

SAN BERNARDINO COUNTY

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT LABEL:

APN:	0601-211-09 and 13	USGS Quad:	Joshua Tree North & South
APPLICANT:	YV 105 LLP/Terra Nova	T, R, Section:	T: 1N R: 6E Sec.34 SE ¼
COMMUNITY:	Joshua Tree	Thomas Bros.:	Page 4958, grids: H1, J1, H2, and J2.
LOCATION:	North side of Alta Loma Drive, west side of Sunny Vista Road and south side of Sunburst Road	Planning Area:	Joshua Tree
PROJECT NO:	P200700997	Land Use Zoning:	RS-10M
STAFF:	Chris Warrick	Overlays:	None
REP(S):	Terra Nova Planning & Research, Inc.		
PROPOSAL:	A) Tentative Tract Map 18255 to create 248 single family residential lots, one lot for a one-acre community center and 40 lettered lots for private streets, landscaping and drainage facilities on 105.24 acres. B) Conditional Use Permit (CUP) for the construction of a sewer package treatment plant to serve the single family structures within Tentative Tract 18255.		

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino
Land Use Services Department - Current Planning
385 North Arrowhead Avenue
San Bernardino, CA 92415-0182

Contact person: Chris Warrick, Planner
Phone No: (909) 387-4112

Project Sponsor: Terra Nova Planning and Research, Inc.
400 South Farrell, Suite B-205
Palm Springs, Ca 92262
Phone No: (760) 320-9040
E-mail: jcriste@terranovaplanning.com

OVERVIEW AND EXISTING CONDITIONS:

The subject property consists of 105± acres located in the unincorporated community of Joshua Tree, San Bernardino County, California. The subject property is located adjacent to an existing elementary school and partially built-out residential neighborhoods comprised of single-family homes. The applicant has filed a subdivision map (TTM 18255) to subdivide 105 acres for the development of 248 single-family lots, public and private streets, recreation and open space areas, and various drainage facilities. The applicant has also submitted an application for a Conditional Use Permit for the construction of a sewage package treatment plant that will serve the residential subdivision. The proposed subdivision has a minimum net lot area of 10,000 square feet. Some lots exceed 20,230 square feet and the proposed average residential lot size is 11,528 square feet.

The subject property is currently vacant and no structures exist on-site. However, there are two unpaved roads and a footpath that transects the subject property, as well as disturbance from OHV use. In addition, there is an existing but unused utility easement that runs east/west across the midsection of the site, which has been abandoned.

The site slopes gently to the north, with an elevation of approximately 3,200 feet on the southern boundary of the property and about 3,000 feet on the northern boundary, with an average slope of approximately 6 percent. Uplands occur to the south and well-defined watersheds of limited size generate storm flows that are tributary to the subject property, with both sheet and channalized flows passing through the area and the subject property. On-site drainage includes an unnamed blue-line stream. Drainage along Alta Loma Drive and tributary to the site is to be trained and diverted along the north side of the road, to drain to specific locations along the project frontage. A third drainage originates from the southwest and cuts through the northwest corner of the site. The subject property is designated Zone X on the Federal Insurance Rate Map for the area prepared by the Federal Emergency Management Agency (FEMA). Zone X designates lands located outside the 100-year flood plain but within the 500-year flood plain.

Vegetation on the subject property is sparse and is made up of shrubs and groundcover typical of the area, including an open Joshua tree woodland across much of the site, as well as cactus, yucca species, and other local perennial and annual plant species. Biological resources surveys conducted on the subject property indicated no presence of sensitive plant or animal species. The area has been known to harbor desert tortoise, although no tortoise or tortoise sign were detected on the site during multiple surveys. Burrowing owl may also occasionally occupy the site. Site development will result in the removal of native vegetation, including Joshua tree and associated elements of this woodland. Removal of on-site vegetation will be done in accordance with Title 8, Division 9 of the County of San Bernardino Development Code, Native Plant Ordinance.

PROJECT LOCATION

The subject property is located in the unincorporated community of Joshua tree in the Morongo Basin area of San Bernardino County. The property is one-half mile south of State Highway 62 (Twentynine Palms Highway). The project site is bounded on the south by Alta Loma Drive, on the west by scattered single-family residential development and Sherwood Road, on the east by Sunny Vista Road, and on the north by vacant land and Sunburst Drive. Friendly Hills Elementary School is located adjacent to the site and occupies the northwest corner of Alta Loma Drive and Sunny Vista Road. Immediately to the north, west and south of the subject property are lands that are subdivided into single-family lots with average lot sizes of 18,000 square feet. Somewhat farther to the east is another residential subdivision with lots ranging from approximately 7,600 square feet to 14,000 square feet in size. There is limited development to the north of the property and lands to the northwest remain vacant (See exhibits 1 through 3). The site may be reached from State Highway 62 via Sunny Vista Road or from Alta Loma Drive, which also provides important east-west connectivity in the area (Please see attached Project Vicinity Map and Site Aerials).

PROJECT DESCRIPTION:

The project proposes the development of a subdivision on 105± acres within the community of Joshua Tree in San Bernardino County. At buildout, the development will contain 248 single-family homes on residential lots no smaller than 10,000 square feet, with some lots exceeding 20,000 square feet. The proposed average residential lot size is 11,528 square feet.

The proposed development will provide for on-site recreational facilities including a 1-acre community park in the northeast portion of the site. Development will also incorporate passive open space areas, including areas suitable for walking and to exercise domestic pets within stormwater basins, undeveloped open space and the stormwater channel in the western portion of the site.

Project development will also result in construction of infrastructure to serve the site, including public and private roads, drainage channels, and retention basins. The project includes the construction of an onsite wastewater treatment package plant, to be sited in the northeast portion of property on approximately 0.93 acres on lot KK, just south of Sunburst Drive. The proposed package plant will treat all wastewater generated on-site to tertiary levels, and will then be recharged to the groundwater basin via injection wells. This facility will be managed by the Joshua Basin Water District.

Site preparation will require grading activities, alteration of onsite drainages, and the removal and relocation of Joshua Tree woodland vegetation. Removal of on-site vegetation will be done in accordance with Title 8, Division 9 of the County of San Bernardino Development Code, Native Plant Ordinance. Any removed vegetation that is removed will be placed in a nursery and re-introduced into the project landscaping.

The review of onsite drainages with the California Department of Fish and Wildlife will require that a Streambed Alteration Agreement (SAA) (Section 1600-1603) be issued by the California Department of Fish and Wildlife (CDFW). The SAA application for has been filed with CDFW and is currently being processed. The project is expected to impact approximately 37,820 cubic yards (cut and fill) within the designated streambed, and 9.73 acres of drainage area.

ENVIRONMENTAL/EXISTING SITE CONDITIONS:

AREA	EXISTING LAND USE	LAND USE/OVERLAY DISTRICT
Site	Vacant	Single Residential (RS-10M)
North	Vacant, Single Family Residential	Single Residential (RS-14M) Single Residential (RS-10M)
South	Single Family Residential Elementary School	Single Residential (RS-14M)/FS2 Institutional (IN)
East	Single Family Residential	Single Residential (RS-10M)
West	Single Family Residential	Single Residential (RS-14M) Multiple Residential (RM)

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): 1602 Streambed Alteration Agreement from CDFW.

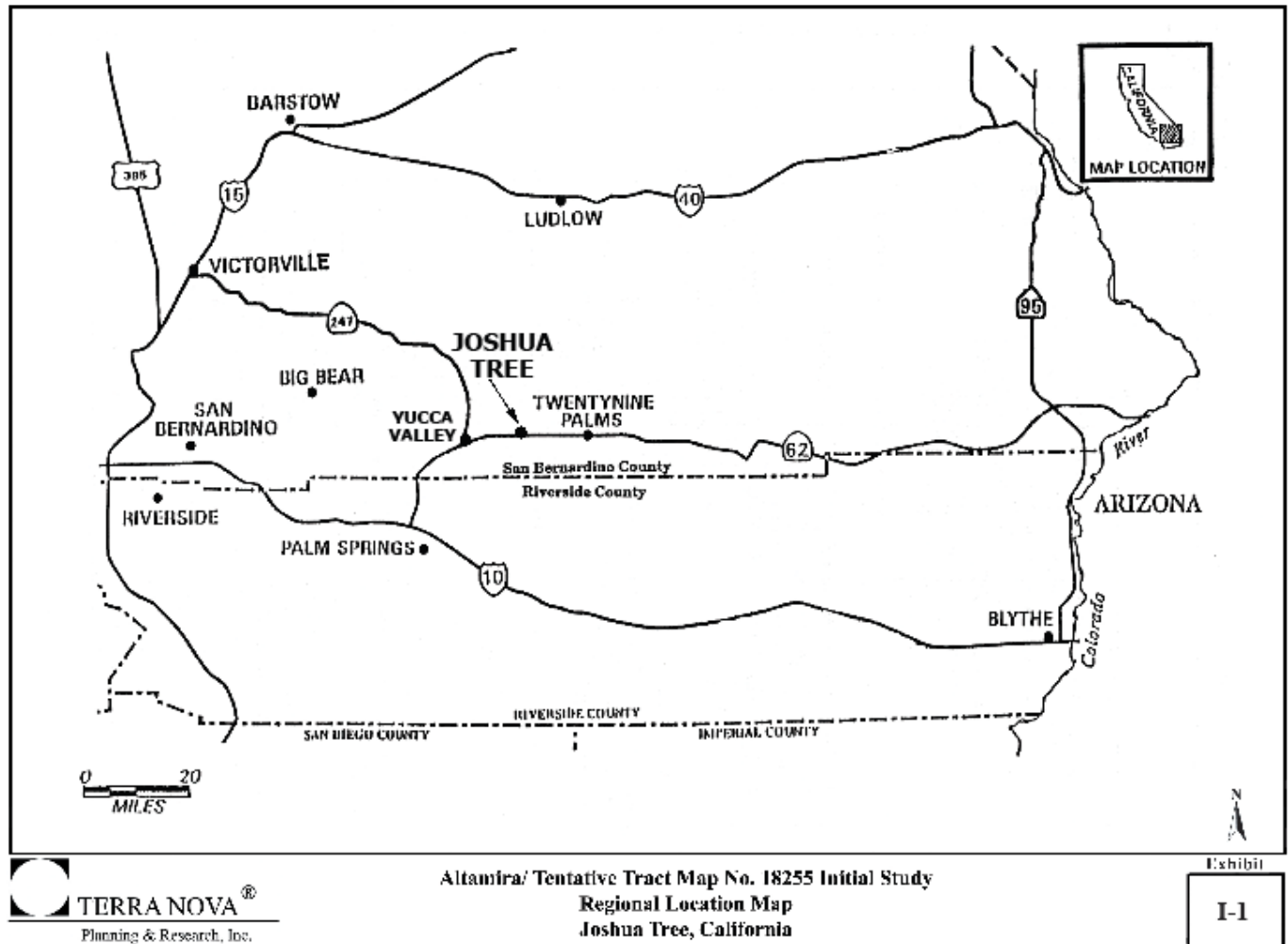
Federal: None.

State of California: Regional Water Quality Control Board, and Department of Fish and Wildlife.

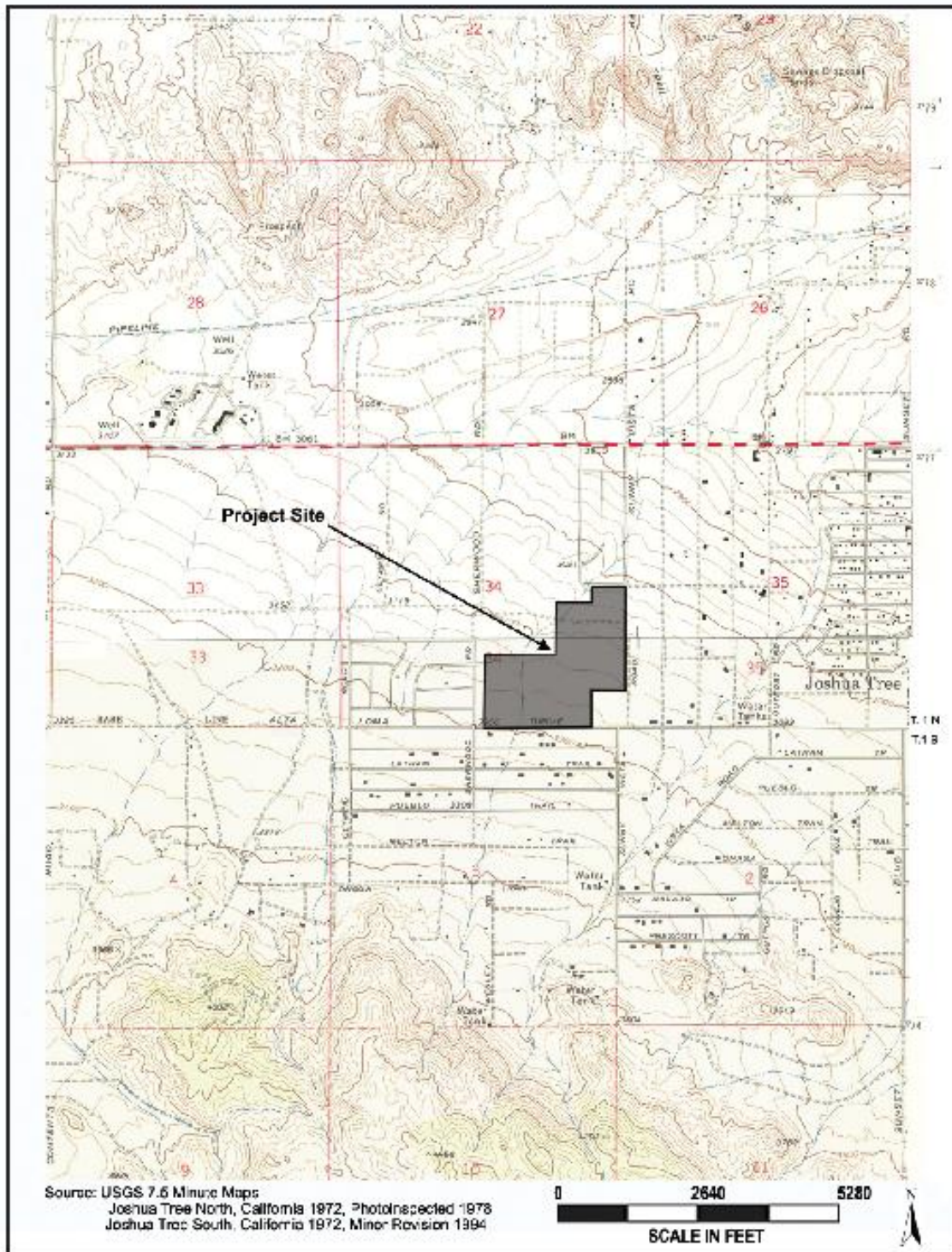
County of San Bernardino: Land Use Services Department – Planning, Land Development, Code Enforcement, Building and Safety, Public Health-Environmental Health Services, Special Districts, Public Works, and County Fire.

Local: Joshua Basin Water District.

