

Appendix A – Approved 58-Acre Kirkjan Project MND

ENVIRONMENTAL INITIAL STUDY NO. 04-05
MITIGATED NEGATIVE DECLARATION
CHANGE OF ZONE NO. 04-04
TENTATIVE TRACT MAP NO. 32075

58-Acre Kirkjan Project

LEAD AGENCY:

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Coachella, California 92236
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(760) 398-3102

CONSULTANT:



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JN 20-100472

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TECHNICAL APPENDICES
(Bound Under A Separate Cover)

- A. Phase I Environmental Site Assessment
- B. Traffic Impact Analysis
- C. Biological Resources Assessment
- D. Air Quality Assessment
- E. Cultural Resources Assessment
- F. Noise Modeling

1.0 INTRODUCTION

Following preliminary review of the proposed Kirkjan project (Project), the City of Coachella (City) has determined that the proposed Project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects associated with the development of 232 single-family residential uses on 58 acres.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR), the City of Coachella, acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration for that project. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080(c), Public Resources Code).

The environmental documentation, which is ultimately selected by the City of Coachella in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required.

The environmental documentation and supporting analysis is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the City of Coachella. Following review of any comments received, the City of Coachella will consider these comments as a part of the project's environmental review and include them with the Initial Study documentation and administrative record for consideration by the City of Coachella.

1.2 PURPOSE

The purpose of the Initial Study is to: (1) identify environmental impacts; (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or Negative Declaration; (3) enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared; (4) facilitate environmental assessment early in the design of the project; (5) provide documentation of the factual basis for the finding in a Negative Declaration that a project would not have a significant environment effect; (6) eliminate needless EIRs; and (7) determine whether a previously prepared environmental document could be used for the project.

Section 15063 of the State CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include: (1) a description of the project, including the location of the project; (2) an identification of the environmental setting; (3) an identification of environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

As soon as the Lead Agency has determined that an Initial Study would be required for the Project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the Project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the Project. Following receipt of any written comments from those agencies, the Lead Agency would consider any recommendations of those agencies in the formulation of the recommended mitigation measures. The City will consider recommendations from Responsible Agencies, Trustee agencies and other parties as part of the IS/MND 30-day public review period. As stated in the Notice of Availability, CEQA requires that any Responsible or Trustee agencies provide comments relative to their statutory area of responsibility, and that any recommended mitigation measures include recommended monitoring requirements and suggestions for potential feasible Project alternatives. The City has experience in successfully working with the various affected public agencies, and will also consult with and/or secure applicable permits or approvals from the necessary agencies as part of Project implementation (see Section 3.1 for a listing of other anticipated permits or approvals).

1.4 INCORPORATION BY REFERENCE

Pertinent documents relating to this Initial Study have been cited and incorporated, in accordance with Sections 15148 and 15150 of the CEQA Guidelines, to eliminate the need for inclusion of voluminous engineering and technical reports within the EIR. Of particular relevance are those previous EIRs that present information regarding descriptions of environmental settings, future development-related growth and cumulative impacts. This Initial Study/Mitigated Negative Declaration has incorporated by reference the *City of Coachella General Plan Environmental Impact Report*, the *City of Coachella General Plan*, and the *County of Riverside Comprehensive General Plan*. These planning and environmental clearance documents include background information regarding environmental conditions, as well as policies and information related to the proposed Project. These documents were utilized throughout this Initial Study/Mitigated Negative Declaration and are available for review at the City of Coachella Community Development Department, located at 1515 Sixth Street, Coachella, California, 92236.

City of Coachella General Plan 2000 Environmental Impact Report (SCH #96071011), March 1997

The City of Coachella General Plan 2000 EIR presents environmental impacts and mitigation measures in order to ensure successful implementation of the Coachella General Plan. The study area for the General Plan EIR includes the incorporated City of Coachella, its Sphere of Influence (SOI), and other surrounding areas that could ultimately become part of the City and therefore have an effect on the planning process in the City. The boundaries of the Planning

Area were chosen by the City to assure that adequate data would be available for analyzing the future growth of the City and its environs, and for the analysis of future services and infrastructure, circulation and traffic, compatibility of land uses in outlying areas and environmental concerns. The lands included within the Planning Area boundary were not limited to those included within the City of Coachella's currently adopted SOI. The areas included were chosen based upon their importance to Coachella's future. The availability of environmental and general planning data for the whole planning area assures the ability to respond to future issues with consistent information. The General Plan environmental analysis included biological and archaeological information for the General Plan Study Area. The General Plan EIR identified unavoidable significant impacts for the following areas; land use; biotic resources; air quality; noise; water consumption; energy and educational facilities.

City of Coachella General Plan 2000

The City of Coachella General Plan 2000 is a policy planning document which provides a long-range, comprehensive plan for the physical development of the jurisdiction and any land outside its boundaries which the agency deems relevant for planning purposes. The General Plan for the City is a compilation of the goals, policies, and objectives that will guide the physical development of the City, and in those areas which the City considers within its planning purview (i.e., existing spheres of influence and surrounding study area). The 2000 General Plan expresses community development goals for the distribution of future land uses.

County of Riverside Comprehensive General Plan, Amended through December 1989

Riverside County, an area of 7,310 square miles, stretches from the Colorado River, 200-miles west to the Los Angeles metropolitan area and to within 10 miles of the Pacific Ocean. Riverside County includes 19 incorporated cities, dozens of unincorporated communities, and substantial amounts of state and federally controlled areas such as parks, wildlife areas, and other public lands. The Comprehensive General Plan is designed to provide an administrative guideline for the County in providing services for the residents of the County. This is accomplished through the County's implementation of the General Plan's Administrative Element and the programs located in the other Elements of the Plan. The Comprehensive General Plan is also used to determine appropriate land uses for sites located within the County. In conjunction with this use, development proposals are reviewed for consistency with the Comprehensive General Plan.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION/SETTING

The City of Coachella is located in the southwestern portion of the Coachella Valley in eastern Riverside County, California (refer to Exhibit 1, *Regional Vicinity Map*). The Coachella Valley straddles the southern edge of the Mojave Desert and the northern edge of the Colorado Desert. The 58-acre Project site is located in the western portion of the City of Coachella and is bounded by Avenue 50 to the north, vacant land and Frederick Street to the east, Avenue 51 to the south and vacant land and Van Buren Street to the west (refer to Exhibit 2, *Site Vicinity Map*). The Project site is west of State Route 86 (SR-86) and approximately 1.5 miles southwest of Interstate 10 (I-10). The Project site is currently zoned Agriculture Transition (A-T).

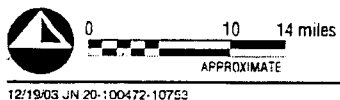
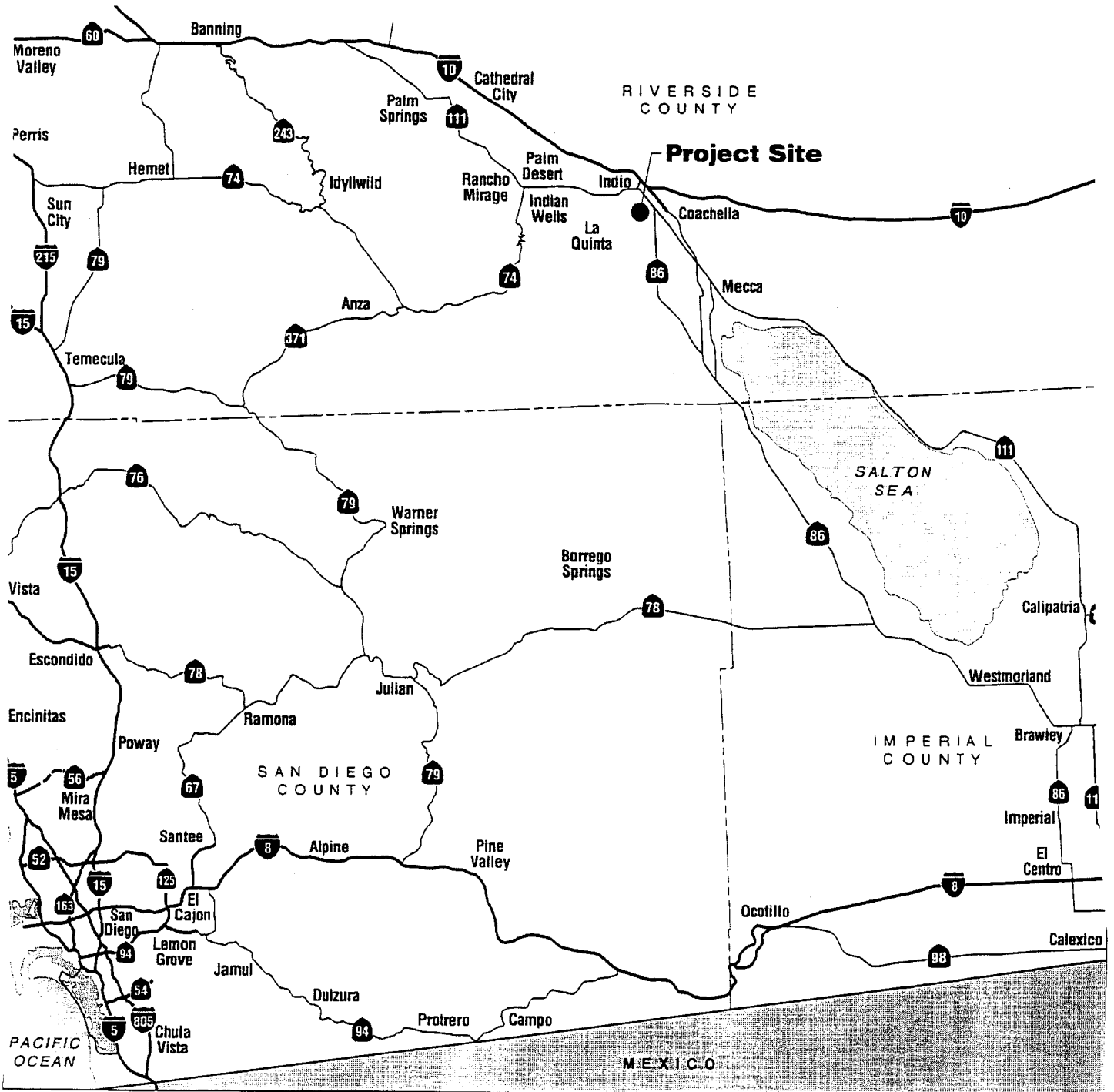
2.2 PROJECT CHARACTERISTICS

The proposed Project would involve redesignating the Project site to R-S (Residential Single-Family Zone), in order to be developed with 232 single-family dwelling units (refer to Exhibit 3, *Preliminary Site Plan*). Site access is proposed at one full-access location and two right-in-right-out only access locations on Avenue 50 and one full-access location on Avenue 51.

2.3 PROJECT PHASING

The proposed Project is anticipated to begin construction in early 2005. The Project would be developed in one phase and is anticipated to take approximately 12 months for completion.

Exhibit 1, Regional Vicinity Map

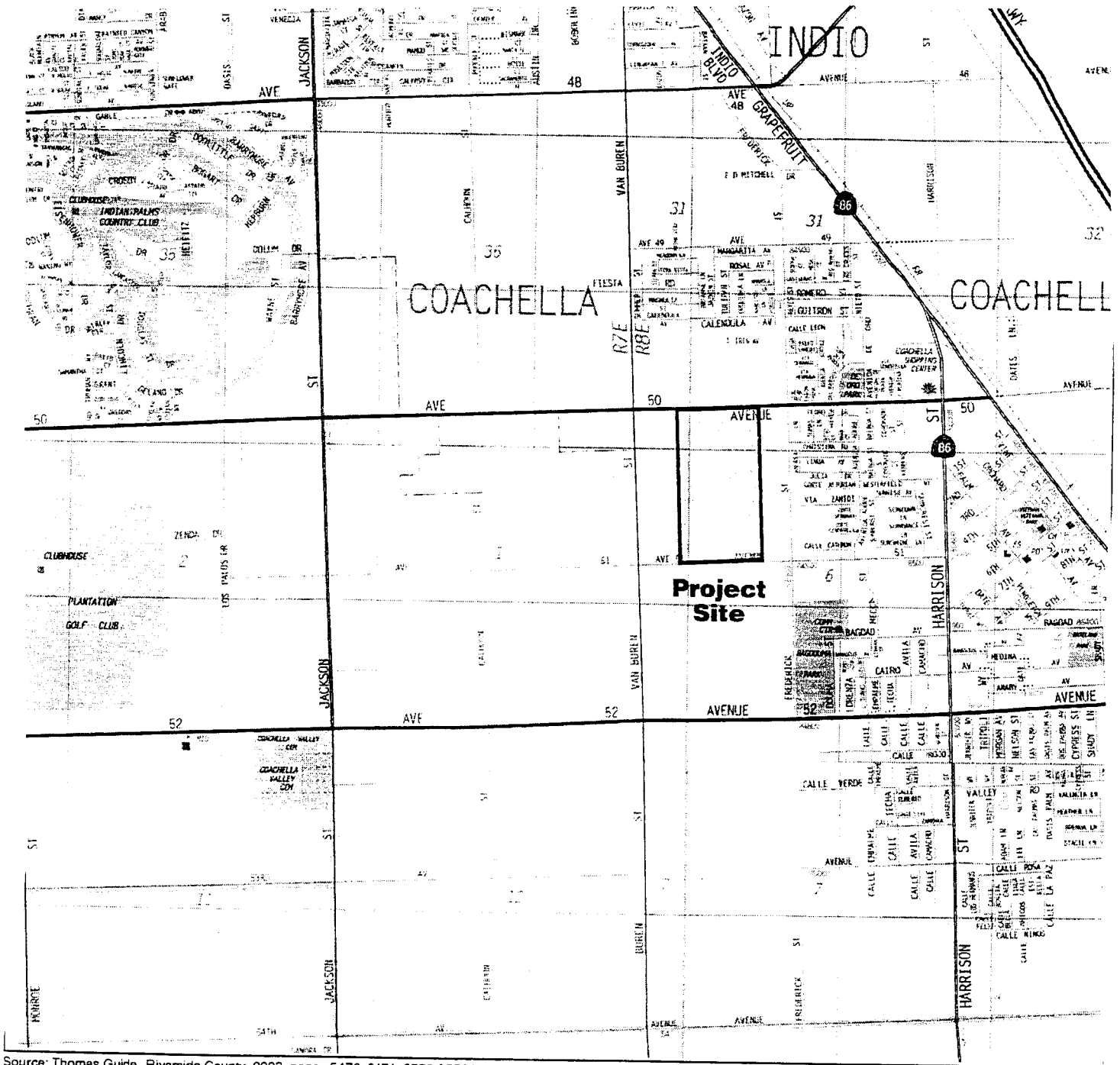


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KIRKJAN PROJECT
Regional Vicinity

Exhibit 1

Exhibit 2, Site Vicinity Map



Source: Thomas Guide, Riverside County, 2003, pages 5470, 5471, 5530 & 5531.

RBF
CONSULTING

0 2500'
APPROXIMATE

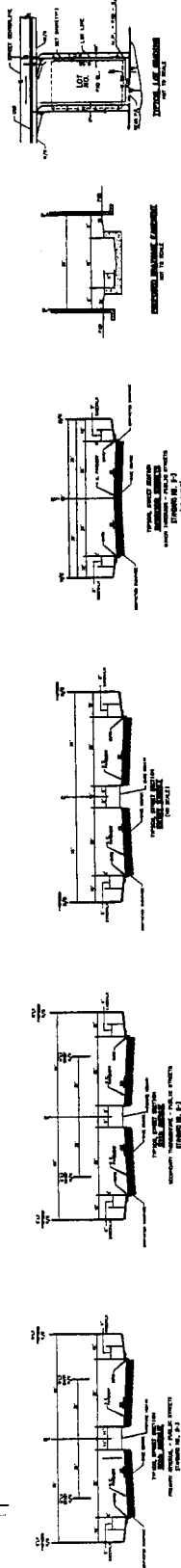
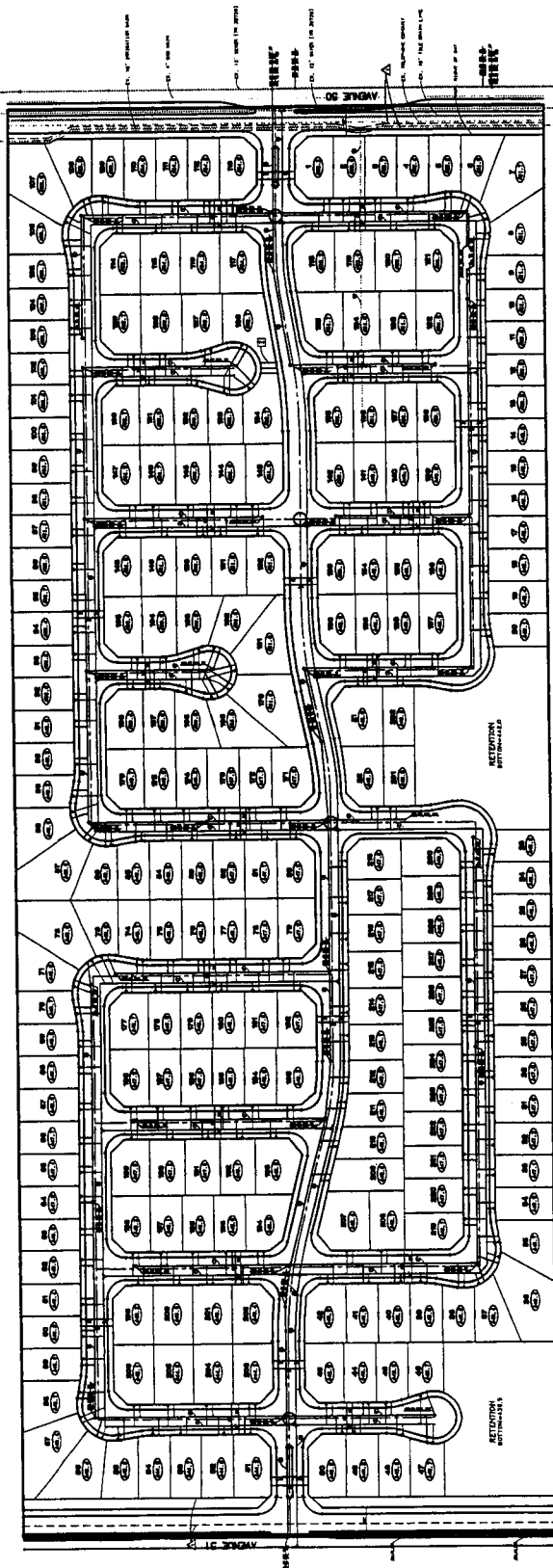
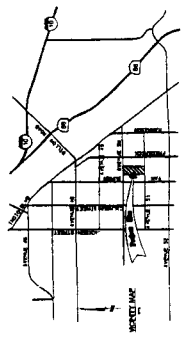
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KIRKJAN PROJECT
Site Vicinity
Exhibit 2

IN THE CITY OF CONGELLA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA
PRELIMINARY WATER AND SEWER PLAN
TENTATIVE TRACT MAP NO. 32075

BEING A PORTION OF THE NORTHEAST QUARTER
 OF SECTION 11, T.18N., R.7E., SAN BERNARDINO MERIDIAN

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 APRIL, 2004



NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF CONGELLA, CALIFORNIA, LOCAL ORDINANCES AND THE CALIFORNIA PUBLIC WORKS ACT.
2. THE WATER AND SEWER SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE CALIFORNIA PUBLIC WORKS ACT AND THE CITY OF CONGELLA, CALIFORNIA, LOCAL ORDINANCES.
3. THE WATER AND SEWER SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE CALIFORNIA PUBLIC WORKS ACT AND THE CITY OF CONGELLA, CALIFORNIA, LOCAL ORDINANCES.
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10. THE WATER AND SEWER SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE CALIFORNIA PUBLIC WORKS ACT AND THE CITY OF CONGELLA, CALIFORNIA, LOCAL ORDINANCES.

LEGEND:

- 1. WATER MAIN
- 2. SEWER MAIN
- 3. WATER SERVICE LINE
- 4. SEWER SERVICE LINE
- 5. MANHOLE
- 6. RETENTION BASIN
- 7. STREET
- 8. LOT
- 9. EASEMENT
- 10. PROPERTY LINE

SCALE: 1" = 40' (PLAN VIEW)
 1" = 10' (VERTICAL SECTION)

RBF
 CONSULTING

NO.	DATE	DESCRIPTION

PLANNING & DESIGN & CONSTRUCTION
 7440 HIGHWAY 91
 PALMDALE, CALIFORNIA 93550-4444
 PHONE: 805-790-1000 FAX: 805-790-1001
 WWW: WWW.RBFCONSULTING.COM

3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

Project Title: 58-Acre Kirkjan Property
Lead Agency Name and Address: City of Coachella 1515 Sixth Street Coachella, CA 92236
Contact Person and Phone Number: City of Coachella Gabriel E. Papp Director of Community Development (760) 398-3102
Project Location: The 58-acre Project site is located in the western portion of the City of Coachella and is bounded by Avenue 50 to the north, Van Buren Street to the west, Avenue 51 to the south and Frederick Street to the east.
Project Sponsor's Name and Address: Steve Hyman Westshore Development, LLC 38-858 Lobelia Drive Palm Desert, CA 92211
General Plan Designation: RL (Low Density Residential 0-6du/ac)
Zoning: A-T (Agriculture Transition)
Description of the Project: (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary, support or off-site features necessary for its implementation.) The proposed Project would involve development of 232 single-family dwelling units. The proposed Project would require a zone change from A-T (Agriculture-Transition) to R-S (Low-Density Residential).
Surrounding Land Uses and Setting: The 58-Acre Project site is bounded by Avenue 50 to the north, vacant land and Van Buren Street to the west, vacant land and Avenue 51 to the south and Frederick Street to the east.
Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement). City of Coachella Planning Commission City of Coachella City Council City of Coachella Sanitary District City of Coachella Fire Department District

3.2 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” or “Less than Significant Impact With Mitigation”, as indicated by the checklist on the following pages.

