



COMMUNITY DEVELOPMENT
DEPARTMENT

ENVIRONMENTAL PLANNING
SERVICES

300 Richards Boulevard
Third Floor
Sacramento, CA 95811

PROPOSED MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

PACIFICA SENIOR ARTS COMMUNITY PROJECT (P14-024) - The project is located at 700 16th Street, Sacramento, California (APN 002-0172-024-0000), which is north of H Street and between 15th and 16th Streets.

The Project consists of (1) the demolition of the existing Clarion Hotel, and (2) the construction of a new mixed-use age restricted art-centered apartment community and ground-level commercial and retail spaces. Components of the Proposed Project are described below. The demolition of the Clarion Hotel and construction of the proposed Senior Arts Community is anticipated to take approximately 15 months.

As part of the Project development, all of the above ground structures of the existing Clarion Hotel would be demolished. The existing basement would remain intact and would be expanded by approximately 3,978 square feet to a total size of 20,554 square feet. The Project development includes a four-story plus basement building with a gross footprint of 167,788 square feet, which will include 100 Independent Living units and associated facilities, 41 Assisted Living units and associated facilities, a 1,843-square foot Community Arts Center, and approximately 12,361 square feet of ground-level commercial space. Both the Independent Living and Assisted Living units would include a total of approximately 162 beds. Amenities for the residents would include dedicated activity spaces, two outdoor courtyards, kitchen and dining areas, library, computer lab, a fitness center, beauty salon, spa, and other associated service and storage areas. The Community Arts Center would be primarily used by the residents of the Proposed Project and would be available to lease by Sacramento community members.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Sections 21000, et seq., Public Resources Code of the State of California).

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento, and the Sacramento City Code.

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 from 9:00 a.m. to 4:00 p.m. (or 8:00 a.m. to 5:00 p.m. with prior arrangement). The document is also available on the CDD website at: <http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

INITIAL STUDY

City of Sacramento Pacifica Senior Arts Community Project (#P14-024)

May 2015

PREPARED FOR:



Colby Young
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PREPARED BY:



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PACIFICA SENIOR ARTS COMMUNITY PROJECT (#P14-024)

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2030 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the Proposed Project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews the Proposed Project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master Environmental Impact Report (EIR) for the 2030 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the Proposed Project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

SECTION I - BACKGROUND

Project Name and File Number: Pacifica Senior Arts Community Project (P14-024)

Project Location: 700 16th Street, Sacramento, California
(APN 002-0172-024-0000)

Project Applicant: Pacifica Companies
1775 Hancock Street, Suite 200
San Diego, CA 92110

Project Planner: Evan Compton
Senior Planner for Central City and East
Sacramento
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Environmental Planner: Scott Johnson, Associate Planner
Community Development Department
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Sacramento, CA 95814
Telephone: (916) 808-5842
Email: srjohnson@cityofsacramento.org

Date Initial Study Completed: Thursday, May 28, 2015

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the Proposed Project and, on the basis of the whole record before it, has determined that the Proposed Project is an anticipated subsequent project identified and described in the 2030 General Plan Master EIR and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2030 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to (1) review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2030 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)) and (2) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR

(CEQA Guidelines Section 15177(d)). The Master EIR mitigation measures that are identified as appropriate are set forth in the applicable technical sections below. Policies included in the 2030 General Plan that reduce significant impacts identified in the Master EIR are identified and discussed in the Master EIR.

This analysis incorporates by reference the general discussion portions of the 2030 General Plan Master EIR (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at: <http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>.

During the preparation of this initial study, the City was in the process of updating the 2030 General Plan with the 2035 General Plan and associated Master EIR. On March 3, 2015 the City Council adopted the 2035 General Plan and certified the Master EIR. The 2035 General Plan then took effect on April 2nd, 2015. The 2035 General Plan update maintains the overall land use planning and development direction established in the 2030 General Plan. The changes in the 2035 General Plan update do not change the analysis or conclusions made in this Initial Study.

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but no later than the 20-day review period ending Wednesday, June 24, 2015.

Please send written responses to:

Scott Johnson, Associate Planner
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-5842
srjohnson@cityofsacramento.org

SECTION II - PROJECT DESCRIPTION

INTRODUCTION

The Pacifica Senior Arts Community Project (Proposed Project) would be located at 700 16th Street, Sacramento, California (Assessor Parcel Number [APN] 002-0172-024-0000). The parcel encompasses the southern half of the city block bounded by 16th Street to the west, G Street to the North, H Street to the South and 15th Street to the east. A regional location map, aerial, and site plan of the Proposed Project are shown in **Figures 1, 2, and 3**.

PROJECT BACKGROUND

The project site is approximately 1.18 acres. The site is currently occupied by the vacant 132-room Clarion Hotel which became non-operational in December 2012. Land uses in the vicinity of the project site include a Holiday Inn Express to the immediate north, the historic Governor's Mansion to the south, the Wells Fargo Pavilion to the west, as well as other office/commercial buildings to the east and southwest. Land use and zoning designations of the project area are depicted in **Figures 4 and 5**.

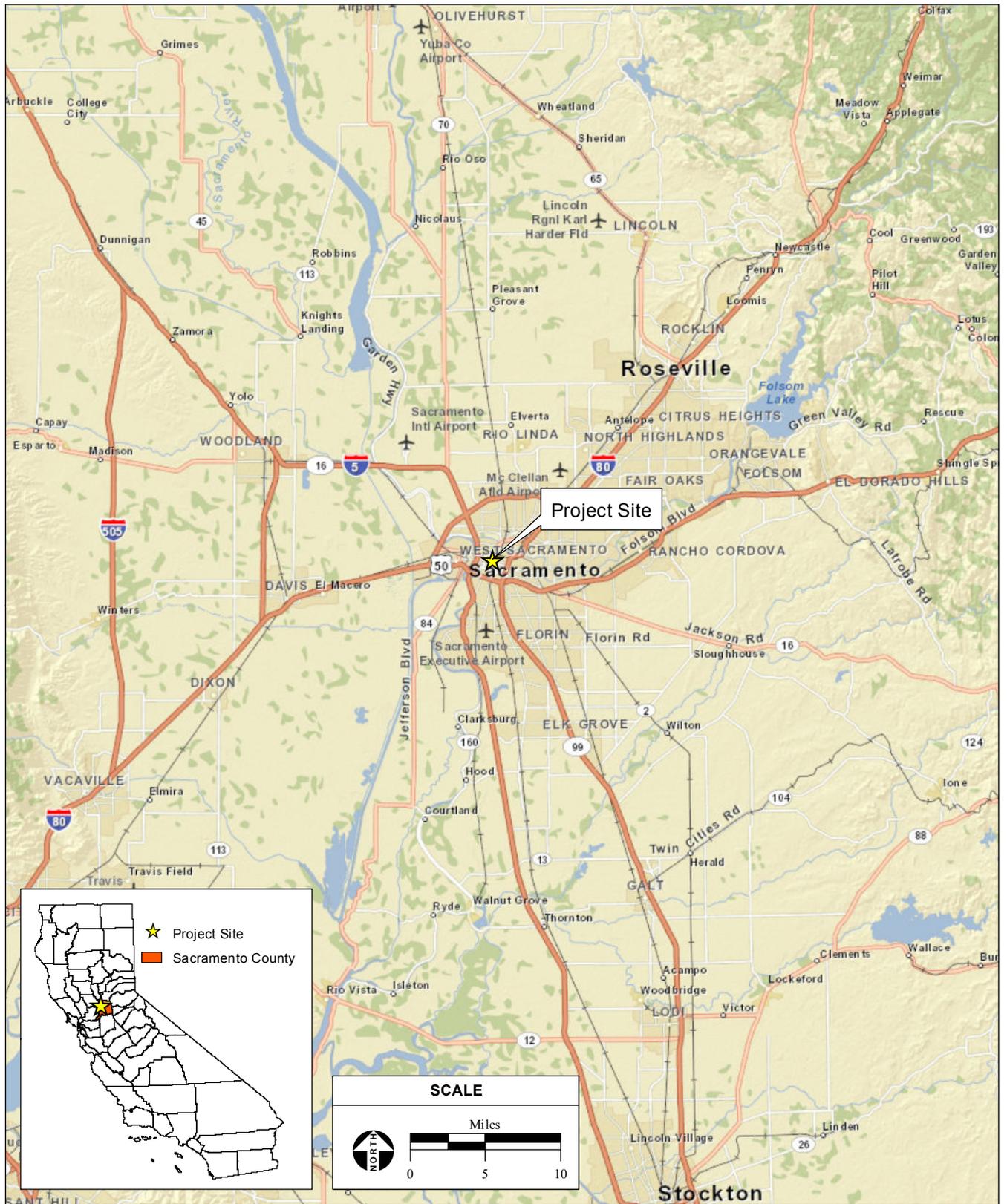
PROJECT DESCRIPTION

The Proposed Project consists of (1) the demolition of the existing Clarion Hotel, and (2) the construction of a new mixed-use age restricted art-centered apartment community and ground-level commercial and retail spaces. The Proposed Project would require a Conditional Use Permit to allow a percentage of units to function as Assisted Living units, defined as a "Residential Care Facility" by the City of Sacramento Planning and Development Code. Components of the Proposed Project are described below. The demolition of the Clarion Hotel and construction of the proposed Senior Arts Community is anticipated to take approximately 15 months. An architectural rendering of the Senior Arts Community is provided in **Figure 6**.

Clarion Hotel Demolition

The existing two-story Clarion Hotel extends to the street and alley on the north, south, and west façades. The east façade overlooks a parking lot that extends the length of the building. The hotel was constructed in phases with the first building (which included 50 rooms, a manager's apartment, a small restaurant, and a bar) completed in 1958. A second 66-room building that included meeting rooms, kitchen and service facilities, was added to the first building in 1963. **Table 1** provides a breakdown of components of the existing Clarion Hotel with associated square footages.

Under the Proposed Project all of the above ground structures of the existing Clarion Hotel would be demolished. The existing basement would remain intact and would be expanded by approximately 3,978 square feet to a total size of 20,554 square feet. The demolition and grading of the site would include the use of heavy earthmoving equipment. The use of pile-driving or similar vibration-generating equipment will not be required.



SOURCE: ESRI Server, 2013; AES, 2015

City of Sacramento Pacifica Senior Arts Community Project / 213524 ■

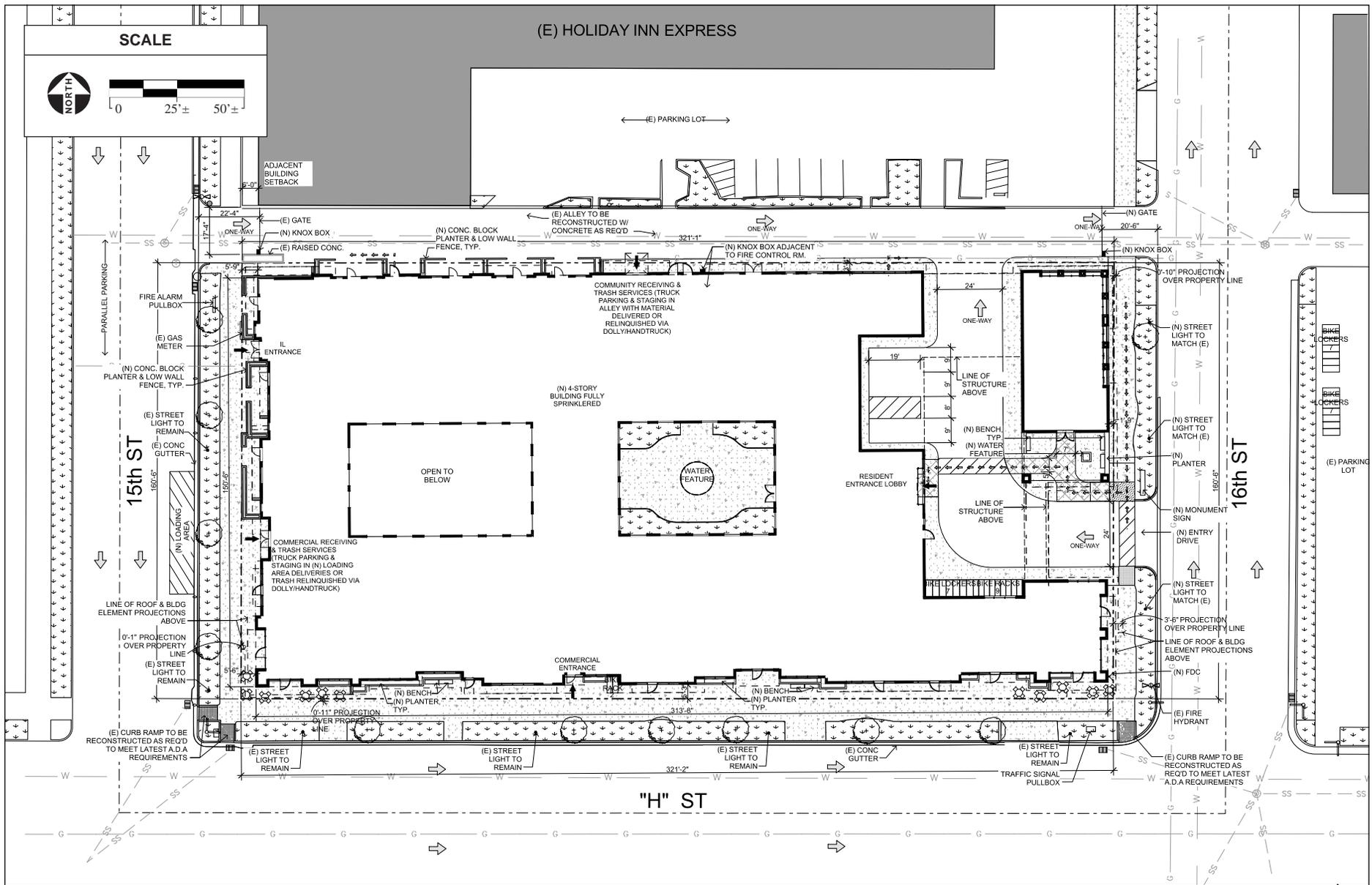
Figure 1
Regional Location

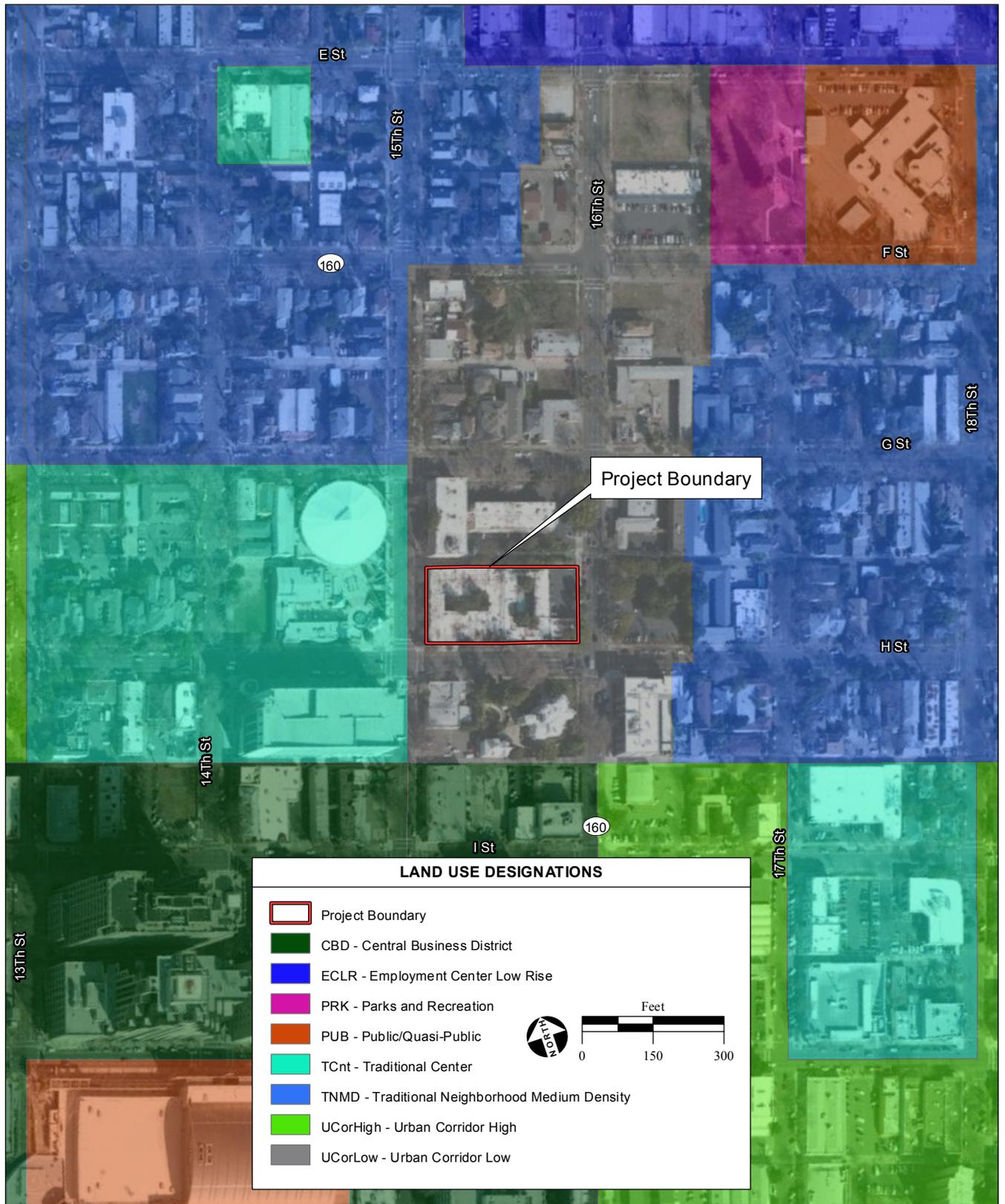


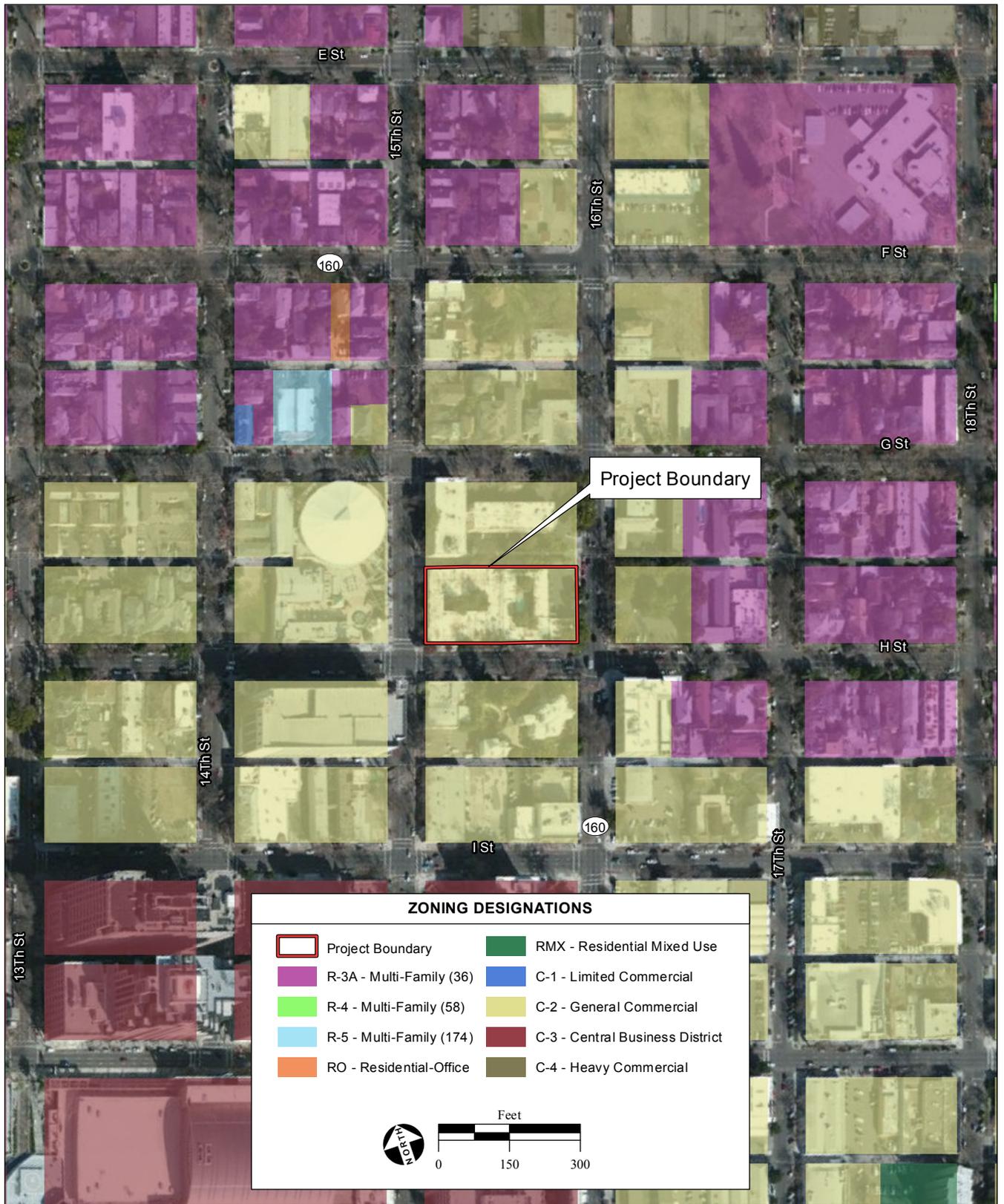
SOURCE: Microsoft aerial photograph, 2/2/2012; ESRI Server, 2013; AES, 2015

City of Sacramento Pacifica Senior Arts Community Project / 213524 ■

Figure 2
Aerial Photograph







SOURCE: City of Sacramento Planning Dept., 2013; AES, 2015

City of Sacramento Pacifica Senior Arts Community Project / 213524 ■

Figure 5
Zoning



TABLE 1
EXISTING CLARION HOTEL

Area	Rooms	Total Approximate Square Footage
Lobby	-	1,600
Foyers	-	1,700
Guest Rooms	132	42,900
Dining	-	2,121
Bar	2	2,400
Banquet Rooms	2	1,800
Meeting Rooms	6	4,500
Kitchen	-	1,700
Storage	3	4,200
Mechanical	4	3,000
Corridors	-	6,800
Ancillary / BOH	-	3,500
Total		76,221
Source: Pacifica Companies, 2013		

Mixed-Use Development

The proposed development includes a four-story plus basement building with a gross footprint of approximately 167,788 square feet, which will include up to 100 Independent Living units and associated facilities, 41 Assisted Living units and associated facilities, an approximately 1,843-square foot Community Arts Center, and an approximately 12,361 square feet of ground-level commercial space. Both the Independent Living and Assisted Living units would include a mix of one- and two-bed units for a total of approximately 162 beds. Amenities for the residents would include dedicated activity spaces, two outdoor courtyards, kitchen and dining areas, library, computer lab, a fitness center, beauty salon, spa, and other associated service and storage areas. The Community Arts Center would be primarily used by the residents of the Proposed Project and would be available to lease by Sacramento community members. **Tables 2 and 3** provide a breakdown of the proposed components of the Senior Arts Community with associated approximate square footages. A site plan showing the approximate building footprint is included as **Figure 3**. The building aesthetics and activity spaces will be art-focused and support the objectives of the Cultural and Entertainment District (**Figure 6**).

The Proposed Project will be designed and constructed to comply with the applicable requirements of the 2013 California Code of Regulations Title 24, Part 2 (California Building Code), Part 3 (California Electrical Code), Part 4 (California Mechanical Code), Part 5 (California Plumbing Code), Part 6 (California Energy Code), Part 9 (California Fire Code), and Part 11 (California Green Code). The Proposed Project will comply with CALGreen Tier 1 water efficiency standards. Features included as part of the Proposed Project to meet Tier 1 standards may include, but are not limited to: low flow faucets/showerheads, low flow dishwashers, low-water consumption irrigation system, rainwater capture, storage, and re-use system, air-cooled ice makers. Additionally, the Proposed Project includes the installation of an on-site photovoltaic system that would generate at least a minimum of 15 percent of the project's total energy demand.

TABLE 2
PROPOSED SENIOR ARTS COMMUNITY BY FLOOR

Area	Rooms	Approximate Square Footage
Basement		20,554
Apartment Units		
Resident Care Studio	7	2,518
Resident Care 2 Bed	4	1,792
Public Spaces – Apts		8,087
Circulation		6,299
Service & Storage		1,858
First Floor		34,969
Apartment Units		
Independent Living Studio	3	1,347
Independent Living 1 Bed	7	3,999
Independent Living 2 Bed	2	1,893
Public Spaces – Apts		3,718
Commercial Space		12,361
Circulation		5,615
Community Arts Center		1,843
Service & Storage		1,193
Second Floor		36,965
Apartment Units		
Resident Care Studio	2	750
Resident Care 1 Bed	23	12,502
Resident Care 2 Bed	5	5,032
Public Spaces – Apts		8,175
Circulation		8,659
Service & Storage		1,847
Third Floor		37,650
Apartment Units		
Independent Living Studio	10	4,486
Independent Living 1 Bed	29	17,763
Independent Living 2 Bed	5	5,184
Public Spaces – Apts		427
Circulation		8,660
Service & Storage		1,130
Fourth Floor		37,650
Apartment Units		
Independent Living Studio	10	4,486
Independent Living 1 Bed	29	17,763
Independent Living 2 Bed	5	5,184
Public Spaces – Apts		427
Circulation		8,660
Service & Storage		1,130
Proposed Project Total	141	167,788

Source: Pacifica Companies, 2015

TABLE 3
PROPOSED SENIOR ARTS COMMUNITY BY USE

Area	Rooms	Approximate Square Footage
Apartment Units		
Independent Living Studio	23	10,319
Independent Living 1 Bed	65	39,252
Independent Living 2 Bed	12	12,261
Resident Care Studio	9	3,268
Resident Care 1 Bed	23	12,502
Resident Care 2 Bed	9	6,824
Apartment Total	141	84,699
Public Spaces – Apts		23,834
Commercial Space		12,361
Circulation		37,893
Community Arts Center		1,843
Service & Storage		7,158
Total (Excluding Units)		83,089
Proposed Project Total	141	167,788
Source: Pacifica Companies, 2015		

Parking

Although current zoning does not require on-site parking, a total of three parking spaces are proposed on-site, which will include one accessible parking space, one accessible van visitor parking space, and one standard visitor parking space. Additional public parking is available at parking lots in the vicinity, including one across the street, and as street parking. On-site bike parking shall be provided in accordance with Section 17.608.030 C of the Planning and Development Code either on-site or on the street. Potential location of the on-site bike parking is shown on **Figure 3**.

Site Access

Access to the project site is currently provided by a driveway on H Street near the H Street/16th Street intersection, a drive way on 16th Street, as well as the alley which borders the project site to the north. As shown on page A3 of **Attachment 1**, under the Proposed Project, the driveway on H Street will be closed, the 16th Street driveway will become an entrance only, and visitors will exit the parking lot through the existing alley. The Proposed Project would include, as needed, improvements and/or repairs along the frontages, including sidewalk, landscaping, and curb and gutter repair.

Utilities

Water supply and wastewater treatment services for the Proposed Project would be provided by the City of Sacramento through the existing connection that was previously utilized by the Clarion Hotel. Similarly, electricity and natural gas services would continue to be provided by local service providers that previously served the Clarion Hotel.

Actions

The Proposed Project would require the City to approve a Conditional Use Permit to allow the operation of a “Residential Care Facility” within the C2 – General Commercial zone and Site Plan and Design Review for new construction in the Central Core Design Review area.

Figures

Figure 1 – Regional Location

Figure 2 – Aerial Photograph

Figure 3 – Site Plan

Figure 4 - Land Use Map

Figure 5 – Zoning Designations

Figure 6 – Architectural Rendering

Attachments

Attachment 1 – CalEEMod Inputs and Outputs

Attachment 2 – CAP Consistency Review Checklist

Attachment 3 - CNDDDB, USFWS, and CNPS Species Lists

Attachment 4 – Arborist’s Report

Attachment 5 - DPR Form and Review of Historical Resource Evaluation

Attachment 6 – Historic Resource Review

Attachment 7 – Geotechnical Investigation

Attachment 8 – EDR Report

Attachment 9 – Preliminary Sewer Study

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES AND ENERGY

INTRODUCTION

CEQA requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the Proposed Project and applicable general plans and regional plans.

An inconsistency between the Proposed Project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the Proposed Project are discussed in the appropriate technical sections.

This section of the initial study (IS) identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the Proposed Project. This section also discusses agricultural resources and the effect of the project on these resources.

DISCUSSION

Land Use

The project site has been designated as Urban Corridor Low in the 2030 General Plan, and is zoned as C-2 General Commercial. The project site is located in an urbanized portion of the community. The project site is currently occupied by the vacant 132-room Clarion Hotel which became non-operational in December 2012. Land uses in the vicinity of the project site include a Holiday Inn Express to the immediate north, the historic Governor's Mansion to the south, the Wells Fargo Pavilion to the west, as well as other office/commercial buildings to the east and southwest. An aerial photograph and site plan for the Proposed Project is shown in **Figure 2** and **3**.

Development of the site as proposed would alter the existing landscape, but the project site has been designated and zoned for urban development in the City's General Plan and Planning and Development Code and the proposed development is consistent with these planning designations. Land use and zoning designations of the project area are depicted in **Figures 4** and **5**. Components of the Proposed Project would be allowed under the General Plan designation. The Proposed Project would require a Conditional Use Permit to allow a percentage of the residential units to function as a Residential Care Facility, and would be consistent with the special use regulations in Section 17.228.117 for multi-unit dwellings as required by the C-2 zoning designation. Therefore, the Proposed Project would be allowed

under the site's current zoning designation. Impacts to land use would be considered less than significant and no mitigation is required.

Population and Housing

According to the U.S. Census Bureau American Community Survey, the City of Sacramento had an estimated population of approximately 467,467 from 2008-2012 (U.S. Census Bureau, 2012). Of the 467,467 number of people in the City, 50,622 (10.8%) are over the age of 65 (U.S. Census Bureau, 2012). The Proposed Project includes the development of a 162-resident living facility, with some units designated as Assisted Living units. Development of the project would result in a direct increase in housing, but the project would serve to fill the need for Assisted Living units in the City.

Population growth and development is regulated by the 2030 General Plan and the Proposed Project is designed to serve growth controlled by the 2030 General Plan and local ordinances. Implementation of the Proposed Project would not displace existing housing or people or require the construction of new housing elsewhere, since the project site is currently occupied by the non-operational Clarion Hotel. Cumulative growth in the region has been addressed in the General Plan for the project vicinity, and the Proposed Project is not expected to increase growth beyond what is projected and accounted for in both the 2030 General Plan and the recently adopted 2035 General Plan Update. Therefore, impacts are considered less than significant.

Agricultural Resources

The project site is currently developed and within the downtown (developed) area of the City, and it is designated and zoned for urban development.

The project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Statewide Importance), and is not designated as forest land (DOC, 2014). The site is not zoned for agricultural or forest uses, and there are no Williamson Act contracts that affect the project site (DOC, 2013). No existing agricultural or timber-harvest uses are located on or in the vicinity of the project site. Development of the site would result in no impact to agricultural and forestry resources.

Energy

As described above, the Proposed Project would be subject to Titles 20 and 24 of the California Code of Regulations, which serve to reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The 2030 General Plan includes policies (see Policies 6.1.10 through 6.1.13) to encourage the spread of energy-efficient technology by offering rebates and other incentives to commercial and residential developers, and recruiting businesses that research and promote energy conservation and efficiency.

Policies 6.1.6 through 6.1.8 focus on promoting the use of renewable resources, which would reduce the cumulative impacts associated with use of non-renewable energy sources. In addition, Policies 6.1.5 and 6.1.12 call for the City to work closely with utility providers and industries to promote new energy conservation technologies.

The Master EIR evaluated the potential impacts on energy and concluded that the effects would be less than significant. (See Impacts 6.11-9 and 6.11-10) The Proposed Project would not result in any impacts not identified and evaluated in the Master EIR.

1.0 AESTHETICS, LIGHT, AND GLARE

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the proposal:			
A) Create a source of glare that would cause a public hazard or annoyance?		X	
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?			X
C) Substantially degrade the existing visual character of the site or its surroundings?			X

ENVIRONMENTAL SETTING

The project site is currently occupied by the two-story Clarion Hotel and surrounded by commercial development, which provides a source of light and glare in the project vicinity. Additionally, the site is bounded by 15th, 16th, and H streets, the traffic on which provides a source of light and glare at night from vehicle headlights.

STANDARDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- substantially degrade the existing visual character or quality of the site and its surroundings;
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or
- substantially degrade the existing visual character of the site or its surroundings.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR described the existing visual conditions in the general plan policy area, and the potential changes to those conditions that could result from development consistent with the 2030 General Plan. See Master EIR, Chapter 6.13, Urban Design and Visual Resources.

The Master EIR identified potential impacts of development under the 2030 General Plan to contribute to glare in such a way as to cause a public hazard or annoyance (Impact 6.13-1). Mitigation Measure 6.13-1, set forth below, was identified to reduce the effect to a less-than-significant level.

Light cast onto oncoming traffic or residential uses was identified as a potential impact (Impact 6.13-2). The Master EIR identified Policy LU 6.1.14 (Compatibility with Adjoining Uses) and its

requirement that lighting must be shielded and directed downward, Policy ER 7.1.5 (lighting) and its requirement to minimize obtrusive light that is misdirected, excessive, or unnecessary, and Policy ER 7.1.6 (glare) and its requirement that new development must avoid the creation of incompatible glare through development design features, as reducing the potential effect to a less-than-significant level.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

Master EIR Mitigation Measure 6.13-1: The City shall amend the Zoning Code to prohibit new development from:

- 1) using reflective glass that exceeds 50 percent of any building surface and on the ground three floors;
- 2) using mirrored glass;
- 3) using black glass that exceeds 25 percent of any surface of a building; and,
- 4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building.

The Zoning Code has been replaced by the Planning and Development Code, Title 17 of the City Code. The Planning and Development Code does not include the restrictions identified in Mitigation Measure 6.13-1. The provisions of the mitigation measure have been applied to the project. See below, **Mitigation Measure LG-1**.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B - Would the proposal create a source of glare that would cause a public hazard or annoyance or Create a new source of light that would be cast onto oncoming traffic or residential use?

The Proposed Project would include the demolition of the existing Clarion Hotel and construction of a new, four-story plus basement multi-use building on the northern side of H Street, between 15th and 16th streets. The Proposed Project would be generally consistent with the general plan and zoning designations for the project site, but would require a conditional use permit for the Assisted Living units.

Design of buildings, as indicated in the Master EIR in Mitigation Measure 3.16-1, could result in glare effects on neighboring properties and persons using the site. Because the new building would replace an existing building, the Proposed Project would not introduce significant new sources of light but does include the installation of street lighting adjacent to the project site. Installation of street lighting would be consistent with Section 14 of the City's Design and Procedures Manual to the satisfaction of the Public Works Department and other associated lighting would comply with City Policies LU 6.1.14 and ER 7.1.5. Additionally, because the project site is surrounded by commercial development, lighting installed as a part of the Proposed Project would be consistent with the existing lighting of surrounding development and would not adversely affect day or nighttime views. Therefore, adjacent uses would not be adversely affected by lighting on the project site and impacts from lighting would be **less than significant**.

The building is anticipated to be constructed with stucco, wood, aluminum panel, and brick and could create a source of glare at the project site. The project will be conditioned to comply with City Policy ER 7.1.6 that relates to ensuring glare from new developments does not become a hazard or annoyance. **Mitigation Measure LG-1** below would ensure that impacts to glare as a result of the Proposed Project are **less than significant**.

Question C - Would the proposal substantially degrade the existing visual character of the site or its surroundings?

The Proposed Project is an infill project replacing an existing vacant building. As described above, the building aesthetics and activity spaces will be art-focused and support the objectives of the Cultural and Entertainment District. The corners of the building will feature architectural articulation and the two main corner anchors of the building will feature colorful architectural screens. The Community Art Center will also feature an architectural perforated metal screen and contemporary signage. The building as a whole will feature dynamic horizontal layering of materials, with the heavier materials such as brick and stucco on the lower levels and lighter materials such as wood plank siding and zinc shingles on the upper levels. The entry will be framed by a colorful high-tech bridge and a courtyard-style carport. An architectural rendering is presented as **Figure 6**. The Proposed Project would not substantially degrade the existing visual character of the site or its surroundings and would not result in any impacts not identified and evaluated in the Master EIR. This would be a **less-than-significant impact**.

MITIGATION MEASURES

LG-1 The project applicant shall ensure that buildings do not use reflective glass that exceeds 50 percent of any building surface and on the ground three floors, use mirrored glass, use black glass that exceeds 25 percent of any surface of a building, or use metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building.

FINDINGS

All additional significant environmental effects of the project relating to Aesthetics can be mitigated to a less-than-significant level.

2.0 AIR QUALITY

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the proposal:			
A) Result in construction emissions of NO _x above 85 pounds per day?			X
B) Result in operational emissions of NO _x or ROG above 65 pounds per day?			X
C) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X	
D) Result in PM ₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?		X	
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?		X	
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H) Conflict with the Climate Action Plan?			X

ENVIRONMENTAL SETTING

The Project Site is located in downtown Sacramento, within Sacramento County, which is within the Sacramento Valley Air Basin (SVAB) and the jurisdictional boundaries of the Sacramento Air Quality Management District (SMAQMD).

Ambient concentrations of criteria air pollutants (the most prevalent air pollutants known to be harmful of human health and the environment) are indicators of the quality of ambient air and are influenced by the amount of emissions released by pollutant sources and the atmosphere's ability to transport and dilute such emissions. Criteria air pollutants include ozone, particulate matter (including respirable particulate matter with a diameter of 10 micrometers or less [PM₁₀] and fine particulate with an diameter of 2.5 micrometers or less [PM_{2.5}]), and carbon monoxide (CO). Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. ROG emissions result primarily from incomplete combustion

and the evaporation of chemical solvents and fuels. NO_x are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels. Carbon monoxide is also emitted by automobiles and other vehicles. PM₁₀ and PM_{2.5} consist of particulate matter emitted directly into the air, such as fugitive dust, soot and smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by reaction of gaseous precursors (ARB, 2009).

Natural factors that affect transport and dilution of air pollutants include terrain, wind, atmospheric stability, and the presence of sunlight. Ambient air quality in the SVAB is affected by pollutants emitted from stationary and mobile sources. Stationary sources are divided into point sources and area sources. Point sources consist of one or more emission sources at a facility from an identified location and are usually associated with manufacturing and industrial processing plants. Area sources are widely distributed and consist of many small emission sources. Area source examples include lawnmowers and other landscape maintenance equipment, natural gas fired water and space heaters, and consumer products such as paints, hairspray, deodorant, and similar products with evaporative emissions. Mobile sources emissions are from on- and off- road motor vehicles and including emissions from vehicle tailpipes, evaporative emissions, and fugitive emissions.

The U.S. Environmental Protection Agency (USEPA) established the National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. California has also established its own California Ambient Air Quality Standards (CAAQS) that are at least as stringent as the NAAQS. The SVAB is designated as nonattainment with respect to the NAAQS and CAAQS for ozone, PM₁₀, and PM_{2.5}.

Hazardous Air Pollutants

In addition to the above-described criteria air pollutants, Hazardous Air Pollutants (HAPs) are a group of chemical pollutants which can cause adverse effects to human health and/or the environment. HAPs are a list of over 188 airborne chemicals developed by the USEPA. Sources of HAPs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, cigarette smoke, and motor vehicle exhaust. Cars and trucks release at least 40 different HAPs. The most important, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Health effects of HAPs can include cancer, birth defects, and neurological damage.

Toxic Air Contaminants

The California Health and Safety Code defines Toxic Air Contaminates (TACs) as air pollutants which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A total of 243 substances have been designated TACs under California law; they include the 189 (federal) HAPs adopted in accordance with AB 2728. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. Toxic air contaminant emissions from individual facilities are quantified and prioritized. "High priority" facilities are required to perform a health risk assessment and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings.

Sensitive Receptors

Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality related health problems. Residential areas are considered sensitive to poor air quality, because people usually stay home for extended periods of time increasing the potential exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

Sensitive receptors near the proposed project site include multi-family residences to the south, north, east, and west of the proposed project site; a school and public park located 0.2 miles northeast of the proposed project site; and a state historic park directly adjacent to the proposed project site.

Climate Change and Greenhouse Gases

Global climate change is a change in the average weather of the Earth, which can be measured by wind patterns, storms, precipitation, and temperature. It is exacerbated by greenhouse gases (GHGs), which trap heat in the atmosphere (thus the “greenhouse” effect). GHGs include carbon dioxide, methane, and nitrous oxide, and are emitted by natural processes and human activities. The accumulation of greenhouse gases in the atmosphere regulates the Earth’s temperature, and is natural and desirable, as without it the Earth’s surface would be significantly cooler.

Scientific evidence suggests that emissions from human activities, such as electricity production and vehicle emissions, have elevated the concentration of these gases in the atmosphere, and are increasing the rate and magnitude of climate change to a degree that could present hazardous conditions. Potential adverse effects of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels, changes to ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, city, and virtually every individual on Earth. A project’s GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

In September 2006, then-Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. AB 32 delegated the authority for its implementation to the California Air Resources Board (CARB) and directs CARB to enforce the statewide cap.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts

that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

- construction emissions of NO_x above 85 pounds per day;
- operational emissions of NO_x or ROG above 65 pounds per day;
- violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- PM₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM₁₀ ambient air quality standards (City of Sacramento General Plan, 2009).
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm);
- exposure of sensitive receptors to substantial pollutant concentrations;

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

A project is considered to have a significant effect relating to greenhouse gas emissions if it fails to satisfy the requirements of the City's Climate Action Plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR addressed the potential effects of the 2030 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthful pollutant concentrations. See Master EIR, Chapter 6.1.

Policies in the 2030 General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the 2030 General Plan. For example, Policy ER 6.1.1 calls for the City to work with CARB and SMAQMD to meet state and federal air quality standards; Policy ER 6.1.12 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of TACs as a potential effect. Policies in the 2030 general Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.5, requiring consideration of current guidance provided by the Air Resources Board and SMAQMD; requiring development adjacent to stationary or mobile TAC sources to be designed with consideration of such exposure in design, landscaping and filters; as well as Policies ER 6.11.1 and ER 6.11.15, referred to above.

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2030 General Plan would be a significant and unavoidable cumulative impact. The discussion of greenhouse gas emissions and climate change in the 2030 General Plan Master EIR are incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

Policies identified in the 2030 General Plan include directives relating to sustainable development patterns and practices, and increasing the viability of pedestrian, bicycle and public transit modes. A complete list of policies addressing climate change is included in the Master EIR in Table 8-5, pages 8-50 et seq; the Final Master EIR included additional discussion of greenhouse gas emissions and climate change in response to written comments. See changes to Chapter 8 at Final Master EIR pages 2-19 et seq. See also Letter 2 and response.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impact.

Impact 6.1-11: Implementation of the proposed 2030 General Plan, in conjunction with other development in the SVAB, would generate TAC emissions that could adversely affect sensitive receptors.

General Plan Policy ER 6.1.8 - Development Near TAC Sources: The City shall ensure that new development with sensitive uses located adjacent to toxic air contaminant sources, as identified by CARB, reduces potential health risks. In its review of these projects, the City shall consider current guidance provided by and consult with the CARB and SMAQMD.

ANSWERS TO CHECKLIST QUESTIONS

Question A - Would the proposal result in construction emissions of NO_x above 85 pounds per day?

Construction of the Proposed Project would include demolition of the existing Clarion Hotel and construction of a new 141 unit senior art community including ground level commercial uses. Construction activities could commence as early as fall 2015 and be completed within a 15 month period. Construction would generate short-term, temporary, and intermittent pollutants as a result of activities such as demolition, building construction, asphalt paving, and application of architectural coatings. Criteria air pollutant emissions and TACs would be generated by heavy-duty construction equipment, material delivery and haul trucks, and construction worker vehicles. Ground-disturbance and building demolition activities would generate fugitive particulate matter (PM) emissions. Architectural coating activities would result in ROG emissions during construction.

In accordance with recommended methodologies of the SMAQMD project-related construction emissions were modeled using the California Emissions Estimator Model Version 2013.2.2 (CalEEMod), 2010. Project-specific inputs were used (e.g., total acreage, number of dwelling units, volume of imported material, area of existing structure), as well as defaults contained in CalEEMod. The CalEEMod inputs and outputs are provided in **Attachment 1**.

Table 4 shows emissions generated during construction of the Proposed Project. Based on the modeling conducted, the maximum daily level of NO_x emissions generated by project

construction would be 64 pounds per day. Thus, project-generated short-term construction-related emissions of NO_x would not exceed SMAQMD's mass emissions threshold of 85 pounds per day for construction activity. This impact would be **less than significant**.

TABLE 4
UNMITIGATED CONSTRUCTION EMISSIONS

Year	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	lbs/day					
2015	8.64	64.25	44.76	0.06	9.53	6.54
2016	15.89	37.57	29.44	0.05	2.86	2.34
Thresholds	N/A	85	N/A	N/A	N/A	N/A
Exceed Thresholds	N/A	No	N/A	N/A	N/A	N/A
Source: CalEEMod 2013.2.2, Attachment 1 .						

Question B - Would the proposal result in operational emissions of NO_x or ROG above 65 pounds per day?

SMAQMD has established an operational significance threshold of 65 pounds per day for NO_x or ROG and the City has utilizes the thresholds. The City has determined that if a project generates NO_x or ROG emissions in excess of 65 pounds per day during operation, it would be considered to have a significant impact to regional air quality. Operation of the project would result in emissions of NO_x and ROG associated with area, energy and mobile sources. In accordance with recommended methodologies of the SMAQMD, project-related operational emissions were modeled using the CalEEMod Version 2013.2.2. Project-specific inputs were used (e.g., number of dwelling units, commercial square feet), as well as defaults contained in CalEEMod. The CalEEMod inputs and outputs are provided in **Attachment 1**.

Table 5 shows emissions generated during operation of the Proposed Project. Based on the modeling conducted, the maximum daily level of ROG and NO_x emissions generated by project operation would be 24 and 22 pounds per day, respectively. This is well below the operational emissions threshold of 65 pounds per day. Therefore, this impact would be **less than significant**.

TABLE 5
UNMITIGATED OPERATIONAL EMISSIONS

Sources	ROG	NO _x	CO	SO ₂	PM10	PM2.5
	lbs/day					
Area	1.13	0.15	12.55	0.00	0.07	0.07
Energy	0.08	0.69	0.30	0.00	0.06	0.06
Mobile	22.79	21.09	94.80	0.16	9.96	2.85
Total	24.00	21.94	107.66	0.16	10.08	2.97
Thresholds	65	65	N/A	N/A	N/A	N/A
Exceed Thresholds	No	No	N/A	N/A	N/A	N/A
Source: CalEEMod 2013.2.2, Attachment 1 .						

Question C - Would the proposal violate any air quality standard or contribute substantially to an existing or projected air quality violation?

As described in the response to Question A (above) construction-related emissions of NO_x would not exceed SMAQMD's recommended mass emission thresholds of 85 pounds per day. Therefore, project-related construction emissions of ozone precursors, including NO_x, would not violate or contribute to a violation of the ambient air quality standards for ozone.

As described in the response to Question B (above) operational emissions of ozone precursors (i.e., ROG and NO_x) would not exceed SMAQMD's recommended mass emission thresholds of 65 pounds per day for NO_x or 65 pounds per day of ROG. Therefore, operation of the Proposed Project would not violate or contribute to a violation of the ambient air quality standards for ozone.

As described in the response to Question D (below) the Proposed Project would not result in PM₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) with implementation of **Mitigation Measure AQ-1**, which requires that SMAQMD's Basic Construction Emission Control Practices be implemented during project construction.

As discussed in the response to Question E (below) the Proposed Project would not result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm).

For these reasons, project-generated emissions of criteria air pollutants and precursors, including ozone, ROG, NO_x, PM₁₀, and PM_{2.5} would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. This impact would be **less than significant** with mitigation.

Question D - Would the proposal result in PM₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?

Sacramento County is nonattainment with respect to the State Ambient Air Quality Standards for PM₁₀ or 50 micrograms per cubic meter during a 24-hour period (SMAQMD, 2013). Unlike for ozone, there is no approved regional plan for attaining the PM₁₀ (or PM_{2.5}) standards. PM directly emitted from a project is generally regarded as having regional and localized impacts. Emissions sources and activities that typically generate large concentrations of PM₁₀ include stationary sources like petroleum refineries and industrial sites, idling and operation of diesel vehicles, and earth moving activities (CARB, 2011). The Proposed Project does not include any significant operational sources of PM₁₀ (and PM_{2.5}) emissions; however, emissions of these pollutants would occur during construction, primarily during the site preparation phase.

SMAQMD does not recommend that dispersion modeling be performed to evaluate construction projects if they would not result in an area greater than 15 acres in size being actively disturbed on any given day (SMAQMD, 2014:8-5).

Construction emissions are described as short term or temporary in duration and have the potential to generate substantial levels of PM₁₀. Fugitive-dust emissions are associated primarily with site preparation and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance, and vehicle travel on- and offsite. Exhaust emissions of PM₁₀

are also generated by off-road construction equipment (e.g., graders, dozers, excavators). Because the project description does not include measures that would minimize these sources of PM₁₀ emissions, there is potential for project-related construction activity to result in PM₁₀ concentrations equal to or greater than five percent of the State Ambient Air Quality Standard. This would be a significant impact.

All construction projects within the jurisdiction of the SMAQMD, regardless of the quantity of emissions, must implement pollutant reduction measures (SMAQMD Basic Construction Measures) to reduce project-related emissions during construction (SMAQMD, 2010). Implementation of **Mitigation Measure AQ-1** would fulfill SMAQMD's Basic Construction Mitigation Measures. With the implementation of **Mitigation Measure AQ-1**, which would minimize both fugitive PM₁₀ dust emissions generated by earth-disturbance activities and exhaust emissions of PM₁₀ from off-road construction equipment, this impact would be reduced to **less than significant**.

Question E - Would the proposal result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?

A primary source of mobile-source pollutants of localized concern is CO. Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, speed, and delay. Transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain specific meteorological conditions, CO concentrations near roadways and/or intersections with high volumes of vehicles may reach unhealthy levels with respect to local sensitive receptors, resulting in a CO hotspot. Modeling of CO concentrations is typically recommended for areas located near signalized roadway intersections that are projected to operate at an unacceptable level of service (LOS) (i.e., LOS E or F) during peak traffic hours (Garza, Graney, and Sperling 1997).

Intersections controlled by stop signs do not experience high enough traffic volumes and associated congestion to be the site of violations of the AAQS; therefore, CO modeling is not recommended for unsignalized intersections (Garza, Graney, and Sperling, 1997). Because the intersections controlled by stop signs would accommodate fewer vehicles than signalized intersections, it is reasonable to conclude that congestion at the intersections controlled by stop signs would not result in CO concentrations that exceed the AAQS.

The screening criteria provided in SMAQMD's *Guide to Air Quality Assessment in Sacramento County* provides lead agencies with a conservative indication of whether project-generated vehicle trips would result in the generation of CO emissions that exceed or contribute to an exceedance of the CAAQS for CO (SMAQMD, 2014). The screening criteria have been developed to help lead agencies analyze potential CO impacts and identify when site-specific CO dispersion modeling is not necessary. The project would not require site-specific CO dispersion modeling and therefore, would result in a less-than-significant impact to air quality for CO hotspots if:

- Traffic generated by the project would not result in deterioration of intersection level of service (LOS) to LOS E or F; or
- The project would not contribute additional traffic to an intersection that already operates at LOS of E or F.

The Proposed Project is adjacent to 16th street, a 4 lane arterial road that currently operates at LOS B with a daily volume of 24,100 adjacent to the project site (City of Sacramento, 2014). In the vicinity of the project site, 15th Street is a 3-lane Arterial Low Access Control roadway that currently operates at LOS A with a daily volume of 10,300 between J Street and P Street. The Proposed Project is predicted to add approximately 1,421 daily trips to the roadway network (see Transportation and Circulation section of this IS, Questions A and B). With the exception of roadways providing direct access to the project site, it is anticipated that project related traffic would be widely distributed throughout the downtown grid, and thus would not substantially increase traffic volumes at any one intersection.

The increase in traffic due to the implementation of the Proposed Project would not deteriorate intersection LOS to E or F at any location (see Transportation and Circulation section of this IS, Question B). Therefore, in accordance with the SMAQMD's *Guide to Air Quality Assessment in Sacramento County* the project would not result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm). This impact is **less than significant**.

Question F - Would the proposal result in exposure of sensitive receptors to substantial pollutant concentrations?

As explained above under Questions A and B, construction and operation-related emissions of ROG and NO_x would not exceed SMAQMD's NO_x threshold of 85 pounds per day during construction and 65 pounds per day threshold for ROG and NO_x during operation (refer to **Table 4 and 5**). As discussed in the response to Question D (above) the Proposed Project would not result in PM₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) with implementation of **Mitigation Measure AQ-1**, which requires that SMAQMD's Basic Construction Emission Control Practices be implemented during project construction. As discussed in the response to Question E (above) the Proposed Project would not result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm). For these reasons, construction- and operation-related emissions of criteria air pollutants and precursors would not result in exposure of sensitive receptors to substantial pollutant concentrations. Moreover, as explained in the response to Question G (below), the level of TAC concentrations and related health risk exposure to residents of the Proposed Project from nearby sources of TACs, including area roadways, would not be substantial. As a result, this impact would be **less-than-significant** with mitigation.

Question G - Would the proposal result in TAC exposures that create a cancer risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?

Existing Sensitive Receptors

Construction activities are anticipated to involve the operation of diesel-powered equipment. In 1998, the CARB identified diesel exhaust as a TAC (CARB, 2008). According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments that determine the health risks associated with exposure of residential receptors to TAC emissions should be based on a 70- year exposure period and health risk assessments that address the health risk associated with exposure of children to TAC emissions should be based on a 9-year exposure period (OEHHA, 2003). Although elevated cancer rates can result from exposure periods of less than 70 years, acute exposure (i.e., exposure periods of 2 to 3 years) to diesel exhaust typically are not anticipated to result in an increased health risk because acute exposure typically does not result in exposure concentrations that would represent a health risk. Health

impacts associated with exposure to diesel exhaust from project construction are not anticipated to be significant because construction activities would occur well below the 70-year exposure period used in health risk assessments. Therefore, construction of the project is not anticipated to result in an elevated cancer risk to exposed persons.

Because the Proposed Project would include the demolition of an existing building, construction activities would be subject to SMAQMD Rule 902 (Asbestos). Rule 902 requires specific asbestos emissions abatement, handling, and disposal methods for projects that find asbestos materials within to-be-demolished buildings or structures. According to SMAQMD, compliance with Rule 902 would fulfill all national emissions standards for HAPs (including National Emission Standards for Hazardous Air Pollutants [NESHAP]) along with additional requirements, minimize the release of airborne asbestos emissions, and reduce demolition related asbestos emissions to a less-than-significant level. This is a **less-than-significant** impact.

Proposed Sensitive Receptors within the Project Site

The CARB Land Use Handbook recommends siting sensitive receptors no closer than 1,000 feet from TAC sources (CARB, 2011). Per CARB's Community Health Air Pollution Information System (CHAPIS) database, there are no stationary sources of TACs within 1,000 feet of the project site. The nearest stationary source of TACs to the project site is the Sacramento Cogeneration Authority facility located at 5000 83rd Street, more than 5 miles away. CARB's Land Use Handbook recommends that a site specific health risk assessment (HRA) be performed for projects that would locate residences or other sensitive land uses within 500 feet of a freeway or major roadway (CARB, 2011). The project site is located more than 5,200 feet east of Interstate 80, which is the nearest freeway; however, 16th and G Streets which are adjacent to the project site. These roadways have traffic volumes less than 24,100 vehicles per day (City of Sacramento, 2014). The SMAQMD defines a major roadway as a freeway or urban road with 50,000 vehicles per day (CARB, 2011); therefore, 16th and G Streets are not considered major roadways.

Because the project site is not located within 1,000 feet of existing TAC sources and is not within 500 feet of a freeway or major roadway, in accordance with the City's recommended protocol the level of health risk exposure at the project site would not be substantial (SMAQMD, 2011). Therefore, the Proposed Project would not result in TAC exposures beyond the City's recommended 10 in 1 million threshold for stationary sources or substantially increase the risk of exposure to TACs from mobile sources. Therefore, this impact would be considered **less than significant**.

Question H - Would the proposal conflict with the Climate Action Plan?

The Proposed Project would generate greenhouse gas (GHG) emissions during construction as a result of operating heavy-duty construction equipment, material delivery trucks, and construction worker vehicles.

To directly address the issue of climate change and GHG emissions, the City of Sacramento adopted its climate action plan (CAP) on February 14, 2012. The CAP describes GHG emissions from uses and activities within the City and establishes policies, actions, and implementation measures to reduce existing and future GHG emissions. As part of the CAP development process, a baseline GHG emissions inventory for the year 2005 was created that determined the City of Sacramento generated approximately 4.1 MMT (million metric tons) of carbon dioxide equivalent (CO₂e) in 2005. The CAP also established a GHG emissions

reduction target of 15 percent below 2005 levels by the year 2020 and GHG reduction goals of 38 percent below 2005 levels by the year 2030 and 83 percent below 2005 levels by the year 2050.

The CAP is consistent with elements of a plan for the reduction of GHG emissions, in compliance with Section 15183.5 of the CEQA Guidelines, which provides for tiering and streamlining of GHG emissions analysis for projects consistent with a CAP or other similar programmatic plan for the reduction of GHG emissions. The City has prepared a Climate Action Plan Consistency Checklist for use in determining project consistency with the CAP pursuant to Section 15183.5.

The Proposed Project has been reviewed against the City's CAP Consistency Review Checklist (see **Attachment 2** of this IS for the completed CAP Checklist). The Proposed Project would be consistent with all applicable performance standards specified in the CAP Consistency Review Checklist, including:

- Substantial consistency with the 2030 General Plan;
- Reduction of vehicle miles traveled per capita by 35 percent compared to the statewide average;
- Incorporation of pedestrian facilities and connections to transit consistent with the Pedestrian Master Plan;
- Includes Photovoltaic renewable energy system for at least 15% of the project's energy demands; and
- Compliance with minimum CALGreen Tier 1 Water Efficiency Standards.

As discussed above, the City of Sacramento adopted a communitywide CAP that contains a comprehensive set of strategies, measures and implementing actions to achieve the 2020 GHG reduction target. The CAP is consistent with elements of a plan for the reduction of GHG emissions, in compliance with Section 15183.5 of the CEQA Guidelines, which provides for tiering and streamlining of GHG emissions analysis for projects consistent with a CAP or other similar programmatic plan for the reduction of GHG emissions. Moreover, no features of the Proposed Project are inconsistent with the strategies and measures in the CAP that plan for future climate change-related risks, including increases in average temperature, diminished water supply, increased energy demand, and damage to infrastructure. Because the Proposed Project would be consistent with the CAP, this impact would be considered **less than significant**

MITIGATION MEASURES

AQ-1 The applicant shall require its construction contractors to implement all of SMAQMD's Basic Construction Emission Control Practices, as follows, to minimize construction-related emissions of PM₁₀ (and PM_{2.5}).

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 3 minutes, less than the time required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

FINDINGS

All additional significant environmental effects of the project relating to Air Quality can be mitigated to a less-than-significant level.

3.0 BIOLOGICAL RESOURCES

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the proposal:			
A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?			X
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?		X	
D) Violate the City's Heritage Tree Ordinance (12.64.040)?			X

ENVIRONMENTAL SETTING

The project site is approximately 1.18 acres located on an existing developed site in an urban setting approximately 1.3 miles east of the Sacramento River and approximately 1.4 miles south of the American River. The Sacramento River and American River corridors provide sensitive habitats for special-status species; however, the Proposed Project site is separated from these rivers by dense urban development. The site is currently occupied by the vacant 132-unit Clarion Hotel which became non-operational in December 2012. As the site was formerly used as a hotel, it is fully developed and primarily consists of the hotel building and asphalt.

SPECIAL-STATUS SPECIES

A record search of known special-status species occurrences within five miles of the project site was performed using the California Natural Diversity Database (CNDDDB), which is maintained by the California Department of Fish and Wildlife (CDFW). This database provides known information about species and habitats that are of concern to both state and federal laws (see **Attachment 3**). After reviewing nearby occurrences from the CNDDDB, AES staff performed a field assessment of the project site on September 25, 2013.

The CNDDDB search yielded occurrences for a total of 25 special-status species within a 5-mile radius of the project site; including, two plants, ten birds, five fish, five invertebrates, two mammals, and one reptile. Special-status plants include Sanford's arrowhead (*Sagittaria sanfordii*) and woolly rose-mallow (*Hibiscus lasiocarpus var. occidentalis*). Special-status birds include bank swallow (*Riparia riparia*), burrowing owl (*Athene cunicularia*), Cooper's hawk (*Accipiter cooperii*), great blue heron (*Ardea herodias*), least Bell's vireo (*Vireo bellii pusillus*), purple martin (*Progne subis*), song sparrow ("Modesto" population; *Melospiza melodia*), Swainson's hawk (*Buteo swainsonii*), tricoloured blackbird (*Agelaius tricolor*), and white-tailed

kite (*Elanus leucurus*). Special-status fish include Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), longfin smelt (*Spirinchus thaleichthys*), Sacramento splittail (*Pogonichthys macrolepidotus*), and Central Valley steelhead (*Oncorhynchus mykiss irideus*). Special-status invertebrates include California linderiella (*Linderiella occidentalis*), Sacramento Valley tiger beetle (*Cicindela hirticollis abrupta*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), vernal pool fairy shrimp (*Branchinecta lynchi*), and vernal pool tadpole shrimp (*Lepidurus packardii*). Special-status mammals include the American badger (*Taxidea taxus*) and the hoary bat (*Lasiurus cinereus*). Special-status reptiles include the giant garter snake (*Thamnophis gigas*).

The nearest records for special-status species to the project site are for Cooper's hawk, song sparrow, and Swainson's hawk. The project site is located within the occurrence for the song sparrow. The Cooper's hawk and Swainson's hawk occurrences are located approximately 0.3 miles southeast and approximately 0.7 miles southwest of the proposed project site, respectively. The song sparrow occurrence is dated June 6, 1900 and is presumed extant. The Cooper's hawk occurrence is dated May 31, 2008 and is presumed extant. The Swainson's hawk occurrence is dated April 23, 2012 and is presumed extant.

Current and surrounding land uses reduce the potential for special status species to occur in the vicinity of the project site. The project site is almost entirely paved and developed with a non-operational hotel, and ornamental trees along the perimeter of the lot and surrounding the existing parking lot in the western portion of the site. The project site does not provide suitable habitat for the majority of the special-status species identified within the CNDDDB 5-mile radius of the project site.

The nearest bank swallow occurrence is located approximately 2.4 miles east of the project site. Bank swallows typically inhabit colonies on sandy banks of rivers, lakes and seashores (National Audubon Society, 2014). No suitable habitat for the bank swallow exists on the project site or on surrounding properties.

The nearest burrowing owl occurrence is located approximately 2.8 miles east of the project site. Suitable habitat for burrowing owls typically consists of open spaces such as grasslands, treeless plains, savannas, and deserts (Haug et al. 1993). No suitable habitat for the burrowing owl exists on the project site or on surrounding properties.

The nearest great blue heron occurrence is located approximately 1.5 miles north of the project site, within the American River riparian corridor. The great blue heron inhabits a wide range of habitat types including salt marsh and mangrove swamps, freshwater marshes and swamps, lagoons, estuaries, riverbanks, lake edges, flooded fields, and ditches (Kushlan and Hancock 2005). Suitable habitat for great blue heron does not exist on the project site or on surrounding properties.

The nearest least Bell's vireo occurrence is located approximately 1.8 miles west of the project site, on the west side of Highway 99. Suitable breeding habitat for the least Bell's vireo typically consists of dense, low, shrubby vegetation typical of early successional habitat (Kus et al. 2010). Suitable breeding habitat for the least Bell's vireo does not exist on the project site or on surrounding properties.

The nearest purple martin occurrence is located approximately 1.2 miles south of the project site, on a bridge on a railroad corridor under Highway 50. Purple martins typically form mud

nests in open spaces (Purple Martin Conservation Association, 2012). No mud nests have been observed on the existing buildings on the project site.

The nearest tricoloured blackbird occurrence is located approximately 4 miles west of the project site. Suitable breeding habitat for the tricoloured blackbird typically consists of lowland freshwater marshes as well as thickets of non-native Himalayan blackberry (*Rubus discolor*) in upland regions (Cook and Toft, 2005). No suitable habitat for the tricoloured blackbird exists on the project site.

The nearest Sacramento Valley tiger beetle occurrence is located approximately 1.8 miles west of the project site. Sacramento Valley tiger beetles typically occur in point sand bars that are primarily unvegetated (Knisley and Fenster 2005). No suitable habitat for the Sacramento Valley tiger beetle exists on the project site or on surrounding properties.

During the site reconnaissance survey, the project site was examined for special-status plant species, including elderberry shrubs (*Sambucus nigra caerulea*), the host plant for elderberry longhorn beetle. The site is nearly entirely paved and does not support any special-status plants, including elderberry shrubs.

There are no surface water resources or wetlands located on the project site. There is no suitable habitat for fish (including Central Valley spring-run Chinook salmon, Sacramento River winter-run Chinook salmon, longfin smelt, Sacramento splittail, and Central Valley steelhead) located on the project site. Additionally, there is no suitable habitat for wetland species (including California linderiella, vernal pool fairy shrimp, and vernal pool tadpole shrimp) located on the project site.

The nearest American badger occurrence is located approximately 4.5 miles southeast of the project site, on the south side of Highway 50. Suitable habitat for American badgers generally consists of open spaces such as grassland, which support prey populations such as burrowing rodents (Stephenson and Calcarone 1999; Williams 1986). There is no suitable habitat for the American badger on the project site or on surrounding properties.