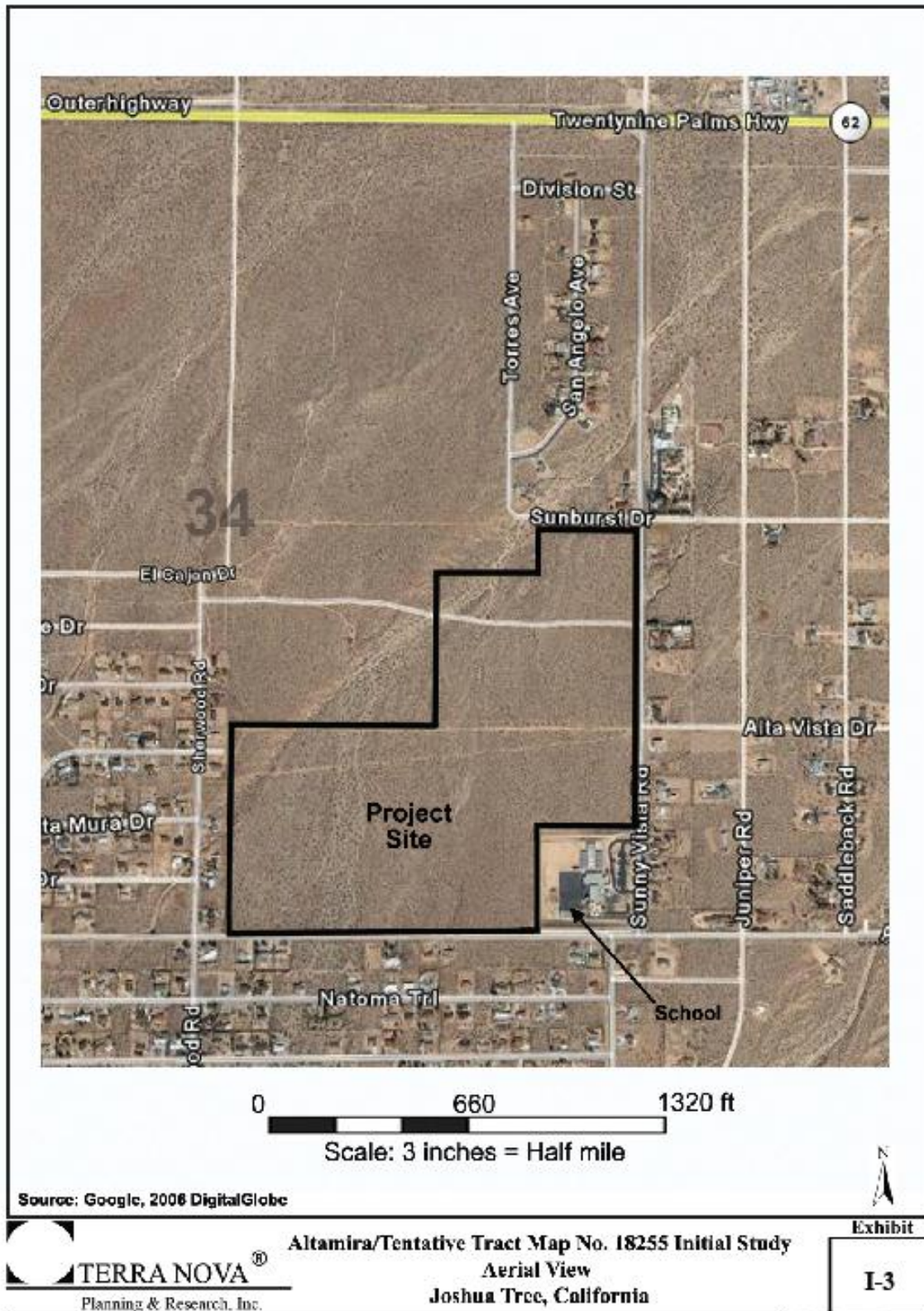
Region Exhibit I-1



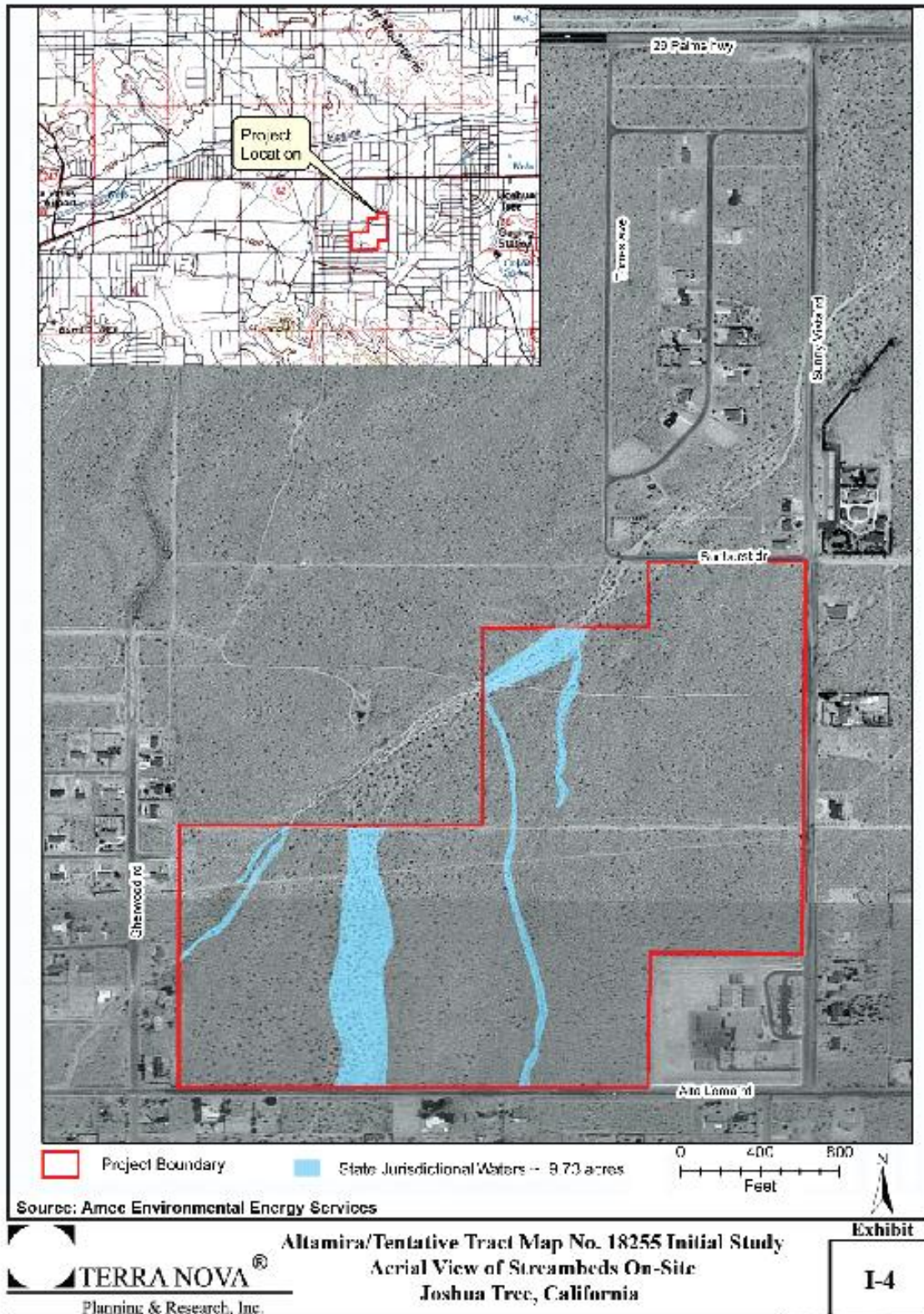
Vicinity Exhibit I-2



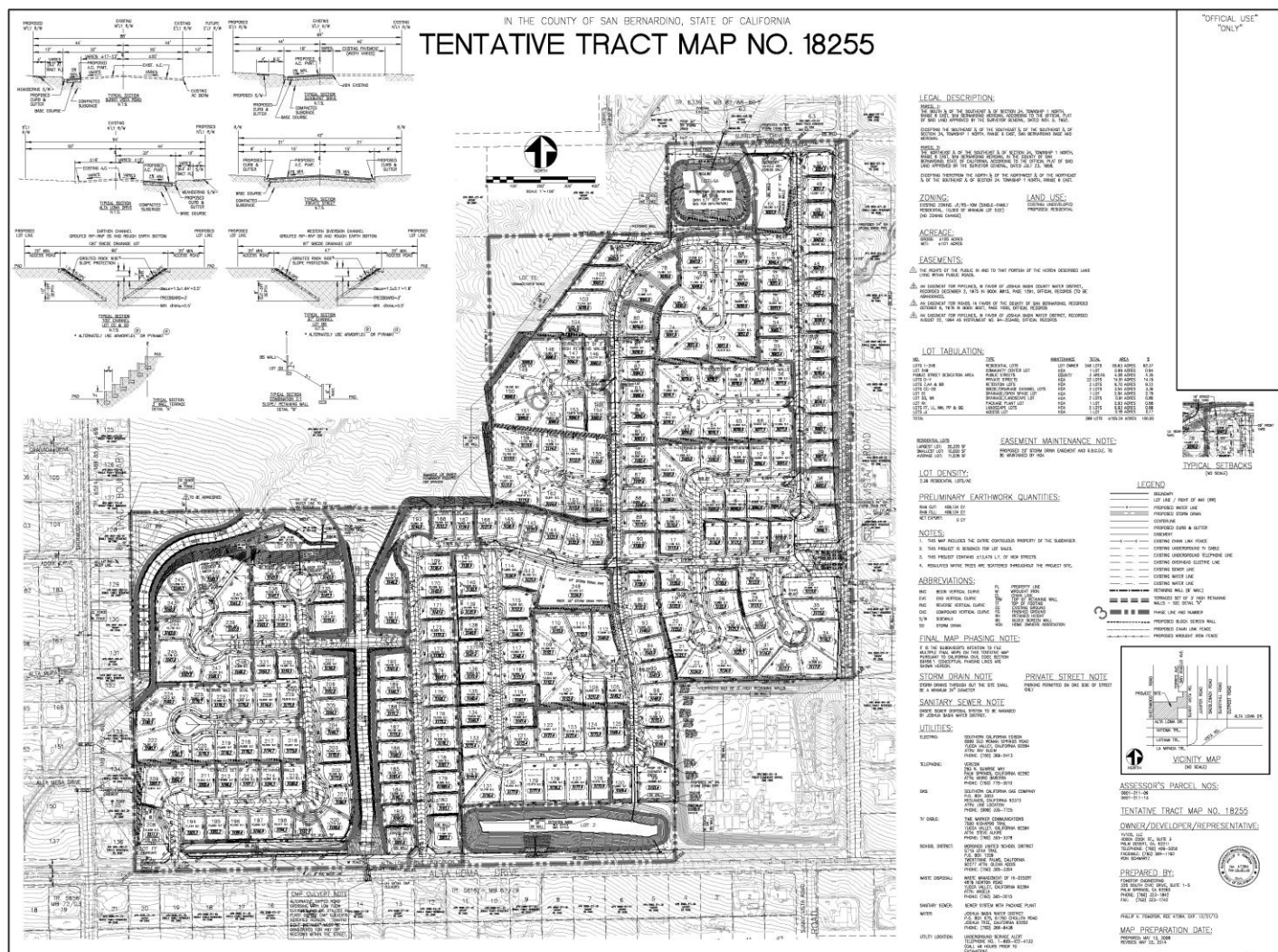
Aerial Exhibit I-3



Streams Exhibit I-4



IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA
TENTATIVE TRACT MAP NO. 18255



EVALUATION FORMAT

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on seventeen (17) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant	No Impact
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Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. **No Impact:** No impacts are identified or anticipated and no mitigation measures are required.
2. **Less than Significant Impact:** No significant adverse impacts are identified or anticipated and no mitigation measures are required.
3. **Less than Significant Impact with Mitigation Incorporated:** Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)
4. **Potentially Significant Impact:** Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (List of the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use/ Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

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

Signature: prepared by Chris Warrick, Senior Planner

July 15, 2014

Date

Signature: David Prusch, Supervising Planner
Planning Division

July 15, 2014

Date

Issues		Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
I. AESTHETICS - Would the project					
a)	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

(Check ☐ if project is located within the view-shed of any Scenic Route listed in the General Plan):

- I a) **Less than significant.** The project will have a less than significant impact on scenic vistas. The proposed project is to be sited on sloping terrain allowing stepped development, and within an area where surrounding lands are already substantially developed. The applicant proposes complementary architecture and a palette of materials that will further blend the development with the surrounding viewshed.
- I b) **Less than Significant.** The site is located on the elevated valley floor, away from rock outcroppings. There are no historic buildings or structures of any kind on the subject site. The property is located approximately one-half mile south of State Highway 62, which is an officially designated State scenic highway, and over one mile west of Park Boulevard/Quail Springs Road. Salvageable specimens of Joshua Trees and other unique native vegetation presently onsite that will be removed, and will be preserved in a nursery and replanted into the project's landscaping. This will be conducted in a manner that is consistent with best nursery practices and Title 8, Division 9 of the San Bernardino County Development Code.
- I c) **Less than Significant.** The subject property is located within an area that is surrounded by existing development, which is primarily residential, with the exception of an elementary school which is located adjacent to the southeast portion of the site. Site topography also allows the development of stepped lots that minimize viewshed impacts within the community and along Alta Loma Drive, which is further buffered by planned parkway and drainage area improvements. The project restricts two-story development to internal lots only. Development of the subject property will not substantially degrade the visual character or quality of the site or area.
- I d) **Less than Significant with Mitigation Incorporated.** Development of 248 residential units has the potential to result in an increase in light or glare. In order to minimize this potential impact residential lighting shall be in conformance with the Night Sky Ordinance and lighting restrictions, and exterior lighting designs shall be reviewed during the approval process. The Altamira development standards and guidelines will effectively limit unwanted light and glare. Implementation of mitigation measures set forth below will ensure that impacts of light or glare are reduced to less than significant levels.

Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

MM# Mitigation Measures

- I-1** Lighting – Streets. Street lamps shall be low-scale, low-intensity lighting and well-shielded. Street lighting shall be limited to the greatest extent practicable, while retaining safe and defensible space. Street lighting at major and secondary access drives may be required, as well as at the most heavily traveled intersections within the development. Wherever possible, other, smaller scale and lower intensity lighting should be used. [Mitigation Measure I-1] General Requirements/Planning
- I-2** Lighting – Common Areas. Common area, pedestrian and other project lighting shall utilize the lowest levels of illumination practicable. No upward lighting of slopes shall be permitted. Landscape lighting shall be shielded to direct and limit areas of illumination. Lighting plans shall be provided with project building and landscape plans, and every reasonable effort shall be made to protect night skies. The developer shall utilize the lowest levels of private and community level lighting necessary to provide adequate visibility and security, while protecting adjoining lands. No flashing, pulsing or animated lighting will be permitted. Elevated lighting, including but not limited to parking lot lighting, shall be full-cutoff fixtures. Drop or sag lens fixtures shall not be permitted. Semi-cutoff fixtures constructed to direct 95% of light rays below the horizontal plane may be permitted upon careful review by the County. [Mitigation Measure I-2] General Requirements/Planning

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
II. AGRICULTURE AND FORESTRY 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (Check ☐ if project is located in the Important Farmlands Overlay):

- II a) **No Impact.** The proposed project will have no impact to agricultural resources, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. There are no agricultural land uses within the subject property or in the vicinity.
- II b) **No Impact.** The subject property is currently zoned for single-family residential land use, which is consistent with the proposed project, and will have no impact on existing agriculture land use designations. The project site is not located near agricultural lands, or any lands that are under Williamson Act contract. Therefore, the project will not conflict with existing zoning for agricultural use, or a Williamson Act contract.
- II c) **No Impact.** The proposed project will not have any direct or indirect impacts to agricultural resources in the County including the conversion of Farmland to non-agricultural uses.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
III. 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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION (Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

- III a) **Less than Significant.** Development of the subject property will not interfere with implementation of the Air Quality Plan as established by the Mojave Desert Air Quality Management District (MDAQMD). Based on the Air Quality Impacts Analysis, which can be seen in full in Appendix A of this document, grading, construction, and operation-related emissions do not exceed the District's thresholds and therefore will not conflict with the Air Quality Plan. Table III-1 (Below) shows the annual and daily thresholds for the MDAQMD.