	Aesthetics		Agricultural Resources	✓	Air Quality
✓	Biological Resources	✓	Cultural Resources	✓	Geology/Soils
✓	Hazards & 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		

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed Project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities & Service Systems

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the City of Coachella’s CEQA Guidelines and used by the City in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study’s preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development’s impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the proposed residential development. To each question, there are four possible responses:

- **No Impact.** The project will not have any measurable environmental impact on the environment.
- **Less Than Significant Impact.** The project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Potentially Significant Impact Unless Mitigation Incorporated.** The project will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the project's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The project will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
1. AESTHETICS. <i>Would the project:</i>				
a. Have a substantial adverse effect on a scenic vista?			✓	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			✓	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	
2. AGRICULTURAL RESOURCES. <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</i>				
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?			✓	
b. Conflict with existing zoning for agricultural use, or a Williamson act contract?			✓	
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?			✓	
3. AIR QUALITY. <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
a. Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		✓		
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)?			✓	
d. Expose sensitive receptors to substantial pollutant concentrations?			✓	
e. Create objectionable odors affecting a substantial number of people?			✓	

4. BIOLOGICAL RESOURCES. Would the project:					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
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?				✓
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		✓		
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		✓		
5. CULTURAL RESOURCES. Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?		✓		
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?		✓		
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓
d.	Disturb any human remains, including those interred outside of formal cemeteries?				✓
6. GEOLOGY AND SOILS. Would the project:					
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓

2) Strong seismic ground shaking?		✓		
3) Seismic-related ground failure, including liquefaction?		✓		
4) Landslides?			✓	
b. Result in substantial soil erosion or the loss of topsoil?		✓		
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		✓		
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
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?			✓	
7. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		✓		
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		✓		
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
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?		✓		
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?				✓
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?				✓
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
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?				✓
8. HYDROLOGY AND WATER QUALITY. Would the project				
a. Violate any water quality standards or waste discharge requirements?		✓		

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)?			✓	
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or situation on- or off-site?				✓
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?				✓
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?		✓		
f.	Otherwise substantially degrade water quality?			✓	
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?			✓	
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
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?				✓
j.	Inundation by seiche, tsunami, or mudflow?				✓
9. LAND USE AND PLANNING. Would the project:					
a.	Physically divide an established community?			✓	
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?			✓	
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?		✓		
10. MINERAL RESOURCES. Would the project:					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

11. NOISE. Would the project result in:				
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?		✓		
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
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?				✓
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?				✓
12. POPULATION AND HOUSING. Would the project:				
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)?			✓	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓
13. PUBLIC SERVICES.				
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:				
1) Fire protection?			✓	
2) Police protection?			✓	
3) Schools?		✓		
4) Parks?		✓		
5) Other public facilities?				✓

14. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		✓		
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓
15. TRANSPORTATION/TRAFFIC. Would the project:				
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)?		✓		
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?		✓		
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?				✓
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		✓		
e. Result in inadequate emergency access?			✓	
f. Result in inadequate parking capacity?			✓	
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				✓
16. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?		✓		
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?		✓		
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?		✓		
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			✓	
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 project's projected demand in addition to the provider's existing commitments?			✓	

f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g.	Comply with federal, state, and local statutes and regulations related to solid waste?			✓	
17. MANDATORY FINDINGS OF SIGNIFICANCE.					
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?			✓	
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)?			✓	
c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

3.4 MITIGATION MEASURES

Air Quality

AQ1 All off-road construction equipment shall use aqueous diesel fuel.

AQ2 During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the South Coast Air Quality Management Districts Rules and Regulations.

Comply with AQMD Rule 403, particularly to minimize fugitive dust and noise to surrounding areas. SCAQMD Rule 403.1, as amended, should be adhered to, ensuring the clean up of the construction-related dirt on approach routes to the site, and the application of water and/or chemical dust retardants that solidify loose soils, should be implemented for construction vehicle access, as directed by the City Engineer. This should include covering, watering or otherwise stabilizing all inactive soil piles (left more than 10 days) and inactive graded areas (left more than 10 days).

- On-site vehicle speed will be limited to 15 miles per hour.
- All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferable in the late morning and after work is done for the day.
- Unpaved haul roads shall be watered at least twice daily.
- All material transported on-site or off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earth moving, or excavation operations will be minimized so as to prevent excessive amounts of dust.
- These control techniques will be indicated in Project specifications. Compliance with this measure will be subject to periodic site inspections by the City.

AQ3 Project grading plans shall show the duration of construction. Ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Compliance with this measure will be subject to periodic inspections of construction equipment vehicles by the City.

AQ4 All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

Biological Resources

BIO1 Spring botanical surveys shall be conducted during Spring 2004 assuming appropriate weather conditions occur (i.e., appropriate rainfall) to determine if special status plant species are present or absent. If no special status plant species are identified within the study area, no further mitigation shall be required. If a sizeable population of special status plant species is located within the study area, mitigation shall be developed through either a conservation easement or mitigation plan. The mitigation plan shall include the following requirements:

- A pre-construction survey conducted during the peak flowering period for each respective special status plant potentially occurring on the Project site shall be conducted by the Project biologist the spring prior to grading.
- If a large population of special status plants (as determined by USFWS staff) is found during these surveys, the limits of each impacted location shall be clearly delineated with lath and brightly colored flagging.
- The locations of special status plants shall be monitored every two weeks by the Project biologist to determine when the seeds are ready for collection. A qualified seed collector shall collect all of the seeds from the plants to be impacted when the seeds are ripe. The seeds shall be cleaned and stored by a qualified nursery or institution with appropriate storage facilities.
- Following the seed collection, the top 12 inches of topsoil from special status plant populations shall be scraped, stockpiled and used in the selected mitigation location agreed upon by the City and the Project biologist.
- The mitigation plan shall include detailed descriptions of maintenance appropriate for the Project site, monitoring requirements and annual reports requirements and shall have the full authority to suspend any operation on the Project site which is, in the qualified biologist's opinion, not consistent with the mitigation plan.
- The performance criteria developed in the mitigation plan shall include requirements for a minimum of 60 percent germination of the number of plants impacted. The performance criteria shall also include percent cover, density and seed production requirements. These criteria shall be developed by the Project biologist following habitat analysis of an existing habitat. This information shall be recorded by a qualified biologist.
- If the germination goal of 60 percent is not achieved following the first season, remediation measures shall be implemented and additional seeding may be necessary. Remedial measures would include at a minimum: soils testing, control of invasive species, soil amendments and physical disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional mitigation measures may be suggested as determined necessary by the Project biologist.
- Potential seed sources from additional donor sites shall also be identified in case it becomes necessary to collect additional seed for use on the Project site following performance of remedial measures.

BIO2 In order to avoid impacts to an occupied burrowing owl burrow, focused surveys shall be conducted prior to commencement of clearing or grading operations on the Project site. Additionally, if clearing or grading operations are planned during the breeding season for any of these species, a breeding raptor survey shall be conducted prior to any clearing or grading activities.

Surveys for burrowing owl shall be conducted according to a protocol prepared by the Burrowing Owl Consortium of the Santa Cruz Predatory Bird Research Group. Surveys shall be conducted by walking through suitable habitat over the entire Project site and in areas within approximately 500 feet of the Project impact zone. Any active burrows found during survey efforts shall be mapped on the construction plans. If no active burrowing owl burrows are found, no further mitigation is required. Results of the surveys shall be provided to the CDFG.

BIO3 If burrowing owl nest sites are found, the following restrictions on construction are required between March 1 and August 31 (or until nests are no longer active as determined by a qualified biologist):

- Clearing limits shall be established with a minimum of 250 feet, or as otherwise determined by a qualified biologist, in any direction from any occupied burrow exhibiting nesting activity; and
- Access and surveying shall not be allowed within 100 feet of any burrow exhibiting nesting activity. Any encroachment into the 250/100-foot buffer area around the known nest is allowed only if it is determined by a qualified biologist that the proposed activity shall not disturb the nest occupants.

If construction occurs outside of the breeding season, exclusion of burrowing owls from their burrow is a practice generally accepted by the CDFG. Exclusion of burrowing owls involves placement of one-way doors at the opening of known occupied burrows to allow egress from and preventing ingress to the burrow. In this manner the burrowing owl is forced to look for another suitable roosting location. One-way doors should be left in place for 48 hours to ensure owls have left the burrow before excavation. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

BIO4 Surveys for the Coachella Valley round-tailed ground squirrel shall be conducted according to guidelines provided by the USFWS and consist of the following:

- A minimum of three surveys conducted between May 1 and July 31;
- Each survey must be conducted from one hour after sunrise to four hours after sunrise;
- Temperatures in the shade must range from 80 degrees to 91.4 degrees Fahrenheit (27 degrees to 33 degrees Centigrade);
- Wind speeds must be low; and

- 100 percent of the study area must be covered, using walking transects spaced approximately 32 feet (10 meters) apart.

BIO5 Adequate fees shall be paid according to the adopted Multiple Species Habitat Plan (MSHCP) and Natural Community Conservation Plan (NCCP) shall it become adopted prior to Project development.

Cultural Resources

CUL1 Prior to construction, the applicant shall hire a certified archaeologist to observe grading/ major trenching activities and salvage and catalogue archaeological resources as necessary. The archaeologist shall establish, in cooperation with the City, procedures for temporarily halting or redirecting work to permit sampling, identification and evaluation of the artifacts, as appropriate. If the archaeological resources are found to be significant, the archaeologist shall determine appropriate actions, in consultation with the City, for exploration and/or salvage.

Geology and Soils

GEO1 All structures shall be designed as confirmed during the building design plan checking, to withstand anticipated groundshaking caused by future earthquakes within an acceptable level of risk (i.e., high risk zone), as designated by the City's latest adopted edition of the Uniform Building Code.

GEO2 Prior to the issuance of a grading permit, a site specific geologic and soils report shall be prepared by a registered geologist or soils engineer and submitted to the City Building and Safety Division for approval. The report shall specify design parameters necessary to remediate any soil and geologic hazards.

GEO3 All grading, landform modifications and construction shall be in conformance with state-of-the-practice design and construction parameters. Typical standard minimum guidelines regarding regulations to control excavations, grading, earthwork construction, including fills and embankments and provisions for approval of plans and inspection of grading construction are set from the latest version of the Uniform Building Code. Compliance with these standards shall be evident on grading and structural plans. This measure shall be monitored by the City Building and Safety Division through periodic site inspections.

GEO4 Type 5 cement shall be used for all foundations and slabs on grade.

GEO5 Precise grading plans shall include an Erosion, Siltation and Dust Control Plan to be approved by the City Building Division. The Plan's provisions may include sedimentation basins, sand bagging, soil compaction, revegetation, temporary irrigation, scheduling and time limits on grading activities, and construction equipment restrictions on-site. This plan shall also demonstrate compliance with South Coast Air Quality Management District Rule 403, which regulates fugitive dust control.

GEO6 As soon as possible following the completion of grading activities, exposed soils shall be seeded or vegetated seed mix and/or native vegetation to ensure soil stabilization.

Hazards and Hazardous Materials

HAZ1 Any hazardous waste that is generated on-site shall be transported to an appropriate disposal facility by a licensed hauler in accordance with the appropriate State and Federal laws.

HAZ2 All miscellaneous vehicles, maintenance equipment and materials, construction/irrigation materials, miscellaneous stockpiled debris, 1 and 5-gallon containers, construction/irrigation materials, and former agricultural equipment, should be removed off-site and properly disposed of at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials should be performed. Any stained soils observed underneath the removed materials should be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.

HAZ3 Soil sampling should be performed within the maintenance yard to characterize the extent of contamination associated with the surficial soil staining. Soil should be removed and disposed of at an appropriate landfill facility in accordance with state and federal requirements.

HAZ4 The majority of the Project site has been historically utilized for agricultural purposes for several decades and may contain pesticide residues in the soil. Soil sampling should occur throughout the Project site, including the maintenance and staging areas. The sampling will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that may be required.

HAZ5 The terminus of all undocumented pipes should be defined. The primary concern with pipes that extend into the ground surface is the potential for the pipe(s) to act as a ventilation apparatus for a UST. Should USTs be present, the USTs should be removed and properly disposed of at an approved landfill facility. Once the UST is removed, a visual inspection of the areas beneath and around the removed UST should be performed. Any stained soils observed underneath the UST should be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.

HAZ6 The location of the two former USTs should be defined since no closure/removal records were found during this Assessment. Once identified, soil sampling should be performed within the former UST areas to characterize the extent of contamination (if any) associated with the former USTs staining.

HAZ7 The on-site water well should be properly removed and abandoned pursuant to the latest procedures required by the local agency with closure responsibilities for the wells. Any associated equipment should be removed off-site properly disposed of at a permitted landfill. A visual inspection of the areas beneath the removed materials (if present) should be performed.

- HAZ8 A visual inspection of the interior the on-site structure is recommended. In the event that hazardous materials are encountered, they should be properly tested and then properly disposed of pursuant to State and Federal regulations.
- HAZ9 Any transformers to be removed/relocated should be conducted under the purview of the local utility purveyor to identify property handling procedures regarding potential PCBs.
- HAZ10 Based upon the year the existing structure located on the Project site was built (prior to 1978), asbestos-containing materials and lead-based paint may be present within the existing on-site structures and would need to be handled properly prior to remodeling or demolition activities.
- HAZ11 If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contract shall:
- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
 - Notify the Project Engineer of the implementing Agency;
 - Secure the area a directed by the Project Engineer; and
 - Notify the implementing agency's Hazardous Waste/Materials Coordinator.

Hydrology and Water Quality

- HYD1 The applicant shall obtain a Notice of Intent from the State of California Regional Water Quality Control Board, as the approximately 58-acre proposed Project would result in the disturbance of one or more acres. A copy of the Notice of Intent acknowledgement from the State of California Regional Water Quality Control Board must be submitted to the City of Coachella before issuance of grading permits.
- HYD2 Prior to the issuance of grading permits, Best Management Practices (BMPs) shall be developed in compliance with the City of Coachella and the Coachella Valley Water District NPDES Permit. Specific measures shall include:
- Siltation of drainage devices shall be handled through a maintenance program to remove silt/dirt from channels and parking areas;
 - Surplus or waste materials from construction shall not be placed in drainage ways or within the 100-year floodplain surface waters;
 - All loose piles of soil, silt, clay, sand, debris or other earthen materials shall be protected in a reasonable manner to eliminate any discharge to waters of the State;
 - During construction, temporary gravel or sandbag dikes shall be used as necessary to prevent discharge of earthen materials from the site during periods of precipitation or runoff;

- Stabilizing agents such as straw, wood chips and/or soil sealant/dust retardant shall be used during the interim period after grading in order to strengthen exposed soil until permanent solutions are implemented; and
- Revegetated areas shall be continually maintained in order to assure adequate growth and root development.

- HYD3 The applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP), which identifies construction and post construction BMPs to the City for review and approval.
- HYD4 Prior to the issuance of building permits, the applicant shall submit a Water Quality Management Plan (WQMP) pursuant to the Coachella Valley Water District and the City of Coachella local implementation plan, specifically identifying BMPs that shall be used on-site to control predictable pollutant runoff.
- HYD5 Prior to the issuance of building permits, the applicant shall obtain coverage under NPDES Statewide Industrial Stormwater Permit for General Construction Activities from the State Water Resources Control Board. Evidence that this has been obtained shall be submitted to the City.

Land Use and Planning

- LAN1 The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Community Development Department regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impacts of new development. One of these fees is the General Plan Fee to be paid at the time permits are issued. If permits are issued prior to the approval of a development impact fee, a fee shall be paid at the time permits are issued as a mitigation of the environmental impacts associated with this project. The fees shall be as follows: Buildings - \$50.00 per Dwelling Unit.

Noise

- N1 During all Project site excavation and grading, the Project Contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- N2 The Construction Contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site.
- N3 The Construction Contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the Project site during all Project construction.

Public Services

- PS1 The developer is subject to school assessment fees pursuant to California State law. The developer shall provide evidence of compliance to the City prior to issuance of building permits.
- PS2 The developer is subject to park assessment fees pursuant to California State law. The developer shall provide evidence of either the dedication of land or fees paid in lieu of, to the City prior to issuance of building permits.

Traffic

- TR1 The Project applicant's payment to the Coachella Valley Association of Governments (CVAG) Transportation Uniform Mitigation Fund (TUMF) Fee Program and to the City of Coachella Environmental Fee Program for Traffic Signals shall pay for the Project's fair share contribution to the identified mitigation measures as follow:
- Van Buren Street/Avenue 50 – Modify eastbound Avenue 50 approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane and one shared through/right-turn lane.
 - Frederick Street/Avenue 50 – Modify westbound Avenue 50 approach from one left-turn lane, one through lane and one right-turn lane to consist of one left-turn lane, one through lane and one shared through/right-turn lane.
- TR2 The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Department of Community Development regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impact of new development, as follows: The approved development impact fee for Traffic Signal be paid at the time permits are issued. A fee shall be paid at the time the permits are issued as a mitigation of the environmental impacts associated with this project. The fees shall be as follows: Building - \$192.00 per dwelling unit.
- TR3 The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Department of Community Development regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impact of new development as follows: The approved development impact fee for Bridge and Grade Separation be paid at that permits are issued. If permits are issued prior to the approval of a development impact fee, a fee shall be paid at the time the permits are issued as a mitigation of the environmental impacts associated with this project. The fee shall be as follows: Buildings - \$422.00 per dwelling unit.
- TR4 The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Department of Community Development regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impact of new development. The approved development impact fee for Bus Shelter and Bus Stop Safety Zone shall be paid at the time permits are issued. A fee shall be paid at the time the permits are issued as a mitigation for environmental impacts associated with the project. The fees shall be as follows: Bus Shelters - \$50.00 per dwelling unit.

- TR5 Prior to Project plan approval, the quantity, location, width and type of driveways shall be subject to the approval of the City Engineer. An effective sight distance for vehicular traffic shall be maintained at the driveway entrances on Avenue 50 and Calhoun Street. Adequate sight distance shall also be maintained within the development at all driveway intersections to the satisfaction of the City Engineer.

Utilities and Services

- UTIL1 All required sewer improvements shall be designed and constructed to City Standards. All tentative tract maps, site plans and other plans within the Project area shall be accompanied by adequate plans for sewer improvements prepared by a registered professional engineer.
- UTIL2 Prior to the issuance of building permits, the applicant shall submit for approval of the City Engineering Department, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that shall be used on-site to control predictable pollutant runoff.

4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential impacts associated with development of 232 single-family residential units on a 58-acre site. Explanations are provided for each item below.

4.1 AESTHETICS. *Would the project:*

- a) *Have a substantial adverse effect on a scenic vista?*

Less Than Significant Impact. The Project proposes development of approximately 58 acres with single-family residential units. The Project site currently consists of bare soil, agricultural trees (date palms), unimproved dirt roads, abandoned residential structures, a maintenance garage, miscellaneous storage areas and shipping/receiving areas which were utilized during past harvests. The General Plan does not identify any scenic vistas within the Project vicinity. Therefore, impacts in this regard would be less than significant.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Less Than Significant Impact. Refer to Response 4.1(a). In addition, no historical buildings are known to occur within the Project site. Finally, the Coachella General Plan does not identify any scenic highways within the Project area.

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

Less Than Significant Impact. The proposed Project would include development of 232 single-family residential units. Therefore, the proposed Project would result in the alteration of the existing visual character of the Project site. However, the proposed Project would be required to submit development plans for approval of the Planning Commission, which would ensure a high quality design of development. In addition, the proposed Project would be subject to architectural review pursuant to Section 080.10, *Architectural Review*, and Section 070.07(D)(4), *Landscaping*, of the City's Zoning Ordinance. Upon approval of the development plans and the inclusion of landscaping plans and design guidelines, impacts in this regard would be less than significant.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less Than Significant Impact. Implementation of the proposed Project would create the following new light sources: building exterior and interior lighting, security lighting, signage and parking lot lighting.

The unwanted illumination on an adjacent property is defined as light spill. Perceived glare is the unwanted and potentially objectionable result from looking directly into a light source of a luminaire. The proposed Project would be required to comply with Section 070.03(K) of the City's Zoning Ordinance that requires, "parking areas such lighting fixtures shall be located, with hoods provided and adjusted, so as to preclude the direct

glare of the light from shining onto property or streets. Upon compliance with the City's Zoning Ordinance in regards to light spill and glare, impacts as a result of Project implementation would be less than significant.

4.2 AGRICULTURAL RESOURCES. *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:*

- 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?*

Less than Significant Impact. As indicated in the City's General Plan, the City's Planning Area includes 21,840-acres of agricultural land, 3,800-acres in the incorporated area and 18,040-acres in the unincorporated area. The agricultural areas are primarily located east and south of the existing urbanized area of the City. The agricultural areas include date groves, citrus orchards, as well as grape, lettuce, corn and carrot production. Figure 40, *Environmental Conservation – Existing Setting*, of the City's General Plan currently identifies the Project site as Significant Agricultural Lands. The City General Plan indicates the important role agriculture plays in the economic, social, and physical fabric of the City and its need to retain and maintain the agricultural element. The General Plan Land Use Policy Diagram indicates that the Project site is designated as Low Density Residential (RL) having a density of 0 to 6 dwelling units per acre, with a zoning designation of Agriculture-Transition (A-T). The City's Zoning Ordinance describes the intent and purpose of the Agricultural Transition Zone designation as, "permitting the continued agricultural use of those lands suited to eventual development in other uses and zones, pending proper timing for the economical provisions of utilities, major streets, and other facilities, so that compact, orderly development will occur." Therefore, the proposed Project would be consistent with the intent of the Agricultural Transition Zone by providing compact, orderly development consistent with the surrounding uses. The Project site is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance or as an Agricultural Retention Area, within the City's General Plan. Therefore, impacts in this regard would be less than significant.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Less Than Significant Impact. As previously mentioned, agricultural uses are present within the Project area. In addition, the Project site is zoned A-T and designated at RL in the City's General Plan. However, as discussed above, the intent of the A-T designation is to provide for the eventual development of the area as evidenced by the RL designation. The Project site is not under a Williamson Act contract, therefore impacts in this regard would be less than significant.

- c) *Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use?*

Less Than Significant Impact. As previously stated, the Project area is designated as an agricultural area slated for future development, as is the surrounding vicinity. Refer to Responses 4.3(a) and 4.3(b).

4.3 AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

Information in this section is based on the *Air Quality Technical Assessment – Kirkjan Property*, prepared by RBF Consulting (dated March 25, 2004). The *Air Quality Assessment* is reproduced in its entirety as Appendix D.

The Project site is located within the City of Coachella, which is part of the Salton Sea Air Basin (Basin) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD's current guidelines and emission thresholds established in the *CEQA Air Quality Analysis Guidance Handbook*, updated October 2003, were adhered to in the assessment of air quality impacts for the proposed Project. The City regularly relies on the SCAQMD standards as the standards for the City.

The air quality assessment includes estimating emissions associated with short-term construction and long-term operation of the proposed Project. The URBEMIS 2002 model was used to estimate Project-related mobile and stationary sources emissions in this air quality assessment. A local Carbon Monoxide (CO) hot spot analysis was conducted to assess the potential for a CO hotspot. The Caltrans CALINE 4 model was utilized to assess local CO concentrations at intersections most affected by Project traffic. Project-specific information was used in the modeling. Default values representative of the proposed Project were used when Project-specific data were not available.

