

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

729



FROM: Economic Development Agency and the Department of Public Social Services

SUBMITTAL DATE:
October 19, 2009

SUBJECT: Roy's Desert Resource Center Project

RECOMMENDED MOTION: That the Board of Supervisors:

1. Adopt the Initial Study/Negative Declaration (IS/ND) (Attachment A) for Environmental Assessment No. EA08510003957 based on the finding incorporated in the Initial Study and the conclusion that the project will not have a significant effect on the environment; and
2. Approve the Project as described in the Environmental Assessment No. EA08510003957.

BACKGROUND: As the Lead Agency, the County of Riverside prepared an Initial Study for the proposed septic system upgrade to support the County of Riverside Roy's Desert Resource Center, formerly known as Desert Resource Center Build-Out, located in the City of Palm Springs.

(Continued)

Susan Loew

Robert Field

Susan Loew, Director
Department of Public Social Services

Robert Field
Assistant County Executive Officer/EDA

FINANCIAL DATA	Current F.Y. Total Cost:	\$ 0	In Current Year Budget:	N/A
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	N/A
	Annual Net County Cost:	\$ 0	For Fiscal Year:	09/10

SOURCE OF FUNDS: Palm Desert Financing Authority
Bond Proceeds 81% and Federal Department of Housing and
Urban Development Appropriations Act 19%

Positions To Be Deleted Per A-30

☐

Requires 4/5 Vote

☐

C.E.O. RECOMMENDATION:

APPROVE

BY

Jennifer L. Sargent

County Executive Office Signature

Jennifer L. Sargent

☐ Consent ☒ Policy
☐ Consent ☒ Policy

Dep't Recomm.:
 Per Exec. Ofc.:

Prev. Agn. Ref.: 3.38, 7/21/09; 3.43,
7/29/08; 3.34, 7/01/08

District: 5

Agenda Number:

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

3.32

Reviewed by
 CIP TEAM
 Christopher Hans
 Departmental Concurrence
 10/21/09
 Tiffany N. North
 FORM APPROVED COUNTY COUNSEL
 BY:

2009 OCT 21 15:03

BACKGROUND: (Continued)

Roy's Desert Resource Center's current septic system is undersized to accommodate the projected discharge of 15,000 gallons of sewage per day. The proposed Project will include the installation of three 5,000 gallon septic tanks and seepage pits. Discretionary approval from the California Regional Water Quality Board is required. Therefore, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21177), an Initial Study was prepared to analyze the proposed project to determine if any potential significant impacts upon the environment would result from construction and implementation of the Project.

The analysis contained in the Initial Study demonstrates that the Project would not have any significant impact on the environment. The Initial Study/Negative Declaration (IS/ND) was prepared and circulated for the mandated 30-day public review and comment period from September 29, 2009 to October 28, 2009. The Notice of Determination is contained in Attachment A.

The comment letters, Notice of Determination, Determination of No Effect are included as an Attachment.

All costs associated with this project will be funded with Palm Desert Financing Authority and Federal Department of Housing and Urban Development Appropriations Act funds.

COUNTY OF RIVERSIDE

ENVIRONMENTAL ASSESSMENT FORM: INITIAL STUDY

Environmental Assessment (E.A.) Number: EA08510003957

Project Case Type (s) and Number(s): N/A

Lead Agency Name: County of Riverside Economic Development Agency

Address: 3133 Mission Inn Avenue, Riverside, CA 92507

Contact Person: Claudia Steiding, Senior Environmental Planner

Telephone Number: 951-955-8174

Email: CSteiding@rivcoeda.org

Applicant's Name: County of Riverside Economic Development Agency

Applicant's Address: 3133 Mission Inn Avenue, Riverside, CA 92507

I. PROJECT INFORMATION

Project Description: The County of Riverside's Economic Development Agency (EDA) is proposing modification improvements to an existing septic sewer system for Roy's Desert Resource Center homeless shelter located at 19533 McLane Street in the City of Palm Springs, California (See Exhibits 1 through 3).

Background:

The Project's Phase I development involved the existing facility known as the Mental Health Safe Haven and Full Service Partnership Clinic. Owned and operated by the Coachella Valley Multi-Services Center (CVMSC), this facility occupies a total of 13,448 square feet, of the eastern portion of the existing building and has the current capability of accommodating up to 25 homeless, single men and women. The facility is comprised of 7,908 square feet for housing, kitchen and dining amenities and another 5,540 square feet dedicated for the full service Partnership Clinic, which consists of a doctor's office, a nurse's office, a triage, chart room, an administrative office with office cubicles, private offices, and file/storage space. Currently, Phase I development utilizes a 4,000 gallon septic tank, which adequately serves the project's size. Phase I development is completed at this time.

The Phase II development involves the western portion of the existing 47,000 square foot building, and is named as Roy's Desert Resource Center, in honor of the County's late Supervisor Roy Wilson. This facility will occupy 20,546 square feet and will be able to accommodate up to 120 single men, single women, and families. Phase II will be managed by a total of 30 employees. Currently, the facility has one (1) 1,500 gallon septic tank, which is undersized to serve the Roy's Desert Resource Center. Therefore, in order to serve Roy's Desert Resource Center the proposed Project will consist of the proposed Phase II development, replacing the existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and associated seepage pits. This modification improvement would be located between the facility's existing building and the existing building located to the north (Refer to Exhibits 4 and 5). Overall, this would add to a total septic tank capacity of 19,000 gallons. Roy's Desert Resource Center is scheduled to open in December 2009 and will be operated and maintained by the Coachella Valley Association of Governments (CVAG).

A. Project Location and Assessor Parcel Numbers (APNs)

The Project site consists of one parcel: APN 666-411-011 totaling approximately 3.53 acres and is located at 19533 McLane Street in North Palm Springs, California.

Type of Project: Site Specific ☒; Countywide ☐; Community ☐; Policy ☐.

B. Total Project Area: 3.53 acres

Industrial/Commercial Acres: 3.53 **Lots:** 1 **Sq. Ft. of Bldg. Area:** 20,546 **Est. No. of Employees:** 30

C. Assessor's Parcel No(s): 666-411-011

D. Street References: The Project site is located at the southwest corner side of McLane Street, approximately 0.45 miles west of Indian Avenue in the City of Palm Springs, California. The site location is at 19533 McLane Street.

E. Section, Township & Range Description or reference/attach a Legal Description: Section 15, Township 3 South, Range 4 East. Latitude/Longitude: 33° 54' 21.23" North/116° 33' 11.98" West.

F. Brief description of the existing environmental setting of the project site and its surroundings: The Project site consists of the replacement of one (1) 1,500 gallon septic tank with three (3) 5,000 gallon septic tanks and seepage pit expansion on 3.53 acres at 19533 McLane Street. The facility is owned and operated by Riverside County's Economic Development Agency (EDA) for the purpose of providing shelter care and assistance to the homeless. Surrounding land uses consist of an existing industrial/commercial building to the north, a vacant-graded undeveloped pad to the east, Interstate 10 freeway to the south, and vacant undeveloped land to the west.

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

A. General Plan Elements/Policies:

- 1. Land Use:** The entire 3.53 acre property is located in the City of Palm Springs and the project will adhere to the goals and policies of the County of Riverside's General Plan. The Project is consistent with the City's General Plan.
- 2. Circulation:** Access to the Project site is off of McLane Street and is consistent with the Goals and Policies of the City's Circulation Element and the County Fire Department.
- 3. Multipurpose Open Space:** Not Applicable
- 4. Safety:** The proposed septic sewer improvement modifications to the existing facility would adhere to the policies pertaining to flood, fire, hazardous waste and seismic hazards as outlined in the Safety Element of the County of Riverside General Plan.
- 5. Noise:** The Project will comply with the County of Riverside regarding construction work hours.

6. **Housing:** The Project site does not contain residential use designated land and is not located adjacent to existing residences. All immediate land uses adjacent to the site are of non-residential land use designation.
7. **Air Quality:** The Project will adhere to the goals and policies for projects located within the Salton Sea Air Basin (SSAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

B. General Plan Area Plan(s): Western Coachella Valley

C. Foundation Component(s): N/A

D. Land Use Designation(s): Regional Business Park

E. Overlay(s), if any: None

F. Policy Area(s), if any: None

G. Adjacent and Surrounding Area Plan(s), Foundation Component(s), Land Use Designation(s), and Overlay(s) and Policy Area(s), if any: District 4 Redevelopment Zone.

H. Adopted Specific Plan Information

1. **Name and Number of Specific Plan, if any:** None

2. **Specific Plan Planning Area, and Policies, if any:** None

I. Existing Zoning: Service/Manufacturing Zone (M-1)

J. Proposed Zoning, if any: None

K. Adjacent and Surrounding Zoning: Service/Manufacturing Zone (M-1) (west of Project site), Planned Research and Development Zone (MIP) (south of Project site and south of Interstate 10 freeway) and Service/Manufacturing Zone (M-1) (east of project site).

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

IV. DETERMINATION

On the basis of this initial evaluation:

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS NOT PREPARED
☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project, described in this document, have been made or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS PREPARED
☐ I find that although the proposed project could have a significant effect on the environment NOTHING FURTHER IS REQUIRED because all potentially significant effects (a) have been adequately analyzed in an earlier Environmental Impact Report (EIR) or Negative Declaration pursuant to applicable legal 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.
☐ I find that although all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none of the conditions described in California Code of Regulations, Section 15162 exist. An ADDENDUM to a previously-certified EIR or Negative Declaration has been prepared and will be considered by the approving body or bodies.
☐ I find that at least one of the conditions described in California Code of Regulations, Section 15162 exist, but I further find that only minor additions or changes are necessary to make the previous EIR adequately apply to the project in the changed situation; therefore a SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT is required that need only contain the information necessary to make the previous EIR adequate for the project as revised.
☐ I find that at least one of the following conditions described in California Code of Regulations, Section 15162, exist and a SUBSEQUENT ENVIRONMENTAL IMPACT REPORT is required: (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) Substantial changes have occurred with respect to the circumstances under which the project is undertaken which will require

major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following:(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration;(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or,(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Signature

Date

For

Claudia Steiding
Senior Environmental Planner
County of Riverside Economic Development Agency



Source: Census 2000 Data, The CaSIL, MBA GIS 2009.



Source: Google Earth Pro Aerial (January, 2006).



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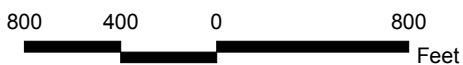
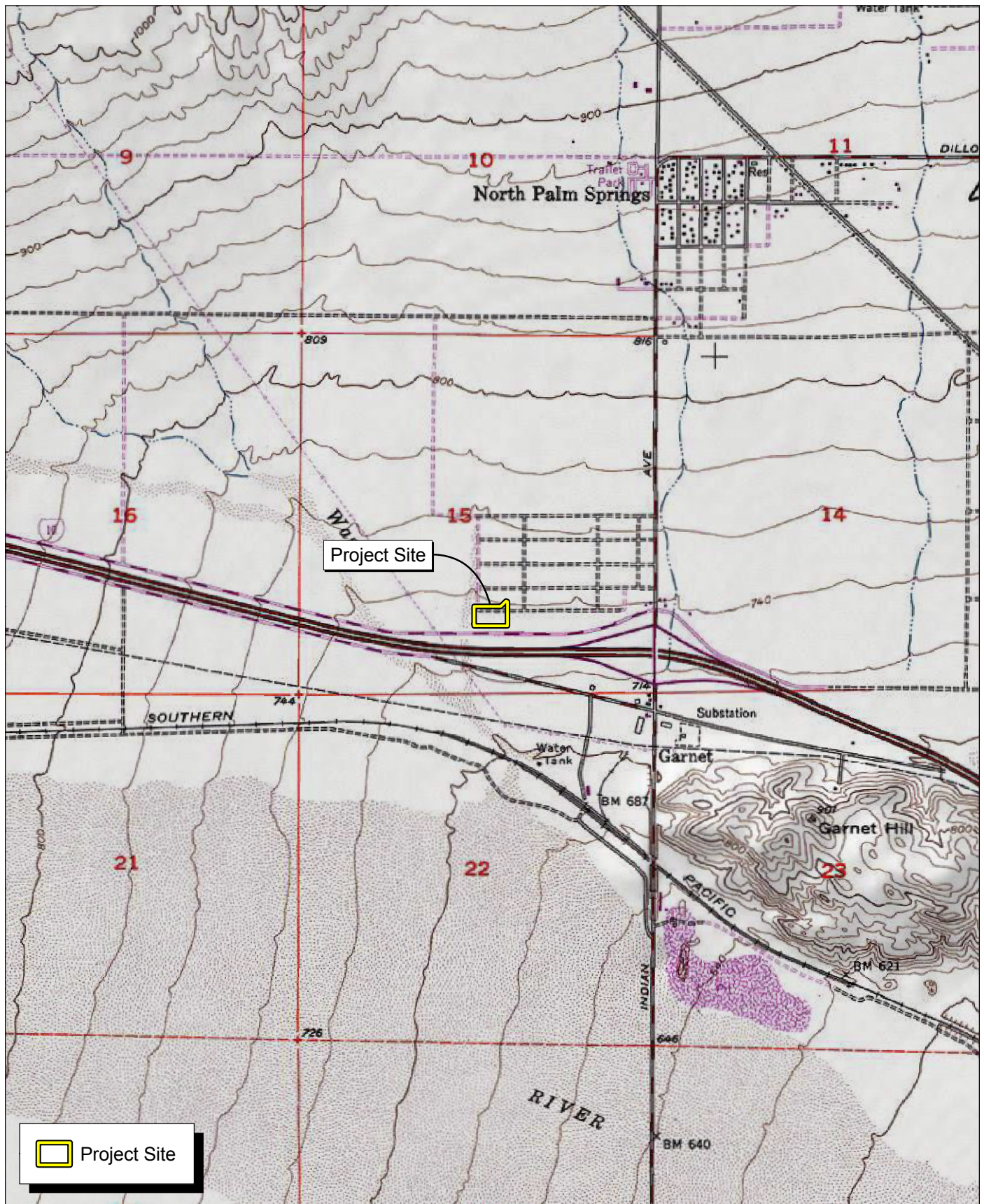
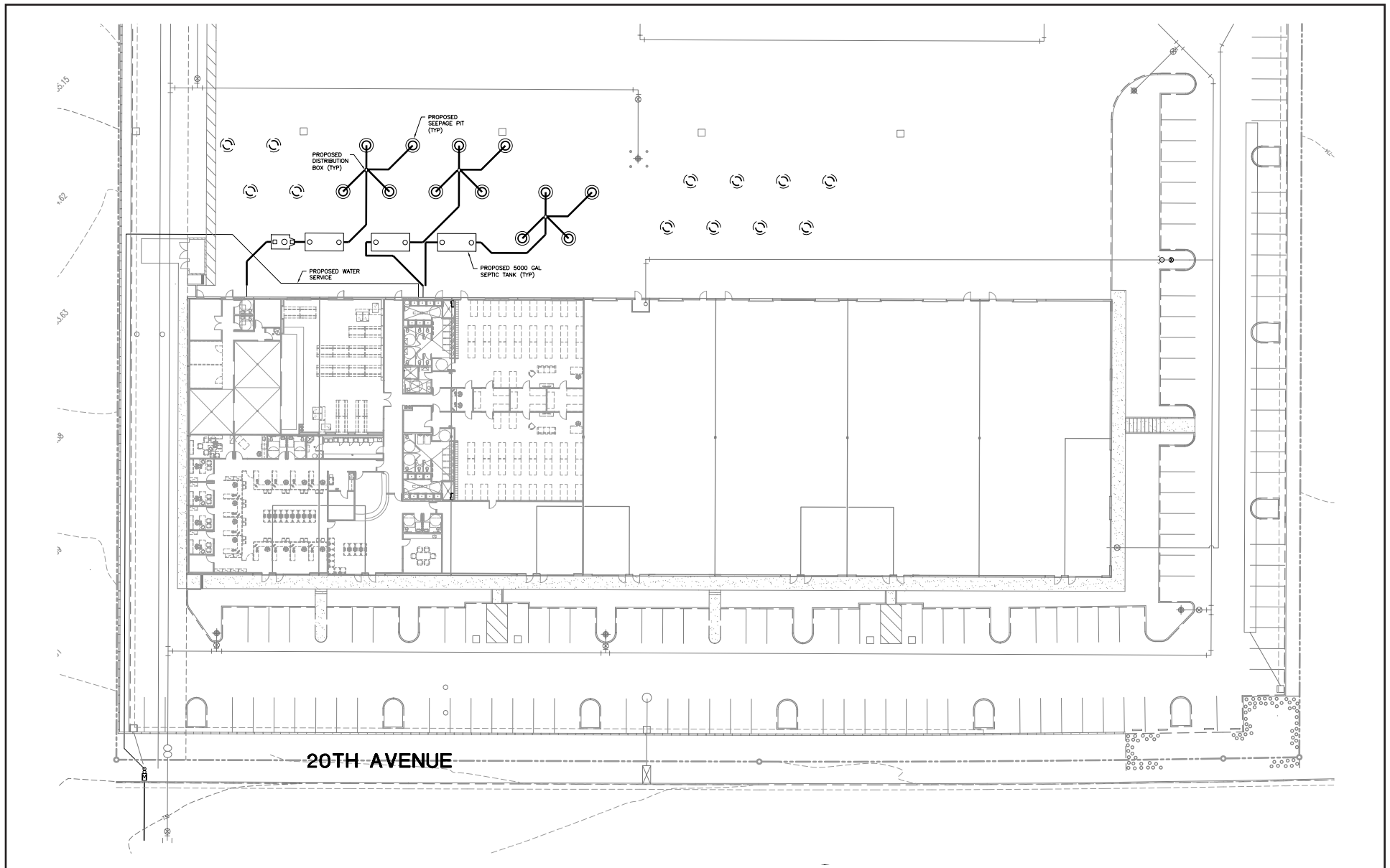


Exhibit 2 Local Vicinity Map Aerial Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Source: TOPO! Desert Hot Springs (1978) 7.5' DRG.



Source: MSA Consulting, Inc. (2009).

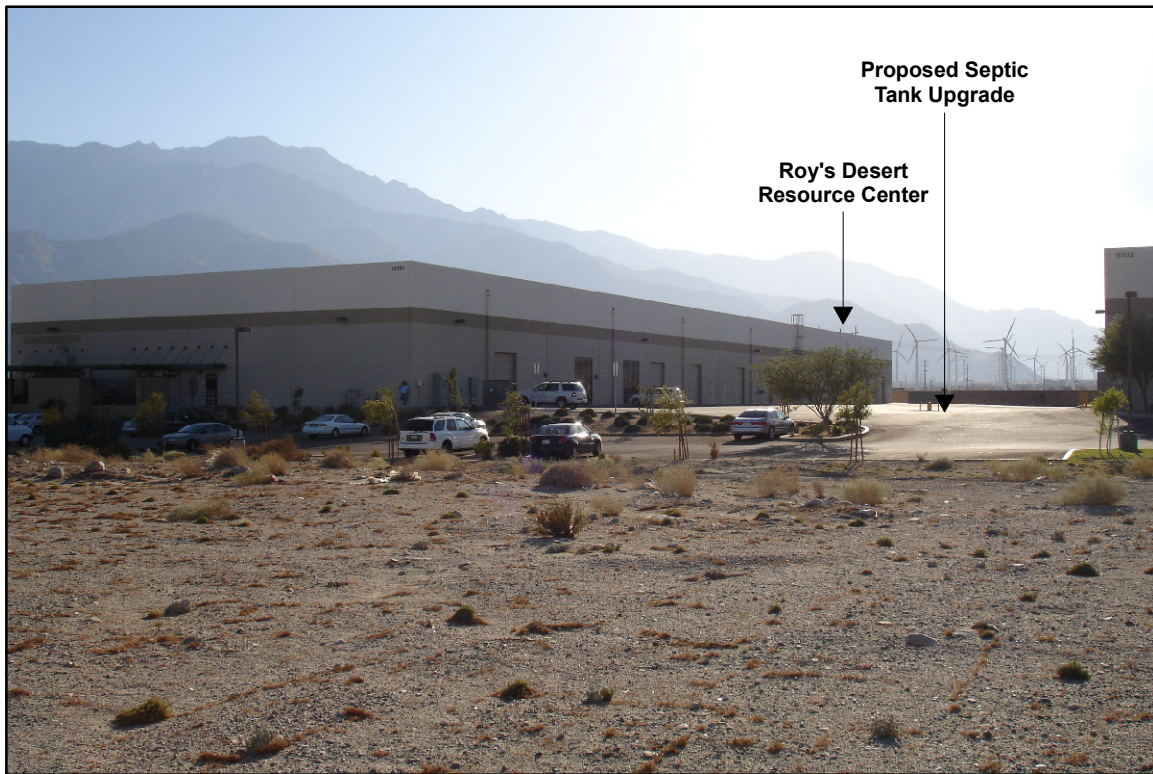


Michael Brandman Associates

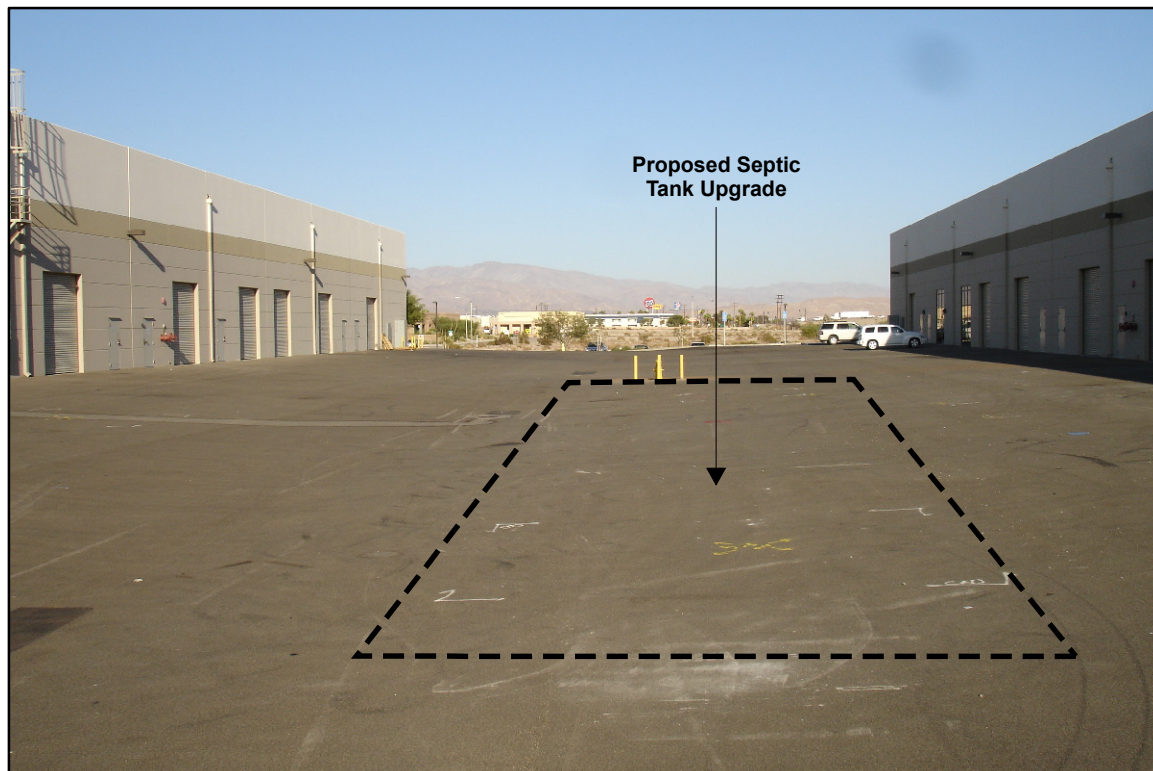
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Exhibit 4 Conceptual Site Plan

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Photograph 1: Looking west toward the project site.



Photograph 2: Facing proposed septic tank within the project site.

Source: Michael Brandman Associates, 2009.



Michael Brandman Associates

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Exhibit 5 Site Photographs

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the Proposed Project and to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. In accordance with California Code of Regulations (CCR), Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the County of Riverside, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration (MND), or an EIR is required for the Proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the Proposed Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS Would the project				
1. Scenic Resources	☐	☐	☐	☒
a) Have a substantial effect upon a scenic highway corridor within which it is located?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?	☐	☐	☐	☒

Source: Caltrans California Scenic Highway Mapping System. County of Riverside, Riverside County Integrated Project (RCIP) Figure C-7 "Scenic Highways".

Findings of Fact:

- a-b) The proposed Project involves the installation of the (3), 5,000 gallon septic tanks with seepage pits to an existing developed, paved surface of land and located between the facility's existing building and the existing adjacent building to the north (Refer to Exhibits: 4 and 5). The Project is not located within a scenic corridor, nor considered as a scenic resource. The Project's installation of septic tanks and seepage pits will be located underneath the existing truck parking lot with no visual obstructions created. Therefore, the Project will not have an impact to scenic resources. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

2. Mt. Palomar Observatory☐☐☐☒

a) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?

Source: RICP; TG; Ord. No. 655

Findings of Fact:

- a) Light pollution occurs when an over abundance of artificial illumination enters the night sky and reflects off of airborne water droplets and dust particles causing a condition known as skyglow. It occurs when glare from improperly aimed and unshielded light fixtures cause uninvited illumination to cross over into adjacent property lines. The Mt. Palomar Observatory is located in San Diego County and requires limited nighttime lighting requirements in order for the night sky to be observed clearly. The proposed Project is located approximately 41 miles northeast of the Observatory. The proposed improvements include the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and seepage pits. The Project site is not within and will not affect the Mt. Palomar Nighttime Lighting Overlay Area. Therefore, the Project would not impact the Observatory's night sky viewing ordinance.

Mitigation: None required.

Monitoring: None required.

3. Other Lighting Issues☐☐☐☒

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

b) Expose residential property to unacceptable light levels?

☐☐☐☒

Source: RCIP; Proposed project description, site evaluation.

Findings of Fact:

- a-b) The Project's proposed installation of septic tanks and seepage pits will not involve the installation of permanent outdoor lighting and would not expose residential property to unacceptable light levels. There are no proposed modifications to the exterior lighting. There are no existing residences within close proximity to the Project site. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE RESOURCES Would the project				
4. Agriculture	☐	☐	☐	☒
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 (FMMP) of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing agricultural use, or a Williamson Act (agricultural preserve) contract (Riv. Co. Agricultural Land Conservation Contract Maps)?	☐	☐	☐	☒
c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?	☐	☐	☐	☒
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Source: RCIP Figure OS-17 "Agricultural Resources", GIS database and Project Materials.

Findings of Fact:

a-d) The project site is located in a developed portion of land currently designated as Service/Manufacturing (M-1) in the City of Palm Springs Zoning Ordinance. However, the Project is under jurisdiction of the County of Riverside. The Department of Conservation Farmland Mapping and Monitoring Program (FMMP) designates the site as Urban and Built-Up Land. The Project site is not located within an agricultural preserve or within a Williamson Act contract area. Therefore, no adverse agriculture impacts will occur as a result of the proposed Project

Mitigation: None required.

Monitoring: None required.

AIR QUALITY Would the project				
5. Air Quality Impacts	☐	☐	☒	☐
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors, which are located within 1 mile of the project site to project substantial point source emissions?	☐	☐	☒	☐
e) Involve the construction of a sensitive receptor located within one mile of an existing substantial point	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
source emitter?				
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
g) Result in an increase in greenhouse gas emissions that would significantly hinder or delay the State's ability to meet the reduction targets contained in AB 32?	☐	☐	☒	☐
h) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Source: Proposed project description, site evaluation

Findings of Fact:

- a-h) Less than Significant Impact. The proposed project would generate short-term emissions during construction. Such emissions would include exhaust emissions from construction equipment and worker and delivery vehicles as well as fugitive dust generated during the construction process. Exhaust emissions are controlled by the rules promulgated by the CARB while fugitive dust emissions are controlled by SCAQMD Rule 403. Rule 403 requires the application of best management practices such as watering disturbed areas, restricting onsite traffic to 15 miles per hour or less, and cessation of soil disturbing activities when wind speeds exceed 25 miles per hour. The construction of the proposed project must adhere to the requirements of Rule 403.

Short-term construction emissions from the proposed project were estimated during three construction activities: demolition of the existing septic tank area, replacement of the existing septic tank with three new ones, and the asphalt paving of the finished surface. The estimated construction emissions are shown in Table 1. The determination of the environmental significance of the project's construction emissions was determined by comparing the estimated emissions with the regional emission significance thresholds defined by the SCAQMD for construction activities which are also shown in Table 1.

Table 1: Estimated Daily Short-term Construction Emissions

Construction Activity	Emissions (pounds per day)(1)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Demolition	4	35	16	0	8	3
Tank Replacement	0	4	2	0	2	1
Asphalt Paving	3	9	15	0	1	1

Table 1: Estimated Daily Short-term Construction Emissions (Cont.)

Construction Activity	Emissions (pounds per day)(1)					
	VOC	NOx	CO	SOx	PM10	PM2.5

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
Max emissions in 1 day	4	35	16	0	8	3
Regional Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Note: (1) Emissions shown assume compliance with applicable emission regulations. The PM10 and PM2.5 fugitive dust emissions are in the “mitigated” output in URBEMIS because the project would comply with dust control measures as specified in SCAQMD Rule 403.						

As shown in Table 1 above, the short-term construction emissions from the proposed project would not exceed any SCAQMD regional emission significance threshold during construction. Furthermore, the Project will not generate odors and due to the scale of the Project, will not impact plans to reduce greenhouse gas emissions. Therefore, Project impacts are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

BIOLOGICAL RESOURCES	Would the project			
6. Wildlife & Vegetation	☐	☐	☐	☒
a) Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	☐	☐	☐	☒
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	☐	☐	☐	☒
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U. S. Wildlife Service (USFWS)?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) 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 CDFG or USFWS?	☐	☐	☐	☒
f) Have a substantial adverse effect on federally	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Source: MBA Consistency Analysis.

Findings of Fact:

a-g) No impact. The Project site is a 3.53 acre lot which is developed. The Proposed project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. No open space or undeveloped land would be involved with the installation of the septic tanks and seepage pits. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

CULTURAL RESOURCES Would the project				
7. Historic Resources	☐	☐	☐	☒
a) Alter or destroy an historic site?				
b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	☐	☐	☐	☒

Source: MBA Consistency Analysis. Native American Heritage Commission (NAHC).

Findings of Fact:

a-b) No impact. The Project site is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Thus, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

8. Archaeological Resources	☐	☐	☐	☒
a) Alter or destroy an archaeological site.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
California Code of Regulations, Section 15064.5?				
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
d) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☒

Source: MBA Consistency Analysis. MBA Records Search.

Findings of Fact:

- a, d) There are no archaeological sites or existing religious or sacred uses within the Project site as it is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.
- b, c) MBA conducted a archaeological records search of the Project site and found no documentation of archaeological resources being located on or near to the Project site. In addition, a records search was performed by the Native American Heritage Commission's Sacred Lands File (SLF) and concluded that no sites were found within or near to the Project site. (Appendix B).

Furthermore, the Project site is already graded and developed; and chances are minimal that archaeological resources would be encountered during the installation of the septic tanks, since the area would have had a better chance of finding archaeological resources in the initial construction phase for existing buildings. Nevertheless, the potential exists for sub-surface archaeological resources to be uncovered during excavation, grading, and other construction related activities for the three septic tanks.

As a standard procedure in the event that a sub-surface archaeological artifact were to be uncovered during project construction or ground-disturbing activities, the find would be redirected until the nature and extent of the find could be evaluated by a qualified archaeologist. As applicable, resources would be collected, curated, and provided to the Eastern Information Center at the University of California at Riverside. The archeologist would then coordinate with local Native American groups as necessary if tribal artifacts were found. Therefore, project impacts with regard to disturbing human remains will be less than significant.

Mitigation: None required.

Monitoring: None required.

9. Paleontological Resources	☐	☐	☐	☒
a) Directly or indirectly, destroy a unique				

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

paleontological resource, or site, or unique geologic feature?

Source: Riverside County TLMA GIS.

Findings of Fact:

- a) The Project site has a low potential for paleontological resources. The Project site is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. Therefore, no impacts are foreseen from Project development and no mitigation is required.

Mitigation: None required.

Monitoring: None required.

GEOLOGY AND SOILS Would the project

10. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones	☐	☐	☒	☐
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?	☐	☐	☒	☐
b) Be subject to 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?	☐	☐	☒	☐

Source: Geotechnical Engineering Study. Consolidated Engineering Laboratories. September 4, 2003 (Appendix A)

Findings of Fact:

- a-b) The Project site is roughly 739 feet above sea level and is relatively flat. As indicated in the Geotechnical Engineering Study (Appendix A), soils are consistent of Quaternary-aged, alluvial deposits consisting of unconsolidated stream, river channel and alluvial fan deposits with local eolian sands. No known active faults transect the Project site. The Project site is not located within the Alquist-Priolo Special Studies or County Fault Hazard Zones. The nearest active fault is the Banning segment of the San Andreas Fault system, which is located 1.0 mile north of the Project site. The Project does not involve structural building, but involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, impacts from the proposed Project are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

11. Liquefaction Potential Zone	☐	☐	☒	☐
a) Be subject to seismic-related ground failure,				

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

including liquefaction?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A); Riverside County TLMA GIS (Liquefaction Map).

Findings of Fact:

- a) In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction. As indicated in the Geotechnical Engineering Study, six bore holes were drilled to a maximum of 41.5 feet in depth and did not encounter groundwater, which would suggest groundwater levels to below 50 feet in depth. Nonetheless, laboratory and field data gathered in the Geotechnical Engineering Study concluded that the Project site does not have the potential for liquefaction to occur. Therefore, impacts from the proposed Project are considered less than significant.

Mitigation: None required.

Monitoring: None required.

12. Ground-shaking Zone

☐	☐	☒	☐

- a. Be subject to strong seismic ground shaking?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Western Coachella Valley is traversed by several active and potentially active fault zones, including the San Andreas Fault, and has experienced several earthquakes of moderate magnitude since records have been kept. The primary seismic hazards, which result, are ground shaking and the potential for ground rupture along the surface trace of the fault. Secondary seismic hazards result from the interaction of ground shaking with existing soil and bedrock conditions, and include liquefaction, settlement, and landslides. The nearest active fault is the San Andreas Fault, which is located 2.46 miles northeast of the project site. At that distance, strong ground shaking can still be expected at the Project site.

Although the Project site is located within a ground-shaking zone, the Project does not involve any additional structural buildings to be constructed other than the installation of three septic tanks and seepage pits.

Furthermore, the Geotechnical Engineering Study (originally prepared in 2003) already addressed geologic issues with mitigation for the development of the Project area's existing buildings and parking lot and included mitigation in addressing the installation of existing septic tanks and seepage pits. Therefore, in compliance with proper Cal OSHA grading methods and with the County of Riverside grading requirements during

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

temporary excavations for the septic tanks, there will be a less than significant impact as a result of the project.

Mitigation: None required.

Monitoring: None required.

13. Landslide Risk

☐
☐
☐
☒

a) 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, collapse, or rockfall hazards?

Source: WCVAP Figures 15, "Steep Slopes" and 16, "Slope Instability"; Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Project site is not affected by landslide or rock falling risks. Topography on the site is generally flat, without boulders or steep slopes. Therefore, there is no impact associated with the Proposed Project.

Mitigation: None required.

Monitoring: None required.

14. Ground Subsidence

☐
☐
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☐

a) 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 ground subsidence?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Geotechnical Engineering Study indicated that the Project site has a moderate susceptibility for settlement due to consolidation and dynamic compaction. However, laboratory and field data gathered at the site does not indicate near surface soils in the upper 15 feet to be susceptible to collapse. Nevertheless, as indicated above (Section 12a), the Project will comply with proper Cal OSHA grading methods and with the County of Riverside grading requirements during temporary excavations for the septic tanks. Therefore, Project impacts with regard to ground subsidence will be considered as less than significant.

Mitigation: None required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Monitoring: None required.

15. Other Geologic Hazards

a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

☐	☐	☐	☒

Source: Site visit. Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

a) The Project is not affected by a geological hazard such as seiche, mudflow or volcanic hazard, since the site is not located near a body of water (seiche), steep topography (with mudflow potential) or volcanic hazards. Therefore, there is no impact to the Project with regard to other geologic hazards.

Mitigation: None required.

Monitoring: None required.

16. Slopes

a) Change topography or ground surface relief features?

☐	☐	☐	☒

b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?

☐	☐	☐	☒

c) Result in grading that affects or negates subsurface sewage disposal systems?

☐	☐	☒	☐

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A). Staff Review, and Site Visit

Findings of Fact:

- a-b) The Project will not change the topography or create cut or fill slopes since the Project site is already developed. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the project.
- c) Grading has already been performed for the Project area at the time the existing building was constructed. Existing septic tank and seepage pit facilities for the building were already in place, and would be able to offer additional of septic sewer infrastructure installation if needed. Since the Project area was developed in compliance with mitigation listed in the Geotechnical Engineering Study, the Project site will only need to comply with proper Cal OSHA grading methods and County

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

of Riverside grading requirements during construction . Therefore, Project impacts in negating the operability of subsurface sewer disposal systems will be less than significant.

Mitigation: None Required.

Monitoring: None Required.

17. Soils	☐	☐	☐	☒
a) Result in substantial soil erosion or the loss of topsoil?				
b) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A). Staff Review, and Site Visit

Findings of Fact:

- a) The Project site is not affected by significant topography, surface features or slopes or expansive soils. The Project site is currently developed in which septic tank and seepage pit installation will occur underneath the existing parking lot (Refer to Exhibit 5). Therefore, there will be no impact.
- b) As indicated in Geotechnical Engineering Study, Project site soils are sandy and non-expansive. Therefore, impacts associated with expansive soils will not occur.

Mitigation: None Required.

Monitoring: None Required.

18. Erosion	☐	☐	☐	☒
a) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?				
b) Result in any increase in water erosion either on or off site?	☐	☐	☐	☒

Source: Staff Review, and Site Visit

Findings of Fact:

- a-b) The Project site is currently developed. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot, which

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

has existing storm drainage installed. Therefore, there will be no impact as a result of the Project.

Mitigation: None Required.

Monitoring: None Required.

19. Wind Erosion and Blows sand from project either on or off site.

☐
☐
☒
☐

a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?

Source: Site visit.

Findings of Fact:

- a) The Project site is currently developed in which septic tank and seepage pit installation will occur underneath an existing parking lot. As shown in Exhibit 5, roughly 11,000 square feet of soil would be temporarily exposed with the removal of asphalt during installation. Exposure of soils will be temporary, with occasional exposure to high winds, which are common to the region. However, since the Project is a temporary operation, and that appropriate dust suppression measures, per Air Quality Management District (AQMD's) Rule 403.1 (i.e. tarp covers) will be applied, impacts with regard to wind erosion will be reduced to less than significant.

Mitigation: None required.

Monitoring: None required.

HAZARDS AND HAZARDOUS MATERIALS Would the project

20. Hazards and Hazardous Materials

☐
☐
☒
☐

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

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

☐
☐
☒
☐

c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?

☐
☐
☐
☒

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

☐
☐
☐
☒

e) 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

☐
☐
☐
☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

environment?

Source: California State Water Resources Control Board Geo Tracker. 2008. Staff Review, and Site Visit.

Findings of Fact:

- a,b) The Project site will not create a significant hazard to the public through the routine transport or from accidental release of hazardous substances. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot for the purpose of sewage containment. Furthermore, the Project site plans will be submitted for review and approval by the California Regional Water Quality Control Board Colorado River Basin Region (CRWQCB) to assure that installation of septic tanks and seepage pits will not contaminate the local groundwater aquifer. Therefore Project impacts are considered to be less than significant.
- c) The Project will not impair implementation of, or interfere with an adopted emergency response or evacuation plan. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impacts as a result of the Project.
- d) The Project will not emit hazardous emissions or handle acutely hazardous materials within one-quarter mile of an existing or proposed school. The nearest school is the Grace Christian Learning Center, which is located 3.43 miles northwest of the Project site. Therefore, there will be no impacts as a result of the Project.
- e) The State Water Resources Control Board GeoTracker Database indicates that no evidence of listed hazardous materials site(s) exist within or near to the Project site. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

21. Airports	☐	☐	☐	☒
a) Result in an inconsistency with an Airport Master Plan?	☐	☐	☐	☒
b) Require review by the Airport Land Use Commission?	☐	☐	☐	☒
c) 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?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Source: RCIP Figure S-19 "Airport Locations"

Findings of Fact:

- a-d) The Project site is not within an airport influence area boundary or otherwise affected by airport issues as identified in the Western Coachella Valley Area Plan (WCVAP). The nearest airport is Palm Springs International Airport, which is located 5.13 miles to the southeast. Therefore, there will be no conflicts with an airport land use plan as a result of the Project and no impacts will occur as a result of the Project.

Mitigation: None required.

Monitoring: None required.

21. Hazardous Fire Area	☐	☐	☐	☒
a) 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?				

Source: Site inspection.

Findings of Fact:

- a) The Project site will not expose people or structures to a significant risk, loss, or death from wildland fires. The Project site is currently developed and will be located underneath the Project site's existing parking lot. Therefore, there will be no impact.

Mitigation: None required.

Monitoring: None required.

HYDROLOGY AND WATER QUALITY Would the project				
22. Water Quality Impacts	☐	☐	☐	☒
a) Substantially alter the existing drainage pattern of the site or area, including 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?				
b) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
c) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				
d) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
e) 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?	☐	☐	☐	☒
f) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☒
g) Otherwise substantially degrade water quality?	☐	☐	☒	☐
h) Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?	☐	☐	☐	☒

Source: Riverside County Land Information System GIS

Findings of Fact:

- a) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. The site already contains existing storm drainage infrastructure (i.e, curb and gutter). There are no additional storm drain improvements proposed or required at this time. Therefore, there will be no impact as a result of the Project.

- b,g) The Project will adhere to Regional Water Board Order No. 97-500, General Waste Discharge Requirements for "On-site Subsurface Wastewater Disposal Systems for Mobile Home and Recreational Vehicle Parks and Other Similar Facilities." This Project qualifies under "Other similar facilities" and as such will be adequately designed, installed, and maintained such that it meets the requirement of Order NO. 97-500. Additionally, within one year of project approval the County will prepare a groundwater monitoring program for review and approval by the Colorado Regional Water Quality Control Board . With the adequate design of the septic system along with groundwater monitoring and adherence to Order 97-500, impacts to groundwater quality will remain less than significant.

- c) The Project site will not deplete groundwater supplies or interfere with groundwater recharge. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.

- d) The Project will not create or contribute to runoff of water in exceeding the capacity of existing or planned stormwater drainage systems. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.
- e) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. Therefore, there would be no impact as a result of the Project.
- f) No improvements are proposed within a 100-year designated flood plane area. The Project site falls within the 500-year designated flood plane area (0.2% flood chance). The Project area is developed and has existing storm drain improvements, all of which located on raised building pads. Therefore, there will be no impact as a result of the Project.
- h) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. No stormwater treatment control BMP's are required. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

24. Floodplains

Degree of Suitability in 100-Year Floodplains. As indicated below, the appropriate Degree of Suitability has been checked.

Suitability has been assessed:				
NA - Not Applicable	U - Generally Unsuitable			R - Restricted
a) 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?				
b) Changes in absorption rates or the rate and amount of surface runoff?				
c) 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 (Dam Inundation Area)?				
d) Changes in the amount of surface water in any				

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

water body?

Source: Staff Review, and Site Visit

Findings of Fact:

- a-d) The Project site will not impact any of the above-listed discussion questionnaire with regard to alteration of existing drainage patterns, increase in surface runoff, changes in absorption rates, or expose people to significant risk from flooding . The Project area is developed and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

LAND USE/PLANNING Would the project				
25. Land Use	☐	☐	☐	☒
a) Result in a substantial alteration of the present or planned land use of an area?	☐	☐	☐	☒
b) Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?	☐	☐	☐	☒

Source: City of Palm Springs General Plan.

Findings of Fact:

- a-b) The Project site will not result in a substantial alteration of present or planned land use nor would the Project affect land use within a city sphere of influence. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. The land use for the Project site is pre-existing and would not change as a result of Project implementation. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

26. Planning	☐	☐	☐	☒
a) Be consistent with the site's existing or proposed zoning?	☐	☐	☐	☒
b) Be compatible with existing surrounding zoning?	☐	☐	☐	☒
c) Be compatible with existing and planned surrounding land uses?	☐	☐	☐	☒
d) Be consistent with the land use designations and	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
policies of the Comprehensive General Plan (including those of any applicable Specific Plan)?				
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	☐	☐	☐	☒

Source: City of Palm Springs General Plan.

Findings of Fact:

- a-e) The Project site will not interfere, disrupt or create an inconsistency with the Project area and region's existing and planned-for land uses. Although the Project site is located within the City's General Plan land use, the Project site alone (APN 666-411-011) is County-owned land, and therefore not considered as a part of the City and will be required to adhere to all of the County's goals and policies pertaining to the County of Riverside's General Plan and Ordinances. Nevertheless, both the City of Palm Springs and the County of Riverside permit the same type of use proposed for the Project site (septic sewer improvement). Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

MINERAL RESOURCES Would the project				
26. Mineral Resources	☐	☐	☐	☒
a) Result in the loss of availability of a known mineral resource in an area classified or designated by the State that would be of value to the region or the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	☐	☐	☐	☒
d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?	☐	☐	☐	☒

Source: Staff Review, and Site Visit

Findings of Fact:

- a-d) The Project site will not impact mineral resources. The Project site is developed with existing industrial warehouse buildings and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Thus, there will be no impact as a result of the Project.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation: None required.

Monitoring: None required.

NOISE Would the project result in

Definitions for Noise Acceptability Ratings

Where indicated below, the appropriate Noise Acceptability Rating(s) has been checked.

NA - Not Applicable

A - Generally Acceptable

B - Conditionally Acceptable

C - Generally Unacceptable

D - Land Use Discouraged

28. Airport Noise

a) 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?

NA ☒ A ☐ B ☐ C ☐ D ☐

b) 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?

NA ☒ A ☐ B ☐ C ☐ D ☐

Source: RCIP Figure S-19 "Airport Locations," County of Riverside Airport Facilities Map

Findings of Fact:

a-b) The Project site is not within an airport influence area boundary or otherwise affected by airport issues as identified in the WCVAP. The nearest airport is Palm Springs International Airport, which is located approximately 5.13 miles to the southeast of the Project site. Therefore, there will be no impacts to an airport land use plan as a result of the Project.

Mitigation: None required.

Monitoring: None required.

29. Railroad Noise

NA ☒ A ☐ B ☐ C ☐ D ☐

Source: RCIP Figure C-1 "Circulation Plan", S-21 "Rail Facilities, Available Water, Oil and Natural Gas Pipelines Inventory Data", Thomas Guide 2005 Edition, Site Visit

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Project site is located approximately 0.37 mile north of the heavily-traveled Union Pacific Railroad line. However, the area is located between existing industrial developed warehouses and located 0.10 mile north of the Interstate 10 freeway. The Project is expected to generate only sporadic noise from excavation activities and for a temporary period of time. Therefore, impacts with regard to railroad noise will be considered less than significant.

Mitigation: None required.

Monitoring: None required.

30. Highway Noise	☐	☐	☐	☒
NA ☐ A ☒ B ☐ C ☐ D ☐				

Source: Site Visit

Findings of Fact:

- a) The Project site is located adjacent to existing industrial developed warehouses approximately 0.10 mile north of the Interstate 10 Freeway. The Project is a temporary construction operation involving the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

31. Other Noise	☐	☐	☐	☒
NA ☒ A ☐ B ☐ C ☐ D ☐				

Source: City of Palm Springs General Plan; project description and materials; site visit.

Findings of Fact:

- a) The Project is not influenced by other unique noise issues as identified in the City of Palm Springs General Plan. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

32. Noise Effects on or by the Project	☐	☐	☐	☒
a) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
b) A substantial temporary or periodic increase in	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ambient noise levels in the project vicinity above levels existing without the project?				
c) 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?	☐	☐	☐	☒
d) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Source: Project materials and project description

Findings of Fact:

- a) The Project will not create a substantial permanent increase in ambient noise levels in the Project vicinity. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact.
- b) Temporary or periodic increases in noise levels would occur during Project installation of septic tanks and seepage pits. However, once construction is completed noise associated with construction equipment would cease. There are no sensitive receptors in the vicinity that would be affected by the construction noise. Therefore, Project impacts with regard to temporary increases in noise levels are considered to be less than significant.
- c) The Project will not expose persons to noise levels in excess of standards established in the local general plan or noise ordinance. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact.
- d) There are no sensitive receptors within the vicinity of the Project site. During construction temporary ground-borne noise and vibrations could occur during trenching and compaction from installation of septic tanks and seepage pits. Therefore, Project impacts will be considered as less than significant.

Mitigation: None required.

Monitoring: None required.

POPULATION AND HOUSING Would the project				
33. Housing	☐	☐	☐	☒
a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
b) Create a demand for additional housing, particularly housing affordable to households earning 80%	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
or less of the County's median income?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
d) Affect a County Redevelopment Project Area?	☐	☐	☐	☒
e) Cumulatively exceed official regional or local population projections?	☐	☐	☐	☒
f) 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)?	☐	☐	☒	☐

Source: Project description and materials, GIS

Findings of Fact:

- a-e) The Project site will not result in the displacement of existing housing, creating a demand for additional housing, displacement of people, affecting a County Redevelopment Project Area, or cumulatively exceeding regional or local populations. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits. The Project would be located underneath the project area's existing parking lot for the purpose of accommodating homeless patron sheltering. Thus, there are no impacts as a result of the project.
- f) The Project would not induce population growth in the area. The Project's potential to accommodate additional sewage discharge is directly related to accommodating additional homeless patrons (total of 120) for temporary sheltering. However, this increase is considered as minimal and temporary for homeless patron occupancy would fluctuate and not exceed a maximum of 120 patrons. Therefore, the Project's impact in inducing substantial population growth is considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

27. Fire Services	☐	☐	☒	☐

Source: RCIP Safety Element, Google Maps

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Riverside County Fire Department serves the Project area. The nearest facility is Station No. 36, which is located 5.13 miles north of the Project at 11535 Karen Avenue in Desert Hot Springs. The Project's proposed installation of septic tank upgrades and seepage pits are not anticipated to significantly impact the level of service for fire protection. Therefore, Project impacts to fire services are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

28. Sheriff Services	☐	☐	☒	☐

Source: RCIP, Google Maps.

Findings of Fact:

- a) Police protection services for the Project area are provided by the City of Palm Springs Police Department, Police Headquarters located at 200 South Civic Drive in Palm Springs (6.33 miles southeast of Project site). The proposed Project is currently developed and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, the Project's impact to Sheriff Services is considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

29. Schools	☐	☐	☐	☒

Source: City of Palm Springs General Plan; Palm Springs Unified School District.

Findings of Fact:

- a) The proposed Project will not affect school services. The Project site is currently developed in which septic tank and seepage pit installation would occur underneath the existing asphalt parking lot. Therefore, there will be no impact with regard to School Services.

Mitigation: None required.

Monitoring: None required.

30. Libraries	☐	☐	☐	☒

Source: RCIP, Google Maps.

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Proposed Project will not impact library services. The Project site is currently developed in which septic tank and seepage pit modification improvements will occur underneath the existing asphalt, parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

31. Health Services	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a) The proposed Project will not impact health services. The Project site is currently developed in which septic tank and seepage pit modification improvements would occur underneath the existing parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

RECREATION

32. Parks and Recreation	☐	☐	☐	☒
a) Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒
b) Would the project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
c) Is the project located within a C.S.A. or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

- a-c) The proposed Project will not have an impact from park creation, park deterioration, or location within a C.S.A. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact with regard to existing parks and recreation facilities.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation: None required.

Monitoring: None required.

33. Recreational Trails	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

- a) The proposed Project will not have an impact on recreational trails. The Project site is currently developed, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing asphalt parking lot. Therefore, there will be no impact.

Mitigation: None required.

Monitoring: None required.

TRANSPORTATION/TRAFFIC Would the project				
34. Circulation	☐	☐	☒	☒
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☒
b) Result in inadequate parking capacity?	☐	☐	☐	☒
c) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated road or highways?	☐	☐	☐	☒
d) 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?	☐	☐	☐	☒
e) Alter waterborne, rail or air traffic?	☐	☐	☐	☒
f) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
g) Cause an effect upon, or a need for new or altered maintenance of roads?	☐	☐	☐	☒
h) Cause an effect upon circulation during the project's construction?	☐	☐	☐	☒
i) Result in inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
j) Conflict with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☐	☒

Source: RCIP

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

- a-j) The Project site will not result in impacts to traffic. The Project site involves the temporary construction replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing asphalt parking lot. There are no proposed changes to the Project area's existing circulation pattern. The Project site's excavation area is small in relation to the size of the existing parking lot (See Exhibit 4) and that parking will temporarily be relocated to alternate locations of the parking lot during project construction. Therefore, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

35. Bike Trails	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a) Not applicable. The Project site will not have an impact on bike trails. The Project site involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. There are no proposed improvements outside of the site that would impact bike trails. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

UTILITY AND SERVICE SYSTEMS Would the project

36. Water	☐	☐	☐	☒
a) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a-b) The proposed Project will not require the construction of new water treatment facilities nor would have an impact on sufficient water supplies to serve the Project. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the project.

Mitigation: None required.

Monitoring: None required.

37. Sewer	☐	☐	☒	☐
a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☒	☐
b) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

Source: Project description and materials

Findings of Fact:

- a-b) The proposed Project does not require the construction of a new wastewater treatment facility. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Furthermore, the Project applicant, and their wastewater treatment provider feel that the proposed three (3) 5,000 gallon septic tanks and seepage pits would accommodate the projected 15,000 gallons of sewage to be discharged per day from Roy's Desert Resource Center. Therefore, Project impacts are considered to be less than significant as a result of the Project.

Mitigation: None required.

Monitoring: None required.

38. Solid Waste	☐	☐	☒	☐
a) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
b) Comply with federal, state, and local statutes and regulations related to solid wastes (including the CIWMP (County Integrated Waste Management Plan)?	☐	☐	☒	☐

Source: RCIP,

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

- a-b) The Project area is currently served by Palm Springs Disposal Service which provides waste disposal services for the Project area. The Project site alone will not require these services as it involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, Project construction will only create minimal quantities of solid waste from construction that will comply with federal, state and local regulations concerning solid waste. Impacts will be considered as less than significant.

Mitigation: None required.

Monitoring: None required.

39. Utilities

- a) Would the project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

a) Electricity?	☐	☐	☐	☒
b) Natural gas?	☐	☐	☐	☒
c) Communications systems?	☐	☐	☐	☒
d) Storm water drainage?	☐	☐	☐	☒
e) Street lighting?	☐	☐	☐	☒
f) Maintenance of public facilities, including roads?	☐	☐	☐	☒
g) Other governmental services?	☐	☐	☐	☒
h) Conflict with adopted energy conservation plans?	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a-h) The Project site will not have an impact on utilities. The Project site involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Once constructed, the Project is not reliant on existing utilities. Therefore, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

OTHER

40. Other:	☐	☐	☐	☒

Source: Staff review

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact: No other issues of concern to report. No impacts will occur.

Mitigation: None required.

Monitoring: None required.

OTHER

41. Other:	☐	☐	☐	☒

Source: Staff review

Findings of Fact: No other issues of concern to report. No impacts will occur.

Mitigation: None required.

Monitoring: None required.

OTHER

42. Other:	☐	☐	☐	☒

Source: Staff review

Findings of Fact: No other issues of concern to report. No impacts will occur

Mitigation: None required.

Monitoring: None required.

MANDATORY FINDINGS OF SIGNIFICANCE

43. Does the project have the potential to substantially 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 to eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐

Source: Staff review, Application materials

Findings of Fact:

- a) Implementation of the proposed Project will not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause fish or wildlife populations to

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

drop below self sustaining levels, threaten to eliminate a plant or animal community, or 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. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, impacts will be less than significant.

44. Does the project have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	☐	☐	☒	☐

Source: Staff review, Project description.

Findings of Fact:

- a) The Proposed Project does not have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals. The Project involves the modification improvement of septic sewer infrastructure to the benefit of the Project area's long-term environmental goals with regard to wastewater management. Therefore, Project impacts with regard to long-term environmental goals will be considered less than significant.

45. Does the project have impacts, which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in California Code of Regulations, Section 15130)?	☐	☐	☐	☒

Source: Staff review, Project description.

Findings of Fact:

- a) The Project does not have impacts, which are individually limited, but cumulatively considerable. There are no biological or cultural resources identified on the Project site that will be cumulatively impacted as the Project site is already developed. Furthermore, there will be no impacts with regard to water supply due to the nature (temporary construction) and location (developed land) of the Project site. Therefore, there will be no impact.

46. Does the project have environmental effects that will cause substantial adverse effects on human beings,	☐	☐	☐	☒

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

either directly or indirectly?

Source: Staff review, project application

Findings of Fact:

- a) The proposed Project will not result in environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly because the project is the expansion of an existing facility. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, no impacts will occur from Project implementation.

VI. EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration as per California Code of Regulations, Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:

Earlier Analyses Used, if any: No earlier analyses were used in this document.

RCIP: Riverside County Integrated Project.

Location Where Earlier Analyses, if used, are available for review:

Location: City of Palm Springs Planning Department
3200 E Tahquitz Canyon Way
Palm Springs, CA 92262-6959

County of Riverside Planning Department
4080 Lemon Street, 9th Floor
Riverside, CA 92505

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

47. REFERENCES

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Appendix A: Geotechnical Engineering Study

Appendix B:
Cultural Resource Review and
Initial Study Recommendations Letter

**Geotechnical Engineering Study
Industrial Parcel
Between Southwest Corner of McLane/Rupert Street
and 20th Avenue
North Palm Springs, California**

**Prepared for:
Buntain Construction
4531 Harlin Drive
Sacramento, California 95826**

**Prepared by:
CONSOLIDATED ENGINEERING LABORATORIES
7060 Koll Center Parkway, Suite 300
Pleasanton, California 94566
CEL Project No. G1357**



**CONSOLIDATED ENGINEERING
LABORATORIES**

September 4, 2003

Buntain Construction, Inc
4531 Harlin Drive
Sacramento, California 95826

Attention: Mr. Jarrod Short

Subject: Geotechnical Engineering Study
Industrial Parcel
Between Southwest Corner of McLane/Rupert Street and 20th Avenue
North Palm Springs, California
CEL Project No. G1357

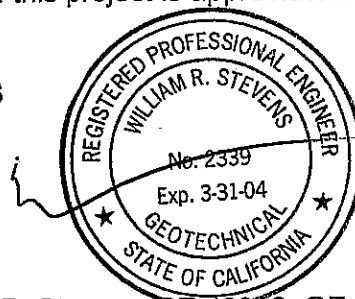
Dear Mr. Short:

In accordance with your authorization, Consolidated Engineering Laboratories (CEL) has completed a geotechnical engineering study for a proposed industrial parcel to contain warehouses between the southwest corner of McLane/Rupert Street and 20th Avenue, in North Palm Springs, California. Transmitted herewith are the results of our findings, conclusions, and recommendations for foundations, interior and exterior concrete slabs, pavement section design, site grading and drainage, temporary cut slope excavation and trench slope stability, drilled piers for light standards, retaining walls design for truck docks, utility trench backfilling, and guideline specifications for grading operations. In general, the proposed development at the site is considered to be geotechnically feasible provided the recommendations of this report are implemented in the design and construction of the project.

Should you or members of the design team have questions or need additional information, please contact the undersigned at (925) 485-5000. The opportunity to be of service to Buntain Construction, Inc., and to be involved in the design of this project is appreciated.

Sincerely,
CONSOLIDATED ENGINEERING LABORATORIES


Marc Hachey
Staff Geologist



William R. Stevens, PE 43010, GE 2339
Principal Geotechnical Engineer

Copies: 6 to Addressee (916/255-5000, Fax 916/255-5020)
2 to CEL Sacramento

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CONSOLIDATED ENGINEERING
LABORATORIES

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- Key to Boring Logs and Test Pits
- Logs of Borings and Test Pits

APPENDIX B

- LABORATORY TEST RESULTS
- Sieve Analysis
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APPENDIX C

- Grading and Earthwork Specifications

APPENDIX D

- Pier Drilling and Construction Specifications



GEOTECHNICAL ENGINEERING STUDY

Project: Industrial Parcel
North Palm Springs, California

Client: Buntain Construction, Inc
Sacramento, California

1.0 INTRODUCTION

1.1 Purpose and Scope

The purposes of this study were to evaluate the subsurface conditions at the site and prepare geotechnical recommendations for the proposed development. This study provides recommendations for the design and construction of proposed foundations, interior and exterior concrete slabs, pavement sections, site drainage, temporary cut slope and trench slope stability, retaining wall design for truck docks, utility trench backfill, drilled piers, and grading. This study was performed in accordance with the scope of work outlined in our proposal dated July 29, 2003.

The scope of this study included the review of pertinent published and unpublished documents related to the site, the drilling of several subsurface borings, laboratory testing of selected samples retrieved from the borings, engineering analysis of the accumulated data, and preparation of this report. The conclusions and recommendations presented in this report are based on the data acquired and analyzed during this study, and on prudent engineering judgment and experience. This study did not include an assessment of potentially toxic or hazardous materials that may be present on or beneath the site or a comprehensive evaluation of the corrosion potential of the site soils.

1.2 Site Description

The subject site is located at the southwest corner of McLane Street and extends west and southward to 20th Avenue in North Palm Springs, California as shown on Figure 1, Site Vicinity. Some maps indicate McLane Street to be Rupert Street; we do not know which one is correct. The site is approximately 31,000 square feet in size and rectangular in shape. The site is covered in gravelly sand with scattered surface boulders and cobbles, and is relatively flat with some local



relief. There are scattered piles of cobbles and boulders throughout the site, with the east half of the site exhibiting more surficial rock than the west. The western perimeter of the site is bounded by a rock retaining wall consisting of boulder sized rock, which separates the site and the open field to the west. The area to the west of the site is approximately 6 to 7 feet lower in elevation than the subject site. It appears the wall was placed to stabilize fill soil used to grade the entire industrial park to its existing grade. The site is bounded on the north by an empty lot, on the east by McLane Street, on the west by open field, and on the south by 20th Avenue. The site is situated at approximately 33.91° north latitude and 116.55° west longitude at approximately 740 feet above mean sea level.

1.3 Proposed Development

The proposed development includes two, one-story warehouse buildings, each approximately 55,000 sf in size. Both buildings may be up to 35-feet tall and are anticipated to have shallow foundations and concrete floor slabs. Grading is expected to be minor for drainage purposes and to mitigate possible collapsible surficial soils. Other improvements include asphalt paved parking and driveways, landscape areas, truck loading docks, concrete hardscapes and pavement, underground utilities, and light poles.

1.4 Validity of Report

This report is valid for two years after publication. If construction begins after this time period, CEL should be contacted to confirm that the site conditions have not changed significantly. If the proposed development differs considerably from that described above, CEL should be notified to determine if additional recommendations are required. Additionally, if CEL is not involved during the geotechnical aspects of construction, this report may become wholly or in part invalid; CEL's geotechnical personnel verifies that the subsurface conditions anticipated preparing this report are similar to the subsurface conditions revealed during construction. CEL's involvement should include site grading and foundation plan review; monitoring site clearing, mass grading and building pad construction; foundation excavation and pier drilling observations; testing retaining wall and utility trench backfill, and subgrade preparation and baserock placement in paved areas.

2.0 PROCEDURES AND RESULTS

2.1 Literature Review

Pertinent geologic and geotechnical literature pertaining to the site area was reviewed. These included various USGS, DMG and other agency publications and maps.

2.2 Drilling and Sampling

A subsurface exploration program was undertaken to evaluate the soil conditions at the site. A total of six borings were drilled at the site on August 12, 2003. The borings were drilled using a truck-mounted drill rig equipped with 8-inch diameter, hollow-stem augers. Seven test pits were excavated with a backhoe on August 18, 2003 to categorize near surface soils more closely.

The materials encountered in the borings and test pits were visually classified according to the Unified Soil Classification System by a CEL representative as the borings and test pits were advanced. Relatively undisturbed soil samples were recovered at selected intervals using a 3-inch outside diameter Modified California split spoon sampler containing 6-inch long brass liners, and a 2-inch outside diameter Standard Penetration Test (SPT) sampler. The samplers were driven by means of a 140-pound downhole safety hammer with an approximate 30-inch fall. Resistance to penetration was recorded as the number of hammer blows required to drive the sampler the final foot of a 12 or 18-inch drive. Bulk samples were obtained in the upper few feet of the borings from the auger cuttings.

The boring and test pits logs with descriptions of the various materials encountered in each boring and test pit, the penetration resistance values, and some of the laboratory test results are presented in Appendix A. The approximate locations of the borings and test pits are shown on the Site Plan, Figure 2.

2.3 Laboratory Testing

Laboratory tests were performed on selected samples to determine some of the physical and engineering properties of the subsurface soils. The results of the laboratory testing are presented on the boring logs, and are included in Appendix B. The following soil tests were performed for this study:



Dry Density and Moisture Content (ASTM D2216 and ASTM D2937) – In-situ density and moisture tests were conducted to determine the in-place dry density and moisture content of the subsurface materials. These properties provide information for evaluating the physical characteristics of the subsurface soils.

Particle Size Analysis (Wet and Dry Sieve) and Hydrometer (ASTM D422, D1140, and CT202) - Sieve analysis testing is conducted on selected samples to determine the soil particle size distribution. This information is useful for the evaluation of liquefaction potential and characterizing the soil type according to USCS.

Collapse Potential Test (ASTM D5333) – A single point consolidation test that provides information on hydroconsolidation potential of a soil after introducing additional stress and then saturating the soil.

R-Value (ASTM D2844) - R-Value testing was performed in accordance with Caltrans Test Method 301 to develop design parameters for asphalt concrete pavement recommendations.

Water Soluble Sulfate (ASTM D4327 and CT417) - Water soluble sulfate tests are utilized to determine the type of concrete required for underground construction and is required by the UBC, CBC, and IBC.



3.0 FINDINGS

3.1 Geologic Setting

According to published geologic maps for the area, the subject site is underlain by Quaternary aged, alluvial deposits consisting of unconsolidated stream, river channel and alluvial fan deposits, with local eolian sand.

3.2 Subsurface Soil Conditions.

The earth materials encountered in CEL's exploratory borings and test pits can be described as approximately six to seven feet of light, moderate and grayish-brown, dry to slightly moist, medium dense to dense, poorly to well-graded sand (SP/SW) with silt, gravel, cobbles and some boulders. The gravel, cobbles, and boulders were observed to be subangular to subrounded. The upper six to seven feet of soil is considered fill material, but no discernible contact between fill and native soils was observed in the borings or test pits. Fill thickness was interpreted from the elevation change along the western perimeter of the site. Cobbles and boulders were encountered throughout the site, mainly in the upper five feet. Some areas exhibited more cobbles and boulders. The sandy soils encountered to the maximum depth explored consisted of poorly to well graded, dry to slightly moist, medium to very dense sand (SP/SW) with silt and some fine gravel. Details of site soils encountered in the CEL borings and test pits are contained in Appendix A.

The entire soil profile is non-expansive and a bulk sample collected from the upper three feet had an R-Value of 77. Sieve analysis tests were performed on a bulk samples collected from Boring 7 and 11, at eight feet and seven feet respectively. The sample from Test Pit 1 had 93% of sand, 5% gravel and 2% of silt. The sample from Test Pit 5 had 87% of sand, 9% gravel and 4% of silt. Sieve analyses of the cobble and boulder content was not included in the samples tested. Cobbles are defined as rock between 3 to 12 inches in diameter, and boulders are over 12 inches in diameter according to the Unified Soil Classification System. In-situ densities and moistures ranged from 107.1 psf to 130.6 psf and 0.9% to 5.5%.