**Table III-1
Emissions Thresholds for MDAQMD**

Criteria Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Carbon Monoxide (CO)	100	548
Nitrogen Oxide (NOx)	25	137
Volatile Organic Compounds (VOC)	25	137
Sulfur Oxide (SOx)	25	137
Particulate Matter (PM10 and PM2.5)	15	82

Source: "MDAQMD CEQA and Federal Conformity Guidelines," June 2007.

- III b) **Less than significant with Mitigation Incorporated.** The Mojave Desert Air Quality Management District (MDAQMD) is in severe non-attainment for ozone and PM10. The District has met the attainment standards for SOx, NOx, lead, and CO. With the implementation of mitigation measures set forth below, development of the subject project will not contribute to an air quality violation beyond the existing non-attainment designation mentioned above. The Air Quality tables below quantify the potential emissions that may result from all activities associated with development of the project, including site preparation, construction, and operation. It should be noted that the following analysis assumes construction on 105 acres with no more than 17 acres of active disturbance on any given day. Also, see the appended Air Quality Study for methodology and modeling assumptions.

Fugitive Dust

Site preparation and grading activities will result in the generation of fugitive dust. Development will allow for as much as 17 acres to be actively disturbed on any given day. In the event that a 17 acre area is disturbed simultaneously, with the implementation of mitigation measures approximately 76.37 pounds of fugitive dust per day is estimated to be generated. With implementation of BMP's and other measures set forth below, the MDAQMD daily threshold of 82 pounds for particulate matter would not be exceeded and impacts associated with air quality impacts from fugitive dust generation would be less than significant.

**Table III-2
Fugitive Dust Potential (Unmitigated)**

Area to be Disturbed	Total Potential Factor	Mitigated Dust
17.0 ± acres	20.0 lbs./day/acre	76.37 lbs./day

Source: URBEMIS 2007 version 9.2.4.

Construction Summary

The proposed project will generate emissions from the operation of construction equipment, workers travel to and from the site, trenching activities for the installation of utilities, roadway paving, application of architectural coating, and the delivery of materials to the project site. Emissions for all pollutants of concern are well below the thresholds as established by MDAQMD (Table III-3).

**Table III-3
Construction Emission Summary**

	(pounds per day)						
	CO	ROG	NOx	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Equip. Emissions 2014	60.59	8.14	62.42	0.08	3.10	2.85	11,318.84
Equip. Emissions 2015	25.53	22.49	25.53	0.07	1.49	1.36	9,712.17
MDAQMD Threshold	548.00	137.00	137.00	137.00	82.00	N/A	N/A

Note that emission projections for summer and winter are equivalent.

Operational Summary

The project has the potential to generate stationary source emissions from residential dwelling units and moving source emissions from vehicle trips. Stationary sources include the use of natural gas and electricity. Table III-4 shows that emissions for all criteria pollutants are below the MDAQMD thresholds.

**Table III-4
Operational Emission Summary**

	(pounds per day)						
	CO	ROG	NOx	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
<u>Summer</u>							
Area Source Emissions	13.00	14.03	4.23	0.00	0.04	0.04	5,258.35
Operational Emissions	354.03	28.59	49.57	0.38	61.20	12.33	37,469.21
Summer Emissions	367.03	42.62	53.80	0.38	61.24	12.37	42,727.56
<u>Winter</u>							
Area Source Emissions	111.35	51.51	7.69	0.31	17.01	16.38	10,035.51
Operational Emissions	339.18	32.23	58.66	0.32	61.20	12.33	34,171.06
Winter Emissions	450.53	83.74	66.35	0.63	78.21	28.71	44,206.57
MDAQMD Threshold	548.00	137.00	137.00	137.00	82.00	N/A	N/A

- III c) **Less than Significant.** Although the County is in “severe non-attainment” for ozone and PM10, development of the project will not significantly contribute to this violation. As demonstrated in the Air Quality tables above, the subject development will not result in a cumulatively considerable net increase of any criteria pollutants. Nonetheless, in order to further reduce potential impacts to air quality, mitigation measures are set forth below.
- III d) **Less than Significant with Mitigation Incorporated.** The subject property is located in proximity to sensitive receptors, including residential development to the east, west and south, and an elementary school adjacent to the southeast corner of the project site. Additionally, the project will be phased, which may result in construction activities occurring adjacent or in proximity to occupied homes. To limit potential impacts to nearby receptors, the project shall utilize best control measures and BMPs, shall limit construction activities to specified hours as delineated in the General Plan, and adhere to those guidelines established in the Altamira PDP. In addition, implementation of the mitigation measures set forth below will further reduce potential impacts to air quality.
- III e) **Less than Significant.** Development of the subject property is not expected to result in objectionable odors. With the exception of a neighborhood community center and the proposed wastewater treatment package plant, all buildings on the project site are single-family residences that will not generate objectionable odors. The community center is intended to serve only project residents' needs, and food preparation or any other community-related activity is not expected to generate any objectionable odors. The package plant will incorporate odor control filters and design specifications to assure that odors associated with treatment are avoided. This and other mitigation measures set forth below will ensure that impacts to air quality including undesirable odors are reduced to less than significant levels.

Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

MM# Mitigation Measures

- III-1** AQ-Dust Control Plan. The “developer” shall prepare, submit for review and obtain approval from County Planning of both a Dust Control Plan (DCP) consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/ subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following requirements:
- a) Exposed soil shall be kept continually moist to reduce fugitive dust during all grading and construction activities, through application of water sprayed a minimum of two times each day.
 - b) Any portion of the site to be graded shall be pre-watered to a depth of three feet prior to the onset of grading activities.
 - c) During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 25 mph.
 - d) Any area that will remain undeveloped for a period of more than 30 days shall be stabilized using either chemical stabilizers and/or a desert wildflower mix hydroseed on the affected portion of the site.
 - e) Storage piles that are to be left in place for more than three working days shall be sprayed with a non-toxic soil binder, covered with plastic or revegetated.
 - f) Imported fill and exported excess cut shall be adequately watered prior to transport, covered during transport, and watered prior to unloading on the project site.
 - g) Storm water control systems shall be installed to prevent off-site mud deposition.
 - h) All trucks hauling dirt away from the site shall be covered.
 - i) Construction vehicle tires shall be washed, prior to leaving the project site.
 - j) Rumble plates shall be installed at construction exits from dirt driveways.
 - k) Paved access driveways and streets shall be washed and swept daily when there are visible signs of dirt track-out.
 - l) Street sweeping shall be conducted daily when visible soil accumulations occur along site access roadways to remove dirt dropped or tracked-out by construction vehicles. Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday and after street sweeping.
- [Mitigation Measure III-1] Prior to Grading Permits/Planning
- III-2** AQ - Construction Mitigation. The “developer” shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce vehicle and equipment emissions and other impacts to air quality by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:
- a) Provide documentation prior to beginning construction demonstrating that the project will comply with all SCAQMD regulations including 402, 403, 431.1, 431.2, 1113 and 1403.
 - b) Each contractor shall certify to the developer prior to construction-use that all equipment engines are properly maintained and have been tuned-up within last 6 months.
 - c) Each contractor shall minimize the use of diesel-powered vehicles and equipment through the use of electric, gasoline or CNG-powered equipment. All diesel engines shall have aqueous diesel filters and diesel particulate filters.
 - d) All gasoline-powered equipment shall have catalytic converters.
 - e) Provide onsite electrical power to encourage use of electric tools.
 - f) Minimize concurrent use of equipment through equipment phasing.
 - g) Provide traffic control during construction to reduce wait times.
 - h) Provide on-site food service for construction workers to reduce offsite trips.
 - i) Implement the County approved Dust Control Plan (DCP)
 - j) Suspend use of all construction equipment operations during second stage smog alerts.
- NOTE: For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).

[Mitigation Measure III-2] Prior to Grading Permits/Planning

- III-3** AQ - Coating Restriction Plan. The developer shall submit for review and obtain approval from County Planning of a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/subcontracts a condition that the contractors adhere to the requirements of the CRP. The CRP measures shall be following implemented to the satisfaction of County Building and Safety:
- a) Architectural coatings with Reactive Organic Compounds (ROC) shall not have content greater than 100 g/l.
 - b) Architectural coating volume shall not exceed the significance threshold for ROG, which is 75 lbs. /day and the combined daily ROC volume of architectural coatings and asphalt paving shall not exceed the significance threshold for ROC of 75 lbs. per day.
 - c) High-Volume, Low Pressure (HVLP) spray guns shall be used to apply coatings.
 - d) Precoated/natural colored building materials, water-based or low volatile organic compound (VOC) coatings shall be used, if practical.
 - e) Comply with SCAQMD Rule 1113 on the use or architectural coatings.

[Mitigation Measure III-3] Prior to Building Permits/Planning

- III-4** AQ – Design. The developer shall include the following air quality design considerations, where feasible, into the project design (per SBCC § 83.14.030). The building design with these features shall be submitted for review and approval obtained from County Planning in coordination with County Building and Safety:
- a) Bicycle Plan. Participate in implementation of the Countywide Bicycle Plan, through construction of on/off- site facilities or contribution of fees.
 - b) Transit improvements. Transit improvements (e.g. bus pullouts, bus signage, bus pads, and/or bus shelters) shall be provided along existing or planned transit routes. The need for and nature of those improvements shall be determined in cooperation with the designated local transportation authority (e.g. Omnitrans, MARTA or other).
 - c) Energy conservation. Conserve energy through the use of alternative energy resources (e.g. passive lighting, heating, ventilation and air conditioning) and conservation efforts in wastewater treatment, irrigation and use of recycled water. Incorporate energy efficient lighting and California Energy Commission insulation standards into the design.
 - d) SCAQMD – Design. New and modified stationary sources shall be required to install Best Available Control Technology and offset any new emissions such that there is no net gain in emissions within the air basin. (SCAQMD Regulation XIII)

[Mitigation Measure III-4] Prior to Building Permits/Planning

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
IV. BIOLOGICAL RESOURCES - Would the project:				
a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUBSTANTIATION (Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database <input checked="" type="checkbox"/>):				

AMEC Earth & Environmental, Inc. (AMEC) conducted an updated biological assessment for the 105-acre Altamira Project (Tentative Tract 18255) dated December 6, 2013. The initial biological assessment for this Project (which was previously named "JT 105") was conducted by AMEC in April 2007. This update included a review of pertinent and current literature, and a site visit to assess current physical and ecological site conditions.

- IV a) **Less than significant with Mitigation Incorporated.** The Biological Resources report prepared by AMEC identifies 11 sensitive species that have the potential to inhabit the site. All of these species, except the Loggerhead Shrike and Prairie Falcon, were determined to have an Absent or Absent to low occurrence probability. The Loggerhead Shrike was designated with a moderate to high occurrence probability, and the Prairie Falcon was determined to have a moderate probability of foraging, but its preferred nesting habitat, cliffs, do not exist onsite. Burrowing owls or their sign were not observed onsite and two potentially suitable burrows were encountered in the south-central

portion of the site.

A focused tortoise survey was performed on-site and within the zone of influence. This systematic survey detected no tortoises or their signs (scat, burrows, pellets, carcasses, etc.) onsite or in the project vicinity. The entire Biological Resources study can be found in Appendix B of this document and concludes that with implementation of mitigation measures and execution of the Streambed Alteration Agreement (California Fish and Game Code Section 1602: further discussed below) development of the project will have less than significant impacts on biological resources.

Potential for the desert tortoise and burrowing owl to occur onsite still exists. In order to ensure compliance with both federal and state Endangered Species Acts, and Fish and Game code, focused and preconstruction clearance surveys for these species conducted in accordance with the respective federal and state survey guidelines would be required prior to, and/or as a condition of approval, by any Project grading permits. If either tortoise or burrowing owl are found onsite, additional federal and state "take" permits and conditions would be required prior to any project-related site disturbance.

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, and/or possess, or attempt to engage in any such conduct to any migratory bird, nest, egg or parts thereof. Impacts to nesting birds can be avoided by either: 1) avoiding grading and/or vegetation clearance during the nesting season (which is generally February 1 through August 15); or 2) conducting a nesting bird survey to determine if and where birds are nesting and avoidance of the nesting areas until nesting has been completed (e.g., phased development). If impacts cannot be avoided, permits for incidental take of nesting birds may be granted by the Secretary of the Interior. Project grading permits should require MBTA compliance as a condition of approval.

Implementation of the project may have a low potential to affect Le Conte's Thrashers, Loggerhead Shrikes, and Prairie Falcons, as well as common bird species that may nest on the site (several Cactus Wren [*Campylorhynchus brunneicapillus*] nests were observed in cacti on various locations on the site). Suitable habitat for Burrowing Owls is also present on the project site, although no sign of owls and only two burrows capable of hosting owls were observed on the site.

The potential for occurrence for the special status species identified by the initial biological assessment remain the same. One additional species that has recently been added to the CNDDDB, hoary bat, has a very low potential to occur. Parish's club cholla, a recently added historic record from the site's vicinity, is considered absent.

- IV b) **Less than significant with Mitigation Incorporated.** The dominant plant community onsite is characterized as sparse Joshua Tree "Woodland" intermixed with Mojave Mixed Wood Scrub (Holland 1986). In the northern (down-slope) portion of the site habitat is characterized as Mojave Creosote Bush Scrub. Within the portions of the site that are delineated as blue-line streams or drainages, vegetation is a mixture of Mojave Creosote Bush Scrub and Mojave Desert Wash Scrub (the microphyllous tree species is not present).

Development of the proposed project will result in construction activities within and adjacent to approximately 9.73 acres of streambeds as delineated by AMEC and within the jurisdiction of the California Department of Fish and Wildlife (CDFW). It is estimated that of the total cut and fill, approximately 37,820 cubic yards (cy), will be removed from streambeds and used to construct improvements on-site. These stream courses have been mapped as "Waters of the State", and would require a Streambed Alteration Agreement from CDFW prior to issuance of a grading permit or recordation of the Final Map. The Streambed Alteration Agreement with CDFW assures that potential impacts to streambeds are reduced to less than significant levels.

- IV c) **No Impact.** The project will not result in a direct or indirect adverse impact to any federally protected wetlands, since there are no wetlands onsite or in the project vicinity. As mentioned above, there are ephemeral streams crossing the onsite, but these are not under federal jurisdiction but are regulated by CDFW. A Streambed Alteration Agreement application has been filed with CDFW.
- IV d) **Less than significant.** Development of the subject property will not significantly interfere with the movement or migration of any wildlife species, including obstruction of a wildlife corridor or access to a nursery site. The subject property is bounded by major roadways and development on the east, west and south.
- IV e) **Less than significant with Mitigation Incorporated.** Implementation of the project will result in impacts to biological resources on the site. However, some portions of the site have been moderately disturbed, and some areas have been cleared. Some of the "biological value" of the site has already been lost to off-road vehicle use, and by roaming neighborhood pets.

