

City of Santa Monica

Santa Monica Palisades Bluffs Improvement Project

Final
**Initial Study/
Mitigated Negative
Declaration**

SCH# 2007021027

July 2007

Santa Monica Palisades Bluffs Improvement Project

Final **Initial Study/Mitigated Negative Declaration** SCH# 2007021027

Prepared by:

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July 2007

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1.0 INTRODUCTION

This Initial Study and Mitigated Negative Declaration (IS/MND) addresses the potential environmental effects of the Santa Monica Palisades Bluffs Improvement project located along 1.6 miles of coastal bluffs adjacent to and above the Pacific Coast Highway (PCH, HWY-1) below the length of Palisades Park. The proposed project involves the implementation of various stabilization and dewatering measures in order to decrease the rate of gradual deterioration of the Santa Monica Palisades Bluffs and resulting rim recession along Santa Monica Palisades Park.

Section 2.0, *Project Description*, of this document provides a detailed description of the proposed project. Section 3.0, *Environmental Checklist*, provides an analysis of the potential environmental impacts of the project and includes mitigation measures when impacts are potentially significant. Section 4.0, *References*, includes references and identifies the preparers of this report.

1.1 LEGAL AUTHORITY AND FINDINGS

This IS/MND has been prepared in accordance with the California Environmental Quality Act (CEQA). The lead agency for the proposed project is the City of Santa Monica Planning and Community Development Department. In accordance with Section 15070 of the *State of California Environmental Quality Act Guidelines*, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- (b) *The initial study identifies potentially significant effects, but:*
 - (1) *Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - (2) *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

Based on the Initial Study, it has been determined that the project would not have a significant impact on the environment provided that the mitigation measures identified herein are implemented. Mitigation measures are needed when direct impacts resulting from the project exceed project significance thresholds. Thus, mitigation measures are not identified unless they are required to lessen impacts caused directly by the project. Mitigation measures have been provided for effects related traffic and noise within the vicinity of the project site during project implementation. In addition, mitigation measures have been included in order to reduce visual impacts from groutcrete application; avoid disturbance of nesting, roosting, or foraging wildlife;



avoid disturbance of subsurface archaeological or paleontological resources that might exist onsite, procedure for reducing risk from potential subsurface soil contaminates.

1.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

None of the environmental factors identified below would be significantly affected by this project provided that the mitigation measures identified herein are implemented. The discussion in Section 3.0 provides additional detail to substantiate these findings. The following issues are evaluated herein:

- *Aesthetics*
- *Agricultural Resources*
- *Air Quality*
- *Biological Resources*
- *Construction Effects*
- *Cultural Resources*
- *Economic and Social Impacts*
- *Geology and Soils*
- *Hazards and Hazardous Materials*
- *Hydrology and Water Quality*
- *Land Use and Planning*
- *Energy and Mineral Resources*
- *Neighborhood Effects*
- *Noise*
- *Population and Housing*
- *Public Services*
- *Recreation*
- *Shadows*
- *Transportation/Traffic*
- *Utilities and Service Systems*

1.3 USE OF THIS DOCUMENT

This Initial Study/Mitigated Negative Declaration is intended to provide information regarding the environmental consequences associated with the proposed Santa Monica Palisades Bluffs Improvement Project. The City of Santa Monica, other reviewing agencies, and the general public will use this document in their evaluation of the proposed project.

1.4 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

The *CEQA Guidelines* require the identification of “lead,” “responsible” and “trustee” agencies. The City of Santa Monica Civil Engineering and Architecture Department is the lead agency for the preparation of this Initial Study/Mitigated Negative Declaration and will be responsible for decisions that could allow development of the proposed project.

Section 15381 of the State CEQA Guidelines defines a “responsible agency” as:

“[A] public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For purposes of CEQA, responsible agencies include all public agencies other than the lead agency that have discretionary approval authority over the project.”

The following are responsible agencies for the proposed project:

- *California Department of Transportation (Caltrans)*
- *Federal Highway Administration (FHWA)*
- *Los Angeles Regional Water Quality Control Board*



According to the *CEQA Guidelines*, a “Trustee Agency” means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. The following are considered trustee agencies for this project:

- *California Coastal Commission*
- *California Office of Historic Preservation*
- *California State Parks*



1.5 DETERMINATION

On the basis of this initial evaluation:

| | |
|---|----------|
| I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. | |
| I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the attached Initial Study have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared. | X |
| I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. | |
| I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. | |
| I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (1) have been analyzed in an earlier EIR pursuant to applicable standards and (2) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. | |

Spiros Lazaris, P.E.
 Civil Engineer
 City of Santa Monica EPWM
 Civil Engineering & Architecture Department

Date

Pursuant to section 21082.1 of the California Environmental Quality Act, the City of Santa Monica Civil Engineering & Architecture Department has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of the Civil Engineering & Architecture Department. The Civil Engineering & Architecture Department as the lead agency also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.



2.0 PROJECT DESCRIPTION

This section provides a detailed description of the proposed project, including the project applicant, project location, a description of the major project characteristics, project objectives, and a list of discretionary approvals needed for project approval.

2.1 PROJECT APPLICANT

City of Santa Monica EPWM
Civil Engineering & Architecture Department
1918 Main Street, Suite 300
Santa Monica, CA 90405

2.2 PROJECT LOCATION

The project site is located in the western portion of Los Angeles County, in the City of Santa Monica. Figure 2-1 illustrates the location of the project site in its regional context. The proposed project site, the Santa Monica Palisades Bluffs (Bluffs), form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH), a portion of which is also referred to as Palisades Beach Road. The project area extends 1.6 miles along PCH, from the McClure Tunnel to the northwestern limit of the City, as shown in Figure 2-2. The project site is regionally accessible from Interstate 10 (the Santa Monica Freeway) and State Route 1 (Pacific Coast Highway). Figure 2-3 and 2-4 display an aerial view of the project site showing the Area of Potential Effect (APE).

2.4 PURPOSE AND NEED FOR THE PROJECT

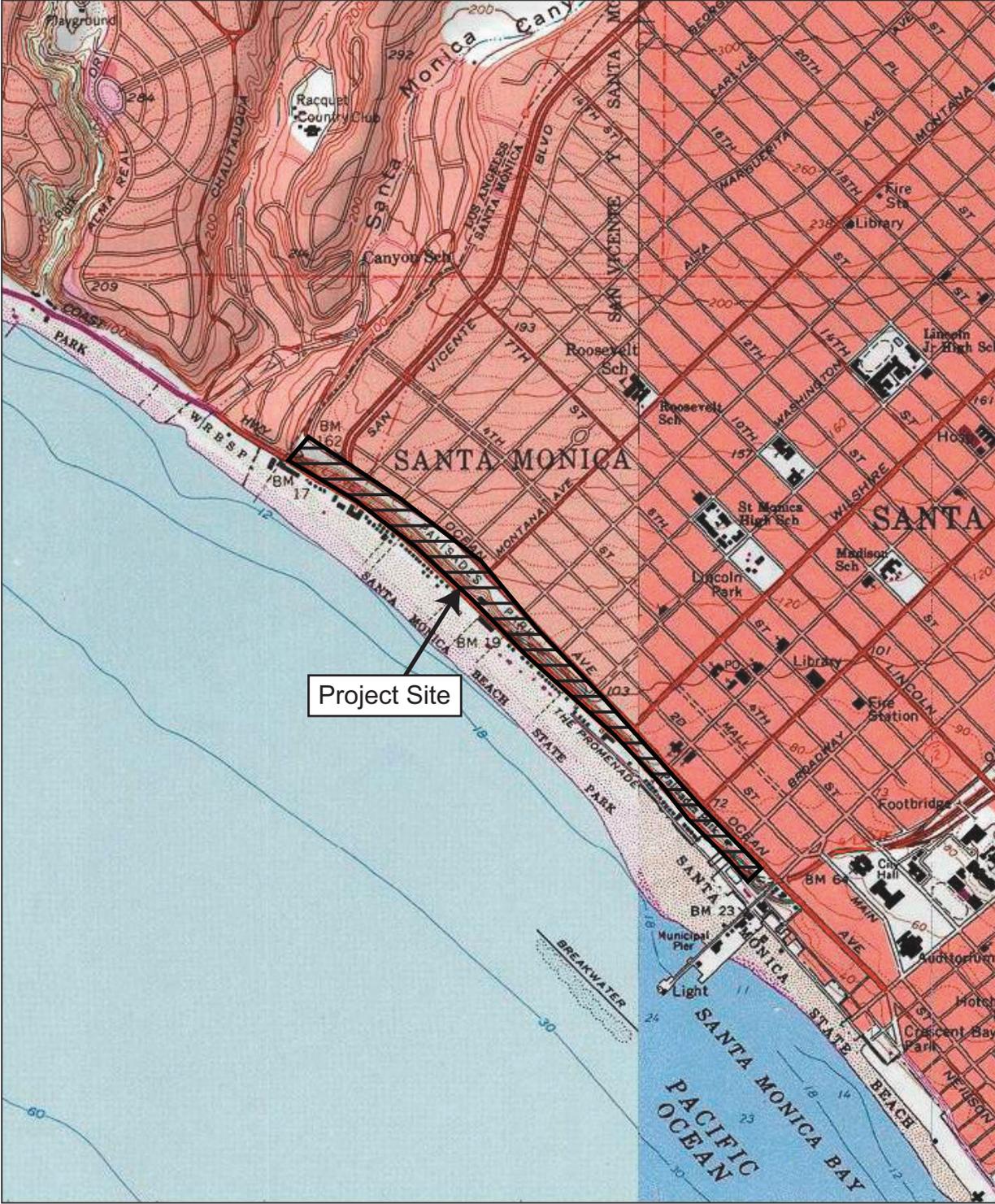
2.4.1 Existing Site Characteristics

The Bluffs extend along PCH from the McClure Tunnel to the northwest boundary of the City of Santa Monica, with heights ranging from about 50 to 150 feet. Situated on top of the steep escarpment, overlooking the PCH and the Pacific Ocean is Palisades Park, which has been an important recreational and visual resource for the City for over 100 years.

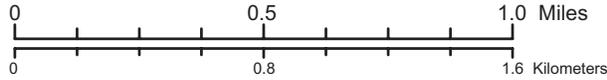
The Bluffs consist of relatively fragile Pleistocene age alluvial deposits with near-vertical slopes and peninsular soil columns. Along the toe of the Bluffs, a densely vegetated, gently sloped mass of loose soil and debris (talus) from the Bluffs has accumulated, particularly northwest of the California Avenue Incline. Over the years, the Bluffs have steadily receded due to natural causes including weathering, surface erosion during heavy rainstorms, localized slope failures caused by groundwater seepage, earthquake shaking, and animal burrows. Some of the slope failures have been large enough for slide debris to cover several traffic lanes of PCH.

Surface drainage improvements in the Park, recently undertaken by the City of Santa Monica, have been effective in reducing erosion damage from stormwater runoff, as well as limiting





Source: National Geographic TOPOI, Beverly Hills, 1995.

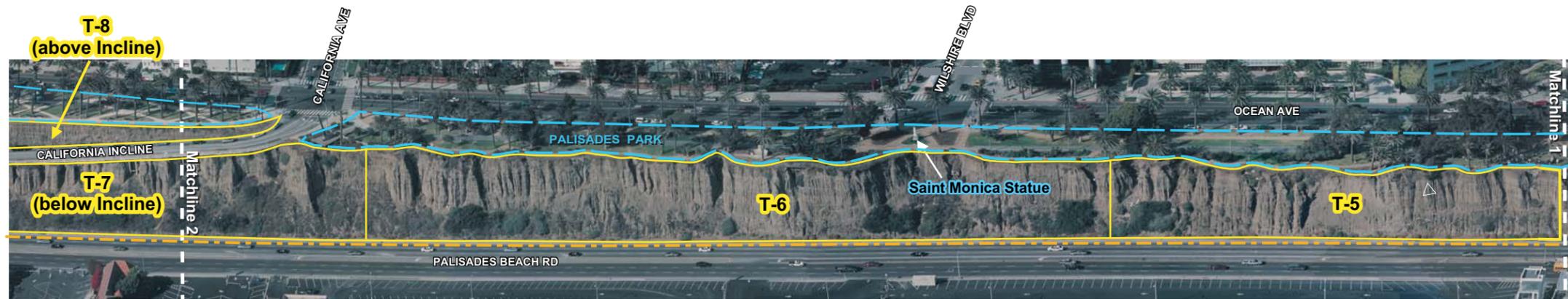


Project Location

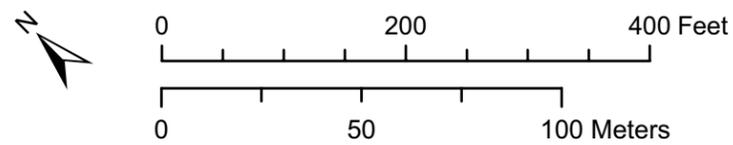
Figure 2-2

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Source: URS Corp., 2004 (aerial), Rincon Consultants, Inc., 2007.

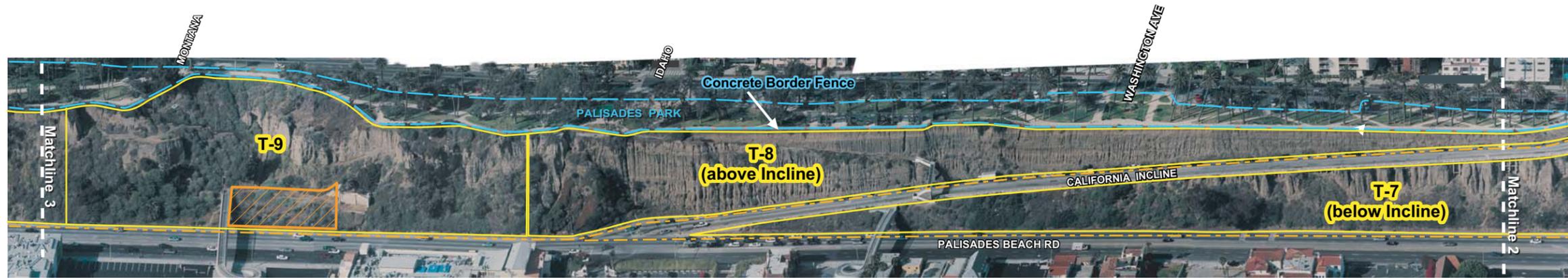


1 inch equals approximately 150 Feet
 Note: Scale is taken horizontally from street locations, and may show some distortion on the oblique view.

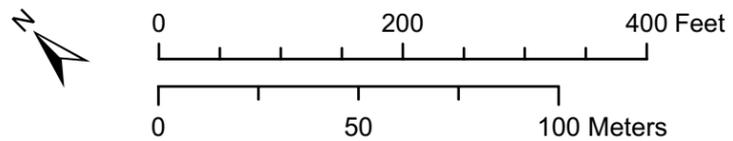
Legend

- Area of Potential Effects
- Palisades Park
- Traffic Lanes Subject to Temporary Closure
- T-1 Treatment Zone

| | |
|---------------------|------|
| Approved by: | |
| | |
| Caltrans DLAE | Date |
| | |
| Caltrans PQS\Level | Date |



Source: URS Corp., 2004 (aerial), Rincon Consultants, Inc., 2007.



1 inch equals approximately 150 Feet
 Note: Scale is taken horizontally from street locations, and may show some distortion on the oblique view.

Legend

- Area of Potential Effects
- Palisades Park
- Construction Staging Area
- Traffic Lanes Subject to Temporary Closure
- T-1 Treatment Zone

water infiltration behind the bluff face. However, other factors including groundwater seepage from more distant regional sources, animal burrows, bluff face erosion from direct impact of rainfall, and fractures created by previous rainstorms and earthquake events, continue to take their toll.

2.4.2 Project Objectives

The unique nature and topography of the Bluffs have established them as a prominent feature important to the historical development and community residents of the City. This project would decrease the rate of gradual deterioration of the Bluffs and resulting rim line recession along Santa Monica Palisades Park. The project would preserve an important recreational and visual resource that has been a prominent part of the City's development for over 100 years. Additionally, the objectives of the project include:

- Protection of public and private property above and below the Bluffs;
- Enhancement of public safety;
- Preservation of the natural appearance and unique visual character of the Bluffs;
- Improvement of traffic flow along PCH; and
- The preservation and enhancement of the Palisades Park's historical character.

2.5 PROJECT CHARACTERISTICS

The proposed project includes several techniques intended to improve the stability of the Bluffs and Palisades Park. The following description includes methods for overall bluff stability and safety, and techniques intended to individually stabilize the bluff rim, bluff face, and bluff toe, photos of which can be seen in Figure 2-5.

2.5.1 Improvement Methods for Overall Bluff Stability

Horizontal Drains or Hydraugers

Horizontal drains, or hydraugers would be installed by drilling 100 to 300 feet into the bluff from the toe. Boreholes are drilled at an angle of 5 to 20 degrees from horizontal. Then perforated pipes (usually 1 to 3 inches in diameter) are inserted to serve as drains for groundwater to dissipate by gravity flow. The collected water would be routed to stormdrain catch basins along PCH. Such systems were installed as part of the slope repair following the 1998 landslide and proved to be successful in removing excess water. The typical installation of a hydrauger is shown in Figure 2-6.

In evaluating the effectiveness of hydraugers, it is important to realize that it is not necessarily the quantity of water removed which counts. Instead, the main objective is to reduce pore water pressure within the saturated soil or rock materials. Depending on whether the permeability of these materials is low or high, such pressure reduction is accomplished by small or large volumes of flow, respectively. In low-permeability materials, such as some of the fine-grained soil formations encountered in the Santa Monica Palisades bluffs, for example, even hydraugers that are merely dripping are likely to be effective.





Photo 1 - View of bluffs looking southeast along Pacific Coast Highway.



Photo 2 - View of bluff rim recession with erosion pocket and overhanging debris.

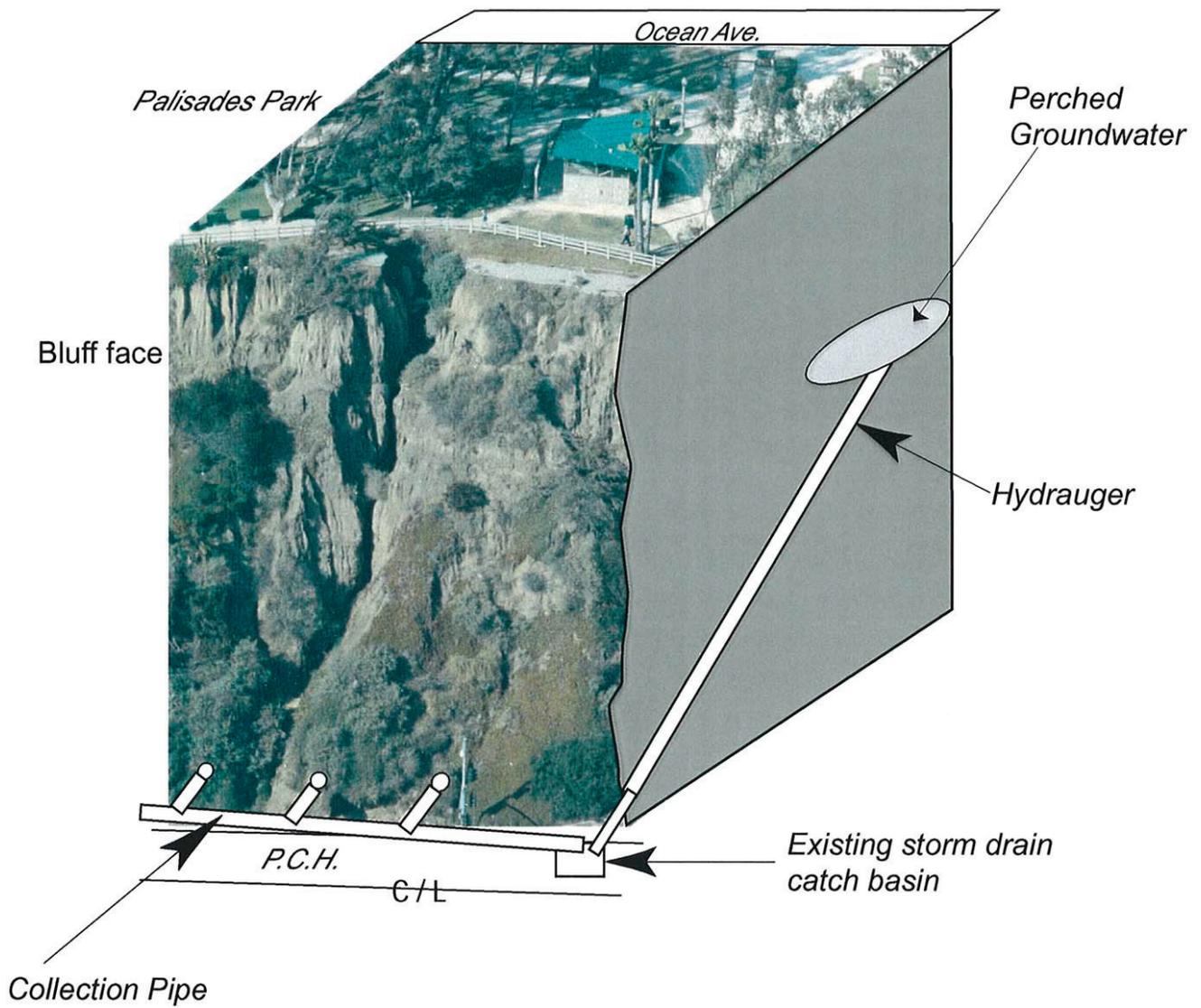


Photo 3 - View of bluffs and pedestrian bridge access near Arizona Avenue.



Photo 4 - View of typical "peninsular" bluff columns and near-erention erosion gullies.





Source: URS 6-5-2006

Illustration of Hydraugers

Figure 2-6

2.5.2. Improvement Methods for Bluff Rim

The upper surface edge, or rim area, of the Bluffs is subjected to surface erosion from stormwater runoff and direct impact from rainfall, but may also experience slope failure. The latter develops as the rim gradually deepens and/or is being undermined by the sloughing of deeper soil layers, which intersect the bluff face below the rim. The improvement measures for the bluff rim are aimed at increasing the resistance to surface erosion, as well as strengthening the soils in the upper 20 to 30 feet of the bluff face by mechanical means. As such, the improvement of the bluff rim may be accomplished by implementing a combination of some, or all, of the measures discussed below.