Single point consolidation tests were performed on 8 samples collected from in-situ samples at depth ranging from 3 to 15 feet. The samples were loaded to 4,000 psf, and then water was added.



The initial loading determines the consolidation (compressibility) of the soil, and adding the water determines the collapse potential of the soil. The soils were not found to be collapsible since the samples consolidated less than about 1 percent when water was added. The total consolidation of the soil was found to be less than about 3.5 percent under a 4,000 psf load. One sample consolidated nearly 6 percent, and 2 samples about 2 percent.

3.3 Groundwater

Groundwater was not encountered in the borings or test pits to the maximum depth explored of 41.5 feet. Examination of Department of Water Resources well data indicates that the groundwater is approximately 230 to 330 feet deep in nearby wells from the Palm Springs and Desert Hot Springs area (DWR, 2002). Groundwater levels can vary in response to time of year, variations in seasonal rainfall, well pumping, irrigation, and alterations to site drainage. Determining the detailed groundwater characteristics of the site was not included in our scope of work.

3.4 Water-Soluble Sulfate

Water-soluble sulfate can affect the concrete mix design for concrete in contact with the ground, such as shallow foundations, piles, piers, and concrete slabs. The UBC, CBC, and IBC provides the following evaluation criteria:

Sulfate Exposure	Sulfate Percent by Weight or (mg/kg)	Cement Type	Max. Water Cementitious Ratio by Weight	Min. Unconfined Compressive Strength, psi
Negligible	0.00-0.10 (0-1,000)	NA	NA	NA
Moderate	0.10-0.20 (1,000-2,000)	II, IP (MS), IS (MS)	0.50	4,000
Severe	0.20-2.00 (2,000-20,000)	V	0.45	4,500
Very Severe	Over 2.00 (20,000)	V plus pozzolan	0.45	4,500

For the bulk sample collected from the borings and test pits, the results reported a 54 mg/kg concentration. Hence, the water-soluble sulfate content in the site soil has a negligible impact on buried concrete at the site. However, it should be pointed out that the water-soluble sulfate concentrations can vary due to the addition of fertilizer, irrigation, and other possible development activities. An appropriate expert should be contacted if a detailed evaluation is required.



3.5 Expansive Soil

The onsite soil is sandy and non-expansive.

3.6 Liquefaction Induced Phenomena

Soil liquefaction is a phenomenon in which loose, saturated, cohesionless soil experiences a temporary loss of strength during strong cyclic loading such as that produced by earthquakes. Typically, liquefaction potential increases with increased duration and magnitude of cyclic loading. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand. On the basis the field and laboratory data, it is our opinion that there is not a potential for liquefaction to occur at the site.

3.7 Flooding

According to the ESRI (Environmental Systems Research Institute) and FEMA (Federal Emergency Management Agency) website, the subject site is situated in a zone prone to estimated 500-year flood potential. An assessment of flooding potential was not in our scope of work for this project, and a flood risk specialist should be contacted for a more detailed interpretation.

3.8 Settlement Due to Consolidation, Dynamic Compaction, and Collapse

Settlement of soil can be caused by consolidation, dynamic compaction, and collapsible soil. Consolidation is the densification of soil into a more dense arrangement from additional loading, such as fill or foundations. Consolidation of clayey soils is usually a long-term process, whereas sandy soils consolidate relatively rapidly with an introduction to a load. Dynamic compaction is the densification of predominantly sandy soil caused by vibration, such as an earthquake or vibrating machinery. Collapsible soils are fine sandy and silty soils that have been laid down by the action of flowing water, usually in alluvial fan deposits. The soil particles are usually bound together with a mineral precipitate. The loose structure is maintained in the soil until a load is imposed on the soil and water is introduced. The water breaks down the inter-particle bonds and the newly imposed loading densifies the soil. It is our opinion that the soil matrix within the fill and the upper few feet of the native soils have a moderate susceptibility for settlement due to consolidation and dynamic compaction. The laboratory data does not indicate the near surface soil in the upper 15 feet to be susceptible to collapse.



3.9 Seismicity and Faulting

The site is located in an area of high seismic activity associated with the San Andreas Fault Zone and would be influenced by major earthquakes along nearby active faults. The active, Type A San Andreas Fault is located approximately 1 miles (1.6 km) north of the site. In 1986, this segment of the San Andreas was observed to experience visible fault creep slippage. The Type B Gorgonio Pass Fault Zone is located approximately 3.5 miles (5.8 km) to the west of the site. The site is located approximately 12 miles (19.5 km) south of the Type B Pinto Mountain Fault. The Type B Morongo Valley Fault is located approximately 10.2 miles (16.5 km) north of the site. The site is located in an area which has been subject to five earthquakes larger than 6.0 since 1932.

3.10 Surface Fault Rupture

According to DMG Special Publication 42 (Hart, 1994), the site does not lie within an Earthquake Fault Zone, as defined by the Alquist-Priolo Act of 1972. According to published mapping by DMG, no known fault traces cross the site, and no evidence of surface ground rupture was noted during our site reconnaissance. Therefore, it is our opinion that the likelihood of surface fault rupture at the site is low.

3.11 Other Geologic Hazards

The site is not considered subject to other potential geologic hazards, including landslides, soil erosion, volcanism, mass wasting, loss of mineral resources, or loss of unique geologic features. This is due to the sites topography, geology, and land use. Subsidence due to groundwater withdrawal is possible, but should not impact the site detrimentally since this phenomena is more regional than local.



4.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based upon the analysis of the information gathered during the course of this study and our understanding of the proposed improvements.

4.1 General

The site is considered geotechnically suitable for the proposed development provided the recommendations of this report are incorporated into the design and implemented during construction. The predominant geotechnical and geological issues that will need to be addressed are:

Seismic Considerations – The site is located within a seismically active region. The building design should consider the effects of seismic activity.

Differential Settlement – The site is underlain by undocumented fill and native soil that appears to consist of a dense sandy and gravelly soil matrix with cobbles and boulders. However, differential settlement will have to be addressed since portions of a footing may be on a sandier matrix and portions on a more rocky condition. We recommend that the foundations be designed for a lower bearing pressure rather than excessive overexcavation and replacement grading in the building pads.

Excavation of Footings and Utilities due to Cobbles and Boulders – The subsurface soil contains cobbles (3 to 12 inch size) and boulders (over 1-foot size), and excavating foundations and underground utilities may produce either oversized excavations or unstable excavation walls. We are suggesting, but not requiring, that the building pad be overexcavated, the large rocks removed, and the soil replaced as engineered fill. If this is performed, an added benefit would be higher allowable bearing capacities for the shallow foundations.

4.2 UBC Seismic Design Parameters

According to the 1997 UBC, the site is located within Seismic Zone 4. Site soils are of soil profile type S_D . Near-source acceleration and velocity factors are determined by the UBC based upon the



site's soil profile and proximity to Type A and Type B faults. Based on the site soil profile and the 1.6 km distance from the site to the Type A San Andreas fault, the Near-Source Acceleration Factor, N_a for site is 1.5, and the Near-Source Velocity Factor, N_v is 2.0.

4.3 Site Grading

Site grading should be performed in accordance with these recommendations and the Grading and Earthwork Specifications in the appendices. A pre-construction conference should be held at the jobsite with representatives from the owner, general contractor, grading contractor, and CEL prior to starting the stripping and demolition operations at the site.

4.3.1 Site Preparation and Demolition

The site should be cleared of vegetation, large surface rocks greater than six inches in diameter, debris, and other deleterious materials. Existing underground utilities to be abandoned at the site should be properly grouted, closed or removed as needed. If the utilities are removed, the excavations should be backfilled with properly compacted fill or other material approved by the Geotechnical Engineer.

4.3.2 Building Pad Grading

The areas of proposed buildings should be thoroughly saturated for at least four to six hours and compacted to at least 92 percent relative compaction in accordance with ASTM D1557 with a large, smooth drum vibratory loader. Large boulders and cobbles greater than 6 inches at the ground surface should be excavated and removed from the soil. Engineered fill can then be placed in no greater than one-foot thick lifts, moisture conditioned to at least 2 to 3 percent over optimum moisture and compacted to at least 92 percent relative compaction.

OPTION: If higher allowable bearing capacities and the easier utility and footing excavations are desired, the building pad should be overexcavated at least 4 feet, and the soil replaced as engineered fill. The soil should be compacted to at least 92 percent relative compaction. Scarifying the bottom of the overexcavation is not required. However, an option would be to overexcavate 3.5 feet and scarify 6 inches. The overexcavation should extend at least 5-feet beyond the building perimeter. Rocks larger than about 4 inches in largest dimension should be removed prior to utilizing the material as engineered fill. Lifts should be less than 8-inches thick.



4.3.3 General Grading

Site grading is anticipated to consist of approximately up to 2 feet of cut and fill for drainage purposes and to level the site. Onsite soil generated from cut areas following clearing and grubbing that is free of excess organic material (3 percent or less by weight) or debris may be suitable for use as structural fill at the site.

Pavement and concrete hardscape areas should be completely saturated by means of water truck for at least four to six hours and compacted. Areas supporting vehicles should be compacted to at least 95 percent relative compaction in accordance with ASTM D1557 with a large, smooth drum vibratory loader. Pedestrian areas can be compacted to at least 92 percent relative compaction. Boulders and cobbles greater than 6 inches encountered during scarification should be excavated and removed from the soil. Engineered fill can then be placed in no greater than one-foot thick lifts, moisture conditioned to over optimum moisture content and compacted.

If used, imported fill materials should be non-expansive, having a Plasticity Index of 12 or less, an R-Value greater than 30, and fines so the soil can bind together. Imported materials should be free of organic materials and debris, and should not contain rocks or lumps greater than 3 inches in maximum size. Import fill materials should be approved by the geotechnical engineer prior to use on site.

Final grading should be designed to provide positive drainage away from structures. Soil areas within 10 feet of proposed structures should slope at a minimum of 2 percent away from the buildings. Roof leaders and downspouts should discharge onto paved surfaces sloping away from the structure or into a closed pipe system which outfalls to the street gutter pan or directly to the storm drain system.

If grading occurs in the winter rainy season, unstable subgrade conditions may be present. These conditions may require stabilizing the subgrade with admixtures, such as cement kiln dust, cement, or lime. Additional recommendations can be provided, if required, during construction.



4.4 Utility Trench Construction

Utility trenches may be backfilled with native soil above the utility bedding and shading materials. If rocks larger than 4 inches in maximum size are encountered, they should be removed from the fill material prior to placement in the utility trenches. Backfill in the upper 5 feet of utility trenches should be compacted to at least 92 percent relative compaction. Trench backfill deeper than 5 feet

should be compacted to at least 95 percent relative compaction. Utility bedding and shading compaction requirements should be in conformance with the requirements of the local agencies having jurisdiction. Jetting of trench backfill is not recommended.

Pea gravel, rod mill, or other similar self-compacting material can be utilized for trench backfill in the building pad. However, the self-compacting material should be compacted with a whacker and placed in minimum 2-foot lifts. The upper foot of backfill in the building pad subgrade should consist of Class 2 baserock. Self-compacting backfill material should not be used in exterior underground trenches due to the potential for water seeping into the trench backfill. Fines may migrate into the voids in the pea gravel or rod mill, which could cause settlement of the ground surface above the trench.

Utility trenches should be sealed with concrete, clayey soil, sand-cement slurry, or controlled density fill (CDF) where the utility enters the building under the perimeter foundation. This would reduce the potential for migration of water beneath the building through the shading material in the utility trench.

4.5 Temporary Excavations

The contractor should utilize proper Cal OSHA methods during construction. Excavations in soil more than 5 feet deep for utility trenches should have side slopes constructed at 1.5H:1V (horizontal to vertical). The grading contractor, based upon the materials encountered during the excavation, should make selection of temporary side slopes. Maximum slope ratios provided above are assumed to be uniform from top to toe of the slope. Adequate provisions should be made to prevent water from ponding on top of the slope and from flowing over the slope face. Surcharge loads

should not be permitted within 10 feet of the top of the slope. Desiccation or excessive moisture in the excavation could reduce stability and require shoring or laying backside slopes.



4.6 Building Foundations

The proposed structures can be supported on spread footings. Shallow strip perimeter footings should be founded a minimum of 18 inches below lowest adjacent finish grade. Interior footings can be founded 12 inches below building pad subgrade. The allowable bearing capacity for the proposed foundations is 2,200 pounds per square foot (psf) for dead plus live loads. The allowable bearing capacity may be increased by 1/3 for temporary seismic or wind loading. The allowable bearing capacity can be increased to 3,500 psf if the building pad is overexcavated and replaced as engineered fill (see option in building pad grading section).

For resistance to lateral loads, a coefficient of friction of 0.35 between the base of the foundation elements and underlying material is recommended. In addition, an allowable passive resistance equal to an equivalent fluid weighing 350 pounds per cubic foot (pcf) acting against the foundation may be used to resist lateral forces. The top foot of passive resistance at foundations should be neglected unless the ground surface around the footing is covered by concrete or pavement. If both friction and passive resistance is utilized, a 50 percent reduction is recommended for either of them.

Footing excavations should have firm bottoms and be free from excessive slough prior to concrete or reinforcing steel placement. Where utility trenches are to be located adjacent to foundations, the bottom of the footing should be located below an imaginary 1:1 (horizontal to vertical) plane projected upward from the nearest bottom edge of the utility trench.

The foundation excavations should be observed by a representative of Consolidated Engineering Laboratories prior to placement of reinforcing steel or concrete to evaluate the exposed soil conditions.

Total static and dynamic settlement of the building is anticipated to be about 1-inch. Differential static settlement between isolated columns and perimeter footings is anticipated to be about 3/4-inch. Most of the settlement should occur during construction.

4.7 Drilled Piers

Drilled piers may be used to support awnings for covered walkways, light poles or similar structures. Pier drilling and construction specifications are provided in the appendices. The allowable skin friction for these piers resisting vertical downward loads can be considered to be 450 psf. End



bearing should be neglected. Piers resisting vertical upward (tension) should be designed using an allowable skin friction of 3000 psf. A passive pressure of 350 psf is allowed for lateral resistance. The upper foot of skin friction and passive resistance should be neglected unless the surrounding area is covered by concrete. The piers should be spaced a minimum of 3 diameters apart. Pier spacings less than 3 diameters will require a reduction in allowable skin friction. Passive resistance for less than 6 pier diameters will need to be reduced. For piers spaced at 3 diameters, the passive resistance should be reduced by half. Full passive resistance is allowed for piers spaced on 6 diameter spacings. The amount of reduction for passive resistance between 3 pier diameters to 6 diameters can be considered to be linear. Passive resistance for less than 3 pier diameter spacings should be determined during the plan review process.

The bottom of the piers should be properly cleaned out after drilling. A CEL representative should observe the drilling of the piers to confirm final depths and proper cleaning of the bottom of the piers. Soil should be prevented from falling into the pier hole after drilling. This can be accomplished by removing excess soil cuttings from the top of the pier hole and covering the hole. The pier hole cover should also prevent persons or objects from falling into the hole. Additionally, piers drilled during the day should have the reinforcing cages installed in the hole and filled with concrete before the end of the day.

Because of the presence of near surface cobbles and boulders encountered in our exploratory borings and test pits, the drilling of piers may be difficult in the top five to six feet of soil. The pier contractor should be made aware of the presence of cobbles boulders so the necessary equipment can be utilized. Boulders and cobbles will need to be removed if encountered during pier drilling operations, and the location of piers may need to have some flexibility to account for this condition.

4.8 Concrete Slabs on Grade

Non-structural concrete slab-on-grade floors should be a minimum of 4 inches in thickness. Reinforcing requirements should be determined by the structural engineer. The concrete floor slab can be constructed on 4 inches of Class 2 aggregate baserock compacted to a minimum 95 percent relative compaction. If the floor slab will have high rack loading or fork lift traffic, the slabs should be at least 5-inches thick and underlain by at least 6 inches of Class 2 baserock. If the floor will have moisture sensitive floor coverings, the baserock should be replaced with a vapor barrier over a minimum of 2-inches of angular, clean sand. The civil engineer should determine if a thin sand layer



is required on top of the vapor barrier. If construction occurs in the winter months, the vapor barrier may prevent the vertical percolation of rainwater. Exterior concrete flat work can be placed on the existing site soil. The subgrade beneath the flatwork should be compacted to at least 92 percent

relative compaction as discussed in the grading section of the report. Where flatwork is contiguous to the building at doorways and entrances, the flatwork should be doweled into the building foundation to reduce potential tripping hazards.

4.9 Retaining Wall Design

Proposed retaining walls can be supported on spread footings as discussed above. The anticipated retaining wall pressures for the on-site soil conditions are provided in Figure 3. The active and at rest pressures for soils shown on Figure 3 assume the backfill behind the retaining wall is a gravel blanket or wall drain with native soil or gravel.

Drainage should be provided behind the retaining walls. The drainage system should consist of a minimum of 4-inch diameter perforated pipe placed at the base of the retaining wall and surrounded by 3/4-inch drain rock wrapped in a Mirafi 140N filter fabric, or equivalent approved by the geotechnical engineer. The drain rock wrapped in fabric should be at least 12 inches wide and extend from the base of the wall to within 2 feet of the ground surface. The upper 2 feet of backfill should consist of compacted native soil. The retaining wall drainage system should be sloped to outfall to the storm drain system or other appropriate facility.

As an alternative to the drain rock and fabric, Miradrain 2000, or approved equivalent, may be used behind the retaining wall. The Miradrain 2000 should extend from the base of the wall to within 2 feet of the ground surface. A perforated pipe should be placed at the base of the wall in direct contact with the Miradrain 2000. The Miradrain fabric at the base of the Miradrain 2000 panel should be wrapped around the perforated pipe to prevent soil intrusion into the pipe

The foundation excavations should be observed by a representative of Consolidated Engineering Laboratories prior to placement of reinforcing steel or concrete to evaluate the exposed soil conditions.

4.10 Pavement Design

Recommendations for the design of asphalt concrete pavement sections were developed in accordance with the procedures outlined in the latest edition of the Caltrans Highway Design Manual. The Caltrans design method uses Traffic Indices (TI) to represent anticipated wheel loads and frequency of usage for a given design life. A design life of 20 years is typically used. Factors such as surface and subsurface drainage have an effect on the overall life of a pavement section.

An R-Value of 70 were obtained for a near surface soil samples at the site. An R-Value of 70 was used for design. The following are recommended structural asphalt concrete (AC) pavement sections.

Pavement (Traffic Index)	Asphalt Concrete (Inches)	Class 2 Aggregate Baserock (Inches)	Total Section (Inches)
Car Parking (4.5)	2.5	4	6.5
Car Driveways (5.0)	3.0	4	7.0
Heavy Duty (6.0)	3.5	6	9.5
Street (7.0)	4.0	6	12.0

Asphalt concrete should be designed per Caltrans standards. Car parking areas should be ½-inch maximum medium mix, and the other pavements should be ¾ inch max medium mix. The asphalt pavement should be placed in minimum 1-1/2 inch thick compacted lifts and a maximum 4-inch thick lifts.

The subgrade underlying pavement areas should be prepared per the recommendations provided in the Site Grading section. Aggregate base materials should be compacted to a minimum of 95 percent of the maximum dry density within two percent of the optimum moisture content as determined by ASTM D1557.



4.11 Plan Review

It is recommended that Consolidated Engineering Laboratories be provided the opportunity to review the final project plans prior to construction. The purpose of this review is to assess the general compliance of the plans with the recommendations provided in this report and the incorporation of these recommendations into the project plans and specifications.

4.12 Observation and Testing During Construction

It is recommended that Consolidated Engineering Laboratories be retained to provide observation and testing services during site preparation, site grading, utility construction, foundation excavation, pier drilling and to observe final site drainage. This is to observe compliance with the design concepts, specifications and recommendations, and to allow for possible changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.



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Division of Mines and Geology (DMG), Guidelines for Evaluating and Mitigating Seismic Hazards in California, DMG Special Publication 117, March 13, 1997.

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Pradel, Daniel, "Procedure to Evaluate Earthquake-Induced Settlements in Dry Sandy Soils," Journal of Geotechnical and Geoenvironmental Engineering, April 1998.

Uniform Building Code, International Conference of Building Officials, April 1997.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

The recommendations of this report are based upon the soil and conditions encountered in the borings. If variations or undesirable conditions are encountered during construction, Consolidated Engineering Laboratories (CEL) should be contacted so that supplemental recommendations may be provided.

This report is issued with the understanding that it is the responsibility of the owner or his representatives to see that the information and recommendations contained herein are called to the attention of the others members of the design team and incorporated into the plans and specifications, and that the necessary steps are taken to see that the recommendations are implemented during construction.

The findings and recommendations presented in this report are valid as of the present time for the development as currently proposed. However, changes in the conditions of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Accordingly the findings and recommendations presented in this report may be invalidated, wholly or in part, by changes outside our control. Therefore, this report is subject to review by CEL after a period of three (3) years has elapsed from the date of issuance of this report. In addition, if the currently proposed design scheme as noted in this report is altered CEL should be provided the opportunity to review the changed design and provide supplemental recommendations as needed.

Recommendations are presented in this report which specifically request that CEL be provided the opportunity to review the project plans prior to construction and that we be retained to provide observation and testing services during construction. The validity of the recommendations of this report assumes that CEL will be retained to provide these services.

This report was prepared upon your request for our services, and in accordance with currently accepted geotechnical engineering practice. No warranty based on the contents of this report is intended, and none shall be inferred from the statements or opinions expressed herein.



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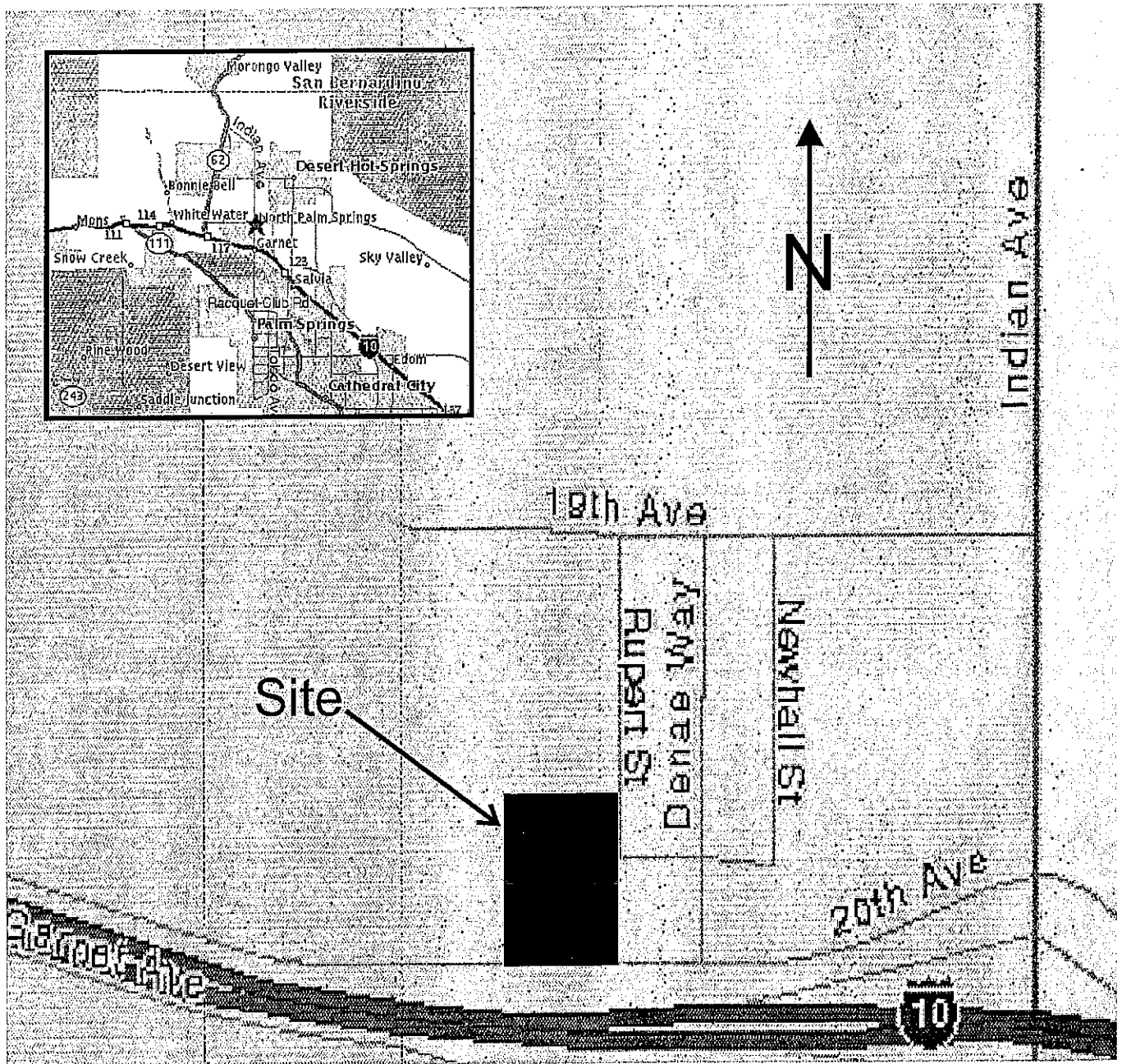
The scope of our services for this report did not include an environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater or air, on, below or around this site. Any statements within this report or on the attached figures, logs or records regarding odors noted or other items or conditions observed, are for the information of our client only.

FIGURES

Figure 1 - Site Vicinity

Figure 2 - Site Plan

Figure 3 - Retaining Wall Pressures



No Scale

Warehouse Lot - N. Palm Springs

G1357

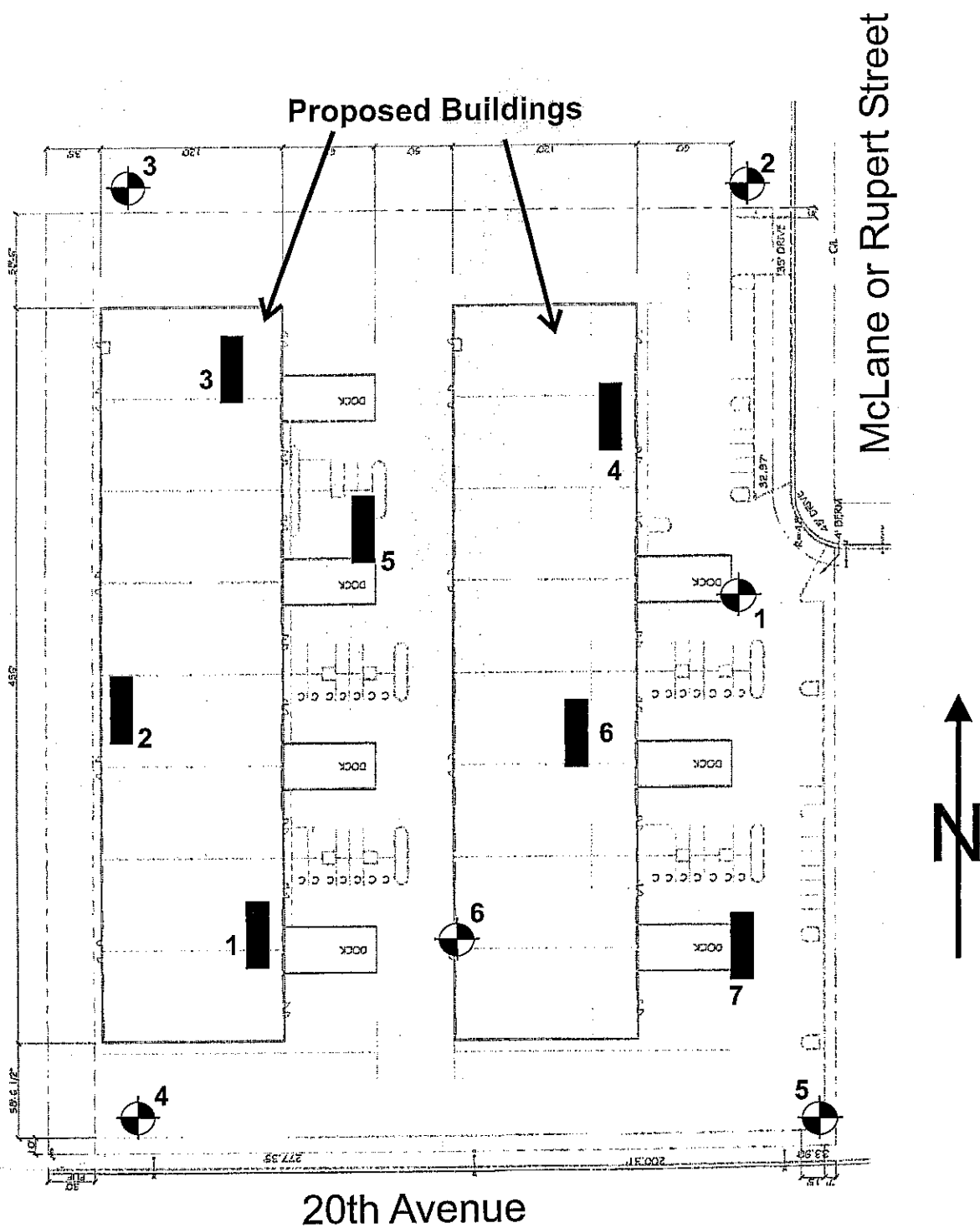
September 2003



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Site Vicinity

Figure 1



No Scale

Warehouse Lot - N. Palm Springs

G1357

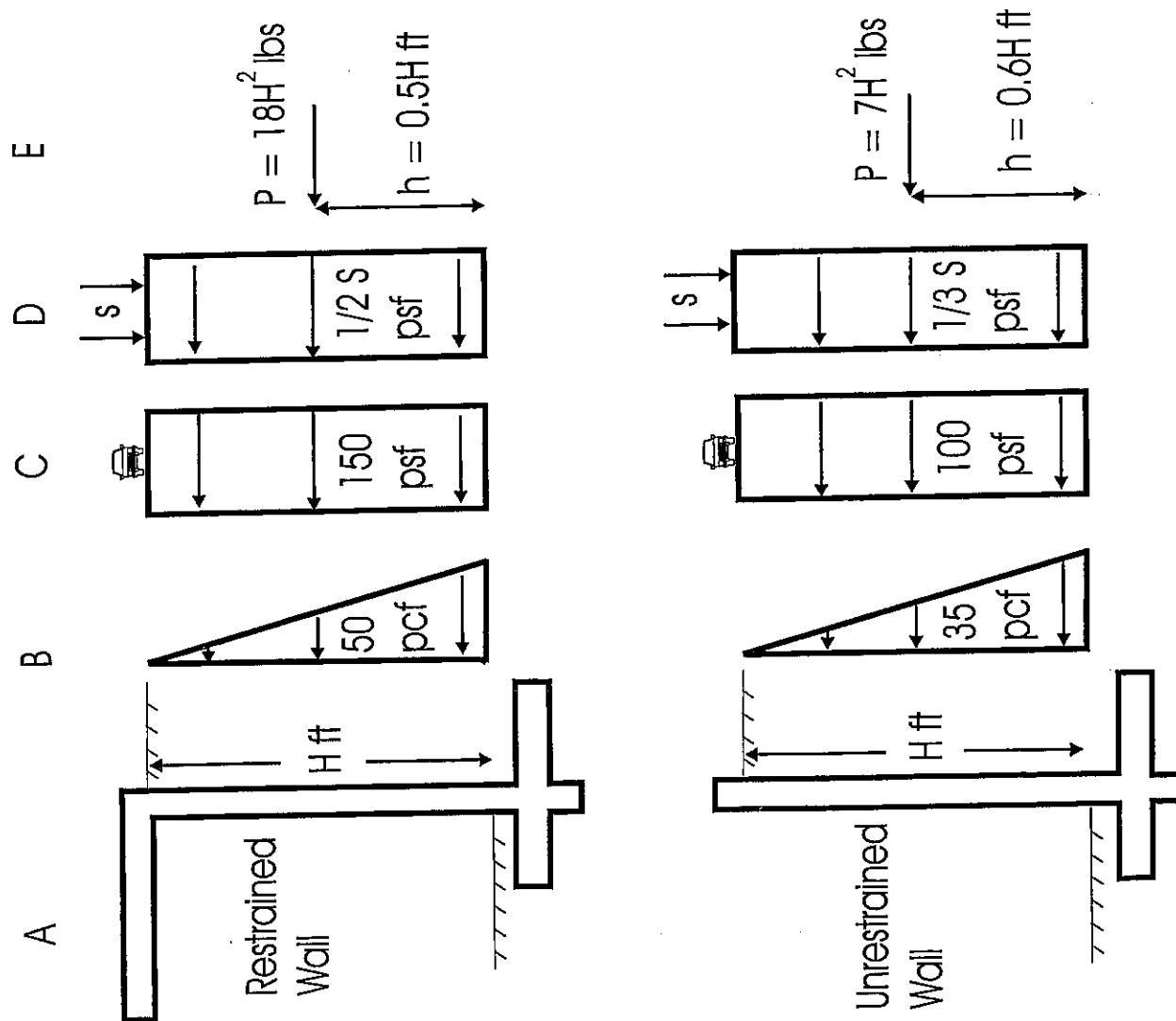
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Site Plan

Figure 2



NOTES

A: Restrained and unrestrained retaining wall schematic.

B: Equivalent fluid pressure for level backfill.

C: Lateral load from vehicles near top of wall.

D: Lateral load from uniform surcharge (S psf) on wall backfill.

E: P = Dynamic thrust on retaining wall

from earthquakes utilizing a pseudostatic acceleration of 0.15g.

h = Point of application of dynamic thrust.

1) Assumed drained backfill condition.

2) Equivalent fluid pressure increase for sloping backfill:

Restrained wall; add 1.5 pcf for each degree of backfill inclination.

Unrestrained wall; add 1 pcf for each degree of backfill inclination.



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Warehouse Lot - N. Palm Springs

G1357

September 2003

Retaining Wall
Pressures

Figure 3

APPENDIX A
Key to Boring Logs
Logs of Borings and Test Pits

Key to Boring Logs



3-inch O.D. Modified California Sampler



2-inch O.D. Standard Penetration Test (SPT)



Bulk Sample



2.5-inch O.D. Split Spoon Sampler



3-inch O.D. Shelby Tube (hydraulically advanced)



Groundwater Level Encountered During Drilling



Groundwater Level Measured After Drilling

25

Blow Count To Drive Sampler One Foot

1. The boring locations were determined by pacing, sighting and/or measuring from site features. Elevations of borings (if included) are determined by interpolation between plan contours. The location and elevation of borings should be considered accurate only to the degree implied by the method used.
2. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.
3. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. This data has been reviewed and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, tides, temperature and other factors at the time measurements were made.

Warehouse Lot - N. Palm Springs

CEL #G1357

September 2003



CONSOLIDATED ENGINEERING
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Key to Boring Logs

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 1			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light brown, poorly to well-graded, medium to coarse SAND with silt and gravel. Fill.	Dry	Med. Dense	SP/SW	0
1											-
2											-
3											-
4											-
5		28	1-1		104.9	6.0	Becoming less silty and gravelly. Fill?	Dry	Med. Dense	SP/SW	5
6											-
7											-
8											-
9											-
10											-
11											-
12											-
13											-
14											-
15											-
16											-
17											-
18											-
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20											-
21											-
22											-
23											-
24											-
25											-
CONSOLIDATED ENGINEERING LABORATORIES											

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 2			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light brown, poorly to well-graded, medium to coarse SAND with silt and gravel. Fill.	Dry	Med. Dense	SP/SW	0
5		32	2-1	(no recovery)							5
		52	2-2		130.6	0.9	Becoming gray and white with feldspar grains, medium to coarse grained, poorly graded. Native	Dry	Med. Dense To Dense	SP	
10		24	2-3		107.1	1.5	Sand with abundant quartz grains, medium to coarse grained with trace gravel.	Dry	Med. Dense	SP	10
15		37	2-4		108.3	1.6	Becoming coarser with more feldspar grains.	Dry	Med. Dense	SP	15
20		54	2-5				Becoming finer, poorly to well-graded.	Dry	Dense	SP/SW	20
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 2			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
25		34	2-6		110.9	5.5	Moderate brown, fine to medium grained with trace coarse, poorly graded SAND with silt.	Dry To Slight. Moist	Med. Dense	SP	25
30		44	2-7				Becoming brown with white quartz and some gravel.	Dry To Slight. Moist	Dense	SP	30
35		50	2-8				Grading to medium to coarse, poorly-graded, medium to coarse SAND with gravel.	Dry	Dense	SP	35
40		68	2-9				Salt and pepper colored, fine to medium, poorly graded SAND grading to well-graded SAND with gravel.	Dry To Slight. Moist	Dense	SP/SW	40
45							Boring terminated at 41.5 feet. No groundwater encountered.				45
50											50

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 3			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish to moderate brown, fine to medium, poorly graded SAND with silt binder. Fill.	Slight. Moist	Dense	SP	0
1											
2											
3											
4											
5											5
6											
7											
8							Becoming medium to coarse with trace fines and gravel. Native.	Dry	Med. Dense	SP/ SW	
9											
10											10
11											
12											
13							Becoming less gravelly.	Dry	Dense	SP/ SW	
14											
15											15
16											
17											
18							Becoming fine to medium with trace silt.	Dry	Dense	SP	
19											
20							Boring terminated at 18.5 feet. No groundwater encountered.				20
21											
22											
23											
24											
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 4			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Moderate brown, fine to medium, poorly to well-graded SAND with silt and gravel. Fill.	Dry	Med. Dense To Dense	SP/SW	0
-											-
-											-
-											-
-											-
-											-
-											-
5		74	4-1		109.6	2.5	Becoming siltier and grayish-brown. Fill?	Dry	Very Dense	SP/SW	5
-											-
-											-
-											-
-											-
-											-
10		35	4-2		100.0	2.6	Fine to medium with some coarse and silt, poorly graded SAND. Native.	Dry	Med. Dense	SP	10
-											-
-											-
-											-
-											-
-											-
15		34	4-3				Becoming poorly to well-graded SAND.	Dry	Med. Dense	SP/SW	15
-											-
-											-
-											-
-											-
-											-
20		44	4-4				Becoming fine to coarse, well graded.	Dry	Dense	SW	20
-											-
-											-
-											-
-											-
25		51	4-5				Trace coarse gravel.	Dry	Dense	SW	25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 4			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
25							Rocky zone, approximately 2 feet thick				25
-											-
-											-
-											-
-											-
30		71	4-6				Fine to medium, poorly graded SAND with trace gravel and silt.	Dry	Very Dense	SP	30
-											-
-											-
-											-
-											-
35		23	4-7				Moderate brown, fine silty SAND.	Slight. Moist	Med. Dense	SM	35
-											-
-											-
-											-
-											-
40		16	4-8				Grading to moderate brown, fine to medium, poorly graded SAND.	Slight. Moist	Loose	SP	40
-											-
-											-
-											-
-											-
-											-
45							Boring terminated at 40.0 feet. No groundwater encountered.				45
-											-
-											-
-											-
-											-
-											-
50											50

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 5			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Tannish-brown to grayish-brown silty, fine, poorly-graded SAND with gravel. Fill.	Dry	Med. Dense	SP/SM	0
5		27	5-1				Native.				5
10							Practical refusal at 8.0 feet. No groundwater encountered.				10
15											15
20											20
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 6			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light grayish-brown, silty to poorly-graded SAND. Fill.	Dry	Med. Dense	SM/SP	0
5		39	6-1		104.5	2.9		Dry	Med. Dense	SM/SP	5
10		30	6-2		101.0	4.2	Salt and pepper colored, fine to medium, poorly-graded SAND. Native.	Dry	Med. Dense	SP	10
15		29	6-3					Dry	Med. Dense	SP	15
20		35	6-4				Becoming moderate brown, fine to medium, poorly graded SAND with silt.	Slight. Moist	Med. Dense	SP	20
25							Boring terminated at 21.5 feet. No groundwater encountered.				25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 1			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, fine to medium, poorly-graded SAND with gravel, silt and some cobbles. Fill.	Dry	Med. Dense	SP	0
-							Becoming medium to coarse with less silt.	Dry	Dense	SP/	-
-							Difficult digging, becoming moderate brown.	Dry	Dense	SP/ SW	-
-											-
5							Becoming pebbly. Native?	Dry	Dense	SP/ SW	5
-											-
-											-
-							Becoming less cobbly, digging easier, large quartz sand grains, little to no silt binder.	Dry	Med. Dense	SP	-
-	8		7-1	(no recovery)							-
10							Test Pit terminated at 9.0 feet. Minor collapsing in top 1.5 feet of pit. No visible fill contact.				10
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
25											25
CONSOLIDATED ENGINEERING LABORATORIES											

Project Name: Warehouse Lot							Project No: G1357		Logged By: MAH		Test Pit No.: 2		
Location: N. Palm Springs, California						Excavation Method: Backhoe with Modified California sampler					Date Excavated: 8-18-03		
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level		
0							Grayish-brown, poorly-graded to well-graded, fine to coarse SAND with silt and gravel. Some cobbles. Fill.	Dry	Med. Dense	SP/ SW	0		
-							Becoming moderate brown, less coarse, more silt.	Dry	Dense	SP	-		
-		40	8-1		106.6	3.9					-		
-											-		
-											-		
-											-		
5		24	8-2		107.9	2.0		Dry	Med. Dense	SP	5		
-											-		
-											-		
-											-		
-											-		
-											-		
-											-		
10											10		
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25											25		
CONSOLIDATED ENGINEERING LABORATORIES													

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 3			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
-							Becoming moderate brown and slightly more coarse.				-
-											-
-											-
-		35	9-1		113.0	2.5	2-boulders 1.5 feet in diameter. 3-boulders 3/4' to 1' in diameter.	Dry	Med. Dense To Dense	SP/ SW	5
5							Becoming more coarse. Native.				-
-											-
-											-
-											-
-											-
-											-
10							Test Pit terminated at 8.0 feet. Very little to no collapsing of pit.				10
-											-
-											-
-											-
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-											-
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15											15
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20											20
-											-
-											-
-											-
-											-
-											-
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 4			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Three boulders to 2 feet in diameter. Some pit collapsing. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
1							Becoming coarser sand.				
2							Less boulders and cobbles.				
3		12	10-1	(no recovery)			Digging easier, less cohesion. Native?	Dry	Med. Dense	SP/ SW	5
4											
5											
6											
7											
8											
9											
10							Test Pit terminated at 7.0 feet. No visible fill contact.				10
11											
12											
13											
14											
15											15
16											
17											
18											
19											
20											20
21											
22											
23											
24											
25											25

CONSOLIDATED ENGINEERING LABORATORIES

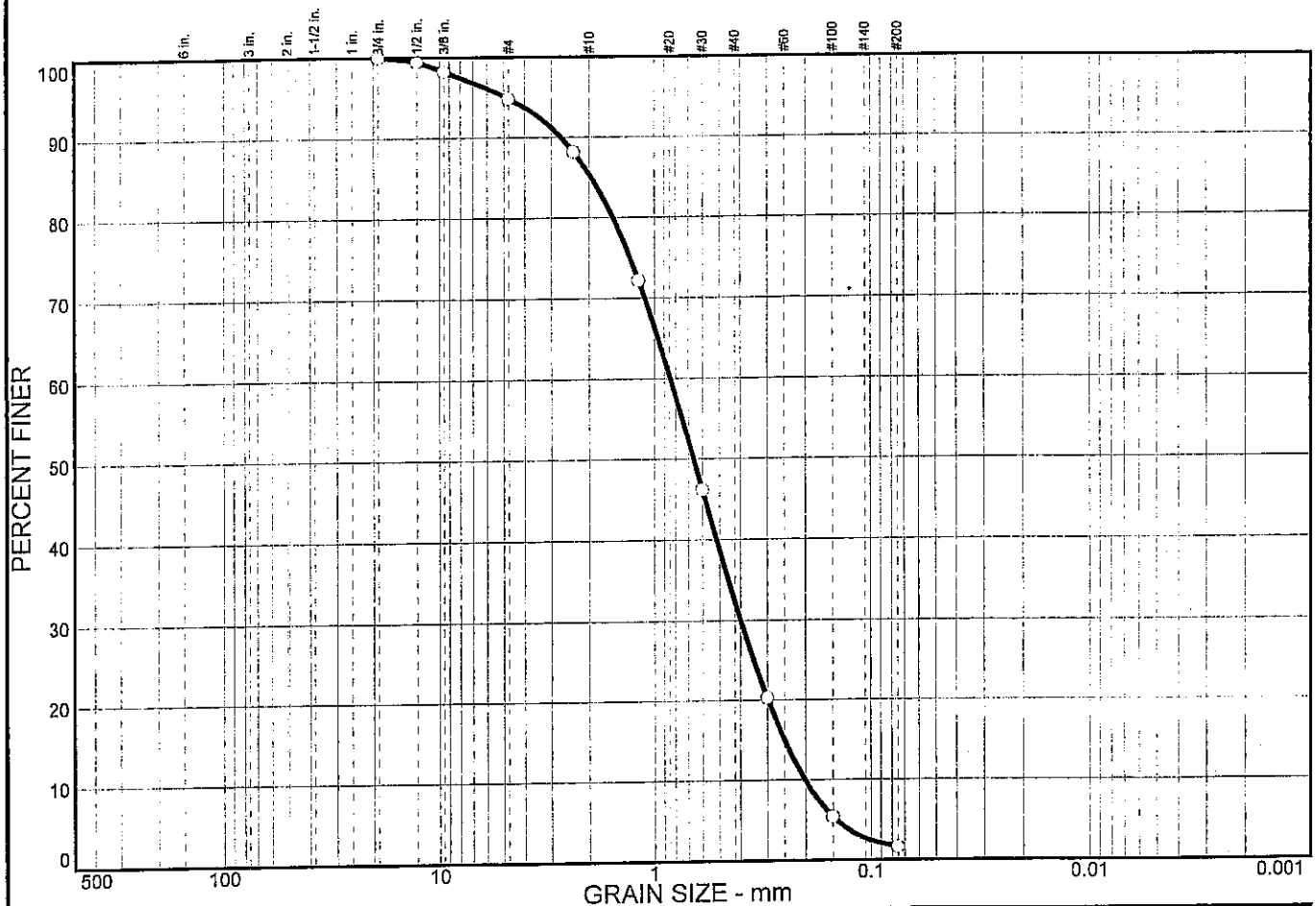
Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 5			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
-							Becoming moderate brown, some boulders, fine to medium with silt.	Dry	Med. Dense	SP	-
-		23	11-1		115.4	2.6					-
-											-
5							Becoming fine to coarse. Native?	Dry	Med. Dense	SP/ SW	5
-		8	11-2	(slough)							-
-							Test Pit terminated at 7.5 feet. Little to no collapsing of pit.				-
-											-
10											10
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 6			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense	SP/SW	0
-											-
-											-
-											-
-											-
5		20	12-1				Becoming cobbly and bouldery, moderate to tannish-brown.				5
-											-
-							Becoming less cobbly, less cohesive. Native?				-
-											-
-											-
-											-
10							Test Pit terminated at 6.0 feet. Little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
-											-
25											25

Project Name: Warehouse Lot						Project No: G1357		Logged By: MAH		Test Pit No.: 7	
Location: N. Palm Springs, California						Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03	
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense	SP/ SW	0
-											-
-							Becoming moderate brown, fine to medium. Some coarse grains.	Dry	Med. Dense	SP	-
-							Becoming more cobbly and some boulders.				-
-							Less cohesion.				-
5							Easier digging, fine to coarse, very little cobbles. Native?	Dry	Med. Dense	SP/ SW	5
-											-
-											-
-											-
-											-
10							Test Pit terminated at 8.0 feet. Little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
25											25
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APPENDIX B
LABORATORY TEST RESULTS
Sieve Analysis
Single Point Consolidation
R-Value
Water Soluble Sulfate

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	5.2	93.2	1.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	99.4		
3/8 in.	98.2		
#4	94.8		
#8	88.2		
#16	72.2		
#30	46.2		
#50	20.3		
#100	5.4		
#200	1.6		

* (no specification provided)

Soil Description
 7-1: brown sand with some rock

Atterberg Limits
 PL= LL= PI=

Coefficients
 D₈₅= 1.95 D₆₀= 0.842 D₅₀= 0.658
 D₃₀= 0.398 D₁₅= 0.249 D₁₀= 0.200
 C_u= 4.21 C_c= 0.94

Classification
 USCS= AASHTO=

Remarks

Sample No.: S0820-05: 7-1
Location:

Source of Sample:

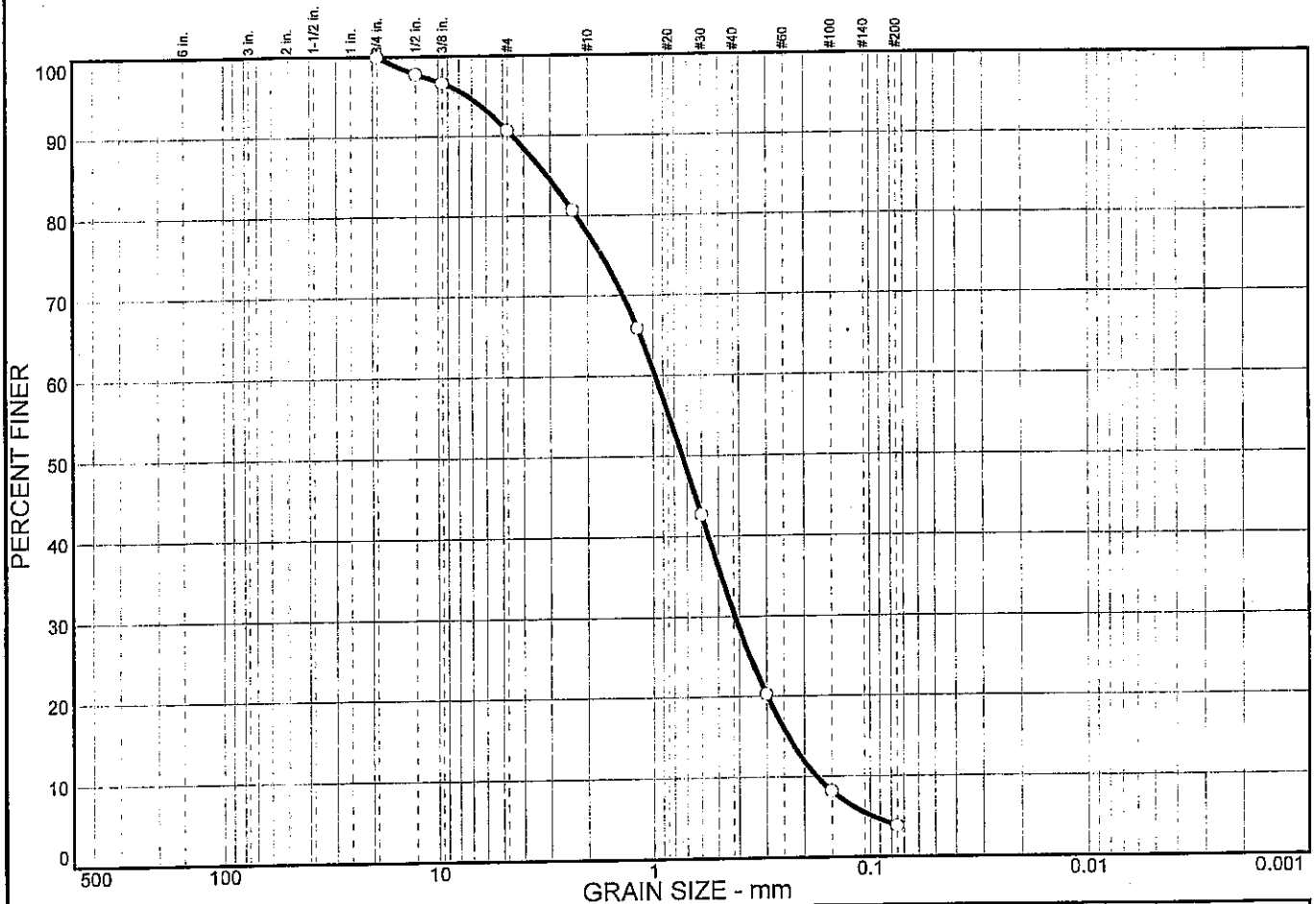
Date:
Elev./Depth: 8.0'-8.5'

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Client:
Project: Palm Springs
Project No: G1357

Plate 7-1

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	9.3	86.9	3.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	97.8		
3/8 in.	96.7		
#4	90.7		
#8	80.7		
#16	65.9		
#30	42.7		
#50	20.3		
#100	8.2		
#200	3.8		

* (no specification provided)

Soil Description

11-2: brown sand with some rock

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₈₅= 3.10
D₃₀= 0.417
C_u= 5.58

D₆₀= 0.975
D₁₅= 0.237
C_c= 1.02

D₅₀= 0.733
D₁₀= 0.175

Classification

USCS=

AASHTO=

Remarks

Sample No.: S0820-05: 11-2
Location:

Source of Sample:

Date:
Elev./Depth: 6.5'-7.5'

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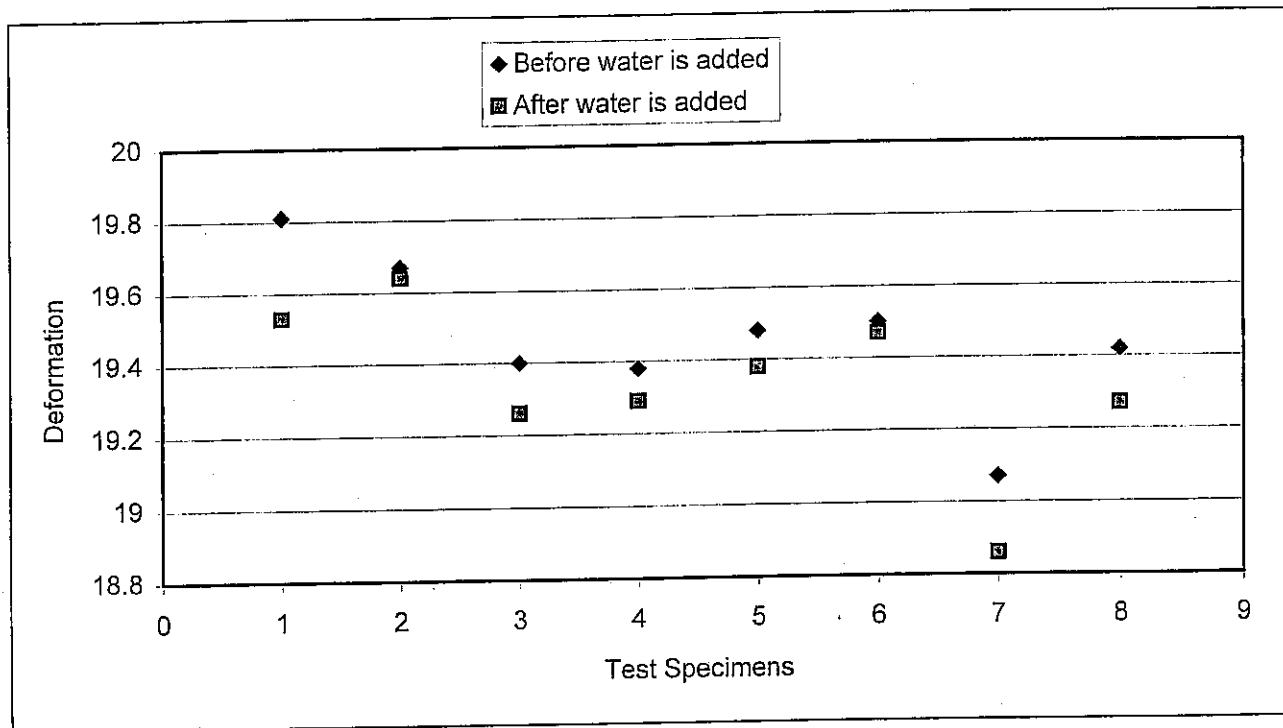
Client:
Project: Palm Springs

Project No: G1357

Plate 11-2

CEL# G1357
 Project: Palm Springs
 Lab No.: S0820-05

One Dimensional Consolidation



Initial Height, mm: 20
 Load, psf: 4000

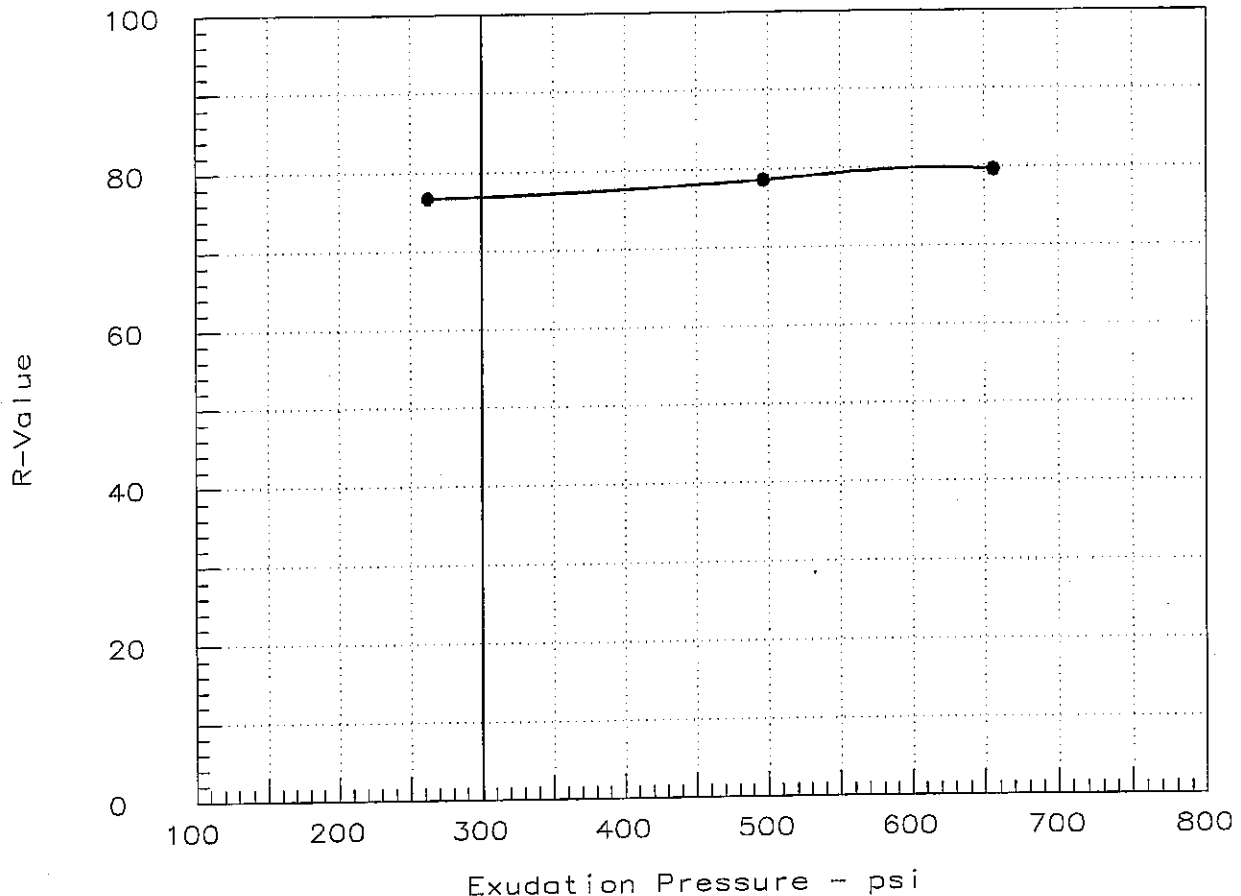
Height of Specimens after Loading

Specimen ID	<u>1-1</u>	<u>3-3</u>	<u>4-1</u>	<u>4-2</u>	<u>6-1</u>	<u>6-3</u>	<u>8-1</u>	<u>8-3</u>
Test Specimen	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
Before Water Added	19.81	19.67	19.40	19.38	19.48	19.50	19.07	19.42
After Water Added	19.53	19.64	19.26	19.29	19.38	19.47	18.86	19.27
Deform'n before water, mm	0.188	0.333	0.602	0.617	0.518	0.500	0.927	0.584
Deformation after water, mm	0.470	0.356	0.742	0.706	0.620	0.533	1.140	0.723
* Dry Density, pcf	104.9	98.1	109.6	100.0	104.5	101.0	106.6	107.9
* Moisture Content, %	6.0	4.3	2.5	2.6	2.9	4.2	3.9	2.0
Final Moisture Cont, %	18.8	21.0	17.2	18.4	18.0	21.8	15.3	17.5

* as prepared

Specimen ID	Depth, ft	Material Description
1-1	4.5-5.0	light brownish gray silty sand
3-3	13.0-13.5	light gray coarse sand (moisture added before set up)
4-1	4.5-5.0	brown sand with silt (partially disturbed, removed 1/4" rock)
4-2	9.5-10.0	light brown sand (partially disturbed, removed 1-1/2" rock)
6-1	6.0-6.5	light brown sand
6-3	16.0-16.5	light brownish gray sand
8-1	2.5-3.0	brown sand with some silt
8-3	4.5-5.0	brown sand with some silt

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	121.3	7.8	0.00	26	2.50	263	77	77
2	350	121.5	7	0.00	25	2.51	497	79	79
3	350	122.0	6.8	0.00	22	2.50	657	80	80

TEST RESULTS	MATERIAL DESCRIPTION
R-Value @ 300 psi exudation pressure = 77	brown sand with some gravel
Project No.: G1357 Project: Palm Springs Location: Bulk sample Date: 8-29-2003	Tested by: YD Checked by: CG Remarks: Lab NO. S0820-05
R-VALUE TEST REPORT Consolidated Engineering Laboratories	Fig. No.



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SPECIAL SOIL REPORT

To: Marc Hachey
Consolidated Engineering Labs
7060 Koll Center Parkway, #300
Pleasanton, CA 94566-3108

Date: August 27, 2003
Lab #: 00143-1
Received: August 20, 2003
Tech(s): H. Banwait
Lab Supervisor: D. Jacobson
Lab Director: G.S. Conrad, Ph.D.
Sample ID(s): PS1/C

Sample of: soil (grab)
File Number: G1357

Site Location/Job: Palm Springs, California.

RESULTS

<u>SAMPLE ID</u>	<u>SAMPLE DESCRIPTION</u>	<u>SULFATE (SO₄)</u>
PS1/C	Grab/Bulk	54 mg/kg

COMMENTS

This sample has a low sulfate level in terms of adverse engineering impacts at just over 50 ppm. Therefore, as long as this sample is representative of the soil as a whole, the soil is well within acceptable limits for this particular parameter as concerns its potential impact on concrete, mortar, grout and cement.

NOTES:

This test was done in a manner consistent with EPA, DHS, and LUFT protocols, i.e., Standard Methods UC Davis, Methods of Soil Analysis, Association of Test Materials (ASTM), CalTrans or other appropriate protocols: Cal Test - 417 (CalTrans).

APPENDIX C

Grading and Earthwork Specifications



GRADING AND EARTHWORK SPECIFICATIONS

A geotechnical engineering study has been prepared for this site by Consolidated Engineering Laboratories. The contractor shall become familiar with the site conditions and the recommendations contained within this report.

Definition of Terms

1. The term "Geotechnical Engineer," as used in this specification, shall mean a state registered professional engineer or his representative qualified to observe and test earthwork construction, and provide geotechnical engineering and consulting services.
2. "Engineered Fill" shall be earth material mechanically compacted to the degree specified by the Geotechnical Engineer. The Geotechnical Engineer shall make sufficient observations and tests to verify that fills have been placed in accordance with applicable specifications and the recommendations contained in the project geotechnical report.
3. The term "Relative Compaction" is defined as the ratio of in-place field dry density to the theoretical maximum dry density determined in the laboratory by the ASTM D1557 test procedure. The optimum moisture content is the moisture content at which the maximum theoretical dry density has been achieved in the laboratory by the ASTM D1557 test procedure.

Materials

4. Engineered fill shall be either on-site or imported material which is free of organic material, debris or other deleterious material. Engineered fill materials shall be approved by the Geotechnical Engineer prior to their use on the site. Engineered fill material shall not contain rocks or lumps larger than 6 inches in maximum dimension unless otherwise specified or approved by the Geotechnical Engineer. When used for trench backfill, engineered fill shall not contain rocks or lumps larger than 4 inches in maximum dimension.
5. Imported fill materials should meet the requirements of "Engineered Fill," be predominantly non-expansive, and have a Plasticity Index (PI) of 15 or less. Additional requirements for imported fill may be also specified by the Geotechnical Engineer.



6. Paving materials and their placement shall be in conformance with the requirements of the State of California, Department of Transportation (Caltrans) Standard Specifications, except that relative compaction shall be based on the ASTM D1557 test procedure. Aggregate base materials used for pavement construction shall be Caltrans Class 2 Aggregate Base, meeting the requirements of the Caltrans Standard Specifications, current edition.

7. Aggregate subbase materials used for pavement construction shall be Caltrans Class 2 Aggregate Subbase, meeting the requirements of the Caltrans Standard Specifications, current edition.

8. Material used as a capillary break beneath interior concrete slab-on-grade floors shall be clean gravel or crushed rock of 3/4-inch maximum size with less than 5 percent passing the No. 4 sieve. The material should have a Durability Index (CTM 229) of not less than 40.

Site Clearing, Stripping, and Demolition

9. Prior to placement of engineered fills or construction of site improvements, the site shall be cleared of existing abandoned structures, pavements, underground utilities, debris, and other deleterious materials, within proposed development areas. Debris resulting from the removal of these items shall be removed from the site, unless otherwise permitted.

10. Underground utilities shall be located prior to commencing grading operations. If underground utilities are abandoned, they shall be entirely removed, or fully grouted closed, unless otherwise directed by the Geotechnical Engineer. After removal, the excavations shall be backfilled with approved fill material and compacted to at least 90 percent relative compaction.

11. Following demolition and site clearing operations, areas to receive fill, concrete flatwork, structures and/or pavements shall be stripped of surface vegetation, trees and their root systems, existing loose fill materials, organic-laden soils, soft or wet soils and other deleterious materials.

Excavations resulting from the removal of such items shall be cleaned out to firm soil, as directed by the Geotechnical Engineer, and backfilled with engineered fill compacted in accordance with these specifications.



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12. The depth of stripping of surface vegetation shall be at least 3 inches, and as necessary to remove organic materials. Tree removal shall include removal of the major root systems, including roots larger than 2 inches in diameter. Excavations in tree removal areas shall be dished to allow through passage of compaction equipment. The stripped materials shall be removed from the site, unless otherwise permitted. Organic-laden soils may be suitable for use in landscape areas with the approval of the owner and the Geotechnical Engineer.

General Grading

13. Following clearing and stripping operations, the exposed soil in areas to receive fill, structures, and/or concrete flatwork shall be scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 90 percent relative compaction at a moisture content at or above optimum, except where otherwise specified in the Geotechnical Engineering Study. Soil areas disturbed during demolition operations shall be sub-excavated to firm native soil, scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 90 percent relative compaction at a moisture content at or above optimum.

14. Processing of soil for compaction shall consist of aerating the material if it is too wet or adding water to the material if it is too dry. When the moisture content of a material is too high to allow the specified degree of compaction to be achieved, the material shall be aerated by plowing, blading, spreading, or other suitable means until the proper moisture content has been achieved. When the moisture content of a material is below optimum, water shall be added and the material thoroughly mixed until the proper moisture content has been achieved.

15. Fill materials shall be placed in lifts not exceeding 8 inches in uncompacted thickness. Each layer shall be thoroughly mixed to promote uniformity in each layer. Engineered fill materials shall be compacted uniformly to at least 90 percent relative compaction at a moisture content at or above optimum, except where otherwise specified in the Geotechnical Investigation Report. Filling operations shall continue until the final grades have been attained in accordance with the approved plans. Structural fills shall extend at least 5 feet beyond the footprints of proposed structures.