The following plants identified onsite are subject to the County of San Bernardino Development Code, Chapter 88.01, Plant Protection and Management: Joshua Tree, Mesquite, Creosote Bush (greater than 10 feet in diameter), and the Mojave Yucca. These plants are not Federally or State protected endangered species, threatened species, or species of concern; however, they are a biologically valuable resource to wildlife in the region and are regulated by County Ordinance, which prohibits their removal without a required finding by the review authority concerning the tree's location or condition (County Code Section 88.01.050). This Ordinance also requires that all transferable Joshua trees which are proposed for removal, be transplanted or stockpiled for future transplanting whenever possible.

Full Joshua tree surveys will be required for each phase of the proposed project as a part of the approval requirements. A Joshua tree report will be prepared for each phase's full Joshua tree survey, for acceptance by the County. Each report will include the mapped location, size, health, and transferability of the trees surveyed, and specific recommendations for maximizing Joshua tree preservation within that phase.

A Joshua Tree Transplantation Plan shall be prepared along with each phase's Joshua tree report. The proposed project phase-specific timeframes, maintenance, monitoring, and reporting specifications will be provided to ensure maximum survivability of the Joshua trees within each phase.

- IV f) **No Impact.** As proposed the project will not interfere or conflict with the objectives of any established local, regional, or state habitat conservation plans.

Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

MM# Mitigation Measures

IV-1 Tree Removal Permit. A County Tree Removal Permit shall be required for the removal of a Joshua tree or other regulated desert native plant. [Mitigation Measure IV-1] Prior to Grading Permit/Planning

IV-2 Joshua Tree Survey. A Joshua tree survey and report and a Joshua Tree Management Program shall be completed and submitted to County Planning prior to the issuance of a grading permit or recordation of a final tract map for any phase of this project. The required Joshua tree survey and report will be prepared by a Desert Native Plant Specialist and will include a field inventory of Joshua trees throughout the site, indicating their approximate height, age, health rating,

transferability, and whether they are a clone or single-trunked tree. The report will include a plot plan showing the on-site locations of all Joshua trees and will identify any regulated desert native plants. [Mitigation Measure IV-2] Prior to Grading Permit/Planning

IV-3 Desert Native Landscaping. The development of the residential subdivision, including the individual single family lots, the common area landscape lots and the natural and re-naturalized perimeter and internal drainage facilities shall utilize reclaimed vegetation consisting of Joshua Trees and other Mojave Desert wash scrub (mesquite, palo verde, ironwood, smoketree, etc.). Other native and drought-tolerant materials shall also be used. No invasive plant materials shall be permitted. A landscape palette consistent with these provisions shall be submitted to the project biologist and County for final approval. The Conditions, Covenants and Restrictions (CC&Rs) for the project shall include specific regulations that prohibit the removal of native desert plants without the preparation of a biological report and receiving a tree removal permit from the County of San Bernardino. The developer shall be responsible for disclosing to each property owner that there are regulations prohibiting the removal of native desert plants without the appropriate permits. [Mitigation Measure IV-3] General Requirements/Planning

IV-4 Nesting Bird Mitigation – Pre-Construction Surveys. Within 30 days prior to vegetation clearing or ground disturbance associated with construction or grading that would occur during the nesting/breeding season (February 1 through August 31, unless determined otherwise by a qualified biologist based on observations in the region), the Applicant shall retain a qualified biologist to determine if active nests of species protected by the Migratory Bird Treaty Act or the California Fish and Game Code are present within or adjacent to the disturbance zone or within 100 feet (300 feet for raptors) of the disturbance zone. The surveys will be conducted no more than seven days prior to initiation of disturbance work within active project areas. If ground disturbance activities are delayed, then additional pre-disturbance surveys will be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities. If ground disturbance will be phased across the project site, pre-disturbance surveys may also be phased to conform to the development schedule.

If active nests are found, clearing and construction within 100 feet of the nest (or a lesser distance if approved by the U.S. Fish & Wildlife Service) will be postponed or halted, until the nest is vacated and juveniles have fledged, as determined by the biologist. Avoidance buffers will be established in the field with highly visible construction fencing or flagging, and construction personnel will be instructed on the sensitivity of nest areas. A qualified biologist will serve as a construction monitor during those periods when construction activities will occur near active nests to ensure that no inadvertent impacts on these nests occur.

The results of pre-construction nesting bird surveys, including graphics showing the locations of any nests detected, and documentation of any avoidance measures taken, will be submitted to the County of San Bernardino and the California Department of Fish & Wildlife within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds. [Mitigation Measure IV-4] Prior to Grading/Planning

IV-5 Burrowing Owl Mitigation – Pre-Construction Surveys. Within 14 days prior to ground disturbance, the Applicant will retain a qualified biologist to conduct burrowing owl surveys within the area to be disturbed. The survey will be performed by walking parallel transects spaced no more than 20 meters apart, and will be focused on detecting burrows that are occupied, or are suitable for occupation, by the burrowing owl. The results of the surveys, including graphics showing the locations of any active burrows detected and any avoidance measures required, will be submitted to the County of San Bernardino and the California Department of Fish & Wildlife (CDFW) within 14 days following completion of the surveys. If active burrows are detected, the following take avoidance measures will

be implemented:

- a) If burrowing owls are observed using burrows on-site during the non-breeding season (September through January, unless determined otherwise by a qualified biologist based on field observations in the region), occupied burrows will be left undisturbed, and no construction activity will take place within 300 feet of the burrow where feasible (see below).
- b) If avoiding disturbance of owls and owl burrows on-site is infeasible, owls will be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with protocols established in CDFW's Staff Report on Burrowing Owl Mitigation (2012). Specifically, exclusion devices, utilizing one-way doors, will be installed in the entrance of all active burrows. The devices will be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows will then be excavated by hand and/or mechanically and refilled to prevent reoccupation. Exclusion will continue until the owls have been successfully excluded from the disturbance area, as determined by a qualified biologist.
- c) Any active burrowing owl burrows detected on-site during the breeding season (February through August, unless determined otherwise by a qualified biologist based on field observations in the region), will not be disturbed. Construction activities will not be conducted within 300 feet of an active on-site burrow at this season.

[Mitigation Measure IV-5] Prior to Grading Permit/Planning

IV-6 Burrowing Owl Mitigation – Management Plan. If burrowing owl are determined to occupy the project site, prior to issuance of a grading permit, a habitat management plan for the burrowing owl will be developed. The plan will include provisions for protecting foraging habitat and replacing any active burrows from which owls may be passively evicted as allowed by Mitigation Measure BIO-1. The Burrowing Owl Management Plan will be submitted to the County of San Bernardino and the California Department of Fish and Wildlife for review and approval prior to issuance of a grading permit for the Project. At a minimum, the plan will include the following elements:

- a) If occupied burrows are to be removed, the plan will contain schematic diagrams of artificial burrow designs and a map of potential artificial burrow locations that would compensate for the burrows removed.
- b) All active on-site burrows excavated as described in Mitigation Measure BIO-1 will be replaced with suitable natural or artificial burrows within the preservation areas approved by the County of San Bernardino.
- c) Measures prohibiting the use of rodenticides during the construction process if any active on-site burrows are identified.
- d) The plan will ensure that adequate suitable burrowing owl foraging habitat is provided in proximity to natural or artificial burrows within off-site mitigation areas.

[Mitigation Measure IV-6] – Prior to Grading Permit/Planning

IV-7 Pre-Construction Mojave Desert Tortoise Surveys and Avoidance. Within 14 days prior to construction-related ground clearing and/or grading, the Applicant shall retain a qualified biologist to conduct surveys for signs of occupancy by the Mojave desert tortoise. Should any sign indicating the presence of Mojave desert tortoise be detected, the Applicant shall not proceed with ground clearing and/or grading activities in the area of the find, and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise. The results of the pre-construction surveys, including graphics showing the locations of any tortoise sign detected, and documentation of any avoidance measures taken, shall be submitted to the USFWS, CDFW, and the County of San Bernardino within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable federal and state laws pertaining to the protection of Mojave desert tortoise. [Mitigation Measure IV-7] – Prior to Grading Permit/Planning

- IV-8** Department of Fish and Wildlife (CDFW). *A mapped blue line stream occurs on portions of the project site as well as additional dry channels* Development of the proposed project will result in construction activities within and adjacent to approximately 9.73 acres of streambeds as delineated by AMEC and within the jurisdiction of the California Department of Fish and Wildlife (CDFW). It is estimated that of the total cut and fill, approximately 37,820 cubic yards (cy), will be removed from streambeds and used to construct improvements on-site. These stream courses have been mapped as "Waters of the State", and would require a Streambed Alteration Agreement from CDFW prior to issuance of a grading permit or recordation of the Final Map. The Streambed Alteration Agreement with CDFW assures that potential impacts to streambeds are reduced to less than significant levels. If any of these stream courses qualify as federal jurisdictional waters, any alteration of these courses due to project activities would require consultation with the U.S. Army Corps of Engineers prior to grading or recordation of the Final Map. *[Mitigation Measure IV-8] Prior to Grading Permit/Planning*

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
V. CULTURAL RESOURCES - Would the project				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION (Check if the project is located in the Cultural ☐ or Paleontologic ☐ Resources overlays or cite results of cultural resource review):

V a/b) **Less Than Significant.** Based on the Historical/Archaeological Resources Report prepared by CRM Tech, which included records search, historical research, a field survey, and consultation with California's American Heritage Commission, there are no historical or archaeological resources onsite or in the project vicinity. Therefore, development of the subject property is not expected to result in any adverse impacts to historical or archaeological resources.

As mentioned above, a comprehensive historical/archeological report was prepared for the subject property and found no indication that any historical, archeological, or paleontological resource would be directly or indirectly impacted as a result of the proposed project. The site-specific report, which can be found in Appendix C of this document, concludes that there are no paleontological resources or unique geological features onsite.

V c/d) **Less Than Significant.** According to the Historical/Archaeological Resources Report prepared for this project, development of the proposed project will not directly or indirectly impact paleontological resources or disturb human remains. The field survey did not find any indication that human remains are present onsite or have the potential to be present. If any human remains are discovered during construction of this project, standard requirements in the Conditions of approval will require the developer to contact the County Coroner and the County Museum for a determination of appropriate measures to be taken. Potential impacts associated with human remains and paleontological resources are expected to be less than significant.

A standard condition of approval will be applied to the project to require the developer to contact the County Museum in the event of discovery of any artifact during construction, for instructions regarding evaluation for significance as a cultural or paleontological resource. No significant adverse impacts are identified or anticipated and therefore no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
VI. 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:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION (Check ☐ if project is located in the Geologic Hazards Overlay District):

VI a) **Less Than Significant Impact.** A Geotechnical Investigation was prepared by Landmark Consultants, Inc. in order to identify the site's geotechnical parameters and can be found in Appendix E of this document. The study determined that the project site does not lie within a State of California Alquist-Priolo Earthquake Fault Zone. The potential for a surface fault rupture within the project boundary is considered unlikely since the USGS and CDMG fault lines are well delineated and do not intersect with the project site nor are they inferred by patterns of area faulting. The subject property is located in proximity to a number of faults and has the potential to be subject to severe ground shaking. The closest fault, the Pinto Mountain Fault, is 1.2 miles north of the project site.

The potential for liquefaction to occur onsite is low since the depth to groundwater is greater than 100 feet, and liquefaction typically occurs where groundwater is less than 50 feet below the ground

surface. Historical geologic maps of the region reveal no indication of landslides, and none were observed during the site visit. However, site development will result in numerous manufactured slopes, which shall be engineered to resist sloughing or slope failure in the event of strong ground shaking.

- VI b) **Less Than Significant Impact.** The project will not result in substantial soil erosion or the loss of topsoil, because the site will be paved and landscaped. Erosion control plans will be required to be submitted, approved and implemented. Measures to reduce and control erosion of soil during construction and long term operation are required by SCAQMD through its Rule 403 for control of fugitive dust, the Regional Water Quality Control Board (RWQCB) under its administration of the State's General Construction Permit, and the County of San Bernardino Public Works Department through its Storm Water Management Program. Implementation of requirements under SCAQMD Rule 403 for control of fugitive dust would reduce or eliminate the potential for soil erosion due to wind. Implementation of Best Management Practices (BMPs) that would be included in the applicant's Storm Water Pollution Prevention Plan (SWPPP), would reduce soil erosion due to storm water or water associated with construction.
- VI c) **Less Than Significant Impact.** There is no indication that the subject property is located in an area that is geologically unstable or would become unstable as a result of development. As mentioned above, it is unlikely that a landslide, lateral spreading, subsidence, liquefaction or collapse would occur onsite or in the project vicinity. The proposed project will include the development of manufactured slopes, which may be subject to lateral stresses in the event of a nearby earthquake. The geotechnical study prepared for the project also sets forth recommendations for grading and site engineering, which addresses and mitigates the potential for slope instability.
- VI d) **Less Than Significant Impact.** Expansive soils contain a significant amount of clay particles and have the ability to give up or take on water. When such soils shrink or swell, the change in volume exerts tremendous pressures on loads that are placed on them. As mentioned above, soils onsite are primarily comprised of sand, and are not considered to be highly expansive due to the relatively minor amount of clay present in the soils. Therefore potential impacts associated with expansive soils are considered to be less than significant.
- VI e) **Less Than Significant Impact.** Septic tanks will not be used on-site; rather, all wastewater generated onsite will be routed to an onsite wastewater treatment plant, which will treat wastewater to tertiary levels.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
VII GREENHOUSE GAS EMISSIONS - Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

- a) **Less than Significant.** The County's Greenhouse Gas Emissions Reduction Plan (GHG Plan) was adopted on December 6, 2011 and became effective on January 6, 2012. The GHG Plan establishes a GHG emissions reduction target for the year 2020 that is 15 percent below 2007 emissions. The Plan is consistent with AB 32 and sets the County on a path to achieve a more substantial long-term reduction in the post-2020 period. Achieving this level of emissions will ensure that the contribution to greenhouse gas emissions from activities covered by the GHG Plan will not be cumulatively considerable.

In 2007, the California State Legislature adopted Senate Bill 97 (SB97), which required that the CEQA Guidelines be amended to include provisions addressing the effects and mitigation of GHG emissions. New CEQA Guidelines have been adopted that require: inclusion of a GHG analyses in CEQA documents; quantification of GHG emissions; a determination of significance for GHG emissions; and, adoption of feasible mitigation to address significant impacts. The CEQA Guidelines [Cal. Code of Regulations Section 15083.5 (b)] also provide that the environmental analysis of specific projects may be tiered from a programmatic GHG plan that substantially lessens the cumulative effect of GHG emissions. If a public agency adopts such a programmatic GHG Plan, the environmental review of subsequent projects may be streamlined. A project's incremental contribution of GHG emissions will not be considered cumulatively significant if the project is consistent with the adopted GHG plan.

Implementation of the County's GHG Plan is achieved through the Development Review Process by applying appropriate reduction requirements to projects, which reduce GHG emissions. All new development is required to quantify a project's GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review standard of 3,000 metric tons of carbon dioxide equivalent (MTCO₂e) per year is used to identify and mitigate project emissions. Based on the CalEEMod statistical analysis, multi-family residential projects with more than 85 units typically generate more than 3,000 MTCO₂e. For projects exceeding 3,000 MTCO₂e per year of GHG emissions, the developer may use the GHG Plan Screening Tables as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that garner 100 or more points on the Screening Tables do not require quantification of project-specific GHG emissions. The point system was devised to ensure project compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those from existing development, will allow the County to meet its 2020 target and support longer-term reductions in GHG emissions beyond 2020. Consistent with the CEQA Guidelines, such projects are consistent with the Plan and, therefore, will be determined to have a less than significant individual and cumulative impact for GHG emissions.