The nearest hoary bat occurrence is located approximately 1.6 miles to the west of the project site on the west side of Highway 99. Hoary bats typically roost in dense trees, dense vegetation, tree cavities, and rock crevices (Shump and Shump 1982). Given the urban setting and developed condition of the project site, suitable habitat for hoary bats is not present on the project site or on surrounding properties.

The nearest giant garter snake occurrence is located approximately 4 miles north of the project site. Suitable habitat for the giant garter snake typically consists of ponds and small lakes, agricultural wetlands, irrigation and drainage canals, marshes, sloughs, and slow-moving streams (Stebbins 2003). Suitable habitat for the giant garter snake is not present on the project site or on surrounding properties.

MIGRATORY BIRD TREATY ACT (MBTA)

The Migratory Bird Treaty Act (MBTA) makes it “unlawful to take any migratory bird listed in 50 CFR Part 10, including nests, eggs, or products.” This regulation is pertinent to any shrub or tree removal required for a Proposed Project, or project-related disturbance that could affect nesting migratory birds. The MBTA could require that elements of the Proposed Project (particularly vegetation removal) to be reduced or eliminated during critical phases of the

nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered “taking.”

TREES

The City of Sacramento adopted the Tree Preservation Ordinance (Ordinance) to protect trees as an important resource for the community. The Ordinance (per Chapter 12.64 of the Sacramento City Code) states that heritage trees are protected in order to “promote scenic beauty, enhance property values, reduce soil erosion, improve air quality, abate noise and provide shade to reduce energy consumption.” Heritage trees are defined as:

1. Any tree of any species with a trunk circumference of one hundred (100) inches or more, which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.
2. Any native oak, buckeye, or sycamore, having a circumference of thirty-six (36) inches or greater when a single trunk, or a cumulative circumference of thirty-six (36) inches or greater when a multi-trunk, which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.
3. Any tree thirty-six (36) inches in circumference or greater in a riparian zone. The riparian zone is measured from the centerline of the water course to thirty (30) feet beyond the high water line.
4. Any tree, grove of trees or woodland trees designated by resolution of the city council to be of special historical or environmental value or of significant community benefit. (Sac. City Code Section 12.64.020.)

A tree inventory is provided in the Arborist’s Report included in **Attachment 4**. Based on the definition above, none of the trees along the perimeter of the project site are heritage trees. Additionally, no Dutch Elm disease concerns were noted in the arborist’s report, so there are no concerns regarding Chapter 12.60 of the city code.

The street tree ordinance (12.56.060) states that “No person shall remove, trim, prune, cut or otherwise perform any maintenance on any city street tree without first obtaining a permit from the director pursuant to Section 12.56.070.” Any non-heritage street trees planned for removal will require a permit from the City. As described within the Arborist Report, there are 21 trees along the perimeter of the site along city streets.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the Proposed Project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, “special-status” has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Wildlife Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Wildlife Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to CDFW;
- Plants or animals that meet the definition of rare or endangered under CEQA.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.3 of the Master EIR evaluated the effects of the 2030 General Plan on biological resources within the general plan policy area. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2030 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2030 General Plan. Policy 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy 2.1.11 requires the City to coordinate its actions with those of CDFW, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR concluded that the cumulative effects of development that could occur under the 2030 General Plan would be significant and unavoidable as they related to effects on special-status plant species (Impact 6.3-2), reduction of habitat for special-status invertebrates (Impact 6.3-3), loss of habitat for special-status birds (Impact 6.3-4), loss of habitat for special-status amphibians and reptiles (Impact 6.3-5), loss of habitat for special-status mammals (Impact 6.5-6), special-status fish (Impact 6.3-7) and, in general, loss of riparian habitat, wetlands and sensitive natural communities such as elderberry savannah (Impacts 6.3-8 through 10).

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.3-2: Implementation of the 2030 General Plan could adversely affect special-status plant species due to the substantial degradation of the quality of the environment or reduction of population or habitat below self-sustaining levels.

and

Impact 6.3-3: Implementation of the 2030 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status invertebrates.

and

Impact 6.3-4: Implementation of the 2030 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels with special-status birds, through the loss of both nesting and foraging habitat.

and

Impact 6.3-5: Implementation of the 2030 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status amphibians and reptiles.

and

Impact 6.3-6: Implementation of the 2030 General Plan could result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status mammals.

and

Impact 6.3-10: Implementation of the 2030 General Plan could result in the loss of CDFW-defined sensitive natural communities such as elderberry savanna, northern claypan vernal pools, and northern hardpan vernal pools.

and

Impact 6.3-13: Implementation of the City's 2030 General Plan and regional buildout assumed in the Sacramento Valley could result in a regional loss of special-status plant or wildlife species or their habitat.

Mitigation Measure 6.3-2 - General Plan Policy ER 2.1.10 - Habitat Assessments: The City shall consider the potential impact on sensitive plants and for each project requiring discretionary approval and shall require preconstruction surveys and/or habitat assessments for sensitive plant and wildlife species. If the preconstruction survey and/or habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level or industry recognized (if no protocol has been established) surveys shall be conducted; or (2) presence of the species shall be assumed to occur in suitable habitat on the project site. Survey Reports shall be prepared and submitted to the City and CDFW or USFWS (depending on the species) for further consultation and development of avoidance and/or mitigation measures consistent with state and federal law.

Impact 6.3-8: Implementation of the 2030 General Plan could result in the loss or modification of riparian habitat, resulting in a substantial adverse effect.

Mitigation Measure 6.3-8 – General Plan Policy ER 2.1.5 - Riparian Habitat Integrity: The City shall preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources by preserving native plants and, to the extent feasible, removing invasive, non-native plants. If not feasible, adverse impacts on riparian habitat shall be mitigated by the preservation and/or restoration of this habitat at a 1:1 ratio, in perpetuity.

Impact 6.3-9: Implementation of the 2030 General Plan could result in a substantial adverse effect on state or federally protected wetlands and/or waters of the United States through direct removal, filling, or hydrological interruption.

Mitigation Measure 6.3-9 – General Plan Policy ER 2.1.6 – Wetland Protection: The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetland, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City may require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no-net-loss of value and/or function.

Impact 6.3-14: Implementation of the 2030 General Plan and regional buildout assumed in the Sacramento Valley could contribute to the cumulative loss of sensitive natural communities including wetlands and riparian habitat in the region.

Implement Mitigation Measures 6.3-8 and 6.3-9.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A - Would the proposal create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?

As described in detail in the Hazards section of this IS, site preparation including demolition, excavation, grading and trenching may disturb contaminated soil that may contain hazardous substances that would pose a hazard to plant or animal populations in the area. The project site previously contained an underground storage tank and, because of its age, it is likely that the Clarion Hotel includes asbestos-containing materials (ACMs) and lead-based paint. With the incorporation of HM-1 and HM-2 the potential for exposing plant or animal populations in the area to hazardous materials would be reduced to a less-than-significant level.

The proposed mixed-use development would not create a health hazard or create hazardous materials that could affect neighboring properties or surface areas. Disposal of solid waste or other materials from the site would comply with the City requirements and be directed to the City's ongoing solid waste program and directed to the appropriate disposal facility. Thus, there would be no hazard to plant or animal communities in the project area. This is considered a **less-than-significant** impact

Questions B and C - Would the proposal result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species or Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?

As described above, the project site is completely developed and does not have any wetland, riparian, aquatic, or other sensitive habitats that would be affected by the Proposed Project. Similarly, the project site does not contain any suitable habitat for any special status species that have the potential to occur in the area. Therefore, construction and operation of the Proposed Project would not have an impact on any threatened or endangered species of plant or animal.

The Proposed Project would result in the removal of the trees within the existing interior courtyards of the Clarion Hotel. None of the city street trees along the perimeter of the project site are proposed to be removed. Tree removal along with ground disturbances associated with demolition and construction of the project site could result in direct destruction of bird nests protected under the Migratory Bird Treaty Act and CDFW 3503.5 code. Project construction noise could also result in disturbance of raptors and migratory birds causing nest abandonment by the adults and mortality of chicks and eggs. Thus, negatively affect breeding or reproduction of species on or adjacent to the project site. The loss of some nests of common migratory bird species would not be considered a substantial impact, because it would not result in a substantial effect on their populations locally or regionally. However, the destruction of any active migratory bird nest is a violation of the Migratory Bird Treaty Act and would be considered a significant impact (USFWS, 2003). If the trees were utilized for nesting by raptors at the time of removal, adults or young could be killed. This impact would be in conflict with CDFW 3503.5 code. The loss of an active raptor nest or take of individuals from demolition or construction would, therefore, be a significant impact. Implementation of **Mitigation Measure BIO-1** would reduce these impacts to both migratory bird and raptors to a **less-than-significant** level.

Questions D - Would the proposal violate the City's Heritage Tree Ordinance (12.64.040)?

As described above, none of the trees along the perimeter of the project site are heritage trees as defined under the Sacramento City Code (Section 12.64.020); therefore, implementation of the Proposed Project would not result in the removal of, or damage to, heritage trees. Street tree removal is anticipated according to the arborist report for the Proposed Project, any removal or maintenance of street trees would require a permit from the City per the City Street Tree Ordinance (Section 12.56.060). The City prohibits removal, trimming, pruning, cutting, or otherwise performing any maintenance on any city tree without first obtaining a permit from the Director of the City Department of Public Works. Therefore, removal of onsite trees is subject to City Code and would result in a **less-than-significant** impact.

MITIGATION MEASURES

BIO-1 The following mitigation measures will be implemented to avoid or minimize impacts to active nests of migratory birds and other birds of prey:

- If construction and vegetation/tree removal activities are conducted during breeding season for special status species or other non special status birds and raptors (generally between March 1 and September 1), a qualified biologist shall conduct a preconstruction survey within 14 days prior to commencement of any construction activities to determine if active nests are present. A report shall be prepared and

submitted to the City following the preconstruction survey to document the results. If surveys show that there is no evidence of nests, then no additional mitigation will be required provided construction commences within 14 days prior to the preconstruction survey.

- If any active nests are located within the vicinity of the project site, a no-disturbance buffer zone shall be established around the nests to avoid disturbance or destruction of the nest. The distance around the no-disturbance buffer will be determined by the biologist in coordination with CDFW and will depend on the level of noise or construction activity, the level of ambient noise in the vicinity of the nest, and line-of-sight between the nest and disturbance. The biologist should delimit the buffer zone with construction tape or pin flags. The no-disturbance buffer will remain in place until after the nesting season (March 1 through September 1) or until the biologist determines that the young have fledged. A report shall be prepared and submitted to the County and CDFW following the fledging of the nestlings to document the results.

FINDINGS

All additional significant environmental effects of the project relating to Biological Resources can be mitigated to a less-than-significant level.

4.0 CULTURAL RESOURCES

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the project: A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?		X	

ENVIRONMENTAL SETTING

As described above, the Clarion Hotel was constructed in phases with the first building (which included 50 rooms, a manager’s apartment, a small restaurant, and a bar) completed in 1958. A second 66-room building that included meeting rooms, kitchen, and service facilities, was added to the first building in 1963. The Clarion Hotel was evaluated for historic significance by an architectural historian (AECOM, 2013; **Attachment 5**). After careful review and thorough evaluation, it was determined that the Clarion Hotel should not be considered a historical resource under CEQA Guidelines §15064.5 as it is not eligible for listing in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or for local listing in the City of Sacramento. PAR Environmental Services, Inc. (PAR) completed an independent peer review of the 2013 historical significance evaluation and concurred with AECOM’s findings.

The Governor’s Mansion State Historic Park is located south of H Street, approximately 100 feet from the project site. The Victorian era residence was constructed in 1877 for Albert and Clemenza Gallatin, and later purchased by the State of California as the home for sitting state governors. The house, with associated structures and landscaped grounds, is listed in the NRHP, the CRHR, and listed as California Historic Landmark Number 823. To the immediate west of the Governor’s Mansion State Historic Park is a building with the address of 805 15th Street that was constructed in 1948 (Daly & Associates, 2013; **Attachment 6**).

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, cultural resource impacts may be considered significant if the Proposed Project would result in one or more of the following:

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5 or
- Directly or indirectly destroy a unique paleontological resource.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of development under the 2030 General Plan on prehistoric and historic resources. See Chapter 6.4 of the 2030 General Plan. The Master EIR

identified significant and unavoidable effects on historic resources and archaeological resources.

General plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2 and HCR 2.1.15), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10 and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.13). Demolition of historic resources is deemed a last resort. (Policy HCR 1.1.14)

The Proposed Project will comply with the General Plan policies outlined above.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A - Would the proposal cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?

Historical Resources

As described above, the Clarion Hotel should not be considered a historical resource under CEQA Guidelines §15064.5 as it is not eligible for listing in NRHP, CRHR, or for local listing in the City of Sacramento; therefore, the demolition of the Clarion Hotel would not be considered an impact to historical resources.

The 2030 General Plan Environmental Constraint (EC) Policy 3.1.7 requires construction projects be evaluated to determine if nearby historic properties will be exposed to ground-borne vibration peak-particle velocities (ppv) greater than 0.25 inches per second. Structural damage may occur to fragile historic structures when vibration-induced activities such as pile-driving, blasting, and/or earthmoving, are used in close proximity to built-environment resources. As described in the Geology and Soils section of this IS, the Proposed Project would use structure foundation consisting of spread footings supported on drill displacement columns (DDCs). DDCs are ideal for sensitive project sites such as those near critical structures that require low noise and no vibration construction methods such as unreinforced masonry walls, occupied offices, and sensitive soil. As described in detail in the Historic Resource Review (Daly & Associates, 2013) included as **Attachment 6**, a Construction Vibration Analysis (Bollard Acoustical Consultants, 2013) was done to quantify baseline vibration levels that could occur at the project site during construction of the new facility to determine if those levels would exceed the acceptable vibration exposure levels as defined by City Policy EC 3.1.7. Since construction of the Proposed Project would not include pile-driving activities, Bollard Acoustical Consultants, Inc. determined that ground vibration levels at the Governor's Mansion would be approximately 0.01 inches/second ppv. Therefore, the ppv for the Proposed Project is expected to measure well below the vibration thresholds established for fragile buildings.

While the details of the design of the proposed hotel will fall under the purview of the Central Core Design Guidelines, guidelines for CEQA require that a project be evaluated for its potential to cause a substantial adverse change in the significance of a historical resource, such as the Governor's Mansion property. As concluded within the Historic Resource Review (**Attachment 6**), the Proposed Project and related construction activities do not have the capacity to physically alter by any means, either directly or indirectly, the building, structures, and landscape located within the Governor's Mansion State Historic Park. The Proposed Project will

not alter in any manner those physical characteristics of the historic property that are used to convey its historic significance as all project activities will take place well outside the boundary of the historic property. Therefore, no project-specific environmental effects relating to historical resources would occur.

Archaeological Resources

The project site is not located in an archaeologically sensitive area as shown in Figure 6.4-1 of the 2030 General Plan Master EIR. Additionally, given the extent of previous disturbance that has occurred on the project site for the construction of the Clarion Hotel, the potential for impacts on significant intact archaeological resources is low, and a construction monitoring program is not warranted. However, this does not preclude the possibility that significant subsurface cultural resources could be discovered during project-related grading, excavation, and other earth-moving activities during construction. Further, California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. As specified in Sections 7050.5 and 7052 of the California Health and Safety Code and Section 5097 of the Public Resources Code, procedures to protect and respectfully treat these resources must be implemented. Implementation of **Mitigation Measures CR-1** through **CR-3** described below would reduce the impacts to a **less-than-significant** level.

Question B - Would the proposal directly or indirectly destroy a unique paleontological resource?

As discussed in Section 6.5, Geology, of the General Plan Master EIR, the City of Sacramento is not considered sensitive or paleontological resources and the likelihood for finding something paleontologically significant would be very low. General Plan Policy HCR 2.1.15 requires compliance with protocols that protect or mitigate impacts to archeological, historic, and cultural resources, including prehistoric resources. The City also interprets this policy to address paleontological resources (General Plan Master EIR, page 6.5-25).

While the project site is not considered sensitive for paleontological resources and the likelihood of encountering paleontological resources is very low, project-related earth-disturbing activities could affect the integrity of a paleontological site, thereby causing a substantial change in the significance of the resource. Therefore the project could result in potentially significant impacts on paleontological resources. Implementation of **Mitigation Measure CR-4** described below would reduce the impacts to **less than significant**.

MITIGATION MEASURES

CR-1 In the event that any prehistoric subsurface archeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, animal bone, obsidian and/or mortars are discovered during construction-related earth-moving activities, all work within 50 feet of the resources shall be halted, and the City shall consult with a qualified archeologist to assess the significance of the find. Archeological test excavations shall be conducted by a qualified archeologist to aid in determining the nature and integrity of the find. If the find is determined to be significant by the qualified archeologist, representatives of the City and the qualified archeologist shall coordinate to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis and professional museum curation. In addition, a report shall be prepared by the qualified archeologist according to current professional standards.

- CR-2** If a Native American site is discovered, the evaluation process shall include consultation with the appropriate Native American representatives. If Native American archeological, ethnographic, or spiritual resources are involved, all identification and treatment shall be conducted by qualified archeologists, who are certified by the Society of Professional Archeologists (SOPA) and/or meet the federal standards as stated in the Code of Federal Regulations (36 CFR 61), and Native American representatives, who are approved by the local Native American community as scholars of the cultural traditions. In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. If historic archeological sites are involved, all identified treatment is to be carried out by qualified historical archeologists, who shall meet either Register of Professional Archeologists (RPA), or 36 CFR 61 requirements.
- CR-3** If a human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find, and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, who shall notify the person most likely believed to be a descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have taken place.
- CR-4** Should paleontological resources be identified at any project construction sites during any phase of construction, the construction manager shall cease operation at the site of the discovery and immediately notify the City of Sacramento Community Development Department. The project applicant shall retain a qualified paleontologist to provide an evaluation of the find and to prescribe mitigation measures to reduce impacts to a less-than significant level. In considering any suggested mitigation proposed by the consulting paleontologist, the Community Development Department shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.

FINDINGS

All additional significant environmental effects of the project relating to Cultural Resources can be mitigated to a less-than-significant level.

5.0 GEOLOGY AND SOILS

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
A) Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?			X

ENVIRONMENTAL SETTING

Surface faulting and ground rupture generally occurs along existing fault lines. As discussed in Section 6.5, Geology, of the General Plan Master EIR, there are no known faults within the City, and the nearest fault, the Foothill Fault System, is located approximately 23 miles northeast of the project site (City of Sacramento, 2009a). Although there is very little risk of fault rupture at the project site, it would experience ground shaking during a seismic event.

To estimate the probability of future earthquake events, the U.S. Geological Survey (USGS) considers potential sources of an event on the fault systems in the area using the 2008 USGS National Seismic Hazard Mapping Project model. Based on a combined probability of the fault systems and background earthquakes of the region, there is a 40 percent chance of a magnitude 5.0 or larger earthquake occurring at the project site within the next 50 years (USGS, 2010). Although this is a relatively low seismic ground-shaking hazard for California areas, the Proposed Project would be required to comply with the California Building Code (CBC – California Code of Regulations (CCR), Title 24, Part 2), which provides minimum design standards to protect new development from seismic hazard.

As described in the geotechnical report included as **Attachment 7**, the project site contains soft saturated silts and clays with varying amounts of sands susceptible to the high probability of experiencing liquefaction-induced settlement from seismic ground motions. The geotechnical report satisfies the requirements of General Plan Policy 1.1.2, which requires a site-specific geotechnical investigation before construction of a proposed project; the geotechnical investigation should identify any potential soil hazards, such as liquefaction-prone or expansive soils, and contain recommendations for foundation type and design criteria to reduce the effects of these soils.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the general plan policy area. Implementation of identified policies in the 2030 General Plan reduced all effects to a less-than-significant level. Policies EC 1.1.1

through 1.1.3 require regular review of the City's seismic and geologic safety standards, geotechnical investigations for project sites and retrofit of critical facilities such as hospitals and schools.

The Proposed Project will comply with the General Plan policies outlined above.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A - Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?

As discussed above (Environmental Setting), the project would not be subject to fault rupture. However, the 2030 General Plan indicates that ground shaking would occur periodically in Sacramento as a result of distant earthquakes. The State of California provides minimum standards for building design through the California Building Standards Code (CBSC) (Title 24 of the California Code of Regulations). The CBSC is based on more the federal Uniform Building Code (UBC) but is more detailed and stringent than the federal UBC. Specific minimum seismic safety requirements are set forth in Chapter 23 of the CBSC. The state earth protection law (California Health and Safety Code Section 191000 et seq.) requires that buildings be designed to resist stresses produced by lateral forces caused by earthquakes. Earthquake-resistant design and materials are required to meet or exceed the current seismic engineering standards of the CBSC Seismic Risk Zone 3 improvements. The Proposed Project would be required to comply with CBSC requirements and the City's 2030 General Plan and Master EIR, which requires conformance with Title 24 of the California Code of Regulations.

The geotechnical investigation for the Proposed Project (**Attachment 7**) will be reviewed by the City for compliance with existing building codes and ordinances. **Attachment 7** contains detailed design and construction criteria to address potential settlement from liquefaction and the settlement associated with the site's upper, soft silts and clays. The Proposed Project would use structure foundation consisting of spread footings supported on drill displacement columns (DDCs). As described in Section 9.3.2 of **Attachment 7**, DDC ground improvement mitigates liquefaction and settlement of heavy foundations and slabs. DDC are ideal for sensitive project sites such as those near critical structures that require low noise and no vibration construction methods such as unreinforced masonry walls, occupied offices, and sensitive soil. Implementation of the recommended site preparation activities would be enforced through inspection by the City, which would reduce the risk of geologic or soil hazards to less-than-significant levels.

The City has adopted standard measures to control erosion and sediment during construction and all projects in the City are required to comply with the City's Standard Construction Specifications for Erosion and Sediment Control. The Proposed Project would comply with the City's standards set forth in the "Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control." The project would also comply with the City's grading ordinance (Chapter 15.88 of Sacramento City Code) which specifies construction standards to minimize erosion and runoff.

Because the Proposed Project would be required to comply with federal, state, and local construction standards, it would not expose people or structures to the risk of loss, injury, or death. In addition, these standards along with recommendations provided in the geotechnical report (**Attachment 7**) require the project applicant to identify and protect against potential hazards from groundshaking, liquefaction, unstable soil conditions, soil erosion, and/or subsidence problems on the project site. Therefore, a **less-than-significant** seismic impact would occur.

MITIGATION MEASURES

None Required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Geology and Soils.

6.0 HAZARDS

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the project:			
A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?		X	
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?		X	
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

ENVIRONMENTAL SETTING

The Clarion Hotel (formerly known as the Mansion Inn) was constructed in 1958. Because of its age, it is likely that the current building includes asbestos-containing materials (ACMs) and lead-based paint. According to the 1957 Sacramento City Directory, a gas station occupied the southeast corner of the project site.

According to a records search by Environmental Data Resources (EDR), Inc., the Clarion Hotel site is listed on the Sacramento County Master List as having oil changed by an outside company, California HazNet (a database of hazardous materials waste manifests) for 2003 oil-containing waste and 2006 asbestos-containing waste, and the EDR Historical Auto Station List from approximately 1952 to 1966 (**Attachment 8**).

REGULATORY SETTING

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the SMAQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

SMAQMD Rule 902 and Commercial Structures

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or

- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM.

Asbestos Surveys

To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the SMAQMD.

Removal Practices, Removal Plans/Notification, and Disposal

If the survey shows that there are asbestos-containing materials present, the SMAQMD recommends leaving it in place.

If it is necessary to disturb the asbestos as part of a renovation, remodel, repair or demolition, Cal Occupational Safety and Health Administration (OSHA) and the Contractors State License Board require a licensed asbestos abatement contractor be used to remove the asbestos-containing material.

There are specific disposal requirements in Rule 902 for friable asbestos-containing material, including disposal at a licensed landfill. If the material is non-friable asbestos, any landfill willing to accept asbestos-containing material may be used to dispose of the material.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if the Proposed Project would:

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 6.6. Implementation of the General Plan may result in

the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the General Plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2030 general Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A - Would the proposal expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?

As described above (Environmental and Regulatory Setting), according to the 1957 Sacramento City Directory, a gas station occupied the southeast corner of the project site. Although the underground storage tank (UST) associated with the gas station was likely removed prior to the construction of the Clarion Hotel, there is no record of its removal. Therefore, it is assumed that the potential for people to be exposed to contaminated soil during project construction would be potentially significant. Implementation of **Mitigation Measures HM-1** and **HM-2** would reduce this impact to a **less-than-significant** level.

Question B - Would the proposal expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?

Unmitigated demolition or renovation of structures, such as the Clarion Hotel, containing ACMs and lead-based paint could create asbestos dust, lead paint chips, and lead dust, which pose inhalation hazards for both construction workers and the surrounding public. In addition, collection and disposal of ACMs and lead paint debris by untrained personnel could cause asbestos and lead paint dust emissions to be transported offsite, resulting in the release of hazardous material into the environment. Implementation of **Mitigation Measure HM-3** below would reduce impacts associated with exposure to ACMs and lead-based paint to a less-than-significant level by ensuring ACMs and lead-based paint are properly removed from onsite buildings and disposed of in accordance with federal, State, and local regulations. Therefore, this impact would be **less than significant**.

Question C - Would the proposal Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?

Construction of the Proposed Project would not include dewatering activities. The Clarion Hotel currently includes a basement that would be minimally expanded as a part of the Proposed Project. Furthermore, as described above, the groundwater monitoring well located on the Project Site does not indicate the presence of contaminated groundwater. Therefore, this impact would be **less than significant**.

MITIGATION MEASURES

HM-1: Prior to commencement of construction on the project site, the City shall ensure that a geophysical survey is performed on the southeast corner of the site, in the location of the historic service station. The geophysical survey shall include a magnetometer survey to check for the presence of UST. If a UST is identified during the geophysical survey,

prior to construction the City shall ensure that the UST is removed pursuant to California Health and Safety Code, California Code of Regulations, and Sacramento County Code requirements.

HM-2: If contaminated soil or suspected contamination is encountered during site development, work should be halted in the area, and the type and extent of the contamination shall be determined. A qualified professional, in consultation with appropriate regulatory agencies, should then develop an appropriate method to remediate the contamination. If necessary, the developer should implement a remediation plan in conjunction with continued construction.

HM-3: Prior to demolition activities on the project site, the City shall ensure that ACMs and lead-based paint are properly removed by a Cal/OSHA-certified Asbestos Consultant and Lead Based Paint Inspector/Assessor in accordance with California Code of Regulations 17 Sections 36000 and 36100 (lead-based paint), Section 39658(b)(1) of the California Health and Safety Code (asbestos), and SMAQMD Rule 902 (asbestos abatement). Friable ACM (crushable by hand) shall be disposed of as an asbestos waste at an approved facility. Non-friable ACMs shall be disposed of as a nonhazardous waste at a landfill that accepts such wastes. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos and lead worker construction standards.

FINDINGS

All additional significant environmental effects of the project relating to Hazards can be mitigated to a less-than-significant level.

7.0 HYDROLOGY AND WATER QUALITY

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the project: A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?			X

ENVIRONMENTAL SETTING

The project site is currently fully paved, with the exception of a few planted trees for landscaping. The project site is within an area designated by the Federal Emergency Management Agency (FEMA) as Zone X (FEMA, 2012). This zone indicates those areas that are protected from the 100-year flood event by levees or other flood control structures that are subject to possible failure or overtopping during larger flood events.

The public wastewater collection system with the city includes a combined sewer system (CSS), which collects both sanitary sewage and storm drainage flows, in the older central city area where the project site is located, and a newer separated sewer system (sanitary sewer) in the remaining areas of the City. The CSS is composed of about 345 miles of 4- to 120-inch diameter vitrified clay, reinforced concrete, and brick pipes that drain to the west to two large pump station facilities known as Pump Station 1/1A/1B and Pump Station 2/2A, located near the Sacramento River. Pump Stations 1B and 2A are the primary pumping stations at each facility, operating continuously throughout the year, while Pump Stations 1/1A and 2 only operate during large storms. Other City facilities include an off-line storage facility known as a Pioneer Reservoir that also serves as a primary treatment plant and the Combined Wastewater Treatment Plant (CWTP), which is another primary treatment plant with a capacity of 130 million gallons per day (mgd). Pioneer Reservoir has a peak hydraulic capacity of approximately 350 mgd and a treatment capacity of about 250 mgd. The Clarion Hotel is currently hooked up to an 8-inch CSS line in the alley along the northern border of the project site.

The City has an agreement with the Sacramento Regional County Sanitation District (SRCSD) whereby the City can convey a maximum of 60 mgd to the Sacramento Regional Wastewater Treatment Plant (SRWTP) for secondary treatment prior to discharge to the Sacramento River. This capacity is sufficient to treat all CSS dry weather sanitary flows (about 17 to 18 mgd) and stormwater from low-intensity storms. During moderate to large storms when the CSS flows are greater than 60 mgd, the flows greater than 60 mgd are routed to CWTP and/or Pioneer Reservoir for temporary storage. When flows exceed storage capacity, the excess flows are released to the Sacramento River after receiving primary treatment, including chlorination and

de-chlorination. When the storage and treatment capacities are reached, additional CSS flows are discharged directly to the Sacramento River from Sump 1 and/or Sump 2.

Flows conveyed by the City's wastewater systems are routed to the SRWTP for treatment and disposal via an interceptor system consisting of large diameter pipes and pump stations. The interceptor system and the SRWTP, located just south of the City limits, are owned and operated by the independent SRCSD.

The Stormwater Quality Improvement Plan (SQIP) (revised edition July 2007) outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management program. The Program is based on the National Pollutant Discharge Elimination System (NPDES) municipal stormwater discharge permit. The comprehensive Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The Program also includes an extensive public education effort, target pollutant reduction strategy and monitoring program (Sacramento Stormwater Quality Improvement Partnership, 2015)

The Sacramento City Code Section 13.08.145 addresses mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities. The code requires that when a property contributes drainage to the storm drain system or combined sewer system, all storm water and surface runoff drainage impacts resulting from the improvement or development must be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or combined sewer system, and that there is no increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property. Because the CSS is considered at or near capacity, all additional inflow into the system is required to be mitigated. The Sewer Development Fee Fund is used to recover an appropriate share of the capital costs of the City's existing or newer system facilities or the City's existing or new CSS facilities. Revenues are generated from impact fees paid by developers and others whose projects add to the demand on the combined sewer collection systems. In order to connect with the SRCSD wastewater conveyance and treatment system, developers must pay impact fees.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

- substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan or
- substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.7 of the Master EIR evaluates the potential effects of the 2030 General Plan as they relate to surface water, groundwater, flooding, stormwater, and water quality. Potential effects include water quality degradation due to construction activities (Impacts 6.7-1, 6.7-2), and

exposure of people to flood risks (Impacts 6.7-3, 6.7-4). Policies included in the 2030 General Plan were identified that reduced all impacts to a less-than-significant level.

Policies ER 1.1.1 through 1.1.8 protect water quality through conservation of open space, regional planning, stormwater runoff control, design standards for new development projects, requiring no net increase to peak runoff, controlling the volume of runoff from a project site, implement erosion control measures, and engage in watershed awareness educational programs.

Policy EC 2.1.6 requires new development projects to evaluate potential flood hazards, and Policy U.4.1.5 requires that new development projects submit drainage studies that adhere to City stormwater design requirements and incorporate measures to prevent on- or offsite flooding.

The Proposed Project would be required to comply with all the General Plan policies as outlined above, which would reduce all impacts to hydrology and water quality to less-than-significant levels.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts.

Impact 6.7-1: Implementation of the 2030 General Plan could result in construction activities that could degrade water quality and violate state water quality objectives by increasing sedimentation and other contaminants entering streams and rivers.

General Plan Policy ER 1.1.3 – Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through storm water protection measures consistent with the City's NPDES Permit.

General Plan Policy ER 1.1.4 – New Development. The City shall require new development to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, best management practices (BMPs) and Low Impact Development (LID), and hydromodification strategies consistent with the City's NPDES Permit.

Impact 6.7-3: Implementation of the 2030 General Plan could increase exposure of people and/or property to risk of injury and damage from a localized 100-year flood.

and

Impact 6.7-6: Implementation of the 2030 General Plan, in addition to other projects in the watershed, could result in increased numbers of residents and structures exposed to a localized 100-year flood event.

Mitigation Measure 6.7-6 - General Plan Policy ER 1.1.5 - No Net Increase. The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100- year storm event. This mitigation has been implemented through the City's Stormwater design standards. General Plan Policy U 4.1.5 -

New Development. The City shall require proponents of new development to submit drainage studies that adhere to City stormwater design requirements and incorporate measures to prevent on- or offsite flooding. This mitigation has been implemented through the City's Stormwater design standards.

General Plan Policy U 4.1.5 - New Development. The City shall require proponents of new development to submit drainage studies that adhere to City stormwater design requirements and incorporate measures to prevent on- or offsite flooding. This mitigation has been implemented through the City's Stormwater design standards.

Impact 6.7-4: Implementation of the 2030 General Plan could increase exposure of people and/or property to risk of injury and damage from a regional 100-year flood.

General Plan Policy EC 2.1.2 – Interagency Levee Management. The City shall work with local, regional, State, and Federal agencies to ensure new and existing levees are adequate in providing flood protection.

General Plan Policy EC 2.1.3 – Funding for 200-year Flood Protection. The City shall continue to cooperate with local, regional, State, and Federal agencies in securing funding to obtain the maximum level of flood protection that is practical, with a minimum goal of achieving at least 200-year flood protection as quickly as possible.

General Plan Policy EC 2.1.14 – Comprehensive Flood Management Plan. The City shall maintain, implement, update, and make available to the public the Local Comprehensive Flood Management Plan.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A - Would the proposal substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?

Construction-Related Impacts

Storm water runoff from the project site is either absorbed onsite or flows to the City's storm water drainage system. Under the Proposed Project, there would be no significant change in the amount of impervious surfaces on the project site. During construction, construction equipment and materials have the potential to leak, thereby discharging pollutants into stormwater. Construction site pollutants include particulate matter, sediment, oils and greases, concrete, and adhesives. Discharge of these pollutants could result in contamination of area drainages, causing an exceedance of water quality objectives. Because demolition activities associated with the Proposed Project have the potential to result in soil erosion, siltation, and contamination of stormwater, this is considered a potentially significant impact.

The City operates under a Phase I NPDES permit for stormwater municipal discharges to surface waters (NPDES No. CAS082597). The permit requires that the City impose water quality and watershed protection measures for all development projects. The City's SQIP contains a Construction Element that guides in implementation of the NPDES Permit for Storm

Water Discharges Associated with Construction Activity. This General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection, and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list BMPs the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Compliance with City requirements to protect storm water inlets would require the developer to implement BMPs such as the use of straw bales, sandbags, gravel traps, and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measure such as fences, dams, barriers, berms, traps, and basins. City staff also inspect and enforce the erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control ordinance).

Conformance with City regulations and permit requirements along with implementation of BMPs outlined in the SWPPP, construction activities under the Proposed Project would result in a **less-than-significant** impact related to storm water absorption rates, discharges, flows, and water quality.

Operation-Related Impacts

The Proposed Project would not change the amount of impervious surfaces currently on the project site; therefore, there would be no change in stormwater absorption or stormwater discharges and flows to storm drains. The NPDES Permit regulates waste discharge requirements from the CSS (NPDES No. CA0079111). The City of Sacramento requires source control measures, as described in the Stormwater Quality Design Manual, to meet regulatory requirements for the NPDES permit. Because the Proposed Project would not add any additional stormwater to the CSS, no impacts are anticipated. Please refer to the Public Services Section of this IS regarding potential impacts to the CSS from increased wastewater flows as a result of the Proposed Project. Conformance with City regulations and permit requirements would result in a **less-than-significant** impact related to storm water absorption rates, discharges, flows, and water quality.

Question B - Would the proposal substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?

The Proposed Project would not be located within a 100-year floodplain and would not expose people and property to the risk of injury or damage in the event of a 100-year flood. FEMA does not have building regulations for development in areas designated Zone X and would not require mandatory flood insurance for structures in Zone X. The project site is not within 50 feet of a levee, therefore would not be subject to levee setback limitations (General Plan Policy EC 2.1.7), nor would it obstruct access to levees (General Plan Policy EC 2.1.13). Additionally the General Plan includes Policy EC 2.1.3 that ensures funding to meet a minimum level of 200-year regional flood protection is obtained as quickly as possible. Future development is required to comply with Policies EC 2.1.2, EC 2.1.3, EC 2.1.14 which require the City to maintain eligibility under the National Flood Insurance Program (NFIP) and cooperate with regional flood planning efforts, and update the City’s Floodplain Management Plan.

As described above, the Proposed Project would not increase the amount of stormwater runoff from the project site; therefore, localized flooding caused by failure of the storm drainage system, which typically results in street flooding would not likely occur as a result of the Proposed Project. Additionally, implementation of General Plan Policy ER 1.1.5 requires that there be no net increase in storm water runoff peak flows over existing conditions associated with a 100-year storm event. Implementation of General Plan Policy U 4.1.5 requires new development proponents to submit drainage studies that adhere to City storm water design requirements and incorporate measures to prevent on- or offsite flooding (Sacramento City Code Title 13, Chapter 13.08, Article III(13.08.145 Subsection A)). Therefore, conformance with City regulations and permit requirements would result in a **less-than-significant** impact related to exposure of people and property to risks associated with a 100-year flood.

MITIGATION MEASURES

None Required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

8.0 NOISE

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the project:			
A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?			X
B) Result in residential interior noise levels of 45 dBA L _{dn} or greater caused by noise level increases due to the project?			X
C) Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?		X	
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

ENVIRONMENTAL SETTING

The noise environment in the vicinity of the project site is dominated by traffic. Background noise levels are influenced by 16th and 15th Streets and G and H Streets, existing surrounding commercial and residential uses, light rail, and parking lot and sidewalk activities. The vicinity of the project area is a downtown urban area with a noise level of approximately 62 decibels (dB), community noise equivalence level (CNEL) (City of Sacramento, 2014).

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

- result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 A-weight decibels (dBA) day-night average sound levels (L_{dn}) or greater caused by noise level increases due to the project;
- result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential for development under the 2030 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the general plan. See Policy EC 3.1.8, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 6.8-1) and interior noise levels (Impact 6.8-2), and vibration impacts (Impact 6.8-4) were found to be significant and unavoidable.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.8-4: Implementation of the 2030 General Plan could permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction.

and

Impact 6.8-9: Implementation of the 2030 General Plan could result in cumulative construction vibration levels that exceed the vibration-peak-particle velocities greater than 0.5 inches per second.

General Plan Policy EC 3.1.5 – Interior Vibration Standards: The City shall require construction projects anticipated to generate a significant amount of vibration to ensure

acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

Impact 6.8-5: Implementation of the 2030 General Plan could permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

and

Impact 6.8-10: Implementation of the 2030 General Plan could result in cumulative impacts on adjacent residential and commercial areas being exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

General Plan Policy EC 3.1.6 – Vibration Screening Distances: The City shall require new residential and commercial projects located adjacent to major freeways, hard rail lines, or light rail lines to follow the FTA screening distance criteria.

Impact 6.8-6: Implementation of the 2030 General Plan could permit historic buildings and archeological sites to be exposed to vibration-peak-particle velocities greater than 0.25 inches per second due to project construction, highway traffic, and rail operations.

General Plan Policy EC 3.1.7 – Vibration: The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B - Would the proposal result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases or Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project?

Stationary source and traffic operational noise from development of the Proposed Project have the potential to increase the ambient noise level in the vicinity of the project site. Stationary source noise such as noise from heating, ventilation, and air conditioning units, parking lots, and sidewalk activities would be consistent with the current urban setting and is not anticipated to increase ambient noise levels over the existing ambient noise level of 70 dBA, CNEL, which is less than the City's Urban Residential Infill and Mixed Use Projects compatibility standard.

The Proposed Project would add approximately 1,421 vehicles per day local roadways. Given the grid layout of the roadways surrounding the project site it is anticipated that half the traffic would arrive and leave the project site via G Street and half via 16th Street; therefore, approximately 711 vehicles per day would use G Street and approximately 711 would use 16th Street. The existing traffic volume on G Street is approximately 4,500 vehicles per day and 24,100 vehicles per day on 16th Street (City of Sacramento, 2014). Project traffic would not double the traffic volumes on 16th and G Streets and the increase in the ambient noise level due to project traffic would be approximately 0.06 and 0.29 dBA, L_{dn} , respectively. Therefore, with

project traffic the maximum ambient noise level in the vicinity of the Proposed Project would be approximately 62.3 dBA, L_{dn}. This is less than the City’s land use compatibility max level of 70 dBA for Urban Residential Infill and Mixed Use Projects. Therefore, this is a **less-than-significant** impact.

Question C - Would the proposal result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?

During the construction phases of the Proposed Project, noise from construction activities would add to the noise environment in the immediate vicinity of the project site. Activities and equipment involved in construction would likely generate maximum noise levels listed in **Table 6**. Noise may be generated during the construction phase by increased truck traffic on area roadways from the hauling of materials to and from the project site. Noise increases would be of short duration, intermittent, and limited to daytime hours.

TABLE 6
NOISE EMISSION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment Description	Typical Use Factor (%)	Predicted Lmax @ 50 ft (dBA, Lmax)
Backhoe	40	80
Concrete Mixer Truck	40	85
Concrete Pump Truck	20	82
Dozer	40	85
Dump Truck	40	84
Excavator	40	85
Flat Bed Truck	40	84
Front End Loader	40	80
Pickup Truck	40	55
Pneumatic Tools	50	85
All Other Equipment > 5 HP	50	85
Source: FHWA, 2006.		

Impacts to Existing Sensitive Receptors

The nearest sensitive receptor is the Holiday Inn Express located approximately 20 feet north of the project site where construction activities would occur. As indicated in **Table 6**, the loudest activities associated with construction would be 85 dBA, Lmax at 50 feet from the construction equipment. Taking into account existing ambient noise level is approximately 62 dBA, CNEL (General Plan, 2009), the resulting maximum noise level as a result of construction activities that would occur at the nearest sensitive receptor north of the project site would be approximately 95 dBA, Lmax.

Noise levels as a result of construction would cause an exceedance of the City’s land use compatibility max level for Urban Residential Infill and Mixed Use Projects. However, Sacramento City Code (SCC) Section 8.68.080(D) exempts noise sources due to construction activities as long as the project meets the requirements of the Code. Implementation of **Mitigation Measure N-1**, identified below, would ensure the adherence to the requirements of SCC Section 8.68.080 and would provide further measures to reduce construction related noise. Therefore, this impact would be **less than significant** with mitigation.

Question D, E, and F - Would the proposal permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction; permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic

A project-specific construction vibration analysis was conducted by Bollard Acoustical Consultants, August 23, 2013 and is provided in **Attachment 6**. Existing vibration levels were measured on May 29, 2013 at six vibration monitoring sites in the vicinity of the Proposed Project. **Table 7** shows the results of the monitoring events.

TABLE 7
MEASURED AMBIENT VIBRATION LEVELS

Site	Location	Peak Particle Velocity (In/Sec)
A	NE Corner of Project Site - 16th St.	0.005-0.013
B	SE Corner of Project Site - 16th & H Sts.	0.004-0.006
C	H St., Midway Between 15th & 15th Sts.	0.006-0.009
D	SW Corner of Project Site - 15th & H Sts.	0.004-0.007
E	NW Corner of Project Site - 15th St.	0.008-0.010
F	Directly in Front of Governor's Mansion	0.008-0.013
Source Bollard, 2013.		

As shown in **Table 7**, the existing ambient vibration levels do not exceed the City's vibration level threshold of 0.5 inches per second due to highway traffic and rail operations or the historic buildings and archaeological sites vibration-peak-particle velocities (ppv) threshold of greater than 0.2 inches per second due to project construction and highway traffic.

Various type of construction equipment will be used during the demolition and construction phases of the Proposed Project. Some common construction equipment with high vibration-peak-particle velocities (inches/second) are shown in **Table 8**.

The project would not require pile-driving or other similar high vibration-generating equipment; therefore, the most significant source of vibration generated by construction equipment will be from earthmoving equipment during the demolition and grading phases of construction (Bollard, 2013).

The nearest existing structure to the project site is the Holiday Inn Express located approximately 20 feet north and the Governor's Mansion, which is an historic building located 100 feet south of the project site. Other structures are located approximately 70 to 100 feet from the project site.

TABLE 8
VIBRATION SOURCE LEVELS OF CONSTRUCTION EQUIPMENT

Equipment		PPV at 25 ft. (in/sec)
Pile Driver (impact)	upper range	1.518
	typical	0.644
Pile Driver (sonic)	upper range	0.734
	typical	0.17
Hoe Ram		0.089
Large bulldozer		0.089
Loaded trucks		0.076
Jackhammer		0.035
Small bulldozer		0.003
Source: Bollard, 2013.		

The range of vibration during construction would be from 0.003 to 0.0890 inches/second ppv at the Holiday Inn Express and approximately 0.01 inches/second ppv at the Governor's Mansion. The ppv for all other structures in the immediate area of the project would approximately the same as that of the Holiday Inn Express. As none of the construction vibration levels would exceed the City's vibration threshold of 0.5 inches per second for construction or the 0.2 inches per second for historic buildings. Therefore, this impact is **less than significant**.

MITIGATION MEASURES

N-1: The project applicant shall ensure through contractual agreements that the following measures are implemented during construction:

- Construction activities shall be limited to occur between the hours of 7:00 A.M. to 6:00 P.M. Monday through Saturday, and 9:00 A.M. to 6:00 P.M. on Sundays. The intent of this measure is to prevent construction activities during the more sensitive time period and minimize the potential for effects.
- Stationary equipment and staging areas shall be located as far as practical from noise-sensitive receptors.
- All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and acoustical shields or shrouds, in accordance with manufacturers' recommendations.
- Construction activities shall conform to the following standards: (a) there shall be no start-up of machines or equipment, no delivery of materials or equipment, no cleaning of machines or equipment and no servicing of equipment except during the permitted hours of construction; (b) radios played at high volume, loud talking and other forms of communication constituting a nuisance shall not be permitted.

FINDINGS

All additional significant environmental effects of the project relating to Noise can be mitigated to a less-than-significant level.

9.0 PUBLIC SERVICES

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
A) Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2030 General Plan?			X

ENVIRONMENTAL SETTING

The City of Sacramento provides fire, police, and parks and recreation services in the vicinity of the project site.

The Sacramento Fire Department (SFD) provides fire protection and emergency medical services to the project area. Service to the project site is provided by Station 2, located at 1229 I Street, approximately 1,000 feet southwest of the project site (SFD, 2012). The next closest stations are Station 14, located at 1341 N C Street, approximately 0.7 miles northwest of the project site; Station 1, located at 624 Q St, approximately one mile southwest of the project site; and Station 4, located at 3145 Granada Way, located approximately 1.3 miles southeast of the project site (SFD, 2013).

The Sacramento City Police Department (SPD) provides police protection services to the project area. The project area is serviced by Central Command which is located at the Richards Police Facility, 300 Richards Boulevard, approximately 1.3 miles away from the project site (SPD, 2014). In addition to the SPD, the Sacramento County Sheriff's Department, California Highway Patrol (CHP), University of California, Davis (UC Davis) Medical Center Police Department, and the Regional Transit Police Department aid the SPD to provide protection for the City.

The project site is within the Sacramento City Unified School District (SCUSD). SCUSD serves over 43,000 students on 75 campuses spanning 75 square miles (SCUSD, 2015). The nearest SCUSD school is William Land Elementary School, which is located approximately 1.1 miles southwest of the project site.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2030 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of the 2030 General Plan on various public services. These include community parks (Master EIR Chapter 6.9) and fire protection, law enforcement, schools, libraries and emergency services (Master EIR Chapter 6.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Policy Public Health and Safety (PHS) 1.1.1 and PHS 2.1.1). The Master EIR concluded that effects to police and fire service would be less than significant with implementation of 2030 General Plan policies.

2030 General plan policies that call for the City to consider impacts of new development on schools (Policy Education, Recreation, and Culture (ERC) 1.1.2 through Policy ERC 1.1.5) reduce impacts on schools to a less-than-significant level. Impacts on library facilities were also considered less than significant (Master EIR Impact 6.10-8) with the implementation of ERC 3.1.1.

The Proposed Project shall comply with all 2030 General Plan policies pertaining to fire protection, police protection, schools, libraries, and emergency services.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A - Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2030 General Plan?

The Proposed Project would add residential uses in the project area. However, the project would not result in increased demand for fire protection, police protection, or roadway maintenance beyond that of the existing Clarion Hotel. The 141 residential units that would be developed as part of the Proposed Project would be age-restricted Senior Living Facility units housing 162 people. Therefore, because of its nature, the Proposed Project would not impact schools and would not significantly increase the demand for parks or recreation facilities in the project area. Therefore, consistent with the Master EIR's conclusions, implementation of the Proposed Project would result in a **less-than-significant** impact related to Public Services.

MITIGATION MEASURES

None Required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Public Services.

10.0 RECREATION

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the project: A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			X
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan?			X

ENVIRONMENTAL SETTING

There are several City parks that exist in the project area including Washington Park at 1631 F Street, J. Neely Johnson Park at 516 11th Street, and Muir Children's Park at 1515 C Street.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the Proposed Project would do either of the following:

- Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.9 of the Master EIR considered the effects of the 2030 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The general plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities. (Policy ERC 2.2.4). Impacts were considered less than significant after application of the applicable policies. (Impacts 6.9-1 and 6.9-2).

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B - Would the proposal cause or accelerate substantial physical deterioration of existing area parks or recreational facilities or create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan?

The Proposed Project, a residential project, is anticipated to create a demand for recreational facilities. Although use of City parks is anticipated, the Proposed Project is not anticipated to significantly increase the use of existing recreational facilities such that substantial deterioration of the facility would occur or be accelerated. The Proposed Projects impacts on recreation from future development anticipated under the 2030 General Plan, including development of the project site for residential uses, were evaluated in the Master EIR. The Master EIR determined that implementation of General Plan policies would ensure adequate parks and recreational facilities are provided to serve increased demands within the City. Therefore, the Proposed Project would not result in impacts on parks and recreational facilities not evaluated in the Master EIR or result in the need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan.

The Proposed Project would construct a new residential development on the same site as the existing Clarion Hotel. The Proposed Project would be subject to park development impact fees pursuant to Chapter 18.44 of the City's municipal code. The City would determine the park development impact fee at the time of development and payment of the fees is required prior to issuance of building permits. Park development impact fees are used by the City to finance construction of new neighborhood and community parks and address the impacts on existing parks caused by development in the City. Also, the Master EIR determined that implementation of General Plan policies would ensure adequate parks and recreational facilities are provided to serve increased demands within the City. Based on the minimal increased demand and the payment of park development impact fees there is no evidence that this Proposed Project would adversely affect the capacity or physical conditions of local parks and recreation facilities. Further, no aspect of this Proposed Project would cause or accelerate the physical deterioration of area parks and recreation facilities, and would not create the need for construction or expansion of parks or recreation facilities. This impact would be **less than significant**.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Recreation.

11. TRANSPORTATION AND CIRCULATION

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the project:			
A) Roadway segments: degrade peak period Level of Service (LOS) from A, B, C, D, or E (without the project) to F (with project) or the LOS (without project) is F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.			X
B) Intersections: degrade peak period level of service from A, B, C, D, or E (without project) to F (with project) or the LOS (without project) is F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.?			X
C) Freeway facilities: off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway; project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?			X
D) Transit: adversely affect public transit operations or fail to adequately provide for access to public?			X
E) Bicycle facilities: adversely affect bicycle travel, bicycle paths or fail to adequately provide for access by bicycle?			X
F) Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?			X

ENVIRONMENTAL SETTING

The project site is located northeast of H Street between 15th and 16th Street and is bounded by G Street to the northeast.

The City of Sacramento's August 2014 Draft 2035 General Plan Update included a Roadway Level of Service Analysis. 16th street is the only roadway immediately adjacent to the project site included in this analysis (City of Sacramento General Plan Update, 2014). Near the project site, 16th Street operates at Level of Service B with a daily traffic volume of 24,100.

The following are descriptions of the major roadways in the project vicinity:

Interstate 5 (I-5) is a north-south freeway with four travel lanes in each direction located west of the project site. Primary access to the project site from I-5 is provided at the I Street/J Street interchange.

Interstate 80 Business (I-80 Bus) is an east-west business loop of Interstate 80 with four travel lanes in each direction located east of the project site. Primary access to the project site from I-80 Bus is provided at the H street exit.

I Street is a one-way, westbound arterial roadway located south of the project site. I Street extends from the Sacramento River to the west to 53rd Street to the east. In the vicinity of the project site, this roadway provides three westbound travel lanes.

J Street is a one-way, eastbound arterial roadway located south of the project site. J Street extends from the Sacramento River to the west to M Street at California State University-Sacramento to the east, where it becomes Fair Oaks Boulevard. In the vicinity of this project site, this roadway provides three eastbound travel lanes.

12th Street is a one-way, southbound arterial roadway located west of the project site. 12th Street extends from Richards Boulevard to the north to Riverside Boulevard to the south. In the vicinity of the project site, this roadway provides four southbound travel lanes.

15th Street is a one-way southbound roadway located west of the project site. 15th Street extends from one block north of C Street to the north to Broadway to the south. In the vicinity of the project site, 15th Street is classified as an arterial roadway between intersections with P Street and J Street south of the project site. In the vicinity of the project site, this roadway provides three southbound travel lanes.

16th Street is a one-way, northbound arterial roadway located adjacent to the eastern boundary of the project site. 16th Street extends from Richards Boulevard to the north to Broadway to the south. In the vicinity of the project site, this roadway provides four northbound travel lanes.

H Street is a one-way westbound roadway located adjacent to the southern boundary of the project site. H Street extends from 5th Street to the west to Camelia Avenue to the east, where it merges with J Street. Adjacent to the project site, this roadway provides two westbound travel lanes. East of 16th Street H Street becomes 2 way street with one lane in each direction.

G Street is a one-way eastbound roadway located north of the project site site. G Street extends from Alhambra Boulevard to the east to 7th Street to the west. In the vicinity of the project site, this roadway provides two eastbound travel lanes.

On-street bike lanes along G Street, H Street, E Street, 13th Street, 18th Street, and portions of 11th Street are provided within the vicinity of the project site. Sidewalks are located along all streets in the immediate vicinity of the project site. Pedestrian crosswalks are also provided at most of the major signalized intersections in downtown Sacramento.

The Sacramento Regional Transit (RT) provides public transit service within the project area. The RT Light Rail Transit (LRT) Blue Line operates from the Meadowview Station southeast of the project site to the Watt/I-80 station Northeast of the project site. This line serves the area in the vicinity of the project site at the northbound and southbound LRT stations on 12th Street,

adjacent to the H Street and I street intersections, three blocks away from the project site. The Sacramento Valley Station LRT/Bus Transfer Station, located west of the project site on I Street at the 5th Street intersection, also serves as Amtrak's boarding station for its Capitol Corridor line. RT provides peak hour bus transit service that operates adjacent to the proposed project site. Parking facilities in the Central City include City, state, and privately-owned lots and garages, off-street residential spaces, and on-street parking, including metered and permitted spaces. On-street parking restrictions for metered and permitted spaces vary by location (Sacramento RT, 2014).

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

Roadway Segments

- the traffic generated by a project degrades peak period LOS from A, B, C, D, or E (without the project) to F (with project) or
- the LOS (without project) is F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.

Intersections

- the traffic generated by a project degrades peak period level of service from A, B, C, D, or E (without project) to F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Freeway Facilities

The California Department of Transportation (Caltrans) considers the following to be significant impacts.

- off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway;
- project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service;
- project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or
- the expected ramp queue is greater than the storage capacity.

Transit

- adversely affect public transit operations or
- fail to adequately provide for access to public transit.

Bicycle Facilities

- adversely affect bicycle travel, bicycle paths or

- fail to adequately provide for access by bicycle.

Pedestrian Circulation

- adversely affect pedestrian travel, pedestrian paths or
- fail to adequately provide for access by pedestrians.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Transportation and circulation were discussed in the Master EIR in Chapter 6.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. The analysis included consideration of roadway capacity and identification of levels of service, and effects of the 2030 General Plan on the public transportation system. Provisions of the 2030 General Plan that provide substantial guidance include Goal Mobility 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), identification of level of service standards (Policy M 1.2.2), development of a fair share funding system for Caltrans facilities (Policy M 1.5.6) and development of complete streets (Goal M 4.2).

While the general plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the general plan development would result in significant and unavoidable effects. See Impacts 6.12-1, 6.12-8 (roadway segments in the City), Impacts 6.12-2, 6.12-9 (roadway segments in neighboring jurisdictions), and Impacts 6.12-3, 6.12-10 (freeway segments).

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts.

Impact 6.12-1: Implementation of the 2030 General Plan could result in roadway segments located within the Policy Area that do not meet the City's current Level of Service (LOS) standard or the LOS D – E goal.

and

Impact 6.12-8: Implementation of the 2030 General Plan could result in a cumulative increase in traffic that would adversely impact the existing LOS for City roadways.

General Plan Policy M 1.2.2 - LOS Standard: The City shall allow for flexible Level of Service (LOS) standards, which will permit increased densities and mix of uses to increase transit ridership, biking, and walking, which decreases auto travel, thereby reducing air pollution, energy consumption, and greenhouse gas emissions.

- a. Core Area Level of Service Exemption-**LOS F conditions are acceptable during peak hours in the Core Area bounded by C Street, the Sacramento River, 30th Street, and X Street. If a Traffic Study is prepared and identifies a LOS impact that would otherwise be considered significant to a roadway or intersection that is in the Core Area as described above, the project would not be required in that particular instance to widen roadways in order for the City to find project conformance with the General Plan. Instead, General

Plan conformance could still be found if the project provides improvements to other parts of the citywide transportation system in order to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. The improvements would be required within the project site vicinity or within the area affected by the project's vehicular traffic impacts. With the provision of such other transportation infrastructure improvements, the project would not be required to provide any mitigation for vehicular traffic impacts to road segments in order to conform to the General Plan. This exemption does not affect the implementation of previously approved roadway and intersection improvements identified for the Railyards or River District planning areas.

b. Level of Service Standard for Multi-Modal Districts-The City shall seek to maintain the following standards in the Central Business District, in areas within 1/2 mile walking distance of light rail stations, and in areas designated for urban scale development (Urban Centers, Urban Corridors, and Urban Neighborhoods as designated in the Land Use and Urban Form Diagram). These areas are characterized by frequent transit service, enhanced pedestrian and bicycle systems, a mix of uses, and higher-density development.

- Maintain operations on all roadways and intersections at LOS A-E at all times, including peak travel times, unless maintaining this LOS would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. LOS F conditions may be acceptable, provided that provisions are made to improve the overall system and/or promote non-vehicular transportation and transit as part of a development project or a City-initiated project.

c. Base Level of Service Standard-the City shall seek to maintain the following standards for all areas outside of multi-modal districts.

- Maintain operations on all roadways and intersections at LOS A-D at all times, including peak travel times, unless maintaining this LOS would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. LOS E or F conditions may be accepted, provided that provisions are made to improve the overall system and/or promote non-vehicular transportation as part of a development project or a City-initiated project.

d. Roadways Exempt from Level of Service Standard-The above LOS standards shall apply to all roads, intersections or interchanges within the City except as specified below. If a Traffic Study is prepared and identifies a significant LOS impact to a roadway or intersection that is located within one of the roadway corridors described below, the project would not be required in that particular instance to widen roadways in order for the City to find project conformance with the General Plan. Instead, General Plan conformance could still be found if the project provides improvements to other parts of the city wide transportation system in order to improve transportation-system-wide roadway capacity to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. The improvements would be required within the project site vicinity or within the area affected by the project's vehicular traffic impacts. With the provision of such other transportation infrastructure improvements, the project would not be required to provide any mitigation for vehicular traffic impacts to the listed road segment in order to conform to the General Plan.

- 12th/14th Avenue: State Route 99 to 36th Street
- 24th Street: Meadowview Road to Delta Shores Circle
- 65th Street: Folsom Boulevard to 14th Avenue
- Alhambra Boulevard: Folsom Boulevard to P Street
- Arcade Boulevard: Marysville Boulevard to Del Paso Boulevard
- Arden Way: Capital City Freeway to Ethan Way
- Blair Avenue/47th Avenue: S. Land Park Drive to Freeport Boulevard
- Broadway: 15th Street to Franklin Boulevard
- Broadway: 58th to 65th Streets
- El Camino Avenue: Stonecreek Drive to Marysville Boulevard
- El Camino Avenue: Capitol City Freeway to Howe Avenue
- Elder Creek Road: 65th Street to Power Inn Road
- Florin Perkins Road: 14th Avenue to Elder Creek Road
- Florin Road: Greenhaven Drive to 1-5; 24th Street to Franklin Boulevard
- Folsom Boulevard: 34th Street to Watt Avenue
- Freeport Boulevard: Broadway to Seamas Avenue
- Fruitridge Road: Franklin Boulevard to SR 99
- Garden Highway: Truxel Road to Northgate Boulevard
- Howe Avenue: American River Drive to Folsom Boulevard
- J Street: 43rd Street to 56th Street
- Mack Road: Meadowview Road to Stockton Boulevard
- Martin Luther King Boulevard: Broadway to 12th Avenue
- Marysville Boulevard., 1-80 to Arcade Boulevard
- Northgate Boulevard: Del Paso Road to SR 160
- Raley Boulevard: Bell Avenue to 1-80
- Roseville Road: Marconi Avenue to 1-80
- Royal Oaks Drive: SR 160 to Arden Way
- Truxel Road: 1-80 to Gateway Park

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A and B - Roadway segments: Would the project degrade peak period Level of Service (LOS) from A, B, C, D, or E (without the project) to F (with project) or the LOS (without project) is F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more? Intersections: degrade peak period level of service from A, B, C, D, or E (without project) to F (with project) or the LOS (without project) is F, and project generated traffic increases the peak period average vehicle delay by five seconds or more?

Construction

Construction traffic generated by the Proposed Project would consist of trucks and commuter vehicles accessing the site daily over a 15-month period. The City of Sacramento Municipal Code 12.20.020 requires that a traffic control plan be adopted when construction would obstruct vehicular or pedestrian traffic on City streets. In accordance with this code, the contractor is required to have a traffic control plan approved by the City and available at the project site for inspection during construction work. Compliance with the city approved plan would ensure that adequate traffic access to the project vicinity is afforded and that temporary increase in construction-related vehicle trips and traffic congestion do not exceed established level of service standards. Therefore, compliance with City Code 12.20.020 would ensure construction-related traffic associated with the Proposed Project would not result in a substantial increase in traffic or exceed any level of service standards. This is considered a **less than significant** impact.

Operation

The project site is located on the former site of the Clarion Hotel. The proposed construction of a 141-unit mixed use building will require a Conditional Use Permit to allow a percentage of units to function as Assisted Living units, defined as a "Residential Care Facility" by the City of Sacramento Planning and Development Code. The estimate traffic generated by the proposed age-restricted apartment community and ground level commercial and retail uses is shown in **Table 9**.

The primary roadways providing access to the project site are 16th Street, 15th Street and H Street. Project generated trips would increase traffic volumes on these roadways and would also be distributed throughout the downtown street network. With the exception of roadways providing direct access to the project site, it is anticipated that project related traffic would be widely distributed throughout the downtown grid, and thus would not substantially increase traffic volumes at any one roadway segment or intersection.

Roadway Segments

The Proposed Project is adjacent to 16th street, a 4-lane Arterial-Moderate Access Control roadway that currently operates at LOS B with a daily volume of 24,100 adjacent to the project site (City of Sacramento, 2014). In the vicinity of the project site, 15th Street is a 3-lane Arterial Low Access Control roadway that currently operates at LOS A with a daily volume of 10,300 between J Street and P Street (City of Sacramento, 2014).

As shown in **Table 9** below, the Proposed Project is predicted to add approximately 1,421 daily trips to the roadway network. Most of these trips would utilize 16th street to provide access to and from the project site. The daily traffic volumes generated by the project will not change the level of service on 16th Street adjacent to the project site. The level of service on 16th Street will

remain LOS B. The increase in traffic due to the implementation of the Proposed Project would not degrade roadway segment LOS to E or F. This impact is **less than significant**.

TABLE 9
PROJECT TRIP GENERATION – ITE 9TH EDITION

Land Use (ITE)	Quantity	ITE Land Use Code	Trips						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Retail	12,361 ksf	820	1,745	27	17	44	71	77	148
Assisted Living	50 beds	254	193	5	2	7	5	6	11
Senior Adult Housing	100 d.u.	252	319	6	12	18	13	9	22
Total Project Trips			2,257	38	31	69	89	92	181
<i>Transit Adjustments (-3%)</i>			-68	-1	-1	-2	-2	-3	-5
<i>Walk/Bike Adjustments (-26%)</i>			-587	-10	-8	-18	-23	-24	-47
<i>Internal Trips (-8%)</i>			-181	-3	-3	-6	-7	-7	-14
Net New Trips			1,421	24	19	43	57	58	115
Source: ITE, 2012									

Intersections

As described above, arterial roadways that would provide access to the project site, including 15th and 16th streets, would operate at LOS A and LOS B with the addition of project related traffic, respectively. In the vicinity of the project site, these arterial roadways intersect with smaller collector roadways at H Street and G Street. These collector roadways are not anticipated to carry large enough traffic volumes with the addition of project-related traffic to cause intersections with 15th and 16th Streets to operate at unacceptable levels. Because 15th and 16th Streets will operate at acceptable levels, and H Street and G Street are not anticipated to carry traffic volumes that would cause intersections to operate at unacceptable levels, the trips generated by the project are not expected to degrade peak period level of service to E or F at these locations. This impact is **less than significant**.

The Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition* trip generation rates are used for the proposed project trip calculations. **Table 9** includes the proposed project trip generation estimate according to the ITE. Additional trip adjustments are given for the other trips modes such as transit, pedestrian and bicycle and internal trip reduction similar to ones applied for other projects downtown.

As shown in **Table 9**, the proposed project will generate 43 new trips in the AM peak hour, 115 new trips in the PM peak hour, and 1,421 new daily trips.