Both the State of California and the Federal government have established health based Ambient Air Quality Standards (AAQS) for six criteria air pollutants. These pollutants include ozone (O₃), carbon monoxide (CO), nitrogen oxides (NO_x), sulfur oxides (SO_x), PM₁₀, and lead (Pb). Currently, O₃ and PM₁₀ are designated by the California Air Resources Board (CARB) as non-attainment for the Salton Sea Air Basin (refer to Table 1 in the *Air Quality Impact Analysis*). O₃ (smog) is formed by a photochemical reaction between NO_x and reactive organic compounds (ROC). Thus, impacts from O₃ are assessed by evaluating impacts from NO_x and ROC.

The net increase in pollutant emissions determines the significance and impact on regional air quality as a result of the proposed Project. The results also allow the local government to determine whether the proposed Project will deter the region from achieving the goal of reducing pollutants in accordance with the AQMP in order to comply with Federal and State Ambient Air Quality Standards (AAQS).

Construction Emission Thresholds

The following CEQA significance thresholds for construction emissions have been established for the Basin:

- 75 pounds per day or 2.5 tons per quarter of (ROC) Reactive Organic Compounds;
- 100 pounds per day or 2.5 tons per quarter of NO_x (Nitrogen Oxide);
- 550 pounds per day or 24.75 tons per quarter of CO (Carbon Monoxide);
- 150 pounds per day or 6.75 tons per quarter of PM₁₀ (Particulates); and
- 150 pounds per day or 6.75 tons per quarter of SO_x (Sulfur Oxides).

Projects in the Basin with construction-related emissions that exceed any of the emission thresholds are considered to be significant under the SCAQMD guidelines.

Operational Emission Thresholds

The daily operational emissions "significance" thresholds for the Basin are detailed below.

Emission Thresholds for Pollutants with Regional Effects

Projects with operation-related emissions that exceed any of the emission thresholds listed below are considered significant under the SCAQMD guidelines:

- 55 pounds per day of ROC;
- 55 pounds per day of NO_x;
- 550 pounds per day of CO;
- 150 pounds per day of PM₁₀; and
- 150 pounds per day of SO_x.

Local Microscale Concentration Standards

The significance of localized Project impacts under CEQA depends on whether ambient CO levels in the vicinity of the Project are above or below State and Federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions exceed one or more of these standards. If ambient levels already exceed a State or Federal standard, project emissions are considered significant if they increase one-hour CO concentrations by 1.0 part per million (ppm) or more or eight-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State one-hour CO standard of 20.0 ppm; and
- California State eight-hour CO standard of 9.0 ppm.

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact. The SCAQMD has prepared multiple Air Quality Management Plans (AQMPs). The most recent AQMP was updated in 2003. The AQMP relies on a multi-level partnership of governmental agencies at the federal, state, regional and local level. These agencies (Environmental Protection Agency, California

Air Resources Board (CARB), local governments, Coachella Valley Association of Governments (CVAG) and the SCAQMD) are the cornerstones that implement the AQMP programs.

CVAG is responsible under the Federal Clean Air Act (Federal CAA) for determining conformity of projects, plans and programs with the SCAQMD AQMP. Although air quality is a regional problem, SCAQMD's AQMP place a heavy reliance on local implementation measures, such as land use decisions and local employment transportation programs. The implementation process stresses the freedom of cities to choose attainment measures that best suit local conditions.

As indicated in SCAQMD's *CEQA Air Quality Handbook*, there are two main indicators of consistency:

- Whether the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP; and
- Whether the project would exceed the AQMP's assumptions for 2010 or increments based on the year of project build-out and phase.

As indicated in Response 4.3(b) (refer to Table 1, *Short-Term (Construction) Emissions* and Table 2, *Long-Term (Operational) Emissions*), the proposed Project would not exceed SCAQMD thresholds for construction activities or long-term operations. In addition, while the proposed Project would involve the transition of a vacant land with development of residential uses, the General Plan designated the Project site as RL (Low Density Residential) with the anticipation that the Project site would be developed with low-density residential uses. Therefore, the proposed Project was included in the SCAG's RCPG and the growth assumptions included within, resulting in less than significant impacts in this regard.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant Impact With Mitigation Incorporated.

SHORT-TERM (CONSTRUCTION) EMISSIONS

Short-term impacts to air quality would occur as a result of construction activities associated with development of the proposed Project. Additionally, construction activities required to construct the proposed Project would include:

- Exhaust emissions and potential odors from construction equipment used on the construction site as well as the vehicles used to transport materials to and from the site; and
- Exhaust emissions from the motor vehicles of the construction crew.

Project construction would result in temporary emissions CO, NO_x, ROC and PM₁₀. Construction activities would result in criteria pollutant emissions from stationary and mobile powered on-site equipment, from material delivery trucks, and from worker vehicles to and from the Project site. Stationary or mobile powered on-site construction equipment includes trucks, backhoes, pavers and other paving equipment. Construction activities would require an estimated work force averaging 18 construction workers per day for the duration of construction activities. This would result in an estimate of 72 construction worker inbound and outbound trips per day during the projected construction period. Based on the considerably insignificant amount of daily work trips required for Project construction, construction worker trips are not anticipated to significantly contribute to or affect traffic flow on local roadways and are therefore not considered significant.

Table 1, *Short-Term (Construction) Emissions*, provides anticipated short-term construction emissions estimates, which would result during the construction phase of the proposed Project. Anticipated emissions were quantified utilizing emission factors within the URBEMIS2002 computer model developed by the CARB (refer to Appendix A, *Air Quality Impact Analysis*). It should be noted that emission estimates are based on eight (8) hours of continual operation, which is considered a worst-case analysis of actual equipment use on any given day. Thus, quantified estimated provided below provides for a conservative emission estimates of criteria pollutants. Table 1 below indicates that the total daily anticipated Project construction emissions would not exceed SCAQMD construction thresholds for CO, ROC, and PM₁₀. However, implementation of the proposed Project would approach the SCAQMD threshold for NO_x emissions associated with construction activities. Implementation of the recommended mitigation measure to use aqueous diesel fuel for off-road construction equipment would ensure that NO_x emissions to below the SCAQMD threshold level. Additionally, particulate emission control measures, while not required to reduce PM₁₀ emissions to below the applied threshold, are recommended.

Table 1
SHORT-TERM (CONSTRUCTION) EMISSIONS

Emission Source	Pollutant (lbs/day) ¹			
	ROC	NO _x	CO	PM ₁₀
Unmitigated Construction Emissions	16.44	99.10	103.94	116.02
Mitigated Construction Emissions	16.44	85.33	103.94	38.07
SCAQMD Threshold	75	100	550	150
Is Threshold Exceeded?	No	No	No	No
ROC = reactive organic compounds CO = Carbon Monoxide NO _x = Nitrogen Oxides PM ₁₀ = fine particulate matter				
Source: Emissions calculated using the URBEMIS2002 Computer Model as recommended by the SCAQMD.				

Based upon the conclusions provided in Table1, Project construction would not have the potential to result in significant short-term air quality impacts. In order to minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the state-mandated emission control devices

pursuant to state emission regulations and standard construction practices. Short-term construction PM₁₀ emissions would further be reduced with the implementation of required dust suppression measures outlined within SCAQMD Rule 403. After construction of the Project is complete, all construction-related impacts would cease, thus resulting in a less than significant impact. Therefore, Project construction is not anticipated to violate State or Federal air quality standards or contribute to existing air quality violation in the air basin as only minor amounts of earth movement is proposed.

LONG-TERM (OPERATIONAL) EMISSIONS

Mobile Sources

Mobile source emissions are major contributors to air pollution within the City of Coachella and the surrounding vicinity. As shown on Table 2, *Long-Term (Operational) Emissions*, emissions from the proposed Project would not exceed SCAQMD thresholds for ROG, NO_x, CO and PM₁₀. Operational emissions are based on land use data provided by the Applicant, the Project Traffic Study and assuming full occupancy by 2006.

Stationary Source Emissions

Stationary source emissions would be generated due to an increased demand for natural resources consumption with the development of the proposed Project (referred to below as "area source emissions"). The primary use of natural gas by the proposed land uses would be for combustion to produce space heating, water heating and other miscellaneous heating or air conditioning. It is important to note that, while construction-related emissions occur predominantly in the immediate Project area, operational emissions are dispersed throughout Southern California (due to Project traffic). As shown on Table 2, emissions from the proposed Project would not exceed SCAQMD thresholds for ROG, NO_x, CO or PM₁₀.

**Table 2
LONG-TERM (OPERATIONAL) EMISSIONS**

Project	Pollutant (lbs/day) ¹			
	ROG	NO _x	CO	PM ₁₀
• Area Source Emissions ²	5.04	1.96	0.84	0.00
• Vehicle Emissions	23.72	36.16	293.45	22.57
Total Unmitigated Emissions	28.76	38.12	294.28	22.57
SCAQMD Threshold	55	55	550	150
Is Threshold Exceeded?	No	No	No	No
ROG = Reactive Organic Gases CO = Carbon Monoxide NO _x = Nitrogen Oxides PM ₁₀ = Fine Particulate Matter				
Notes: 1 – Based on URBEMIS2002 modeling results, worst-case seasonal emissions for area and mobile emissions, and trip rate data provided in the Project Traffic Study. 2 – Area Source emissions excludes the use of fireplaces and wood burning stoves.				
Source: Emissions calculated using the URBEMIS2002 Computer Model as recommended by the SCAQMD.				

Carbon Monoxide Hotspots

Local air quality is a major concern along roadways. Carbon monoxide is a primary pollutant, and unlike ozone, is directly emitted from a variety of sources. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of its impacts upon the local air quality. Comparisons of levels with State and Federal CO standards indicate the severity of the existing concentrations for receptors in the Project area. The Federal and State standards for CO are presented in Table 3, *Federal and State Carbon Monoxide Standards*.

**Table 3
FEDERAL AND STATE CARBON MONOXIDE STANDARDS**

Jurisdiction	Averaging Time	CO Standard
Federal	1 Hour	35 ppm
	8 Hour	9 ppm
State	1 Hour	20 ppm
	8 Hour	9 ppm
Notes: ppm = parts per million		
Source: California Air Resources Board.		

An impact is potentially significant if the project produces emissions levels that exceed the State or Federal AAQS. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations. Areas of vehicle congestion have the potential to create "pockets" of CO called "hot spots". These pockets have the potential to exceed the State 1-hour standard of 20.0 ppm and/or the 8-hour standard to 9.0 ppm. Note that federal levels are based on 1- and 8-hour standards of 35.0 and 9.0 ppm respectively. To identify CO hotspots, the SCAQMD criterion recommends performing a CO hotspot analysis when a project increases the volume to capacity ratio (also called the intersection capacity utilization) by 0.02 (two percent) for any intersection with an existing level of service (LOS) D or worse. However, since the existing intersections are not at an LOS D, Year 2005 was used to be conservative. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersection locations. Typically, the level of service (LOS) at an intersection producing a hot spot is at D or worse during the peak hour. The intersections within the study area that operate at an LOS of D or worse during Year 2005 have been analyzed for the potential to create a CO hotspot (refer to Table 4, *Projected CO Concentrations*).

The analysis provides a worst-case scenario. Intersection turning movements are based on data supplied by the Project Traffic Impact Analysis. Because the p.m. peak hour results in higher intersection capacity utilization (ICU) (i.e., worse LOS) in all cases, the p.m. peak hour was used in the modeling process. Year 2005 projections are modeled using the existing lane configurations. The projected traffic volumes were then modeled using the CALINE4 dispersion model. The resultant values were then added to an ambient concentration. For the purposes of this analysis, the ambient concentrations

**Table 4
PROJECTED CO CONCENTRATIONS**

Intersection	1-Hour CO (ppm)		8-Hour CO (ppm)	
	1-Hour Standard	Future + Project	8-Hour Standard	Future + Project
Van Buren Street/Avenue 50	20 ppm	4.4 ppm	9 ppm	3.1 ppm
Frederick Street/Avenue 50	20 ppm	4.4 ppm	9 ppm	3.1 ppm

Notes:

- As measured at a distance of 10 feet from the corner of the intersection predicting the highest value. Presented 1-hour CO concentrations include a background concentration of 3.3 ppm. Eight-hour concentrations are based on a persistence of 0.7 of the 1-hour concentration.
- The State 1-hour standard is 20 ppm. The Federal standard is 35 ppm. The most stringent standard is reflected in the Table.
- The State 8-hour and Federal 8-hour standard is 9 ppm.

are taken as the highest one-hour concentration that was measured at the nearest monitoring station. Future ambient concentrations would be far lower than present levels based upon expected trends and advancing technologies.

The Van Buren Street/Avenue 50 and Frederick Street/Avenue 50 intersections operate at an LOS D, and are projected to increase the delay time by more than two percent. The maximum Year 2005 1-hour weekday CO concentration is 4.4 ppm for both intersections. The CO levels are well below the State and Federal standards of 20 ppm and 35 ppm respectively. The proposed Project would not result in adverse CO emissions. Additionally, the measured concentrations are well below the State and Federal standard of 9 ppm. Therefore, the proposed Project would not result in adverse CO emissions and impacts in this regard would be less than significant.

Mitigation Measures:

AQ1 *All off-road construction equipment shall use aqueous diesel fuel.*

AQ2 *During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the South Coast Air Quality Management Districts Rules and Regulations.*

Comply with AQMD Rule 403, particularly to minimize fugitive dust and noise to surrounding areas. SCAQMD Rule 403.1, as amended, should be adhered to, ensuring the clean up of the construction-related dirt on approach routes to the site, and the application of water and/or chemical dust retardants that solidify loose soils, should be implemented for construction vehicle access, as directed by the City Engineer. This should include covering, watering or otherwise stabilizing all inactive soil piles (left more than 10 days) and inactive graded areas (left more than 10 days).

- *On-site vehicle speed will be limited to 15 miles per hour.*
- *All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily*

with complete coverage, preferable in the late morning and after work is done for the day.

- *Unpaved haul roads shall be watered at least twice daily.*
- *All material transported on-site or off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.*
- *The area disturbed by clearing, grading, earth moving, or excavation operations will be minimized so as to prevent excessive amounts of dust.*
- *These control techniques will be indicated in Project specifications. Compliance with this measure will be subject to periodic site inspections by the City.*

AQ3 *Project grading plans shall show the duration of construction. Ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Compliance with this measure will be subject to periodic inspections of construction equipment vehicles by the City.*

AQ4 *All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.*

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)?*

Less Than Significant Impact. Cumulative projects include local development as well as general growth within the Project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for a project's air quality analysis must be regional by nature.

The Project area is in attainment for CO. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the SSAB. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, the greatest cumulative impact on the quality of regional air will be the incremental addition of pollutants mainly from increased traffic from residential, commercial and industrial development and the use of heavy equipment and trucks associated with the construction of these projects.

With respect to emissions that may contribute to exceeding state and federal standards, a CO hot spot screening analysis was performed for Year 2005 traffic. The results of this analysis shows that continued background growth in the area would not violate

published air quality standards, and therefore do not present a significant cumulative impact. In addition, due to the Project's relatively small scale, the contribution to the cumulative air emissions is not "cumulatively considerable".

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact. Sensitive populations (i.e., children, senior citizens and acutely or chronically ill people) are more susceptible to the effects of air pollution than the general population. Land uses considered sensitive receptors typically include residences, schools, playgrounds, child care centers, hospitals, convalescent homes and retirement homes. The proposed Project would not expose sensitive receptors to substantial pollutant concentrations, as construction and operational air emissions would not exceed SCAQMD thresholds. In addition, long-term (mobile) emissions would not exceed SCAQMD thresholds. Less than significant impacts would occur in this regard with development of the proposed Project.

e) *Create objectionable odors affecting a substantial number of people?*

Less Than Significant Impact. Construction activities associated with the Project may generate detectable odors typical of construction equipment exhaust. Odors associated with diesel and gasoline fumes are transitory in nature and would not create objectionable odors affecting a substantial number of people. The impacts of these odors would be short-term, would cease upon Project completion, and are not anticipated to be significant.

4.4 **BIOLOGICAL RESOURCES. *Would the project:***

BonTerra Consulting conducted a search of available literature to identify special status plants, wildlife, and habitats known to occur in the vicinity of the Project site (refer to Appendix C, *Biological Resources Assessment*). The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (2003) and compendia of special status species published by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) were reviewed. In addition, the CDFG's California Natural Diversity Database was reviewed (CDFG 2003).

A general biological survey was conducted on January 7, 2004 to describe the vegetation and evaluate the potential of habitats on the Project site to support special status plant and wildlife species. The timing of the survey was not conducive to identifying certain special status annual plants that sprout briefly during the spring and then die back; however, potential habitat to support these species could be identified.

The Project site was walked in parallel transects approximately 30 feet apart, covering the entire Project site. All plant and wildlife species or signs of presence observed were recorded in field notes. Plant species were identified in the field or collected for future identification. Plants were identified using keys in Hickman (1993), Munz (1974), and Abrams (1923, 1960). Taxonomy follows Hickman (1993) for scientific and common names. Taxonomy and nomenclature for wildlife generally follows AOU (1998) for birds, Collins and Taggart (2002) for amphibians and reptiles, and Kays and Wilson (2002) for mammals. All wildlife species observed were recorded in field notes.

- 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 (CDFG) or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated.

Vegetation

Vegetation on the Project site consists of three types following the CDFG List of California Terrestrial Natural Communities (2002). These vegetation types consist of disturbed/ruderal, disturbed and developed areas.

Disturbed/ruderal areas on the Project site are characterized by the remnant east-west trending agricultural crop rows with native and non-native weeds and shrubs. The dominant plant in this vegetation type is saltbush (*Atriplex* sp.) with other species occurring throughout including four-wing saltbush (*Atriplex canescens*), Bermuda grass (*Cynodon dactylon*), Jimson weed (*Datura wrightii*), red-stemmed filaree (*Erodium cicutarium*), sunflower (*Helianthus annuus*), cheese bush (*Hymenoclea salsola*), arrow weed (*Pluchea sericea*), Russian thistle (*Salsola tragus*), bush seepweed (*Suaeda moquinii*) and salt cedar (*Tamarisk* sp.).

Disturbed areas on the Project site are characterized by substrate disturbed by grading and/or disking prior to and during the survey. This portion of the Project site is currently devoid of vegetation and consists of bare ground.

Developed areas on the Project site consist of paved areas and a man-made structure including a small prefabricated warehouse (less than 5,000 square feet) and associated parking lot. This portion of the Project site is currently devoid of vegetation.

Wildlife

Vegetation on the Project site provides potential habitat for several wildlife species. Wildlife species found or expected to occur on the Project site include species associated with agricultural operations and disturbed/ruderal vegetation in low desert areas.

No common reptile species were observed on the Project site given the timing of the survey during winter hibernation for species occurring in the region. Reptile species potentially occurring on the Project site includes the desert iguana (*Dipsosaurus dorsalis*), side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), coachwhip (*Masticophis flagellum*), gopher snake (*Pituophis melanoleucus*) and sidewinder (*Crotalus cerastes*).

No fish or amphibian species were observed during the survey and none would be expected to occur on the Project site due to the lack of permanent water. Additionally, no depressions or other sources of temporary water substantial enough to provide amphibian breeding pools currently exist on the Project site.

Common bird species or evidence of their presence observed during the survey included killdeer (*Charadrius vociferous*), mourning dove (*Zenaida macroura*), common ground-dove (*Columbina passerina*), rock pigeon (*Columba livia*), white-throated swift

(*Aeronautes saxatalis*), Say's phoebe (*Sayornis saya*), loggerhead shrike (*Lanius ludovicianus*), verdin (*Auriparus flaviceps*), cactus wren (*Campylorhynchus brunneicapillus*), northern mockingbird (*Mimus polyglottos*), yellow-rumped warbler (*Dendroica coronata*), California towhee (*Pipilo crissalis*), white-crowned sparrow (*Zonotrichia leucophrys*), great-tailed grackle (*Quiscalus mexicanus*), lesser goldfinch (*Carduelis psaltria*), house finch (*Carpodacus mexicanus*) and house sparrow (*Passer domesticus*). Other year-round resident desert species potentially occurring on the Project site include black phoebe (*Sayornis nigricans*), western meadowlark (*Sturnella neglecta*) and Brewer's blackbird (*Euphagus cyanocephalus*).

Raptor species or evidence of their presence observed during the survey included American kestrel (*Falco sparverius*) and burrowing owl (*Athene cunicularia*). The Project site may also provide potential foraging habitat for the turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*) and prairie falcon (*Falco mexicanus*).

One mammal species, the desert cottontail (*Sylvilagus audubonii*), was observed on the Project site. Other mammal species potentially occurring on the Project site include western harvest mouse (*Reithrodontomys megalotis*), deer mouse (*Peromyscus maniculatus*), house mouse (*Mus musculus*) and Botta's pocket gopher (*Thomomys bottae*). Additionally, the coyote (*Canis latrans*) may incidentally occur on the Project site.

Several bat species may forage on the Project site including the Mexican free-tailed bat (*Tadarida brasiliensis*), pallid bat (*Antrozus pallidus*), fringed myotis (*Myotis thysanodes*), California myotis (*Myotis californicus*), western small-footed myotis (*Myotis ciliolabrum*), western pipistrelle (*Pipistrellus hesperus*) and big brown bat (*Eptesicus fuscus*). No bats would be expected to roost on the Project site.

Special Status Biological Resources

BonTerra Consulting conducted a literature search to identify special status plants, wildlife, and habitats known to occur in the study area. For this Project, the study area is defined as an approximately 250-square mile area as shown on the Indio, Thermal Canyon, Valerie, and Mecca USGS 7.5-minute California Quadrangle maps. Special status biological resources include plant and wildlife species, and habitats that have been afforded special status and/or recognition by federal and/or state resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (e.g., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitation of its population size, or geographic range and/or distribution resulting in most cases from habitat loss.

Special Status Plant Species

Of those plant species that occur in the region, 10 species are listed or proposed for listing as Endangered or Threatened by the CDFG and/or the USFWS, or are CNPS List 1B or List 2 species. A brief description of the Threatened or Endangered species potentially occurring on the Project site is provided below. Additionally, the species identified by the CNDDDB and CNPS records searches for the study area along with their listing status and potential for occurrence are listed in Table 5, *Special Status Plant Species Known to Occur in the Study Area*. It should be noted that other species that are considered rare or of limited distribution may occur in the Project region; however,

none of these species are listed as Threatened or Endangered and substantial populations would not be expected to occur on the Project site.