Surface Treatment by Chemical Grouting

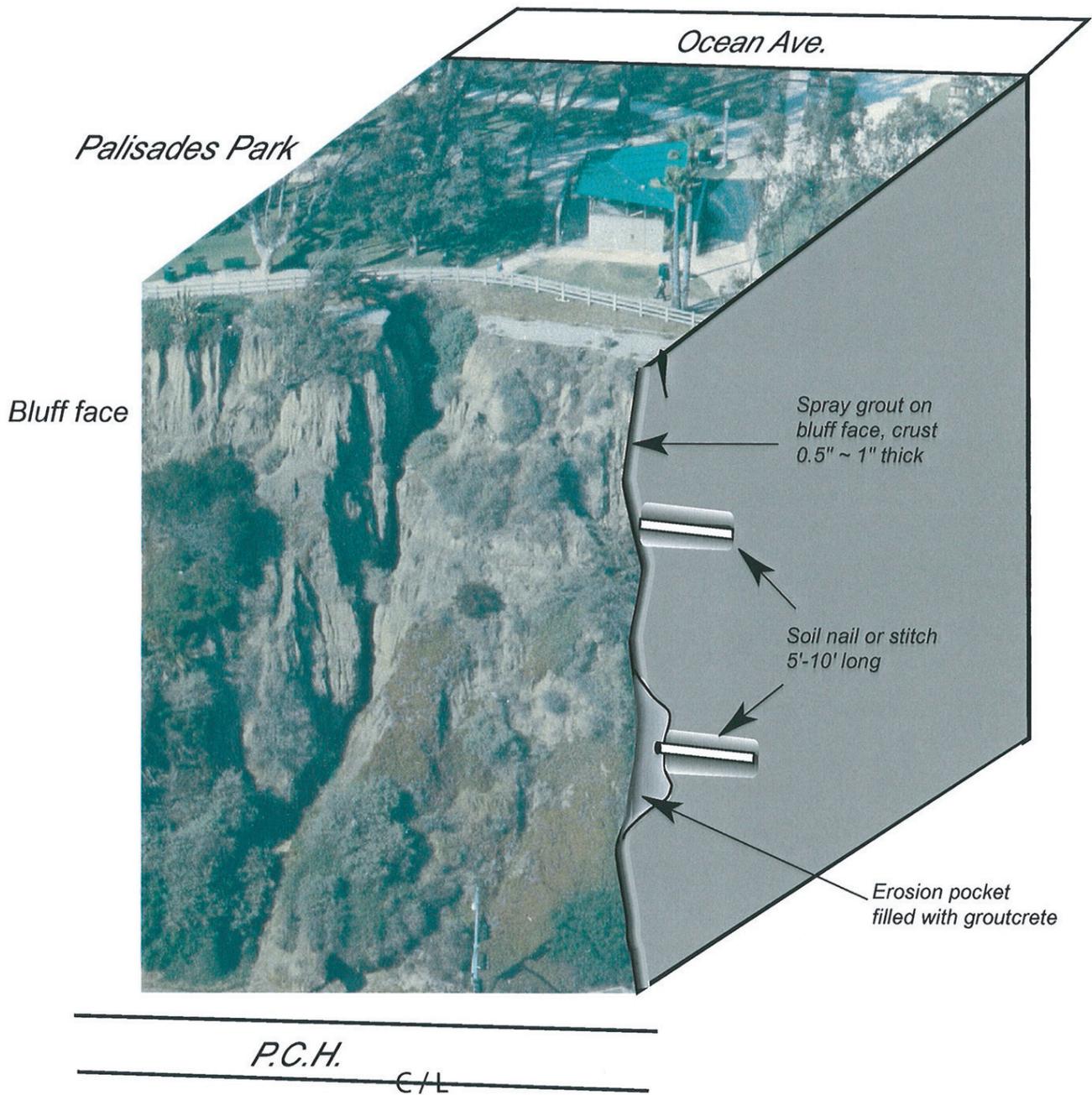
In order to increase erosion resistance of exposed surfaces along the Bluffs, including pinnacles, noses and peninsulas, a form of “spray on” chemical grouting developed for in-situ soil treatment would be used. This involves saturating a surficial soil layer with grout consisting of water-reactive polyurethane prepolymer by means of surface spray. Once sprayed on the soil surface, the grout is absorbed by capillary action as it displaces existing air or fluid in the pores of the soil and bonds to soil particles forming a thin crust a half inch to an inch thick, depending on the soil type.

In larger areas, the protective surface layer would be anchored to the underlying soil by a pattern of short soil nails, or “stitches.” The latter would consist of a pattern of perforated steel pipes, or strainer tubes, drilled or driven into the surface and grouted in place. The tubes would be cut flush with the bluff surface and patched with a mixture of natural soil and grout to restore the natural look of the surface. Additionally, short perforated moisture-relief pipes or breather tubes would be drilled or driven into the grouted surface in approximately 10-foot intervals to provide drainage for water accumulating behind the treated surface. An illustration of “spray on” grouting treatment can be seen in Figure 2-7.

Soil Nailing

Installation of soil nails involves drilling arrays of small-diameter holes in the bluff face, installing galvanized steel or fiberglass pipes, and grouting the boreholes to establish a bond between the pipes and the surrounding soil. In order to help maintain the natural appearance of the Bluff’s surface the soil nails may be installed without washers. Soil nails would be used to stabilize the Bluff’s from the toe up the bluff face to the bluff rim. Installation of the 20 to 30 foot long soil nails would occur from “cherry picker” extensions of equipment operating from PCH. The soil nails would be used in combination with the other measures to increase stability of bluff face, erosion pockets, gullies, peninsular columns, overhanging blocks and tension cracks along the entire length of the Bluffs. Illustration of soil nailing can be seen in Figure 2-8.



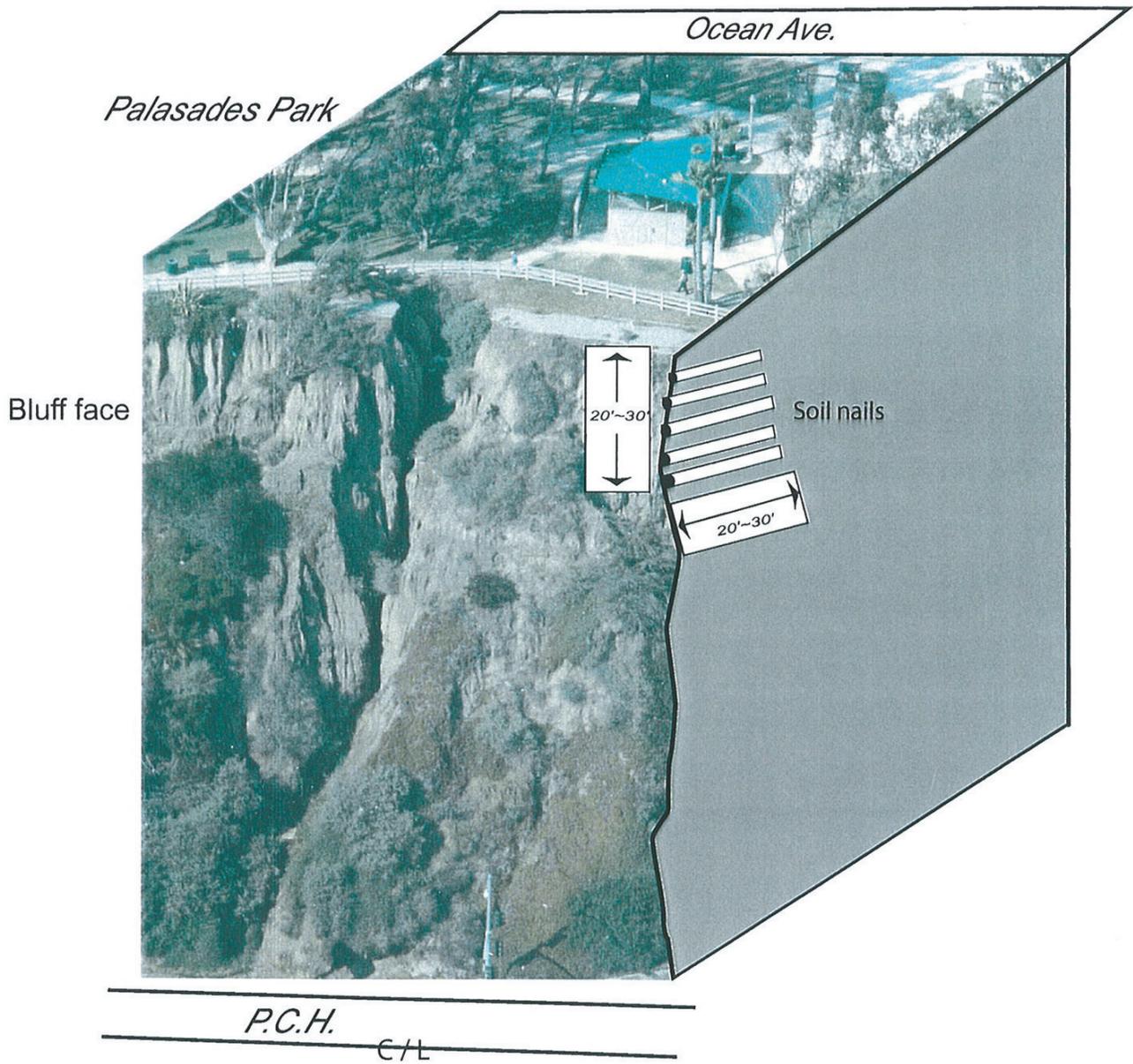


Source: URS 6-5-2006

Illustration of "Spray on" Grouting

Figure 2-7





Source: URS 6-5-2006

Illustration of Soil Nailing

Figure 2-8



2.5.3 Improvement Methods for Bluff Face

Surface Grouting and Soil Nailing

Surface grouting and soil nailing, which are described above, are also applicable for improving the stability of the bluff face.

Stabilization of Gullies

Deep gullies that pose a potential risk of undermining the Park rim would be protected from further erosion by partially filling them with “groutcrete,” a mixture of water, water-reactive polyurethane resin and native soils, designed to protect the walls and bottom of the gullies. This mixture, which would roughly match the color of the bluff face, would be applied by means of a shotcrete machine. The groutcrete would also be anchored in place by the soil nails.

Stabilization of the “Peninsular” Bluff Columns

The peninsular columns separating the near-vertical erosion gullies, arguably are the most unique features of the Bluffs. Hence, protecting these columns is an important step towards the objective of preserving the Bluffs’ visual character. As discussed previously, loss of lateral and vertical support for these columns would be included as part of the bluff improvement program. The lateral support of these columns would be improved by grouting the tension cracks and/or anchoring the columns with soil nails as discussed above.

The loss of vertical support appears to be due to enlargement of erosion pockets on the bluff face. Therefore, the erosion pockets would be filled at the base of the bluff columns with groutcrete. Short perforated pipes will be inserted and grouted before placing groutcrete, and left in place to provide support as “stitches.” In addition, “breather” tubes would be installed. The groutcrete method for Bluff face improvement is illustrated in Figures 2-9 and 2-10.

2.5.4 Improvement Methods for Bluff Toe

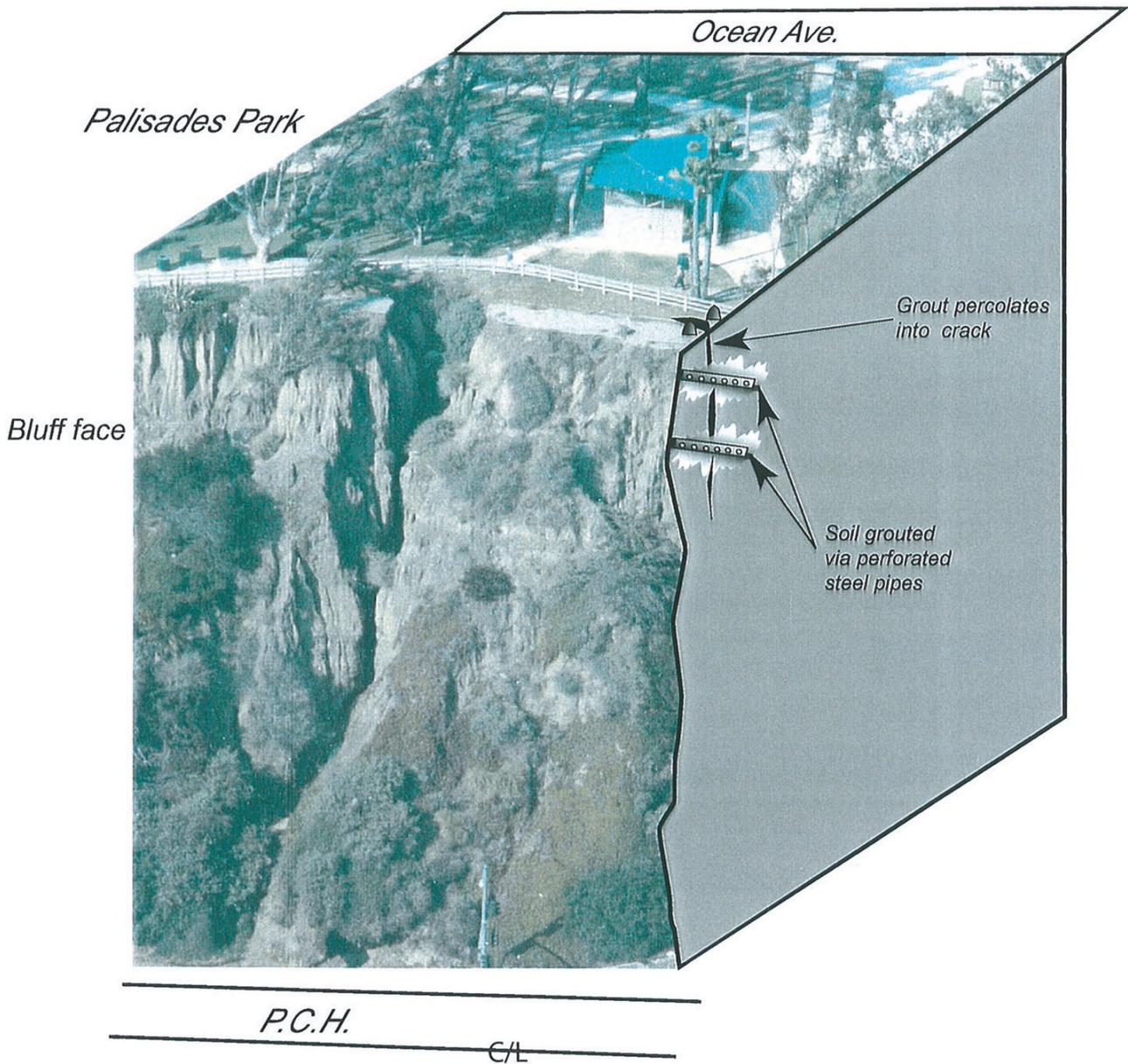
Surface Grouting and Soil Nailing

Surface grouting and soil nailing, as described above, would also be used for improving the stability of the bluff toe.

Vegetation

To assist in stabilizing bluff soil against erosion, native Southern Coastal Bluff Scrub habitat plant species would be used for planting and landscaping of the Bluffs. The use of native plants would require little or no watering after the initial planting, or once the plants are established. The plant species chosen would be characteristic of, and endemic to, southern coastal bluffs where they are constantly exposed to winds with high salt content, on poorly developed soils.

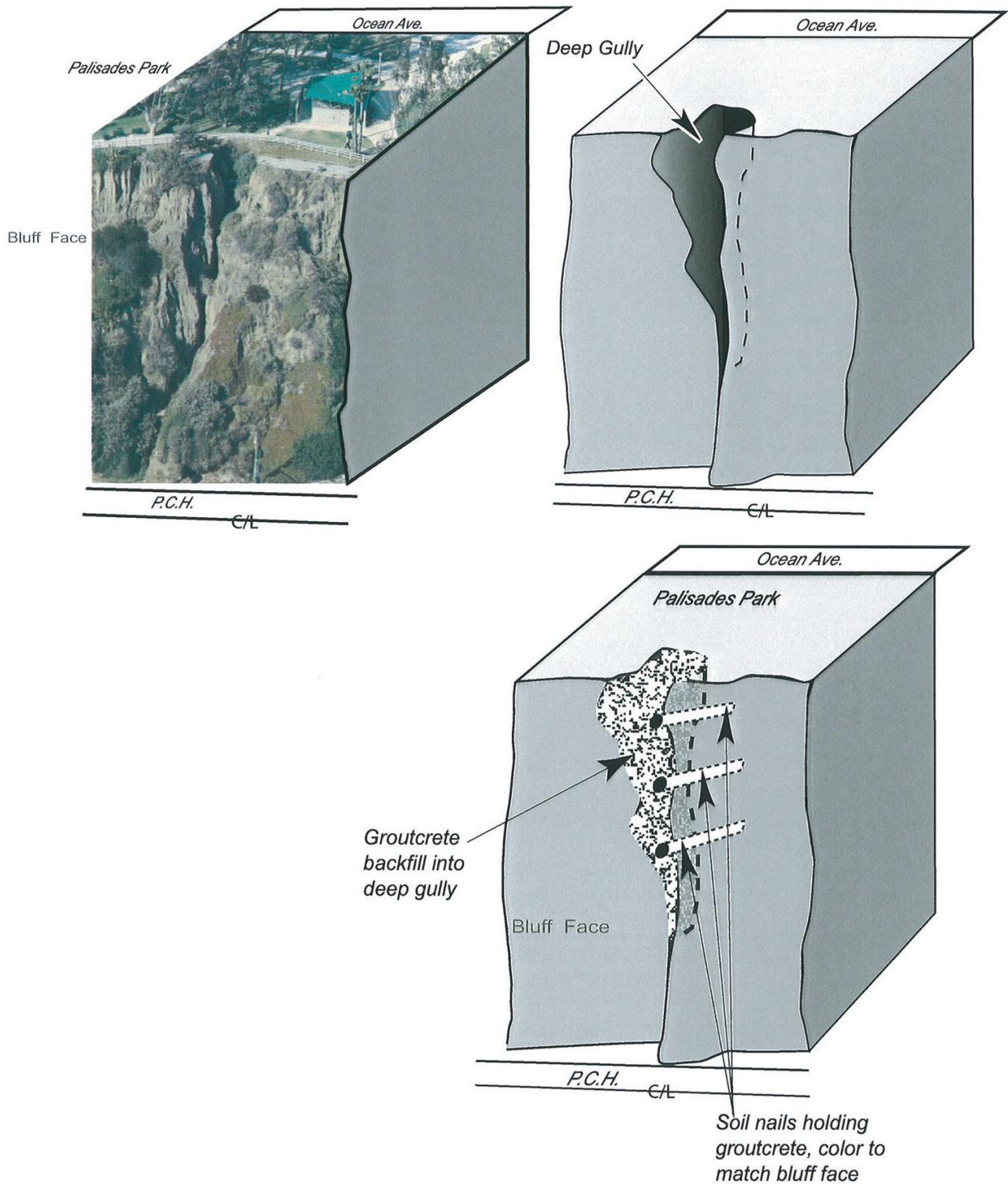




Source: URS 6-5-2006

Illustration of Groutcrete for Blocks with Cracks

Figure 2-9



Source: URS 6-5-2006

Illustration of Groutcrete for Gullies

Figure 2-10

Anchor Blocks on Talus Slope

Relatively large reinforced-concrete anchor blocks with pre-stressed tiebacks would be installed at locations on the talus slope up-coast from the California Incline. These anchor blocks, while being placed between and behind the tall vegetation along the toe of the Bluffs, would strengthen the talus slope without being in plain view. Thereby providing additional buttressing support to the adjacent near-vertical bluff face. An illustration of this method can be viewed in Figure 2-11.

2.6 PROJECT IMPLEMENTATION

To facilitate project implementation, the Bluffs have been divided into 11 treatment zones. Each treatment zone would receive various treatment measures in order to address the major issues of each zone. Treatment Zone 1 (T-1) starts from the McClure Tunnel and Treatment Zone 11 (T-11) ends at the northwest end of the Bluffs. Further, Treatment Zone 8 (T-8) is designated as the central area below the Incline, and Treatment Zone (T-9) is designated as the area above the California Incline. As shown in Table 1, due to the variety of stability concerns along the Bluffs each zone would have a different combination of treatments, the combinations, and conditions addressed are further explained as follows.

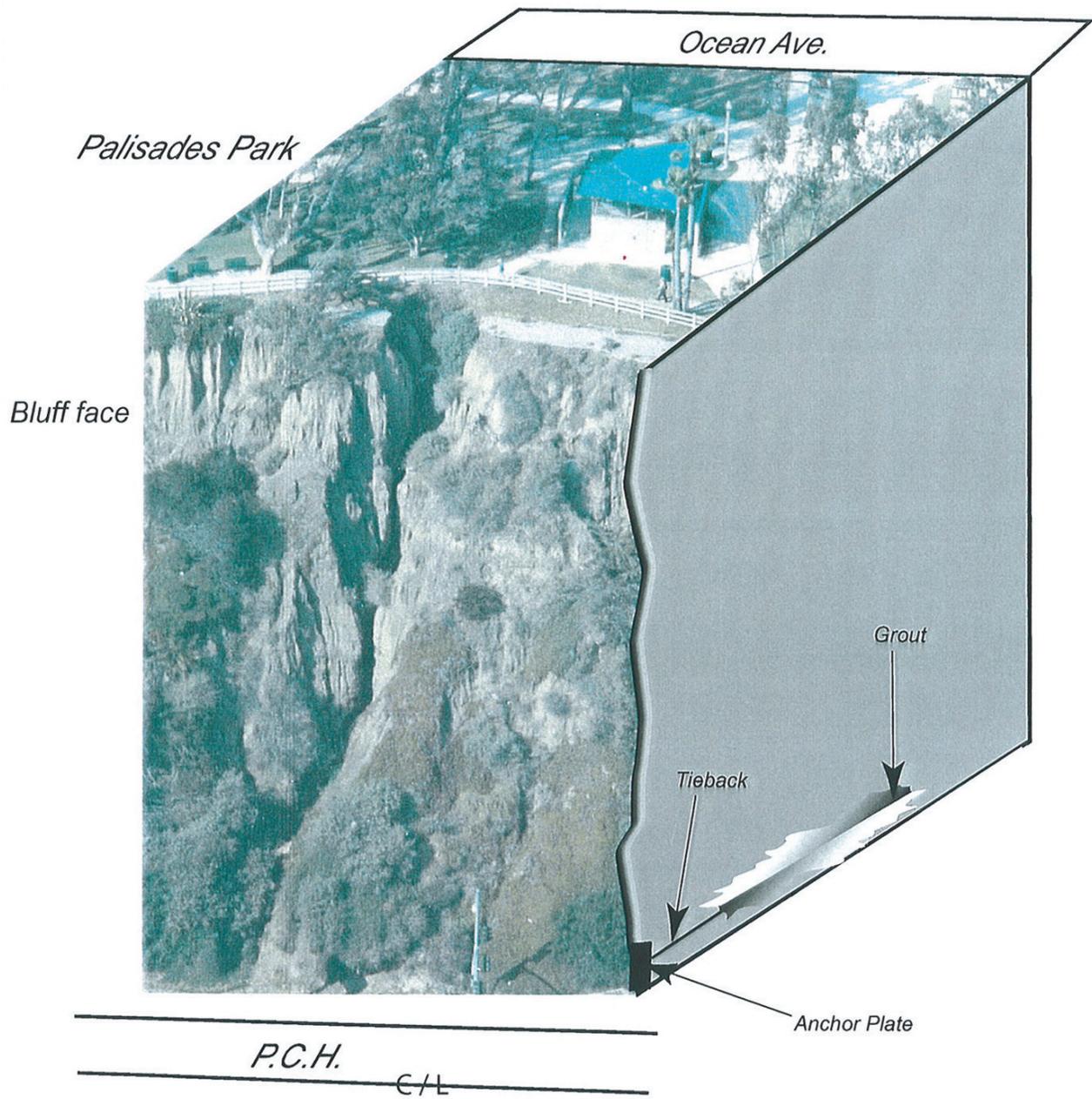
2.6.1 Treatment Zone 1

The stability conditions of this zone include:

- *Surface erosion*
- *Erosion pockets on bluff face*
- *Peninsular columns*
- *One erosion gully undermining park fence*
- *Undermined bluff rim*
- *Minor erosion at toe*

Along the rim surface treatment by grouting would be performed to protect the surface. Surface treatment by grouting would also be applied to noses and pinnacles against future erosion. Surface treatment with grouting would also be performed for the bluff face and bluff toe. The drainpipe near the rim would be removed or backfilled with groutcrete.

The erosion gully would be backfilled with a layer of groutcrete as explained above.