For the comparison purposes, the existing hotel (currently vacant) on the project site would generate 56 trips during the AM peak hour, 64 trips during the PM peak hour, and 576 daily trips. Please see **Table 10** below. The proposed project will generate 13 fewer trips in the AM peak hour, 51 more trips in the PM peak hour, and 845 more daily trips than the existing hotel when operational.

TABLE 10
EXISTING DEVELOPMENT TRIP GENERATION

Land Use (ITE)	Quantity	ITE Land Use Code	Trips						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	106 Rooms	310	576	33	23	56	32	31	64
Source: ITE, 2012									

Question C - Freeway facilities: off-ramps with vehicle queues that extend into the ramp’s deceleration area or onto the freeway; project traffic increases that cause any ramp’s merge/diverge level of service to be worse than the freeway’s level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?

In 2008 the City updated its General Plan and the Master EIR prepared for the 2030 General Plan evaluated potential traffic impacts associated with buildout of the City and included land use and development assumptions for land either previously planned for development or infill parcels. This project is an infill development and is consistent with the City of Sacramento 2030 General Plan. The 2035 General Plan update has not changed the project consistency with the General Plan.

Traffic generated by build-out of the 2030 General Plan would result in significant traffic impacts—based on the Caltrans LOS threshold and related significance standards—for eight freeway segments in the City (City of Sacramento, 2009a).

The Proposed Project consists of an age restricted art-centered apartment community with and ground-level commercial and retail spaces. These uses are not anticipated to generate high volumes of freeway traffic. The project would not have any additional significant effects to freeway facilities beyond those addressed in the Master EIR. The impact on freeway facilities is **less than significant**.

Question D - Transit: adversely affect public transit operations or fail to adequately provide for access to public?

The project area is served by a fully developed roadway system of arterial and local streets. Existing roadway, pedestrian, and public-transit infrastructure would remain in place and as currently designed and the project would not substantially change the existing movement of persons and traffic through the project area. The Proposed Project is anticipated to result in the addition of residents and commercial visitors to the site, some of whom would travel by transit.

The Proposed Project is served by Sacramento Regional Transit Route 29, which operates two afternoon buses a day that serve the bus stop at 16th Street and H Street. These buses have a seated capacity of 34 and additional standing capacity. The Proposed Project is also served by Roseville Transit Commuter Service, which operates 18 buses a day that serve the bus stop at 16th Street and H Street. These buses have a seated capacity of 45 and additional standing capacity. The project is expected to increase transit ridership by approximately 68 trips per day. These trips would be distributed between light rail, bus and door-to-door services that cater to the needs of seniors such as paratransit. Because the proposed residents are of retirement age, most of these trips are expected to occur outside of peak commuting hours.

The Proposed Project is not anticipated to add transit ridership that will exceed the capacity of existing transit options. Operational impacts associated with the performance or safety of public transit systems were analyzed in Impacts 6.12-4 of the 2030 General Plan Master EIR (City of Sacramento, 2009). The analysis of Impact 6.12-4 of the 2030 General Plan Master EIR determined that implementing the 2030 General Plan would increase citywide transit trips by 49 percent compared to the 2030 No Project scenario. The Mobility Element of the 2030 General Plan includes policies (M 1.1.3, M 1.2.1 through M 1.2.3, M 1.3.5, M 1.4.1 through M 1.4.3, M 3.1.1 through M 3.1.7, M 3.1.9, M 3.1.11 through M 3.1.15, M 9.1.1, and M 9.1.5) that specifically address providing a safe, comprehensive, and integrated transit system throughout the city. In addition, policies in the Land Use and Urban Design Element (LU 1.1.1, 1.1.4, 2.1.3, 2.5.1, 2.6.4, 2.7.6, and 5.5.2) support increased transit use and access to transit. The 2030 General Plan Master EIR concluded that with implementation of these policies, this impact would be less than significant. The Proposed Project will not adversely affect public transit operations or fail to adequately provide for access to public transit. The impact to transit facilities is less than significant.

Question E - Bicycle facilities: adversely affect bicycle travel, bicycle paths, or fail to adequately provide for access by bicycle?

As shown in **Table 9** above, the Proposed Project is anticipated to add up to 587 new daily walking and bicycle trips to the surrounding area.

Bicycle infrastructure exists in the Proposed Project's surrounding area. H Street is directly adjacent to the Proposed Project and includes an on-street bicycle lane. Roadways in the surrounding area that provide bikeways include G Street, E street, 18th Street, and 13th Street (City of Sacramento, 2011a). Additionally, the project site will include bicycle parking facilities. The project is consistent with the City of Sacramento Bikeway Master Plan (see CAP Checklist in **Attachment 2**).

The project will also comply with applicable guidelines from the Central City Urban Design Guidelines and other City development standards and regulations which address hazards or barriers for pedestrian or bicycle access (City of Sacramento, 2009b).

The Proposed Project will not adversely affect bicycle travel, bicycle paths, or fail to adequately provide for access by bicycle. The impact to bicycle facilities is **less than significant**.

Question F – Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?

The Proposed Project is an infill development project where existing streets will serve the project. Existing pedestrian infrastructure will serve the project site. The Proposed Project is consistent with the City of Sacramento Pedestrian Master Plan (see CAP Checklist in **Attachment 2**). As defined by the Plan, the Proposed Project is located in an area of moderate to high pedestrian improvement need and designated a Pedestrian Corridor and a Pedestrian Node. This requires premium category improvements. Existing pedestrian infrastructure already meets the requirements of premium improvements. These include:

- Streets with gutters
- Public art
- Street lighting
- Street trees and landscaping

- High visibility crosswalks
- Accessible pedestrian signals
- Transit access

The Proposed Project site plan features numerous pedestrian access points and pedestrian access features with opportunities for pedestrians to access the site from surrounding streets and other parts of the site. The project site driveway on 16th street will be constructed to City Standards. The project would also be required to comply with the Central City Urban Design Guidelines and other City development standards and regulations, which address hazards or barriers for pedestrian access. The Proposed Project will not adversely affect pedestrian travel paths, and will provide adequate access for pedestrians. Therefore, the impact to pedestrian facilities is considered **less than significant**.

MITIGATION MEASURES

None required

FINDINGS

The project would have no additional project-specific environmental effects relating to Transportation and Circulation.

12.0 UTILITIES AND SERVICE SYSTEMS

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Would the project: A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

ENVIRONMENTAL SETTING

Wastewater and Stormwater

Wastewater and stormwater would be collected by the City of Sacramento's CSS, conveyed to the SRCSD system, and ultimately treated at the SRWTP, which is located in Elk Grove, California. Please see Hydrology and Water Quality section of this IS for additional detail on the City of Sacramento's CSS.

The Clarion Hotel is currently hooked up to an 8-inch CSS line in the alley along the northern border of the project site, which has a total capacity of 549,370 gallons per day. Flows from this 8-inch line flow into a 12-inch line then to a 15-inch line in 17th Street that becomes an 18-inch line 1.5 blocks to the south of the project site. There is sufficient capacity in the sewer lines per the April 30, 2015 Preliminary Sewer Study for this project.

Water Supply

Water service for the project would be provided by the City of Sacramento. The City provides domestic water service from a combination of surface water and groundwater sources: the American River, Sacramento River, and groundwater wells. Water from the American River and Sacramento River is diverted by two water treatment plants: the Sacramento River Water Treatment Plant (WTP), located at the southern end of Bercut Drive approximately 1.5 miles northwest of the project site, and the E.A. Fairbairn Water Treatment Plant (EAFWTP), located at the northeast corner of State University Drive South and College Town Drive approximately 6 miles southeast of the project site. Water diverted from the Sacramento and American Rivers is treated, stored in storage reservoirs, and pumped to customers via a conveyance network.

The City of Sacramento complies with the California Water Code, which requires urban water suppliers to prepare and adopt Urban Water Management Plan (UWMPs) every five years. The most recent UWMP was adopted in 2010, and includes an analysis of water demand sufficiency under normal, single dry year, and multiple dry year scenarios. Water supply and demand projections include future planned development under the 2030 General Plan. Based, in part, on these projections, the City possesses sufficient water supply entitlements and treatment capacity during normal, dry, and multiple dry years to meet the demands of its customers up to

the year 2035. It is important to note that this assumes that wells and surface water treatment capacity will be rehabilitated and expanded as needed (City of Sacramento, 2011b).

Solid Waste Disposal

Solid waste materials collected by the Solid Waste Division of the City Department of Utilities are sorted at the Sacramento Recycling and Transfer Station, with the remaining refuse taken to Lockwood Landfill in Lockwood, Nevada. The City of Sacramento General Plan Master EIR indicates that the City landfills have sufficient capacity for full buildout of the 2030 General Plan.

Electricity and Natural Gas

The Sacramento Municipal Utility District (SMUD) is responsible for the generation, transmission, and distribution of electrical power to its 900 square mile service area, which includes most of Sacramento County and a small portion of Placer County. SMUD buys and sells energy and capacity on a short-term basis to meet load requirements and reduce costs. There is an underground 12 kilovolt (kV) route along east side of 15th street and West end of G-H Alley and an overhead 21 kV route along the north side of G-H alley. The Pacific Gas & Electric Company (PG&E) provides natural gas service to residents and businesses within the City of Sacramento.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2030 General Plan:

- result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments or
- require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the effects of development under the 2030 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 6.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2030 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 6.11-1) but the need for new water supply facilities results in a significant and unavoidable effect (Impact 6.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a significant and unavoidable effect (Impacts 6.11-4, 6.11-5). Impacts on solid waste facilities were less than significant (Impacts 6.11-7, 6.11-8). Implementation of energy efficient standards as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings, would reduce effects for energy to a less-than-significant level.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B - Would the proposal result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments or require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?

Wastewater and Stormwater

As described in the Hydrology and Water Quality section of this IS, the Proposed Project would not change the amount of impervious surfaces currently on the project site; therefore, there would be no change in stormwater absorption or stormwater discharges and flows to storm drains. The City of Sacramento requires source control measures, as described in the Stormwater Quality Design Manual, to meet regulatory requirements for the NPDES permit. Because the Proposed Project would not add any additional stormwater to the CSS, no additional impacts would occur.

A sewer study has been completed and is included as **Attachment 9**. As described therein, the Proposed Project would increase contributing flows to the CSS from 31.8 ESDs (12,720 gpd) to 72.9 ESDs (29,160 gpd). The study concludes that, there is sufficient capacity in the sewer lines to accommodate the addition flows generated by the Proposed Project. However, because the CSS is considered at or near capacity, all additional inflow into the system is required to be mitigated in accordance with the Combined System Development fee and SRCSD Regional Connection Fee. Therefore, the Proposed Project would be required to pay an appropriate share of the capital costs into the Sewer Development Fee Fund in order to recover the City's costs for meeting or mitigating demands of increased growth on existing or new CSS facilities. Conformance with City regulations and permit requirements would result in a **less-than-significant** impact related to wastewater and stormwater system capacity. No new facilities are required to serve the Proposed Project.

Water Supply

Similar to wastewater, the Proposed Project would increase the water demand over that of the existing Clarion Hotel. However, the project is consistent with the General Plan land use designation accounted for in the Master EIR. The 2010 UWMP considered these projections during normal, dry, and multiple dry years. Thus, the project's water demand would be met by the City's existing water right permits and United States Bureau of Reclamation contract. In addition, according to the 2010 UWMP, the City's water supply would be within the City's water demand and treatment capability during a multi-dry year in 2015, 2020, 2025, 2030, and 2035. Additionally, the Proposed Project will comply with CALGreen Tier 1 water efficiency standards. Thus, the project would have a **less-than-significant** impact related to water supply. No new facilities are required to serve the Proposed Project.

Solid Waste Disposal

The Proposed Project would increase the demand for solid waste disposal over that of the existing Clarion Hotel. However, because the project was accounted for in the City's General Plan and Master EIR, and the project is consistent with the General Plan land use designation, this increase in solid waste production would not exhaust the remaining landfill capacity and this impact would be **less than significant**. No new facilities are required to serve the Proposed Project.

Electricity and Natural Gas

The Proposed Project may increase the demand for electricity and natural gas over that of the existing Clarion Hotel. Because the increased demand in energy is evaluated in the 2030 General Plan Master EIR, and because PG&E and SMUD would ensure their capability of providing an adequate level of service to the project site, this impact would be **less than significant**. No new facilities are required to serve the Proposed Project.

MITIGATION MEASURES

None Required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Utilities and Service Systems.

13.0 MANDATORY FINDINGS OF SIGNIFICANCE

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
A.) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X	
B.) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X	
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X	

ANSWERS TO CHECKLIST QUESTIONS

Question A - Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As described in the Biological Resources section of this IS, the Proposed Project is located in an urbanized area of the City and would not result in elimination of habitat or impacts to special-status species. Implementation of **Mitigation Measure BIO-1** would reduce potential impacts to both migratory bird and raptors to a less-than-significant level. No cultural or historic resources have been identified on the project site, and Implementation of **Mitigation Measures CR-1 through CR-4** would reduce potential impacts to unknown archaeological and paleontological resources a **less-than-significant** level.

Question B - Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Cumulative environmental effects are multiple individual effects that, when considered together, would be considerable or compound or increase other environmental impacts. Individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time.

The Proposed Project would not affect population growth either directly or indirectly beyond that which was analyzed in the City’s 2030 General Plan Master EIR and the recently adopted 2035 General Plan Update and associated Master EIR. Implementation of the Master EIR and project-specific mitigation measures proposed in this Initial Study would reduce the project’s impacts to a **less-than-significant** level, further reducing the project’s contribution to environmental impacts to less than cumulatively considerable.

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

With implementation of Master EIR and project-specific mitigation measures for potential air quality, hazards, and noise impacts identified in this IS, the Proposed Project would not have a substantial adverse effect on human beings, either directly or indirectly.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

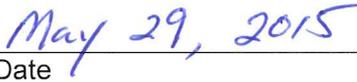
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|--|--|
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| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Transportation/Circulation |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> None Identified |

SECTION V - DETERMINATION

On the basis of the initial study:

I find that (a) the Proposed Project is an anticipated subsequent project identified and described in the 2030 General Plan Master EIR; (b) the Proposed Project is consistent with the 2030 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are not adequate for the Proposed Project; and (d) the Proposed Project will have additional significant environmental effects not previously examined in the Master EIR. An EIR shall be prepared, which shall tier off of the Master EIR to the extent feasible. (CEQA Guidelines Section 15178(e))


Signature


Date


Printed Name

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ATTACHMENTS

ATTACHMENT 1

CALEEMOD INPUTS AND OUTPUTS

Cascade Defaults



Project Characteristics

Project Detail

Project Name:

Project Location:

Windspeed (m/s):

Precipitation Frequency (days):

Climate Zone:

Land Use Setting:

Operational Year:

Pollutants

Pollutant Selection	Pollutant Full Name
<input checked="" type="checkbox"/>	Reactive Organic Gases (ROG)
<input checked="" type="checkbox"/>	Nitrogen Oxides (NOx)
<input checked="" type="checkbox"/>	Carbon Monoxide (CO)
<input checked="" type="checkbox"/>	Sulfur Dioxide (SO2)
<input checked="" type="checkbox"/>	Particulate Matter 10um (PM10)
<input checked="" type="checkbox"/>	Particulate Matter 2.5um (PM2.5)
<input checked="" type="checkbox"/>	Fugitive PM10um (PM10)
<input checked="" type="checkbox"/>	Fugitive PM2.5um (PM2.5)
<input checked="" type="checkbox"/>	Biogenic Carbon Dioxide (CO2)
<input checked="" type="checkbox"/>	Non-Biogenic Carbon Dioxide (CO2)
<input checked="" type="checkbox"/>	Carbon Dioxide (CO2)
<input checked="" type="checkbox"/>	Methane (CH4)
<input checked="" type="checkbox"/>	Nitrous Oxide (N2O)
<input checked="" type="checkbox"/>	CO2 Equivalent GHGs (CO2e)

Utility Information

**If "User Defined" is selected, user must specify data source in Remarks*

Select Utility Company:

CO2 Intensity Factor (lb/MWh):

CH4 Intensity Factor (lb/MWh):

N2O Intensity Factor (lb/MWh):

Remarks

Cascade Defaults



Import csv Default Undo

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
Residential	Congregate Care (Assisted Living)	50	Dwelling Unit	0	0	50
Residential	Retirement Community	100	Dwelling Unit	0	0	100
Retail	Strip Mall	12.36	1000sqft	0.28	12,361	1,998
+						

Population
Lot Acreage

<< Previous Next >>

Remarks

CalEEMod.2013.2

Home Project Characteristics Land Use Construction Operational Vegetation Mitigation Reporting Help

Cascade Defaults

Construction

Construction Phase Off-Road Equipment Dust from Material Movement Demolition Trips And VMT On-Road Fugitive Dust Architectural Coatings

*Make sure that the operational year is later than the final construction year

Import csv Default Undo

Phase Name	Phase Type	Start Date	End Date	Days/Week	Total Days	Phase Description
Demolition	Demolition	07/01/2015	10/31/2015	5 Days/Week	88	
Site Preparation	Site Preparation	11/01/2015	12/01/2015	5 Days/Week	22	
Building Construction	Building Construction	12/01/2015	10/15/2016	5 Days/Week	229	
Architectural Coating	Architectural Coating	03/01/2016	10/31/2016	5 Days/Week	175	
*						

<< Previous Next >>

Remarks
Construction would occur over 15 months.

3:04 PM
3/6/2015

Construction

Construction Phase Off-Road Equipment Dust from Material Movement Demolition Trips And VMT On-Road Fugitive Dust Architectural Coatings

Select Construction Phase

Phase Name Demolition

<< Previous Phase

Next Phase >>

Import csv

Default

Undo

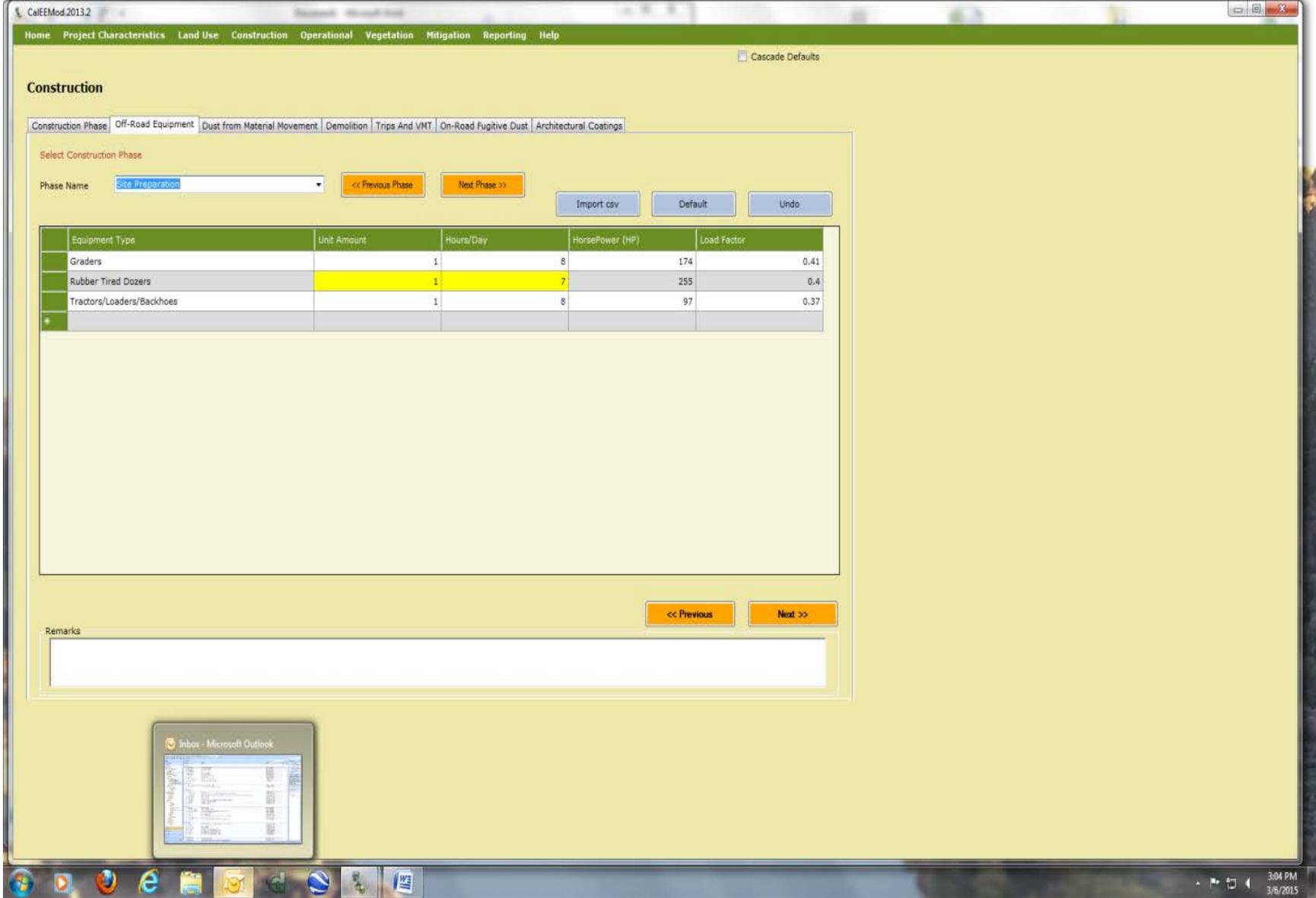
Equipment Type	Unit Amount	Hours/Day	HorsePower (HP)	Load Factor
Concrete/Industrial Saws	1	8	255	0.4
Excavators	2	8	81	0.73
Other Material Handling Equipment	2	8	97	0.37
Rubber Tired Dozers	1	8	255	0.4
Tractors/Loaders/Backhoes	3	8	97	0.37
*				

<< Previous

Next >>

Remarks

Demonition equipment.



Construction

Construction Phase Off-Road Equipment Dust from Material Movement Demolition Trips And VMT On-Road Fugitive Dust Architectural Coatings

Select Construction Phase

Phase Name

<< Previous Phase

Next Phase >>

Import csv

Default

Undo

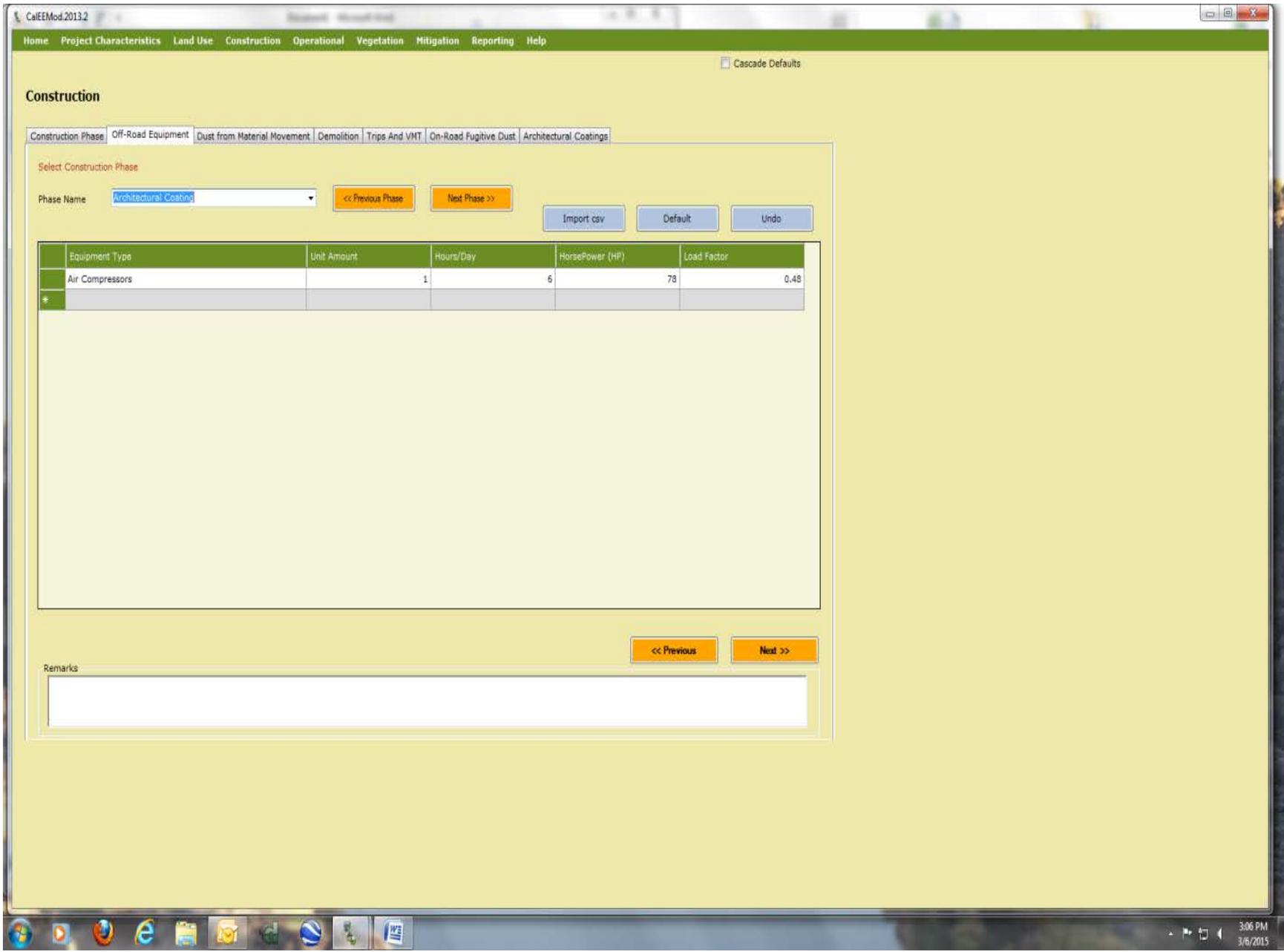
Equipment Type	Unit Amount	Hours/Day	HorsePower (HP)	Load Factor
Cranes	1	6	226	0.29
Forklifts	1	6	89	0.2
Generator Sets	1	8	84	0.74
Other Construction Equipment	1	8	171	0.42
Other Material Handling Equipment	1	8	167	0.4
Tractors/Loaders/Backhoes	1	6	97	0.37
Welders	3	8	46	0.45
*				

<< Previous

Next >>

Remarks

Building equipment.



Cascade Defaults

Construction

Construction Phase Off-Road Equipment Dust from Material Movement Demolition Trips And VMT On-Road Fugitive Dust Architectural Coatings

Select Construction Phase

Phase Name

<< Previous Phase

Next Phase >>

Import csv

Default

Undo

Equipment Type	Unit Amount	Hours/Day	HorsePower (HP)	Load Factor
Air Compressors	1	6	78	0.48
*				

<< Previous

Next >>

Remarks

CalEEMod.2013.2

Home Project Characteristics Land Use Construction Operational Vegetation Mitigation Reporting Help

Cascade Defaults

Construction

Construction Phase | Off-Road Equipment | Dust from Material Movement | Demolition | Trips And VMT | On-Road Fugitive Dust | Architectural Coatings

Import csv Default Undo

Phase Name	Material Imported	Material Exported	Size Metric	Material Import/Export Phased?	Mean Vehicle Speed (mph)	Total Acres Disturbed	Material Moisture Content (%) Bulldozing	Material Moisture Content (%) Truck Loading	Material Silt Content (%)
Site Preparation	0	0		<input type="checkbox"/>	7.1	1.18	7.9	12	6.9

<< Previous Next >>

Remarks
Per project discription.

3:06 PM
3/6/2015

CalEEMod.2013.2

Home Project Characteristics Land Use Construction Operational Vegetation Mitigation Reporting Help

Cascade Defaults

Construction

Construction Phase Off-Road Equipment Dust from Material Movement Demolition Trips And VMT On-Road Fugitive Dust Architectural Coatings

Import csv Default Undo

Phase Name	Size Metric	Unit Amount
Demolition	Building Square Footage	192,000

Remarks

300*160*4 stories.

<< Previous Next >>

3:06 PM 3/8/2015

Cascade Defaults

Construction

Construction Phase Off-Road Equipment Dust from Material Movement Demolition **Trips And VMT** On-Road Fugitive Dust Architectural Coatings

Import csv Default Undo

Phase Name	# Trips Worker (/day)	# Trips Vendor (/day)	Total # Trips Hauling	TripLength Worker (miles)	TripLength Vendor (miles)	TripLength Hauling (miles)	Vehicle Class Worker	Vehicle Class Vendor	Vehicle Class Hauling
Demolition	20	0	873	10.8	7.3	20	LDA,LDT1,LDT2	HHDT,MHDT	HHDT
Site Preparation	8	0	0	10.8	7.3	20	LDA,LDT1,LDT2	HHDT,MHDT	HHDT
Building Construction	40	10	0	10.8	7.3	20	LDA,LDT1,LDT2	HHDT,MHDT	HHDT
Architectural Coating	20	0	0	10.8	7.3	20	LDA,LDT1,LDT2	HHDT,MHDT	HHDT

<< Previous Next >>

Remarks
 No more than forty worker trips per day and 10 material haul trips

Cascade Defaults

Construction

Construction Phase Off-Road Equipment Dust from Material Movement Demolition Trips And VMT On-Road Fugitive Dust Architectural Coatings

Import csv Default Undo

Phase Name	% Pave Worker	% Pave Vendor	% Pave Hauling	Road Silt Loading (g/m2)	Material Silt Content (%)	Material Moisture Content (%)	Average Vehicle Weight (tons)	Mean Vehicle Speed (mph)	
Demolition	100	100	100	0.1	8.5	0.5	2.4	40	
Site Preparation	100	100	100	0.1	8.5	0.5	2.4	40	
Building Construction	100	100	100	0.1	8.5	0.5	2.4	40	
Architectural Coating	100	100	100	0.1	8.5	0.5	2.4	40	

<< Previous Next >>

Remarks

Cascade Defaults

Construction

Construction Phase | Off-Road Equipment | Dust from Material Movement | Demolition | Trips And VMT | On-Road Fugitive Dust | **Architectural Coatings**

Phase Name	Residential Interior VOC (g/L)	Residential Interior Area (sqft)	Residential Exterior VOC (g/L)	Residential Exterior Area (sqft)	Non Residential Interior VOC (g/L)	Non Residential Interior Area (sqft)	Non Residential Exterior VOC (g/L)	Non Residential Exterior Area (sqft)
Architectural Coating	250	0	250	0	250	110,400	250	36,800

Remarks
 Based on 160*2 + 300*2 for exterior and 36,800 sqft *3 for interior.

Cascade Defaults

Operational - Mobile

Vehicle Trips **Vehicle Emissions** Road Dust

Import csv Default Undo

Land Use SubType	Size Metric	WkDy Trip Rate (/size /day)	Sat Trip Rate (/size /day)	Sun Trip Rate (/size /day)	Res H-W Trip Length (miles)	Res H-S Trip Length (miles)	Res H-O Trip Length (miles)	Non Res C-C Trip Length (miles)	Non Res C-W Trip Length (miles)	Non Res C-NW Trip Length (miles)	Primar Trip (%)	Divert Trip (%)	Pass-B Trip (%)	Res H-W Trip (%)	Res H-S Trip (%)	Res H-O Trip (%)	Non Res C-C Trip (%)	Non Res C-W Trip (%)	Non Res C-NW Trip (%)
Congregate Care (A...	Dwelling Unit	3.92	3.92	3.92	10.8	7.3	7.5	0	0	0	63	0	37	32.9	18	49.1	0	0	0
Retirement Commu...	Dwelling Unit	3.17	3.17	3.17	10.8	7.3	7.5	0	0	0	63	0	37	32.9	18	49.1	0	0	0
Strip Mall	1000sqft	161.62	161.62	161.62	0	0	0	7.3	9.5	7.3	63	0	37	0	0	0	64.4	16.6	19

<< Previous Next >>

Remarks

Trep generation rates for ITE 9th Edition.

Cascade Defaults

Operational - Energy Use

Using Historical Data

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	NonTitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Energy Intensity (KBTU/size/yr)	NonTitle-24 Natural Gas Energy Intensity (KBTU/size/yr)
Congregate Care (Assisted Living)	322.48	2,554.47	741.44	8,261.25	1,716.22
Retirement Community	301.15	3,125.85	1,001.1	18,960.8	2,951
Strip Mall	3.98	2.98	6.01	4.72	0.93

Remarks

Cascade Defaults

Operational - Water and Wastewater

Land Use Subtype	Size Metric	Indoor Water Use (gals/year)	Outdoor Water Use (gals/year)	Electricity Intensity Factor To Supply (kWhr /Mgal)	Electricity Intensity Factor To Treat (kWhr /Mgal)	Electricity Intensity Factor To Distribute (kWhr /Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWhr /Mgal)	Septic Tank (%)	Aerobic (%)	Facultative Lagoons (%)	Anaerobic Digester with Combustion of Digester Gas (%)	Anaerobic Digestion with Cogeneration from Combustion of Digester Gas (%)
Congregate Care (Assisted Livi...	Dwelling Unit	3,257,701...	2,053,768.2	2,117	111	1,272	1,911	10.33	87.46	2.21	100	0
Retirement Community	Dwelling Unit	6,515,402...	4,107,536.4	2,117	111	1,272	1,911	10.33	87.46	2.21	100	0
Strip Mall	1000sqft	915,610,4...	561,180,5...	2,117	111	1,272	1,911	10.33	87.46	2.21	100	0

Remarks

Cascade Defaults

Operational - Solid Waste

Land Use Subtype	Size Metric	Solid Waste Generation Rate (tons/year)	Landfill No Gas Capture (%)	Landfill Capture Gas Flare (%)	Landfill Capture Gas Energy Recovery (%)
Congregate Care (Assisted Living)	Dwelling Unit	45.63	6	94	0
Retirement Community	Dwelling Unit	46	6	94	0
Strip Mall	1000sqft	12,979.05	6	94	0

Remarks

**Pacifica Senior Living Facility Project
Sacramento Valley Air Basin, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Retirement Community	100.00	Dwelling Unit	0.00	0.00	100
Strip Mall	12.36	1000sqft	0.28	12,361.00	1998
Congregate Care (Assisted Living)	50.00	Dwelling Unit	0.00	0.00	50

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	65
Climate Zone	6			Operational Year	2016
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project description.

Construction Phase - Construction would occur over 15 months.

Off-road Equipment - Demonlition equipment.

Off-road Equipment -

Off-road Equipment - Building equipment.

Off-road Equipment -

Grading - Per project discription.

Demolition - 300'*160'*4 stories.

Trips and VMT - No more than forty worker trips per day and 10 material haul trips

Vehicle Trips - Trep generation rates for ITE 9th Edition.

Woodstoves - No fireplaces or woodstoves.

Architectural Coating - Based on 160*2 + 300*2 for exterior and 36,800 sqft *3 for interior.

Area Coating - Consistent with construction.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	6,180,500.00	36,800.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	18,541,500.00	110,400.00
tblAreaCoating	Area_Nonresidential_Exterior	6180500	36800
tblAreaCoating	Area_Nonresidential_Interior	18541500	110400
tblConstructionPhase	NumDays	10.00	175.00
tblConstructionPhase	NumDays	200.00	229.00
tblConstructionPhase	NumDays	20.00	88.00
tblConstructionPhase	NumDays	2.00	22.00
tblConstructionPhase	PhaseEndDate	6/16/2017	10/31/2016
tblConstructionPhase	PhaseEndDate	10/17/2016	10/15/2016
tblConstructionPhase	PhaseEndDate	10/30/2015	10/31/2015
tblConstructionPhase	PhaseStartDate	10/16/2016	3/1/2016

tblConstructionPhase	PhaseStartDate	12/2/2015	12/1/2015
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	55.00	0.00
tblFireplaces	NumberGas	27.50	0.00
tblFireplaces	NumberNoFireplace	10.00	0.00
tblFireplaces	NumberNoFireplace	5.00	0.00
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	17.50	0.00
tblGrading	AcresOfGrading	11.00	1.18
tblLandUse	LandUseSquareFeet	100,000.00	0.00
tblLandUse	LandUseSquareFeet	50,000.00	0.00
tblLandUse	LotAcreage	20.00	0.00
tblLandUse	LotAcreage	3.13	0.00
tblLandUse	Population	286.00	100.00
tblLandUse	Population	0.00	1,998.00
tblLandUse	Population	143.00	50.00
tblOffRoadEquipment	HorsePower	162.00	81.00
tblOffRoadEquipment	HorsePower	81.00	255.00
tblOffRoadEquipment	HorsePower	167.00	97.00
tblOffRoadEquipment	LoadFactor	0.38	0.73
tblOffRoadEquipment	LoadFactor	0.73	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.37
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Excavators

tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	VendorTripNumber	2,042.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	20.00
tblTripsAndVMT	WorkerTripNumber	4,064.00	40.00
tblTripsAndVMT	WorkerTripNumber	813.00	20.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	PB_TP	3.00	37.00
tblVehicleTrips	PB_TP	3.00	37.00
tblVehicleTrips	PB_TP	15.00	37.00
tblVehicleTrips	PR_TP	86.00	63.00
tblVehicleTrips	PR_TP	86.00	63.00
tblVehicleTrips	PR_TP	45.00	63.00
tblVehicleTrips	ST_TR	2.81	3.17
tblVehicleTrips	ST_TR	2.20	3.92

tblVehicleTrips	ST_TR	42.04	161.62
tblVehicleTrips	SU_TR	2.81	3.17
tblVehicleTrips	SU_TR	2.44	3.92
tblVehicleTrips	SU_TR	20.43	161.62
tblVehicleTrips	WD_TR	2.81	3.17
tblVehicleTrips	WD_TR	2.74	3.92
tblVehicleTrips	WD_TR	44.32	161.62
tblWoodstoves	NumberCatalytic	5.00	0.00
tblWoodstoves	NumberCatalytic	2.50	0.00
tblWoodstoves	NumberNoncatalytic	5.00	0.00
tblWoodstoves	NumberNoncatalytic	2.50	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	8.6402	64.2525	44.7617	0.0584	5.7868	3.7474	9.5342	3.0261	3.5156	6.5417	0.0000	5,775.1398	5,775.1398	1.4093	0.0000	5,804.7359
2016	15.8901	37.5764	29.4428	0.0455	0.5592	2.2980	2.8572	0.1497	2.1910	2.3407	0.0000	4,319.0729	4,319.0729	0.8833	0.0000	4,337.6211
Total	24.5303	101.8289	74.2045	0.1039	6.3461	6.0453	12.3914	3.1757	5.7067	8.8824	0.0000	10,094.2127	10,094.2127	2.2926	0.0000	10,142.3570

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	8.6333	64.1947	44.7247	0.0583	13.9874	3.7440	16.7755	3.2309	3.5124	6.5385	0.0000	5,770.4560	5,770.4560	1.4081	0.0000	5,800.0255
2016	15.8856	37.5430	29.4200	0.0455	0.5592	2.2959	2.8551	0.1497	2.1890	2.3387	0.0000	4,315.8038	4,315.8038	0.8825	0.0000	4,334.3355
Total	24.5190	101.7377	74.1446	0.1038	14.5466	6.0398	19.6305	3.3805	5.7014	8.8772	0.0000	10,086.2598	10,086.2598	2.2905	0.0000	10,134.3610

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.05	0.09	0.08	0.09	-129.22	0.09	-58.42	-6.45	0.09	0.06	0.00	0.08	0.08	0.09	0.00	0.08

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1271	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.2856	22.2856	0.0227	0.0000	22.7626
Energy	0.0815	0.6980	0.3048	4.4500e-003		0.0563	0.0563		0.0563	0.0563		889.5707	889.5707	0.0171	0.0163	894.9845
Mobile	22.7987	21.0987	94.8020	0.1574	9.6785	0.2822	9.9607	2.5886	0.2591	2.8477		13,811.9455	13,811.9455	0.5624		13,823.7552
Total	24.0073	21.9435	107.6557	0.1625	9.6785	0.4063	10.0848	2.5886	0.3831	2.9718	0.0000	14,723.8017	14,723.8017	0.6021	0.0163	14,741.5023

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1271	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.2856	22.2856	0.0227	0.0000	22.7626
Energy	0.0815	0.6980	0.3048	4.4500e-003		0.0563	0.0563		0.0563	0.0563		889.5707	889.5707	0.0171	0.0163	894.9845
Mobile	22.7987	21.0987	94.8020	0.1574	9.6785	0.2822	9.9607	2.5886	0.2591	2.8477		13,811.9455	13,811.9455	0.5624		13,823.7552
Total	24.0073	21.9435	107.6557	0.1625	9.6785	0.4063	10.0848	2.5886	0.3831	2.9718	0.0000	14,723.8017	14,723.8017	0.6021	0.0163	14,741.5023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2015	10/31/2015	5	88	
2	Site Preparation	Site Preparation	11/1/2015	12/1/2015	5	22	
3	Building Construction	Building Construction	12/1/2015	10/15/2016	5	229	
4	Architectural Coating	Architectural Coating	3/1/2016	10/31/2016	5	175	

Acres of Grading (Site Preparation Phase): 1.18

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 110,400; Non-Residential Outdoor: 36,800

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	2	8.00	81	0.73
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Building Construction	Other Construction Equipment	1	8.00	171	0.42
Building Construction	Other Material Handling Equipment	1	8.00	167	0.40
Demolition	Other Material Handling Equipment	2	8.00	97	0.37
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	9	20.00	0.00	873.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	40.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2391	0.0000	2.2391	0.3390	0.0000	0.3390			0.0000			0.0000
Off-Road	4.0801	41.4605	30.6850	0.0345		2.7405	2.7405		2.5213	2.5213		3,621.661 1	3,621.661 1	1.0812		3,644.366 6
Total	4.0801	41.4605	30.6850	0.0345	2.2391	2.7405	4.9796	0.3390	2.5213	2.8603		3,621.661 1	3,621.661 1	1.0812		3,644.366 6

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9477	2.9163	2.7100	7.4000e-003	0.1731	0.0488	0.2219	0.0474	0.0449	0.0923		752.6687	752.6687	5.8500e-003		752.7916
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3576	0.0957	1.2264	2.1000e-003	0.1643	1.3000e-003	0.1656	0.0436	1.1800e-003	0.0448		178.9237	178.9237	9.4700e-003		179.1226
Total	1.3052	3.0121	3.9364	9.5000e-003	0.3374	0.0501	0.3875	0.0910	0.0460	0.1370		931.5924	931.5924	0.0153		931.9141

3.2 Demolition - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2391	0.0000	2.2391	0.3390	0.0000	0.3390			0.0000			0.0000
Off-Road	4.0763	41.4225	30.6569	0.0344		2.7380	2.7380		2.5190	2.5190	0.0000	3,618.3384	3,618.3384	1.0802		3,641.0231
Total	4.0763	41.4225	30.6569	0.0344	2.2391	2.7380	4.9771	0.3390	2.5190	2.8580	0.0000	3,618.3384	3,618.3384	1.0802		3,641.0231

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9477	2.9163	2.7100	7.4000e-003	11.5839	0.0488	11.6327	2.8483	0.0449	2.8931		752.6687	752.6687	5.8500e-003		752.7916
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3576	0.0957	1.2264	2.1000e-003	0.1643	1.3000e-003	0.1656	0.0436	1.1800e-003	0.0448		178.9237	178.9237	9.4700e-003		179.1226
Total	1.3052	3.0121	3.9364	9.5000e-003	11.7482	0.0501	11.7983	2.8918	0.0460	2.9379		931.5924	931.5924	0.0153		931.9141

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3262	0.0000	5.3262	2.9026	0.0000	2.9026			0.0000			0.0000
Off-Road	2.5362	26.8886	17.0107	0.0171		1.4671	1.4671		1.3497	1.3497		1,801.7440	1,801.7440	0.5379		1,813.0398
Total	2.5362	26.8886	17.0107	0.0171	5.3262	1.4671	6.7933	2.9026	1.3497	4.2523		1,801.7440	1,801.7440	0.5379		1,813.0398

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1430	0.0383	0.4906	8.4000e-004	0.0657	5.2000e-004	0.0662	0.0174	4.7000e-004	0.0179		71.5695	71.5695	3.7900e-003		71.6490
Total	0.1430	0.0383	0.4906	8.4000e-004	0.0657	5.2000e-004	0.0662	0.0174	4.7000e-004	0.0179		71.5695	71.5695	3.7900e-003		71.6490

3.3 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3262	0.0000	5.3262	2.9026	0.0000	2.9026			0.0000			0.0000
Off-Road	2.5339	26.8639	16.9951	0.0171		1.4657	1.4657		1.3484	1.3484	0.0000	1,800.0910	1,800.0910	0.5374		1,811.3765
Total	2.5339	26.8639	16.9951	0.0171	5.3262	1.4657	6.7919	2.9026	1.3484	4.2510	0.0000	1,800.0910	1,800.0910	0.5374		1,811.3765

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1430	0.0383	0.4906	8.4000e-004	0.0657	5.2000e-004	0.0662	0.0174	4.7000e-004	0.0179		71.5695	71.5695	3.7900e-003		71.6490
Total	0.1430	0.0383	0.4906	8.4000e-004	0.0657	5.2000e-004	0.0662	0.0174	4.7000e-004	0.0179		71.5695	71.5695	3.7900e-003		71.6490

3.4 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.9243	36.1063	23.3324	0.0338		2.2590	2.2590		2.1464	2.1464		3,303.4650	3,303.4650	0.8467		3,321.2447
Total	4.9243	36.1063	23.3324	0.0338		2.2590	2.2590		2.1464	2.1464		3,303.4650	3,303.4650	0.8467		3,321.2447

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3214	1.0278	1.4753	2.3800e-003	0.0663	0.0182	0.0845	0.0189	0.0167	0.0356		240.5140	240.5140	2.0600e-003		240.5572
Worker	0.7152	0.1915	2.4527	4.2000e-003	0.3286	2.6000e-003	0.3312	0.0872	2.3700e-003	0.0895		357.8473	357.8473	0.0190		358.2451
Total	1.0366	1.2193	3.9281	6.5800e-003	0.3949	0.0208	0.4157	0.1061	0.0191	0.1251		598.3613	598.3613	0.0210		598.8023

3.4 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.9198	36.0732	23.3110	0.0338		2.2570	2.2570		2.1445	2.1445	0.0000	3,300.4343	3,300.4343	0.8459		3,318.1977
Total	4.9198	36.0732	23.3110	0.0338		2.2570	2.2570		2.1445	2.1445	0.0000	3,300.4343	3,300.4343	0.8459		3,318.1977

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3214	1.0278	1.4753	2.3800e-003	0.0663	0.0182	0.0845	0.0189	0.0167	0.0356		240.5140	240.5140	2.0600e-003		240.5572
Worker	0.7152	0.1915	2.4527	4.2000e-003	0.3286	2.6000e-003	0.3312	0.0872	2.3700e-003	0.0895		357.8473	357.8473	0.0190		358.2451
Total	1.0366	1.2193	3.9281	6.5800e-003	0.3949	0.0208	0.4157	0.1061	0.0191	0.1251		598.3613	598.3613	0.0210		598.8023

3.4 Building Construction - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5317	34.0549	22.9865	0.0338		2.0824	2.0824		1.9770	1.9770		3,281.8343	3,281.8343	0.8224		3,299.1046
Total	4.5317	34.0549	22.9865	0.0338		2.0824	2.0824		1.9770	1.9770		3,281.8343	3,281.8343	0.8224		3,299.1046

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2678	0.8943	1.3000	2.3700e-003	0.0663	0.0152	0.0816	0.0189	0.0140	0.0329		237.5201	237.5201	1.8600e-003		237.5592
Worker	0.6503	0.1699	2.1816	4.2100e-003	0.3286	2.4700e-003	0.3311	0.0872	2.2600e-003	0.0894		345.5137	345.5137	0.0172		345.8750
Total	0.9181	1.0643	3.4816	6.5800e-003	0.3949	0.0177	0.4126	0.1061	0.0163	0.1223		583.0338	583.0338	0.0191		583.4342

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5275	34.0237	22.9654	0.0338		2.0805	2.0805		1.9752	1.9752	0.0000	3,278.8234	3,278.8234	0.8216		3,296.0778
Total	4.5275	34.0237	22.9654	0.0338		2.0805	2.0805		1.9752	1.9752	0.0000	3,278.8234	3,278.8234	0.8216		3,296.0778

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2678	0.8943	1.3000	2.3700e-003	0.0663	0.0152	0.0816	0.0189	0.0140	0.0329		237.5201	237.5201	1.8600e-003		237.5592
Worker	0.6503	0.1699	2.1816	4.2100e-003	0.3286	2.4700e-003	0.3311	0.0872	2.2600e-003	0.0894		345.5137	345.5137	0.0172		345.8750
Total	0.9181	1.0643	3.4816	6.5800e-003	0.3949	0.0177	0.4126	0.1061	0.0163	0.1223		583.0338	583.0338	0.0191		583.4342

3.5 Architectural Coating - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.7467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	10.1152	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3252	0.0850	1.0908	2.1000e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		172.7568	172.7568	8.6000e-003		172.9375
Total	0.3252	0.0850	1.0908	2.1000e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		172.7568	172.7568	8.6000e-003		172.9375

3.5 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.7467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3681	2.3701	1.8822	2.9700e-003		0.1964	0.1964		0.1964	0.1964	0.0000	281.1898	281.1898	0.0332		281.8860
Total	10.1149	2.3701	1.8822	2.9700e-003		0.1964	0.1964		0.1964	0.1964	0.0000	281.1898	281.1898	0.0332		281.8860

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3252	0.0850	1.0908	2.1000e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		172.7568	172.7568	8.6000e-003		172.9375
Total	0.3252	0.0850	1.0908	2.1000e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		172.7568	172.7568	8.6000e-003		172.9375

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.7987	21.0987	94.8020	0.1574	9.6785	0.2822	9.9607	2.5886	0.2591	2.8477		13,811.94 55	13,811.94 55	0.5624		13,823.75 52
Unmitigated	22.7987	21.0987	94.8020	0.1574	9.6785	0.2822	9.9607	2.5886	0.2591	2.8477		13,811.94 55	13,811.94 55	0.5624		13,823.75 52

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Retirement Community	317.00	317.00	317.00	625,785	625,785
Congregate Care (Assisted Living)	196.00	196.00	196.00	386,921	386,921
Strip Mall	1,997.62	1,997.62	1,997.62	3,538,293	3,538,293
Total	2,510.62	2,510.62	2,510.62	4,550,999	4,550,999

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Retirement Community	10.80	7.30	7.50	32.90	18.00	49.10	63	0	37
Congregate Care (Assisted)	10.80	7.30	7.50	32.90	18.00	49.10	63	0	37
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	63	0	37

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462992	0.061838	0.181170	0.154683	0.057449	0.007359	0.019227	0.041233	0.001831	0.001687	0.006984	0.000699	0.002847

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0815	0.6980	0.3048	4.4500e-003		0.0563	0.0563		0.0563	0.0563		889.5707	889.5707	0.0171	0.0163	894.9845
NaturalGas Unmitigated	0.0815	0.6980	0.3048	4.4500e-003		0.0563	0.0563		0.0563	0.0563		889.5707	889.5707	0.0171	0.0163	894.9845

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	1366.78	0.0147	0.1260	0.0536	8.0000e-004		0.0102	0.0102		0.0102	0.0102		160.7973	160.7973	3.0800e-003	2.9500e-003	161.7759
Retirement Community	6003.23	0.0647	0.5532	0.2354	3.5300e-003		0.0447	0.0447		0.0447	0.0447		706.2627	706.2627	0.0135	0.0130	710.5609
Strip Mall	191.342	2.0600e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5108	22.5108	4.3000e-004	4.1000e-004	22.6478
Total		0.0815	0.6980	0.3048	4.4400e-003		0.0563	0.0563		0.0563	0.0563		889.5707	889.5707	0.0171	0.0163	894.9845

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	1.36678	0.0147	0.1260	0.0536	8.0000e-004		0.0102	0.0102		0.0102	0.0102		160.7973	160.7973	3.0800e-003	2.9500e-003	161.7759
Retirement Community	6.00323	0.0647	0.5532	0.2354	3.5300e-003		0.0447	0.0447		0.0447	0.0447		706.2627	706.2627	0.0135	0.0130	710.5609
Strip Mall	0.191342	2.0600e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5108	22.5108	4.3000e-004	4.1000e-004	22.6478
Total		0.0815	0.6980	0.3048	4.4400e-003		0.0563	0.0563		0.0563	0.0563		889.5707	889.5707	0.0171	0.0163	894.9845

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1271	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.2856	22.2856	0.0227	0.0000	22.7626
Unmitigated	1.1271	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.2856	22.2856	0.0227	0.0000	22.7626

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4673					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3953	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677		22.2856	22.2856	0.0227		22.7626
Total	1.1271	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.2856	22.2856	0.0227	0.0000	22.7626

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4673					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3953	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677		22.2856	22.2856	0.0227		22.7626
Total	1.1271	0.1468	12.5489	6.5000e-004		0.0677	0.0677		0.0677	0.0677	0.0000	22.2856	22.2856	0.0227	0.0000	22.7626

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

ATTACHMENT 2

CAP CONSISTENCY REVIEW CHECKLIST

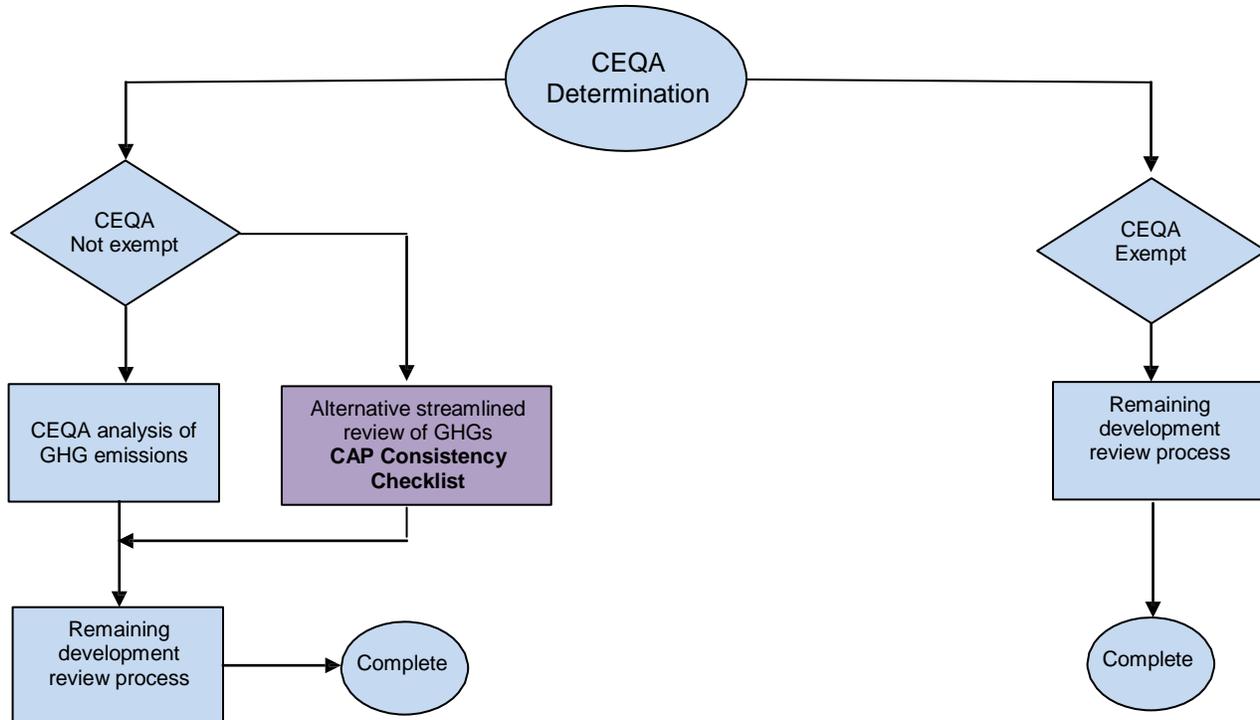
CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

The purpose of the Climate Action Plan Consistency Review Checklist (CAP Consistency Review Checklist) is to provide a streamlined review process for proposed new development projects which are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA)..

CEQA Guidelines require the analysis of greenhouse gas (GHG) emissions and potential climate change impacts from new development. The Sacramento Climate Action Plan qualifies under section 15183.5 of the CEQA Guidelines as a plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. This allows projects that demonstrate consistency with the CAP to be eligible for this streamlining procedure. Projects that demonstrate consistency with the CAP and the Sacramento 2030 General Plan may be able to answer “No additional significant environmental effect” in the City’s initial study checklist. Projects that do not demonstrate consistency may, at the City’s discretion, prepare a more comprehensive project-specific analysis of GHG emissions consistent with CEQA requirements. (See FAQ about the CAP Consistency Review Checklist for more details.)

The diagram below shows the context for the CAP Consistency Review Checklist within the planning review process framework.

Streamlined Review of GHG Emissions in Development Projects



CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

Application Submittal Requirements

1. The CAP Consistency Review Checklist is required only for proposed new development projects which are subject to CEQA review (non-exempt projects)
2. If required, the CAP Consistency Review Checklist must be submitted in addition to the basic set of requirements set forth in the Universal Application and the Planning Application Submittal Matrix.
3. The applicant shall work with staff to meet the requirements of this checklist. These requirements will be reflected in the conditions of approval and/or mitigation measures.
4. All conditions of approval and mitigation measures from this checklist shall be shown on full-size sheets for building plan check submittals.

Application Information

Project Number: P14-024

Address of Property: 700 16th Street, Sacramento, CA

Was a special consultant retained to complete this checklist? Yes No. If yes, complete following

Consultant Name*: Erin Quinn, Senior Air Quality and Climate Change Specialist

Company: Analytical Environmental Services

Phone: 916-447-3479 E-Mail: equinn@analyticalcorp.com

CAP Consistency Checklist Form for Projects that are Not Exempt from CEQA

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check

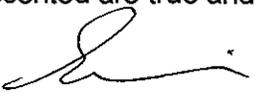
Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	No*	
1. Is the proposed project substantially consistent with the City's over-all goals for land use and urban form, allowable floor area ratio (FAR) and/or density standards in the City's 2030 General Plan, as it currently exists?	X		
<p><i>Please explain how proposed project compares to 2030 General Plan with respect to density standards, FAR, land use and urban form. (See directions for filling out CAP Checklist)</i></p> <p>The project site consists of 1.18 acres and is currently occupied by the vacant 132-unit room Clarion Hotel which became non-operational in December 2012. The Proposed Project consists of (1) the demolition of the existing Clarion Hotel, and (2) the construction of a new mixed-use age restricted art-centered apartment community and ground-level commercial and retail spaces. The proposed development includes a four-story plus basement building with a gross footprint of 167,788 square feet, which will include 100 Independent Living units and associated facilities, 41 Assisted Living units and associated facilities, a 1,843-square foot Community Arts Center, and approximately 12,361 square feet of ground-level commercial space. The units would range in size from 338 square feet (sf) to 1,159 sf. A total of eighty parking spaces are proposed (3 on-site parking spaces; 77 off-site parking spaces for residents and visitors in a lot across 16th street). The project site is designated Urban Corridor Low in the City's General Plan; the site is zoned as General Commercial (C-2).</p> <p>The proposed project is consistent with numerous General Plan policies that support the City's overall goals for livability, smart growth and sustainability, including (but not limited to): LU 1.1.5 (Infill Development), LU 2.1.2 (Protect Established Neighborhoods), LU 2.1.16 (Neighborhood Enhancement), LU 2.6.1 (Sustainable Development Patterns), LU 2.7.7 (Buildings that Engage the street), LU 4.1.1 (Mixed-Use Neighborhoods), LU 4.1.3 (Walkable Neighborhoods), LU 4.1.4 (Alley Access), LU 4.1.7 (Connections to Open Space), LU 4.1.11 (Senior Housing Development), LU 5.5.1 (Urban Centers), LU 5.6.1 (Downtown Center Development), LU 6.1.6 (Higher Intensity Nodes), LU 6.1.7 (Conversion to Residential), M 2.3.1 (Streetscape Design), M 4.2.2 (Pedestrian and Bicycle-Friendly Streets), and M 4.3.1 (Neighborhood Traffic Management). The proposed project would require a Conditional Use Permit to allow a percentage of units to function as Assisted Living units, defined as a "Residential Care Facility" by the City of Sacramento Planning and Development Code.</p> <p>The project is consistent with the City of Sacramento 2030 General Plan and MEIR and would not require an amendment to the site's land use or zoning designations. Therefore, the proposed project is substantially consistent with the City's overall goals for land use and urban form and density standards in the 2030 General Plan, and is therefore consistent with the assumptions used to estimate GHG emissions and reductions applicable to new development that is approved consistent with the General Plan.</p> <p><small>*If "No", equivalent or better GHG reduction must be demonstrated as part and incorporated into the conditions of approval.</small></p>			
2. Would the project reduce average vehicle miles traveled (VMT) per capita of the proposed residents, employees, and/or visitors to the project by a minimum of 35% compared to the statewide average?	X		NA
<p><i>Please explain how proposed project meets this requirement. If "not applicable", explain why this was not required. If project does not meet this requirement, see Directions for filling out CAP Consistency Review Checklist for alternatives to meeting checklist requirements.</i></p> <p>The proposed project site is shown within the green area on Exhibit 1 in the Checklist Directions ("City of Sacramento Daily VMT/Capita, 2008 Base Year"). Thus, it can be assumed to have a VMT/capita/day below 16. Therefore, VMT/capita for the project would be at least 35 percent less than the statewide average, and would be consistent with CAP Action 1.1.1. No further analysis is required, per the guidance in the Checklist Directions.</p> <p>(Attach a copy of the VMT model <u>input</u> and output. Record the model and version here <u>CalEEMOD 2013.2.2</u>)</p> <p><small>*If "No", equivalent or better GHG reduction must be demonstrated as part and incorporated into the conditions of approval.</small></p>			

Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	NA
3. Would the project incorporate traffic calming measures? <i>(Examples of traffic calming measures include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.)</i>		X
<p><i>Please explain how the proposed project meets this requirement (list traffic calming measures). If "not applicable", explain why traffic calming measures were not required.</i></p> <p>The proposed project is an infill project in downtown Sacramento, and does not include any roadway or transportation facility improvements. Existing infrastructure is sufficient and no traffic calming measures are required.</p>		
4. Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan?	Yes	NA
	X	
<p><i>Please explain how the proposed project meets this requirement. If "not applicable", explain why this was not required.</i></p> <p>The proposed project is an infill development project where existing streets will serve the project. The level of pedestrian improvements necessary to determine Pedestrian Master Plan consistency will be measured according to the "Basic, Upgrade or Premium" categories defined in Appendix A to the Pedestrian Master Plan.</p> <p>As defined by the Plan, the proposed project is located in an area of moderate to high pedestrian improvement need and designated a Pedestrian Corridor and a Pedestrian Node. This requires premium category improvements. Existing pedestrian infrastructure already meets the requirements of premium improvements. This includes:</p> <ul style="list-style-type: none"> • Streets with gutters • Street lighting • Street trees and landscaping • Crosswalks • Vehicle speed control • Special traffic signaling • Dense housing • Dense employment • Transit access 		

<p>5. Would the project incorporate bicycle facilities consistent with the City's Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen?</p>	<p>Yes</p>	<p>NA</p>	
		<p>X</p>	
<p><i>Please explain how the proposed project meets this requirement. If "not applicable", explain why this was not required.</i></p> <p>Existing on-street bikeways are already present and are consistent with the Bikeway Master Plan. H Street is directly adjacent to the proposed project and includes on-street Class II bikeways. Additional roadways in the surrounding area that provide bikeways include G Street, E street, 18th Street, and 13th Street. Further, the project will install on-site bicycle parking facilities.</p>			
<p>6. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., photovoltaic systems) that would generate at least a minimum of 15% of the project's total energy demand on-site? (CAP Actions: 3.4.1 and 3.4.2)</p>	<p>Yes</p>	<p>No*</p>	<p>NA</p>
	<p>X</p>		
<p><i>Please explain how the proposed project meets this requirement. If "not applicable", explain why this was not required. If project does not meet requirements, see DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST re: alternatives to meeting checklist requirements.</i></p> <p>The proposed project will include an on-site photovoltaic system that will be sized to generate a minimum of 15% of the project's energy demand.</p> <p>Attach a copy of the CalEEMod input and output. Record the model and version here CalEEMOD 2013.2.2. Do NOT select the "use historical" box in CalEEMod for energy demand analysis related to this requirement.</p> <p><small>*If "No", equivalent or better GHG reduction must be demonstrated as part and incorporated into the conditions of approval.</small></p>			
<p>7. Would the project (if constructed on or after January 1, 2014) comply with minimum CALGreen Tier 1 water efficiency standards?</p>	<p>Yes</p>	<p>NA</p>	
	<p>X</p>		
<p><i>Please explain how the proposed project meets this requirement. If "not applicable", explain why this was not required.</i></p> <p>The project will include the following condition of approval: Project must meet CALGreen Tier 1 water efficiency and conservation standards. Copies of the appropriate CalGreen checklist (see FAQ) shall be included on the full-size sheets for building plan check submittals.</p>			

Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Signature:  _____ Date: 5/28/2015

DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST

General Plan Consistency

1. Is the proposed project substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's [2030 General Plan](#)?

Consistency with the General Plan land use and urban form designation, FAR and/or density standards is a key determining factor in whether or not the CAP Consistency Review procedure can be used. This is because future growth and development consistent with the General Plan was used to estimate business as usual emission forecasts, as well as emission reductions from actions that would be applicable to new development.

Refer to the 2030 General Plan, Land Use and Urban Form Designations and Development Standards starting on page 2-29. If a project is not fully consistent with the General Plan, the project still may qualify for consistency with the CAP, but this determination will need to be closely coordinated with the City. The City will determine whether the proposed land uses under consideration could be found consistent with the growth projections and assumptions used to develop the GHG emissions inventory and projections in the CAP.

Sustainable Land Use

2. Would the project reduce average vehicle miles traveled (VMT) per capita of the proposed residents, employees, and/or visitors to the project by a minimum of 35% compared to the statewide average? (Applicable CAP Action: 1.1.1)

The statewide VMT/capita in 2009 was 8,937 VMT/capita/year, which is approximately 24.5 VMT/capita/day^{1,2}. A 35% reduction below the 2009 statewide average would be 5,809 VMT/capita/year, or about 15.9 VMT/capita/day.