Table 5
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE STUDY AREA¹

Species	Status		Potential For Occurrence
	Federal/State	CNPS	
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	None	1B	Low; marginally suitable habitat
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch	FE	1B	Low; marginally suitable habitat
<i>Chamaesyce platysperma</i> flat-seeded spurge	SOC	1B	Not expected to occur; outside known range; presumed extinct
<i>Ditaxis clariana</i> glandular ditaxis	None	2	Moderate; suitable habitat present
<i>Ditaxis serrata</i> var. <i>californica</i> California ditaxis	None	3	Moderate; suitable habitat present
<i>Gilia maculata</i> Little San Bernardino Mountains gilia	None	1B	Not expected to occur; lack of suitable habitat, well below known elevation range
<i>Mentzelia tridentata</i> creamy blazing star	None	1B	Not expected to occur; lack of suitable habitat, well below known elevation range
<i>Nemacaulis denudata</i> var. <i>gracilis</i> slender woolly-heads	None	2	Moderate; suitable habitat present
<i>Stemodia durantifolia</i> purple stemodia	None	2	Not expected to occur; lack of suitable habitat
<i>Xylorhiza cognata</i> Mecca-aster	None	1B	Not expected to occur; lack of suitable habitat

Federal Designations:
 FE = Listed by the federal government as an Endangered species.
 FT = Listed by the federal government as a Threatened species.
 SOC = Species of Concern [as noted by CNDDDB 2000A], former FC2 species.

State Designations:
 SE = Listed as Endangered by the State of California.
 ST = Listed as Threatened by the State of California.

California Native Plant Society (CNPS):
 CNPS 1A = Plants presumed extinct in California.
 CNPS 1B = Plants considered Rare, Threatened or Endangered in California and elsewhere.
 CNPS 2 = Plants Rare, Threatened or Endangered in California but more common elsewhere.
 CNPS 3 = Plants about which we need more information - A review list.
 CNPS 4 = Plants of limited distribution - A watch list.

¹ The study area is defined as an approximately 250-square mile area as shown on the Indio, Thermal Canyon, Valerie and Mecca USGS 7.5-minute California Quadrangle maps.

Source: BonTerra Consulting, *Biological Resources Assessment*, August 2002.

Coachella Valley Milk-vetch (*Astragalus lentiginosus* var. *coachellae*)

The Coachella Valley milk-vetch is a federally-listed Endangered species. Coachella Valley milk-vetch may flower as early as February or as late as May, depending on rainfall and temperature. It is endemic to windblown sand in the Coachella Valley from Cabazon to Indio, below approximately 1,200 ft above mean sea level (msl). It is also reported on hillsides surrounding the dunelands. It is an annual or short-lived perennial with a deep taproot that dies back to ground level in the summer. After flowering, the leaves dry and fall. In some years this species may not come up at all. This species has a low potential to occur on the Project site due to the presence of marginally suitable habitat.

Special Status Wildlife Species

Of the wildlife species that occur in the region, 12 species are listed by the CNDDDB as Threatened and/or Endangered or considered species of concern by the USFWS and/or CDFG have the potential to occur on the Project site. Brief descriptions of the Threatened or Endangered species are listed below alphabetically according to their scientific name. Additionally, the species identified by the CNDDDB records search for the study area along with their listing status and potential for occurrence are listed in Table 6, *Special Status Wildlife Species Known to Occur in the Study Area*. It should be noted that other species that are considered rare or of limited distribution may occur in the Project region; however, none of these species are listed as Threatened or Endangered and substantial populations would not be expected to occur on the Project site.

Fish

Desert Pupfish (*Cyprinodon macularius*)

The desert pupfish is a state- and federally-listed Endangered species. This species inhabits springs, marshes, lakes, and pools of creeks over mud or sand where it feeds on algae and can tolerate extreme environmental conditions, including temperatures up to 113 degrees Fahrenheit (45 degrees Celsius), salinities as high as 142 parts per thousand (ocean water is typically 33 parts per thousand), and oxygen concentrations as low as 0.13 milligram per liter (the lowest known for any fish species restricted to gill breathing). The desert pupfish is not expected to occur on the Project site due to lack of standing water in the Project area.

Reptiles

Coachella Valley Fringe-toed Lizard (*Uma inornata*)

The Coachella Valley fringe-toed lizard (CVFTL) is a federally-listed Threatened and state-listed Endangered species restricted to sand dunes in the Coachella Valley and requires habitat with fine, loose, windblown sand and widely spaced desert shrubs.

Suitable habitat can include loose sand dunes, sand hummocks and the edges of washes where sand has accumulated. Critical habitat was designated for the CVFTL at the time of federal listing. The northern and western boundaries of designated critical habitat extend beyond the limits of the CVFTL's distribution to include the sand source,

Table 6
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE STUDY AREA¹

Species	Status		Potential For Occurrence
	Federal	State	
Invertebrates			
<i>Macrobaetes valgum</i> Coachella giant sand-treader cricket	SOC	None	None; lack of suitable habitat
<i>Oliarces clara</i> cheeseweed owl	SOC	None	None; lack of suitable habitat
<i>Stenopelmatus cahuilensis</i> Coachella Valley Jerusalem cricket	SOC	None	None; lack of suitable habitat
Fish			
<i>Cyprinodon macularius</i> desert pupfish	FE	SE	None; lack of suitable habitat
Reptiles			
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	FT	SSC/P	None; lack of suitable habitat
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	FT	SE	None; lack of suitable habitat
Birds			
<i>Falco mexicanus</i> prairie falcon	None	SSC	High for foraging; no potential for nesting
<i>Lanius ludovicianus</i> loggerhead shrike	SOC	SSC	Observed; suitable nesting habitat present
<i>Speotyto cunicularia</i> burrowing owl	SOC	SSC	Observed; suitable habitat present
<i>Toxostoma lecontei</i> LeConte's thrasher	SOC	None	Low for foraging; None for nesting
Mammals			
<i>Ovis canadensis nelsoni</i> DPS Peninsular bighorn sheep	FT	SE	None; lack of suitable habitat and distance from known populations
<i>Spermophilus tereticaudus chlorus</i> Coachella Valley round-tailed ground squirrel	C	SSC	Low; marginally suitable habitat present
LEGEND			
Federal (USFWS)		State (CDFG)	
FE	Endangered	E	Endangered
FT	Threatened	T	Threatened
PE	Proposed Endangered	PE	Proposed Endangered
PT	Proposed Threatened	PT	Proposed Threatened
C	Candidate Species	SSC	Species of Special Concern
SOC	Species of Concern ²	FP	Fully Protected
		P	Protected
¹ The study area is defined as an approximately 250-square mile area as shown on the Indio, Thermal Canyon, Valerie and Mecca USGS 7.5-minute California Quadrangle maps. ² This designation, although not an active term, has been reinstated for informational purposes only.			
Source: BonTerra Consulting, <i>Biological Resources Assessment</i> , August 2002.			

which is essential for maintaining down-wind blow sand deposits. The Project site is located outside the designated critical habitat boundaries.

Mammals

Peninsular Bighorn Sheep (*Ovis canadensis nelsoni*)

The peninsular bighorn sheep is a federally-listed Endangered and state-listed Threatened/Fully Protected species. This species is considered a Distinct Population Segment (DPS) of the Nelson's bighorn sheep more common in the mountain ranges of central and southern Nevada, northwestern Arizona and eastern Idaho. The peninsular population segment occurs on the steep slopes, canyons, and washes of the San Jacinto and Santa Rosa mountains generally below 4,600 ft above msl. Steep (50 to over 70 percent slopes) and rough (i.e., with many small-scale changes in slope) terrain is utilized extensively for escape cover, but flat areas such as bajadas or alluvial fans at the base of mountains are often used for foraging.

A total of approximately 844,897 acres in Riverside, San Diego and Imperial counties, California, were designated Critical Habitat for the Peninsular bighorn sheep by the USFWS on February 1, 2001. Designated Critical Habitat encompasses the San Jacinto Mountains and adjacent lowlands approximately five miles to the west of the Project site. This species is not expected to occur on the Project site due to the lack of suitable habitat and distance from suitable habitat and known populations.

Summary

Special Status Plants

Five special status plant species have potential to occur on the Project site, including one federally-listed Endangered species. Therefore, spring botanical surveys for these species should be conducted during their appropriate survey "window" to determine their presence or absence on the Project site. If a substantial population of one of these species were found on the Project site, impacts on the population would require mitigation. If construction of the proposed Project is expected to commence prior to the survey window for the special status plant species, the proposed Project would have to address these species as potentially present and make a finding of potentially significant based on habitat suitability alone. This would require the development and implementation of mitigation measures prior to construction.

Special Status Wildlife

One special status wildlife species, the burrowing owl, was observed on the Project site. Additionally, the Palm Springs round-tailed ground squirrel has potential to occur on the Project site.

Raptors

Raptors, including the American kestrel and burrowing owl, were observed on the Project site during the survey. Burrowing owl burrows are protected under Fish and Game Code Section 3503.5, which prohibits "take, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or take, possession, or

destruction of the nest or eggs of any such bird". In order to avoid impacts to an occupied burrowing owl burrow, focused surveys should be conducted prior to commencement of clearing or grading operations on the Project site. American kestrels are not expected to breed on the Project site. In order to avoid impacts to an occupied burrowing owl burrows, focused surveys should be conducted prior to commencement of clearing or grading operations on the Project site. Additionally, if clearing or grading operations are planned during the breeding season for any of these species, a breeding raptor survey should be conducted prior to any clearing or grading activities.

Coachella Valley Round-tailed Ground Squirrel

The Coachella Valley round-tailed ground squirrel is a federal Candidate for listing as Threatened or Endangered and, as such, is not protected by the federal or state ESAs. However, if a population of this species is known to occur on a site, impacts to the species may be considered significant depending on the size of the population detected. Therefore, if a population were found within the Project area, mitigation would be required in consultation with the CDFG. Mitigation generally consists of purchase of known occupied habitat for preservation.

Mitigation Measures:

BIO1 Spring botanical surveys shall be conducted during Spring 2004 assuming appropriate weather conditions occur (i.e., appropriate rainfall) to determine if special status plant species are present or absent. If no special status plant species are identified within the study area, no further mitigation shall be required. If a sizeable population of special status plant species is located within the study area, mitigation shall be developed through either a conservation easement or mitigation plan. The mitigation plan shall include the following requirements:

- *A pre-construction survey conducted during the peak flowering period for each respective special status plant potentially occurring on the Project site shall be conducted by the Project biologist the spring prior to grading.*
- *If a large population of special status plants (as determined by USFWS staff) is found during these surveys, the limits of each impacted location shall be clearly delineated with lath and brightly colored flagging.*
- *The locations of special status plants shall be monitored every two weeks by the Project biologist to determine when the seeds are ready for collection. A qualified seed collector shall collect all of the seeds from the plants to be impacted when the seeds are ripe. The seeds shall be cleaned and stored by a qualified nursery or institution with appropriate storage facilities.*
- *Following the seed collection, the top 12 inches of topsoil from special status plant populations shall be scraped, stockpiled and used in the selected mitigation location agreed upon by the City and the Project biologist.*

- The mitigation plan shall include detailed descriptions of maintenance appropriate for the Project site, monitoring requirements and annual reports requirements and shall have the full authority to suspend any operation on the Project site which is, in the qualified biologist's opinion, not consistent with the mitigation plan.
- The performance criteria developed in the mitigation plan shall include requirements for a minimum of 60 percent germination of the number of plants impacted. The performance criteria shall also include percent cover, density and seed production requirements. These criteria shall be developed by the Project biologist following habitat analysis of an existing habitat. This information shall be recorded by a qualified biologist.
- If the germination goal of 60 percent is not achieved following the first season, remediation measures shall be implemented and additional seeding may be necessary. Remedial measures would include at a minimum: soils testing, control of invasive species, soil amendments and physical disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional mitigation measures may be suggested as determined necessary by the Project biologist.
- Potential seed sources from additional donor sites shall also be identified in case it becomes necessary to collect additional seed for use on the Project site following performance of remedial measures.

BIO2 In order to avoid impacts to an occupied burrowing owl burrow, focused surveys shall be conducted prior to commencement of clearing or grading operations on the Project site. Additionally, if clearing or grading operations are planned during the breeding season for any of these species, a breeding raptor survey shall be conducted prior to any clearing or grading activities.

Surveys for burrowing owl shall be conducted according to a protocol prepared by the Burrowing Owl Consortium of the Santa Cruz Predatory Bird Research Group. Surveys shall be conducted by walking through suitable habitat over the entire Project site and in areas within approximately 500 feet of the Project impact zone. Any active burrows found during survey efforts shall be mapped on the construction plans. If no active burrowing owl burrows are found, no further mitigation is required. Results of the surveys shall be provided to the CDFG.

BIO3 If burrowing owl nest sites are found, the following restrictions on construction are required between March 1 and August 31 (or until nests are no longer active as determined by a qualified biologist):

- Clearing limits shall be established with a minimum of 250 feet, or as otherwise determined by a qualified biologist, in any direction from any occupied burrow exhibiting nesting activity; and

- Access and surveying shall not be allowed within 100 feet of any burrow exhibiting nesting activity. Any encroachment into the 250/100-foot buffer area around the known nest is allowed only if it is determined by a qualified biologist that the proposed activity shall not disturb the nest occupants.

If construction occurs outside of the breeding season, exclusion of burrowing owls from their burrow is a practice generally accepted by the CDFG. Exclusion of burrowing owls involves placement of one-way doors at the opening of known occupied burrows to allow egress from and preventing ingress to the burrow. In this manner the burrowing owl is forced to look for another suitable roosting location. One-way doors should be left in place for 48 hours to ensure owls have left the burrow before excavation. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

BIO4 Surveys for the Coachella Valley round-tailed ground squirrel shall be conducted according to guidelines provided by the USFWS and consist of the following:

- A minimum of three surveys conducted between May 1 and July 31;
- Each survey must be conducted from one hour after sunrise to four hours after sunrise;
- Temperatures in the shade must range from 80 degrees to 91.4 degrees Fahrenheit (27 degrees to 33 degrees Centigrade);
- Wind speeds must be low; and
- 100 percent of the study area must be covered, using walking transects spaced approximately 32 feet (10 meters) apart.

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 (CDFG) or U.S. Fish and Wildlife Service?

No Impact. The proposed Project would not result in impacts to riparian habitat or other sensitive natural community. The proposed Project would modify any natural drainage would be required to obtain a 1600 Streambed Alteration agreement from the California Department of Fish and Game (CDFG). Therefore, there would be no impacts in this regard.

- c) *Have a substantially adverse impact 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?*

No Impact. The proposed Project would not result in any adverse effects on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA).¹ Refer to response 4.4(b).

- 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?*

Less Than Significant Impact With Mitigation Incorporated. Refer to Response 4.4(a).

- e) *Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?*

Less Than Significant Impact. The City General Plan policies encourage preservation of the habitat areas of rare, threatened and endangered wildlife and plant resources within open space areas. Future development proposals will be required to demonstrate compliance with General Plan policies. Therefore, less than significant impacts would occur in this regard.

- 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?*

Less Than Significant Impact With Mitigation Incorporated. The Coachella Valley Association of Governments (CVAG) is currently preparing a Multiple Species Habitat Conservation Plan (MSHCP) and Natural Community Conservation Plan (NCCP) for the Coachella Valley region. The MSHCP and NCCP will create large interconnected preserves for special status species and their habitats while streamlining the regulatory process outside of the reserve areas. This will be accomplished by providing a means to standardize mitigation/compensation measures for species covered by the plan and satisfy applicable provisions of federal and state ESAs, the California Environmental Quality Act (CEQA), and National Environmental Policy Act (NEPA). Measures will most likely take the form of payment of fees as a standard condition of approval for development within the fee area. A draft plan is expected to be circulated for public review after April 2004.

Mitigation Measure:

BIO5 *Adequate fees shall be paid according to the adopted MSHCP and NCCP shall it become adopted prior to Project development.*

¹ BonTerra Consulting, *Biological Resources Assessment*, August 2004.

4.5 CULTURAL RESOURCES. *Would the project:*

Archaeological Resource Management Corporation (ARMC) conducted a Phase I archaeological assessment for the 58-acre parcel (refer to Appendix E, *Cultural Resources Assessment*). The purpose of the assessment was to identify any archaeological sites or isolates (prehistoric or historic) within or adjacent to the Project site that might be impacted by the proposed development. Due to the limited nature of the Project, no formal research design was developed. In general the assessment was carried out to identify significant cultural resources that might be impacted by the proposed development.

Field Methods

The field crew walked 5-10 meter, zig-zag transects east to west and the reverse across the Project site. The surveyors scanned the exposed soil for evidence of prehistoric activities, items such as grinding equipment (manos, metates, mortars, and pestles), hunting equipment (arrowpoints or dart points; shaft or arrow straightener), storage or cooking items (ceramic vessels), and features, such as hearths. They also sought evidence of historic period artifacts, such as metals, kitchen items (glassware, dinnerware, cutlery) and consumer items (bottles, tins).

Database Search

The results of the records and literature search at the Eastern Information Center (EIC), University of California, Riverside, were that the property had not been previously surveyed for archaeological resources within the past five years and that no archaeological sites or isolates had been recorded within or adjacent to the Project site. The 1941 15' USGS topographic map (Coachella) revealed a structure that appeared to fall within the site boundaries. That structure was no longer present on the 1956 USGS topographic map (7.5' Indio Quadrangle). The results of the field survey were that the foundations for an agricultural complex (Primary Number 33-13197) were located and recorded on the property. See Appendix E for the site survey record.

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*

Less Than Significant Impact With Mitigation Incorporated.

The field crew observed that the Project site was completely disturbed by agriculture and related activities. Three quarters (northwest, southwest, southeast) of the Project site consisted of a plowed field. The field contained scattered dried plants allowing approximately 60 to 65 percent ground visibility. No evidence of prehistoric or historic resources was observed on the Project site.

Several dirt roads traversed the east and east-central parts of the Project site. In the northeast quarter of the Project site, an abandoned earthen reservoir, large recent dump, and a row of introduced ornamental trees surrounded two poured concrete foundations. These foundations appeared to have been part of temporary storage or processing buildings associated with the agricultural field and the reservoir. There was no evidence of a substantial structure at the site of the foundations; only one hole,

evidence of a bolt attachment, was found on the concrete slabs. Refer Appendix E for the site survey record for this small agricultural complex (Primary Number 33-13197).

In the extreme northeastern portion of the parcel, between the foundations, the reservoir, and Avenue 50, decomposing sod remnants were found, providing evidence that this portion of the Project site was devoted to sod farming. The dump, reservoir, sod patch and foundations area of the Project site permitted an estimated 20 to 30 percent ground visibility. These data are presented in the Site Survey Record (refer to Appendix E).

Prehistoric Resources

The records search through the EIC did not disclose any recorded prehistoric sites or isolates within or adjacent to the Project site. The field survey also did not record any prehistoric resources.

Historic Resources

The records search through the EIC revealed that a structure appeared to fall within the parcel boundaries by 1941, but it was no longer present by the 1956 topographic map revision date. No historic sites or isolates had been recorded previously within or adjacent to the parcel. The field survey revealed the foundations of a small agricultural complex, recorded as Primary Number 33-13197, within the Project boundaries.

The results were that an agricultural complex (Primary Number 33-13197) was found to be present within the Project boundaries. It is not, however, considered to be a significant archaeological resource, that is, it would not qualify for the California Register of Historic Resources (CRHR). Due to the presence of the historic archaeological site, the limited ground visibility, and the potential for encountering unknown and potentially significant archaeological resources, monitoring during grading is recommended. If in the course of grading archaeological resources are encountered, a qualified archaeologist should review the finds, assess their significance, develop and carry out a program of mitigation, where appropriate. Therefore, implementation of the recommended mitigation measure would reduce impacts to historical resources to a less than significant level.

Mitigation Measures:

CUL1 Prior to construction, the applicant shall hire a certified archaeologist to observe grading/ major trenching activities and salvage and catalogue archaeological resources as necessary. The archaeologist shall establish, in cooperation with the City, procedures for temporarily halting or redirecting work to permit sampling, identification and evaluation of the artifacts, as appropriate. If the archaeological resources are found to be significant, the archaeologist shall determine appropriate actions, in consultation with the City, for exploration and/or salvage.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?*

Less Than Significant Impact With Mitigation Incorporated. Results of the EIC search indicated that an agricultural complex (Primary Number 33-13197) was present

within the Project site boundaries. It is not, however, considered to be a significant archaeological resource, since it would not qualify for the California Register of Historic Resources (CRHR). Due to the presence of the historic archaeological site, the limited ground visibility, and the potential for encountering unknown and potentially significant archaeological resources, monitoring during grading is recommended. If in the course of grading archaeological resources are encountered, a qualified archaeologist should review the finds, assess their significance, develop and carry out a program of mitigation, where appropriate.

Mitigation Measures: Refer to Mitigation Measure CUL1.

- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No Impact. Results from the Cultural Resources Assessment indicated that no paleontological resources were identified through either the records search or the field survey. In addition, the Project site is well removed from designated Geologic Resource Areas, as indicated in the City General Plan Conservation Element. Therefore, there would be no impacts in this regard.

- d) *Disturb any human remains, including those interred outside of formal cemeteries?*

No Impact. There are no known formal or informal grave sites within the proposed Project area. Therefore, there would be no impacts in this regard.

4.6 GEOLOGY AND SOILS. *Would the project:*

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- 1) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Less Than Significant Impact. The Project site is located within the seismically active southern California region. Active faults are faults that are considered likely to undergo renewed movement within a period of concern to humans. These include faults that are currently slipping, those that display earthquake activity, and those that have historical surface rupture. The California Geological Survey (previously known as the California Division of Mines and Geology) defines active faults as those which have had surface displacement within Holocene time (about the last 11,000 years). Such displacement can be recognized by the existence of sharp cliffs in young alluvium, unweathered terraces, and offset modern stream courses. Potentially active faults are those believed to have generated earthquakes during the Quaternary period, but prior to Holocene time.

The seismic activity in the central portion of the Coachella Valley and the Coachella Valley segment of the San Andreas fault have been relatively low, compared to other parts of southern California. Several Alquist-Priolo Earthquake Fault Zones which are defined as active and potentially active faults either transect or are in close proximity to

the Project area. Active faults are defined by the California Department of Mines and Geology (CDMG) as those areas with evidence of ground rupture within 10,000 year old or less sediments. Active faults within the area include the San Andreas, Skeleton Canyon and Coachella Fan Fault zones. Potentially active faults that transect the Project area include the southeasterly fault segments or extensions of the Coachella fan fault zone and the northwesterly extensions of the Skeleton Canyon fault zones. The above fault zone extensions are considered segments of the San Andreas Fault zone and are not presently zoned for the Alquist-Priolo Earthquake Fault Zone or Riverside County Fault Zone studies. Therefore, impacts in this regard would be less than significant

2. *Strong seismic ground shaking?*

Less Than Significant Impact With Mitigation Incorporated. As previously stated the Project site is located within the seismically active region of southern California, which could result in groundshaking. Southern California is likely to experience, on average, an earthquake of Magnitude 7.0, and ten (10) earthquakes of Magnitude 6.0 over a period of 10 years.