Source: URS 6-5-2006

Illustration of "Hidden" Anchor Blocks

Figure 2-11

2.0 Project Description

Table 2-1 Palisades Bluff Improvement Project Components by Treatment Zone

| Issue | Project Components | Treatment Zone (Palisades Beach Road Street Address) | | | | | | | | | | |
|---|---|---|---------------|---------------|------------------|----------------|----------------|------------------------|--------------|---------|---------|---------|
| | | T-1 | T-2 | T-3 | T-4 | T-5 | T-6 | T-7 | T-8 | T-9 | T-10 | T-11 |
| | | 1423- Parking | 1401- 1423 | 1321- 1401 | Parking- 1321 | Parking Lot | Parking Lot | 972- Parking Lot | 850- 1038 | 723-850 | 541-729 | 237-522 |
| Erosion Pockets | Groutcrete with stitches, hydroseeding | X | X | | X | X | X | X | X | X | X | X |
| Surface Erosion and Rilling | Surface treatment by grouting, groutcrete with stitches, vegetation | X | X | X | X | X | X | X | X | X | X | X |
| Peninsular Columns | Surface treatment by grouting with breather tubes | X | X | X | X | X | X | X | | X | X | |
| Toe Erosion | Surface treatment by grouting, at selected locations | X | X | X | X | | X | X | X | X | X | X |
| Gullies | Groutcrete with stitches/soil nails. Hydroseeding | X | X | X | X | X | X | X | X | X | | |
| Blocks with Cracks | Surface treatment by grouting, groutcrete with stitches/soil nails | | | | X | | X | X | | X | X | X |
| Undermined Bluff Rim, or Debris along Rim | 1)Surface treatment by grouting 2)Install soil nails | X | X | X | | | X | | X | | | X |
| Groundwater | Horizontal drains | | | | | | | | X | X | X | X |
| Talus Slope Support | Anchor Blocks "Hidden" on Talus Slope | | | | | | | | X | | X | X |

Note: An "X" indicates Project Components implemented in that Treatment Zone.
Source: URS, July 2006.



2.6.2 Treatment Zone 2

The stability conditions of this zone include:

- *Peninsular columns*
- *Overhanging blocks*
- *Debris along bluff rim*
- *Erosion gullies*
- *Surface erosion*

Surface treatment by grouting would be applied to the bluff face and toe. Overhanging materials at the bluff rim would be cleaned off to form a new vertical face, and surface treatment with grouting would also be performed for protection against future erosion. The erosion gullies would be backfilled with a layer of groutcrete as explained above.

2.6.3 Treatment Zone 3

The stability conditions of this zone include:

- *Surface erosion*
- *Erosion gullies below old access road*
- *Debris along bluff rim and top of access road*
- *Landslide deposit below old access road*
- *Extensive surface rilling*

Debris at the location of the old access road would be cleaned off and soil nails would be installed below the old access road. Surface treatment by grouting would be performed for the bluff face. Further, the erosion gullies would be filled with groutcrete to stop further erosion.

2.6.4 Treatment Zone 4

The stability conditions of this zone include:

- *Blocks with cracks at bluff rim*
- *Erosion pockets on bluff face*
- *Erosion gullies*
- *Peninsular columns*
- *A clay pipe outlet at top*
- *A concrete structure and pipe outlet at top*
- *A concrete block near toe*

Soil nails would be installed on the blocks with cracks along the bluff rim, in combination with surface treatment by grouting. Surface treatment would also be performed at the bluff face and toe. Erosion pockets on the bluff face should be filled with groutcrete. Further, the erosion gullies would be backfilled with a layer of groutcrete to stop further erosion. The concrete block



near the bluff toe would be removed and replaced with groutcrete anchored in place by stitches. The concrete structure near the top of the slope would be partially removed, followed by anchor installation and coating with a layer of groutcrete, as outlined above. The pipe should be plugged at the inland end, and backfilled with groutcrete.

2.6.5 Treatment Zone 5

The stability conditions of this zone include:

- *Erosion pockets*
- *Soil piping holes*
- *Erosion gullies*
- *Rilling of surface*

The piping holes and erosion pockets would be filled with groutcrete. Erosion gullies would also be backfilled with groutcrete to stop further erosion that endangers the Park rim. Further, surface treatment by grouting would be performed for the bluff face and toe.

2.6.6 Treatment Zone 6

The stability conditions of this zone include:

- *Undermined bluff rim, with remnants of old walkway*
- *Blocks with vertical cracks*
- *Noses and peninsular columns*
- *Erosion gullies*
- *Erosion pockets*
- *Pipe outlet near top*
- *Concrete structure on top*
- *Talus (old landslide deposit) at toe*

The debris and the remnants of an old walkway along the bluff rim would be cleaned off. Surface treatment by grouting would be performed along the bluff rim and the near-vertical bluff face. Erosion gullies would be filled with groutcrete as explained above. Erosion pockets on the bluff face would also be filled with groutcrete. The pipe outlet and the concrete structure near the top of the slope would be partially removed, followed by anchor installation, and backfilling with groutcrete.

2.6.7 Treatment Zone 7

The stability conditions of this zone include:

- *Erosion pockets*
- *Overhanging blocks*
- *Erosion gully*
- *Blocks and noses with vertical and horizontal cracks*



- *Talus (old landslide deposit) along the toe*

Soil nailing would be installed at the location of overhanging blocks and noses with cracks, in combination with surface treatment by grouting. Erosion pockets and the erosion gully would be filled with groutcrete.

2.6.8 Treatment Zone 8

The stability conditions of this zone include:

- *Erosion pockets along the entire stretch*
- *Access road in the middle of the bluff face*
- *Talus (old landslide deposit) along the toe*
- *Soil failure below walkway bridge*
- *Deep erosion gully and undermined park rim at the western end, old pipes below park rim*
- *Perched high groundwater table behind the bluff face*
- *Old dewatering tunnel above intersection of the California Incline with PCH*

Erosion pockets along the entire stretch of this zone would be filled with groutcrete. Soil nailing and surface improvement by grouting would be performed for areas below the access road in the middle of the bluff face. The void in the failed area below the walkway bridge would be filled with groutcrete secured in place by soil nails. The deep erosion gully at the western end of this zone would also be filled with a layer of groutcrete. The old pipes on top of the gully would be removed and backfilled with groutcrete. In portions of this treatment area where the talus has potential to shift further, it will be supported by the installation of anchor blocks hidden within the talus slope. Horizontal drains should be installed for the western portion of this zone, i.e., from the location of the old dewatering tunnel to the western end of the zone to provide dewatering for the perched groundwater in this area.

2.6.9 Treatment Zone 9

The stability conditions of this zone include:

- *Blocks and noses with vertical cracks*
- *Erosion pockets along the bluff face*
- *Pipe outlet on bluff face*
- *Erosion gully*
- *Perched high groundwater table behind the bluff face*

Soil nailing and surface improvement by grouting would be performed for blocks and noses with cracks. Erosion pockets on the bluff face would be filled with groutcrete. The erosion gully would also be filled with groutcrete. The old pipe would be plugged at the inland end, and backfilled with groutcrete. For dewatering purposes, horizontal drains or hydraugers would be installed along the toe to provide drainage for perched groundwater in this area.

2.6.10 Treatment Zone 10



The stability conditions of this zone include:

- *Tension cracks along park rim*
- *Erosion pockets on bluff face*
- *Past history of landslides*
- *Talus materials above the toe, covered with thick vegetation at some locations*
- *High groundwater table behind the bluff face*

Soil nailing and surface improvement by grouting would be performed below the Bluff rim in areas with tension cracks. Erosion pockets on the bluff face would be filled with groutcrete. In portions of this treatment area where the talus has potential to shift further, it will be supported by the installation of anchor blocks hidden within the talus slope. Given the history of high groundwater table in this zone, a subsurface drainage system would be installed for the purpose of dewatering the slope. The drainage system would consist of horizontal drains (hydraugers) along the toe of the Bluffs.

2.6.11 Treatment Zone 11

The stability conditions of this zone include:

- *Tension cracks along park rim*
- *Debris of old pavement near park rim*
- *Erosion pockets on bluff face*
- *Past history of landslides*
- *Surface erosion*
- *Talus materials above the toe, covered with thick vegetation at some locations*
- *High groundwater table behind the bluff face*

Debris near park rim would be cleaned off to form a new vertical surface, and surface treatment by grouting would be performed to prevent future erosion. As in the previous zone, soil nailing and surface improvement by grouting would be performed below the Bluff rim in areas with tension cracks. Erosion pockets on the bluff face would be filled with groutcrete. In portions of this treatment area where the talus has potential to shift further, it will be supported by the installation of anchor blocks hidden within the talus slope. For dewatering purposes, a subsurface drainage system would be installed. The drainage system would consist of horizontal drains (hydraugers) along the toe of the Bluffs.

2.7 CONSTRUCTION STAGING AND SCHEDULE

The construction staging area would be located on the Bluffs beneath the Montana Avenue stairway. Temporary lane closures along Pacific Coast Highway north of the California Incline, as well as a portion of the Incline itself, would occur on in the right-hand northbound lane. The lane closures would be done in stages, for stretches of approximately 1,000 feet at a time, and would shift monthly as the construction work moves along the toe of the bluffs. For work conducted on the bluff face and rim, tractors with elevating platforms (cherry pickers) would be used to lift workers and machines to the face and top of the Bluffs.



Project construction would last approximately 18 months, and is expected to be completed in 2008.

2.8 FUTURE MAINTENANCE OF BLUFFS

Maintenance of the Bluffs area would be conducted to minimize the hazard from surficial slumping. Maintenance tasks include periodic monitoring and control of the natural process of bluff recession by means of localized surface treatment by grouting, soil nail installation, groutcrete with stitches, and remedial surface grading within selected areas.

For dewatering facilities, monitoring and maintenance would also be performed to ensure their function. For example, cleaning of horizontal drains would occur every 2 to 5 years to prevent clogging of the drains by soil particles.

All surface drains would be maintained to ensure their function throughout the year. Over-irrigation in Palisades Park would be avoided. Further, any drain or water pipe breakage in Palisades Park would be promptly repaired to avoid water infiltration into the underlying soil.

2.9 REQUIRED APPROVALS

Discretionary approval of the project would be required from the following agencies:

- *California Department of Transportation (Caltrans)*
- *Federal Highway Administration (FHWA)*
- *California Coastal Commission*
- *Los Angeles Regional Water Quality Control Board*
- *California Office of Historic Preservation*
- *California State Parks*



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3.0 ENVIRONMENTAL CHECKLIST

The following checklist was developed as a tool to screen potential environmental impacts and is consistent with that contained in the CEQA Guidelines and used in the City of Santa Monica. A discussion, including an environmental impact analysis and a requirement for mitigation measures, is included after each issue area.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| 3.1 AESTHETICS - Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | | X | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | X | |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | | X | | |
| d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | | | | X |

a-c. A visual impact assessment was conducted for the proposed project. The following analysis is partially based on that assessment, a copy of which can be found in Appendix A. The project involves the implementation of various improvement methods to decrease the rate of gradual deterioration of the Santa Monica Palisades Bluffs (Bluffs), photos of which can be seen in Figure 2-5 of the *Project Description*. Figures 3-1 through 3-4 illustrate conceptual post project views of the Bluffs after implementation of the improvement measures at various locations. The measures proposed are designed to reduce pore water pressure in the soil behind the Bluffs as well as strengthen the soil surface against erosion while maintaining the visual quality and aesthetic character of the Bluffs. The hydraugers (horizontal drains) drilled into the Bluffs to drain perched groundwater, are usually one to three inches in diameter and would be installed so the drain end is flush with the bluff toe near PCH. Locating the drain ends at the bottom of the Bluffs, along with the size and flush installation of the hydraugers would result in limited visual perceptibility of the horizontal drains. The exposed soil surfaces along the Bluffs, including pinnacles, noses and peninsulas, would be treated with a clear spray on chemical grouting consisting of water-reactive polyurethane prepolymer. The spray on grouting is intended to apply and dry transparent, such that the treated areas are indistinguishable from the untreated areas. In large exposed surface areas the protective grout layer would be anchored to the underlying soil by a pattern of short soil nails. The soil nails would be cut flush with the bluff surface and patched with a mixture of natural soil and grout to restore the natural look of the surface. Erosion pockets and deep gullies around the peninsular bluff columns would be partially filled with “groutcrete”, a mixture of water, water reactive polyurethane resin and native soils. The “groutcrete” would be developed on site using native soils in order to appear consistent with the color and texture of the natural bluff face. The mixture is designed to roughly match the color of the Bluffs, however it may create the appearance of increased non-vegetated areas on the bluff face. This could result in a moderate adverse change to the visual resource with moderate viewer response, which could be



a potentially significant visual compatibility effect. The proposed components for the improvement of the Bluffs are designed using native soils and flush installation to minimize impacts to the scenic vistas, resources and visual quality of the Bluffs. However, mitigation measure AES-1 would require revegetation of affected areas to further soften and blend the treated areas with the surrounding natural areas to the extent that a viewer from Pacific Coast Highway or the California Incline would not be able to discern the difference from the treated and natural areas. Therefore, upon implementation of AES-1, potential impacts to visual resources would be less than significant. *Impacts to aesthetic resources would be less than significant with mitigation.*

- d. The proposed project does not include any new lighting or reflective material. Therefore *no impact would result.*

Mitigation Measure

Implementation of the following recommended mitigation measure would reduce the potential for visual impacts from groutcrete application. This would minimize the appearance of increased exposed soil on the Bluffs, and help lengthen the lifetime of the groutcrete application.

AES-1 Vegetated Covering of Groutcrete. Areas of large groutcrete implementation shall be revegetated with native hydroseed, or covered with a native vegetation mat or blanket. The vegetated covering shall use native species matching the existing bluff habitat including but not limited to: *Atriplex spp.* [spp. means several species], Saltbushes; *Calystegia cyclostegi*, Morning Glory; *Calystegia macrostegia*; *Castilleja affinis*, Indian Paintbrush; *Chorizanthe orcuttiana*, Spineflower; *Coreopsis gigantean*, Giant Coreopsis; *Coreopsis maritime*, Sea-Dahlia; *Dudleya spp.*; *Encelia californica*, California; *Erigeron glaucus*, Seaside Daisy; *Eriophyllum staechadifolium*, Woolly Sunflower; *Haploppappus spp.*, Goldenbush; *Malacotrhix saxatilis*; *Marah macrocarpus*, Wild Cucumber; *Opuntia littoralis*, Cholla; and *Rhus integrifolia*, Lemonadeberry. The revegetation shall be used to soften and blend the treated areas with the surrounding natural areas to ensure that a viewer from Pacific Coast Highway or the California Incline would not be able to discern the difference between the treated and natural areas and shall be subject to the review and approval of a licensed landscape architect. This treatment process shall first only be undertaken in areas that are not visible from Pacific Coast Highway or the California Incline and shall only be undertaken in other areas if the initial treatment process is successful.

Impacts to aesthetic resources would be less than significant with implementation of the above mitigation measure.





Existing View



Post-Project View

NOT TO SCALE

Source: URS Corp, Inc., Sept. 2006

Existing and Post-Project View Near Arizona Avenue

Figure 3-1
City of Santa Monica





Existing View



Post-Project View

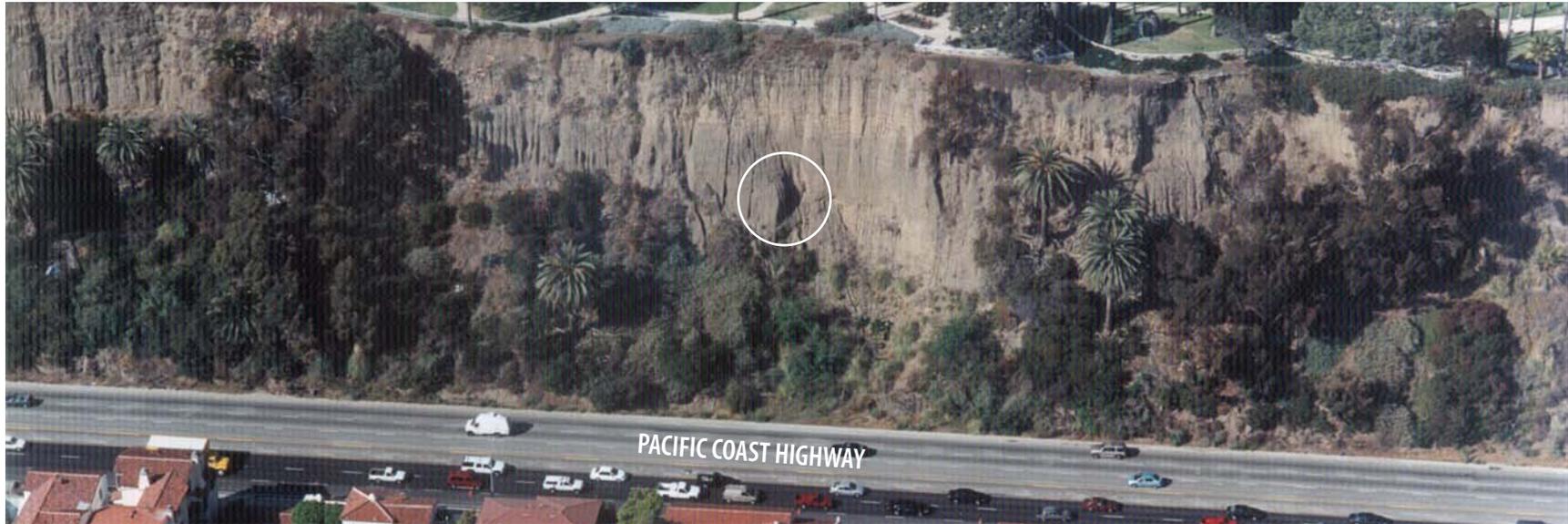
NOT TO SCALE

Source: Rincon Consultants, Inc., Jan. 2007
URS Corp, Inc., Sept. 2006

Existing and Post-Project View Near Idaho Avenue

Figure 3-2
City of Santa Monica





Existing View



Post-Project View

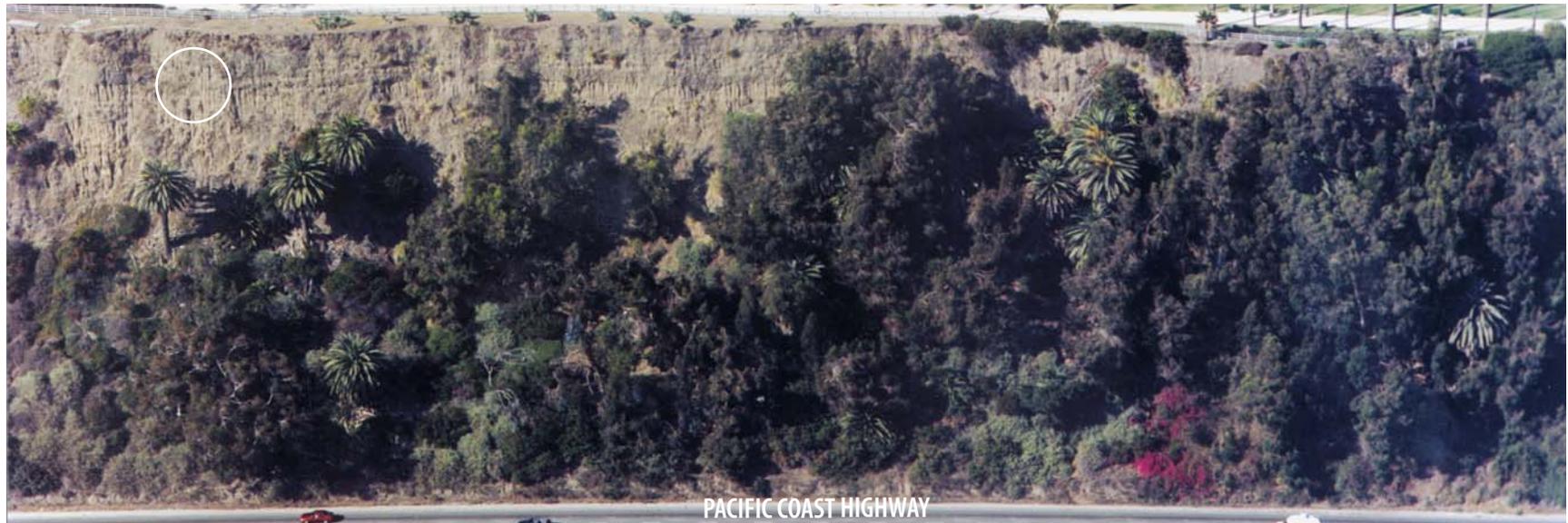
NOT TO SCALE

Source: Rincon Consultants, Inc., Jan. 2007
URS Corp, Inc., Sept. 2006

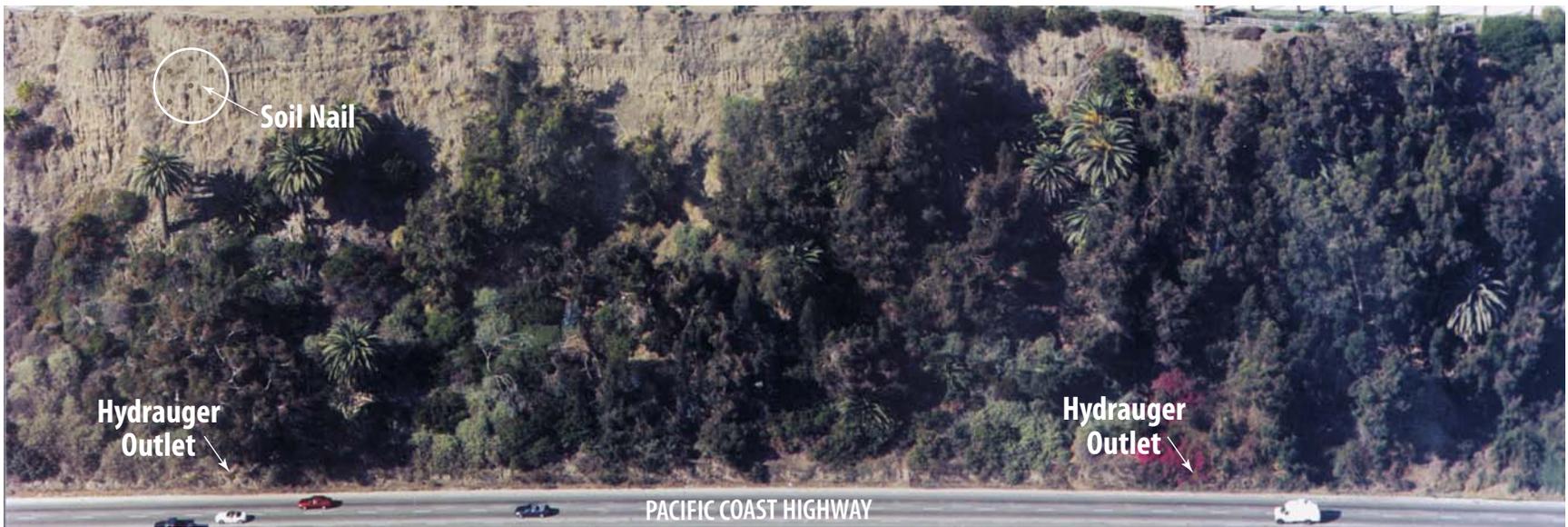
Existing and Post-Project View Near Palisades Avenue

Figure 3-3
City of Santa Monica





Existing View



Post-Project View

NOT TO SCALE

Source: Rincon Consultants, Inc., Jan. 2007
URS Corp, Inc., Sept. 2006

Existing and Post-Project View Near Georgina Avenue

Figure 3-4
City of Santa Monica



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| 3.2 AGRICULTURAL RESOURCES - Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use? | | | | X |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |
| c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | | | | X |

a-c. The project site is located in an urban area on a vertical bluff face. The project site is not in the general vicinity of any existing or planned agricultural land. The proposed project would not convert farmland or conflict with any land zoned for agriculture (Santa Monica Districting Map, 2004). The project also would not result in any indirect effects that could result in conversion of farmland to non-agricultural use. Therefore, *no impacts to agricultural resources would occur.*

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|---------------------------------------|---|-------------------------------------|------------------|
| 3.3 AIR QUALITY - Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | X | |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | X | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | X | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | X | |
| e) Create objectionable odors affecting a substantial number of people? | | | X | |



The project site is within the South Coast Air Basin (SCAB), a 6,600-square mile basin encompassing all of Orange County, most of Los Angeles and Riverside Counties, and the western portion of San Bernardino County, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The local air quality management agency is required to monitor air pollutant levels to ensure that the air quality standards are met and, if they are not met, to develop strategies to meet the standards. Ambient pollution concentrations recorded in Los Angeles County are among the highest in the four counties comprising the SCAB. The South Coast Air Quality Management District (SCAQMD) measures concentrations of the following air pollutants at over 37 monitoring stations: ozone, carbon monoxide, nitrogen dioxide, particulate matter, sulfur dioxide, and lead.