Steps to Determine if Proposed Project is Consistent with CAP Action 1.1.1:

Step 1: Consult VMT/Capita Screening Map:

The map below can be used as a quick screening tool to determine whether or not a proposed project is likely to meet the 35% reduction standard based on its geographic location.

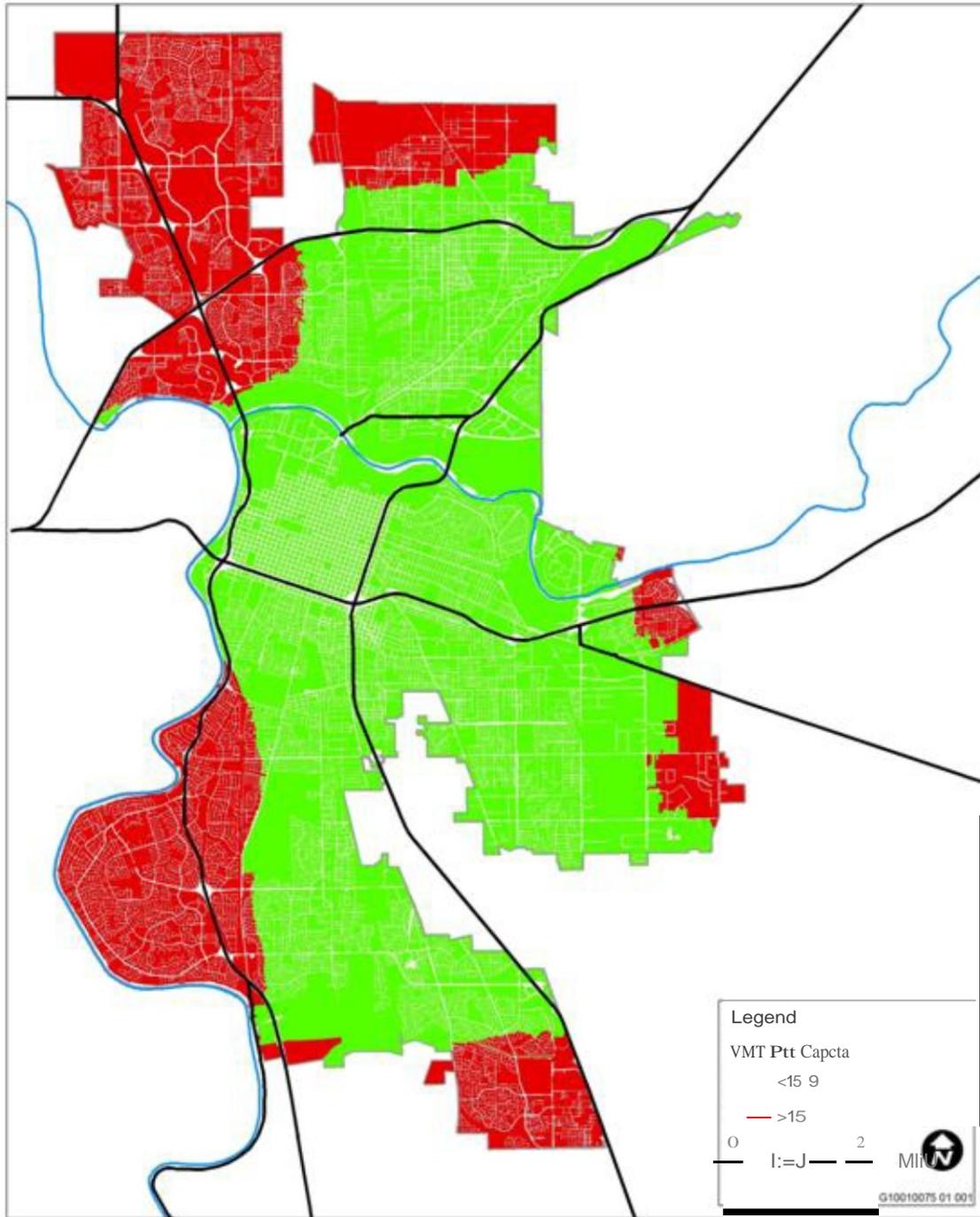
If the proposed project is located in the green area of the map, it can be assumed to have a VMT/capita/day below 16, and no further action related to VMT is necessary. If the proposed project is located within one of the red areas, or in a white area adjacent to any red parcel, it cannot be assumed to achieve the standard, and further analysis is required to show that the project is below 16 VMT/capita/day. Proceed to Step 2, and estimate the project VMT using one of the computer modeling tools below.

¹ Federal Highway Administration. 2009. Table VM-2 - Highway Statistics 2009. <http://www.fhwa.dot.gov/policyinformation/statistics/2009/vm2.cfm>.

² U.S. Census Bureau. 2005-2009 American Community Survey.

http://factfinder.census.gov/servlet/ACSSAFFacts?_event=Search&_lang=en&_sse=on&geo_id=04000US06&_state=04000US06

Exhibit 1: City of Sacramento Daily VMT/Capita, 2008 Base Year
Source: SACOG, SACSIM Model, 2012.



Step 2: VMT Modeling

Download one of computer modeling tools from the following links and follow the user guide for the tool that you have selected. Select the year 2020 as the year of project operation and compare the modeled VMT/capita/day with the City's standard of 15.9 VMT/capita/day. If the result of the computer modeling supports the project's consistency with the City's VMT/capita standard, then the project is considered to comply with CAP Action 1.1.1. If the project's estimated VMT/capita exceeds the City's standard of 15.9, proceed to Step 3.

[California Emission Estimator Model](#) (CalEEMod 2013.2 or most recent version)

CalEEMod is a statewide land use emissions computer model that provides a comprehensive estimate of development project criteria pollutants and GHG emissions associated with both construction and operations from a variety of land use project types.

[Sketch 7 VMT Estimation Tool](#) (Contact SACOG for most recent version)

The Sketch 7 model is a web-based, parcel-level, scenario planning tool that allows users to input land uses and project attributes such as demographic data, design, density, quality of public transit, mix of land uses, and other planning-related features. Sketch 7 estimates VMT/capita and other environmental indicators based on region-specific parameters, local land use plans and the SACSIM model. Sketch 7 also accounts for the interaction of the project's proposed land uses with the surrounding land uses.

Step 3: Additional Mitigation and Further Analysis

If the proposed project does not pass Steps 1 and 2, additional mitigation from another category (such as building energy efficiency) can be substituted as long as this GHG reduction does not "double count" GHG reductions already taken by the CAP. In other words, mitigation will be necessary to reduce GHG emissions from the project beyond what is already accounted for in the CAP (to avoid double-counting).

Step 3(a) - Determine the increment of total VMT by which the project exceeds the City's 15.9 VMT/capita/day standard. For example, if the project would result in 18 VMT/capita/day and proposes to accommodate 400 new residents, the increment that the project would exceed the City's standard would be 306,600 VMT, which equals: $(18 - 15.9 \text{ VMT/capita/day}) * 400 \text{ residents} * 365 \text{ days/year}$.

Step 3(b) - Convert VMT into metric tons carbon dioxide equivalent per year (MT CO₂e/year) by use of a vehicle emission factor. The City recommends using an emission factor of 0.000452 MT CO₂e/VMT, which was obtained from the California Air Resources Board's (ARB's) Mobile-Source Emission Factor Model (EMFAC) and was used to develop the City's GHG inventory in its CAP. In the above example, the project would be required to mitigate approximately 139 MT CO₂e/year through additional mitigation.

Additional mitigation may include equivalent or better GHG reduction from individual measures or a combination of:

- Exceeding energy efficiency standards of Title 24, part 6 of the California Building Code (using 2008 T24 standards as a baseline)
- Generation of greater than 15% of the project's energy on-site through installation of solar panels or other on-site renewable energy technology
- Other land use (e.g., additional amenities), transportation, bicycle, or pedestrian improvements that would reduce VMT not already accounted for in Sketch 7 modeling under Step 2.

The applicant should provide documentation (e.g., [California Emissions Estimator Model \[CalEEMod\]](#)) that the combination of mitigation selected would achieve the equivalent GHG emission reduction necessary to close the gap between the proposed project's VMT/capita/day and the City's standard of 15.9 VMT/capita/day. If the project applicant can present equivalent mitigation as defined by this section, the City would consider the project consistent with CAP Action 1.1.1. If the project applicant could not identify sufficient surplus mitigation to reduce equivalent project-generated GHG emissions, the project would not be consistent with CAP Action 1.1.1.

Mobility

3. Would the project incorporate traffic calming measures? (Applicable CAP Action: 2.1.1)

List the traffic calming measures that have been incorporated into the project. These may include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.

The project proponent and City staff should consult with staff in the Department of Public Works-Transportation Division to verify that traffic calming measures are adequate and in compliance with the City's Street Design Standards.

If the proposed project does not include any roadway or facility improvements, traffic calming measures may not apply. For example, certain infill projects may not result in on-street or transportation facility improvements because sufficient infrastructure already exists

4. Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan? (Applicable CAP Action: 2.2.1)

List the pedestrian facilities and connections to public transportation that have been included in the proposed project on the Checklist. These may include, but are not limited to: sidewalks on both sides of streets, marked crosswalks, count-down signal timers, curb extensions, median islands, transit shelters, street lighting.

The project proponent and City staff should consult with Department of Public Works-Transportation Division staff to verify that pedestrian facilities are consistent with the [Pedestrian Master Plan](#). As in the previous example, if "not applicable", an explanation shall be documented in the Checklist. The "Pedestrian Review Process Guide" ([Appendix A to the Master Plan](#)) will be used to determine consistency, as follows:

- For typical infill development projects where existing streets will serve the site (no new streets are proposed): the level of pedestrian improvements necessary to determine Pedestrian Master Plan consistency will be measured according to the "Basic, Upgrade or Premium" categories defined in Appendix A to the Pedestrian Master Plan, which are based on project location, surrounding land uses, proximity to transit, etc. If the proposed project does not include the minimum level of improvements per the assigned category for the project's location, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.

- For new "greenfield" projects and/or larger infill development projects where new streets are proposed as part of the project, the following will apply:
 - "Basic, Upgrade or Premium" levels of improvement will be required based on the proposed project's location and context, where applicable, consistent with the criteria defined in the Master Plan. If the proposed project does not include the minimum level of improvements per the assigned category, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.
 - The "Pedestrian Smart Growth Scorecard" (Appendix A to the Master Plan) will be required to be completed for the project, and a minimum score of 3 or better will need to be achieved. If the proposed

project cannot achieve the minimum score, changes to the proposed project may be required, and/or the project may be required as a condition of approval to include certain improvements such that the average score will meet 3 or better. (Note: an Excel version of the Pedestrian Smart Growth Scorecard is available, to assist in automating the rating & scoring process)

5. Would the project incorporate bicycle facilities consistent with the City's Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen? (Applicable CAP Action: 2.3.1)

List the bicycle facilities that are incorporated into the proposed project on the Checklist. In addition, list bicycle facilities. These include, but are not limited to: Class I bike trails and Class II bike lanes connecting the project site to an existing bike network and transit stations, bike parking [bike racks, indoor secure bike parking, bike lockers], end-of-trip facilities at non-residential land uses [showers, lockers]).

The project proponent and City staff should consult with staff in the Transportation Division of the Department of Public Works to verify that such facilities are consistent with the [Bikeway Master Plan](#) and meet or exceed Zoning Code and CALGreen standards. Generally, the following guidelines will be used:

- If existing on-street and off-street bikeways are already present and determined to be consistent with the Bikeway Master Plan, no additional on-street bikeways will be required. Check the "not applicable" box if appropriate. However, on-site facilities shall still be required to meet or exceed minimum Zoning and CALGreen requirements.
- If not applicable, fully document the reasons why using the Checklist.
- If on-street bicycle facilities are not present or are only partially consistent with the Master Plan, the project will be required as a condition of approval to construct or pay for its fair-share of on-street and/or off-street bikeways described in the Master Plan, in addition to meeting or exceeding minimum on-site facilities.
- In some cases, a combination of new or upgraded on-street and off-street bikeways may be used to determine consistency with the Master Plan, at the discretion of the Department of Public Works-Transportation Division staff.

Energy Efficiency and Renewable Energy

6. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., solar photovoltaic, solar water heating etc.) that would generate at least 15% of the project's total energy demand? (CAP Actions: 3.4.1 and 3.4.2)

For projects of the minimum size specified in this measure, a commitment in the project description or in a mitigation measure that the project shall generate a minimum of 15% of the project's energy demand on-site is sufficient to demonstrate consistency with this measure. However, the project conditions of approval or mitigation measures should specify the intended renewable energy technology to be used (e.g. solar photovoltaic, solar water heating, wind, etc.) and estimated size of the systems to meet project demand based on the project description.

"Total energy demand" refers to the energy (electricity and natural gas) consumed by the built environment (including HVAC systems, water heating systems, and lighting systems) as well as uses that are independent of the construction of buildings, such as office equipment and other plug-ins.

Applicants may estimate the total energy demand of their projects using California Emissions Estimator Model (CalEEMod 2013.2), the same software used to estimate greenhouse gas emissions. **For CalEEMod estimates of energy demand to meet this specific requirement, the user should NOT select the “use historical” box, otherwise they will be “double-counting” emissions reductions that have already been counted.** CalEEMod outputs for electricity demand are provided in annual kWh, and natural gas demand is provided in annual kBtu.

The energy demand estimate by CalEEMod is based on two datasets:

- The California Commercial End Use Survey (CEUS);
- The Residential Appliance Saturation Survey (RASS)

CalEEMod takes energy use intensity data (above) and forecasts energy demand based on climate zone, land use subtype (such as “hospital”, “arena”, or “apartments, mid rise”), building area, and the number of buildings or units. This is an appropriate level of analysis for use at the planning submittal stage, but it may not provide an accurate picture of actual project energy demand because it does not factor project specifics such as building design.

Therefore, the applicant is advised (but not required) to run a more comprehensive energy simulation once project-specific details are known: basic building design, square-footage, building envelope, lighting design (at least rudimentary), and the mechanical system (at least minimally zoned). Some of the energy simulation programs that are appropriate for this level of analysis include: DOE 2.2, Trace 700, and Energy Pro.

The U.S. DOE maintains a list of energy simulation programs that are available.

http://apps1.eere.energy.gov/buildings/tools_directory/subjects.cfm/pagename=subjects/pagename_menu=whole_building_analysis/pagename_submenu=energy_simulation

The applicant may then work with City staff to revise the estimate and make a final determination regarding the size of the PV system that is required.

Substitutions: Projects may substitute a quantity of energy efficiency for renewable energy, as long as the substituted GHG reduction does not “double count” GHG reductions already taken by the CAP. In other words, substitutions must reduce GHG emissions from the project beyond what is already accounted for in the CAP (to avoid double-counting).

- Additional mitigation may include equivalent or better GHG reduction from individual measures or a combination of:
- Exceeding energy efficiency standards of Title 24, part 6 of the California Building Code by 15% or better using 2008 T24 standards as a baseline. (Please note that due to more rigorous minimum energy efficiency standards, after January 1, 2014, residential projects will need to exceed the new minimum building code standards by 10% and commercial projects will need to exceed the new minimum building code by 5%).
- Other land use (e.g., additional amenities), transportation, bicycle, or pedestrian improvements that would reduce VMT not already accounted for in VMT models under Step 2.

7. Would the project comply with minimum CALGreen Tier I water efficiency standards? (CAP Action: 5.1.1)

The [California Green Building Standards Code \(CALGreen\)](#) includes mandatory green building measures, as well as voluntary measures that local jurisdictions may choose to adopt to achieve higher performance tiers, at either Tier 1 or Tier 2 compliance levels. Sacramento has adopted Tier 1 Water Efficiency Standards to be required on or after January 1, 2014. Currently, in order to meet the Tier 1 Water Efficiency Standards, buildings are required to implement all mandatory water efficiency and conservation measures as well as certain Tier 1 specific measures that exceed minimum mandatory measures (e.g. 30% increase in indoor water efficiency). Specific Tier 1 provisions can be found in the CALGreen Code at <http://www.bsc.ca.gov/Home/CALGreen.aspx>.

The City recognizes that project construction details are often not known at the environmental review stage, and it may be premature for a project proponent to identify compliance with precise requirements of CALGreen. A condition of approval requiring the project to comply with minimum CALGreen Tier 1 water efficiency and conservation standards is sufficient to demonstrate consistency with this criterion.

Planning approval of your project will include the following condition:

Project must meet CALGreen Tier 1 water efficiency and conservation standards. Copies of the appropriate CalGreen checklist (see FAQ) shall be included on the full-size sheets for building plan check submittals.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

ATTACHMENT 3

CNDDDB, USFWS, AND CNPS SPECIES LISTS

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 140708023418

Current as of: July 8, 2014

Quad Lists

Listed Species

Invertebrates

- Branchinecta conservatio
Conservancy fairy shrimp (E)
- Branchinecta lynchi
Critical habitat, vernal pool fairy shrimp (X)
vernal pool fairy shrimp (T)
- Desmocerus californicus dimorphus
Critical habitat, valley elderberry longhorn beetle (X)
valley elderberry longhorn beetle (T)
- Lepidurus packardii
Critical habitat, vernal pool tadpole shrimp (X)
vernal pool tadpole shrimp (E)

Fish

- Acipenser medirostris
green sturgeon (T) (NMFS)
- Hypomesus transpacificus
Critical habitat, delta smelt (X)
delta smelt (T)
- Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)
- Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Ambystoma californiense
California tiger salamander, central population (T)
- Rana draytonii
California red-legged frog (T)

Reptiles

- Thamnophis gigas
giant garter snake (T)

Birds

- Vireo bellii pusillus
Least Bell's vireo (E)

Plants

- Calystegia stebbinsii

- Stebbins's morning-glory (E)
- Ceanothus roderickii
 - Pine Hill ceanothus (E)
- Fremontodendron californicum ssp. decumbens
 - Pine Hill flannelbush (E)
- Galium californicum ssp. sierrae
 - El Dorado bedstraw (E)
- Orcuttia tenuis
 - Critical habitat, slender Orcutt grass (X)
 - slender Orcutt grass (T)
- Orcuttia viscida
 - Critical habitat, Sacramento Orcutt grass (X)
 - Sacramento Orcutt grass (E)
- Senecio layneae
 - Layne's butterweed (=ragwort) (T)

Candidate Species

Birds

- Coccyzus americanus occidentalis
 - Western yellow-billed cuckoo (C)

Quads Containing Listed, Proposed or Candidate Species:

- ELK GROVE (496A)
- FLORIN (496B)
- CLARKSVILLE (511A)
- CITRUS HEIGHTS (512A)
- RIO LINDA (512B)
- SACRAMENTO EAST (512C)
- CARMICHAEL (512D)
- TAYLOR MONUMENT (513A)
- SACRAMENTO WEST (513D)

County Lists

Sacramento County

Listed Species

Invertebrates

- Apodemia mormo langei
 - Lange's metalmark butterfly (E)
- Branchinecta conservatio
 - Conservancy fairy shrimp (E)
- Branchinecta lynchi
 - Critical habitat, vernal pool fairy shrimp (X)
 - vernal pool fairy shrimp (T)
- Desmocerus californicus dimorphus
 - Critical habitat, valley elderberry longhorn beetle (X)
 - valley elderberry longhorn beetle (T)
- Elaphrus viridis

delta green ground beetle (T)

Lepidurus packardi

Critical habitat, vernal pool tadpole shrimp (X)

vernal pool tadpole shrimp (E)

Fish

Acipenser medirostris

green sturgeon (T) (NMFS)

Hypomesus transpacificus

Critical habitat, delta smelt (X)

delta smelt (T)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)

Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha

Central Valley spring-run chinook salmon (T) (NMFS)

Critical Habitat, Central Valley spring-run chinook (X) (NMFS)

Critical habitat, winter-run chinook salmon (X) (NMFS)

winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Critical habitat, CA tiger salamander, central population (X)

Rana draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Birds

Charadrius alexandrinus nivosus

western snowy plover (T)

Rallus longirostris obsoletus

California clapper rail (E)

Sternula antillarum (=Sterna, =albifrons) browni

California least tern (E)

Vireo bellii pusillus

Least Bell's vireo (E)

Mammals

Reithrodontomys raviventris

salt marsh harvest mouse (E)

Sylvilagus bachmani riparius
riparian brush rabbit (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Arctostaphylos myrtifolia
Ione manzanita (T)

Calystegia stebbinsii
Stebbins's morning-glory (E)

Castilleja campestris ssp. *succulenta*
Critical habitat, succulent (=fleshy) owl's-clover (X)
succulent (=fleshy) owl's-clover (T)

Ceanothus roderickii
Pine Hill ceanothus (E)

Cordylanthus mollis ssp. *mollis*
soft bird's-beak (E)

Cordylanthus palmatus
palmate-bracted bird's-beak (E)

Eriogonum apricum var. *apricum*
Ione buckwheat (E)

Eriogonum apricum var. *prostratum*
Irish Hill buckwheat (E)

Erysimum capitatum ssp. *angustatum*
Contra Costa wallflower (E)
Critical Habitat, Contra Costa wallflower (X)

Fremontodendron californicum ssp. *decumbens*
Pine Hill flannelbush (E)

Galium californicum ssp. *sierrae*
El Dorado bedstraw (E)

Lasthenia conjugens
Contra Costa goldfields (E)

Neostapfia colusana
Colusa grass (T)

Oenothera deltoides ssp. *howellii*
Antioch Dunes evening-primrose (E)

Critical habitat, Antioch Dunes evening-primrose (X)

Orcuttia tenuis

Critical habitat, slender Orcutt grass (X)

slender Orcutt grass (T)

Orcuttia viscida

Critical habitat, Sacramento Orcutt grass (X)

Sacramento Orcutt grass (E)

Senecio layneae

Layne's butterweed (=ragwort) (T)

Sidalcea keckii

Keck's checker-mallow (=checkerbloom) (E)

Candidate Species

Birds

Coccyzus americanus occidentalis

Western yellow-billed cuckoo (C)

Key:

(E) Endangered - Listed as being in danger of extinction.

(T) Threatened - Listed as likely to become endangered within the foreseeable future.

(P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the [National Oceanic & Atmospheric Administration Fisheries Service](#). Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.

(C) Candidate - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our [Protocol](#) and [Recovery Permits](#) pages.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands

are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [Map Room](#) page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. [More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be October 06, 2014.

CNPS *California Native Plant Society* Rare and Endangered Plant Inventory

Plant List

20 matches found. Click on scientific name for details

Search Criteria

Found in 9 Quads around 38121E4

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Astragalus tener var. ferrisiae	Ferris' milk-vetch	Fabaceae	annual herb	1B.1	S1	G2T1
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	2B.1	S2	G5
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	4.2	S3.2	G3T3
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	2B.2	SH	G5T4T5
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	2B.2	S2	GU
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	4.2	S3.2	G3
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2
Hesperervax caulescens	hogwallow starfish	Asteraceae	annual herb	4.2	S3.2	G3
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	Malvaceae	perennial rhizomatous herb	1B.2	S2	G5T2
Juglans hindsii	Northern California black walnut	Juglandaceae	perennial deciduous tree	1B.1	S1	G1
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Juncaceae	annual herb	1B.2	S1	G2T1
Legenere limosa	legenere	Campanulaceae	annual herb	1B.1	S2	G2
Lepidium latipes var. heckardii	Heckard's pepper-grass	Brassicaceae	annual herb	1B.2	S2	G4T2
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	1B.1	S2	G2
Navarretia eriocephala	hoary navarretia	Polemoniaceae	annual herb	4.3	S3.3	G3
Orcuttia tenuis	slender Orcutt grass	Poaceae	annual herb	1B.1	S2	G2
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	1B.1	S1	G1
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	1B.2	S3	G3
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2

[Trifolium hydrophilum](#)

saline clover

Fabaceae

annual herb

1B.2

S2

G2

Suggested Citation

CNPS, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 08 July 2014].

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Information

[About the Inventory](#)[About the Rare Plant Program](#)[CNPS Home Page](#)[About CNPS](#)[Join CNPS](#)

Contributors

[The Calflora Database](#)[The California Lichen Society](#)

ATTACHMENT 4

ARBORIST'S REPORT



10/27/2014

Terry Monahan
Fallen Leaf Tree Management
4951 Hedge Avenue
Sacramento, CA 95826

RE: 16th Street at H, Sacramento, CA (Proposed Clarion Inn)

Assignment

Perform a brief examination of trees located on the site to determine their overall condition, based upon health and structure. Identify tree location on a map and compare it to the one provided by the client. Include recommendations for tree retention or removal, considering the proposed improvements. Impacts associated with construction are assumed to be compaction, mechanical damage and possibly grade changes.

Provide general tree protection measures, but Specifications for Tree Protection to be inserted onto construction documents are not included, because the specific location of improvements have not yet been identified, and the trees to be retained have not been conclusively agreed upon.

Observations

Trees were rated for both health and structure. Vigor is a measure of overall health, and a tree's inherent ability to resist pests and diseases, as well as other stresses. Vigor is not a measure of structural stability or risk of failure. It is rated as excellent, good, fair, poor or dying or dead. Structure is discussed in greater detail, within the description of the root collar, trunk, and limbs.

The trees are not tagged, but are located on the accompanying map in an aerial view. The inventory summarizes tree condition and recommendations.

Most of the trees are street trees, some newly planted, and others are well established. There are differences between the site plans for the proposed project and the trees I inventoried. For instance:

1. There are 4 street trees on 16th Street, the plans show only one.
2. There are 7 street trees and one private tree on H Street, the plans show only 6 street trees.

I did not inventory any trees in the interior of the lot because of access and safety concerns.

There are a row of camphor trees along the north boundary to the property that are shading the parking lot for the adjoining Hotel. These should be treated in the same way that the street trees are to provide maximum protection for their roots. From the proposed site plans, it appears these trees will be greatly impacted, including the need to severely prune the canopy as well as the roots.

DISCUSSION – CAUSES OF IMPACTS TO TREES DURING CONSTRUCTION

Construction of driveways, parking areas, foundations and buildings impact trees in predictable ways. The largest impacts result from root loss, which many developers, engineers and contractors do not recognize because the impacts do not become evident for months and/or years after the work is complete. Tree root systems do not look like the top of the tree, nor do they look like carrots. Tree roots spread out near the surface of the soil, and can be found growing 100' or more from a large oak tree. Absorbing roots are usually found within the dripline and in the upper 12" to 24" of soil, but structural roots may grow as deep as 3' to 15'. While some species have sinker roots fairly near the trunk, it is the small absorbing roots that provide the most water and mineral uptake for most trees. Saving only large roots, while cutting or killing all the small absorbing roots can have significant and serious impacts to tree health. Likewise, cutting large roots (4" to 6" diameter or greater) at any distance from the trunk can have severe consequences to the tree's health and or stability. Cutting large anchoring roots within the dripline can predispose the tree to failure.

Root loss occurs due to one or more of the following:

- Disturbance to the soil surface – removing organic duff and/or topsoil and soil compaction
- Soil preparation for Compaction – Ripping the soil surface in preparation for general compaction.

- Soil Compaction – caused by equipment traveling over the soil surface, and is required by engineering standards underneath road and path surfaces.

- Grading within root zones, including:

 - Cuts – any cut that removes more than 3" to 6" of soil

 - Fill within root zones (These often require a cut, and compaction, prior to filling.)

- Trenching within root zones

- Placement of impervious surfaces over root zones, excluding rainfall.

Other types of expected impacts include:

- Excessive foliage removal, or branch breakage from equipment

- Equipment hitting tree trunks close to the construction zone

- Equipment, such as a backhoe, tearing through roots, so that they split back toward the tree.

- Chemical damage from paints, plaster, concrete or other chemicals used on site.

Potential impacts of root loss are branch death, dieback of main limbs, tree death and/or whole tree failure.

Conclusions and Recommendations

I have recommended the following trees be retained or removed.

1. The street trees on 16th Street should remain, but the drawings submitted show only one tree to remain. The tree closest to H, an American elm cultivar would be the only street tree I could recommend removing.
2. The Camphor trees inside the parking lot appear to all be planned for removal – I can concur with this decision.
3. H Street has 2 sweetgums, a hackberry and a red oak that I recommended be removed. The only trees that are shown to be preserved in the drawing are the Chinese elm and the red oak next to the corner of 15th. The only trees I recommend stay are the red AT the corner and the Chinese elm. It appears that the replacement tree on this street is Chinese pistache, which would work just fine for replacing the trees to be removed.
4. I recommended saving the trees on 15th street, even though they are hackberry. I would normally suggest these be replaced with another species due to pest control concerns. The City should be approached with this idea.
5. The site plans show no disturbance of the alley – If the fence is placed along the alley way and the pavement is NOT disrupted, then no special plans will be needed to protect the trees on the adjoining site. If the pavement will be replaced, then the site plans need to indicated protection measures.

I have attached a general set of Tree Protection Specifications, but I find that these MUST not be used as a stand-alone document. Instead, tree protection specifications need to be included on the site, grading and utility plans if they are to be effective. Too often tree information is only included in the landscape plan, so the grading and foundation contractors do not recognize that the protection measures apply to their work. They therefore do not put the extra time and effort into their bid, and resist using new techniques, or taking more time for working around trees.

The following information needs to be included in your plan set to be presented to the Planning agency for approval:

1. **Mapping.** Tree locations should be included on the site plans, with the accurate dripline size, and tag number. While the trunk locations of trees proposed for retention are included on the site plans provided, all trees are not located on them and **accurate** driplines are not shown.
2. **Location of improvements.** Carefully consider the location of the buildings, driveways and utility trenches in regard to the prime trees to be preserved on site. Avoid placing buildings or grade changes with the dripline of the large old trees. To the greatest extent possible, utility sewer and drainage trenches should be outside the driplines of trees to be preserved. Likewise, existing foundations should not be changed under significant trees if at all possible. If foundations must intrude within the dripline of significant trees, the architect and/or engineer should confer with the arborist and consider using grade beams or other methods to reduce the need for deep excavations that would require large roots to be cut.

3. Protection measures. The site and grading plans should clearly identify which of the trees are to be retained, and show the location of tree protection fencing which needs to be put in place PRIOR to demolition or grading equipment moving onto the site. Tree removals should also be identified, and the method of removal specified, i.e. by tree service, including the grinding of stumps to allow for re-planting.

Once these decisions are made, and the planning agency has approved the proposed work, proceed with fence installation as described below.

4. Obtain permits for trees to be removed or pruned. Remove the permitted trees, and prune the remaining trees to remove dead branches, thin the outer canopy and remove the lower foliage. This work must be completed by a company with ISA Certified Arborists¹. Spread the chip mulch from removals and pruning under the trees to be preserved.

5. Install root zone protection fencing one foot outside the dripline of each tree to be preserved (or per City tree protection requirements). This is usually done prior to grading. However, some minor grading to clean the soil surface of garbage and debris, and to generally level it should take place before the fences are installed. This should be done by a small bobcat, under the direction of an arborist. Once completed, a 4" layer of chip mulch should be spread under the trees, and inside the fences. In some cases, such as the Douglas fir trees, it may be most economical and convenient to install one fence along the outer edge of both canopies.

6. Develop an inspection schedule that coincides with any work to be completed near the trees, so that an arborist can be on site for root cutting or excavation that preserves roots, and to determine if irrigation is needed to enhance vigor on retained trees. Such work would include:

- a. installation of any storm drain facility that requires work near the trees.
- b. installation of the sewer main and laterals that come closer than the dripline.
- c. installation of electric, phone or irrigation trenches that come within the driplines.

7. If no trenching or digging is to take place within the root protection zone, then the inspection schedule should include a monthly visit from the arborist to insure that fences are retained in place, protected root zones are being respected, and the trees are not showing signs of stress.

8. If any landscaping is to be included with the homes, the landscape contractor and the landscape architect must be made aware of the fact that no irrigation lines can be installed within the root protection zone unless they are techline or drip emitters installed on the soil surface.

Limitations and Assumptions

I examined the trees from the ground for visual signs and symptoms of defects which may lead to structural failure. I assessed the health of the trees based upon foliage color, density and twig growth. I did not climb the trees.

The intent of this inspection and subsequent report is to document, identify and provide recommendations for preservation of trees which may be impacted by proposed construction activities.

¹ International Society of Arboriculture Certification program.

Trees are biological organisms subject to environmental forces beyond our control. I cannot predict with absolute certainty the safety or structural integrity of any tree, nor can I guarantee it. I provide in this report a summary of my assessment, performed to the best of my ability and knowledge.

This report reflects the condition of the trees at the time of examination. It is not intended to predict safety during highly unusual or catastrophic natural occurrences such as, but not limited to, floods, hurricanes and earthquakes. It is understood that the health of trees can change as a result of drought, especially where prior irrigation has now been eliminated.

The consultant cannot control or be responsible for another's means, methods, techniques, schedules, sequences or procedures, or for construction safety or any other related programs, or for another's failure to complete the work in accordance with the plans and specifications.

Proper project maintenance is required after the project is complete. A lack of proper maintenance in areas such as, but not limited to, tree or other plant maintenance, may result in damage to property or persons. The consultant has recommended in this report inspection and monitoring of trees during and after construction, which the client must authorize. Any lack of or improper maintenance will therefore be the sole responsibility of the property owner.

Please feel free to call should you have any questions regarding my assessment or if I may be of any further assistance. I appreciate the opportunity to be of service to your project.

Prepared by:



Denice Britton
Registered Consulting Arborist #296

Attachments:

General Tree Protection Specifications
Map of the trees as inventoried
List of trees by inventory

TREE PROTECTION SPECIFICATIONS

When development occurs around native oaks or other mature trees, great care must be taken to prevent damage to trunks, branches and the root system buried beneath the soil. The four greatest dangers to mature trees posed by construction practices are soil compaction, grade changes, trenching and wounds on trunk or branches hit by heavy equipment. **TREES SUFFERING SEVERE ROOT DAMAGE FROM IMPROPER CONSTRUCTION PRACTICES MAY NOT DISPLAY EXTERNAL SYMPTOMS FOR ONE TO TWO YEARS AFTER CONSTRUCTION** is completed, leaving new property owners with the expense of treating or removing a dead or dying tree.

The best way to protect trees during development is to utilize design concepts that avoid substantial change to the environment within or adjacent to the dripline of mature trees. This involves the establishment of a plan of action that includes the architect and the contractor. Only with full knowledge that trees are to be protected, will they provide realistic bids and work plans. If they do not understand that root zones are to be considered "sacred", and not encroached upon, then they will assume it is ok to put in trenches, store equipment and go about their job in their usual way. Giving them the courtesy and respect to let them know ahead of time, will not only help the trees, it will keep everyone working toward the same specified goal.

The most basic step in tree protection is to establish a Root Preservation Zone (RPZ), defined as the area under the canopy of the tree out to 1 to 10 feet beyond the dripline, depending on local statutes. If the zone must be smaller due to site constraints, your consultant can help specify what needs to be done to come closer to the tree, while leaving enough space for the tree's continued health. When grading and construction in this Root Preservation Zone cannot be avoided, the specifications provided herein provide the necessary steps to mitigate the construction impacts. We recommend the work within the RPZ be supervised by a Consulting Arborist who can help make on-site decisions appropriate to the specific situation at hand. A pre-construction meeting of all involved contractors, to discuss the mitigating specifications, is necessary. A plan of action can be agreed upon and a schedule established for coordinating root pruning crews with excavation time tables, delivery of protective mulch and other protection activities.

On large sites, or with valuable trees, an assessment of landscape value can be established before construction starts. The owner can ask for a Bond to cover tree repair and/or fines, for unwarranted damage to the trees, as an enforcement measure.

Soil Compaction:

An integral part of a tree's water and mineral absorbing activity in the root zone is the exchange of gases between the absorbing roots, soil microorganisms and the atmosphere. This exchange is made possible by the presence of tiny open spaces in the soil which provide passages for the movement of gases. These same "pore spaces" are used by water to percolate down through the root zone. When heavy equipment is parked or operated under the dripline of trees, or when impervious paving or foundation slabs are installed, the soil is compacted, closing these air and water passages, causing stunting and death of roots and symbiotic soil organisms, and hastening the decline of the tree.

1. To avoid soil compaction, grading contractors shall erect temporary protective fencing around the dripline of all trees prior to commencement of grading.
2. Construction equipment and supplies shall not be operated or stored inside the Root Preservation Zone. Vehicles shall not be parked in the Root Preservation Zone.
3. If paving must occur under and around mature oaks, porous materials such as interlocking blocks, brick with sand joints, gravel, bark mulch, permeable asphalt and other materials which permit air and water penetration can be used.

Protective Fencing:

Wounds in the bark of trunks, branches or roots of trees provide openings for pathogens which can cause decay, disfigurement and structural weakness leading to windthrow or the eventual death of the tree.

1. To avoid wounds to the bark and damage to roots, install a fence around the tree beyond the dripline prior to any activity such as grading or ditching. The fence should be removed only upon the completion of all construction activities. Any work performed within this zone must be under the supervision of the Consulting Arborist.
2. Develop an Inspection schedule that the contractor agrees to, so that the consultant is called when events are to take place that may impact the tree. The purpose of having a schedule is not for the consultant to direct the work, but to be fully aware of what impacts are happening, so they can be counter-acted by treatments such as root cutting, irrigation, fertilization and mulching.

Pruning:

Where work must be performed underneath the canopy, lower branches should be elevated, using proper pruning techniques, to prevent breakage by grading or other equipment. Improper pruning cuts can lead to extensive decay and structural problems.

1. All pruning cuts made to elevate the foliage or to shape foliage away from buildings shall be made using the WC ISA Pruning Standards, under the supervision of the Consulting Arborist.
2. Elevation of foliage, where needed, shall take place prior to commencement of grading. All final pruning cuts shall be made just outside the branch bark ridge of the limb being removed. All pruning cuts shall be thinning cuts, limbs shall not be headed back.

Grade Changes:

Grade changes should be minimized within or adjacent to the dripline of existing trees. Raising or lowering the soil grade under or near the dripline of mature trees can cause severe physical damage to the roots themselves as well as to the ability of air and water to move freely through the soil. Optimally, grade changes should be avoided, at least within the dripline. Where grade changes within the RPZ must occur, the following precautions shall be used to lessen the adverse impacts on mature trees. This work shall be done under the supervision of the Consulting Arborist.

Fills:

When fill is added to raise the soil grade, the following procedures shall be used to minimize damage to the trees:

1. All fills in the RPZ shall be two feet or less in depth. Any tree with a fill greater than 6 inches in depth in the RPZ shall have an aeration system constructed.
2. Any fill requiring a cut prior to filling, must be protected as discussed under Cuts.
3. Prior to adding fill soil, strip off surface organic matter (grasses, leaves etc.) which may form an impervious layer when fill material is added.
4. Use only porous topsoil, coarser in texture than the native soil, as fill material around any trees.
5. Native soils and fills within the RPZ shall not be machine compacted.

Cuts:

Cutting away soil to lower the grade around trees can cause severe, permanent damage to the vitality and structural stability of the tree. Where cuts within the RPZ cannot be avoided, the following guidelines shall be followed:

1. All cuts in the RPZ shall be done under the supervision of the Consulting Arborist. Cuts shall not impact more than one third the area of the RPZ.
2. Mulch the soil surface of the RPZ to build an environment conducive to new root growth prior to commencement of grading.
3. Hand dig a trench at the edge of the proposed cut to expose the roots and prune them cleanly before mass grading occurs. Immediately cover the cut surface of exposed soil and roots with a temporary plastic or burlap tarp to prevent desiccation (See Figure 3). Mechanical trenching which shatters and rips roots and causes extensive damage to the tree shall be avoided.
4. Build retaining walls as soon as possible after excavation occurs. Allow for water drainage from behind the wall.
5. Prior to backfilling, carefully clean the area behind the wall to be sure that no mortar or other construction debris remains. Backfill the area between the retaining wall and excised roots with native porous topsoil. Apply water during this process to insure uniform settling of the soil.
6. Construct a temporary fence just outside the final RPZ of the tree for protection throughout mass grading and building construction.
7. Monitor for water stress due to loss of roots. If necessary, apply irrigation two or three times during the first and second summers following root damage. Irrigation water should be applied with soaker hoses, covering the RPZ. Slow soaking for 8 - 12 hours or more will be required to wet the entire soil/root profile.

Utility Trenching:

Consolidate utility trenching activities to avoid or minimize damage to roots. The cutting of trenches for utilities installed at individual residences, commercial buildings or along streets can cause severe damage to roots. Often, several trenches are opened by separate utility companies, criss-crossing the root zone and resulting in massive root loss to the tree.

Whenever ditches must be placed in the RPZ and, where feasible, avoid trenching entirely by using a power auger to bore a horizontal conduit line at a depth of four feet. Boring causes less damage to roots. Utility lines can be fed through the conduit to points of connection. IRRIGATION LINES are one of the worst causes of tree root damage.

If trenching in the RPZ of mature trees cannot be avoided, the following precautions apply:

1. Mulch the RPZ (generally at least 4" to 6" inside the tree protection fencing) prior to trenching to develop a soil environment conducive to new root growth.
2. Consolidate all utilities into one trench that impacts less than one third the area of the RPZ.
3. Hand excavate a single trench under the dripline; carefully excise and protect roots over 1" diameter. Feed pipes or conduit underneath the preserved roots.
4. Where roots are cut, the exposed soil surface on both sides of the trench shall be protected from desiccation by a tarp or plastic sheeting.
5. Irrigation of native trees during the first two dry seasons may be necessary. Caution must be taken not to over irrigate as root rot may result. Check soil moisture at 6", 12" and 24". Water only when dry at 12" to 24".
6. Construct a temporary fence around the final RPZ to protect the rest of the tree's roots prior to commencement of mass grading.

Landscaping Under Native Trees:

Landscaping under native mature trees often has severe detrimental impacts on the longevity of these trees. Native trees have evolved and, in most situations, have grown in an environment of dry summer soil conditions. The use of irrigation water under a mature tree in sufficient quantities to maintain a bluegrass lawn, ivy or periwinkle means almost certain death, especially when water from sprinklers keep tree trunks wet. The average length of time required to kill a mature native tree placed under intensively irrigated landscape cultivation is 5 to 10 years.

1. Landscaping under native trees shall be of drought and shade tolerant plants which require only two or three irrigations per summer once established.
2. A leaf and twig mulch should be maintained under the tree to reduce water needs and weed competition, and to encourage soil aeration. Mulch that is prone to compaction must be avoided; i.e. shredded redwood bark, straw or black plastic. This leads to soil compaction and poor aeration.

3. Irrigation systems shall not be placed within the RPZ. Any irrigation performed within the RPZ shall provide a thorough soaking of the entire soil profile on an infrequent basis. The irrigation system must not wet the trunk of the tree at any time.

Future Maintenance:

Inspection of oaks should be made on a regular basis to determine the need for pruning, fertilizing or pest management.

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Appendix 2 - Maps of the Site



Tree #	Common Name Species	DBH	Dripline Radius	Vigor	Root Collar Condition	Limb Condition	Trunk Condition	Foliage Condition	Condition %	Maintenance Recommended	Comments
1	Chinese pistache	3.0	5.0	4 Good	4 Soil raised	4 Minor Problem	5 No Problems	5 Normal	0.875	9. Retain	New young street tree.
2	Chinese pistache	3.0	6.0	4 Good	4 Soil raised	4 Minor Problem	5 No Problems	5 Normal	0.875	9. Retain	Street tree, foliage extends over walk.
3	Chinese pistache	4.0	8.0	5 Excellent	4 Soil raised	3 Moderate Problem	5 No Problems	5 Normal	0.85	9. Retain	Street tree. Low limbs very co-dominant need to be shaped as soon as possible. All three of the first three trees were buried when planted.
4	American elm cultivar	7.3	18.0	4 Good	4 Soil raised	3 Moderate Problem	3 Moderate Problem	5 Normal	0.725	9. Retain	Street tree, south entrance to parking lot. Injury at base of tree on south side. Canopy is one sided Overstreet due to crowding by adjacent tree.
5	Chinese elm	18.5	25.0	3 Fair	5 At grade	3 Moderate Problem	4 Minor Problem	4 Low Density	0.775	9. Retain	Street tree, on H Street. Small injury on driveway side of Route call her. Limb structure okay, so I'm long heavy Overstreet. Appears to be an infestation of Elm leaf beetle.
6	Common hackberry	8.5	20.0	2 Poor	5 At grade	4 Minor Problem	5 No Problems	2 Decline	0.8	8. Remove	Street tree. A main root grows towards sidewalk, has been previously cut back, and sidewalk repaired. Top of tree is dying back. Replace with better species.
7	Chinese pistache	1.0	4.0	4 Good	4 Soil raised	5 No Problems	4 Minor Problem	4 Low Density	0.85	9. Retain	Recently planted street tree. Top of tree bends to south. May require pruning later to correct this. Tree is slightly buried from when it was planted.
8	Sweetgum	19.0	25.0	3 Fair	1 Extensive crown rot	4 Minor Problem	3 Moderate Problem	4 Low Density	0.575	8. Remove	Street tree. Extensive pruning has taken place in the past, with decay showing in the pruned roots. Root sprouts are evident as well. Girdling roots are leading to dead bark that is cracking up to about 6 feet on the north and east sides. Remove as a potential hazard.
9	Sweetgum	19.2	20.0	2 Poor	2 Obvious crown rot	4 Minor Problem	5 No Problems	2 Decline	0.65	8. Remove	Street tree. On the surface and injured from walking on top of them. Some decay as well. Girdling roots also. Given the decline in the tree I would remove it and replace it with a more desirable species.
10	Pin oak	7.0	15.0	3 Fair	5 At grade	2 Significant Problem	3 Moderate Problem	4 Low Density	0.675	8. Remove	Street tree, may be Shumard Oak. Trunk has injury on Southside probably from a vehicle or sunburn. Codominant limbs the one to the north is sunburned with decay on the upper side of the limb. Remove the tree at this time and replace with the better species.

11	Pin oaks	12.7	25.0	4 Good	5 At grade	3 Moderate Problem	4 Minor Problem	5 Normal	0.825	9. Retain	Street tree, extends over intersection and traffic signal. Root collar is at grade but the roots have been injured on the surface and some decay is evident. Two minor sunburn injuries on the south side of the trunk. The branches are co-dominant especially the one out over the intersection. This is a borderline tree in terms of retaining.
12	Common hackberry	10.7	15.0	4 Good	5 At grade	4 Minor Problem	5 No Problems	4 Low Density	0.9	9. Retain	Street tree on 15th St. Verify species of Hackberry. Tree is going to be retained but call Joe about the species.
13	Common hackberry	14.4	20.0	4 Good	3 Minor crown rot	3 Moderate Problem	4 Minor Problem	5 Normal	0.725	9. Retain	Street tree. Surface routing is significant. Sidewalk has been repaired. The two main limbs are co-dominant. And should be addressed if the tree is going to be retained.
14	Common hackberry	8.7	12.0	3 Fair	5 At grade	4 Minor Problem	5 No Problems	4 Low Density	0.875	9. Retain	Street tree. Vigor is less than the others, but structure is better. Dead twigs indicate vigor is declining.
15	Common hackberry	11.5	25.0	2 Poor	5 At grade	3 Moderate Problem	5 No Problems	2 Decline	0.75	9. Retain	Final street tree to north on 15th St. Some decline in the top. Structure is awkward with some co-dominance.
16	Scotch pine	19.0	20.0	3 Fair	5 At grade	3 Moderate Problem	2 Significant Problem	4 Low Density	0.675	8. Remove	Behind sidewalk on H St. Sidewalk curves around this tree. Trunk leans out over the sidewalk and away from building. Extensive routes on the surface. Remove this tree.
17	Camphor	25.7	35.0	4 Good	4 Soil raised	4 Minor Problem	5 No Problems	4 Low Density	0.85	8. Remove	private tree inside fits this is the first street on the south at corner of H St and 16th St.
18	Camphor	12.8	25.0	2 Poor	5 At grade	3 Moderate Problem	4 Minor Problem	4 Low Density	0.75	8. Remove	Private tree. Good condition although there are numerous small dead branches. The canopy stands out over the parking as well as the street.
19	Camphor	13.4	20.0	3 Fair	4 Soil raised	2 Significant Problem	3 Moderate Problem	4 Low Density	0.625	8. Remove	Tree is at the corner of the entrance driveway. The center leader was removed at one time, leaving an injury that is decaying. Several limbs have grown from this injury. Generally for structure.
20	Camphor	15.4	25.0	4 Good	5 At grade	3 Moderate Problem	5 No Problems	5 Normal	0.875	9. Retain	Tree is north of driveway and fairly near sidewalk. There are low limbs over the walk one at least should be removed otherwise this is a very nice tree and would be a good one to retain for the project.
21	Camphor	16.0	12.0	4 Good	4 Soil raised	1 Severe Problem	1 Severe Problem	5 Normal	0.525	8. Remove	This tree appears vigorous and healthy at first glance. The top of the tree was broken or cut at one point in time and the canopy is now only new sprouts. Given the decay in the trunk it should be removed. There are a series of camphor trees along the north side of the alley on the adjacent property that should be protected during construction.

ATTACHMENT 5

***DPR FORM AND REVIEW OF HISTORICAL RESOURCE
EVALUATION***

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____ 6Z _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 17

*Resource Name or # (Assigned by recorder) Clarion Hotel

P1. Other Identifier: 700 16th Street

*P2. Location: Not for Publication Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County Sacramento

*b. USGS 7.5' Quad Sacramento East Date 1967 (R 1980) T 8N; R 4E; ___ ¼ of Sec ___; _____ B.M.

c. Address 700 16th Street City Sacramento Zip 95814

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

APN: 002-0172-024

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is the former Clarion Hotel, located at 700 16th Street in the downtown area of the City of Sacramento. The motel building encompasses the southern half of the city block bounded by 16th Street to the west, G Street to the North, H Street to the South, and 15th Street to the east. The 239-unit motel building is two stories in height and extends to the street and alley on the north, south, and west facades. The east façade overlooks an automobile parking lot that extends the length of the motel building (**Photograph 1**).

The building is wood and steel-frame set in a generally rectangular configuration with the longest dimension extending east to west. A concrete, steel, and glass porte-cochere that spans the width of the parking lot is attached to the east façade covering the entryway (Photograph 2). Featuring a flat roof throughout, much of the exterior of the building is currently encased in a thick mass of ivy. Construction attributes and materials are visible in places. (See Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP5. Hotel/Motel

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1, Mansion Inn east façade and porte cochere, camera facing southwest, March 20, 2013

*P6. Date Constructed/Age and Sources:
 Historic Prehistoric Both
ca. 1958 / The Sacramento Bee

*P7. Owner and Address:
Pacifica Companies
1775 Hancock Street, Suite 200
San Diego, CA 92110

*P8. Recorded by: (Name, affiliation, address)
Mark Bowen
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

*P9. Date Recorded:
March 20, 2013

*P10. Survey Type: (Describe)
Intensive



*P11. Report Citation: (Cite survey report and other sources, or enter "none.") None

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record
 District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record
 Other (list) _____

B1. Historic Name: Mansion Inn

B2. Common Name: Clarion Hotel

B3. Original Use: Hotel B4. Present Use: Vacant

*B5. Architectural Style: International

*B6. Construction History: (Construction date, alteration, and date of alterations) constructed – 1958; 1963 – addition; 1976 – interior remodeling and porte cochere

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: Holiday Inn Express, north of motel, and not included in this evaluation

B9. Architect: Dreyfuss & Blackford b. Builder: E. A. Corum (1958 building); Charles F. Unger Construction Company (1963)

*B10. Significance: Theme Commercial Development / Architecture Area Sacramento

Period of Significance 1958; 1963 Property Type Motel Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The property at 700 16th Street is a former motel originally known as the Mansion Inn and more recently as the Clarion Hotel. Designed by the Sacramento architectural firm of Dreyfuss & Blackford, the motel was constructed in phases with the first building (which included 50 rooms, a manager's apartment, a small restaurant and a bar) completed in 1958. A second 66-room building that included meeting rooms, kitchen and service facilities, was added to the first building in 1963. A third building was constructed in 1972 which also has a 1977 addition and today is the Holiday Inn Express, located north of the Mansion Inn. The third building is not included in this evaluation.

Motels as Building Types

The term 'motel' was first coined in 1926, and is a contraction of the word motor and hotel. The term became a generic label that encompassed a variety of roadside and highway facilities that accommodated automobile travelers. Unlike a hotel, a motel was not typically located in the downtown of urban cities, was not multistoried, but rather horizontally massed, and did not have formal lobbies, dining rooms, or ball rooms. Motels also did not have staff such as doormen, bellboys or a concierge (Jakle, et. al 1996:18–19; Architectural Record 1960:26). (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References: See Continuation Sheet

B13. Remarks:

*B14. Evaluator: Patricia Ambacher

*Date of Evaluation: April 12, 2013

(This space reserved for official comments.)



Description (cont)

The exterior of the eastern portion of the building is largely devoid of fenestration with the exception of a single set of second story aluminum fixed-frame windows at the northeast and southeast corners (**Photograph 3**), a modern tiled and anodized door entryway (**Photograph 4**), and a recessed fixed-frame window set on the southern facade. The majority of the eastern exterior is split between a first story brick veneer and a protruded second story façade faced in stucco panels separated by vertical wooden battens (see visible area above entryway in **Photograph 4**). Though almost completely obscured by ivy, the underlying eastern façade conveys attributes of the International Style. The western façade is similar to that of the eastern façade. This façade also features the “Clarion” signage which is largely obscured by ivy (**Photograph 5**).

Publicly viewed fenestration is most visible in the second story of the western half of the southern façade and similarly the western half of the northern façade (**Photograph 6 and 7**). In these locations, full-length aluminum sliding doorways and picture windows front the street and alley visible through metal railings that form individual room balconettes. In these areas, the roof features linear boxed eaves and the rooms are separated by wood and stucco pilasters.

Both 1st and 2nd story room access is gained through the entryways that overlook two separate east/west courtyards. Individual rooms are framed by the wood and stucco horizontal roof eaves and walkways as well as by vertical pilasters. Simple metal railings front the walkways and two sets of concrete stairs. Rooms are marked by unadorned doors and sets of aluminum-framed picture windows/sliding doors. The eastern courtyard is characterized by a north/south rectangular plan with a swimming pool and sunroom. Landscaping within the eastern courtyard includes palm and deciduous trees and shrubs (**Photograph 8 and 9**). The western courtyard is characterized by an east/west rectangular plan with concrete and stucco rectilinear water features and sitting areas that are interspersed by rocks and conifer type trees and small shrubs (**Photograph 10 and 11**). A former breezeway between the two courtyards appears in-filled by a modern sunroom/lounge area (**Photograph 12**).

Notable public interior spaces are limited to the modernized lobby (**Photograph 13**) and sunroom area that protrudes into the eastern courtyard (**Photograph 14**). Exterior landscaping includes repetitively spaced deciduous trees and shrubs along all streets and the alley between the motel and the adjacent Holiday Inn Express.

Prominent adjacent properties include the Holiday Inn Express at 728 16th Street, which occupies the north half of the same block as 700 16th Street and the historic Governor’s Mansion State Park, which is located directly to the south of the motel. Downtown urban and commercial development otherwise surrounds the property.

Significance (cont)

Motels as Building Types

As a building type, motels evolved in phases starting with the early auto camps popular at the turn of the 20th century and into early 1920s. With the growing popularity of the motor vehicle, the auto camp was seen as a convenient alternative to a hotel, which was typically a larger and, more expensive option, and often located in the center of a metropolis. Car camping was a more economical means of travel for the tourist as most of the travel costs would go toward gasoline and less toward lodging allowing the traveler to stretch their trips out longer (Jakle, et. al 1996: 31, 33, 36). In the western United States, the auto camps started out as free municipal run operations. But, during the Great Depression of the 1930s, fees were charged to discourage transients who would often stay for months at the auto camps while they searched for work. With the implementation of fees, the municipal auto camp gave way to commercial enterprises in most regions. These commercial-operated camps included such amenities as fireplaces, picnic tables and coin-operated stoves (Jakle, et. al 1996:33–34).

The auto camps evolved into offering cabins for the tourists and cabin camps began to appear in the early 1930s. These newer camps were either built without tent camping facilities or cabins were added to the existing camp facility. The cabins were often built from prefabricated kits and were usually arranged in clusters or built in L or U-shaped rows. Each cabin offered a designated parking space either in front of the cabin or next to the cabin. The success of these new lodging facilities was considered an economic boom in the building industry during the Great Depression (Jakle, et. al 1996:38–39). Like their auto camp predecessor, cabin camps were popular with tourists because they were less expensive, offered quick check out, did not require driving into the downtowns of major cities, and since there was no lobby to pass through on the

way to your room, it was less embarrassing for those who were driving all day and whose appearance was not as formal as it would be checking into a hotel (Jakle, et. al 1996:39).

This same period saw the introduction of the cottage courts, which evolved from the more substantial cabin camps. Unlike cabin camps, cottage courts operated year round. The cottages were typically arranged in a U-shape around a central courtyard. After 1930, attached garages were introduced. Architecturally, the cottages were designed to resemble small houses to make them attractive to the middle-class tourist (Jakle, et. al 1996:41, 43).

Cottage courts evolved into motor courts, which were of a similar concept. However, unlike cottage courts, motor courts shared a similar roofline and the rooms were set into a single-story building. The motor courts also offered guests a coffee shop and quite often a gas station. After World War II, motor courts were commonly referred to as motels. They were built around a central courtyard, in a U-shape which often included a swimming pool, with parking restricted to the rear of the building. The rooms typically had two doors, one facing the parking area and the other facing the courtyard. Some rooms faced the pool area that was accessed by sliding glass doors.

In the 1950s, motor inns were introduced as a motel type and were located primarily in downtown areas of major cities; near freeways or interchanges. They were the next evolutionary step in motel design. Motor inns were considered more substantial than motor courts and were typically two- or three-stories arranged around a center courtyard with dining rooms and cocktail lounges (Jakle, et. al 1996:45–47, 49). The lobby of motor inns was small and usually included a magazine rack or counter and a small gift shop, similar to the original design of the Mansion Inn (see Historic Photo 1). The rooms in motor inns were larger than motor courts and accounted for a greater percentage of the building's overall space (Architectural Record 1960:48). Motor inns were popular among motel chains.

The motor inns gave way to the highway hotel in the 1960s. The highway hotel was a motel that was composed of multi-story, geometrical shaped buildings that by the 1970s included a high rise portion with wings. These motels were located in urban areas frequently near airports or in redeveloped sections of downtowns in major cities. The 1980s witnessed further change in the design of highway hotels with the introduction of the all-suite motel that catered to the business traveler. These motels had larger rooms with kitchenettes and large desks, but they were still less formal than a hotel and did not have bellboys, dining rooms or restaurants. A leading chain in this type of motel was the Embassy Suites (Jakle, et. al 1996:51–52). This trend in motel design continues into the 21st century.

Growth of Motels

In general, the motel industry saw an incredible amount of growth following World War II. In 1948 more than 25,000 motels were spread across the United States. By 1954 that number increased to more than 29,000 nationwide (Jakle, et. al 1996:20). Several factors contributed to the rise of motels in America. During the 1950s with the ongoing popularity of the automobile, more Americans were moving to the suburbs and purchasing cars. Leisure travel was more common place and much of this travel was done by automobile which was aided by the Highway Act of 1956. Motels were also seen as a wise real estate investment as new motels appreciated quickly. The 1954 tax code allowed equity to be sheltered through accelerated depreciation early in the ownership of the motel. But, after about 10 years amortization payments became greater than depreciation allowances, the owners would sell and take their long-term capital gain. This encouraged new construction and the remodeling of older motels under new ownership (Jakle, et. al 1996:45, 47). In 1958 alone it was estimated that the motel industry generated two billion dollars (Architectural Record 1960:25). By 1964, there were an estimated 61,000 motels in the United States (Jakle, et. al 1996:20). By the 1970s there was a slight decline with only 52,000 motels operating in the nation. In the 1990s, there were more than 3 million rooms available, however, those estimates compiled within the lodging industry did not distinguish between motel and hotel operations.

International Style and Dreyfuss & Blackford

Many motels of the late-1950s and early 1960s were designed in the International style of architecture. International style has its roots in Europe's Modern Movement of the 1920s where architects and designers based their designs around the concept that buildings should embody and express the scientific technology of the industrial age (Roland 2009:8-5). The style was heavily influenced by Walter Gropius who founded the Bauhaus, a school of design and building at Dessau, Germany (Pehnt 1964:42). The Bauhaus produced some of the master architects who would practice in the modern movement.

In 1928, the Congrès Internationaux d'Architecture Moderne (CIAM) was created and provided a forum for international academic discussion about modern architecture. This first meeting was attended by Gropius and other modernist architects. It established the idea that building design should follow the economic and political issues rather than adhering to historical architectural formulas. By the 1930s there were many examples of Modernism throughout Europe designed by architects of the Bauhaus. The definition of the International style was first used in 1932, at an exhibit at the Museum of Modern Art in New York. Architects from 16 countries displayed their modernist designs (Khan 2009: 34, 61). Henry-Russell Hitchcock and Philip Johnson devised the term International style to define the style of architecture being created in Europe by the students of the Bauhaus. Hitchcock and Johnson identified the style by its aesthetic qualities (Khan 2009: 8, 62). The style emphasizes volumetric forms devoid of ornamentation and was dependent on materials like steel and concrete. Windows were freely distributed, thereby providing ample light, but also serving as an exterior design element. Horizontality became a character-defining feature of the style (Khan 2009:63–64, 66). The lack of ornamentation in the International style also made it a practical means for construction.

Even after the exhibit in New York, International style failed to take root in America except for some iconic designs by master architects including Le Corbusier, Richard Neutra and Rudolph Schindler (Roland 2009:8-5). With the threat of another world war in the 1930s, many of Europe's top modernists architects, including Walter Gropius, Mies van der Rohe, and Erich Mendelsohn immigrated to the United States and began teaching at the architectural schools of Harvard, Illinois Institute of Technology, and University of California, Berkeley (Pehnt 1964:306, Roland 2009:8-5). This collective group designed residences, campuses, and commercial buildings with modernist movement styling throughout the United States. With its steel and walls of windows, the International style became the most popular for designing skyscrapers and high rises. In the 1960s, Johnson altered some of the character-defining features of the style to include repetitive modular rhythms and large expansions of glass and flat roofs (Khan 2009:76, 85-104). These features of the style are still identifiable today.

It was in post-World War II America where the International style finally gained popularity. The demand for commercial enterprises was high after the war and numerous returning war veterans like Albert Dreyfuss and Leonard Blackford entered architectural school. The trend during this period was to integrate architecture with master planning for cities (Roland 2009:8-7). Albert M. Dreyfuss, a graduate of Tulane University, became a member of the American Institute of Architects (AIA) in 1947, working first as an associate at Samuel G. Wiener & Associates and then briefly as an associate designer for the California State Architect. He then opened a small firm on J Street in Sacramento in 1950 (AIA 1953:1–2). Dreyfuss' first project in Sacramento was the Santa Paula Manor apartments located in north Sacramento (*Executive Place* 1982:6–7). This was followed by Marconi Manor and several civic buildings at Travis Air Force Base in 1951. Dreyfuss also designed the Corum Houses in northern Sacramento for E. A. Corum & Sons (*Western Building* 1954:20). Leonard Blackford graduated from University of California, Berkeley. He worked for a firm in the San Francisco Bay Area before moving to Sacramento to work for the State as a designer. Blackford and his family lived across the street from Dreyfuss and in 1953; Dreyfuss offered him a job at his firm. In 1954, the two became partners (Hope 1970:B3). Some of Blackford's early work while working at Dreyfuss & Blackford included the Nut Tree restaurant in Vacaville, California (no longer extant), the Mansion Inn, and the Starr King School in Sacramento (Bowker 1962:59; Hope 1970:B3).

Dreyfuss & Blackford had a prolific career. Like most architects during the 1950s, they were influenced by post-World War II Modernism that expressed itself in the International style. Their works in this style in Sacramento include the Harvey's Drive Inn on Fulton Avenue (1957 – no longer extant), the former Vogel Chevrolet Showroom (1959) at 1616 I Street, the Mansion Inn (1958), and Asclepius Medical Building (1964) at 5120 J Street. Their most notable work in Sacramento includes the headquarters building for Sacramento Municipal Utility District (SMUD), which was completed in 1959, and designed in the International/Miesian style of post-World War II Modernism (Roland 2009:8-5). For the SMUD headquarters building the firm received several architectural awards. After the SMUD building the firm designed the condominium tower at 4100 Folsom (1963), the former IBM Building (1964) on Capitol Mall, Sacramento Savings & Loan (1965 – no longer extant), Sacramento Union Building (1968 – no longer extant) (Roland 2009:8-13–8-14). With these larger commissions, Dreyfuss & Blackford established itself in the 1960s with a signature style that expressed the International style with pre-stressed concrete panels and fenestration, which often was inset with modular windows (*Executive Place* 1982:6–7). During that period, their work in the International style transformed Sacramento's architectural landscape. By the 1980s, they were involved in notable Sacramento projects such as Lincoln Plaza. The firm has continued to produce major commissions throughout the Sacramento region, but it appears that both Dreyfuss and Blackford have retired from the firm and no longer practice.

Mansion Inn

Dreyfuss & Blackford was hired in 1958, by E. A. Corum & Sons to design the Mansion Inn, named for the historic Governor's Mansion located directly south of the motel. E. A. Corum & Sons was the oldest home building company operating in Sacramento at the time having been in the business since 1914 (*Western Building* 1954:20). According to the motel plans, Blackford was the architect of record who designed the Mansion Inn to be a two-story building focused inward towards a courtyard and pool. The elevations of the motel visible to the public featured stucco panels with 2x3 wood battens and brick siding (Dreyfuss & Blackford 1958). The design focused on the volume of the building and there was no exterior ornamentation, which are character-defining features of the International style. The building had little exterior fenestration and all the entrances to the rooms were set facing the interior courtyard and featured sliding glass doors. The motel opened in 1958 and courtyard design was generally considered innovative for its time (Flicker 2013). Dreyfuss & Blackford received the AIACV Honor Award in 1959, for the Mansion Inn (Flicker 2013).