There are no faults, active or inactive, that run through the Project site. In addition, the Project site is not located within an Alquist-Priolo Special Study Zones area. However, there are several active and potentially active fault zones, near the Project site that could result in groundshaking. These fault zones include Wildomar Fault and Murrieta Creek Fault Zone. Improvements and developments would be required to conform to all applicable City Ordinances, as well as adherence to standard engineering practices and design criteria. Therefore, mitigation measures are recommended to ensure that impacts from groundshaking would be reduced to a less than significant level.

Mitigation Measures:

GEO1 *All structures shall be designed as confirmed during the building design plan checking, to withstand anticipated groundshaking caused by future earthquakes within an acceptable level of risk (i.e., high risk zone), as designated by the City's latest adopted edition of the Uniform Building Code.*

3. *Seismic-related ground failure, including liquefaction?*

Less Than Significant Impact With Mitigation Incorporated. Liquefaction is the loss of strength of cohesionless soils when the pore water pressure in the soil becomes equal to the confining pressure. Liquefaction generally occurs as a "quicksand" type of ground failure caused by strong groundshaking. The primary factors influencing liquefaction potential include groundwater, soil type, relative density of the sandy soils, confining pressure and the intensity and duration of groundshaking. A majority of the City's Planning Area has a high generalized liquefaction potential, including the Project site, due to the presence of alluvial sediment and shallow or semi-perched groundwater to within 50 feet of the ground surface. The potential effects of seismic settlement may need to be mitigated. Mitigation measures typically include ground improvement techniques to reduce the potential for liquefaction or utilizing "deep" foundation systems for the proposed structures. Such methods may consist of compaction grouting;

overexcavation of near surface soils and the placement of a gravel blanket wrapped in geofabric beneath the structure(s); "rammed aggregate piers" which feature successive layers of densely compacted aggregate; and/or a deep foundation system such as driven piles. Specific recommendations and details to reduce the potential for surface manifestation of liquefaction should be provided in supplemental reports as the Project progresses and additional data is obtained and analyzed. Implementation of the recommended mitigation measures would reduce impacts regarding liquefaction and settlement to a less than significant level.

Mitigation Measures:

GEO2 *Prior to the issuance of a grading permit, a site specific geologic and soils report shall be prepared by a registered geologist or soils engineer and submitted to the City Building and Safety Division for approval. The report shall specify design parameters necessary to remediate any soil and geologic hazards.*

GEO3 *All grading, landform modifications and construction shall be in conformance with state-of-the-practice design and construction parameters. Typical standard minimum guidelines regarding regulations to control excavations, grading, earthwork construction, including fills and embankments and provisions for approval of plans and inspection of grading construction are set from the latest version of the Uniform Building Code. Compliance with these standards shall be evident on grading and structural plans. This measure shall be monitored by the City Building and Safety Division through periodic site inspections.*

GEO4 *Type 5 cement shall be used for all foundations and slabs on grade.*

4. *Landslides?*

Less Than Significant Impact. Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. The proposed Project site is not identified on Figure 52, *Environmental Hazards Policy Diagram*, of the City's General Plan, as an area susceptible to landslides. Therefore, impacts in this regard would be less than significant.

b) *Result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact With Mitigation Incorporated. According to the *Soil Survey of Riverside County, California, Coachella Valley Area* by the United States Department of Agriculture Soil Conservation Service, the Project site is situated on the Gilman-Coachella-Indio association. This association is nearly level to rolling, somewhat excessively drained to moderately well drained fine sands, fine sandy loams, silt loams, loamy fine sands and very fine sandy loams on alluvial fans. Two soil series are present on the Project site and are briefly described below.

Gilman fine sandy loam generally occurs on alluvial fans and flood plains of the Coachella Valley. Depth to the high water table is 40 to 60 inches. Runoff is slow and

the erosion hazard is slight. The soil is moderately alkaline. The hazard of soil blowing is moderate. Available water capacity is 9.5 to 10.5 inches. This soils is used for truck crops, citrus, cotton, alfalfa hay and dates.

Gilman silt loam is a nearly level soils that has a silt loam surface layer and is moderately alkaline. Runoff is very slow on this moderately permeable soil. The erosion hazard is slight. Available water capacity is 9.5 to 10.5 inches. The depth to the water table is 40 to 60 inches. The soil is used for dates, cotton, alfalfa hay and recreation.

Site preparation would include site grading of the entire Project site. Development on-site would be subject to City codes and requirements for erosion control, grading, and soil remediation as recommended in Mitigation Measures GEO5 and GEO6 and Mitigation Measure AQ2, which would reduce impacts to a less than significant level.

Mitigation Measures:

GEO5 *Precise grading plans shall include an Erosion, Siltation and Dust Control Plan to be approved by the City Building Division. The Plan's provisions may include sedimentation basins, sand bagging, soil compaction, revegetation, temporary irrigation, scheduling and time limits on grading activities, and construction equipment restrictions on-site. This plan shall also demonstrate compliance with South Coast Air Quality Management District Rule 403, which regulates fugitive dust control.*

GEO6 *As soon as possible following the completion of grading activities, exposed soils shall be seeded or vegetated seed mix and/or native vegetation to ensure soil stabilization.*

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

Less Than Significant Impact With Mitigation Incorporated. As identified on Figure 52 of the City's General Plan, the only geologic hazards associated with the proposed Project site is the potential for liquefaction to occur. As indicated above, mitigation measures would reduce the impacts from liquefaction to a less than significant level. Therefore, impacts in this regard would be less than significant.

Mitigation Measures: Refer to Mitigation Measures GEO2 through GEO4.

- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?*

Less Than Significant Impact. As mentioned previously, dominant soil association in the Project area is the Gilman-Coachella-Indio soil association. Characteristics of the Gilman fine sandy loam association are well drained soils with slow runoff and slight erosion hazard. These soils are generally non-expansive and therefore, impacts in this regard would be less than significant.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal system where sewers are not available for the disposal of waste water?*

Less Than Significant Impact. Implementation of the proposed Project does not have the capacity to affect existing and/or proposed septic tanks or alternate wastewater disposal systems. Therefore, impacts in this regard would be less than significant.

4.7 HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

A Phase I Environmental Site Assessment (ESA) was prepared by RBF Consulting, dated February 6, 2004 (refer to Appendix A. *Phase I Environmental Site Assessment*). The purpose of conducting the ESA is to satisfy one of the requirements to qualify for the Innocent Landowner Defense to CERCLA (Superfund Law) liability, by providing an appropriate inquiry into the previous uses of the Project site in order to identify Recognized Environmental Conditions (RECs). As defined in American Society for Testing and Materials (ASTM) Standard Practice E 1527-00, a REC is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include "de minimis" conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be "de minimis" are not RECs.

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact With Mitigation Incorporated. The Project proposes development of residential uses on the Project site. Hazardous materials are not typically associated with this type of land use. Minor cleaning products along with the occasional use of pesticides and herbicides for landscape maintenance of the Project site are the extent of materials used and applicable here. Implementation of the recommended mitigation measure would ensure all impacts regarding hazardous materials would be reduced to a less than significant level.

Mitigation Measure:

- HAZ1 *Any hazardous waste that is generated on-site shall be transported to an appropriate disposal facility by a licensed hauler in accordance with the appropriate State and Federal laws.*

- 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?*

Less Than Significant Impact With Mitigation Incorporated. A summary of results of the Phase I ESA is as follows (refer to Appendix A for a complete discussion of the investigation and conclusions).

Site Inspection

Evidence of recognized environmental conditions within the boundary of the Project site was observed during the January 5, 2004 site inspection, which consisted of the following:

- Miscellaneous debris (i.e., hoses, pipeline, tires, wood, vegetation) was noted throughout various portions of the Project site, primarily along the boundaries that adjoin existing dirt roadways. Within the northeastern portion of the Project site, one 55-gallon drum, debris and piles of concrete blocks were present. RBF could not visually inspect the ground surface in areas where debris was present, especially large inaccessible debris piles.
- Miscellaneous agricultural equipment (e.g., an old truck, shipping boxes, tools) was noted to the south of the on-site structure. The abandoned farm equipment appeared to be in poor condition; RBF could not visually inspect the ground surface that underlies the on-site equipment and materials.
- The maintenance yard appeared to contain miscellaneous debris, tractors, and radiators. However, access to the maintenance yard and associated structure was unavailable at the time of the Assessment.
- Surficial staining of the ground surface (bare soil) was visually observed within the maintenance yard and adjacent to the south of the on-site structure.
- One water well was observed within the boundaries of the Project site during the January 5, 2004 inspection.

Asbestos Containing Materials

Based upon the year the existing structure present on-site was built (prior to 1978), the potential for asbestos-containing materials (ACMs) to be found on-site is considered likely.

Lead-Based Paints

Based upon the year the existing structure present on-site was built (prior to 1978), the potential for lead-based paints (LBPs) to be found on-site is considered likely.

Adjacent Properties

The presence of hazardous materials on the Project site that may have been generated from adjacent properties was not visible during the January 5, 2004 site inspection.

Public Records

Available public records (provided by Environmental Data Resources, Inc. (EDR)) were reviewed by RBF on December 12, 2003. The list reviewed identified one regulatory property within the boundaries of the Project site, which is briefly described below:

- 84265 Avenue 50 was listed within the Historical Underground Storage Tank (HIST UST) database. The HIST UST database contains historical listings of underground storage tank locations. 84265 Avenue 50 has been listed within this database for the presence of two historical underground storage tanks within the Project site. No contamination has been reported within the EDR database with respect to the Project site.

The list identified 18 listed regulatory sites located within a one-mile radius of the Project site. A potential REC on the Project site caused by these properties is considered to be low due to the groundwater flow direction from the Project site, and/or the status of the identified sites.

Historic Recognized Environmental Condition

A "historic recognized environmental condition" (HREC) is defined as a condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. HRECs are generally conditions that have in the past been remediated to the satisfaction of the responsible regulatory agency. A HREC has been identified since the Project site has been listed as having two historic USTs. The exact location of the historic USTs remains undefined; no closure/removal records were found during the review of building department records.

Historical Use(s) Information

Review of available environmental documentation and interviews indicates that past on-site activities have created the potential for environmental conditions to be present within the boundary of the Project site. Based upon the site inspection, review of available historical aerial photographs and interviews, portions of the Project site were historically used for agricultural purposes and portions of the Project site are have been utilized as a nursery for several years. Therefore, a combination of several commonly used pesticides (i.e., DDD, DDT, DDE), which are now banned may have been used throughout the Project site. It should be noted that the historical use of agricultural pesticides might have resulted in pesticide residues of certain persistence in soil at concentrations that are considered to be hazardous according to established Federal regulatory levels. The primary concern with historical pesticide residues is human health risk from inadvertent ingestion of contaminated soil, particularly by children. The presence of moderately elevated pesticide residuals in soil present potential health and marketplace concerns.

Based upon the results of the Phase I ESA, mitigation measures are recommended in order to reduce impacts regarding hazardous materials to a less than significant level.

Mitigation Measures:

- HAZ2 All miscellaneous vehicles, maintenance equipment and materials, construction/irrigation materials, miscellaneous stockpiled debris, 1 and 5-gallon containers, construction/irrigation materials, and former agricultural equipment, should be removed off-site and properly disposed of at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials should be performed. Any stained soils observed underneath the removed materials should be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.
- HAZ3 Soil sampling should be performed within the maintenance yard to characterize the extent of contamination associated with the surficial soil staining. Soil should be removed and disposed of at an appropriate landfill facility in accordance with state and federal requirements.
- HAZ4 The majority of the Project site has been historically utilized for agricultural purposes for several decades and may contain pesticide residues in the soil. Soil sampling should occur throughout the Project site, including the maintenance and staging areas. The sampling will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that may be required.
- HAZ5 The terminus of all undocumented pipes should be defined. The primary concern with pipes that extend into the ground surface is the potential for the pipe(s) to act as a ventilation apparatus for a UST. Should USTs be present, the USTs should be removed and properly disposed of at an approved landfill facility. Once the UST is removed, a visual inspection of the areas beneath and around the removed UST should be performed. Any stained soils observed underneath the UST should be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.
- HAZ6 The location of the two former USTs should be defined since no closure/removal records were found during this Assessment. Once identified, soil sampling should be performed within the former UST areas to characterize the extent of contamination (if any) associated with the former USTs staining.
- HAZ7 The on-site water well should be properly removed and abandoned pursuant to the latest procedures required by the local agency with closure responsibilities for the wells. Any associated equipment should be removed off-site properly disposed of at a permitted landfill. A visual inspection of the areas beneath the removed materials (if present) should be performed.
- HAZ8 A visual inspection of the interior the on-site structure is recommended. In the event that hazardous materials are encountered, they should be properly

tested and then properly disposed of pursuant to State and Federal regulations.

HAZ9 Any transformers to be removed/relocated should be conducted under the purview of the local utility purveyor to identify property handling procedures regarding potential PCBs.

HAZ10 Based upon the year the existing structure located on the Project site was built (prior to 1978), asbestos-containing materials and lead-based paint may be present within the existing on-site structures and would need to be handled properly prior to remodeling or demolition activities.

HAZ11 If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contract shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the Project Engineer of the implementing Agency;
- Secure the area as directed by the Project Engineer; and
- Notify the implementing agency's Hazardous Waste/Materials Coordinator.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. No existing or proposed school facilities are located within a one-quarter mile radius of the Project site. Furthermore, as previously stated in Response 4.7(a), the proposed Project would not involve the use, storage, transport, and/or disposal of hazardous materials. Therefore, impacts in this regard would be less than significant.

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?

Less Than Significant Impact With Mitigation Incorporated. The governmental sources have been searched by EDR (at the request of RBF), for sites within the Project site and within an approximate one-mile radius of the Project site boundaries. Upon completion of their search, EDR provided RBF with their findings dated December 12, 2003 (refer to Appendix A, *Phase I Environmental Site Assessment*). To reduce the potential for omitting possible hazardous material sites on the Project site and within the surrounding area, sites may be listed in this report if there is any doubt as to the location because of discrepancies in map location, zip code, address, or other information.

The lists identified 18 regulatory sites located within a one-mile radius of the Project site. A REC on the Project site caused by one or more of these sites are considered to be low

due to the groundwater flow direction; the distance and direction from the Project site; and/or the status of the identified sites. For a complete list of sites identified and their status, refer to the map of sites within a one-mile radius of the Project site. Table 7, *Identified Sites Within a One-Mile Radius of the Project Site*, below, indicates the listed regulatory sites located within a one-mile radius of the Project site.

As discussed in Response 4.7(d), implementation of the recommended mitigation measures would reduce impacts regarding hazardous materials to a less than significant level.

Mitigation Measure: Refer to Mitigation Measures HAZ11 and HAZ15.

- 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?*

No Impact. The proposed Project is not located within an airport land use plan, or within two miles of a public airport or public use airport. The nearest airport is the Desert Resorts Regional Airport serving the greater Coachella Valley located approximately six miles southeast of the Project site. Implementation of the proposed Project would not result in a safety hazard for people residing or working in the Project area.

- 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?*

No Impact. Refer to Response 4.7(e).

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

No Impact. Implementation of the proposed Project would not interfere with an existing emergency response plan. No revisions to adopted emergency plans would be required, as a result of the proposed Project. Therefore, no impacts are anticipated as a result of Project implementation.

- 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?*

No Impact. The proposed Project does not have the capacity to expose people or structures to wildland fires. No impacts would occur in this regard.

Table 7
IDENTIFIED SITES WITHIN A ONE-MILE RADIUS OF THE PROJECT SITE

EDR Map ID#	Site Name/Address	Direction from Project site	Regulatory LIST	Site Status	Potential for an Environmental Condition on the Project site
1	Ranch 1 84265 Avenue 50 Coachella, CA 92236	Project site	HIST UST	Two (2) historical underground storage tanks reported on-site.	Low (Historical USTs; No contamination reported)
A2-A3	Sungold #1 Ranch Ave 50/Van Buren Thermal, CA 92274	0.12-miles west of the Project site	HIST UST CHMIRS	One (1) historical underground storage tank reported on-site.	Low (No contamination reported)
4	50606 Suncrest St. #6 Coachella, CA 92670	0.65-miles east of the Project site	CHMIRS	Suspicious mail at residence. Letter turned over to County Health, nothing found.	Low (Refer to site status)
5	50071 Kenmore Street Coachella, CA 92670	0.60-miles east of the Project site	CHMIRS	Sulfur contamination at residence. Resident washed agricultural spraying rig, runoff water went into street. Cleanup by county fire and health.	Low (Refer to site status)
6	Soco Apple Market #4 50980 Highway 86 Coachella, CA 92236	0.70-miles east of the Project site	LUST Cortese	Leaking underground storage tank on-site. Gasoline contamination, aquifer affected. MTBE detected.	Low (Contamination down gradient and greater than ½-mile from Project site)
7	Chevron Station #9-2447 49-975 Harrison Coachella, CA 92236	0.70-miles northeast of the Project site	Notify 65 LUST Cortese	Leaking underground storage tank on-site. Gasoline contamination, aquifer affected. Case closed July 9, 1998.	Low (Refer to site status)
B8	Lucky's Auto Service 51229 Harrison Street Coachella, CA 92236	0.70-miles southeast of the Project site	LUST Cortese HAZNET	Waste oil contamination to soil only. Case closed August 21, 1995. Aqueous solution. Disposal Method: Recycler.	Low (Refer to site status)
B9	Deleon's Service 51298 Harrison Street Coachella, CA 92236	0.70-miles southeast of the Project site	LUST Cortese	Gasoline contamination. Preliminary site assessment underway. Case closed August 18, 1998.	Low (Refer to site status)
10	Amigo Mini Mart 85-509 Highway 111 Coachella, CA 92236	0.75-miles northeast of the Project site	RCRIS-SQG FINDS LUST Cortese HAZNET	Small Quantity Generator. No violations found. Gasoline contamination, aquifer affected. Local oversight program underway. Aqueous solution. Disposal Method: Recycler.	Low (Contamination down gradient and greater than ½-mile from Project site)
C11-C12	Escher Oil 85119 Avenue 50 Coachella, CA 92236	0.85-miles northeast of the Project site	LUST Cortese Notify 65 LUST EMI	Gasoline contamination, aquifer affected. Case closed January 27, 1997.	Low (Refer to site status)

EDR Map ID#	Site Name/Address	Direction from Project site	Regulatory LIST	Site Status	Potential for an Environmental Condition on the Project site
D13-D14	Foster-Gardner, Inc. 1577 First Street Coachella, CA 92236	0.85-miles east of the Project site	Cortese RCRIS-SQG FINDS AWP Cal-Sites DEED HAZNET HIST UST	Small Quantity Generator, no violations found. Active annual work plan site.	Low (Property located greater than ¼-mile from the Project site)
15	Sossa's Market #7 48975 Grapefruit Boulevard Coachella, CA 92236	0.75-miles northeast of the Project site	LUST Cortese	Gasoline contamination. Preliminary site assessment underway.	Low (Contamination located down gradient and greater than ¼-mile from Project site)
16	Fire Station 1377 Sixth Street Coachella, CA 92236	0.85-miles southeast of the Project site	Notify 65	No further information provided.	Low (No contamination reported)
C17	Circle K Store #1303 49989 Grapefruit Street Coachella, CA 92236	0.85-miles northeast of the Project site	RCRIS-SQG FINDS LUST Cortese HIST UST	Small Quantity Generator. No violations found. Gasoline contamination, aquifer affected. Case closed November 13, 2000.	Low (Refer to site status)
18	Walter Property 84540 Mitchell Coachella, CA 92236	0.75-miles north of the Project site	LUST Cortese	Gasoline contamination, aquifer affected. Case closed April 23, 1993.	Low (Refer to site status)
19	Coachella City Yard 1670 Second Street Coachella, CA 92236	0.95-miles east of the Project site	LUST Cortese	Diesel contamination, aquifer affected. Case closed December 8, 1999.	Low (Refer to site status)
20	Coachella Fire Station 1377 Sixth Street Coachella, CA 92236	0.95-miles southeast of the Project site	LUST Cortese	Gasoline contamination, aquifer affected. Post remedial action monitoring.	Low (Contamination located down gradient and greater than ¼-mile from Project site)
E21-E22	Old Builders Supply 85-220 Avenue 50 Coachella, CA 92236	0.95-miles southeast of the Project site	Notify 65 LUST Cortese	Gasoline contamination, aquifer affected. Case closed July 22, 1992.	Low (Refer to site status)
23	Autos Del Valle 51890 Highway 86 Coachella, CA 92236	0.9-miles southeast of the Project site	LUST Cortese	Gasoline contamination, aquifer affected. Case closed October 28, 1998.	Low (Refer to site status)

Notes: Map ID numbers match the site numbers indicated on the map of sites within one-mile radius contained within Appendix A, EDR SEARCH.

POTENTIAL FOR ENVIRONMENTAL CONDITION KEY:

Low Potential = Potential to create environmental condition on Project site is considered to be low for one or several factors including, but not limited to, the following:

direction of groundwater flow is away from the Project site (down gradient); remedial action is underway or completed at off-site location; distance from Project site is considered great enough to not allow the creation of a potential environment condition; only soil was affected by the occurrence; and/ or reporting agency has determined no further action is necessary.

Moderate Potential = Potential to create environmental condition on Project site is considered to be moderate and further investigation may be necessary due to one or several factors including, but not limited to, the following:

occurrence reported but remedial status unknown; unable to confirm remedial action completed; proximity to Project site; groundwater flow is towards the Project site (up gradient).

High Potential = Potential to create environmental condition on Project site is considered to be high and further investigation necessary due to one or several factors including the following; occurrence noted on-site and status if remedial action unknown; occurrence affected groundwater and is located up gradient from Project site.

Source: RBF Consulting, Phase I Environmental Site Assessment, February 6, 2004.

4.8 HYDROLOGY AND WATER QUALITY. *Would the project:*

- a) *Violate any water quality standards or waste discharge requirements?*

Less Than Significant Impact With Mitigation Incorporated. Impacts to water quality would range over three different periods: 1) during the earthwork and construction phase, when the potential for erosion, siltation and sedimentation would be the greatest; 2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and 3) following completion of the Project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

As part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control direct storm water discharge. In California, the State Water Quality Control Board (WQCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. All new construction projects over one acre must prepare a Storm Water Pollution Prevention Plan (SWPPP) and file a Notice of Intent with the State Water Resources Control Board under the requirements of Statewide Industrial Storm Water Permit for General Construction Activities. The State then issues a permit for the construction phase of the development.

The Coachella area is within the Colorado River Basin Region (Region No. 7), which adopted its Water Quality Control Plan on November 17, 1993. The owners and operators of municipal storm sewer systems in the Whitewater River Basin, including the City of Coachella and the Coachella Valley Water District, received approval by the RWQCB in May of 1996, which includes NPDES permit No. CAS617002 along with Waste Discharge Requirements governing storm water discharge into the Whitewater River. In applying for the permit, a Storm Water Management Plan was prepared which provides a basis for reducing the discharge of pollutants into municipal storm sewers to the maximum extent practical. The permit establishes Best Management Practices (BMPs) to reduce pollutants, water quality monitoring and sampling standards to evaluate ambient water quality and the effectiveness of BMPs in reducing pollutants. Accordingly, the following mitigation measures would reduce Project impacts to a less than significant level.