Depending on whether or not the standards are met or exceeded, the air basin is classified as being in “attainment” or “nonattainment.” The South Coast Air Basin is currently designated as a nonattainment area for both the federal and state standards for ozone and PM₁₀, and the state standard for PM_{2.5}. Thus, the basin currently exceeds state and federal ambient air quality standards and is required to implement strategies that would reduce the pollutant levels to recognized acceptable standards. This non-attainment status is a result of several factors, the primary ones being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate pollutants from the air, and the number, type, and density of emission sources within the South Coast Air Basin. The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards.

The SCAQMD has adopted the following thresholds for temporary construction-related pollutant emissions:

- 75 pounds per day ROC
- 100 pounds per day NO_x
- 550 pounds per day CO
- 150 pounds per day of PM₁₀
- 150 pounds per day of SO_x

The SCAQMD also has established the following significance thresholds for project operations within the South Coast Air Basin:

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

Impacts relating to carbon monoxide (CO) concentrations are also considered significant if the additional CO from a project creates a “hot spot” where either the California one-hour standard of 20 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm of carbon monoxide is exceeded.

The SCAB is further subdivided into Receptor Forecast and Monitoring areas, of which Santa Monica is located in the Northwest Los Angeles County Coastal (NWLACC) monitoring area and is characterized by readings taken at the nearest SCAQMD monitoring station located in the region. Readings of ozone, and carbon monoxide at the coastal station seldom attain high concentrations compared to inland portions of the Basin. The nearest monitoring station for particulate matter is located at the downtown Los Angeles Station. In the year 2005, the NWLACC station recorded zero days where the federal or state standards for nitrogen dioxide or carbon monoxide were exceeded. The State standard for 1-hour ozone levels were exceeded 7 days in 2005, and 8-hour ozone levels were exceeded 5 days in 2005. Federal standards for 1-hour ozone levels were not exceeded, and 8-hour ozone levels were exceeded 1 day in 2005.

- a-e. The project would not create an increase in traffic or visitors to the park, nor would it create any operational emissions. The proposed project would not result in a considerable net increase of a pollutant for which the project region is in non-attainment (ozone and particulate matter), or expose sensitive receptors to substantial pollutant concentrations. This type of development would not generate significant air pollutants exceeding the SCAQMD thresholds listed above. The project would not generate objectionable odors affecting a substantial number of people. The project does not involve the development of structures, attractions, or any other traffic or population inducing facilities that would result in the creation or release of air pollutants. Thus, the project impacts related to air quality would be *less than significant*.

Temporary air quality impacts related to project construction are discussed in Item 3.5, *Construction Effects*.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| 3.4 BIOLOGICAL RESOURCES - Would the project: | | | | |
| a) Have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | | X | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | | X | |
| c) Have a substantial effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | X | |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or | | X | | |



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Santa Monica Municipal Code Chapter 7.40) | | | | X |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | X |

a-c. A biological assessment of the site was conducted for the proposed project by Rincon Consultants, Inc., in September 2006. The following analysis is partially based on that assessment, which can be found in Appendix B of this document. The proposed project site is in an urbanized area surrounded by development. The lack of large-scale contiguous native habitats and the ease of public access to the shoreline have resulted in little opportunity for sensitive plant and animal species to remain in the City of Santa Monica. Although the Pacific Ocean is located approximately 900 feet west of the project site, there are no existing waterways connecting the ocean to the site. The proposed project site is generally comprised of disturbed southern coastal bluff scrub habitat dominated by natives including laurel sumac (*Malosma laurina*), California brittlebush (*Encelia californica*), arroyo willow (*Salix lasiolepis*) in areas damp from nuisance road and irrigation runoff, and saltbush (*Atriplex lentiformis*). Non-native exotic species can also be found on site, including Canary Island Palm (*Phoenix canarensis*), Blue Gum (*Eucalyptus globulus*), tumbleweed (Family Amaranthaceae), and pampas grass (*Cortaderia jubata*). Ground cover throughout the site includes non-native grasses and iceplant, along with many areas of barren soil. A search of the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDDB; database current as of June 2006) indicates that two animals and six plants of concern have been recorded in the Topanga and Beverly Hills Quadrangles, though a larger number of special-status species could potentially occur in the general area. No special-status animal or plant species were observed onsite during the field visit by Rincon Consultants (see Appendix B). Due to surrounding development, the presence of special-status species is likely to be limited to nesting raptors and other birds in the trees, shrubs, and bushes located on the subject property. Of the special status species potentially in the area, the site may contain suitable habitat for the endangered coastal dunes milk-vetch (*Astragalus tener var. titi*) and Orcutt's pincushion (*Chaenactis glabriuscula var. orcuttiana*).

The coastal dunes milk-vetch is known to occur in coastal bluff scrub and coastal dunes. According to the U.S Fish and Wildlife Service (USFWS) Recovery Plan for the Coastal Dune Milk-Vetch (2004), coastal dunes milk-vetch was historically found in Monterey, Los Angeles and San Diego Counties. However, the known locations in Los Angeles County (Hyde Park and Santa Monica) have been heavily urbanized, and it is unlikely that it is still present in the residual disturbed habitat in this area. Prior to development, coastal dunes milk-vetch occurred adjacent to coastal terrace grassland in vernal wetland areas that became dry in the summer. Today, coastal dunes milk-vetch occurs on relatively flat coastal terraces within 30



meters (100 feet) of the ocean beach (USFWS, 2004). Given the disturbed nature of the coastal bluff scrub on site, the distance from the ocean, and the abrupt slope face that is inherent to the Santa Monica Palisades Bluffs, coastal dunes milk-vetch presence onsite is unlikely.

The Orcutt's pincushion is also known to occur on sandy coastal bluff scrub and coastal dunes. Orcutt's pincushion blooms from January to August and if present onsite, would have been identifiable by its foliage or would have been observed in flower, neither of which occurred during the biological investigation. Orcutt's pincushion is not federally or state listed as threatened or endangered. The proposed project implementation would occur in locations that are largely barren, eroding soil or areas now dominated by weedy invasive annuals. Orcutt's pincushion is generally found in sandy soils (and dunes) as compared to the finer earth materials present on the Bluffs. Given the disturbance levels and marginal habitat, it is unlikely to be present within the work areas.

The southern coastal bluff scrub located on the site is listed as a community of special concern as defined by the CNDDDB. However, due to the disturbed nature of the bluff habitat, the erosion that has occurred in recent years, and the fact that the majority of the improvements associated with the stabilization project are focused on the unvegetated bluffs and do not disturb the native habitat, the project would not result in significant impacts to the community and/or wildlife.

The project does not involve development in a federally protected wetland and does not involve improvements that would impair or interrupt hydrological flow into such a wetland. The project site is not landscaped. Although the disturbed southern coastal bluff scrub vegetation in the area provides suitable habitat for native plants, birds and other wildlife, the majority of the improvements associated with the stabilization project are focused on the unvegetated bluffs, and do not disturb the native habitat. *Impacts would be less than significant.*

- d. The limited wildlife that exists in the area has adapted to the urban environment and there are no known migratory wildlife corridors or native nursery sites. However, the onsite trees, shrubs and bushes are considered potential roosting/nesting habitat for a variety of migratory and resident birds, including several raptors. The currently proposed project design generally avoids disturbance to the onsite vegetation; however, removal or disturbance of individual trees, shrubs or bushes onsite could result in impacts to nesting birds that are protected by the California Fish and Game Code if construction were to occur during the bird nesting season, approximately March 1 to September 15. Impacts related to movement of fish or wildlife species or migration corridors, or nursery sites would be less than significant with the avoidance of onsite trees, shrubs and bushes, and implementation of Mitigation Measure BIO-1. Therefore, the project's impact to migratory wildlife would be *potentially significant unless mitigation incorporated.*
- e, f. The City of Santa Monica adopted the Community Forest Management Plan 2000 in November 1999. The plan established objectives and policies designed to protect trees within the City limits. These policies included measures for avoidance and replacement of City trees during construction projects. As the current project proposal does not involve the removal or disturbance of any trees, the proposed project would not conflict with any

biological resource policy or ordinance. The project site is not subject to any habitat conservation plan or natural communities conservation plan. *No impact would occur.*

Mitigation Measure.

Although the proposed project would generally have less than significant impacts to biological resources, the following mitigation measure would ensure no significant impacts to nesting, foraging or burrowing species would occur.

BIO-1 Nesting Season Survey. If the construction of the proposed bluff improvements are to occur during the nesting season (March 1 through September 15), a search for active nests should be conducted within one week prior to construction by a qualified biologist. If active nests are located within 250 feet of the proposed improvements and are potentially sensitive, then construction work should be delayed in that area until after the nesting season or until the young are no longer dependent upon the nest site.

Implementation of the above mitigation measure would ensure no significant impacts would occur to nesting, foraging or burrowing species during the nesting season.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| 3.5 CONSTRUCTION EFFECTS | | | | |
| a) Would the proposal have considerable construction-period impacts due to the scope, or location of construction activities? | | X | | |

- a. The project site is located along the eastern side of the PCH below Santa Monica Palisades Park. Nearest residential uses are single- and multi-family residences along the west side of the PCH at the beach edge. Private beach clubs and public beach access and parking are also situated along the beach edge, across PCH from the project location.

Street parking is not allowed along the four-lane segment of PCH adjacent to the Bluffs. Elevated pedestrian bridges span PCH at multiple locations providing pedestrian and bicycle access to the beach resources from Palisades Park situated above the bluffs.

Construction effects are related to the site preparation and development components of a project's implementation. For a discussion of temporary noise effects from project implementation please see Section 3.14 *Noise*. Temporary effects to water quality are discussed in Section 3.10 *Hydrology and Water Quality*. Construction effects include temporary traffic, parking, and staging issues that may disrupt circulation during the project implementation period.

Temporary Air Quality Impacts. For Air Quality setting information, please refer to section 3.3, *Air Quality*. Temporary air quality emissions related to project implementation were estimated using the California Air Resources Board's (ARB's) URBEMIS 2002 computer model. Temporary air quality impacts are considered significant if emissions associated



with construction would exceed adopted South Coast Air Quality Management District (SCAQMD) thresholds. Temporary construction emission thresholds have been set by the SCAQMD on a daily basis as follows:

- 75 pounds per day of ROC
- 100 pounds per day of NO_x
- 550 pounds per day of CO
- 150 pounds per day of PM₁₀
- 150 pounds per day of SO_x

In addition to the above thresholds, if quarterly construction emissions would exceed 2.5 tons for ROC or NO_x, 24.75 tons for CO, or 6.75 tons for PM₁₀, or SO_x, air quality impacts relating to construction are considered significant.

Table 3-1 shows the worst-case daily emissions for the project during implementation. Fugitive dust would generally result in the greatest amount of PM₁₀ emissions, while construction equipment would generate the greatest amount of NO_x, ROC, and CO emissions. Although component of project implementations including operation of mechanical equipment, drilling, boring and earth moving activities would result in the emissions of some criteria pollutants, total emissions during project implementation would be well below established SCAQMD thresholds for all pollutants.

Project implementation would generate a temporary increase in air pollutant emissions. However, as shown in Table 3-1, worst-case daily emissions are well below established SCAQMD thresholds for ROC, NO_x, CO and PM₁₀, and would therefore *be less than significant*.

**Table 3-1 Worst-Case Daily Emissions
 During Project Implementation (lbs per day)**

| Pollutant | Construction Emissions | SCAQMD Thresholds | Threshold Exceedance (Yes/No) |
|------------------|------------------------|-------------------|-------------------------------|
| ROC | 7.69 | 75 | No |
| NO _x | 51.12 | 100 | No |
| CO | 62.58 | 550 | No |
| PM ₁₀ | 1.91 | 150 | No |
| SO _x | 0 | 150 | No |

See Air Quality Modeling Data sheets on in Appendix C

Temporary Traffic Related Impacts. The following analysis is partially based upon the memorandum summarizing project construction related traffic and recommended measures prepared by Kaku Associates, which can be found in Appendix D of this document. Traffic impacts associated with construction activities are considered significant when project construction would interfere with the existing traffic flow or cause unsafe conditions, or if it would introduce truck traffic through a residential area.



Project implementation would temporarily increase truck traffic in the project area, which could disrupt the normal use of Palisades Beach Road (PCH), the California Incline, and Moomat Ahiko Way. During implementation of the project, it would be necessary to temporarily close portions of the right-hand lane of northbound California Incline, northbound PCH and northbound Moomat Ahiko Way. While northbound Moomat Ahiko Way provides two lanes over most of its length, it narrows to one lane where it joins PCH. Because of this constraint, it would likely be necessary to implement a full closure of northbound Moomat Ahiko Way while improvement of the bluff occurs there. Two methods of implementing the temporary lane closures are possible. The closures could be implemented either on a daily basis, with appropriate signage and cones deployed and retrieved each day, or implementation could be on a longer-term basis, where they would remain in place for up to two months in each treatment zone or longer at the proposed staging area. A determination on which of these methods would be used, or a combination of them, would be made following the final design of the project and development of a detailed Traffic Management Plan (TMP). While no closures on the southbound lanes of PCH or Moomat Ahiko Way are planned, it may be necessary to restripe the California Incline temporarily to provide one northbound lane and one southbound lane.

Because no sidewalks lie on the east side of the California Incline or Moomat Ahiko Way and the sidewalk that exists on the east side of PCH is discontinuous, the formal temporary prohibition on pedestrian movements adjacent to each treatment zone under construction would not result in an adverse impact on pedestrians. The project would not affect the ability of pedestrians to use the sidewalks on the west side of the California Incline and Palisades Beach Road.

It should be noted that another project proposed by the Santa Monica EPWM Department is the California Incline Replacement Project, which would reconstruct and rehabilitate the Incline Bridge. The California Incline is located within Treatment Zones T-7 and T-8 (as shown on Figure 2-3). Construction of the Incline project would take approximately ten months, and would occur subsequent to the construction activities associated with the Palisades Bluffs Improvement Project.

With implementation of the recommended measures, the temporary construction-related impact of the project would be less than significant. To minimize the temporary effects of the construction activity an Encroachment Permit should be obtained from the California Department of Transportation (Caltrans) and a TMP should be prepared in accordance with Caltrans and City requirements.

Temporary impacts to vehicular flow in the area are *potentially significant unless mitigation incorporated*.

Mitigation Measures.

- CON-1 Construction Traffic Management Plan.** In consultation with Caltrans, the City shall prepare and implement a Construction Traffic Management Plan to provide for traffic management during bluff improvement activities. The TMP should focus on informing the motoring public and affected parties of construction activities and



dates. This plan shall be subject to review and approval by the City and, at a minimum, shall include the following:

- *A public information program to advise motorists of impending construction activities (e.g., mailed notices to properties in the surrounding area, portable message signs, and information signs at the construction site);*
- *Approval from the City for any construction detours or construction work requiring encroachment into public rights-of-way, or any other street use activity (e.g., haul routes);*
- *Timely notification of construction schedules to all affected agencies (e.g., Police Department, Fire Department, Department of Environmental and Public Works Management, and Department of Planning and Community Development);*
- *Coordination of construction work with affected agencies five to ten days prior to start of work;*
- *A traffic control plan for the streets surrounding the work area, including specific information regarding the project's construction and activities that will disrupt normal traffic flow;*
- *Avoiding dirt and demolition material hauling and construction material delivery during the morning and afternoon peak traffic periods and cleaning of streets and equipment as necessary;*
- *Scheduling and expediting of work to minimize disruption of and interference with the adjacent vehicular and pedestrian traffic flow. Weekday daytime work on City streets shall primarily be performed between the hours of 9:00 AM and 3:00 PM;*
- *Limiting of queuing of trucks to onsite to the extent feasible;*
- *Scheduling of preconstruction meetings with affected agencies to properly plan methods of controlling traffic through work areas;*
- *Storage of construction material and equipment within the designated staging area and limitation of equipment and material visibility to the public;*
- *Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City of Santa Monica; and*
- *The City of Santa Monica shall coordinate construction activity associated with the Bluffs project with activities associated with the California Incline Replacement Project. In particular, improvements associated with the Bluffs Improvement project shall be completed prior to the commencement of construction activities associated with the California Incline.*

Implementation of the Traffic Control Plan will ensure that the proposed project does not interfere with existing traffic flow or cause unsafe traffic conditions during the construction period. Short-term construction traffic impacts would therefore be reduced to a less than significant level.



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| 3.6 CULTURAL RESOURCES - Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | | | X | |
| b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? | | X | | |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | X | | |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | X | | |

A preliminary Archaeological Survey Report (Historical, Environmental, Archaeological, Research, Team [HEART], 2006), and a Historic Resources Technical Memo (San Buenaventura Research Associates [SBRA], 2006) were prepared for the project site in 2006. The following analysis is partially based on these studies, which can be found in Appendix E to this document.

- a. A property may be designated as historic by National, State, or local authorities. In order for a building to qualify for listing in the National Register of Historic Places, the California Register of Historical Resources, or as a locally significant property in the City of Santa Monica, it must meet one or more identified criteria of significance. The property must also retain sufficient architectural integrity to continue to evoke the sense of place and time with which it is historically associated.

The proposed project site, the Santa Monica Palisades Bluffs (Bluffs), form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH), a portion of which is also referred to as Palisades Beach Road. The project area extends 1.6 miles along PCH, from the McClure Tunnel to the northwestern limit of the City. Palisades Park, situated atop the Bluffs, including the California Incline was determined to be eligible for listing in the National Register of Historic Places in 1998 under Criterion A (HRER for Properties in BIG, 1998). It is considered a highly significant resource in the history of parks and recreation within the City of Santa Monica. Established in 1892, the 26-acre park is the largest and oldest urban park in Santa Monica and has figured prominently in the history of the City. The period of significance for the park dates from 1892 to 1944. Palisades Park is included on the California Register of Historical Resources. The precise boundaries of the property covered by this determination of eligibility are not entirely clear. The written physical description of the property found on the Primary Record form attached to the Historic Property Survey Report (HPSR) suggests that the western boundary of the park is Palisades Beach Road (PCH). Assessor parcel maps further indicate that much of the park consists of one large parcel bounded by Ocean Ave and PCH. However, the map attached to the Primary Record form illustrated the western boundary of the park as the bluff line. The net result of this inconsistency is to create some uncertainty with respect to the boundaries of the property which was determined eligible. However, it is apparent from the



documentation that the character-defining features of the park are located between the bluff line on the west and Ocean Ave on the east. (SBRA, 2006)

The character-defining features of Palisades Park identified by the 1998 determination of eligibility include lawns, paths, palm and other trees, pergola, monuments cannons, sundial, totem pole, statue, the Camera Obscura, gates, the concrete wall at the bluff edge and the California Incline. None of these features are proposed to be altered or removed during implementation of the bluff improvement measures. All of the proposed activities would be confined to stabilizing the vertical face, rim, and toe of the Bluffs. Consequently, the “physical characteristics ... that convey its historical significance” of the Park would not be materially altered, nor would the integrity of the park features which “qualify the property for inclusion in the National Register” be diminished. Therefore, *impacts to Palisades Park would be less than significant.*

The Bluffs do appear to potentially be eligible for listing on the National Register of Historic Places, the California Register of Historic Resources, or the City of Santa Monica historic landmarks or districts list. Therefore, the Bluffs could be regarded as a significant historical resource for purposes of CEQA, however, the improvement measures proposed are designed to decrease the rate of gradual deterioration of the Bluffs by reducing pore water pressure in the soil behind the Bluffs as well as strengthening the soil surface against erosion while maintaining the quality and character of the Bluffs. The proposed methods would be implemented in order to increase the longevity of the Bluffs and to preserve their presence within the City of Santa Monica. This would result in *less than significant impacts.*

- b. No known prehistoric or historic archeological resources were discovered to exist within the project area. The Bluffs are located within an urbanized area and have been subject to surface disruption over the years due to previous activity; thus, any surficial archaeological resources that may have been present at one time have likely been previously disturbed. Nevertheless, the potential exists for previously unknown archaeological resources to be encountered during project implementation activities (HEART, 2006). The potential for site preparation and drilling to damage previously unknown archeological resources is considered a potentially significant impact. However, the implementation of mitigation measures CR-1 and CR-2 would reduce impacts to a less than significant level. Therefore, *impacts would be potentially significant unless mitigation incorporated.*
- c. The City of Santa Monica has principal rock units underlying the area consisting of sedimentary formations of Tertiary (2 to 65 million years ago) to Holocene (last 10,000 years) age. The rock formations underlying the project site consist of the Qal (Recent Alluvium), which are thin sands and gravels with a thickness of 0-20 feet. The soil underlying the project site is Diablo Altamont, which is composed of clays that overly soft, fractured shales. Because the project site has been disturbed previously, any surficial paleontological resources that may have been present at one time have likely been disturbed. Therefore, the topmost layers of soil in the project area are not likely to contain substantive fossils (HEART, 2006). However, drilling into the deeper soils could uncover vertebrate fossil remains. Although project implementation is not expected to uncover unique paleontological resources, if such resources were encountered during project implementation activities all work would be required to cease in that area. Any discovery

of paleontological resources would be treated in accordance with federal, state, and local guidelines for disclosure, recovery, preservation, and curation, as appropriate. With regard to geologic features, no such features are present on the project site. With the implementation of mitigation measure CR-1, impacts would be reduced to a less than significant level. Therefore, *impacts would be potentially significant unless mitigation incorporated.*

- d. The project site is located within an urbanized area and has been previously disturbed. Within the project area, any traditional burial resources, which include archaeological sites, burial sites, ceremonial areas, gathering areas, or any other natural area important to a culture for religious or heritage reasons, would likely be associated with the Native American group known as the Gabrielino (HEART, 2006). No known burial sites have been identified within the project site or in the vicinity. Any discovery of such resources would be treated in accordance with federal, state, and local guidelines for disclosure, recovery, preservation, and curation, as appropriate. Implementation of mitigation measure CR-2, would reduce impacts to a less than significant level. Therefore *impacts would be potentially significant unless mitigation incorporated.*

Mitigation Measures.

Implementation of the following mitigation measures would reduce potential impacts unknown archeological and paleontological resources to a less than significant level.

CR-1 Stop Work Order. If cultural resource remains or paleontological resources are encountered during construction or land modification activities, the applicable procedures established under CEQA shall be followed. In this event, work shall stop, and the City shall be notified at once to assess the nature, extent, and potential significance of any cultural or paleontological resources. If such resources are determined to be significant, appropriate actions to mitigate impacts to the resources shall be implemented. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist.

CR-2 Procedures for Discovery of Human Remains. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then identify the person(s) thought to be the Most Likely Descendent (MLD) of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

Provided that the above mitigation measures are implemented, impacts to human remains, archeological resources, and paleontological resources would be less than significant.



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| 3.7 ECONOMIC AND SOCIAL IMPACTS | | | | |
| a) Does the project have economic or social effects which would result in additional physical changes (e.g., if a new shopping center located away from a downtown shopping area would take business away from the downtown and thereby cause business closures and eventual physical deterioration of the downtown)? | | | | X |

a. The project involves stability improvements to the Santa Monica Palisades Bluffs that include measures for decreasing pore water pressure behind the Bluffs and decreasing potential for surface erosion of the Bluffs face, rim, and toe. The project would not have economic or social effects that would result in adverse physical changes or deterioration of the surrounding area. Therefore, *no impacts would result*.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| 3.8 GEOLOGY AND SOILS – Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? | | | X | |
| ii) Strong seismic ground shaking? | | | X | |
| iii) Seismic-related ground failure, including liquefaction? | | | X | |
| iv) Landslides? | | | X | |
| b) Result in substantial soil erosion or the loss of topsoil? | | | X | |
| c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | | | X | |
| d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property? | | | X | |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | X |

A geotechnical report was prepared for the proposed project by URS Corporation dated February 24, 2006. The following analysis is partially based on that report (which is



available for review at the City of Santa Monica EPWM Civil Engineering & Architecture Department), the Safety Element of the City of Santa Monica General Plan, and various other resources.