The firm was re-hired in 1959 by Corum & Sons to convert the live-in manager's apartment at the motel to a cocktail lounge. During this time the original bar was modified to additional restaurant seating (Dreyfuss & Blackford Flicker 2013). Corum & Sons also commissioned Dreyfuss & Blackford in 1961 to design an addition to the motel (Dreyfuss & Blackford 1961:2). It was completed in 1963 and included 66 rooms, a terrace court designed by landscape architect Robert Danielson, a restaurant and banquet/meeting rooms. This same year, Sacramento voters rejected a bond measure to construct a convention center. The Mansion Inn was strategically located at the intersection of a highway and a major Sacramento thoroughfare. It is likely that Corum & Sons saw this as an opportunity to provide such facilities at his motel because other motels, including the Sacramento Inn, were also expanding their motels to include meeting and banquet rooms (*The Sacramento Bee* 1959:C15). The addition was similar to the 1958 building, two-stories with little fenestration and stucco panels separated by wood battens. The motel rooms and public facilities faced inward to a courtyard. The firm was hired again in 1972, to construct a third building for the Mansion Inn, also in the International style. This third building is today the Holiday Inn Express and is not part of this evaluation (*The Sacramento Bee* 1963:B7; *Architectural Record* 1976:42; McGowan and Willis 1983:94). Dreyfuss & Blackford were hired in 1976 to redesign the lobby of the 1958 building. They added a sunroom overlooking the pool and interior courtyard. A porte cochere was added in 1977 (Dreyfuss & Blackford 1977:E1). For the lobby redesign the firm received a California Governor's Award, Certificate of Excellence, and the AIACV Citation Award (Flicker 2013).

Dreyfuss & Blackford employed landscape architect Robert Deering for the landscape design for the 1958 building. Based on historic photographs (**Historic Photographs 1–3**), and the architectural drawings, the plantings selected by Deering were minimalistic and included grasses and palms. The planting boxes outside the rooms of the interior courtyard were narrow and could not accommodate large plants. Deering operated a private practice and focused on designing gardens, parks and commercial sites. He had worked with Dreyfuss & Blackford on their 1955 commission for the Nut Tree in Vacaville where Deering designed what was one of the first tree-shaded parking lots in the nation. Deering left the private sector in 1960 and joined the California State Parks as a landscape designer (Deering 2010). Likely because Deering was no longer in private practice, for the 1963 addition to the Mansion Inn Dreyfuss & Blackford hired landscape architect Robert Danielson (*Architectural Record* 1976:42). Danielson, like Deering, was a faculty member of the University of California, Davis landscape architecture program. He left the university in 1968 (Danielson).

The Mansion Inn was sold in 1984 and became the Clarion Inn. During this branding as a Clarion Inn, the interior registration area, gift shop and lounges were remodeled by Vitiello & Neiga Inc. of Sacramento and Barbara Elliott Interiors of Concord, California. The entrance on the main façade was altered and tile and anodized entry doors were introduced to the design.

Evaluation

The property does not meet the criteria for listing in the Sacramento Register of Historic and Cultural Resources (Sacramento Register) or the California Register of Historical Resources (CRHR). The motel does not meet Sacramento Register Criterion A and CRHR Criterion 1, because the motel did contribute to significant historical events or patterns of history. The motel industry developed in Sacramento much like it did in the rest of California. Motels were constructed along major highways and thoroughfares in urban areas to accommodate the automobile traveler. The Mansion Inn did not influence this trend, but was simply a part of it. The motel does not meet the Sacramento Register Criterion B for an association of persons significant in the city's past and does not meet CRHR Criterion 2 for similar associations. While E. A. Corum & Sons was a prominent builder in the Sacramento Region, the company was one of many operating in the area during the time period when the Mansion Inn was constructed (1958) and when it was expanded (1963). For a property to

meet the criteria for an association with individual's significant in history it must have a direct association and be the best representation of that person's life or career. The Mansion Inn is not an example of this.

Architecturally, the motel does not meet Sacramento Register Criterion C, D, and E and CRHR Criterion 3. As a motor inn, a building type of motels, the motel does not express the necessary characteristics of a motor inn because key elements of this type of motel building were altered with the introduction of new design elements over the years, such as the porte cochere, the redesigned lobby and the sunroom. The building also does not express distinctive characteristics of the International style. Ornamentation was added to the building that would not have historically existed on an International style building. The International style emphasizes the volume of the building and geometrical shapes. The porte cochere and the remodeling of the entrance with the marble entryway and lobby expansion introduced elements that disrupt the massing of the original building. The building also no longer expresses many of the character-defining features of the International style, which include expansive use of glass and steel. The glass seen in the courtyards is not visible from the public's view, which for the International style is typically intended to be visible to the public. The glass in the courtyard is a modest example of the use of glass often seen in the International style and does not reflect the more expansive use of glass and steel most commonly identified with the style. This motel is not an important example of the motor inn typology of motel buildings and is not an important example of the International style applied to a commercial building such as a motor inn.

The property also does not express the work of master or a master landscape architect. While Dreyfuss & Blackford are master architects with a prolific body of work, particularly in Sacramento, this specific property does not reflect a transition in their work in the International style. Architectural critics have noted that Dreyfuss & Blackford created a distinctive look in the design of their buildings, starting with the 1959 SMUD Headquarters (listed on the National Register of Historic Places) and also expressed in the 1963 residential building at 4100 Folsom and the former IBM building (1964). The distinctiveness in their designs was the use of the pre-stressed concrete panel and the fenestration, which are inset and modular windows (*Executive Place* 1982:6-7). This distinctive style of Dreyfuss & Blackford, expressed in the application of the International style, was better recognized in their larger commissions throughout Sacramento, even though some of those buildings are no longer extant, the Sacramento Union Building in particular. The design of the Mansion Inn does not appear to represent a notable transition of their style into larger works. In fact the SMUD building was executed during the same time period. The subject property does not retain those same characteristics that define the building as a Dreyfuss & Blackford design. It lacks the concrete panels and the fenestration that is found in most of their commissions from the same period. The Mansion Inn also does not best reflect the work of master landscape architects. In terms of the 1958 portion, Deering designed sites that used planting to compliment and emphasize modern architecture. His work was arguably best represented by his Vacaville Nut Tree design. Nor does the landscaping of the Mansion Inn's 1963 addition by Robert Danielson express an important phase in his landscape design career. Furthermore, the motel does not possess high artistic values. It is a common example of the International style from the late-1950s, typical of motor inn building types designed during this period. The Mansion Inn does not articulate the aesthetics of the International style. There are better examples of the style that can be found throughout Sacramento, including the former Vogel Chevrolet Showroom or the Asclepius Medical Building.

Lastly, the building is not likely to yield information important to history under Sacramento Register Criterion F or CRHR Criterion D because it is not the principal source of information of important information.

In addition to lacking historical and architectural significance, the property lacks integrity. Specifically, the property lacks integrity of design to either 1958 or 1963. The additions of the porte cochere, the remodeled lobby, and the sunrooms have introduced non-International Style design elements that altered the overt horizontality and massing of the building. The porte corchere introduced a prominent visual feature that was not part of the 1958 or 1963 design and detracts from the former clean, modular façade that existed historically. The sunrooms constructed in the mid-1970s and early 1980s disrupts the original flow between courtyards and their relationship to the interior space of the building by making the overall space of the courtyard appear smaller. The alterations from the 1970s further altered the integrity of the design as a type of motel, a motor inn. The 1958 lobby was a character-defining feature of the motor inn that included a small lobby, magazine rack or counter and a small gift shop. When the lobby was expanded and the gift shop converted to an office, this design feature was lost. The property also lacks integrity of materials at the main entrance and in the interior courtyard of the 1958 building. The porte cochere, the re-modeled entrance, and the sunroom have introduced new materials, including marble and anodized aluminum, which historically did not exist on the building. The original materials were stucco, wood batten and aluminum for the windows and sliding glass doors. Lastly, the setting and feeling of the property are altered. When it was

first constructed, the Mansion Inn was surrounded by automobile-related businesses, garages, gas stations and residences. It was one of a few motels located on Highway 160 as it passed through Sacramento. Today, it is surrounded by some motels that post-date the construction of the Mansion Inn on its east side and non-automobile related commercial businesses on its south and north side. When the Mansion Inn was constructed there were automobile garages, and residences in its immediate vicinity. There are also late 20th and early 21st century constructed buildings on the blocks in the immediate vicinity of the motel. These detract from the setting of mid-century urban environment. The ivy that is growing on the public façade of the building dramatically alters the feeling of the property as an International style building because it hides the character-defining features of the style, including the modular design of the stucco panels (see Historic Photograph 2). The ivy and vines render the building incapable of displaying the character-defining features of the International style which should lack ornamentation, but in the case of the ivy, has introduced a prominent ornamentation that does not adhere to the architectural style.

In summary, the property is not eligible for either the Sacramento Register or the CRHR because of a lack of historical and architectural significance and a loss of integrity.

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Page 9 of 17

*Recorded by M. Bowen, AECOM

*Resource Name or # (Assigned by recorder) Clarion Hotel
*Date March 20, 2013 Continuation Update

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Photographs (cont)



Photograph 2. Main entrance and porte cochere, camera facing southwest

Page 10 of 17

*Recorded by M. Bowen, AECOM

*Resource Name or # (Assigned by recorder) Clarion Hotel

*Date March 20, 2013

Continuation Update

Photographs (cont)



Photograph 3. East façade window at northeast corner, camera facing west

Photographs (cont)



Photograph 4. Remodeled main entrance, camera facing west (note stucco panels and battens above door)



Photograph 5. "Clairon" signage, camera facing northwest

Photographs (cont)



Photograph 6. South elevation, camera facing north



Photograph 7. North elevation, camera facing southwest

Photographs (cont)



Photograph 8. East courtyard and swimming pool, camera facing east



Photograph 9. East courtyard and sunroom, camera facing south

Photographs (cont)



Photograph 10. West courtyard, camera facing west

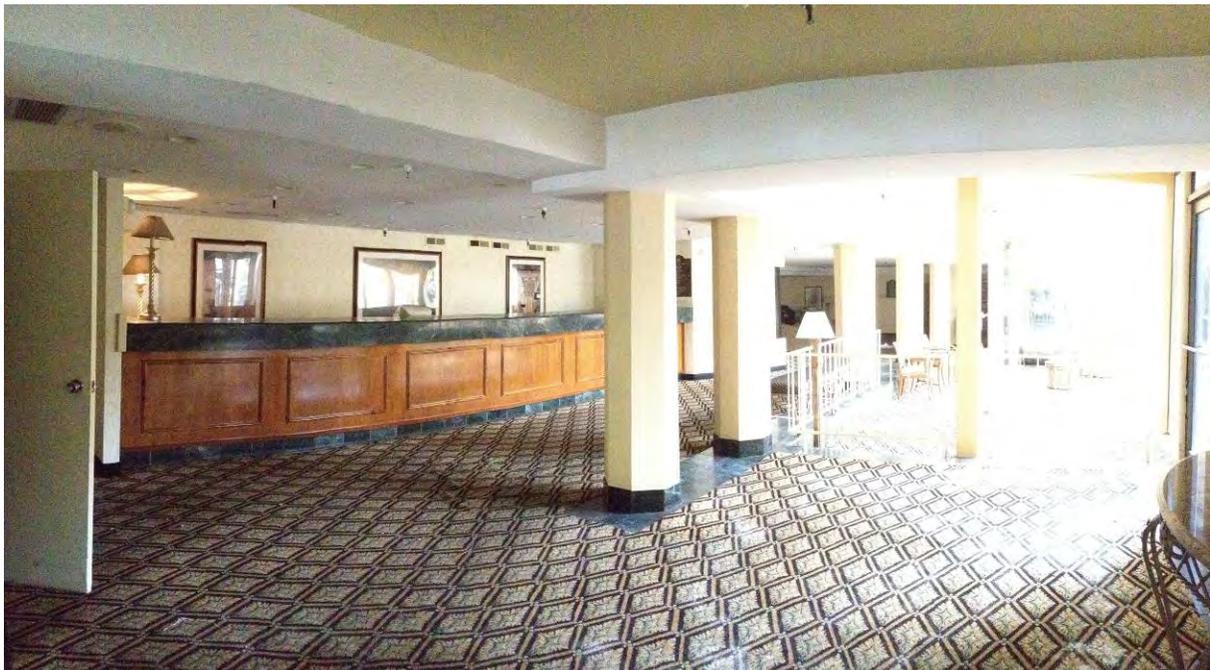


Photograph 11. West courtyard and landscaping, camera facing east

Photographs (cont)



Photograph 12. Sunroom and former breezeway, camera facing east



Photograph 13. Remodeled lobby, camera facing east

Photographs (cont)



Photograph 14. 1970s sunroom, camera facing north

Historic Photographs



Historic Photograph 1. Mansion Inn's original entryway and lobby
(Photograph Available online at Dreyfuss & Blackford's Photostream)

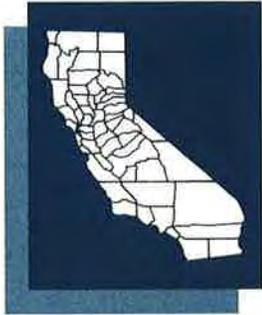
Historic Photographs (cont)



Historic Photograph 2. Mansion Inn, 1958 east façade, view west.
(Photograph Available online at Dreyfuss & Blackford's Photostream)



Historic Photograph 3. Mansion Inn, courtyard, view south, 1958
(Photograph Available online at Dreyfuss & Blackford's Photostream)



ESTABLISHED 1982

PAR ENVIRONMENTAL SERVICES, INC.

Environmental Planning Services and Cultural Resource Management

November 24, 2014

Ryan Lee Sawyer, AICP
Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811

RE: Review of Historical Resource Evaluation of 700 16th Street (PAR Ref. No. 14-0030)

Dear Ryan Lee Sawyer:

PAR Environmental Services Inc. (PAR) has completed a peer review of the historical evaluation of the former motel at 700 16th Street by Mark Bowen and Patricia Ambacher of AECOM. I have thoroughly reviewed their 17-page recordation, including architectural descriptions, historic context and evaluation discussion. In addition, I visited the site on November 19, 2014 and examined the building in person to determine current condition and agreement with the recordation. While unable to go inside the building, I walked the entirety of the exterior of the building and looked in numerous windows and doors to view interior conditions, including a good partial view of the original 1958 courtyard.

AECOM's recordation provides excellent physical and architectural descriptions of the resource and is more than adequate for its purpose. The historic context places the motel into the context of the development of roadside hospitality, discusses the backgrounds and other architectural contributions of the architects involved in the original construction and remodeling, and provides historical photographs to contrast with current conditions. The evaluation thoroughly addresses both the Sacramento Register of Historic and Cultural Resources (Sacramento Register) and the California Register of Historical Resources (CRHR). AECOM's work considers importance under Criterion A/1 for its contribution to significant historical events or patterns, under Criterion B/2 for its association with the building and architects, under Criterion C/3 for its significance as a motor inn, and also as the work of a master architect or landscape architect, and under Criterion D/4 as a source of important information. They also provide extensive information related to comparable properties in the region, including those that are considered to hold significance and integrity and that provide superior examples of architectural expression. AECOM's integrity discussion is also well considered and notes specific and extensive modifications that have indeed altered the original integrity of the structure.

Ryan Lee Sawyer
November 24, 2014
Page 2

In summary, AECOM's evaluation determined that the building does not meet the criteria for listing in the Sacramento Register or the CRHR due to both lack of significance and loss of integrity. I concur with this finding and believe that their reasoning and findings are legally sound in light of the CEQA guidelines.

Thank you for the opportunity to conduct this peer review. If you have any questions or need further information, please do not hesitate to call.

Sincerely yours,

PAR ENVIRONMENTAL SERVICES, INC.



Cindy L. Baker

cc: Mary L. Maniery
CLB: clb



ATTACHMENT 6

HISTORIC RESOURCE REVIEW



4486 University Avenue, Riverside, California 92501

(951) 369-1366 ■ daly.rvrsde@sbcglobal.net

September 12, 2013

Ryan Lee Sawyer, AICP
Vice-President
Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811

Re: Pacifica Senior Living Facility Project

Dear Ms. Sawyer;

Thank you for requesting that Daly & Associates review the proposed project noted above for its potential to cause a substantial adverse change in the significance of a historical resource as defined in California Environmental Quality Act (CEQA) Guidelines Section 15064.5.

The project site for the Pacifica Senior Living Facility is located in the downtown area of the City of Sacramento, and is bordered by H Street to the south, 15th Street to the west, 16th Street to the east, and G Street alley to the north. The proposed project is located within the Central Core neighborhood of the City of Sacramento's Central City Community Plan area. The proposed Pacifica Senior Living Facility will be a two-story building. The project site is rectangular in shape, level, and consists of approximately 51,400 square feet in size.

The project proposes the demolition of the existing two-story Clarion Hotel with the address of 700 16th Street. The Clarion Hotel (historically known as the Mansion Hotel) was evaluated for historic significance by architectural historian Patricia Ambacher of AECOM, Sacramento, in April of 2013. Ms. Ambacher prepared a thorough and comprehensive evaluation of the Clarion Hotel property, and determined that it should not be considered a historical resource. (The DPR523 Series set of inventory site forms for the Clarion Hotel is attached to this letter.) Ms. Ambacher assigned the property the California Historical Resource Status Code of 6Z, having found the property not eligible for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or for local listing in the City of Sacramento.

The project proponents desire to construct the new senior living facility within an area of the City of Sacramento developed with mostly commercial properties. To the east of the project site across 15th Street, located at the northwest corner of H and 15th Streets, is the Sacramento Theater Company campus with the address of 1419 15th Street. To the west of the project site, across 16th Street, is a paved parking lot. To the north of the project site, across the G Street Alley, is the Holiday Inn Express motel at 728 16th Street.

Across H Street from the proposed project site, situated at the southwest corner of 16th Street and H Street, is the Governor's Mansion State Historic Park. The Victorian era residence was constructed in 1877 for Albert and Clemenza Gallatin, and later purchased by the State of California as the home for sitting state governors. The house, with associated structures and landscaped grounds, is listed in the NRHP, the CRHR, and listed as California Historic Landmark Number 823. To the immediate west of the Governor's Mansion State Historic Park is a building with the address of 805 15th Street that was constructed in 1948. (See Figure 1)



Figure 1: Proposed project in relationship to the Governor's Mansion State Historic Park located within the City of Sacramento's Central Core neighborhood.

The project site is located within the Central Core neighborhood of the Sacramento Central City Community Plan area as described in the 2030 General Plan for the City of Sacramento (adopted March 3, 2009.) The Central Core neighborhood, which includes the Central Business

District (CBD), is the neighborhood spanning from the Capital and Capital Mall, to the north, south, and west, and contains some of the most historic properties of Sacramento's early settlement.

The proposed project is being reviewed for compliance with 2030 General Plan Environmental Constraint (EC) Policy 3.1.7. This policy requires construction projects be evaluated to determine if nearby historic properties will be exposed to ground-borne vibration peak-particle velocities (ppv) greater than 0.25 inches per second. Structural damage may occur to fragile historic structures when vibration-induced activities such as pile-driving, blasting, and/or earth-moving, are used in close proximity to built-environment resources.

The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to history buildings and archaeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur. (Sacramento 2030 General Plan, page 6.8-25)

In August of 2013, Paul Bollard, President of Bollard Acoustical Consultants, Inc. (BAC) completed a Construction Vibration Analysis of the Pacifica Senior Living Facility Project. (A copy of the BAC report is attached to this letter.) BAC was charged with preparing an analysis to quantify baseline vibration levels that could occur at the project site during construction of the new facility to determine if those levels would exceed the acceptable vibration exposure levels as defined by City Policy EC 3.1.7.

To determine the baseline vibration levels at the Governor's Mansion property, BAC conducted vibration measurements there in May 2013. The data collected confirmed that the existing day-to-day vibration levels were below the thresholds of perception. Using data from the Federal Transit Administration (FTA), BAC presented in their report a table of vibration impact levels in terms of ppv for a variety of construction equipment routinely found on construction sites.

As the Governor's Mansion is situated approximately 100 feet from the project site (per the BAC report), and the project does not propose the use of pile driving, "peak particle velocities would be approximately 1/8th the intensity of the levels received at 25 feet" and "the resulting levels at the Governor's Mansion would be approximately 0.01 inches/second ppv or less." The FTA has set the limit of ppv for buildings extremely susceptible to vibration damage at 0.12. The ppv for the proposed project is expected to measure well below the vibration thresholds established by the FTA for fragile buildings.

While the details of the design of the proposed hotel will fall under the purview of the Central Core Design Guidelines, guidelines for the California Environmental Quality Act (CEQA) require that a project be evaluated for its potential to cause a substantial adverse change in the significance of a historical resource, such as the Governor's Mansion property.

CEQA defines a substantial adverse change as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. The significance of a historic resource is materially impaired when a project:

Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources.

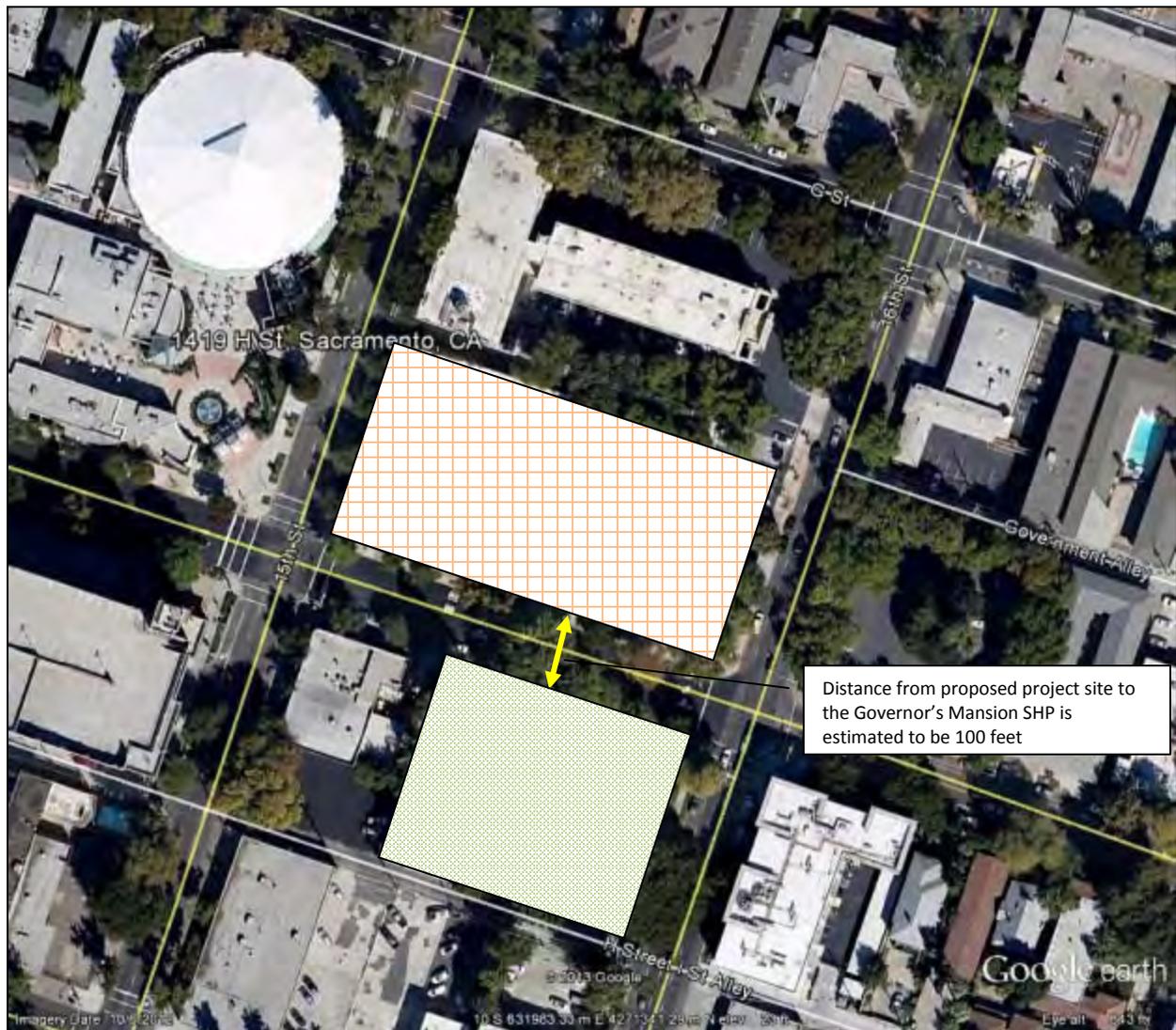


Figure 2: Approximate distance between the proposed project site and the Governor's Mansion State Historic Park.

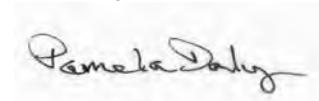
As seen in Figure 2, the proposed project area is located approximately 100 feet to the north of the Governor's Mansion State Historic Park. The project and related construction activities do not have the capacity to physically alter by any means, either directly or indirectly, the building, structures, and landscape located within the Governor's Mansion State Historic Park. The proposed project will not alter in any manner those physical characteristics of the historic property that are used to convey its historic significance as all project activities will take place well outside the boundary of the historic property.

It can also be stated that the proposed project will not have capacity to create any visual impacts as the new building is to be limited to the same two-story height as the existing hotel building. The height of the new building will not create any shadows could compromise the illumination of its interior rooms facing H Street.

The results of our investigation find that the construction of the proposed project does not have the potential to physically change the character or physical integrity of the Governor's Mansion and its surrounding landscape.

Please do not hesitate to contact us if you have any questions about our findings.

Sincerely,

A handwritten signature in black ink that reads "Pamela Daly". The signature is written in a cursive style and is positioned above the typed name.

Pamela Daly, M.S.H.P.
Principal/Architectural Historian

- Attachments:
1. Qualifications of Pamela Daly, M.S.H.P.
 2. Bollard Acoustical Consultants Report: Construction Vibration Analysis – Pacifica Senior Living Facility Project, Sacramento, CA
 3. California Department of Parks and Recreation Series 523 Inventory Site Forms for Clarion Hotel, 700 16th Street, Sacramento, CA



Pamela Daly, M.S.H.P., Principal Architectural Historian
Daly & Associates, 4486 University Avenue, Riverside, CA 92501
(951) 369-1366 daly.rvrsde@sbcglobal.net

Ms. Daly is a Qualified Architectural Historian with more than 16 years experience in historic resource management and consulting in California, Vermont, New York, and Nevada. She earned a Bachelor of Science degree in Business Management from Elmira College in Elmira, New York, and a Master of Science degree in Historic Preservation at University of Vermont. Ms. Daly's coursework in Historic Preservation included the study of American Architecture, Historic Landscapes, and Building Conservation Techniques.

Ms. Daly has expertise not only in assessing and evaluating classic residential architectural styles of the United States dating from the eighteenth to the twenty-first century, but she has a wide range of experience in the survey and evaluation of military sites and structures in both the western and eastern United States. She has performed studies on airplane hangars, military housing, helicopter hangers, ammunition bunkers, flight simulators, and Cold War radar arrays. Industrial archaeological sites include automobile and railroad bridges, irrigation canals and ditches, gravity-fed water supply systems, sewer treatments systems, gold mines, water-pumping systems, privately-owned reservoirs, electric transmission line towers, roads, historic signage, airplane hangars, steam-powered belt and pulley systems, and a historic zanja.

Studies of built-environment resources include archival research, field investigation, significance criteria and determinations, assessment of impacts/effects, management plans, and mitigation implementation. Mitigation measures include preparation of Historic American Building Survey (HABS) documentation, Historic American Engineering Record (HAER) documentation, Historic American Landscape (HALS) documentation, interpretive signage, layout and production of brochures, websites, and video displays. Ms. Daly has also worked with clients with historically significant buildings to restore or rehabilitate them in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

From her training at the University of Vermont, Ms. Daly is qualified to prepare Historic Structure Reports (HRA) for built-environment resources. She has the expertise and equipment to perform chromochronology, mortar analysis, historic interior evaluations, and analysis of historic paint finishes. She has prepared reports detailing the existing conditions of the interior and exterior features of a building, and presented the recommended repair and maintenance tasks necessary to protect the historic resource.

Ms. Daly has experience with federal agencies including U.S. Air Force, U.S. Navy, U.S. Army Reserve, U.S. Army Corps of Engineers, Bureau of Land Management, the U.S. Forest Service, the National Park Service, and U.S. Fish & Wildlife. She is accepted as a principal investigator for both Architectural History and History by the California State Office of Historic Preservation, and holds the qualifications to work throughout the United States. Ms. Daly belongs to the National Trust for Historic Preservation, Vernacular Architecture Forum, Society of Industrial Archaeology, and Association of Preservation Technology.

Ms. Daly has owned her own consulting firm, Daly & Associates for fifteen years. Prior to entering the field of Historic Preservation, Ms. Daly worked for over 25 years as a corporate accountant.

Construction Vibration Analysis

Pacifica Senior Living Facility Project

Sacramento, California

BAC Job # 2013-047

Prepared For:

Analytical Environmental Services (AES)

Ms. Ryan Lee Sawyer
1801 7th Street, Ste. 100
Sacramento, CA 95814

Prepared By:

Bollard Acoustical Consultants, Inc.



Paul Bollard, President

August 23, 2013

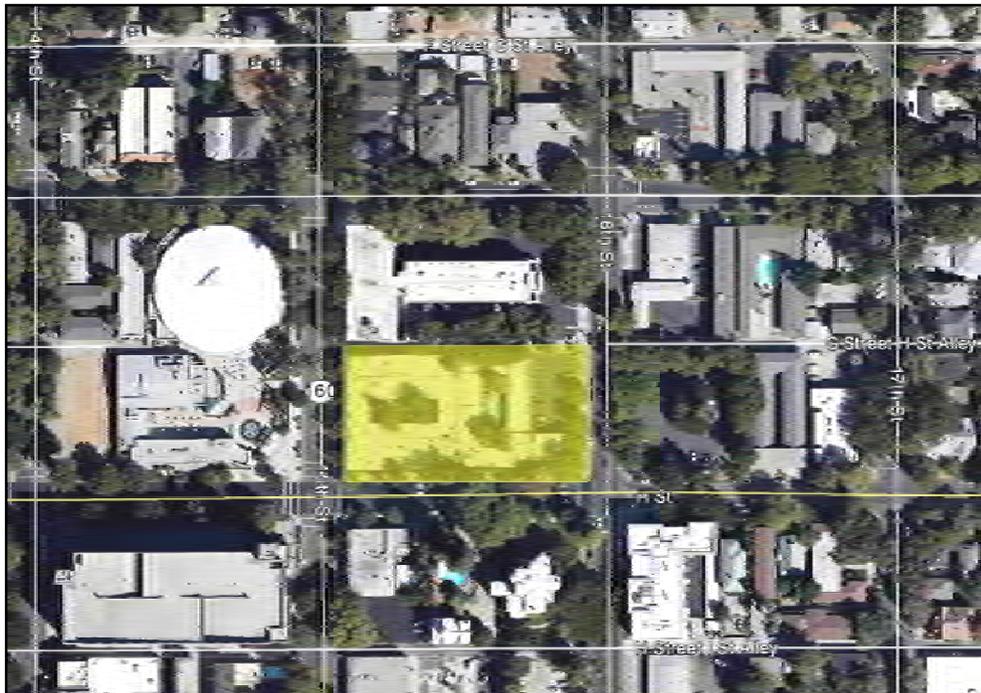


Introduction

The Pacifica Senior Housing facility project site is located in downtown Sacramento, bordered by H Street to the south, 15th Street to the west, 16th Street (Highway 160) to the east, and an alley to the north. The project proposes to demolish the existing Clarion Hotel currently located at this site, and construct a Senior Housing Facility in its place. Due to the proximity of historic structures in the immediate project vicinity (Governor's Mansion to the immediate south), Bollard Acoustical Consultants, Inc. (BAC) was retained by Analytical Environmental Sciences (AES) to prepare an analysis of construction-related vibration.

The purposes of this analysis are to quantify baseline vibration levels at the project site, to predict construction and demolition-related vibration levels, and to determine if those levels would exceed the applicable criteria at existing structures in the immediate project vicinity, including the Governor's Mansion.

Figure 1 – Pacifica Senior Living Facility Site Location



Fundamentals of Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through ground or a structure. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches/second (ppv in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity.

According to the Transportation and Construction-Induced Vibration Guidance Manual (Caltrans, June 2004), operation of construction equipment and construction techniques generate ground vibration. Traffic traveling on roadways can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage (e.g., crack plaster). Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities.

As vibrations travel outward from the source, they excite the ground through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. The maximum rate or velocity of particle movement is the commonly accepted descriptor of the vibration “strength.”

Human response to vibration can be difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases.

Criteria for Acceptable Vibration Exposure

The noise element of the City of Sacramento 2030 General Plan contains two policies which pertain to vibration. Those policies are as follows:

- **Policy EC 3.1.5 Interior Vibration Standards.** The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.
- **Policy EC 3.1.7 Vibration.** The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archaeological sites and require all feasible mitigation measures be implemented to ensure no damaged would occur.

The Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment protocol (FTA-VA-90-1003-06) provides thresholds for assessing impacts to a variety of land-use categories. Table 12-3 of the FTA guidelines, which provide construction vibration damage criteria, is reproduced below as Table 1.

Building Category	PPV (in/sec)
Reinforced concrete, steel, or timber (no plaster)	0.5
Engineered concrete and masonry (no plaster)	0.3
Nonengineered timber and masonry buildings	0.2
Buildings extremely susceptible to vibration damage	0.12

Notes: FTA = Federal Transit Administration; in/sec = inches per second; PPV = peak particle velocity
Source: Federal Transit Administration. 2006 (May). *Transit Noise and Vibration Impact Assessment*. Washington, DC. Page 12-13.

Existing Vibration Environment

No appreciable sources of vibration were identified during BAC field surveys of the immediate project vicinity and existing ambient vibration levels were subjectively evaluated as being below the threshold of perception. Nonetheless, to quantify baseline vibration levels at the nearest representative sensitive receptors to the project site, BAC conducted vibration measurements on May 29, 2013.

The vibration measurements were conducted using a Larson-Davis Laboratories Model HVM-100 Vibration Analyzer with a PCB Electronics Model 353B51 ICP Vibration Transducer. The test system is a Type I instrument designed for use in assessing vibration as perceived by humans, and meets the full requirements of ISO 8041:1990(E). Atmospheric conditions present during the tests were within the operating parameters of the instrument. A photograph of the vibration measurement setup near the Governor's Mansion is shown by Figure 2. A summary of the vibration measurement results is provided in Table 2.

The Table 2 data confirm that measured existing ambient vibration levels in the immediate project vicinity were below the thresholds of perception.

Figure 2 – Vibration Measurements Conducted near Governor’s Mansion



**Table 2
Measured Ambient Vibration Levels
Pacifica Senior Living Facility Project Vicinity: May 29, 2013**

Site	Location	Peak Particle Velocity (In/Sec)
A	Northeast Corner of Project Site – 16 th St.	0.005 - 0.013
B	Southeast Corner of Project Site – 16 th & H	0.004 - 0.006
C	H Street, Midway Between 15 th & 16 th	0.006 - 0.009
D	Southwest Corner of Project Site – 15 th & H	0.004 - 0.007
E	Northwest Corner of Project Site – 15 th St.	0.008 – 0.010
F	Directly in Front of Governor’s Mansion	0.008 – 0.013

Source: Bollard Acoustical Consultants, Inc. (BAC)

Vibration Levels from Construction Equipment

Various types of construction equipment have been measured and reported in the FTA guidelines under a wide variety of construction activities with an average of source levels reported in terms of velocity as shown in Table 3. Although Table 3 provides one vibration level for each piece of equipment, it should be noted that there is a considerable variation in reported ground vibration levels from construction activities. The data provide a reasonable estimate for a wide range of soil conditions.

Equipment	PPV at 25 ft (in/sec)	
Pile Driver (impact)	upper range	1.518
	typical	0.644
Pile Driver (sonic)	upper range	0.734
	typical	0.170
Hoe Ram	0.089	
Large bulldozer	0.089	
Loaded trucks	0.076	
Jackhammer	0.035	
Small bulldozer	0.003	
Source: FTA Transit Noise and Vibration Impact Assessment Table 12-2		

Analysis of Construction-Related Vibration

According to the project applicant, project construction will not require pile-driving or other similar vibration-generating equipment. As a result, the most significant sources of vibration generated by project construction will likely be limited to heavy earthmoving equipment required for site demolition and grading.

The nearest existing structures to the project site boundary consist of a Holiday Inn Express to the immediate north (approximately 20 feet from the project site), the Governor's Mansion to the South (approximately 100 feet from the project site), and other office/commercial buildings to the south and east of the project site (between approximately 70 and 100 feet from the project site).

Because the project does not propose pile driving, vibration levels at a distance of 25 feet from the operating equipment (approximate distance to Holiday Inn Express to the north), would likely range from 0.003 to 0.0890 inches/second ppv, as indicated in Table 3. At the architecturally significant Governor's Mansion, which is located approximately 100 feet south of the project site, peak particle velocities would be approximately 1/8th the intensity of the levels received at 25 feet. The resulting levels at the Governor's Mansion would be approximately 0.01 inches/second ppv or less.

Table 1 indicates that the threshold applicable to buildings which are extremely susceptible to vibration damage, such as the Governor's Mansion, is 0.12 inches/second, ppv. Because the vibration levels predicted at that location are well below that threshold, no adverse vibration impacts are identified for the Governor's Mansion during project demolition and construction.

At the Holiday Inn Express located immediately north of the project site (approximately 20 feet from the site), vibration levels are predicted to be 0.124 inches per second or less. According to the thresholds in Table 1, vibration levels as high as 0.2 to 0.3 inches per second would be considered acceptable given the construction type of that structure. As a result, no adverse vibration impacts are identified for the nearby Holiday Inn Express, provided project demolition and construction is limited to daytime hours.

Conclusions

This analysis concludes that project demolition and construction activities, as proposed, would satisfy the vibration thresholds recommended by the FTA. Because no pile-driving activities are proposed, construction-induced vibration levels are predicted to be below levels considered to cause damage to structures, both historic and otherwise. As a result, adverse construction vibration impacts are not identified for this project.

This concludes BAC's analysis of construction-related vibration for the Pacifica Senior Living Project in Sacramento, California. Please contact Paul Bollard at (916) 663-0500 or PaulB@bacnoise.com if there are any questions or comments on this analysis.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____ 6Z _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 17

*Resource Name or # (Assigned by recorder) Clarion Hotel

P1. Other Identifier: 700 16th Street

*P2. Location: Not for Publication Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County Sacramento

*b. USGS 7.5' Quad Sacramento East Date 1967 (R 1980) T 8N; R 4E; ___ ¼ of Sec ___; _____ B.M.

c. Address 700 16th Street City Sacramento Zip 95814

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

APN: 002-0172-024

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is the former Clarion Hotel, located at 700 16th Street in the downtown area of the City of Sacramento. The motel building encompasses the southern half of the city block bounded by 16th Street to the west, G Street to the North, H Street to the South, and 15th Street to the east. The 239-unit motel building is two stories in height and extends to the street and alley on the north, south, and west facades. The east façade overlooks an automobile parking lot that extends the length of the motel building (**Photograph 1**).

The building is wood and steel-frame set in a generally rectangular configuration with the longest dimension extending east to west. A concrete, steel, and glass porte-cochere that spans the width of the parking lot is attached to the east façade covering the entryway (Photograph 2). Featuring a flat roof throughout, much of the exterior of the building is currently encased in a thick mass of ivy. Construction attributes and materials are visible in places. (See Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP5. Hotel/Motel

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1, Mansion Inn east façade and porte cochere, camera facing southwest, March 20, 2013

*P6. Date Constructed/Age and Sources:
 Historic Prehistoric Both
ca. 1958 / The Sacramento Bee

*P7. Owner and Address:
Pacifica Companies
1775 Hancock Street, Suite 200
San Diego, CA 92110

*P8. Recorded by: (Name, affiliation, address)
Mark Bowen
AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

*P9. Date Recorded:
March 20, 2013

*P10. Survey Type: (Describe)
Intensive



*P11. Report Citation: (Cite survey report and other sources, or enter "none.") None

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record
 District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record
 Other (list) _____

DPR 523A (1/95)

*Required Information

B1. Historic Name: Mansion Inn

B2. Common Name: Clarion Hotel

B3. Original Use: Hotel B4. Present Use: Vacant

*B5. Architectural Style: International

*B6. Construction History: (Construction date, alteration, and date of alterations) constructed – 1958; 1963 – addition; 1976 – interior remodeling and porte cochere

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: Holiday Inn Express, north of motel, and not included in this evaluation

B9. Architect: Dreyfuss & Blackford b. Builder: E. A. Corum (1958 building); Charles F. Unger Construction Company (1963)

*B10. Significance: Theme Commercial Development / Architecture Area Sacramento

Period of Significance 1958; 1963 Property Type Motel Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The property at 700 16th Street is a former motel originally known as the Mansion Inn and more recently as the Clarion Hotel. Designed by the Sacramento architectural firm of Dreyfuss & Blackford, the motel was constructed in phases with the first building (which included 50 rooms, a manager's apartment, a small restaurant and a bar) completed in 1958. A second 66-room building that included meeting rooms, kitchen and service facilities, was added to the first building in 1963. A third building was constructed in 1972 which also has a 1977 addition and today is the Holiday Inn Express, located north of the Mansion Inn. The third building is not included in this evaluation.

Motels as Building Types

The term 'motel' was first coined in 1926, and is a contraction of the word motor and hotel. The term became a generic label that encompassed a variety of roadside and highway facilities that accommodated automobile travelers. Unlike a hotel, a motel was not typically located in the downtown of urban cities, was not multistoried, but rather horizontally massed, and did not have formal lobbies, dining rooms, or ball rooms. Motels also did not have staff such as doormen, bellboys or a concierge (Jakle, et. al 1996:18–19; Architectural Record 1960:26). (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References: See Continuation Sheet

B13. Remarks:

*B14. Evaluator: Patricia Ambacher

*Date of Evaluation: April 12, 2013

(This space reserved for official comments.)



Description (cont)

The exterior of the eastern portion of the building is largely devoid of fenestration with the exception of a single set of second story aluminum fixed-frame windows at the northeast and southeast corners (**Photograph 3**), a modern tiled and anodized door entryway (**Photograph 4**), and a recessed fixed-frame window set on the southern facade. The majority of the eastern exterior is split between a first story brick veneer and a protruded second story façade faced in stucco panels separated by vertical wooden battens (see visible area above entryway in **Photograph 4**). Though almost completely obscured by ivy, the underlying eastern façade conveys attributes of the International Style. The western façade is similar to that of the eastern façade. This façade also features the “Clarion” signage which is largely obscured by ivy (**Photograph 5**).

Publicly viewed fenestration is most visible in the second story of the western half of the southern façade and similarly the western half of the northern façade (**Photograph 6 and 7**). In these locations, full-length aluminum sliding doorways and picture windows front the street and alley visible through metal railings that form individual room balconettes. In these areas, the roof features linear boxed eaves and the rooms are separated by wood and stucco pilasters.

Both 1st and 2nd story room access is gained through the entryways that overlook two separate east/west courtyards. Individual rooms are framed by the wood and stucco horizontal roof eaves and walkways as well as by vertical pilasters. Simple metal railings front the walkways and two sets of concrete stairs. Rooms are marked by unadorned doors and sets of aluminum-framed picture windows/sliding doors. The eastern courtyard is characterized by a north/south rectangular plan with a swimming pool and sunroom. Landscaping within the eastern courtyard includes palm and deciduous trees and shrubs (**Photograph 8 and 9**). The western courtyard is characterized by an east/west rectangular plan with concrete and stucco rectilinear water features and sitting areas that are interspersed by rocks and conifer type trees and small shrubs (**Photograph 10 and 11**). A former breezeway between the two courtyards appears in-filled by a modern sunroom/lounge area (**Photograph 12**).

Notable public interior spaces are limited to the modernized lobby (**Photograph 13**) and sunroom area that protrudes into the eastern courtyard (**Photograph 14**). Exterior landscaping includes repetitively spaced deciduous trees and shrubs along all streets and the alley between the motel and the adjacent Holiday Inn Express.

Prominent adjacent properties include the Holiday Inn Express at 728 16th Street, which occupies the north half of the same block as 700 16th Street and the historic Governor’s Mansion State Park, which is located directly to the south of the motel. Downtown urban and commercial development otherwise surrounds the property.

Significance (cont)

Motels as Building Types

As a building type, motels evolved in phases starting with the early auto camps popular at the turn of the 20th century and into early 1920s. With the growing popularity of the motor vehicle, the auto camp was seen as a convenient alternative to a hotel, which was typically a larger and, more expensive option, and often located in the center of a metropolis. Car camping was a more economical means of travel for the tourist as most of the travel costs would go toward gasoline and less toward lodging allowing the traveler to stretch their trips out longer (Jakle, et. al 1996: 31, 33, 36). In the western United States, the auto camps started out as free municipal run operations. But, during the Great Depression of the 1930s, fees were charged to discourage transients who would often stay for months at the auto camps while they searched for work. With the implementation of fees, the municipal auto camp gave way to commercial enterprises in most regions. These commercial-operated camps included such amenities as fireplaces, picnic tables and coin-operated stoves (Jakle, et. al 1996:33–34).

The auto camps evolved into offering cabins for the tourists and cabin camps began to appear in the early 1930s. These newer camps were either built without tent camping facilities or cabins were added to the existing camp facility. The cabins were often built from prefabricated kits and were usually arranged in clusters or built in L or U-shaped rows. Each cabin offered a designated parking space either in front of the cabin or next to the cabin. The success of these new lodging facilities was considered an economic boom in the building industry during the Great Depression (Jakle, et. al 1996:38–39). Like their auto camp predecessor, cabin camps were popular with tourists because they were less expensive, offered quick check out, did not require driving into the downtowns of major cities, and since there was no lobby to pass through on the

way to your room, it was less embarrassing for those who were driving all day and whose appearance was not as formal as it would be checking into a hotel (Jakle, et. al 1996:39).

This same period saw the introduction of the cottage courts, which evolved from the more substantial cabin camps. Unlike cabin camps, cottage courts operated year round. The cottages were typically arranged in a U-shape around a central courtyard. After 1930, attached garages were introduced. Architecturally, the cottages were designed to resemble small houses to make them attractive to the middle-class tourist (Jakle, et. al 1996:41, 43).

Cottage courts evolved into motor courts, which were of a similar concept. However, unlike cottage courts, motor courts shared a similar roofline and the rooms were set into a single-story building. The motor courts also offered guests a coffee shop and quite often a gas station. After World War II, motor courts were commonly referred to as motels. They were built around a central courtyard, in a U-shape which often included a swimming pool, with parking restricted to the rear of the building. The rooms typically had two doors, one facing the parking area and the other facing the courtyard. Some rooms faced the pool area that was accessed by sliding glass doors.

In the 1950s, motor inns were introduced as a motel type and were located primarily in downtown areas of major cities; near freeways or interchanges. They were the next evolutionary step in motel design. Motor inns were considered more substantial than motor courts and were typically two- or three-stories arranged around a center courtyard with dining rooms and cocktail lounges (Jakle, et. al 1996:45–47, 49). The lobby of motor inns was small and usually included a magazine rack or counter and a small gift shop, similar to the original design of the Mansion Inn (see Historic Photo 1). The rooms in motor inns were larger than motor courts and accounted for a greater percentage of the building's overall space (Architectural Record 1960:48). Motor inns were popular among motel chains.

The motor inns gave way to the highway hotel in the 1960s. The highway hotel was a motel that was composed of multi-story, geometrical shaped buildings that by the 1970s included a high rise portion with wings. These motels were located in urban areas frequently near airports or in redeveloped sections of downtowns in major cities. The 1980s witnessed further change in the design of highway hotels with the introduction of the all-suite motel that catered to the business traveler. These motels had larger rooms with kitchenettes and large desks, but they were still less formal than a hotel and did not have bellboys, dining rooms or restaurants. A leading chain in this type of motel was the Embassy Suites (Jakle, et. al 1996:51–52). This trend in motel design continues into the 21st century.

Growth of Motels

In general, the motel industry saw an incredible amount of growth following World War II. In 1948 more than 25,000 motels were spread across the United States. By 1954 that number increased to more than 29,000 nationwide (Jakle, et. al 1996:20). Several factors contributed to the rise of motels in America. During the 1950s with the ongoing popularity of the automobile, more Americans were moving to the suburbs and purchasing cars. Leisure travel was more common place and much of this travel was done by automobile which was aided by the Highway Act of 1956. Motels were also seen as a wise real estate investment as new motels appreciated quickly. The 1954 tax code allowed equity to be sheltered through accelerated depreciation early in the ownership of the motel. But, after about 10 years amortization payments became greater than depreciation allowances, the owners would sell and take their long-term capital gain. This encouraged new construction and the remodeling of older motels under new ownership (Jakle, et. al 1996:45, 47). In 1958 alone it was estimated that the motel industry generated two billion dollars (Architectural Record 1960:25). By 1964, there were an estimated 61,000 motels in the United States (Jakle, et. al 1996:20). By the 1970s there was a slight decline with only 52,000 motels operating in the nation. In the 1990s, there were more than 3 million rooms available, however, those estimates compiled within the lodging industry did not distinguish between motel and hotel operations.

International Style and Dreyfuss & Blackford

Many motels of the late-1950s and early 1960s were designed in the International style of architecture. International style has its roots in Europe's Modern Movement of the 1920s where architects and designers based their designs around the concept that buildings should embody and express the scientific technology of the industrial age (Roland 2009:8-5). The style was heavily influenced by Walter Gropius who founded the Bauhaus, a school of design and building at Dessau, Germany (Pehnt 1964:42). The Bauhaus produced some of the master architects who would practice in the modern movement.

In 1928, the Congrès Internationaux d'Architecture Moderne (CIAM) was created and provided a forum for international academic discussion about modern architecture. This first meeting was attended by Gropius and other modernist architects. It established the idea that building design should follow the economic and political issues rather than adhering to historical architectural formulas. By the 1930s there were many examples of Modernism throughout Europe designed by architects of the Bauhaus. The definition of the International style was first used in 1932, at an exhibit at the Museum of Modern Art in New York. Architects from 16 countries displayed their modernist designs (Khan 2009: 34, 61). Henry-Russell Hitchcock and Philip Johnson devised the term International style to define the style of architecture being created in Europe by the students of the Bauhaus. Hitchcock and Johnson identified the style by its aesthetic qualities (Khan 2009: 8, 62). The style emphasizes volumetric forms devoid of ornamentation and was dependent on materials like steel and concrete. Windows were freely distributed, thereby providing ample light, but also serving as an exterior design element. Horizontality became a character-defining feature of the style (Khan 2009:63–64, 66). The lack of ornamentation in the International style also made it a practical means for construction.

Even after the exhibit in New York, International style failed to take root in America except for some iconic designs by master architects including Le Corbusier, Richard Neutra and Rudolph Schindler (Roland 2009:8-5). With the threat of another world war in the 1930s, many of Europe's top modernists architects, including Walter Gropius, Mies van der Rohe, and Erich Mendelsohn immigrated to the United States and began teaching at the architectural schools of Harvard, Illinois Institute of Technology, and University of California, Berkeley (Pehnt 1964:306, Roland 2009:8-5). This collective group designed residences, campuses, and commercial buildings with modernist movement styling throughout the United States. With its steel and walls of windows, the International style became the most popular for designing skyscrapers and high rises. In the 1960s, Johnson altered some of the character-defining features of the style to include repetitive modular rhythms and large expansions of glass and flat roofs (Khan 2009:76, 85-104). These features of the style are still identifiable today.

It was in post-World War II America where the International style finally gained popularity. The demand for commercial enterprises was high after the war and numerous returning war veterans like Albert Dreyfuss and Leonard Blackford entered architectural school. The trend during this period was to integrate architecture with master planning for cities (Roland 2009:8-7). Albert M. Dreyfuss, a graduate of Tulane University, became a member of the American Institute of Architects (AIA) in 1947, working first as an associate at Samuel G. Wiener & Associates and then briefly as an associate designer for the California State Architect. He then opened a small firm on J Street in Sacramento in 1950 (AIA 1953:1–2). Dreyfuss' first project in Sacramento was the Santa Paula Manor apartments located in north Sacramento (*Executive Place* 1982:6–7). This was followed by Marconi Manor and several civic buildings at Travis Air Force Base in 1951. Dreyfuss also designed the Corum Houses in northern Sacramento for E. A. Corum & Sons (*Western Building* 1954:20). Leonard Blackford graduated from University of California, Berkeley. He worked for a firm in the San Francisco Bay Area before moving to Sacramento to work for the State as a designer. Blackford and his family lived across the street from Dreyfuss and in 1953; Dreyfuss offered him a job at his firm. In 1954, the two became partners (Hope 1970:B3). Some of Blackford's early work while working at Dreyfuss & Blackford included the Nut Tree restaurant in Vacaville, California (no longer extant), the Mansion Inn, and the Starr King School in Sacramento (Bowker 1962:59; Hope 1970:B3).

Dreyfuss & Blackford had a prolific career. Like most architects during the 1950s, they were influenced by post-World War II Modernism that expressed itself in the International style. Their works in this style in Sacramento include the Harvey's Drive Inn on Fulton Avenue (1957 – no longer extant), the former Vogel Chevrolet Showroom (1959) at 1616 I Street, the Mansion Inn (1958), and Asclepius Medical Building (1964) at 5120 J Street. Their most notable work in Sacramento includes the headquarters building for Sacramento Municipal Utility District (SMUD), which was completed in 1959, and designed in the International/Miesian style of post-World War II Modernism (Roland 2009:8-5). For the SMUD headquarters building the firm received several architectural awards. After the SMUD building the firm designed the condominium tower at 4100 Folsom (1963), the former IBM Building (1964) on Capitol Mall, Sacramento Savings & Loan (1965 – no longer extant), Sacramento Union Building (1968 – no longer extant) (Roland 2009:8-13–8-14). With these larger commissions, Dreyfuss & Blackford established itself in the 1960s with a signature style that expressed the International style with pre-stressed concrete panels and fenestration, which often was inset with modular windows (*Executive Place* 1982:6–7). During that period, their work in the International style transformed Sacramento's architectural landscape. By the 1980s, they were involved in notable Sacramento projects such as Lincoln Plaza. The firm has continued to produce major commissions throughout the Sacramento region, but it appears that both Dreyfuss and Blackford have retired from the firm and no longer practice.

Mansion Inn

Dreyfuss & Blackford was hired in 1958, by E. A. Corum & Sons to design the Mansion Inn, named for the historic Governor's Mansion located directly south of the motel. E. A. Corum & Sons was the oldest home building company operating in Sacramento at the time having been in the business since 1914 (*Western Building* 1954:20). According to the motel plans, Blackford was the architect of record who designed the Mansion Inn to be a two-story building focused inward towards a courtyard and pool. The elevations of the motel visible to the public featured stucco panels with 2x3 wood battens and brick siding (Dreyfuss & Blackford 1958). The design focused on the volume of the building and there was no exterior ornamentation, which are character-defining features of the International style. The building had little exterior fenestration and all the entrances to the rooms were set facing the interior courtyard and featured sliding glass doors. The motel opened in 1958 and courtyard design was generally considered innovative for its time (Flicker 2013). Dreyfuss & Blackford received the AIACV Honor Award in 1959, for the Mansion Inn (Flicker 2013).

The firm was re-hired in 1959 by Corum & Sons to convert the live-in manager's apartment at the motel to a cocktail lounge. During this time the original bar was modified to additional restaurant seating (Dreyfuss & Blackford Flicker 2013). Corum & Sons also commissioned Dreyfuss & Blackford in 1961 to design an addition to the motel (Dreyfuss & Blackford 1961:2). It was completed in 1963 and included 66 rooms, a terrace court designed by landscape architect Robert Danielson, a restaurant and banquet/meeting rooms. This same year, Sacramento voters rejected a bond measure to construct a convention center. The Mansion Inn was strategically located at the intersection of a highway and a major Sacramento thoroughfare. It is likely that Corum & Sons saw this as an opportunity to provide such facilities at his motel because other motels, including the Sacramento Inn, were also expanding their motels to include meeting and banquet rooms (*The Sacramento Bee* 1959:C15). The addition was similar to the 1958 building, two-stories with little fenestration and stucco panels separated by wood battens. The motel rooms and public facilities faced inward to a courtyard. The firm was hired again in 1972, to construct a third building for the Mansion Inn, also in the International style. This third building is today the Holiday Inn Express and is not part of this evaluation (*The Sacramento Bee* 1963:B7; *Architectural Record* 1976:42; McGowan and Willis 1983:94). Dreyfuss & Blackford were hired in 1976 to redesign the lobby of the 1958 building. They added a sunroom overlooking the pool and interior courtyard. A porte cochere was added in 1977 (Dreyfuss & Blackford 1977:E1). For the lobby redesign the firm received a California Governor's Award, Certificate of Excellence, and the AIACV Citation Award (Flicker 2013).

Dreyfuss & Blackford employed landscape architect Robert Deering for the landscape design for the 1958 building. Based on historic photographs (**Historic Photographs 1–3**), and the architectural drawings, the plantings selected by Deering were minimalistic and included grasses and palms. The planting boxes outside the rooms of the interior courtyard were narrow and could not accommodate large plants. Deering operated a private practice and focused on designing gardens, parks and commercial sites. He had worked with Dreyfuss & Blackford on their 1955 commission for the Nut Tree in Vacaville where Deering designed what was one of the first tree-shaded parking lots in the nation. Deering left the private sector in 1960 and joined the California State Parks as a landscape designer (Deering 2010). Likely because Deering was no longer in private practice, for the 1963 addition to the Mansion Inn Dreyfuss & Blackford hired landscape architect Robert Danielson (*Architectural Record* 1976:42). Danielson, like Deering, was a faculty member of the University of California, Davis landscape architecture program. He left the university in 1968 (Danielson).

The Mansion Inn was sold in 1984 and became the Clarion Inn. During this branding as a Clarion Inn, the interior registration area, gift shop and lounges were remodeled by Vitiello & Neiga Inc. of Sacramento and Barbara Elliott Interiors of Concord, California. The entrance on the main façade was altered and tile and anodized entry doors were introduced to the design.

Evaluation

The property does not meet the criteria for listing in the Sacramento Register of Historic and Cultural Resources (Sacramento Register) or the California Register of Historical Resources (CRHR). The motel does not meet Sacramento Register Criterion A and CRHR Criterion 1, because the motel did contribute to significant historical events or patterns of history. The motel industry developed in Sacramento much like it did in the rest of California. Motels were constructed along major highways and thoroughfares in urban areas to accommodate the automobile traveler. The Mansion Inn did not influence this trend, but was simply a part of it. The motel does not meet the Sacramento Register Criterion B for an association of persons significant in the city's past and does not meet CRHR Criterion 2 for similar associations. While E. A. Corum & Sons was a prominent builder in the Sacramento Region, the company was one of many operating in the area during the time period when the Mansion Inn was constructed (1958) and when it was expanded (1963). For a property to

meet the criteria for an association with individual's significant in history it must have a direct association and be the best representation of that person's life or career. The Mansion Inn is not an example of this.

Architecturally, the motel does not meet Sacramento Register Criterion C, D, and E and CRHR Criterion 3. As a motor inn, a building type of motels, the motel does not express the necessary characteristics of a motor inn because key elements of this type of motel building were altered with the introduction of new design elements over the years, such as the porte cochere, the redesigned lobby and the sunroom. The building also does not express distinctive characteristics of the International style. Ornamentation was added to the building that would not have historically existed on an International style building. The International style emphasizes the volume of the building and geometrical shapes. The porte cochere and the remodeling of the entrance with the marble entryway and lobby expansion introduced elements that disrupt the massing of the original building. The building also no longer expresses many of the character-defining features of the International style, which include expansive use of glass and steel. The glass seen in the courtyards is not visible from the public's view, which for the International style is typically intended to be visible to the public. The glass in the courtyard is a modest example of the use of glass often seen in the International style and does not reflect the more expansive use of glass and steel most commonly identified with the style. This motel is not an important example of the motor inn typology of motel buildings and is not an important example of the International style applied to a commercial building such as a motor inn.

The property also does not express the work of master or a master landscape architect. While Dreyfuss & Blackford are master architects with a prolific body of work, particularly in Sacramento, this specific property does not reflect a transition in their work in the International style. Architectural critics have noted that Dreyfuss & Blackford created a distinctive look in the design of their buildings, starting with the 1959 SMUD Headquarters (listed on the National Register of Historic Places) and also expressed in the 1963 residential building at 4100 Folsom and the former IBM building (1964). The distinctiveness in their designs was the use of the pre-stressed concrete panel and the fenestration, which are inset and modular windows (*Executive Place* 1982:6-7). This distinctive style of Dreyfuss & Blackford, expressed in the application of the International style, was better recognized in their larger commissions throughout Sacramento, even though some of those buildings are no longer extant, the Sacramento Union Building in particular. The design of the Mansion Inn does not appear to represent a notable transition of their style into larger works. In fact the SMUD building was executed during the same time period. The subject property does not retain those same characteristics that define the building as a Dreyfuss & Blackford design. It lacks the concrete panels and the fenestration that is found in most of their commissions from the same period. The Mansion Inn also does not best reflect the work of master landscape architects. In terms of the 1958 portion, Deering designed sites that used planting to compliment and emphasize modern architecture. His work was arguably best represented by his Vacaville Nut Tree design. Nor does the landscaping of the Mansion Inn's 1963 addition by Robert Danielson express an important phase in his landscape design career. Furthermore, the motel does not possess high artistic values. It is a common example of the International style from the late-1950s, typical of motor inn building types designed during this period. The Mansion Inn does not articulate the aesthetics of the International style. There are better examples of the style that can be found throughout Sacramento, including the former Vogel Chevrolet Showroom or the Asclepius Medical Building.

Lastly, the building is not likely to yield information important to history under Sacramento Register Criterion F or CRHR Criterion D because it is not the principal source of information of important information.

In addition to lacking historical and architectural significance, the property lacks integrity. Specifically, the property lacks integrity of design to either 1958 or 1963. The additions of the porte cochere, the remodeled lobby, and the sunrooms have introduced non-International Style design elements that altered the overt horizontality and massing of the building. The porte corchere introduced a prominent visual feature that was not part of the 1958 or 1963 design and detracts from the former clean, modular façade that existed historically. The sunrooms constructed in the mid-1970s and early 1980s disrupts the original flow between courtyards and their relationship to the interior space of the building by making the overall space of the courtyard appear smaller. The alterations from the 1970s further altered the integrity of the design as a type of motel, a motor inn. The 1958 lobby was a character-defining feature of the motor inn that included a small lobby, magazine rack or counter and a small gift shop. When the lobby was expanded and the gift shop converted to an office, this design feature was lost. The property also lacks integrity of materials at the main entrance and in the interior courtyard of the 1958 building. The porte cochere, the re-modeled entrance, and the sunroom have introduced new materials, including marble and anodized aluminum, which historically did not exist on the building. The original materials were stucco, wood batten and aluminum for the windows and sliding glass doors. Lastly, the setting and feeling of the property are altered. When it was

first constructed, the Mansion Inn was surrounded by automobile-related businesses, garages, gas stations and residences. It was one of a few motels located on Highway 160 as it passed through Sacramento. Today, it is surrounded by some motels that post-date the construction of the Mansion Inn on its east side and non-automobile related commercial businesses on its south and north side. When the Mansion Inn was constructed there were automobile garages, and residences in its immediate vicinity. There are also late 20th and early 21st century constructed buildings on the blocks in the immediate vicinity of the motel. These detract from the setting of mid-century urban environment. The ivy that is growing on the public façade of the building dramatically alters the feeling of the property as an International style building because it hides the character-defining features of the style, including the modular design of the stucco panels (see Historic Photograph 2). The ivy and vines render the building incapable of displaying the character-defining features of the International style which should lack ornamentation, but in the case of the ivy, has introduced a prominent ornamentation that does not adhere to the architectural style.

In summary, the property is not eligible for either the Sacramento Register or the CRHR because of a lack of historical and architectural significance and a loss of integrity.