Mitigation Measures:

HYD1 The applicant shall obtain a Notice of Intent from the State of California Regional Water Quality Control Boars, as the approximately 58-acre proposed Project would result in the disturbance of one or more acres. A copy of the Notice of Intent acknowledgement from the State of California Regional Water Quality Control Board must be submitted to the City of Coachella before issuance of grading permits.

HYD2 Prior to the issuance of grading permits, Best Management Practices (BMPs) shall be developed in compliance with the City of Coachella and the

Coachella Valley Water District NPDES Permit. Specific measures shall include:

- Siltation of drainage devices shall be handled through a maintenance program to remove silt/dirt from channels and parking areas;
- Surplus or waste materials from construction shall not be placed in drainage ways or within the 100-year floodplain surface waters;
- All loose piles of soil, silt, clay, sand, debris or other earthen materials shall be protected in a reasonable manner to eliminate any discharge to waters of the State;
- During construction, temporary gravel or sandbag dikes shall be used as necessary to prevent discharge of earthen materials from the site during periods of precipitation or runoff;
- Stabilizing agents such as straw, wood chips and/or soil sealant/dust retardant shall be used during the interim period after grading in order to strengthen exposed soil until permanent solutions are implemented; and
- Revegetated areas shall be continually maintained in order to assure adequate growth and root development.

HYD3 The applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP), which identifies construction and post construction BMPs to the City for review and approval.

HYD4 Prior to the issuance of building permits, the applicant shall submit a Water Quality Management Plan (WQMP) pursuant to the Coachella Valley Water District and the City of Coachella local implementation plan, specifically identifying BMPs that shall be used on-site to control predictable pollutant runoff.

HYD5 Prior to the issuance of building permits, the applicant shall obtain coverage under NPDES Statewide Industrial Stormwater Permit for General Construction Activities from the State Water Resources Control Board. Evidence that this has been obtained shall be submitted to the City.

- 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)?

Less Than Significant Impact. Groundwater has historically been the principal source of water supply in the Coachella Valley. The Project site is located at the southeasterly end of the Coachella Valley Groundwater Basin as defined by the Department of Water

Resources (DWR).² This groundwater basin encompasses most of the Coachella Valley from the San Geronio Pass to the Salton Sea and has been subdivided by the DWR and U.S. Geological Survey into four interrelated water bearing sub-basins which are delineated by fault barriers that restrict the lateral movement of groundwater. Specifically, the Project site lies within the Whitewater River (or Indio) sub-basin, which encompasses approximately 400 square miles. The Project site is further located within the Thermal Subarea of the Whitewater Sub-basin. Using imported water from the Colorado River; the Coachella Valley Water District (CVWD) operates a recharge area north of Palm Springs. Recently, CVWD indicates that the groundwater basin in the lower valley is showing signs of overdraft including a drop in the water table.

According to the General Plan EIR, buildout of the General Plan would result in an increase of approximately 12 million gallons per day (GPD) of water. Based on a generation factor of 1,121 GPD/acre, the proposed Project would result in an increase demand of approximately 65,018 GPD of water.³ This increase would represent 0.5 percent of the anticipated increase in water demand upon buildout of the General Plan (approximately 12.1 million GPD). In addition, the General Plan EIR indicates that the increase in demand for water as a result of buildout of the General Plan would not have a significant effect on groundwater recharge.⁴ The General Plan EIR concludes, "because the City is working cooperatively to address the issue of groundwater supply on a regional basis, and because prior efforts in the upper Whitewater Basin have proven successful, impacts relating to the supply of water via groundwater resources are not anticipated to be significant." Therefore, since the proposed Project would result in a fraction of the increase of water to be supplied by groundwater, compared to the anticipated General Plan buildout, impacts to groundwater would be less than significant.

- 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?*

No Impact. While the proposed Project would involve grading and construction activities, which would permanently alter the drainage pattern of the Project site, there are no streams or rivers that traverse the Project site. Therefore, development of the proposed Project would not result in substantial erosion or siltation on- or off-site.

- 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?*

No Impact. There are no existing natural water bodies in the area. However, development of the vacant site with impervious surfaces (paved parking lots and driveways) would increase the amount of surface runoff in the area. Appropriate BMPs would be considered for inclusion as a means to address any potential stormwater issues. Existing infrastructure improvements, including surface gutters along Avenue 50 would provide adequate drainage for the surface runoff created by the proposed Project.

² Coachella Valley Water District, *Engineer's Report on Water Supply and Replenishment Assessment 1991/1992*.

³ City of Coachella, *General Plan EIR*, Table 3.10-2, September 1996.

⁴ *Ibid*, page 195.

Therefore, the proposed Project would not affect water courses or substantially increase the rate or amount of surface runoff to create flooding impacts, resulting in less than significant impacts.

- 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?*

Less Than Significant Impact With Mitigation Incorporated. Construction of the proposed Project may result in minor changes in the amount of runoff due to an increase in the amount of impermeable surface area within the Project area. Surface runoff velocities, volumes, and peak flow rates would have a minor increase due to an increase in impervious surfaces. Drainage improvements would be provided on-site as part of the Project design and would be subject to review and approval by the City of Coachella. Therefore, impacts would be less than significant.

Mitigation Measure:

HYD6 *The Project applicant shall submit stormdrain plans to the City Engineer for approval, prior to approval of the Tentative Tract Map.*

- f) *Otherwise substantially degrade water quality?*

Less Than Significant Impact. Construction and post-development surface runoff would occur as a result of development on-site. The proposed Project is not anticipated to create any additional impacts that would degrade water quality beyond those previously identified in the General Plan EIR.

- 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?*

Less Than Significant Impact. The Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate Maps (FIRM) showing areas subject to 100-year floods. One-hundred-year floods are those floods expected to occur, on the average, once every 100 years, based on historical data. The 100-year flood has a 1/100 or one percent chance of occurring in any given year. Flood insurance rates are based on FEMA's designations of flood zones, and the practice is to avoid or restrict construction within the 100-year flood zones, or to engage in flood proofing techniques such as elevating building pads or by constructing flood walls and levees.

According to the most recent Flood Insurance Rate Map published by FEMA (March 22, 1983), small portions of the Study area remain in Zone AO which is defined as areas of 100-year shallow flooding where depths are between one and three feet. There are also areas within Zone B, which is between the limits of the 100-year flood and the 500-year flood; or subject to 100-year flooding at depths of less than a foot; or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. However, as discussed above, channel improvements to the Coachella Valley Storm Channel, which, as stated earlier, is designed to carry the

Standard Project Flood, make it likely that no true flood hazard currently exists in these areas.

According to a letter dated September 21, 1984 from FEMA to the City, the entire city limits as they existed at that time are in Zone C, which is classified as "Areas of Minimal Flooding" however, the most recent Flood Insurance Rate Map dated March 22, 1983 has not been updated to reflect this change in status. The Coachella Valley Water District (CVWD) indicates that the Cities of Indio and Coachella were reclassified to Zone C when channel protection was applied to portions of the Coachella Storm water Channel. In addition, the "limits of study" on this version of the FIRM does not cover unincorporated portions of the study area south of Avenue 58 suggesting that this area may need further evaluation. CVWD does indicate, however, that the Coachella Storm water Channel has ample capacity to contain the 100-year flood in this area.

The proposed Project site is not located within a 100-year flood hazard area. The Environmental Hazards Policy Diagram within the City General Plan does not indicate the Project site as an area within the 100-Year Floodplain designation. The proposed Project site is not located within a 100-year flood hazard area. The Environmental Hazards Policy Diagram within the City General Plan does not indicate the Project site as an area within the 100-Year Floodplain designation. Therefore, less than significant impact would occur in this regard.

- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

No Impact. As mentioned above, the proposed Project would not place structures or housing within the 100-year flood hazard area which would impede or redirect flood flows. Therefore, there would be no impacts in this regard.

- 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?*

No Impact. As stated previously, the proposed Project does not propose any new housing or building structures within the 100-year flood plain. The proposed Project would not expose people or structures to a significant risk of loss, injury or death involving flooding or the failure of a levee or a dam. Therefore, there would be no impacts in this regard.

- j) *Inundation by seiche, tsunami, or mudflow?*

No Impact. The City of Coachella lies within the lower end of the Coachella Hydrological Unit, which includes approximately 1,600 square miles. Known also as the Whitewater River Basin, all surface waters ultimately discharges into the Salton Sea. Due to the location and nature of the proposed Project, in north central Riverside County and well removed from the Pacific Ocean, the potential for inundation by seiche, tsunami, or mudflow is not anticipated.

4.9 LAND USE AND PLANNING. *Would the project:*

- a) *Physically divide an established community?*

Less Than Significant Impact. The majority of the area surrounding the Project site is undeveloped. In addition, the area has been zoned A-T but designated as Low Density Residential within the General Plan. Therefore, the development of 232 single-family residential uses within the Project site is consistent with the anticipated development in the surrounding community and the low-density residential General Plan designation. Thus, impacts in this regard would be less than significant.

- 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?*

Less Than Significant Impact. The Project site is zoned A-T (Agriculture Transitional) and designated as RL (Low Density Residential) in the City's General Plan. The proposed Project would require approval of a zone change to R-S (Residential Single-Family). The A-T designation requires a minimum lot size of five acres. However, the R-S designation provides for a minimum lot size of 6,000 square feet. Under the existing zoning designation, the Project site could be developed with a maximum of six lots per acre, while under the proposed zone change the maximum density that can be developed on the Project site would be 348 lots. The proposed Project involves development of 232 residential units for a density of 4 dwelling units per acre. Development of 232 residential units on the approximately 58-acre site would be consistent with the General Plan's RL designation. Upon approval of the zone change to R-S, the proposed Project would be required to comply with Article 030: *R-S Residential Single-Family Zone* requirements. The zoning designation establishes permitted uses and property development standards that the proposed Project must be consistent with. Approval of the zone change and compliance with Article 030 of the City's Zoning Ordinance would reduce impacts to a less than significant impact.

Mitigation Measure:

LAN1 *The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Community Development Department regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impacts of new development. One of these fees is the General Plan Fee to be paid at the time permits are issued. If permits are issued prior to the approval of a development impact fee, a fee shall be paid at the time permits are issued as a mitigation of the environmental impacts associated with this project. The fees shall be as follows: Buildings - \$50.00 per Dwelling Unit.*

- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

Less Than Significant Impact With Mitigation Incorporated. The Coachella Valley Association of Governments (CVAG) is currently preparing a Multiple Species Habitat Conservation Plan (MSHCP) and Natural Community Conservation Plan (NCCP) for the Coachella Valley region. The MSHCP and NCCP will create large interconnected preserves for special status species and their habitats while streamlining the regulatory process outside of the reserve areas. This will be accomplished by providing a means to standardize mitigation/compensation measures for species covered by the plan and satisfy applicable provisions of federal and state ESAs, the California Environmental Quality Act (CEQA), and National Environmental Policy Act (NEPA). Measures will most likely take the form of payment of fees as a standard condition of approval for development within the fee area. A draft plan is expected to be circulated for public review after April 2004.

Mitigation Measure: Refer to Mitigation Measure BIO5.

4.10 MINERAL RESOURCES. *Would the project:*

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

No Impact. No classified or designated mineral deposits of statewide or regional significance are known to occur within the Project area. According to figure 42, CDMG *Mineral Land Classification and BLM Mineral Resource Potential Maps*, of the City's General Plan, the Project site is designated as MRZ-1, which is defined as, "Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence." Therefore, the proposed Project would not result in the loss of availability of any known mineral resource valuable to the region or to the residents of the state.

- b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. Refer to Response 4.10(a).

4.11 NOISE. *Would the project result in:*

- 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?*

Less Than Significant Impact With Mitigation Incorporated. The applicable noise standards governing the Project site are the criteria in the City's Noise Element of the General Plan.

City of Coachella Environmental Hazards and Safety Element of the General Plan. The Environmental Hazards and Safety Element of the City's General Plan identifies the City's policy concerning natural and manmade hazards, including noise, in order to increase the community's public safety. The following policies from the City's General Plan relate to the proposed Project.

- The City shall require noise control plans for new development located within the 60 CNEL contour (approximately 550 feet) of the centerline of major arterial roadways, 370 feet of the centerline of arterial roadways and 225 feet of collectors.
- The City will consider the severity of noise exposure in the community planning process to prevent or minimize noise impacts to existing and proposed land uses.
- Noise sensitive land uses (residences, lodging, hospitals, long term medical care facilities, educational facilities, libraries and churches) will not be located near major noise sources unless noise mitigation measures such as walls or earth berms have been incorporated into the design of the Project to reduce noise exposures in exterior living spaces and interior living areas to the levels deemed acceptable by the City.

In addition the City of Coachella has adopted specific interior and exterior noise standards that were included in the 1987 City of Coachella General Plan Noise Element. These standards are included in Table 8, *Interior and Exterior Noise Standards*.

**Table 8
INTERIOR AND EXTERIOR NOISE STANDARDS**

Land Use Categories		Energy/Average CNEL (dB)	
Category	Uses	Interior ¹	Exterior ²
Residential	Single Family, Duplex, Multiple Family	45 ³	65
	Mobile Home	NA	65 ⁴
Commercial Industrial Institutional	Hotel, Motel, Transient Lodging	45	65 ⁵
	Commercial, Retail, Bank, Restaurant	55	NA
	Office Building, Research and Development, Professional Offices, City Office Building	50	NA
	Amphitheatre, Concert Hall, Auditorium, Meeting Hall	45	NA
	Gymnasium (Multipurpose)	50	NA
	Sports Club	55	NA
	Manufacturing, Warehousing, Wholesale, Utilities	65	NA
	Movie Theatres	45	NA

Institutional	Hospital, School Classroom	45	65
	Church, Library	45	NA
Open Space	Parks	NA	65
Notes: 1. Indoor environment excluding: bathrooms, toilets, closets, corridors. 2. Outdoor environment limited to : Private yard of single family, Multi-family private patio or balcony served by a means of exit from inside, mobile home park, hospital patio, park's picnic area, school playground and hotel and motel recreation area. 3. Noise levels required with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided per Chapter 12, Section 1205 of the Uniform Building Code. 4. Exterior noise level should be such that internal noise level will not exceed 45 CNEL. 5. Except those areas affected by aircraft noise.			
Source: City of Coachella, <i>General Plan EIR</i> , September 1996.			

Short-term noise impacts would be associated with excavation, grading, and erecting of buildings on-site during construction of the proposed Project. Construction related short-term noise levels would be higher than existing ambient noise levels in the Project area today, but would no longer occur once construction of the Project is completed.

Two types of short-term noise impacts could occur during the construction of the proposed Project. First, construction crew commutes and the transport of construction equipment and materials to the site for the proposed Project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 87 dBA), the effect on longer term (hourly or daily) ambient noise levels would be small. Therefore, short-term construction related impacts associated with worker commute and equipment transport to the Project site would be less than significant.

The second type of short-term noise impact is related to noise generated during excavation, grading, and construction of buildings on the Project site. Construction is completed in discrete steps, each of which has its own mix of equipment, and consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site, and therefore the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 9, *Typical Construction Equipment Noise Levels*, lists typical construction equipment noise levels based on a distance of 50 feet between the equipment and a noise receptor. Typical noise levels range up to 91 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels, because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three or four minutes at lower power settings.

Construction of the proposed Project is expected to require the use of earthmovers, bulldozers and water and pickup trucks. Based on the information in Table 9, the maximum noise level generated by each earthmover on the Project site is assumed to be 88 dBA L_{max} at 50 feet from the earthmover. Each bulldozer would also generate 88 dBA L_{max} at 50 feet. The maximum noise level generated by water and pickup trucks is approximately 86 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound source with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 91 dBA L_{max} at a distance of 50 feet from the active construction area.

There are no sensitive receptors within the vicinity of the Project area that would be subjected to noise levels above those established by the City. However, compliance with the construction hours specified in the City's Noise Ordinance as well as implementation of the recommended mitigation measures would ensure that construction noise impacts would be reduced to a less than significant level.

**Table 9
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS**

Type of Equipment	Range of Maximum Sound Levels Measured (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers, 12,000 to 18,000 ft-lb/blow	81 to 96	93
Rock Drills	83 to 99	96
Jack Hammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	74 to 84	80
Dozers	77 to 90	85
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Cranes	79 to 86	82
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Tractors	77 to 82	80
Front-End Loaders	77 to 90	86
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 89	86
Trucks	81 to 87	86

Source: Noise Control for Buildings and Manufacturing Plants, Bolt, Beranek & Newman 1987.

Mitigation Measures:

- N1 *During all Project site excavation and grading, the Project Contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.*
- N2 *The Construction Contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site.*
- N3 *The Construction Contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the Project site during all Project construction.*

- b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact. Minimal groundborne vibrations or noise would be created by the proposed Project. However, no excessive groundborne vibration or noise would be created by the proposed Project. Excessive groundborne vibration is typically caused by activities such as blasting used in mining operations, or the use of pile drivers during construction. The proposed Project would not require any blasting and no pile driving is anticipated. Thus, the grading and construction of infrastructure and buildings is not anticipated to generate excessive groundborne vibration or groundborne noise levels. Thus, less than significant impacts would occur in this regard.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant Impact.

LONG-TERM (MOBILE) SOURCES

In accordance with the Project Traffic Study, mobile source noise impacts on the surrounding street network were modeled for Future (2005) and Future (2005) Plus Project. These two scenarios were modeled to demonstrate the Project's net acoustical increase over future ambient (No Project) conditions. An increase of five dBA or greater in noise levels occurring from Project-related activities would be significant when the "No Project" noise level is below 65 dBA CNEL. Additionally, an increase of three dBA or greater in noise levels occurring from Project-related activities would be significant when the "No Project" noise level is above 65 dBA CNEL.

In Table 10, *Projected Noise Levels Per Roadway Segment*, the first contour (dBA at 100 feet from centerline) depicts the noise level that would be heard 100 feet perpendicular to the roadway centerline. This is the typical distance to the midpoint of a rear yard for a receptor adjacent to a roadway. The second contour (distance from roadway centerline) illustrates the distances for which various noise levels would be encountered. The distance from centerline, which is the midpoint of the roadway cross section, depicts the spreading effect of the acoustics generated by mobile sources.

According to Table 10, under the “2005 Without Project” scenario, noise levels at a distance of 100 feet from centerline would range from approximately 47 dBA to 63 dBA. The highest noise levels would occur along Harrison Street, south of Avenue 50. Noise levels along this roadway segment would be 62.9 dBA at 100 feet from the roadway centerline. The lowest noise levels would occur along Frederick Street, north of Avenue 51. Noise levels along this roadway segment would be 47.4 dBA at 100 feet from the roadway centerline.

Under the “2005 With Project” scenario, noise levels at a distance of 100 feet from centerline would also range from approximately 49 to 63 dBA. The highest noise levels would occur along Harrison Street, south of Avenue 50. Noise levels along this roadway segment would be 66.6 dBA at 100 feet from the roadway centerline. The lowest noise levels would occur along Frederick Street, south of Avenue 51. Noise levels along this roadway segment would be 48.4 dBA at 100 feet from the roadway centerline.

Table 10 also compares the “2005 Without Project” scenario with the “2005 With Project” scenario. The highest noise increase would occur along Harrison Street, which would have a noise increase of 3.8 dBA. Under the “2005 Without Project Scenario”, this roadway segment would be 62.4 dBA at 100 feet from the roadway centerline.

**Table 10
PROJECTED NOISE LEVELS PER ROADWAY SEGMENT**

Roadway Segment	Future					Future Plus Project					Difference in dBA @100 Feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 CNEL Noise contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour	
Avenue 50											
East of Harrison Street	4,675	55.5	57	27	12	5,275	56.0	62	29	13	0.5
West of Calhoun Street	7,470	57.5	78	36	17	7,670	57.7	80	37	17	0.2
West of Frederick Street	7,545	57.6	79	37	17	8,390	58.1	85	39	18	1.5
West of Harrison Street	7,828	57.7	81	37	17	10,658	59.1	99	46	21	1.4
West of Van Buren Street	7,925	57.8	81	38	18	8,003	57.8	82	38	18	0.0
Avenue 51											
West of Calhoun Street	1,050	49.0	21	10	5	1,050	49.0	21	10	5	0.0
West of Frederick Street	1,870	51.5	31	14	7	2,393	52.6	37	17	8	1.1
West of Harrison Street	2,350	52.5	36	17	8	2,450	52.7	37	17	8	0.2
West of Van Buren Street	1,195	49.6	23	11	5	1,195	49.6	23	11	5	0.0
Avenue 52											
West of Frederick Street	5,130	55.9	61	28	13	5,130	55.9	61	28	13	0.0
West of Van Buren Street	4,245	55.1	54	25	12	4,455	55.3	55	26	12	0.2
Calhoun Street											
North of Avenue 50	4,210	55.1	53	25	11	4,410	55.3	55	26	12	0.2
North of Avenue 51	1,720	51.2	29	14	6	1,720	51.2	29	14	6	0.0
South of Avenue 51	1,685	51.1	29	13	6	1,685	51.1	29	13	6	0.0

Frederick Street											
North of Avenue 50	2,400	52.6	37	17	8	2,500	52.8	38	17	8	0.2
North of Avenue 51	723	47.4	16	8	4	1,058	49.1	21	10	5	1.7
South of Avenue 51	835	48.0	18	8	4	900	48.4	19	9	4	0.4
Harrison Street											
North of Avenue 50	11,400	62.4	183	85	39	27,095	66.2	325	151	70	3.8
South of Avenue 50	12,925	62.9	199	92	43	30,055	66.6	348	162	75	3.7
Van Buren Street											
North of Avenue 50	7,855	57.8	81	38	17	5,180	56.0	61	28	13	1.8
North of Avenue 51	2,680	53.1	39	18	8	2,890	53.4	42	19	9	0.3
North of Avenue 52	2,445	52.7	37	17	8	2,763	53.2	40	19	9	0.5
Note: Noise level models computed for 2020 scenarios utilized existing 2004 roadway cross-section data.											

As noted previously, an increase of five dBA or less is considered less than significant when the "No Project" noise levels are less than 65 dBA CNEL. Additionally, an increase of three dBA or greater in noise levels occurring from Project-related activities would be significant when the "No Project" noise level is above 65 dBA CNEL. Since the largest traffic noise increase due to Project related traffic would be 3.8 dBA (along Harrison Street) where the traffic noise level without the Project is 62.4 dBA (less than 65 dBA), a less than significant impact would occur as a result of Project implementation.