- a. i. Earthquake Fault Rupture. The California Department of Conservation, California Geological Survey's Seismic Hazard Zonation Program Map indicates that the project site is not within an Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo zone to the project site is located approximately 7 miles to the east-northeast of the site. This zone is associated with the active Newport-Inglewood Fault Zone. However, the City of Santa Monica Safety Element EIR (1995) indicates that the northwest portion of the Bluffs is within a Fault Hazard Management Zone associated with the north and south branch of the Santa Monica-Hollywood Fault Zone. The proposed project involves the implementation of measures designed in part to increase Bluff stability and decrease susceptibility to seismically induced failures, including those resulting from fault rupture. Furthermore, the Bluffs are not currently supporting any residential structures, nor is any structural development proposed in association with the project. Due to the nature of the project, no structures or people would be exposed to potential adverse effects involving fault hazards as a result of the project; thus impacts from such would be *less than significant*.
- ii. Seismically-Induced Ground Shaking. The U.S. Geological Survey defines active faults as those that have had surface displacement within the last 11,000 years. Potentially active faults are those that have had surface displacement during the last 1.6 million years. Inactive faults have not had surface displacement during the last 1.6 million years. Several active and potentially active faults are located within this area of Southern California. These nearby faults include: the Santa Monica Fault, Hollywood Fault, Raymond Fault, Malibu Coast Fault, Palos Verdes Fault, Newport-Inglewood Fault, and the Charnock Fault. In addition to these nearby faults, other large faults in the Southern California area have the potential to seismically impact the site, including the San Gabriel Fault and San Andreas Fault. The nearest fault to the project site is the south branch of the Santa Monica Fault, located about 0.5 miles to the north of the northwestern end of the Bluffs. Since the part of the project's objective is to increase Bluff stability and decrease susceptibility to seismically induced failures, it is anticipated that impacts related to seismically-induced ground shaking would be *less than significant*, based on geologic analysis undertaken for this project (URS, 2006).
- iii. Liquefaction. Liquefaction is a temporary, but substantial loss of shear strength in granular solids, usually occurring during or after a major earthquake. The City of Santa Monica Safety Element (1995) indicates that the project site is located in an area of high liquefaction potential. However liquefaction is generally confined to low lying areas and the project site is 100-150 feet in elevation on a sheer Bluff, and therefore not likely susceptible to liquefaction. Due to the fact that the project site is 100-150 feet above PCH, and that part of the project's objective is to decrease susceptibility to seismically induced failures, impacts related to liquefaction would be *less than significant*.
- iv. Landslides. The City of Santa Monica Safety Element (1995) identified the Santa Monica Palisades Bluffs as the "Palisades" Landslide Hazard Area, an area of high landslide potential. The project's objectives include decreasing erosion and landslide potential

along the Bluffs, thus, impacts related to landslides would be less than significant. Furthermore, the project would not create any structures or elements for visitation which would result in the exposure of people to potential adverse effects from landslides. During the construction period of the project, workers would be operating in potential landslide hazard areas. However all safety precautions and procedures, including the use of safety helmets and harness, would be implemented in order to reduce risk to onsite workers. Thus, safety precautions would reduce impacts related to landslides to a *less than significant level*.

- b. A significant component of the project is to decrease erosion potential while stabilizing topsoil through the application of groutcrete, soil nails and native vegetation. The project does not involve significant grading or excavation. The project does involve drilling into the bluff face for hydrauger installation. Although the potential for onsite erosion is low, project implementation activities could result in increased erosion and offsite sedimentation. Implementation of standard City-required erosion control techniques and construction Best Management Practices (BMPs) as identified in Section 7.10.060 of the Municipal Code (e.g., the use of silt fencing, detention ponds, etc.) would reduce soil erosion effects to a *less than significant level*.
- c, d. The City of Santa Monica has principal rock units underlying the area consisting of sedimentary formations of Tertiary (2 to 65 million years ago) to Holocene (last 10,000 years) age. The rock formations underlying the project site consist of the Qal (Recent Alluvium), which are thin sands and gravels with a thickness of 0-20 feet. The soil underlying the project site is Diablo Altamont, which is composed of clays that overlay soft, fractured shales. This soil has a moderate erosion hazard potential, and a high expansion hazard potential. However, the proposed project does not involve any structural development, and is intended to strengthen the Bluffs against erosion and seismic failures through the application of groutcrete, installation of soil nails, replanting of native vegetation, and the reduction of pore water pressure in the soil behind the Bluffs. Therefore, the potential for impacts relating to soil instability is considered low; impacts would be *less than significant without mitigation*.
- e. The project would not involve the use of septic tanks or the generation, conveyance, disposal or treatment of wastewater. Thus *no impact* to the soils from such would occur.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
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| 3.9 HAZARDS AND HAZARDOUS MATERIALS - Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | X | |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | X | | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, | | | X | |



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| substances, or waste within 1/4-mile of an existing or proposed school? | | | | |
| d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | X | | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| f) For a project in the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the area? | | | | X |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | X | |

- a, c. The following analysis is partially based upon a Phase I Environmental Site Assessment (ESA) (Rincon Consultants, October 2006) conducted for the proposed project. That assessment can be found in its entirety in Appendix G of this document. The stability improvements that are proposed for the Santa Monica Palisades Bluffs would not involve the production, transfer, or storage of hazardous materials or substances. Santa Monica High School is located approximately one half mile east of the southern end of the Bluffs. The proposed project would not create a significant hazard to the public or environment, or emit hazardous emissions within one-quarter mile of a school. Therefore, impacts from implementation of the project elements would be *less than significant*.
- b. The project involves the application of grout and groutcrete through a shotcrete machine, which may create potential for splatter during application. The materials used are not expected to be hazardous or toxic. Due to the historical presence of gasoline/service stations within the area surrounding the project (see discussion in part d.), the potential exists for drilling and boring activities to release contaminated soil. However unlikely, the potential release would be a potentially significant impact. Implementation of the Mitigation Measure at the end of the section would reduce the potential impact to a less than significant level. Therefore impacts would be *potentially significant unless mitigation incorporated*.
- d. According to the Phase I ESA report three sites with environmental listings are located adjacent to the subject site. These facilities include the Miramar Hotel Corp, the Kurumaya USA Inc. facility, and the Unknown release at 1500 Pacific Coast Highway. Based on the nature of the listing for the Miramar Hotel as a non-release site, this facility



would not impact the subject property. Although the Kurumaya site is listed as a UST release site, the release was waste oil and affected soil only and the release case is currently closed. Therefore the nearby LUST site would not impact the subject property. The Unknown release at 1500 Pacific Coast Highway was reportedly 5-gallons of an unknown acid that was cleaned up by the Public Works Department. Based on small quantity of the release and the reported cleanup procedures, this location would not impact the subject property. Three historic gasoline stations were identified immediately adjacent to the east of the subject site. One station was located on the southeast corner of the intersection of Ocean Avenue and Wilshire Blvd., a second gasoline service station was located on the southeast corner of the intersection of Ocean Avenue and Santa Monica Blvd., and a third gasoline service station was located on the southeast corner of Ocean Avenue and Broadway. A fourth gasoline service station was identified on the south side of Wilshire Blvd. between Ocean Avenue and 2nd Street, all four stations ceased operation prior to 1977.

Due to the proximity to State Route 1 (PCH) and other historically traveled roadways, there is potential for elevated levels of aerielly deposited lead (ADL) on site. This would be a potentially significant impact. Based on the findings of the Phase I ESA, the former gasoline service stations represent a potential environmental condition due to the unknown presence of underground storage tanks remaining at the former locations of these facilities. Although there is no indication of a release from these former gasoline service stations, the potential remains for drilling and boring activities associated with the proposed project to discover and expose contaminated soil. This would be a potentially significant impact. However, implementation of Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 would ensure potential impacts from aerielly deposited lead (ADL) and the historic gas and service stations would be less than significant. Therefore impacts would be *potentially significant unless mitigation incorporated*.

- e, f. The project site is not located within an airport land use plan or airstrip, and the nearest airport, the Santa Monica Airport, is located more than two miles east of the site (Google Earth, 2006). *No impact would occur*.
- g. The proposed project's objective included improving safety for motorists on PCH and pedestrians in Palisades Park through the stabilization of the Bluffs. The proposed project is partially intended to reduce the risk of soil failure and slumping, which has historically impeded traffic on PCH. It would not impair implementation of an adopted emergency access plan. *No impact would occur*.
- h. The proposed project involves the implementation of measures designed to decrease the rate of erosion and rim recession of the Santa Monica Palisades Bluffs. The project does not involve any structural development and is located within an urban area. Therefore the proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. *Impacts would be less than significant*.

Mitigation Measures

HAZ-1 **Aerially Deposited Lead (ADL) Soil Sampling.** Prior to issuance of permits for the proposed Bluff improvements, a Preliminary



Site Investigation shall be performed in compliance with Caltrans ADL Testing Guidance (March 16, 2001). The Preliminary Site Investigation shall include soil borings in the locations of future Bluff improvement borings to a minimum depth of 2.5 feet below ground surface (bgs) using hand auger sampling methods. All soil samples from the ADL investigation shall be analyzed for the presence of total lead following EPA Test Method 6010. The regulatory criteria for determining whether soils are to be classified as “hazardous waste” for materials handling and disposal purposes based on metal content are contained in the California Code of Regulations Title 22, Section 66261.24. The Total Threshold Limit Concentration (TTLC) for ADL is 1,000 milligrams per kilogram (mg/kg) and the Soluble Threshold Limit Concentration (STCL) for lead is 5.0 milligrams per liter (mg/l). In the event that ADL is discovered in excess of TTLC or STCL, the soil shall be excavated, put into 55-gallon drums, and transported to a licensed land fill for proper disposal. In addition:

- Handling of materials containing ADL shall result in no visible dust migration. The contractor shall have a means of dust control available at all times while handling material in work areas containing ADL.
- Project construction activities shall be conducted in compliance with Caltrans Guidelines associated with aeriaily deposited lead. This requirement shall be included in construction contracts.

HAZ-2

Construction Monitoring. During the drilling of the boreholes into the Bluffs as a part of the proposed Bluffs improvement project (to the west of the four former gasoline service stations) a 40-hour Hazwoper-trained environmental scientist shall be onsite to monitor the soil for hydrocarbons and volatile organic compounds (VOCs). These contaminants may be present in the soil or groundwater from an undocumented release from one of the four former gasoline service stations. The environmental scientist shall examine the excavated soil that is coming out of the boring for visual and olfactory indications of contamination. In addition, the scientist shall use a photoionization detector (PID) to measure VOC concentrations within the worker breathing zone and in the excavated soil to screen for contamination. If contaminants are suspected, soil samples shall be obtained and analyzed to determine whether there are contaminants, and if present, to determine the type and concentrations of contaminants. The sampling results are to be used to make a determination as to where to transport the material for offsite disposal, or to determine if the soils can be used onsite. If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (City of Santa Monica Environmental Program Division). The agency shall review the



data and determine if any additional investigation or remedial activities are deemed necessary.

HAZ-3

Procedure for Suspected Contaminants. If contamination is identified in the water that is to be discharged from the Bluff’s slope that will be collected through the proposed drainage system, it shall be treated prior to discharging to the storm drain system. Please note that any discharge to the storm drain system requires and NPDES permit issued by the Regional Water Quality Control Board. Treatment options include the use of granulated activated carbon. The water being discharged from the slope would be piped into the carbon units. The system would be gravity fed to allow the water to flow through the canisters for treatment of organic chemicals. Periodic monitoring and maintenance of the carbon filtration system would be needed in accordance with an NPDES permit that would need to be obtained from the Regional Water Quality Control Board.

Implementation of the above mitigation measures would ensure that impacts from the proposed project related to the potential soil and groundwater hazards would remain less than significant.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
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| 3.10 HYDROLOGY AND WATER QUALITY - Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | | | X | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | X | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation? | | | X | |
| d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | | | X | |



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | | | X | |
| f) Otherwise substantially degrade water quality? | | | X | |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | | X |
| i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | X |
| j) Inundation by seiche, tsunami, or mudflow? | | | X | |

a-f. A geotechnical report was prepared for the proposed project by URS Corporation dated February 24, 2006. The following analysis is partially based on information from that report which is available for review at the City of Santa Monica EPWM Civil Engineering & Architecture Department. The City of Santa Monica is nearly fully urbanized, with an extensive stormwater drainage system. The site of the proposed project includes the Santa Monica Palisades Bluffs. Over the years, the Bluffs have steadily receded due to natural causes including weathering, surface erosion during heavy rainstorms, localized slope failures caused by groundwater seepage, earthquake shaking, and animal burrows. Surface drainage improvements in the Park, recently undertaken by the City of Santa Monica, have been effective in reducing erosion damage from stormwater runoff, as well as limiting water infiltration behind the bluff face. However, other factors including groundwater seepage from more distant regional sources, animal burrows, bluff face erosion from direct impact of rainfall, and fractures created by previous rainstorms and earthquake events, continue to take their toll. The unique nature and topography of the Bluffs have established them as a prominent feature important to the historical development and community residents of the City. This project would decrease the rate of gradual deterioration of the Bluffs and resulting rim line recession along Santa Monica Palisades Park through the reduction of pore water pressure in the soil behind the Bluffs and stabilization of soil surface on the Bluffs. The surface of the Bluffs is currently vegetated and exposed coastal bluff. Improvement measures are not expected to alter surface water runoff patterns, substantially deplete groundwater supplies, violate water quality standards, create run-off that would exceed the capacity of existing systems, or otherwise substantially degrade water quality.

Horizontal drains, or hydraugers would be installed by drilling 100 to 300 feet into the bluff from the toe. Boreholes are drilled at an angle of 5 to 20 degrees from horizontal. Then perforated pipes (usually 1 to 3 inches in diameter) are inserted to serve as drains for groundwater to dissipate by gravity flow. The collected water would be routed to stormdrain catch basins along PCH. Such systems were installed as part of the slope



repair following the 1998 landslide and proved to be successful in removing excess water. The typical installation of a hydrauger is shown in Figure 2-6.

In evaluating the effectiveness of hydraugers, the main objective is to reduce pore water pressure within the saturated soil or rock materials. Depending on whether the permeability of these materials is low or high, such pressure reduction is accomplished by small or large volumes of flow, respectively. In low-permeability materials, such as some of the fine-grained soil formations encountered in the Santa Monica Palisades Bluffs, for example, even hydraugers that are merely dripping are likely to be effective (URS, 2006).

Dewatering effluent from the hydraugers will be conveyed to the storm drain system associated with Pacific Coast Highway (PCH), which is owned, operated, and maintained by the California Department of Transportation (Caltrans) District 7. For this portion of PCH, the storm drain system discharges into Santa Monica Bay. Some of the designated beneficial uses for Santa Monica Bay are water contact recreation, navigation, commercial and sport fishing, marine habitat, and shellfish harvesting, among others. Santa Monica Bay is considered an impaired water body and is included in the State's Clean Water Act (CWA) Section 303(d) list of impaired water bodies. (This list is most often referred to as the "303(d) List.") The 303(d) List identifies water bodies or segments of water bodies that do not meet the water quality objectives necessary to sustain the water body's designated beneficial uses. There are many federal, state, and local programs and regulations in place to achieve water quality objectives by managing the quality of stormwater and non-stormwater (e.g., dewatering effluent) discharges to water bodies.

Caltrans Statewide Stormwater Permit

Caltrans will require that the stormwater runoff and dewatering effluent flowing into its storm drainage system be in compliance with the Caltrans Statewide Stormwater Permit (State Water Resources Control Board Order No. 99-06-DWQ, NPDES No. CAS000003) and the Caltrans Statewide Stormwater Management Plan. This means that the groundwater dewatering effluent and stormwater discharges associated with the proposed project must be in compliance with all federal, state, and local regulations, including NPDES permits and Waste Discharge Requirements.

Permits Related to Discharges from Construction Sites

Construction activities for the proposed project would comply with:

- *The Waste Discharge Requirements for Municipal Stormwater and Urban Runoff Discharges within the County of Los Angeles, and the Incorporated Cities Therein, Except the City of Long Beach (Los Angeles Regional Water Quality Control Board Order No. 01-182, NPDES No. CAS004001) as the proposed project is a municipal construction project owned by the City of Santa Monica; and*
- *The General Permit for Stormwater Discharges Associated with Construction Activity (State Water Resources Control Board Order No. 99-08-DWQ, NPDES No. CAS000002).*



Both of these permits require a Notice of Intent (NOI) to comply, which is submitted to the State Water Resources Control Board with a fee, and the preparation and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Plan (SWPPP/MP). The SWPPP/MP must address:

- *Erosion Control Best Management Practices (BMPs)*
- *Sediment Control BMPs*
- *Tracking BMPs*
- *Wind Erosion BMPs*
- *Construction Site Management BMPs for:*
 - *Non-Stormwater Discharges*
 - *Construction Materials*
 - *Construction Wastes*
- *BMP Inspection, Maintenance, and Repair*
- *Permanent (Post-Construction) BMPs*
- *Site Inspections and Reporting*
- *Runoff Sampling and Analysis*

Groundwater Dewatering Permit

The discharge of groundwater during both the construction phase and from the completed proposed project would comply with Los Angeles Regional Water Quality Control Board Order No. R4-2003-0111, Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters (NPDES Permit No. G994004). Application for coverage under this general permit for groundwater dewatering requires:

- *A description of the discharge*
- *Identification of the discharge locations (outfalls) to surface waters*
- *An estimate of the maximum daily discharge volume in gallons per day*
- *Treatment processes, if necessary*
- *Start-up date and duration of the discharge*
- *Sampling and analysis to provide an initial characterization of groundwater quality*

Compliance and continuing coverage under Order No. 2003-0111 requires implementation of a Monitoring and Reporting Program that typically consists of:

- *Sampling and Analysis for designated parameters on a monthly, quarterly, semi-annual, and/or annual basis*
- *Reporting of laboratory analytical data on a quarterly basis*
- *Where laboratory analytical data indicates an exceedance of an effluent limitation, termination of the discharge until remedial measures are taken.*

Therefore, stormwater discharges and groundwater dewatering effluent from the proposed project would have a less than significant impact on the water quality of Santa Monica Bay given the proposed project's compliance with the various NPDES permits and Waste



Discharge Requirements and the ongoing monitoring and reporting required for the discharged groundwater.

The improvement measures include components that would alter the subsurface drainage patterns through the use of hydraugers. These elements of the project would serve to decrease the amount of ground water and subsurface pore water pressure in order to increase Bluff stability and decrease erosion potential. The ground water that would be drained does not support any wells or groundwater supply systems nor is it an important resource for any water uses, nor do the small pockets of water serve to recharge any groundwater supplies or table levels. The subsurface water would drain to an existing surface stormwater conveyance infrastructure; however the amount of water expected to drain would be minimal (URS, 2006), and would not result in flooding or capacity deficiencies. Therefore, impacts related to hydrology and water quality as a result of the project would be *less than significant*.

- g-i The City lacks open surface water areas, with only a few open concrete drainage channels located in the City. As a result, the City does not have any natural floodplains remaining within the City, and no part of the City, including the project site, is contained within Zone A, the 100-year flood zone (FEMA Map No. 060159). *No impact would occur.*

- j. The proposed project site is within a potential tsunami inundation area (City of Santa Monica Safety Element, 1995). Tsunamis are spontaneous water waves that are usually caused when hundreds to thousands of square miles of submerged continental shelf or slope are rapidly displaced several feet in a vertical direction during a large earthquake. Damage may be confined to a near coast, but waves may travel across oceans and devastate distant shorelines. Destructive tsunami waves are also generated when earthquake-triggered rocks or landslides fall into water bodies. Historically, California has suffered little tsunami damage. The wide, physiographically complex offshore borderland may aid in decreasing tsunami effects in Southern California. Predictive models for distantly generated tsunamis indicate that wave heights of 10 to 17 feet are exceeded on the average of once every 500 years along the Santa Monica Bay (McCulloch, 1985). The Bluffs average 100 to 200 feet in height above sea level, and this project would not result in new structures or increased visitation in the tsunami inundation area. Therefore, the risk of loss, injury or death from inundation is *less than significant*.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| 3.11 LAND USE AND PLANNING - Would the project: | | | | |
| a) Physically divide an established community? | | | | X |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| c) Conflict with an applicable habitat conservation plan or natural community conservation plan? | | | | X |



a-c. The project would not physically divide an established community or conflict with any applicable habitat conservation plan or natural community conservation plan. The project site, the Santa Monica Palisades Bluffs, General Plan Land Use designation is within the Santa Monica General Plan Parks District. This District includes parks, beaches, and median strips. The zoning designation for the project site is designated DP, Designated Parks, by the City of Santa Monica.

The project involves stability improvements to the Santa Monica Palisades Bluffs that include improvement measures for seismic strengthening and decreasing potential for surface erosion of the Bluffs face, rim, and toe, through the reduction in pore water pressure in the soil behind the Bluffs and surface soil support and strengthening. Therefore, *the project would not impact land use and planning for the City of Santa Monica.*

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| 3.12 ENERGY AND MINERAL RESOURCES - Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | X |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | | | | X |

a, b. The project site is located in a developed urban area that does not provide any mineral resource value. Development of the proposed project would not result in the loss of the availability of a known mineral resource that would be of value locally, regionally, or to the State (California Geological Survey/U.S. Geological Survey, 2003). Therefore, *no impacts to mineral resources would occur.*

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| 3.13 NEIGHBORHOOD EFFECTS | | | | |
| a) Will the proposal have considerable effects on the project neighborhood? | | X | | |

a. The City of Santa Monica Land Use Element of the General Plan requires the completion of a neighborhood impact statement, with public input. This requirement details the assessment of neighborhood impacts associated with all proposed projects on the character and cohesiveness of each neighborhood in the City. The principal objective stated under "Neighborhood Participation" in the Land Use Element is to encourage citizen and neighborhood participation in the City planning process to ensure realization of the goals of the Element.



The project involves stability improvements to the Santa Monica Palisades Bluffs that include measures for soil block strengthening and decreasing potential for surface erosion of the Bluffs face, rim, and toe. Sections of the project are located within residential communities identified by the City. From Montana Avenue north to the northern end of the Bluffs (northern City limit) is designated to be within the North of Montana Association area. This association represents residences from the beachfront along PCH to the eastern City limit at Twenty Sixth Street. South of Montana Avenue and north of Wilshire Boulevard, from the beachfront residences along PCH east to Twenty First Street is represented by the Wilshire/Montana Neighborhood association. The remainder of the Bluffs south of Wilshire Boulevard is not designated to be within any identified community. The residences along PCH are located within 60 feet of segments of the project site. These residences would have potential for adverse impacts related to aesthetics, noise and traffic generated during project implementation.

Project impacts relating to the surrounding neighborhood are summarized in Table 3-2. A discussion of the project’s impacts on the surrounding neighborhood and the significance criteria for each impact listed below are described in their respective sections (Sections 3.1 *Aesthetics*, 3.5, *Construction Effects*, and 3.14, *Noise*). Please refer to individual sections for detailed analysis of project impacts and mitigation measures for each issue area.