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Page 9 of 17

*Resource Name or # (Assigned by recorder) Clarion Hotel

*Recorded by M. Bowen, AECOM

*Date March 20, 2013

Continuation Update

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Photographs (cont)



Photograph 2. Main entrance and porte cochere, camera facing southwest

Page 10 of 17

*Recorded by M. Bowen, AECOM

*Resource Name or # (Assigned by recorder) Clarion Hotel

*Date March 20, 2013

Continuation Update

Photographs (cont)



Photograph 3. East façade window at northeast corner, camera facing west

Photographs (cont)



Photograph 4. Remodeled main entrance, camera facing west (note stucco panels and battens above door)



Photograph 5. "Clairon" signage, camera facing northwest

Photographs (cont)



Photograph 6. South elevation, camera facing north



Photograph 7. North elevation, camera facing southwest

Photographs (cont)



Photograph 8. East courtyard and swimming pool, camera facing east



Photograph 9. East courtyard and sunroom, camera facing south

Photographs (cont)



Photograph 10. West courtyard, camera facing west

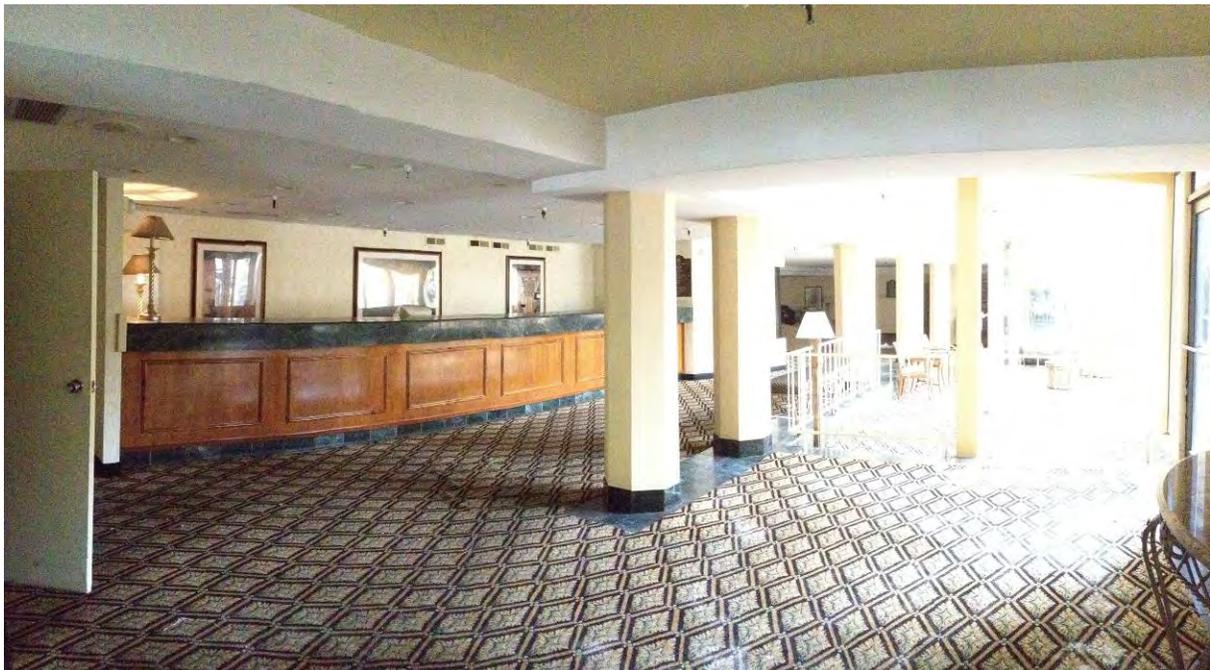


Photograph 11. West courtyard and landscaping, camera facing east

Photographs (cont)



Photograph 12. Sunroom and former breezeway, camera facing east



Photograph 13. Remodeled lobby, camera facing east

Photographs (cont)



Photograph 14. 1970s sunroom, camera facing north

Historic Photographs



Historic Photograph 1. Mansion Inn's original entryway and lobby
(Photograph Available online at Dreyfuss & Blackford's Photostream)

Historic Photographs (cont)



Historic Photograph 2. Mansion Inn, 1958 east façade, view west.
(Photograph Available online at Dreyfuss & Blackford's Photostream)



Historic Photograph 3. Mansion Inn, courtyard, view south, 1958
(Photograph Available online at Dreyfuss & Blackford's Photostream)

ATTACHMENT 7

GEOTECHNICAL INVESTIGATION

GEOTECHNICAL INVESTIGATION
PACIFICA SENIOR ARTS COMMUNITY AT MIDTOWN
700 16TH STREET
SACRAMENTO, CALIFORNIA 95814

REPORT PREPARED FOR:
PACIFICA COMPANIES

OUR PROJECT NUMBER: SGE140025

AUGUST 5, 2014

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RENEWABLE ENERGY RESOURCES

August 5, 2014

Our Project Number: SGE140025

Mr. Ian Blake

Pacifica Companies

1785 Hancock Street, Suite 200

San Diego, California 92110

Subject: **Geotechnical Investigation**
Pacifica Senior Arts Community at Midtown
700 16th Street
Sacramento, California 95814

Dear Mr. Ian Blake:

The following report presents the findings and conclusions of our geotechnical investigation conducted at the subject site. The purpose of the report was to provide geotechnical recommendations for demolition, site grading, building foundations, floor slab, utility construction, retaining walls, liquefaction analysis, and pavement sections, as indicated in our revised proposal dated May 12, 2014 and executed on May 30, 2014.

Recommendations for this project have been provided in the body of the report. Coordination between our office and your grading contractor will help reduce the potential for soil related problems.

Key information regarding this geotechnical report is presented on the following page. This information sheet has been provided to aid you in assessing the limitations of this geotechnical investigation as well as to indicate when additional information from our office may be required.

Lodi • Sacramento • Concord

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50 Goldenland Court, #100, Sacramento, CA 95834



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RENEWABLE ENERGY RESOURCES

SGE140025

We appreciate the opportunity of working with you on this project and look forward to providing our services in the future. Please contact us if you have any questions.

Sincerely,

NEIL O. ANDERSON & ASSOCIATES, INC,
A Terracon Company

DRAFT

Ryan R. King, Project Manager
Licensed Civil Engineer 77326

DRAFT

Patrick C. Dell, Principal
Licensed Geotechnical Engineer 2186

DRAFT

Robert E. Holmer, Principal
Licensed Geotechnical Engineer 2672

KEY INFORMATION REGARDING YOUR GEOTECHNICAL REPORT

➤ ***The Applicability of Geotechnical Reports is Limited***

Geotechnical reports are written to provide test results, observations, and professional opinions regarding a specific site for a specific project. Reports are tailored to the client and are influenced by each client's risk management strategies, economical constraints, and personal preferences. Since each report is a "custom fit" for a particular client, reports should not be transferred to anyone else without first consulting the geotechnical engineer.

Each geotechnical report considers only the construction information and site boundaries that existed at the time of the investigation. Modification of construction plans, such as a change in the shape, size, weight, location, or intended use of a project, nullifies the recommendations contained in the report, unless the geotechnical engineer indicates otherwise. A geotechnical report can not be used for an adjacent site. Time and money can often be saved by consulting with the geotechnical engineer when circumstances change from those which existed when the report was written.

➤ ***Site Conditions Can Change***

The conditions which existed at the time of a geotechnical investigation can change. Investigations can only report conditions at a particular time and place and no guarantee exists to ensure that recommendations will apply after natural or man made changes occur. Examples of some possible changes include: earthquakes, floods, fluctuations in groundwater, construction on or *next* to the site, and the addition or removal of soil. In addition, even the mere passing of time can affect site conditions. Consult with the geotechnical engineer to verify site conditions have not changed since the geotechnical report was completed.

➤ ***Geotechnical Findings Are Comprised Primarily of Professional Opinions***

Even if typical 6 inch borings were spaced 5 feet apart across an entire site (typical borehole spacings are on the order of at least 10's or 100's of feet apart), *less than one percent* of the soil or rock on the site would actually be explored. From this limited exploration, the geotechnical engineer is called on to provide an opinion regarding the subsurface conditions across the site, provide appropriate foundation recommendations, and predict the response of subsurface materials to numerous scenarios using information from samples that may or may not be representative of the entire site. Obviously, most of the geotechnical report is based on the professional opinion of the geotechnical engineer. The actual subsurface conditions may significantly differ from those which were encountered during the geotechnical investigation. Consequently, the most effective method of managing the risks associated with a project is to retain the geotechnical engineer who provided the report throughout construction of the project.

➤ ***Contact Your Geotechnical Engineer When in Doubt***

Time, money, and confusion can all be saved by simple explanations at critical moments. Please contact your geotechnical engineer whenever there is any doubt regarding subsurface conditions or their effect on part or all of any project.



**GEOTECHNICAL INVESTIGATION
PACIFICA SENIOR ARTS COMMUNITY AT MIDTOWN
SACRAMENTO, CALIFORNIA**

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	SUMMARY OF CONCLUSIONS.....	2
3.0	GENERAL (SURFICIAL) SITE CONDITIONS	2
4.0	GENERAL GEOLOGIC CONDITIONS.....	3
5.0	FIELD EXPLORATION.....	4
6.0	SOIL CONDITIONS & LABORATORY TESTING.....	5
7.0	GROUND WATER.....	6
8.0	LIQUEFACTION ANALYSIS	6
9.0	DESIGN STUDIES AND RECOMMENDATIONS.....	9
9.1	Demolition	9
9.2	Winterization and Construction Equipment Mobilization.....	10
9.3	Structure Foundations.....	10
9.3.1	Option-1: Driven Pile Foundation.....	11
9.3.1.1	Grading Recommendations.....	11
9.3.1.2	Driven Pile Recommendations.....	11
9.3.1.3	Building Slabs.....	13
9.3.2	Option-2: Spread Footings Supported on Drilled Displacement Columns.....	14
9.4	Below Grade Construction	16
9.5	Retaining/Screen Walls	16
9.6	Drainage.....	17
9.7	Excavation	18
9.8	Testing, Inspections and Review	18
10.0	EVALUATION FOR SOIL CORROSIVITY	18
11.0	PAVEMENT RECOMMENDATIONS	20
12.0	UTILITY CONSTRUCTION	22
13.0	LIMITATIONS	22
	Location Map.....	Plate No. 1
	Test Boring Logs.....	Plate Nos. 2 - 8
	Test Boring Legends.....	Plate Nos. 9A & 9B
	Exterior Foundation Wall Detail	Plate No. 10
	Retaining Wall Drain Detail	Plate No. 11
	APPENDIX A	
	Engineered Fill Specifications	
	APPENDIX B	
	Laboratory Test Results	



August 5, 2014

GEOTECHNICAL INVESTIGATION
PACIFICA SENIOR ARTS COMMUNITY AT MIDTOWN
700 16th STREET
SACRAMENTO, CALIFORNIA 95814
OUR PROJECT NUMBER: SGE140025

1.0 INTRODUCTION

This report presents the findings, conclusions, and recommendations of a geotechnical investigation conducted for the proposed Assisted Living and Memory Care Facility & Community Arts Center to be constructed at 700 16th Street in Sacramento, California. The approximate 1.2 acre parcel is currently developed with an existing 2 story Clarion Hotel with a below grade basement. The above grade structure will be demolished to accommodate the proposed construction. The below grade basement is currently planned to be utilized in the new design. The current basement is shaped like a 'C' and plans include widening and extending the basement to be more shaped like a square or rectangle. The existing foundation masonry basement walls will be utilized as shoring walls, however these walls will not be utilized as support walls.

We anticipate construction for the proposed structure will consist of a four story wood framed structure founded on spread footings or deep foundations with a concrete slab on grade floor and basement floor. Maximum foundation loads (dead plus live) for this structure are anticipated to be in the range of 2 to 4 kips per linear foot for perimeter and interior wall loads and 60 to 80 kips for isolated column loads. The development will include new parking & drives, concrete flatwork, trash enclosures and associated landscaping. The site is relatively flat; however, planned construction includes expansion of the existing basement, so we expect that grading will consist of cuts and fills of the order of 10 to 12 feet in vertical extent.



The geotechnical study conducted at this site was prepared for the use of the architect and engineer for application to the design of the building and grading plans in accordance with generally accepted geotechnical engineering practices. No warranty is expressed or implied. This report presents the results of this study.

2.0 SUMMARY OF CONCLUSIONS

1. The main item of consideration that will affect the development of this site is the presence of soft saturated silts and clays with varying amounts of sands susceptible to the high probability of experiencing liquefaction induced settlement from seismic ground motions. A secondary concern is the demolition of the existing structure and providing uniform support of the new foundation system.
2. The soils encountered during our field investigation were fairly consistent between the test holes. The upper soils generally consisted of soft to medium stiff, silt and clay with varying amounts of sand that extended to depths of 19 to 21½ feet below the existing ground surface (bgs). The upper silts and clays with varying amounts of sand were underlain by medium dense to dense, poorly graded sand and poorly graded gravel with silt and sand, which in turn were underlain by medium dense silty sand and very stiff lean clay with some silt and sand, and very stiff fat clays with sands to the maximum depth explored of 51½ feet bgs. For a more detailed description of the soils encountered in the test holes see the Logs of Test Boring sheets. Groundwater was encountered at depths of 19 to 20 feet bgs at the time of our investigation.
3. Based on the potential settlement from liquefaction and the settlement associated with the upper, soft silts and clays, we recommend the proposed structure be founded on either pre-cast driven concrete piles or spread footings supported on drilled displacement columns. Detailed design and construction criteria are presented in this report.
4. Flexible (asphalt) and rigid (concrete) pavement sections are provided for various traffic indices.
5. Good surface drainage should be constructed to provide rapid removal of runoff away from the building.

3.0 GENERAL (SURFICIAL) SITE CONDITIONS

At the time of our investigation, the site was developed with a Clarion Hotel consisting of a two-story hotel with a below grade basement. The below grade foundation walls were constructed with 12x8x16 CMU blocks while the above grade structure appeared



to be constructed with wood and possibly some steel. The hotel included interior courtyard areas with an in-ground swimming pool (at the time of our investigation the swimming pool was empty), a porte-cochere, asphalt parking and drives, and associated landscaping. The site was bordered to the south by H Street, to the west by 15th Street, to the north by an alley way followed by a Holiday Inn Express, and to the east by 16th Street.

The existing pavement areas within the site showed minor signs of cracking with no visible signs of rutting. A visual inspection was observed in limited areas of the exterior and interior surfaces of the existing structure. Based on our non-destructive, visual inspection, it's our opinion the existing foundation appeared to be performing well. The parking areas had overhead lighting along with some trees. There were overhead power lines along the north side of the parcel, oriented in the west-east direction. The site was relatively flat and the surrounding area was mixed use, retail, business, and residential.

4.0 GENERAL GEOLOGIC CONDITIONS

A geologic map¹ of the area was reviewed and indicated the project area is situated within the Great Valley geomorphic province of California. The native soils underlying the site are considered to be levee and channel deposits associated with the confluence of the Sacramento and American Rivers. The sediments are late Quaternary in age (2.6 million years ago and present) and consist of fluviially deposited sands and gravels underlying fine-grained splay deposits. The total thickness of the fluvial sediments at this location was not determined during our investigation.

The closest active fault with a Maximum Moment Magnitude of 6.4 and a slip rate of 0.1 millimeter per year is the Great Valley 2 fault located a distance of 90.1 kilometers from the site. A significantly more active fault with a Maximum Moment Magnitude of 7.0 and a slip rate of 9 millimeters per year is the Rodgers Creek fault located a distance of 92.2 kilometers from the site. The Foothills Fault system is located 35 kilometers from the site with a Maximum Moment Magnitude of 6.5 and a minimal slip rate of 0.05 millimeters per year. This system is thought to have the potential of generating an earthquake but the probability of the site experiencing ground motions from an Alquist-Priolo fault is much higher. Consequently, the USGS 2002 Interactive Deaggregations² were used in our analysis in accordance with acceptable geotechnical practices for the area.

¹ Wagner, D.L., 1981, Geologic Map of the Sacramento Quadrangle, California: California Geological Survey, Scale 1:250,000

² <http://geohazards.usgs.gov/deaggint/2002/>



Following is a table of the 2013 California Building Code (CBC) Soil Parameters³ which may be used for design of structure at the subject site:

Table 1.

2013 California Building Code Seismic Design Parameters	
Site Class	D*
Mapped Spectral Acceleration Value of Rock (Short Period), S_S	0.668g
Mapped Spectral Acceleration Value of Rock (1-Second Period), S_1	0.292g
Site (Amplification) Coefficient, F_a	1.363
Site (Amplification) Coefficient, F_v	2.833
Maximum Considered Earthquake/Site Modified (MCE) Spectral Response Acceleration Value (Short Period), S_{MS}	0.911g
Maximum Considered Earthquake/Site Modified (MCE) Spectral Response Acceleration Value (1-Second Period), S_{M1}	0.826g
Design Spectral Acceleration Value (Short Period), S_{DS}	0.607g
Design Spectral Acceleration Value (1-Second Period), S_{D1}	0.551g
PGA_M (Peak Ground Acceleration adjusted for Site Class effects)	0.355g
* For structures with fundamental periods of vibration of less than 0.5 seconds, Section 20.3.1 of ASCE 7-05 allows the site coefficients (F_a and F_v) to be determined assuming that liquefaction does not occur (i.e. Site Class D). In the event the fundamental structure exceeds 0.5 seconds, site class should be considered class "F". The structure's fundamental period should be verified by the structural engineer.	

A site latitude and longitude of 38.5808° and -121.4848° were utilized in conjunction with the tools provided by United States Geologic Survey web site. An analysis of earthquake induced liquefaction for the proposed site is included in Section 8.0, Analysis for Seismically Induced Liquefaction, of this report.

5.0 FIELD EXPLORATION

The field investigation conducted at this site consisted of drilling 7 exploratory test holes carried to a maximum depth of 51½ feet the below existing ground surface. Four test holes were drilled with a CME 75 drill rig, utilizing 8-inch continuous flight hollow stem augers and three test holes were drilled with a 4-inch hand auger. The locations of the test holes are shown on the Location Map, Plate No. 1. The locations of the test holes were determined by pacing from existing site features; hence, accuracy can be implied only to the degree that this method warrants.

³ <http://earthquake.usgs.gov/designmaps/us/application.php>



Sampling of the drilled test holes was performed at various depths using a California Modified 2.5-inch o.d. split spoon sampler with stainless steel tube liners or grab samples. The samplers were driven by a 140 pound hammer with a 30-inch drop. Blow counts required to drive the sampler every 6 inches for a total of 18 inches were recorded and a summary of blows to drive the sampler the last 12 inches is presented on the Log of Test Boring sheets, Plates 2 through 8.

Soil samples obtained from the test holes were preserved in stainless steel tubes and sealable plastic bags until the samples could be tested in the laboratory. Samples were taken to the laboratory of Neil O. Anderson & Associates, Inc., Sacramento, California and used for performing various laboratory tests. Tests performed consisted of unit weights, moisture contents, Pocket Penetrometer Readings, minus No. 200 sieve wash, gradation analyses, Atterberg limits, and an R-value. A summary of the test results are presented on the Log of Boring sheets, Plates 2 through 8. Laboratory test data sheets are illustrated in Appendix B.

6.0 SOIL CONDITIONS & LABORATORY TESTING

Visual classification of each soil stratum encountered according to ASTM D2488 (Visual – Manual Procedure) was made in the field by a representative from our office at the time the test holes were drilled. The samples obtained were checked in the laboratory by an engineer and classification verified according to ASTM D2487. A classification and graphical representation of each soil encountered is presented on the Log of Boring sheets. The test boring legend is presented on Plate Nos. 9A & 9B.

The soils encountered during our field investigation were fairly consistent between the test holes. The upper soils generally consisted of soft to medium stiff, silt and clay with varying amounts of sand that extended to depths of 19 to 21½ feet below the existing ground surface (bgs). The upper silts and clays with varying amounts of sand were underlain by medium dense to dense, poorly graded sand and poorly graded gravel with silt and sand, which in turn were underlain by medium dense silty sand and very stiff lean clay with some silt and sand, and very stiff fat clays with sands to the maximum depth explored of 51½ feet bgs. For a more detailed description of the soils encountered in the test holes see the Logs of Test Boring sheets.

Test hole logs show subsurface conditions at the date and location indicated and it is not warranted that they are representative of subsurface conditions at other locations and times.

Three samples of lean clay with varying amounts of sands were tested in our laboratory for Atterberg limits and exhibited liquid limits of 30 to 36, plasticity indexes of 8 to 17, and contained 60 to 86 percent silt and clay-sized particles (passing the No. 200 sieve). Four samples of silts with varying amounts of sands were tested in our laboratory for Atterberg limits and exhibited liquid limits of 29 to 32, plasticity indexes of 4 to 7, and



contained 83 to 93 percent silt and clay-sized particles (passing the No. 200 sieve). One sample of the underlying fat clay with sand was tested in our laboratory for Atterberg limits and exhibited a liquid limit of 55, a plasticity index of 27, and contained 78 percent silt and clay-sized particles (passing the No. 200 sieve). One sample of the sandy silt was deemed non-plastic and contained 58 percent silt and clay-sized particles (passing the No. 200 sieve). Laboratory testing indicates that the near surface sandy silts and clays with varying amounts of sands have low to moderate plasticity and based on our experience have low to moderate expansion potential.

One sample of poorly graded sand with silt was tested for sieve analysis and contained 8 percent silt and clay sized particles (passing the No. 200 sieve) with a coefficient of uniformity (C_u) equal to 4.6 and a coefficient of curvature (C_c) equal to 2.2. Two samples of poorly graded gravel with silt and sand were tested for sieve analysis and contained 7 to 8 percent silt and clay sized particles (passing the No. 200 sieve) with coefficients of uniformity (C_u) equal to 77 and 232 and coefficients of curvature (C_c) equal to 0.8 and 0.2

7.0 GROUND WATER

Groundwater was encountered in borings 1 through 4 at the time the borings were drilled at depths of 19 to 20 feet below existing grade. Groundwater was encountered in borings 5 and 7 at the time the borings were drilled at depths of 7½ to 8 feet below basement slab elevation. Geotracker⁴ and the California Department of Water Resources Water Data Library⁵ were also reviewed for the surrounding area. A monitoring well which was installed and measured on May 19, 2006, located at or near 1601 L street in Sacramento, indicated groundwater to be encountered at 13 feet below existing grade. Groundwater Level Data for well 385784N1214655W001 which is approximately 1 mile east of the site depicted ground water to be measured at 20 feet below surrounding grade (measurement taken 5-4-2001). Groundwater conditions in the future could change due to rainfall, construction activities, irrigation, or other factors. The evaluation of these factors is beyond the scope of this study.

8.0 LIQUEFACTION ANALYSIS

A detailed analysis of earthquake induced liquefaction for the proposed site was completed for the purpose of determining the potential of liquefaction and any associated induced settlement.

⁴ http://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6262006998/T0606789695.pdf

⁵ <http://www.water.ca.gov/waterdatalibrary/>



Liquefaction is a loss of strength in soil when a cyclic stress, such as that caused by an earthquake, is subjected to typical soils, such as loose saturated sands and silts. A cyclic stress subjected to these soils causes them to densify rapidly elevating the pore pressures which cause the soil to act as a liquid. Factors that *may* affect the likelihood of liquefaction include the age and density of soils, *recent* depths to subsurface water (19 to 20 feet) and the potential ground acceleration from a seismic event (0.36g).

Prior to providing specific recommendations for the design and construction of the structure, the susceptibility of the site to liquefaction needs to be addressed. The following describes the results of our liquefaction analysis for the site.

The results of the dynamic “blow count” testing performed during the drilling of the 51½ foot boring have been used in our liquefaction analysis. Blow counts were attempted to be taken every 5 to 10 feet and a liquefaction analysis of each distinct stratum has been performed. Our analysis of the potential for liquefaction at the site was performed using the method developed by R. B. Seed, et al., which provides results based on a calculated probability of liquefaction⁶.

As indicated, a CME 75 drill rig equipped with 8-inch diameter continuous flight hollow stem auger was used to drill the 51½ foot boring. The drill rig has a calculated energy efficiency of 70 percent. Blow counts reported in the bore logs are corrected based on 60% efficiency (N_{60} value).

The R.B. Seed method of analysis was used to assess the liquefaction potential of the site. Besides data obtained during field and laboratory testing, a value of peak ground acceleration at the site and a magnitude of the earthquake responsible for the peak ground acceleration are required. A magnitude of 6.6 was selected as the design earthquake using the deaggregation tool provided by the USGS⁷ and a peak horizontal ground acceleration of 0.36g was calculated and used in our liquefaction analysis. The shear wave velocity was calculated to be 430 feet per second (131 meters per second) based on correlations with blow count values. Saturated conditions were assumed to exist at a depth of 10 feet due to the potential for fluctuating water depths in the future. The following table shows the results of our liquefaction analysis based on soils encountered and test results obtained in our test boring B3 (see Plate No. 4).

⁶ Seed, R.B., *Recent Advances in Soil Liquefaction Engineering and Seismic Site Response Evaluation*, Proceedings of the Fourth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor W.D. Liam Finn, San Diego, California, March 26-31, 2001, Paper No. SPL-2.

⁷ <http://geohazards.usgs.gov/deaggint/2002/>



Table 2.

Layer, depth below ground surface (feet)	Probability of Liquefaction based on Seed et. al. method*	Comments
0-5	1.26	Low potential for liquefaction induced settlement given the lack of saturated soil conditions.
5-13	0.00	Low potential for liquefaction due to fine content (ML).
13-19	1.79	Moderate to high potential for liquefaction due to low blow counts (ML).
19-25	2.52	Moderate to high potential for liquefaction due to low blow counts (SP).
25-35	0.00	Low potential for liquefaction due to very dense gravels.
35-40	0.00	Low potential for liquefaction due to blow counts (SP).
40-47	0.00	Low potential for liquefaction due to amount of fines (CL).
47-51.5	0.49	Low potential for liquefaction due to amount of fines (CH).

* **The closer the value is to 1.0, the more probable liquefaction becomes.**

The darker shaded cells are shown in the table to emphasize the layers most prone to liquefaction. In this case, the procedure performed to evaluate liquefaction only takes into account fines content and does not differentiate between silts and clays. Even though the procedure shows the probability of liquefaction, further assessment considering the clay content of the soils needs to be analyzed. The method developed by Boulanger and Idriss⁸ was used to determine the potential of the fine grained soils to liquefy. Based on the analyses with these two methods, the potential for liquefaction at this site is moderate to high.

The state of the art in predicting liquefaction induced settlement is limited. Estimates of settlement are generally expected to vary on the order of a factor of 2. Our calculations of settlement due to liquefaction are based on the method described by Cetin⁹. The results of our analysis indicate that the site could experience a total potential settlement of approximately 3 to 4 inches. Differential settlement could be on the order of approximately 1.5 to 2 inches due to the settlement likely occurring globally across the site. Please note that these calculations are applicable only to the soils encountered in our borings. Liquefaction may potentially occur in soils below those encountered in our investigation; if deeper soils do liquefy, the potential for settlement of the site may increase.

⁸ Boulanger, R. W., Idriss, I. M., 2006. *Liquefaction susceptibility criteria for silts and clays*, J. Geotechnical and Geoenvironmental Engineering, ASCE 133 (6), 641-52.

⁹Cetin, K. O. et al., 2002, *Liquefaction-induced ground deformations at Hotel Sapanca during Ixmit-Turkey Earthquake*, Soil Dynamics Earthquake Engineering, 22 (9-12), 1083-1092.



Due to the relatively flat nature of the site and the lack of a free face condition, damage of the building from lateral spreading is not expected. However, ground oscillation and limited lateral displacements may still occur

9.0 DESIGN STUDIES AND RECOMMENDATIONS

From a soil engineering standpoint, our office concludes that the site is suitable for construction of the proposed structure; however, all of the conclusions and recommendations presented in this report should be incorporated into the design and construction to help reduce the potential for soil and foundation problems. The primary geotechnical concern for construction of the building is the presence of soft silts and clays which are susceptible to the high probability for liquefaction induced settlement to occur from seismic ground motions. A secondary concern for construction is the demolition of the existing structure and providing uniform support of the new foundation.

9.1 Demolition

The existing structure and surrounding pavement will be demolished to accommodate the proposed construction. It is our understanding that the existing basement masonry foundation walls will remain for shoring purposes, and ultimately stay as is, but will not be utilized for support. Following demolition, the concrete slab floors, footing foundations, swimming pool shell, exterior concrete flatwork, and pavement sections should be completely removed. Aggregate base and asphalt grindings may be stock-piled for reuse, if desired.

The thickness of the existing asphalt and aggregate base sections encountered in our borings are tabulated below.

Table 3.

Boring Location	Existing Asphalt/Concrete Thickness	Existing Aggregate Base/Sand Thickness
B-1	--	<1"
B-2	5"	--
B-3	--	--
B-4	1.5"	3"
B-5	4" Concrete Slab	3" Sand Layer
B-6	--	--
B-7	4.5" Concrete Slab	--



After removal of the building slabs, foundations, and flatwork, any loose soil should be removed and the resulting excavations should be scarified to a depth of 12 inches, moisture conditioned to at least 2 percent above optimum moisture content, and compacted to at least 90 percent of maximum density as determined by ASTM D1557, modified proctor density. Any underground utilities that will be abandoned and are smaller than 2 inches in diameter may be left in place. Utilities 2 inches in diameter or larger should be removed, grouted solid, or crushed in place and back-filled. The stumps of any trees should be removed. During stump removal all roots greater than 2 inches in diameter should be grubbed out. Voids resulting from concrete, asphalt, stump and root or utility removal should be cleaned out of all loose soil and debris, scarified, moisture conditioned, and re-compacted as specified in Appendix A. We recommend project bidding to include a line item for foundation and utility demolition.

9.2 Winterization and Construction Equipment Mobilization

The silty/clayey soils located across the site generally have elevated moisture contents, which are above optimum as determined by ASTM D1557, and can also trap moisture from winter rains within the upper zones of the subgrade. Elevated moisture in these soils can cause increased pore pressures in the subgrade during traffic loading. This is also known as unstable "pumping" subgrade conditions which can hinder the movement of grading equipment, especially if construction is occurring in the winter or early spring. This should be taken into consideration when planning the site grading during wet conditions. Chemical treatment of the subgrade will help to provide a more stable subgrade to work from. Our office can provide additional recommendations for subgrade stabilization, if requested. Our office shall be consulted for further recommendations if construction is planned to take place during these months.

9.3 Structure Foundations

We anticipate the structure foundation loads on isolated columns to be on the order of 40 to 80 kips. Based on the subgrade soil conditions, the potential settlement due to liquefaction and soft silt and clays, and the anticipated construction loading, we are providing two options to support the proposed structure. These foundation options should not be combined, consequently only one of these options should be selected to support the structure. These two options are as follows:

Option-1, Conventional Driven Pile Foundation

Option-2, Spread Footings Supported on Drilled Displacement Columns

The two options are presented in order to provide some latitude of methods in dealing with the anticipated settlement due to liquefaction and settlement from the soft silts and clays.



9.3.1 Option-1: Driven Pile Foundation

9.3.1.1 Grading Recommendations

After demolition and removal of the existing pavement area, and any cuts have been made, the site should initially be cleared of all surface organic growth, loose organic soil, and miscellaneous debris. As mentioned earlier, it is our understanding the existing basement will be widened and expanded. The existing masonry basement foundation walls will be utilized for shoring purposes, but will not be used for support. Additional excavation cuts shall be in accordance with Section 9.4 and Section 12 of this report. After the building pads have been cleared, the resulting subgrade shall be scarified to a depth of 12 inches, moisture conditioned, and re-compacted as specified in Appendix A, Engineered Fill Specifications. The onsite soils are suitable for use as engineered fill. Any additional fill material should be non-expansive as specified in Appendix A. A sample of any import engineered fill material should be submitted to the testing laboratory for approval prior to construction.

9.3.1.2 Driven Pile Recommendations

Due to the relatively high ground water, drilled piers would need to be cased; consequently recommendations for displacement piles are provided. Precast concrete piles may be utilized. The strata susceptible to liquefaction is approximately 12 feet thick (13 to 25 feet below existing ground surface) and should be ignored when computing allowable pile capacities due to the loose to medium dense liquefiable sands and silts encountered in this zone, see pile capacities in Table 4 and soil parameters in Table 5. Allowable computed bearing applied for a 30 foot deep pile is as follows utilizing a geotechnical standard factor of safety of 3.0. Given the liquefiable soils encountered in our test borings, negative skin friction "down drag" should be accounted for as specified below. Down drag is generated when the compressible soils consolidate and produce a downward friction force against the pile causing it to be dragged downward which ultimately works against the allowable capacity of the pile. The down drag effect can cause considerable length to be added to piles in order to offset this adverse downward force. The upper 12 feet shall be neglected for down drag during a seismic event. All piles shall bear in the same bearing stratum. We estimate piles to have minimum lengths of 30 feet for piles installed at existing ground elevations and minimum pile lengths of 20 feet for piles installed below existing basement elevations. Piles are designed as end bearing piles with tip elevations extending a minimum of 2 feet into the gravel layer which was encountered in test hole B-3 at a depth of approximately 25 feet below existing grade. The pile capacity or design should be checked prior to construction using a wave equation analysis.



Table 4, Standard Pile Capacities for Site

Depth of Pile, ft.	Cross-Section of Pile	Allowable Uplift, kips	Allowable Bearing ¹ , kips
30	10 inch sq. precast concrete	25, (plus wt. of pile)	18
30	14 inch sq. precast concrete	45, (plus wt. of pile)	26

¹Allowable Bearing takes into account negative skin friction "down drag" from liquefaction induced settlement.

For simplicity, the above capacities may be utilized for design of the deep foundation system; however, Table 5 summarizes soil data necessary for pile design calculations if the design capacity or type of pile presented is altered. Soil parameters for the computer program LPILE have been provided to evaluate allowable lateral loading.

Table 5, Pile Foundation Soil Strength Criteria^{1,3}

Depth (ft)	Material (USCS)	Total Unit Wt. (pcf)	Eff. Unit Wt. (pcf)	c (psf)	Φ (deg)	All. Side Friction for Compression (psf)	All. Side Friction for Tension (psf)	Modulus of Subgrade Reaction, k (pci)	E _p /MFAD (ksi)	ε ₅₀ (in/in)	Allowable Tip Resistance (ksf)
0-5	ML	115	115	1250	0	120	70	50	2 to 4	.02 to .01	n/a
5-13	ML	115	115	1250	0	100	60	50	2 to 4	.02 to .01	n/a
13-19	ML	115	53	1250	0	-400 ²	40	50	2 to 4	.02 to .01	n/a
19-25	SP	120	58	15	34	-500 ²	440	100	2	n/a	n/a
25-35	GP-GM	135	72	10	34	600	500	200	4	n/a	60

¹ The surface 2 feet shall be neglected when calculating pile capacity. Pile installation observations are required to be provided by our office to verify pile capacity has been achieved. The Modified Engineering News Record Formula should be utilized to verify pile design capacities.

²Negative Skin Friction "Down Drag" indicated by a negative sign may be reduced by 50% provided an epoxy low friction coating is used to coat the pile in these zones only. Coating specs shall be submitted to Foundation Engineer for review and approval.

³These values will need to be modified if piles larger than 18 inches are used.

If pile types and sizes are different than indicated, upon request, our office may perform pile design calculations for desired type and size of piles. Capacities may be increased 1/3 for temporary loading such as wind and seismic. A minimum spacing of 3 pier diameters should be maintained in order to avoid capacity reduction due to group action. The structural capacity of the piles to carry design loads should be verified by the Structural Engineer. We recommend the pile capacity should be checked prior to construction using a wave equation analysis.



Due to the loose to medium dense saturated sands and the site geology, our office recommends the required capacity specified by the Structural Engineer be verified in the field by a representative from our office. This can be accomplished by utilizing the Engineering News Record (ENR) driving resistance formula to evaluate pile bearing capacity or a Pile Driving Analyzer (PDA) to determine pile driving capacity. Care should be taken to contract with an experienced contractor that is able to match appropriate pile driving equipment with selected piles and soil conditions. If the piles are constructed, loaded, and designed as recommended, settlement should be limited to less than 1/2 inch.

9.3.1.3 Building Slabs

Moisture transmission through concrete slab-on-grade floors has been known to cause delamination, warping and other damage to floor coverings. Wood and vinyl floorings are particularly susceptible to damage. Neil O. Anderson and Associates does not profess to be experts in moisture proofing concrete slabs-on-grade, and our firm knows of no construction method that will completely eliminate the risk of damage. In order to provide some level of protection against damage, it is common practice in this area to place a capillary break and a vapor retarder beneath the slab.

There are additional measures that may be incorporated to further reduce, but not eliminate, the risk. Some (but not all) of these measures include: using concrete with a water-cement ratio of 0.45 or less, employing a qualified testing laboratory to provide materials testing and quality control during concrete placement and curing, using topical concrete sealers, installing water stops at cold joints between the foundation capillary break and slab on grade, sealing the vapor retarder where plumbing penetrations occur, limiting the use of vinyl and wood flooring, and testing the concrete slab for moisture transmission rates immediately prior to placement of floor coverings. These measures may be considered if additional protection is desired.

The following recommendations are commonly used in this area and we believe these measures should be incorporated to provide a minimum level of protection against damage if limiting moisture vapor transmission is critical to the project.



Floor Slab Minimum Recommendations:

Four inches of clean $\frac{3}{4}$ inch gravel should be placed between the slab and the engineered fill. The gravel should be covered by an impervious vapor retarder such as 10 mil sheet vinyl or equivalent. The vapor retarder should be continuous and lapped a minimum of 2 feet and draped down the side of the footings at least 1 foot. The vapor retarder should be covered by 2 inches of sand to protect it during construction and to aid in curing the concrete. This sand should meet the requirements of ACI 302.1R. However, we know from experience that most local sand will not meet these requirements. In our opinion, the sand should be a sand or silty sand containing no more than 20 percent passing the No. 200 sieve. Alternative materials must be approved by the geotechnical engineer prior to being brought to the site.

The sand should be moist but not saturated at the time of concrete placement. If the sand is saturated or free water is visible, the concrete should not be placed until the sand is dried sufficiently to only be moist or is replaced. If construction will take place in winter, sand may be substituted with $\frac{3}{8}$ inch pea gravel. The pea gravel may not be saturated. Free water must not be visible on the gravel. If the gravel is saturated, it must be dried sufficiently to only be moist or be replaced prior to placement of concrete.

If the recommended 2 inches of sand is not utilized over the vapor retarder, we recommend wet curing the concrete slabs to help limit the potential of slab curl resulting from differential curing of the top and bottom of the slab. Since the sand provided a protection for the vapor barrier, we recommend increasing the thickness to 15 mil and using a product equivalent to Stego Wrap which meets ASTM E1745, Class A.

Our office recommends the floor slab thickness and reinforcing design be determined by the project structural engineer. Exterior finish grades should be below the floor subgrade level unless special drainage and waterproofing features are employed to reduce the potential for moisture migration under the slab.

9.3.2 Option-2: Spread Footings Supported on Drilled Displacement Columns

Drill Displacement Columns™ (DDC) replace and displace liquefiable and compressible soil with cemented Controlled Low Strength Material (CLSM). Use of CLSM provides confidence by using an engineered material that results in a well-defined sand cement ground improvement column. DDC ground improvement mitigates liquefaction and settlement of heavy foundations and slabs. DDC are ideal for sensitive project sites such as those near critical structures that require low noise and no vibration construction methods such as unreinforced masonry walls, occupied offices, and sensitive soil. For nearly all heavy structures, the structure footings and mats can be supported on DDC. The DDC are separated from the bottom of the footing, mat, or slab using a minimum 8



inch layer of crushed rock or other aggregate material "cushion". This decouples the DDC from overlying structural foundation concrete. In some cases, a Ground Anchor may be used in the column to resist uplift forces. Lateral resistance is provided by footing, mat, or slab bottom friction at the structural concrete to crushed rock interface or passive resistance.

DDC are used to mitigate the damaging effects of liquefiable soil. In sand soil profiles, the displacement method increases the density of the sand and produces a very stiff, sand/cement column in the soil profile. In the mixed silty and clayey sand soil profiles, the DDC method increases the density but mostly increases the stiffness of the soil profile and reduces post seismic settlement. The target strengths of the CLSM are usually about 500 to 1000 pounds per square inch (psi) at 56 days, depending on load and seismic demands. The DDC method allows for discrete ground improvement with increased pumping volume of CLSM at specific depths within the soil profile where discrete lenses of loose sand exist. This specialization gives the engineer an opportunity to customize ground improvement at specific depths to mitigate the damaging effects of liquefaction and associated potential settlements.

We have consulted with Farrell Design-Build Companies, Inc. (Farrell), regarding DDC design capacities. If the DDC system is selected for structural support, then a design-build contractor, such as Farrell, could provide a complete design-build submittal with design recommendations, engineered plans and specifications. **If this option is selected, our office should perform a geotechnical review of the DDC design.** This review is not included in our current scope of services. Based on the soil conditions, Farrell has estimated the following DDC capacities for the subject project:

1. DDC shaft lengths should extend through the liquefiable soils. We estimate for bearing elements located below the existing basement, DDC shaft lengths should extend 12 to 15 feet below the bottom of spread footings and DDC shaft lengths for bearing elements located at existing grade should extend 25 to 28 feet below the bottom of spread footings.
2. Anticipated allowable DDC composite bearing capacity:
5,000 to 8,000 pounds per square foot (psf)
3. Allowable DDC composite sliding coefficient: 0.45 (includes FS=2)
4. Total and differential settlements will be less than 1 inch and ½ inch, respectively.
5. A 1/3 increase to these allowable capacities is permitted for short term seismic and wind loads.
6. The allowable vertical capacities should be verified by full-scale load tests.



9.4 Below Grade Construction

Portions of the structure will include new below grade foundation walls to accommodate the basement expansion. Foundation walls that will retain earth should be designed for lateral earth pressures. We recommend design of below grade walls using an at rest equivalent fluid density of at least 50 pounds per cubic foot (pcf) for this site. Unusual backfill configuration or surcharge loads could result in higher lateral loads. Our office recommends that any compaction within 5 feet of below-grade foundation walls be compacted by hand methods such as "jumping jack" to reduce increased lateral loads on the walls.

The backfill of basement walls should be placed and compacted in accordance with the specifications provided in the "Grading" section of this report. Water from surface irrigation of lawns and landscaping and surface runoff from adjacent slopes frequently flow through relatively permeable backfill placed adjacent to a structure and collect on the surface of less permeable soils occurring at the bottom of the foundation and below-grade excavation. This can cause wet or moist conditions after construction. To reduce the likelihood that water pressure will develop outside foundation or basement walls and the risk of accumulation of water, we recommend provision of a foundation drain for all below-grade walls. The drain should consist of a 4-inch diameter perforated pipe placed adjacent to the footing foundation. The pipe should be encased in free draining gravel or hydraulically connected to a drainage composite fabric. The drain should discharge to a positive gravity outlet. All below grade foundation walls should be waterproofed. A typical foundation drain detail is presented on Plate No. 10.

9.5 Retaining/Screen Walls

Site retaining walls may be constructed. Retaining walls will be subject to lateral earth pressures. Retaining walls that are **detached** from the structure may be founded on comparatively shallow spread footings bearing on the upper native subgrade. These retaining walls shall be completely detached from the structure. Foundations that are 12 inches wide and 18 inches deep may be designed using a bearing capacity of 1500 psf for dead plus live loads. The above bearing capacity may be increased by 1/3 for temporary wind and seismic loads.

Lateral resistance for spread footings may be provided by assuming passive pressure acting against the side of the footings equal to 300 pounds per cubic foot (pcf) equivalent fluid pressure. Lateral resistance may also be provided by computing friction between the bottom of the footing and the soil. A coefficient of friction of 0.35 may be utilized. If footings are cast against compacted engineered fill, passive and frictional resistance may be combined but the passive resistance should be reduced by 50 percent.



The lateral earth pressure on a retaining wall depends on the height of the wall, type of backfill, slope of the backfill surface, and allowable horizontal movement on top of the wall. A calculated at-rest earth pressure of 65 pcf equivalent fluid density should be used for retaining walls which are restrained from rotating at the top. A calculated active earth pressure of 50 pcf equivalent fluid density should be used for site retaining walls which are allowed to rotate at the top. The above active earth pressure assumes the retaining wall will support a backslope no steeper than 5:1 (H:V). We have assumed the backfill will be non-expansive soils. For lateral load resistance, footings may be designed with a passive earth pressure of 300 pcf. Equivalent fluid densities do not include allowances for surcharge loads or hydrostatic pressures. The hydrostatic pressure on the retaining walls should be relieved using drains behind the walls connected to tight lines. In order to accommodate additional loading on retaining structures from the effects of ground motions, the active and at-rest earth pressures may be increased by 10 pcf, if warranted by the structural engineer. A typical retaining wall detail is presented in Plate 11.

9.6 Drainage

Special care should be taken to ensure adequate drainage is provided throughout the life of the structure. Properly designed and constructed foundations can be seriously damaged by neglecting to install and regularly verify performance of recommended drainage systems. Appropriate down spout extensions from roof drainage should be connected to tight lines that drain away from the building. Any flatwork adjacent to the buildings should slope a minimum of 1 percent for a distance of 5 feet. Exposed exterior subgrade (soil or non-paved areas) should slope away from the structures at a minimum slope of ½ inch per foot for a distance of 8 to 10 feet beyond the building perimeters. If this grade is unable to be obtained, proper drainage inlets will need to be placed to carry surface water away from the foundations.

Care should be taken to ensure that landscaping is not excessively irrigated and to ensure that landscaping drains away from the structures. Implementation of adequate drainage for this project can effect the surrounding developments. Consequently in addition to designing and constructing drainage for the subject site, the effects of site drainage must be taken into consideration for surrounding sites.



9.7 Excavation

As indicated previously, silts/clays with varying amounts of sand and sandy soils were encountered in our test borings. Consequently, conventional excavating equipment may be utilized on this site. The contractor should plan his work accordingly.

9.8 Testing, Inspections and Review

Our office should be afforded the opportunity of reviewing the completed foundation and grading plans to verify that our recommendations have been properly interpreted and incorporated. Unless our office is allowed this opportunity, we disavow any responsibility from problems arising from failure to follow geotechnical recommendations or improper interpretation and implementation of our recommendations.

Our office should be retained to perform the recommended foundation inspections, grading observations and compaction testing. As indicated, the building pad shall be tested for compaction as per the requirements specified in Appendix A of this report. Unless we have been retained to provide these services, our office cannot be held responsible for problems arising during or after construction that could have been avoided had these services been performed. The fees for these services are in addition to that associated with this report.

10.0 EVALUATION FOR SOIL CORROSIVITY

Neil O. Anderson & Associates, Inc., a Terracon Company does not profess to be corrosion engineers. We are providing the following information for use by the design engineer. A competent corrosion engineer should be consulted to determine the necessary corrosion/cathodic protection for the proposed concrete and underground utilities and if additional testing is warranted.

One soil sample was submitted to Terracon Chemical Laboratory in Las Vegas, Nevada for testing. The tests performed on this sample included pH, resistivity, sulfate concentration, and chloride concentration. The results of these tests are presented below. The test results from the laboratory are included in Appendix B.

Table 6.

Boring ID	Depth, ft.	pH	Resistivity, ohm-cm	Sulfate concentration, mg/kg	Chloride concentration, mg/kg
B1	1-2.5	8.02	6693	41	25
B1	5-6.5	7.88	4317	50	25



According to the ACI Code 318, Sections 4.3, sulfate concentrations between 0 ppm to 150 ppm are considered negligible. The sulfate tests resulted in negligible values. Furthermore, ACI does not specify a specific cement type, a maximum water-cement ratio, or minimum compressive strength for concrete exposed to negligible sulfate exposure. For further information see the ACI Code 318, Sections 4.3 and 4.4.

The results for resistivity were 4317 to 6693 ohm-cm. Testing indicates the soils are moderately corrosive to corrosive towards buried ferrous metals. A generally accepted correlation between soil resistivity and corrosivity towards buried ferrous metals is provided below¹⁰:

Table 7.

Minimum Resistivity, ohm-cm	Corrosion Potential
Greater than 20,000	Essentially non-corrosive
10,000-20,000	Mildly corrosive
5,000-10,000	Moderately corrosive
3,000-5,000	Corrosive
1,000-3,000	Highly corrosive
Less than 1,000	Extremely corrosive

In general, sandy soils are fairly resistant while clay soils, especially those contaminated with saline water, are extremely corrosive. These test results are only an indication of the corrosive potential of the soils encountered in our test borings at the depths indicated under saturated conditions as determined by ASTM G-57. Since soils are not likely to be in a saturated condition minimum resistivity will likely be higher than what was tested in our laboratory. Other factors that affect the life of buried metals are the pH of the soil and whether the soils will be saturated or dry. In general, soils high in pH and low in moisture tend to be less corrosive. Other soils present on the site may produce widely varying test results.

As indicated, a competent corrosion engineer should be consulted to determine the necessary corrosion/cathodic protection for the proposed concrete and underground utilities and if additional testing is warranted.

¹⁰ Roberge, Pierre R., Corrosive Basics: An Introduction of, 2nd Edition, 2006.



11.0 PAVEMENT RECOMMENDATIONS

Two soil samples were obtained from the near surface soils on the site. Due to similar soils conditions, only one sample was subjected to an R-value test in our laboratory. The approximate locations of these samples are shown on the location map, Plate No. 1. From the results of the R-value test, a design R-value of 40 was utilized. Recommendations for conventional pavement sections are presented below.

Traffic Indices of 4, 5 and 7 were used to design the pavement sections for the site. **The project civil engineer should be afforded the opportunity of specifying the most appropriate traffic index for the proposed traffic and usage.** If a different traffic index is desired or required, please contact our office and a suitable recommended design can be provided. Flexible (asphalt) pavement sections have been designed according to the latest addition of the Cal Trans Highway design manual and using a 20-year pavement life. The pavement sections designs are shown below.

Table 8.

FLEXIBLE PAVEMENT SECTION DESIGN				
Subgrade R-Value	Traffic Index	Traffic	Pavement Section, inches	
			Asphalt Concrete	Aggregate Base
40	4	Auto Parking	2.5	4
40	5	Auto Drive	3	4
40	7	Truck Drive	3.5	8

The recommended concrete pavement sections have been designed utilizing the Caltrans Highway Design manual. Design is based on a 20 year pavement life. The rigid pavement sections are presented next:



Table 9.

RIGID (CONCRETE) PAVEMENT SECTION DESIGN				
R-value	Traffic Index	Pavement Section		
		Concrete Pavement, inches	Compressive Strength, psi	Aggregate Base, inches
<40	6	6	3,000	4.0
<i>Note: 3/4 inch diameter by 16 inch smooth dowels spaced at 12 inches on center should be lightly greased and utilized at construction joints. Dowels should be cut not sheared. #3 bars at 18 inches on center may be utilized for shrinkage control, however, bars should not continue across construction or contraction joints. Reinforcement across joints restrains joints from opening as the slab shrinks and expands during temperature fluctuations.¹¹ As an alternative to shrinkage reinforcement, fiber or steel mesh may be utilized. A rough finish of the concrete surface also helps to mask cracks. Contraction joints should have a maximum spacing of 12 feet on center.</i>				

The paving materials must conform to the requirements of the State of California, Department of Transportation, Standard Specifications, latest edition. Type B asphalt concrete and Class 2 aggregate base should be used.

The pavement area should be stripped of all organic matter, loose soil, etc., and any required cuts or fills made. A minimum of 8 inches of compacted subgrade should be provided beneath the pavement sections. The subgrade should be compacted to dry densities in excess of 95 percent of the maximum dry density obtainable by the ASTM D1557 test method.

Studies have indicated that a major factor in extending pavement life is to provide adequate drainage for both the pavement surface and subgrade. Care should be made during the development of the grading plan to provide for good drainage. We recommend extruded curbs not be utilized for planters. Landscaped and irrigated planters that are constructed adjacent to pavement should have cut-off curbing constructed around them that extends a minimum of 4 inches into the subgrade soil. We recommend rigid concrete pavements in areas where heavy trucks, such as garbage trucks, will travel or make sharp turns. The above recommended pavement sections assume periodic maintenance, such as crack sealing, etc., will be performed over the life of the pavements.

¹¹ ACI, Guide for concrete floor and Slab Construction, ACI 302.1R-96.



12.0 UTILITY CONSTRUCTION

Based on Occupational Safety and Health Standards, the soils encountered in our test holes classify as Type A (clay) and Type C (sand). Type A soils require a maximum slope of $\frac{3}{4}$:1 (horizontal to vertical) and Type C soils require a maximum slope of $1\frac{1}{2}$:1 (horizontal to vertical) for excavations less than 20 feet deep. The contractor should have a competent person identify all soils encountered in excavation and refer to OSHA and Cal-OSHA standards to determine appropriate methods to protect individuals working in excavations.

Backfill placed in trenches should be placed in approximately 8 inch lifts in uncompacted thickness. However, thicker lifts may be used, provided the method of compaction is approved by the soil engineer and the required minimum degree of compaction is achieved. Material should be compacted to at least 90 percent of the maximum dry density obtained by the ASTM D1557 test method. The upper 8 inches of trench backfill within pavement areas should be compacted to at least 95 percent relative compaction.

13.0 LIMITATIONS

The recommendations of this report are based on the information provided regarding the proposed construction as well as the subsoil conditions encountered at the test hole locations. If the proposed construction is modified or re-sited, or if it is found during construction that subsurface conditions differ from those described on the test hole logs, the conclusions and recommendations of the report should be considered invalid unless the changes are reviewed and the conclusions and recommendations modified or approved in writing.

The analysis, conclusions and recommendations contained in this report are based on the site conditions as they existed at the time we drilled our test holes. It was assumed that the test holes are representative of the subsurface conditions throughout the site. If there is a substantial lapse of time between the submission of our report and the start of the work at the site, or if conditions have changed due to natural causes or construction operations at or adjacent to the site, we urge that our report be reviewed to determine the applicability of the conclusions and recommendations considering the changed conditions and time lapse. This report is applicable only for the project and site studied. **This report should not be used after 3 years.**



Our professional services were performed, our findings obtained, and our recommendations proposed in accordance with generally accepted engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied. Test findings and statements of professional opinion do not constitute a guarantee or warranty, expressed or implied.

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





VICINITY MAP

LEGEND

 Approximate location of Boring

NOTE: BORING LOCATIONS ARE APPROXIMATE.
BASE PLAN PROVIDED BY GOOGLE EARTH



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BORING LOCATION MAP

CLARION HOTEL
700 16TH STREET
SACRAMENTO, CALIFORNIA

DATE:	07/14/14
JOB NUMBER:	SGE140025
SCALE:	NONE
DRAWN BY:	E. NUÑEZ
CHECKED BY:	R. KING
PLATE:	PLATE 1

BORING LOG NO. 1

PROJECT: Clarion Hotel

**CLIENT: Pacifica Companies
San Diego, CA**

**SITE: 700 16th Street
Sacramento, CA**

GRAPHIC LOG	LOCATION See Plate 1	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	0.1' 3/4" Crushed Rock , brown, in landscape area SILT (ML) , some fine sand, brown, medium stiff to stiff				5-7-8		10	80	32-28-4	92	
		5			5-6-8	1.5	24	76			
	10.0 SANDY SLIT (ML) , fine grained, brown, medium stiff to stiff	10			3-5-7		22	92			
	15.0 SILT (ML) , fine grained, brown, soft to medium stiff	15			2-3-3	2.5	34	83			
	21.5 Boring Terminated at 21.5 Feet	20			1-3-3		34	83	29-23-6	86	

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic Hammer

Advancement Method:
8" Hollow Stem Auger

See Plate 9 for explanation of symbols and abbreviations

Notes:

Abandonment Method:
Borings backfilled with bentonite chips, top 5' backfilled with soil cuttings upon completion

WATER LEVEL OBSERVATIONS

No free water observed



Boring Started: 6/27/2014

Boring Completed: 6/27/2014

Drill Rig: CME-75

Driller: Neil O. Anderson

Project No.: SGE140025

PLATE 2

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL - 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 9-31-14.GPJ 7/29/14

BORING LOG NO. 2

PROJECT: Clarion Hotel

CLIENT: Pacifica Companies
San Diego, CA

SITE: 700 16th Street
Sacramento, CA

GRAPHIC LOG	LOCATION	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	See Plate 1								DEPTH	LL-PL-PI	
	0.4 ASPHALT CONCRETE , fine grained										
	LEAN CLAY (CL) , with fine sand, brown, medium stiff			X	3-3-4	1.75	22				
		5		X	5-7-10		25	89	30-22-8	86	
	7.0 SANDY SILT (ML) , fine grained, light brown, medium stiff			X	5-7-8		22	92			66
		15		X	2-4-4	2	21	99			
	soft										
	19.0 POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) , fine to coarse grained, gray, medium dense			X	3-6-9		24	104			8
	21.5 Boring Terminated at 21.5 Feet			X							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic Hammer

Advancement Method:
8" Hollow Stem Auger

See Plate 9 for explanation of symbols and abbreviations

Notes:

Abandonment Method:
Borings backfilled with cement-bentonite grout and capped with cold patch asphalt.

WATER LEVEL OBSERVATIONS

▽ While sampling



Boring Started: 6/27/2014

Boring Completed: 6/27/2014

Drill Rig: CME-75

Driller: Neil O. Anderson

Project No.: SGE140025

PLATE 3

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL - 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 3-31-14.GPJ 7/29/14

BORING LOG NO. 3

PROJECT: Clarion Hotel

**CLIENT: Pacifica Companies
San Diego, CA**

**SITE: 700 16th Street
Sacramento, CA**

GRAPHIC LOG	LOCATION See Plate 1	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	SILT (ML) , some fine sand, light brown, medium stiff				4-5-5	2.25	16				
	SILT WITH SAND (ML) , fine grained, light brown, medium stiff	5			4-6-7		26	80			
	brown	10			2-5-6	1.25	29	80			82
	SANDY SILT (ML) , fine grained, light brown, soft	15			1-2-2	1.25	23	90	NP		66
	POORLY GRADED SAND (SP) , fine to coarse grained, gray, medium dense	20	▽		9-9-6						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic Hammer

Advancement Method:
8" Hollow Stem Auger

See Plate 9 for explanation of symbols and abbreviations

Notes:

Abandonment Method:
Borings backfilled with bentonite chips, top 5' backfilled with soil cuttings upon completion

WATER LEVEL OBSERVATIONS

▽ While sampling



Boring Started: 6/27/2014

Boring Completed: 6/27/2014

Drill Rig: CME-75

Driller: Neil O. Anderson

Project No.: SGE140025

PLATE 4

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL - 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 3-31-14.GPJ 7/29/14

BORING LOG NO. 3

PROJECT: Clarion Hotel

CLIENT: Pacifica Companies
San Diego, CA

SITE: 700 16th Street
Sacramento, CA

GRAPHIC LOG	LOCATION See Plate 1	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	DEPTH LOCATION See Plate 1										
	24.5 POORLY GRADED SAND (SP) , fine to coarse grained, gray, medium dense <i>(continued)</i>	25			28-50/4"		8	120			7
	36.0 POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) , gray, very dense	35			33-29-9		15				
	39.0 SILTY SAND (SP) , fine to coarse, brown, medium dense	40			10-9-10		18		37-13-24		
	SANDY LEAN CLAY (CL) , some silt, tan, very stiff										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic Hammer

Advancement Method:
8" Hollow Stem Auger

Abandonment Method:
Borings backfilled with bentonite chips, top 5' backfilled with soil cuttings upon completion

See Plate 9 for explanation of symbols and abbreviations

Notes:

WATER LEVEL OBSERVATIONS

While sampling



Boring Started: 6/27/2014

Boring Completed: 6/27/2014

Drill Rig: CME-75

Driller: Neil O. Anderson

Project No.: SGE140025

PLATE 4

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 3-31-14.GPJ 7/29/14

BORING LOG NO. 3

PROJECT: Clarion Hotel

CLIENT: Pacifica Companies
San Diego, CA

SITE: 700 16th Street
Sacramento, CA

GRAPHIC LOG	LOCATION See Plate 1	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
	DEPTH								LL-PL-PI		
45	SANDY LEAN CLAY (CL) , some silt, tan, very stiff <i>(continued)</i>	45		X	17-29-50/5"		29		36-19-17	60	
47.0	FAT CLAY WITH SAND (CH) , fine grained, brown, very stiff										
51.5	Boring Terminated at 51.5 Feet	50		X	7-18-50		33	90	55-28-27	78	

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic Hammer

Advancement Method:
8" Hollow Stem Auger

See Plate 9 for explanation of symbols and abbreviations

Notes:

Abandonment Method:
Borings backfilled with bentonite chips, top 5' backfilled with soil cuttings upon completion

WATER LEVEL OBSERVATIONS

While sampling



Boring Started: 6/27/2014

Boring Completed: 6/27/2014

Drill Rig: CME-75

Driller: Neil O. Anderson

Project No.: SGE140025

PLATE 4

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 3-31-14.GPJ 7/29/14

BORING LOG NO. 4

PROJECT: Clarion Hotel

CLIENT: Pacifica Companies
San Diego, CA

SITE: 700 16th Street
Sacramento, CA

GRAPHIC LOG	LOCATION See Plate 1	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
0.1	ASPHALT CONCRETE, 1.5"										
0.4	AGGREGATE BASE COURSE, 3"										
2.0	SANDY SILT (ML), fine grained, brown, medium stiff			X	4-5-15						
3.0	TERRACOTTA BRICKS										
5.0	SILT (ML), with some fine sand, brown, medium stiff			X	4-6-8		26	89	32-24-8	92	
10.0	soft			X	4-4-6	1.25	21	86			
12.0	SANDY SILT (ML), fine grained, brown, medium stiff										
15.0				X	3-5-7		17	108		55	
19.0	POORLY GRADED SAND WITH GRAVEL (SP), fine to coarse grained, gray, dense			▽							
21.5	Boring Terminated at 21.5 Feet			X	10-14-24		22	91			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic Hammer

Advancement Method:
8" Hollow Stem Auger

See Plate 9 for explanation of symbols and abbreviations

Notes:

Encountered a layer of terracotta bricks moved over 18" and redrilled only to encounter the layer once more. We drilled through the brick layer.

Abandonment Method:
Borings backfilled with cement-bentonite grout and capped with cold patch asphalt.

WATER LEVEL OBSERVATIONS

▽ While sampling



50 Goldenland Ct., #100
Sacramento, California

Boring Started: 6/27/2014

Boring Completed: 6/27/2014

Drill Rig: CME-75

Driller: Neil O. Anderson

Project No.: SGE140025

PLATE 5

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL - 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 3-31-14.GPJ 7/29/14

BORING LOG NO. 5

PROJECT: Clarion Hotel

CLIENT: Pacifica Companies
San Diego, CA

SITE: 700 16th Street
Sacramento, CA

GRAPHIC LOG	LOCATION See Plate 1	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	DEPTH										
	0.3 Concrete, 4"										
	0.6 FILL - POORLY GRADED SAND , medium grained sand, bluish-gray, 3" followed by black plastic liner SILT (ML) , some fine sand, dark brown, moist										
				✎			36				
		5		✎			34				89
				✎			33				
	8.0 wet		▽								
	SILT WITH SAND (ML) , dark brown, wet			✎			38				
	9.5			✎			36		30-25-5		83
	Boring Terminated at 9.5 Feet										

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method: 4" Hand Auger	See Plate 9 for explanation of symbols and abbreviations	Notes: B-5 was located as shown on plate 1 in basement of existing structure.
Abandonment Method: Borings backfilled with soil cuttings upon completion.		
WATER LEVEL OBSERVATIONS ▽ While drilling	 50 Goldenland Ct., #100 Sacramento, California	Boring Started: 6/18/2014 Boring Completed: 6/18/2014 Drill Rig: Hand Auger Driller: Terracon Project No.: SGE140025 PLATE 6

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 9-31-14.GPJ 7/29/14

BORING LOG NO. 6

PROJECT: Clarion Hotel

CLIENT: Pacifica Companies
San Diego, CA

SITE: 700 16th Street
Sacramento, CA

GRAPHIC LOG	LOCATION See Plate 1	DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
										LL-PL-PI		
	<p>SILT WITH GRAVEL (ML), light brown, dry</p> <p>2.0</p> <p>SILT (ML), some fine sand, light brown, dry</p> <p>brown, moist</p> <p>7.0</p> <p>SILT WITH SAND (ML), brown, moist</p> <p>15.5</p> <p>Boring Terminated at 15.5 Feet</p>		<p>5</p> <p>10</p> <p>15</p>		<p>Hand</p> <p>Hand</p> <p>Hand</p> <p>Hand</p> <p>Hand</p> <p>Hand</p> <p>Hand</p> <p>Hand</p>							
	Stratification lines are approximate. In-situ, the transition may be gradual.											

Advancement Method: 4" Hand Auger	See Plate 9 for explanation of symbols and abbreviations
Abandonment Method: Borings backfilled with soil cuttings upon completion.	
WATER LEVEL OBSERVATIONS No free water observed	

Notes:
Adjacent to swimming pool.