However, as indicated in the City's General Plan, the City will require noise control plans for new development located within the 60 CNEL contour of the centerline of a major roadway. Since the 60 CNEL contour extends a maximum of 199 feet from the roadway centerline (Harrison Street, south of Avenue 50), the proposed Project will not be required to prepare noise control plans.

LONG-TERM (STATIONARY) SOURCES

Mechanical equipment such as air conditioners often generate noise levels that may exceed local noise standards. At a distance of 90 feet, the noise level from all units operating simultaneously would be approximately 54 dBA, which is below the City's acceptable exterior noise level of 65 dBA CNEL.⁵ Therefore, there would be a less than significant impacts associated with long-term stationary sources.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant Impact With Mitigation Incorporated. Refer to Response 4.11(a).

⁵ Per conversation with Carmen Manriquez, City Planner, on March 22, 2004.

- 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?

No Impact. The Project site is not located within two miles of a public airport or public use airport. Given the Project's site distance from the Desert Resorts Regional Airport (approximately six miles), no impacts are anticipated in this regard.

- 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?

No Impact. The Project site is not located within the vicinity of a private airstrip. Thus, future uses would not be subjected to excessive noise levels in this regard.

4.12 POPULATION AND HOUSING. *Would the project:*

- 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)?

Less Than Significant Impact. A project could induce population growth in an area either directly or indirectly. More specifically, the development of new homes or businesses could induce population growth directly, whereas, the extension of roads or other infrastructure could induce population growth indirectly. According to the 2000 Census, the City of Coachella's population was approximately 22,724 persons. As of January 1, 2003, the City's population was approximately 26,772 persons.⁶

The net increase of 232 housing units within the Project area would cause an increase in the City's population. Based on an estimate of 4.8 persons per household (State of California Department of Finance), the development of 232 additional housing units would result in a population increase of approximately 1,114 persons. As a result of Project implementation, the City's population would increase to approximately 27,886 persons. This would represent an approximately 4.2 percent increase over the City's 2003 population estimate of 26,772 persons.

The Southern California Association of Governments (SCAG) is the regional planning body for the Southern California region. SCAG projects the City of Coachella's population to reach approximately 22,996 by the year 2005 and 29,283 by the year 2020. This increase would represent approximately 30 percent of SCAG's projected growth anticipated by the year 2020. Due to the under-estimation of population growth by SCAG (the 2003 population of 26,772 persons is already above SCAG's projected population of 22,996 by 2005), the City's population growth is anticipated to be greater than that projected by SCAG. Based upon a historical growth rate of 2.6 percent a year, the City of Glendora's population is projected to be 41,409 persons by the year 2020.⁷ This is more consistent with the growth anticipated in the City's General Plan based on

⁶ California Department of Finance, *Table 2 – E-5 City/County Population and Housing Estimates, 1/1/2003*, updated 2003.

⁷ This figure is based upon an average of historical population growth from the Department of Finance from 1990 through 2000.

the assumption of a 3.3 percent growth rate from 2000 through 2005. The City's General Plan anticipates a total population of 27,306 persons by the year 2005, an increase of approximately 534 persons from the City's 2003 estimated population. Therefore, an increase of 1,114 persons as a result of Project implementation would directly induce substantial population growth. However, the City's General Plan projected a need for 1,488 additional residential units by the year 2005. The addition of 232 residential units represents approximately 15.6 percent of the required additional housing needed by the year 2005. Therefore, while the proposed Project would induce population growth, the proposed Project would decrease the existing housing shortage, resulting in less than significant impacts in this regard.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The proposed Project involves the development of currently vacant land with 232 residential units. Therefore, the proposed Project would not involve the displacement of existing housing and there would be no impacts in this regard.

- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. Refer to Response 4.12(b).

4.13 PUBLIC SERVICES.

- 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 ratio, response times or other performance objectives for any of the public service:*

- 1) *Fire protection?*

Less Than Significant Impact. The City of Coachella currently contracts with the Riverside County Fire Department for fire protection services and emergency medical services. The City's General Plan policy in regards to fire protection is to, "achieve a high standard of fire protection to adequately serve the City at full buildout. The targeted standard of personnel per 1,000 populations is 2.0. The targeted response time is five minutes or less. The service standard is to provide fire protection within a 1.5 mile radius from the fire stations."

The fire station that would serve the Project site is Fire Station #79, located at 1377 6th Street, approximately 2.3 miles southeast of the Project site. Fire Station #79 has a total of eight full-time personnel, which results in approximately 3.3 firefighters for every 1,000 residents, which is slightly higher than the City's standard of 2.0. Fire Station #79 includes two Type 1 Engines, one Breathe Support facility, one water tender, one utility truck and one Battalion Chief.⁸

⁸ Per phone conversation on March 2, 2004, with Robert Michael of the Riverside County Fire Department.

Although new residences would exist on-site, this would not result in significant emergency service impacts. The proposed Project would result in the addition of 989 persons, which would increase the firefighter personnel per 1,000 population to 3.5.⁹ This would not result in significant emergency service impacts. In addition, the overall Project design shall be required to provide adequate emergency vehicle access. The Riverside County Fire Department would review and comment on the site plan prior to Project approval. As part of the review, the Riverside County Fire Department would impose standard conditions of approval, which would ensure that Project impacts are at a less than significant level.

2) *Police protection?*

Less Than Significant Impact. The City of Coachella Police Department is under contract with the Riverside County Sheriff's Department, which provides police protection services to the Project site. The nearest police station is located at 82-695 Dr. Carreon Boulevard, within the City of Indio. The City's General Plan policy in regard to police protection is to, "achieve a high standard of police protection to adequately serve the City at full buildout to a standard of 1.3 sworn officers per 1,000 population."

Although new residences would exist on-site, this would not result in significant emergency service impacts. The overall Project design shall be required to provide adequate emergency vehicle access. The Police Department would review the site plan as a standard condition of approval, resulting in less than significant impacts in this regard.

3) *Schools?*

Less Than Significant Impact With Mitigation Incorporated. The Coachella Valley Unified School District (CVUSD) serves the entire City of Coachella, portions of Indio and La Quinta, as well as unincorporated communities of Thermal and Mecca. Based on the student generation rate of 1.12 students per residential unit, provided by the CVUSD, the estimated potential students for the proposed Project would result in the addition of approximately 260 students. Students from the Project site would go to the Mountain Vista Elementary School (K-6), Cahuilla Desert Academy (7-8) or Coachella Valley High School (9-12). Each of these schools are currently at capacity with total enrollment for Mountain Vista Elementary School at 681 students, 1,330 students enrolled at Cahuilla Desert Academy and a total of 2,873 students enrolled at Coachella Valley High School.

Developers shall be required to pay school impact fees, as authorized by State law, in order to reduce impacts resulting from new development, to less than significant levels. Currently, the CVUSD Level 1 Impact Fees are \$2.24 per square foot of residential uses and Level 2 Fees are \$2.19 per square foot. However, Level 2 Fees are anticipated to increase to above \$2.70 per square foot in April 2004. Payment of school fees is considered full mitigation of new development impacts on schools.

⁹ Based on an estimate of 4.8 persons per household (State of California Department of Finance), the development of 232 additional housing units would result in a population increase of approximately 1,114 persons.

Mitigation Measures:

PS1 The developer is subject to school assessment fees pursuant to California State law. The developer shall provide evidence of compliance to the City prior to issuance of building permits.

4) Parks?

Less Than Significant Impact With Mitigation Incorporated. The City required new residential development to dedicate land or fees in lieu for park and recreation facilities in order to achieve a standard of five acres of park space/open space per 1,000 population. The proposed Project would be required to comply with Section 21-266, *Dedication of Land and/or Payment of Fees for Park and Recreation Purposes Pursuant to the Quimby Act*, of the City's Municipal Code. Dedication of land or payment of fees pursuant to Section 21-266 of the City's Municipal Code would reduce all impacts to parks to a less than significant level.

Mitigation Measure:

PS2 The developer is subject to park assessment fees pursuant to California State law. The developer shall provide evidence of either the dedication of land or fees paid in lieu of, to the City prior to issuance of building permits.

5) Other Public Facilities?

Less Than Significant Impact. Due to the size and scope of the proposed Project, the Project would not significantly affect other governmental agencies or facilities. No significant impacts are anticipated in this regard.

4.14 RECREATION

- a) *Would the proposed 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?*

Less Than Significant Impact With Mitigation Incorporated. The proposed Project would result in 232 new single-family homes, generating approximately 1,114 new residents, who would utilize existing parks and recreation facilities. The proposed Project would be subject to payment of Quimby Act Fees, which would mitigate impacts as a result of increased use of the City's recreational facilities. Payment of required mitigation fees would reduce impacts to recreation facilities to a less than significant level.

Mitigation Measures: Refer to Mitigation Measure PS2.

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

No Impact. The proposed Project would result in 232 new single-family homes generating approximately 1,114 new residents, who would utilize existing parks and recreation facilities. No on-site recreational facilities are proposed. Therefore, there are no impacts in this regard.

4.15 TRANSPORTATION/TRAFFIC. *Would the project:*

RBF Consulting has prepared an analysis evaluating the traffic impacts of the proposed 58-acre Kirkjan project. The Traffic Impact Analysis prepared by RBF Consulting, dated March 2004, is reproduced in its entirety as Appendix B, *Traffic Impact Analysis*.

Study Area

City of Coachella staff identified the following eight intersections for analysis in this study:

- Calhoun Street/Avenue 50 (4-way stop controlled);
- Calhoun Street/Avenue 51 (4-way stop controlled);
- Van Buren Street/Avenue 50 (4-way stop controlled);
- Van Buren Street/Avenue 51 (4-way stop controlled);
- Van Buren Street/Avenue 52 (4-way stop controlled);
- Frederick Street/Avenue 50 (4-way stop controlled);
- Frederick Street/Avenue 51 (2-way stop controlled); and
- Harrison Street/Avenue 50 (signalized).

The study intersections were are analyzed for the following study scenarios:

- Existing Conditions;
- Forecast Year 2005 Without Project Conditions;
- Forecast Year 2005 With Project Conditions;
- Forecast General Plan Buildout Without Project Conditions; and
- Forecast General Plan Buildout With Project Conditions.

Analysis Methodology

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the type of traffic control and delay experienced at the intersection. The Highway Capacity Manual (HCM) analysis methodology for *Signalized Intersections* and *Unsignalized Intersections* is utilized to determine the operating LOS of the study intersections.

The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding ranges of stopped delay experienced per vehicle for signalized and unsignalized intersections shown in Table 11, *LOS and Delay Ranges*.

**Table 11
LOS AND DELAY RANGES**

	Delay (seconds/vehicle)
--	-------------------------

LOS	Signalized Intersections	Unsignalized Intersections
A	< 10.0	≤ 10.0
B	> 10.0 to < 20.0	> 10.0 to < 15.0
C	> 20.0 to < 35.0	> 15.0 to < 25.0
D	> 35.0 to < 55.0	> 25.0 to < 35.0
E	> 55.0 to < 80.0	> 35.0 to < 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board, Highway Capacity Manual, Special Report 209, Third Edition (Washington D.C., 1997).

Performance Criteria

The City of Coachella goal for peak hour intersection operation is LOS C or better.

Threshold of Significance

To determine whether the addition of Project-generated trips results in a significant impact at a study intersection, the City of Coachella has established the following threshold of significance:

- At intersections operating at LOS C or better, a significant project impact occurs when a proposed project decreases the peak hour LOS at a study intersection to LOS D or worse.

- 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)?

Less Than Significant Impact With Mitigation Incorporated.

Existing Peak Hour Level of Service

Table 12, *Existing Conditions Peak Hour LOS*, summarizes the existing a.m. and p.m. peak hour average stopped delay per vehicle and corresponding LOS of the study intersections based on existing peak hour intersection volumes; detailed HCM analysis sheets are provided in Appendix B.

**Table 12
EXISTING CONDITIONS PEAK HOUR LOS**

Study Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Calhoun St/Avenue 50 (Stop)	8.2	A	9.9	A
Calhoun St/Avenue 51 (Stop)	7.4	A	7.7	A
Van Buren St/Avenue 50 (Stop)	8.1	A	10.2	B

Van Buren St/Avenue 51 (Stop)	7.6	A	8.1	A
Van Buren St/Avenue 52 (Stop)	9.9	A	10.1	B
Frederick St/Avenue 50 (Stop)	8.4	A	11.4	B
Frederick St/Avenue 51(Stop)	9.1	A	11.4	B
Harrison St/Avenue 50 (Signal)	13.5	B	18.0	B
Source: RBF Consulting, 58 Acre Kirkjan Site Traffic Impact Analysis, March 19, 2004.				

As shown in Table 12, all study intersections are currently operating at an acceptable LOS (LOS C or better) during the a.m. and p.m. peak hours according to City of Coachella performance criteria.

FORECAST YEAR 2005 WITHOUT PROJECT CONDITIONS

Thirty-two other projects in the vicinity of the Project study area have been approved by the City of Coachella and the City of Indio, but have not yet been constructed and therefore are not currently generating trips. However, by year 2005, these 32 approved projects are expected to be built and generating trips. This section analyzes the impact of adding trips forecast to be generated by these 32 approved projects to existing traffic conditions to reflect forecast year 2005 without Project conditions. Approved Project trip generation and assignment data was provided by the City of Coachella and the City of Indio for use in this analysis. To calculate trips forecast to be generated by an approved project or a proposed project, transportation planners/engineers utilize published trip generation rate sources such as *Institute of Transportation Engineers (ITE) Trip Generation Manual*, 6th Edition, which is used to analyze the proposed Project.

The City of Indio approved projects are forecast to generate approximately 22,052 daily trips, which includes approximately 1,866 a.m. peak hour trips and approximately 2,253 p.m. peak hour trips. The City of Coachella approved projects are forecast to generate approximately 24,00 daily trips, which includes approximately 1,691 a.m. peak hour trips and approximately 2,329 p.m. peak hour trips.

Approved Projects Improvements

Since trips forecasted to be generated by the approved projects are included in this study, planned improvements for the approved projects are assumed as well. Improvements planned by 2005 as part of already approved projects include:

- An additional westbound lane on Avenue 50 will be constructed along the Project site frontage.
- Two additional southbound lanes on Van Buren Street will be constructed along the Project site frontage.

- The southbound Van Buren Street approach at the Van Buren Street/Avenue 50 intersection will be widened from one shared left-turn/through/right-turn lane to one left-turn lane, two through lanes and one right-turn lane.
- An additional westbound lane on Avenue 50 will be constructed along the Project site frontage.
- An additional southbound lane on Frederick Street will be constructed along the Project site frontage.
- The southbound Frederick Street approach at the Frederick Street/Avenue 50 intersection will be widened from one shared left-turn/through/right-turn lane to one left-turn lane, one through lane, and one defacto right-turn lane.

Forecast Year 2005 Without Project Conditions Peak Hour Level of Service

Forecast year 2005 without Project traffic volumes were derived by adding City of Coachella and City of Indio approved projects-generated trips to existing conditions traffic volumes.

Table 13, *Forecast Year 2005 Without Project Peak Hour LOS*, summarizes forecast year 2005 without Project conditions a.m. and p.m. peak hour average stopped delay per vehicle and corresponding LOS of the study intersections; detailed HCM analysis sheets are provided in Appendix B.

**Table 13
FORECAST YEAR 2005 WITHOUT PROJECT PEAK HOUR LOS**

Study Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Calhoun St/Avenue 50 (Stop)	10.8	B	25.1	D
Calhoun St/Avenue 51 (Stop)	7.6	A	8.0	A
Van Buren St/Avenue 50 (Stop)	11.1	B	28.9	D
Van Buren St/Avenue 51 (Stop)	7.8	A	8.4	A
Van Buren St/Avenue 52 (Stop)	10.3	B	10.7	B
Frederick St/Avenue 50 (Stop)	10.4	B	26.7	D
Frederick St/Avenue 51 (Stop)	9.1	A	11.4	B
Harrison St/Avenue 50 (Signal)	17.0	B	21.2	C
Note: Deficient intersection operation shown in bold.				
Source: RBF Consulting, 58 Acre Kirkjan Site Traffic Impact Analysis, March 19, 2004.				

As shown in Table 13, three study intersections are forecast to operate at an unacceptable LOS (LOS D or worse) according to City of Coachella performance criteria for forecast year 2005 without Project conditions:

- Calhoun Street/Avenue 50 (p.m. peak hour only);
- Van Buren Street/Avenue 50 (p.m. peak hour only); and
- Frederick Street/Avenue 50 (p.m. peak hour only).

Forecast Year 2005 Without Project Conditions Recommended Improvements

To eliminate the forecast year 2005 without Project conditions deficiencies at the three study intersections, the following improvements are recommended:

- Calhoun Street/Avenue 50 - Modify eastbound Avenue 50 approach from one shared left-turn/through lane and one defacto right-turn lane to consist of one left-turn lane and one shared through/right-turn lane.
- Van Buren Street/Avenue 50 - Modify eastbound Avenue 50 approach from one shared left-turn/through lane and one defacto right-turn lane to consist of shared left-turn/through lane and one shared through/right-turn lane.
- Frederick Street/Avenue 50 - Modify westbound Avenue 50 approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.

Assuming implementation of the recommended improvements, Table 14, *Forecast Improved Year 2005 Without Project Conditions Peak Hour LOS*, shows the forecast LOS of the three intersections for forecast year 2005 without Project conditions; detailed HCM analysis sheets are provided in Appendix B.

**Table 14
FORECAST IMPROVED YEAR 2005 WITHOUT PROJECT CONDITIONS PEAK
HOUR LOS**

Study Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Calhoun St/Avenue 50	10.5	B	17.5	C
Van Buren St/Avenue 50	10.5	B	23.5	C
Frederick St/Avenue 50	10.4	B	21.5	C
Source: RBF Consulting, 58 Acre Kirkjan Site Traffic Impact Analysis, March 19, 2004.				

As shown in Table 14, assuming implementation of the recommended improvements, the three deficient study intersections are forecast to operate at an acceptable LOS (LOS C or better) during the a.m. and p.m. peak hours for forecast year 2005 without Project conditions.

PROPOSED PROJECT

The proposed 58-acre Project site consists of 232 single-family dwelling units in the City of Coachella. As part of the proposed Project, the following improvements are planned for Avenue 50 and Avenue 51:

- An additional eastbound lane on Avenue 50 will be constructed along the Project site frontage.
- An additional westbound lane on Avenue 51 will be constructed along the Project site frontage.

Project Trip Generation

Table 15, *Proposed Project ITE Trip Rates*, summarizes the *Institute of Transportation Engineers (ITE)* trip generation rates used to calculate the number of trips forecast to be generated by the proposed Project.

Table 16, *Forecast Project Trip Generation*, summarizes trips forecast to be generated by the proposed Project utilizing the trip generation rates shown in Table 15.

As shown in Table 16, the proposed Project is forecast to generate approximately 2,220 daily trips, which includes approximately 179 a.m. peak hour trips and approximately 237 p.m. peak hour trips.

**Table 15
PROPOSED PROJECT ITE TRIP RATES**

Land Use (ITE Code)	AM Peak Hour Rates			PM Peak Hour Rates			Daily Trip Rate
	In	Out	Total	In	Out	Total	
Single-Family Detached Housing (210)	0.19	0.58	0.77	0.65	0.37	1.02	9.57

Source: 1997 ITE Trip Generation Manual, 6th Edition.

**Table 16
FORECAST PROJECT TRIP GENERATION**

Land Use	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
	In	Out	Total	In	Out	Total	
232 Single-Family Dwelling Units	44	135	179	151	86	237	2,220

Source: 1997 ITE Trip Generation Manual, 6th Edition.

FORECAST YEAR 2005 WITH PROJECT CONDITIONS

This section analyzes the impact of adding trips forecast to be generated by the proposed Project to forecast year 2005 without Project traffic conditions.

Forecast year 2005 with Project traffic volumes were derived by adding Project - generated trips to forecast year 2005 without Project traffic volumes. Forecast year 2005 with Project conditions assume implementation of improvements recommended to eliminate forecast year 2005 without Project deficiencies.

Forecast Year 2005 With Project Conditions Peak Hour Level of Service

Table 17, *Forecast Year 2005 With Project Peak Hour LOS*, summarizes the forecast year 2005 with Project conditions a.m. and p.m. peak hour average stopped delay per vehicle and corresponding LOS of the study intersections; detailed HCM analysis sheets are provided in Appendix B.

As shown in Table 17, two study intersections are forecast to operate at an unacceptable LOS (LOS D or worse) according to City of Coachella performance criteria for forecast year 2005 with Project conditions:

- Van Buren Street/Avenue 50 (p.m. peak hour only); and
- Frederick Street/Avenue 50 (p.m. peak hour only).

To eliminate the forecast year 2005 with Project conditions deficiencies at the two study intersections, the following mitigation measures are recommended:

Table 17
FORECAST YEAR 2005 WITH PROJECT PEAK HOUR LOS

Study Intersection	Forecast Improved Year 2005 Without Project				Forecast Year 2005 With Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Calhoun St/Avenue 50 (Stop)	10.5	B	17.5	C	10.8	B	19.1	C
Calhoun St/Avenue 51 (Stop)	7.6	A	8.0	A	7.6	A	8.0	A
Van Buren St/Avenue 50 (Stop)	10.5	B	23.5	C	11.0	B	29.5	E
Van Buren St/Avenue 51 (Stop)	7.8	A	8.4	A	8.0	A	8.7	A
Van Buren St/Avenue 52 (Stop)	10.3	B	10.7	B	10.4	B	11.0	B
Frederick St/Avenue 50 (Stop)	10.4	B	21.5	C	11.0	B	26.3	D
Frederick St/Avenue 51 (Stop)	9.1	A	11.4	A	9.2	A	10.4	B
Harrison St/Avenue 50 (Signal)	17.0	B	21.2	C	17.0	B	21.4	C
Note: Deficient intersection operation shown in bold.								
Source: RBF Consulting, 58 Acre Kirkjan Site Traffic Impact Analysis, March 19, 2004.								

- Van Buren Street/Avenue 50 - Modify eastbound Avenue 50 approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.
- Frederick Street/Avenue 50 - Modify westbound Avenue 50 approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.

Assuming implementation of the recommended mitigation measures, Table 18, *Forecast Mitigated Year 2005 With Project Peak Hour LOS*, shows the forecast LOS of the two intersections for forecast year 2005 with Project conditions; detailed HCM analysis sheets are provided in Appendix B.

Table 18
FORECAST MITIGATED YEAR 2005 WITH PROJECT PEAK HOUR LOS

Study Intersection	Non-Mitigated				Mitigated			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Van Buren St/Avenue 50 (Stop)	11.0	B	29.5	E	10.5	B	20.9	C
Frederick St/Avenue 50 (Stop)	11.0	B	26.3	D	10.7	B	17.8	C
Note: Deficient intersection operation shown in bold.								
Source: RBF Consulting, 58 Acre Kirkjan Site Traffic Impact Analysis, March 19, 2004.								