Table 3-2 Summary of Neighborhood Effects

| Section 3.1, Aesthetics | |
|---|---|
| Impact | Mitigation Measure |
| Impact AES-1: Project implementation may alter scenic resources. This impact is considered <i>potentially significant unless mitigation incorporated.</i> | AES-1 Vegetated Covering of Groutcrete. <i>See Section 3.1 for a complete discussion of this impact.</i> |
| Section 3.5, Construction Effects | |
| Impact | Mitigation Measure |
| Impact CON-1: Project construction would temporarily increase truck traffic in the project area, which could disrupt the normal use of Palisades Beach Road (PCH), the California Incline, and Moomat Ahiko Way. This impact is considered <i>potentially significant unless mitigation incorporated.</i> | CON-1 Construction Impact Mitigation Plan. <i>See Section 3.5, for a complete discussion of this impact.</i> |
| Section 3.14, Noise | |
| Impact | Mitigation Measures |
| Impact N-1: Project construction would intermittently generate high noise levels on and adjacent to the site, which may affect sensitive receptors located near the project site. This impact is considered <i>potentially significant unless mitigation incorporated.</i> | N-1 (a) Diesel Equipment Mufflers. N-1 (b) Electrically-Powered Tools. N-1(c) Restrictions on Excavation and Foundation/Conditioning. N-1 (d) Additional Noise Attenuation Techniques. |



Table 3-2 Summary of Neighborhood Effects

| | |
|--|---|
| | <p>N-1 (e) Construction Sign Posting.</p> <p><i>See below, section 3.14, for a complete discussion of this impact.</i></p> |
|--|---|

As discussed in their respective sections, neighborhood effects from Noise, and Construction would be reduced to less than significant, provided the respective mitigation measures are implemented.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| 3.14 NOISE – Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | X | | |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | | | X |
| c) A substantial permanent increase in ambient noise levels above levels existing without the project? | | | | X |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | X | | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise? | | | | X |

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while noise levels along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.



One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.

The actual time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than noise that occurs during the daytime. Two commonly used noise metrics - the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dB to actual nighttime (10 PM to 7 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5 dB penalty for noise occurring during the evening (7 PM to 10 PM).

Noise exposure goals for different land uses reflect the varying noise sensitivities associated with those uses. The nearest noise-sensitive receptors located in the vicinity of the project site are the beach front residences along the west side of PCH, across from the Bluffs.

The City of Santa Monica adopted an updated General Plan Noise Element in 1992. The Element was updated to provide a description of existing and projected future noise levels, and to incorporate comprehensive goals, policies, and implementing actions. The City revised its Noise Ordinance in February 2004 to support the goals and policies of the Noise Element. Consistent with the Noise Element, the revised Noise Ordinance requires that noise mitigation measures be followed in the siting and design of new development [Santa Monica Municipal Code (SMMC) §4.12.070].

To determine whether noise mitigation measures should be undertaken, project applicants must first consult the City's future noise contours map to determine the level of ambient noise and the applicable noise zone. Based upon the applicable noise zone and the type of proposed land use, the project applicant must then consult the Land Use/ Noise Compatibility Matrix to determine what types of mitigation measures may be required to maintain appropriate indoor and outdoor noise levels.

- a-c. The City of Santa Monica Noise Ordinance (SMMC Chapter 4.12) prohibits any "unnecessary, excessive, or annoying noise" in the City. The Ordinance does not control traffic noise on public streets, but applies to all noise sources located on private property including traffic noise. As part of this ordinance, properties within the City are assigned a noise zone based on their corresponding zoning district. Residential districts are designated as Noise Zone I; commercial districts are designated Noise Zone II; and manufacturing or industrial districts are designated as Noise Zone III. The Ordinance also limits the amount of noise generated by uses during normal operation that may affect the surrounding areas. Table 3-3 shows the allowable noise levels and corresponding times of day for each of the three identified noise zones. The project site is not within the noise zones, and activities in parks are exempt from the noise standards (SMMC §4.12.030),

however it is predominately surrounded by residential areas designated as Noise Zone I and commercial uses designated as Noise Zone II.

Table 3-3 Exterior Noise Standards

| Noise Zone | Time Interval | Allowable Leq | |
|------------|---|---|--|
| | | 15-Minute Continuous Measurement Period | 5-Minute Continuous Measurement Period |
| I | Monday – Friday 10 PM – 7 AM 7 AM – 10 PM | 50 dBA 60 dBA | 55 dBA 65 dBA |
| | Saturday and Sunday 10 PM – 8 AM 8 AM – 10 PM | 50 dBA 60 dBA | 55 dBA 65 dBA |
| II | All Days of Week 10 PM – 7 AM 7 AM – 10 PM | 60 dBA 65 dBA | 65 dBA 70 dBA |
| | III | Anytime | 70 dBA 75 dBA |

Source: City of Santa Monica Municipal Code §4.12.060(a).

The project would not result in modifications to the existing traffic patterns or associated noise levels. Operation of the project would not result in a permanent increase in ambient noise levels. The project would result in temporary noise levels that may exceed the noise standards for the surrounding land use zones during construction activity related to the proposed project (see d. for further discussion). However, noise level exceedance during project implementation would be temporary in nature, and with adherence to the City Noise Ordinance and incorporation of the Mitigation Measures at the end of this section, impacts would be reduced to less than significant levels. Therefore, *impacts would be potentially significant unless mitigation incorporated.*

- d. The City’s Noise Ordinance (SMMC §4.12.110) restricts construction activity to the hours between 8:00 AM and 6:00 PM Monday through Friday, between 9:00 AM and 5:00 PM on Saturday, and does not allow construction activity to occur on Sunday or major national holidays. In general, the equivalent noise level during construction is prohibited from exceeding the standard on the receiving property, plus 20 dB (i.e., 85 dBA for Zone I during the daytime 5 minute continuous period). The maximum instantaneous noise level during construction is prohibited from exceeding the standard plus 40 dB (i.e., 105 dB for Zone I). However, construction-related noise exceeding these thresholds is permitted, provided that it is restricted to the hours between 10:00 AM and 3:00 PM.

Project implementation would intermittently generate high noise levels on and adjacent to the site, which may affect sensitive receptors located near the project site. The drilling/boring phase of the project implementation would likely create the highest noise levels due to the operation of heavy equipment, similar to that used during excavation. Temporary noise levels associated with heavy equipment typically range from about 78 to 88 dBA at 50 feet from the source. Continuous operation of this equipment during a workday can cause noise levels onsite and at adjacent receptor locations that are well above ambient levels and could exceed applicable noise standards.



Project implementation would occur over a period of approximately 18 months ending in 2008, and the project site has been divided into 11 treatment zones of approximately 1,000 feet or less. It is anticipated that work will be performed in one or two zones concurrently and that each zone would require up to two months for improvement activities to be performed. Therefore, adjacent land uses would not be exposed to noise from implementation activities for the entire 18 month implementation period. An open area at the foot of the bluff between the Montana Avenue pedestrian bridge and the intersection of Palisades Beach Road and California Incline has been proposed for use as a staging area for equipment and materials. This staging area would be in use throughout the duration of the project. Parking for construction workers would likely be located in Lot 8 North or Lot 9 North, each of which is accessible to the proposed staging area via the Montana Avenue pedestrian bridge. Planned hours of construction activity are between 9:00 a.m. and 5:00 p.m. on weekdays, with construction work also possible on Saturdays during the same hours. As described above, the City's Noise Ordinance prohibits the equivalent noise level resulting from demolition and other construction activities from exceeding the exterior noise standard for any zone by more than 20 dB and prohibits the instantaneous noise level from exceeding the standard by more than 40 dB, unless the noise occurs between 10:00 AM and 3:00 PM. The project site is surrounded by properties that, because they are in residential zone districts, are in Noise Ordinance Noise Zone I and have a maximum exterior five minute continuous noise standard of 65 dB (see Table 3-3). Therefore, construction-related noise generated on the project site would not be permitted to exceed 80 dB for a fifteen minute continuous period, 85 dB for a five minute continuous period, or 105 dB for instantaneous noise, at adjacent residential properties. The residences to the west of the project site are located approximately 100 feet from the project boundaries. At 100 feet construction-related noise could be as high as approximately 82 dBA. Construction-related noise is therefore not expected to exceed the Noise Ordinance's equivalent and instantaneous construction noise standards for adjacent uses within Noise Zone I. However, as the residences across PCH would be exposed to levels above the generally acceptable outdoor level for residential uses of 65 dBA, the impact of construction noise from the proposed project is considered *potentially significant unless mitigation incorporated*.

- e, f. The project site is located approximately 2.25 miles west of the Santa Monica Airport and is not located within an airport land use plan. The project site is well outside the 60-dBA contour for airport noise associated with the Santa Monica Airport (General Plan Noise Element, 1992). Thus, *no impacts would result*.

Mitigation Measures.

Implementation of the following Mitigation Measures would reduce Noise impacts during project implementation to less than significant levels.

- N-1 Diesel Equipment Mufflers.** All diesel equipment shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.
- N-2 Electrically-Powered Tools.** Electrical power shall be used to run air compressors and similar power tools.



N-3 **Timing Restrictions.** The noisiest phases of construction shall be restricted to between the hours of 10:00 AM and 3:00 PM, Monday through Friday, in accordance with Section 4.12.110(d) of the Santa Monica Municipal Code.

N-4 **Additional Noise Attenuation Techniques.** For all noise-generating construction activity on the project site, additional noise attenuation techniques shall be employed to reduce noise levels to City of Santa Monica noise standards. Such techniques may include, but are not limited to, the use of sound blankets on noise generating equipment and the construction of temporary sound barriers between construction sites and nearby sensitive receptors.

N-5 **Construction Sign Posting.** In accordance with Santa Monica Municipal Code Section 4.12.120, the project applicant shall be required to post a sign informing all workers and subcontractors of the time restrictions for construction activities. The sign shall also include the City telephone numbers where violations can be reported and complaints associated with construction noise can be submitted.

Provided that the above mitigation measures are implemented, impacts related to noise exposure during project implementation would be less than significant.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| 3.15 POPULATION AND HOUSING - Would the project: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | X |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X |

a-c. The project involves stability improvements to the Santa Monica Palisades Bluffs that include improvement measures for seismic strengthening and decreasing potential for surface erosion of the Bluffs face, rim, and toe. No structural development exists on the project site, and no resident or tourist attracting elements or structures are proposed as part of the project. The proposed project would not involve altering any growth



restricting infrastructure. *Therefore, the project would not result in impacts to population and housing within the City of Santa Monica.*

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| 3.16 PUBLIC SERVICES - | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| i) Fire protection? | | | | X |
| ii) Police protection? | | | | X |
| iii) Schools? | | | | X |
| iv) Parks? | | | | X |
| v) Other public facilities? | | | | X |

- a. The project involves stability improvements to the Santa Monica Palisades Bluffs that include measures for seismic strengthening and decreasing potential for surface erosion of the Bluffs face, rim, and toe. Once project implementation is complete, the site would revert to its existing passive use. The project would not increase use of the Park or the Bluffs, and therefore would not increase demand for public services within the City of Santa Monica. The project does not include any measures that would alter the existing demand for fire or police protection, schools, parks or other public facilities in the vicinity of the site. *Therefore, the project would result in no impacts to public services.*

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| 3.17 RECREATION - | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | X |

- a. Palisades Park itself is considered part of the City’s Open Space, and is located on top of the Santa Monica Palisades Bluffs. The project involves stability improvements to the Santa Monica Palisades Bluffs that include measures for soil block strengthening and decreasing potential for surface erosion of the Bluffs face, rim, and toe. However, it is not



expected that substantial physical deterioration of Palisades Park would be incurred or accelerated as a result of construction activities related to the proposed project. On the contrary, one of the goals of the project is to decrease the rate of Bluff rim recession along Palisades Park, which would extend the longevity of the park and decrease the rate of physical deterioration, which would result in beneficial impacts to parks. *No impacts would result.*

- b. The project would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The project would not permanently impact existing recreational facilities in the vicinity. *No impacts would result.*

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| 3.18 SHADOWS- | | | | |
| a) Will the proposal produce extensive shadows affecting adjacent uses or property? | | | | X |

- a. The project involves stability improvements to the Santa Monica Palisades Bluffs that include measures for seismic strengthening and decreasing potential for surface erosion of the Bluffs face, rim, and toe. The project would not produce extensive shadows affecting adjacent uses or property as no structures are proposed. *No impact would result.*

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| 3.19 TRANSPORTATION / TRAFFIC - Would the project: | | | | |
| a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | | | X | |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | | | X | |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | X | |
| d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible use (e.g. farm equipment)? | | | X | |
| e) Result in inadequate emergency access? | | | X | |
| f) Result in inadequate parking capacity? | | | X | |



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|---------------------------------------|---|-------------------------------------|------------------|
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | | | X | |
| h) Involve right of way dedication resulting in a reduced lot area? | | | X | |
| i) Reduce access to other properties and uses? | | | X | |
| j) Create abrupt grade differential between public and private property? | | | X | |

a-j. The project involves stability improvements to the Santa Monica Palisades Bluffs that include seismic strengthening and decreasing potential for surface erosion of the Bluffs face, rim, and toe. Implementation of these measures to the Bluffs would not cause any increase in traffic in relation to the capacity of the existing street system, would not exceed a level of service standard, substantially increase hazards due to a design feature, or reduce access to other properties and uses (Fehr & Peers/Kaku Associates, 2006). The project would not result in permanent modifications to the existing traffic patterns. The project would not change air traffic patterns, inadequate emergency access, conflict with adopted transportation policies, involve right of way dedication resulting in a reduced lot area, or create an abrupt differential between public and private property. The project would not result in temporary reductions in street parking during the construction period as no on-street parking is allowed on PCH. However, the project would result in temporary impacts to northbound traffic on the PCH, California Incline, and Moomat Ahiko Way, as segments of northbound lanes would be closed periodically during project implementation. Temporary impacts to transportation and traffic related to project construction are discussed in Item 3.5, *Construction Effects*. No significant long-term impacts related to transportation and traffic would result from project operation, therefore *impacts would be less than significant*.

| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|---------------------------------------|---|-------------------------------------|------------------|
| 3.20 UTILITIES AND SERVICE SYSTEMS - Would the project: | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | X |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | X | |
| d) Have sufficient water supplies available to serve the project from existing entitlements | | | | X |



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---------------------------------------|---|-------------------------------------|------------------|
| and resources, or are new or expanded entitlements needed? | | | | |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | X |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | X |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | | X |

a, b, d-g. The two sources of water for the City of Santa Monica are imported water purchased from the Metropolitan District of Southern California (MWD) and local groundwater. The Department of General Services of the City of Santa Monica administers and maintains the distribution facilities and water supplies.

The City of Santa Monica Department of General Services maintains both a sewage collection system and pump stations that convey effluent to treatment facilities operated by the City of Los Angeles under a municipal sewage treatment contract.

The project involves improvements to the Santa Monica Palisades Bluffs that include measures to increase soil stability and decreasing the potential for surface erosion of the Bluffs face, rim, and toe. The project is not expected to include any modifications that would alter the existing demand for utilities. The project involves landscaping with native vegetation for in-creased topsoil stability. The use of drought tolerant species typical of Southern California coastal Bluffs would not result in an increase demand for irrigation water. *No impacts to utilities and service systems would result.*

c. The project involves the development of new drainage facilities such as hydraugers, or horizontal soil drains. The installation of subsurface drainage infrastructure may incrementally increase the amount of storm water conveyed through the existing infrastructure along PCH (URS, 2006). *Less than significant impacts* would result, however the potential is discussed further in Section 3.10, *Hydrology and Water Quality*.



| ISSUES: | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| 3.21 MANDATORY FINDINGS OF SIGNIFICANCE | | | | |
| a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, 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 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 | |

- a. As discussed in Section 3.4, *Biological Resources*, the project site is within an urbanized area. Although the Pacific Ocean is located less than one mile west of the project site, there are no existing waterways connecting the ocean to the site. The lack of large-scale contiguous native habitats and the ease of public access to the shoreline have resulted in little opportunity for sensitive plant and animal species to remain in the City of Santa Monica. The southern coastal bluff scrub located on the site is listed as a community of special concern as defined by the CNDDDB. However, due to the disturbed nature of the bluff habitat, the erosion that has occurred in recent years, and the fact that the majority of the improvements associated with the improvement project are focused on the unvegetated bluffs, and do not disturb the native habitat, this project would not result in significant impacts to the community and/or wildlife. The limited wildlife that exists in the area has adapted to the urban environment and there are no known migratory wildlife corridors. The vegetation within the coastal bluff habitat located on the Bluffs could potentially serve as nesting, roosting, or foraging habitat for native plants, birds or other wildlife (Rincon, 2006). However, due to the disturbed nature of the bluff habitat, the erosion that has occurred in recent years, and the fact that the majority of the improvements associated with the project are focused on the unvegetated bluffs and do not disturb the native habitat, the project would not result in significant impacts to the community and/or wildlife. Further more if project implementation were to occur during nesting season, Mitigation Measure BIO-1 would reduce impacts to a less than significant level. An inconsistency in the location of the boundary of Palisades Park, which was formally determined eligible for listing on the National Register of Historic Places in 1998 under Criterion A, was discovered during record reviews. The net result of this inconsistency is uncertainty with respect to the boundaries of property which was determined eligible, some records indicate the boundary is PCH and other indicate it at the Bluff rim line. However, it is apparent from the documentation that the character-defining features of the



park are located between the bluff line on the west and Ocean Avenue on the east. No work is proposed in Palisades Park from the bluff line to Ocean Avenue. Although no important examples of the major periods of California history or prehistory would be affected by the proposed project (HEART, 2006 and SBRA, 2006) the drilling and boring activities associated with the proposed project would have the potential to discover unknown cultural resources. However implementation of Mitigation Measures CR-1 and CR-2 would reduce potential impacts to less than significant levels. *Impacts would be less than significant.*

- b. As discussed in Section 3.6, *Cultural Resources*, the proposed project has the potential to disturb previously unknown subsurface archaeological and paleontological resources, thereby contributing to the cumulative loss of such resources. However, assuming that Mitigation Measures CR-1 and CR-2 are implemented, thereby resulting in the avoidance and/or treatment of archaeological or paleontological resources that might exist on site, impacts to these resources would be less than significant. The Santa Monica Palisades Bluffs are considered the only remaining native terrestrial habitat within the Santa Monica City limits. However, the project is designed to preserve the natural value of the Bluffs without disturbing the vegetation and coastal bluff habitat. The proposed project would not create any impacts that cannot be mitigated to a less than significant level. Therefore, the project's contribution to cumulative impacts would *be less than significant.*

- c. As discussed in Section 3.14, *Noise*, the construction phase of the proposed project has the potential to generate noise levels that could create temporary adverse conditions for residents on surrounding properties. However, implementation of Mitigation Measures N-1 through N-5 and CON-1 would ensure that temporary construction-related noise is attenuated to a less than significant level. As discussed in Section 3.9, *Hazards and Hazardous Materials*, due to the presence of historic gasoline and service stations adjacent to the project site, the potential exists for the drilling and boring activities associated with the project to discover and release unknown soil contamination, which could pose a potential risk of adverse effects to human beings. However, implementation of Mitigation Measure HAZ-1 would reduce potential impacts to a less than significant level. As discussed in Section 3.8, *Geology and Soils*, the Bluffs are designated as a landslide hazard area (Safety Element, 1995), however part of the proposed project's objectives is to reduce susceptibility to seismically induce ground failure through soil stability with groutcrete, soil nails, and reduction in pore water pressure in the soil behind the Bluffs. The project is not expected to have environmental effects that could potentially cause substantial effects on human beings, either directly or indirectly. Impacts would be *less than significant.*

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4.2 REPORT PREPARERS

This IS/MND was prepared by the City of Santa Monica Civil Engineering and Architecture Department with the assistance of Rincon Consultants, Inc. Spiros Lazaris, P.E., civil engineer, managed the IS/MND for the City. Consultant staff involved in the preparation of the IS/MND are listed below.

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Appendix A

Visual Assessment



Visual Impact Assessment Memo

Santa Monica Palisades Bluffs Improvement Project Santa Monica, California

I. Purpose of Study

This visual impact assessment has been prepared in support of the Categorical Exclusion (CE) and Mitigated Negative Declaration (MND) for the City of Santa Monica's Palisades Bluffs Improvement Project. The purpose of this study is to assess the visual impacts of the proposed project and to propose measures to mitigate any adverse visual impacts associated with the Bluff Improvement Project on the surrounding visual environment.

II. Project Description

The project proposed by the City of Santa Monica is designed to decrease the rate of gradual deterioration of the Bluffs and resulting rim line recession along Santa Monica Palisades Park. The project would preserve an important recreational and visual resource that has been a prominent part of the City's development for over 100 years. Additionally, the objectives of the project include:

- Protection of public and private property above and below the Bluffs;
- Enhancement of public safety;
- Preservation of the natural appearance and unique visual character of the Bluffs;
- Improvement of traffic flow along PCH; and
- The preservation and enhancement of the Palisades Park's historical character.

The proposed project includes several techniques intended to improve the stability of the Bluffs and Palisades Park. The following description includes methods for overall bluff stability and safety, and techniques intended to individually stabilize the bluff rim, bluff face, and bluff toe.

Improvement Methods for Overall Bluff Stability

Hydraugers (Horizontal Drains)

Horizontal drains, or hydraugers, would be installed by drilling 100 to 300 feet into the bluff from the toe. Boreholes are drilled at an angle of 5 to 20 degrees from horizontal, then perforated pipes (usually 1 to 3 inches in diameter) are inserted to serve as drains for groundwater to dissipate by gravity flow. The collected water would be routed to storm drain catch basins along PCH. Such systems were installed as part of the slope repair following the 1998 landslide and proved to be successful in removing excess water.

Improvement Methods for Bluff Rim

The upper surface edge, or rim area, of the Bluffs is subjected to surface erosion from stormwater runoff and direct impact from rainfall, but may also experience slope failure. The latter develops as the rim gradually deepens and/or is being undermined by the sloughing of deeper soil layers, which intersect the bluff face below the rim. The

improvement measures for the bluff rim are aimed at increasing the resistance to surface erosion, as well as strengthening the soils in the upper 20 to 30 feet of the bluff face by mechanical means. As such, the improvement of the bluff rim may be accomplished by implementing a combination of some, or all, of the measures discussed below.

Surface Treatment by Chemical Grouting

In order to increase erosion resistance of exposed surfaces along the Bluffs, including pinnacles, noses and peninsulas, a form of chemical grouting developed for in-situ soil treatment would be used. This involves saturating a surficial soil layer with grout consisting of water-reactive polyurethane prepolymer by means of surface spray. Once sprayed on the soil surface, the grout is absorbed by capillary action as it displaces existing air or fluid in the pores of the soil and bonds to soil particles forming a thin crust a half inch to an inch thick, depending on the soil type.

In larger areas, the protective surface layer would be anchored to the underlying soil by a pattern of short soil nails, or "stitches." The latter would consist of a pattern of perforated steel pipes, or strainer tubes, drilled or driven into the surface and grouted in place. The tubes would be cut flush with the bluff surface and patched with a mixture of natural soil and grout to restore the natural look of the surface. Additionally, short perforated moisture-relief pipes or breather tubes would be drilled or driven into the grouted surface in approximately 10-foot intervals to provide drainage for water accumulating behind the treated surface.

Soil Nailing

Installation of soil nails involves drilling arrays of small-diameter holes in the bluff face, installing galvanized steel or fiberglass pipes, and grouting the boreholes to establish a bond between the pipes and the surrounding soil. In order to help maintain the natural appearance of the Bluff's surface the soil nails may be installed without washers. Soil nails would be used to stabilize the Bluff's from the toe up the bluff face to the bluff rim. Installation of the 20 to 30 foot long soil nails can occur from "cherry picker" extensions of equipment operating from PCH. The soil nails would be used in combination with the other measures to increase stability of bluff face, erosion pockets, gullies, peninsular columns, overhanging blocks and tension cracks along the entire length of the Bluffs.

Improvement Methods for Bluff Face

Surface Grouting and Soil Nailing

Surface grouting and soil nailing, which are described above, are also applicable for improving the stability of the bluff face.

Stabilization of Gullies

Deep gullies that pose a potential risk of undermining the Park rim would be protected from further erosion by partially filling them with "groutcrete," a mixture of water, water-reactive polyurethane resin and native soils, designed to protect the walls and bottom of the gullies. This mixture, which would roughly match the color of the bluff face, would be applied by means of a shotcrete machine. The groutcrete would also be anchored in place by the soil nails.