NEIL O. ANDERSON
AND ASSOCIATES
A Terracon COMPANY

50 Goldenland Ct., #100
Sacramento, California

Boring Started: 6/18/2014	Boring Completed: 6/18/2014
Drill Rig: Hand Auger	Driller: Terracon
Project No.: SGE140025	PLATE 7

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL - 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 3-31-14.GPJ 7/29/14

BORING LOG NO. 7

PROJECT: Clarion Hotel

CLIENT: Pacifica Companies
San Diego, CA

SITE: 700 16th Street
Sacramento, CA

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 80145216 - CLARION HOTEL.GPJ TEMPLATE UPDATE 3-31-14.GPJ 7/29/14

GRAPHIC LOG	LOCATION See Plate 1	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
									LL-PL-PI		
	DEPTH										
0.4	Concrete										
	SILT (ML) , brown, moist						24				
4.0	SILTY CLAY WITH SAND (CL-ML) , brown, moist	5					23			76	
	wet						24				
9.0			▽				20				
9.5	POORLY GRADED GRAVEL WITH SILT (GP-GM) , brown, wet						22				8
	<i>Boring Terminated at 9.5 Feet</i>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method: 4" Hand Auger	See Plate 9 for explanation of symbols and abbreviations	Notes: B-7 was located as shown on plate 1 in basement of existing structure.	
Abandonment Method: Borings backfilled with soil cuttings upon completion.			
WATER LEVEL OBSERVATIONS	 NEIL O. ANDERSON AND ASSOCIATES A Terracon COMPANY 50 Goldenland Ct., #100 Sacramento, California	Boring Started: 6/18/2014	Boring Completed: 6/18/2014
▽ While drilling		Drill Rig: Hand Auger	Driller: Terracon
		Project No.: SGE140025	PLATE 8

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

SAMPLING			WATER LEVEL		Water Initially Encountered	FIELD TESTS	(HP) Hand Penetrometer
	Auger	Split Spoon			Water Level After a Specified Period of Time		(T) Torvane
					Water Level After a Specified Period of Time		(b/f) Standard Penetration Test (blows per foot)
	Modified Cal	Macro Core		Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.			(PID) Photo-Ionization Detector
							(OVA) Organic Vapor Analyzer
Ring Sampler	Rock Core						
							
Grab Sample	No Recovery						

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

LOCATION AND ELEVATION NOTES

Unless otherwise noted, Latitude and Longitude are approximately determined using a hand-held GPS device. The accuracy of such devices is variable. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

STRENGTH TERMS	RELATIVE DENSITY OF COARSE-GRAINED SOILS <small>(More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance Includes gravels, sands and silts.</small>			CONSISTENCY OF FINE-GRAINED SOILS <small>(50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance</small>		
	Descriptive Term (Density)	Standard Penetration or N-Value Blows/FL	Ring Sampler Blows/FL	Descriptive Term (Consistency)	Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-Value Blows/Ft.
Very Loose	0 - 3	0 - 6	Very Soft	less than 500	0 - 1	< 3
Loose	4 - 9	7 - 16	Soft	500 to 1,000	2 - 4	3 - 4
Medium Dense	10 - 29	19 - 58	Medium-Stiff	1,000 to 2,000	4 - 8	5 - 9
Dense	30 - 50	59 - 98	Stiff	2,000 to 4,000	8 - 15	10 - 16
Very Dense	> 50	≥ 99	Very Stiff	4,000 to 8,000	15 - 30	19 - 42
			Hard	> 8,000	> 30	> 42

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 15
With	15 - 29
Modifier	> 30

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300 mm)
Cobbles	12 in. to 3 in. (300mm to 75mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm)
Silt or Clay	Passing #200 sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 5
With	5 - 12
Modifier	> 12

PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1 - 10
Medium	11 - 30
High	> 30

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A				Soil Classification		
				Group Symbol	Group Name ^B	
Coarse Grained Soils: More than 50% retained on No. 200 sieve	Gravels: More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels: Less than 5% fines ^C	$Cu \geq 4$ and $1 \leq Cc \leq 3$ ^E	GW	Well-graded gravel ^F	
			$Cu < 4$ and/or $1 > Cc > 3$ ^E	GP	Poorly graded gravel ^F	
		Gravels with Fines: More than 12% fines ^C	Fines classify as ML or MH	GM	Silty gravel ^{F,G,H}	
			Fines classify as CL or CH	GC	Clayey gravel ^{F,G,H}	
	Sands: 50% or more of coarse fraction passes No. 4 sieve	Clean Sands: Less than 5% fines ^D	$Cu \geq 6$ and $1 \leq Cc \leq 3$ ^E	SW	Well-graded sand ^I	
			$Cu < 6$ and/or $1 > Cc > 3$ ^E	SP	Poorly graded sand ^I	
		Sands with Fines: More than 12% fines ^D	Fines classify as ML or MH	SM	Silty sand ^{G,H,I}	
			Fines classify as CL or CH	SC	Clayey sand ^{G,H,I}	
Fine-Grained Soils: 50% or more passes the No. 200 sieve	Silts and Clays: Liquid limit less than 50	Inorganic:	$PI > 7$ and plots on or above "A" line ^J	CL	Lean clay ^{K,L,M}	
			$PI < 4$ or plots below "A" line ^J	ML	Silt ^{K,L,M}	
		Organic:	Liquid limit - oven dried	< 0.75	OL	Organic clay ^{K,L,M,N}
			Liquid limit - not dried		OH	Organic silt ^{K,L,M,O}
	Silts and Clays: Liquid limit 50 or more	Inorganic:	PI plots on or above "A" line	CH	Fat clay ^{K,L,M}	
			PI plots below "A" line	MH	Elastic Silt ^{K,L,M}	
		Organic:	Liquid limit - oven dried	< 0.75	OH	Organic clay ^{K,L,M,P}
			Liquid limit - not dried		OH	Organic silt ^{K,L,M,Q}
Highly organic soils:	Primarily organic matter, dark in color, and organic odor			PT	Peat	

^A Based on the material passing the 3-inch (75-mm) sieve

^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

^C Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

^D Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

$$^E Cu = D_{60}/D_{10} \quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

^F If soil contains $\geq 15\%$ sand, add "with sand" to group name.

^G If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

^H If fines are organic, add "with organic fines" to group name.

^I If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

^J If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

^K If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

^L If soil contains $\geq 30\%$ plus No. 200 predominantly sand, add "sandy" to group name.

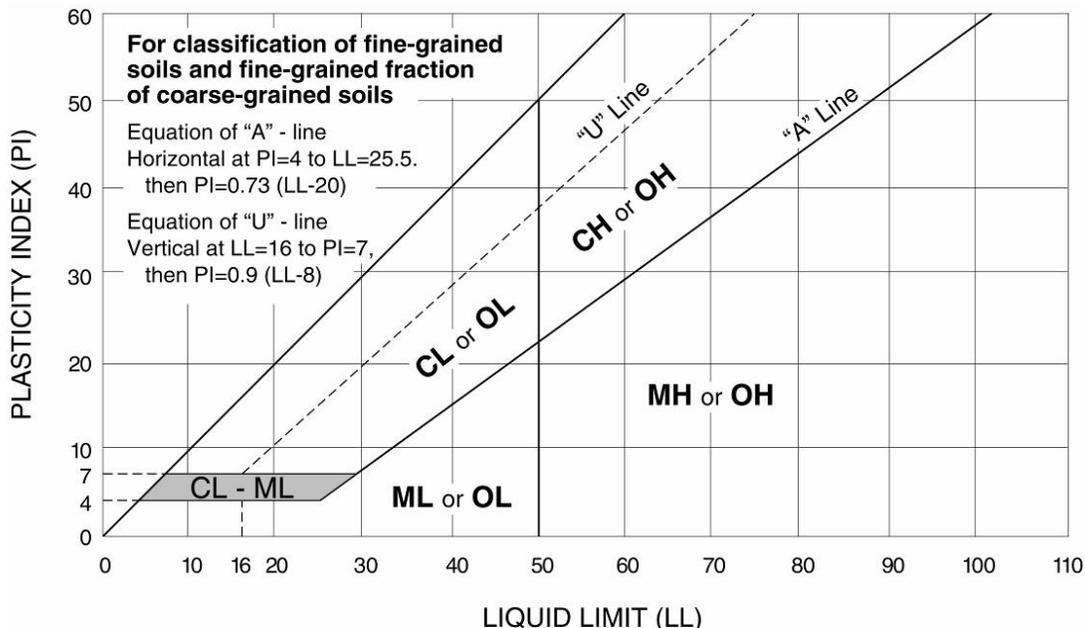
^M If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.

^N $PI \geq 4$ and plots on or above "A" line.

^O $PI < 4$ or plots below "A" line.

^P PI plots on or above "A" line.

^Q PI plots below "A" line.



APPENDIX A

Engineered Fill Specifications

SCOPE

Principal items of work included in this section are as follows:

- A. Cleaning and Striping
- B. Construction of Fill

A. CLEANING AND STRIPPING

Work includes cleaning and stripping of the building pad and surrounding area as indicated on the drawings. From this area remove all debris, irrigation lines, old pavement, trees, brush, roots, and vegetable ruin and grub out all large roots (½ inch or greater diameter) to a depth of at least two feet below the footing elevation. The vegetable materials and all materials from the cleaning operation shall be removed from the site.

B. CONSTRUCTION OF FILL

1. Preliminary Operations

After the cleaning and stripping operation and the cuts have been completed and before any fill is placed in any particular area, the existing surface shall be scarified to a depth of 10 inches and compacted to dry densities of at least 90 percent of the maximum dry density as obtained by the Standard Test Methods for Laboratory Compaction Characteristics of Soil using Modified Effort, ASTM D1557 designation. The soil should be compacted at moisture contents between 1 and 3 percentage points above the optimum moisture content. It may be necessary to adjust the moisture content of the subgrade soil by watering or aeration, to bring the moisture content of the soil near optimum in order that the specified densities can be obtained.

2. Source of Material

Engineered fill materials (on site or import) shall consist of sandy silts, sands, or sands and gravels unless stated otherwise in the report. Engineered fill material shall not contain rocks greater than 3 inches in greatest dimension and should be non-expansive in nature with less than 50% passing the No. 200 sieve and a plasticity index less than 12.



At least seven days prior to the placement of any fill, the engineer shall be notified of the source of materials. Samples of the proposed fill shall be obtained to determine the suitability of the materials for use as engineered fill.

3. Placing and Compacting

Fill materials shall be spread in layers and shall have a uniform moisture content that will provide the specified dry density after compaction. If necessary to obtain uniform distribution of moisture, water shall be added to each layer by sprinkling and the soil disked, harrowed, or otherwise manipulated after the water is added. The layers of the fill material shall not exceed 8 inches and each layer shall be compacted with suitable compaction equipment to provide the specified dry densities.

4. Required Densities

The dry density of the compacted earth shall be at least 90 percent of the maximum dry density obtainable by the ASTM D1557 test method. The optimum moisture content and maximum dry density will be determined by the engineer and this information supplied to the contractor.

5. Seasonal Limits

No fill shall be placed during weather conditions which will alter the moisture content of the fill materials sufficiently to make adequate compaction impossible. After placing operations have been stopped because of adverse weather conditions, no additional fill material shall be placed until the last layer compacted has been checked and found to be compacted to the specified densities.

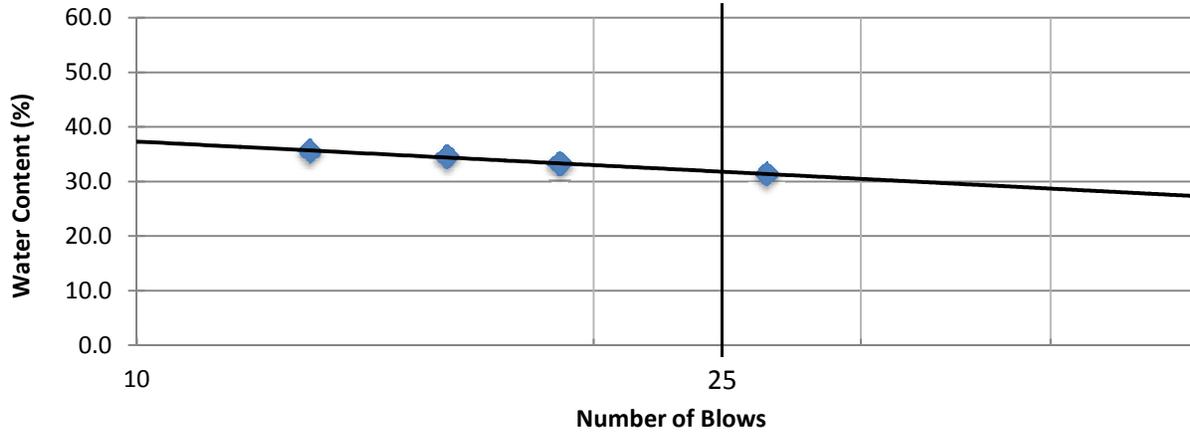
6. Control of Compaction

The density of the upper 6 inches of subgrade and of each layer of fill shall be checked by the engineer after each layer has been compacted. Field density tests shall be used to check the compaction of the fill materials. Sufficient tests shall be made on each layer by the engineer to assure adequate compaction throughout the entire area. If the dry densities are not satisfactory, the contractor will be required to increase the weight of the roller, the number of passes of the roller, or manipulate the moisture content as required to produce the specified densities.





ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)		#074 (MED)		#014		#060 (#40)	
#006 (110c)		#075 (SMALL)				#192 (Pan)	
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3	4		
Number of blows	19	16	13	26		
Tare Number	BB	YZ	WX	45		
Tare (g)	14.37	14.64	14.75	14.33		
Wet soil + Tare (g)	21.82	23.32	24.43	23.34		
Dry soil + tare (g)	19.96	21.09	21.89	21.19		
Water (g)	1.86	2.23	2.54	2.15		
Dry soil (g)	5.59	6.45	7.14	6.86		
Water Content (%)	33.3	34.6	35.6	31.3		

PLASTIC LIMIT

WASH 200

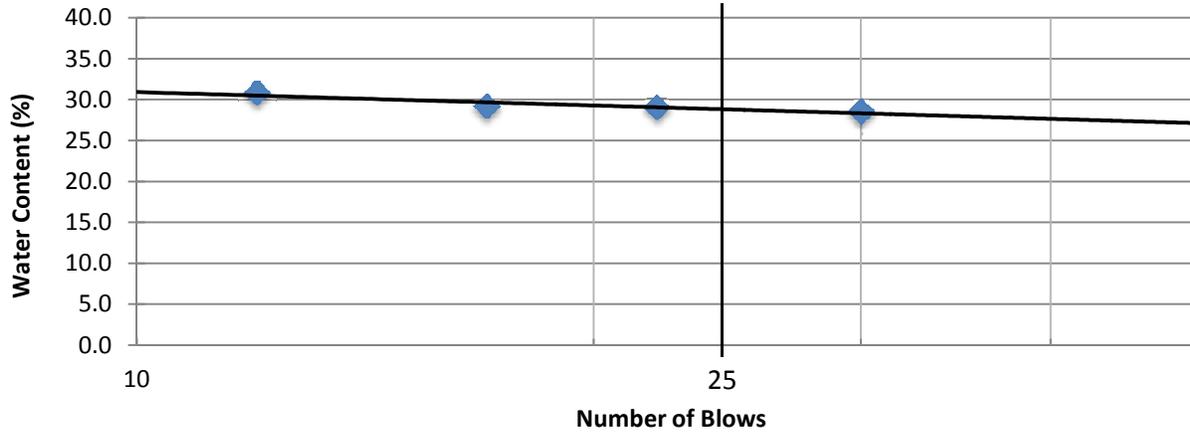
Run Number	1	2	Tare Number		CE
Tare Number	RD	PI	Tare (g)		210.5
Tare (g)	13.44	14.00	Dry Soil + Tare (g)		397.7
Wet soil + Tare (g)	17.22	17.07	Washed Soil + Tare (g)		225.4
Dry soil + tare (g)	16.40	16.39	Percent Passing		92
Water (g)	0.82	0.68			
Dry soil (g)	2.96	2.39			
Water Content (%)	27.7	28.5			

Sampled Date: 6/27/2014
Tested Date: 7/8/2014
Project: Clarion Hotel
Project Number: SGE140025
Sample ID: B1-1-I
Technician: Rick Dodds
Soil Source: Native
Soil Information: ML - Silt

Liquid Limit: 32
Plastic Limit: 28
Plastic Index: 4



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)		#074 (MED)		#014		#060 (#40)	
#006 (110c)		#075 (SMALL)				#192 (Pan)	
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3	4		
Number of blows	30	22	17	12		
Tare Number	RV	FA	GH	107		
Tare (g)	14.68	14.24	14.58	13.86		
Wet soil + Tare (g)	23.42	23.17	23.48	22.31		
Dry soil + tare (g)	21.48	21.16	21.47	20.32		
Water (g)	1.94	2.01	2.01	1.99		
Dry soil (g)	6.80	6.92	6.89	6.46		
Water Content (%)	28.5	29.0	29.2	30.8		

PLASTIC LIMIT

WASH 200

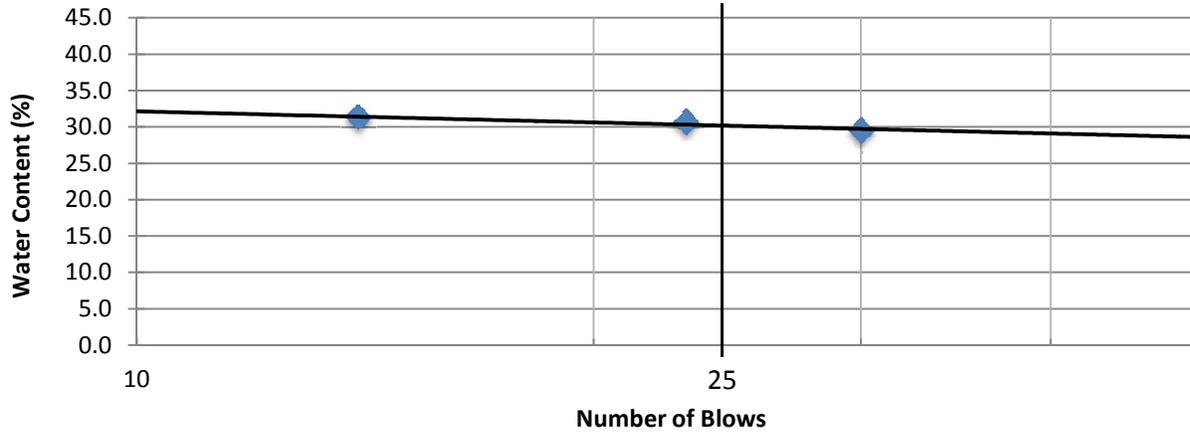
Run Number	1	2	Tare Number	TD
Tare Number	4	H	Tare (g)	201.4
Tare (g)	13.66	13.78	Dry Soil + Tare (g)	399.3
Wet soil + Tare (g)	17.84	20.12	Washed Soil + Tare (g)	226.6
Dry soil + tare (g)	17.06	18.92	Percent Passing	87
Water (g)	0.78	1.20		
Dry soil (g)	3.40	5.14		
Water Content (%)	22.9	23.3		

Sampled Date: 6/27/2014
Tested Date: 7/8/2014
Project: Clarion Hotel
Project Number: SGE140025
Sample ID: B1-5-I
Technician: Rick Dodds
Soil Source: Native
Soil Information: ML - Silt

Liquid Limit: 29
Plastic Limit: 23
Plastic Index: 6



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)		#074 (MED)		#014		#060 (#40)	
#006 (110c)		#075 (SMALL)				#192 (Pan)	
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3	4		
Number of blows	30	23	14			
Tare Number	G1	KE	19			
Tare (g)	13.83	14.70	13.86			
Wet soil + Tare (g)	26.07	24.17	25.44			
Dry soil + tare (g)	23.28	21.95	22.68			
Water (g)	2.79	2.22	2.76			
Dry soil (g)	9.45	7.25	8.82			
Water Content (%)	29.5	30.6	31.3			

PLASTIC LIMIT

WASH 200

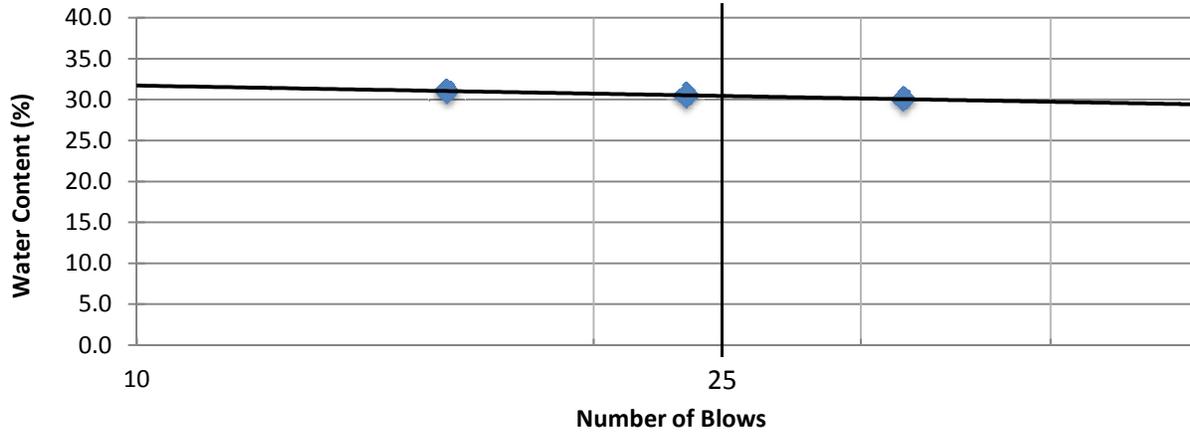
Run Number	1	2	Tare Number		2010
Tare Number	770	RO	Tare (g)		206.8
Tare (g)	13.90	13.69	Dry Soil + Tare (g)		410.1
Wet soil + Tare (g)	17.89	18.37	Washed Soil + Tare (g)		234.4
Dry soil + tare (g)	17.18	17.49	Percent Passing		86
Water (g)	0.71	0.88			
Dry soil (g)	3.28	3.80			
Water Content (%)	21.6	23.2			

Sampled Date: 6/27/2014
Tested Date: 7/8/2014
Project: Clarion Hotel
Project Number: SGE140025
Sample ID: B2-2-I
Technician: Rick Dodds
Soil Source: Native
Soil Information: CL - Lean Clay

Liquid Limit: 30
Plastic Limit: 22
Plastic Index: 8



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)		#074 (MED)		#014		#060 (#40)	
#006 (110c)		#075 (SMALL)				#192 (Pan)	
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3			
Number of blows	32	23	16			
Tare Number	34	ST	110			
Tare (g)	14.02	14.41	13.91			
Wet soil + Tare (g)	29.29	27.20	28.89			
Dry soil + tare (g)	25.76	24.21	25.34			
Water (g)	3.53	2.99	3.55			
Dry soil (g)	11.74	9.80	11.43			
Water Content (%)	30.1	30.5	31.1			

PLASTIC LIMIT

WASH 200

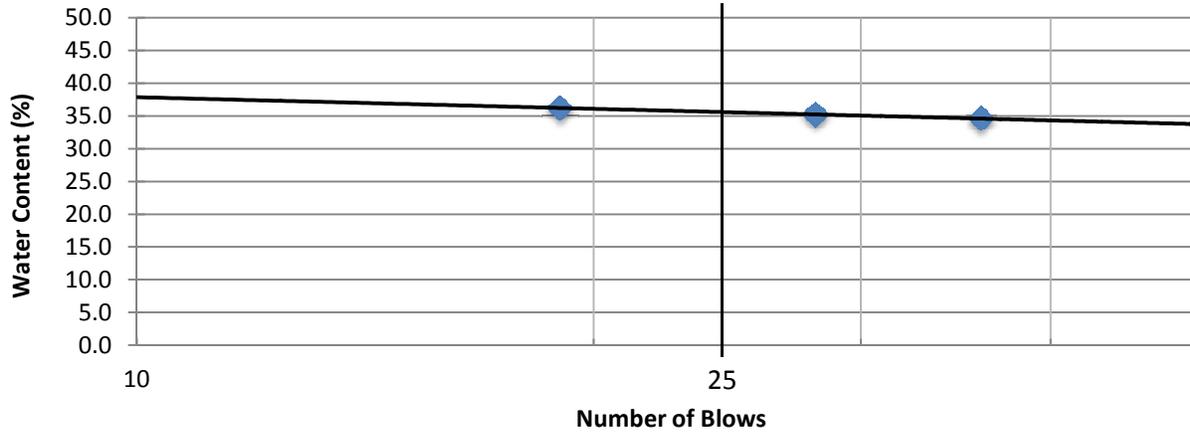
Run Number	1	2	Tare Number	
Tare Number	PR	777	Tare (g)	
Tare (g)	13.75	13.67	Dry Soil + Tare (g)	
Wet soil + Tare (g)	18.32	17.84	Washed Soil + Tare (g)	
Dry soil + tare (g)	17.78	17.35	Percent Passing	
Water (g)	0.54	0.49		
Dry soil (g)	4.03	3.68		
Water Content (%)	13.4	13.3		

Sampled Date: 6/27/2014
Tested Date: 7/9/2014
Project: Clarion Hotel
Project Number: SGE140025
Sample ID: B3-8-I
Technician: Rick Dodds
Soil Source: Native
Soil Information: CL: Lean Clay

Liquid Limit: 30
Plastic Limit: 13
Plastic Index: 17



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)		#074 (MED)		#014		#060 (#40)	
#006 (110c)		#075 (SMALL)				#192 (Pan)	
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3			
Number of blows	36	28	19			
Tare Number	12	PU	UV			
Tare (g)	13.73	13.62	14.48			
Wet soil + Tare (g)	27.97	27.28	26.40			
Dry soil + tare (g)	24.31	23.72	23.23			
Water (g)	3.66	3.56	3.17			
Dry soil (g)	10.58	10.10	8.75			
Water Content (%)	34.6	35.2	36.2			

PLASTIC LIMIT

WASH 200

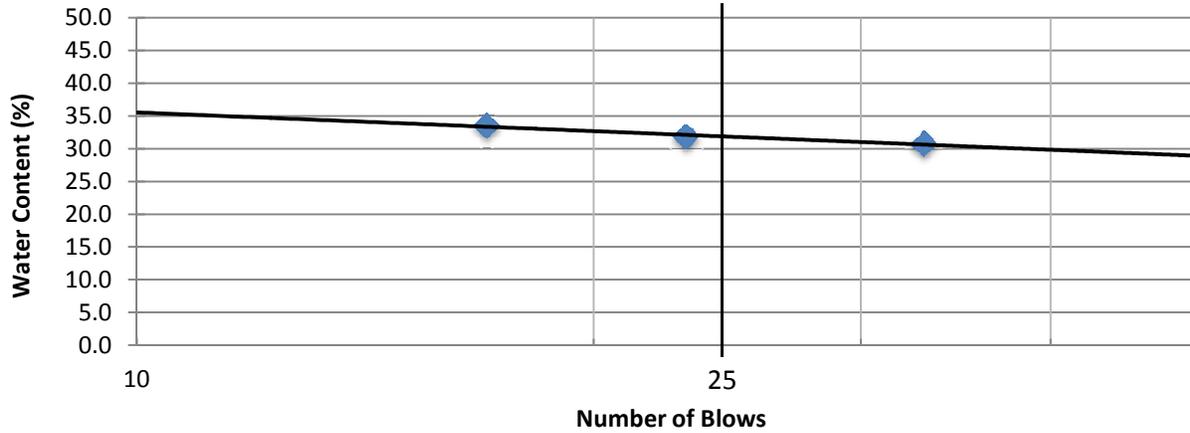
Run Number	1	2	WASH 200	
Tare Number	MN	OO	Tare Number	
Tare (g)	14.24	14.35	Tare (g)	
Wet soil + Tare (g)	18.14	18.01	Dry Soil + Tare (g)	
Dry soil + tare (g)	17.52	17.41	Washed Soil + Tare (g)	
Water (g)	0.62	0.60	Percent Passing	
Dry soil (g)	3.28	3.06		
Water Content (%)	18.9	19.6		

Sampled Date: 6/27/2014
Tested Date: 7/9/2014
Project: Clarion Hotel
Project Number: SGE140025
Sample ID: B3-9-I
Technician: Rick Dodds
Soil Source: Native
Soil Information: CL - Lean Clay

Liquid Limit: 36
Plastic Limit: 19
Plastic Index: 16



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)		#074 (MED)		#014		#060 (#40)	
#006 (110c)		#075 (SMALL)				#192 (Pan)	
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3	4		
Number of blows	33	23	17			
Tare Number	O	QR	3M			
Tare (g)	13.80	14.40	13.64			
Wet soil + Tare (g)	25.62	25.04	24.12			
Dry soil + tare (g)	22.84	22.47	21.49			
Water (g)	2.78	2.57	2.63			
Dry soil (g)	9.04	8.07	7.85			
Water Content (%)	30.8	31.8	33.5			

PLASTIC LIMIT

WASH 200

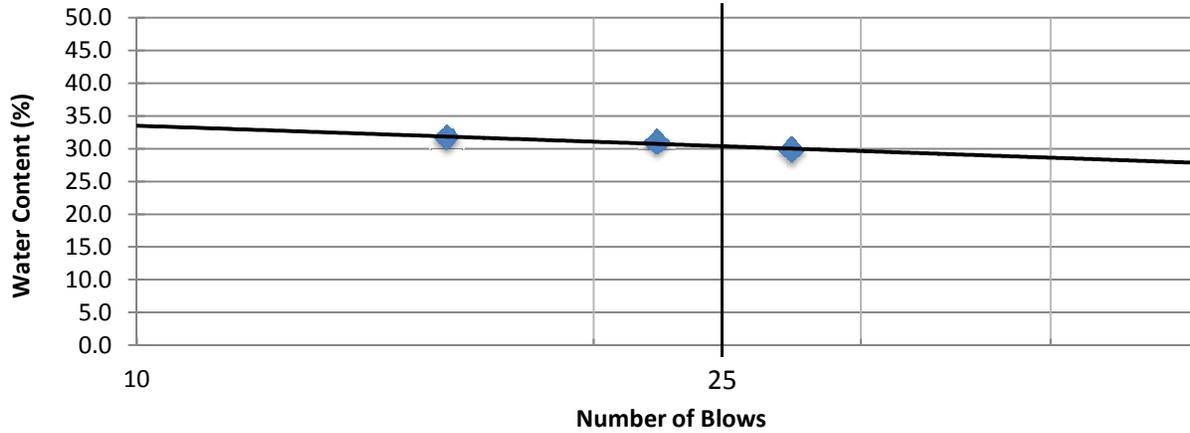
Run Number	1	2	Tare Number	K2
Tare Number	E	8	Tare (g)	200.9
Tare (g)	13.70	13.68	Dry Soil + Tare (g)	312.2
Wet soil + Tare (g)	17.08	17.33	Washed Soil + Tare (g)	210.2
Dry soil + tare (g)	16.42	16.61	Percent Passing	92
Water (g)	0.66	0.72		
Dry soil (g)	2.72	2.93		
Water Content (%)	24.3	24.6		

Sampled Date: 6/27/2014
Tested Date: 7/8/2014
Project: Clarion Hotel
Project Number: SGE140025
Sample ID: B4-2-I
Technician: Rick Dodds
Soil Source: Native
Soil Information: ML : Silt

Liquid Limit: 32
Plastic Limit: 24
Plastic Index: 7



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)		#074 (MED)		#014		#060 (#40)	
#006 (110c)		#075 (SMALL)				#192 (Pan)	
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3			
Number of blows	27	22	16			
Tare Number	BB	KE	FA			
Tare (g)	14.37	14.69	14.23			
Wet soil + Tare (g)	27.29	26.18	26.18			
Dry soil + tare (g)	24.32	23.46	23.30			
Water (g)	2.97	2.72	2.88			
Dry soil (g)	9.95	8.77	9.07			
Water Content (%)	29.8	31.0	31.8			

PLASTIC LIMIT

WASH 200

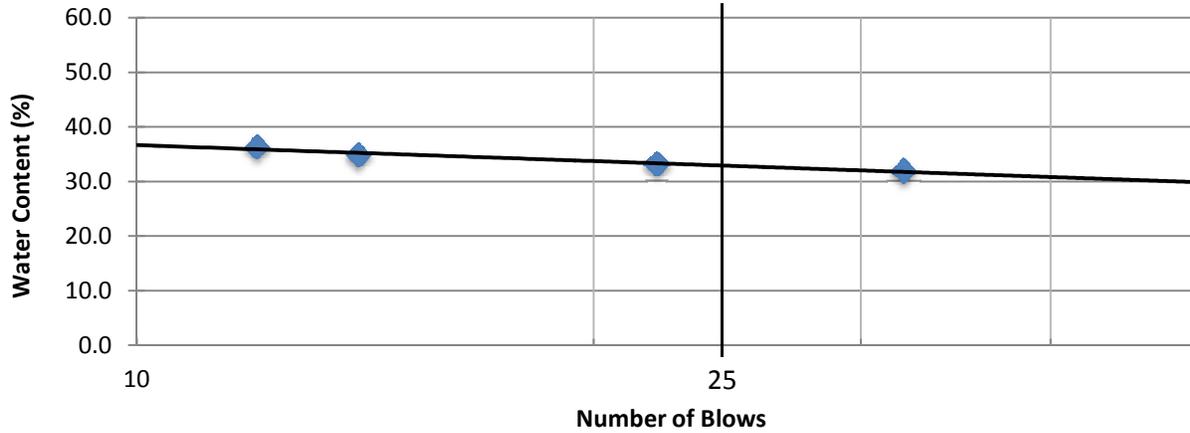
Run Number	1	2	Tare Number		RX
Tare Number	GH	15	Tare (g)		243.6
Tare (g)	14.59	13.69	Dry Soil + Tare (g)		445.3
Wet soil + Tare (g)	17.85	17.86	Washed Soil + Tare (g)		277.6
Dry soil + tare (g)	17.22	17.01	Percent Passing		83
Water (g)	0.63	0.85			
Dry soil (g)	2.63	3.32			
Water Content (%)	24.0	25.6			

Sampled Date: 6/16/2014
Tested Date: 6/24/2014
Project: Clarion Hotel
Project Number: SGE140025
Sample ID: B5-9FT
Technician: Rick Dodds
Soil Source: Native
Soil Information: ML: Silt with Sand

Liquid Limit: 30
Plastic Limit: 25
Plastic Index: 5



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)	X	#074 (MED)		#014	X	#060 (#40)	X
#006 (110c)	X	#075 (SMALL)				#192 (Pan)	X
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3	4		
Number of blows	32	22	14	12		
Tare Number	ST	+	4	YZ		
Tare (g)	14.40	13.67	13.66	14.64		
Wet soil + Tare (g)	24.16	24.54	21.13	25.46		
Dry soil + tare (g)	21.80	21.83	19.20	22.58		
Water (g)	2.36	2.71	1.93	2.88		
Dry soil (g)	7.40	8.16	5.54	7.94		
Water Content (%)	31.9	33.2	34.8	36.3		

PLASTIC LIMIT

WASH 200

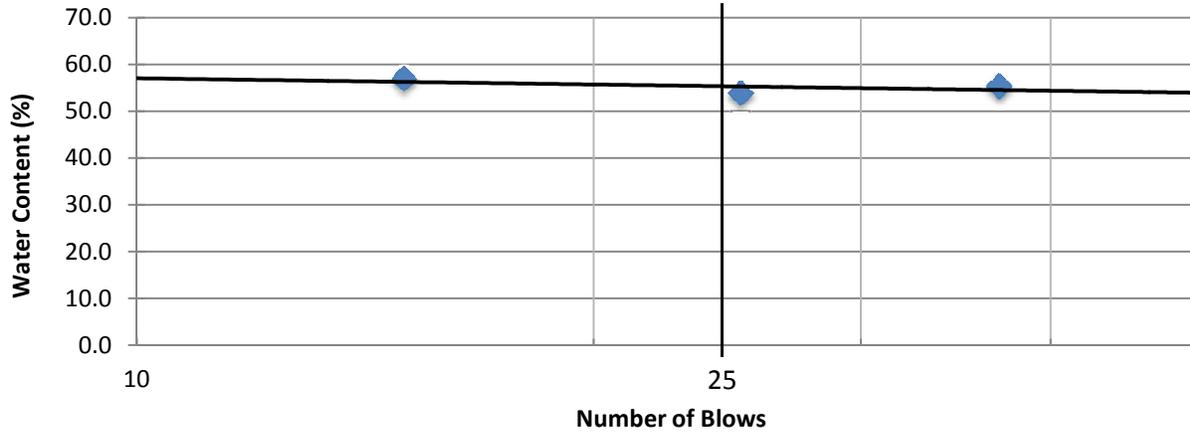
Run Number	1	2	Tare Number		SV
Tare Number	PR	11	Tare (g)		240.1
Tare (g)	13.75	13.82	Dry Soil + Tare (g)		391.4
Wet soil + Tare (g)	17.45	17.25	Washed Soil + Tare (g)		250.3
Dry soil + tare (g)	16.67	16.53	Percent Passing		93
Water (g)	0.78	0.72			
Dry soil (g)	2.92	2.71			
Water Content (%)	26.7	26.6			

Sampled Date: 6/4/2014
Tested Date: 6/18/2014
Project: Clairon Hotel
Project Number: SGE140025
Sample ID: B6 @ 4'
Technician: Rick Dodds
Soil Source: Native
Soil Information: ML - Silt

Liquid Limit: 33
Plastic Limit: 27
Plastic Index: 6



ATTERBERG LIMITS DETERMINATION, WASH #200 (ASTM D 4318)



EQUIPMENT

Ovens		Splitter		Scales		Sieves	
#007 (60c)	X	#074 (MED)		#014	X	#060 (#40)	X
#006 (110c)	X	#075 (SMALL)				#192 (Pan)	X
Liquid Limit Device		Ground Glass Plate					
#173		#191					
#174		#S171	X				
#S160	X						

LIQUID LIMIT

Run Number	1	2	3	4		
Number of blows	25	15	37			
Tare Number	6	91	10			
Tare (g)	11.05	10.68	11.07			
Wet soil + Tare (g)	31.65	30.17	31.58			
Dry soil + tare (g)	24.44	23.10	24.27			
Water (g)	7.21	7.07	7.31			
Dry soil (g)	13.39	12.42	13.20			
Water Content (%)	53.8	56.9	55.4			

PLASTIC LIMIT

WASH 200

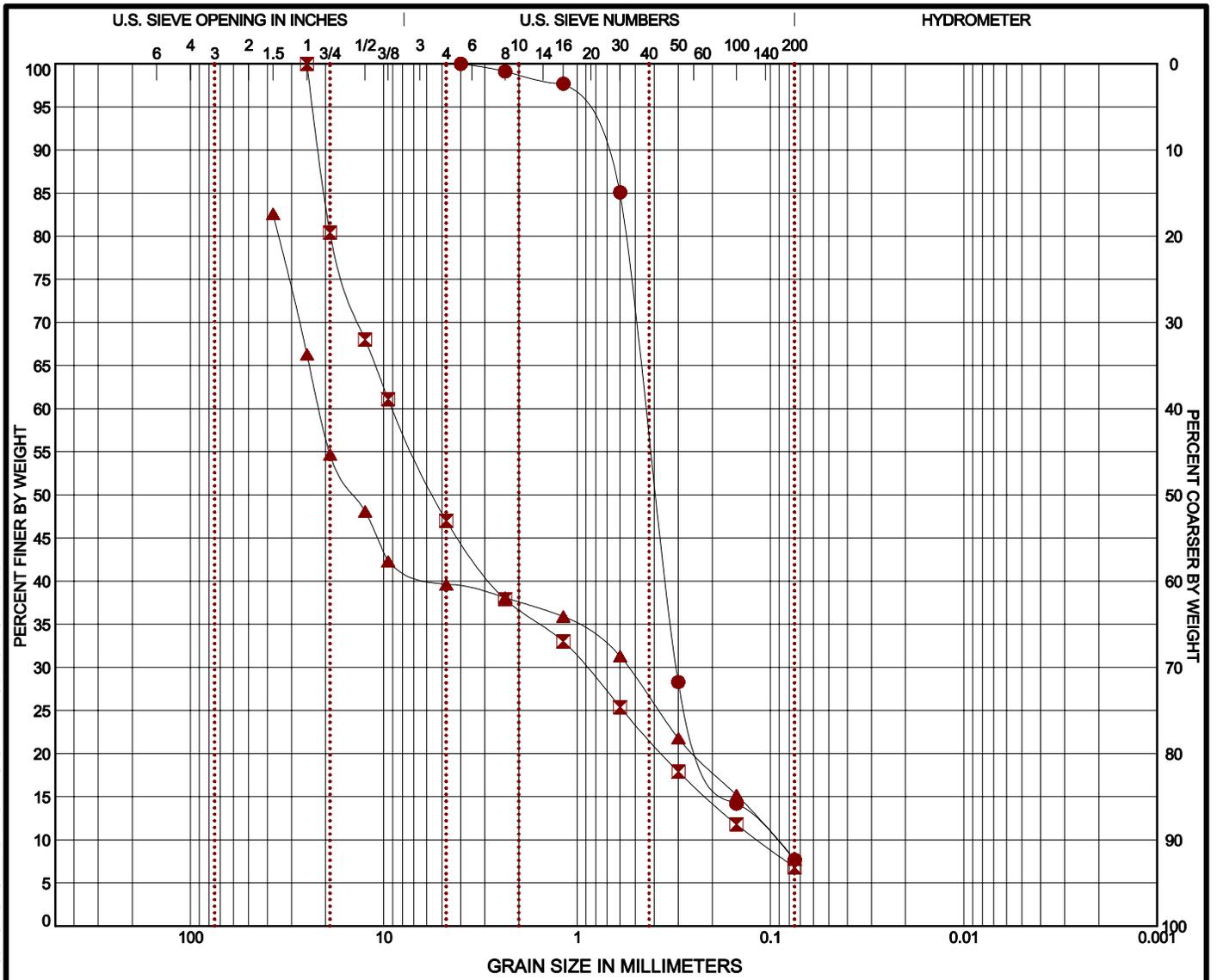
Run Number	1	2	Tare Number		BB
Tare Number	15	23	Tare (g)		174
Tare (g)	11.05	11.05	Dry Soil + Tare (g)		381.5
Wet soil + Tare (g)	18.27	17.06	Washed Soil + Tare (g)		219.2
Dry soil + tare (g)	16.69	15.71	Percent Passing		78
Water (g)	1.58	1.35			
Dry soil (g)	5.64	4.66			
Water Content (%)	28.0	29.0			

Sampled Date: 6/27/2014
Tested Date: 7/28/2014
Project: Clairon Hotel
Project Number: SGE140025
Sample ID: B3-10-I
Technician: Roger Williams
Soil Source: Native
Soil Information: CH: Fat Clay with Sand

Liquid Limit: 55
Plastic Limit: 28
Plastic Index: 27

GRAIN SIZE DISTRIBUTION

ASTM D422



ATTACHMENT 8

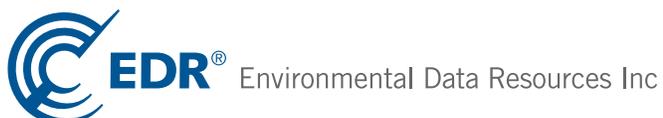
EDR REPORT

Clarion Hotel Site

700 16th Street
Sacramento, CA 95814

Inquiry Number: 4016952.2s
July 24, 2014

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	691
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

700 16TH STREET
SACRAMENTO, CA 95814

COORDINATES

Latitude (North): 38.5808000 - 38° 34' 50.88"
Longitude (West): 121.4848000 - 121° 29' 5.28"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 631981.3
UTM Y (Meters): 4271140.5
Elevation: 22 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 38121-E4 SACRAMENTO EAST, CA
Most Recent Revision: 1980

West Map: 38121-E5 SACRAMENTO WEST, CA
Most Recent Revision: 1980

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20120628
Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
CLARION HOTEL 700 16TH ST SACRAMENTO, CA 95814	CA Sacramento Co. ML	N/A
CLARION HOTEL 700 16TH ST SACRAMENTO, CA 95814	CA HAZNET	N/A
CLARION HOTEL 700 16TH STREET SACRAMENTO, CA 95814	CA HAZNET	N/A

EXECUTIVE SUMMARY

JERRY S CHEVRON SERVICE
700 16TH ST
SACRAMENTO, CA

EDR US Hist Auto Stat

N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal RCRA generators list

RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

CA SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST..... Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
CA SWRCY..... Recycler Database
CA HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
CA SCH..... School Property Evaluation Program
CA Toxic Pits..... Toxic Pits Cleanup Act Sites
CA CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CA LDS..... Land Disposal Sites Listing
CA MCS..... Military Cleanup Sites Listing
CA SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
PADS..... PCB Activity Database System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
RMP..... Risk Management Plans

EXECUTIVE SUMMARY

CA UIC.....	UIC Listing
CA CUPA Listings.....	CUPA Resources List
CA DRYCLEANERS.....	Cleaner Facilities
CA WIP.....	Well Investigation Program Case List
CA ENF.....	Enforcement Action Listing
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
CA HWT.....	Registered Hazardous Waste Transporter Database
CA PROC.....	Certified Processors Database
CA Financial Assurance.....	Financial Assurance Information Listing
CA WDS.....	Waste Discharge System
CA MWMP.....	Medical Waste Management Program Listing
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
PRP.....	Potentially Responsible Parties
LEAD SMELTERS.....	Lead Smelter Sites
PCB TRANSFORMER.....	PCB Transformer Registration Database
EPA WATCH LIST.....	EPA WATCH LIST
US FIN ASSUR.....	Financial Assurance Information

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CA RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank
CA RGA LF.....	Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/11/2014 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION PACIFIC SACRAMENTO YARD	501 JIBBOOM ST	WNW 1/2 - 1 (0.919 mi.)	BC378	662

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/11/2014 has revealed that there are 5 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
16TH ST AUTO BODY	614 SIXTEEN ST	NE 0 - 1/8 (0.087 mi.)	C45	33
MEMORIAL AUDITORIUM	1515 J ST	SSW 1/8 - 1/4 (0.160 mi.)	Q95	66
PACIFIC BELL	1407-1423 J STREET	SW 1/8 - 1/4 (0.176 mi.)	T131	89
CA DEPT OF JUSTICE BUREAU OF N	1800 I ST	SE 1/8 - 1/4 (0.178 mi.)	O137	93
PORTER SPRAGUE INC	722 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	Y257	158

State- and tribal - equivalent NPL

CA RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the CA RESPONSE list, as provided by EDR, and dated 06/05/2014 has revealed that there are 9 CA RESPONSE sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SP-PURITY OIL	1324 A STREET	N 1/2 - 1 (0.522 mi.)	AX343	334
SIMS METAL SITE	130 NORTH 12 STREET; AT	N 1/2 - 1 (0.658 mi.)	348	364
UP, DOWNTOWN SAC - MANUFACTURE	400 I STREET	WNW 1/2 - 1 (0.859 mi.)	BA363	430
UP, DOWNTOWN SAC - TRACK RELOC	401 I STREET	WNW 1/2 - 1 (0.919 mi.)	BC372	454
KEN'S BUFF AND PLATING	1816 21ST STREET	S 1/2 - 1 (0.927 mi.)	380	680
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FONTS PROPERTY	1822 16TH STREET	SSW 1/2 - 1 (0.722 mi.)	AY353	378
16TH STREET PLATING	1826 16TH STREET	SSW 1/2 - 1 (0.722 mi.)	AY354	381
ORCHARD SUPPLY CO	1731 17TH ST	S 1/2 - 1 (0.776 mi.)	AZ361	400
PALM IRON WORKS	1515 S STREET	SSW 1/2 - 1 (0.881 mi.)	BB366	440

EXECUTIVE SUMMARY

State- and tribal - equivalent CERCLIS

CA ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the CA ENVIROSTOR list, as provided by EDR, and dated 06/05/2014 has revealed that there are 30 CA ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA ANALYTICAL LABS. Status: No Further Action	401 N 16TH ST.	NNE 1/4 - 1/2 (0.276 mi.)	AJ284	182
MCCURRY COMPANIES Status: No Further Action	1231 K ST	WSW 1/4 - 1/2 (0.320 mi.)	AO301	218
WOODWARD CLEANERS AND DRYER Status: Refer: Other Agency	2201 J STREET	SE 1/4 - 1/2 (0.489 mi.)	341	332
SP-PURITY OIL Status: Certified	1324 A STREET	N 1/2 - 1 (0.522 mi.)	AX343	334
NORTH 12TH STREET SOCIAL SERVI Status: Inactive - Action Required	1221 N A ST., 1223 N A	N 1/2 - 1 (0.525 mi.)	AX345	359
SIMS METAL SITE Status: Active	130 NORTH 12 STREET; AT	N 1/2 - 1 (0.658 mi.)	348	364
SACRAMENTO FOODS, INC. Status: Refer: Other Agency	424 NORTH 7TH STREET	NW 1/2 - 1 (0.662 mi.)	349	370
SMUD NORTH CITY SUBSTATION Status: Inactive - Needs Evaluation	20TH AND NORTH B STREET	NE 1/2 - 1 (0.663 mi.)	350	374
A-B-C CLEANERS Status: Refer: Other Agency	1120 7TH STREET	W 1/2 - 1 (0.686 mi.)	351	376
RED FEATHER CLEANERS (INACTIVE) Status: Refer: Other Agency	2500 J ST.	ESE 1/2 - 1 (0.725 mi.)	356	387
VALLEY GRAPHIC ARTS Status: Inactive - Needs Evaluation	1711 18TH ST	S 1/2 - 1 (0.747 mi.)	357	388
FEDERAL COURTHOUSE - SACRAMENT Status: Certified O&M - Land Use Restrictions Only	5TH AND I STREETS	WNW 1/2 - 1 (0.778 mi.)	362	425
UP, DOWNTOWN SAC - MANUFACTURE Status: Active	400 I STREET	WNW 1/2 - 1 (0.859 mi.)	BA363	430
UP, DOWNTOWN SAC - TRACK RELOC Status: Certified O&M - Land Use Restrictions Only Status: Active Status: Certified Status: No Further Action Status: Certified / Operation & Maintenance	401 I STREET	WNW 1/2 - 1 (0.919 mi.)	BC372	454
UNION PACIFIC SACRAMENTO YARD Status: Refer: Other Agency	501 JIBBOOM ST	WNW 1/2 - 1 (0.919 mi.)	BC378	662

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KEN'S BUFF AND PLATING Status: Backlog	1816 21ST STREET	S 1/2 - 1 (0.927 mi.)	380	680
UNION PACIFIC BANNON STREET PA Status: Active	NORTH B STREET AND SEVE NNW 1/2 - 1 (0.941 mi.)		381	687
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
L STREET SITE - #1830 Status: Refer: RWQCB	1830 L STREET	SSE 1/4 - 1/2 (0.366 mi.)	AQ319	265
MERCURY CLEANERS Status: Refer: Other Agency	1419 16TH ST	SSW 1/2 - 1 (0.529 mi.)	346	361
MATHER STORAGE ANX (J09CA0081) Status: Inactive - Needs Evaluation		WSW 1/2 - 1 (0.702 mi.)	352	377
FONTS PROPERTY Status: Certified	1822 16TH STREET	SSW 1/2 - 1 (0.722 mi.)	AY353	378
16TH STREET PLATING Status: Certified	1826 16TH STREET	SSW 1/2 - 1 (0.722 mi.)	AY354	381
1500 Q STREET SITE Status: Refer: Other Agency	1500 Q STREET	SSW 1/2 - 1 (0.724 mi.)	355	385
ORCHARD SUPPLY COMPANY/WORLD O Status: No Further Action	THE BUILDING AT THE ORC	S 1/2 - 1 (0.749 mi.)	AZ358	390
A-1 PLATING CO. (INACTIVE #3) Status: Inactive - Needs Evaluation	1721 16TH ST.	SSW 1/2 - 1 (0.770 mi.)	AY359	392
ORCHARD SUPPLY CO Status: Certified / Operation & Maintenance	1731 17TH ST	S 1/2 - 1 (0.776 mi.)	AZ361	400
CADA WAREHOUSE REDEVELOPMENT P Status: Certified	1108 R STREET	SW 1/2 - 1 (0.862 mi.)	365	434
PALM IRON WORKS Status: Certified	1515 S STREET	SSW 1/2 - 1 (0.881 mi.)	BB366	440
Not reported Status: Refer: RWQCB	1733 S ST.	S 1/2 - 1 (0.889 mi.)	368	443
YOUR CLEANERS (INACTIVE #242) Status: Refer: Other Agency	1924 16TH ST.	SSW 1/2 - 1 (0.925 mi.)	379	679

State and tribal leaking storage tank lists

CA LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the CA LUST list, as provided by EDR, and dated 06/16/2014 has revealed that there are 47 CA LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION OIL SS #5382 Status: Completed - Case Closed	1600 H ST	SE 0 - 1/8 (0.002 mi.)	A6	10
FORMER 16TH & G STREETS SERVIC Status: Completed - Case Closed	631 16TH STREET	NE 0 - 1/8 (0.073 mi.)	C23	21

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WAREHOUSE (VACANT) Status: Completed - Case Closed	1630 I ST	SSE 0 - 1/8 (0.086 mi.)	D43	31
DOWNTOWN FORD SALES INC Status: Completed - Case Closed	525 16TH ST	NNE 1/8 - 1/4 (0.153 mi.)	J87	58
PACIFIC BELL Status: Completed - Case Closed	1407 J ST (AKA: 1423)	SW 1/8 - 1/4 (0.183 mi.)	T146	99
GRADY'S COPY SHOP Status: Completed - Case Closed	1228 H ST	WNW 1/8 - 1/4 (0.214 mi.)	Y183	122
LOOMIS ARMORED CAR SERVICE Status: Completed - Case Closed	1717 E ST	NE 1/8 - 1/4 (0.222 mi.)	Z198	133
1622 K STREET Status: Completed - Case Closed	1622 K STREET	S 1/8 - 1/4 (0.243 mi.)	AD237	149
1622 K STREET	1622 K STREET	S 1/8 - 1/4 (0.243 mi.)	AD238	152
MADE IN JAPAN/MADE IN AMERICA Status: Completed - Case Closed	1200 I ST	W 1/8 - 1/4 (0.248 mi.)	W276	171
CVS/PHARMACY #3945 Status: Completed - Case Closed	1701 K ST	S 1/4 - 1/2 (0.253 mi.)	282	175
PDR PARK & GAS Status: Completed - Case Closed	1200 F ST	NW 1/4 - 1/2 (0.270 mi.)	AH283	178
THE SALVATION ARMY - ADULT REH Status: Completed - Case Closed	1615 D ST	NNE 1/4 - 1/2 (0.279 mi.)	AJ285	183
GEMSCH COMPANY Status: Completed - Case Closed	520 12TH ST N	NW 1/4 - 1/2 (0.289 mi.)	AH288	187
15TH & L INVESTORS Status: Completed - Case Closed	1501 L STREET	SSW 1/4 - 1/2 (0.295 mi.)	AK290	189
15TH & L INVESTORS	1501 L STREET	SSW 1/4 - 1/2 (0.295 mi.)	AK291	191
1125 I STREET COMMERCIAL PROPE Status: Completed - Case Closed	1125 I STREET	W 1/4 - 1/2 (0.310 mi.)	AL292	191
FOOD & LIQUOR #142 (AKA FORMER) Status: Completed - Case Closed	809 20TH ST	ESE 1/4 - 1/2 (0.311 mi.)	293	193
FORMER BC STOCKING STATION Status: Open - Verification Monitoring	324 16TH ST N	NNE 1/4 - 1/2 (0.311 mi.)	AJ294	197
THRIFTY CAR RENTAL Status: Completed - Case Closed	500 12TH ST	NW 1/4 - 1/2 (0.315 mi.)	AM296	208
FIRESTONE TIRE & SERV CENTER # Status: Completed - Case Closed	1531 L ST	SSW 1/4 - 1/2 (0.320 mi.)	AK304	225
FORMER FIRESTONE SERVICE CENTE	1531 L STREET	SSW 1/4 - 1/2 (0.320 mi.)	AK305	229
LAWRENCE MAYFLOWER MOVING & ST Status: Completed - Case Closed	908 20TH ST	SE 1/4 - 1/2 (0.320 mi.)	AN307	230
FORMER CHEVRON #3-0205 Status: Completed - Case Closed	1530 L ST	SSW 1/4 - 1/2 (0.322 mi.)	AK308	241
KRAUS PROPERTIES Status: Completed - Case Closed	1431 L ST	SW 1/4 - 1/2 (0.324 mi.)	309	247
VICTORY BUILDING MAINTENANCE Status: Completed - Case Closed	1814 D ST	NE 1/4 - 1/2 (0.327 mi.)	311	250
ELKS BUILDING * Status: Completed - Case Closed	921 11TH ST	W 1/4 - 1/2 (0.330 mi.)	AL312	253

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MOHAWK SS (FORMER) TEXACO Status: Completed - Case Closed	424 12TH ST	NNW 1/4 - 1/2 (0.340 mi.)	AM313	255
PUBLIC STORAGE FACILITY Status: Completed - Case Closed	1625 C ST N	NNE 1/4 - 1/2 (0.359 mi.)	AR314	257
MID-TOWN OFFICE CENTER Status: Completed - Case Closed	2020 J ST	SE 1/4 - 1/2 (0.362 mi.)	318	262
BLUE DIAMOND GROWERS BLUE DIAMOND GROWERS Status: Completed - Case Closed	1802 C STREET 1802 C ST	NE 1/4 - 1/2 (0.394 mi.) NE 1/4 - 1/2 (0.394 mi.)	AT322 AT324	271 285
CHEVRON #9-0915 (FORMER) Status: Completed - Case Closed	901 10TH	W 1/4 - 1/2 (0.402 mi.)	327	293
AUTO GLASS DIST Status: Completed - Case Closed	515 10TH ST N	NW 1/4 - 1/2 (0.424 mi.)	329	298
HOBBS BATTERY (SULLIVAN PROPER Status: Completed - Case Closed	1206 C ST	NNW 1/4 - 1/2 (0.426 mi.)	AU330	299
MCDONALD'S FOOD EQUIPMENT Status: Completed - Case Closed	211-217 16TH ST N	NNE 1/4 - 1/2 (0.428 mi.)	331	302
TARNASKY RESIDENCE Status: Completed - Case Closed	630 22ND ST	E 1/4 - 1/2 (0.462 mi.)	334	305
CITY HALL Status: Completed - Case Closed	915 I ST	W 1/4 - 1/2 (0.466 mi.)	336	308
CRYSTAL CREAM AND BUTTER CO Status: Open - Eligible for Closure	1013 D ST	NW 1/4 - 1/2 (0.475 mi.)	AW337	310
CHEVRON #94176 Status: Completed - Case Closed	1601 J ST	W 1/4 - 1/2 (0.479 mi.)	339	323
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SHELL OIL PRODUCTS US 170736 Status: Open - Eligible for Closure	1601 L ST	SSW 1/4 - 1/2 (0.320 mi.)	AP302	219
FORMER SHELL SERVICE STATION STATE CAPITOL Status: Completed - Case Closed	1601 L STREET 1300 CAPITOL MALL	SSW 1/4 - 1/2 (0.320 mi.) SW 1/4 - 1/2 (0.362 mi.)	AP303 317	225 261
HARV'S CAR WASH Status: Completed - Case Closed	1901 L ST	SSE 1/4 - 1/2 (0.391 mi.)	AS320	266
CAPITOL PLAZA RETIREMENT Status: Completed - Case Closed	1812-1820 L ST	SSE 1/4 - 1/2 (0.394 mi.)	321	270
HAYATT REGENCY HOTEL Status: Completed - Case Closed	1205 L	WSW 1/4 - 1/2 (0.398 mi.)	325	290
CITY SUDS Status: Completed - Case Closed	1830 L ST	SSE 1/4 - 1/2 (0.407 mi.)	AS328	296

EXECUTIVE SUMMARY

CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the CA SLIC list, as provided by EDR, and dated 06/16/2014 has revealed that there are 6 CA SLIC sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
1622 K STREET Facility Status: Open - Inactive	1622 K STREET	S 1/8 - 1/4 (0.243 mi.)	AD237	149
BOYS & GIRLS CLUB PARK Facility Status: Completed - Case Closed	1120 F STREET	NW 1/4 - 1/2 (0.325 mi.)	310	249
BLUE DIAMOND GROWERS, ALMOND P	1802 C ST	NE 1/4 - 1/2 (0.394 mi.)	AT323	284
BLUE DIAMOND GROWERS Facility Status: Open - Inactive	1802 C ST	NE 1/4 - 1/2 (0.394 mi.)	AT324	285
MEINEKE DISCOUNT MUFFLERS Facility Status: Completed - Case Closed	317 12TH ST	NNW 1/4 - 1/2 (0.399 mi.)	AU326	292
STANDARD TRANSMISSION EXCHANGE Facility Status: Open - Inactive	1131 C ST	NNW 1/4 - 1/2 (0.463 mi.)	335	306

CA Sacramento Co. CS: List of sites where unauthorized releases of potentially hazardous materials have occurred.

A review of the CA Sacramento Co. CS list, as provided by EDR, and dated 02/06/2014 has revealed that there are 48 CA Sacramento Co. CS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION OIL SS #5382 Date Closed: 10/12/2004	1600 H ST	SE 0 - 1/8 (0.002 mi.)	A6	10
FORMER 16TH & G STREETS SERVIC WAREHOUSE (VACANT) Date Closed: 05/20/1999	631 16TH STREET 1630 I ST	NE 0 - 1/8 (0.073 mi.) SSE 0 - 1/8 (0.086 mi.)	C23 D43	21 31
GRAND AUTO DOWNTOWN FORD SALES INC Date Closed: 07/25/2002	1400 I ST 525 16TH ST	WSW 0 - 1/8 (0.112 mi.) NNE 1/8 - 1/4 (0.153 mi.)	G64 J87	45 58
AT & T MOBILITY - SAC MSC (336 SCHAAP-BRENNER TIRE CENTER GRADY'S COPY SHOP Date Closed: 12/07/1994	1407 J ST 17TH/J ST 1228 H ST	SW 1/8 - 1/4 (0.175 mi.) SSE 1/8 - 1/4 (0.177 mi.) WNW 1/8 - 1/4 (0.214 mi.)	T125 S133 Y183	86 91 122
LOOMIS ARMORED CAR SERVICE Date Closed: 01/04/1992	1717 E ST	NE 1/8 - 1/4 (0.222 mi.)	Z198	133
SHRA Date Closed: 11/03/1994	1617 K ST	S 1/8 - 1/4 (0.240 mi.)	AD217	142
1622 K STREET Date Closed: 06/14/2006	1622 K STREET	S 1/8 - 1/4 (0.243 mi.)	AD237	149
MADE IN JAPAN/MADE IN AMERICA Date Closed: 07/29/2005	1200 I ST	W 1/8 - 1/4 (0.248 mi.)	W276	171
BURPO PROPERTIES CVS/PHARMACY #3945 Date Closed: 03/07/1997	1222 F ST 1701 K ST	NW 1/4 - 1/2 (0.251 mi.) S 1/4 - 1/2 (0.253 mi.)	AH281 282	175 175
PDR PARK & GAS THE SALVATION ARMY - ADULT REH Date Closed: 01/28/1997	1200 F ST 1615 D ST	NW 1/4 - 1/2 (0.270 mi.) NNE 1/4 - 1/2 (0.279 mi.)	AH283 AJ285	178 183

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SACRAMENTO CONVENTION	1100 14TH ST	SW 1/4 - 1/2 (0.285 mi.)	AI286	185
CARSON DEVELOPMENT	520 N 12TH ST	NW 1/4 - 1/2 (0.289 mi.)	AH287	187
15TH & L INVESTORS	1501 L STREET	SSW 1/4 - 1/2 (0.295 mi.)	AK290	189
1125 I STREET COMMERCIAL PROPE	1125 I STREET	W 1/4 - 1/2 (0.310 mi.)	AL292	191
Date Closed: 09/14/2012				
FOOD & LIQUOR #142 (AKA FORMER	809 20TH ST	ESE 1/4 - 1/2 (0.311 mi.)	293	193
CARS RENT A CAR	500 N 12TH ST	NW 1/4 - 1/2 (0.315 mi.)	AM297	211
Date Closed: 09/08/1997				
FIRESTONE TIRE & SERV CENTER #	1531 L ST	SSW 1/4 - 1/2 (0.320 mi.)	AK304	225
Date Closed: 12/14/2006				
LAWRENCE MAYFLOWER MOVING & ST	908 20TH ST	SE 1/4 - 1/2 (0.320 mi.)	AN307	230
Date Closed: 05/20/2011				
FORMER CHEVRON #3-0205	1530 L ST	SSW 1/4 - 1/2 (0.322 mi.)	AK308	241
KRAUS PROPERTIES	1431 L ST	SW 1/4 - 1/2 (0.324 mi.)	309	247
BOYS & GIRLS CLUB PARK	1120 F STREET	NW 1/4 - 1/2 (0.325 mi.)	310	249
VICTORY BUILDING MAINTENANCE	1814 D ST	NE 1/4 - 1/2 (0.327 mi.)	311	250
ELKS BUILDING *	921 11TH ST	W 1/4 - 1/2 (0.330 mi.)	AL312	253
Date Closed: 12/22/1993				
MOHAWK SS (FORMER) TEXACO	424 12TH ST	NNW 1/4 - 1/2 (0.340 mi.)	AM313	255
Date Closed: 05/28/2004				
HATFIELD TRUCKING SERVICE, INC	1625 N C ST	NNE 1/4 - 1/2 (0.359 mi.)	AR315	258
Date Closed: 08/03/1998				
BLUE DIAMOND GROWERS	1802 C ST	NE 1/4 - 1/2 (0.394 mi.)	AT324	285
Date Closed: 07/01/1993				
MEINEKE DISCOUNT MUFFLERS	317 12TH ST	NNW 1/4 - 1/2 (0.399 mi.)	AU326	292
CHEVRON #9-0915 (FORMER)	901 10TH	W 1/4 - 1/2 (0.402 mi.)	327	293
HOBBS BATTERY (SULLIVAN PROPER	1206 C ST	NNW 1/4 - 1/2 (0.426 mi.)	AU330	299
Date Closed: 07/24/1997				
OLD SHASTA HOTEL	1017 10TH ST	W 1/4 - 1/2 (0.442 mi.)	AV332	304
CREST RETAIL	1013 K ST	WSW 1/4 - 1/2 (0.452 mi.)	AV333	304
Date Closed: 01/13/1997				
CITY HALL	915 I ST	W 1/4 - 1/2 (0.466 mi.)	336	308
Date Closed: 01/24/1997				
CRYSTAL CREAM AND BUTTER CO	1013 D ST	NW 1/4 - 1/2 (0.475 mi.)	AW337	310
RIO LINDA CHEMICAL COMPANY	410 N 10TH ST	NW 1/4 - 1/2 (0.479 mi.)	AW338	322
Date Closed: 06/27/1997				
CHEVRON #94176	1601 J ST	W 1/4 - 1/2 (0.479 mi.)	339	323
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SHELL OIL PRODUCTS US 170736	1601 L ST	SSW 1/4 - 1/2 (0.320 mi.)	AP302	219
BARBER'S SHOP AUTOMOTIVE	1116 18TH ST	SSE 1/4 - 1/2 (0.320 mi.)	AQ306	229
CAPITOL PLAZA RETIREMENT	1812 L ST	SSE 1/4 - 1/2 (0.361 mi.)	AQ316	260
STATE CAPITOL	1300 CAPITOL MALL	SW 1/4 - 1/2 (0.362 mi.)	317	261
Date Closed: 03/10/1989				
HARV'S CAR WASH	1901 L ST	SSE 1/4 - 1/2 (0.391 mi.)	AS320	266
Date Closed: 02/03/1998				
HAYATT REGENCY HOTEL	1205 L	WSW 1/4 - 1/2 (0.398 mi.)	325	290
CITY SUDS	1830 L ST	SSE 1/4 - 1/2 (0.407 mi.)	AS328	296

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

CA UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the CA UST list, as provided by EDR, and dated 06/16/2014 has revealed that there are 4 CA UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DOWNTOWN FORD SALES INC	525 16TH ST	NNE 1/8 - 1/4 (0.153 mi.)	J87	58
PACIFIC BELL (UA-010)	1407 J ST	SW 1/8 - 1/4 (0.175 mi.)	T128	87
SACRAMENTO CONVENTION CENTER	1030 15TH ST	SSW 1/8 - 1/4 (0.184 mi.)	Q148	102
HERTZ RENT A CAR	1025 16TH ST	S 1/8 - 1/4 (0.205 mi.)	P166	110

CA AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the CA AST list, as provided by EDR, and dated 08/01/2009 has revealed that there is 1 CA AST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JOHN THOMAS	1515 K ST., STE. 100	SSW 1/8 - 1/4 (0.241 mi.)	AE221	144

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 03/20/2014 has revealed that there are 3 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION PACIFIC RAILROAD	1050 12TH ST	WSW 1/4 - 1/2 (0.319 mi.)	AO299	214
SOUTHERN PACIFIC RAILROAD	1050 12TH ST	WSW 1/4 - 1/2 (0.319 mi.)	AO300	216
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
EAST END GATEWAY PROPERTY 1	1517-1531 N STREET	SSW 1/4 - 1/2 (0.483 mi.)	340	327

Local Lists of Hazardous waste / Contaminated Sites

CA HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the CA HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that

EXECUTIVE SUMMARY

there are 10 CA HIST Cal-Sites sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SP-PURITY OIL	1324 A	N 1/2 - 1 (0.522 mi.)	AX344	349
SP, SAC - BATTERY SHOP YARD	401 I STREET	WNW 1/2 - 1 (0.919 mi.)	BC373	572
SP, SAC - SAND PILES	401 I STREET	WNW 1/2 - 1 (0.919 mi.)	BC374	577
SP, SAC - SACRAMENTO STATION	401 I STREET	WNW 1/2 - 1 (0.919 mi.)	BC375	579
UP, DOWNTOWN SAC - LAGOON	401 I STREET	WNW 1/2 - 1 (0.919 mi.)	BC376	585
UP, DOWNTOWN SAC - CENTRAL SHO	401 I STREET	WNW 1/2 - 1 (0.919 mi.)	BC377	601
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FONTS PROPERTY	1822 16TH STREET	SSW 1/2 - 1 (0.722 mi.)	AY353	378
16TH STREET PLATING	1826 16TH STREET	SSW 1/2 - 1 (0.722 mi.)	AY354	381
ORCHARD SUPPLY COMPANY	1731 17TH STREET	S 1/2 - 1 (0.776 mi.)	AZ360	393
PALM IRON WORKS	1515 S STREET	SSW 1/2 - 1 (0.881 mi.)	BB367	442

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 14 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION OIL SS #5382	1600 H ST	SE 0 - 1/8 (0.002 mi.)	A9	14
NATIONAL CAR RENTAL	526 16TH ST	NNE 1/8 - 1/4 (0.152 mi.)	J81	53
DOWNTOWN FORD SALES INC	525 16TH ST	NNE 1/8 - 1/4 (0.153 mi.)	J87	58
CHEVRON USA INC	1601 J ST	S 1/8 - 1/4 (0.159 mi.)	P91	64
SACRAMENTO MEMORIAL AUDITORIUM	1515 J ST	SSW 1/8 - 1/4 (0.160 mi.)	Q98	69
NEILLO CHEVROLET	1530 J ST	SSW 1/8 - 1/4 (0.162 mi.)	Q105	74
PACIFIC BELL UAO10 SCRMC04	1423 J ST	SW 1/8 - 1/4 (0.171 mi.)	T115	79
PACIFIC BELL (UA-010)	1407 J ST	SW 1/8 - 1/4 (0.175 mi.)	T124	85
HERTZ LOCAL EDITION	1025 16TH ST	S 1/8 - 1/4 (0.205 mi.)	P167	111
FIRE STATION #2	1229 I ST	W 1/8 - 1/4 (0.206 mi.)	W171	113
1325 J ST OFFICE BUILDING	1325 J ST	WSW 1/8 - 1/4 (0.209 mi.)	V175	119
LOOMIS ARMORED	1717 E ST	NE 1/8 - 1/4 (0.216 mi.)	Z185	126
ERNEST C. FARRINGTON JR.	1731 E ST	NE 1/8 - 1/4 (0.216 mi.)	Z187	127
JOHN ELLIS GARAGE	910 19TH ST	SE 1/8 - 1/4 (0.246 mi.)	AG266	165

CA HIST UST: Historical UST Registered Database.