16. The Geotechnical Engineer shall observe the placement of fill/backfill and conduct in-place field density tests on the fill/backfill to check for adequate moisture content and relative compaction as outlined herein. Where less than the specified relative compaction is obtained, additional compactive effort shall be applied and the fill moisture-conditioned as necessary until the specified relative compaction is attained. The Contractor shall provide safe and timely access to the Geotechnical Engineer at the grading site, to permit monitoring and testing.

17. Fills constructed on ground sloping steeper than 6H:1V (horizontal to vertical) shall be keyed and benched into the natural grade, as specifically recommended by the Geotechnical Engineer. Subsurface drains shall be installed in areas of observed seepage, as recommended by the Geotechnical Engineer.

18. Fill slopes should be constructed by overfilling and cutting the slope to final grade. Track walking of a slope to achieve slope compaction is not an acceptable procedure for slope construction, unless otherwise permitted by the Geotechnical Engineer.

19. In general, cut and fill slopes should be designed and constructed at slope gradients not steeper than 2H:1V (horizontal to vertical). Interceptor drainage ditches should be constructed at 30-foot vertical intervals on slopes higher than 30 feet. These interceptor drainage ditches should be constructed on drainage terraces that are at least 6 feet wide. The drainage terrace shall be constructed to provide adequate access for periodic maintenance of the drainage ditch. The drainage terrace shall have a minimum cross slope of 2 percent into the hillside, and toward the drainage ditch. Interceptor ditches should be constructed above the tops of slopes where natural drainage is toward the slope. Erosion control planting should be established as soon after grading as possible.

20. Cut slopes should be observed by the Geotechnical Engineer or Engineering Geologist to check for possible adverse geologic conditions. If unfavorable conditions are exposed, supplementary recommendations shall be developed to mitigate possible slope instability.

21. Wherever, in the opinion of the Owner's or the Geotechnical Engineer's representative, an unstable condition is being created either by cutting or filling, work should not proceed in that area until an investigation has been made and the grading operations revised, if found necessary.



Trenches

22. Trench backfill materials shall meet the requirements of "Engineered Fill," as specified in this report, and shall not contain rocks or lumps larger than 4 inches in maximum size. Trench backfill shall be placed in lifts not exceeding 8 inches in uncompacted thickness, and be mechanically compacted to at least 90 percent relative compaction at a moisture content at or above optimum.

23. Where access to construction personnel is required, trenches in excess of 5 feet deep shall be shored or have their side walls sloped back in accordance with OSHA and other applicable regulations.

24. Jetting of trench backfill materials shall not be permitted as a means of obtaining the required compaction. Jetting shall be permitted only within the sand bedding and shading material around buried utilities.

25. Open trenches adjacent and parallel to existing foundations shall not extend below an imaginary 2H:1V (horizontal to vertical) plane projected downward from the nearest edge of the base of the adjacent footing without specific review and recommendation by the Geotechnical Engineer.

Pavement Subgrade and Aggregate Base Preparation

26. The top 8 inches of soil subgrade in pavement areas shall be compacted to at least 95 percent relative compaction. In cut areas, the subgrade soils shall be scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 95 percent relative compaction at a moisture content at or above optimum. The finished subgrade shall be graded to provide a firm and stable base for support of the specified pavement section.

27. Aggregate base and subbase materials within pavement areas shall be placed in lifts not exceeding 8 inches in uncompacted thickness. These materials shall be compacted to at least 95 percent relative compaction, at a moisture content at or above optimum. All final grades shall be firm and stable prior to placement of pavement.



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28. Where unstable subgrade is encountered, the Geotechnical Engineer shall provide mitigation recommendations as required. The contractor shall minimize the amount of construction traffic on unstable or potentially unstable areas, as defined by the Geotechnical Engineer. If rutting or other instability is caused by the contractor's excessive construction traffic in area designated as unstable or potentially unstable, these areas shall be repaired at the contractor's expense.

Seasonal Limits

29. Fill materials shall not be placed, spread or rolled during unfavorable weather conditions, unless otherwise permitted by the Geotechnical Engineer. Fill operations shall not be resumed until field tests by the Geotechnical Engineer indicate that the moisture contents of subgrade and fill materials are satisfactory. Placement of fill material on frozen ground shall not be permitted.

30. Surface drainage provisions shall be made by the contractor, as necessary during construction, to prevent the ponding of water on engineered fill and pavement subgrade areas during construction. The contractor shall implement erosion control measures as necessary to protect the work.

APPENDIX D
Pier Drilling and Construction Specification



PIER DRILLING AND CONSTRUCTION SPECIFICATIONS

1. The drilled caisson excavation should be advanced with a single-flight auger or bucket auger to the design depth (the completed excavation should be verified by observations and measurement to be clean and free of water to the specified depth). After reaching the design depth, the auger should be placed back in the hole and two additional passes made without advancement to remove loose material from the bottom of the hole.
2. If the drilled hole is left open, the hole should be covered to prevent tools, soil, or personnel from falling into the drilled hole. During rains, water should be prevented from flowing into the drilled hole.
3. The caisson excavation shall be drilled such that the vertical alignment does not deviate by more than 1/2 caisson diameter from top to bottom.
4. Reinforcing cages should have spacers or centralizers to ensure at least 2 inches of concrete cover.
5. Concrete should be placed through a hopper or other device approved by CEL so that it is channeled in such a manner to free-fall and clear the walls of the excavation and reinforcing steel until it strikes the bottom. Adequate compaction of the concrete will be achieved by free fall up to the top 8 feet or depth of the anchors, whichever is deeper. Above 8 feet the concrete should be vibrated to achieve proper density.
6. If groundwater is present in the caisson excavation it should be pumped dry prior to concrete placement or tremie placement of the concrete should be performed.
7. Concrete placed using the tremie method should be pumped into the excavation with sufficient head to lift the groundwater and spoils present in the excavation to the ground surface. The concrete should be placed in one continuous pour and should continue until "clean" concrete is observed at the top of the excavation.



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8. Continuous observation of the construction should be provided by CEL. Our geotechnical engineering personnel should confirm proper diameter, depth and cleaning, and should also confirm the nature of the materials encountered in the caisson excavation. Concrete placement should be continuously observed to confirm that it meets requirements. A quality control report should be submitted on the caisson, verifying that details of the caisson construction have been observed.

September 24, 2009

Claudia Steiding, Senior Environmental Planner
County of Riverside Economic Development Agency
3133 Mission Inn Avenue, Riverside, CA 92507

Subject: **Cultural Resource Review and Initial Study Recommendations for the Roy's Desert Center (Western Coachella Valley Multi-Service Center) Project located at 19-531 McLane Street, North Palm Springs, California.**

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

Dear Ms. Steiding:

Michael Brandman Associates (MBA) is providing the County of Riverside Economic Development Agency (EDA) with environmental compliance documents in support of this Project. The EDA is proposing interior improvements on an existing 48,000 square foot building and the installation of three (3) additional septic tanks. The shelter is located at 19-531 McLane Street in the City of Palm Springs, California. New construction will occur in areas that have been previously graded for office building construction.

MBA undertook a records search on September 18, 2009 for cultural resources at the Eastern Information Center (EIC) at the Department of Anthropology, University of California - Riverside. The records search was conducted by MBA Senior Archaeologist Michael Dice, M.A. This report summarizes the results of the analysis, and then provides the proper language for insertion into the Initial Study cultural resource section.

Cultural Resource Records Search

The project area is located in Section 15, Township 3 South, Range 4 East as depicted on the Desert Hot Springs, California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. A one-mile radius was used for the records search. The results of the records search indicated that few cultural resources (Table 1) have been recorded within the search radius of the project area, and none are located within the boundaries of the proposed project. The project study radius exhibits two nearby cultural resources: the nearest recorded cultural resource is about 600 meters to the southeast.

Table 1: Known Cultural Resources Located in a 1-Mile, 0.5 Mile and 0.25-Mile Radius of the Roys Desert Project

Site Number	Location Section	Resource Description	~0.5-mile Radius	~0.25-mile Radius	On Site?
CA-RIV-3441H	22	Historic Garnet siding site assoc. with the historic railroad grade	●	—	No
33-9498	various	Historic SP and UP railroad grades	—	●	No

Twenty-one area-specific cultural resource reports are on file with the EIC for the search radius. None of these reports directly surveyed the project area. This suggests that the project area has never been surveyed by a qualified archaeologist previously.

Prehistoric Cultural Setting

Four general, but distinctive cultural periods have been identified by Wallace (1955) for the prehistoric occupation of southern California (Early Hunter; Milling Stone; Intermediate; Late). Fagan (2003), Moratto (1984), and Chartkoff and Chartkoff (1984) provide more recent overviews of California archaeology and historical reviews of the inland southern California coast, among other locales. These authors use a modified version of Wallace's period format, updated to reflect newer research efforts.

Early Man Period (before 9500 B.P.) sites are characterized by large projectile points, and other stone implements adapted to chase big game animals. The large size and weight of the points suggest that the primary weapon for hunting was the dart, propelled by a spear thrower. Lack of grinding tools, suggest that the inhabitants were not exploiting the plant foods to the extent that later cultures were. They were nomadic in hunters, following the game throughout the seasons. Archaeological sites representing this early period are not common.

The Milling Stone Period (about 9500 B.P. to 3000 B.P.) represents a long period of time characterized by small, highly mobile groups of Native Americans. These groups probably had a seasonal round of settlement that included both inland and coastal residential bases. They relied primarily on grasses and seeds for food. Characteristic inland sites include numerous manos, metates, and hammerstones. Shell middens are more common at coastal sites.

The Intermediate Period occurred from approximately 3000 B.P. to 1250 B.P. Mortars and pestles first appear in this period, indicating knowledge of acorn leaching. Use of the acorn probably permitted greater sedentism, especially at inland locations. Large projectile points suggest use of spear throwers rather than the bow and arrow. Settlement patterns during this period are not well understood. Exchange between the coast and Colorado River groups becomes apparent in the archaeological record.

The Late Period (1250 B.P. to Historic Contact) saw a more semi-sedentary settlement pattern. Smaller projectile points suggest introduction of the bow and arrow and less or no reliance on the spear thrower. Lifestyle is little unchanged from the previous period, but influxes of Shoshonean speakers are evident in linguistic studies. Differences in archaeological deposits are representative of changes in population ancestry. Pottery-making is introduced.

The Cahuilla

According to Bean (1978), the Cahuilla traditional use area extends north-south from the summit of the San Bernardino Mountains in the north, to Borrego Springs and the Chocolate Mountains in the south, and extends east-west from the eastern slopes of the Palomar Mountains in the west to the Colorado Desert east of the Orocopia Mountain to the east. This description of Cahuilla territory includes the project area within their traditional use area. Bean (1972, 1978) forms the primary modern reference for this cultural group. Bean notes that of all the southern California Indians, the Cahuilla existed within the most geographically diverse region, constrained only by water supplies and topography.

Pre-contact Cahuilla territory encompassed the extremely rugged San Bernardino Mountain ranges at an elevation of 11,000 feet to the Salton Sink (Salton Sea), which is 273 feet below sea level. The upper Coachella Valley and Palm Springs areas exhibited protohistoric Cahuilla villages near defined water sources, with good access to food-gathering locales. Village sites were usually located near alluvial fans, streams or at the base of the San Jacinto Mountains for protection against the winds, while some Desert

Cahuilla settlements were located around hand dug wells and watering holes. Typically, one clan or family occupied several food-gathering locations and aggressively guarded these areas against other Cahuilla clans (Bean 1972 and 1978, Oswalt 1988, Strong 1972).

The Cahuilla have had definitive historical relationships with the Hopi of Arizona, the Gabrielino and Digueño of the southern Californian coast, the Serrano, and the Luiseño of Riverside County as well as other desert tribes such as the Kamia, Chemehuevi, and Paiute. It is thought the Cahuilla population prior to Spanish contact may have been as numerous as 6,000 people in an area over 2,400 square miles in size (Bean 1978, Bean and Saubel 1972, Strong 1972).

The prehistoric Cahuilla were characterized by the occupation of sedentary villages in subsistence territories that permitted them to reach the majority of their resources within a day's walk. Villages were commonly located near reliable sources of water. During October to November, much of the village population moved to temporary camps in the mountains to harvest acorns and hunt game. Inland groups also had fishing and gathering spots on the coast that they visited annually. In comparison with the Gabrielino and Luiseño, the Cahuilla appear to have had a lower population density and a less rigid social structure. The Cahuilla patterns may have been relatively stable until mission secularization in 1834, due to the policy of the Catholic Mission fathers or padres to maintain imported European traditional style settlement and economic patterns (Bean and Shipek 1978).

Pre-contact Cahuilla homes were generally constructed with forked posts, which supported the wood cross members and were completely covered in thatch, which was then sealed with sand or soil. In some cases the floor was subterranean. Each house was positioned so that a measure of privacy was attained (Bean 1978, Kroeber and Hooper 1978). Wilke confirms Blakes' earlier observations, that the Cahuilla homes were generally hidden in the mesquite groves and consequently overlooked when explorers searched for their villages (Wilke and Lawton 1975).

Cahuilla (Patayan) pottery has been stylistically and ornamentally compared to that of an ancient Pueblo style, as well as that made by Colorado River Indians, the Digueño, Luiseño and Mohave clans (Bean and Lawton 1975, Kroeber and Hooper 1978). Cahuilla pottery was constructed in coil form, then shaped with a polishing stone and wooden paddle, occasionally incised for decorative purposes and then finally sun baked and fired (Bean and Lawton 1975, Kroeber and Hooper 1978). Kroeber and Hooper suggest that the Cahuilla had four definitive pottery forms; an open bowl or dish, a cooking pot, a small-rimmed vessel and a wider opening rimmed vessel (1978), while Bean and Lawton suggest that ladles, trays, and pipes were also manufactured (1975).

Baskets were also an important item, and were manufactured in a variety of shapes and sizes, but always produced from coiled and woven mesquite branches, willow or palm leaves. Grasses were used in the foundation. The only tools used to manufacture these baskets were either a needle made from the leg bone of a deer or a heavy cactus needle, set into a wooden handle (Bean 1978).

Ceremony and ritual was of great importance to the Cahuilla (Bean 1978). Deep ceremonial ties existed between the Serrano and the Cahuilla, and in many cases the desert Cahuilla are thought to have adopted many of the ceremonial practices from the Serrano (Strong 1972). Frequently practiced ceremonies include multiple rituals for the mourning of the dead, the eagle dance, separate initiation rites ceremonies for boys and girls, and a summer and winter solstice celebration (James 1960, Strong 1972). This cultural linkage between the Cahuilla and Serrano is then furthered by inferences from Mission baptismal records and Serrano oral tradition.

According to personal communication with Britt W. Wilson, Cultural Resource Coordinator for the Morongo Band of Mission Indians, the relationship between the Cahuilla and Serrano is borne out of Mission baptismal records, available on-line from the Huntington Memorial Library. From these records, it may be inferred that Cahuilla people from White Water married into people from Serrano villages, such as Gupiabit located in the Cajon Pass region. In addition, the Cahuilla people accepted groups of Serrano peoples from Twentynine Palms, after a migration of Chemehuevi peoples into the Twentynine Palms area. Then, according to Serrano oral tradition, the Cahuilla adopted many of the Serrano songs because they had lost their own traditional songs (Britt W. Wilson, personal communication, 05/29/07).

The first European contact with the Coachella Valley region and the Cahuilla peoples occurred in 1774 and 1775-76, as the Juan Bautista de Anza expedition was looking for an inland route between Sonora, Mexico and the coast. This expedition passed through the Santa Rosa Mountains and established a route between Sonora and newly established Alta California settlements. Thereafter, the Cahuilla remained relatively isolated from Euro-American expansion, as their territory was distanced from the Spanish missions and unsuitable for large-scale ranching and farming. Contact increased in the 1820s with expeditions to find inland routes to the missions, and the first known Europeans to cross the Coachella valley were members of the Jose Romero expedition to Yuma between 1823 and 1825.

The Desert Cahuilla were able to maintain relative autonomy until the Colorado River gold rush of the 1860s. This event brought miners and emigrants to California along the Bradshaw Trail, which later became the route of modern I-10. This event, in conjunction with the 1863 smallpox epidemic and extended droughts, decimated the Cahuilla population. As the populations decreased, old villages were abandoned and traditional Cahuilla lands were rapidly lost to the encroaching settlers. The Cahuilla were finally granted allotments of land when the Morongo, Cabazon and Torres-Martinez Reservations were established by President Grant on May 15, 1876. The Mission Indian Agency was created for southern California in 1877. Today, Cahuilla Reservations include Santa Rosa, Cahuilla and Ramona in addition to the aforementioned Reservations established under President Grant.

Native American Sacred Lands Search and Consultation

The project is very unlikely to affect any cultural resources, nonetheless, a Sacred Lands File search request was sent to the Native American Heritage Commission (NAHC) on September 18, 2009 in an effort to determine whether any sacred sites are known within the vicinity of the project area. Our efforts are associated with fact-finding only. The NAHC responded on September 22, 2009 and indicated that no known sacred sites are located in or near the project area. The NAHC indicated that 12 tribal organizations may have additional information associated with the project area. Should the County be required to contact any local Tribes as part of future environmental compliance for this project (i.e.: SB18), we suggest that the attached list be used for this purpose.

It must be noted that the entirety of the project area was graded during construction of the existing office building. This would have resulted in an engineering of topsoil to code. It is highly likely that the upper 5-6 feet of topsoil was disturbed and recompacted at the spot where the existing structures now stand. There is a low-to-none chance that significant buried Native American resources will be impacted during grading of ground below the existing buildings.

Paleontological Impacts

According to an on-line paleontological sensitivity review of the Desert Center parcels using the County's TLMA website (APN 666411011 and 666411012), the property is considered Low in paleontologic sensitivity. The property is covered with recent Holocene Alluvium and Aeolian sand deposits, which is a

soil and rock strata considered too young to exhibit significant paleontological resources. It is very unlikely that fossil resources would be uncovered during excavation for the septic tanks.

Initial Study Analysis

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

Historical Resource: Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

There is no potential for a substantial adverse change in the significance of a historic resource during construction of this project. Records indicate that no historical resources have ever been located on the project site, and that the chance that historic resources could be encountered during grading is extremely low. Therefore, a mitigation-monitoring plan to mitigate for potential impacts to historic resources during construction is not recommended. The Initial Study check box should read “No effect”.

Archaeological Resource: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Because it is highly unlikely that most of the subsurface soils on the project site are intact, there is a low-to-none potential for a substantial adverse change in the significance of a prehistoric resource during construction of this project. Records indicate that no prehistoric resources have ever been found on or within one mile of the project site (despite numerous surveys near the project), and that the chance that prehistoric resources could be encountered during grading is extremely low. Therefore, a mitigation-monitoring plan to mitigate for potential impacts to prehistoric resources during construction is not recommended. The Initial Study check box should read “No effect”.

Paleontological Resource or Geologic Feature: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There is no potential for a substantial adverse change in the significance of a paleontologic resource during construction of this project. Data indicates that paleontologic resources are extremely unlikely to be found during grading because any strata having good potential for fossil resources are not located in the project area. Therefore, a monitoring plan to mitigate for potential impacts to prehistoric resources during construction is not recommended. The Initial Study check box should read “No effect”.

Human Remains: Would the project disturb any human remains, including those interred outside of formal cemeteries?

There is little chance that human remains will be encountered during construction-related grading. Records indicate that no human remains have ever been found on or near the project site, and that the chance that human remains could be encountered during grading is extremely low due to heavy disturbance. Therefore, a plan to mitigate for potential impacts to human remains during construction is not required. The Initial Study check box should read "No effect". State law requires that if in the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code § 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Environmental Quality Act (CEQA) regulations and Public Resources Code (PRC) § 5097.98.

Summary

Based on the results of the records search, the existing land-use, and development within and adjacent to the project area, and the parameters of the proposed construction, the potential for impacts to buried and potentially significant cultural resources is considered low. Under these conditions and following CEQA guidelines, cultural and paleontological resource mitigation-monitoring is not recommended.

Unanticipated Discoveries

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources without a monitor or archaeologist present. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the CEQA guidelines. Cultural resources could consist of, but are not limited to, stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under §15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site into green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study. In addition, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property will be taken, and the State Historic Preservation Office (SHPO) and Native American tribes with concerns about the property, as well as the Advisory Council on Historic Preservation (ACHP), will be notified within 48 hours in compliance with 36 CFR 800.13(b)(3).

In the event of an accidental discovery or recognition of any human remains, Public Resource Code (PRC) §5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:

1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC §5097.98, or

2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission;
- The descendant identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

MBA appreciates the opportunity to assist you on this project. If we can assist further, or if you have questions, please contact me at 909.884.2255 extension 1208.

Sincerely,



Michael H. Dice, M.A., RPA
Senior Archaeologist
Michael Brandman Associates
621 E Carnegie Drive
San Bernardino, CA. 92408

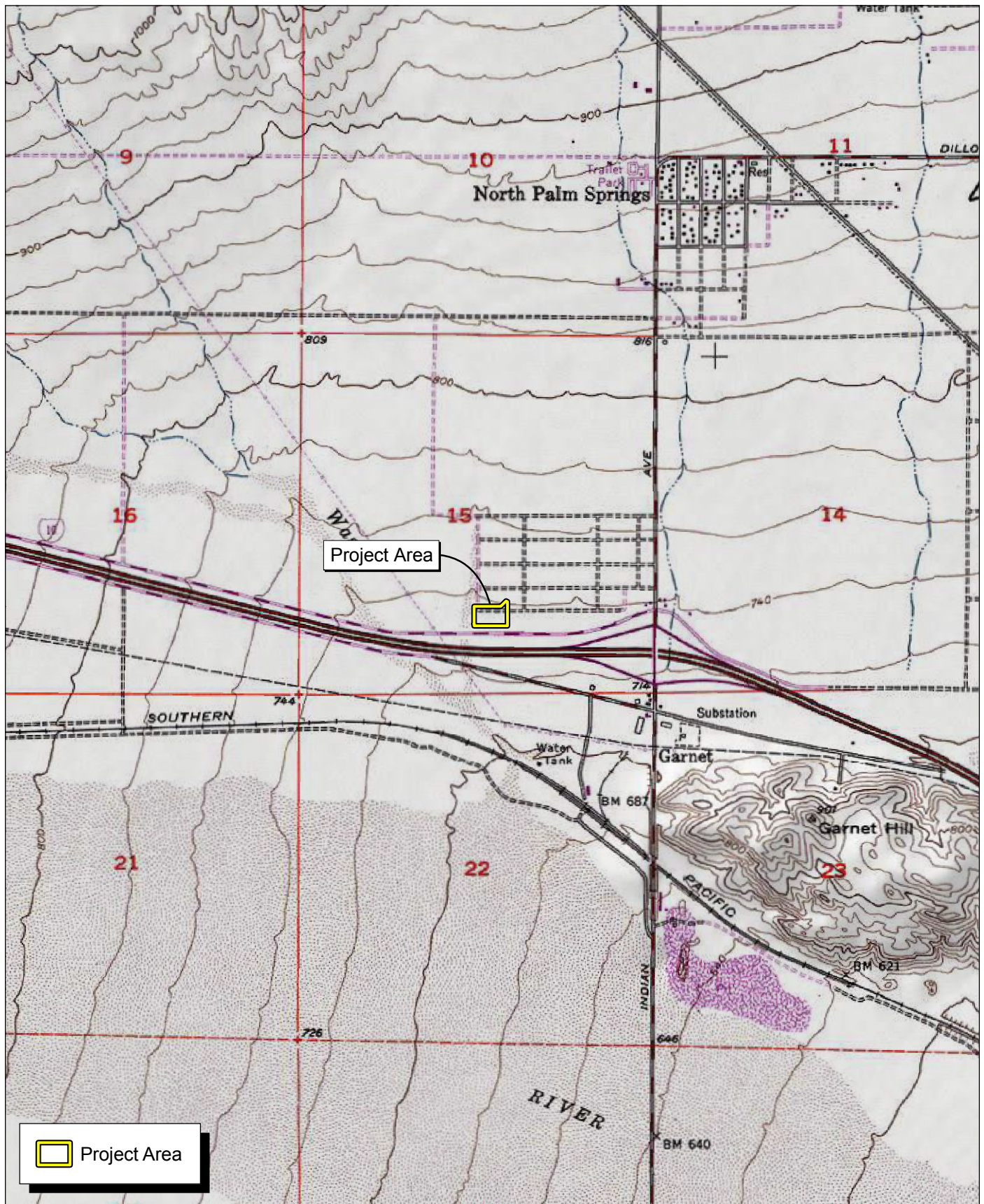
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Source: Census 2000 Data, The CaSIL, MBA GIS 2009.



Source: TOPO! Desert Hot Springs (1978) 7.5' DRG.



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Exhibit 2 Local Vicinity Map Topographic Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
CULTURAL RESOURCE DUE DILIGENCE



Source: Google Earth Pro Aerial (January, 2006).



27490030 • 09/2009 | 3_Local_Aerial.mxd

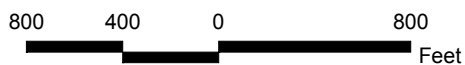


Exhibit 3 Local Vicinity Map Aerial Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
CULTURAL RESOURCE DUE DILIGENCE

**Appendix A:
NAHC Request Letter (MBA)
NAHC Response Letter
MBA Staff Resumes**



September 18, 2009

Native American Heritage Commission
915 Capitol Mall, Suite 364
Sacramento, CA 95814-4801

VIA FACSIMILE: 916.657.5390

Subject: **Request for a Sacred Lands Records Search for the Roys Center IS Project located in the City of Palm Springs, California. (USGS Desert Hot Springs, CA. quad)**

County of Riverside, California.

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

To Whom It May Concern:

Michael Brandman Associates (MBA) would like to determine whether any listed sacred sites are located within or near a future development project on private land in the City of Palm Springs, CA. The project will involve modification of about 2 acres of land where three septic tanks will be undergrounded. Excavation during construction is required

As seen in the attached topographic map, the project area is located in Section 15 of Township 3 South and Range 4 East as found on the USGS Desert Hot Springs, CA. 7.5' topographic quadrangle.

Please notify us of any sacred Native American sites that may be affected by the undertaking. A full description of this project can be found in our archaeological survey report, which is forthcoming. A response can be sent to our FAX, 909-884-2113. If you have any more questions or need to speak with me, please feel free to call me at 714.742.0468. Thank you for your time and effort!

Sincerely,

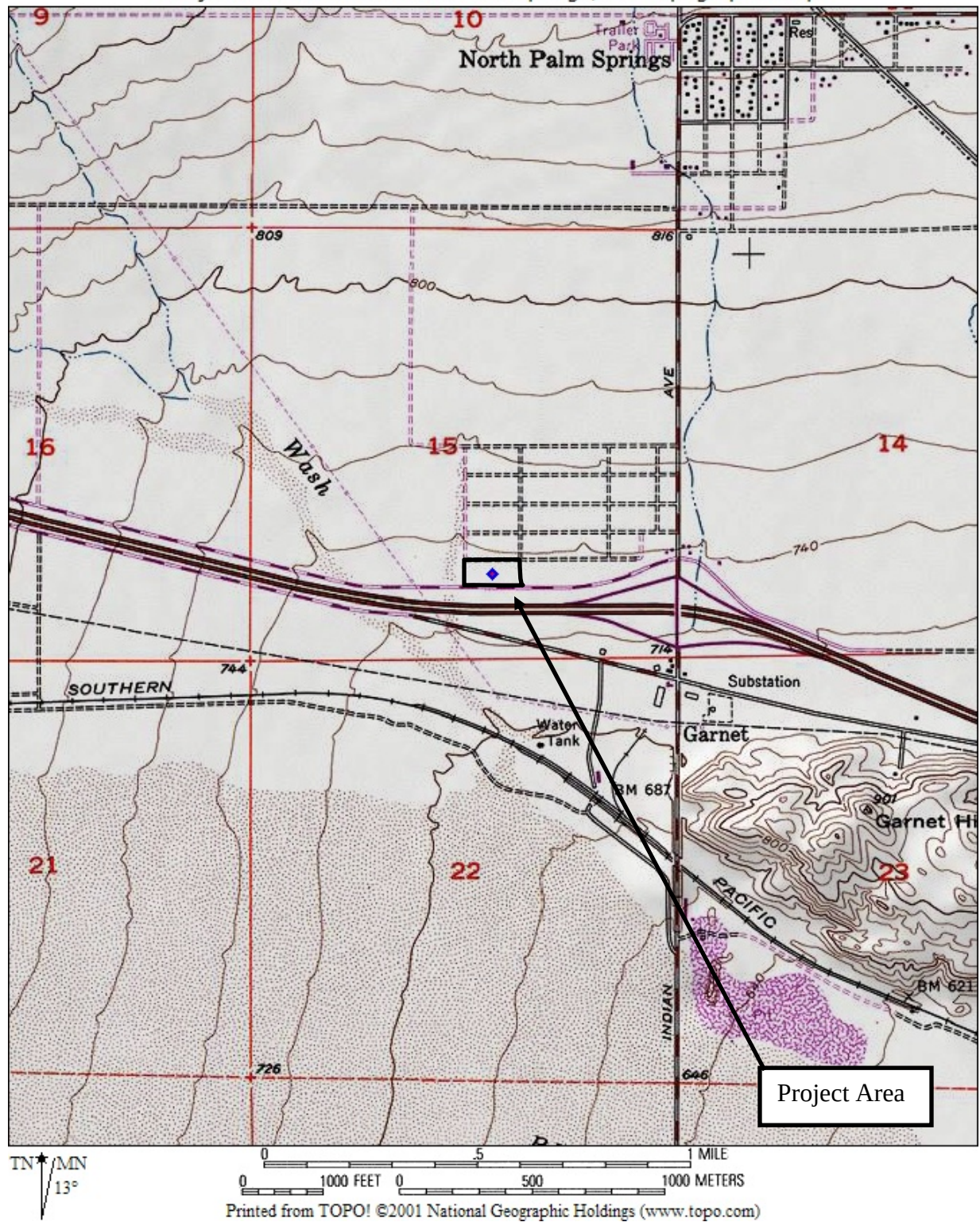
Michael H. Dice, M.A., R.P.A., Senior Archaeologist
Michael Brandman Associates
621 E Carnegie Drive Suite 100
San Bernardino, CA. 92408

Enclosures: Exhibit 1: Topographic Map

Q:\Michael Dice\2009 Projects\2749.0030.0\27490030 NAHC Letter.doc

MD:md

Project 2749.0030.0. Desert Hot Springs, CA. topographic map



Source: Topo! @National Geographic Holdings.



Michael Brandman Associates
2749.0030 • 9/2009 | CR Exhibit 1

Exhibit 1
Topographic Map
Rois Center Project • Cultural Resource RS

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
de_nahc@pacbell.net



September 21, 2009

Mr. Michael H. Dice, M.A., R.P.A., Senior Archaeologist

MICHAEL BRANDMAN ASSOCIATES

621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408

Sent by FAX to: 909-884-2113

Number of pages: 4

**Re: Request for a Sacred Lands File Search and Native American Contacts List for a Proposed,
Rays Center IS Project, located in the City of Palm Springs, Riverside County, California**

Dear Mr. Dice:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources (c.f. CA Public Resources Code §21070), was able to perform a record search of its Sacred Lands File (SLF) for the affected project area (APE) requested. The California Environmental Quality Act (CEQA; CA Public Resources Code Section 21000 – 21177) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." The NAHC SLF search did not indicate the presence of Native American cultural resources within one-half - mile radius of the project area (APE) of the proposed project (APE). There are, however, Native American cultural resources in close proximity to the APE.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and individuals as 'consulting parties' under both state and federal law.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. A Native American Tribe or Tribal Elder may be the only source of information about a cultural resource.. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation Coordinator's office (at (916) 653-7278, for referral to the nearest Information Center of which there are 11..

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 [f]) *et se*, and NAGPRA (25 U.S.C. 3001-3013), as appropriate. .

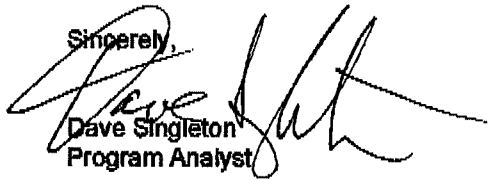
Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a

project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of 'historic properties of religious and cultural significance' may also be protected the under Section 304 of the NHPA or at the Secretary of the Interior' discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,


Dave Singleton
Program Analyst

Attachment: Native American Contacts List (NOTE: we further recommend that other forms of 'proof of mailing or proof of contact be utilized instead of 'Return Receipt Requested' Certified or Registered Mail.) Further, we suggest a follow-up telephone call to the contacts if the replies are not received or need clarification.

Native American Contact
Riverside County
September 21, 2009

Cabazon Band of Mission Indians
David Roosevelt, Chairperson
84-245 Indio Springs Parkway Cahuilla
Indio , CA 92203-3499
(760) 342-2593
(760) 347-7880 Fax

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 609 Cahuilla
Hemet , CA 92546
srtribaloffice@aol.com
(951) 658-5311
(951) 658-6733 Fax

Los Coyotes Band of Mission Indians
Francine Kupsch, Spokesperson
P.O. Box 189 Cahuilla
Warner , CA 92086
loscoyotes@earthlink.net
(760) 782-0711
(760) 782-2701 - FAX

Augustine Band of Cahuilla Mission Indians
Mary Ann Green, Chairperson
P.O. Box 846 Cahuilla
Coachella , CA 92236
(760) 369-7171
760-369-7161

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Morongo Band of Mission Indians
Michael Contreras, Cultural Heritage Prog. Coordinatr
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
mcontreras@monongo-nsn.
(951) 755-5025
(951) 201-1866 - cell
(951) 922-0105 Fax

Torres-Martinez Desert Cahuilla Indians
Mary Resvaloso, Chairperson
PO Box 1160 Cahuilla
Thermal , CA 92274
mresvaloso@torresmartinez.org
(760) 397-0300
(760) 397-8146 Fax

Torres-Martinez Desert Cahuilla Indians
Diana L. Chihuahua, Cultural Resources Coordinator
P.O. Box 1160 Cahuilla
Thermal , CA 92274
dianac@torresmartinez.org
760) 397-0300, Ext. 1209
(760) 272-9039 - cell (Lisa)
(760) 397-8146 Fax

Torres-Martinez Desert Cahuilla Indians
Ernest Morreo
PO Box 1160 Cahuilla
Thermal , CA 92274
maxtm@aol.com
(760) 397-0300
(760) 397-8146 Fax

Los Coyotes Band of Mission Indians
Melody Sees, Environmental Director
P.O. Box 189 Cahuilla
Warner , CA 92086
(760) 782-0712
(760) 782-2730 - FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code, and federal NEPA (42 USC 4321-4335), NHPA Sections 106, 4(f) (16 USC 470(f) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Royce Center IS Project, located in the City of Palm Springs, Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

**Native American Contact
Riverside County
September 21, 2009**

Agua Caliente Band of Cahuilla Indians THPO
Patricia Tuck, Tribal Historic Preservation Officer
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA 92264
ptuck@aguacaliente-nsn.gov
(760) 699-6907
(760) 699-6800
(760) 699-6924- Fax

Cahuilla Band of Indians
Luther Salgado, Sr.
PO Box 391760 Cahuilla
Anza, CA 92539
tribalcouncil@cahuilla.net
915-763-5549

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code, and federal NEPA (42 USC 4321-4335), NHPA Sections 106, 4(f) (16 USC 470(f)) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Roys Center IS Project; located in the City of Palm Springs; Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Michael H. Dice, RPA

Senior Cultural Resource Specialist/Project Manager

Overview

- 30+ years experience
- Master's degree, Anthropology – Arizona State University, Tempe. 1993
- Bachelor's degree, Anthropology – Washington State University, Pullman. 1986
- Registered Professional Archaeologist (RPA 2000)
- Registered Archaeologist in Orange County and Riverside County

Michael H. Dice, MA, Senior Cultural Resource Specialist and Project Manager, has more than 30 years experience performing record searches, archaeological surveys, archaeological site testing projects, and data collection projects on private and public lands in the Southwestern United States. He has authored or co-authored more than 150 Cultural Resources Inventory Reports required for CEQA and/or NEPA level documents including several manuscripts for the National Park Service. Michael has extensive experience with California Native American Tribes, having provided direct consultation and coordination with the Agua Caliente Band, Gabrielino Band, Juaneno Band, Morongo Band, and Pechanga Band.

Related Experience

High Desert Archaeological Projects

Sky Harbor Ranch Specific Plan Project. 2008. Town of Yucca Valley. Mr. Dice undertook an archaeological survey of 640 acres located south of the Town of Yucca Valley and bordering Joshua Tree National Park. Mr. Dice surveyed the entirety of the section with two staff archaeologists, then wrote the report and recorded a single historic archaeological site. The survey was undertaken for a Specific Plan in the Town.

The Barstow Industrial Park Project. 2007-2009. City of Barstow. MBA is preparing an EIR for a new logistics center to handle multi-modal transport of goods in and out of the Los Angeles Basin and throughout the country. The center, being developed by IDA Real Estate Group, will be located on 1,200 acres along the Mojave River west of the City of Barstow. Technical studies will be completed and integrated into the EIR that will be used by the City of Barstow and the various regulatory agencies involved in the permitting process. The cultural resource analysis was led by Mr. Dice and consisted of a Phase 1 survey and Phase II test of various historic and historic archaeological resources. The final cultural resource element to the project is the crafting of a Phase III (data collection through subsurface excavation) program consistent with scientific studies that have taken place in the region in previous years. More than 30 cultural resources have been identified in the project area and consultations with Native Americans have taken place since project inception.

An Archaeological Survey of the Mastro Property. 2007. Yucca Mesa Area, County of San Bernardino. Mr. Dice undertook a survey of 30 acres in the Yucca Mesa region of Joshua Tree. Several archaeological resources were detected and recorded onto DPR523a form sets. Mitigation measures were recommended that asked for test excavations before the property was approved for subdivision by the County.

The Foxfire Ranch Project. 2005. City of Victorville. Mr. Dice performed a Phase 1 Cultural Resource Survey of a 65-Acre Property at Tentative Tract #16574 (Foxfire Ranch), located near Cobalt and Dos Palmas Roads, Section 26 of T.5N R.5W, City of Victorville, Including Parcel #3094-131-02. Century-Crowell Communities.

Cultural Survey Report for Two Planned Ryland Homes Developments in the City of Victorville. 2004 and 2006. City of Victorville. Mr. Dice performed a Phase I Cultural Resources Assessment and Paleontological Records Review Tract Nos. 16496 and 16905 in the City of Victorville. Ryland Homes of Corona.

Phase I Cultural Resources Survey for the Victorville Acres Project, Tentative Tract 16847, City of Victorville, San Bernardino County. Mr. Dice prepared a cultural resource survey report for planned development in the City of Victorville. Van Daele Homes, Inc.

Project Archaeologist for the California Lightweight Pumice Makayla Mine Expansion. Mr. Dice undertook a Class III Intensive Field Survey of mining lease properties located within Sections 21 and 28, T21S/R38W, Coso Junction Area, County of Inyo, California. Wrote research design, direct survey and recordation of more than 20 obsidian scatter and two quarries in an area southeast of Olancho and west of Coso Junction. All Native American coordination flowed through the BLM-Ridgecrest Field Office.

Cultural Resource Survey Reports for the Palm Desert Rock Project, and the Coachella Aggregates Expansion Project, Coachella Valley, Riverside County. Mr. Dice prepared cultural survey and inventory reports for planned mining development in the County of Riverside. Requires Section 106 and County of Riverside General Plan concurrence through the County Archaeologist.

High Desert Water-Related Cultural Resource Management Projects

The Victor Valley Recycled Water Project 2004-2006. Mr. Dice served as the Project Archaeologist for a series of studies in Hesperia, Victorville, Apple Valley and the County of San Bernardino for a proposed subregional facilities project that will treat excess and sewage for recycling in the noted towns and communities. The project was completed for Bauer Consulting, Irvine, Ca. A records search, survey and mitigation recommendations were made as part of an EIR/EIS. Contact with the SWCB (Cookie Hearn, Archaeologist) were made as part of the Section 106 (Federal) compliance process.

Navajo Road Sewer Project 2002-2004. Mr. Dice served as the Project Archaeologist for a infrastructure improvement project in the Town of Apple Valley. A right-of-way for the new sewer was surveyed between the existing airport and the new Costco distribution center for Carter and Burgess Engineering of Fort Worth, Texas. Mr. Dice recommended testing and monitoring of the project

Professional Affiliations

- Member, California Historical Society
- Member, National Trust for Historic Preservation
- Certified County of Riverside Archaeologist
- Certified County of Orange Archaeologist

Arabesque Said

Staff Archaeologist

Overview

- 5 Years Experience
- Bachelor's degree, Anthropology – University of California, Riverside, California

Arabesque Said, BA, has been working in the archaeological field since 2004. She has conducted numerous pre-field assessments, archival research, pedestrian field surveys, site evaluation and testing, and data recovery and analysis. As an Archaeological crew member for the URS Corporation she has gained expertise in both prehistoric and historical site testing. Her projects have included testing on both private and public land throughout the Southwest and have allowed her to build relationships with various federal and state level entities.

Related Experience

Historical, Archaeological and Paleontological Resources

Solar 1, Mojave Desert, County of Riverside. Archaeological crew member for a 6,500 acre pedestrian survey for prehistoric and historic sites. This Phase I cultural resources survey was conducted on BLM land for a solar energy field that will include approximately 20,000 solar dishes by SES (Stirling Energy Systems).

Solar 2, Yuha Desert, County of Riverside. Archaeological crew member for a 7,500 acre pedestrian survey for prehistoric and historic sites. This Phase I cultural resources survey was conducted on BLM land for a solar energy field that will include approximately 20,000 solar dishes by SES (Stirling Energy Systems).

Chuckwalla Valley Project, Chuckwalla Valley, County of Riverside. Archaeological crew member for a 5,200 acre pedestrian survey for prehistoric and historic sites. Located previously recorded sites, taking and recording photographs of site and artifacts, and creating site map.

Redland Crossing Walmart EIR, Redlands, County of Riverside. Archaeological Field assistant for testing of numerous historical sites through out Redlands as part of the EIR process. Conducted excavation of trenches, artifact collection, screening and sidewall profile drawing with costs of \$28,000.

EIR/EA- 800MHz Radio Tower Sites Project, Riverside County, CA. Currently assisting with the cultural resources assessment and technical reports for the Radio Tower project through out Southern California and Arizona. The Environmental Impact Report, Environmental Assessment and all related studies are for developing 75 800MHz radio tower sites throughout the County of Riverside. An opportunity and constraints analysis was conducted on each site using a specific set of criteria to determine which sites could be eliminated immediately due to a particular constraint (i.e., proximity to a known fault, habitat for a threatened or endangered species, proximity to a known site of significant cultural resource, land use constraints, etc.) and which sites could realistically be developed. The analysis included a summary of potential permitting requirements at the state, federal, and local levels.

Phase I Archaeological Survey 11-acres, City of Wildomar, CA. Currently assisting with the cultural resources assessment and phase 1 report for the development of an 11-acre site in Wildomar.



Kotake Trust

Via Certified United States mail

County of Riverside
Economic Development Agency
Claudia Steiding
3133 Mission Inn Avenue
Riverside, CA 92507

Date: October 26, 2009

Subject: Project Site - Instillation of 3 - 5,000 gallon septic tanks
19533 Mclane Street
Palm Springs, CA

Reference: Notice of Intent to a adopt a Negative Declaration
Geotechnical Study prepared by Consolidated Engineer Laboratories
Proposed site plan of project

Dear Ms. Claudia Steiding,

Although I see the need for your departments services in our area, and I understand the difficulties to find a suitable site; regretfully the North Palm Springs Business Center is not the place. The County of Riverside and its' project is in conflict of the land use.

I represent a trust that owns several properties located in the North Palm Springs Business Center. The area is zoned a Regional Business Center and I am sure habitation is not allowed on the premises. Properties located in the Business Center had been subdivided into half acre and above. All of the buildings in the center are on a septic system and there no sewer lines in the immediate area to tap into.

In reference to the department's plans for (I assume) 120 individuals - single men, single women, families and 30 employees will occupy the above mention facility at any given time. This plan is not suited for this use. It is my opinion that the Phase II of the department's plans to construct a kitchen, washing facility, extra toilets, showers and I assume a laundry facility, would taxed the soil in the immediate and surrounding areas. Yet the department has not stated or estimated the amount of raw sewage and or non - potable water that will be discharge into the septic system and ultimately end up in the leach line and in the soil.

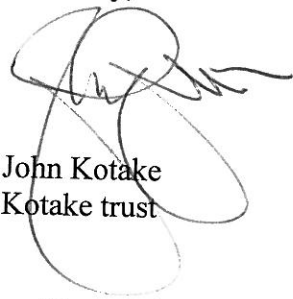
Please be advised that the outdated geological study prepared by Consolidated Engineer Laboratories was submitted for the purpose to evaluate the site for an industrial

warehouse and should not be used as a reference to the negative declaration. Although the study's conclusion ultimately allowed the construction of the subject building, I found that the scope of the study did not include any percolation tests. I would like to know if the county has done their due diligence to find out if the soils are able to retain the discharge from the facility, or what would happen to the soil if it became supersaturated. The soil also is porous. Is there a chance that the discharge can leach and contaminate to the ground water? Please note that the ground water is only located approximately 230 to 330 feet, as explained in the study.

I also examined the site plans for the project and did not find a pretreatment system for the discharge from the kitchen facility. Does the project address the reduction of BOD (Biochemical oxygen demand) before the non – potable water is discharged in to the septic system?

Lastly, if the county is going to adamantly pursue the project, I would ask if the county would be neighborly and pump the septic tanks during weekends and on off business hours. I thank you for your time, and I await your reply.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Kotake', written over a circular stamp or seal.

John Kotake
Kotake trust

cc. North Palm Springs Business Association
AES Wind Generation, Inc.

major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following: (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration; (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration; (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or, (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Claudia Steiding 9/29/09
Signature Date
Se. Env. Planner For County of Riverside

Claudia Steiding
Senior Environmental Planner
County of Riverside Economic Development Agency

COUNTY OF RIVERSIDE

ENVIRONMENTAL ASSESSMENT FORM: INITIAL STUDY

Environmental Assessment (E.A.) Number: EA08510003957

Project Case Type (s) and Number(s): N/A

Lead Agency Name: County of Riverside Economic Development Agency

Address: 3133 Mission Inn Avenue, Riverside, CA 92507

Contact Person: Claudia Steiding, Senior Environmental Planner

Telephone Number: 951-955-8174

Email: CSteiding@rivcoeda.org

Applicant's Name: County of Riverside Economic Development Agency

Applicant's Address: 3133 Mission Inn Avenue, Riverside, CA 92507

I. PROJECT INFORMATION

Project Description: The County of Riverside's Economic Development Agency (EDA) is proposing modification improvements to an existing septic sewer system for Roy's Desert Resource Center homeless shelter located at 19533 McLane Street in the City of Palm Springs, California (See Exhibits 1 through 3).

Background:

The Project's Phase I development involved the existing facility known as the Mental Health Safe Haven and Full Service Partnership Clinic. Owned and operated by the Coachella Valley Multi-Services Center (CVMSC), this facility occupies a total of 13,448 square feet, of the eastern portion of the existing building and has the current capability of accommodating up to 25 homeless, single men and women. The facility is comprised of 7,908 square feet for housing, kitchen and dining amenities and another 5,540 square feet dedicated for the full service Partnership Clinic, which consists of a doctor's office, a nurse's office, a triage, chart room, an administrative office with office cubicles, private offices, and file/storage space. Currently, Phase I development utilizes a 4,000 gallon septic tank, which adequately serves the project's size. Phase I development is completed at this time.

The Phase II development involves the western portion of the existing 47,000 square foot building, and is named as Roy's Desert Resource Center, in honor of the County's late Supervisor Roy Wilson. This facility will occupy 20,546 square feet and will be able to accommodate up to 120 single men, single women, and families. Phase II will be managed by a total of 30 employees. Currently, the facility has one (1) 1,500 gallon septic tank, which is undersized to serve the Roy's Desert Resource Center. Therefore, in order to serve Roy's Desert Resource Center the proposed Project will consist of the proposed Phase II development, replacing the existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and associated seepage pits. This modification improvement would be located between the facility's existing building and the existing building located to the north (Refer to Exhibits 4 and 5). Overall, this would add to a total septic tank capacity of 19,000 gallons. Roy's Desert Resource Center is scheduled to open in December 2009 and will be operated and maintained by the Coachella Valley Association of Governments (CVAG).

A. Project Location and Assessor Parcel Numbers (APNs)

The Project site consists of one parcel: APN 666-411-011 totaling approximately 3.53 acres and is located at 19533 McLane Street in North Palm Springs, California.

Type of Project: Site Specific ☒; Countywide ☐; Community ☐; Policy ☐.

B. Total Project Area: 3.53 acres

Industrial/Commercial Acres: 3.53 **Lots:** 1 **Sq. Ft. of Bldg. Area:** 20,546 **Est. No. of Employees:** 30

C. Assessor's Parcel No(s): 666-411-011

D. Street References: The Project site is located at the southwest corner side of McLane Street, approximately 0.45 miles west of Indian Avenue in the City of Palm Springs, California. The site location is at 19533 McLane Street.

E. Section, Township & Range Description or reference/attach a Legal Description: Section 15, Township 3 South, Range 4 East. Latitude/Longitude: 33° 54' 21.23" North/116° 33' 11.98" West.

F. Brief description of the existing environmental setting of the project site and its surroundings: The Project site consists of the replacement of one (1) 1,500 gallon septic tank with three (3) 5,000 gallon septic tanks and seepage pit expansion on 3.53 acres at 19533 McLane Street. The facility is owned and operated by Riverside County's Economic Development Agency (EDA) for the purpose of providing shelter care and assistance to the homeless. Surrounding land uses consist of an existing industrial/commercial building to the north, a vacant-graded undeveloped pad to the east, Interstate 10 freeway to the south, and vacant undeveloped land to the west.

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

A. General Plan Elements/Policies:

- 1. Land Use:** The entire 3.53 acre property is located in the City of Palm Springs and the project will adhere to the goals and policies of the County of Riverside's General Plan. The Project is consistent with the City's General Plan.
- 2. Circulation:** Access to the Project site is off of McLane Street and is consistent with the Goals and Policies of the City's Circulation Element and the County Fire Department.
- 3. Multipurpose Open Space:** Not Applicable
- 4. Safety:** The proposed septic sewer improvement modifications to the existing facility would adhere to the policies pertaining to flood, fire, hazardous waste and seismic hazards as outlined in the Safety Element of the County of Riverside General Plan.
- 5. Noise:** The Project will comply with the County of Riverside regarding construction work hours.

6. **Housing:** The Project site does not contain residential use designated land and is not located adjacent to existing residences. All immediate land uses adjacent to the site are of non-residential land use designation.
7. **Air Quality:** The Project will adhere to the goals and policies for projects located within the Salton Sea Air Basin (SSAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

B. General Plan Area Plan(s): Western Coachella Valley

C. Foundation Component(s): N/A

D. Land Use Designation(s): Regional Business Park

E. Overlay(s), if any: None

F. Policy Area(s), if any: None

G. Adjacent and Surrounding Area Plan(s), Foundation Component(s), Land Use Designation(s), and Overlay(s) and Policy Area(s), if any: District 4 Redevelopment Zone.

H. Adopted Specific Plan Information

1. **Name and Number of Specific Plan, if any:** None

2. **Specific Plan Planning Area, and Policies, if any:** None

I. Existing Zoning: Service/Manufacturing Zone (M-1)

J. Proposed Zoning, if any: None

K. Adjacent and Surrounding Zoning: Service/Manufacturing Zone (M-1) (west of Project site), Planned Research and Development Zone (MIP) (south of Project site and south of Interstate 10 freeway) and Service/Manufacturing Zone (M-1) (east of project site).

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

IV. DETERMINATION

On the basis of this initial evaluation:

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS NOT PREPARED
☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project, described in this document, have been made or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS PREPARED
☐ I find that although the proposed project could have a significant effect on the environment NOTHING FURTHER IS REQUIRED because all potentially significant effects (a) have been adequately analyzed in an earlier Environmental Impact Report (EIR) or Negative Declaration pursuant to applicable legal 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.
☐ I find that although all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none of the conditions described in California Code of Regulations, Section 15162 exist. An ADDENDUM to a previously-certified EIR or Negative Declaration has been prepared and will be considered by the approving body or bodies.
☐ I find that at least one of the conditions described in California Code of Regulations, Section 15162 exist, but I further find that only minor additions or changes are necessary to make the previous EIR adequately apply to the project in the changed situation; therefore a SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT is required that need only contain the information necessary to make the previous EIR adequate for the project as revised.
☐ I find that at least one of the following conditions described in California Code of Regulations, Section 15162, exist and a SUBSEQUENT ENVIRONMENTAL IMPACT REPORT is required: (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) Substantial changes have occurred with respect to the circumstances under which the project is undertaken which will require

major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following:(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration;(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or,(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Signature

Date

For

Claudia Steiding
Senior Environmental Planner
County of Riverside Economic Development Agency



Source: Census 2000 Data, The CaSIL, MBA GIS 2009.



Source: Google Earth Pro Aerial (January, 2006).



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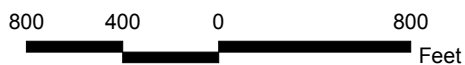
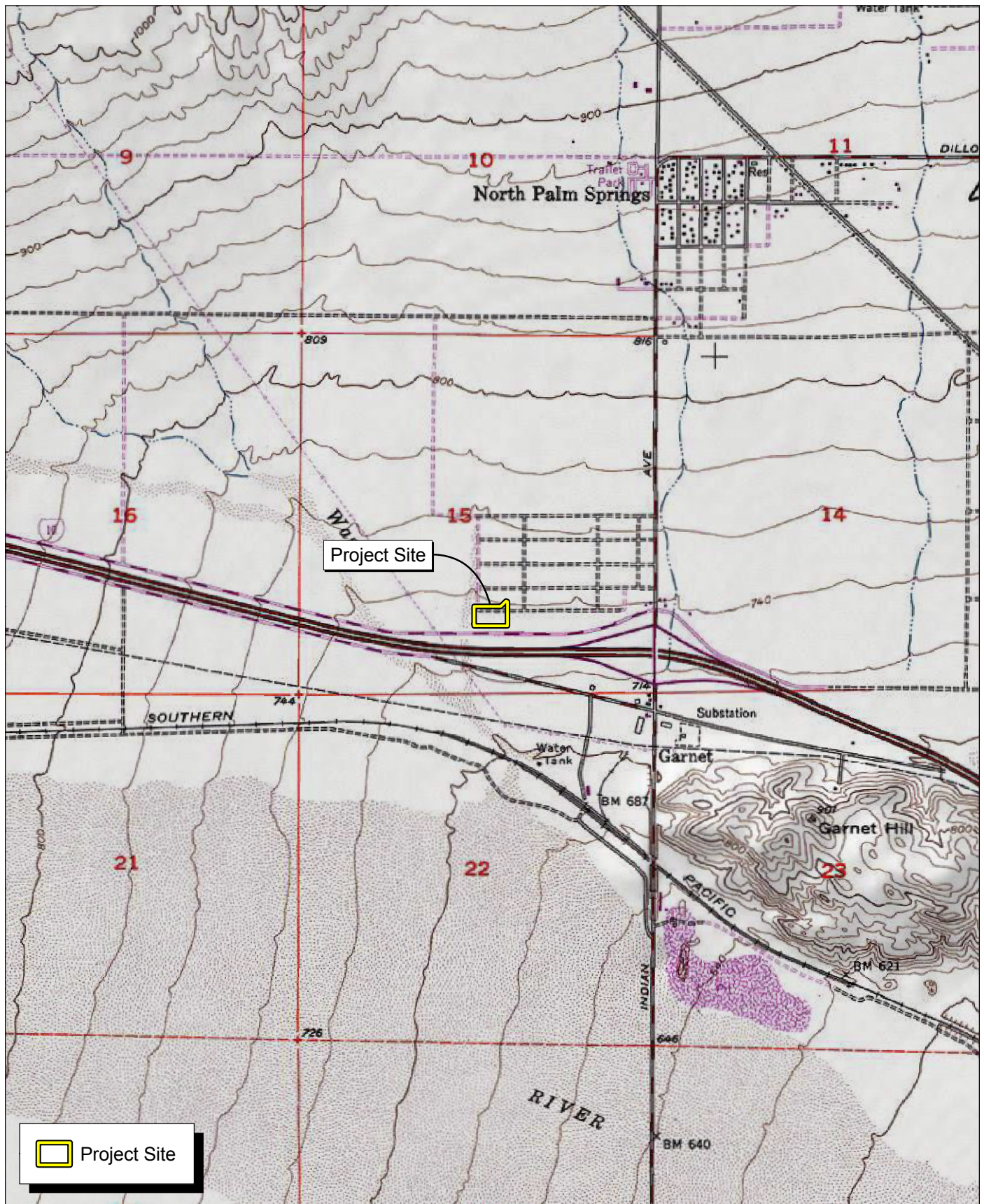


Exhibit 2 Local Vicinity Map Aerial Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Source: TOPO! Desert Hot Springs (1978) 7.5' DRG.

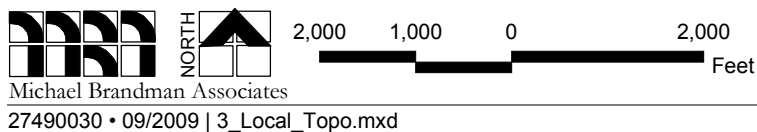
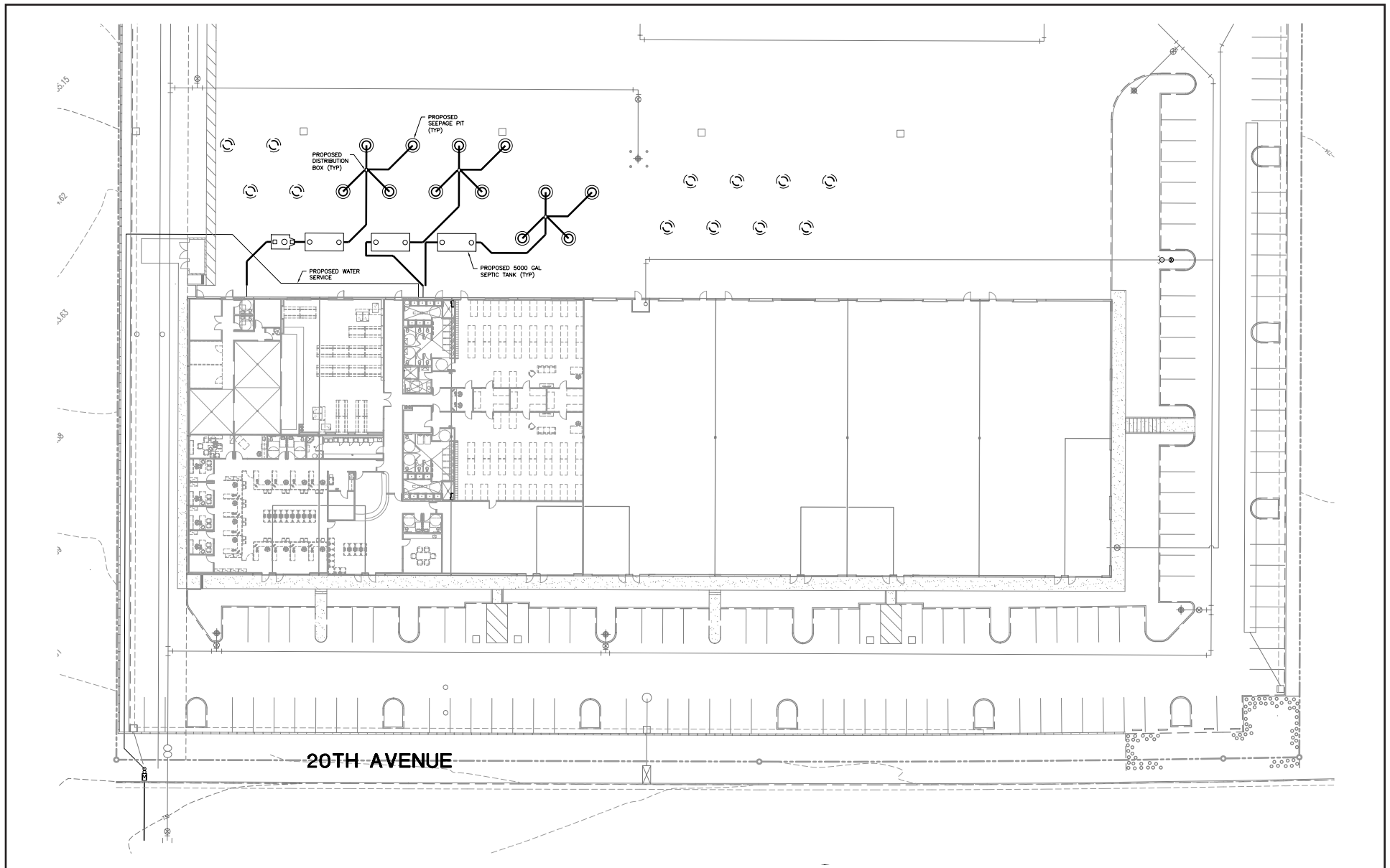


Exhibit 3 Local Vicinity Map Topographic Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Source: MSA Consulting, Inc. (2009).



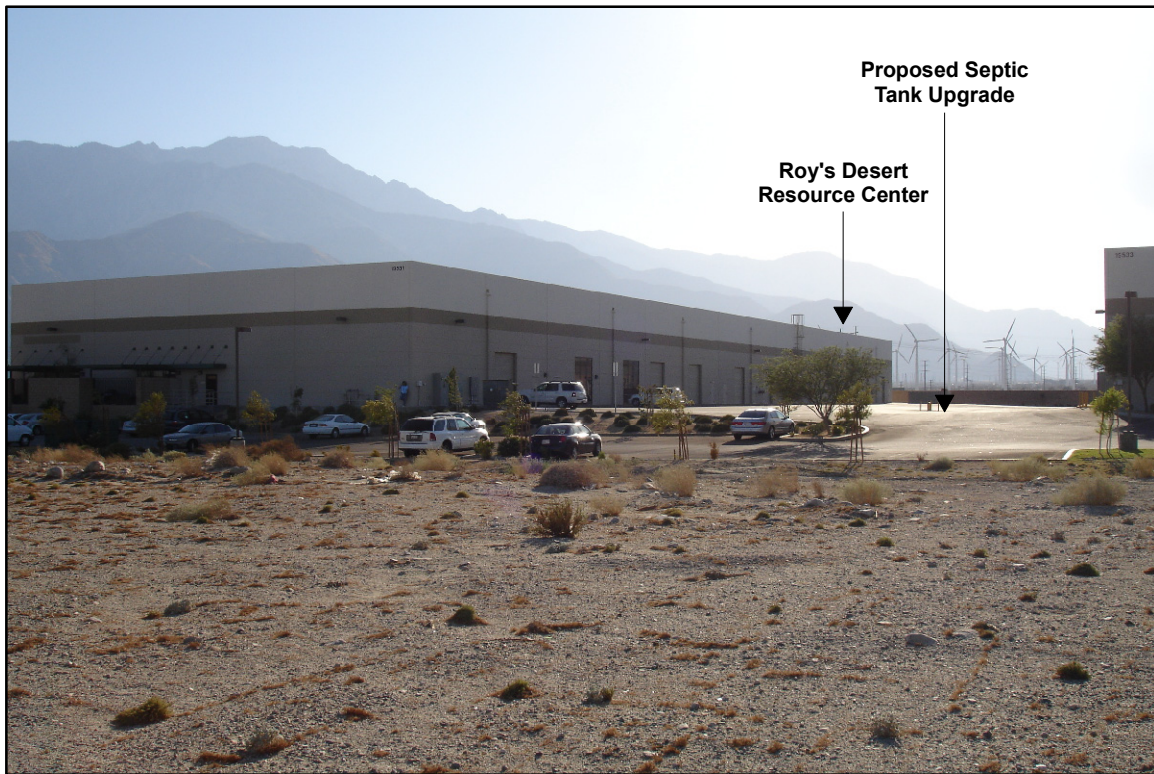
25 12.5 0 25 Feet

Michael Brandman Associates

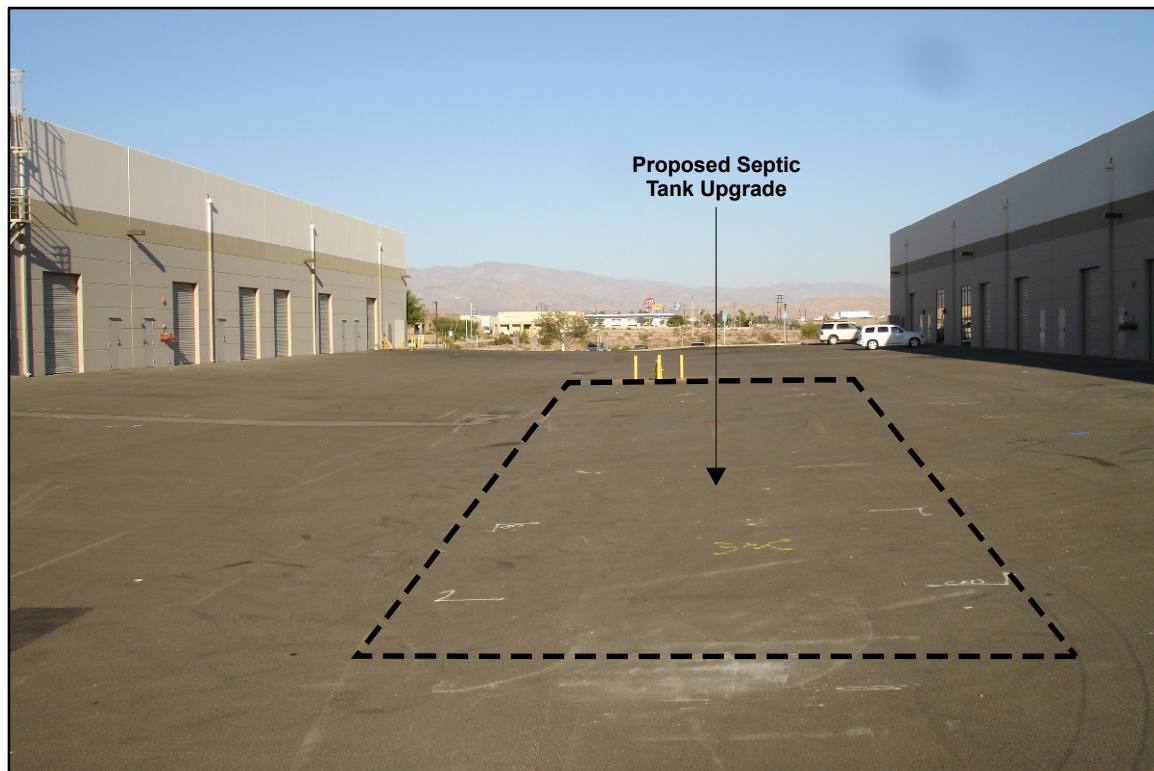
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Exhibit 4 Conceptual Site Plan

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Photograph 1: Looking west toward the project site.



Photograph 2: Facing proposed septic tank within the project site.

Source: Michael Brandman Associates, 2009.



Michael Brandman Associates

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Exhibit 5 Site Photographs

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the Proposed Project and to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. In accordance with California Code of Regulations (CCR), Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the County of Riverside, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration (MND), or an EIR is required for the Proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the Proposed Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS Would the project				
1. Scenic Resources	☐	☐	☐	☒
a) Have a substantial effect upon a scenic highway corridor within which it is located?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?	☐	☐	☐	☒

Source: Caltrans California Scenic Highway Mapping System. County of Riverside, Riverside County Integrated Project (RCIP) Figure C-7 "Scenic Highways".