Stabilization of the "Peninsular" Bluff Columns

The peninsular columns separating the near-vertical erosion gullies, arguably are the most unique features of the Bluffs. Hence, protecting these columns is an important step towards the objective of preserving the Bluffs' visual character. As discussed previously, loss of lateral and vertical support for these columns would be included as part of the bluff improvement program. The lateral support of these columns would be improved by grouting the tension cracks and/or anchoring the columns with soil nails as discussed above.

The loss of vertical support appears to be due to enlargement of erosion pockets on the bluff face. Therefore, the erosion pockets would be filled at the base of the bluff columns with groutcrete. Short perforated pipes will be inserted and grouted before placing groutcrete, and left in place to provide support as "stitches." In addition, "breather" tubes would be installed.

Improvement Methods for Bluff Toe

Surface Grouting and Soil Nailing

Surface grouting and soil nailing, as described above, would also be used for improving the stability of the bluff toe.

Vegetation

To assist in stabilizing bluff soil against erosion, native Southern Coastal Bluff Scrub habitat plant species would be used for planting and landscaping of the Bluffs. The use of native plants would require little or no watering after the initial planting, or once the plants are established. The plant species chosen would be characteristic of, and endemic to, southern coastal bluffs where they are constantly exposed to winds with high salt content on poorly developed soils.

Anchor Blocks on Talus Slope

Relatively large reinforced-concrete anchor blocks with pre-stressed tiebacks would be installed at locations on the talus slope up-coast from the California Incline. These anchor blocks, while being placed between and behind the tall vegetation along the toe of the Bluffs, would strengthen the talus slope without being in plain view. Thereby providing additional buttressing support to the adjacent near-vertical bluff face.

III. Assessment Method

The process used in this visual impact study generally follows the guidelines outlined in the publication "Visual Impact Assessment for Highway Projects," Federal Highway Administration (FHWA), March 1981. The assessment of visual impacts requires following a procedure that includes six steps. They are as follows:

- Define the project setting and viewshed.
- Identify key views for visual assessment.
- Analyze existing visual resources and viewer response.
- Depict the visual appearance of project.
- Assess the visual impacts of project.
- Propose methods to mitigate adverse visual impacts.

IV. Project Visual Setting and Existing Visual Resources

A. Project Setting

The project site is located in the western portion of Los Angeles County, in the City of Santa Monica. The proposed project site, the Palisades Bluffs (Bluffs), form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH), a portion of which is also referred to as Palisades Beach Road. The project area extends 1.6 miles along PCH, from the McClure Tunnel to the northwestern limit of the City. The project site is regionally accessible from Interstate 10 (the Santa Monica Freeway) and State Route 1 (Pacific Coast Highway).

The aesthetic appeal of the site is relatively high, because of its shoreline location and its corresponding view of the Pacific Ocean from atop the Bluffs. The Bluffs are a prominent geologic feature of the Santa Monica shoreline, and views of the Bluffs can be seen from the beach, the Santa Monica Pier (Pier), PCH and the Santa Monica Bay. Palisades Park atop the Bluffs is a popular site for tourists and other recreational users.

B. Existing Visual Resources

The Bluffs extend along PCH from the McClure Tunnel to the northwest boundary of the City of Santa Monica, with heights ranging from about 50 to 150 feet. Situated on top of the steep escarpment, overlooking the PCH and the Pacific Ocean is Palisades Park, which has been an important recreational and visual resource for the City for over 100 years.

The Bluffs consist of relatively fragile Pleistocene age alluvial deposits with near-vertical slopes and peninsular soil columns. Along the toe of the Bluffs, a densely vegetated, gently sloped mass of loose soil and debris (talus) from the Bluffs has accumulated, particularly northwest of the California Avenue Incline. Areas of the Bluffs are covered with native and non-native vegetation, with other areas of exposed soil. Prominent visual features include the topographical variations of peninsular columns, or noses, separated by near vertical erosion gullies; and the aesthetic appeal of transitions between various vegetated areas to areas of exposed soil.

Over the years, the Bluffs have steadily receded due to natural causes including weathering, surface erosion during heavy rainstorms, localized slope failures caused by groundwater seepage, earthquake shaking, and animal burrows. Some of the slope failures have been large enough for slide debris to cover several traffic lanes of PCH.

Surface drainage improvements in the Park, recently undertaken by the City of Santa Monica, have been effective in reducing erosion damage from stormwater runoff, as well as limiting water infiltration behind the bluff face. However, other factors including groundwater seepage from more distant regional sources, animal burrows, bluff face erosion from direct impact of rainfall, and fractures created by previous rainstorms and earthquake events, continue to take their toll.

The Palisades Bluffs are a vivid visual element. The Bluffs currently do not have any physical encroachments blocking their view. As a visual feature distinct from its surroundings, it is memorable both in its immediate vicinity and as a landmark for the City of Santa Monica.

C. Public Views

1. Existing Views of the Site. Public views of the site are available from various vantage points, including Palisades Park, Pacific Coast Highway (PCH), Santa Monica Pier, the nearby beach, as well as from the Santa Monica Bay. From Palisades Park pedestrians walking along recreation paths can see the Bluffs below. Motorists on PCH, as well as recreational users on the beach and on the water of the Santa Monica Bay can clearly view the Bluffs. The vista for pedestrians walking across the multiple pedestrian bridges spanning PCH, that connect the rest of the City of Santa Monica to the beach via Palisades Park, affords clear views of the Bluffs.

2. Existing Views from the Site. Due to the topography of the site being a 1.6 mile long stretch of near vertical bluffs, few points within the project boundaries afford views of the surrounding areas. Four pedestrian bridges span PCH near the project site connecting the beach to Palisades Park and the rest of the City. These bridges generally connect to staircases located on the Bluffs, which could be considered to be within the project area. These staircases afford views to the west of the beach, the Santa Monica Bay, PCH, the Pier, and the structural development along PCH. Although the project area does not include Palisades Park itself, it should be noted that the majority of the park affords scenic vistas of the Santa Monica Bay, the beach, the Pier, the coastline to the north and south including partial views of the Santa Monica Mountains, and PCH including the structural development.

D. Existing Viewer Exposure and Sensitivity

1. Viewer Exposure. Viewer exposure is typically assessed by measuring the number of views exposed to the resource, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. Viewers that are exposed to the visual resources on and around the Bluffs include recreators on the Santa Monica Bay, pedestrians, cyclists, and motorists. Kayakers, paddlers and boaters on the Bay, as well as pedestrians walking on the PCH, along the beach, on the Pier, across the pedestrian bridges or on a scenic pathway at Palisades Park are exposed to the visual resources for a longer duration than a motorist traveling along PCH, who may only catch a few glimpses of the Bluffs as they travel past it. Therefore, pedestrians, cyclists, beach, Pier, and ocean goers would react more strongly to a visual change than motorists.

2. Viewer Sensitivity. Sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. For example, the Bluffs as a visual resource are a distinctive landmark of the City. Viewers would be highly sensitive to any change in its visual character, although the overall cohesiveness of the view would probably be more important than minor alterations on individual components. In addition, people are characteristically sensitive to views of the Pacific Ocean, since many tourists and residents alike come to Palisades Park, atop the project site, for a scenic view of the ocean and surrounding vista.

E. Light, Glare, and Shadows

Sources of light on the project site and vicinity include lighting of the staircases connecting to the pedestrian bridges, lighting in Palisades Park, as well as structure, street and parking lot lighting along Pacific Coast Highway. Primary glare sources include the sun's reflection from metallic or glass surfaces on vehicles parked or

traveling along PCH, as well as metallic or glass surfaces on structures situated adjacent to PCH and in Palisades Park.

“Light-sensitive” uses are those that depend upon light for their operation (solar panels, for example) or for which solar access is essential to their function (swimming pools, for example). Certain recreational facilities may be light-sensitive, depending on their function. Within the project boundary there are no light-sensitive uses. Recreational facilities such as the Palisades Park atop the project site could be considered light-sensitive. Residential uses are also considered light-sensitive; the residences nearest to the Bluffs are located approximately 100 feet to the west across PCH.

V. Visual Impact Assessment

A. Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 applied environmental awareness policies to all types of federally supported projects and all types of project settings. The Act declares that it is the “continuous responsibility” of the federal government to “use all practicable means” to “assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.”

The coverage of aesthetics in Title 23 of the U.S. Code, which governs the Federal Highway Administration, was augmented to reflect NEPA’s directives. Section 109(h) states that the project/environment balance point is the “best overall public interest.” The costs of minimizing or elimination the “destruction or disruption of manmade and natural resources,” specifically including “aesthetic values” must be considered in striking this balance. To further implement NEPA, Section 109(h) and Section 4(f), the Department of Transportation inaugurated its Design, Arts, and Architecture in Transportation program in 1978. This program goes beyond the conservation of existing scenic resources and requires that environmental impact statements document the consideration of design quality in projects that involve public use areas or sensitive locations, such as parks or historic districts.

In addition to federal policies regarding the issue of aesthetics and character, the City of Santa Monica addresses the topic in several local policies, especially those contained in the Urban Design Objectives and Policies (Section 3.0) of the General Plan Land Use Element. It is further addressed in the City’s Zoning Ordinance through a range of development standards that are applied by district. This section primarily focuses on those requirements most applicable to the design of the proposed project for the purpose of assessing whether any inconsistency with these standards creates an adverse impact on the City’s visual resources. The ultimate determination of whether this project is consistent with the General Plan and Zoning Ordinance is a decision that resides exclusively with the decision-making body (i.e., the Planning Commission or the City Council on appeal).

B. Methodology for Visual Impact Analysis

The visual impacts of the project are determined by assessing the visual resource change due to the project and predicting viewer response to that change.

Visual resource change is the sum of the change in visual character and change in visual quality. The first step in determining visual resource change is to assess the compatibility of the proposed project with the visual character of the existing landscape. The

second step is to compare the visual quality of the existing resources with projected visual quality after the project is constructed.

The viewer response to project changes is the sum of viewer exposure and viewer sensitivity to the project. The resulting level of visual impact is determined by combining the severity of resource change with the degree to which people are likely to oppose the change.

The City of Santa Monica General Plan was reviewed relative to visual resources and design policy. An impact is considered adverse if it can be reasonably argued that the project would conflict with City policies, particularly the Urban Design Objectives and Policies (Section 3.0) of the General Plan Land Use Element, or result in the following:

- Loss of a major open space resource;
- Obstruction of existing ocean views from a public area such as a park;
- Loss of a major public scenic view;
- Generation of excessive nighttime lighting that is out of character with the land uses surrounding the project site;
- A substantial increase in ambient lighting in residential areas; or
- Generation of excessive glare.

C. Definition of Visual Impact Levels

- **Low** - Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment. May or may not require mitigation.
- **Moderate** - Moderate adverse change to the visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices.
- **Moderately High** - Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response. Extraordinary mitigation practices may be required. Landscape treatment required will generally take longer than five years to mitigate.
- **High** - A high level of adverse change to the resource or a high level of viewer response to visual change such that architectural design and landscape treatment cannot mitigate the impacts. Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts.

D. Analysis of Key Views and Project Impacts

1. Alteration of Public Views. Because it is not feasible to analyze all the views from which the proposed project would be seen, it is necessary to select a number of key viewpoints that would most clearly display the visual effects of the project. Key views also represent the primary viewer groups that would potentially be affected by the project. Four public viewing locations were chosen to assess the potential visual effects that each project alternative may produce:

- View A:** Pedestrian Bridge across Pacific Coast Highway connecting beach parking lot with Palisades Park south of Montana Ave, north of Idaho Ave, and north of the California Incline. This view represents what pedestrians and motorists would see from the pedestrian bridges, as well as

the public parking lots, sidewalks, structures and vehicles along PCH near the northern site boundary.

View B: A scenic look out in Palisades Park near the intersection of Georgina Ave and Ocean Ave. This view represents what pedestrians would see from the walking paths and scenic outlooks in Palisades Park looking north, south, and west down slope.

View C: Pedestrian Bridge across Pacific Coast Highway connecting the beach parking lot with Palisades Park near the intersection of Arizona Ave and Ocean Ave. This view represents what pedestrians and motorists would see from the pedestrian bridges, as well as the public parking lots, sidewalks, structures and vehicles along PCH near the southern site boundary.

View D: On the end of the Santa Monica Pier looking northeast towards the beach, PCH and the Bluffs. This view represents what recreational users on the beach, on the Santa Monica Bay, and pedestrians on the Pier would see.

A discussion of how the project affects each of these views follows.

View A. Figure 2 illustrates current visual conditions and a conceptual view of the post-project conditions of the Bluffs to the south of View A. The post-project view of the Bluffs from this location displays how the soil nails, hydraugers and groutcrete are likely to appear when implemented along this section of the Bluffs. Views of the Bluffs would not be obscured under this scenario. The physical appearance of the Bluffs would alter slightly with the reduction in topographic variety resulting from the groutcrete infill of deep erosion gullies. The project would not result in an obstruction of existing ocean views or result in a loss of a major public view. Therefore, the project's visual impact would be low and would result in minor adverse change to the existing visual resource, with low viewer response to change in the visual environment and would not require mitigation.

View B. Figure 4 displays the existing and conceptual post-project conditions at View B. From the illustration we can see the expected look of the Bluffs below the location of View B. Views of the Bluffs, the beach, PCH, Santa Monica Bay and the greater Pacific Ocean from this location in Palisades Park would not be obscured by the project. No views would be altered. Thus, the project's visual impact at this location would be low and would result in minor adverse change to the existing visual resource, with low viewer response to change in the visual environment and would not require mitigation.

View C. The conceptual post-project view of the Bluffs near View C can be seen on Figure 1. From this location, the fill of the gullies with groutcrete and soil nails would be visible, however this would not obscure views of the Bluffs or Palisades Park. No views would be altered. Therefore, the project's visual impact would be low and would result in minor adverse change to the existing visual resource, with low viewer response to change in the visual environment and would not require mitigation.

View D. Figure 3 shows pre- and post-project conceptual views that would be expected along the lengths of the Bluffs and could be considered a typical view from the Pier or Bay. The conceptual post-project Bluffs would not obstruct the view of the beach, PCH, Palisades Park or any other aspect of the Bluffs. Thus, the project's visual impact would be low and would result in minor adverse change to the existing visual

resource, with low viewer response to change in the visual environment and would not require mitigation.

2. Visual Character and Compatibility. The project does not include the implementation, construction, or alteration of any sources of light or glare. The project may produce temporary light during the nighttime hours of construction and for safety. However, this would be a low level visual impact due to the temporary nature of the construction lighting. No mitigation is required.

This project would add new elements to the existing Palisades Bluffs that may adversely affect the aesthetic character of the site. These elements include groutcrete, soil nails, and hydraugers. The project components are designed to preserve the visual character of the Bluffs. The groutcrete would be mixed with native soil in order to maintain consistent color and reduce the appearance of vertical stratification between the groutcrete areas and the exposed native soil. The exposed ends of the soil nails would be capped with a native soil/grout mix to maintain continuity on the Bluff surface. The hydrauger outlets would be situated along portions of the Bluffs toe, where views are obstructed by vehicles. At this level the outlets would not be highly visible other than to passing motorists who would only get glimpses of them as they passed. The stabilization measures are designed to incorporate the natural Bluff surface so that implementation of them would decrease the rate of erosion while preserving the visual and aesthetic character of the Bluffs.

The proposed project includes filling gullies and erosion pockets with groutcrete, a mixture of water, water-reactive polyurethane resin and native soils. The mixture is designed to roughly match the color of the Bluffs, however it may create the appearance to increased non-vegetated areas on the bluff face. This could be a potentially adverse visual compatibility effect. It could be considered a moderate level visual impact. This could result in a moderate adverse change to the visual resource with moderate viewer response. However, the impact can be mitigated within five years using conventional practices including but not limited to covering large areas of groutcrete with seeded vegetation mats or similar techniques could reduce this effect.

VI. Mitigation

The California Department of Transportation (Caltrans) and the FHWA mandate that a qualitative/aesthetic approach be taken to mitigate for visual quality loss in the project area. This approach fulfills the letter and the spirit of FHWA requirements because it addresses the actual cumulative loss of visual quality that would occur in the project viewshed when the project is implemented. It also constitutes mitigation that can more readily generate public acceptance of the project.

The following mitigation measure is recommended for the project:

- MM1 Vegetated Covering of Groutcrete.** Areas of large groutcrete implementation shall be revegetated with native hydroseed, or covered with a native vegetation mat or blanket when feasible. The vegetated covering shall use native species matching the existing bluff habitat including but not limited to: *Atriplex spp.* [spp. means several species] Saltbushes, *Calystegia cyclostegi* Morning Glory, *Calystegia macrostegia*, *Castilleja affinis* Indian Paintbrush, *Chorizanthe orcuttiana* Spineflower, *Coreopsis gigantea* Giant Coreopsis, *Coreopsis maritima* Sea-Dahlia, *Dudleya spp.* *Encelia*

californica California, *Erigeron glaucus* Seaside Daisy, *Eriophyllum staechadifolium* Woolly Sunflower, *Haploppappus spp* Goldenbush, *Malacotrrix saxatilis*, *Marah macrocarpus* Wild Cucumber, *Opuntia littoralis* Cholla, and *Rhus integrifolia* Lemonadeberry.

The above mitigation measure would minimize the appearance of increased exposed soil on the Bluffs, and help lengthen the lifetime of the groutcrete application. Implementation of the above measure would mitigate the potentially adverse change to the visual character of the Palisades Bluffs.

VII. References

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U.S.D.O.T., Federal Highway Administration, Office of Environmental Policy, Visual Impact Assessment for Highway Projects, U.S. Department of Transportation, Washington D.C., March 1981.

Washington State Department of Transportation, Roadside & Site Development, "Soil Bioengineering", 2002.

VII. Attachments

- Figure 1 Pre- and Post-Project Conceptual View Near Arizona Avenue
- Figure 2 Existing and Post-Project View Near Idaho Avenue
- Figure 3 Existing and Post Project View Near Palisades Avenue
- Figure 4 Existing and Post-Project View Near Georgina



Existing View



Post-Project View

NOT TO SCALE

Source: URS Corp, Inc., Sept. 2006

Existing and Post-Project View Near Arizona Avenue

Figure 1
City of Santa Monica





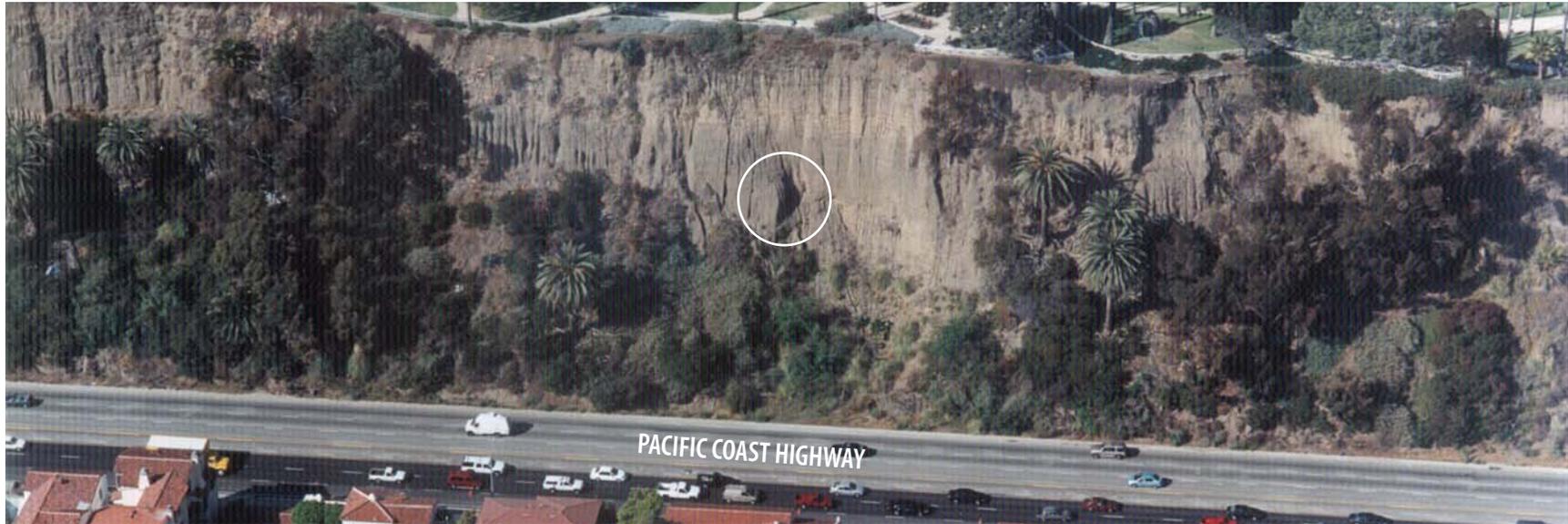
Existing View



Post-Project View

NOT TO SCALE





Existing View



Post-Project View

NOT TO SCALE





Existing View



Post-Project View

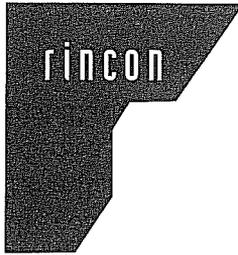
NOT TO SCALE



Appendix B

Biological Assessment





Rincon Consultants, Inc.

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September 22, 2006
Project Number: 04-57300

Spiros Lazaris
The City of Santa Monica
Civil Engineering & Architecture
1918 Main Street, Suite 300
Santa Monica, CA 90405

**Palisades Bluff Stabilization Project
Biological Assessment
Santa Monica, California**

Dear Mr. Lazaris:

This letter presents the results of a biological assessment conducted for the proposed Palisades Bluff Stabilization Project, located in the City of Santa Monica, California. The purpose of this study is to establish the baseline conditions of the biological resources present in the project site, identify and map habitat types based on the composition and structure of the dominant vegetation, determine the presence or absence of any species listed, proposed, or candidate for listing as rare, threatened, or endangered under both the state and federal Endangered Species Acts, and/or other provisions of the Fish and Game Code of California. In addition, this study assesses the impacts of the project and selected project alternatives on biological resources that may occur in the project area. This Biological Assessment is being prepared based on coordination with Gary Iverson of Caltrans District 7 on August 22, 2006, who indicated that this report could be prepared instead of the more formal Natural Environment Study (NES) per Caltrans March 1997, *Guidance for Consultants, Procedures for Completing the Natural Environmental Study and Related Biological Reports*.

The scope of work for this assessment included an office review of the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB; database current as of June 2006), Biogeographic Information and Observation System (BIOS - www.bios.dfg.ca.gov), and U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (<http://criticalhabitat.fws.gov>) prior to a site visit. A site plan and photographs provided by the City were also examined. Based on this review and the site visit of August 29, 2006, the proposed bluff stabilization improvements would not be expected to affect sensitive biological resources.

PROJECT DESCRIPTION

The proposed project site, the Palisades Bluffs (Bluffs), form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH - State Route 1). The project area extends 1.6 miles along PCH, from McClure Tunnel to the northwestern limit of the City of Santa Monica. The proposed project consists of bluff stabilization improvements, including the installation of horizontal drains (hydraugers); surface treatments by chemical grouting and



soil nailing; gully stabilization by shotcrete; and revegetation using native southern coastal bluff scrub species.

PROJECT LOCATION AND PHYSICAL CONDITIONS

The Bluffs extend along PCH from the McClure Tunnel to the northwest boundary of the City of Santa Monica, with heights ranging from 50 to 150 feet. Situated on top of the Bluffs, overlooking the PCH and the Pacific Ocean is Palisades Park. The Bluffs consist of relatively fragile Pleistocene age alluvial deposits with near-vertical slopes and peninsular soil columns. Along the toe of the Bluffs, a densely vegetated, gently sloped mass of loose soil and debris from the Bluffs has accumulated. The disturbed southern coastal bluff scrub habitat located on the project site was dominated by natives including laurel sumac (*Malosma laurina*), California brittlebush (*Encelia californica*), arroyo willow (*Salix lasiolepis*) in areas damp from nuisance road and irrigation runoff, and saltbush (*Atriplex lentiformis*), and also exotic species including Canary Island Palm (*Phoenix canarensis*), Blue Gum (*Eucalyptus globulus*), tumbleweed (Family Amaranthaceae), and pampas grass (*Cortaderia jubata*). Ground cover throughout the site included non-native grasses and iceplant.