The proposed project has garnered 102 points on the Screening Tables through the application of Building Energy Reduction Measures by 1) exceeding energy efficiency standards in Title 24 of the Building Code by 15%, 2) utilizing high-efficiency lighting fixtures and appliances, 3) providing pedestrian linkages to nearby commercial uses, 4) improving bicycle linkages between the site and other land uses, 5) utilizing EPA high efficiency shower heads, faucets and toilets, and 6) providing solar ready homes. The project is consistent with the GHG Plan and is therefore determined to have a less than significant individual and cumulative impact for GHG emissions. The GHG reduction measures proposed by the developer through the Screening Tables review process are included in the project design, and will be included as conditions of approval.

- b) **Less than Significant.** The proposed project is not anticipated to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. In January of 2012, the County of San Bernardino adopted a Greenhouse Gas Emissions Reduction Plan (GHG Plan). The proposed project is consistent with the GHG Plan and potential impacts are expected to be less than significant.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
VIII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- VII a) **Less Than Significant Impact.** Existing and planned land uses on the subject property are limited to open space and single family residential uses, neither of which generates hazardous or toxic materials that will require routine transport, use, or disposal. Onsite hazardous waste generation will be limited to household hazardous wastes (batteries, light bulbs, appliances. The County offers free disposal of such wastes on the 3rd Saturday of each month at 62499 29 Palms Highway Joshua Tree, California. Potential hazards to the public or the environment as a result of this project are expected to be less than significant.

- VIII b) **Less Than Significant Impact.** There are no reasonably foreseeable conditions onsite or within the project description that have the potential to lead to an accident involving the release of hazardous material that would impact the public or the environment. Impacts from an accidental release of hazardous materials as a result of the proposed project are expected to be less than significant.
- VIII c) **Less Than Significant Impact.** Although there is a school adjacent to the southeast corner of the subject property, development and operation of the residential subdivision is not expected to result in the use of hazardous materials or the generation of hazardous waste that would adversely impact the school. The proposed project will not be a hazardous waste emitter or handler. The school will not be impacted by hazardous materials emitted from the subject property and potential impacts associated with hazardous materials from the project site are considered to be less than significant.
- VIII d) **No Impact.** A Phase I Environmental Assessment was conducted for the subject property and the entire report can be found in Appendix G of this document. The assessment included a field survey, review of local geology, hydrogeology, current and historical conditions, and an environmental database review, which searched the National Priority List and other records for hazardous material releases within one (1) mile of the site. The Phase I Environmental Assessment did not identify any existing hazardous materials onsite or in the project vicinity. Development of the subject property is not expected to create a significant hazard to the public or environment due to existing hazardous materials onsite, and potential impacts associated with existing hazardous materials on-site or in the project vicinity are considered to be less than significant.
- VIII e/f) **No Impact.** The subject property is not located within close proximity to a public or private airstrip. The proposed project is not located within an airport land use plan, and the nearest airport is the Roy Williams Airport located over 6 miles from the site. Development of the project is not expected to result in safety hazards related to airport use for people residing or working within the project site. Potential impacts from the Roy Williams Airport are expected to be less than significant.
- VIII g) **Less Than Significant Impact.** The San Bernardino Office of Emergency Services through the County Fire Department is responsible for disaster planning and emergency management within the County. Development of the subject property will not interfere with an adopted emergency response plan or an emergency evacuation plan. The project is expected to have a less than significant impact on the County's emergency response plan and emergency evacuation plan.
- VIII h) **Less Than Significant Impact.** The fire hazard threat on-site site and in the project vicinity is characterized as "moderate" due to the arid climate, vegetation, and fuel loads. Lands to the immediate south (south of Alta Loma Drive) are within the Fire Safety Area 2 (FS2) Overlay area. The FS2 areas include lands just to the north and east of the mountains FS1 areas in the mountain-desert interface. These areas have gentle to moderate sloping terrain and contain light to moderate fuel loading. Fire safety and prevention measures, including non-combustible and combustion-resistant building materials (roofs, eaves, etc.) vegetation management can greatly reduce the risk of fires. With proper management and fire safety awareness hazards associated with wildland fires are expected to be less than significant.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
IX. HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 that would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structure that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (Check ☐ if project is located in the Flood Hazard Overlay District):

- IX a) **Less Than Significant Impact.** To ensure that runoff within the project site does not contain pollutants, NPDES permit requirements will be imposed by the County, as appropriate. The lands tributary to the subject property are limited in area and are comprised of partially built out single-family residential subdivisions of lot 14,000 square foot and larger in size. The quality of runoff from lands tributary to the subject property is expected to be affected primarily by suspended solids (turbidity), with limited organic (oxygen demand) loads. Upstream runoff crosses Alta Loma Drive and may pick up a variety of organic and inorganic compounds deposited by vehicular traffic.

The project design incorporates stormwater intercept and conveyance channels, as well as three stormwater detention basins, which are to be partially vegetated as re-naturalized community open space. These detention basins will provide stormwater quality remediation by bio-filtration provided by trees, shrubs and groundcovers. The detention function will also maximize the percolation of runoff into the soil column.

A Preliminary Water Quality Management Plan (WQMP) was prepared and has been approved by the County Public Works Department. The Final WQMP is required prepared prior to approval of the Final TTM and/or Final Development Plan. As proposed and through the implementation of standard mitigation measures (see below) the project is not expected to violate any water quality standards or wastewater discharge requirements.

- IX b) **Less Than Significant Impact.** The project is not expected to generate a significant need for additional water resources, and the Joshua Basin Water District has indicated that it is able and willing to serve the proposed project. Joshua Basin Water District (JBWD) has approximately 4,700 potable water service connections across a 100 square mile service area. JBWD supplies high quality ground water obtained from district-owned wells. The water system presently consists of an estimated 625,000 acre-feet of usable water drawn from five wells, conveyed through approximately 270 miles of mainlines and stored in 17 reservoirs.

The proposed subdivision will result in an intensification of land use, but one that is well below maximum potential intensities of development (2.46 du/ac v. 4 du/ac) permitted under the General Plan. The natives-based zeriscape landscape palette is very efficient and will be comprised of site-sourced and other native desert and other drought-tolerant materials, and will limit water demands from irrigation needs. The proposed project will meet or exceed the requirements of the County's water-conserving landscaping ordinance. The development standards and guidelines for the project (see Altamira PDP) also include the extensive use of native desert and other drought-tolerant vegetation.

At buildout, the project has the potential to utilize approximately 50.26 acre-feet of water per year or 45,000 gallons per day for potable consumption. This figure is based on a usage factor of 69.3 gallons per person per day,¹ an average household occupancy of 2.68 persons,² and assumes that all homes in the project area are water-efficient and fully compliant with Title 24. Assuming that 10% of the total site, or 10.5 acres will be landscaped with moderate desert plants, onsite irrigation would demand 32.6 acre-feet per year or approximately 29,000 gallons per day.

The overall water demand onsite is projected to be approximately 82.86 acre-feet per year or 74,000 gallons per day. This estimated water demand will not substantially deplete groundwater supplies, or interfere with groundwater recharge. Development of the proposed project is not

¹ "Residential End Uses of Water" prepared by American Waterworks Association, 1999/2000.

² "County Population and Housing Estimates," California Department of Finance, 2008.

expected to result in the lowering of the groundwater table including any potential impacts to existing groundwater extraction wells. The project's long-term impact to water resources is expected to be less than significant, and the implementation of water conservation standards will reduce potential impacts to less than significant levels.

- IX c) **Less Than Significant with Mitigation Incorporated.** Development of the proposed project will result in construction activities within and adjacent to approximately 9.73 acres of streambeds as delineated by AMEC and within the jurisdiction of the California Department of Fish and Wildlife (CDFW). It is estimated that of the total cut and fill, approximately 37,820 cubic yards (cy), will be removed from streambeds and used to construct improvements on-site. Development of the proposed project will result in construction activities within and adjacent to approximately 9.73 acres of streambeds as delineated by AMEC and within the jurisdiction of the California Department of Fish and Wildlife (CDFW). It is estimated that of the total cut and fill, approximately 37,820 cubic yards (cy), will be removed from streambeds and used to construct improvements on-site. These stream courses have been mapped as "Waters of the State", and would require a Streambed Alteration Agreement from CDFW prior to issuance of a grading permit or recordation of the Final Map. The Streambed Alteration Agreement with CDFW assures that potential impacts to streambeds are reduced to less than significant levels. The applicant has filed a Streambed Alteration Agreement application with CDFW. The Streambed Alteration Agreement with CDFW assures that potential impacts to streambeds are reduced to less than significant levels. See Section IV Biological Resources for further discussion and mitigation regarding impacts to existing streambeds.

Some bank excavation will be necessary to construct the channelized stormwater drainage system. Excavation is expected to be minimal. The project will result in construction of a stormwater intercept system, which will be within and adjacent to a portion of the unnamed blue-line stream. A portion of the streambed will be converted to a permanent detention basin, and a narrow segment will be filled and compacted to support residential lots. Each phase of development shall be protected from the 100-year tributary storm flows.

Although development of the proposed project will involve work within a designated blue-line stream and modifications to the drainage pattern onsite, extensive hydrological analysis and engineering plans have demonstrated that with the use of mitigation measures, impacts can be reduced to less than significant levels. The hydrology and drainage study can be found in Appendix D of this document.

- IX d) **Less Than Significant Impact.** Development of the site will result in limited changes to onsite hydrology as determined by the hydrograph analysis. This analysis concludes that peak flow rates from the subject property will ultimately increase by 47 CFS, and onsite runoff volume will result in an additional 5.39 acre feet. These changes will be accommodated through the use of three proposed detention basins that will reduce peak flows by 164 CFS, and will establish a combined storage volume of 9.42 acre feet. The proposed stormwater intercept system will minimize the extent of potential flooding and convey flows in a channelized fashion to onsite retention basins, which then discharge off-site in a manner comparable to the natural condition.

As mentioned above, development of the proposed project will result in limited modifications to the drainage patterns on-site, but are intended to reduce as much as possible the potential for flooding. The project design includes drainage improvements that address any potential drainage impacts and the potential for flooding to less than significant levels.

- IXI e) **Less Than Significant Impact.** The stormwater intercept system has been engineered to accommodate the peak flow rate that may occur as a result of development. As mentioned above, the project proposes a combined stormwater retention area of 9.42 acre feet, which is expected to

capture and retain any additional flows that may be generated as a result of development on-site. The central channel will be soft bottom, which will further serve to capture contaminants before they can be transported farther downstream. The project is not expected to create or release any polluted runoff.

- IX f) **Less Than Significant Impact.** Less than significant impacts to water quality are expected to result from construction of the proposed project. Precautions against accidental spillage or other potential sources of contamination during project construction are inherent in the project design. Impacts to water quality as a result of this project are expected to be mitigated by on-site facilities.
- IX g) **Less Than Significant Impact.** The subject property is not mapped as occurring within a flood hazard zone. Portions of the project planning area are vulnerable to flashfloods during high-intensity storm events, summer thundershowers, and winter storms conditions, as evidenced by drainages crossing the site. Drainage within the proposed site and vicinity is limited to the ephemeral streams and dry washes draining local watersheds created by the surrounding elevated terrain.

As mapped by FEMA, the proposed project is located within a Flood Hazard Zone X. Zone X is considered to be subjected to minimal flooding including areas of 1-percent annual chance sheet flow flooding where average depths are less than 1 foot, and areas of 1-percent annual chance stream flooding where the contributing drainage area is less than 1 square mile. As noted above and hydrology study, planned flood control improvements will protect Alta Loma Drive from flooding, will safely convey off-site drainage through the site, and effectively manage on-site runoff. No significant flood threat is expected to impact the proposed subdivision.

- IX h) **Less Than Significant Impact.** As mentioned above, the proposed project is not located within a 100-year flood hazard area. As designated by FEMA the project site is located within a Flood Zone X, which apply to areas that are subject to minimal flooding. Impacts associated with the 100-year flood hazard are expected to be less than significant.
- IX i) **Less Than Significant Impact.** Construction of the proposed project will not place residential units in the path a flood hazard zone, and flooding is not anticipated. Channelization of the streambed in conjunction with drainage basins and retention onsite is expected to prevent flooding, while maintaining the integrity of the natural drainage patterns onsite. Potential impacts from flooding are expected to be less than significant.
- IX j) **No Impact.** The proposed project is not susceptible to seiche, tsunamis, or mudflow given the location of the project site. There are no significant bodies of water adjacent to or in the vicinity of the project site. Similarly, the project is not located in proximity to steep slopes where mudflows may occur. Therefore, potential impacts associated with seiche, tsunamis, or mudflows are considered unlikely.

Possible significant adverse impacts related to hydrology and water quality have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

MM# Mitigation Measures

See Mitigation Measure IV-8 Biological Resources

ISSUES		Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
X.	LAND USE AND PLANNING - Would the project:				
a)	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- X a) **No Impact.** The proposed project will not divide an established community. Surrounding lands consist of scattered residential dwelling units to the east west and south; land to the north are largely undeveloped. The proposed project will fill between these spatially distinct neighborhoods. In this regard, the proposed project is considered to be infill development, and is not expected to physically divide an established community.
- X b) **Less Than Significant Impact.** The proposed project does not conflict with any applicable habitat conservation plans or natural community conservation plans. However, as stated previously, a mapped blue line stream occurs on portions of the project site. Additional dry channels also occur on the site. If any of these stream courses qualify as federal jurisdictional waters any alteration of these courses due to project activities would require consultation with the U.S. Army Corps of Engineers. Additionally, these stream courses are highly likely to qualify as "Waters of the State", and would also require a Streambed Alteration Agreement from CDFW prior to any modification. As noted above, a Streambed Alteration Agreement application has been filed with the CDFW.
- X-c) **Less Than Significant Impact** The proposed project does not conflict with any applicable habitat conservation plans or natural community conservation plans.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorp.</i>	<i>Less than Significant</i>	<i>No Impact</i>
XI. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUBSTANTIATION (Check <input type="checkbox"/> if project is located within the Mineral Resource Zone Overlay):				

XI a/b) **No Impact.** The project will not result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state, because there are no identified important mineral resources on the project site and the site is not within a Mineral Resource Zone Overlay. The proposed project is designated for residential land use and mineral extraction would be incompatible with existing and planned land uses in the area.

No Impact. The project will not 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, because there are no identified locally important mineral resources on the project site. The underlying soils in the area could be recovered, but the area has already been developed with residential uses and it is impractical to recover those resources. As such the area has not been identified as a locally important mineral resource.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XII. NOISE - Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUBSTANTIATION	(Check if the project is located in the Noise Hazard Overlay District <input type="checkbox"/> or is subject to severe noise levels according to the General Plan Noise Element <input type="checkbox"/>):			

XII a) **Less Than Significant Impact.** Noise is an undesirable byproduct of urban development and can contribute to both temporary and permanent physical impairment, including hearing loss, fatigue, stress, annoyance, and anxiety. The evaluation of noise levels is important to protecting the health and welfare of the general public and preserving a high quality of life in urban areas.

Sensitive receptors are those land uses that are particularly sensitive to noise intrusion, including residences, schools, libraries, churches, hospitals, nursing homes, and other health care facilities. Day care centers, parks, and other outdoor recreation areas may also be considered sensitive receptors. Moderately sensitive land uses include cemeteries, golf courses, hotels and motels, and dormitories.

There are sensitive receptors in the immediate project vicinity including residences and an elementary school. The nearest sensitive receptors to the project site is the school located adjacent to the southeast corner of the project site. Various residential developments are located to the west, south, and east of the subject.