A review of the CA HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 13 CA HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION OIL SS#5382	1600 H ST	SE 0 - 1/8 (0.002 mi.)	A7	13
UNION OIL SS #5382	1600 H ST	SE 0 - 1/8 (0.002 mi.)	A8	13
NATIONAL CAR RENTAL	526 16TH ST	NNE 1/8 - 1/4 (0.152 mi.)	J82	56
DOWNTOWN FORD SALES INC	525 16TH ST	NNE 1/8 - 1/4 (0.153 mi.)	J87	58
94176	1601 'J' ST	S 1/8 - 1/4 (0.159 mi.)	P92	65
MEMORIAL AUDITORIUM	1515 J ST	SSW 1/8 - 1/4 (0.160 mi.)	Q96	68

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SACRAMENTO MEMORIAL AUDITORIUM	1515 J ST	SSW 1/8 - 1/4 (0.160 mi.)	Q97	69
PACIFIC BELL (UA-010)	1407-1411-J STREET	SW 1/8 - 1/4 (0.175 mi.)	T123	84
FIRE DEPARTMENT ENGINE #2	1229 I ST	W 1/8 - 1/4 (0.206 mi.)	W170	112
SACRAMENTO CITY FIRE STATION 2	1229 I ST	W 1/8 - 1/4 (0.206 mi.)	W172	116
LOOMIS ARMORED CAR SERVICE INC	1717 "E" STREET	NE 1/8 - 1/4 (0.220 mi.)	Z195	131
ERNEST C. FARRINGTON JR.	1731 "E" STREET	NE 1/8 - 1/4 (0.225 mi.)	Z205	137
JOHN ELLIS AND SON	910-19TH ST	SE 1/8 - 1/4 (0.246 mi.)	AG265	164

CA SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the CA SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 14 CA SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>UNION OIL SS #5382</i>	<i>1600 H ST</i>	<i>SE 0 - 1/8 (0.002 mi.)</i>	<i>A9</i>	<i>14</i>
<i>NATIONAL CAR RENTAL</i>	<i>526 16TH ST</i>	<i>NNE 1/8 - 1/4 (0.152 mi.)</i>	<i>J81</i>	<i>53</i>
<i>DOWNTOWN FORD SALES INC</i>	<i>525 16TH ST</i>	<i>NNE 1/8 - 1/4 (0.153 mi.)</i>	<i>J87</i>	<i>58</i>
<i>CHEVRON USA INC</i>	<i>1601 J ST</i>	<i>S 1/8 - 1/4 (0.159 mi.)</i>	<i>P91</i>	<i>64</i>
<i>SACRAMENTO MEMORIAL AUDITORIUM</i>	<i>1515 J ST</i>	<i>SSW 1/8 - 1/4 (0.160 mi.)</i>	<i>Q98</i>	<i>69</i>
<i>NEILLO CHEVROLET</i>	<i>1530 J ST</i>	<i>SSW 1/8 - 1/4 (0.162 mi.)</i>	<i>Q105</i>	<i>74</i>
<i>PACIFIC BELL UAO10 SCRMCA04</i>	<i>1423 J ST</i>	<i>SW 1/8 - 1/4 (0.171 mi.)</i>	<i>T115</i>	<i>79</i>
<i>PACIFIC BELL (UA-010)</i>	<i>1407 J ST</i>	<i>SW 1/8 - 1/4 (0.175 mi.)</i>	<i>T128</i>	<i>87</i>
<i>HERTZ RENT A CAR</i>	<i>1025 16TH ST</i>	<i>S 1/8 - 1/4 (0.205 mi.)</i>	<i>P166</i>	<i>110</i>
<i>FIRE STATION #2</i>	<i>1229 I ST</i>	<i>W 1/8 - 1/4 (0.206 mi.)</i>	<i>W171</i>	<i>113</i>
<i>1325 J ST OFFICE BUILDING</i>	<i>1325 J ST</i>	<i>WSW 1/8 - 1/4 (0.209 mi.)</i>	<i>V175</i>	<i>119</i>
<i>LOOMIS ARMORED</i>	<i>1717 E ST</i>	<i>NE 1/8 - 1/4 (0.216 mi.)</i>	<i>Z185</i>	<i>126</i>
<i>ERNEST C. FARRINGTON JR.</i>	<i>1731 E ST</i>	<i>NE 1/8 - 1/4 (0.216 mi.)</i>	<i>Z187</i>	<i>127</i>
<i>JOHN ELLIS GARAGE</i>	<i>910 19TH ST</i>	<i>SE 1/8 - 1/4 (0.246 mi.)</i>	<i>AG266</i>	<i>165</i>

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/11/2014 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>THOMAS CHEVROLET GEO INC</i>	<i>1530 J ST</i>	<i>SSW 1/8 - 1/4 (0.162 mi.)</i>	<i>Q107</i>	<i>76</i>
<i>PACIFIC BELL</i>	<i>1201 I ST</i>	<i>W 1/8 - 1/4 (0.248 mi.)</i>	<i>W273</i>	<i>169</i>

EXECUTIVE SUMMARY

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there are 4 CA BOND EXP. PLAN sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SP, SAC. - PONDS & DITCH	401 "I" STREET	WNW 1/2 - 1 (0.907 mi.)	BA369	452
SP, SAC.-LOCOMOTIVE WORKS	401 "I" STREET	WNW 1/2 - 1 (0.907 mi.)	BA370	452
SP, SAC. - BATTERY SHOP	401 "I" STREET	WNW 1/2 - 1 (0.907 mi.)	BA371	453
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ORCHARD SUPPLY COMPANY	1731 17TH STREET	S 1/2 - 1 (0.776 mi.)	AZ360	393

CA HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the CA HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 32 CA HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION OIL SS #5382	1600 H ST	SE 0 - 1/8 (0.002 mi.)	A6	10
WAREHOUSE (VACANT)	1630 I ST	SSE 0 - 1/8 (0.086 mi.)	D43	31
DOWNTOWN FORD SALES INC	525 16TH ST	NNE 1/8 - 1/4 (0.153 mi.)	J87	58
PACIFIC BELL	1407 J ST (AKA: 1423)	SW 1/8 - 1/4 (0.183 mi.)	T146	99
GRADY'S COPY SHOP	1228 H ST	WNW 1/8 - 1/4 (0.214 mi.)	Y183	122
LOOMIS ARMORED CAR SERVICE	1717 E ST	NE 1/8 - 1/4 (0.222 mi.)	Z198	133
CVS/PHARMACY #3945	1701 K ST	S 1/4 - 1/2 (0.253 mi.)	282	175
THE SALVATION ARMY - ADULT REH	1615 D ST	NNE 1/4 - 1/2 (0.279 mi.)	AJ285	183
GEDSCH COMPANY	522 NO. 12TH ST.	NW 1/4 - 1/2 (0.290 mi.)	AH289	188
FOOD & LIQUOR #142 (AKA FORMER	809 20TH ST	ESE 1/4 - 1/2 (0.311 mi.)	293	193
PETRO-SPEED/BC STOCKING	324 16TH	NNE 1/4 - 1/2 (0.311 mi.)	AJ295	208
THRIFTY CAR RENTAL	500 12TH ST	NW 1/4 - 1/2 (0.315 mi.)	AM296	208
LAWRENCE MAYFLOWER MOVING	908914 20TH	SE 1/4 - 1/2 (0.316 mi.)	AN298	214
FORMER CHEVRON #3-0205	1530 L ST	SSW 1/4 - 1/2 (0.322 mi.)	AK308	241
VICTORY BUILDING MAINTENANCE	1814 D ST	NE 1/4 - 1/2 (0.327 mi.)	311	250
ELKS BUILDING *	921 11TH ST	W 1/4 - 1/2 (0.330 mi.)	AL312	253
MOHAWK SS (FORMER) TEXACO	424 12TH ST	NNW 1/4 - 1/2 (0.340 mi.)	AM313	255
PUBLIC STORAGE FACILITY	1625 C ST N	NNE 1/4 - 1/2 (0.359 mi.)	AR314	257
MID-TOWN OFFICE CENTER	2020 J ST	SE 1/4 - 1/2 (0.362 mi.)	318	262
BLUE DIAMOND GROWERS	1802 C ST	NE 1/4 - 1/2 (0.394 mi.)	AT324	285
CHEVRON #9-0915 (FORMER)	901 10TH	W 1/4 - 1/2 (0.402 mi.)	327	293
AUTO GLASS DIST	515 10TH ST N	NW 1/4 - 1/2 (0.424 mi.)	329	298
HOBBS BATTERY (SULLIVAN PROPER	1206 C ST	NNW 1/4 - 1/2 (0.426 mi.)	AU330	299
TARNASKY RESIDENCE	630 22ND ST	E 1/4 - 1/2 (0.462 mi.)	334	305
CITY HALL	915 I ST	W 1/4 - 1/2 (0.466 mi.)	336	308
CRYSTAL CREAM AND BUTTER CO	1013 D ST	NW 1/4 - 1/2 (0.475 mi.)	AW337	310
CHEVRON #94176	1601 J ST	W 1/4 - 1/2 (0.479 mi.)	339	323
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
STATE CAPITOL	1300 CAPITOL MALL	SW 1/4 - 1/2 (0.362 mi.)	317	261
HARV'S CAR WASH	1901 L ST	SSE 1/4 - 1/2 (0.391 mi.)	AS320	266
CAPITOL PLAZA RETIREMENT	1812-1820 L ST	SSE 1/4 - 1/2 (0.394 mi.)	321	270

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HAYATT REGENCY HOTEL	1205 L	WSW 1/4 - 1/2 (0.398 mi.)	325	290
CITY SUDS	1830 L ST	SSE 1/4 - 1/2 (0.407 mi.)	AS328	296

CA Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the CA Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 CA Notify 65 site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BURNETT & SONS	11TH & C STREETS	NNW 1/2 - 1 (0.509 mi.)	342	333

CA Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the CA Sacramento Co. ML list, as provided by EDR, and dated 02/06/2014 has revealed that there are 83 CA Sacramento Co. ML sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNION OIL SS #5382	1600 H ST	SE 0 - 1/8 (0.002 mi.)	A6	10
RED D TRANSMISSION	701 16TH ST	NE 0 - 1/8 (0.039 mi.)	C15	18
MASTER RADIATOR WORKS	817 16TH ST	SSE 0 - 1/8 (0.042 mi.)	D18	19
A TO Z AUTOMOTIVE ENGINEERING	821 16TH ST	SSE 0 - 1/8 (0.044 mi.)	D21	20
SACRAMENTO THEATRE COMPANY	1419 H ST	W 0 - 1/8 (0.061 mi.)	E22	21
SIERRA RESEARCH	1521 I ST	SSW 0 - 1/8 (0.080 mi.)	F28	24
AMERICAN SPEEDY PRINTING	900 15TH ST	SW 0 - 1/8 (0.082 mi.)	F33	26
CARON'S SERVICE CENTER	1616 I ST	S 0 - 1/8 (0.083 mi.)	D39	28
16TH STREET AUTO BODY	614 16TH ST	NE 0 - 1/8 (0.084 mi.)	C41	30
GAMERA CENTER	904 15TH ST	SW 0 - 1/8 (0.085 mi.)	F42	31
A TO Z AUTOMOTIVE ENGINEERING	615 15TH ST	N 0 - 1/8 (0.087 mi.)	B46	36
BLACK ROCK AUTOMOTIVE	615 15TH ST STE A	N 0 - 1/8 (0.087 mi.)	B48	38
BULETTI BROTHERS	826 14TH ST	WSW 0 - 1/8 (0.091 mi.)	E49	38
MARGARET REYNOLDS	1431 I ST	WSW 0 - 1/8 (0.095 mi.)	G51	40
SACRAMENTO AUTO SUPPLY CO	1411 I ST	WSW 0 - 1/8 (0.105 mi.)	G56	42
CULVER ARMATURE & MOTOR	1723 I ST	SSE 0 - 1/8 (0.110 mi.)	K61	44
TONIS AUTOMOTIVE	1715 I ST	SSE 0 - 1/8 (0.110 mi.)	K62	44
PAPERPLUS	1705 I ST	SSE 0 - 1/8 (0.110 mi.)	K63	45
GRAND AUTO	1400 I ST	WSW 0 - 1/8 (0.112 mi.)	G64	45
DEPT OF JUSTICE	1800 I ST	SSE 0 - 1/8 (0.112 mi.)	K65	46
D & D QUICK MART	1605 F ST	NE 0 - 1/8 (0.119 mi.)	J69	48
FRANK'S QUALITY MEATS, INC	1609 F ST	NE 0 - 1/8 (0.120 mi.)	J70	48
BIKER'S DREAM	1715 I ST	SSE 0 - 1/8 (0.121 mi.)	K71	49
WOOD BROTHERS	550 N 16TH ST	NNE 1/8 - 1/4 (0.141 mi.)	J77	51
CAPITOL BUILDERS HARDWARE	1831 F ST	ENE 1/8 - 1/4 (0.144 mi.)	M79	52
NATIONAL CAR RENTAL	526 16TH ST	NNE 1/8 - 1/4 (0.152 mi.)	J81	53
STATE OF CALIFORNIA ATTORNEY G	1300 I ST	WSW 1/8 - 1/4 (0.153 mi.)	N86	58
DOWNTOWN FORD SALES INC	525 16TH ST	NNE 1/8 - 1/4 (0.153 mi.)	J87	58
CITY FIRE DEPT STATION #2	1325 I ST	WSW 1/8 - 1/4 (0.154 mi.)	N88	62
HELVETIA AUTO SALES	520 N 16TH ST	NNE 1/8 - 1/4 (0.154 mi.)	J89	62
MEMORIAL AUDITORIUM	1515 J ST	SSW 1/8 - 1/4 (0.160 mi.)	Q96	68
SACRAMENTO MEMORIAL AUDITORIUM	1515 J ST	SSW 1/8 - 1/4 (0.160 mi.)	Q98	69

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
VACANT	1615 J ST	S 1/8 - 1/4 (0.160 mi.)	P99	70
JAPANESE IMPORTS, INC	1617 J ST	S 1/8 - 1/4 (0.160 mi.)	P100	71
MIKUNI JAPANESE RESTAURANT & S	1530 J ST 150	SSW 1/8 - 1/4 (0.162 mi.)	Q104	73
NEILLO CHEVROLET	1530 J ST	SSW 1/8 - 1/4 (0.162 mi.)	Q105	74
T-MOBILE WEST CORP (SC060094)	1713 J ST	SSE 1/8 - 1/4 (0.168 mi.)	S114	78
PACIFIC BELL UAO10 SCRMCA04	1423 J ST	SW 1/8 - 1/4 (0.171 mi.)	T115	79
AT&T CORP - CAK138	1421 J ST	SW 1/8 - 1/4 (0.171 mi.)	T117	81
AT & T MOBILITY - SAC MSC (336	1407 J ST	SW 1/8 - 1/4 (0.175 mi.)	T125	86
AT&T CALIFORNIA - UA010	1407 J ST STE 100	SW 1/8 - 1/4 (0.175 mi.)	T126	86
THE CAMERA CENTER	1408 J ST	SW 1/8 - 1/4 (0.176 mi.)	T132	91
THOMAS CHEVROLET & GEO	1701 J ST	SSE 1/8 - 1/4 (0.177 mi.)	S134	92
METRO ELECTRONICS	1831 J ST	SSE 1/8 - 1/4 (0.177 mi.)	S135	92
CENTRAL AUTO SUPPLY	1830 J ST	SSE 1/8 - 1/4 (0.179 mi.)	S138	95
THE EFFORT MEDICAL CLINIC	1820 J ST	SSE 1/8 - 1/4 (0.179 mi.)	S139	95
NEWBERT HARDWARE	1700 J ST	SSE 1/8 - 1/4 (0.179 mi.)	S140	97
AT&T MOBILITY	1030 15TH ST	SSW 1/8 - 1/4 (0.184 mi.)	Q147	101
CAPITOL ACE HARDWARE	1815 I ST	SE 1/8 - 1/4 (0.186 mi.)	O149	102
LITHOGRAPHICS	1616 J ST	S 1/8 - 1/4 (0.188 mi.)	P151	103
RIVER CITY TIRES	500 16TH ST	NNE 1/8 - 1/4 (0.196 mi.)	R155	105
EXHIBIT BUILDING	1350 J ST	WSW 1/8 - 1/4 (0.198 mi.)	V157	106
SACRAMENTO TRANSAXLE	1609 E ST	NNE 1/8 - 1/4 (0.199 mi.)	R159	107
THE SCOOT SHOP	1619 E ST STE A	NNE 1/8 - 1/4 (0.199 mi.)	R160	107
ROSTEN REMODELING, INC	1619 E ST STE B	NNE 1/8 - 1/4 (0.199 mi.)	R161	108
CARONS SERVICE CENTER	1619 E ST	NNE 1/8 - 1/4 (0.199 mi.)	R163	109
HERTZ LOCAL EDITION	1025 16TH ST	S 1/8 - 1/4 (0.205 mi.)	P167	111
FIRE STATION #2	1229 I ST	W 1/8 - 1/4 (0.206 mi.)	W171	113
SACRAMENTO CITY FIRE STATION 2	1229 I ST	W 1/8 - 1/4 (0.206 mi.)	W172	116
1325 J ST, LLC	1325 J ST STE 100	WSW 1/8 - 1/4 (0.209 mi.)	V174	119
GRADY'S COPY SHOP	1228 H ST	WNW 1/8 - 1/4 (0.214 mi.)	Y183	122
LEVEL (3) COMMUNICATIONS, LLC	1303 J ST 300& 700	WSW 1/8 - 1/4 (0.215 mi.)	V184	125
E STREET AUTOMOTIVE	1811 E ST	NE 1/8 - 1/4 (0.216 mi.)	Z186	127
ERNEST C. FARRINGTON JR.	1731 E ST	NE 1/8 - 1/4 (0.216 mi.)	Z187	127
MODINE WESTERN, INC	460 N 16TH ST	NNE 1/8 - 1/4 (0.218 mi.)	AA192	130
LOOMIS ARMORED CAR SERVICE	1717 E ST	NE 1/8 - 1/4 (0.222 mi.)	Z198	133
WASHINGTON ELEMENTARY	520 18TH ST	ENE 1/8 - 1/4 (0.222 mi.)	X199	135
SIERRA RESEARCH INC	1801 J ST	SSE 1/8 - 1/4 (0.224 mi.)	AB203	136
MIDAS SHOP	431 16TH ST	NNE 1/8 - 1/4 (0.231 mi.)	AA210	139
LPA	1215 G ST	WNW 1/8 - 1/4 (0.233 mi.)	AC211	139
STAFFORD KING & ASSOCIATES	1210 G ST	WNW 1/8 - 1/4 (0.237 mi.)	AC213	140
K STREET AUTOMOTIVE	1621 K ST	S 1/8 - 1/4 (0.241 mi.)	AD218	142
TELE PACIFIC COMMUNICATIONS	1515 K ST STE 100	SSW 1/8 - 1/4 (0.241 mi.)	AE220	143
SHRA	1612 K ST	S 1/8 - 1/4 (0.242 mi.)	AD228	146
SACRAMENTO METROPOLITAN AIR QU	777 12TH ST 3RD FLR	WNW 1/8 - 1/4 (0.244 mi.)	Y244	154
PORTER-SPRAGUE, INC	722 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	Y255	157
MONIGHAN & ASSOCIATES	710 12TH ST	WNW 1/8 - 1/4 (0.246 mi.)	AC260	161
SAC CITY EMP RETIREMENT	1414 K ST	SW 1/8 - 1/4 (0.246 mi.)	AE262	162
JOHN ELLIS AND SON	910 19TH ST	SE 1/8 - 1/4 (0.246 mi.)	AG264	163
HAYES BROS. COLLISION REPAIR	1911 G ST	E 1/8 - 1/4 (0.248 mi.)	AF270	167
COLLISION SPECIALTIES	1911 G ST	E 1/8 - 1/4 (0.248 mi.)	AF272	168
MADE IN JAPAN/MADE IN AMERICA	1200 I ST	W 1/8 - 1/4 (0.248 mi.)	W276	171
ATLAS BLUE PRINT	915 19TH ST	SE 1/8 - 1/4 (0.249 mi.)	AG279	174

EXECUTIVE SUMMARY

CA HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the CA HWP list, as provided by EDR, and dated 05/27/2014 has revealed that there are 2 CA HWP sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>CALTRANS HEADQUARTERS</i>	<i>1120 N ST</i>	<i>SW 1/2 - 1 (0.570 mi.)</i>	<i>347</i>	<i>363</i>
<i>UNION PACIFIC SACRAMENTO YARD</i>	<i>501 JIBBOOM ST</i>	<i>WNW 1/2 - 1 (0.919 mi.)</i>	<i>BC378</i>	<i>662</i>

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UP, DOWNTOWN SAC - MANUFACTURE	400 I STREET	WNW 1/2 - 1 (0.859 mi.)	BA364	434

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 120 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SCOTTY S SHELL SERVICE	1531 H ST	0 - 1/8 (0.000 mi.)	A5	9
CHUCK S FLYING A SERVICE	1601 H ST	SE 0 - 1/8 (0.002 mi.)	A10	16
SHELL SERVICE INC	1600 H ST	SE 0 - 1/8 (0.003 mi.)	A11	16
MIDAS MUFFLER SHOP OF @SACRAME	701 16TH ST	NE 0 - 1/8 (0.039 mi.)	C14	17
SCHEFFLER W A REAR	1609 G ST	ENE 0 - 1/8 (0.041 mi.)	C17	18
Not reported	817 16TH ST	SSE 0 - 1/8 (0.042 mi.)	D19	19
Not reported	821 16TH ST	SSE 0 - 1/8 (0.044 mi.)	D20	19
SIGNAL OIL CO	631 16TH ST	NE 0 - 1/8 (0.073 mi.)	C24	23
VIRGILIO C C	717 14TH ST	WNW 0 - 1/8 (0.075 mi.)	E25	23

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DON S RICHFIELD SERVICE	1531 I STREET	SSW 0 - 1/8 (0.080 mi.)	F27	24
LEMERY BESSIE MRS	1515 I ST	SSW 0 - 1/8 (0.080 mi.)	F29	25
VALENTINE L G	1601 I ST	S 0 - 1/8 (0.080 mi.)	D30	25
WINTER MOTOR CO	1611 I STREET	S 0 - 1/8 (0.080 mi.)	D31	25
EDDIE S UNION SERVICE	1600 I ST	S 0 - 1/8 (0.082 mi.)	D32	26
FRANCISCO J E REAR	1608 I ST	S 0 - 1/8 (0.082 mi.)	D34	26
HOLTERLING TEXACO SERV	901 16TH ST	S 0 - 1/8 (0.082 mi.)	D35	27
ARNOLD E G REAR	1610 I ST	S 0 - 1/8 (0.082 mi.)	D36	27
ELM GARAGE	1612 I ST	S 0 - 1/8 (0.083 mi.)	D37	27
VOGEL CHEVROLET CO	1616 I ST	S 0 - 1/8 (0.083 mi.)	D38	28
SIXTEENTH ST GARAGE	614 16TH ST	NE 0 - 1/8 (0.084 mi.)	C40	29
SEHESTEDT & KEEFE	903 16TH ST	S 0 - 1/8 (0.087 mi.)	D44	33
CAPITAL RADIATOR & FENDER WORK	615 15TH ST	N 0 - 1/8 (0.087 mi.)	B47	37
AUTO BRAKE & MUFFLER	1431 I STREET	WSW 0 - 1/8 (0.095 mi.)	G50	39
BENDIX HOWARD	1415 I ST	WSW 0 - 1/8 (0.103 mi.)	G52	41
CRAWFORD-HOOKE CO	911 16TH ST	S 0 - 1/8 (0.105 mi.)	I54	41
STEWART-WARNER SPEEDOMETER SER	1411 I ST	WSW 0 - 1/8 (0.105 mi.)	G55	42
SHIELDS ALDEN D CO	913 16TH ST	S 0 - 1/8 (0.109 mi.)	I59	43
FRAGO J J REAR	1520 F ST	N 0 - 1/8 (0.117 mi.)	L67	47
OXFORD MOTORS BODY SHOP	1727 I ST	SE 1/8 - 1/4 (0.128 mi.)	K74	50
FISHER E C REAR	1314 H ST	WNW 1/8 - 1/4 (0.139 mi.)	76	51
Not reported	1780 F ST	ENE 1/8 - 1/4 (0.142 mi.)	M78	52
A-1 DOUGLAS	526 16TH ST	NNE 1/8 - 1/4 (0.152 mi.)	J83	57
UNIVERSAL MOTOR CO THE	1300 I ST	WSW 1/8 - 1/4 (0.153 mi.)	N85	57
ACME RADIATOR SERVICE	1323 I ST	WSW 1/8 - 1/4 (0.155 mi.)	N90	63
Not reported	1617 J ST	S 1/8 - 1/4 (0.160 mi.)	P101	73
SIMMONS G B	1516 J ST	SSW 1/8 - 1/4 (0.162 mi.)	Q103	73
WINTER VOLVO	1530 J ST	SSW 1/8 - 1/4 (0.162 mi.)	Q106	75
MC FARLANE JOHN	1629 J ST	S 1/8 - 1/4 (0.162 mi.)	P108	77
BRYANT MOTOR CO	1510 J ST	SSW 1/8 - 1/4 (0.162 mi.)	Q109	77
BOYLE J C	1631 J ST	S 1/8 - 1/4 (0.162 mi.)	P110	77
DAY AND NIGHT GARAGE	1311 I ST	W 1/8 - 1/4 (0.163 mi.)	N111	78
BAILEY GEO REAR	1307 I ST	W 1/8 - 1/4 (0.166 mi.)	N112	78
WEATHERWAX R A	1015 15TH ST	SSW 1/8 - 1/4 (0.173 mi.)	Q119	82
CRAIG G B	900 13TH ST	W 1/8 - 1/4 (0.173 mi.)	N120	83
LOW GLENN	1418 J ST	SW 1/8 - 1/4 (0.173 mi.)	T121	83
Not reported	1407 J ST	SW 1/8 - 1/4 (0.175 mi.)	T127	87
FISHER L D REAR	1410 J ST	SW 1/8 - 1/4 (0.176 mi.)	T129	88
RUSSELL BROS & KOPP	917 13TH ST	WSW 1/8 - 1/4 (0.177 mi.)	N136	93
PERKINS C A	916 13TH ST	WSW 1/8 - 1/4 (0.179 mi.)	N141	97
SWANEY R R	920 13TH ST	WSW 1/8 - 1/4 (0.180 mi.)	N143	98
DANA MOTORS	1707 J ST	SSE 1/8 - 1/4 (0.181 mi.)	S145	99
CAHALAN A G	1731 J ST	SSE 1/8 - 1/4 (0.190 mi.)	S152	104
SORENSEN T S	1017 17TH ST	SSE 1/8 - 1/4 (0.191 mi.)	S153	105
TURCOTTE J E	500 16TH ST	NNE 1/8 - 1/4 (0.196 mi.)	R154	105
HALL J H	1830 I ST	SE 1/8 - 1/4 (0.197 mi.)	O156	106
HOFF S PAUL AUTOMOTIVE CENTER	1605 E ST	NNE 1/8 - 1/4 (0.198 mi.)	R158	107
Not reported	1619 E ST	NNE 1/8 - 1/4 (0.199 mi.)	R162	108
FRAGO J J	1621 E ST	NNE 1/8 - 1/4 (0.199 mi.)	R164	110
STANDARD STATIONS INC	1531 E ST	NNE 1/8 - 1/4 (0.199 mi.)	165	110
DOWNTOWN GULF STATION	1025 16TH ST	S 1/8 - 1/4 (0.205 mi.)	P168	112
SACRAMENTO COUNTY GARAGE	1414 E ST	N 1/8 - 1/4 (0.206 mi.)	169	112
BENEDIX HOWARD	1327 J ST	WSW 1/8 - 1/4 (0.207 mi.)	V173	118
BOWMAN CARRIAGE CO	1221 I ST	W 1/8 - 1/4 (0.210 mi.)	W177	120
MAHAN BROS	1318 J ST	WSW 1/8 - 1/4 (0.212 mi.)	V179	121
VARGAS R R REAR	1230 H ST	WNW 1/8 - 1/4 (0.212 mi.)	Y180	121

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BENEDIX H F	1215 I ST	W 1/8 - 1/4 (0.213 mi.)	W181	121
CLARK-BEAMER CO	1225 H ST	WNW 1/8 - 1/4 (0.218 mi.)	Y189	129
Not reported	460 N 16TH ST	NNE 1/8 - 1/4 (0.218 mi.)	AA190	129
Not reported	460 16TH ST	NNE 1/8 - 1/4 (0.218 mi.)	AA191	129
ALLEN G E	1205 I ST	W 1/8 - 1/4 (0.219 mi.)	W193	131
MAHAN BROS GARAGE	1300 J ST	WSW 1/8 - 1/4 (0.220 mi.)	V194	131
STANDARD OIL CO OF CALIFORNIA	1220 H ST TEL	WNW 1/8 - 1/4 (0.221 mi.)	Y196	132
KISBEY R H	1009 13TH ST	WSW 1/8 - 1/4 (0.223 mi.)	V202	136
REEDER S WELDING WORKS AND MAC	1015 13TH ST	WSW 1/8 - 1/4 (0.225 mi.)	V204	137
GALYEAN & DUNCAN REAR	1808 J ST	SSE 1/8 - 1/4 (0.230 mi.)	AB207	138
Not reported	431 16TH ST	NNE 1/8 - 1/4 (0.231 mi.)	AA209	138
DA ROZA D R	430 16TH ST	NNE 1/8 - 1/4 (0.233 mi.)	AA212	140
LUND H A	1210 G ST	WNW 1/8 - 1/4 (0.237 mi.)	AC214	141
BROWN D H	1601 K ST	S 1/8 - 1/4 (0.240 mi.)	AD215	141
CARROLL BROS	1605 K ST	S 1/8 - 1/4 (0.240 mi.)	AD216	142
GAMBOA S BODY & FRAME	1621 K STREET	S 1/8 - 1/4 (0.241 mi.)	AD219	143
CENTRAL TRANSMISSION SUPPLY IN	1830 J STREET	SSE 1/8 - 1/4 (0.241 mi.)	AB222	144
LUNDSTROM MOTORS	1631 K ST	S 1/8 - 1/4 (0.241 mi.)	AD223	144
OWENS M H	1604 K ST	S 1/8 - 1/4 (0.242 mi.)	AD224	145
PORTER-SPRAGUE CO	718 12TH AVE	WNW 1/8 - 1/4 (0.242 mi.)	Y225	145
PORTER-SPRAGUE CO	716 12TH AVE	WNW 1/8 - 1/4 (0.242 mi.)	Y226	145
PORTER-SPRAGUE CO	722 12TH AVE	WNW 1/8 - 1/4 (0.242 mi.)	Y227	145
LEMKA C G REAR	614 19TH ST	E 1/8 - 1/4 (0.242 mi.)	AF230	147
WEST COAST TRANSMISSION SERVIC	1616 K STREET	S 1/8 - 1/4 (0.242 mi.)	AD231	147
MILLER AUTOMOBILE CO	1520 K ST	SSW 1/8 - 1/4 (0.242 mi.)	AE232	147
STRAWDERMAN L J	1512 K ST	SSW 1/8 - 1/4 (0.242 mi.)	AE233	148
PORTER-SPRAGUE CO	720 12TH AVE	WNW 1/8 - 1/4 (0.242 mi.)	Y234	148
ARNOLD E G	1508 K ST	SSW 1/8 - 1/4 (0.242 mi.)	AE235	148
PORTER-SPRAGUE CO	721 12TH AVE	WNW 1/8 - 1/4 (0.242 mi.)	AC236	148
PORTER-SPRAGUE CO	719 12TH AVE	WNW 1/8 - 1/4 (0.243 mi.)	AC239	152
PORTER-SPRAGUE CO	717 12TH AVE	WNW 1/8 - 1/4 (0.243 mi.)	AC240	152
SACRAMENTO SUPER SERVICE INC	1630 K ST	S 1/8 - 1/4 (0.243 mi.)	AD241	152
HUBACHER CADILLAC INC	1500 K ST	SSW 1/8 - 1/4 (0.243 mi.)	AE242	153
BOYD & FREDRICKSON	801 12TH ST	WNW 1/8 - 1/4 (0.244 mi.)	Y243	153
KEEGAN J E	1431 K ST	SSW 1/8 - 1/4 (0.244 mi.)	AE245	154
WESTLAKE & HOWE	727 12TH ST	WNW 1/8 - 1/4 (0.244 mi.)	AC246	154
PORTER-SPRAGUE CO	721 12TH ST	WNW 1/8 - 1/4 (0.244 mi.)	AC247	155
PORTER-SPRAGUE CO	719 12TH ST	WNW 1/8 - 1/4 (0.244 mi.)	AC248	155
PORTER-SPRAGUE CO	717 12TH ST	WNW 1/8 - 1/4 (0.244 mi.)	AC249	155
PALACE GARAGE	715 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	AC250	155
AUTOMOTIVE SERVICE CO	711 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	AC251	156
PORTER-SPRAGUE CO	718 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	Y252	156
PORTER-SPRAGUE CO	716 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	AC253	156
PORTER-SPRAGUE CO	720 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	Y254	157
PORTER & SPRAGUE	722 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	Y256	158
TRANSMISSION FACTORY THE	728 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	Y258	161
BAKER LEO	712 12TH ST	WNW 1/8 - 1/4 (0.245 mi.)	AC259	161
STEVENSON G R	1422 K ST	SSW 1/8 - 1/4 (0.246 mi.)	AE261	162
Not reported	910 19TH ST	SE 1/8 - 1/4 (0.246 mi.)	AG267	166
LUNDLEE G T CO	815 12TH ST	W 1/8 - 1/4 (0.248 mi.)	269	167
GUNTHER S COLLISION SERVICE	1911 G STREET	E 1/8 - 1/4 (0.248 mi.)	AF271	168
DREW J H	1201 I ST	W 1/8 - 1/4 (0.248 mi.)	W274	170
SCHWARTZ JEAN	700 12TH ST	WNW 1/8 - 1/4 (0.248 mi.)	AC275	171
Not reported	1200 I ST	W 1/8 - 1/4 (0.248 mi.)	W277	174
COFFING C M	1317 K ST	SW 1/8 - 1/4 (0.250 mi.)	AI280	175

EXECUTIVE SUMMARY

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 39 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

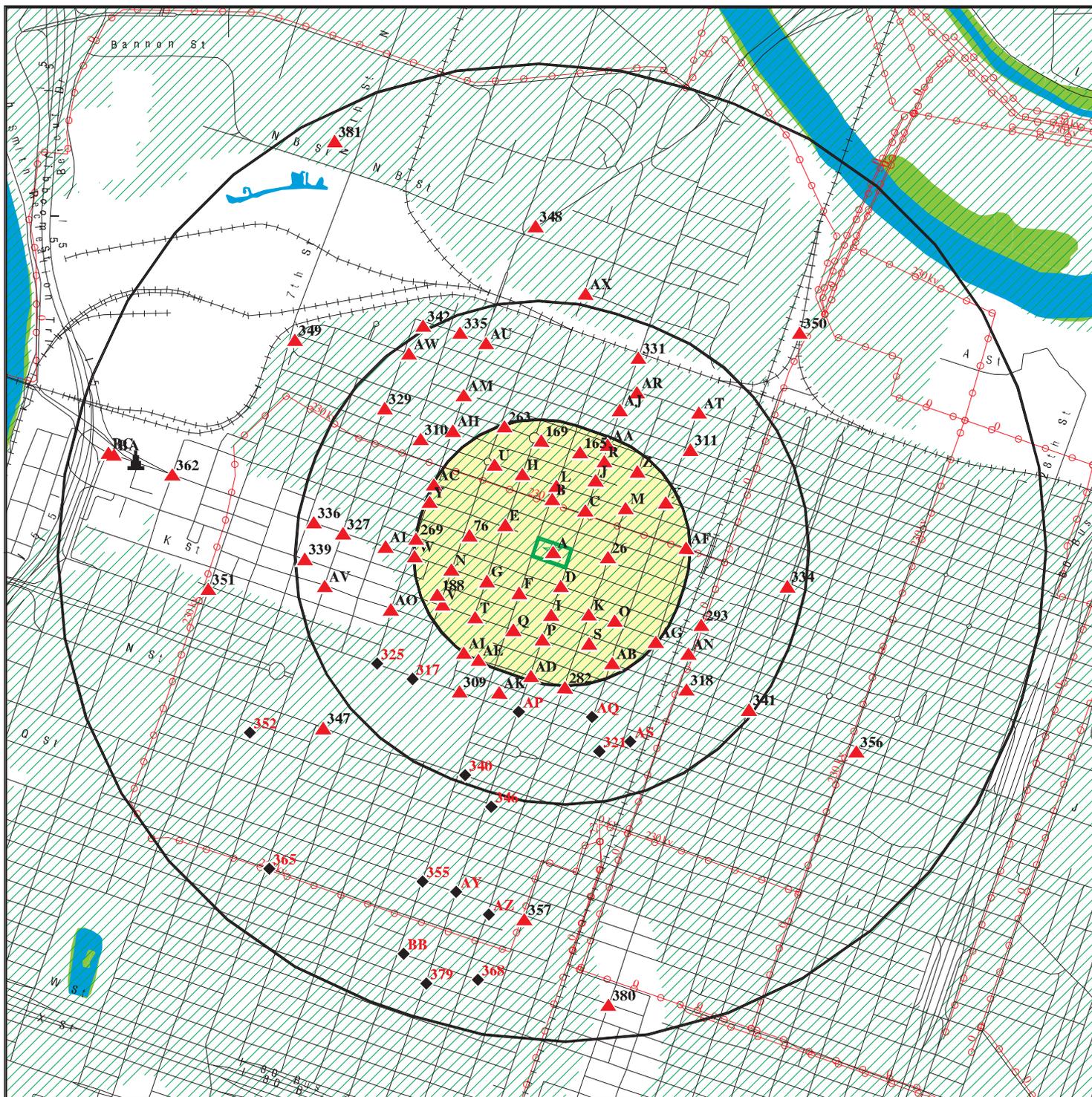
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WESTINGHOUSE LAUNDROMAT	1500 G ST	NNW 0 - 1/8 (0.037 mi.)	B12	16
DODGE JOEY	1520 G ST	N 0 - 1/8 (0.037 mi.)	B13	17
LANDRETH W O	815 16TH ST	SSE 0 - 1/8 (0.040 mi.)	D16	18
MAMMAY LAUNDRY & DRY CLEANERS	714 17TH ST	E 0 - 1/8 (0.079 mi.)	26	24
HARTSFIELD R D	627 14TH ST	NNW 0 - 1/8 (0.103 mi.)	H53	41
AH LUN	1406 I ST	WSW 0 - 1/8 (0.108 mi.)	G57	42
STERLING W R	605 16TH ST	NE 0 - 1/8 (0.109 mi.)	J58	43
EYE STREET LAUNDRY & CLEANERS	1403 I STREET	WSW 0 - 1/8 (0.109 mi.)	G60	43
LOY JUE LAUNDRY	601 15TH ST	N 0 - 1/8 (0.116 mi.)	L66	47
DEDELOW HERMAN	1603 F ST	NE 0 - 1/8 (0.119 mi.)	J68	48
COIN-O-MATIC LAUNDRY	1631 F STREET	NE 0 - 1/8 (0.123 mi.)	J72	50
EYE STREET LAUNDERETTE	1723 I STREET	SE 1/8 - 1/4 (0.126 mi.)	K73	50
HAULENBECK M E MRS	1400 F ST	NNW 1/8 - 1/4 (0.139 mi.)	H75	51
BOYLE BROS	1330 I ST	WSW 1/8 - 1/4 (0.151 mi.)	N80	53
TILLET G E	1725 I ST	SE 1/8 - 1/4 (0.153 mi.)	O84	57
BALL ALPHONSE	1603 J ST	S 1/8 - 1/4 (0.159 mi.)	P93	66
FICETTI DRY CLEANING CO	1605 J ST	S 1/8 - 1/4 (0.159 mi.)	P94	66
LOWES LAUNDRY	1604 J ST	S 1/8 - 1/4 (0.161 mi.)	P102	73
BEN S LAUNDRY	511 16TH ST	NNE 1/8 - 1/4 (0.166 mi.)	R113	78
Not reported	1423 J ST	SW 1/8 - 1/4 (0.171 mi.)	T116	81
YEE THOS	1426 J ST	SW 1/8 - 1/4 (0.172 mi.)	T118	82
UNIVERSAL CLEANERS	1416 J ST	SW 1/8 - 1/4 (0.174 mi.)	T122	83
LAYBOURN C V	1405 J ST	SW 1/8 - 1/4 (0.176 mi.)	T130	89
COIN-O-MATIC SPEEDWASH	608 13TH ST	NW 1/8 - 1/4 (0.180 mi.)	U142	98
HING S LAUNDRY & DRY CLEANERS	1310 F STREET	NNW 1/8 - 1/4 (0.181 mi.)	U144	99
ANDERSON H M	1723 J ST	SSE 1/8 - 1/4 (0.187 mi.)	S150	103
I STREET LAUNDRY & CLEANERS	1224 I ST	W 1/8 - 1/4 (0.209 mi.)	W176	120
SPOONER W A REAR	1819 F ST	ENE 1/8 - 1/4 (0.210 mi.)	X178	121
TILLET R J	1311 J ST	WSW 1/8 - 1/4 (0.214 mi.)	V182	122
THOMAS F CO	1223 J ST	WSW 1/8 - 1/4 (0.216 mi.)	188	128
QUALITY LAUNDRY OFFICE	1007 13TH PHONE MAIN	WSW 1/8 - 1/4 (0.222 mi.)	V197	132
QUALITY CLEANERS & DYERS	1007 13TH ST	WSW 1/8 - 1/4 (0.223 mi.)	V200	135
ONE HOUR MARTINIZING	1009 13TH ST	WSW 1/8 - 1/4 (0.223 mi.)	V201	136
KIM S LAUNDRY & DRY CLEANING	1219 G STREET	WNW 1/8 - 1/4 (0.229 mi.)	AC206	137
KIM S LAUNDRY & DRY CLEANING R	1217 G STREET	WNW 1/8 - 1/4 (0.231 mi.)	AC208	138
MITCHELL-SMITH CO	1612 K ST	S 1/8 - 1/4 (0.242 mi.)	AD229	146
SUN WING CLEANERS & HAND LAUND	1311 E STREET	NNW 1/8 - 1/4 (0.246 mi.)	263	163
NEW HOP LAUNDRY	811 12TH ST	W 1/8 - 1/4 (0.247 mi.)	Y268	166
VOGUE CLEANERS	1226 F STREET	NW 1/8 - 1/4 (0.248 mi.)	AH278	174

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 33 records.

<u>Site Name</u>	<u>Database(s)</u>
CAMP CONNELL	CA FID UST, CA SWEEPS UST
TAFT	CA SWEEPS UST
TOPAZ INSPECTION STATION	CA SWEEPS UST
BOULEVARD	CA HIST UST
BUELLTON	CA HIST UST
COLFAX	CA HIST UST
PACHECO PASS	CA HIST UST
GRIZZLY CREEK REDWOODS S.P.	CA HIST UST
MAYS-TAHOE VLY	CA HIST UST
KEEN CAMP	CA HIST UST
MIDWAY	CA HIST UST
CHESTER	CA HIST UST
BUCKHORN	CA HIST UST
ADIN	CA HIST UST
DESERT CENTER	CA HIST UST
INYOKERN	CA HIST UST
LEBEC	CA HIST UST
PLATINA	CA HIST UST
SIMMLER	CA HIST UST
LANGBARN	CA HIST UST
TAHOE CITY	CA HIST UST
PINEHURST	CA HIST UST
TOPAZ INSPECTION STATION	CA HIST UST
TRINITY CENTER	CA HIST UST
RIVERSIDE ELEVATORS	CA AST
CADA PROPERTIES SITE 1	US BROWNFIELDS
CADA PROPERTIES R STREET	US BROWNFIELDS
SACRAMENTO-YOLO MOSQUITO & VECTOR	CA SLIC
BARNETT INC	CA Sacramento Co. ML
TESTING PURPOSES ONLY	CA Sacramento Co. ML
CAMPUS RECYCLING CENTER	CA Sacramento Co. CS
CALTRANS	CA Sacramento Co. CS
PRICE CO/DWR - RETENTION POND	CA Sacramento Co. CS

overview MAP - 4016952.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Areas of Concern

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

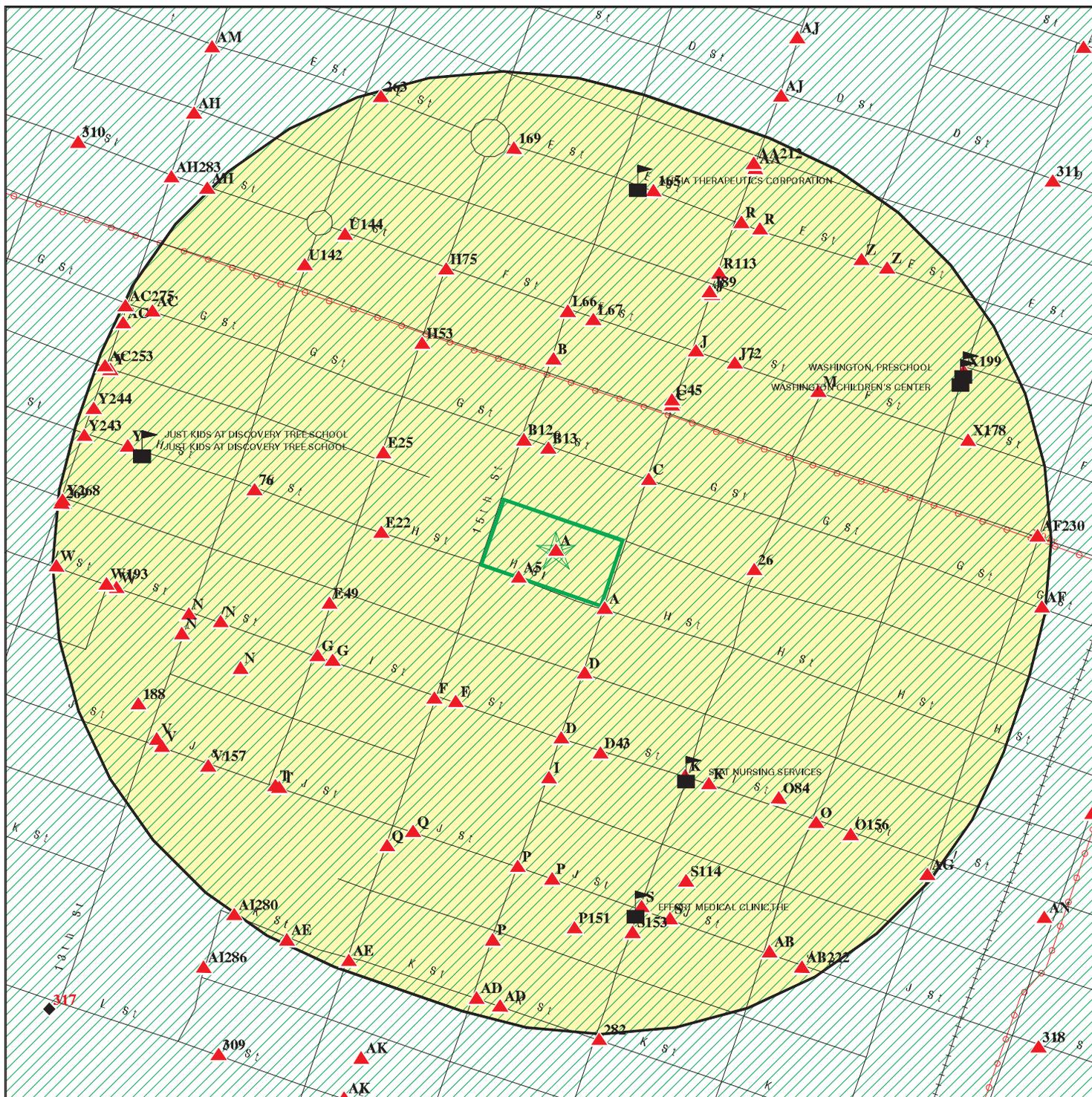
National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Clarion Hotel Site
 ADDRESS: 700 16th Street
 Sacramento CA 95814
 LAT/LONG: 38.5808 / 121.4848

CLIENT: Analytical Environmental Serv.
 CONTACT: Alison Middlekauff
 INQUIRY #: 4016952.2s
 DATE: July 24, 2014 4:08 pm

detail MAP - 4016952.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Power transmission lines
-  Oil & Gas pipelines from USGS
-  100-year flood zone
-  500-year flood zone
-  Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p>SITE NAME: Clarion Hotel Site ADDRESS: 700 16th Street Sacramento CA 95814 LAT/LONG: 38.5808 / 121.4848</p>	<p>CLIENT: Analytical Environmental Serv. CONTACT: Alison Middlekauff INQUIRY #: 4016952.2s DATE: July 24, 2014 4:10 pm</p>
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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	1	NR	1
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	4	NR	NR	NR	5
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
CA RESPONSE	1.000		0	0	0	9	NR	9
<i>State- and tribal - equivalent CERCLIS</i>								
CA ENVIROSTOR	1.000		0	0	4	26	NR	30
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
CA SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
CA LUST	0.500		3	7	37	NR	NR	47

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA SLIC	0.500		0	1	5	NR	NR	6
CA Sacramento Co. CS	0.500		4	8	36	NR	NR	48
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
CA UST	0.250		0	4	NR	NR	NR	4
CA AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
CA VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	3	NR	NR	3
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
CA SWRCY	0.500		0	0	0	NR	NR	0
CA HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
CA WMUDS/SWAT	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CA HIST Cal-Sites	1.000		0	0	0	10	NR	10
CA SCH	0.250		0	0	NR	NR	NR	0
CA Toxic Pits	1.000		0	0	0	0	NR	0
CA CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		1	13	NR	NR	NR	14
CA HIST UST	0.250		2	11	NR	NR	NR	13
CA SWEEPS UST	0.250		1	13	NR	NR	NR	14
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
CA LIENS	TP		NR	NR	NR	NR	NR	0
CA DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CA CHMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA LDS	TP		NR	NR	NR	NR	NR	0
CA MCS	TP		NR	NR	NR	NR	NR	0
CA SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	2	NR	NR	NR	2
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	4	NR	4
CA NPDES	TP		NR	NR	NR	NR	NR	0
CA UIC	TP		NR	NR	NR	NR	NR	0
CA Cortese	0.500		0	0	0	NR	NR	0
CA HIST CORTESE	0.500		2	4	26	NR	NR	32
CA CUPA Listings	0.250		0	0	NR	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
CA Notify 65	1.000		0	0	0	1	NR	1
CA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA WIP	0.250		0	0	NR	NR	NR	0
CA ENF	TP		NR	NR	NR	NR	NR	0
CA Sacramento Co. ML	0.250	1	23	60	NR	NR	NR	84
CA HAZNET	TP	2	NR	NR	NR	NR	NR	2
CA EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
CA HWT	0.250		0	0	NR	NR	NR	0
CA PROC	0.500		0	0	0	NR	NR	0
CA Financial Assurance	TP		NR	NR	NR	NR	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
CA MWMP	0.250		0	0	NR	NR	NR	0
CA HWP	1.000		0	0	0	2	NR	2
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	1	NR	1
EDR US Hist Auto Stat	0.250	1	28	92	NR	NR	NR	121
EDR US Hist Cleaners	0.250		11	28	NR	NR	NR	39

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CA RGA LUST	TP		NR	NR	NR	NR	NR	0
CA RGA LF	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

ATTACHMENT 9

PRELIMINARY SEWER STUDY

PRELIMINARY SEWER STUDY

For

**PACIFICA SENIOR ARTS
COMMUNITY AT MIDTOWN**

**700 16TH Street
Sacramento, California 95315**

April 30, 2015



**Prepared by,
RFE Engineering, Inc.
2260 Douglas Blvd., Suite 160
Roseville, CA 95661
Ph 916-772-7800
RFE Project No. 21364**



TABLE OF CONTENTS

A. PROJECT DESCRIPTION 4

B. SEWAGE FLOWS 4

C. SEWAGE CAPACITY 5



APPENDIX

APPENDIX A.....ALTA SURVEY MAP

APPENDIX BSEWER CAPACITY CALCULATIONS BASED ON NEW PROJECT

A. PROJECT DESCRIPTION

The old Clarion Hotel site located at 700 16th Street (APN 002-0172-024-0000). The site is located in the City of Sacramento. The site location is shown on in Appendix A. The alley way on the north side of the hotel serves as the utility corridor to provide water, sewer, storm drain, gas, telephone and power facilities.

B. SEWAGE FLOWS

Existing Use: Clarion Hotel, 106 rooms

Equivalent Single Family Dwelling Unit (ESD); 1 ESD = 400 gallons per day (gpd)

For Hotels 0.3 ESD/sleeping room

Average Flow = 106 rooms x 0.3 ESD/room = 31.8 ESD

31.8 ESD x 400 gpd/ESD = **12,720 gpd**

Proposed Use: Independent Living and Assisted Living 141-units (160 resident count)

Per City of Sacramento Use 0.5 ESD/unit.

141 x 0.5 ESD/bed = 70.5 ESDs.

Proposed Use: Commercial Use (First Floor)

Per City of Sacramento, use 0.2 ESD/1,000 SF

5 Commercial Spaces totaling 12,097 SF

12,097 SF x 0.2 ESD/1,000 SF = 2.4 ESDs.

Total Proposed Use: Independent Living and Assisted Living and Commercial Use (First Floor)

70.5 ESDs + 2.4 ESDs = 72.9 ESDs.

72.9 ESDs x 400 gallons/day per ESD = 29,160 gallons per day.

C. SEWAGE CAPACITY

Alley way between G and H Streets and 15th and 16th Streets

Current 8" combination sewer line in alley is at a slope of 0.50%. Per RFE survey.

Per Appendix D, 8" CSS is at **33% of capacity** with new project.

Alley way between G and H Streets and 16th and 17th Streets

Current 12" combination sewer line in alley is at a slope of 0.26%. Per City Asbuilts.

Cumulative flows from 15th Street to 17th Street. See attached Appendix D for Sewer Shed boundaries.

Per Appendix B, 12" CSS is at **20% of capacity** with new project.



APPENDIX A

ALTA Survey Map

A.L.T.A. / A.C.S.M. Land Title Survey Clarion Hotel Property

Lots 1 through 8 in the block bounded by "G", "H", 15th and 16th Streets together with Lot 7 and Lot 8 in the block bounded by "G", "H", 16th and 17th Streets City of Sacramento, State of California

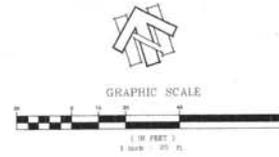
Cooper, Thorpe and Associates, Inc.
3023 Master Drive
Rancho Cordova, CA 95742
(916) 638-0919



Block Breakdown Diagram
NOT TO SCALE



Vicinity Map



Surveyor's Certificate

Date: 08-17-99

This survey is made for the benefit of:

Golden State Mortgage Company, a New York limited partnership, for itself and as agent for one or more banks, financial institutions or other parties, and their respective successors and assigns, ARROW Group, L.P., a Delaware limited partnership, for itself and as agent for one or more other banks, financial institutions or other parties, and their respective successors and assigns, Fidelity National Title Insurance Company, Fidelity National Title Insurance Company of New York, Fidelity Agency of New York, Inc., Chicago Title Insurance Company, Lawyers Title Insurance Corporation and Agent Title Management, a Delaware corporation.

I, Kevin A. Neasey, Professional Land Surveyor do hereby certify to the attached parties, as of the date set forth above that I have made a careful survey of a tract of land described as follows:

- PARCEL ONE: The West 50 feet of Lot 8 in the block bounded by 16th and 17th and G and H Streets of the City of Sacramento, according to the official plat thereof.
- PARCEL TWO: The West 1/4 of Lot 7 and the East 35 feet of Lot 8 in block bounded by 16th and 17th and G and H Streets of the City of Sacramento, according to the official plat thereof.
- PARCEL THREE: The East 60 feet of Lot 7, in the block bounded by 16th and 17th Street and G and H Streets of the City of Sacramento, according to the map or plan thereof.
- PARCEL FOUR: Lots 5 and 6 in the block bounded by G and H, 15th and 16th Streets of the City of Sacramento, according to the map or plan thereof.
- PARCEL FIVE: Lots 7 and 8, in the block bounded by G and H, 15th and 16th Streets of the City of Sacramento, according to the map or plan thereof.
- PARCEL SIX: Lots 1,2,3 and the East one-half of Lot 4, in the block bounded by G and H, 15th and 16th Streets of the City of Sacramento, according to the map or plan thereof.
- PARCEL SEVEN: The West one-half of Lot 4, in the block bounded by G and H, 15th and 16th Streets of the City of Sacramento, according to the map or plan thereof.

I further certify that:

- The accompanying survey was made on the ground and correctly shows the location of all buildings, structures and other improvements situated on the above premises; that there are no visible encroachments on the subject property or upon adjacent lots situated and properly except as shown hereon.
- This map of plot and the survey on which it is based were made in accordance with laws regarding surveying in the State of California, and with the Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and ACSM in 1997 and meets the accuracy requirements (as adopted by ALTA and ACSM and in effect on the date of this certification) on an urban survey, as defined therein, with accuracy and precision requirements modified to meet current usage and their tolerance requirements of the state in which the subject property is located, and including Items 2,2.3,4.5,7,8,9,10,11,12,14,15 and 16 in Table A contained therein.
- The property described herein is the same as the property described in Fidelity National Title Company Commitment No.24122-C with an effective date of April 28,1999, 07:30 A.M., and that of amendments, corrections and restrictions referenced in said Title Commitment or approved from a physical inspection of the site or otherwise shown to me to have been published herein or otherwise noted as to their effect on the subject property.
- Said described property is located within an area having a Zone Designation APP (suit to be changed to Zone M) by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Map No. 06028R 0021 E, with a date of identification of November 15, 1989, for the City of Sacramento, in Sacramento County, State of California, which is the current Flood Insurance Rate Map for the community in which said premises is situated. It is noted that the Sacramento, CA Community is undergoing flood designation revisions and inquiries should be directed to the local flood control district or FEMA for specific information.
- The property has direct access to 15th, 16th, G and H Streets, dedicated public streets or highways.
- The total number of existing parking spaces on the subject property is 234, including 3 designated handicap spaces. There are no loading docks located on the property.
- Except as shown, or visible utilizing viewing the subject property either through existing public streets, alleys and or easements of record.
- The property described as Parcels One, Two, Three and Parcels Four and Five and Parcel Six and Seven are contiguous and contain no gaps, spaces or overlaps, except as noted herein.



Cooper, Thorpe and Associates, Inc.
3023 Master Drive
Rancho Cordova, CA 95742
(916) 638-0919
(916) 638-2479 Fax

Existing 8" combination sewer/storm drain pipe

728 16th St
Holiday Inn Express

Sewer service location from HIE to Sewer Main unknown

Sewer Cleanout Location in alleyway (Clarion)

Clarion Hotel
700 16th St

Sewer Sump and Pump in Basement (Clarion)

Basis of Bearings

All bearings shown herein are referenced to the centerline of 15th Street, as evidenced by City of Sacramento files, the bearing of which is assumed to be N. 50°00'00" E.

Legend:

- DIMENSION POINT, NOTHING FOUND OR SET
- FOUND MONUMENT AS NOTED
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- TELEPHONE MANHOLE
- DRAIN INLET
- STREET LIGHT/PARKING LIGHT
- POWER POLE
- POST INDICATOR VALVE
- SIGN
- EXISTING FENCE
- CONCRETE
- UTILITY PULLBOX
- TRAFFIC SIGNAL LIGHT
- PARKING METER

Zoning Data

Zone C-2 (General Commercial)
Setbacks:
Front = 25'
Side/Street Side = 5/5'
Rear = 0' (None)

Sanitary Sewer Exhibit



APPENDIX B

Sewer Capacity Calculations Based on New Project



Sewer Calculations - Proposed

JUNCTION INLET	AREA (SF)	Area (ac)	Apt Units per AC	Apt Units	ESD/1,000 SF	ESD/apt	Rooms	ESD/sleeping room	ESD	400 gpd/ESD (GPD)	Q (cfs)	I/I 500 gpd/inch/mile (gpd)	I/I (cfs)	Average Flow (cfs)	Peaking Factor	Design Flow (cfs)	CUM Q % OF CAP. (%)	PIPE SIZE (IN)	PIPE AREA (FT^2)	WETTED PERIM. (FT)	HYDR. RADIUS (FT)	PIPE SLOPE (FT/FT)	MANNING'S "n"	FULL FLOW CAPACITY (CFS)
Holiday Inn Express							132	0.30	39.60															
New Seniors Project-IL units							160	0.50	80.00															
New Seniors Project-Commercial									2.40															
16th/Government Alley									122.00	48,800	0.0755	242	0.0004	0.0759	4	0.30	36%	8	0.349	2.094	0.167	0.50%	0.013	0.85
002-174-003/023 C-2	7,000		0.20	0.20	0.20				1.40	560.00	0.0009						0%	12	0.785	3.142	0.250	0.26%	0.013	1.82
002-174-024 parking lot	25,060										0.0000											0.26%		
002-009-012, 021 R-3A		0.647	36	23.29		0.75			17.47	6,988	0.0108						1%	12	0.785	3.142	0.250	0.26%	0.013	1.8
002-174-013, 016, 022 R-3A		0.588	36	21.17		0.75			15.88	6,350	0.0098						1%	12	0.785	3.142	0.250	0.26%	0.013	1.8
Subtotal 16th-17th										13,898	0.0215	364	0.0006	0.0221	4	0.09	1%	12	0.785	3.142	0.250	0.26%	0.013	1.8
Sum Total 15th-17th																0.39	22%	12	0.785	3.142	0.250	0.26%	0.013	1.8
I/I = 500 gpd/inch/mile																								
Between 15th and 16th 8" x 500 gpd x 320/5280 = 242 gpd																								
Between 16th and 17th 12" x 500 x 320/5280 = 364 gpd																								



8" CSS s = 0.50%

12" CSS s = 0.26%

APN 002-174-003, 023
C-2 Zoning
7,000 sf retail

APN
002-174-009-012,
021
R-3A Zoning
36 units/ac
0.146 ac

132 unit Holiday Inn Express

Proposed Project
141 Independent Living Units

700 16th St

APN 002-174-024
C-2 Zoning
Parking Lot

APN 002-174-013, 016, 022
R-3A Zoning
36 units/ac
0.59 ac

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1993

38°34'50.76" N 121°29'01.98" W elev 72 ft eye alt 1592 ft