As shown in Table 18, assuming implementation of the recommended mitigation measures, the two study intersections are forecast to operate at an acceptable LOS (LOS C or better) during the a.m. and p.m. peak hours for forecast mitigated year 2005 with Project conditions.

FORECAST GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS

Forecast General Plan buildout without Project traffic volumes were derived by applying an annual growth rate factor of five percent on top of existing traffic volumes to obtain year 2025 volumes as directed by City staff.

Planned Roadway Improvements

Forecast General Plan buildout conditions assume buildout of the City General Plan Circulation Element as follows:

- Calhoun Street is improved to a two-lane, undivided Collector. At the intersections, Calhoun Street consists of one left-turn lane, one through lane, and one defacto right-turn lane;
- Van Buren Street is improved to a four-lane, divided Secondary Arterial. At the intersections, Van Buren Street consists of one left-turn lane, two through lanes, and one defacto right-turn lane;
- Frederick Street, south of Avenue 50, is improved to a four-lane, divided Secondary Arterial. At the intersections, Frederick Street consists of one left-turn lane, two through lanes, and one defacto right-turn lane;
- Harrison Street is improved to an eight-lane, divided Enhanced Major Arterial. At the intersections, Harrison Street consists of one left-turn lane, four through lanes, and one right-turn lane;
- Avenue 50 is improved to a four-lane, divided Primary Arterial. At the intersections, Avenue 50 consists of one left-turn lane, two through lanes, and one right-turn lane;
- Avenue 51 is improved to a four-lane, divided Secondary Arterial. At the intersections, Avenue 51 consists of one left-turn lane, two through lanes, and one defacto right-turn lane; and
- Avenue 52 is improved to a six-lane, divided Major Arterial. At the intersections, Avenue 52 consists of one left-turn lane, three through lanes, and one right-turn lane.

Forecast General Plan Buildout Without Project Conditions Peak Hour Level of Service

In response to widening the roadways to satisfy General Plan buildout conditions, the following intersections are assumed to be signalized:

- Calhoun Street/Avenue 50;
- Van Buren Street/Avenue 50;
- Frederick Street/Avenue 50; and

- Van Buren Street/Avenue 52.

Table 19, *Forecast General Plan Buildout Without Project Peak Hour LOS*, summarizes forecast General Plan buildout without Project conditions a.m. and p.m. peak hour average stopped delay per vehicle and corresponding LOS of the study intersections; detailed HCM analysis sheets are provided in Appendix B.

Table 19
FORECAST GENERAL PLAN BUILDOUT WITHOUT PROJECT PEAK HOUR LOS

Study Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Calhoun St/Avenue 50 (Stop)	10.6	B	10.4	B
Calhoun St/Avenue 51 (Stop)	8.9	A	11.7	B
Van Buren St/Avenue 50 (Stop)	12.9	B	12.1	B
Van Buren St/Avenue 51 (Stop)	9.6	A	12.2	B
Van Buren St/Avenue 52 (Stop)	11.7	B	12.8	B
Frederick St/Avenue 50 (Stop)	14.4	B	14.0	B
Frederick St/Avenue 51 (Stop)	10.5	B	21.9	C
Harrison St/Avenue 50 (Signal)	18.6	B	39.2	D
Note: Deficient intersection operation shown in bold.				
Source: RBF Consulting, <i>58 Acre Kirkjan Site Traffic Impact Analysis</i> , March 19, 2004.				

As shown in Table 19, one study intersection is forecast to operate at an unacceptable LOS (LOS D or worse) according to City of Coachella performance criteria for forecast General Plan buildout without Project conditions:

- Harrison Street/Avenue 50 (p.m. peak hour only).

Forecast General Plan Buildout Without Project Conditions Recommended Improvements

To eliminate the forecast General Plan buildout without Project conditions deficiency at the study intersection, the following improvement is recommended:

- Harrison Street/Avenue 50 - Modify eastbound Avenue 50 approach signal-timing to include a right-turn overlap.

Assuming implementation of the recommended improvement, Table 20, *Forecast Improved General Plan Buildout Without Project Conditions Peak Hour LOS*, shows the forecast LOS of the study intersection for forecast General Plan buildout without Project conditions; detailed HCM analysis sheets are provided in Appendix B.

**Table 20
FORECAST IMPROVED GENERAL PLAN BUILDOUT WITHOUT PROJECT
CONDITIONS PEAK HOUR LOS**

Study Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Harrison St/Avenue 50 (Signal)	17.7	B	23.9	C

Source: RBF Consulting, 58 Acre Kirkjan Site Traffic Impact Analysis, March 19, 2004.

As shown in Table 20, assuming implementation of the recommended improvement, the deficient study intersection is forecast to operate at an acceptable LOS (LOS C or better) during the a.m. and p.m. peak hours for forecast General Plan buildout without Project conditions.

FORECAST GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS

This section analyzes the impact of adding trips forecast to be generated by the proposed Project to forecast General Plan buildout without Project traffic conditions.

Forecast General Plan buildout with Project traffic volumes were derived by adding Project -generated trips to forecast General Plan buildout without Project traffic volumes. This represents the net difference in trips generated by the current existing General Plan agricultural-preserve zoning, which is assumed to not generate any trips and trips generated by the proposed General Plan Amendment (GPA). With the addition of this Project, a GPA would allow for up to ten dwelling units per acre, which is assumed for this analysis. Forecast buildout with Project conditions assume implementation of improvements recommended to eliminate forecast General Plan buildout without Project deficiencies.

Forecast General Plan Buildout With Project Conditions Peak Hour Level of Service

Table 21, *Forecast General Plan Buildout With Project Peak Hour LOS*, summarizes the forecast General Plan buildout with Project conditions a.m. and p.m. peak hour average stopped delay per vehicle and corresponding LOS of the study intersections; detailed HCM analysis sheets are provided in Appendix B.

As shown in Table 21, all study intersections are forecast to operate at an acceptable LOS (LOS C or better) according to City of Coachella performance criteria for forecast General Plan buildout with Project conditions.

SUMMARY

All study intersections are currently operating at an acceptable LOS (LOS C or better) during the a.m. and p.m. peak hours according to City of Coachella performance criteria.

The proposed Project is forecast to generate approximately 2,220 daily trips, which include approximately 179 a.m. peak hour trips and approximately 237 p.m. peak hour trips.

Table 21
FORECAST GENERAL PLAN BUILDOUT WITH PROJECT PEAK HOUR LOS

Study Intersection	Forecast Improved General Plan Buildout Without Project				Forecast General Plan Buildout With Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Calhoun St/Avenue 50 (Signal)	10.6	B	10.4	B	10.4	B	10.5	B
Calhoun St/Avenue 51 (Stop)	8.9	A	11.7	B	8.9	A	11.7	B
Van Buren St/Avenue 50 (Signal)	12.9	B	12.1	B	12.9	B	12.1	B
Van Buren St/Avenue 51 (Stop)	9.6	A	12.2	B	9.7	A	12.5	B
Van Buren St/Avenue 52 (Stop)	11.7	B	12.8	B	11.9	B	12.9	B
Frederick St/Avenue 50 (Signal)	14.4	B	14.0	B	14.3	B	14.0	B
Frederick St/Avenue 51 (Stop)	10.5	B	21.9	C	10.1	B	16.0	C
Harrison St/Avenue 50 (Signal)	17.7	B	23.9	C	19.0	B	25.1	C

Source: RBF Consulting, 58 Acre Kirkjan Site Traffic Impact Analysis, March 19, 2004.

Two study intersections are forecast to operate at an unacceptable LOS (LOS D or worse) according to City of Coachella performance criteria for forecast year 2005 with Project conditions:

- Van Buren Street/Avenue 50 (p.m. peak hour only); and
- Frederick Street/Avenue 50 (p.m. peak hour only).

To eliminate the forecast year 2005 with Project conditions deficiencies at the two study intersections, the following mitigation measures are recommended:

- Van Buren Street/Avenue 50 - Modify eastbound Avenue 50 approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.
- Frederick Street/Avenue 50 - Modify westbound Avenue 50 approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.

Assuming implementation of the recommended mitigation measures, the two study intersections are forecast to operate at an acceptable LOS (LOS C or better) during the a.m. and p.m. peak hours for forecast year 2005 with Project conditions.

The Project applicant's payment to the Coachella Valley Association of Governments (CVAG) Transportation Uniform Mitigation Fund (TUMF) Fee Program and to the City of Coachella Environmental Fee Program For Traffic Signals shall pay for the Project's fair share contribution to the identified mitigation measures. Implementation of the recommended mitigation measures would reduce impacts to a less than significant level.

All study intersections are forecast to operate at an acceptable LOS (LOS C or better) according to City of Coachella performance criteria for forecast General Plan buildout with Project conditions. No mitigation measures are required for forecast General Plan buildout with Project conditions and therefore, impacts would be less than significant in this regard.

Mitigation Measure:

- TR1 *The Project applicant's payment to the Coachella Valley Association of Governments (CVAG) Transportation Uniform Mitigation Fund (TUMF) Fee Program and to the City of Coachella Environmental Fee Program For Traffic Signals shall pay for the Project's fair share contribution to the identified mitigation measures as follows:*
- *Van Buren Street/Avenue 50 - Modify eastbound Avenue 50 approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.*
 - *Frederick Street/Avenue 50 - Modify westbound Avenue 50 approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.*
- TR2 *The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Department of Community Development regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impact of new development, as follows: The approved development impact fee for Traffic Signal be paid at the time permits are issued. A fee shall be paid at the time the permits are issued as a mitigation of the environmental impacts associated with this project. The fees shall be as follows: Building - \$192.00 per dwelling unit.*
- TR3 *The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Department of Community Development regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impact of new development as follows: The approved development impact fee for Bridge and Grade Separation be paid at that permits are issued. If permits are issued prior to the approval of a development impact fee, a fee shall be paid at the time the permits are issued as a mitigation of the environmental impacts associated with this project. The fee shall be as follows: Buildings - \$422.00 per dwelling unit.*
- TR4 *The City of Coachella has determined that there is a need for improvements that are caused by new development and for which a shared responsibility for constructing exists. The study prepared by the Department of Community Development regarding Proposed New Development Impact Fees has been prepared and is available for review. Payment of a fair share amount would serve to mitigate the impact of new development. The approved development impact fee for Bus Shelter and Bus Stop Safety Zone shall be paid at the time*

permits are issued. A fee shall be paid at the time the permits are issued as a mitigation for environmental impacts associated with the project. The fees shall be as follows: Bus Shelters - \$50.00 per dwelling unit.

- b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

Less Than Significant Impact With Mitigation Incorporated. Refer to Response 4.15(a).

- 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?*

No Impact. Since the Project site is not located within the direct flight path of the Desert Resorts Regional Airport, an increase in traffic levels or change in location that would result in substantial safety risks are not anticipated to occur. Therefore, there would be no impact in this regard.

- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact With Mitigation Incorporated. Project site access is proposed at one full-access location and two right-in-right-out only access location on Avenue 50 and one full-access location on Avenue 51. The proposed Project is subject to the provisions of the City of Coachella design standards in order to alleviate design features and safety hazards, which would reduce potential impacts to a less than significant level. However, the following mitigation measure is recommended to ensure transportation safety and visibility impacts remain at or below existing levels.

Mitigation Measure:

TR5 *Prior to Project plan approval, the quantity, location, width and type of driveways shall be subject to the approval of the City Engineer. An effective sight distance for vehicular traffic shall be maintained at the driveway entrances on Avenue 50 and Calhoun Street. Adequate sight distance shall also be maintained within the development at all driveway intersections to the satisfaction of the City Engineer.*

- e) *Result in inadequate emergency access?*

Less Than Significant Impact. The Project proposes ingress/egress locations off of Avenue 50 and Calhoun Street. The site plan must satisfy all City of Coachella design standards related to emergency access. Thus, no significant impacts are anticipated in this regard.

- f) *Result in inadequate parking capacity?*

Less Than Significant Impact. Section 070.03. *Parking Requirements*, identifies the parking requirements for residential uses. Section 4(a), *Residential Uses*, requires two parking spaces per dwelling unit, both to be in an enclosed garage. The proposed Project would be required to comply with this parking requirement, therefore, impacts in this regard would be less than significant.

- g) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

No Impact. Due to the nature and scope of the proposed Project, no impacts are anticipated in regards to alternative transportation.

4.16 UTILITIES AND SERVICE SYSTEMS. *Would the project:*

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Less Than Significant Impact With Mitigation Incorporated. Refer to Response 4.8(a).

Mitigation Measures: Refer to Mitigation Measures HYD1 through HYD5.

- 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?*

Less Than Significant Impact With Mitigation Incorporated. The Coachella Sanitary District (CSD) is responsible for the provision of wastewater treatment facilities that serve the Project site. The existing sewer collection system is composed of small diameter pipe with larger diameter pipes serving as interceptors at Harrison and Highway 111; east to west between Avenue 52 and Avenue 53; parallel to the stormwater channel north of Avenue 54; and in Avenue 54 from Van Buren to the existing wastewater treatment plant (WWTP). The WWTP has a designed capacity of 2.8 million gallons per day (MGD). Currently, the average daily flow is 1.9 MGD or 68 percent capacity.

Based on CSD generation factors, residential uses generate 646 gallons of wastewater per day per acre.¹⁰ Therefore, the proposed Project (58 acres) would generate approximately 37,468 gallons of wastewater per day. This represents approximately 0.1 percent of the anticipated increase in wastewater generation upon buildout of the General Plan, which is anticipated to be approximately 34.5 million gallons of wastewater per day. In addition, the increase of 37,468 gallons of wastewater per day would represent less than one percent of the current flow. Therefore, development of the proposed Project would not result in significant impacts to wastewater facilities. However, mitigation measures have been included in order to ensure impacts to wastewater facilities are reduced to a less than significant level.

The Coachella Municipal Water Department serves the incorporated area of the City, including the Project site, with potable water. As discussed above, the City relies on groundwater extraction from the Whitewater River sub-basin as its chief source of potable water. Using water from this source, the City operates a water supply, storage and delivery system consisting of wells, reservoirs, booster stations and distribution lines.

¹⁰ Wastewater generation rates based on the *General Plan EIR*, Table 3.10-4. The generation rate for residential land use is 646 gallons per day per acre.

Currently, the City has two reservoirs; a 1.5 million gallon (MG) water tank located south of 46th Avenue and west of Polk Street. The second storage tank is 3.6 MG is located near 51st Avenue, west of Highway 86. The City's water system employs the use of four active wells with a total production capacity of approximately 3,750 gallons per minute (2.6 MGD). The City's existing water system is organized around two pressure zones. The Project site is located within the lower zone that lies south of 48th Avenue, bounded by Van Buren on the west, the Coachella Valley Storm Drain on the east and 54th Avenue on the south.

Based on generation factors from the City of Coachella Water Master Plan, residential uses have a demand factor 1,121 gallons of water per day per acre.¹¹ Therefore, the proposed Project (58 acres) would increase water demand by 65,018 gallons of water per day. This represents approximately 0.5 percent of the anticipated increase in water demand upon buildout of the General Plan (approximately 12.1 million GPD). Therefore, development of the proposed Project would not result in significant impacts to water facilities.

Mitigation Measures:

UTIL1 *All required sewer improvements shall be designed and constructed to City Standards. All tentative tract maps, site plans and other plans within the Project area shall be accompanied by adequate plans for sewer improvements prepared by a registered professional engineer.*

¹¹ Water generation rates based on the *General Plan EIR*, Table 3.10-2. The generation rate for residential land use is 1,121 gallons per day per acre.

- 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?*

Less Than Significant Impact With Mitigation Incorporated. The Coachella Valley Stormwater District merged with the Coachella Valley Water District in 1937, which presently maintains regional flood control facilities in the valley. Within the Project area, the west side of the Whitewater River channel has been lined with concrete north of Avenue 50 and is designed to handle 82,000 cubic feet per second (cfs) or the Standard Project Flood (SPF) which is defined as the largest flood which can occur within a given area. The SPF is determined using meteorological data, hydrological data and historical records and is equal to more than twice the amount of flow associated with a 100-year storm event (42,000 cfs).

The proposed Project would be subject to requirements of the NPDES that would reduce impacts to the storm water drainage systems. Also, Project storm drain improvements shall be subject to City review and approval. The following mitigation measures are recommended to ensure storm water drainage impacts remain at or below existing levels.

Mitigation Measures:

UTIL2 *Prior to the issuance of building permits, the applicant shall submit for approval of the City Engineering Department, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that shall be used on-site to control predictable pollutant runoff.*

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Less Than Significant Impact. Refer to Responses 4.8(b) and 4.16(b).

- 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 project's projected demand in addition to the provider's existing commitments?*

Less Than Significant Impact. Refer to Response 4.16(a).

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Less Than Significant Impact. The City of Coachella currently contracts with Western Waste Industries (WWI) for solid waste collection and disposal services. WWI has curbside recycling programs for single-family residences along with voluntary programs. Currently, WWI estimates a diversion rate of approximately 61 percent. Solid waste that is not otherwise diverted is disposed of at either the Arvin Sanitary Landfill, Azusa Land Reclamation Landfill, Lamb Canyon Disposal site, the Badlands Landfill or the Mesquite Landfill. The City of Coachella generated a total of 22,301 tons of solid waste in 2002.¹²

¹² California Integrated Waste Management Board, *Jurisdiction Disposal and ADC by Facility*, Updated March 2, 2004.

The California Integrated Waste Management Act, AB 939, required jurisdictions to divert 50 percent of the waste stream away from land disposal by the year 2000. According to a study prepared for Riverside County, the incorporated City of Coachella diverted approximately 57 percent of their solid waste in 1990, through recycling and composting.¹³ Since 1995, the City has diverted on average 54 percent of the City's solid waste.¹⁴

Proposed demolition and construction activities would generate construction debris from development of the Project site. Post development operations resulting from development of 232 single-family residential units would further increase the volume of solid waste generated from the Project site. Based upon a generation factor of 2.27 pounds per person per year, the proposed Project would generate approximately 2,529 pounds (1.1 tons) of solid waste a year.¹⁵

The addition of 1.1 tons of solid waste generated as a result of the proposed Project represents 0.8 percent of the anticipated solid waste generated from buildout of the General Plan (approximately 144 tons per year). In addition, the volume of the Project's solid waste, ultimately disposed of at the landfills would be reduced due to the requirements of AB 939. Therefore, impacts in this regard would be less than significant.

- g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

Less Than Significant Impact. Refer to Response 4.16(f).

4.17 MANDATORY FINDINGS OF SIGNIFICANCE.

- 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?*

Less Than Significant Impact. A total of five special status species were identified on the Project site. Therefore, mitigation measures including performing spring surveys and requiring protection or relocation of the species, have been included which would reduce impacts to special status plants to a less than significant impact. In addition, the burrowing owl and the Coachella Valley Round-tailed Ground Squirrel were either identified on-site or have a potential to occur at the Project site. As a result, mitigation measures have been recommended which would require further surveying and protection of the special status wildlife species. Therefore, with implementation of the recommended mitigation measures, the proposed Project would not have the potential to degrade the quality of the environment.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a*

¹³ CHM Hill, *Riverside County Waste Generation Study*, June 1991.

¹⁴ California Integrated Waste Management Board, *Jurisdiction Diversion Rate Summary*, Updated March 2, 2004.

¹⁵ City of Coachella, *General Plan EIR*, Table 3.10-6.

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)?

Less Than Significant Impact. Although the Project may incrementally affect other resources that were determined to be less than significant, the Project's contribution to these effects is not considered "cumulatively considerable", in consideration of the less than significant impacts associated with the proposed Project, with implementation of the recommended mitigation measures. In addition, each project would be evaluated on a case by case basis and mitigation would be implemented to ensure that impacts would be reduced to the maximum extent feasible.

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

Less Than Significant Impact. Section 4.0, *Environmental Analysis*, reviewed the proposed Project's potential impacts related to air pollution, noise, public health and safety, traffic and other issues. As explained in these sections, the proposed Project would not cause substantial adverse effects on human beings.

5.0 REFERENCES

5.1 Environmental Evaluation Personnel

RBF Consulting

Mr. Eddie Torres, INCE, Project Manager
Ms. Lindsay Anderson, Environmental Analyst

Lead Agency

City of Coachella
Gabriel E. Papp
1515 Sixth Street
Coachella, CA 92236

5.2 Reference Documents

The following references were utilized during preparation of this Initial Study/Negative Declaration.

Archaeological Resource Management Corporation, Report of Phase I Archaeological Assessment for 58-Acre Parcel, January 14, 2004.

BonTerra Consulting, Biological Resources Assessment for a 58-Acre site in the City of Coachella, Riverside County, California, January 14, 2004.

California Department of Finance, County Population and Housing Statistics Table E-5, 2003.

California Environmental Resources Evaluation System, website: <http://ceres.ca.gov/>.

City of Coachella, General Plan 2020, October 1998.

City of Coachella, General Plan Housing Update, October 2001.

County of Riverside, Riverside County Comprehensive General Plan, Fourth Edition, March 6, 1984.

Department of Conservation, California Geological Survey website: www.consrv.ca.gov.

RBF Consulting, 58-Acre Kirkjan Site Traffic Impact Analysis, March 18, 2004.

RBF Consulting, Air Quality Assessment – Kirkjan Property, March 25, 2004.

RBF Consulting, Phase I Environmental Site Assessment 58-Acre Kirkjan Property, February 6, 2004.

South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993.

Southern California Association of Governments, Regional Comprehensive Plan and Guide, May 1995.

The Thomas Guide, San Bernardino and Riverside Counties, 2003.

United States Department of Agriculture, Soil Conservation Service, United States Department of the Interior, Bureau of Indian Affairs in cooperation with the University of California Agricultural Experiment Station, Soil Survey for Western Riverside Area, California. November 1971.

United States Department of the Interior, Geological Survey, Fallbrook Quadrangle. 1968, revised 1988.

6.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in this Initial Study/Negative Declaration, we recommend that the City of Coachella prepare a Negative Declaration for this project. We find that the Kirkjan Project would not have a significant effect on environmental issues, and that issues identified were either at a Less Than Significant or No Impact level. We recommend that the first category be selected for the Lead Agency's determination (refer to Section 7.0, *Lead Agency Determination*).



Eddie Torres
Project Manager, Environmental Services
RBF Consulting

3/31/04

Date

7.0 LEAD AGENCY DETERMINATION

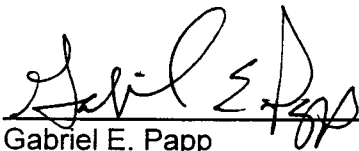
On the basis of this initial evaluation:

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

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 the appropriate mitigation measures have been added. 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 significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.



Gabriel E. Papp
City of Coachella

4/27/04
Date