Findings of Fact:

- a-b) The proposed Project involves the installation of the (3), 5,000 gallon septic tanks with seepage pits to an existing developed, paved surface of land and located between the facility's existing building and the existing adjacent building to the north (Refer to Exhibits: 4 and 5). The Project is not located within a scenic corridor, nor considered as a scenic resource. The Project's installation of septic tanks and seepage pits will be located underneath the existing truck parking lot with no visual obstructions created. Therefore, the Project will not have an impact to scenic resources. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

2. Mt. Palomar Observatory☐☐☐☒

a) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?

Source: RICP; TG; Ord. No. 655

Findings of Fact:

- a) Light pollution occurs when an over abundance of artificial illumination enters the night sky and reflects off of airborne water droplets and dust particles causing a condition known as skyglow. It occurs when glare from improperly aimed and unshielded light fixtures cause uninvited illumination to cross over into adjacent property lines. The Mt. Palomar Observatory is located in San Diego County and requires limited nighttime lighting requirements in order for the night sky to be observed clearly. The proposed Project is located approximately 41 miles northeast of the Observatory. The proposed improvements include the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and seepage pits. The Project site is not within and will not affect the Mt. Palomar Nighttime Lighting Overlay Area. Therefore, the Project would not impact the Observatory's night sky viewing ordinance.

Mitigation: None required.

Monitoring: None required.

3. Other Lighting Issues☐☐☐☒

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

b) Expose residential property to unacceptable light levels?

☐☐☐☒

Source: RCIP; Proposed project description, site evaluation.

Findings of Fact:

- a-b) The Project's proposed installation of septic tanks and seepage pits will not involve the installation of permanent outdoor lighting and would not expose residential property to unacceptable light levels. There are no proposed modifications to the exterior lighting. There are no existing residences within close proximity to the Project site. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE RESOURCES Would the project				
4. Agriculture	☐	☐	☐	☒
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 (FMMP) of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing agricultural use, or a Williamson Act (agricultural preserve) contract (Riv. Co. Agricultural Land Conservation Contract Maps)?	☐	☐	☐	☒
c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?	☐	☐	☐	☒
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Source: RCIP Figure OS-17 "Agricultural Resources", GIS database and Project Materials.

Findings of Fact:

a-d) The project site is located in a developed portion of land currently designated as Service/Manufacturing (M-1) in the City of Palm Springs Zoning Ordinance. However, the Project is under jurisdiction of the County of Riverside. The Department of Conservation Farmland Mapping and Monitoring Program (FMMP) designates the site as Urban and Built-Up Land. The Project site is not located within an agricultural preserve or within a Williamson Act contract area. Therefore, no adverse agriculture impacts will occur as a result of the proposed Project

Mitigation: None required.

Monitoring: None required.

AIR QUALITY Would the project				
5. Air Quality Impacts	☐	☐	☒	☐
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors, which are located within 1 mile of the project site to project substantial point source emissions?	☐	☐	☒	☐
e) Involve the construction of a sensitive receptor located within one mile of an existing substantial point	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
source emitter?				
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
g) Result in an increase in greenhouse gas emissions that would significantly hinder or delay the State's ability to meet the reduction targets contained in AB 32?	☐	☐	☒	☐
h) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Source: Proposed project description, site evaluation

Findings of Fact:

- a-h) Less than Significant Impact. The proposed project would generate short-term emissions during construction. Such emissions would include exhaust emissions from construction equipment and worker and delivery vehicles as well as fugitive dust generated during the construction process. Exhaust emissions are controlled by the rules promulgated by the CARB while fugitive dust emissions are controlled by SCAQMD Rule 403. Rule 403 requires the application of best management practices such as watering disturbed areas, restricting onsite traffic to 15 miles per hour or less, and cessation of soil disturbing activities when wind speeds exceed 25 miles per hour. The construction of the proposed project must adhere to the requirements of Rule 403.

Short-term construction emissions from the proposed project were estimated during three construction activities: demolition of the existing septic tank area, replacement of the existing septic tank with three new ones, and the asphalt paving of the finished surface. The estimated construction emissions are shown in Table 1. The determination of the environmental significance of the project's construction emissions was determined by comparing the estimated emissions with the regional emission significance thresholds defined by the SCAQMD for construction activities which are also shown in Table 1.

Table 1: Estimated Daily Short-term Construction Emissions

Construction Activity	Emissions (pounds per day)(1)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Demolition	4	35	16	0	8	3
Tank Replacement	0	4	2	0	2	1
Asphalt Paving	3	9	15	0	1	1

Table 1: Estimated Daily Short-term Construction Emissions (Cont.)

Construction Activity	Emissions (pounds per day)(1)					
	VOC	NOx	CO	SOx	PM10	PM2.5

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
Max emissions in 1 day	4	35	16	0	8	3
Regional Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Note: (1) Emissions shown assume compliance with applicable emission regulations. The PM10 and PM2.5 fugitive dust emissions are in the “mitigated” output in URBEMIS because the project would comply with dust control measures as specified in SCAQMD Rule 403.						

As shown in Table 1 above, the short-term construction emissions from the proposed project would not exceed any SCAQMD regional emission significance threshold during construction. Furthermore, the Project will not generate odors and due to the scale of the Project, will not impact plans to reduce greenhouse gas emissions. Therefore, Project impacts are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

BIOLOGICAL RESOURCES	Would the project			
6. Wildlife & Vegetation	☐	☐	☐	☒
a) Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	☐	☐	☐	☒
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	☐	☐	☐	☒
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U. S. Wildlife Service (USFWS)?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) 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 CDFG or USFWS?	☐	☐	☐	☒
f) Have a substantial adverse effect on federally	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Source: MBA Consistency Analysis.

Findings of Fact:

a-g) No impact. The Project site is a 3.53 acre lot which is developed. The Proposed project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. No open space or undeveloped land would be involved with the installation of the septic tanks and seepage pits. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

CULTURAL RESOURCES Would the project				
7. Historic Resources	☐	☐	☐	☒
a) Alter or destroy an historic site?				
b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	☐	☐	☐	☒

Source: MBA Consistency Analysis. Native American Heritage Commission (NAHC).

Findings of Fact:

a-b) No impact. The Project site is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Thus, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

8. Archaeological Resources	☐	☐	☐	☒
a) Alter or destroy an archaeological site.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
California Code of Regulations, Section 15064.5?				
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
d) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☒

Source: MBA Consistency Analysis. MBA Records Search.

Findings of Fact:

- a, d) There are no archaeological sites or existing religious or sacred uses within the Project site as it is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.
- b, c) MBA conducted a archaeological records search of the Project site and found no documentation of archaeological resources being located on or near to the Project site. In addition, a records search was performed by the Native American Heritage Commission's Sacred Lands File (SLF) and concluded that no sites were found within or near to the Project site. (Appendix B).

Furthermore, the Project site is already graded and developed; and chances are minimal that archaeological resources would be encountered during the installation of the septic tanks, since the area would have had a better chance of finding archaeological resources in the initial construction phase for existing buildings. Nevertheless, the potential exists for sub-surface archaeological resources to be uncovered during excavation, grading, and other construction related activities for the three septic tanks.

As a standard procedure in the event that a sub-surface archaeological artifact were to be uncovered during project construction or ground-disturbing activities, the find would be redirected until the nature and extent of the find could be evaluated by a qualified archaeologist. As applicable, resources would be collected, curated, and provided to the Eastern Information Center at the University of California at Riverside. The archeologist would then coordinate with local Native American groups as necessary if tribal artifacts were found. Therefore, project impacts with regard to disturbing human remains will be less than significant.

Mitigation: None required.

Monitoring: None required.

9. Paleontological Resources	☐	☐	☐	☒
a) Directly or indirectly, destroy a unique				

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

paleontological resource, or site, or unique geologic feature?

Source: Riverside County TLMA GIS.

Findings of Fact:

- a) The Project site has a low potential for paleontological resources. The Project site is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. Therefore, no impacts are foreseen from Project development and no mitigation is required.

Mitigation: None required.

Monitoring: None required.

GEOLOGY AND SOILS Would the project

10. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones	☐	☐	☒	☐
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?	☐	☐	☒	☐
b) Be subject to 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?	☐	☐	☒	☐

Source: Geotechnical Engineering Study. Consolidated Engineering Laboratories. September 4, 2003 (Appendix A)

Findings of Fact:

- a-b) The Project site is roughly 739 feet above sea level and is relatively flat. As indicated in the Geotechnical Engineering Study (Appendix A), soils are consistent of Quaternary-aged, alluvial deposits consisting of unconsolidated stream, river channel and alluvial fan deposits with local eolian sands. No known active faults transect the Project site. The Project site is not located within the Alquist-Priolo Special Studies or County Fault Hazard Zones. The nearest active fault is the Banning segment of the San Andreas Fault system, which is located 1.0 mile north of the Project site. The Project does not involve structural building, but involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, impacts from the proposed Project are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

11. Liquefaction Potential Zone	☐	☐	☒	☐
a) Be subject to seismic-related ground failure,				

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

including liquefaction?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A); Riverside County TLMA GIS (Liquefaction Map).

Findings of Fact:

- a) In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction. As indicated in the Geotechnical Engineering Study, six bore holes were drilled to a maximum of 41.5 feet in depth and did not encounter groundwater, which would suggest groundwater levels to below 50 feet in depth. Nonetheless, laboratory and field data gathered in the Geotechnical Engineering Study concluded that the Project site does not have the potential for liquefaction to occur. Therefore, impacts from the proposed Project are considered less than significant.

Mitigation: None required.

Monitoring: None required.

12. Ground-shaking Zone

☐ ☐ ☒ ☐

- a. Be subject to strong seismic ground shaking?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Western Coachella Valley is traversed by several active and potentially active fault zones, including the San Andreas Fault, and has experienced several earthquakes of moderate magnitude since records have been kept. The primary seismic hazards, which result, are ground shaking and the potential for ground rupture along the surface trace of the fault. Secondary seismic hazards result from the interaction of ground shaking with existing soil and bedrock conditions, and include liquefaction, settlement, and landslides. The nearest active fault is the San Andreas Fault, which is located 2.46 miles northeast of the project site. At that distance, strong ground shaking can still be expected at the Project site.

Although the Project site is located within a ground-shaking zone, the Project does not involve any additional structural buildings to be constructed other than the installation of three septic tanks and seepage pits.

Furthermore, the Geotechnical Engineering Study (originally prepared in 2003) already addressed geologic issues with mitigation for the development of the Project area's existing buildings and parking lot and included mitigation in addressing the installation of existing septic tanks and seepage pits. Therefore, in compliance with proper Cal OSHA grading methods and with the County of Riverside grading requirements during

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

temporary excavations for the septic tanks, there will be a less than significant impact as a result of the project.

Mitigation: None required.

Monitoring: None required.

13. Landslide Risk

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a) 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, collapse, or rockfall hazards?

Source: WCVAP Figures 15, "Steep Slopes" and 16, "Slope Instability"; Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Project site is not affected by landslide or rock falling risks. Topography on the site is generally flat, without boulders or steep slopes. Therefore, there is no impact associated with the Proposed Project.

Mitigation: None required.

Monitoring: None required.

14. Ground Subsidence

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a) 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 ground subsidence?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Geotechnical Engineering Study indicated that the Project site has a moderate susceptibility for settlement due to consolidation and dynamic compaction. However, laboratory and field data gathered at the site does not indicate near surface soils in the upper 15 feet to be susceptible to collapse. Nevertheless, as indicated above (Section 12a), the Project will comply with proper Cal OSHA grading methods and with the County of Riverside grading requirements during temporary excavations for the septic tanks. Therefore, Project impacts with regard to ground subsidence will be considered as less than significant.

Mitigation: None required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Monitoring: None required.

15. Other Geologic Hazards

a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

☐	☐	☐	☒

Source: Site visit. Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

a) The Project is not affected by a geological hazard such as seiche, mudflow or volcanic hazard, since the site is not located near a body of water (seiche), steep topography (with mudflow potential) or volcanic hazards. Therefore, there is no impact to the Project with regard to other geologic hazards.

Mitigation: None required.

Monitoring: None required.

16. Slopes

a) Change topography or ground surface relief features?

☐	☐	☐	☒

b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?

☐	☐	☐	☒

c) Result in grading that affects or negates subsurface sewage disposal systems?

☐	☐	☒	☐

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A). Staff Review, and Site Visit

Findings of Fact:

- a-b) The Project will not change the topography or create cut or fill slopes since the Project site is already developed. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the project.
- c) Grading has already been performed for the Project area at the time the existing building was constructed. Existing septic tank and seepage pit facilities for the building were already in place, and would be able to offer additional of septic sewer infrastructure installation if needed. Since the Project area was developed in compliance with mitigation listed in the Geotechnical Engineering Study, the Project site will only need to comply with proper Cal OSHA grading methods and County

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

of Riverside grading requirements during construction . Therefore, Project impacts in negating the operability of subsurface sewer disposal systems will be less than significant.

Mitigation: None Required.

Monitoring: None Required.

17. Soils	☐	☐	☐	☒
a) Result in substantial soil erosion or the loss of topsoil?				
b) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A). Staff Review, and Site Visit

Findings of Fact:

- a) The Project site is not affected by significant topography, surface features or slopes or expansive soils. The Project site is currently developed in which septic tank and seepage pit installation will occur underneath the existing parking lot (Refer to Exhibit 5). Therefore, there will be no impact.
- b) As indicated in Geotechnical Engineering Study, Project site soils are sandy and non-expansive. Therefore, impacts associated with expansive soils will not occur.

Mitigation: None Required.

Monitoring: None Required.

18. Erosion	☐	☐	☐	☒
a) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?				
b) Result in any increase in water erosion either on or off site?	☐	☐	☐	☒

Source: Staff Review, and Site Visit

Findings of Fact:

- a-b) The Project site is currently developed. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot, which

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

has existing storm drainage installed. Therefore, there will be no impact as a result of the Project.

Mitigation: None Required.

Monitoring: None Required.

19. Wind Erosion and Blows sand from project either on or off site.

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☐

a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?

Source: Site visit.

Findings of Fact:

- a) The Project site is currently developed in which septic tank and seepage pit installation will occur underneath an existing parking lot. As shown in Exhibit 5, roughly 11,000 square feet of soil would be temporarily exposed with the removal of asphalt during installation. Exposure of soils will be temporary, with occasional exposure to high winds, which are common to the region. However, since the Project is a temporary operation, and that appropriate dust suppression measures, per Air Quality Management District (AQMD's) Rule 403.1 (i.e. tarp covers) will be applied, impacts with regard to wind erosion will be reduced to less than significant.

Mitigation: None required.

Monitoring: None required.

HAZARDS AND HAZARDOUS MATERIALS Would the project

20. Hazards and Hazardous Materials

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

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

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☐

c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?

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

☐
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e) 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

☐
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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

environment?

Source: California State Water Resources Control Board Geo Tracker. 2008. Staff Review, and Site Visit.

Findings of Fact:

- a,b) The Project site will not create a significant hazard to the public through the routine transport or from accidental release of hazardous substances. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot for the purpose of sewage containment. Furthermore, the Project site plans will be submitted for review and approval by the California Regional Water Quality Control Board Colorado River Basin Region (CRWQCB) to assure that installation of septic tanks and seepage pits will not contaminate the local groundwater aquifer. Therefore Project impacts are considered to be less than significant.
- c) The Project will not impair implementation of, or interfere with an adopted emergency response or evacuation plan. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impacts as a result of the Project.
- d) The Project will not emit hazardous emissions or handle acutely hazardous materials within one-quarter mile of an existing or proposed school. The nearest school is the Grace Christian Learning Center, which is located 3.43 miles northwest of the Project site. Therefore, there will be no impacts as a result of the Project.
- e) The State Water Resources Control Board GeoTracker Database indicates that no evidence of listed hazardous materials site(s) exist within or near to the Project site. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

21. Airports	☐	☐	☐	☒
a) Result in an inconsistency with an Airport Master Plan?	☐	☐	☐	☒
b) Require review by the Airport Land Use Commission?	☐	☐	☐	☒
c) 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?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Source: RCIP Figure S-19 "Airport Locations"

Findings of Fact:

- a-d) The Project site is not within an airport influence area boundary or otherwise affected by airport issues as identified in the Western Coachella Valley Area Plan (WCVAP). The nearest airport is Palm Springs International Airport, which is located 5.13 miles to the southeast. Therefore, there will be no conflicts with an airport land use plan as a result of the Project and no impacts will occur as a result of the Project.

Mitigation: None required.

Monitoring: None required.

21. Hazardous Fire Area	☐	☐	☐	☒
a) 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?				

Source: Site inspection.

Findings of Fact:

- a) The Project site will not expose people or structures to a significant risk, loss, or death from wildland fires. The Project site is currently developed and will be located underneath the Project site's existing parking lot. Therefore, there will be no impact.

Mitigation: None required.

Monitoring: None required.

HYDROLOGY AND WATER QUALITY Would the project				
22. Water Quality Impacts	☐	☐	☐	☒
a) Substantially alter the existing drainage pattern of the site or area, including 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?				
b) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
c) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				
d) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
e) 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?	☐	☐	☐	☒
f) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☒
g) Otherwise substantially degrade water quality?	☐	☐	☒	☐
h) Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?	☐	☐	☐	☒

Source: Riverside County Land Information System GIS

Findings of Fact:

- a) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. The site already contains existing storm drainage infrastructure (i.e, curb and gutter). There are no additional storm drain improvements proposed or required at this time. Therefore, there will be no impact as a result of the Project.

- b,g) The Project will adhere to Regional Water Board Order No. 97-500, General Waste Discharge Requirements for "On-site Subsurface Wastewater Disposal Systems for Mobile Home and Recreational Vehicle Parks and Other Similar Facilities." This Project qualifies under "Other similar facilities" and as such will be adequately designed, installed, and maintained such that it meets the requirement of Order NO. 97-500. Additionally, within one year of project approval the County will prepare a groundwater monitoring program for review and approval by the Colorado Regional Water Quality Control Board . With the adequate design of the septic system along with groundwater monitoring and adherence to Order 97-500, impacts to groundwater quality will remain less than significant.

- c) The Project site will not deplete groundwater supplies or interfere with groundwater recharge. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.

- d) The Project will not create or contribute to runoff of water in exceeding the capacity of existing or planned stormwater drainage systems. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.
- e) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. Therefore, there would be no impact as a result of the Project.
- f) No improvements are proposed within a 100-year designated flood plane area. The Project site falls within the 500-year designated flood plane area (0.2% flood chance). The Project area is developed and has existing storm drain improvements, all of which located on raised building pads. Therefore, there will be no impact as a result of the Project.
- h) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. No stormwater treatment control BMP's are required. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

24. Floodplains

Degree of Suitability in 100-Year Floodplains. As indicated below, the appropriate Degree of Suitability has been checked.

Suitability has been assessed:				
NA - Not Applicable ☒	U - Generally Unsuitable ☐			R - Restricted ☐
a) 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?	☐	☐	☐	☒
b) Changes in absorption rates or the rate and amount of surface runoff?	☐	☐	☐	☒
c) 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 (Dam Inundation Area)?	☐	☐	☐	☒
d) Changes in the amount of surface water in any	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

water body?

Source: Staff Review, and Site Visit

Findings of Fact:

- a-d) The Project site will not impact any of the above-listed discussion questionnaire with regard to alteration of existing drainage patterns, increase in surface runoff, changes in absorption rates, or expose people to significant risk from flooding . The Project area is developed and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

LAND USE/PLANNING Would the project				
25. Land Use	☐	☐	☐	☒
a) Result in a substantial alteration of the present or planned land use of an area?	☐	☐	☐	☒
b) Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?	☐	☐	☐	☒

Source: City of Palm Springs General Plan.

Findings of Fact:

- a-b) The Project site will not result in a substantial alteration of present or planned land use nor would the Project affect land use within a city sphere of influence. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. The land use for the Project site is pre-existing and would not change as a result of Project implementation. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

26. Planning	☐	☐	☐	☒
a) Be consistent with the site's existing or proposed zoning?	☐	☐	☐	☒
b) Be compatible with existing surrounding zoning?	☐	☐	☐	☒
c) Be compatible with existing and planned surrounding land uses?	☐	☐	☐	☒
d) Be consistent with the land use designations and	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
policies of the Comprehensive General Plan (including those of any applicable Specific Plan)?				
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	☐	☐	☐	☒

Source: City of Palm Springs General Plan.

Findings of Fact:

- a-e) The Project site will not interfere, disrupt or create an inconsistency with the Project area and region's existing and planned-for land uses. Although the Project site is located within the City's General Plan land use, the Project site alone (APN 666-411-011) is County-owned land, and therefore not considered as a part of the City and will be required to adhere to all of the County's goals and policies pertaining to the County of Riverside's General Plan and Ordinances. Nevertheless, both the City of Palm Springs and the County of Riverside permit the same type of use proposed for the Project site (septic sewer improvement). Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

MINERAL RESOURCES Would the project				
26. Mineral Resources	☐	☐	☐	☒
a) Result in the loss of availability of a known mineral resource in an area classified or designated by the State that would be of value to the region or the residents of the State?				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	☐	☐	☐	☒
d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?	☐	☐	☐	☒

Source: Staff Review, and Site Visit

Findings of Fact:

- a-d) The Project site will not impact mineral resources. The Project site is developed with existing industrial warehouse buildings and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Thus, there will be no impact as a result of the Project.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation: None required.

Monitoring: None required.

NOISE Would the project result in

Definitions for Noise Acceptability Ratings

Where indicated below, the appropriate Noise Acceptability Rating(s) has been checked.

NA - Not Applicable

A - Generally Acceptable

B - Conditionally Acceptable

C - Generally Unacceptable

D - Land Use Discouraged

28. Airport Noise

a) 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?

NA ☒ A ☐ B ☐ C ☐ D ☐

b) 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?

NA ☒ A ☐ B ☐ C ☐ D ☐

Source: RCIP Figure S-19 "Airport Locations," County of Riverside Airport Facilities Map

Findings of Fact:

a-b) The Project site is not within an airport influence area boundary or otherwise affected by airport issues as identified in the WCVAP. The nearest airport is Palm Springs International Airport, which is located approximately 5.13 miles to the southeast of the Project site. Therefore, there will be no impacts to an airport land use plan as a result of the Project.

Mitigation: None required.

Monitoring: None required.

29. Railroad Noise

NA ☒ A ☐ B ☐ C ☐ D ☐

Source: RCIP Figure C-1 "Circulation Plan", S-21 "Rail Facilities, Available Water, Oil and Natural Gas Pipelines Inventory Data", Thomas Guide 2005 Edition, Site Visit

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Project site is located approximately 0.37 mile north of the heavily-traveled Union Pacific Railroad line. However, the area is located between existing industrial developed warehouses and located 0.10 mile north of the Interstate 10 freeway. The Project is expected to generate only sporadic noise from excavation activities and for a temporary period of time. Therefore, impacts with regard to railroad noise will be considered less than significant.

Mitigation: None required.

Monitoring: None required.

30. Highway Noise	☐	☐	☐	☒
NA ☐ A ☒ B ☐ C ☐ D ☐				

Source: Site Visit

Findings of Fact:

- a) The Project site is located adjacent to existing industrial developed warehouses approximately 0.10 mile north of the Interstate 10 Freeway. The Project is a temporary construction operation involving the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

31. Other Noise	☐	☐	☐	☒
NA ☒ A ☐ B ☐ C ☐ D ☐				

Source: City of Palm Springs General Plan; project description and materials; site visit.

Findings of Fact:

- a) The Project is not influenced by other unique noise issues as identified in the City of Palm Springs General Plan. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

32. Noise Effects on or by the Project	☐	☐	☐	☒
a) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
b) A substantial temporary or periodic increase in	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ambient noise levels in the project vicinity above levels existing without the project?				
c) 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?	☐	☐	☐	☒
d) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Source: Project materials and project description

Findings of Fact:

- a) The Project will not create a substantial permanent increase in ambient noise levels in the Project vicinity. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact.
- b) Temporary or periodic increases in noise levels would occur during Project installation of septic tanks and seepage pits. However, once construction is completed noise associated with construction equipment would cease. There are no sensitive receptors in the vicinity that would be affected by the construction noise. Therefore, Project impacts with regard to temporary increases in noise levels are considered to be less than significant.
- c) The Project will not expose persons to noise levels in excess of standards established in the local general plan or noise ordinance. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact.
- d) There are no sensitive receptors within the vicinity of the Project site. During construction temporary ground-borne noise and vibrations could occur during trenching and compaction from installation of septic tanks and seepage pits. Therefore, Project impacts will be considered as less than significant.

Mitigation: None required.

Monitoring: None required.

POPULATION AND HOUSING Would the project				
33. Housing	☐	☐	☐	☒
a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
b) Create a demand for additional housing, particularly housing affordable to households earning 80%	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
or less of the County's median income?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
d) Affect a County Redevelopment Project Area?	☐	☐	☐	☒
e) Cumulatively exceed official regional or local population projections?	☐	☐	☐	☒
f) 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)?	☐	☐	☒	☐

Source: Project description and materials, GIS

Findings of Fact:

- a-e) The Project site will not result in the displacement of existing housing, creating a demand for additional housing, displacement of people, affecting a County Redevelopment Project Area, or cumulatively exceeding regional or local populations. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits. The Project would be located underneath the project area's existing parking lot for the purpose of accommodating homeless patron sheltering. Thus, there are no impacts as a result of the project.
- f) The Project would not induce population growth in the area. The Project's potential to accommodate additional sewage discharge is directly related to accommodating additional homeless patrons (total of 120) for temporary sheltering. However, this increase is considered as minimal and temporary for homeless patron occupancy would fluctuate and not exceed a maximum of 120 patrons. Therefore, the Project's impact in inducing substantial population growth is considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

27. Fire Services	☐	☐	☒	☐

Source: RCIP Safety Element, Google Maps

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Riverside County Fire Department serves the Project area. The nearest facility is Station No. 36, which is located 5.13 miles north of the Project at 11535 Karen Avenue in Desert Hot Springs. The Project's proposed installation of septic tank upgrades and seepage pits are not anticipated to significantly impact the level of service for fire protection. Therefore, Project impacts to fire services are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

28. Sheriff Services	☐	☐	☒	☐

Source: RCIP, Google Maps.

Findings of Fact:

- a) Police protection services for the Project area are provided by the City of Palm Springs Police Department, Police Headquarters located at 200 South Civic Drive in Palm Springs (6.33 miles southeast of Project site). The proposed Project is currently developed and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, the Project's impact to Sheriff Services is considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

29. Schools	☐	☐	☐	☒

Source: City of Palm Springs General Plan; Palm Springs Unified School District.

Findings of Fact:

- a) The proposed Project will not affect school services. The Project site is currently developed in which septic tank and seepage pit installation would occur underneath the existing asphalt parking lot. Therefore, there will be no impact with regard to School Services.

Mitigation: None required.

Monitoring: None required.

30. Libraries	☐	☐	☐	☒

Source: RCIP, Google Maps.

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Proposed Project will not impact library services. The Project site is currently developed in which septic tank and seepage pit modification improvements will occur underneath the existing asphalt, parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

31. Health Services	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a) The proposed Project will not impact health services. The Project site is currently developed in which septic tank and seepage pit modification improvements would occur underneath the existing parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

RECREATION

32. Parks and Recreation	☐	☐	☐	☒
a) Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒
b) Would the project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
c) Is the project located within a C.S.A. or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

- a-c) The proposed Project will not have an impact from park creation, park deterioration, or location within a C.S.A. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact with regard to existing parks and recreation facilities.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation: None required.

Monitoring: None required.

33. Recreational Trails	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

- a) The proposed Project will not have an impact on recreational trails. The Project site is currently developed, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing asphalt parking lot. Therefore, there will be no impact.

Mitigation: None required.

Monitoring: None required.

TRANSPORTATION/TRAFFIC Would the project				
34. Circulation	☐	☐	☒	☒
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☒
b) Result in inadequate parking capacity?	☐	☐	☐	☒
c) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated road or highways?	☐	☐	☐	☒
d) 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?	☐	☐	☐	☒
e) Alter waterborne, rail or air traffic?	☐	☐	☐	☒
f) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
g) Cause an effect upon, or a need for new or altered maintenance of roads?	☐	☐	☐	☒
h) Cause an effect upon circulation during the project's construction?	☐	☐	☐	☒
i) Result in inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
j) Conflict with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☐	☒

Source: RCIP

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

- a-j) The Project site will not result in impacts to traffic. The Project site involves the temporary construction replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing asphalt parking lot. There are no proposed changes to the Project area's existing circulation pattern. The Project site's excavation area is small in relation to the size of the existing parking lot (See Exhibit 4) and that parking will temporarily be relocated to alternate locations of the parking lot during project construction. Therefore, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

35. Bike Trails	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a) Not applicable. The Project site will not have an impact on bike trails. The Project site involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. There are no proposed improvements outside of the site that would impact bike trails. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

UTILITY AND SERVICE SYSTEMS Would the project

36. Water	☐	☐	☐	☒
a) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a-b) The proposed Project will not require the construction of new water treatment facilities nor would have an impact on sufficient water supplies to serve the Project. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the project.

Mitigation: None required.

Monitoring: None required.

37. Sewer	☐	☐	☒	☐
a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?				
b) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

Source: Project description and materials

Findings of Fact:

- a-b) The proposed Project does not require the construction of a new wastewater treatment facility. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Furthermore, the Project applicant, and their wastewater treatment provider feel that the proposed three (3) 5,000 gallon septic tanks and seepage pits would accommodate the projected 15,000 gallons of sewage to be discharged per day from Roy's Desert Resource Center. Therefore, Project impacts are considered to be less than significant as a result of the Project.

Mitigation: None required.

Monitoring: None required.

38. Solid Waste	☐	☐	☒	☐
a) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
b) Comply with federal, state, and local statutes and regulations related to solid wastes (including the CIWMP (County Integrated Waste Management Plan)?	☐	☐	☒	☐

Source: RCIP,

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

- a-b) The Project area is currently served by Palm Springs Disposal Service which provides waste disposal services for the Project area. The Project site alone will not require these services as it involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, Project construction will only create minimal quantities of solid waste from construction that will comply with federal, state and local regulations concerning solid waste. Impacts will be considered as less than significant.

Mitigation: None required.

Monitoring: None required.

39. Utilities

- a) Would the project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

a) Electricity?	☐	☐	☐	☒
b) Natural gas?	☐	☐	☐	☒
c) Communications systems?	☐	☐	☐	☒
d) Storm water drainage?	☐	☐	☐	☒
e) Street lighting?	☐	☐	☐	☒
f) Maintenance of public facilities, including roads?	☐	☐	☐	☒
g) Other governmental services?	☐	☐	☐	☒
h) Conflict with adopted energy conservation plans?	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a-h) The Project site will not have an impact on utilities. The Project site involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Once constructed, the Project is not reliant on existing utilities. Therefore, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

OTHER

40. Other:	☐	☐	☐	☒

Source: Staff review

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact: No other issues of concern to report. No impacts will occur.

Mitigation: None required.

Monitoring: None required.

OTHER

41. Other:	☐	☐	☐	☒

Source: Staff review

Findings of Fact: No other issues of concern to report. No impacts will occur.

Mitigation: None required.

Monitoring: None required.

OTHER

42. Other:	☐	☐	☐	☒

Source: Staff review

Findings of Fact: No other issues of concern to report. No impacts will occur

Mitigation: None required.

Monitoring: None required.

MANDATORY FINDINGS OF SIGNIFICANCE

43. Does the project have the potential to substantially 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 to eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐

Source: Staff review, Application materials

Findings of Fact:

- a) Implementation of the proposed Project will not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause fish or wildlife populations to

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

drop below self sustaining levels, threaten to eliminate a plant or animal community, or 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. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, impacts will be less than significant.

44. Does the project have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	☐	☐	☒	☐

Source: Staff review, Project description.

Findings of Fact:

- a) The Proposed Project does not have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals. The Project involves the modification improvement of septic sewer infrastructure to the benefit of the Project area's long-term environmental goals with regard to wastewater management. Therefore, Project impacts with regard to long-term environmental goals will be considered less than significant.

45. Does the project have impacts, which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in California Code of Regulations, Section 15130)?	☐	☐	☐	☒

Source: Staff review, Project description.

Findings of Fact:

- a) The Project does not have impacts, which are individually limited, but cumulatively considerable. There are no biological or cultural resources identified on the Project site that will be cumulatively impacted as the Project site is already developed. Furthermore, there will be no impacts with regard to water supply due to the nature (temporary construction) and location (developed land) of the Project site. Therefore, there will be no impact.

46. Does the project have environmental effects that will cause substantial adverse effects on human beings,	☐	☐	☐	☒

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

either directly or indirectly?

Source: Staff review, project application

Findings of Fact:

- a) The proposed Project will not result in environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly because the project is the expansion of an existing facility. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, no impacts will occur from Project implementation.

VI. EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration as per California Code of Regulations, Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:

Earlier Analyses Used, if any: No earlier analyses were used in this document.

RCIP: Riverside County Integrated Project.

Location Where Earlier Analyses, if used, are available for review:

Location: City of Palm Springs Planning Department
3200 E Tahquitz Canyon Way
Palm Springs, CA 92262-6959

County of Riverside Planning Department
4080 Lemon Street, 9th Floor
Riverside, CA 92505

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

47. REFERENCES

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Riverside County Integrated Project (RCIP). 2003. Accessed online: September 14, 2009. Website: <http://www.rcip.org/>.

Appendix A:
Geotechnical Engineering Study

Appendix B:
Cultural Resource Review and
Initial Study Recommendations Letter

**Geotechnical Engineering Study
Industrial Parcel
Between Southwest Corner of McLane/Rupert Street
and 20th Avenue
North Palm Springs, California**

**Prepared for:
Buntain Construction
4531 Harlin Drive
Sacramento, California 95826**

**Prepared by:
CONSOLIDATED ENGINEERING LABORATORIES
7060 Koll Center Parkway, Suite 300
Pleasanton, California 94566
CEL Project No. G1357**



**CONSOLIDATED ENGINEERING
LABORATORIES**

September 4, 2003

Buntain Construction, Inc
4531 Harlin Drive
Sacramento, California 95826

Attention: Mr. Jarrod Short

Subject: Geotechnical Engineering Study
Industrial Parcel
Between Southwest Corner of McLane/Rupert Street and 20th Avenue
North Palm Springs, California
CEL Project No. G1357

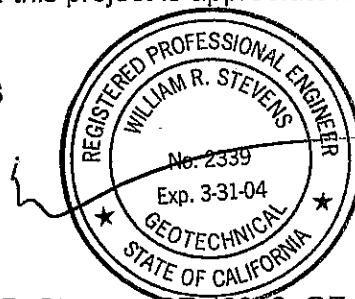
Dear Mr. Short:

In accordance with your authorization, Consolidated Engineering Laboratories (CEL) has completed a geotechnical engineering study for a proposed industrial parcel to contain warehouses between the southwest corner of McLane/Rupert Street and 20th Avenue, in North Palm Springs, California. Transmitted herewith are the results of our findings, conclusions, and recommendations for foundations, interior and exterior concrete slabs, pavement section design, site grading and drainage, temporary cut slope excavation and trench slope stability, drilled piers for light standards, retaining walls design for truck docks, utility trench backfilling, and guideline specifications for grading operations. In general, the proposed development at the site is considered to be geotechnically feasible provided the recommendations of this report are implemented in the design and construction of the project.

Should you or members of the design team have questions or need additional information, please contact the undersigned at (925) 485-5000. The opportunity to be of service to Buntain Construction, Inc., and to be involved in the design of this project is appreciated.

Sincerely,
CONSOLIDATED ENGINEERING LABORATORIES


Marc Hachey
Staff Geologist



William R. Stevens, PE 43010, GE 2339
Principal Geotechnical Engineer

Copies: 6 to Addressee (916/255-5000, Fax 916/255-5020)
2 to CEL Sacramento

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CONSOLIDATED ENGINEERING
LABORATORIES

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- Key to Boring Logs and Test Pits
- Logs of Borings and Test Pits

APPENDIX B

- LABORATORY TEST RESULTS
- Sieve Analysis
- Single-Point Consolidation
- R-Value
- Water-Soluble Sulfate

APPENDIX C

- Grading and Earthwork Specifications

APPENDIX D

- Pier Drilling and Construction Specifications



GEOTECHNICAL ENGINEERING STUDY

Project: Industrial Parcel
North Palm Springs, California

Client: Buntain Construction, Inc
Sacramento, California

1.0 INTRODUCTION

1.1 Purpose and Scope

The purposes of this study were to evaluate the subsurface conditions at the site and prepare geotechnical recommendations for the proposed development. This study provides recommendations for the design and construction of proposed foundations, interior and exterior concrete slabs, pavement sections, site drainage, temporary cut slope and trench slope stability, retaining wall design for truck docks, utility trench backfill, drilled piers, and grading. This study was performed in accordance with the scope of work outlined in our proposal dated July 29, 2003.

The scope of this study included the review of pertinent published and unpublished documents related to the site, the drilling of several subsurface borings, laboratory testing of selected samples retrieved from the borings, engineering analysis of the accumulated data, and preparation of this report. The conclusions and recommendations presented in this report are based on the data acquired and analyzed during this study, and on prudent engineering judgment and experience. This study did not include an assessment of potentially toxic or hazardous materials that may be present on or beneath the site or a comprehensive evaluation of the corrosion potential of the site soils.

1.2 Site Description

The subject site is located at the southwest corner of McLane Street and extends west and southward to 20th Avenue in North Palm Springs, California as shown on Figure 1, Site Vicinity. Some maps indicate McLane Street to be Rupert Street; we do not know which one is correct. The site is approximately 31,000 square feet in size and rectangular in shape. The site is covered in gravelly sand with scattered surface boulders and cobbles, and is relatively flat with some local



relief. There are scattered piles of cobbles and boulders throughout the site, with the east half of the site exhibiting more surficial rock than the west. The western perimeter of the site is bounded by a rock retaining wall consisting of boulder sized rock, which separates the site and the open field to the west. The area to the west of the site is approximately 6 to 7 feet lower in elevation than the subject site. It appears the wall was placed to stabilize fill soil used to grade the entire industrial park to its existing grade. The site is bounded on the north by an empty lot, on the east by McLane Street, on the west by open field, and on the south by 20th Avenue. The site is situated at approximately 33.91° north latitude and 116.55° west longitude at approximately 740 feet above mean sea level.

1.3 Proposed Development

The proposed development includes two, one-story warehouse buildings, each approximately 55,000 sf in size. Both buildings may be up to 35-feet tall and are anticipated to have shallow foundations and concrete floor slabs. Grading is expected to be minor for drainage purposes and to mitigate possible collapsible surficial soils. Other improvements include asphalt paved parking and driveways, landscape areas, truck loading docks, concrete hardscapes and pavement, underground utilities, and light poles.

1.4 Validity of Report

This report is valid for two years after publication. If construction begins after this time period, CEL should be contacted to confirm that the site conditions have not changed significantly. If the proposed development differs considerably from that described above, CEL should be notified to determine if additional recommendations are required. Additionally, if CEL is not involved during the geotechnical aspects of construction, this report may become wholly or in part invalid; CEL's geotechnical personnel verifies that the subsurface conditions anticipated preparing this report are similar to the subsurface conditions revealed during construction. CEL's involvement should include site grading and foundation plan review; monitoring site clearing, mass grading and building pad construction; foundation excavation and pier drilling observations; testing retaining wall and utility trench backfill, and subgrade preparation and baserock placement in paved areas.

2.0 PROCEDURES AND RESULTS

2.1 Literature Review

Pertinent geologic and geotechnical literature pertaining to the site area was reviewed. These included various USGS, DMG and other agency publications and maps.

2.2 Drilling and Sampling

A subsurface exploration program was undertaken to evaluate the soil conditions at the site. A total of six borings were drilled at the site on August 12, 2003. The borings were drilled using a truck-mounted drill rig equipped with 8-inch diameter, hollow-stem augers. Seven test pits were excavated with a backhoe on August 18, 2003 to categorize near surface soils more closely.

The materials encountered in the borings and test pits were visually classified according to the Unified Soil Classification System by a CEL representative as the borings and test pits were advanced. Relatively undisturbed soil samples were recovered at selected intervals using a 3-inch outside diameter Modified California split spoon sampler containing 6-inch long brass liners, and a 2-inch outside diameter Standard Penetration Test (SPT) sampler. The samplers were driven by means of a 140-pound downhole safety hammer with an approximate 30-inch fall. Resistance to penetration was recorded as the number of hammer blows required to drive the sampler the final foot of a 12 or 18-inch drive. Bulk samples were obtained in the upper few feet of the borings from the auger cuttings.

The boring and test pits logs with descriptions of the various materials encountered in each boring and test pit, the penetration resistance values, and some of the laboratory test results are presented in Appendix A. The approximate locations of the borings and test pits are shown on the Site Plan, Figure 2.

2.3 Laboratory Testing

Laboratory tests were performed on selected samples to determine some of the physical and engineering properties of the subsurface soils. The results of the laboratory testing are presented on the boring logs, and are included in Appendix B. The following soil tests were performed for this study:



Dry Density and Moisture Content (ASTM D2216 and ASTM D2937) – In-situ density and moisture tests were conducted to determine the in-place dry density and moisture content of the subsurface materials. These properties provide information for evaluating the physical characteristics of the subsurface soils.

Particle Size Analysis (Wet and Dry Sieve) and Hydrometer (ASTM D422, D1140, and CT202) - Sieve analysis testing is conducted on selected samples to determine the soil particle size distribution. This information is useful for the evaluation of liquefaction potential and characterizing the soil type according to USCS.

Collapse Potential Test (ASTM D5333) – A single point consolidation test that provides information on hydroconsolidation potential of a soil after introducing additional stress and then saturating the soil.

R-Value (ASTM D2844) - R-Value testing was performed in accordance with Caltrans Test Method 301 to develop design parameters for asphalt concrete pavement recommendations.

Water Soluble Sulfate (ASTM D4327 and CT417) - Water soluble sulfate tests are utilized to determine the type of concrete required for underground construction and is required by the UBC, CBC, and IBC.



3.0 FINDINGS

3.1 Geologic Setting

According to published geologic maps for the area, the subject site is underlain by Quaternary aged, alluvial deposits consisting of unconsolidated stream, river channel and alluvial fan deposits, with local eolian sand.

3.2 Subsurface Soil Conditions.

The earth materials encountered in CEL's exploratory borings and test pits can be described as approximately six to seven feet of light, moderate and grayish-brown, dry to slightly moist, medium dense to dense, poorly to well-graded sand (SP/SW) with silt, gravel, cobbles and some boulders. The gravel, cobbles, and boulders were observed to be subangular to subrounded. The upper six to seven feet of soil is considered fill material, but no discernible contact between fill and native soils was observed in the borings or test pits. Fill thickness was interpreted from the elevation change along the western perimeter of the site. Cobbles and boulders were encountered throughout the site, mainly in the upper five feet. Some areas exhibited more cobbles and boulders. The sandy soils encountered to the maximum depth explored consisted of poorly to well graded, dry to slightly moist, medium to very dense sand (SP/SW) with silt and some fine gravel. Details of site soils encountered in the CEL borings and test pits are contained in Appendix A.

The entire soil profile is non-expansive and a bulk sample collected from the upper three feet had an R-Value of 77. Sieve analysis tests were performed on a bulk samples collected from Boring 7 and 11, at eight feet and seven feet respectively. The sample from Test Pit 1 had 93% of sand, 5% gravel and 2% of silt. The sample from Test Pit 5 had 87% of sand, 9% gravel and 4% of silt. Sieve analyses of the cobble and boulder content was not included in the samples tested. Cobbles are defined as rock between 3 to 12 inches in diameter, and boulders are over 12 inches in diameter according to the Unified Soil Classification System. In-situ densities and moistures ranged from 107.1 psf to 130.6 psf and 0.9% to 5.5%.

Single point consolidation tests were performed on 8 samples collected from in-situ samples at depth ranging from 3 to 15 feet. The samples were loaded to 4,000 psf, and then water was added.



The initial loading determines the consolidation (compressibility) of the soil, and adding the water determines the collapse potential of the soil. The soils were not found to be collapsible since the samples consolidated less than about 1 percent when water was added. The total consolidation of the soil was found to be less than about 3.5 percent under a 4,000 psf load. One sample consolidated nearly 6 percent, and 2 samples about 2 percent.

3.3 Groundwater

Groundwater was not encountered in the borings or test pits to the maximum depth explored of 41.5 feet. Examination of Department of Water Resources well data indicates that the groundwater is approximately 230 to 330 feet deep in nearby wells from the Palm Springs and Desert Hot Springs area (DWR, 2002). Groundwater levels can vary in response to time of year, variations in seasonal rainfall, well pumping, irrigation, and alterations to site drainage. Determining the detailed groundwater characteristics of the site was not included in our scope of work.

3.4 Water-Soluble Sulfate

Water-soluble sulfate can affect the concrete mix design for concrete in contact with the ground, such as shallow foundations, piles, piers, and concrete slabs. The UBC, CBC, and IBC provides the following evaluation criteria:

Sulfate Exposure	Sulfate Percent by Weight or (mg/kg)	Cement Type	Max. Water Cementitious Ratio by Weight	Min. Unconfined Compressive Strength, psi
Negligible	0.00-0.10 (0-1,000)	NA	NA	NA
Moderate	0.10-0.20 (1,000-2,000)	II, IP (MS), IS (MS)	0.50	4,000
Severe	0.20-2.00 (2,000-20,000)	V	0.45	4,500
Very Severe	Over 2.00 (20,000)	V plus pozzolan	0.45	4,500

For the bulk sample collected from the borings and test pits, the results reported a 54 mg/kg concentration. Hence, the water-soluble sulfate content in the site soil has a negligible impact on buried concrete at the site. However, it should be pointed out that the water-soluble sulfate concentrations can vary due to the addition of fertilizer, irrigation, and other possible development activities. An appropriate expert should be contacted if a detailed evaluation is required.



3.5 Expansive Soil

The onsite soil is sandy and non-expansive.

3.6 Liquefaction Induced Phenomena

Soil liquefaction is a phenomenon in which loose, saturated, cohesionless soil experiences a temporary loss of strength during strong cyclic loading such as that produced by earthquakes. Typically, liquefaction potential increases with increased duration and magnitude of cyclic loading. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand. On the basis the field and laboratory data, it is our opinion that there is not a potential for liquefaction to occur at the site.

3.7 Flooding

According to the ESRI (Environmental Systems Research Institute) and FEMA (Federal Emergency Management Agency) website, the subject site is situated in a zone prone to estimated 500-year flood potential. An assessment of flooding potential was not in our scope of work for this project, and a flood risk specialist should be contacted for a more detailed interpretation.

3.8 Settlement Due to Consolidation, Dynamic Compaction, and Collapse

Settlement of soil can be caused by consolidation, dynamic compaction, and collapsible soil. Consolidation is the densification of soil into a more dense arrangement from additional loading, such as fill or foundations. Consolidation of clayey soils is usually a long-term process, whereas sandy soils consolidate relatively rapidly with an introduction to a load. Dynamic compaction is the densification of predominantly sandy soil caused by vibration, such as an earthquake or vibrating machinery. Collapsible soils are fine sandy and silty soils that have been laid down by the action of flowing water, usually in alluvial fan deposits. The soil particles are usually bound together with a mineral precipitate. The loose structure is maintained in the soil until a load is imposed on the soil and water is introduced. The water breaks down the inter-particle bonds and the newly imposed loading densifies the soil. It is our opinion that the soil matrix within the fill and the upper few feet of the native soils have a moderate susceptibility for settlement due to consolidation and dynamic compaction. The laboratory data does not indicate the near surface soil in the upper 15 feet to be susceptible to collapse.



3.9 Seismicity and Faulting

The site is located in an area of high seismic activity associated with the San Andreas Fault Zone and would be influenced by major earthquakes along nearby active faults. The active, Type A San Andreas Fault is located approximately 1 miles (1.6 km) north of the site. In 1986, this segment of the San Andreas was observed to experience visible fault creep slippage. The Type B Gorgonio Pass Fault Zone is located approximately 3.5 miles (5.8 km) to the west of the site. The site is located approximately 12 miles (19.5 km) south of the Type B Pinto Mountain Fault. The Type B Morongo Valley Fault is located approximately 10.2 miles (16.5 km) north of the site. The site is located in an area which has been subject to five earthquakes larger than 6.0 since 1932.

3.10 Surface Fault Rupture

According to DMG Special Publication 42 (Hart, 1994), the site does not lie within an Earthquake Fault Zone, as defined by the Alquist-Priolo Act of 1972. According to published mapping by DMG, no known fault traces cross the site, and no evidence of surface ground rupture was noted during our site reconnaissance. Therefore, it is our opinion that the likelihood of surface fault rupture at the site is low.

3.11 Other Geologic Hazards

The site is not considered subject to other potential geologic hazards, including landslides, soil erosion, volcanism, mass wasting, loss of mineral resources, or loss of unique geologic features. This is due to the sites topography, geology, and land use. Subsidence due to groundwater withdrawal is possible, but should not impact the site detrimentally since this phenomena is more regional than local.



4.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based upon the analysis of the information gathered during the course of this study and our understanding of the proposed improvements.

4.1 General

The site is considered geotechnically suitable for the proposed development provided the recommendations of this report are incorporated into the design and implemented during construction. The predominant geotechnical and geological issues that will need to be addressed are:

Seismic Considerations – The site is located within a seismically active region. The building design should consider the effects of seismic activity.

Differential Settlement – The site is underlain by undocumented fill and native soil that appears to consist of a dense sandy and gravelly soil matrix with cobbles and boulders. However, differential settlement will have to be addressed since portions of a footing may be on a sandier matrix and portions on a more rocky condition. We recommend that the foundations be designed for a lower bearing pressure rather than excessive overexcavation and replacement grading in the building pads.

Excavation of Footings and Utilities due to Cobbles and Boulders – The subsurface soil contains cobbles (3 to 12 inch size) and boulders (over 1-foot size), and excavating foundations and underground utilities may produce either oversized excavations or unstable excavation walls. We are suggesting, but not requiring, that the building pad be overexcavated, the large rocks removed, and the soil replaced as engineered fill. If this is performed, an added benefit would be higher allowable bearing capacities for the shallow foundations.

4.2 UBC Seismic Design Parameters

According to the 1997 UBC, the site is located within Seismic Zone 4. Site soils are of soil profile type S_D . Near-source acceleration and velocity factors are determined by the UBC based upon the



site's soil profile and proximity to Type A and Type B faults. Based on the site soil profile and the 1.6 km distance from the site to the Type A San Andreas fault, the Near-Source Acceleration Factor, N_a for site is 1.5, and the Near-Source Velocity Factor, N_v is 2.0.

4.3 Site Grading

Site grading should be performed in accordance with these recommendations and the Grading and Earthwork Specifications in the appendices. A pre-construction conference should be held at the jobsite with representatives from the owner, general contractor, grading contractor, and CEL prior to starting the stripping and demolition operations at the site.

4.3.1 Site Preparation and Demolition

The site should be cleared of vegetation, large surface rocks greater than six inches in diameter, debris, and other deleterious materials. Existing underground utilities to be abandoned at the site should be properly grouted, closed or removed as needed. If the utilities are removed, the excavations should be backfilled with properly compacted fill or other material approved by the Geotechnical Engineer.

4.3.2 Building Pad Grading

The areas of proposed buildings should be thoroughly saturated for at least four to six hours and compacted to at least 92 percent relative compaction in accordance with ASTM D1557 with a large, smooth drum vibratory loader. Large boulders and cobbles greater than 6 inches at the ground surface should be excavated and removed from the soil. Engineered fill can then be placed in no greater than one-foot thick lifts, moisture conditioned to at least 2 to 3 percent over optimum moisture and compacted to at least 92 percent relative compaction.

OPTION: If higher allowable bearing capacities and the easier utility and footing excavations are desired, the building pad should be overexcavated at least 4 feet, and the soil replaced as engineered fill. The soil should be compacted to at least 92 percent relative compaction. Scarifying the bottom of the overexcavation is not required. However, an option would be to overexcavate 3.5 feet and scarify 6 inches. The overexcavation should extend at least 5-feet beyond the building perimeter. Rocks larger than about 4 inches in largest dimension should be removed prior to utilizing the material as engineered fill. Lifts should be less than 8-inches thick.



4.3.3 General Grading

Site grading is anticipated to consist of approximately up to 2 feet of cut and fill for drainage purposes and to level the site. Onsite soil generated from cut areas following clearing and grubbing that is free of excess organic material (3 percent or less by weight) or debris may be suitable for use as structural fill at the site.

Pavement and concrete hardscape areas should be completely saturated by means of water truck for at least four to six hours and compacted. Areas supporting vehicles should be compacted to at least 95 percent relative compaction in accordance with ASTM D1557 with a large, smooth drum vibratory loader. Pedestrian areas can be compacted to at least 92 percent relative compaction. Boulders and cobbles greater than 6 inches encountered during scarification should be excavated and removed from the soil. Engineered fill can then be placed in no greater than one-foot thick lifts, moisture conditioned to over optimum moisture content and compacted.

If used, imported fill materials should be non-expansive, having a Plasticity Index of 12 or less, an R-Value greater than 30, and fines so the soil can bind together. Imported materials should be free of organic materials and debris, and should not contain rocks or lumps greater than 3 inches in maximum size. Import fill materials should be approved by the geotechnical engineer prior to use on site.

Final grading should be designed to provide positive drainage away from structures. Soil areas within 10 feet of proposed structures should slope at a minimum of 2 percent away from the buildings. Roof leaders and downspouts should discharge onto paved surfaces sloping away from the structure or into a closed pipe system which outfalls to the street gutter pan or directly to the storm drain system.

If grading occurs in the winter rainy season, unstable subgrade conditions may be present. These conditions may require stabilizing the subgrade with admixtures, such as cement kiln dust, cement, or lime. Additional recommendations can be provided, if required, during construction.



4.4 Utility Trench Construction

Utility trenches may be backfilled with native soil above the utility bedding and shading materials. If rocks larger than 4 inches in maximum size are encountered, they should be removed from the fill material prior to placement in the utility trenches. Backfill in the upper 5 feet of utility trenches should be compacted to at least 92 percent relative compaction. Trench backfill deeper than 5 feet

should be compacted to at least 95 percent relative compaction. Utility bedding and shading compaction requirements should be in conformance with the requirements of the local agencies having jurisdiction. Jetting of trench backfill is not recommended.

Pea gravel, rod mill, or other similar self-compacting material can be utilized for trench backfill in the building pad. However, the self-compacting material should be compacted with a whacker and placed in minimum 2-foot lifts. The upper foot of backfill in the building pad subgrade should consist of Class 2 baserock. Self-compacting backfill material should not be used in exterior underground trenches due to the potential for water seeping into the trench backfill. Fines may migrate into the voids in the pea gravel or rod mill, which could cause settlement of the ground surface above the trench.

Utility trenches should be sealed with concrete, clayey soil, sand-cement slurry, or controlled density fill (CDF) where the utility enters the building under the perimeter foundation. This would reduce the potential for migration of water beneath the building through the shading material in the utility trench.

4.5 Temporary Excavations

The contractor should utilize proper Cal OSHA methods during construction. Excavations in soil more than 5 feet deep for utility trenches should have side slopes constructed at 1.5H:1V (horizontal to vertical). The grading contractor, based upon the materials encountered during the excavation, should make selection of temporary side slopes. Maximum slope ratios provided above are assumed to be uniform from top to toe of the slope. Adequate provisions should be made to prevent water from ponding on top of the slope and from flowing over the slope face. Surcharge loads

should not be permitted within 10 feet of the top of the slope. Desiccation or excessive moisture in the excavation could reduce stability and require shoring or laying backside slopes.

4.6 Building Foundations

The proposed structures can be supported on spread footings. Shallow strip perimeter footings should be founded a minimum of 18 inches below lowest adjacent finish grade. Interior footings can be founded 12 inches below building pad subgrade. The allowable bearing capacity for the proposed foundations is 2,200 pounds per square foot (psf) for dead plus live loads. The allowable bearing capacity may be increased by 1/3 for temporary seismic or wind loading. The allowable bearing capacity can be increased to 3,500 psf if the building pad is overexcavated and replaced as engineered fill (see option in building pad grading section).

For resistance to lateral loads, a coefficient of friction of 0.35 between the base of the foundation elements and underlying material is recommended. In addition, an allowable passive resistance equal to an equivalent fluid weighing 350 pounds per cubic foot (pcf) acting against the foundation may be used to resist lateral forces. The top foot of passive resistance at foundations should be neglected unless the ground surface around the footing is covered by concrete or pavement. If both friction and passive resistance is utilized, a 50 percent reduction is recommended for either of them.

Footing excavations should have firm bottoms and be free from excessive slough prior to concrete or reinforcing steel placement. Where utility trenches are to be located adjacent to foundations, the bottom of the footing should be located below an imaginary 1:1 (horizontal to vertical) plane projected upward from the nearest bottom edge of the utility trench.

The foundation excavations should be observed by a representative of Consolidated Engineering Laboratories prior to placement of reinforcing steel or concrete to evaluate the exposed soil conditions.

Total static and dynamic settlement of the building is anticipated to be about 1-inch. Differential static settlement between isolated columns and perimeter footings is anticipated to be about 3/4-inch. Most of the settlement should occur during construction.

4.7 Drilled Piers

Drilled piers may be used to support awnings for covered walkways, light poles or similar structures. Pier drilling and construction specifications are provided in the appendices. The allowable skin friction for these piers resisting vertical downward loads can be considered to be 450 psf. End



bearing should be neglected. Piers resisting vertical upward (tension) should be designed using an allowable skin friction of 3000 psf. A passive pressure of 350 psf is allowed for lateral resistance. The upper foot of skin friction and passive resistance should be neglected unless the surrounding area is covered by concrete. The piers should be spaced a minimum of 3 diameters apart. Pier spacings less than 3 diameters will require a reduction in allowable skin friction. Passive resistance for less than 6 pier diameters will need to be reduced. For piers spaced at 3 diameters, the passive resistance should be reduced by half. Full passive resistance is allowed for piers spaced on 6 diameter spacings. The amount of reduction for passive resistance between 3 pier diameters to 6 diameters can be considered to be linear. Passive resistance for less than 3 pier diameter spacings should be determined during the plan review process.

The bottom of the piers should be properly cleaned out after drilling. A CEL representative should observe the drilling of the piers to confirm final depths and proper cleaning of the bottom of the piers. Soil should be prevented from falling into the pier hole after drilling. This can be accomplished by removing excess soil cuttings from the top of the pier hole and covering the hole. The pier hole cover should also prevent persons or objects from falling into the hole. Additionally, piers drilled during the day should have the reinforcing cages installed in the hole and filled with concrete before the end of the day.

Because of the presence of near surface cobbles and boulders encountered in our exploratory borings and test pits, the drilling of piers may be difficult in the top five to six feet of soil. The pier contractor should be made aware of the presence of cobbles boulders so the necessary equipment can be utilized. Boulders and cobbles will need to be removed if encountered during pier drilling operations, and the location of piers may need to have some flexibility to account for this condition.

4.8 Concrete Slabs on Grade

Non-structural concrete slab-on-grade floors should be a minimum of 4 inches in thickness. Reinforcing requirements should be determined by the structural engineer. The concrete floor slab can be constructed on 4 inches of Class 2 aggregate baserock compacted to a minimum 95 percent relative compaction. If the floor slab will have high rack loading or fork lift traffic, the slabs should be at least 5-inches thick and underlain by at least 6 inches of Class 2 baserock. If the floor will have moisture sensitive floor coverings, the baserock should be replaced with a vapor barrier over a minimum of 2-inches of angular, clean sand. The civil engineer should determine if a thin sand layer



is required on top of the vapor barrier. If construction occurs in the winter months, the vapor barrier may prevent the vertical percolation of rainwater. Exterior concrete flat work can be placed on the existing site soil. The subgrade beneath the flatwork should be compacted to at least 92 percent

relative compaction as discussed in the grading section of the report. Where flatwork is contiguous to the building at doorways and entrances, the flatwork should be doweled into the building foundation to reduce potential tripping hazards.

4.9 Retaining Wall Design

Proposed retaining walls can be supported on spread footings as discussed above. The anticipated retaining wall pressures for the on-site soil conditions are provided in Figure 3. The active and at rest pressures for soils shown on Figure 3 assume the backfill behind the retaining wall is a gravel blanket or wall drain with native soil or gravel.

Drainage should be provided behind the retaining walls. The drainage system should consist of a minimum of 4-inch diameter perforated pipe placed at the base of the retaining wall and surrounded by 3/4-inch drain rock wrapped in a Mirafi 140N filter fabric, or equivalent approved by the geotechnical engineer. The drain rock wrapped in fabric should be at least 12 inches wide and extend from the base of the wall to within 2 feet of the ground surface. The upper 2 feet of backfill should consist of compacted native soil. The retaining wall drainage system should be sloped to outfall to the storm drain system or other appropriate facility.

As an alternative to the drain rock and fabric, Miradrain 2000, or approved equivalent, may be used behind the retaining wall. The Miradrain 2000 should extend from the base of the wall to within 2 feet of the ground surface. A perforated pipe should be placed at the base of the wall in direct contact with the Miradrain 2000. The Miradrain fabric at the base of the Miradrain 2000 panel should be wrapped around the perforated pipe to prevent soil intrusion into the pipe

The foundation excavations should be observed by a representative of Consolidated Engineering Laboratories prior to placement of reinforcing steel or concrete to evaluate the exposed soil conditions.

4.10 Pavement Design

Recommendations for the design of asphalt concrete pavement sections were developed in accordance with the procedures outlined in the latest edition of the Caltrans Highway Design Manual. The Caltrans design method uses Traffic Indices (TI) to represent anticipated wheel loads and frequency of usage for a given design life. A design life of 20 years is typically used. Factors such as surface and subsurface drainage have an effect on the overall life of a pavement section.

An R-Value of 70 were obtained for a near surface soil samples at the site. An R-Value of 70 was used for design. The following are recommended structural asphalt concrete (AC) pavement sections.

Pavement (Traffic Index)	Asphalt Concrete (Inches)	Class 2 Aggregate Baserock (Inches)	Total Section (Inches)
Car Parking (4.5)	2.5	4	6.5
Car Driveways (5.0)	3.0	4	7.0
Heavy Duty (6.0)	3.5	6	9.5
Street (7.0)	4.0	6	12.0

Asphalt concrete should be designed per Caltrans standards. Car parking areas should be ½-inch maximum medium mix, and the other pavements should be ¾ inch max medium mix. The asphalt pavement should be placed in minimum 1-1/2 inch thick compacted lifts and a maximum 4-inch thick lifts.

The subgrade underlying pavement areas should be prepared per the recommendations provided in the Site Grading section. Aggregate base materials should be compacted to a minimum of 95 percent of the maximum dry density within two percent of the optimum moisture content as determined by ASTM D1557.



4.11 Plan Review

It is recommended that Consolidated Engineering Laboratories be provided the opportunity to review the final project plans prior to construction. The purpose of this review is to assess the general compliance of the plans with the recommendations provided in this report and the incorporation of these recommendations into the project plans and specifications.

4.12 Observation and Testing During Construction

It is recommended that Consolidated Engineering Laboratories be retained to provide observation and testing services during site preparation, site grading, utility construction, foundation excavation, pier drilling and to observe final site drainage. This is to observe compliance with the design concepts, specifications and recommendations, and to allow for possible changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.



REFERENCES

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California Department of Transportation (Caltrans), California Standard Specifications, 1992.

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Division of Mines and Geology (DMG), Guidelines for Evaluating and Mitigating Seismic Hazards in California, DMG Special Publication 117, March 13, 1997.

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FEMA and ESRI website, Flood Hazard Maps

National Center for Earthquake Engineering Research, Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, Technical Report NCEER-97-0022, December 31, 1997.

Pradel, Daniel, "Procedure to Evaluate Earthquake-Induced Settlements in Dry Sandy Soils," Journal of Geotechnical and Geoenvironmental Engineering, April 1998.

Uniform Building Code, International Conference of Building Officials, April 1997.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

The recommendations of this report are based upon the soil and conditions encountered in the borings. If variations or undesirable conditions are encountered during construction, Consolidated Engineering Laboratories (CEL) should be contacted so that supplemental recommendations may be provided.

This report is issued with the understanding that it is the responsibility of the owner or his representatives to see that the information and recommendations contained herein are called to the attention of the others members of the design team and incorporated into the plans and specifications, and that the necessary steps are taken to see that the recommendations are implemented during construction.

The findings and recommendations presented in this report are valid as of the present time for the development as currently proposed. However, changes in the conditions of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Accordingly the findings and recommendations presented in this report may be invalidated, wholly or in part, by changes outside our control. Therefore, this report is subject to review by CEL after a period of three (3) years has elapsed from the date of issuance of this report. In addition, if the currently proposed design scheme as noted in this report is altered CEL should be provided the opportunity to review the changed design and provide supplemental recommendations as needed.

Recommendations are presented in this report which specifically request that CEL be provided the opportunity to review the project plans prior to construction and that we be retained to provide observation and testing services during construction. The validity of the recommendations of this report assumes that CEL will be retained to provide these services.

This report was prepared upon your request for our services, and in accordance with currently accepted geotechnical engineering practice. No warranty based on the contents of this report is intended, and none shall be inferred from the statements or opinions expressed herein.



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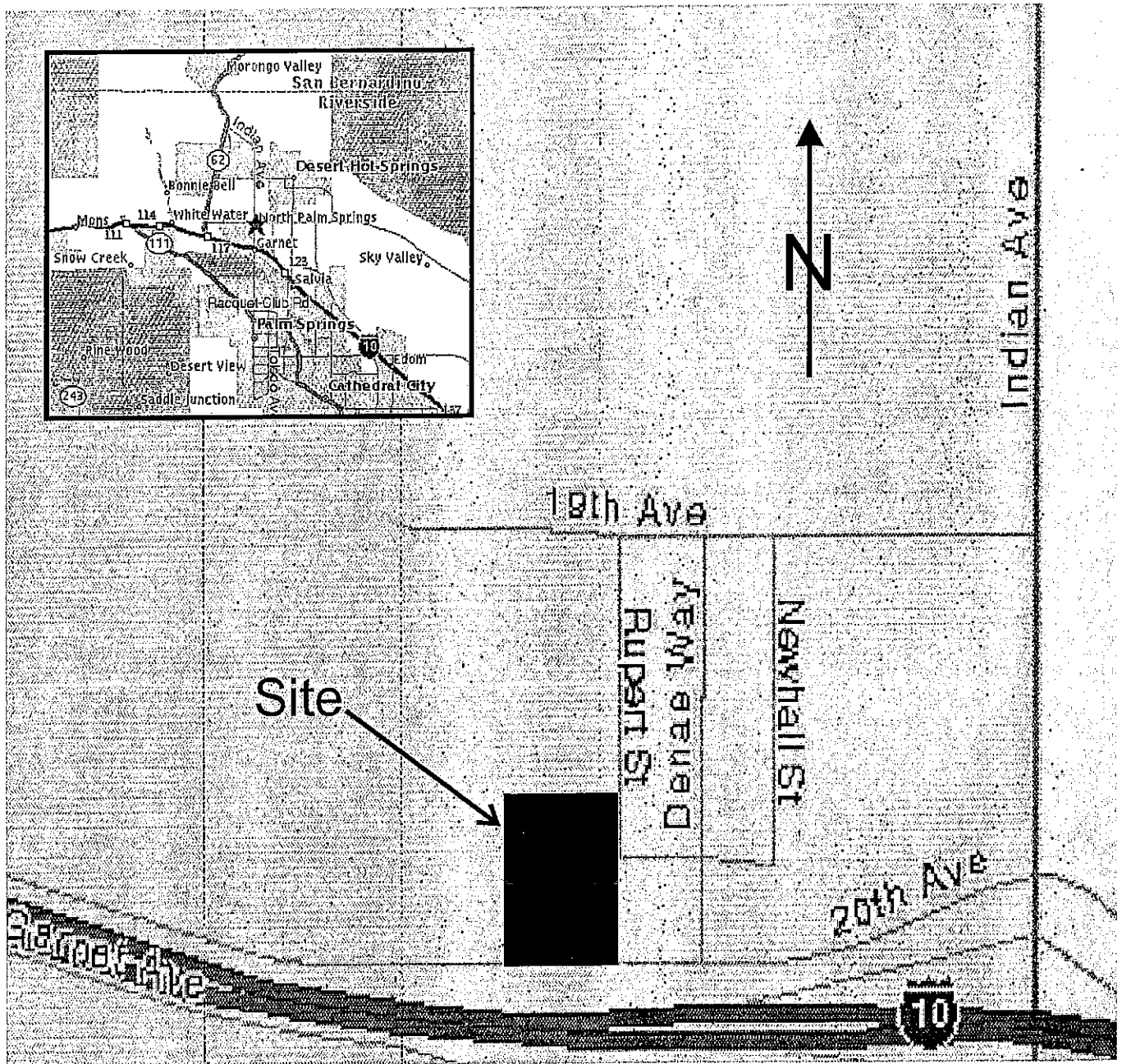
The scope of our services for this report did not include an environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater or air, on, below or around this site. Any statements within this report or on the attached figures, logs or records regarding odors noted or other items or conditions observed, are for the information of our client only.