Noise levels are calculated on a logarithmic scale in decibels, which is the unit of measurement that describes the amplitude, or strength, of sound. The measurements are weighted and added over a specified time period to reflect not only the magnitude of the sound, but also its duration, frequency and time of occurrence.

The San Bernardino County General Plan uses the A-weighted decibel (dBA) for measuring noise levels. This unit de-emphasizes the very low and high frequency components of sound in a manner similar to the response of the human ear. The most common sounds measure between 40 dBA (very quiet) and 100 dBA (very loud). The Community Noise Equivalent Level (CNEL) is the average intensity of a sound over a 24-hour period, and includes penalty factors for sounds that occur in evening and nighttime hours. Five decibels are added to sounds that occur during evening hours (from 7 p.m. to 10 p.m.), and 10 decibels are added to sounds that occur during nighttime hours (between 10 p.m. and 7 a.m.). These adjustments account for the decrease in background noise levels that occur during evening and nighttime hours, as well as people's increased sensitivity to, and decreased tolerance for, noise during these times.

Noise sources can be classified as either "line sources" (such as a busy street) or "point sources" (a commercial air compressor). A number of factors affect noise as it travels through the air, including temperature, wind speed and direction, hard and soft ground surfaces, and intervening vegetation and walls. "Soft site" conditions represent the sound propagation loss over natural surfaces, such as earth and vegetation, while "hard site" conditions represent the loss over hard ground surfaces, such as asphalt, concrete, and stone. A noise reduction rate of 4.5 dBA per doubling of distance is typically observed in soft site conditions, while a reduction of 3.0 dBA typically occurs in hard site conditions.

To evaluate the existing noise environment in the project vicinity, a site-specific noise study was conducted in which noise measurements were taken at four (4) locations in the study area between the hours of 11:00 a.m. and 1:00 p.m. on July 17, 2007. Noise monitoring locations are shown in Exhibit 5-A of the Noise Study, which can be found in Appendix F of this document. Sites were selected based on their respective impact potential. Each site was monitored for a minimum of ten (10) minutes. Precision monitoring equipment was mounted on tripods, fully calibrated and equipped with windscreens to measure ambient noise in a manner similar to human perception.

In San Bernardino County a significant noise impact would generate an increase in noise level by more than 3 dBA CNEL and would exceed the County's exterior noise standard of 60 dBA CNEL or interior standard of 45 dBA CNEL for residential uses. The county permits an exterior noise level of up to 65 dBA CNEL when noise reduction techniques have been incorporated into the design.

The proposed project may result in a 3 to 4 dBA increase off site, but the overall off site level would be 58.4 dBA, which is below the County's threshold.³ However, at project buildout on site noise levels would exceed county thresholds due to traffic along Sunny Vista Road and Alta Loma Drive. Noise measurements taken adjacent to these roadways ranged from 57.1 to 60.7 dBA. With the use of a 5 to 6 foot sound wall, potential impacts can be reduced to less than significant levels. Noise levels shall be maintained at or below County Standards, Development Code Section 83.01.080.

- XII b) **Less Than Significant with Mitigation Incorporated.** Construction activities may result in short term impacts to the noise environment including groundbourne vibration and noise. Potential noise impacts will be short term during construction and will end once the project is operational. At buildout the project is not expected to generate groundbourne vibration or noise that is excessive. Short-term impacts associated with construction will be limited to the greatest extent practicable with the implementation of the mitigation measures outlined below.

3 "Yucca Valley 105 Noise Analysis County of San Bernardino, California," prepared by Urban Crossroads on August 14, 2007.

- XII c) **Less Than Significant with Mitigation Incorporated.** The noise study analyzes the future noise environment at buildout of the project based on predicted traffic flows on-site and in the project vicinity. Future traffic volumes are taken from the Traffic Impact Analysis that was prepared for this project. A site-specific traffic prediction model that analyzes associated noise impacts was created utilizing the predicted traffic volume, mix, and speed. Details on the methodology used to create this model can be found in Section 6.1 of the noise study, the full noise study can be found in Appendix F of this document.

The noise report compares the existing noise environment with the future noise environment with and without the proposed project. Future scenario years 2010 and 2030 were analyzed for the proposed project. Currently, 100 feet from the centerline of the roadway adjacent to the project site, the noise level along Alta Loma Drive is 57.6 dBA, and 54.4 dBA along Sunny Vista Road. In 2010 the noise environment along Alta Loma Drive was projected to be 59.4 dBA, whereas noise contours along Sunny Vista Road would be 55.7 dBA with the project. With development of the proposed project, the noise environment in 2030 along Alta Loma Drive would be 60.7 dBA, whereas noise contours along Sunny Vista Road would be 57.1 dBA.

Based on the model established in the noise study, the noise environment associated with the roadways adjacent to the project site and in the project vicinity would not be significantly impacted by development of the proposed project for scenario year 2010. However, the noise environment in 2030 along Alta Loma Drive has the potential to exceed the County's threshold of 60 dBA by 0.7 dBA CNEL. Therefore, in order to reduce potential impacts from excessive noise along Alta Loma Drive, mitigation measures for noise reduction are set forth below. In addition to set backs and utilizing retention basins and landscaping as noise barrier, a sound wall may be useful to further reduce potential impacts to less than significant levels.

As mentioned above, buildout of the project will result in a modest increase to the noise environment on-site due to traffic volume on adjacent roadways. It should be noted that the Friendly Hills Elementary School, located adjacent to the southeast corner of the subject property has the potential to generate elevated noise levels associated with outdoor activities. The ball field is located 180 feet from the boundary of the proposed project and has the potential to be a source of noise. However, if the outdoor activities comply with the San Bernardino County Development Code for stationary noise sources potential impacts are expected to be less than significant. Nonetheless, a concrete block screen wall will be constructed at the project boundary adjacent to the school.

- XII d) **Less Than Significant with Mitigation Incorporated.** Construction of the proposed project will result in a temporary increase to the noise environment on site and immediately adjacent to the project. The San Bernardino County Development Code Section 83.01(g) permits construction related noise between 7:00 am and 6:00 pm Monday through Saturday excluding holidays. Short-term impacts associated with construction will be limited to the greatest extent practicable with the implementation of the mitigation measures outlined below.
- XI e/f) **No Impact.** The proposed project is not located within an airport land use plan or within the vicinity of a private airstrip and will not expose residents or sensitive receptor to air traffic noise. Therefore, impacts associated with air traffic will be less than significant.

Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

MM# Mitigation Measures

- XII-1** Construction Noise. The "developer" shall submit and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts

requirements to reduce noise impacts during construction, which shall include the following vehicle and equipment emissions and other impacts to the noise environment by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:

- a. During the project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with the manufactures standards.*
- b. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.*
- c. The construction contractor shall limit all construction-related activities that would result in high noise levels between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday excluding holidays.*
- d. 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.*
- e. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.*

[Mitigation Measure XII-1] Prior to Grading Permit/Planning

XII-2 *Perimeter Block Wall.* *The project shall include the construction of a 6-foot high concrete block wall at the perimeter of the project adjacent to the school. The wall shall be constructed of decorative material consistent with the other walls throughout the project. The perimeter walls adjacent to the school shall be constructed with Phase 1 and Phase 4. [Mitigation Measure XII-2] Prior to Building Permit/Planning*

ISSUES	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorp.</i>	<i>Less than Significant</i>	<i>No Impact</i>
XIII. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- XIII a) The proposed project is not expected to result in substantial population growth. The project will not generate more than 248 new single-family residential units. Based on the average household size of 2.68 persons per household, the project could generate a population increase of as many as 665 persons. This is a less than significant increase in the County's total population.
- XIII b/c) There are no existing structures or building onsite, therefore no housing or individuals would be displaced by the implementation of the proposed project and no replacement housing will need to be built elsewhere.
- Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.**

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XIV. 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:				
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

XIV a) Fire Protection

The South Desert Division of the San Bernardino County Fire Department provides fire services for the proposed project and vicinity. This division covers nearly 8,000 square miles, including the project site, and contains 17 fire stations, three of which are within the community of Joshua Tree. The proposed project will generate additional need for fire protection services, but is not expected to require additional services beyond those currently available. The County requires, as a standard condition of approval, that projects participate in Community Facilities District(s) to assure that the costs associated with added services are recovered. This condition will assure that impacts to fire services are reduced to less than significant levels. The subject property and vicinity are served by the following fire stations:

Station 36: is located at 6715 Park Boulevard in Joshua Tree. Fire Station 36 is home to six career firefighters (one Captain, two Engineers, and three LT firefighters) working a 48/96-hour work shift. The station houses one Type I Engine Company, one Squad vehicle and one reserve engine. A staff of seven paid-call firefighters augment the on-duty crews. Fire crews from our Joshua Tree station routinely assist the National Park Service, Twentynine Palms Fire, and the Marine Corps Fire Services.

Station 35: is located at 6562 Sierra Avenue in Joshua Tree. Fire Station 35 is home to paid call crews from the local community. The station houses one Type II/III Engine Company and one Water Tender.

Station 44: is located at 65430 Winters Road in Joshua Tree. This station is currently inactive due to staffing shortages. This station is located in the northeastern portion of the Joshua Tree area known as Copper Mountain Mesa. Units from Station 35 (Panorama) or Station 36 (Joshua Tree) currently handle these incidents.

Police Protection

Police services for the proposed project are provided by the San Bernardino County Sheriff's Department. The proposed project will generate additional need for police protection, but is not expected to require additional services beyond those currently available. Standard lighting will be integrated into the project design, which will serve as a safety feature and as a crime deterrent. In addition, the project is proposed as gated community, which will further deter crime. As a standard condition of approval, the County requires that projects participate in costs associated with added services via fees. This condition will assure that impacts to police services are reduced to less than significant levels.

The local County Sheriff's Station is located at 6527 White Feather Road in Joshua Tree. The Morongo Basin Station is the third largest Sheriff's station in both area and total number of calls for law enforcement services in the County. The station is part of the county's Law and Justice Complex located in Joshua Tree. The facility there also houses three courtrooms and a County Jail with capacity for 79 inmates. The station has some 200 members in its various Volunteer Forces organizations. Volunteer units such as Uniformed Patrol Reserves, Search and Rescue, Mounted Equestrian Search and Rescue, Explorer Scouts, and seven separate Citizen Patrol Units, work in support of uniformed patrol deputies to provide a dynamic and community-based law enforcement service.

Schools

School services for the project site are provided by the Morongo Unified School District (MUSD), and include bus services to all schools. The Altamira neighborhood has been under development for several years and has more recently included the development of the Friendly Hills Elementary School adjacent to the site, which was underway by 1989. In the community of Joshua Tree there are two (2) elementary schools, and within the district there are two (2) high school, 2 middle schools, and a number of private schools within the basin.

In addition, the Copper Mountain Community College is located in the community of Joshua Tree. Since Altamira is a single-family residential project the proponent is required to participate in the state-mandated school mitigation fee program, which will help offset the cost of constructing new schools or expanding existing schools.

Using the Morongo Unified School District Student Generation rate of 0.78 students per dwelling unit, the project is expected to generate approximately 202 students. The Morongo Unified School District school mitigation fees are \$2.63 per square foot of residential development.⁴ The families living in the Altamira project will be able to take advantage of the full range of K through 12 and community college educational opportunities available while minimizing travel.

In addition to the various library resources associated with the Morongo Basin School District and Copper Mountain College, the community of Joshua Tree also hosts a branch library of the County Library system. The Joshua Tree library is located at 6465 Park Boulevard and was originally established in 1945.

Parks

The County General Plan requires new residential development to provide a local park and recreational facilities at rate of not less than 3 acres per 1,000 population. This could include the dedication of lands, payment of fees, or both. The proposed project will include a community center with a pool and community building as part of the design. In addition to the proposed on-site community center, the Joshua Tree Park and Recreation Community Center offers a range of active

4 Personal communication with Linda Hamilton, Morongo Unified School District, September 2008

and passive recreational opportunities for residents. The proposed project is also situated in close proximity to Joshua Tree National Park, which provides many recreational opportunities including hiking, biking, camping, and rock climbing. The existing and proposed recreational opportunities are expected to be adequate to meet the demands of the proposed project and no impacts to recreational amenities are expected.

Policy OS 1.9 of the County General Plan ensures that open space and recreation areas are both preserved and provided to contribute to the overall balance of land uses and quality of life. One of the programs established by this policy is to require new residential development to provide local park and recreation facilities at a rate of not less than 3 acres per 1,000 population. This could include the dedication of lands, payment of fees, or both. Based on the average household size of 2.68 persons per household, the project could generate a population increase of as many as 665 persons. Pursuant to the General Plan policy stated above, a population of 665 would require 2-acres of parkland, and or the payment of fees.

The project includes a 0.86 acre site for the development of a private park. The park will also include a number of improvements, including a swimming pool and spa, a children's playground area and a 2,000 square foot community recreation building. Section 89.02.040 (f) of the County Development Code establishes credits for private open space. Where private open space for park and recreational purposes is provided in a proposed subdivision and the space is to be privately owned and maintained by the future residents of the subdivision, the areas shall be credited up to 75 percent against the requirement of a dedication for park and recreation purposes. Therefore, since this project is required to have 2 acres of park and recreation facilities, pursuant to Section 83.02.040, this requirement can be reduced to 0.5 acres, which is a 75% reduction.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XV. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- XV a) As mentioned above, the Joshua Tree Park and Recreation Community Center offers a range of active and passive recreational opportunities for residents. In addition, Joshua Tree National Park provides a number of outdoor recreational activities and is in close proximity to the project site. At buildout, the proposed development has the potential to support as many as 665 additional residents. Although this increase in population would contribute to the use of existing neighborhood and regional parks and recreational facilities, impacts are expected to be less than significant.
- XV b) Policy OS 1.9 of the County General Plan ensures that open space and recreation areas are both preserved and provided to contribute to the overall balance of land uses and quality of life. One of the programs established by this policy is to require new residential development to provide local park and recreation facilities at a rate of not less than 3 acres per 1,000 population. This could include the dedication of lands, payment of fees, or both. Based on the average household size of 2.68 persons per household, the project could generate a population increase of as many as 665 persons. Pursuant to the General Plan policy stated above, a population of 665 would require 2-acres of parkland, and or the payment of fees.

The project includes a 0.86 acre site for the development of a private park. The park will also include a number of improvements, including a swimming pool and spa, a children's playground area and a 2,000 square foot community recreation building. Section 89.02.040 (f) of the County Development Code establishes credits for private open space. Where private open space for park and recreational purposes is provided in a proposed subdivision and the space is to be privately owned and maintained by the future residents of the subdivision, the areas shall be credited up to 75 percent against the requirement of a dedication for park and recreation purposes. Therefore, since this project is required to have 2 acres of park and recreation facilities, pursuant to Section 83.02.040, this requirement can be reduced to 0.5 acres, which is a 75% reduction.

In addition, the existing recreational opportunities available within the community and the nearby Joshua Tree National Park are expected to be adequate to meet the recreational needs of future residents without adversely impacting the environment or necessitating an expansion of recreational facilities. Therefore, no impacts to recreational amenities are expected.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XVI. 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

The following summaries are based in part on the revised project Traffic Study prepared by Kunzman Associates, Inc. dated March 22, 2011 and revised September 29, 2011. The analysis and conclusions set forth in the traffic report were further validated in a December 4, 2013 validation letter. Please refer to this Traffic Study for further details.

- XVI a/b) **Less Than Significant with Mitigation Incorporated.** The traffic study prepared by Kunzman Associated identified potentially significant traffic-related impacts associated with the development of the proposed project. The subject property is bounded on the south by Alta Loma Drive (Secondary Highway/88-foot R/W) and on the east by Sunny Vista Drive (Secondary Highway/88-foot R/W). Current improvements on these roadways provided one paved travel lane in each direction.

As stated in the traffic impact analysis, the objectives of the study were to assess existing traffic conditions in the vicinity of the site, predict traffic levels for scenario years 2010 and 2030, and determine on-site and off-site improvements and system management actions needed to achieve the County's level of service (LOS) requirements.

The "Level of Service" (LOS) is a qualitative measurement that describes operational conditions within a traffic stream. Speed, travel time, driving comfort, safety, and traffic interruptions are considered into the LOS. Levels of Service are described as a range of alphabetical connotations, "A" through "F," which are used to characterize roadway operating conditions. LOS A represents

the best, free flow conditions, whereas LOS F indicates the worst conditions. Levels of service are also sometimes represented as volume to capacity ratios, or vehicle demand divided by roadway capacity. As the ratio approaches 1.00, roadway operations approach LOS F.

Existing traffic volumes on roadways adjacent to the site and in the project vicinity were established through monitoring specific roadways and intersections between September 2006 and June of 2007. All roadways monitored, with the exception of two intersections, currently operate at LOS C or better during peak hours. Northeast of the project site along Twentynine Palms Highway (SR-62), the intersections of the highway with Torres Avenue and Sunny Vista Road operate at a LOS E and F, respectively.

At buildout the project is expected to generate 2,412 daily vehicle trips, of which 189 occur during the morning peak hour (7:00 am to 9:00 am) and 254 occur during the evening peak hour (4:00 pm to 6:00 pm). The proposed project does not exceed the County's threshold volume of 100 two-way peak hour trips for freeways. However, the proposed project does exceed the arterial link threshold volume of 50 two-way trips during peak hours.

For scenario year 2014 and 2035 traffic related impacts with and without the proposed project are comparable. All roadways analysed are expected to operate at a LOS C or better except for the following intersections that would operate at a LOS D to F.

- Torres Avenue and Twentynine Palms Highway SR-62
- Sunny Vista Road and Twentynine Palms Highway SR-62

In order to meet the Level of Service standards established by San Bernardino County for the above mentioned roadways and intersections, a LOS C or above needs to be achieved. The study area intersections identified above are projected to operate within acceptable Levels of Service during the peak hours for Year 2035 with the proposed road improvements required of this project.

A fair share contribution for this project is required and will be based on the fair share percentages calculated in the revised Kunzman Associates traffic study dated September 29, 2011 and further validated in December 4, 2013. The total fair share contribution shall be paid to the Department of Public Works - Traffic Division per Mitigation Measure XVI-1, below. At the present time, the total estimated fair share contribution is \$68,400. When an application for a building permit is filed, this amount will be adjusted to reflect actual construction costs incurred, if available, or will be adjusted to account for future construction costs using the Caltrans Construction Cost Index.

- XVI c) **No Impact.** The project site is approximately 3.6 miles east of the Yucca Valley Airport and approximately 6 miles west of the Roy Williams Airport in Joshua Tree. The project will not 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, because there is no anticipated notable impact on air traffic volumes by passengers or freight generated by the proposed uses and no new air traffic facilities are proposed. The proposed project will have no impact on air traffic patterns.
- XVI d) **Less than Significant Impact.** The proposed project does not present hazards or conflicts associated with design features onsite or surrounding land uses. Internal circulation provides for multiple travel routes and utilizes cul-de-sac street ends to limit through traffic. Surrounding land uses, like the project site, are residential. Therefore, the proposed project is not expected to have any impact due to hazards in the design features or from incompatible uses.
- XVI e) **Less Than Significant Impact.** The project will provide adequate emergency access at project buildout and during all phases of construction. At project buildout primary access will be taken from Alta Loma Drive and Sunburst Drive (egress, and emergency ingress only), and Sunny Vista Road

(full ingress and egress). Internal roads have been designed per San Bernardino County standards, and will support emergency vehicles. Emergency access during construction will be provided for all phases of development. Therefore, development of the project will have no adverse impacts to emergency access during construction or at buildout.

XVI f) **Less Than Significant Impact.** Adequate parking will be provided on site to accommodate the proposed residential use. Each single-family residential lot accommodates two enclosed parking spaces either as a covered driveway or garage. In addition on street parking will also be available. Parking will also be provided at the community center. The proposed project will result in less than significant impacts related to parking capacity.

XVI g) **Less Than Significant Impact.** The proposed project will not conflict with the use of alternative modes of transportation or with any adopted policies, plans, or programs. Although currently there is no public transportation in the vicinity of the project, public transportation may become available in the future. The project provides both improved public roads and sidewalks, as well as a partial bike path along Alta Loma Drive.

Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

MM# Mitigation Measures

XVI-1 *Fair Share Fees.* *A fair share contribution shall be paid to the Department of Public Works – Traffic Division. At the present time, the total estimated fair share contribution is \$68,400 as detailed in the table below. When an application for a building permit is filed, this amount will be adjusted to reflect actual construction costs incurred, if available, or will be adjusted to account for future construction costs using the Caltrans Construction Cost Index. [Mitigation Measure XVI-1] Prior to Building Permit/Traffic Division*

INTERSECTION	ESTIMATED COST	FAIR SHARE PERCENTAGE	ESTIMATED CONTRIBUTION
Sunny Vista Road at Twentynine Palms Hwy.	\$400,000	17.1%	\$68,400

ISSUES		Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XVII.	UTILITIES AND SERVICE SYSTEMS - Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

XVII **Less Than Significant Impact.** The project in and of its self is not expected to exceed wastewater treatment requirements or necessitate the construction of new water or wastewater treatment facilities. Currently the community of Joshua Tree does not have a sanitary sewer system, and all residences, businesses, and other water consumers use septic tanks to dispose of effluent. To avoid the addition of 248 septic tank users to the area, the project will include the construction of an onsite package plant, which will treat wastewater to tertiary levels and inject treated water into sub-surface soils. The project will comply with all regulation and requirements established by the Regional Water Quality Control Board.

XVII c) **Less Than Significant Impact.** A hydrology study that includes a stormwater drainage plan has been conducted for the proposed project and can be found in Appendix D of this document. The project will involve the development of an onsite stormwater intercept system that includes three (3) retention basins and a reinforced water conveyance channel. As mentioned above, the project will require a Streambed Alteration Agreement with CDFW in order to construct these improvements. The agreement delineates the area of impact and sets forth mitigation measures to lessen potential

impacts. The proposed stormwater drainage and intercept system is designed to capture and retain stormwater runoff onsite. Development of the proposed project is expected to result in the incremental increase of 5.39-acre feet compared to the existing conditions. Excess runoff will be retained within the proposed basins which provide for a combined storage volume of approximately 9.42 acre feet. The project is not expected to significantly alter drainage patterns offsite and no expansion or new storm water drainage facilities beyond what is proposed as part of the project will be required.

- XVII d) **Less Than Significant Impact.** Joshua Basin Water District has indicated that it is able and willing to serve the proposed project. Joshua Basin Water District (JBWD) has approximately 4,700 potable water service connections across a 100 square mile service area. JBWD supplies high quality ground water obtained from district-owned wells. The water system presently consists of an estimated 625,000 acre-feet of usable water in storage drawn from five wells, conveyed through approximately 270 miles of mainlines and stored in 17 reservoirs.

Currently, the JBWD has recently constructed groundwater recharge basins and associated facilities. The planned project includes the construction of recharge basin facilities each 25 to 35 acres in size, and a 10,500 to 20,000 linear foot extension of the Morongo Basin Pipeline to the new basin. These facilities enhance the District's overall groundwater management plan.

The developer will be required to connect to existing JWBD infrastructure to provide water to the site for construction and domestic water service. JBWD water mains are fronting the subject property along both Sunny Vista Road and Alta Loma Drive. JBWD facilities also already cross through the subject property and will be relocated with development and in accordance with JBWD. The developer will be required to comply with all rules, regulations, and other requirements of the JWBD in order to initiate water service to the site. Water service requirements may include, but are not limited to, upgrades, modifications, replacement, and expansion of existing JWBD facilities.

Current water supply, entitlements and additional recharge and other facilities are expected to be sufficient to meet the water needs of existing development, the proposed project and future users. Water mains and lines will need to be installed onsite in order to provide residences with domestic water service. Impacts to the water supply as a result of development of this project are expected to be less than significant.

- XVII e) **Less Than Significant Impact.** Currently there is no wastewater treatment provider within the community of Joshua Tree and residences and businesses rely on on-lot septic systems to process and manage wastewater. The use of septic tanks has in part contributed to degraded water quality in the region and is considered a long-term threat to water quality in the Joshua Basin. In order to avoid further impacts to water quality the project will install an on-site sewage treatment package plant, which will treat wastewater flows to tertiary levels. The plant will be designed to industry standards and tailored to the specificities of the site by the Project's certified sanitary engineer. The proposed package plant will be reviewed by the Joshua Basin Water District and approved by the Regional Water Quality Control board to assure industry standards are achieved. Wastewater will be treated to tertiary standards and injection wells used to recharge water to the underlying soils and aquifer. The treatment plant will be operated by the Joshua Basin Water District and will be regularly monitored by JBWD and the CRWQCB.

- XVII f) **Less Than Significant Impact.** The proposed project is not anticipated to generate substantial amounts of solid waste. Local waste hauling and transport is conducted by Waste Management, Inc. Solid waste is disposed of at the Landers Sanitary Landfill, which is owned and operated by the County of San Bernardino Solid Waste Management Division. The Landers landfill capacity is over 3 million cubic yards, and is permitted to accept 1,200 tons of solid waste per day.

The community of Joshua Tree provides residents with County-sponsored free dump days. Household hazardous waste items can be disposed of at the County operated fire department on a monthly basis.

- XVII g) **Less Than Significant Impact.** The proposed project will abide by all local, state, and federal requirements pertaining to the disposal of solid wastes. On-site recycling and solid waste source reduction programs will be implemented at project build-out in accordance with local and state requirements, including AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991).

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XVIII. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- XVIII a) **Less Than Significant with Mitigation Incorporated.** The proposed project has limited potential to degrade the quality of the environment. The subject property is located in an area that has already been subject to extensive development, including residential and school development. Existing development, which surrounds the property on three sides, has resulted in edge effects including roaming dogs and OHV vehicle use of the site. Potential impacts from the proposed subdivision will be reduced to less than significant levels through the implementation of mitigation measures set forth in this document. Such action will assure that the project does not substantially reduce habitat for fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Implementation of the mitigation measures set forth in this document assure that any potential impacts to the environment are reduced to less than significant levels.
- XVIII b) **Less Than Significant Impact.** The proposed project will result in the development of 248 single-family residential dwelling units, which has the potential to house approximately 665 people. The subject lands are surrounded on three sides by development and constitutes an "infilling" of the already established suburban residential pattern. Development of the proposed project is not expected to result in cumulatively considerable impacts. In addition, the analysis provided in this Initial Study it has been demonstrated that the project is in compliance with all applicable regional plans including but not limited to, water quality, air quality, and plans or regulations for the reduction of greenhouse gas emissions. Compliance with these regional plans serves to reduce impacts on a regional basis so that the Project would not produce impacts, that considered with the effects of other past, present, and probable future projects, would be cumulatively considerable.
- XVIII c) **Less Than Significant Impact With Mitigation Incorporated.** The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or

indirectly, as there are no such impacts identified by the studies conducted for this project or identified by review of other sources or by other agencies.

Increases in air quality emissions, noise, and traffic will be created by the implementation of the project. These potential impacts have been thoroughly evaluated and impacts from noise and traffic were determined to be less than significant with adherence to mandatory requirements or construction of improvements is required.

Implementation of the mitigation measures and adherence to mandatory requirements and standard conditions will ensure that impacts from the Project are neither individually significant nor cumulatively considerable in terms of any adverse effects upon the region.

XIX. MITIGATION MEASURES

(Any mitigation measures, which are not 'self-monitoring' shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval)

SELF MONITORING MITIGATION MEASURES: (Condition compliance will be verified by existing procedure)

- I-1** Lighting – Streets. Street lamps shall be low-scale, low-intensity lighting and well-shielded. Street lighting shall be limited to the greatest extent practicable, while retaining safe and defensible space. Street lighting at major and secondary access drives may be required, as well as at the most heavily traveled intersections within the development. Wherever possible, other, smaller scale and lower intensity lighting should be used. [Mitigation Measure I-1] General Requirements/Planning
- I-2** Lighting – Common Areas. Common area, pedestrian and other project lighting shall utilize the lowest levels of illumination practicable. No upward lighting of mountain slopes shall be permitted. Landscape lighting shall be shielded to direct and limit areas of illumination. Lighting plans shall be provided with project building and landscape plans, and very reasonable effort shall be made to protect night skies. The developer shall utilize the lowest levels of private and community level lighting necessary to provide adequate visibility and security, while protecting adjoining lands. No flashing, pulsing or animated lighting will be permitted. Elevated lighting, including but not limited to parking lot lighting, shall be full-cutoff fixtures. Drop or sag lens fixtures shall not be permitted. Semi-cutoff fixtures constructed to direct 95% of light rays below the horizontal plane may be permitted upon careful review by the County. [Mitigation Measure I-2] General Requirements/Planning
- III-1** AQ-Dust Control Plan. The “developer” shall prepare, submit for review and obtain approval from County Planning of both a Dust Control Plan (DCP) consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/ subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following requirements:
- a) Exposed soil shall be kept continually moist to reduce fugitive dust during all grading and construction activities, through application of water sprayed a minimum of two times each day.
 - b) Any portion of the site to be graded shall be pre-watered to a depth of three feet prior to the onset of grading activities.
 - c) During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 25 mph.
 - d) Any area that will remain undeveloped for a period of more than 30 days shall be stabilized using either chemical stabilizers and/or a desert wildflower mix hydroseed on the affected portion of the site.
 - e) Storage piles that are to be left in place for more than three working days shall be sprayed with a non-toxic soil binder, covered with plastic or revegetated.
 - f) Imported fill and exported excess cut shall be adequately watered prior to transport, covered during transport, and watered prior to unloading on the project site.
 - g) Storm water control systems shall be installed to prevent off-site mud deposition.
 - h) All trucks hauling dirt away from the site shall be covered.
 - i) Construction vehicle tires shall be washed, prior to leaving the project site.
 - j) Rumble plates shall be installed at construction exits from dirt driveways.
 - k) Paved access driveways and streets shall be washed and swept daily when there are visible signs of dirt track-out.
 - l) Street sweeping shall be conducted daily when visible soil accumulations occur along site access roadways to remove dirt dropped or tracked-out by construction vehicles. Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday and after street sweeping. [Mitigation Measure III-1] Prior

to Grading Permits/Planning

III-2 AQ - Construction Mitigation. The “developer” shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce vehicle and equipment emissions and other impacts to air quality by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:

- a) Provide documentation prior to beginning construction demonstrating that the project will comply with all SCAQMD regulations including 402, 403, 431.1, 431.2, 1113 and 1403.
 - b) Each contractor shall certify to the developer prior to construction-use that all equipment engines are properly maintained and have been tuned-up within last 6 months.
 - c) Each contractor shall minimize the use of diesel-powered vehicles and equipment through the use of electric, gasoline or CNG-powered equipment. All diesel engines shall have aqueous diesel filters and diesel particulate filters.
 - d) All gasoline-powered equipment shall have catalytic converters.
 - e) Provide onsite electrical power to encourage use of electric tools.
 - f) Minimize concurrent use of equipment through equipment phasing.
 - g) Provide traffic control during construction to reduce wait times.
 - h) Provide on-site food service for construction workers to reduce offsite trips.
 - i) Implement the County approved Dust Control Plan (DCP)
 - j) Suspend use of all construction equipment operations during second stage smog alerts.
- NOTE: For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).