FIGURES

Figure 1 - Site Vicinity

Figure 2 - Site Plan

Figure 3 - Retaining Wall Pressures



No Scale

Warehouse Lot - N. Palm Springs

G1357

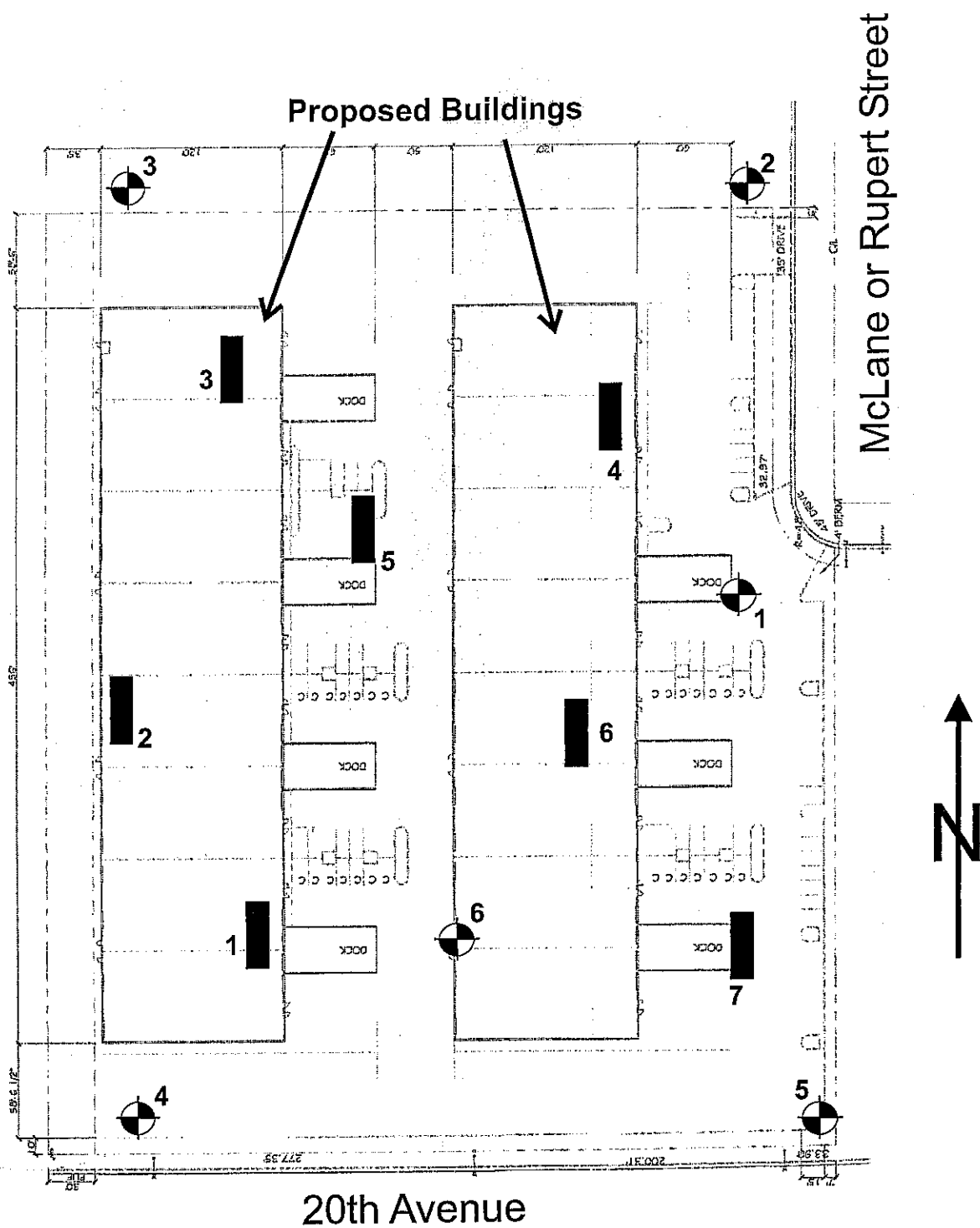
September 2003



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Site Vicinity

Figure 1



No Scale

Warehouse Lot - N. Palm Springs

G1357

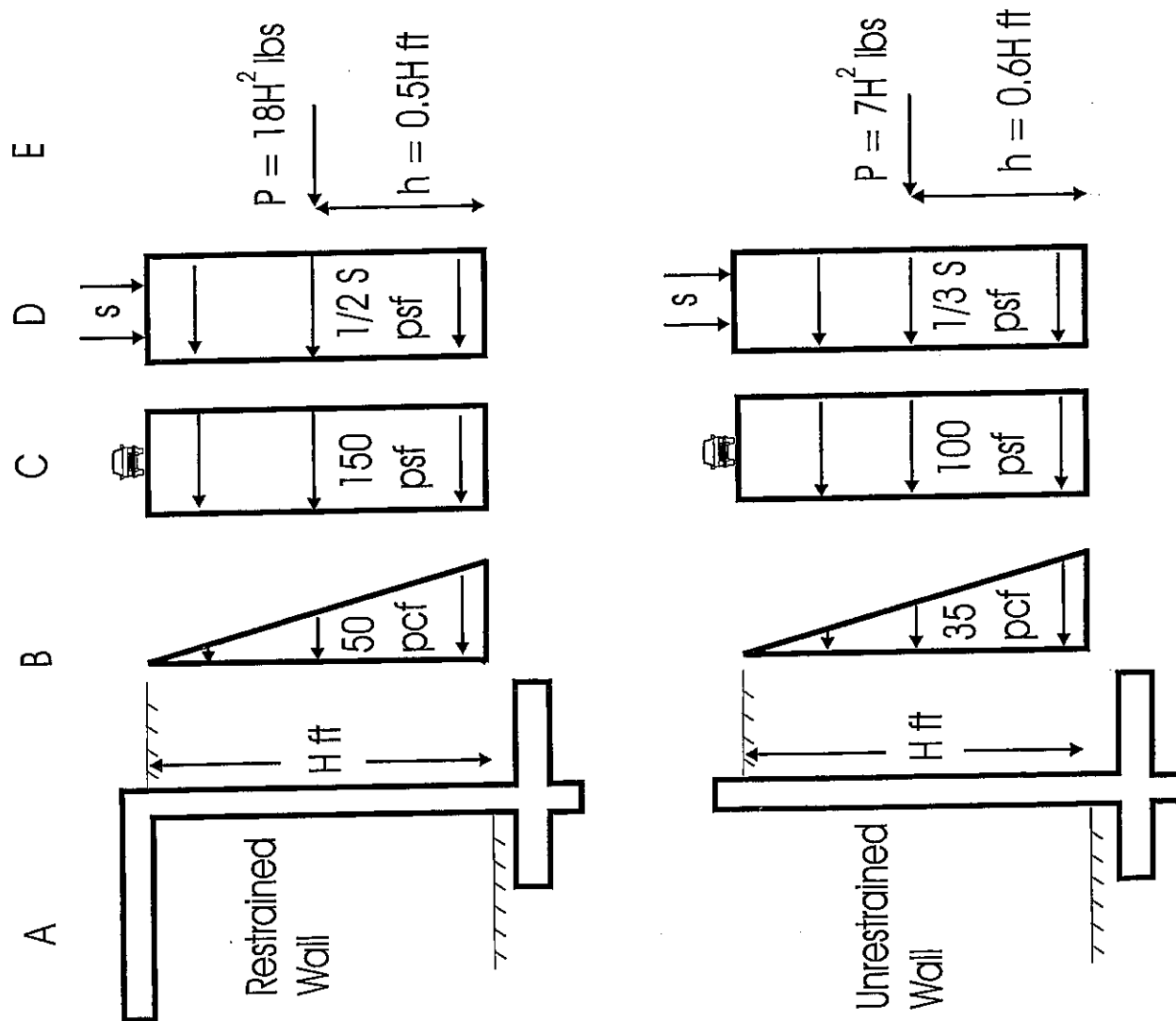
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Site Plan

Figure 2



NOTES

A: Restrained and unrestrained retaining wall schematic.

B: Equivalent fluid pressure for level backfill.

C: Lateral load from vehicles near top of wall.

D: Lateral load from uniform surcharge (S psf) on wall backfill.

E: P = Dynamic thrust on retaining wall

from earthquakes utilizing a pseudostatic acceleration of 0.15g.

h = Point of application of dynamic thrust.

1) Assumed drained backfill condition.

2) Equivalent fluid pressure increase for sloping backfill:

Restrained wall; add 1.5 pcf for each degree of backfill inclination.

Unrestrained wall; add 1 pcf for each degree of backfill inclination.



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Warehouse Lot - N. Palm Springs

G1357

September 2003

Retaining Wall
Pressures

Figure 3

APPENDIX A
Key to Boring Logs
Logs of Borings and Test Pits

Key to Boring Logs



3-inch O.D. Modified California Sampler



2-inch O.D. Standard Penetration Test (SPT)



Bulk Sample



2.5-inch O.D. Split Spoon Sampler



3-inch O.D. Shelby Tube (hydraulically advanced)



Groundwater Level Encountered During Drilling



Groundwater Level Measured After Drilling

25

Blow Count To Drive Sampler One Foot

1. The boring locations were determined by pacing, sighting and/or measuring from site features. Elevations of borings (if included) are determined by interpolation between plan contours. The location and elevation of borings should be considered accurate only to the degree implied by the method used.
2. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.
3. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. This data has been reviewed and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, tides, temperature and other factors at the time measurements were made.

Warehouse Lot - N. Palm Springs

CEL #G1357

September 2003



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Key to Boring Logs

Project Name: Warehouse Lot						Project No: G1357		Logged By: MAH		Boring No.: 1			
Location: N. Palm Springs, California						Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS			Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light brown, poorly to well-graded, medium to coarse SAND with silt and gravel. Fill.			Dry	Med. Dense	SP/SW	0
-													-
-													-
-													-
-													-
5		28	1-1		104.9	6.0	Becoming less silty and gravelly. Fill?			Dry	Med. Dense	SP/SW	5
-													-
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-													-
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CONSOLIDATED ENGINEERING LABORATORIES

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 2			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light brown, poorly to well-graded, medium to coarse SAND with silt and gravel. Fill.	Dry	Med. Dense	SP/SW	0
5		32	2-1	(no recovery)							5
		52	2-2		130.6	0.9	Becoming gray and white with feldspar grains, medium to coarse grained, poorly graded. Native	Dry	Med. Dense To Dense	SP	
10		24	2-3		107.1	1.5	Sand with abundant quartz grains, medium to coarse grained with trace gravel.	Dry	Med. Dense	SP	10
15		37	2-4		108.3	1.6	Becoming coarser with more feldspar grains.	Dry	Med. Dense	SP	15
20		54	2-5				Becoming finer, poorly to well-graded.	Dry	Dense	SP/SW	20
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 2			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
25		34	2-6		110.9	5.5	Moderate brown, fine to medium grained with trace coarse, poorly graded SAND with silt.	Dry To Slight. Moist	Med. Dense	SP	25
30		44	2-7				Becoming brown with white quartz and some gravel.	Dry To Slight. Moist	Dense	SP	30
35		50	2-8				Grading to medium to coarse, poorly-graded, medium to coarse SAND with gravel.	Dry	Dense	SP	35
40		68	2-9				Salt and pepper colored, fine to medium, poorly graded SAND grading to well-graded SAND with gravel.	Dry To Slight. Moist	Dense	SP/SW	40
45							Boring terminated at 41.5 feet. No groundwater encountered.				45
50											50

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 3			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish to moderate brown, fine to medium, poorly graded SAND with silt binder. Fill.	Slight. Moist	Dense	SP	0
1											
2											
3		54	3-1		117.7	3.1					
4											
5											5
6											
7											
8		22	3-2		110.0	1.9	Becoming medium to coarse with trace fines and gravel. Native.	Dry	Med. Dense	SP/ SW	
9											
10											10
11											
12											
13		45	3-3				Becoming less gravelly.	Dry	Dense	SP/ SW	
14											
15											15
16											
17											
18		50	3-4				Becoming fine to medium with trace silt.	Dry	Dense	SP	
19											
20							Boring terminated at 18.5 feet. No groundwater encountered.				20
21											
22											
23											
24											
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 4			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Moderate brown, fine to medium, poorly to well-graded SAND with silt and gravel. Fill.	Dry	Med. Dense To Dense	SP/SW	0
-											-
-											-
-											-
-											-
-											-
-											-
5		74	4-1		109.6	2.5	Becoming siltier and grayish-brown. Fill?	Dry	Very Dense	SP/SW	5
-											-
-											-
-											-
-											-
-											-
10		35	4-2		100.0	2.6	Fine to medium with some coarse and silt, poorly graded SAND. Native.	Dry	Med. Dense	SP	10
-											-
-											-
-											-
-											-
-											-
15		34	4-3				Becoming poorly to well-graded SAND.	Dry	Med. Dense	SP/SW	15
-											-
-											-
-											-
-											-
-											-
20		44	4-4				Becoming fine to coarse, well graded.	Dry	Dense	SW	20
-											-
-											-
-											-
-											-
25		51	4-5				Trace coarse gravel.	Dry	Dense	SW	25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 4			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
25							Rocky zone, approximately 2 feet thick				25
30		71	4-6				Fine to medium, poorly graded SAND with trace gravel and silt.	Dry	Very Dense	SP	30
35		23	4-7				Moderate brown, fine silty SAND.	Slight. Moist	Med. Dense	SM	35
40		16	4-8				Grading to moderate brown, fine to medium, poorly graded SAND.	Slight. Moist	Loose	SP	40
45							Boring terminated at 40.0 feet. No groundwater encountered.				45
50											50

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 5			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Tannish-brown to grayish-brown silty, fine, poorly-graded SAND with gravel. Fill.	Dry	Med. Dense	SP/SM	0
5		27	5-1				Native.				5
10							Practical refusal at 8.0 feet. No groundwater encountered.				10
15											15
20											20
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 6			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light grayish-brown, silty to poorly-graded SAND. Fill.	Dry	Med. Dense	SM/SP	0
5		39	6-1		104.5	2.9		Dry	Med. Dense	SM/SP	5
10		30	6-2		101.0	4.2	Salt and pepper colored, fine to medium, poorly-graded SAND. Native.	Dry	Med. Dense	SP	10
15		29	6-3					Dry	Med. Dense	SP	15
20		35	6-4				Becoming moderate brown, fine to medium, poorly graded SAND with silt.	Slight. Moist	Med. Dense	SP	20
25							Boring terminated at 21.5 feet. No groundwater encountered.				25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 1			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, fine to medium, poorly-graded SAND with gravel, silt and some cobbles. Fill.	Dry	Med. Dense	SP	0
-							Becoming medium to coarse with less silt.	Dry	Dense	SP/	-
-							Difficult digging, becoming moderate brown.	Dry	Dense	SP/ SW	-
-											-
5							Becoming pebbly. Native?	Dry	Dense	SP/ SW	5
-											-
-											-
-							Becoming less cobbly, digging easier, large quartz sand grains, little to no silt binder.	Dry	Med. Dense	SP	-
-	8		7-1	(no recovery)							-
10							Test Pit terminated at 9.0 feet. Minor collapsing in top 1.5 feet of pit. No visible fill contact.				10
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
25											25
CONSOLIDATED ENGINEERING LABORATORIES											

Project Name: Warehouse Lot						Project No: G1357	Logged By: MAH	Test Pit No.: 2			
Location: N. Palm Springs, California						Excavation Method: Backhoe with Modified California sampler		Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly-graded to well-graded, fine to coarse SAND with silt and gravel. Some cobbles. Fill.	Dry	Med. Dense	SP/ SW	0
-							Becoming moderate brown, less coarse, more silt.	Dry	Dense	SP	-
-		40	8-1		106.6	3.9					-
-											-
-											-
5		24	8-2		107.9	2.0		Dry	Med. Dense	SP	5
-											-
-							Test Pit terminated at 6.0 feet. No fill contact visible.				-
-											-
-											-
-											-
10											10
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
25											25

CONSOLIDATED ENGINEERING LABORATORIES

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 3			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
-							Becoming moderate brown and slightly more coarse.				-
-											-
-											-
-		35	9-1		113.0	2.5	2-boulders 1.5 feet in diameter. 3-boulders 3/4' to 1' in diameter.	Dry	Med. Dense To Dense	SP/ SW	5
5							Becoming more coarse. Native.				-
-											-
-											-
-											-
-											-
10							Test Pit terminated at 8.0 feet. Very little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 4			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Three boulders to 2 feet in diameter. Some pit collapsing. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
1							Becoming coarser sand.				
2							Less boulders and cobbles.				
3		12	10-1	(no recovery)			Digging easier, less cohesion. Native?	Dry	Med. Dense	SP/ SW	5
4											
5											
6											
7							Test Pit terminated at 7.0 feet. No visible fill contact.				
8											
9											
10											10
11											
12											
13											
14											
15											15
16											
17											
18											
19											
20											20
21											
22											
23											
24											
25											25

CONSOLIDATED ENGINEERING LABORATORIES

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 5			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
-							Becoming moderate brown, some boulders, fine to medium with silt.	Dry	Med. Dense	SP	-
-		23	11-1		115.4	2.6					-
-											-
5							Becoming fine to coarse. Native?	Dry	Med. Dense	SP/ SW	5
-		8	11-2	(slough)							-
-							Test Pit terminated at 7.5 feet. Little to no collapsing of pit.				-
-											-
10											10
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
25											25

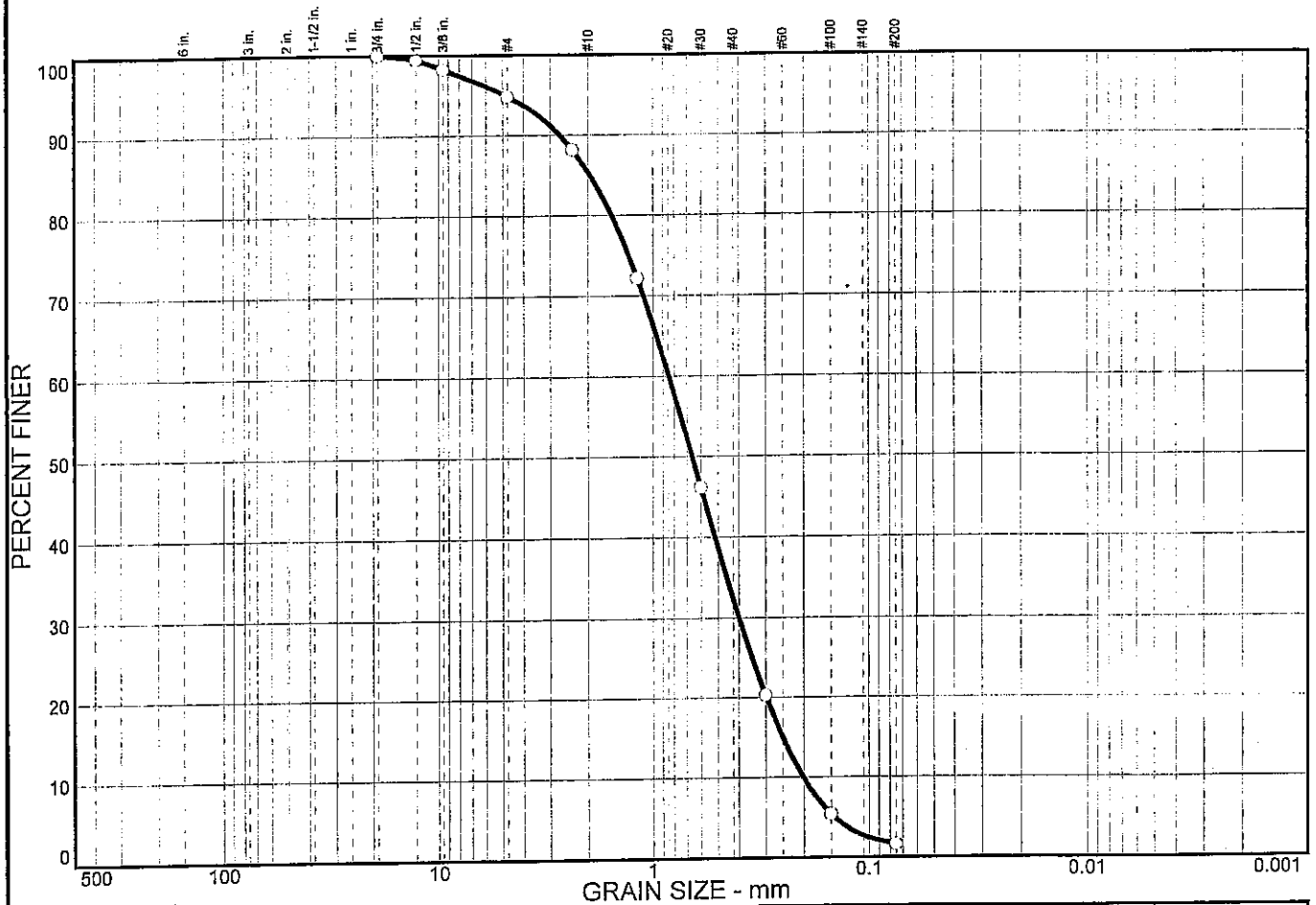
Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 6			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense	SP/SW	0
-											-
-											-
-											-
-											-
5		20	12-1				Becoming cobbly and bouldery, moderate to tannish-brown.				5
-											-
-							Becoming less cobbly, less cohesive. Native?				-
-											-
-											-
-											-
10							Test Pit terminated at 6.0 feet. Little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
-											-
25											25

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Project Name: Warehouse Lot						Project No: G1357		Logged By: MAH		Test Pit No.: 7	
Location: N. Palm Springs, California						Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03	
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense	SP/SW	0
-											-
-							Becoming moderate brown, fine to medium. Some coarse grains.	Dry	Med. Dense	SP	-
-							Becoming more cobbly and some boulders.				-
-							Less cohesion.				-
5							Easier digging, fine to coarse, very little cobbles. Native?	Dry	Med. Dense	SP/SW	5
-											-
-											-
-											-
-											-
10							Test Pit terminated at 8.0 feet. Little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
25											25
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APPENDIX B
LABORATORY TEST RESULTS
Sieve Analysis
Single Point Consolidation
R-Value
Water Soluble Sulfate

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	5.2	93.2	1.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	99.4		
3/8 in.	98.2		
#4	94.8		
#8	88.2		
#16	72.2		
#30	46.2		
#50	20.3		
#100	5.4		
#200	1.6		

* (no specification provided)

Soil Description
 7-1: brown sand with some rock

Atterberg Limits
 PL= LL= PI=

Coefficients
 D₈₅= 1.95 D₆₀= 0.842 D₅₀= 0.658
 D₃₀= 0.398 D₁₅= 0.249 D₁₀= 0.200
 C_u= 4.21 C_c= 0.94

Classification
 USCS= AASHTO=

Remarks

Sample No.: S0820-05: 7-1
Location:

Source of Sample:

Date:
Elev./Depth: 8.0'-8.5'

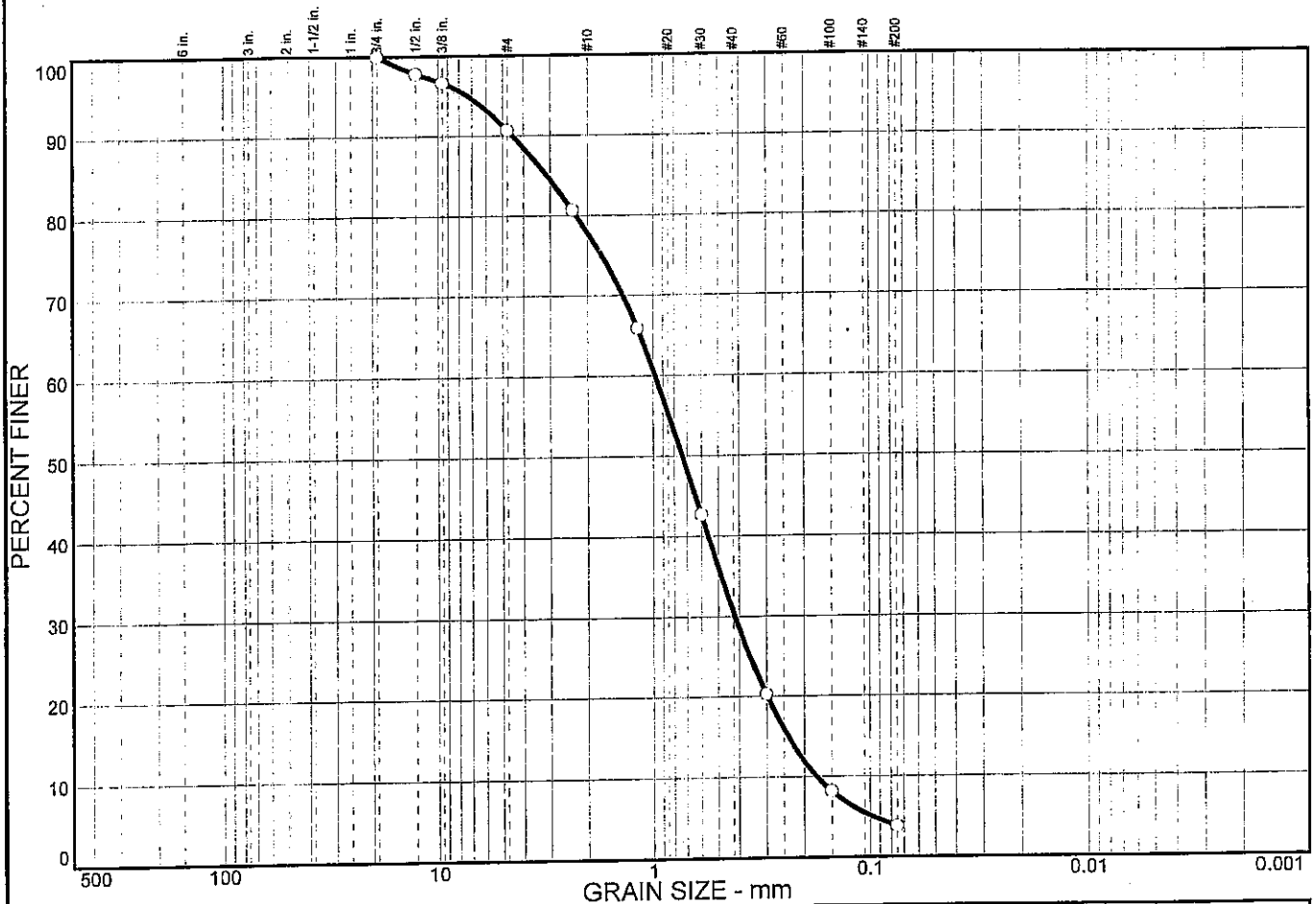
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Client:
Project: Palm Springs

Project No: G1357

Plate 7-1

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	9.3	86.9	3.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	97.8		
3/8 in.	96.7		
#4	90.7		
#8	80.7		
#16	65.9		
#30	42.7		
#50	20.3		
#100	8.2		
#200	3.8		

* (no specification provided)

Soil Description

11-2: brown sand with some rock

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₈₅= 3.10
D₃₀= 0.417
C_u= 5.58

D₆₀= 0.975
D₁₅= 0.237
C_c= 1.02

D₅₀= 0.733
D₁₀= 0.175

Classification

USCS=

AASHTO=

Remarks

Sample No.: S0820-05: 11-2
Location:

Source of Sample:

Date:
Elev./Depth: 6.5'-7.5'

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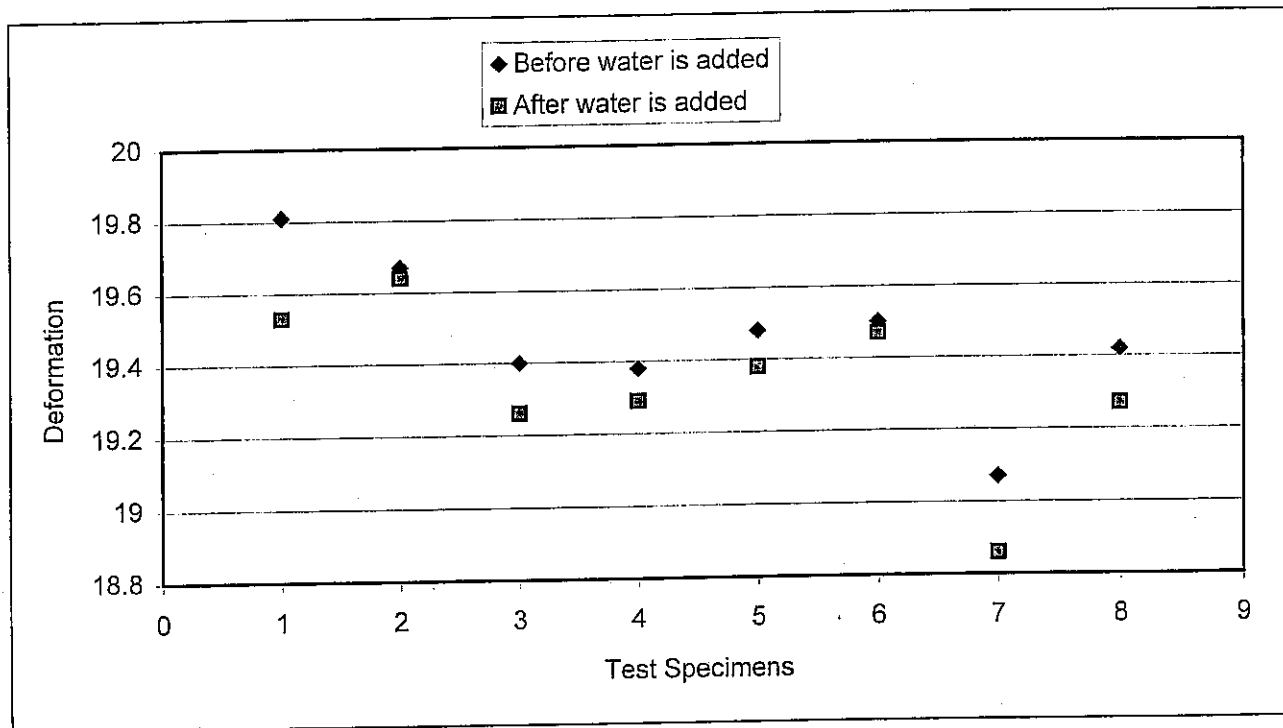
Client:
Project: Palm Springs

Project No: G1357

Plate 11-2

CEL# G1357
 Project: Palm Springs
 Lab No.: S0820-05

One Dimensional Consolidation



Initial Height, mm: 20
 Load, psf: 4000

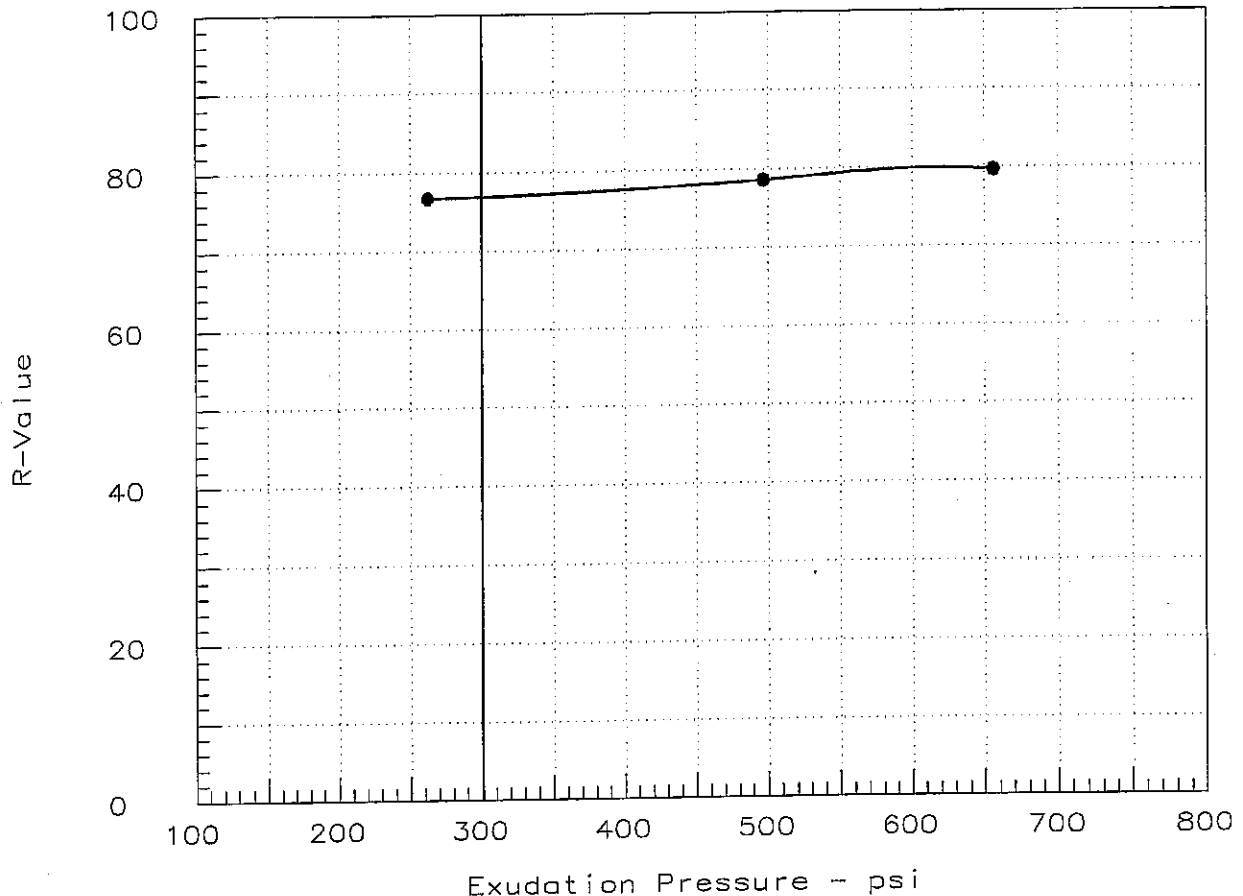
Height of Specimens after Loading

Specimen ID	<u>1-1</u>	<u>3-3</u>	<u>4-1</u>	<u>4-2</u>	<u>6-1</u>	<u>6-3</u>	<u>8-1</u>	<u>8-3</u>
Test Specimen	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
Before Water Added	19.81	19.67	19.40	19.38	19.48	19.50	19.07	19.42
After Water Added	19.53	19.64	19.26	19.29	19.38	19.47	18.86	19.27
Deform'n before water, mm	0.188	0.333	0.602	0.617	0.518	0.500	0.927	0.584
Deformation after water, mm	0.470	0.356	0.742	0.706	0.620	0.533	1.140	0.723
* Dry Density, pcf	104.9	98.1	109.6	100.0	104.5	101.0	106.6	107.9
* Moisture Content, %	6.0	4.3	2.5	2.6	2.9	4.2	3.9	2.0
Final Moisture Cont, %	18.8	21.0	17.2	18.4	18.0	21.8	15.3	17.5

* as prepared

Specimen ID	Depth, ft	Material Description
1-1	4.5-5.0	light brownish gray silty sand
3-3	13.0-13.5	light gray coarse sand (moisture added before set up)
4-1	4.5-5.0	brown sand with silt (partially disturbed, removed 1/4" rock)
4-2	9.5-10.0	light brown sand (partially disturbed, removed 1-1/2" rock)
6-1	6.0-6.5	light brown sand
6-3	16.0-16.5	light brownish gray sand
8-1	2.5-3.0	brown sand with some silt
8-3	4.5-5.0	brown sand with some silt

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	121.3	7.8	0.00	26	2.50	263	77	77
2	350	121.5	7	0.00	25	2.51	497	79	79
3	350	122.0	6.8	0.00	22	2.50	657	80	80

TEST RESULTS	MATERIAL DESCRIPTION
R-Value @ 300 psi exudation pressure = 77	brown sand with some gravel
Project No.: G1357 Project: Palm Springs Location: Bulk sample Date: 8-29-2003	Tested by: YD Checked by: CG Remarks: Lab NO. S0820-05
R-VALUE TEST REPORT Consolidated Engineering Laboratories	Fig. No.



ETS

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so that both benefit.**

SPECIAL SOIL REPORT

To: Marc Hachey
Consolidated Engineering Labs
7060 Koll Center Parkway, #300
Pleasanton, CA 94566-3108

Date: August 27, 2003
Lab #: 00143-1
Received: August 20, 2003
Tech(s): H. Banwait
Lab Supervisor: D. Jacobson
Lab Director: G.S. Conrad, Ph.D.
Sample ID(s): PS1/C

Sample of: soil (grab)
File Number: G1357

Site Location/Job: Palm Springs, California.

RESULTS

<u>SAMPLE ID</u>	<u>SAMPLE DESCRIPTION</u>	<u>SULFATE (SO₄)</u>
PS1/C	Grab/Bulk	54 mg/kg

COMMENTS

This sample has a low sulfate level in terms of adverse engineering impacts at just over 50 ppm. Therefore, as long as this sample is representative of the soil as a whole, the soil is well within acceptable limits for this particular parameter as concerns its potential impact on concrete, mortar, grout and cement.

NOTES:

This test was done in a manner consistent with EPA, DHS, and LUFT protocols, i.e., Standard Methods UC Davis, Methods of Soil Analysis, Association of Test Materials (ASTM), CalTrans or other appropriate protocols: Cal Test - 417 (CalTrans).

APPENDIX C

Grading and Earthwork Specifications



GRADING AND EARTHWORK SPECIFICATIONS

A geotechnical engineering study has been prepared for this site by Consolidated Engineering Laboratories. The contractor shall become familiar with the site conditions and the recommendations contained within this report.

Definition of Terms

1. The term "Geotechnical Engineer," as used in this specification, shall mean a state registered professional engineer or his representative qualified to observe and test earthwork construction, and provide geotechnical engineering and consulting services.
2. "Engineered Fill" shall be earth material mechanically compacted to the degree specified by the Geotechnical Engineer. The Geotechnical Engineer shall make sufficient observations and tests to verify that fills have been placed in accordance with applicable specifications and the recommendations contained in the project geotechnical report.
3. The term "Relative Compaction" is defined as the ratio of in-place field dry density to the theoretical maximum dry density determined in the laboratory by the ASTM D1557 test procedure. The optimum moisture content is the moisture content at which the maximum theoretical dry density has been achieved in the laboratory by the ASTM D1557 test procedure.

Materials

4. Engineered fill shall be either on-site or imported material which is free of organic material, debris or other deleterious material. Engineered fill materials shall be approved by the Geotechnical Engineer prior to their use on the site. Engineered fill material shall not contain rocks or lumps larger than 6 inches in maximum dimension unless otherwise specified or approved by the Geotechnical Engineer. When used for trench backfill, engineered fill shall not contain rocks or lumps larger than 4 inches in maximum dimension.
5. Imported fill materials should meet the requirements of "Engineered Fill," be predominantly non-expansive, and have a Plasticity Index (PI) of 15 or less. Additional requirements for imported fill may be also specified by the Geotechnical Engineer.



6. Paving materials and their placement shall be in conformance with the requirements of the State of California, Department of Transportation (Caltrans) Standard Specifications, except that relative compaction shall be based on the ASTM D1557 test procedure. Aggregate base materials used for pavement construction shall be Caltrans Class 2 Aggregate Base, meeting the requirements of the Caltrans Standard Specifications, current edition.

7. Aggregate subbase materials used for pavement construction shall be Caltrans Class 2 Aggregate Subbase, meeting the requirements of the Caltrans Standard Specifications, current edition.

8. Material used as a capillary break beneath interior concrete slab-on-grade floors shall be clean gravel or crushed rock of 3/4-inch maximum size with less than 5 percent passing the No. 4 sieve. The material should have a Durability Index (CTM 229) of not less than 40.

Site Clearing, Stripping, and Demolition

9. Prior to placement of engineered fills or construction of site improvements, the site shall be cleared of existing abandoned structures, pavements, underground utilities, debris, and other deleterious materials, within proposed development areas. Debris resulting from the removal of these items shall be removed from the site, unless otherwise permitted.

10. Underground utilities shall be located prior to commencing grading operations. If underground utilities are abandoned, they shall be entirely removed, or fully grouted closed, unless otherwise directed by the Geotechnical Engineer. After removal, the excavations shall be backfilled with approved fill material and compacted to at least 90 percent relative compaction.

11. Following demolition and site clearing operations, areas to receive fill, concrete flatwork, structures and/or pavements shall be stripped of surface vegetation, trees and their root systems, existing loose fill materials, organic-laden soils, soft or wet soils and other deleterious materials.

Excavations resulting from the removal of such items shall be cleaned out to firm soil, as directed by the Geotechnical Engineer, and backfilled with engineered fill compacted in accordance with these specifications.



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12. The depth of stripping of surface vegetation shall be at least 3 inches, and as necessary to remove organic materials. Tree removal shall include removal of the major root systems, including roots larger than 2 inches in diameter. Excavations in tree removal areas shall be dished to allow through passage of compaction equipment. The stripped materials shall be removed from the site, unless otherwise permitted. Organic-laden soils may be suitable for use in landscape areas with the approval of the owner and the Geotechnical Engineer.

General Grading

13. Following clearing and stripping operations, the exposed soil in areas to receive fill, structures, and/or concrete flatwork shall be scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 90 percent relative compaction at a moisture content at or above optimum, except where otherwise specified in the Geotechnical Engineering Study. Soil areas disturbed during demolition operations shall be sub-excavated to firm native soil, scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 90 percent relative compaction at a moisture content at or above optimum.

14. Processing of soil for compaction shall consist of aerating the material if it is too wet or adding water to the material if it is too dry. When the moisture content of a material is too high to allow the specified degree of compaction to be achieved, the material shall be aerated by plowing, blading, spreading, or other suitable means until the proper moisture content has been achieved. When the moisture content of a material is below optimum, water shall be added and the material thoroughly mixed until the proper moisture content has been achieved.

15. Fill materials shall be placed in lifts not exceeding 8 inches in uncompacted thickness. Each layer shall be thoroughly mixed to promote uniformity in each layer. Engineered fill materials shall be compacted uniformly to at least 90 percent relative compaction at a moisture content at or above optimum, except where otherwise specified in the Geotechnical Investigation Report. Filling operations shall continue until the final grades have been attained in accordance with the approved plans. Structural fills shall extend at least 5 feet beyond the footprints of proposed structures.



16. The Geotechnical Engineer shall observe the placement of fill/backfill and conduct in-place field density tests on the fill/backfill to check for adequate moisture content and relative compaction as outlined herein. Where less than the specified relative compaction is obtained, additional compactive effort shall be applied and the fill moisture-conditioned as necessary until the specified relative compaction is attained. The Contractor shall provide safe and timely access to the Geotechnical Engineer at the grading site, to permit monitoring and testing.

17. Fills constructed on ground sloping steeper than 6H:1V (horizontal to vertical) shall be keyed and benched into the natural grade, as specifically recommended by the Geotechnical Engineer. Subsurface drains shall be installed in areas of observed seepage, as recommended by the Geotechnical Engineer.

18. Fill slopes should be constructed by overfilling and cutting the slope to final grade. Track walking of a slope to achieve slope compaction is not an acceptable procedure for slope construction, unless otherwise permitted by the Geotechnical Engineer.

19. In general, cut and fill slopes should be designed and constructed at slope gradients not steeper than 2H:1V (horizontal to vertical). Interceptor drainage ditches should be constructed at 30-foot vertical intervals on slopes higher than 30 feet. These interceptor drainage ditches should be constructed on drainage terraces that are at least 6 feet wide. The drainage terrace shall be constructed to provide adequate access for periodic maintenance of the drainage ditch. The drainage terrace shall have a minimum cross slope of 2 percent into the hillside, and toward the drainage ditch. Interceptor ditches should be constructed above the tops of slopes where natural drainage is toward the slope. Erosion control planting should be established as soon after grading as possible.

20. Cut slopes should be observed by the Geotechnical Engineer or Engineering Geologist to check for possible adverse geologic conditions. If unfavorable conditions are exposed, supplementary recommendations shall be developed to mitigate possible slope instability.

21. Wherever, in the opinion of the Owner's or the Geotechnical Engineer's representative, an unstable condition is being created either by cutting or filling, work should not proceed in that area until an investigation has been made and the grading operations revised, if found necessary.



Trenches

22. Trench backfill materials shall meet the requirements of "Engineered Fill," as specified in this report, and shall not contain rocks or lumps larger than 4 inches in maximum size. Trench backfill shall be placed in lifts not exceeding 8 inches in uncompacted thickness, and be mechanically compacted to at least 90 percent relative compaction at a moisture content at or above optimum.

23. Where access to construction personnel is required, trenches in excess of 5 feet deep shall be shored or have their side walls sloped back in accordance with OSHA and other applicable regulations.

24. Jetting of trench backfill materials shall not be permitted as a means of obtaining the required compaction. Jetting shall be permitted only within the sand bedding and shading material around buried utilities.

25. Open trenches adjacent and parallel to existing foundations shall not extend below an imaginary 2H:1V (horizontal to vertical) plane projected downward from the nearest edge of the base of the adjacent footing without specific review and recommendation by the Geotechnical Engineer.

Pavement Subgrade and Aggregate Base Preparation

26. The top 8 inches of soil subgrade in pavement areas shall be compacted to at least 95 percent relative compaction. In cut areas, the subgrade soils shall be scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 95 percent relative compaction at a moisture content at or above optimum. The finished subgrade shall be graded to provide a firm and stable base for support of the specified pavement section.

27. Aggregate base and subbase materials within pavement areas shall be placed in lifts not exceeding 8 inches in uncompacted thickness. These materials shall be compacted to at least 95 percent relative compaction, at a moisture content at or above optimum. All final grades shall be firm and stable prior to placement of pavement.



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28. Where unstable subgrade is encountered, the Geotechnical Engineer shall provide mitigation recommendations as required. The contractor shall minimize the amount of construction traffic on unstable or potentially unstable areas, as defined by the Geotechnical Engineer. If rutting or other instability is caused by the contractor's excessive construction traffic in area designated as unstable or potentially unstable, these areas shall be repaired at the contractor's expense.

Seasonal Limits

29. Fill materials shall not be placed, spread or rolled during unfavorable weather conditions, unless otherwise permitted by the Geotechnical Engineer. Fill operations shall not be resumed until field tests by the Geotechnical Engineer indicate that the moisture contents of subgrade and fill materials are satisfactory. Placement of fill material on frozen ground shall not be permitted.

30. Surface drainage provisions shall be made by the contractor, as necessary during construction, to prevent the ponding of water on engineered fill and pavement subgrade areas during construction. The contractor shall implement erosion control measures as necessary to protect the work.

APPENDIX D
Pier Drilling and Construction Specification



PIER DRILLING AND CONSTRUCTION SPECIFICATIONS

1. The drilled caisson excavation should be advanced with a single-flight auger or bucket auger to the design depth (the completed excavation should be verified by observations and measurement to be clean and free of water to the specified depth). After reaching the design depth, the auger should be placed back in the hole and two additional passes made without advancement to remove loose material from the bottom of the hole.
2. If the drilled hole is left open, the hole should be covered to prevent tools, soil, or personnel from falling into the drilled hole. During rains, water should be prevented from flowing into the drilled hole.
3. The caisson excavation shall be drilled such that the vertical alignment does not deviate by more than 1/2 caisson diameter from top to bottom.
4. Reinforcing cages should have spacers or centralizers to ensure at least 2 inches of concrete cover.
5. Concrete should be placed through a hopper or other device approved by CEL so that it is channeled in such a manner to free-fall and clear the walls of the excavation and reinforcing steel until it strikes the bottom. Adequate compaction of the concrete will be achieved by free fall up to the top 8 feet or depth of the anchors, whichever is deeper. Above 8 feet the concrete should be vibrated to achieve proper density.
6. If groundwater is present in the caisson excavation it should be pumped dry prior to concrete placement or tremie placement of the concrete should be performed.
7. Concrete placed using the tremie method should be pumped into the excavation with sufficient head to lift the groundwater and spoils present in the excavation to the ground surface. The concrete should be placed in one continuous pour and should continue until "clean" concrete is observed at the top of the excavation.



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8. Continuous observation of the construction should be provided by CEL. Our geotechnical engineering personnel should confirm proper diameter, depth and cleaning, and should also confirm the nature of the materials encountered in the caisson excavation. Concrete placement should be continuously observed to confirm that it meets requirements. A quality control report should be submitted on the caisson, verifying that details of the caisson construction have been observed.

September 24, 2009

Claudia Steiding, Senior Environmental Planner
County of Riverside Economic Development Agency
3133 Mission Inn Avenue, Riverside, CA 92507

Subject: **Cultural Resource Review and Initial Study Recommendations for the Roy's Desert Center (Western Coachella Valley Multi-Service Center) Project located at 19-531 McLane Street, North Palm Springs, California.**

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

Dear Ms. Steiding:

Michael Brandman Associates (MBA) is providing the County of Riverside Economic Development Agency (EDA) with environmental compliance documents in support of this Project. The EDA is proposing interior improvements on an existing 48,000 square foot building and the installation of three (3) additional septic tanks. The shelter is located at 19-531 McLane Street in the City of Palm Springs, California. New construction will occur in areas that have been previously graded for office building construction.

MBA undertook a records search on September 18, 2009 for cultural resources at the Eastern Information Center (EIC) at the Department of Anthropology, University of California - Riverside. The records search was conducted by MBA Senior Archaeologist Michael Dice, M.A. This report summarizes the results of the analysis, and then provides the proper language for insertion into the Initial Study cultural resource section.

Cultural Resource Records Search

The project area is located in Section 15, Township 3 South, Range 4 East as depicted on the Desert Hot Springs, California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. A one-mile radius was used for the records search. The results of the records search indicated that few cultural resources (Table 1) have been recorded within the search radius of the project area, and none are located within the boundaries of the proposed project. The project study radius exhibits two nearby cultural resources: the nearest recorded cultural resource is about 600 meters to the southeast.

Table 1: Known Cultural Resources Located in a 1-Mile, 0.5 Mile and 0.25-Mile Radius of the Roys Desert Project

Site Number	Location Section	Resource Description	~0.5-mile Radius	~0.25-mile Radius	On Site?
CA-RIV-3441H	22	Historic Garnet siding site assoc. with the historic railroad grade	●	—	No
33-9498	various	Historic SP and UP railroad grades	—	●	No

Twenty-one area-specific cultural resource reports are on file with the EIC for the search radius. None of these reports directly surveyed the project area. This suggests that the project area has never been surveyed by a qualified archaeologist previously.

Prehistoric Cultural Setting

Four general, but distinctive cultural periods have been identified by Wallace (1955) for the prehistoric occupation of southern California (Early Hunter; Milling Stone; Intermediate; Late). Fagan (2003), Moratto (1984), and Chartkoff and Chartkoff (1984) provide more recent overviews of California archaeology and historical reviews of the inland southern California coast, among other locales. These authors use a modified version of Wallace's period format, updated to reflect newer research efforts.

Early Man Period (before 9500 B.P.) sites are characterized by large projectile points, and other stone implements adapted to chase big game animals. The large size and weight of the points suggest that the primary weapon for hunting was the dart, propelled by a spear thrower. Lack of grinding tools, suggest that the inhabitants were not exploiting the plant foods to the extent that later cultures were. They were nomadic in hunters, following the game throughout the seasons. Archaeological sites representing this early period are not common.

The Milling Stone Period (about 9500 B.P. to 3000 B.P.) represents a long period of time characterized by small, highly mobile groups of Native Americans. These groups probably had a seasonal round of settlement that included both inland and coastal residential bases. They relied primarily on grasses and seeds for food. Characteristic inland sites include numerous manos, metates, and hammerstones. Shell middens are more common at coastal sites.

The Intermediate Period occurred from approximately 3000 B.P. to 1250 B.P. Mortars and pestles first appear in this period, indicating knowledge of acorn leaching. Use of the acorn probably permitted greater sedentism, especially at inland locations. Large projectile points suggest use of spear throwers rather than the bow and arrow. Settlement patterns during this period are not well understood. Exchange between the coast and Colorado River groups becomes apparent in the archaeological record.

The Late Period (1250 B.P. to Historic Contact) saw a more semi-sedentary settlement pattern. Smaller projectile points suggest introduction of the bow and arrow and less or no reliance on the spear thrower. Lifestyle is little unchanged from the previous period, but influxes of Shoshonean speakers are evident in linguistic studies. Differences in archaeological deposits are representative of changes in population ancestry. Pottery-making is introduced.

The Cahuilla

According to Bean (1978), the Cahuilla traditional use area extends north-south from the summit of the San Bernardino Mountains in the north, to Borrego Springs and the Chocolate Mountains in the south, and extends east-west from the eastern slopes of the Palomar Mountains in the west to the Colorado Desert east of the Orocopia Mountain to the east. This description of Cahuilla territory includes the project area within their traditional use area. Bean (1972, 1978) forms the primary modern reference for this cultural group. Bean notes that of all the southern California Indians, the Cahuilla existed within the most geographically diverse region, constrained only by water supplies and topography.

Pre-contact Cahuilla territory encompassed the extremely rugged San Bernardino Mountain ranges at an elevation of 11,000 feet to the Salton Sink (Salton Sea), which is 273 feet below sea level. The upper Coachella Valley and Palm Springs areas exhibited protohistoric Cahuilla villages near defined water sources, with good access to food-gathering locales. Village sites were usually located near alluvial fans, streams or at the base of the San Jacinto Mountains for protection against the winds, while some Desert

Cahuilla settlements were located around hand dug wells and watering holes. Typically, one clan or family occupied several food-gathering locations and aggressively guarded these areas against other Cahuilla clans (Bean 1972 and 1978, Oswalt 1988, Strong 1972).

The Cahuilla have had definitive historical relationships with the Hopi of Arizona, the Gabrielino and Digueño of the southern Californian coast, the Serrano, and the Luiseño of Riverside County as well as other desert tribes such as the Kamia, Chemehuevi, and Paiute. It is thought the Cahuilla population prior to Spanish contact may have been as numerous as 6,000 people in an area over 2,400 square miles in size (Bean 1978, Bean and Saubel 1972, Strong 1972).

The prehistoric Cahuilla were characterized by the occupation of sedentary villages in subsistence territories that permitted them to reach the majority of their resources within a day's walk. Villages were commonly located near reliable sources of water. During October to November, much of the village population moved to temporary camps in the mountains to harvest acorns and hunt game. Inland groups also had fishing and gathering spots on the coast that they visited annually. In comparison with the Gabrielino and Luiseño, the Cahuilla appear to have had a lower population density and a less rigid social structure. The Cahuilla patterns may have been relatively stable until mission secularization in 1834, due to the policy of the Catholic Mission fathers or padres to maintain imported European traditional style settlement and economic patterns (Bean and Shipek 1978).

Pre-contact Cahuilla homes were generally constructed with forked posts, which supported the wood cross members and were completely covered in thatch, which was then sealed with sand or soil. In some cases the floor was subterranean. Each house was positioned so that a measure of privacy was attained (Bean 1978, Kroeber and Hooper 1978). Wilke confirms Blakes' earlier observations, that the Cahuilla homes were generally hidden in the mesquite groves and consequently overlooked when explorers searched for their villages (Wilke and Lawton 1975).

Cahuilla (Patayan) pottery has been stylistically and ornamentally compared to that of an ancient Pueblo style, as well as that made by Colorado River Indians, the Digueño, Luiseño and Mohave clans (Bean and Lawton 1975, Kroeber and Hooper 1978). Cahuilla pottery was constructed in coil form, then shaped with a polishing stone and wooden paddle, occasionally incised for decorative purposes and then finally sun baked and fired (Bean and Lawton 1975, Kroeber and Hooper 1978). Kroeber and Hooper suggest that the Cahuilla had four definitive pottery forms; an open bowl or dish, a cooking pot, a small-rimmed vessel and a wider opening rimmed vessel (1978), while Bean and Lawton suggest that ladles, trays, and pipes were also manufactured (1975).

Baskets were also an important item, and were manufactured in a variety of shapes and sizes, but always produced from coiled and woven mesquite branches, willow or palm leaves. Grasses were used in the foundation. The only tools used to manufacture these baskets were either a needle made from the leg bone of a deer or a heavy cactus needle, set into a wooden handle (Bean 1978).

Ceremony and ritual was of great importance to the Cahuilla (Bean 1978). Deep ceremonial ties existed between the Serrano and the Cahuilla, and in many cases the desert Cahuilla are thought to have adopted many of the ceremonial practices from the Serrano (Strong 1972). Frequently practiced ceremonies include multiple rituals for the mourning of the dead, the eagle dance, separate initiation rites ceremonies for boys and girls, and a summer and winter solstice celebration (James 1960, Strong 1972). This cultural linkage between the Cahuilla and Serrano is then furthered by inferences from Mission baptismal records and Serrano oral tradition.

According to personal communication with Britt W. Wilson, Cultural Resource Coordinator for the Morongo Band of Mission Indians, the relationship between the Cahuilla and Serrano is borne out of Mission baptismal records, available on-line from the Huntington Memorial Library. From these records, it may be inferred that Cahuilla people from White Water married into people from Serrano villages, such as Gupiabit located in the Cajon Pass region. In addition, the Cahuilla people accepted groups of Serrano peoples from Twentynine Palms, after a migration of Chemehuevi peoples into the Twentynine Palms area. Then, according to Serrano oral tradition, the Cahuilla adopted many of the Serrano songs because they had lost their own traditional songs (Britt W. Wilson, personal communication, 05/29/07).

The first European contact with the Coachella Valley region and the Cahuilla peoples occurred in 1774 and 1775-76, as the Juan Bautista de Anza expedition was looking for an inland route between Sonora, Mexico and the coast. This expedition passed through the Santa Rosa Mountains and established a route between Sonora and newly established Alta California settlements. Thereafter, the Cahuilla remained relatively isolated from Euro-American expansion, as their territory was distanced from the Spanish missions and unsuitable for large-scale ranching and farming. Contact increased in the 1820s with expeditions to find inland routes to the missions, and the first known Europeans to cross the Coachella valley were members of the Jose Romero expedition to Yuma between 1823 and 1825.

The Desert Cahuilla were able to maintain relative autonomy until the Colorado River gold rush of the 1860s. This event brought miners and emigrants to California along the Bradshaw Trail, which later became the route of modern I-10. This event, in conjunction with the 1863 smallpox epidemic and extended droughts, decimated the Cahuilla population. As the populations decreased, old villages were abandoned and traditional Cahuilla lands were rapidly lost to the encroaching settlers. The Cahuilla were finally granted allotments of land when the Morongo, Cabazon and Torres-Martinez Reservations were established by President Grant on May 15, 1876. The Mission Indian Agency was created for southern California in 1877. Today, Cahuilla Reservations include Santa Rosa, Cahuilla and Ramona in addition to the aforementioned Reservations established under President Grant.

Native American Sacred Lands Search and Consultation

The project is very unlikely to affect any cultural resources, nonetheless, a Sacred Lands File search request was sent to the Native American Heritage Commission (NAHC) on September 18, 2009 in an effort to determine whether any sacred sites are known within the vicinity of the project area. Our efforts are associated with fact-finding only. The NAHC responded on September 22, 2009 and indicated that no known sacred sites are located in or near the project area. The NAHC indicated that 12 tribal organizations may have additional information associated with the project area. Should the County be required to contact any local Tribes as part of future environmental compliance for this project (i.e.: SB18), we suggest that the attached list be used for this purpose.

It must be noted that the entirety of the project area was graded during construction of the existing office building. This would have resulted in an engineering of topsoil to code. It is highly likely that the upper 5-6 feet of topsoil was disturbed and recompact at the spot where the existing structures now stand. There is a low-to-none chance that significant buried Native American resources will be impacted during grading of ground below the existing buildings.

Paleontological Impacts

According to an on-line paleontological sensitivity review of the Desert Center parcels using the County's TLMA website (APN 666411011 and 666411012), the property is considered Low in paleontologic sensitivity. The property is covered with recent Holocene Alluvium and Aeolian sand deposits, which is a

soil and rock strata considered too young to exhibit significant paleontological resources. It is very unlikely that fossil resources would be uncovered during excavation for the septic tanks.

Initial Study Analysis

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

Historical Resource: Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

There is no potential for a substantial adverse change in the significance of a historic resource during construction of this project. Records indicate that no historical resources have ever been located on the project site, and that the chance that historic resources could be encountered during grading is extremely low. Therefore, a mitigation-monitoring plan to mitigate for potential impacts to historic resources during construction is not recommended. The Initial Study check box should read “No effect”.

Archaeological Resource: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Because it is highly unlikely that most of the subsurface soils on the project site are intact, there is a low-to-none potential for a substantial adverse change in the significance of a prehistoric resource during construction of this project. Records indicate that no prehistoric resources have ever been found on or within one mile of the project site (despite numerous surveys near the project), and that the chance that prehistoric resources could be encountered during grading is extremely low. Therefore, a mitigation-monitoring plan to mitigate for potential impacts to prehistoric resources during construction is not recommended. The Initial Study check box should read “No effect”.

Paleontological Resource or Geologic Feature: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There is no potential for a substantial adverse change in the significance of a paleontologic resource during construction of this project. Data indicates that paleontologic resources are extremely unlikely to be found during grading because any strata having good potential for fossil resources are not located in the project area. Therefore, a monitoring plan to mitigate for potential impacts to prehistoric resources during construction is not recommended. The Initial Study check box should read “No effect”.

Human Remains: Would the project disturb any human remains, including those interred outside of formal cemeteries?

There is little chance that human remains will be encountered during construction-related grading. Records indicate that no human remains have ever been found on or near the project site, and that the chance that human remains could be encountered during grading is extremely low due to heavy disturbance. Therefore, a plan to mitigate for potential impacts to human remains during construction is not required. The Initial Study check box should read "No effect". State law requires that if in the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code § 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Environmental Quality Act (CEQA) regulations and Public Resources Code (PRC) § 5097.98.

Summary

Based on the results of the records search, the existing land-use, and development within and adjacent to the project area, and the parameters of the proposed construction, the potential for impacts to buried and potentially significant cultural resources is considered low. Under these conditions and following CEQA guidelines, cultural and paleontological resource mitigation-monitoring is not recommended.

Unanticipated Discoveries

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources without a monitor or archaeologist present. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the CEQA guidelines. Cultural resources could consist of, but are not limited to, stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under §15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site into green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study. In addition, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property will be taken, and the State Historic Preservation Office (SHPO) and Native American tribes with concerns about the property, as well as the Advisory Council on Historic Preservation (ACHP), will be notified within 48 hours in compliance with 36 CFR 800.13(b)(3).

In the event of an accidental discovery or recognition of any human remains, Public Resource Code (PRC) §5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:

1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC §5097.98, or

2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission;
- The descendant identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

MBA appreciates the opportunity to assist you on this project. If we can assist further, or if you have questions, please contact me at 909.884.2255 extension 1208.

Sincerely,



Michael H. Dice, M.A., RPA
Senior Archaeologist
Michael Brandman Associates
621 E Carnegie Drive
San Bernardino, CA. 92408

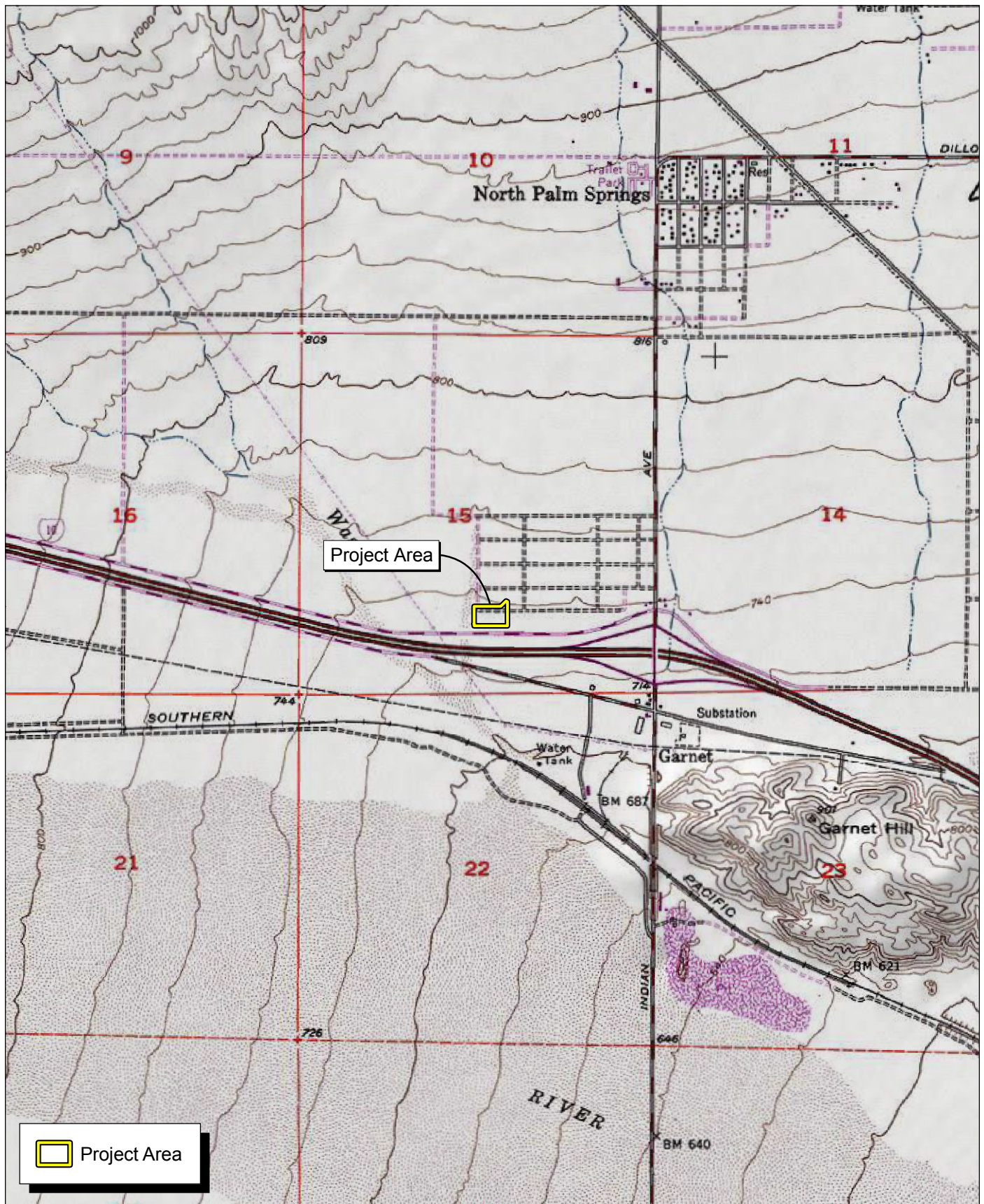
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- Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.
-
- Oswalt, W.H. 1988. This Land Was Theirs, A Study of North American Indians. Mountain View: Mayfield Publishing Co.
-
- Strong, W.D. 1972. Aboriginal Society in Southern California. Banning: Malki Museum Press.
-
- Wallace, W.J. 1955. A Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11(3):214-230.
-
- Wilke, P.J. and H.W. Lawton. 1975. Early Observations on the Cultural Geography of the Coachella Valley. In The Cahuilla Indians of the Colorado Desert: Ethnohistory and Prehistory, edited by L.J. Bean. Ballena Press Anthropological Papers, no. 3:9-37.
-



Source: Census 2000 Data, The CaSIL, MBA GIS 2009.



Source: TOPO! Desert Hot Springs (1978) 7.5' DRG.



Source: Google Earth Pro Aerial (January, 2006).



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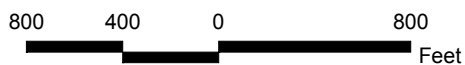


Exhibit 3 Local Vicinity Map Aerial Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
CULTURAL RESOURCE DUE DILIGENCE

**Appendix A:
NAHC Request Letter (MBA)
NAHC Response Letter
MBA Staff Resumes**



September 18, 2009

Native American Heritage Commission
915 Capitol Mall, Suite 364
Sacramento, CA 95814-4801

VIA FACSIMILE: 916.657.5390

Subject: **Request for a Sacred Lands Records Search for the Roys Center IS Project located in the City of Palm Springs, California. (USGS Desert Hot Springs, CA. quad)**

County of Riverside, California.

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

To Whom It May Concern:

Michael Brandman Associates (MBA) would like to determine whether any listed sacred sites are located within or near a future development project on private land in the City of Palm Springs, CA. The project will involve modification of about 2 acres of land where three septic tanks will be undergrounded. Excavation during construction is required

As seen in the attached topographic map, the project area is located in Section 15 of Township 3 South and Range 4 East as found on the USGS Desert Hot Springs, CA. 7.5' topographic quadrangle.

Please notify us of any sacred Native American sites that may be affected by the undertaking. A full description of this project can be found in our archaeological survey report, which is forthcoming. A response can be sent to our FAX, 909-884-2113. If you have any more questions or need to speak with me, please feel free to call me at 714.742.0468. Thank you for your time and effort!

Sincerely,

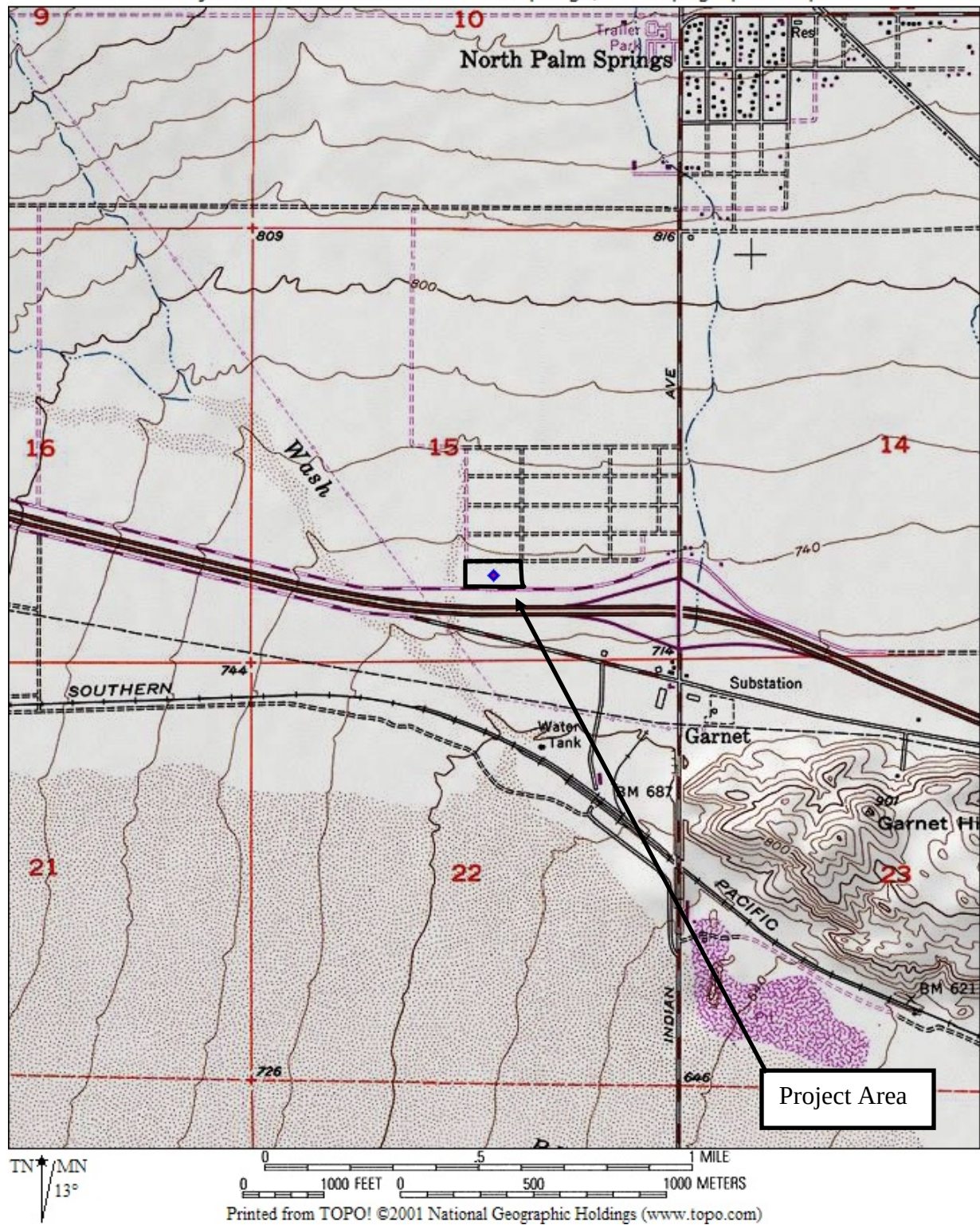
Michael H. Dice, M.A., R.P.A., Senior Archaeologist
Michael Brandman Associates
621 E Carnegie Drive Suite 100
San Bernardino, CA. 92408

Enclosures: Exhibit 1: Topographic Map

Q:\Michael Dice\2009 Projects\2749.0030.0\27490030 NAHC Letter.doc

MD:md

Project 2749.0030.0. Desert Hot Springs, CA. topographic map



Source: Topo! @National Geographic Holdings.



Michael Brandman Associates
2749.0030 • 9/2009 | CR Exhibit 1

Exhibit 1
Topographic Map
Rays Center Project • Cultural Resource RS

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
de_nahc@pacbell.net



September 21, 2009

Mr. Michael H. Dice, M.A., R.P.A., Senior Archaeologist

MICHAEL BRANDMAN ASSOCIATES

621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408

Sent by FAX to: 909-884-2113

Number of pages: 4

**Re: Request for a Sacred Lands File Search and Native American Contacts List for a Proposed,
Rays Center IS Project, located in the City of Palm Springs, Riverside County, California**

Dear Mr. Dice:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources (c.f. CA Public Resources Code §21070), was able to perform a record search of its Sacred Lands File (SLF) for the affected project area (APE) requested. The California Environmental Quality Act (CEQA; CA Public Resources Code Section 21000 – 21177) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." The NAHC SLF search did not indicate the presence of Native American cultural resources within one-half - mile radius of the project area (APE) of the proposed project (APE). There are, however, Native American cultural resources in close proximity to the APE.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and individuals as 'consulting parties' under both state and federal law.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. A Native American Tribe or Tribal Elder may be the only source of information about a cultural resource.. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation Coordinator's office (at (916) 653-7278, for referral to the nearest Information Center of which there are 11..

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 [f]) *et se*, and NAGPRA (25 U.S.C. 3001-3013), as appropriate. .

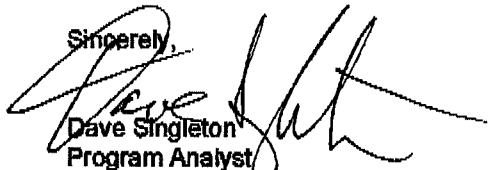
Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a

project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of 'historic properties of religious and cultural significance' may also be protected under Section 304 of the NHPA or at the Secretary of the Interior's discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,


Dave Singleton
Program Analyst

Attachment: Native American Contacts List (NOTE: we further recommend that other forms of 'proof of mailing or proof of contact be utilized instead of 'Return Receipt Requested' Certified or Registered Mail.) Further, we suggest a follow-up telephone call to the contacts if the replies are not received or need clarification.

Native American Contact
Riverside County
September 21, 2009

Cabazon Band of Mission Indians
David Roosevelt, Chairperson
84-245 Indio Springs Parkway Cahuilla
Indio , CA 92203-3499
(760) 342-2593
(760) 347-7880 Fax

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 609 Cahuilla
Hemet , CA 92546
srtribaloffice@aol.com
(951) 658-5311
(951) 658-6733 Fax

Los Coyotes Band of Mission Indians
Francine Kupsch, Spokesperson
P.O. Box 189 Cahuilla
Warner , CA 92086
loscoyotes@earthlink.net
(760) 782-0711
(760) 782-2701 - FAX

Augustine Band of Cahuilla Mission Indians
Mary Ann Green, Chairperson
P.O. Box 846 Cahuilla
Coachella , CA 92236
(760) 369-7171
760-369-7161

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Morongo Band of Mission Indians
Michael Contreras, Cultural Heritage Prog. Coordinatr
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
mcontreras@monongo-nsn.
(951) 755-5025
(951) 201-1866 - cell
(951) 922-0105 Fax

Torres-Martinez Desert Cahuilla Indians
Mary Resvaloso, Chairperson
PO Box 1160 Cahuilla
Thermal , CA 92274
mresvaloso@torresmartinez.org
(760) 397-0300
(760) 397-8146 Fax

Torres-Martinez Desert Cahuilla Indians
Diana L. Chihuahua, Cultural Resources Coordinator
P.O. Box 1160 Cahuilla
Thermal , CA 92274
dianac@torresmartinez.org
760) 397-0300, Ext. 1209
(760) 272-9039 - cell (Lisa)
(760) 397-8146 Fax

Torres-Martinez Desert Cahuilla Indians
Ernest Morreo
PO Box 1160 Cahuilla
Thermal , CA 92274
maxtm@aol.com
(760) 397-0300
(760) 397-8146 Fax

Los Coyotes Band of Mission Indians
Melody Sees, Environmental Director
P.O. Box 189 Cahuilla
Warner , CA 92086
(760) 782-0712
(760) 782-2730 - FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code, and federal NEPA (42 USC 4321-4335), NHPA Sections 106, 4(f) (16 USC 470(f) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Royce Center IS Project, located in the City of Palm Springs, Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Native American Contact
Riverside County
September 21, 2009

Agua Caliente Band of Cahuilla Indians THPO
Patricia Tuck, Tribal Historic Perservation Officer
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA 92264
ptuck@aguacaliente-nsn.gov

(760) 699-6907
(760) 699-6800
(760) 699-6924- Fax

Cahuilla Band of Indians
Luther Salgado, Sr.
PO Box 391760 Cahuilla
Anza, CA 92539
tribalcouncil@cahuilla.net
915-763-5549

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code, and federal NEPA (42 USC 4321-4335), NHPA Sections 106, 4(f) (16 USC 470(f) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Roys Center IS Project; located in the City of Palm Springs; Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Michael H. Dice, RPA

Senior Cultural Resource Specialist/Project Manager

Overview

- 30+ years experience
- Master's degree, Anthropology – Arizona State University, Tempe. 1993
- Bachelor's degree, Anthropology – Washington State University, Pullman. 1986
- Registered Professional Archaeologist (RPA 2000)
- Registered Archaeologist in Orange County and Riverside County

Michael H. Dice, MA, Senior Cultural Resource Specialist and Project Manager, has more than 30 years experience performing record searches, archaeological surveys, archaeological site testing projects, and data collection projects on private and public lands in the Southwestern United States. He has authored or co-authored more than 150 Cultural Resources Inventory Reports required for CEQA and/or NEPA level documents including several manuscripts for the National Park Service. Michael has extensive experience with California Native American Tribes, having provided direct consultation and coordination with the Agua Caliente Band, Gabrielino Band, Juaneno Band, Morongo Band, and Pechanga Band.

Related Experience

High Desert Archaeological Projects

Sky Harbor Ranch Specific Plan Project. 2008. Town of Yucca Valley. Mr. Dice undertook an archaeological survey of 640 acres located south of the Town of Yucca Valley and bordering Joshua Tree National Park. Mr. Dice surveyed the entirety of the section with two staff archaeologists, then wrote the report and recorded a single historic archaeological site. The survey was undertaken for a Specific Plan in the Town.

The Barstow Industrial Park Project. 2007-2009. City of Barstow. MBA is preparing an EIR for a new logistics center to handle multi-modal transport of goods in and out of the Los Angeles Basin and throughout the country. The center, being developed by IDA Real Estate Group, will be located on 1,200 acres along the Mojave River west of the City of Barstow. Technical studies will be completed and integrated into the EIR that will be used by the City of Barstow and the various regulatory agencies involved in the permitting process. The cultural resource analysis was led by Mr. Dice and consisted of a Phase 1 survey and Phase II test of various historic and historic archaeological resources. The final cultural resource element to the project is the crafting of a Phase III (data collection through subsurface excavation) program consistent with scientific studies that have taken place in the region in previous years. More than 30 cultural resources have been identified in the project area and consultations with Native Americans have taken place since project inception.

An Archaeological Survey of the Mastro Property. 2007. Yucca Mesa Area, County of San Bernardino. Mr. Dice undertook a survey of 30 acres in the Yucca Mesa region of Joshua Tree. Several archaeological resources were detected and recorded onto DPR523a form sets. Mitigation measures were recommended that asked for test excavations before the property was approved for subdivision by the County.

The Foxfire Ranch Project. 2005. City of Victorville. Mr. Dice performed a Phase 1 Cultural Resource Survey of a 65-Acre Property at Tentative Tract #16574 (Foxfire Ranch), located near Cobalt and Dos Palmas Roads, Section 26 of T.5N R.5W, City of Victorville, Including Parcel #3094-131-02. Century-Crowell Communities.

Cultural Survey Report for Two Planned Ryland Homes Developments in the City of Victorville. 2004 and 2006. City of Victorville. Mr. Dice performed a Phase I Cultural Resources Assessment and Paleontological Records Review Tract Nos. 16496 and 16905 in the City of Victorville. Ryland Homes of Corona.

Phase I Cultural Resources Survey for the Victorville Acres Project, Tentative Tract 16847, City of Victorville, San Bernardino County. Mr. Dice prepared a cultural resource survey report for planned development in the City of Victorville. Van Daele Homes, Inc.

Project Archaeologist for the California Lightweight Pumice Makayla Mine Expansion. Mr. Dice undertook a Class III Intensive Field Survey of mining lease properties located within Sections 21 and 28, T21S/R38W, Coso Junction Area, County of Inyo, California. Wrote research design, direct survey and recordation of more than 20 obsidian scatter and two quarries in an area southeast of Olancho and west of Coso Junction. All Native American coordination flowed through the BLM-Ridgecrest Field Office.

Cultural Resource Survey Reports for the Palm Desert Rock Project, and the Coachella Aggregates Expansion Project, Coachella Valley, Riverside County. Mr. Dice prepared cultural survey and inventory reports for planned mining development in the County of Riverside. Requires Section 106 and County of Riverside General Plan concurrence through the County Archaeologist.

High Desert Water-Related Cultural Resource Management Projects

The Victor Valley Recycled Water Project 2004-2006. Mr. Dice served as the Project Archaeologist for a series of studies in Hesperia, Victorville, Apple Valley and the County of San Bernardino for a proposed subregional facilities project that will treat excess and sewage for recycling in the noted towns and communities. The project was completed for Bauer Consulting, Irvine, Ca. A records search, survey and mitigation recommendations were made as part of an EIR/EIS. Contact with the SWCB (Cookie Hearn, Archaeologist) were made as part of the Section 106 (Federal) compliance process.

Navajo Road Sewer Project 2002-2004. Mr. Dice served as the Project Archaeologist for a infrastructure improvement project in the Town of Apple Valley. A right-of-way for the new sewer was surveyed between the existing airport and the new Costco distribution center for Carter and Burgess Engineering of Fort Worth, Texas. Mr. Dice recommended testing and monitoring of the project

Professional Affiliations

- Member, California Historical Society
- Member, National Trust for Historic Preservation
- Certified County of Riverside Archaeologist
- Certified County of Orange Archaeologist

Arabesque Said

Staff Archaeologist

Overview

- 5 Years Experience
- Bachelor's degree, Anthropology – University of California, Riverside, California

Arabesque Said, BA, has been working in the archaeological field since 2004. She has conducted numerous pre-field assessments, archival research, pedestrian field surveys, site evaluation and testing, and data recovery and analysis. As an Archaeological crew member for the URS Corporation she has gained expertise in both prehistoric and historical site testing. Her projects have included testing on both private and public land throughout the Southwest and have allowed her to build relationships with various federal and state level entities.

Related Experience

Historical, Archaeological and Paleontological Resources

Solar 1, Mojave Desert, County of Riverside. Archaeological crew member for a 6,500 acre pedestrian survey for prehistoric and historic sites. This Phase I cultural resources survey was conducted on BLM land for a solar energy field that will include approximately 20,000 solar dishes by SES (Stirling Energy Systems).

Solar 2, Yuha Desert, County of Riverside. Archaeological crew member for a 7,500 acre pedestrian survey for prehistoric and historic sites. This Phase I cultural resources survey was conducted on BLM land for a solar energy field that will include approximately 20,000 solar dishes by SES (Stirling Energy Systems).

Chuckwalla Valley Project, Chuckwalla Valley, County of Riverside. Archaeological crew member for a 5,200 acre pedestrian survey for prehistoric and historic sites. Located previously recorded sites, taking and recording photographs of site and artifacts, and creating site map.

Redland Crossing Walmart EIR, Redlands, County of Riverside. Archaeological Field assistant for testing of numerous historical sites through out Redlands as part of the EIR process. Conducted excavation of trenches, artifact collection, screening and sidewall profile drawing with costs of \$28,000.

EIR/EA- 800MHz Radio Tower Sites Project, Riverside County, CA. Currently assisting with the cultural resources assessment and technical reports for the Radio Tower project through out Southern California and Arizona. The Environmental Impact Report, Environmental Assessment and all related studies are for developing 75 800MHz radio tower sites throughout the County of Riverside. An opportunity and constraints analysis was conducted on each site using a specific set of criteria to determine which sites could be eliminated immediately due to a particular constraint (i.e., proximity to a known fault, habitat for a threatened or endangered species, proximity to a known site of significant cultural resource, land use constraints, etc.) and which sites could realistically be developed. The analysis included a summary of potential permitting requirements at the state, federal, and local levels.

Phase I Archaeological Survey 11-acres, City of Wildomar, CA. Currently assisting with the cultural resources assessment and phase 1 report for the development of an 11-acre site in Wildomar.



Kotake Trust

Via Certified United States mail

County of Riverside
Economic Development Agency
Claudia Steiding
3133 Mission Inn Avenue
Riverside, CA 92507

Date: October 26, 2009

Subject: Project Site - Instillation of 3 - 5,000 gallon septic tanks
19533 Mclane Street
Palm Springs, CA

Reference: Notice of Intent to a adopt a Negative Declaration
Geotechnical Study prepared by Consolidated Engineer Laboratories
Proposed site plan of project

Dear Ms. Claudia Steiding,

Although I see the need for your departments services in our area, and I understand the difficulties to find a suitable site; regretfully the North Palm Springs Business Center is not the place. The County of Riverside and its' project is in conflict of the land use.

I represent a trust that owns several properties located in the North Palm Springs Business Center. The area is zoned a Regional Business Center and I am sure habitation is not allowed on the premises. Properties located in the Business Center had been subdivided into half acre and above. All of the buildings in the center are on a septic system and there no sewer lines in the immediate area to tap into.

In reference to the department's plans for (I assume) 120 individuals - single men, single women, families and 30 employees will occupy the above mention facility at any given time. This plan is not suited for this use. It is my opinion that the Phase II of the department's plans to construct a kitchen, washing facility, extra toilets, showers and I assume a laundry facility, would taxed the soil in the immediate and surrounding areas. Yet the department has not stated or estimated the amount of raw sewage and or non - potable water that will be discharge into the septic system and ultimately end up in the leach line and in the soil.

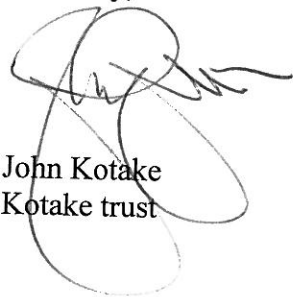
Please be advised that the outdated geological study prepared by Consolidated Engineer Laboratories was submitted for the purpose to evaluate the site for an industrial

warehouse and should not be used as a reference to the negative declaration. Although the study's conclusion ultimately allowed the construction of the subject building, I found that the scope of the study did not include any percolation tests. I would like to know if the county has done their due diligence to find out if the soils are able to retain the discharge from the facility, or what would happen to the soil if it became supersaturated. The soil also is porous. Is there a chance that the discharge can leach and contaminate to the ground water? Please note that the ground water is only located approximately 230 to 330 feet, as explained in the study.

I also examined the site plans for the project and did not find a pretreatment system for the discharge from the kitchen facility. Does the project address the reduction of BOD (Biochemical oxygen demand) before the non – potable water is discharged in to the septic system?

Lastly, if the county is going to adamantly pursue the project, I would ask if the county would be neighborly and pump the septic tanks during weekends and on off business hours. I thank you for your time, and I await your reply.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Kotake', written over a circular stamp or seal.

John Kotake
Kotake trust

cc. North Palm Springs Business Association
AES Wind Generation, Inc.

major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following: (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration; (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration; (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or, (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Claudia Steiding 9/29/09
Signature Date
Se. Env. Planner For County of Riverside

Claudia Steiding
Senior Environmental Planner
County of Riverside Economic Development Agency

COUNTY OF RIVERSIDE

ENVIRONMENTAL ASSESSMENT FORM: INITIAL STUDY

Environmental Assessment (E.A.) Number: EA08510003957

Project Case Type (s) and Number(s): N/A

Lead Agency Name: County of Riverside Economic Development Agency

Address: 3133 Mission Inn Avenue, Riverside, CA 92507

Contact Person: Claudia Steiding, Senior Environmental Planner

Telephone Number: 951-955-8174

Email: CSteiding@rivcoeda.org

Applicant's Name: County of Riverside Economic Development Agency

Applicant's Address: 3133 Mission Inn Avenue, Riverside, CA 92507

I. PROJECT INFORMATION

Project Description: The County of Riverside's Economic Development Agency (EDA) is proposing modification improvements to an existing septic sewer system for Roy's Desert Resource Center homeless shelter located at 19533 McLane Street in the City of Palm Springs, California (See Exhibits 1 through 3).

Background:

The Project's Phase I development involved the existing facility known as the Mental Health Safe Haven and Full Service Partnership Clinic. Owned and operated by the Coachella Valley Multi-Services Center (CVMSC), this facility occupies a total of 13,448 square feet, of the eastern portion of the existing building and has the current capability of accommodating up to 25 homeless, single men and women. The facility is comprised of 7,908 square feet for housing, kitchen and dining amenities and another 5,540 square feet dedicated for the full service Partnership Clinic, which consists of a doctor's office, a nurse's office, a triage, chart room, an administrative office with office cubicles, private offices, and file/storage space. Currently, Phase I development utilizes a 4,000 gallon septic tank, which adequately serves the project's size. Phase I development is completed at this time.

The Phase II development involves the western portion of the existing 47,000 square foot building, and is named as Roy's Desert Resource Center, in honor of the County's late Supervisor Roy Wilson. This facility will occupy 20,546 square feet and will be able to accommodate up to 120 single men, single women, and families. Phase II will be managed by a total of 30 employees. Currently, the facility has one (1) 1,500 gallon septic tank, which is undersized to serve the Roy's Desert Resource Center. Therefore, in order to serve Roy's Desert Resource Center the proposed Project will consist of the proposed Phase II development, replacing the existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and associated seepage pits. This modification improvement would be located between the facility's existing building and the existing building located to the north (Refer to Exhibits 4 and 5). Overall, this would add to a total septic tank capacity of 19,000 gallons. Roy's Desert Resource Center is scheduled to open in December 2009 and will be operated and maintained by the Coachella Valley Association of Governments (CVAG).

A. Project Location and Assessor Parcel Numbers (APNs)

The Project site consists of one parcel: APN 666-411-011 totaling approximately 3.53 acres and is located at 19533 McLane Street in North Palm Springs, California.

Type of Project: Site Specific ☒; Countywide ☐; Community ☐; Policy ☐.

B. Total Project Area: 3.53 acres

Industrial/Commercial Acres: 3.53 **Lots:** 1 **Sq. Ft. of Bldg. Area:** 20,546 **Est. No. of Employees:** 30

C. Assessor's Parcel No(s): 666-411-011

D. Street References: The Project site is located at the southwest corner side of McLane Street, approximately 0.45 miles west of Indian Avenue in the City of Palm Springs, California. The site location is at 19533 McLane Street.

E. Section, Township & Range Description or reference/attach a Legal Description: Section 15, Township 3 South, Range 4 East. Latitude/Longitude: 33° 54' 21.23" North/116° 33' 11.98" West.

F. Brief description of the existing environmental setting of the project site and its surroundings: The Project site consists of the replacement of one (1) 1,500 gallon septic tank with three (3) 5,000 gallon septic tanks and seepage pit expansion on 3.53 acres at 19533 McLane Street. The facility is owned and operated by Riverside County's Economic Development Agency (EDA) for the purpose of providing shelter care and assistance to the homeless. Surrounding land uses consist of an existing industrial/commercial building to the north, a vacant-graded undeveloped pad to the east, Interstate 10 freeway to the south, and vacant undeveloped land to the west.

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

A. General Plan Elements/Policies:

- 1. Land Use:** The entire 3.53 acre property is located in the City of Palm Springs and the project will adhere to the goals and policies of the County of Riverside's General Plan. The Project is consistent with the City's General Plan.
- 2. Circulation:** Access to the Project site is off of McLane Street and is consistent with the Goals and Policies of the City's Circulation Element and the County Fire Department.
- 3. Multipurpose Open Space:** Not Applicable
- 4. Safety:** The proposed septic sewer improvement modifications to the existing facility would adhere to the policies pertaining to flood, fire, hazardous waste and seismic hazards as outlined in the Safety Element of the County of Riverside General Plan.
- 5. Noise:** The Project will comply with the County of Riverside regarding construction work hours.

6. **Housing:** The Project site does not contain residential use designated land and is not located adjacent to existing residences. All immediate land uses adjacent to the site are of non-residential land use designation.
7. **Air Quality:** The Project will adhere to the goals and policies for projects located within the Salton Sea Air Basin (SSAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

B. General Plan Area Plan(s): Western Coachella Valley

C. Foundation Component(s): N/A

D. Land Use Designation(s): Regional Business Park

E. Overlay(s), if any: None

F. Policy Area(s), if any: None

G. Adjacent and Surrounding Area Plan(s), Foundation Component(s), Land Use Designation(s), and Overlay(s) and Policy Area(s), if any: District 4 Redevelopment Zone.

H. Adopted Specific Plan Information

1. **Name and Number of Specific Plan, if any:** None

2. **Specific Plan Planning Area, and Policies, if any:** None

I. Existing Zoning: Service/Manufacturing Zone (M-1)

J. Proposed Zoning, if any: None

K. Adjacent and Surrounding Zoning: Service/Manufacturing Zone (M-1) (west of Project site), Planned Research and Development Zone (MIP) (south of Project site and south of Interstate 10 freeway) and Service/Manufacturing Zone (M-1) (east of project site).

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

IV. DETERMINATION

On the basis of this initial evaluation:

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS NOT PREPARED
☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project, described in this document, have been made or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS PREPARED
☐ I find that although the proposed project could have a significant effect on the environment NOTHING FURTHER IS REQUIRED because all potentially significant effects (a) have been adequately analyzed in an earlier Environmental Impact Report (EIR) or Negative Declaration pursuant to applicable legal 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.
☐ I find that although all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none of the conditions described in California Code of Regulations, Section 15162 exist. An ADDENDUM to a previously-certified EIR or Negative Declaration has been prepared and will be considered by the approving body or bodies.
☐ I find that at least one of the conditions described in California Code of Regulations, Section 15162 exist, but I further find that only minor additions or changes are necessary to make the previous EIR adequately apply to the project in the changed situation; therefore a SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT is required that need only contain the information necessary to make the previous EIR adequate for the project as revised.
☐ I find that at least one of the following conditions described in California Code of Regulations, Section 15162, exist and a SUBSEQUENT ENVIRONMENTAL IMPACT REPORT is required: (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) Substantial changes have occurred with respect to the circumstances under which the project is undertaken which will require

major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following:(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration;(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or,(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Signature

Date

For

Claudia Steiding
Senior Environmental Planner
County of Riverside Economic Development Agency



Source: Census 2000 Data, The CaSIL, MBA GIS 2009.



Source: Google Earth Pro Aerial (January, 2006).



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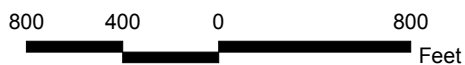
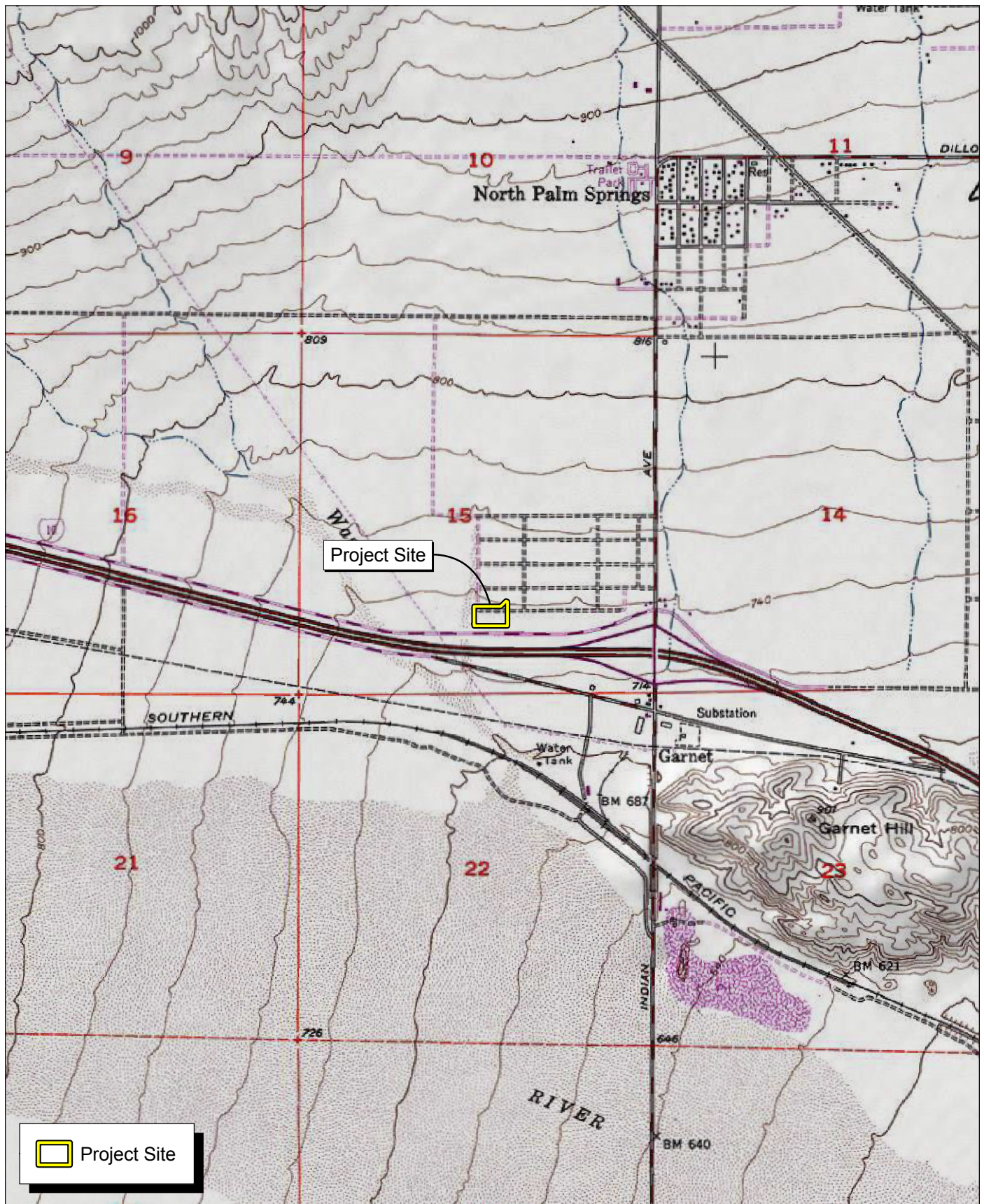


Exhibit 2 Local Vicinity Map Aerial Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Source: TOPO! Desert Hot Springs (1978) 7.5' DRG.

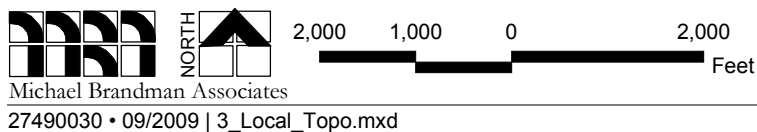
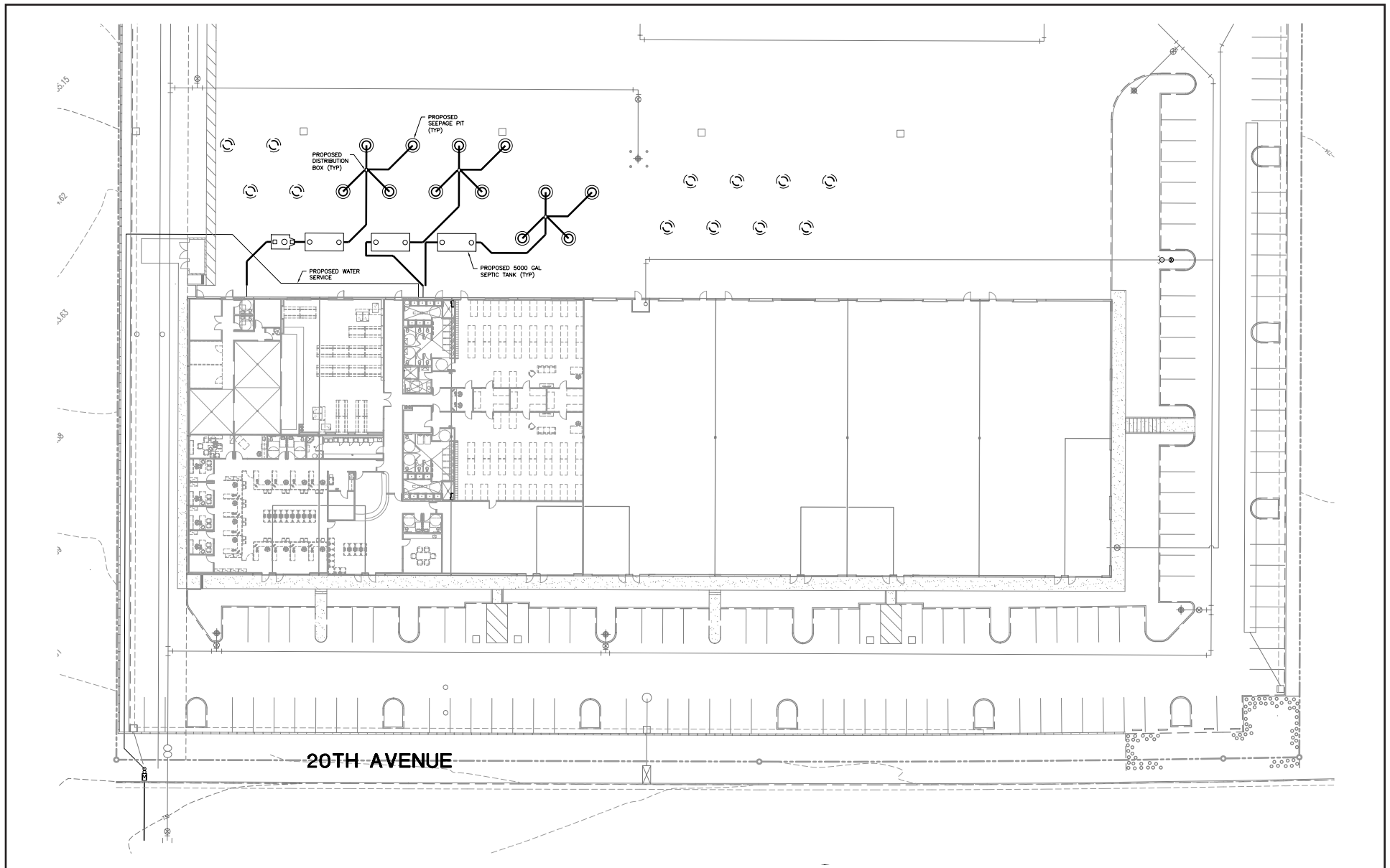


Exhibit 3 Local Vicinity Map Topographic Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Source: MSA Consulting, Inc. (2009).



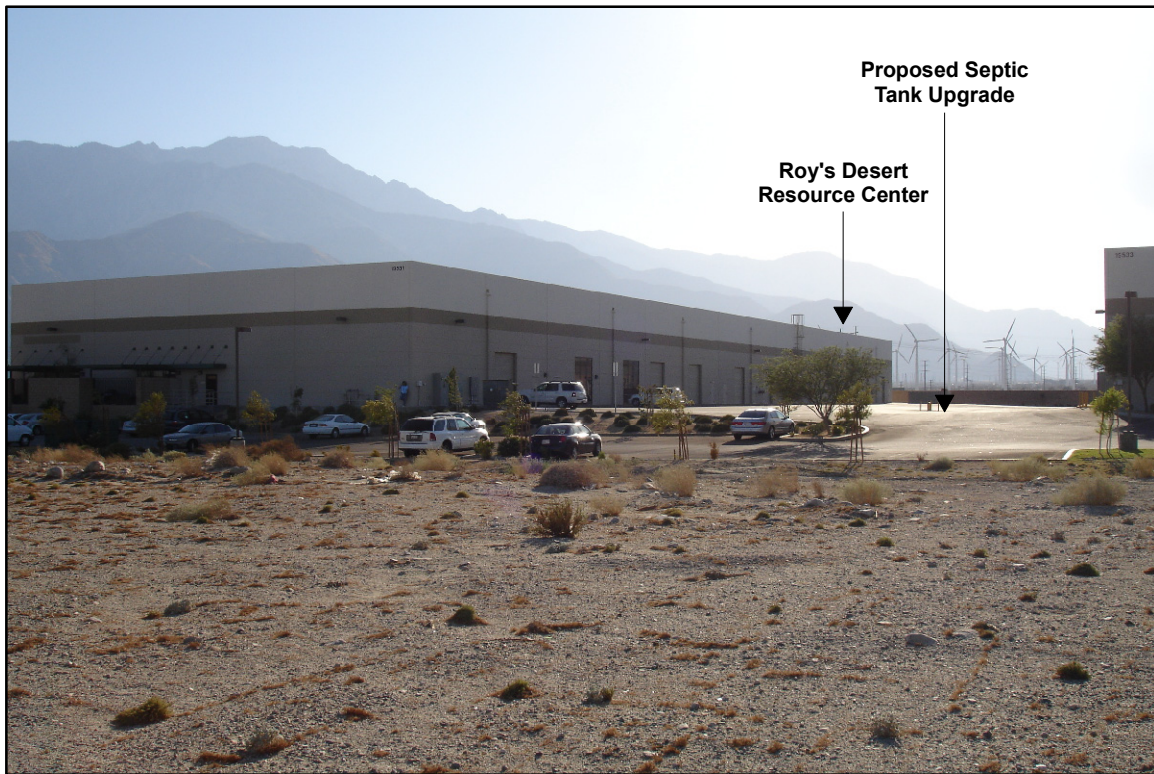
25 12.5 0 25
Feet

Michael Brandman Associates

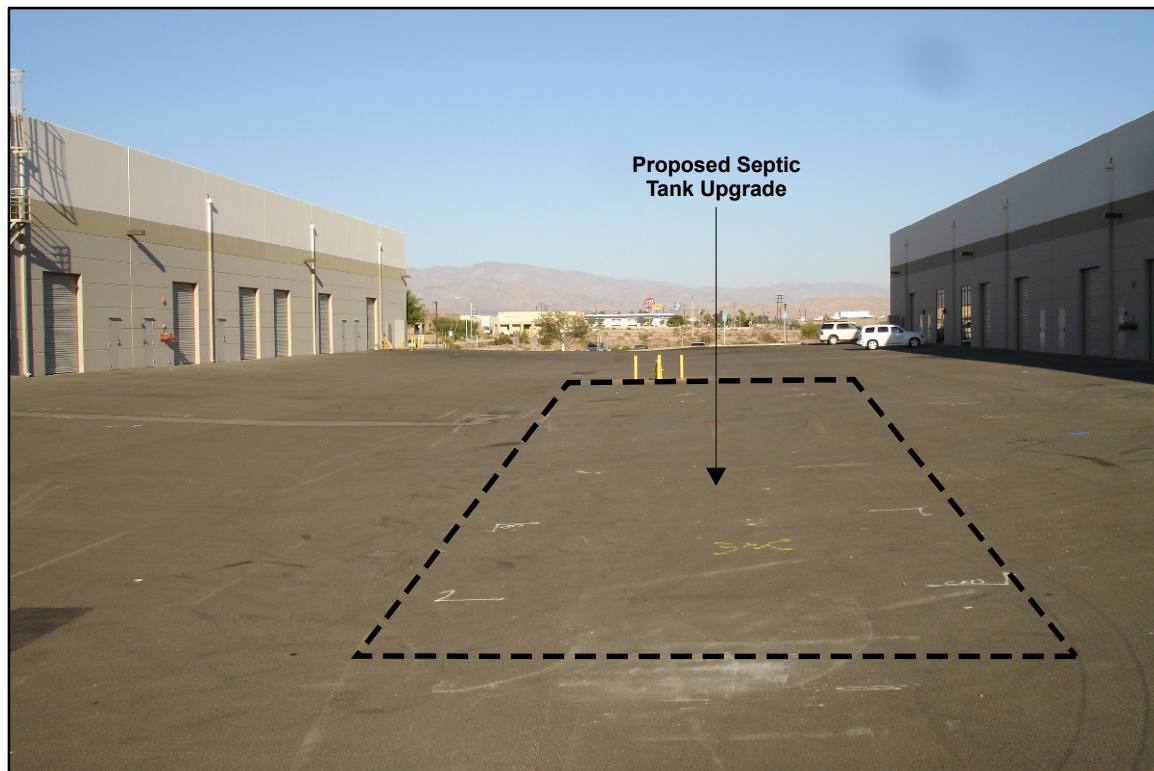
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Exhibit 4 Conceptual Site Plan

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY



Photograph 1: Looking west toward the project site.



Photograph 2: Facing proposed septic tank within the project site.

Source: Michael Brandman Associates, 2009.



Michael Brandman Associates

27490030 • 09/2009 | 5_photos.mxd

Exhibit 5 Site Photographs

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
INITIAL STUDY

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the Proposed Project and to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. In accordance with California Code of Regulations (CCR), Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the County of Riverside, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration (MND), or an EIR is required for the Proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the Proposed Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS Would the project				
1. Scenic Resources	☐	☐	☐	☒
a) Have a substantial effect upon a scenic highway corridor within which it is located?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?	☐	☐	☐	☒

Source: Caltrans California Scenic Highway Mapping System. County of Riverside, Riverside County Integrated Project (RCIP) Figure C-7 "Scenic Highways".

Findings of Fact:

- a-b) The proposed Project involves the installation of the (3), 5,000 gallon septic tanks with seepage pits to an existing developed, paved surface of land and located between the facility's existing building and the existing adjacent building to the north (Refer to Exhibits: 4 and 5). The Project is not located within a scenic corridor, nor considered as a scenic resource. The Project's installation of septic tanks and seepage pits will be located underneath the existing truck parking lot with no visual obstructions created. Therefore, the Project will not have an impact to scenic resources. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

2. Mt. Palomar Observatory☐☐☐☒

a) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?

Source: RICP; TG; Ord. No. 655

Findings of Fact:

- a) Light pollution occurs when an over abundance of artificial illumination enters the night sky and reflects off of airborne water droplets and dust particles causing a condition known as skyglow. It occurs when glare from improperly aimed and unshielded light fixtures cause uninvited illumination to cross over into adjacent property lines. The Mt. Palomar Observatory is located in San Diego County and requires limited nighttime lighting requirements in order for the night sky to be observed clearly. The proposed Project is located approximately 41 miles northeast of the Observatory. The proposed improvements include the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and seepage pits. The Project site is not within and will not affect the Mt. Palomar Nighttime Lighting Overlay Area. Therefore, the Project would not impact the Observatory's night sky viewing ordinance.

Mitigation: None required.

Monitoring: None required.

3. Other Lighting Issues☐☐☐☒

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

b) Expose residential property to unacceptable light levels?

☐☐☐☒

Source: RCIP; Proposed project description, site evaluation.

Findings of Fact:

- a-b) The Project's proposed installation of septic tanks and seepage pits will not involve the installation of permanent outdoor lighting and would not expose residential property to unacceptable light levels. There are no proposed modifications to the exterior lighting. There are no existing residences within close proximity to the Project site. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE RESOURCES Would the project				
4. Agriculture	☐	☐	☐	☒
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 (FMMP) of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing agricultural use, or a Williamson Act (agricultural preserve) contract (Riv. Co. Agricultural Land Conservation Contract Maps)?	☐	☐	☐	☒
c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?	☐	☐	☐	☒
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Source: RCIP Figure OS-17 "Agricultural Resources", GIS database and Project Materials.

Findings of Fact:

a-d) The project site is located in a developed portion of land currently designated as Service/Manufacturing (M-1) in the City of Palm Springs Zoning Ordinance. However, the Project is under jurisdiction of the County of Riverside. The Department of Conservation Farmland Mapping and Monitoring Program (FMMP) designates the site as Urban and Built-Up Land. The Project site is not located within an agricultural preserve or within a Williamson Act contract area. Therefore, no adverse agriculture impacts will occur as a result of the proposed Project

Mitigation: None required.

Monitoring: None required.

AIR QUALITY Would the project				
5. Air Quality Impacts	☐	☐	☒	☐
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors, which are located within 1 mile of the project site to project substantial point source emissions?	☐	☐	☒	☐
e) Involve the construction of a sensitive receptor located within one mile of an existing substantial point	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
source emitter?				
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
g) Result in an increase in greenhouse gas emissions that would significantly hinder or delay the State's ability to meet the reduction targets contained in AB 32?	☐	☐	☒	☐
h) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Source: Proposed project description, site evaluation

Findings of Fact:

- a-h) Less than Significant Impact. The proposed project would generate short-term emissions during construction. Such emissions would include exhaust emissions from construction equipment and worker and delivery vehicles as well as fugitive dust generated during the construction process. Exhaust emissions are controlled by the rules promulgated by the CARB while fugitive dust emissions are controlled by SCAQMD Rule 403. Rule 403 requires the application of best management practices such as watering disturbed areas, restricting onsite traffic to 15 miles per hour or less, and cessation of soil disturbing activities when wind speeds exceed 25 miles per hour. The construction of the proposed project must adhere to the requirements of Rule 403.

Short-term construction emissions from the proposed project were estimated during three construction activities: demolition of the existing septic tank area, replacement of the existing septic tank with three new ones, and the asphalt paving of the finished surface. The estimated construction emissions are shown in Table 1. The determination of the environmental significance of the project's construction emissions was determined by comparing the estimated emissions with the regional emission significance thresholds defined by the SCAQMD for construction activities which are also shown in Table 1.

Table 1: Estimated Daily Short-term Construction Emissions

Construction Activity	Emissions (pounds per day)(1)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Demolition	4	35	16	0	8	3
Tank Replacement	0	4	2	0	2	1
Asphalt Paving	3	9	15	0	1	1

Table 1: Estimated Daily Short-term Construction Emissions (Cont.)

Construction Activity	Emissions (pounds per day)(1)					
	VOC	NOx	CO	SOx	PM10	PM2.5

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
Max emissions in 1 day	4	35	16	0	8	3
Regional Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Note: (1) Emissions shown assume compliance with applicable emission regulations. The PM10 and PM2.5 fugitive dust emissions are in the “mitigated” output in URBEMIS because the project would comply with dust control measures as specified in SCAQMD Rule 403.						

As shown in Table 1 above, the short-term construction emissions from the proposed project would not exceed any SCAQMD regional emission significance threshold during construction. Furthermore, the Project will not generate odors and due to the scale of the Project, will not impact plans to reduce greenhouse gas emissions. Therefore, Project impacts are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

BIOLOGICAL RESOURCES	Would the project			
6. Wildlife & Vegetation	☐	☐	☐	☒
a) Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	☐	☐	☐	☒
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	☐	☐	☐	☒
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U. S. Wildlife Service (USFWS)?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) 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 CDFG or USFWS?	☐	☐	☐	☒
f) Have a substantial adverse effect on federally	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Source: MBA Consistency Analysis.

Findings of Fact:

a-g) No impact. The Project site is a 3.53 acre lot which is developed. The Proposed project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. No open space or undeveloped land would be involved with the installation of the septic tanks and seepage pits. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

CULTURAL RESOURCES Would the project				
7. Historic Resources	☐	☐	☐	☒
a) Alter or destroy an historic site?				
b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	☐	☐	☐	☒

Source: MBA Consistency Analysis. Native American Heritage Commission (NAHC).

Findings of Fact:

a-b) No impact. The Project site is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Thus, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

8. Archaeological Resources	☐	☐	☐	☒
a) Alter or destroy an archaeological site.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
California Code of Regulations, Section 15064.5?				
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
d) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☒

Source: MBA Consistency Analysis. MBA Records Search.

Findings of Fact:

- a, d) There are no archaeological sites or existing religious or sacred uses within the Project site as it is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.
- b, c) MBA conducted a archaeological records search of the Project site and found no documentation of archaeological resources being located on or near to the Project site. In addition, a records search was performed by the Native American Heritage Commission's Sacred Lands File (SLF) and concluded that no sites were found within or near to the Project site. (Appendix B).

Furthermore, the Project site is already graded and developed; and chances are minimal that archaeological resources would be encountered during the installation of the septic tanks, since the area would have had a better chance of finding archaeological resources in the initial construction phase for existing buildings. Nevertheless, the potential exists for sub-surface archaeological resources to be uncovered during excavation, grading, and other construction related activities for the three septic tanks.

As a standard procedure in the event that a sub-surface archaeological artifact were to be uncovered during project construction or ground-disturbing activities, the find would be redirected until the nature and extent of the find could be evaluated by a qualified archaeologist. As applicable, resources would be collected, curated, and provided to the Eastern Information Center at the University of California at Riverside. The archeologist would then coordinate with local Native American groups as necessary if tribal artifacts were found. Therefore, project impacts with regard to disturbing human remains will be less than significant.

Mitigation: None required.

Monitoring: None required.

9. Paleontological Resources	☐	☐	☐	☒
a) Directly or indirectly, destroy a unique				

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

paleontological resource, or site, or unique geologic feature?

Source: Riverside County TLMA GIS.

Findings of Fact:

- a) The Project site has a low potential for paleontological resources. The Project site is developed and located on a 3.53 acre lot and adjacent to the Project facility's existing 47,000 square foot building. Therefore, no impacts are foreseen from Project development and no mitigation is required.

Mitigation: None required.

Monitoring: None required.

GEOLOGY AND SOILS Would the project

10. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones	☐	☐	☒	☐
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?	☐	☐	☒	☐
b) Be subject to 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?	☐	☐	☒	☐

Source: Geotechnical Engineering Study. Consolidated Engineering Laboratories. September 4, 2003 (Appendix A)

Findings of Fact:

- a-b) The Project site is roughly 739 feet above sea level and is relatively flat. As indicated in the Geotechnical Engineering Study (Appendix A), soils are consistent of Quaternary-aged, alluvial deposits consisting of unconsolidated stream, river channel and alluvial fan deposits with local eolian sands. No known active faults transect the Project site. The Project site is not located within the Alquist-Priolo Special Studies or County Fault Hazard Zones. The nearest active fault is the Banning segment of the San Andreas Fault system, which is located 1.0 mile north of the Project site. The Project does not involve structural building, but involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, impacts from the proposed Project are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

11. Liquefaction Potential Zone	☐	☐	☒	☐
a) Be subject to seismic-related ground failure,				

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

including liquefaction?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A); Riverside County TLMA GIS (Liquefaction Map).

Findings of Fact:

- a) In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction. As indicated in the Geotechnical Engineering Study, six bore holes were drilled to a maximum of 41.5 feet in depth and did not encounter groundwater, which would suggest groundwater levels to below 50 feet in depth. Nonetheless, laboratory and field data gathered in the Geotechnical Engineering Study concluded that the Project site does not have the potential for liquefaction to occur. Therefore, impacts from the proposed Project are considered less than significant.

Mitigation: None required.

Monitoring: None required.

12. Ground-shaking Zone

☐	☐	☒	☐

- a. Be subject to strong seismic ground shaking?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Western Coachella Valley is traversed by several active and potentially active fault zones, including the San Andreas Fault, and has experienced several earthquakes of moderate magnitude since records have been kept. The primary seismic hazards, which result, are ground shaking and the potential for ground rupture along the surface trace of the fault. Secondary seismic hazards result from the interaction of ground shaking with existing soil and bedrock conditions, and include liquefaction, settlement, and landslides. The nearest active fault is the San Andreas Fault, which is located 2.46 miles northeast of the project site. At that distance, strong ground shaking can still be expected at the Project site.

Although the Project site is located within a ground-shaking zone, the Project does not involve any additional structural buildings to be constructed other than the installation of three septic tanks and seepage pits.

Furthermore, the Geotechnical Engineering Study (originally prepared in 2003) already addressed geologic issues with mitigation for the development of the Project area's existing buildings and parking lot and included mitigation in addressing the installation of existing septic tanks and seepage pits. Therefore, in compliance with proper Cal OSHA grading methods and with the County of Riverside grading requirements during

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

temporary excavations for the septic tanks, there will be a less than significant impact as a result of the project.

Mitigation: None required.

Monitoring: None required.

13. Landslide Risk

☐	☐	☐	☒

a) 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, collapse, or rockfall hazards?

Source: WCVAP Figures 15, "Steep Slopes" and 16, "Slope Instability"; Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Project site is not affected by landslide or rock falling risks. Topography on the site is generally flat, without boulders or steep slopes. Therefore, there is no impact associated with the Proposed Project.

Mitigation: None required.

Monitoring: None required.

14. Ground Subsidence

☐	☐	☒	☐

a) 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 ground subsidence?

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

- a) The Geotechnical Engineering Study indicated that the Project site has a moderate susceptibility for settlement due to consolidation and dynamic compaction. However, laboratory and field data gathered at the site does not indicate near surface soils in the upper 15 feet to be susceptible to collapse. Nevertheless, as indicated above (Section 12a), the Project will comply with proper Cal OSHA grading methods and with the County of Riverside grading requirements during temporary excavations for the septic tanks. Therefore, Project impacts with regard to ground subsidence will be considered as less than significant.

Mitigation: None required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Monitoring: None required.

15. Other Geologic Hazards

a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

☐	☐	☐	☒

Source: Site visit. Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A).

Findings of Fact:

a) The Project is not affected by a geological hazard such as seiche, mudflow or volcanic hazard, since the site is not located near a body of water (seiche), steep topography (with mudflow potential) or volcanic hazards. Therefore, there is no impact to the Project with regard to other geologic hazards.

Mitigation: None required.

Monitoring: None required.

16. Slopes

a) Change topography or ground surface relief features?

☐	☐	☐	☒

b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?

☐	☐	☐	☒

c) Result in grading that affects or negates subsurface sewage disposal systems?

☐	☐	☒	☐

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A). Staff Review, and Site Visit

Findings of Fact:

- a-b) The Project will not change the topography or create cut or fill slopes since the Project site is already developed. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the project.
- c) Grading has already been performed for the Project area at the time the existing building was constructed. Existing septic tank and seepage pit facilities for the building were already in place, and would be able to offer additional of septic sewer infrastructure installation if needed. Since the Project area was developed in compliance with mitigation listed in the Geotechnical Engineering Study, the Project site will only need to comply with proper Cal OSHA grading methods and County

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

of Riverside grading requirements during construction . Therefore, Project impacts in negating the operability of subsurface sewer disposal systems will be less than significant.

Mitigation: None Required.

Monitoring: None Required.

17. Soils	☐	☐	☐	☒
a) Result in substantial soil erosion or the loss of topsoil?				
b) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒

Source: Consolidated Engineering Laboratories. September 4, 2003. *Geotechnical Engineering Study* (Appendix A). Staff Review, and Site Visit

Findings of Fact:

- a) The Project site is not affected by significant topography, surface features or slopes or expansive soils. The Project site is currently developed in which septic tank and seepage pit installation will occur underneath the existing parking lot (Refer to Exhibit 5). Therefore, there will be no impact.
- b) As indicated in Geotechnical Engineering Study, Project site soils are sandy and non-expansive. Therefore, impacts associated with expansive soils will not occur.

Mitigation: None Required.

Monitoring: None Required.

18. Erosion	☐	☐	☐	☒
a) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?				
b) Result in any increase in water erosion either on or off site?	☐	☐	☐	☒

Source: Staff Review, and Site Visit

Findings of Fact:

- a-b) The Project site is currently developed. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot, which

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

has existing storm drainage installed. Therefore, there will be no impact as a result of the Project.

Mitigation: None Required.

Monitoring: None Required.

19. Wind Erosion and Blows sand from project either on or off site.

☐	☐	☒	☐

a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?

Source: Site visit.

Findings of Fact:

- a) The Project site is currently developed in which septic tank and seepage pit installation will occur underneath an existing parking lot. As shown in Exhibit 5, roughly 11,000 square feet of soil would be temporarily exposed with the removal of asphalt during installation. Exposure of soils will be temporary, with occasional exposure to high winds, which are common to the region. However, since the Project is a temporary operation, and that appropriate dust suppression measures, per Air Quality Management District (AQMD's) Rule 403.1 (i.e. tarp covers) will be applied, impacts with regard to wind erosion will be reduced to less than significant.

Mitigation: None required.

Monitoring: None required.

HAZARDS AND HAZARDOUS MATERIALS Would the project

20. Hazards and Hazardous Materials

☐	☐	☒	☐

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

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

☐	☐	☒	☐

c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?

☐	☐	☐	☒

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

☐	☐	☐	☒

e) 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

☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

environment?

Source: California State Water Resources Control Board Geo Tracker. 2008. Staff Review, and Site Visit.

Findings of Fact:

- a,b) The Project site will not create a significant hazard to the public through the routine transport or from accidental release of hazardous substances. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot for the purpose of sewage containment. Furthermore, the Project site plans will be submitted for review and approval by the California Regional Water Quality Control Board Colorado River Basin Region (CRWQCB) to assure that installation of septic tanks and seepage pits will not contaminate the local groundwater aquifer. Therefore Project impacts are considered to be less than significant.
- c) The Project will not impair implementation of, or interfere with an adopted emergency response or evacuation plan. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impacts as a result of the Project.
- d) The Project will not emit hazardous emissions or handle acutely hazardous materials within one-quarter mile of an existing or proposed school. The nearest school is the Grace Christian Learning Center, which is located 3.43 miles northwest of the Project site. Therefore, there will be no impacts as a result of the Project.
- e) The State Water Resources Control Board GeoTracker Database indicates that no evidence of listed hazardous materials site(s) exist within or near to the Project site. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

21. Airports	☐	☐	☐	☒
a) Result in an inconsistency with an Airport Master Plan?	☐	☐	☐	☒
b) Require review by the Airport Land Use Commission?	☐	☐	☐	☒
c) 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?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Source: RCIP Figure S-19 "Airport Locations"

Findings of Fact:

- a-d) The Project site is not within an airport influence area boundary or otherwise affected by airport issues as identified in the Western Coachella Valley Area Plan (WCVAP). The nearest airport is Palm Springs International Airport, which is located 5.13 miles to the southeast. Therefore, there will be no conflicts with an airport land use plan as a result of the Project and no impacts will occur as a result of the Project.

Mitigation: None required.

Monitoring: None required.

21. Hazardous Fire Area	☐	☐	☐	☒
a) 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?				

Source: Site inspection.

Findings of Fact:

- a) The Project site will not expose people or structures to a significant risk, loss, or death from wildland fires. The Project site is currently developed and will be located underneath the Project site's existing parking lot. Therefore, there will be no impact.

Mitigation: None required.

Monitoring: None required.

HYDROLOGY AND WATER QUALITY Would the project				
22. Water Quality Impacts	☐	☐	☐	☒
a) Substantially alter the existing drainage pattern of the site or area, including 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?				
b) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
c) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				
d) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
e) 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?	☐	☐	☐	☒
f) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☒
g) Otherwise substantially degrade water quality?	☐	☐	☒	☐
h) Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?	☐	☐	☐	☒

Source: Riverside County Land Information System GIS

Findings of Fact:

- a) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. The site already contains existing storm drainage infrastructure (i.e, curb and gutter). There are no additional storm drain improvements proposed or required at this time. Therefore, there will be no impact as a result of the Project.

- b,g) The Project will adhere to Regional Water Board Order No. 97-500, General Waste Discharge Requirements for "On-site Subsurface Wastewater Disposal Systems for Mobile Home and Recreational Vehicle Parks and Other Similar Facilities." This Project qualifies under "Other similar facilities" and as such will be adequately designed, installed, and maintained such that it meets the requirement of Order NO. 97-500. Additionally, within one year of project approval the County will prepare a groundwater monitoring program for review and approval by the Colorado Regional Water Quality Control Board . With the adequate design of the septic system along with groundwater monitoring and adherence to Order 97-500, impacts to groundwater quality will remain less than significant.

- c) The Project site will not deplete groundwater supplies or interfere with groundwater recharge. The proposed Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.

- d) The Project will not create or contribute to runoff of water in exceeding the capacity of existing or planned stormwater drainage systems. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.
- e) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. Therefore, there would be no impact as a result of the Project.
- f) No improvements are proposed within a 100-year designated flood plane area. The Project site falls within the 500-year designated flood plane area (0.2% flood chance). The Project area is developed and has existing storm drain improvements, all of which located on raised building pads. Therefore, there will be no impact as a result of the Project.
- h) The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. No stormwater treatment control BMP's are required. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

24. Floodplains

Degree of Suitability in 100-Year Floodplains. As indicated below, the appropriate Degree of Suitability has been checked.

NA - Not Applicable ☒	U - Generally Unsuitable ☐	R - Restricted ☐
a) 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?	☐	☒
b) Changes in absorption rates or the rate and amount of surface runoff?	☐	☒
c) 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 (Dam Inundation Area)?	☐	☒
d) Changes in the amount of surface water in any	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

water body?

Source: Staff Review, and Site Visit

Findings of Fact:

- a-d) The Project site will not impact any of the above-listed discussion questionnaire with regard to alteration of existing drainage patterns, increase in surface runoff, changes in absorption rates, or expose people to significant risk from flooding . The Project area is developed and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

LAND USE/PLANNING Would the project				
25. Land Use	☐	☐	☐	☒
a) Result in a substantial alteration of the present or planned land use of an area?	☐	☐	☐	☒
b) Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?	☐	☐	☐	☒

Source: City of Palm Springs General Plan.

Findings of Fact:

- a-b) The Project site will not result in a substantial alteration of present or planned land use nor would the Project affect land use within a city sphere of influence. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits and to be located underneath the project site's existing parking lot. The land use for the Project site is pre-existing and would not change as a result of Project implementation. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

26. Planning	☐	☐	☐	☒
a) Be consistent with the site's existing or proposed zoning?	☐	☐	☐	☒
b) Be compatible with existing surrounding zoning?	☐	☐	☐	☒
c) Be compatible with existing and planned surrounding land uses?	☐	☐	☐	☒
d) Be consistent with the land use designations and	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
policies of the Comprehensive General Plan (including those of any applicable Specific Plan)?				
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	☐	☐	☐	☒

Source: City of Palm Springs General Plan.

Findings of Fact:

- a-e) The Project site will not interfere, disrupt or create an inconsistency with the Project area and region's existing and planned-for land uses. Although the Project site is located within the City's General Plan land use, the Project site alone (APN 666-411-011) is County-owned land, and therefore not considered as a part of the City and will be required to adhere to all of the County's goals and policies pertaining to the County of Riverside's General Plan and Ordinances. Nevertheless, both the City of Palm Springs and the County of Riverside permit the same type of use proposed for the Project site (septic sewer improvement). Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

MINERAL RESOURCES Would the project				
26. Mineral Resources	☐	☐	☐	☒
a) Result in the loss of availability of a known mineral resource in an area classified or designated by the State that would be of value to the region or the residents of the State?				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	☐	☐	☐	☒
d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?	☐	☐	☐	☒

Source: Staff Review, and Site Visit

Findings of Fact:

- a-d) The Project site will not impact mineral resources. The Project site is developed with existing industrial warehouse buildings and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Thus, there will be no impact as a result of the Project.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation: None required.

Monitoring: None required.

NOISE Would the project result in

Definitions for Noise Acceptability Ratings

Where indicated below, the appropriate Noise Acceptability Rating(s) has been checked.

NA - Not Applicable

A - Generally Acceptable

B - Conditionally Acceptable

C - Generally Unacceptable

D - Land Use Discouraged

28. Airport Noise

a) 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?

NA ☒ A ☐ B ☐ C ☐ D ☐

b) 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?

NA ☒ A ☐ B ☐ C ☐ D ☐

Source: RCIP Figure S-19 "Airport Locations," County of Riverside Airport Facilities Map

Findings of Fact:

a-b) The Project site is not within an airport influence area boundary or otherwise affected by airport issues as identified in the WCVAP. The nearest airport is Palm Springs International Airport, which is located approximately 5.13 miles to the southeast of the Project site. Therefore, there will be no impacts to an airport land use plan as a result of the Project.

Mitigation: None required.

Monitoring: None required.

29. Railroad Noise

NA ☒ A ☐ B ☐ C ☐ D ☐

Source: RCIP Figure C-1 "Circulation Plan", S-21 "Rail Facilities, Available Water, Oil and Natural Gas Pipelines Inventory Data", Thomas Guide 2005 Edition, Site Visit

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Project site is located approximately 0.37 mile north of the heavily-traveled Union Pacific Railroad line. However, the area is located between existing industrial developed warehouses and located 0.10 mile north of the Interstate 10 freeway. The Project is expected to generate only sporadic noise from excavation activities and for a temporary period of time. Therefore, impacts with regard to railroad noise will be considered less than significant.

Mitigation: None required.

Monitoring: None required.

30. Highway Noise	☐	☐	☐	☒
NA ☐ A ☒ B ☐ C ☐ D ☐				

Source: Site Visit

Findings of Fact:

- a) The Project site is located adjacent to existing industrial developed warehouses approximately 0.10 mile north of the Interstate 10 Freeway. The Project is a temporary construction operation involving the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

31. Other Noise	☐	☐	☐	☒
NA ☒ A ☐ B ☐ C ☐ D ☐				

Source: City of Palm Springs General Plan; project description and materials; site visit.

Findings of Fact:

- a) The Project is not influenced by other unique noise issues as identified in the City of Palm Springs General Plan. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

32. Noise Effects on or by the Project	☐	☐	☐	☒
a) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
b) A substantial temporary or periodic increase in	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ambient noise levels in the project vicinity above levels existing without the project?				
c) 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?	☐	☐	☐	☒
d) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Source: Project materials and project description

Findings of Fact:

- a) The Project will not create a substantial permanent increase in ambient noise levels in the Project vicinity. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact.
- b) Temporary or periodic increases in noise levels would occur during Project installation of septic tanks and seepage pits. However, once construction is completed noise associated with construction equipment would cease. There are no sensitive receptors in the vicinity that would be affected by the construction noise. Therefore, Project impacts with regard to temporary increases in noise levels are considered to be less than significant.
- c) The Project will not expose persons to noise levels in excess of standards established in the local general plan or noise ordinance. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact.
- d) There are no sensitive receptors within the vicinity of the Project site. During construction temporary ground-borne noise and vibrations could occur during trenching and compaction from installation of septic tanks and seepage pits. Therefore, Project impacts will be considered as less than significant.