[Mitigation Measure III-2] Prior to Grading Permits/Planning

III-3 AQ - Coating Restriction Plan. The developer shall submit for review and obtain approval from County Planning of a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/subcontracts a condition that the contractors adhere to the requirements of the CRP. The CRP measures shall be following implemented to the satisfaction of County Building and Safety:

- a) Architectural coatings with Reactive Organic Compounds (ROC) shall not have content greater than 100 g/l.
- b) Architectural coating volume shall not exceed the significance threshold for ROG, which is 75 lbs. /day and the combined daily ROC volume of architectural coatings and asphalt paving shall not exceed the significance threshold for ROC of 75 lbs. per day.
- c) High-Volume, Low Pressure (HVLV) spray guns shall be used to apply coatings.
- d) Precoated/natural colored building materials, water-based or low volatile organic compound (VOC) coatings shall be used, if practical.
- e) Comply with SCAQMD Rule 1113 on the use of architectural coatings.

[Mitigation Measure III-3] Prior to Building Permits/Planning

III-4 AQ – Design. The developer shall include the following air quality design considerations, where feasible, into the project design (per SBCC § 83.14.030). The building design with these features shall be submitted for review and approval obtained from County Planning in coordination with County Building and Safety:

- a) Bicycle Plan. Participate in implementation of the Countywide Bicycle Plan, through construction of on/off- site facilities or contribution of fees.
- b) Transit improvements. Transit improvements (e.g. bus pullouts, bus signage, bus pads, and/or bus shelters) shall be provided along existing or planned transit routes. The need for and nature of those improvements shall be determined in cooperation with the designated local transportation authority (e.g. Omnitrans, MARTA or other).
- c) Energy conservation. Conserve energy through the use of alternative energy resources (e.g. passive lighting, heating, ventilation and air conditioning) and conservation efforts in wastewater treatment, irrigation and use of recycled water. Incorporate energy efficient

lighting and California Energy Commission insulation standards into the design.

- d) *SCAQMD – Design. New and modified stationary sources shall be required to install Best Available Control Technology and offset any new emissions such that there is no net gain in emissions within the air basin. (SCAQMD Regulation XIII)*
[Mitigation Measure III-4] Prior to Building Permits/Planning

IV-1 *Tree Removal Permit.* *A County Tree Removal Permit shall be required for the removal of a Joshua tree or other regulated desert native plant. [Mitigation Measure IV-1] Prior to Grading Permit/Planning*

IV-2 *Joshua Tree Survey.* *A Joshua tree survey and report and a Joshua Tree Management Program shall be completed and submitted to County Planning prior to the issuance of a grading permit or recordation of a final tract map for any phase of this project. The required Joshua tree survey and report will be prepared by a Desert Native Plant Specialist and will include a field inventory of Joshua trees throughout the site, indicating their approximate height, age, health rating, transferability, and whether they are a clone or single-trunked tree. The report will include a plot plan showing the on-site locations of all Joshua trees and will identify any regulated desert native plants. [Mitigation Measure IV-2] Prior to Grading Permit/Planning*

IV-3 *Desert Native Landscaping.* *The development of the residential subdivision, including the individual single family lots, the common area landscape lots and the natural and re-naturalized perimeter and internal drainage facilities shall utilize reclaimed vegetation consisting of Joshua Trees and other Mojave Desert wash scrub (mesquite, palo verde, ironwood, smoketree, etc.). Other native and drought-tolerant materials shall also be used. No invasive plant materials shall be permitted. A landscape palette consistent with these provisions shall be submitted to the project biologist and County for final approval. The Conditions, Covenants and Restrictions (CC&Rs') for the project shall include specific regulations that prohibit the removal of native desert plants without the preparation of a biological report and receiving a tree removal permit from the County of San Bernardino. The developer shall be responsible for disclosing to each property owner that there are regulations prohibiting the removal of native desert plants without the appropriate permits. [Mitigation Measure IV-3] General Requirements/Planning*

IV-4 *Nesting Bird Mitigation – Pre-Construction Surveys.* *Within 30 days prior to vegetation clearing or ground disturbance associated with construction or grading that would occur during the nesting/breeding season (February through August, unless determined otherwise by a qualified biologist based on observations in the region), the Applicant shall retain a qualified biologist to determine if active nests of species protected by the Migratory Bird Treaty Act or the California Fish and Game Code are present within or adjacent to the disturbance zone or within 100 feet (300 feet for raptors) of the disturbance zone. The surveys will be conducted no more than seven days prior to initiation of disturbance work within active project areas. If ground disturbance activities are delayed, then additional pre-disturbance surveys will be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities. If ground disturbance will be phased across the project site, pre-disturbance surveys may also be phased to conform to the development schedule.*

If active nests are found, clearing and construction within 100 feet of the nest (or a lesser distance if approved by the U.S. Fish & Wildlife Service) will be postponed or halted, until the nest is vacated and juveniles have fledged, as determined by the biologist. Avoidance buffers will be established in the field with highly visible construction fencing or flagging, and construction personnel will be instructed on the sensitivity of nest areas. A qualified biologist will serve as a construction monitor during those periods when construction activities will occur near active nests to ensure that no inadvertent impacts on these nests occur.

The results of pre-construction nesting bird surveys, including graphics showing the locations of any nests detected, and documentation of any avoidance measures taken, will be submitted to the County of San Bernardino and the California Department of Fish & Wildlife within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds. [Mitigation Measure IV-4] Prior to Grading/Planning

IV-5 Burrowing Owl Mitigation – Pre-Construction Surveys. Within 14 days prior to ground disturbance, the Applicant will retain a qualified biologist to conduct burrowing owl surveys within the area to be disturbed. The survey will be performed by walking parallel transects spaced no more than 20 meters apart, and will be focused on detecting burrows that are occupied, or are suitable for occupation, by the burrowing owl. The results of the surveys, including graphics showing the locations of any active burrows detected and any avoidance measures required, will be submitted to the County of San Bernardino and the California Department of Fish & Wildlife (CDFW) within 14 days following completion of the surveys. If active burrows are detected, the following take avoidance measures will be implemented:

- a) If burrowing owls are observed using burrows on-site during the non-breeding season (September through January, unless determined otherwise by a qualified biologist based on field observations in the region), occupied burrows will be left undisturbed, and no construction activity will take place within 300 feet of the burrow where feasible (see below).
- b) If avoiding disturbance of owls and owl burrows on-site is infeasible, owls will be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with protocols established in CDFW's Staff Report on Burrowing Owl Mitigation (2012). Specifically, exclusion devices, utilizing one-way doors, will be installed in the entrance of all active burrows. The devices will be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows will then be excavated by hand and/or mechanically and refilled to prevent reoccupation. Exclusion will continue until the owls have been successfully excluded from the disturbance area, as determined by a qualified biologist.
- c) Any active burrowing owl burrows detected on-site during the breeding season (February through August, unless determined otherwise by a qualified biologist based on field observations in the region), will not be disturbed. Construction activities will not be conducted within 300 feet of an active on-site burrow at this season.

[Mitigation Measure IV-5] Prior to Grading Permit/Planning

IV-6 Burrowing Owl Mitigation – Management Plan. Prior to issuance of a grading permit, a habitat management plan for the burrowing owl will be developed. The plan will include provisions for protecting foraging habitat and replacing any active burrows from which owls may be passively evicted as allowed by Mitigation Measure BIO-1. The Burrowing Owl Management Plan will be submitted to the County of San Bernardino and the California Department of Fish and Wildlife for review and approval prior to issuance of a grading permit for the Project. At a minimum, the plan will include the following elements:

- a) If occupied burrows are to be removed, the plan will contain schematic diagrams of artificial burrow designs and a map of potential artificial burrow locations that would compensate for the burrows removed.
- b) All active on-site burrows excavated as described in Mitigation Measure BIO-1 will be replaced with suitable natural or artificial burrows within the preservation areas approved by the County of San Bernardino.
- c) Measures prohibiting the use of rodenticides during the construction process if any active on-site burrows are identified.
- d) The plan will ensure that adequate suitable burrowing owl foraging habitat is provided in proximity to natural or artificial burrows within off-site mitigation areas.

[Mitigation Measure IV-6] – Prior to Grading Permit/Planning

- IV-7** Pre-Construction Mojave Desert Tortoise Surveys and Avoidance. Within 14 days prior to construction-related ground clearing and/or grading, the Applicant shall retain a qualified biologist to conduct surveys for signs of occupancy by the Mojave desert tortoise. Should any sign indicating the presence of Mojave desert tortoise be detected, the Applicant shall not proceed with ground clearing and/or grading activities in the area of the find, and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise. The results of the pre-construction surveys, including graphics showing the locations of any tortoise sign detected, and documentation of any avoidance measures taken, shall be submitted to the USFWS, CDFW, and the County of San Bernardino within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable federal and state laws pertaining to the protection of Mojave desert tortoise. [Mitigation Measure IV-7] – Prior to Grading Permit/Planning
- IV-8** Department of Fish and Wildlife (CDFW). A mapped blue line stream occurs on portions of the project site as well as additional dry channels. Development of the proposed project will result in construction activities within and adjacent to approximately 9.73 acres of streambeds as delineated by AMEC and within the jurisdiction of the California Department of Fish and Wildlife (CDFW). It is estimated that of the total cut and fill, approximately 37,820 cubic yards (cy), will be removed from streambeds and used to construct improvements on-site. These stream courses have been mapped as “Waters of the State”, and would require a Streambed Alteration Agreement from CDFW prior to issuance of a grading permit or recordation of the Final Map. The Streambed Alteration Agreement with CDFW assures that potential impacts to streambeds are reduced to less than significant levels. If any of these stream courses qualify as federal jurisdictional waters, any alteration of these courses due to project activities would require consultation with the U.S. Army Corps of Engineers prior to grading or recordation of the Final Map. [Mitigation Measure IV-8] Prior to Grading Permit/Planning
- XII-1** Construction Noise. The “developer” shall submit and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce noise impacts during construction, which shall include the following vehicle and equipment emissions and other impacts to air quality by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:
- During the project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with the manufactures standards.
 - The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.
 - The construction contractor shall limit all construction-related activities that would result in high noise levels between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday excluding holidays.
 - 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.
 - The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.
- [Mitigation Measure XII-1] Prior to Grading Permit/Planning
- XII-2** Perimeter Block Wall. The project shall include the construction of a 6-foot high concrete block wall at the perimeter of the project adjacent to the school. The wall shall be constructed of decorative material consistent with the other walls throughout the project. The perimeter walls adjacent to the school shall be constructed with Phase 1 and Phase 4. [Mitigation Measure XII-2] Prior to Building Permit/Planning

XVI-1 Fair Share Fees. A fair share contribution shall be paid to the Department of Public Works – Traffic Division. At the present time, the total estimated fair share contribution is \$68,400 as detailed in the table below. When an application for a building permit is filed, this amount will be adjusted to reflect actual construction costs incurred, if available, or will be adjusted to account for future construction costs using the Caltrans Construction Cost Index. [Mitigation Measure XVI-1] Prior to Building Permit/Traffic Division

INTERSECTION	ESTIMATED COST	FAIR SHARE PERCENTAGE	ESTIMATED CONTRIBUTION
Sunny Vista Road at Twentynine Palms Hwy.	\$400,000	17.1%	\$68,400

GENERAL REFERENCES

California Department of Conservation. Alquist-Priolo Special Studies Zone Act Map Series (PRC 27500).

California Department of Conservation. 2010 Geologic Map of California. Accessed September 2013.

County of San Bernardino. Countywide Integrated Waste Management Plan. 2007.

County of San Bernardino Development Code, Adopted 2007 and Revised 2013.

County of San Bernardino. County of San Bernardino General Plan. Adopted 2007 and Amended 2013.

County of San Bernardino. 2006 General Plan Program Final Environmental Impact Report. Adopted 2007.

County of San Bernardino Land Use Services Planning Department. Zoning & Hazard Overlay Maps. Accessed September 2013.

County of San Bernardino. Land Use Zoning Districts Map. Accessed September 2013.

County of San Bernardino. San Bernardino County Stormwater Program Model Water Quality Management Plan Guidance. 2005.

Federal Emergency Management Agency. Flood Insurance Rate Map & Flood Boundary Map. Accessed September 2013.

California Department of Water Resources Bulletin #118 (Critical Regional Aquifers), 1975.

CEQA Guidelines, Appendix G.

County Museum Archaeological Information Center.

County of San Bernardino Identified Hazardous Materials Waste Sites List, April 1998.

County of San Bernardino, Countywide Integrated Waste Management Plan, March 1995.

County of San Bernardino, June 2004, *San Bernardino County Stormwater Program, Model Water Quality Management Plan Guidance*.

County of San Bernardino Road Planning and Design Standards.

Final Program Environmental Impact Report, San Bernardino County 2007 General Plan, prepared by URS Corporation Inc., February 2007.

Federal Emergency Management Agency Flood Insurance Rate Map and Flood Boundary Map.

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

Mojave Desert Air Quality Management District, Mojave Desert Planning Area – Federal Particulate Matter (PM10) Attainment Plan, July 1995.

PROJECT SPECIFIC STUDIES

AIR QUALITY STUDY

"San Bernardino County California, Air Quality Impact Analysis for Tentative Tract Map 18255," prepared by Terra Nova Planning and Research, Inc., in September of 2007; revised February 4, 2010.

BIOLOGICAL STUDY

"Baseline Biological and Focused Desert Tortoise Survey of the JT 105 Project Site, Joshua Tree, unincorporated San Bernardino County, California," prepared by AMEC Earth & Environmental, Inc., on April 27th 2007; updated December 6, 2013.

CULTURAL STUDY

"Historical/Archeological Resources Survey Report Tentative Tract Map No. 18255 Near the community of Joshua Tree San Bernardino, California," prepared by CRM TECH on April 17, 2007, updated December 17, 2013.

DRAINAGE STUDY

"Preliminary Drainage Study for Tentative Tract Map No. 18225 Joshua Tree, California," prepared by Fomotor Engineering, October 2007.

GEOLOGY/SOILS STUDY

"Geotechnical Investigation Proposed Single-Family Residential Development APN's 0601-211-009 & 003 Yucca Valley, California," prepared by LandMark Geo Engineers and Geologists on August 25th 2006.

NOISE STUDY

"Yucca Valley 105 Noise Analysis County of San Bernardino, California," prepared by Urban Crossroads, Inc., on August 14th 2007.

PHASE I STUDY

"Phase I Environmental Site Assessment for Assessor Parcel Numbers 0601-211-09 and 13 Joshua Tree, San Bernardino County, California," prepared by Terra Nova Planning and Research in March of 2007

TRAFFIC STUDY

"County of San Bernardino Yucca Valley 105 Traffic Impact Analysis," prepared by Kunzman Associates, on March 22, 2011.

WATER QUALITY MANAGEMENT PLAN

"Water Quality Management Plan for Altamira Preliminary Development Plan and Tentative Tract Map No. 18255" prepared by Terra Nova Planning & Research, Inc. and Fomotor Engineering. July 2010.