Mitigation: None required.

Monitoring: None required.

POPULATION AND HOUSING Would the project				
33. Housing	☐	☐	☐	☒
a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
b) Create a demand for additional housing, particularly housing affordable to households earning 80%	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
or less of the County's median income?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
d) Affect a County Redevelopment Project Area?	☐	☐	☐	☒
e) Cumulatively exceed official regional or local population projections?	☐	☐	☐	☒
f) 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)?	☐	☐	☒	☐

Source: Project description and materials, GIS

Findings of Fact:

- a-e) The Project site will not result in the displacement of existing housing, creating a demand for additional housing, displacement of people, affecting a County Redevelopment Project Area, or cumulatively exceeding regional or local populations. The Project is a temporary construction operation, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits. The Project would be located underneath the project area's existing parking lot for the purpose of accommodating homeless patron sheltering. Thus, there are no impacts as a result of the project.
- f) The Project would not induce population growth in the area. The Project's potential to accommodate additional sewage discharge is directly related to accommodating additional homeless patrons (total of 120) for temporary sheltering. However, this increase is considered as minimal and temporary for homeless patron occupancy would fluctuate and not exceed a maximum of 120 patrons. Therefore, the Project's impact in inducing substantial population growth is considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

27. Fire Services	☐	☐	☒	☐

Source: RCIP Safety Element, Google Maps

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Riverside County Fire Department serves the Project area. The nearest facility is Station No. 36, which is located 5.13 miles north of the Project at 11535 Karen Avenue in Desert Hot Springs. The Project's proposed installation of septic tank upgrades and seepage pits are not anticipated to significantly impact the level of service for fire protection. Therefore, Project impacts to fire services are considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

28. Sheriff Services	☐	☐	☒	☐

Source: RCIP, Google Maps.

Findings of Fact:

- a) Police protection services for the Project area are provided by the City of Palm Springs Police Department, Police Headquarters located at 200 South Civic Drive in Palm Springs (6.33 miles southeast of Project site). The proposed Project is currently developed and involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, the Project's impact to Sheriff Services is considered to be less than significant.

Mitigation: None required.

Monitoring: None required.

29. Schools	☐	☐	☐	☒

Source: City of Palm Springs General Plan; Palm Springs Unified School District.

Findings of Fact:

- a) The proposed Project will not affect school services. The Project site is currently developed in which septic tank and seepage pit installation would occur underneath the existing asphalt parking lot. Therefore, there will be no impact with regard to School Services.

Mitigation: None required.

Monitoring: None required.

30. Libraries	☐	☐	☐	☒

Source: RCIP, Google Maps.

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a) The Proposed Project will not impact library services. The Project site is currently developed in which septic tank and seepage pit modification improvements will occur underneath the existing asphalt, parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

31. Health Services	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a) The proposed Project will not impact health services. The Project site is currently developed in which septic tank and seepage pit modification improvements would occur underneath the existing parking lot. Therefore, there will be no impact as a result of the Project.

Mitigation: None required.

Monitoring: None required.

RECREATION

32. Parks and Recreation	☐	☐	☐	☒
a) Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒
b) Would the project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
c) Is the project located within a C.S.A. or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

- a-c) The proposed Project will not have an impact from park creation, park deterioration, or location within a C.S.A. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact with regard to existing parks and recreation facilities.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation: None required.

Monitoring: None required.

33. Recreational Trails	☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

- a) The proposed Project will not have an impact on recreational trails. The Project site is currently developed, which involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing asphalt parking lot. Therefore, there will be no impact.

Mitigation: None required.

Monitoring: None required.

TRANSPORTATION/TRAFFIC Would the project				
34. Circulation	☐	☐	☒	☒
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☒
b) Result in inadequate parking capacity?	☐	☐	☐	☒
c) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated road or highways?	☐	☐	☐	☒
d) 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?	☐	☐	☐	☒
e) Alter waterborne, rail or air traffic?	☐	☐	☐	☒
f) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
g) Cause an effect upon, or a need for new or altered maintenance of roads?	☐	☐	☐	☒
h) Cause an effect upon circulation during the project's construction?	☐	☐	☐	☒
i) Result in inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
j) Conflict with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☐	☒

Source: RCIP

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

- a-j) The Project site will not result in impacts to traffic. The Project site involves the temporary construction replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing asphalt parking lot. There are no proposed changes to the Project area's existing circulation pattern. The Project site's excavation area is small in relation to the size of the existing parking lot (See Exhibit 4) and that parking will temporarily be relocated to alternate locations of the parking lot during project construction. Therefore, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

35. Bike Trails

☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a) Not applicable. The Project site will not have an impact on bike trails. The Project site involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. There are no proposed improvements outside of the site that would impact bike trails. Thus, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

UTILITY AND SERVICE SYSTEMS Would the project

36. Water

☐	☐	☐	☒

- a) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?

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

☐	☐	☐	☒

Source: Project description and materials

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- a-b) The proposed Project will not require the construction of new water treatment facilities nor would have an impact on sufficient water supplies to serve the Project. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, there will be no impact as a result of the project.

Mitigation: None required.

Monitoring: None required.

37. Sewer	☐	☐	☒	☐
a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☒	☐
b) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

Source: Project description and materials

Findings of Fact:

- a-b) The proposed Project does not require the construction of a new wastewater treatment facility. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Furthermore, the Project applicant, and their wastewater treatment provider feel that the proposed three (3) 5,000 gallon septic tanks and seepage pits would accommodate the projected 15,000 gallons of sewage to be discharged per day from Roy's Desert Resource Center. Therefore, Project impacts are considered to be less than significant as a result of the Project.

Mitigation: None required.

Monitoring: None required.

38. Solid Waste	☐	☐	☒	☐
a) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
b) Comply with federal, state, and local statutes and regulations related to solid wastes (including the CIWMP (County Integrated Waste Management Plan))?	☐	☐	☒	☐

Source: RCIP,

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

- a-b) The Project area is currently served by Palm Springs Disposal Service which provides waste disposal services for the Project area. The Project site alone will not require these services as it involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, Project construction will only create minimal quantities of solid waste from construction that will comply with federal, state and local regulations concerning solid waste. Impacts will be considered as less than significant.

Mitigation: None required.

Monitoring: None required.

39. Utilities

- a) Would the project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

a) Electricity?	☐	☐	☐	☒
b) Natural gas?	☐	☐	☐	☒
c) Communications systems?	☐	☐	☐	☒
d) Storm water drainage?	☐	☐	☐	☒
e) Street lighting?	☐	☐	☐	☒
f) Maintenance of public facilities, including roads?	☐	☐	☐	☒
g) Other governmental services?	☐	☐	☐	☒
h) Conflict with adopted energy conservation plans?	☐	☐	☐	☒

Source: RCIP

Findings of Fact:

- a-h) The Project site will not have an impact on utilities. The Project site involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Once constructed, the Project is not reliant on existing utilities. Therefore, there will be no impacts as a result of the Project.

Mitigation: None required.

Monitoring: None required.

OTHER

40. Other:	☐	☐	☐	☒

Source: Staff review

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact: No other issues of concern to report. No impacts will occur.

Mitigation: None required.

Monitoring: None required.

OTHER

41. Other:	☐	☐	☐	☒

Source: Staff review

Findings of Fact: No other issues of concern to report. No impacts will occur.

Mitigation: None required.

Monitoring: None required.

OTHER

42. Other:	☐	☐	☐	☒

Source: Staff review

Findings of Fact: No other issues of concern to report. No impacts will occur

Mitigation: None required.

Monitoring: None required.

MANDATORY FINDINGS OF SIGNIFICANCE

43. Does the project have the potential to substantially 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 to eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐

Source: Staff review, Application materials

Findings of Fact:

- a) Implementation of the proposed Project will not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause fish or wildlife populations to

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

drop below self sustaining levels, threaten to eliminate a plant or animal community, or 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. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, impacts will be less than significant.

44. Does the project have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	☐	☐	☒	☐

Source: Staff review, Project description.

Findings of Fact:

- a) The Proposed Project does not have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals. The Project involves the modification improvement of septic sewer infrastructure to the benefit of the Project area's long-term environmental goals with regard to wastewater management. Therefore, Project impacts with regard to long-term environmental goals will be considered less than significant.

45. Does the project have impacts, which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in California Code of Regulations, Section 15130)?	☐	☐	☐	☒

Source: Staff review, Project description.

Findings of Fact:

- a) The Project does not have impacts, which are individually limited, but cumulatively considerable. There are no biological or cultural resources identified on the Project site that will be cumulatively impacted as the Project site is already developed. Furthermore, there will be no impacts with regard to water supply due to the nature (temporary construction) and location (developed land) of the Project site. Therefore, there will be no impact.

46. Does the project have environmental effects that will cause substantial adverse effects on human beings,	☐	☐	☐	☒

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

either directly or indirectly?

Source: Staff review, project application

Findings of Fact:

- a) The proposed Project will not result in environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly because the project is the expansion of an existing facility. The Project involves the replacement of an existing 1,500 gallon septic tank with the installation of three (3) 5,000 gallon septic tanks and additional seepage pits to be located underneath the project site's existing parking lot. Therefore, no impacts will occur from Project implementation.

VI. EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration as per California Code of Regulations, Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:

Earlier Analyses Used, if any: No earlier analyses were used in this document.

RCIP: Riverside County Integrated Project.

Location Where Earlier Analyses, if used, are available for review:

Location: City of Palm Springs Planning Department
3200 E Tahquitz Canyon Way
Palm Springs, CA 92262-6959

County of Riverside Planning Department
4080 Lemon Street, 9th Floor
Riverside, CA 92505

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

47. REFERENCES

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Appendix A:
Geotechnical Engineering Study

Appendix B:
Cultural Resource Review and
Initial Study Recommendations Letter

**Geotechnical Engineering Study
Industrial Parcel
Between Southwest Corner of McLane/Rupert Street
and 20th Avenue
North Palm Springs, California**

**Prepared for:
Buntain Construction
4531 Harlin Drive
Sacramento, California 95826**

**Prepared by:
CONSOLIDATED ENGINEERING LABORATORIES
7060 Koll Center Parkway, Suite 300
Pleasanton, California 94566
CEL Project No. G1357**



**CONSOLIDATED ENGINEERING
LABORATORIES**

September 4, 2003

Buntain Construction, Inc
4531 Harlin Drive
Sacramento, California 95826

Attention: Mr. Jarrod Short

Subject: Geotechnical Engineering Study
Industrial Parcel
Between Southwest Corner of McLane/Rupert Street and 20th Avenue
North Palm Springs, California
CEL Project No. G1357

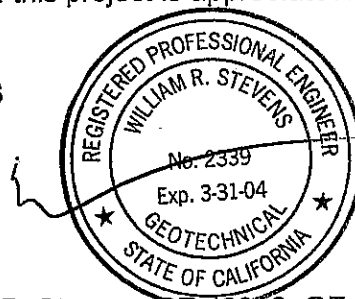
Dear Mr. Short:

In accordance with your authorization, Consolidated Engineering Laboratories (CEL) has completed a geotechnical engineering study for a proposed industrial parcel to contain warehouses between the southwest corner of McLane/Rupert Street and 20th Avenue, in North Palm Springs, California. Transmitted herewith are the results of our findings, conclusions, and recommendations for foundations, interior and exterior concrete slabs, pavement section design, site grading and drainage, temporary cut slope excavation and trench slope stability, drilled piers for light standards, retaining walls design for truck docks, utility trench backfilling, and guideline specifications for grading operations. In general, the proposed development at the site is considered to be geotechnically feasible provided the recommendations of this report are implemented in the design and construction of the project.

Should you or members of the design team have questions or need additional information, please contact the undersigned at (925) 485-5000. The opportunity to be of service to Buntain Construction, Inc., and to be involved in the design of this project is appreciated.

Sincerely,
CONSOLIDATED ENGINEERING LABORATORIES


Marc Hachey
Staff Geologist



William R. Stevens, PE 43010, GE 2339
Principal Geotechnical Engineer

Copies: 6 to Addressee (916/255-5000, Fax 916/255-5020)
2 to CEL Sacramento

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CONSOLIDATED ENGINEERING
LABORATORIES

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APPENDIX A

- Key to Boring Logs and Test Pits
- Logs of Borings and Test Pits

APPENDIX B

- LABORATORY TEST RESULTS
- Sieve Analysis
- Single-Point Consolidation
- R-Value
- Water-Soluble Sulfate

APPENDIX C

- Grading and Earthwork Specifications

APPENDIX D

- Pier Drilling and Construction Specifications



GEOTECHNICAL ENGINEERING STUDY

Project: Industrial Parcel
North Palm Springs, California

Client: Buntain Construction, Inc
Sacramento, California

1.0 INTRODUCTION

1.1 Purpose and Scope

The purposes of this study were to evaluate the subsurface conditions at the site and prepare geotechnical recommendations for the proposed development. This study provides recommendations for the design and construction of proposed foundations, interior and exterior concrete slabs, pavement sections, site drainage, temporary cut slope and trench slope stability, retaining wall design for truck docks, utility trench backfill, drilled piers, and grading. This study was performed in accordance with the scope of work outlined in our proposal dated July 29, 2003.

The scope of this study included the review of pertinent published and unpublished documents related to the site, the drilling of several subsurface borings, laboratory testing of selected samples retrieved from the borings, engineering analysis of the accumulated data, and preparation of this report. The conclusions and recommendations presented in this report are based on the data acquired and analyzed during this study, and on prudent engineering judgment and experience. This study did not include an assessment of potentially toxic or hazardous materials that may be present on or beneath the site or a comprehensive evaluation of the corrosion potential of the site soils.

1.2 Site Description

The subject site is located at the southwest corner of McLane Street and extends west and southward to 20th Avenue in North Palm Springs, California as shown on Figure 1, Site Vicinity. Some maps indicate McLane Street to be Rupert Street; we do not know which one is correct. The site is approximately 31,000 square feet in size and rectangular in shape. The site is covered in gravelly sand with scattered surface boulders and cobbles, and is relatively flat with some local



relief. There are scattered piles of cobbles and boulders throughout the site, with the east half of the site exhibiting more surficial rock than the west. The western perimeter of the site is bounded by a rock retaining wall consisting of boulder sized rock, which separates the site and the open field to the west. The area to the west of the site is approximately 6 to 7 feet lower in elevation than the subject site. It appears the wall was placed to stabilize fill soil used to grade the entire industrial park to its existing grade. The site is bounded on the north by an empty lot, on the east by McLane Street, on the west by open field, and on the south by 20th Avenue. The site is situated at approximately 33.91° north latitude and 116.55° west longitude at approximately 740 feet above mean sea level.

1.3 Proposed Development

The proposed development includes two, one-story warehouse buildings, each approximately 55,000 sf in size. Both buildings may be up to 35-feet tall and are anticipated to have shallow foundations and concrete floor slabs. Grading is expected to be minor for drainage purposes and to mitigate possible collapsible surficial soils. Other improvements include asphalt paved parking and driveways, landscape areas, truck loading docks, concrete hardscapes and pavement, underground utilities, and light poles.

1.4 Validity of Report

This report is valid for two years after publication. If construction begins after this time period, CEL should be contacted to confirm that the site conditions have not changed significantly. If the proposed development differs considerably from that described above, CEL should be notified to determine if additional recommendations are required. Additionally, if CEL is not involved during the geotechnical aspects of construction, this report may become wholly or in part invalid; CEL's geotechnical personnel verifies that the subsurface conditions anticipated preparing this report are similar to the subsurface conditions revealed during construction. CEL's involvement should include site grading and foundation plan review; monitoring site clearing, mass grading and building pad construction; foundation excavation and pier drilling observations; testing retaining wall and utility trench backfill, and subgrade preparation and baserock placement in paved areas.

2.0 PROCEDURES AND RESULTS

2.1 Literature Review

Pertinent geologic and geotechnical literature pertaining to the site area was reviewed. These included various USGS, DMG and other agency publications and maps.

2.2 Drilling and Sampling

A subsurface exploration program was undertaken to evaluate the soil conditions at the site. A total of six borings were drilled at the site on August 12, 2003. The borings were drilled using a truck-mounted drill rig equipped with 8-inch diameter, hollow-stem augers. Seven test pits were excavated with a backhoe on August 18, 2003 to categorize near surface soils more closely.

The materials encountered in the borings and test pits were visually classified according to the Unified Soil Classification System by a CEL representative as the borings and test pits were advanced. Relatively undisturbed soil samples were recovered at selected intervals using a 3-inch outside diameter Modified California split spoon sampler containing 6-inch long brass liners, and a 2-inch outside diameter Standard Penetration Test (SPT) sampler. The samplers were driven by means of a 140-pound downhole safety hammer with an approximate 30-inch fall. Resistance to penetration was recorded as the number of hammer blows required to drive the sampler the final foot of a 12 or 18-inch drive. Bulk samples were obtained in the upper few feet of the borings from the auger cuttings.

The boring and test pits logs with descriptions of the various materials encountered in each boring and test pit, the penetration resistance values, and some of the laboratory test results are presented in Appendix A. The approximate locations of the borings and test pits are shown on the Site Plan, Figure 2.

2.3 Laboratory Testing

Laboratory tests were performed on selected samples to determine some of the physical and engineering properties of the subsurface soils. The results of the laboratory testing are presented on the boring logs, and are included in Appendix B. The following soil tests were performed for this study:



Dry Density and Moisture Content (ASTM D2216 and ASTM D2937) – In-situ density and moisture tests were conducted to determine the in-place dry density and moisture content of the subsurface materials. These properties provide information for evaluating the physical characteristics of the subsurface soils.

Particle Size Analysis (Wet and Dry Sieve) and Hydrometer (ASTM D422, D1140, and CT202) - Sieve analysis testing is conducted on selected samples to determine the soil particle size distribution. This information is useful for the evaluation of liquefaction potential and characterizing the soil type according to USCS.

Collapse Potential Test (ASTM D5333) – A single point consolidation test that provides information on hydroconsolidation potential of a soil after introducing additional stress and then saturating the soil.

R-Value (ASTM D2844) - R-Value testing was performed in accordance with Caltrans Test Method 301 to develop design parameters for asphalt concrete pavement recommendations.

Water Soluble Sulfate (ASTM D4327 and CT417) - Water soluble sulfate tests are utilized to determine the type of concrete required for underground construction and is required by the UBC, CBC, and IBC.



3.0 FINDINGS

3.1 Geologic Setting

According to published geologic maps for the area, the subject site is underlain by Quaternary aged, alluvial deposits consisting of unconsolidated stream, river channel and alluvial fan deposits, with local eolian sand.

3.2 Subsurface Soil Conditions.

The earth materials encountered in CEL's exploratory borings and test pits can be described as approximately six to seven feet of light, moderate and grayish-brown, dry to slightly moist, medium dense to dense, poorly to well-graded sand (SP/SW) with silt, gravel, cobbles and some boulders. The gravel, cobbles, and boulders were observed to be subangular to subrounded. The upper six to seven feet of soil is considered fill material, but no discernible contact between fill and native soils was observed in the borings or test pits. Fill thickness was interpreted from the elevation change along the western perimeter of the site. Cobbles and boulders were encountered throughout the site, mainly in the upper five feet. Some areas exhibited more cobbles and boulders. The sandy soils encountered to the maximum depth explored consisted of poorly to well graded, dry to slightly moist, medium to very dense sand (SP/SW) with silt and some fine gravel. Details of site soils encountered in the CEL borings and test pits are contained in Appendix A.

The entire soil profile is non-expansive and a bulk sample collected from the upper three feet had an R-Value of 77. Sieve analysis tests were performed on a bulk samples collected from Boring 7 and 11, at eight feet and seven feet respectively. The sample from Test Pit 1 had 93% of sand, 5% gravel and 2% of silt. The sample from Test Pit 5 had 87% of sand, 9% gravel and 4% of silt. Sieve analyses of the cobble and boulder content was not included in the samples tested. Cobbles are defined as rock between 3 to 12 inches in diameter, and boulders are over 12 inches in diameter according to the Unified Soil Classification System. In-situ densities and moistures ranged from 107.1 psf to 130.6 psf and 0.9% to 5.5%.

Single point consolidation tests were performed on 8 samples collected from in-situ samples at depth ranging from 3 to 15 feet. The samples were loaded to 4,000 psf, and then water was added.



The initial loading determines the consolidation (compressibility) of the soil, and adding the water determines the collapse potential of the soil. The soils were not found to be collapsible since the samples consolidated less than about 1 percent when water was added. The total consolidation of the soil was found to be less than about 3.5 percent under a 4,000 psf load. One sample consolidated nearly 6 percent, and 2 samples about 2 percent.

3.3 Groundwater

Groundwater was not encountered in the borings or test pits to the maximum depth explored of 41.5 feet. Examination of Department of Water Resources well data indicates that the groundwater is approximately 230 to 330 feet deep in nearby wells from the Palm Springs and Desert Hot Springs area (DWR, 2002). Groundwater levels can vary in response to time of year, variations in seasonal rainfall, well pumping, irrigation, and alterations to site drainage. Determining the detailed groundwater characteristics of the site was not included in our scope of work.

3.4 Water-Soluble Sulfate

Water-soluble sulfate can affect the concrete mix design for concrete in contact with the ground, such as shallow foundations, piles, piers, and concrete slabs. The UBC, CBC, and IBC provides the following evaluation criteria:

Sulfate Exposure	Sulfate Percent by Weight or (mg/kg)	Cement Type	Max. Water Cementitious Ratio by Weight	Min. Unconfined Compressive Strength, psi
Negligible	0.00-0.10 (0-1,000)	NA	NA	NA
Moderate	0.10-0.20 (1,000-2,000)	II, IP (MS), IS (MS)	0.50	4,000
Severe	0.20-2.00 (2,000-20,000)	V	0.45	4,500
Very Severe	Over 2.00 (20,000)	V plus pozzolan	0.45	4,500

For the bulk sample collected from the borings and test pits, the results reported a 54 mg/kg concentration. Hence, the water-soluble sulfate content in the site soil has a negligible impact on buried concrete at the site. However, it should be pointed out that the water-soluble sulfate concentrations can vary due to the addition of fertilizer, irrigation, and other possible development activities. An appropriate expert should be contacted if a detailed evaluation is required.



3.5 Expansive Soil

The onsite soil is sandy and non-expansive.

3.6 Liquefaction Induced Phenomena

Soil liquefaction is a phenomenon in which loose, saturated, cohesionless soil experiences a temporary loss of strength during strong cyclic loading such as that produced by earthquakes. Typically, liquefaction potential increases with increased duration and magnitude of cyclic loading. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand. On the basis the field and laboratory data, it is our opinion that there is not a potential for liquefaction to occur at the site.

3.7 Flooding

According to the ESRI (Environmental Systems Research Institute) and FEMA (Federal Emergency Management Agency) website, the subject site is situated in a zone prone to estimated 500-year flood potential. An assessment of flooding potential was not in our scope of work for this project, and a flood risk specialist should be contacted for a more detailed interpretation.

3.8 Settlement Due to Consolidation, Dynamic Compaction, and Collapse

Settlement of soil can be caused by consolidation, dynamic compaction, and collapsible soil. Consolidation is the densification of soil into a more dense arrangement from additional loading, such as fill or foundations. Consolidation of clayey soils is usually a long-term process, whereas sandy soils consolidate relatively rapidly with an introduction to a load. Dynamic compaction is the densification of predominantly sandy soil caused by vibration, such as an earthquake or vibrating machinery. Collapsible soils are fine sandy and silty soils that have been laid down by the action of flowing water, usually in alluvial fan deposits. The soil particles are usually bound together with a mineral precipitate. The loose structure is maintained in the soil until a load is imposed on the soil and water is introduced. The water breaks down the inter-particle bonds and the newly imposed loading densifies the soil. It is our opinion that the soil matrix within the fill and the upper few feet of the native soils have a moderate susceptibility for settlement due to consolidation and dynamic compaction. The laboratory data does not indicate the near surface soil in the upper 15 feet to be susceptible to collapse.



3.9 Seismicity and Faulting

The site is located in an area of high seismic activity associated with the San Andreas Fault Zone and would be influenced by major earthquakes along nearby active faults. The active, Type A San Andreas Fault is located approximately 1 miles (1.6 km) north of the site. In 1986, this segment of the San Andreas was observed to experience visible fault creep slippage. The Type B Gorgonio Pass Fault Zone is located approximately 3.5 miles (5.8 km) to the west of the site. The site is located approximately 12 miles (19.5 km) south of the Type B Pinto Mountain Fault. The Type B Morongo Valley Fault is located approximately 10.2 miles (16.5 km) north of the site. The site is located in an area which has been subject to five earthquakes larger than 6.0 since 1932.

3.10 Surface Fault Rupture

According to DMG Special Publication 42 (Hart, 1994), the site does not lie within an Earthquake Fault Zone, as defined by the Alquist-Priolo Act of 1972. According to published mapping by DMG, no known fault traces cross the site, and no evidence of surface ground rupture was noted during our site reconnaissance. Therefore, it is our opinion that the likelihood of surface fault rupture at the site is low.

3.11 Other Geologic Hazards

The site is not considered subject to other potential geologic hazards, including landslides, soil erosion, volcanism, mass wasting, loss of mineral resources, or loss of unique geologic features. This is due to the sites topography, geology, and land use. Subsidence due to groundwater withdrawal is possible, but should not impact the site detrimentally since this phenomena is more regional than local.



4.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based upon the analysis of the information gathered during the course of this study and our understanding of the proposed improvements.

4.1 General

The site is considered geotechnically suitable for the proposed development provided the recommendations of this report are incorporated into the design and implemented during construction. The predominant geotechnical and geological issues that will need to be addressed are:

Seismic Considerations – The site is located within a seismically active region. The building design should consider the effects of seismic activity.

Differential Settlement – The site is underlain by undocumented fill and native soil that appears to consist of a dense sandy and gravelly soil matrix with cobbles and boulders. However, differential settlement will have to be addressed since portions of a footing may be on a sandier matrix and portions on a more rocky condition. We recommend that the foundations be designed for a lower bearing pressure rather than excessive overexcavation and replacement grading in the building pads.

Excavation of Footings and Utilities due to Cobbles and Boulders – The subsurface soil contains cobbles (3 to 12 inch size) and boulders (over 1-foot size), and excavating foundations and underground utilities may produce either oversized excavations or unstable excavation walls. We are suggesting, but not requiring, that the building pad be overexcavated, the large rocks removed, and the soil replaced as engineered fill. If this is performed, an added benefit would be higher allowable bearing capacities for the shallow foundations.

4.2 UBC Seismic Design Parameters

According to the 1997 UBC, the site is located within Seismic Zone 4. Site soils are of soil profile type S_D . Near-source acceleration and velocity factors are determined by the UBC based upon the



site's soil profile and proximity to Type A and Type B faults. Based on the site soil profile and the 1.6 km distance from the site to the Type A San Andreas fault, the Near-Source Acceleration Factor, N_a for site is 1.5, and the Near-Source Velocity Factor, N_v is 2.0.

4.3 Site Grading

Site grading should be performed in accordance with these recommendations and the Grading and Earthwork Specifications in the appendices. A pre-construction conference should be held at the jobsite with representatives from the owner, general contractor, grading contractor, and CEL prior to starting the stripping and demolition operations at the site.

4.3.1 Site Preparation and Demolition

The site should be cleared of vegetation, large surface rocks greater than six inches in diameter, debris, and other deleterious materials. Existing underground utilities to be abandoned at the site should be properly grouted, closed or removed as needed. If the utilities are removed, the excavations should be backfilled with properly compacted fill or other material approved by the Geotechnical Engineer.

4.3.2 Building Pad Grading

The areas of proposed buildings should be thoroughly saturated for at least four to six hours and compacted to at least 92 percent relative compaction in accordance with ASTM D1557 with a large, smooth drum vibratory loader. Large boulders and cobbles greater than 6 inches at the ground surface should be excavated and removed from the soil. Engineered fill can then be placed in no greater than one-foot thick lifts, moisture conditioned to at least 2 to 3 percent over optimum moisture and compacted to at least 92 percent relative compaction.

OPTION: If higher allowable bearing capacities and the easier utility and footing excavations are desired, the building pad should be overexcavated at least 4 feet, and the soil replaced as engineered fill. The soil should be compacted to at least 92 percent relative compaction. Scarifying the bottom of the overexcavation is not required. However, an option would be to overexcavate 3.5 feet and scarify 6 inches. The overexcavation should extend at least 5-feet beyond the building perimeter. Rocks larger than about 4 inches in largest dimension should be removed prior to utilizing the material as engineered fill. Lifts should be less than 8-inches thick.



4.3.3 General Grading

Site grading is anticipated to consist of approximately up to 2 feet of cut and fill for drainage purposes and to level the site. Onsite soil generated from cut areas following clearing and grubbing that is free of excess organic material (3 percent or less by weight) or debris may be suitable for use as structural fill at the site.

Pavement and concrete hardscape areas should be completely saturated by means of water truck for at least four to six hours and compacted. Areas supporting vehicles should be compacted to at least 95 percent relative compaction in accordance with ASTM D1557 with a large, smooth drum vibratory loader. Pedestrian areas can be compacted to at least 92 percent relative compaction. Boulders and cobbles greater than 6 inches encountered during scarification should be excavated and removed from the soil. Engineered fill can then be placed in no greater than one-foot thick lifts, moisture conditioned to over optimum moisture content and compacted.

If used, imported fill materials should be non-expansive, having a Plasticity Index of 12 or less, an R-Value greater than 30, and fines so the soil can bind together. Imported materials should be free of organic materials and debris, and should not contain rocks or lumps greater than 3 inches in maximum size. Import fill materials should be approved by the geotechnical engineer prior to use on site.

Final grading should be designed to provide positive drainage away from structures. Soil areas within 10 feet of proposed structures should slope at a minimum of 2 percent away from the buildings. Roof leaders and downspouts should discharge onto paved surfaces sloping away from the structure or into a closed pipe system which outfalls to the street gutter pan or directly to the storm drain system.

If grading occurs in the winter rainy season, unstable subgrade conditions may be present. These conditions may require stabilizing the subgrade with admixtures, such as cement kiln dust, cement, or lime. Additional recommendations can be provided, if required, during construction.



4.4 Utility Trench Construction

Utility trenches may be backfilled with native soil above the utility bedding and shading materials. If rocks larger than 4 inches in maximum size are encountered, they should be removed from the fill material prior to placement in the utility trenches. Backfill in the upper 5 feet of utility trenches should be compacted to at least 92 percent relative compaction. Trench backfill deeper than 5 feet

should be compacted to at least 95 percent relative compaction. Utility bedding and shading compaction requirements should be in conformance with the requirements of the local agencies having jurisdiction. Jetting of trench backfill is not recommended.

Pea gravel, rod mill, or other similar self-compacting material can be utilized for trench backfill in the building pad. However, the self-compacting material should be compacted with a whacker and placed in minimum 2-foot lifts. The upper foot of backfill in the building pad subgrade should consist of Class 2 baserock. Self-compacting backfill material should not be used in exterior underground trenches due to the potential for water seeping into the trench backfill. Fines may migrate into the voids in the pea gravel or rod mill, which could cause settlement of the ground surface above the trench.

Utility trenches should be sealed with concrete, clayey soil, sand-cement slurry, or controlled density fill (CDF) where the utility enters the building under the perimeter foundation. This would reduce the potential for migration of water beneath the building through the shading material in the utility trench.

4.5 Temporary Excavations

The contractor should utilize proper Cal OSHA methods during construction. Excavations in soil more than 5 feet deep for utility trenches should have side slopes constructed at 1.5H:1V (horizontal to vertical). The grading contractor, based upon the materials encountered during the excavation, should make selection of temporary side slopes. Maximum slope ratios provided above are assumed to be uniform from top to toe of the slope. Adequate provisions should be made to prevent water from ponding on top of the slope and from flowing over the slope face. Surcharge loads

should not be permitted within 10 feet of the top of the slope. Desiccation or excessive moisture in the excavation could reduce stability and require shoring or laying backside slopes.

4.6 Building Foundations

The proposed structures can be supported on spread footings. Shallow strip perimeter footings should be founded a minimum of 18 inches below lowest adjacent finish grade. Interior footings can be founded 12 inches below building pad subgrade. The allowable bearing capacity for the proposed foundations is 2,200 pounds per square foot (psf) for dead plus live loads. The allowable bearing capacity may be increased by 1/3 for temporary seismic or wind loading. The allowable bearing capacity can be increased to 3,500 psf if the building pad is overexcavated and replaced as engineered fill (see option in building pad grading section).

For resistance to lateral loads, a coefficient of friction of 0.35 between the base of the foundation elements and underlying material is recommended. In addition, an allowable passive resistance equal to an equivalent fluid weighing 350 pounds per cubic foot (pcf) acting against the foundation may be used to resist lateral forces. The top foot of passive resistance at foundations should be neglected unless the ground surface around the footing is covered by concrete or pavement. If both friction and passive resistance is utilized, a 50 percent reduction is recommended for either of them.

Footing excavations should have firm bottoms and be free from excessive slough prior to concrete or reinforcing steel placement. Where utility trenches are to be located adjacent to foundations, the bottom of the footing should be located below an imaginary 1:1 (horizontal to vertical) plane projected upward from the nearest bottom edge of the utility trench.

The foundation excavations should be observed by a representative of Consolidated Engineering Laboratories prior to placement of reinforcing steel or concrete to evaluate the exposed soil conditions.

Total static and dynamic settlement of the building is anticipated to be about 1-inch. Differential static settlement between isolated columns and perimeter footings is anticipated to be about 3/4-inch. Most of the settlement should occur during construction.

4.7 Drilled Piers

Drilled piers may be used to support awnings for covered walkways, light poles or similar structures. Pier drilling and construction specifications are provided in the appendices. The allowable skin friction for these piers resisting vertical downward loads can be considered to be 450 psf. End



bearing should be neglected. Piers resisting vertical upward (tension) should be designed using an allowable skin friction of 3000 psf. A passive pressure of 350 psf is allowed for lateral resistance. The upper foot of skin friction and passive resistance should be neglected unless the surrounding area is covered by concrete. The piers should be spaced a minimum of 3 diameters apart. Pier spacings less than 3 diameters will require a reduction in allowable skin friction. Passive resistance for less than 6 pier diameters will need to be reduced. For piers spaced at 3 diameters, the passive resistance should be reduced by half. Full passive resistance is allowed for piers spaced on 6 diameter spacings. The amount of reduction for passive resistance between 3 pier diameters to 6 diameters can be considered to be linear. Passive resistance for less than 3 pier diameter spacings should be determined during the plan review process.

The bottom of the piers should be properly cleaned out after drilling. A CEL representative should observe the drilling of the piers to confirm final depths and proper cleaning of the bottom of the piers. Soil should be prevented from falling into the pier hole after drilling. This can be accomplished by removing excess soil cuttings from the top of the pier hole and covering the hole. The pier hole cover should also prevent persons or objects from falling into the hole. Additionally, piers drilled during the day should have the reinforcing cages installed in the hole and filled with concrete before the end of the day.

Because of the presence of near surface cobbles and boulders encountered in our exploratory borings and test pits, the drilling of piers may be difficult in the top five to six feet of soil. The pier contractor should be made aware of the presence of cobbles boulders so the necessary equipment can be utilized. Boulders and cobbles will need to be removed if encountered during pier drilling operations, and the location of piers may need to have some flexibility to account for this condition.

4.8 Concrete Slabs on Grade

Non-structural concrete slab-on-grade floors should be a minimum of 4 inches in thickness. Reinforcing requirements should be determined by the structural engineer. The concrete floor slab can be constructed on 4 inches of Class 2 aggregate baserock compacted to a minimum 95 percent relative compaction. If the floor slab will have high rack loading or fork lift traffic, the slabs should be at least 5-inches thick and underlain by at least 6 inches of Class 2 baserock. If the floor will have moisture sensitive floor coverings, the baserock should be replaced with a vapor barrier over a minimum of 2-inches of angular, clean sand. The civil engineer should determine if a thin sand layer



is required on top of the vapor barrier. If construction occurs in the winter months, the vapor barrier may prevent the vertical percolation of rainwater. Exterior concrete flat work can be placed on the existing site soil. The subgrade beneath the flatwork should be compacted to at least 92 percent

relative compaction as discussed in the grading section of the report. Where flatwork is contiguous to the building at doorways and entrances, the flatwork should be doweled into the building foundation to reduce potential tripping hazards.

4.9 Retaining Wall Design

Proposed retaining walls can be supported on spread footings as discussed above. The anticipated retaining wall pressures for the on-site soil conditions are provided in Figure 3. The active and at rest pressures for soils shown on Figure 3 assume the backfill behind the retaining wall is a gravel blanket or wall drain with native soil or gravel.

Drainage should be provided behind the retaining walls. The drainage system should consist of a minimum of 4-inch diameter perforated pipe placed at the base of the retaining wall and surrounded by 3/4-inch drain rock wrapped in a Mirafi 140N filter fabric, or equivalent approved by the geotechnical engineer. The drain rock wrapped in fabric should be at least 12 inches wide and extend from the base of the wall to within 2 feet of the ground surface. The upper 2 feet of backfill should consist of compacted native soil. The retaining wall drainage system should be sloped to outfall to the storm drain system or other appropriate facility.

As an alternative to the drain rock and fabric, Miradrain 2000, or approved equivalent, may be used behind the retaining wall. The Miradrain 2000 should extend from the base of the wall to within 2 feet of the ground surface. A perforated pipe should be placed at the base of the wall in direct contact with the Miradrain 2000. The Miradrain fabric at the base of the Miradrain 2000 panel should be wrapped around the perforated pipe to prevent soil intrusion into the pipe

The foundation excavations should be observed by a representative of Consolidated Engineering Laboratories prior to placement of reinforcing steel or concrete to evaluate the exposed soil conditions.

4.10 Pavement Design

Recommendations for the design of asphalt concrete pavement sections were developed in accordance with the procedures outlined in the latest edition of the Caltrans Highway Design Manual. The Caltrans design method uses Traffic Indices (TI) to represent anticipated wheel loads and frequency of usage for a given design life. A design life of 20 years is typically used. Factors such as surface and subsurface drainage have an effect on the overall life of a pavement section.

An R-Value of 70 were obtained for a near surface soil samples at the site. An R-Value of 70 was used for design. The following are recommended structural asphalt concrete (AC) pavement sections.

Pavement (Traffic Index)	Asphalt Concrete (Inches)	Class 2 Aggregate Baserock (Inches)	Total Section (Inches)
Car Parking (4.5)	2.5	4	6.5
Car Driveways (5.0)	3.0	4	7.0
Heavy Duty (6.0)	3.5	6	9.5
Street (7.0)	4.0	6	12.0

Asphalt concrete should be designed per Caltrans standards. Car parking areas should be ½-inch maximum medium mix, and the other pavements should be ¾ inch max medium mix. The asphalt pavement should be placed in minimum 1-1/2 inch thick compacted lifts and a maximum 4-inch thick lifts.

The subgrade underlying pavement areas should be prepared per the recommendations provided in the Site Grading section. Aggregate base materials should be compacted to a minimum of 95 percent of the maximum dry density within two percent of the optimum moisture content as determined by ASTM D1557.



4.11 Plan Review

It is recommended that Consolidated Engineering Laboratories be provided the opportunity to review the final project plans prior to construction. The purpose of this review is to assess the general compliance of the plans with the recommendations provided in this report and the incorporation of these recommendations into the project plans and specifications.

4.12 Observation and Testing During Construction

It is recommended that Consolidated Engineering Laboratories be retained to provide observation and testing services during site preparation, site grading, utility construction, foundation excavation, pier drilling and to observe final site drainage. This is to observe compliance with the design concepts, specifications and recommendations, and to allow for possible changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.



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Division of Mines and Geology (DMG), Guidelines for Evaluating and Mitigating Seismic Hazards in California, DMG Special Publication 117, March 13, 1997.

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National Center for Earthquake Engineering Research, Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, Technical Report NCEER-97-0022, December 31, 1997.

Pradel, Daniel, "Procedure to Evaluate Earthquake-Induced Settlements in Dry Sandy Soils," Journal of Geotechnical and Geoenvironmental Engineering, April 1998.

Uniform Building Code, International Conference of Building Officials, April 1997.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

The recommendations of this report are based upon the soil and conditions encountered in the borings. If variations or undesirable conditions are encountered during construction, Consolidated Engineering Laboratories (CEL) should be contacted so that supplemental recommendations may be provided.

This report is issued with the understanding that it is the responsibility of the owner or his representatives to see that the information and recommendations contained herein are called to the attention of the others members of the design team and incorporated into the plans and specifications, and that the necessary steps are taken to see that the recommendations are implemented during construction.

The findings and recommendations presented in this report are valid as of the present time for the development as currently proposed. However, changes in the conditions of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Accordingly the findings and recommendations presented in this report may be invalidated, wholly or in part, by changes outside our control. Therefore, this report is subject to review by CEL after a period of three (3) years has elapsed from the date of issuance of this report. In addition, if the currently proposed design scheme as noted in this report is altered CEL should be provided the opportunity to review the changed design and provide supplemental recommendations as needed.

Recommendations are presented in this report which specifically request that CEL be provided the opportunity to review the project plans prior to construction and that we be retained to provide observation and testing services during construction. The validity of the recommendations of this report assumes that CEL will be retained to provide these services.

This report was prepared upon your request for our services, and in accordance with currently accepted geotechnical engineering practice. No warranty based on the contents of this report is intended, and none shall be inferred from the statements or opinions expressed herein.



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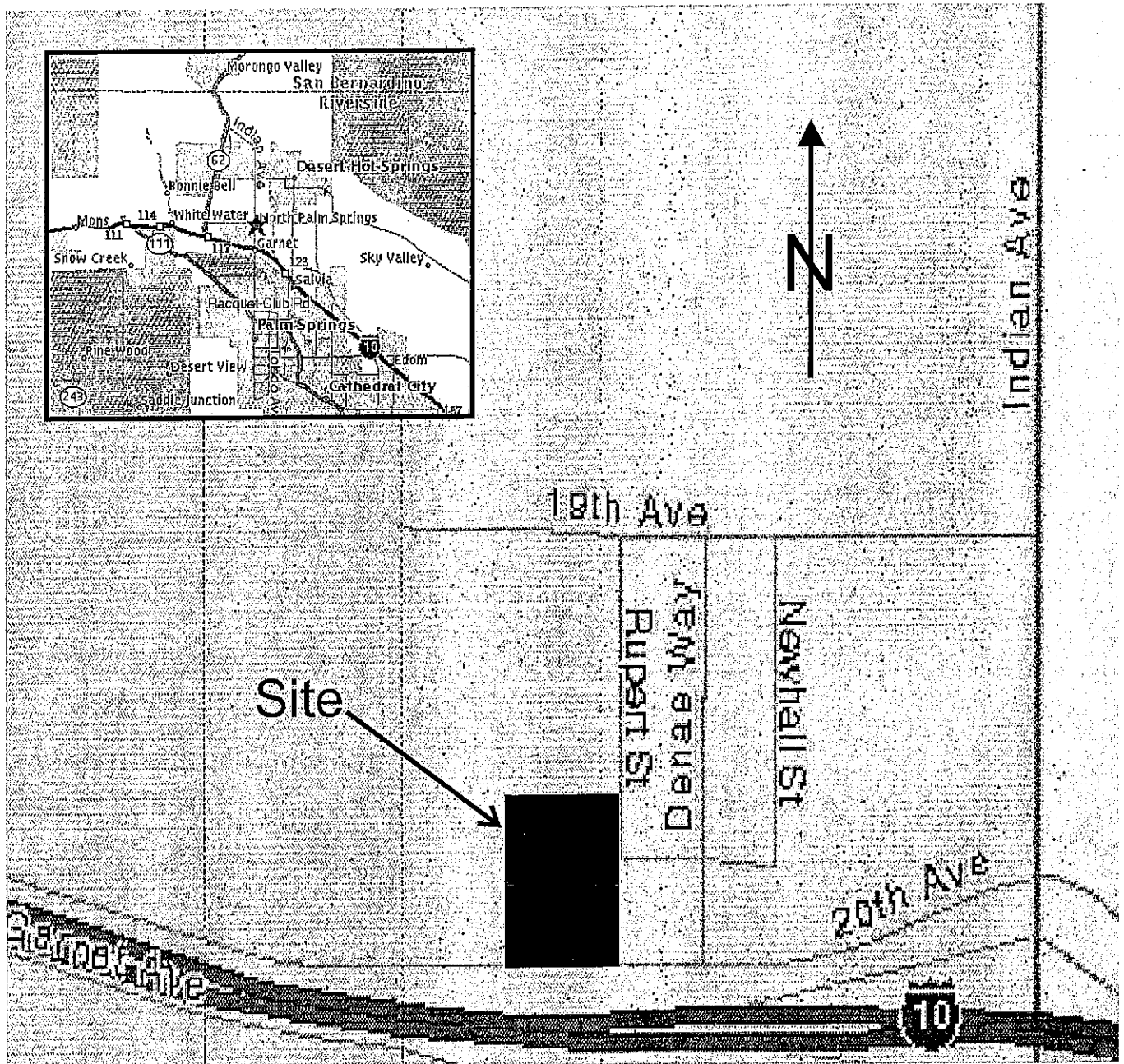
The scope of our services for this report did not include an environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater or air, on, below or around this site. Any statements within this report or on the attached figures, logs or records regarding odors noted or other items or conditions observed, are for the information of our client only.

FIGURES

Figure 1 - Site Vicinity

Figure 2 - Site Plan

Figure 3 - Retaining Wall Pressures



No Scale

Warehouse Lot - N. Palm Springs

G1357

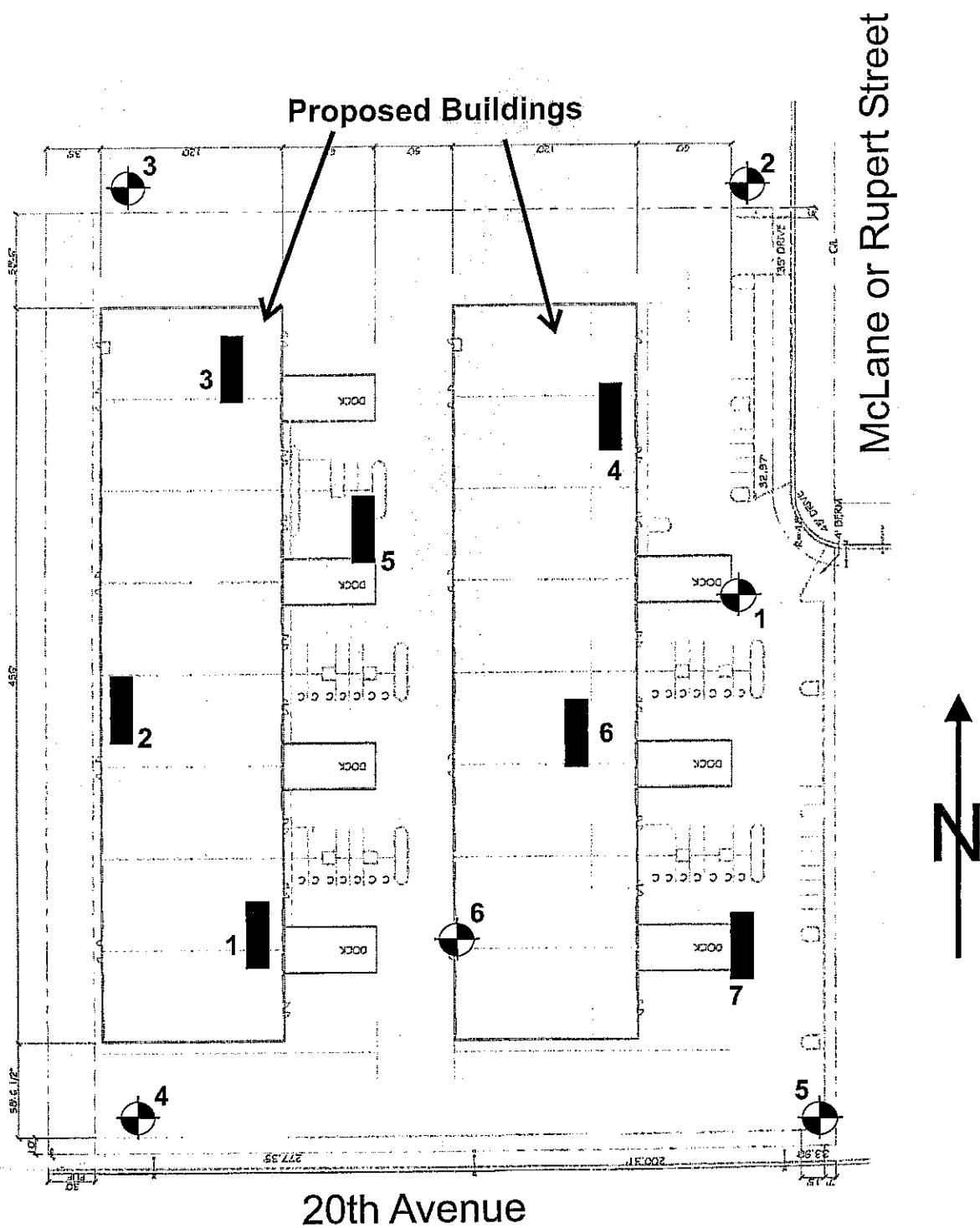
September 2003



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Site Vicinity

Figure 1



-  - Approximate Boring Location
-  - Approximate Test Pit Location

No Scale

Warehouse Lot - N. Palm Springs

G1357

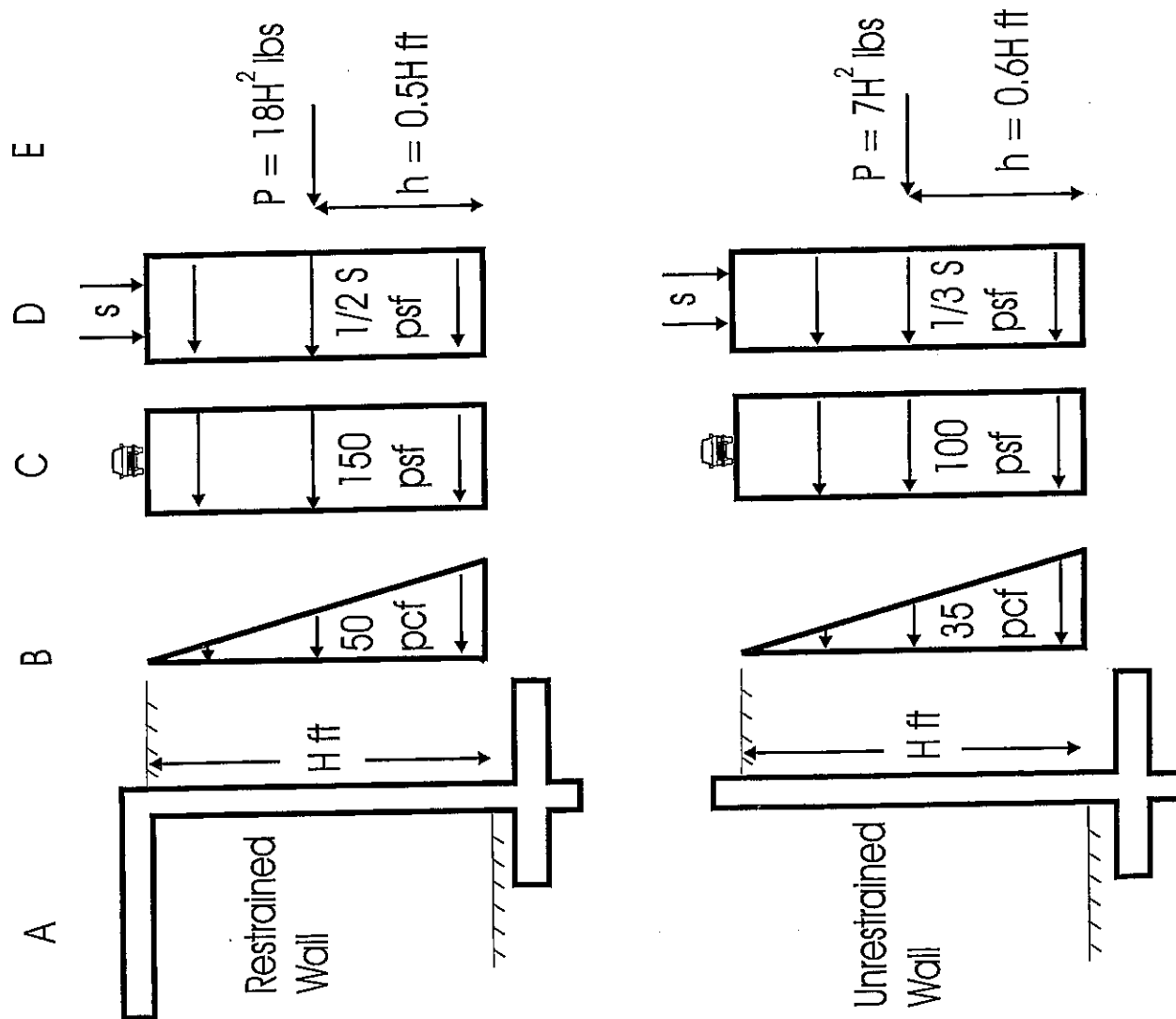
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Site Plan

Figure 2



NOTES

A: Restrained and unrestrained retaining wall schematic.

B: Equivalent fluid pressure for level backfill.

C: Lateral load from vehicles near top of wall.

D: Lateral load from uniform surcharge (S psf) on wall backfill.

E: P = Dynamic thrust on retaining wall

from earthquakes utilizing a pseudostatic acceleration of $0.15g$.

h = Point of application of dynamic thrust.

1) Assumed drained backfill condition.

2) Equivalent fluid pressure increase for sloping backfill:

Restrained wall; add 1.5 pcf for each degree of backfill inclination.

Unrestrained wall; add 1 pcf for each degree of backfill inclination.

Warehouse Lot - N. Palm Springs

G1357

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Retaining Wall
Pressures

Figure 3

APPENDIX A
Key to Boring Logs
Logs of Borings and Test Pits

Key to Boring Logs

- 
3-inch O.D. Modified California Sampler
- 
2-inch O.D. Standard Penetration Test (SPT)
- 
Bulk Sample
- 
2.5-inch O.D. Split Spoon Sampler
- 
3-inch O.D. Shelby Tube (hydraulically advanced)
- 
Groundwater Level Encountered During Drilling
- 
Groundwater Level Measured After Drilling
- 25 Blow Count To Drive Sampler One Foot

1. The boring locations were determined by pacing, sighting and/or measuring from site features. Elevations of borings (if included) are determined by interpolation between plan contours. The location and elevation of borings should be considered accurate only to the degree implied by the method used.
2. The stratification lines represent the approximate boundary between soil types. The transition may be gradual.
3. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. This data has been reviewed and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, tides, temperature and other factors at the time measurements were made.

Warehouse Lot - N. Palm Springs

CEL #G1357

September 2003



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Key to Boring Logs

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 1			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light brown, poorly to well-graded, medium to coarse SAND with silt and gravel. Fill. R-Value = 77	Dry	Med. Dense	SP/SW	0
5		28	1-1		104.9	6.0	Becoming less silty and gravelly. Fill?	Dry	Med. Dense	SP/SW	5
10							Practical drilling refusal at 5.5 feet. No groundwater encountered.				10
15											15
20											20
25											25

CONSOLIDATED ENGINEERING LABORATORIES

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 2			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light brown, poorly to well-graded, medium to coarse SAND with silt and gravel. Fill.	Dry	Med. Dense	SP/SW	0
5		32	2-1	(no recovery)							5
		52	2-2		130.6	0.9	Becoming gray and white with feldspar grains, medium to coarse grained, poorly graded. Native	Dry	Med. Dense To Dense	SP	
10		24	2-3		107.1	1.5	Sand with abundant quartz grains, medium to coarse grained with trace gravel.	Dry	Med. Dense	SP	10
15		37	2-4		108.3	1.6	Becoming coarser with more feldspar grains.	Dry	Med. Dense	SP	15
20		54	2-5				Becoming finer, poorly to well-graded.	Dry	Dense	SP/SW	20
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 2			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
25		34	2-6		110.9	5.5	Moderate brown, fine to medium grained with trace coarse, poorly graded SAND with silt.	Dry To Slight. Moist	Med. Dense	SP	25
30		44	2-7				Becoming brown with white quartz and some gravel.	Dry To Slight. Moist	Dense	SP	30
35		50	2-8				Grading to medium to coarse, poorly-graded, medium to coarse SAND with gravel.	Dry	Dense	SP	35
40		68	2-9				Salt and pepper colored, fine to medium, poorly graded SAND grading to well-graded SAND with gravel.	Dry To Slight. Moist	Dense	SP/SW	40
45							Boring terminated at 41.5 feet. No groundwater encountered.				45
50											50

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 3			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish to moderate brown, fine to medium, poorly graded SAND with silt binder. Fill.	Slight. Moist	Dense	SP	0
1											
2											
3		54	3-1		117.7	3.1					
4											
5											5
6											
7											
8		22	3-2		110.0	1.9	Becoming medium to coarse with trace fines and gravel. Native.	Dry	Med. Dense	SP/ SW	
9											
10											10
11											
12											
13		45	3-3				Becoming less gravelly.	Dry	Dense	SP/ SW	
14											
15											15
16											
17											
18		50	3-4				Becoming fine to medium with trace silt.	Dry	Dense	SP	
19											
20							Boring terminated at 18.5 feet. No groundwater encountered.				20
21											
22											
23											
24											
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 4			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Moderate brown, fine to medium, poorly to well-graded SAND with silt and gravel. Fill.	Dry	Med. Dense To Dense	SP/SW	0
-											-
-											-
-											-
-											-
-											-
-											-
5		74	4-1		109.6	2.5	Becoming siltier and grayish-brown. Fill?	Dry	Very Dense	SP/SW	5
-											-
-											-
-											-
-											-
-											-
10		35	4-2		100.0	2.6	Fine to medium with some coarse and silt, poorly graded SAND. Native.	Dry	Med. Dense	SP	10
-											-
-											-
-											-
-											-
-											-
15		34	4-3				Becoming poorly to well-graded SAND.	Dry	Med. Dense	SP/SW	15
-											-
-											-
-											-
-											-
-											-
20		44	4-4				Becoming fine to coarse, well graded.	Dry	Dense	SW	20
-											-
-											-
-											-
-											-
25		51	4-5				Trace coarse gravel.	Dry	Dense	SW	25
-											-

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 4			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
25							Rocky zone, approximately 2 feet thick				25
-											-
-											-
-											-
-											-
30		71	4-6				Fine to medium, poorly graded SAND with trace gravel and silt.	Dry	Very Dense	SP	30
-											-
-											-
-											-
35		23	4-7				Moderate brown, fine silty SAND.	Slight. Moist	Med. Dense	SM	35
-											-
-											-
-											-
40		16	4-8				Grading to moderate brown, fine to medium, poorly graded SAND.	Slight. Moist	Loose	SP	40
-											-
-											-
-											-
-											-
45							Boring terminated at 40.0 feet. No groundwater encountered.				45
-											-
-											-
-											-
-											-
50											50

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 5			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Tannish-brown to grayish-brown silty, fine, poorly-graded SAND with gravel. Fill.	Dry	Med. Dense	SP/SM	0
5		27	5-1				Native.				5
10							Practical refusal at 8.0 feet. No groundwater encountered.				10
15											15
20											20
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Boring No.: 6			
Location: N. Palm Springs, California				Drilling Method: Mobile B-57, 8" hollow-stem augers, 140 lb hammer				Date Drilled: 8-12-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Light grayish-brown, silty to poorly-graded SAND. Fill.	Dry	Med. Dense	SM/SP	0
5		39	6-1		104.5	2.9		Dry	Med. Dense	SM/SP	5
10		30	6-2		101.0	4.2	Salt and pepper colored, fine to medium, poorly-graded SAND. Native.	Dry	Med. Dense	SP	10
15		29	6-3					Dry	Med. Dense	SP	15
20		35	6-4				Becoming moderate brown, fine to medium, poorly graded SAND with silt.	Slight. Moist	Med. Dense	SP	20
25							Boring terminated at 21.5 feet. No groundwater encountered.				25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 1			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, fine to medium, poorly-graded SAND with gravel, silt and some cobbles. Fill.	Dry	Med. Dense	SP	0
-							Becoming medium to coarse with less silt.	Dry	Dense	SP/	-
-							Difficult digging, becoming moderate brown.	Dry	Dense	SP/ SW	-
5							Becoming pebbly. Native?	Dry	Dense	SP/ SW	5
-											-
-							Becoming less cobbly, digging easier, large quartz sand grains, little to no silt binder.	Dry	Med. Dense	SP	-
10		8	7-1	(no recovery)			Test Pit terminated at 9.0 feet. Minor collapsing in top 1.5 feet of pit. No visible fill contact.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
-											-
-											-
-											-
25											25

CONSOLIDATED ENGINEERING LABORATORIES

Project Name: Warehouse Lot						Project No: G1357	Logged By: MAH	Test Pit No.: 2			
Location: N. Palm Springs, California						Excavation Method: Backhoe with Modified California sampler		Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly-graded to well-graded, fine to coarse SAND with silt and gravel. Some cobbles. Fill.	Dry	Med. Dense	SP/SW	0
-											-
-							Becoming moderate brown, less coarse, more silt.	Dry	Dense	SP	-
-											-
-											-
5		40	8-1		106.6	3.9					
-											-
-											-
-											-
5		24	8-2		107.9	2.0		Dry	Med. Dense	SP	5
-											-
-							Test Pit terminated at 6.0 feet. No fill contact visible.				-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
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-											-
20											20
-											-
-											-
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-											-
-											-
-											-
-											-
-											-
25											25

CONSOLIDATED ENGINEERING LABORATORIES

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 3			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
-							Becoming moderate brown and slightly more coarse.				-
-											-
-											-
-		35	9-1		113.0	2.5	2-boulders 1.5 feet in diameter. 3-boulders 3/4' to 1' in diameter.	Dry	Med. Dense To Dense	SP/ SW	5
5							Becoming more coarse. Native.				-
-											-
-											-
-											-
-											-
10							Test Pit terminated at 8.0 feet. Very little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 4			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Three boulders to 2 feet in diameter. Some pit collapsing. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
1							Becoming coarser sand.				
2							Less boulders and cobbles.				
3		12	10-1	(no recovery)			Digging easier, less cohesion. Native?	Dry	Med. Dense	SP/ SW	5
4											
5											
6											
7											
8											
9											
10											10
11											
12											
13											
14											
15											15
16											
17											
18											
19											
20											20
21											
22											
23											
24											
25											25
Test Pit terminated at 7.0 feet. No visible fill contact.											
CONSOLIDATED ENGINEERING LABORATORIES											

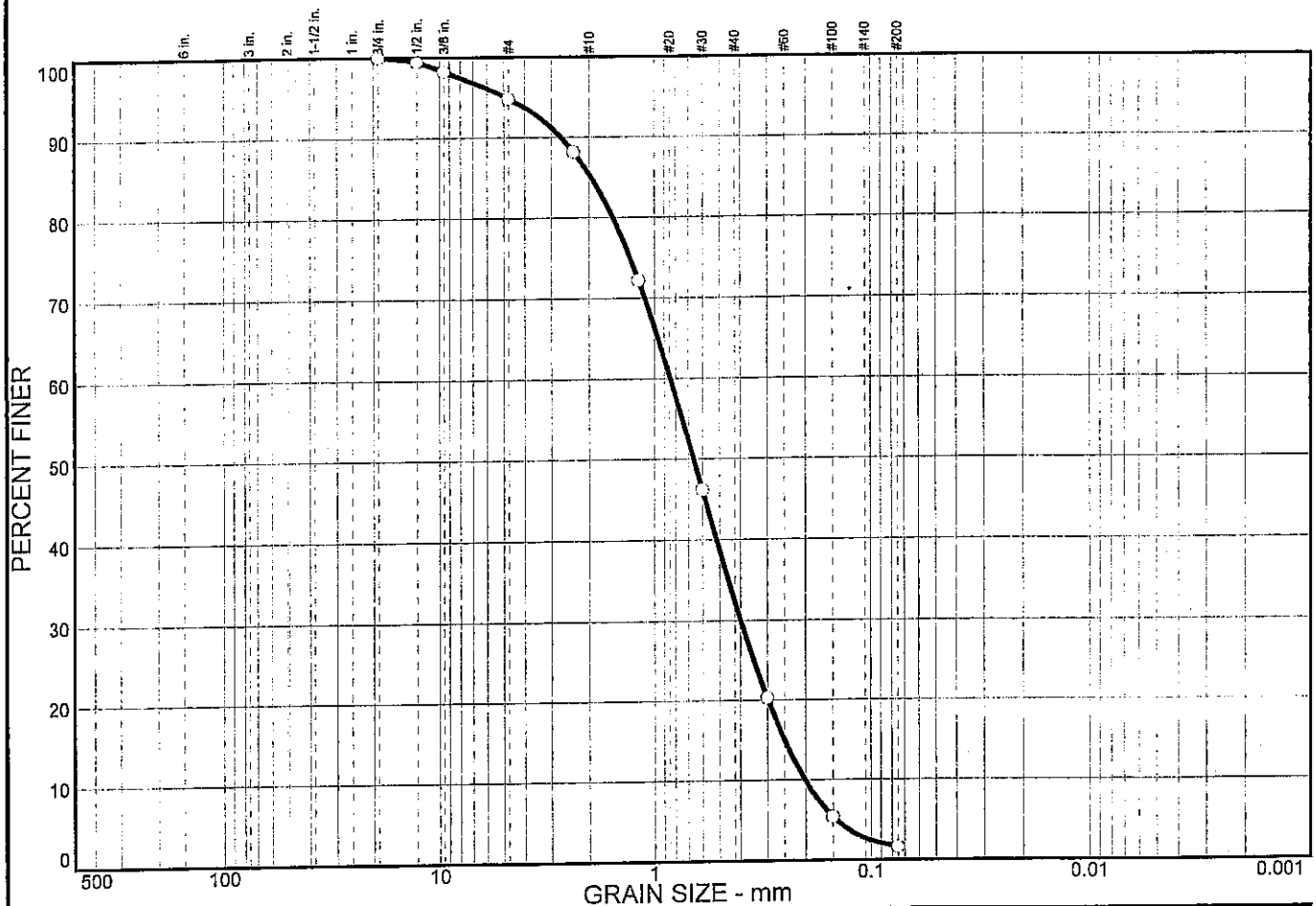
Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 5			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well-graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense To Dense	SP/ SW	0
-							Becoming moderate brown, some boulders, fine to medium with silt.	Dry	Med. Dense	SP	-
-		23	11-1		115.4	2.6					-
-											-
5							Becoming fine to coarse. Native?	Dry	Med. Dense	SP/ SW	5
-		8	11-2	(slough)							-
-							Test Pit terminated at 7.5 feet. Little to no collapsing of pit.				-
-											-
10											10
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
25											25

Project Name: Warehouse Lot				Project No: G1357		Logged By: MAH		Test Pit No.: 6			
Location: N. Palm Springs, California				Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03			
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense	SP/SW	0
-											-
-											-
-											-
-											-
5		20	12-1				Becoming cobbly and bouldery, moderate to tannish-brown.				5
-											-
-							Becoming less cobbly, less cohesive. Native?				-
-											-
-											-
-											-
10							Test Pit terminated at 6.0 feet. Little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
-											-
25											25

Project Name: Warehouse Lot						Project No: G1357		Logged By: MAH		Test Pit No.: 7	
Location: N. Palm Springs, California						Excavation Method: Backhoe with Modified California sampler				Date Excavated: 8-18-03	
Depth (ft)	Sample Symbol	Penet. Resist (Blows/ft)	Sample Number	Pocket Pen (TSF)	Dry Density (PCF)	Moisture Content (%)	DESCRIPTION AND REMARKS	Moisture Condition	Consistency	USCS Soil Classification	Water Level
0							Grayish-brown, poorly to well graded, fine to coarse SAND with silt, gravel and some cobbles. Fill.	Dry	Med. Dense	SP/SW	0
-											-
-							Becoming moderate brown, fine to medium. Some coarse grains.	Dry	Med. Dense	SP	-
-							Becoming more cobbly and some boulders.				-
-							Less cohesion.				-
5							Easier digging, fine to coarse, very little cobbles. Native?	Dry	Med. Dense	SP/SW	5
-											-
-											-
-											-
-											-
10							Test Pit terminated at 8.0 feet. Little to no collapsing of pit.				10
-											-
-											-
-											-
-											-
-											-
-											-
-											-
-											-
15											15
-											-
-											-
-											-
-											-
-											-
-											-
20											20
-											-
-											-
-											-
-											-
25											25
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APPENDIX B
LABORATORY TEST RESULTS
Sieve Analysis
Single Point Consolidation
R-Value
Water Soluble Sulfate

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	5.2	93.2	1.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	99.4		
3/8 in.	98.2		
#4	94.8		
#8	88.2		
#16	72.2		
#30	46.2		
#50	20.3		
#100	5.4		
#200	1.6		

* (no specification provided)

Soil Description
 7-1: brown sand with some rock

Atterberg Limits
 PL= LL= PI=

Coefficients
 D₈₅= 1.95 D₆₀= 0.842 D₅₀= 0.658
 D₃₀= 0.398 D₁₅= 0.249 D₁₀= 0.200
 C_u= 4.21 C_c= 0.94

Classification
 USCS= AASHTO=

Remarks

Sample No.: S0820-05: 7-1
Location:

Source of Sample:

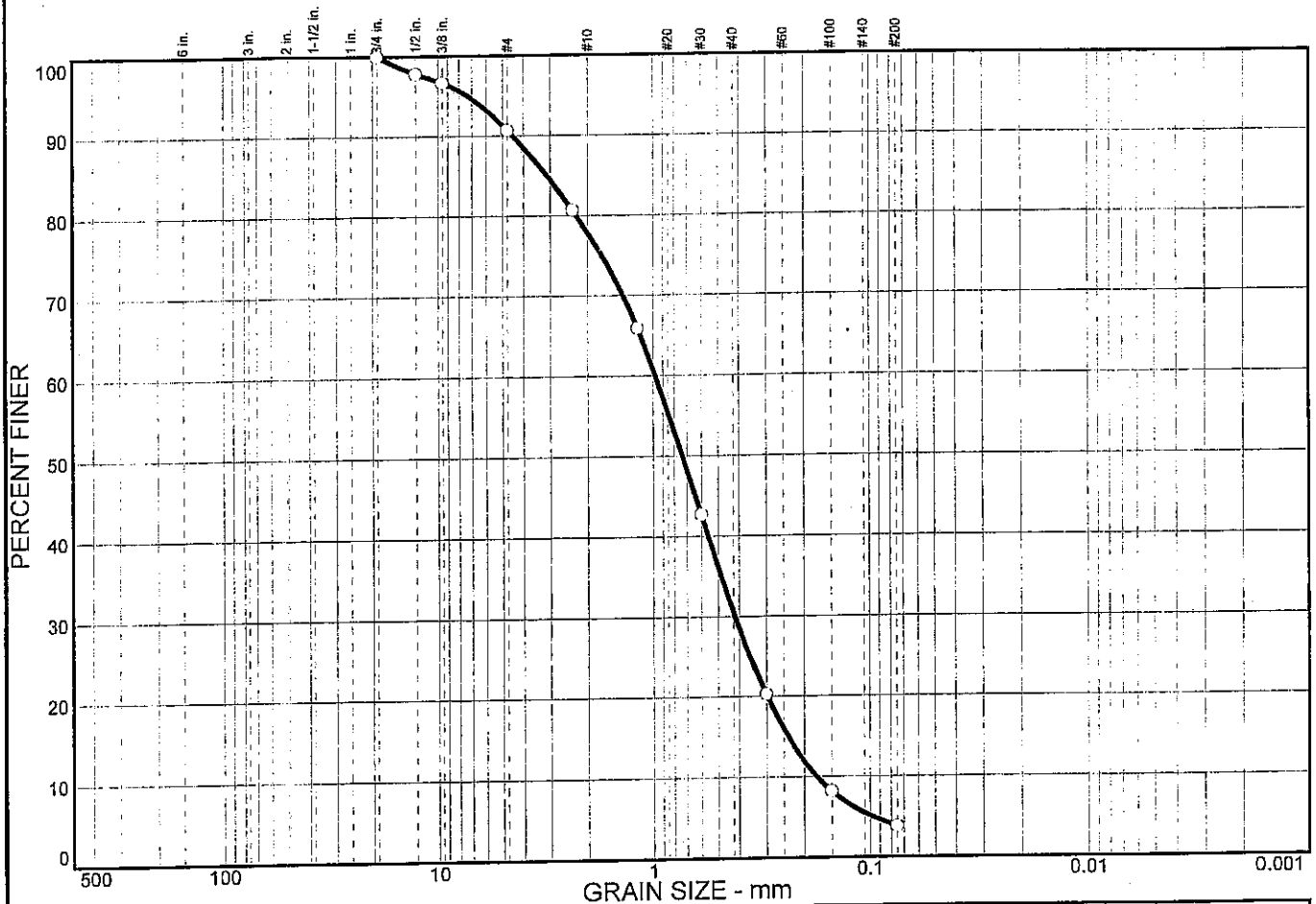
Date:
Elev./Depth: 8.0'-8.5'

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Client:
Project: Palm Springs
Project No: G1357

Plate 7-1

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	9.3	86.9	3.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	97.8		
3/8 in.	96.7		
#4	90.7		
#8	80.7		
#16	65.9		
#30	42.7		
#50	20.3		
#100	8.2		
#200	3.8		

* (no specification provided)

Soil Description

11-2: brown sand with some rock

Atterberg Limits

PL= LL= PI=

Coefficients

D₈₅= 3.10 D₆₀= 0.975 D₅₀= 0.733
D₃₀= 0.417 D₁₅= 0.237 D₁₀= 0.175
C_u= 5.58 C_c= 1.02

Classification

USCS= AASHTO=

Remarks

Sample No.: S0820-05: 11-2
Location:

Source of Sample:

Date:
Elev./Depth: 6.5'-7.5'

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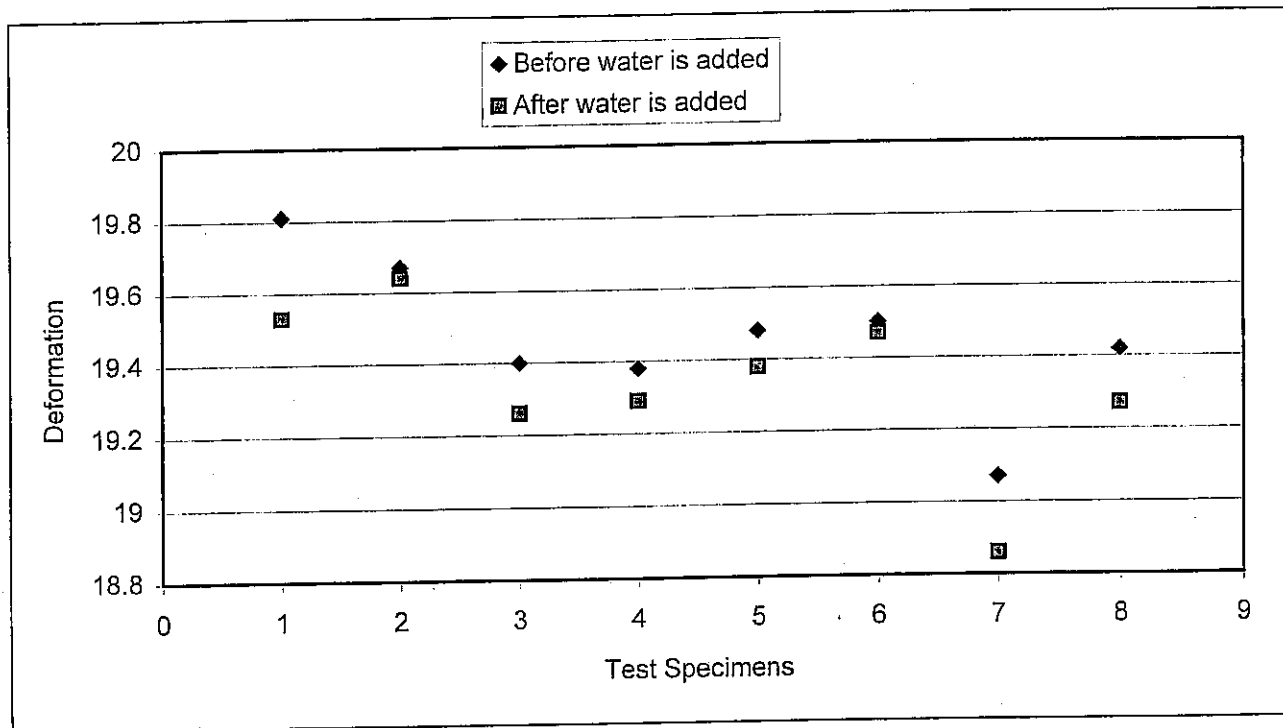
Client:
Project: Palm Springs

Project No: G1357

Plate 11-2

CEL# G1357
 Project: Palm Springs
 Lab No.: S0820-05

One Dimensional Consolidation



Initial Height, mm: 20
 Load, psf: 4000

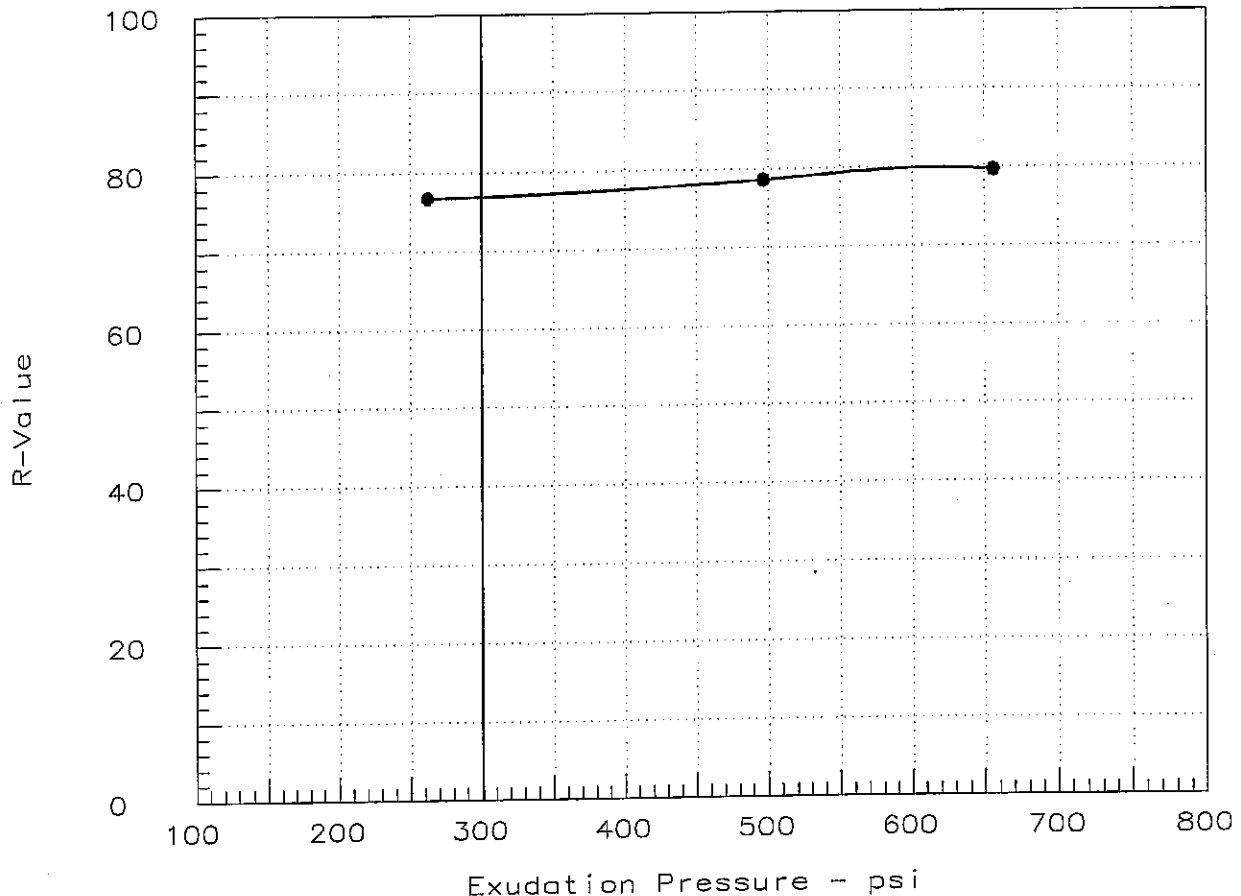
Height of Specimens after Loading

Specimen ID	<u>1-1</u>	<u>3-3</u>	<u>4-1</u>	<u>4-2</u>	<u>6-1</u>	<u>6-3</u>	<u>8-1</u>	<u>8-3</u>
Test Specimen	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
Before Water Added	19.81	19.67	19.40	19.38	19.48	19.50	19.07	19.42
After Water Added	19.53	19.64	19.26	19.29	19.38	19.47	18.86	19.27
Deform'n before water, mm	0.188	0.333	0.602	0.617	0.518	0.500	0.927	0.584
Deformation after water, mm	0.470	0.356	0.742	0.706	0.620	0.533	1.140	0.723
* Dry Density, pcf	104.9	98.1	109.6	100.0	104.5	101.0	106.6	107.9
* Moisture Content, %	6.0	4.3	2.5	2.6	2.9	4.2	3.9	2.0
Final Moisture Cont, %	18.8	21.0	17.2	18.4	18.0	21.8	15.3	17.5

* as prepared

Specimen ID	Depth, ft	Material Description
1-1	4.5-5.0	light brownish gray silty sand
3-3	13.0-13.5	light gray coarse sand (moisture added before set up)
4-1	4.5-5.0	brown sand with silt (partially disturbed, removed 1/4" rock)
4-2	9.5-10.0	light brown sand (partially disturbed, removed 1-1/2" rock)
6-1	6.0-6.5	light brown sand
6-3	16.0-16.5	light brownish gray sand
8-1	2.5-3.0	brown sand with some silt
8-3	4.5-5.0	brown sand with some silt

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	121.3	7.8	0.00	26	2.50	263	77	77
2	350	121.5	7	0.00	25	2.51	497	79	79
3	350	122.0	6.8	0.00	22	2.50	657	80	80

TEST RESULTS						MATERIAL DESCRIPTION			
R-Value @ 300 psi exudation pressure = 77						brown sand with some gravel			
Project No.: G1357 Project: Palm Springs Location: Bulk sample Date: 8-29-2003						Tested by: YD Checked by: CG Remarks: Lab NO. S0820-05			
R-VALUE TEST REPORT Consolidated Engineering Laboratories						Fig. No.			



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so that both benefit.**

SPECIAL SOIL REPORT

To: Marc Hachey
Consolidated Engineering Labs
7060 Koll Center Parkway, #300
Pleasanton, CA 94566-3108

Date: August 27, 2003
Lab #: 00143-1
Received: August 20, 2003
Tech(s): H. Banwait
Lab Supervisor: D. Jacobson
Lab Director: G.S. Conrad, Ph.D.
Sample ID(s): PS1/C

Sample of: soil (grab)
File Number: G1357

Site Location/Job: Palm Springs, California.

RESULTS

<u>SAMPLE ID</u>	<u>SAMPLE DESCRIPTION</u>	<u>SULFATE (SO₄)</u>
PS1/C	Grab/Bulk	54 mg/kg

COMMENTS

This sample has a low sulfate level in terms of adverse engineering impacts at just over 50 ppm. Therefore, as long as this sample is representative of the soil as a whole, the soil is well within acceptable limits for this particular parameter as concerns its potential impact on concrete, mortar, grout and cement.

NOTES:

This test was done in a manner consistent with EPA, DHS, and LUFT protocols, i.e., Standard Methods UC Davis, Methods of Soil Analysis, Association of Test Materials (ASTM), CalTrans or other appropriate protocols: Cal Test - 417 (CalTrans).

APPENDIX C

Grading and Earthwork Specifications



GRADING AND EARTHWORK SPECIFICATIONS

A geotechnical engineering study has been prepared for this site by Consolidated Engineering Laboratories. The contractor shall become familiar with the site conditions and the recommendations contained within this report.

Definition of Terms

1. The term "Geotechnical Engineer," as used in this specification, shall mean a state registered professional engineer or his representative qualified to observe and test earthwork construction, and provide geotechnical engineering and consulting services.
2. "Engineered Fill" shall be earth material mechanically compacted to the degree specified by the Geotechnical Engineer. The Geotechnical Engineer shall make sufficient observations and tests to verify that fills have been placed in accordance with applicable specifications and the recommendations contained in the project geotechnical report.
3. The term "Relative Compaction" is defined as the ratio of in-place field dry density to the theoretical maximum dry density determined in the laboratory by the ASTM D1557 test procedure. The optimum moisture content is the moisture content at which the maximum theoretical dry density has been achieved in the laboratory by the ASTM D1557 test procedure.

Materials

4. Engineered fill shall be either on-site or imported material which is free of organic material, debris or other deleterious material. Engineered fill materials shall be approved by the Geotechnical Engineer prior to their use on the site. Engineered fill material shall not contain rocks or lumps larger than 6 inches in maximum dimension unless otherwise specified or approved by the Geotechnical Engineer. When used for trench backfill, engineered fill shall not contain rocks or lumps larger than 4 inches in maximum dimension.
5. Imported fill materials should meet the requirements of "Engineered Fill," be predominantly non-expansive, and have a Plasticity Index (PI) of 15 or less. Additional requirements for imported fill may be also specified by the Geotechnical Engineer.



6. Paving materials and their placement shall be in conformance with the requirements of the State of California, Department of Transportation (Caltrans) Standard Specifications, except that relative compaction shall be based on the ASTM D1557 test procedure. Aggregate base materials used for pavement construction shall be Caltrans Class 2 Aggregate Base, meeting the requirements of the Caltrans Standard Specifications, current edition.

7. Aggregate subbase materials used for pavement construction shall be Caltrans Class 2 Aggregate Subbase, meeting the requirements of the Caltrans Standard Specifications, current edition.

8. Material used as a capillary break beneath interior concrete slab-on-grade floors shall be clean gravel or crushed rock of 3/4-inch maximum size with less than 5 percent passing the No. 4 sieve. The material should have a Durability Index (CTM 229) of not less than 40.

Site Clearing, Stripping, and Demolition

9. Prior to placement of engineered fills or construction of site improvements, the site shall be cleared of existing abandoned structures, pavements, underground utilities, debris, and other deleterious materials, within proposed development areas. Debris resulting from the removal of these items shall be removed from the site, unless otherwise permitted.

10. Underground utilities shall be located prior to commencing grading operations. If underground utilities are abandoned, they shall be entirely removed, or fully grouted closed, unless otherwise directed by the Geotechnical Engineer. After removal, the excavations shall be backfilled with approved fill material and compacted to at least 90 percent relative compaction.

11. Following demolition and site clearing operations, areas to receive fill, concrete flatwork, structures and/or pavements shall be stripped of surface vegetation, trees and their root systems, existing loose fill materials, organic-laden soils, soft or wet soils and other deleterious materials.

Excavations resulting from the removal of such items shall be cleaned out to firm soil, as directed by the Geotechnical Engineer, and backfilled with engineered fill compacted in accordance with these specifications.



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12. The depth of stripping of surface vegetation shall be at least 3 inches, and as necessary to remove organic materials. Tree removal shall include removal of the major root systems, including roots larger than 2 inches in diameter. Excavations in tree removal areas shall be dished to allow through passage of compaction equipment. The stripped materials shall be removed from the site, unless otherwise permitted. Organic-laden soils may be suitable for use in landscape areas with the approval of the owner and the Geotechnical Engineer.

General Grading

13. Following clearing and stripping operations, the exposed soil in areas to receive fill, structures, and/or concrete flatwork shall be scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 90 percent relative compaction at a moisture content at or above optimum, except where otherwise specified in the Geotechnical Engineering Study. Soil areas disturbed during demolition operations shall be sub-excavated to firm native soil, scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 90 percent relative compaction at a moisture content at or above optimum.

14. Processing of soil for compaction shall consist of aerating the material if it is too wet or adding water to the material if it is too dry. When the moisture content of a material is too high to allow the specified degree of compaction to be achieved, the material shall be aerated by plowing, blading, spreading, or other suitable means until the proper moisture content has been achieved. When the moisture content of a material is below optimum, water shall be added and the material thoroughly mixed until the proper moisture content has been achieved.

15. Fill materials shall be placed in lifts not exceeding 8 inches in uncompacted thickness. Each layer shall be thoroughly mixed to promote uniformity in each layer. Engineered fill materials shall be compacted uniformly to at least 90 percent relative compaction at a moisture content at or above optimum, except where otherwise specified in the Geotechnical Investigation Report. Filling operations shall continue until the final grades have been attained in accordance with the approved plans. Structural fills shall extend at least 5 feet beyond the footprints of proposed structures.



16. The Geotechnical Engineer shall observe the placement of fill/backfill and conduct in-place field density tests on the fill/backfill to check for adequate moisture content and relative compaction as outlined herein. Where less than the specified relative compaction is obtained, additional compactive effort shall be applied and the fill moisture-conditioned as necessary until the specified relative compaction is attained. The Contractor shall provide safe and timely access to the Geotechnical Engineer at the grading site, to permit monitoring and testing.

17. Fills constructed on ground sloping steeper than 6H:1V (horizontal to vertical) shall be keyed and benched into the natural grade, as specifically recommended by the Geotechnical Engineer. Subsurface drains shall be installed in areas of observed seepage, as recommended by the Geotechnical Engineer.

18. Fill slopes should be constructed by overfilling and cutting the slope to final grade. Track walking of a slope to achieve slope compaction is not an acceptable procedure for slope construction, unless otherwise permitted by the Geotechnical Engineer.

19. In general, cut and fill slopes should be designed and constructed at slope gradients not steeper than 2H:1V (horizontal to vertical). Interceptor drainage ditches should be constructed at 30-foot vertical intervals on slopes higher than 30 feet. These interceptor drainage ditches should be constructed on drainage terraces that are at least 6 feet wide. The drainage terrace shall be constructed to provide adequate access for periodic maintenance of the drainage ditch. The drainage terrace shall have a minimum cross slope of 2 percent into the hillside, and toward the drainage ditch. Interceptor ditches should be constructed above the tops of slopes where natural drainage is toward the slope. Erosion control planting should be established as soon after grading as possible.

20. Cut slopes should be observed by the Geotechnical Engineer or Engineering Geologist to check for possible adverse geologic conditions. If unfavorable conditions are exposed, supplementary recommendations shall be developed to mitigate possible slope instability.

21. Wherever, in the opinion of the Owner's or the Geotechnical Engineer's representative, an unstable condition is being created either by cutting or filling, work should not proceed in that area until an investigation has been made and the grading operations revised, if found necessary.



Trenches

22. Trench backfill materials shall meet the requirements of "Engineered Fill," as specified in this report, and shall not contain rocks or lumps larger than 4 inches in maximum size. Trench backfill shall be placed in lifts not exceeding 8 inches in uncompacted thickness, and be mechanically compacted to at least 90 percent relative compaction at a moisture content at or above optimum.

23. Where access to construction personnel is required, trenches in excess of 5 feet deep shall be shored or have their side walls sloped back in accordance with OSHA and other applicable regulations.

24. Jetting of trench backfill materials shall not be permitted as a means of obtaining the required compaction. Jetting shall be permitted only within the sand bedding and shading material around buried utilities.

25. Open trenches adjacent and parallel to existing foundations shall not extend below an imaginary 2H:1V (horizontal to vertical) plane projected downward from the nearest edge of the base of the adjacent footing without specific review and recommendation by the Geotechnical Engineer.

Pavement Subgrade and Aggregate Base Preparation

26. The top 8 inches of soil subgrade in pavement areas shall be compacted to at least 95 percent relative compaction. In cut areas, the subgrade soils shall be scarified to a depth of at least 8 inches, processed as necessary to achieve the proper moisture content, and compacted to at least 95 percent relative compaction at a moisture content at or above optimum. The finished subgrade shall be graded to provide a firm and stable base for support of the specified pavement section.

27. Aggregate base and subbase materials within pavement areas shall be placed in lifts not exceeding 8 inches in uncompacted thickness. These materials shall be compacted to at least 95 percent relative compaction, at a moisture content at or above optimum. All final grades shall be firm and stable prior to placement of pavement.



CONSOLIDATED ENGINEERING
LABORATORIES

28. Where unstable subgrade is encountered, the Geotechnical Engineer shall provide mitigation recommendations as required. The contractor shall minimize the amount of construction traffic on unstable or potentially unstable areas, as defined by the Geotechnical Engineer. If rutting or other instability is caused by the contractor's excessive construction traffic in area designated as unstable or potentially unstable, these areas shall be repaired at the contractor's expense.

Seasonal Limits

29. Fill materials shall not be placed, spread or rolled during unfavorable weather conditions, unless otherwise permitted by the Geotechnical Engineer. Fill operations shall not be resumed until field tests by the Geotechnical Engineer indicate that the moisture contents of subgrade and fill materials are satisfactory. Placement of fill material on frozen ground shall not be permitted.

30. Surface drainage provisions shall be made by the contractor, as necessary during construction, to prevent the ponding of water on engineered fill and pavement subgrade areas during construction. The contractor shall implement erosion control measures as necessary to protect the work.

APPENDIX D
Pier Drilling and Construction Specification



PIER DRILLING AND CONSTRUCTION SPECIFICATIONS

1. The drilled caisson excavation should be advanced with a single-flight auger or bucket auger to the design depth (the completed excavation should be verified by observations and measurement to be clean and free of water to the specified depth). After reaching the design depth, the auger should be placed back in the hole and two additional passes made without advancement to remove loose material from the bottom of the hole.
2. If the drilled hole is left open, the hole should be covered to prevent tools, soil, or personnel from falling into the drilled hole. During rains, water should be prevented from flowing into the drilled hole.
3. The caisson excavation shall be drilled such that the vertical alignment does not deviate by more than 1/2 caisson diameter from top to bottom.
4. Reinforcing cages should have spacers or centralizers to ensure at least 2 inches of concrete cover.
5. Concrete should be placed through a hopper or other device approved by CEL so that it is channeled in such a manner to free-fall and clear the walls of the excavation and reinforcing steel until it strikes the bottom. Adequate compaction of the concrete will be achieved by free fall up to the top 8 feet or depth of the anchors, whichever is deeper. Above 8 feet the concrete should be vibrated to achieve proper density.
6. If groundwater is present in the caisson excavation it should be pumped dry prior to concrete placement or tremie placement of the concrete should be performed.
7. Concrete placed using the tremie method should be pumped into the excavation with sufficient head to lift the groundwater and spoils present in the excavation to the ground surface. The concrete should be placed in one continuous pour and should continue until "clean" concrete is observed at the top of the excavation.



CONSOLIDATED ENGINEERING
LABORATORIES

8. Continuous observation of the construction should be provided by CEL. Our geotechnical engineering personnel should confirm proper diameter, depth and cleaning, and should also confirm the nature of the materials encountered in the caisson excavation. Concrete placement should be continuously observed to confirm that it meets requirements. A quality control report should be submitted on the caisson, verifying that details of the caisson construction have been observed.

September 24, 2009

Claudia Steiding, Senior Environmental Planner
County of Riverside Economic Development Agency
3133 Mission Inn Avenue, Riverside, CA 92507

Subject: **Cultural Resource Review and Initial Study Recommendations for the Roy's Desert Center (Western Coachella Valley Multi-Service Center) Project located at 19-531 McLane Street, North Palm Springs, California.**

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

Dear Ms. Steiding:

Michael Brandman Associates (MBA) is providing the County of Riverside Economic Development Agency (EDA) with environmental compliance documents in support of this Project. The EDA is proposing interior improvements on an existing 48,000 square foot building and the installation of three (3) additional septic tanks. The shelter is located at 19-531 McLane Street in the City of Palm Springs, California. New construction will occur in areas that have been previously graded for office building construction.

MBA undertook a records search on September 18, 2009 for cultural resources at the Eastern Information Center (EIC) at the Department of Anthropology, University of California - Riverside. The records search was conducted by MBA Senior Archaeologist Michael Dice, M.A. This report summarizes the results of the analysis, and then provides the proper language for insertion into the Initial Study cultural resource section.

Cultural Resource Records Search

The project area is located in Section 15, Township 3 South, Range 4 East as depicted on the Desert Hot Springs, California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. A one-mile radius was used for the records search. The results of the records search indicated that few cultural resources (Table 1) have been recorded within the search radius of the project area, and none are located within the boundaries of the proposed project. The project study radius exhibits two nearby cultural resources: the nearest recorded cultural resource is about 600 meters to the southeast.

Table 1: Known Cultural Resources Located in a 1-Mile, 0.5 Mile and 0.25-Mile Radius of the Roys Desert Project

Site Number	Location Section	Resource Description	~0.5-mile Radius	~0.25-mile Radius	On Site?
CA-RIV-3441H	22	Historic Garnet siding site assoc. with the historic railroad grade	●	—	No
33-9498	various	Historic SP and UP railroad grades	—	●	No

Twenty-one area-specific cultural resource reports are on file with the EIC for the search radius. None of these reports directly surveyed the project area. This suggests that the project area has never been surveyed by a qualified archaeologist previously.

Prehistoric Cultural Setting

Four general, but distinctive cultural periods have been identified by Wallace (1955) for the prehistoric occupation of southern California (Early Hunter; Milling Stone; Intermediate; Late). Fagan (2003), Moratto (1984), and Chartkoff and Chartkoff (1984) provide more recent overviews of California archaeology and historical reviews of the inland southern California coast, among other locales. These authors use a modified version of Wallace's period format, updated to reflect newer research efforts.

Early Man Period (before 9500 B.P.) sites are characterized by large projectile points, and other stone implements adapted to chase big game animals. The large size and weight of the points suggest that the primary weapon for hunting was the dart, propelled by a spear thrower. Lack of grinding tools, suggest that the inhabitants were not exploiting the plant foods to the extent that later cultures were. They were nomadic in hunters, following the game throughout the seasons. Archaeological sites representing this early period are not common.

The Milling Stone Period (about 9500 B.P. to 3000 B.P.) represents a long period of time characterized by small, highly mobile groups of Native Americans. These groups probably had a seasonal round of settlement that included both inland and coastal residential bases. They relied primarily on grasses and seeds for food. Characteristic inland sites include numerous manos, metates, and hammerstones. Shell middens are more common at coastal sites.

The Intermediate Period occurred from approximately 3000 B.P. to 1250 B.P. Mortars and pestles first appear in this period, indicating knowledge of acorn leaching. Use of the acorn probably permitted greater sedentism, especially at inland locations. Large projectile points suggest use of spear throwers rather than the bow and arrow. Settlement patterns during this period are not well understood. Exchange between the coast and Colorado River groups becomes apparent in the archaeological record.

The Late Period (1250 B.P. to Historic Contact) saw a more semi-sedentary settlement pattern. Smaller projectile points suggest introduction of the bow and arrow and less or no reliance on the spear thrower. Lifestyle is little unchanged from the previous period, but influxes of Shoshonean speakers are evident in linguistic studies. Differences in archaeological deposits are representative of changes in population ancestry. Pottery-making is introduced.

The Cahuilla

According to Bean (1978), the Cahuilla traditional use area extends north-south from the summit of the San Bernardino Mountains in the north, to Borrego Springs and the Chocolate Mountains in the south, and extends east-west from the eastern slopes of the Palomar Mountains in the west to the Colorado Desert east of the Orocopia Mountain to the east. This description of Cahuilla territory includes the project area within their traditional use area. Bean (1972, 1978) forms the primary modern reference for this cultural group. Bean notes that of all the southern California Indians, the Cahuilla existed within the most geographically diverse region, constrained only by water supplies and topography.

Pre-contact Cahuilla territory encompassed the extremely rugged San Bernardino Mountain ranges at an elevation of 11,000 feet to the Salton Sink (Salton Sea), which is 273 feet below sea level. The upper Coachella Valley and Palm Springs areas exhibited protohistoric Cahuilla villages near defined water sources, with good access to food-gathering locales. Village sites were usually located near alluvial fans, streams or at the base of the San Jacinto Mountains for protection against the winds, while some Desert

Cahuilla settlements were located around hand dug wells and watering holes. Typically, one clan or family occupied several food-gathering locations and aggressively guarded these areas against other Cahuilla clans (Bean 1972 and 1978, Oswalt 1988, Strong 1972).

The Cahuilla have had definitive historical relationships with the Hopi of Arizona, the Gabrielino and Digueño of the southern Californian coast, the Serrano, and the Luiseño of Riverside County as well as other desert tribes such as the Kamia, Chemehuevi, and Paiute. It is thought the Cahuilla population prior to Spanish contact may have been as numerous as 6,000 people in an area over 2,400 square miles in size (Bean 1978, Bean and Saubel 1972, Strong 1972).

The prehistoric Cahuilla were characterized by the occupation of sedentary villages in subsistence territories that permitted them to reach the majority of their resources within a day's walk. Villages were commonly located near reliable sources of water. During October to November, much of the village population moved to temporary camps in the mountains to harvest acorns and hunt game. Inland groups also had fishing and gathering spots on the coast that they visited annually. In comparison with the Gabrielino and Luiseño, the Cahuilla appear to have had a lower population density and a less rigid social structure. The Cahuilla patterns may have been relatively stable until mission secularization in 1834, due to the policy of the Catholic Mission fathers or padres to maintain imported European traditional style settlement and economic patterns (Bean and Shipek 1978).

Pre-contact Cahuilla homes were generally constructed with forked posts, which supported the wood cross members and were completely covered in thatch, which was then sealed with sand or soil. In some cases the floor was subterranean. Each house was positioned so that a measure of privacy was attained (Bean 1978, Kroeber and Hooper 1978). Wilke confirms Blakes' earlier observations, that the Cahuilla homes were generally hidden in the mesquite groves and consequently overlooked when explorers searched for their villages (Wilke and Lawton 1975).

Cahuilla (Patayan) pottery has been stylistically and ornamentally compared to that of an ancient Pueblo style, as well as that made by Colorado River Indians, the Digueño, Luiseño and Mohave clans (Bean and Lawton 1975, Kroeber and Hooper 1978). Cahuilla pottery was constructed in coil form, then shaped with a polishing stone and wooden paddle, occasionally incised for decorative purposes and then finally sun baked and fired (Bean and Lawton 1975, Kroeber and Hooper 1978). Kroeber and Hooper suggest that the Cahuilla had four definitive pottery forms; an open bowl or dish, a cooking pot, a small-rimmed vessel and a wider opening rimmed vessel (1978), while Bean and Lawton suggest that ladles, trays, and pipes were also manufactured (1975).

Baskets were also an important item, and were manufactured in a variety of shapes and sizes, but always produced from coiled and woven mesquite branches, willow or palm leaves. Grasses were used in the foundation. The only tools used to manufacture these baskets were either a needle made from the leg bone of a deer or a heavy cactus needle, set into a wooden handle (Bean 1978).

Ceremony and ritual was of great importance to the Cahuilla (Bean 1978). Deep ceremonial ties existed between the Serrano and the Cahuilla, and in many cases the desert Cahuilla are thought to have adopted many of the ceremonial practices from the Serrano (Strong 1972). Frequently practiced ceremonies include multiple rituals for the mourning of the dead, the eagle dance, separate initiation rites ceremonies for boys and girls, and a summer and winter solstice celebration (James 1960, Strong 1972). This cultural linkage between the Cahuilla and Serrano is then furthered by inferences from Mission baptismal records and Serrano oral tradition.

According to personal communication with Britt W. Wilson, Cultural Resource Coordinator for the Morongo Band of Mission Indians, the relationship between the Cahuilla and Serrano is borne out of Mission baptismal records, available on-line from the Huntington Memorial Library. From these records, it may be inferred that Cahuilla people from White Water married into people from Serrano villages, such as Gupiabit located in the Cajon Pass region. In addition, the Cahuilla people accepted groups of Serrano peoples from Twentynine Palms, after a migration of Chemehuevi peoples into the Twentynine Palms area. Then, according to Serrano oral tradition, the Cahuilla adopted many of the Serrano songs because they had lost their own traditional songs (Britt W. Wilson, personal communication, 05/29/07).

The first European contact with the Coachella Valley region and the Cahuilla peoples occurred in 1774 and 1775-76, as the Juan Bautista de Anza expedition was looking for an inland route between Sonora, Mexico and the coast. This expedition passed through the Santa Rosa Mountains and established a route between Sonora and newly established Alta California settlements. Thereafter, the Cahuilla remained relatively isolated from Euro-American expansion, as their territory was distanced from the Spanish missions and unsuitable for large-scale ranching and farming. Contact increased in the 1820s with expeditions to find inland routes to the missions, and the first known Europeans to cross the Coachella valley were members of the Jose Romero expedition to Yuma between 1823 and 1825.

The Desert Cahuilla were able to maintain relative autonomy until the Colorado River gold rush of the 1860s. This event brought miners and emigrants to California along the Bradshaw Trail, which later became the route of modern I-10. This event, in conjunction with the 1863 smallpox epidemic and extended droughts, decimated the Cahuilla population. As the populations decreased, old villages were abandoned and traditional Cahuilla lands were rapidly lost to the encroaching settlers. The Cahuilla were finally granted allotments of land when the Morongo, Cabazon and Torres-Martinez Reservations were established by President Grant on May 15, 1876. The Mission Indian Agency was created for southern California in 1877. Today, Cahuilla Reservations include Santa Rosa, Cahuilla and Ramona in addition to the aforementioned Reservations established under President Grant.

Native American Sacred Lands Search and Consultation

The project is very unlikely to affect any cultural resources, nonetheless, a Sacred Lands File search request was sent to the Native American Heritage Commission (NAHC) on September 18, 2009 in an effort to determine whether any sacred sites are known within the vicinity of the project area. Our efforts are associated with fact-finding only. The NAHC responded on September 22, 2009 and indicated that no known sacred sites are located in or near the project area. The NAHC indicated that 12 tribal organizations may have additional information associated with the project area. Should the County be required to contact any local Tribes as part of future environmental compliance for this project (i.e.: SB18), we suggest that the attached list be used for this purpose.

It must be noted that the entirety of the project area was graded during construction of the existing office building. This would have resulted in an engineering of topsoil to code. It is highly likely that the upper 5-6 feet of topsoil was disturbed and recompact at the spot where the existing structures now stand. There is a low-to-none chance that significant buried Native American resources will be impacted during grading of ground below the existing buildings.

Paleontological Impacts

According to an on-line paleontological sensitivity review of the Desert Center parcels using the County's TLMA website (APN 666411011 and 666411012), the property is considered Low in paleontologic sensitivity. The property is covered with recent Holocene Alluvium and Aeolian sand deposits, which is a

soil and rock strata considered too young to exhibit significant paleontological resources. It is very unlikely that fossil resources would be uncovered during excavation for the septic tanks.

Initial Study Analysis

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

Historical Resource: Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

There is no potential for a substantial adverse change in the significance of a historic resource during construction of this project. Records indicate that no historical resources have ever been located on the project site, and that the chance that historic resources could be encountered during grading is extremely low. Therefore, a mitigation-monitoring plan to mitigate for potential impacts to historic resources during construction is not recommended. The Initial Study check box should read “No effect”.

Archaeological Resource: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Because it is highly unlikely that most of the subsurface soils on the project site are intact, there is a low-to-none potential for a substantial adverse change in the significance of a prehistoric resource during construction of this project. Records indicate that no prehistoric resources have ever been found on or within one mile of the project site (despite numerous surveys near the project), and that the chance that prehistoric resources could be encountered during grading is extremely low. Therefore, a mitigation-monitoring plan to mitigate for potential impacts to prehistoric resources during construction is not recommended. The Initial Study check box should read “No effect”.

Paleontological Resource or Geologic Feature: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There is no potential for a substantial adverse change in the significance of a paleontologic resource during construction of this project. Data indicates that paleontologic resources are extremely unlikely to be found during grading because any strata having good potential for fossil resources are not located in the project area. Therefore, a monitoring plan to mitigate for potential impacts to prehistoric resources during construction is not recommended. The Initial Study check box should read “No effect”.

Human Remains: Would the project disturb any human remains, including those interred outside of formal cemeteries?

There is little chance that human remains will be encountered during construction-related grading. Records indicate that no human remains have ever been found on or near the project site, and that the chance that human remains could be encountered during grading is extremely low due to heavy disturbance. Therefore, a plan to mitigate for potential impacts to human remains during construction is not required. The Initial Study check box should read "No effect". State law requires that if in the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code § 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Environmental Quality Act (CEQA) regulations and Public Resources Code (PRC) § 5097.98.

Summary

Based on the results of the records search, the existing land-use, and development within and adjacent to the project area, and the parameters of the proposed construction, the potential for impacts to buried and potentially significant cultural resources is considered low. Under these conditions and following CEQA guidelines, cultural and paleontological resource mitigation-monitoring is not recommended.

Unanticipated Discoveries

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources without a monitor or archaeologist present. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the CEQA guidelines. Cultural resources could consist of, but are not limited to, stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under §15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site into green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study. In addition, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property will be taken, and the State Historic Preservation Office (SHPO) and Native American tribes with concerns about the property, as well as the Advisory Council on Historic Preservation (ACHP), will be notified within 48 hours in compliance with 36 CFR 800.13(b)(3).

In the event of an accidental discovery or recognition of any human remains, Public Resource Code (PRC) §5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:

1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC §5097.98, or

2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 24 hours after being notified by the commission;
- The descendant identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

MBA appreciates the opportunity to assist you on this project. If we can assist further, or if you have questions, please contact me at 909.884.2255 extension 1208.

Sincerely,



Michael H. Dice, M.A., RPA
Senior Archaeologist
Michael Brandman Associates
621 E Carnegie Drive
San Bernardino, CA. 92408

H:\Client\2749-Riverside County\27490030 CR due diligence letter report MD_1.doc

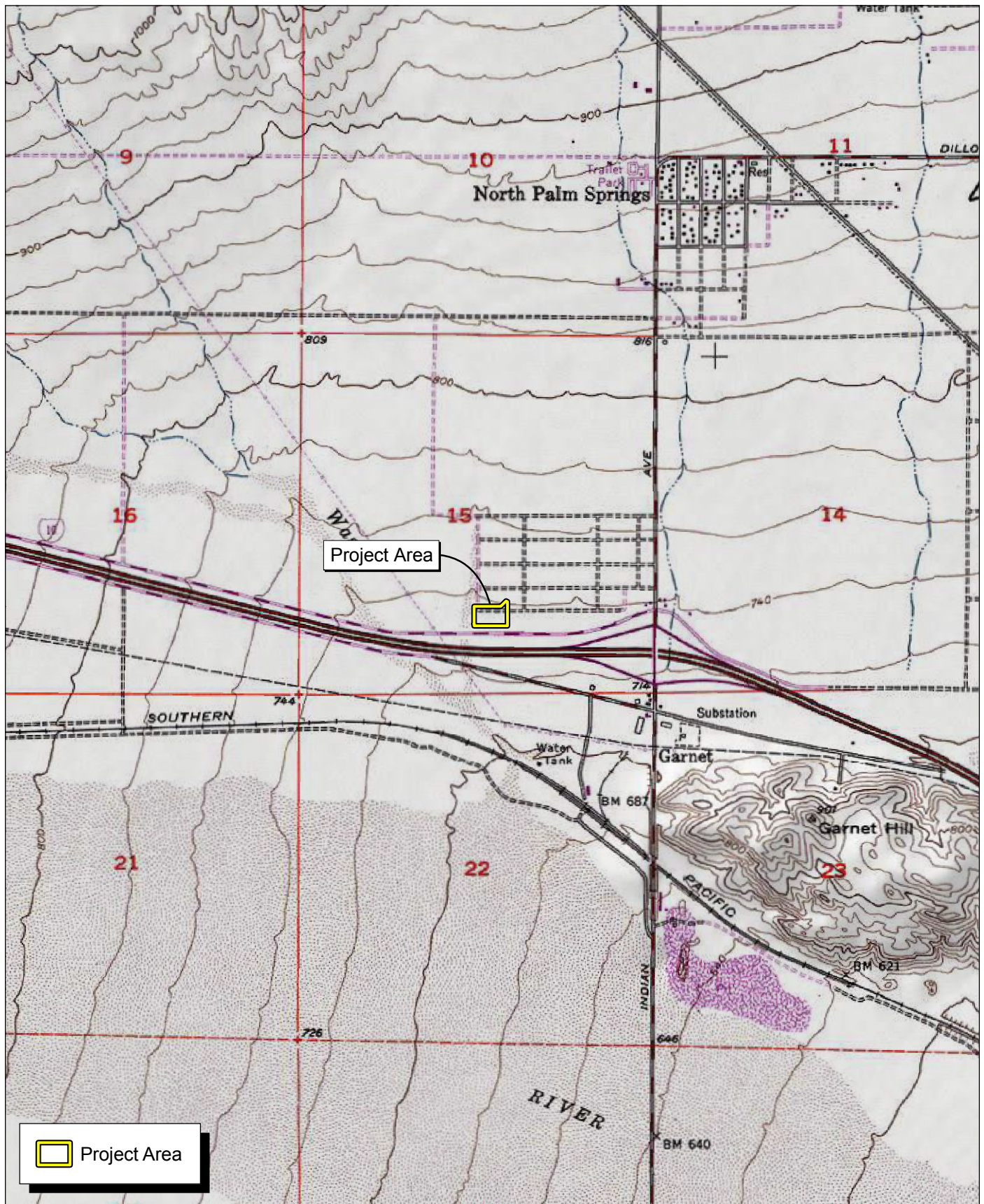
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-



Source: Census 2000 Data, The CaSIL, MBA GIS 2009.

Exhibit 1 Regional Location Map



Source: TOPO! Desert Hot Springs (1978) 7.5' DRG.



Source: Google Earth Pro Aerial (January, 2006).



27490030 • 09/2009 | 3_Local_Aerial.mxd

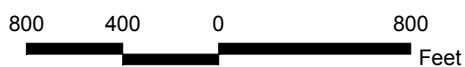


Exhibit 3 Local Vicinity Map Aerial Base

COUNTY OF RIVERSIDE ECONOMIC DEVELOPMENT AGENCY
ROY'S DESERT RESOURCE CENTER
CULTURAL RESOURCE DUE DILIGENCE

**Appendix A:
NAHC Request Letter (MBA)
NAHC Response Letter
MBA Staff Resumes**



September 18, 2009

Native American Heritage Commission
915 Capitol Mall, Suite 364
Sacramento, CA 95814-4801

VIA FACSIMILE: 916.657.5390

Subject: **Request for a Sacred Lands Records Search for the Roys Center IS Project located in the City of Palm Springs, California. (USGS Desert Hot Springs, CA. quad)**

County of Riverside, California.

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

To Whom It May Concern:

Michael Brandman Associates (MBA) would like to determine whether any listed sacred sites are located within or near a future development project on private land in the City of Palm Springs, CA. The project will involve modification of about 2 acres of land where three septic tanks will be undergrounded. Excavation during construction is required

As seen in the attached topographic map, the project area is located in Section 15 of Township 3 South and Range 4 East as found on the USGS Desert Hot Springs, CA. 7.5' topographic quadrangle.

Please notify us of any sacred Native American sites that may be affected by the undertaking. A full description of this project can be found in our archaeological survey report, which is forthcoming. A response can be sent to our FAX, 909-884-2113. If you have any more questions or need to speak with me, please feel free to call me at 714.742.0468. Thank you for your time and effort!

Sincerely,

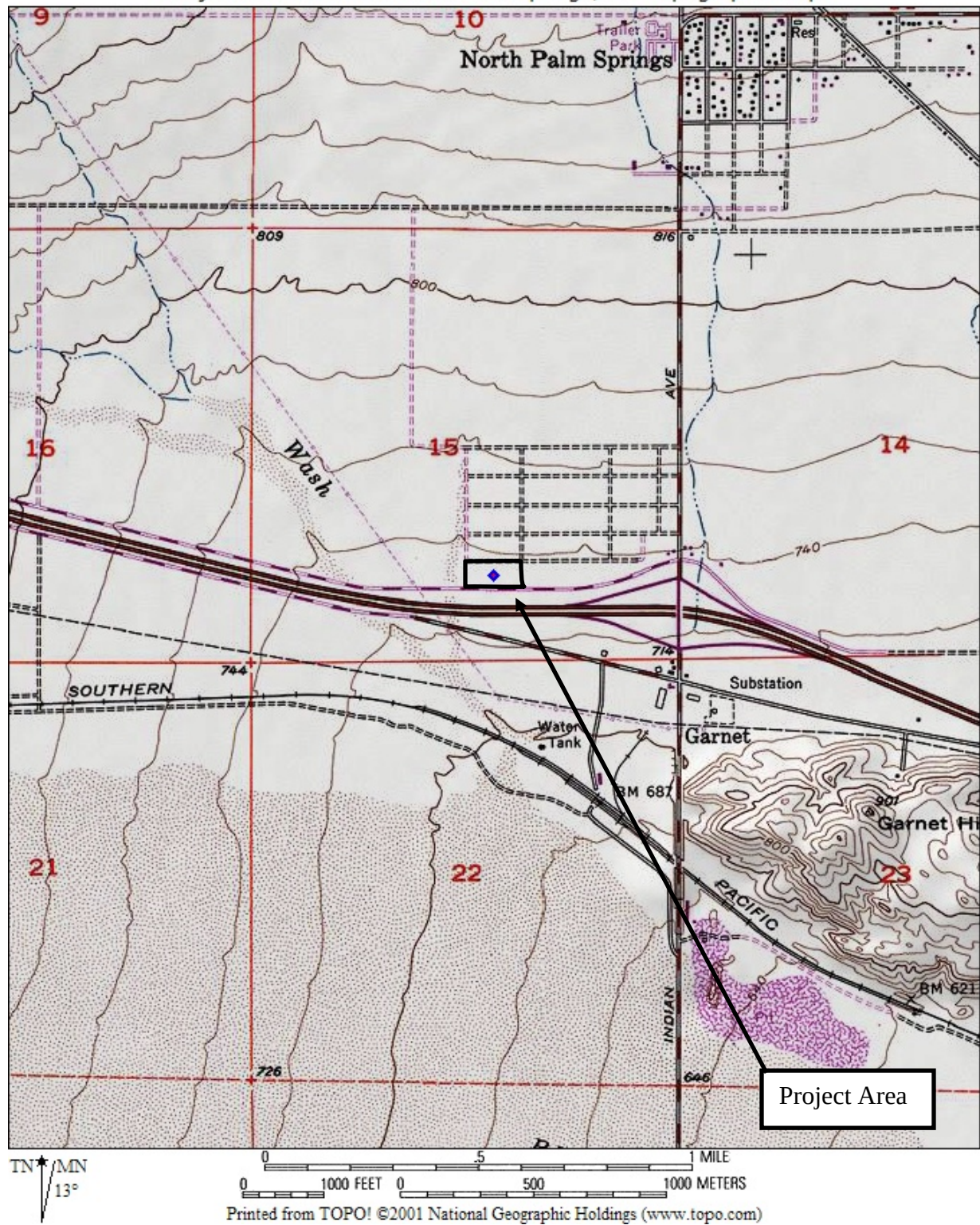
Michael H. Dice, M.A., R.P.A., Senior Archaeologist
Michael Brandman Associates
621 E Carnegie Drive Suite 100
San Bernardino, CA. 92408

Enclosures: Exhibit 1: Topographic Map

Q:\Michael Dice\2009 Projects\2749.0030.0\27490030 NAHC Letter.doc

MD:md

Project 2749.0030.0. Desert Hot Springs, CA. topographic map



Source: Topo! @National Geographic Holdings.



Michael Brandman Associates
2749.0030 • 9/2009 | CR Exhibit 1

Exhibit 1
Topographic Map
Rois Center Project • Cultural Resource RS

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
de_nahc@pacbell.net



September 21, 2009

Mr. Michael H. Dice, M.A., R.P.A., Senior Archaeologist

MICHAEL BRANDMAN ASSOCIATES

621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408

Sent by FAX to: 909-884-2113

Number of pages: 4

**Re: Request for a Sacred Lands File Search and Native American Contacts List for a Proposed,
Rays Center IS Project, located in the City of Palm Springs, Riverside County, California**

Dear Mr. Dice:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources (c.f. CA Public Resources Code §21070), was able to perform a record search of its Sacred Lands File (SLF) for the affected project area (APE) requested. The California Environmental Quality Act (CEQA; CA Public Resources Code Section 21000 – 21177) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." The NAHC SLF search did not indicate the presence of Native American cultural resources within one-half - mile radius of the project area (APE) of the proposed project (APE). There are, however, Native American cultural resources in close proximity to the APE.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and individuals as 'consulting parties' under both state and federal law.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. A Native American Tribe or Tribal Elder may be the only source of information about a cultural resource.. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation Coordinator's office (at (916) 653-7278, for referral to the nearest Information Center of which there are 11..

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 [f]) *et se*, and NAGPRA (25 U.S.C. 3001-3013), as appropriate. .

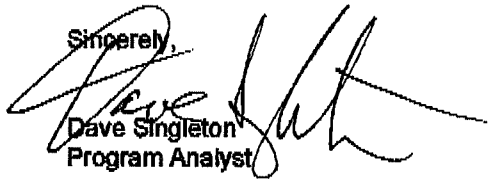
Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a

project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of 'historic properties of religious and cultural significance' may also be protected under Section 304 of the NHPA or at the Secretary of the Interior's discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,



Dave Singleton
Program Analyst

Attachment: Native American Contacts List (NOTE: we further recommend that other forms of 'proof of mailing or proof of contact be utilized instead of 'Return Receipt Requested' Certified or Registered Mail.) Further, we suggest a follow-up telephone call to the contacts if the replies are not received or need clarification.

Native American Contact
Riverside County
September 21, 2009

Cabazon Band of Mission Indians
David Roosevelt, Chairperson
84-245 Indio Springs Parkway Cahuilla
Indio , CA 92203-3499
(760) 342-2593
(760) 347-7880 Fax

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 609 Cahuilla
Hemet , CA 92546
srtribaloffice@aol.com
(951) 658-5311
(951) 658-6733 Fax

Los Coyotes Band of Mission Indians
Francine Kupsch, Spokesperson
P.O. Box 189 Cahuilla
Warner , CA 92086
loscoyotes@earthlink.net
(760) 782-0711
(760) 782-2701 - FAX

Augustine Band of Cahuilla Mission Indians
Mary Ann Green, Chairperson
P.O. Box 846 Cahuilla
Coachella , CA 92236
(760) 369-7171
760-369-7161

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Morongo Band of Mission Indians
Michael Contreras, Cultural Heritage Prog. Coordinatr
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
mcontreras@monongo-nsn.
(951) 755-5025
(951) 201-1866 - cell
(951) 922-0105 Fax

Torres-Martinez Desert Cahuilla Indians
Mary Resvaloso, Chairperson
PO Box 1160 Cahuilla
Thermal , CA 92274
mresvaloso@torresmartinez.org
(760) 397-0300
(760) 397-8146 Fax

Torres-Martinez Desert Cahuilla Indians
Diana L. Chihuahua, Cultural Resources Coordinator
P.O. Box 1160 Cahuilla
Thermal , CA 92274
dianac@torresmartinez.org
760) 397-0300, Ext. 1209
(760) 272-9039 - cell (Lisa)
(760) 397-8146 Fax

Torres-Martinez Desert Cahuilla Indians
Ernest Morreo
PO Box 1160 Cahuilla
Thermal , CA 92274
maxtm@aol.com
(760) 397-0300
(760) 397-8146 Fax

Los Coyotes Band of Mission Indians
Melody Sees, Environmental Director
P.O. Box 189 Cahuilla
Warner , CA 92086
(760) 782-0712
(760) 782-2730 - FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code, and federal NEPA (42 USC 4321-4335), NHPA Sections 106, 4(f) (16 USC 470(f) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Royce Center IS Project, located in the City of Palm Springs, Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Native American Contact
Riverside County
September 21, 2009

Agua Caliente Band of Cahuilla Indians THPO
Patricia Tuck, Tribal Historic Preservation Officer
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA 92264
ptuck@aguacaliente-nsn.gov
(760) 699-6907
(760) 699-6800
(760) 699-6924- Fax

Cahuilla Band of Indians
Luther Salgado, Sr.
PO Box 391760 Cahuilla
Anza, CA 92539
tribalcouncil@cahuilla.net
915-763-5549

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code, and federal NEPA (42 USC 4321-4335), NHPA Sections 106, 4(f) (16 USC 470(f)) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Roys Center IS Project; located in the City of Palm Springs; Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Michael H. Dice, RPA

Senior Cultural Resource Specialist/Project Manager

Overview

- 30+ years experience
- Master's degree, Anthropology – Arizona State University, Tempe. 1993
- Bachelor's degree, Anthropology – Washington State University, Pullman. 1986
- Registered Professional Archaeologist (RPA 2000)
- Registered Archaeologist in Orange County and Riverside County

Michael H. Dice, MA, Senior Cultural Resource Specialist and Project Manager, has more than 30 years experience performing record searches, archaeological surveys, archaeological site testing projects, and data collection projects on private and public lands in the Southwestern United States. He has authored or co-authored more than 150 Cultural Resources Inventory Reports required for CEQA and/or NEPA level documents including several manuscripts for the National Park Service. Michael has extensive experience with California Native American Tribes, having provided direct consultation and coordination with the Agua Caliente Band, Gabrielino Band, Juaneno Band, Morongo Band, and Pechanga Band.

Related Experience

High Desert Archaeological Projects

Sky Harbor Ranch Specific Plan Project. 2008. Town of Yucca Valley. Mr. Dice undertook an archaeological survey of 640 acres located south of the Town of Yucca Valley and bordering Joshua Tree National Park. Mr. Dice surveyed the entirety of the section with two staff archaeologists, then wrote the report and recorded a single historic archaeological site. The survey was undertaken for a Specific Plan in the Town.

The Barstow Industrial Park Project. 2007-2009. City of Barstow. MBA is preparing an EIR for a new logistics center to handle multi-modal transport of goods in and out of the Los Angeles Basin and throughout the country. The center, being developed by IDA Real Estate Group, will be located on 1,200 acres along the Mojave River west of the City of Barstow. Technical studies will be completed and integrated into the EIR that will be used by the City of Barstow and the various regulatory agencies involved in the permitting process. The cultural resource analysis was led by Mr. Dice and consisted of a Phase 1 survey and Phase II test of various historic and historic archaeological resources. The final cultural resource element to the project is the crafting of a Phase III (data collection through subsurface excavation) program consistent with scientific studies that have taken place in the region in previous years. More than 30 cultural resources have been identified in the project area and consultations with Native Americans have taken place since project inception.

An Archaeological Survey of the Mastro Property. 2007. Yucca Mesa Area, County of San Bernardino. Mr. Dice undertook a survey of 30 acres in the Yucca Mesa region of Joshua Tree. Several archaeological resources were detected and recorded onto DPR523a form sets. Mitigation measures were recommended that asked for test excavations before the property was approved for subdivision by the County.

The Foxfire Ranch Project. 2005. City of Victorville. Mr. Dice performed a Phase 1 Cultural Resource Survey of a 65-Acre Property at Tentative Tract #16574 (Foxfire Ranch), located near Cobalt and Dos Palmas Roads, Section 26 of T.5N R.5W, City of Victorville, Including Parcel #3094-131-02. Century-Crowell Communities.

Cultural Survey Report for Two Planned Ryland Homes Developments in the City of Victorville. 2004 and 2006. City of Victorville. Mr. Dice performed a Phase I Cultural Resources Assessment and Paleontological Records Review Tract Nos. 16496 and 16905 in the City of Victorville. Ryland Homes of Corona.

Phase I Cultural Resources Survey for the Victorville Acres Project, Tentative Tract 16847, City of Victorville, San Bernardino County. Mr. Dice prepared a cultural resource survey report for planned development in the City of Victorville. Van Daele Homes, Inc.

Project Archaeologist for the California Lightweight Pumice Makayla Mine Expansion. Mr. Dice undertook a Class III Intensive Field Survey of mining lease properties located within Sections 21 and 28, T21S/R38W, Coso Junction Area, County of Inyo, California. Wrote research design, direct survey and recordation of more than 20 obsidian scatter and two quarries in an area southeast of Olancho and west of Coso Junction. All Native American coordination flowed through the BLM-Ridgecrest Field Office.

Cultural Resource Survey Reports for the Palm Desert Rock Project, and the Coachella Aggregates Expansion Project, Coachella Valley, Riverside County. Mr. Dice prepared cultural survey and inventory reports for planned mining development in the County of Riverside. Requires Section 106 and County of Riverside General Plan concurrence through the County Archaeologist.

High Desert Water-Related Cultural Resource Management Projects

The Victor Valley Recycled Water Project 2004-2006. Mr. Dice served as the Project Archaeologist for a series of studies in Hesperia, Victorville, Apple Valley and the County of San Bernardino for a proposed subregional facilities project that will treat excess and sewage for recycling in the noted towns and communities. The project was completed for Bauer Consulting, Irvine, Ca. A records search, survey and mitigation recommendations were made as part of an EIR/EIS. Contact with the SWCB (Cookie Hearn, Archaeologist) were made as part of the Section 106 (Federal) compliance process.

Navajo Road Sewer Project 2002-2004. Mr. Dice served as the Project Archaeologist for a infrastructure improvement project in the Town of Apple Valley. A right-of-way for the new sewer was surveyed between the existing airport and the new Costco distribution center for Carter and Burgess Engineering of Fort Worth, Texas. Mr. Dice recommended testing and monitoring of the project

Professional Affiliations

- Member, California Historical Society
- Member, National Trust for Historic Preservation
- Certified County of Riverside Archaeologist
- Certified County of Orange Archaeologist

Arabesque Said

Staff Archaeologist

Overview

- 5 Years Experience
- Bachelor's degree, Anthropology – University of California, Riverside, California

Arabesque Said, BA, has been working in the archaeological field since 2004. She has conducted numerous pre-field assessments, archival research, pedestrian field surveys, site evaluation and testing, and data recovery and analysis. As an Archaeological crew member for the URS Corporation she has gained expertise in both prehistoric and historical site testing. Her projects have included testing on both private and public land throughout the Southwest and have allowed her to build relationships with various federal and state level entities.

Related Experience

Historical, Archaeological and Paleontological Resources

Solar 1, Mojave Desert, County of Riverside. Archaeological crew member for a 6,500 acre pedestrian survey for prehistoric and historic sites. This Phase I cultural resources survey was conducted on BLM land for a solar energy field that will include approximately 20,000 solar dishes by SES (Stirling Energy Systems).

Solar 2, Yuha Desert, County of Riverside. Archaeological crew member for a 7,500 acre pedestrian survey for prehistoric and historic sites. This Phase I cultural resources survey was conducted on BLM land for a solar energy field that will include approximately 20,000 solar dishes by SES (Stirling Energy Systems).

Chuckwalla Valley Project, Chuckwalla Valley, County of Riverside. Archaeological crew member for a 5,200 acre pedestrian survey for prehistoric and historic sites. Located previously recorded sites, taking and recording photographs of site and artifacts, and creating site map.

Redland Crossing Walmart EIR, Redlands, County of Riverside. Archaeological Field assistant for testing of numerous historical sites through out Redlands as part of the EIR process. Conducted excavation of trenches, artifact collection, screening and sidewall profile drawing with costs of \$28,000.

EIR/EA- 800MHz Radio Tower Sites Project, Riverside County, CA. Currently assisting with the cultural resources assessment and technical reports for the Radio Tower project through out Southern California and Arizona. The Environmental Impact Report, Environmental Assessment and all related studies are for developing 75 800MHz radio tower sites throughout the County of Riverside. An opportunity and constraints analysis was conducted on each site using a specific set of criteria to determine which sites could be eliminated immediately due to a particular constraint (i.e., proximity to a known fault, habitat for a threatened or endangered species, proximity to a known site of significant cultural resource, land use constraints, etc.) and which sites could realistically be developed. The analysis included a summary of potential permitting requirements at the state, federal, and local levels.

Phase I Archaeological Survey 11-acres, City of Wildomar, CA. Currently assisting with the cultural resources assessment and phase 1 report for the development of an 11-acre site in Wildomar.



Kotake Trust

Via Certified United States mail

County of Riverside
Economic Development Agency
Claudia Steiding
3133 Mission Inn Avenue
Riverside, CA 92507

Date: October 26, 2009

Subject: Project Site - Instillation of 3 - 5,000 gallon septic tanks
19533 Mclane Street
Palm Springs, CA

Reference: Notice of Intent to a adopt a Negative Declaration
Geotechnical Study prepared by Consolidated Engineer Laboratories
Proposed site plan of project

Dear Ms. Claudia Steiding,

Although I see the need for your departments services in our area, and I understand the difficulties to find a suitable site; regretfully the North Palm Springs Business Center is not the place. The County of Riverside and its' project is in conflict of the land use.

I represent a trust that owns several properties located in the North Palm Springs Business Center. The area is zoned a Regional Business Center and I am sure habitation is not allowed on the premises. Properties located in the Business Center had been subdivided into half acre and above. All of the buildings in the center are on a septic system and there no sewer lines in the immediate area to tap into.

In reference to the department's plans for (I assume) 120 individuals - single men, single women, families and 30 employees will occupy the above mention facility at any given time. This plan is not suited for this use. It is my opinion that the Phase II of the department's plans to construct a kitchen, washing facility, extra toilets, showers and I assume a laundry facility, would taxed the soil in the immediate and surrounding areas. Yet the department has not stated or estimated the amount of raw sewage and or non - potable water that will be discharge into the septic system and ultimately end up in the leach line and in the soil.

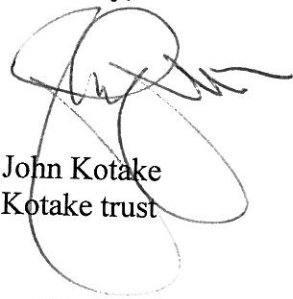
Please be advised that the outdated geological study prepared by Consolidated Engineer Laboratories was submitted for the purpose to evaluate the site for an industrial

warehouse and should not be used as a reference to the negative declaration. Although the study's conclusion ultimately allowed the construction of the subject building, I found that the scope of the study did not include any percolation tests. I would like to know if the county has done their due diligence to find out if the soils are able to retain the discharge from the facility, or what would happen to the soil if it became supersaturated. The soil also is porous. Is there a chance that the discharge can leach and contaminate to the ground water? Please note that the ground water is only located approximately 230 to 330 feet, as explained in the study.

I also examined the site plans for the project and did not find a pretreatment system for the discharge from the kitchen facility. Does the project address the reduction of BOD (Biochemical oxygen demand) before the non – potable water is discharged in to the septic system?

Lastly, if the county is going to adamantly pursue the project, I would ask if the county would be neighborly and pump the septic tanks during weekends and on off business hours. I thank you for your time, and I await your reply.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Kotake', written over a circular stamp or seal.

John Kotake
Kotake trust

cc. North Palm Springs Business Association
AES Wind Generation, Inc.

major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following: (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration; (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration; (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or, (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Claudia Steiding 9/29/09
Signature Date
Se. Env. Planner For County of Riverside

Claudia Steiding
Senior Environmental Planner
County of Riverside Economic Development Agency