SPECIAL-STATUS BIOLOGICAL RESOURCES

Background

A search of the CNNDDB indicates that two animals and six plants of concern have been recorded in the Topanga and Beverly Hills Quadrangles, though a larger number of special-status species could potentially occur in the area. Of greatest concern is the potential for the site to contain suitable habitat for the endangered coastal dunes milk-vetch (*Astragalus tener* var. *titi*) and Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*).

Resources of Concern

Communities of Special Concern. The southern coastal bluff scrub located on the site is listed as a community of special concern as defined by the CNDDDB. However, due to the disturbed nature of the bluff habitat, the erosion that has occurred in recent years, and the fact that the majority of the improvements associated with the stabilization project are focused on the un-vegetated bluffs, and do not disturb the native habitat, this project is not anticipated to result in significant impacts to the community and/or wildlife.

Special-status Plants. The specific project site consists of a disturbed southern coastal bluff scrub. Only two species have the potential to be present given this habitat, soils, elevation, and level of disturbance onsite:

- **Coastal dunes milk-vetch** (*Astragalus tener* var. *titi*), annual herb, Federally Endangered (FE), State Endangered (SE), CDFG Rank S1.1 (very threatened statewide with less than 6 viable occurrences or less than 1,000 individuals or less than 2,000 acres of habitat) and California Native Plant Society List 1B, plants rare, threatened, or endangered in California and elsewhere (CNPS List 1B);
- **Orcutt's pincushion** (*Chaenactis glabriuscula* var. *orcuttiana*), annual herb, CDFG Rank S2.1 (very threatened statewide with 6-20 viable occurrences or 1,000 - 3,000 individuals or 2,000 -10,000 acres of habitat), CNPS List 1B



The **coastal dunes milk-vetch** is known to occur in coastal bluff scrub and coastal dunes. According to the USFWS Recovery Plan for the Coastal Dune Milk-Vetch (2004), coastal dunes milk-vetch was historically found in Monterey, Los Angeles and San Diego Counties. However, the historical known locations in Los Angeles County (Hyde Park and Santa Monica) have been heavily urbanized, and it is unlikely that it is still present in the residual disturbed habitat in this area. Prior to development, coastal dunes milk-vetch occurred adjacent to coastal terrace grassland in vernal wetland areas that became dry in the summer. Today, coastal dunes milk-vetch occurs on relatively flat coastal terraces within 30 meters (100 feet) of the ocean beach (USFWS, 2004). Given the disturbed nature of the coastal bluff scrub on site, the distance from the ocean, the abrupt slope face that is inherent to the Palisades Bluffs, coastal dunes milk-vetch presence onsite is considered unlikely.

The **Orcutt's pincushion** is also known to occur on sandy coastal bluff scrub and coastal dunes. Orcutt's pincushion blooms from January to August and if present onsite, would have been identifiable by its foliage or would have been observed in flower, neither of which occurred. This species is not federally or state listed as threatened or endangered. The proposed actions will occur in locations that are largely barren, eroding soil or areas now dominated by weedy invasive annuals. This plant is more typically found in sandy soils (and dunes) as compared to the finer earth materials present at the site and given the disturbance levels and marginal habitat, it is unlikely to be present within the work areas.

Special-status Wildlife. No special-status wildlife of concern as defined by the CNDDDB were present on site, and no special-status wildlife were observed during the site visit.

Nesting Birds. The coastal bluff scrub habitat in the vicinity of the project site provides marginally suitable nesting habitat for a variety of passerine birds. The proposed improvements will not require the removal of substantial amounts of vegetation. The on-site trees are considered potential roosting/nesting habitat for a variety of migratory and resident birds, including several raptors. It is our understanding that the currently proposed project design does not disturb the on-site trees; however, removal of or disturbance to individual trees on-site could result in impacts to nesting birds that are protected by the California Fish and Game Code if construction were to occur during the bird nesting season, approximately March 1 to September 15. The requirement for a preconstruction survey two weeks in advance of construction would mitigate impacts to nesting birds by the identification of protected nest sites and avoidance of these areas until nesting has completed. Coordination with Department of Fish and Game upon identification of nests would be required to identify appropriate buffers. A no construction buffer zone may be needed to mitigate potential effects to nesting raptors if construction occurs during the breeding season.

Protected Trees. The City of Santa Monica Community Forest Management Plan 2000 (adopted November 9, 1999), has set forth criteria for the removal of public trees within the City right of ways and parks. Removal of a single tree or groups of trees within City property may be necessary as a result of the following:

- A tree is dead.
- A tree had reached an over-mature condition and is in declining health which will result in death within one year.



- A tree which is infected with a disease which cannot be treated successfully and/or there is a strong potential that the pathogen could spread to other trees in the immediate vicinity.
- A tree that has been determined through a Hazard Evaluation Report to be a hazard because of its high potential for failure due to considerable dead or dying foliage, branches, roots or trunk.
- A tree which requires extensive root pruning because of excessive hardscape damage resulting in the severe reduction of its capacity to support itself thereby creating a potential safety hazard.

Prior to removal of any public tree, it is the City's responsibility to evaluate the condition of the tree's root system, trunk, branching system, canopy and foliage. Based upon this evaluation, the Community Forester in consultation with the Director of Community and Cultural Services will make a determination of whether the tree should be removed. Once it had been determined that a tree is to be removed, tree removal notices will be posted in the Public Electronic Network (PEN), notices sent to residences, property owners and merchants in a one block radius of the posted tree and mailed to interested members of the public. During the fourteen day posting period, the public may contest a removal to the Community Forester and if necessary, the offices of the Director of Community and Cultural Services and the City Manager.

This Management Plan applies to the eucalyptus trees and Canary Island palms because the bluffs are part of Palisades Park and within City property. No specific work is proposed within the Tree Protection Zone (TPZ) of these trees at this time, however, if so should become necessary, the City would comply with this plan.

Jurisdictional Drainages and Wetlands. No drainages or wetlands were observed within the project boundary.

Other Regulated Areas. This area is not within any Habitat Conservation Plan area.

MITIGATION

The following is recommended to preserve individual animals that may utilize the on-site coastal bluff scrub habitat for nesting, foraging, or burrowing.

- If the construction of the proposed bluff stabilization improvements are to occur during the nesting season (March 1 through September 15), a search for active nests should be conducted within one week prior to construction by a qualified biologist. If active nests are located within 250 feet of the proposed improvements and are potentially sensitive, then construction work should be delayed in that area until after the nesting season or until the young are no longer dependent upon the nest site.

LIMITATIONS

The identification of potential special-status species and their habitat has been based on a photographic review and site visit designed to assess habitat suitability only. Definitive surveys to confirm the presence or absence of special-status species were not performed. Definitive surveys for special-status wildlife and plant species generally require specific



survey protocols requiring extensive field survey time to be conducted only, at certain times of the year. The findings and opinions conveyed in this report are based on this methodology.

If you have any questions regarding this submittal, please call 760-918-9444.

Sincerely:

RINCON CONSULTANTS, INC.

Christopher Powers
Associate Biologist

Duane Vander Pluym, D.ESE
Principal

Appendix C

Air Quality Results



URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 version 8.7\Projects2k2\Bluffs AQ data.urb
Project Name: Palisades Bluffs
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|------------------------------|------|-------|-------|------|---------------|-----------------|--------------|
| *** 2007 *** | | | | | | | |
| TOTALS (lbs/day,unmitigated) | 7.69 | 51.12 | 61.67 | 0.00 | 1.91 | 1.91 | 0.00 |

| | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|------------------------------|------|-------|-------|------|---------------|-----------------|--------------|
| *** 2008 *** | | | | | | | |
| TOTALS (lbs/day,unmitigated) | 7.69 | 49.70 | 62.58 | 0.00 | 1.78 | 1.78 | 0.00 |

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|------------------------------|------|------|------|------|------|
| TOTALS (lbs/day,unmitigated) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Bluffs AQ data.urb
 Project Name: Palisades Bluffs
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: March, 2007
 Construction Duration: 18
 Total Land Use Area to be Developed: 0 acres
 Maximum Acreage Disturbed Per Day: 0 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

| Source | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|----------------------------------|------|-------|-------|------|---------------|-----------------|--------------|
| *** 2007*** | | | | | | | |
| Phase 1 - Demolition Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 2 - Site Grading Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 3 - Building Construction | | | | | | | |
| Bldg Const Off-Road Diesel | 7.69 | 51.12 | 61.67 | - | 1.91 | 1.91 | 0.00 |
| Bldg Const Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Arch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| Arch Coatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| Asphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| Asphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 7.69 | 51.12 | 61.67 | 0.00 | 1.91 | 1.91 | 0.00 |
| Max lbs/day all phases | 7.69 | 51.12 | 61.67 | 0.00 | 1.91 | 1.91 | 0.00 |
| *** 2008*** | | | | | | | |
| Phase 1 - Demolition Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 2 - Site Grading Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 3 - Building Construction | | | | | | | |
| Bldg Const Off-Road Diesel | 7.69 | 49.70 | 62.58 | - | 1.78 | 1.78 | 0.00 |
| Bldg Const Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Arch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| Arch Coatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| Asphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| Asphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 7.69 | 49.70 | 62.58 | 0.00 | 1.78 | 1.78 | 0.00 |
| Max lbs/day all phases | 7.69 | 49.70 | 62.58 | 0.00 | 1.78 | 1.78 | 0.00 |

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Mar '07

Phase 3 Duration: 18 months

Start Month/Year for SubPhase Building: Mar '07

SubPhase Building Duration: 18 months

Off-Road Equipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|-----|--------------------------|------------|-------------|-----------|
| 1 | Bore/Drill Rigs | 218 | 0.750 | 8.0 |
| 1 | Cranes | 190 | 0.430 | 8.0 |
| 1 | Other Equipment | 190 | 0.620 | 8.0 |
| 2 | Tractor/Loaders/Backhoes | 79 | 0.465 | 8.0 |

SubPhase Architectural Coatings Turned OFF

SubPhase Asphalt Turned OFF

| AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated) | | | | | |
|---|------|------|------|------|------|
| Source | ROG | NOx | CO | SO2 | PM10 |
| Natural Gas | 0.00 | 0.00 | 0.00 | 0 | 0.00 |
| Hearth - No summer emissions | | | | | |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Prdcts | 0.00 | - | - | - | - |
| Architectural Coatings | 0.00 | - | - | - | - |
| TOTALS(lbs/day,unmitigated) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Changes made to the default values for Area

Appendix D

Construction Traffic Assessment



MEMORANDUM

TO: Joanne Dramko, Rincon Consultants, Inc.

FROM: Netai Basu

DATE: January 23, 2007

SUBJECT: Construction Period Recommendations for the Santa Monica Palisades Bluffs Stabilization Project **Ref:** 2058

This memorandum summarizes the recommendations of Kaku Associates, Inc. for construction-period traffic control measures during the construction of the Santa Monica Palisades Bluffs Stabilization project (project).

PROJECT DESCRIPTION

The project proposes a series of physical measures to improve the stability and safety of the Santa Monica Palisades Bluffs, which lie between Ocean Avenue and Palisades Beach Road (also known as Pacific Coast Highway, PCH, State Route 1 or SR 1) in the western portion of the City of Santa Monica (City). The area where the improvements are proposed lies between the McClure Tunnel and the northwest city boundary. The proposed measures would include:

- The insertion of horizontal drains (hydraugers) 100 to 300 feet into the face of the bluffs. The hydraugers would consist of small perforated pipes (one to three inches in diameter) inserted into the bluffs beneath Palisades Park to intercept, collect and drain groundwater. The placement of hydraugers is planned to occur throughout the northern segments of the project site (i.e., north of the intersection of Palisades Beach Road and California Incline).
- Surface treatment by sprayed chemical grouting to reduce surface erosion. This treatment would be supplemented, in larger areas, with the installation of small diameter soil nails to stabilize both the rim and face of the bluffs. This treatment is proposed for application to gullies, cracks and peninsular columns throughout the entire project area.
- To stabilize the toe of the bluffs and reduce the potential for debris flow onto Palisades Beach Road, relatively large reinforced concrete anchor blocks would be installed at key locations throughout the entire project area.

To: Ms. Joanne Dramko
January 23, 2007
Page 2

Construction Methods

Construction would occur over a period of approximately 18 months ending in 2008. To the greatest extent possible, the work will be conducted from the west side of the bluffs to avoid any potential impact to the accessibility of Palisades Park. The project site has been divided into 11 treatment zones of approximately 1,000 feet or less. It is anticipated that work will be performed in one or two zones concurrently and that each zone would require up to two months for stabilization activities to be performed. A detailed Construction Phasing Plan will be prepared during final design of the project. An open area at the foot of the bluffs between the Montana Avenue pedestrian bridge and the intersection of Palisades Beach Road and California Incline has been proposed for use as a staging area for equipment and materials. This staging area would be in use throughout the duration of the project. Parking for construction workers would likely be located in Lot 8 North or Lot 9 North, each of which is accessible to the proposed staging area via the Montana Avenue pedestrian bridge. Planned hours of construction activity are between 9:00 a.m. and 5:00 p.m. on weekdays, with construction work also possible on Saturdays during the same hours.

During construction of the project, it will be necessary to temporarily close portions of the right-hand lane of northbound California Incline, northbound Palisades Beach Road and northbound Moomat Ahiko Way. While northbound Moomat Ahiko Way provides two lanes over most of its length, it narrows to one lane where it joins Palisades Beach Road. Because of this constraint, it would likely be necessary to implement a full closure of northbound Moomat Ahiko Way while stabilization of the bluffs occurs there. Two methods of implementing the temporary lane closures are possible. The closures could be implemented either on a daily basis, with appropriate signage and cones deployed and retrieved each day, or implementation could be on a longer-term basis, where they would remain in place for up to two months in each treatment zone or longer at the proposed staging area. A determination on which of these methods will be used, or a combination of them, will be made following the final design of the project and development of a detailed Traffic Management Plan (TMP). While no closures on the southbound lanes of Palisades Beach Road or Moomat Ahiko Way are planned, it may be necessary to restripe the California Incline temporarily to provide one northbound lane and one southbound lane.

RECOMMENDED MEASURES

Because no sidewalks lie on the east side of the California Incline or Moomat Ahiko Way and the sidewalk that exists on the east side of Palisades Beach Road is discontinuous, the formal temporary prohibition on pedestrian movements adjacent to each treatment zone under construction would not result in an adverse impact on pedestrians. The project would not affect the ability of pedestrians to use the sidewalks on the west side of the California Incline and Palisades Beach Road.

Because the project by its nature would not result in a permanent increase in traffic in the area, no significant traffic impacts would occur. With implementation of the recommended measures, the temporary construction-related impact of the project would be considered less than

To: Ms. Joanne Dramko
January 23, 2007
Page 3

significant. To minimize the temporary effects of the construction activity an Encroachment Permit should be obtained from the California Department of Transportation (Caltrans) and a TMP should be prepared in accordance with Caltrans and City requirements. The TMP should focus on informing the motoring public and affected parties of construction activities and dates and should include, at a minimum, the following elements:

- A public information program should be prepared to advise motorists of planned closures related to construction activity. This could include press releases, a toll-free number with recorded information about the project, information posted to the City's web site and temporary signage on westbound I-10, on Palisades Beach Road on Moomat Ahiko Way and, potentially, at key locations on the routes leading to the affected streets in the project area.
- All affected agencies and departments and surrounding property owners should be notified of planned construction schedules and lane closures. Affected agencies would include, at a minimum, Caltrans, the California Highway Patrol, the Santa Monica Police Department, the Santa Monica Department of Planning and Community Development, the Santa Monica Fire Department and local transit agencies.
- Maintain a minimum of two northbound travel lanes at all times on Palisades Beach Road and one northbound travel lane on the California Incline. It may be necessary to implement a full temporary closure of Moomat Ahiko Way.
- A traffic control plan (detour plan) should be prepared to identify the appropriate advance signage, cone patterns and temporary roadway striping necessary to accomplish the planned lane closures. To minimize driver inconvenience during a full closure of northbound Moomat Ahiko Way, alternate routes should be identified (the California Incline or the Lincoln Boulevard on-ramp to SR 1).
- Haul routes should be identified for construction vehicles to reach the proposed staging area and each of the identified treatment zones.
- Work with the City of Santa Monica to positively identify suitable location(s) where parking for construction workers could occur.
- Limit construction-related truck trips to off-peak hours to the maximum extent possible.

Feel free to call us at (310) 458-9916 if there are any questions or comments regarding the contents of this memorandum. Thank you.

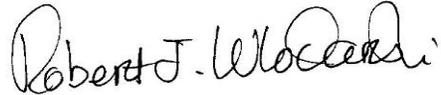
Appendix E

Cultural Resources Assessments



Archaeological Survey Report
Finding of No Adverse Effect with Standard Conditions
For the City of Santa Monica Palisades Bluffs Improvement Project
City of Santa Monica, County of Los Angeles, California
District: Caltrans District 7 - County: Los Angeles
Federal Project Number: HP21L-5107, 017

Prepared and submitted by:



Robert J. Wlodarski
Principal Investigator
M.A./RPA and CCPH Certified
Historical, Environmental, Archaeological, Research, Team
8701 Lava Place. West Hills, California 91304-2126

March 9, 2007
Date

Gary Iverson
District 07 Caltrans PQS
Principal Investigator, Architectural Historian

Date

Gary Iverson
District 07 Environmental Branch Chief

Date

Township 2 South, Range 15 West, Topanga, California 7.5-minute USGS topographic map (1952)
Township 2 South, Range 15 West, Beverly Hills California 7.5-minute USGS topographic map (1995)

Area: Roughly 40 acres within the entire APE

One National Register resource is documented within the APE: Linda Vista Park

March 2007

Summary of Findings

The purpose of this study is to evaluate the potential impacts to heritage resources by the proposed implementation of the City of Santa Monica Palisades Bluffs Improvement Project in order to achieve compliance under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). To achieve the intended goal of this study, an archaeological investigation was conducted by H.E.A.R.T., for the Area of Potential Effect (APE - attached at the end of the document as Maps: Figures 1- 3). The APE was established and approved in consultation with BranDee Bruce, District 07 Caltrans PQS, Co-Principal Investigator, Architectural Historian and Gary Iverson District 07 Environmental Branch Chief. The APE was developed using the engineering plans created for the project by Caltrans and Rincon Consultants, Inc.

The archaeological survey was conducted by Principal Investigator, Robert Wlodarski with the aid of survey archaeologists Wayne Bonner and Diane Bonner on May 11, 2006. Wlodarski, M.A. meets the Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983). Mr. Wlodarski is certified in field archaeology by the Register of Professional Archaeologists (RPA) and has over 34 years cultural resource management experience in California, having completed over 1500 projects. Wayne Bonner meets the Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983) and is certified in field archaeology by the Register of Professional Archaeologists (RPA) with over 36 years of experience in southern California archaeology with an MA in Anthropology from California State University Long Beach; Diane Bonner meets the Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983) and has an MS, in Geology, over 28 years of experience in geology, 19 years of experience in geoarchaeology, and is a member of the Geological Society of America.

The project site is located in the western portion of Los Angeles County, in the City of Santa Monica. The proposed project site, the Santa Monica Palisades Bluffs (Bluffs), form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH), a portion of which is also referred to as Palisades Beach Road. The project area extends 1.6 miles along PCH, from the McClure Tunnel to the northwestern limit of the City. The project site is regionally accessible from Interstate 10 (the Santa Monica Freeway) and State Route 1 (Pacific Coast Highway). The Bluffs extend along PCH from the McClure Tunnel to the northwest boundary of the City of Santa Monica, with heights ranging from about 50 to 150 feet. Situated on top of the steep escarpment, overlooking the PCH and the Pacific Ocean is Palisades Park, which has been an important recreational and visual resource for the City for over 100 years. The Bluffs consist of relatively fragile Pleistocene age alluvial deposits with near-vertical slopes and peninsular soil columns. Along the toe of the Bluffs, a densely vegetated, gently sloped mass of loose soil and debris (talus) from the Bluffs has accumulated, particularly northwest of the California Avenue Incline. Over the years, the Bluffs have steadily receded due to natural causes including weathering, surface erosion during heavy rainstorms, localized slope failures caused by groundwater seepage, earthquake shaking, and animal burrows. Some of the slope failures have been large enough for slide debris to cover several traffic lanes of PCH.

A record search was conducted by professional archaeologist, Wayne Bonner, at the South Central Coast Information Center (SCCIC) located at California State University Fullerton on May 9, 2006. The record search process included a review of all recorded archaeological site information and survey reports within a 0.5-mile radius of the project APE. The record search identified the following cultural resources within the record search radius.

- One prehistoric archaeological site is noted: CA-LAN-135 – a possible campsite recorded by N.C. Nelson.
- Two historic archaeological sites are identified: 19-002392H – 1920s residential trash dump recorded in 1996 by Greenwood & Associates; CA-LAN-016 – Loeff Pier/Santa Monica Pier.
- One National Register resource is documented encompassing the project area: Linda Vista Park was established in 1892 through a gift to the city of the land along the Santa Monica bluffs by Senator John P. Jones, Arcadia de Baker and the Santa Monica Land and Water Company. The park's name was changed to Palisades Park in 1915. The 26.41 acre city park is located between Ocean Avenue on the west and Palisades Beach Road (Pacific Coast Highway) at the foot of a roughly 150 foot high bluff on the west, a width varying between 50 and 150 feet. The park is nearly two miles and 14 city blocks in length, extending from Colorado Boulevard on the south to the city limits on the north. The park features grass lawns, paths, palm and other trees, a pergola, monuments, cannons, sundial, totem pole, statue, a Camera Obscura, gates and a concrete wall at the bluff edge. The park is interrupted by the California Incline roadway, connecting Ocean Avenue to Pacific Coast Highway below. Palisades Park, including the California Incline was formally determined eligible for listing on the National Register of Historic Places in 1998 under Criterion A (historical events) through a Section 106 procedure, with concurrence by the California State Historic Preservation Officer (SHPO). This property should therefore be regarded as an historic

resource for purposes of the California Environmental Quality Act and as an historic property for purposes of Section 106. The character-defining features of the park are located between the bluff line on the west and Ocean Avenue on the east.

- Sixteen prior investigations have been conducted as follows: D'Altroy (1978); Duke (2000, 2001, 2002); Greenwood & Associates (undated, 1996); Historic Resources Group (2005); Lapin (2000); Larson (1991a,b); Maki (2004); Padon (1981); Rice (1974); Singer (1986); Wlodarski, Robert J. (2003); Woodward, (1985).
- Two prior studies (Historic Resources Group 2005; Larson 1991b) encompassed all or part of the project area.
- A letter dated May 9, 2006, was submitted to Rob Wood, Native American Heritage Commission requesting a determination of any Native American/Sacred Lands Issues that might affect the project. A telephone reply on May 11, 2007 indicated that there are no Native American concerns or issues pertinent to this project.
- One California Historical Landmarks (California Department of Parks and Recreation 2003) of the Office of Historic Preservation was identified: CHL 881 – Site of Port of Los Angeles Long Wharf.
- No California Points of Historical Interest (California Department of Parks and Recreation 1992) are identified.
- No Los Angeles County Historical Landmarks are noted.
- The Directory of Historic Properties Data File, Office of Historic Preservation (12-22-2005) was consulted. The following listings were noted: California Avenue Incline; Santa Monica Pier Sign; The Palisades Tract Historic District; South Beach Historic District; Turn-of-the-Century Thematic Historic District; 2000-210 Block Third Street Historic District; Central Business Historic District; Miramonte Apartments (demolished); Mar Vista Apartments; Santa Monica Eagles Hall; William Rapps Los Angeles Beer Garage; Rapp Saloon; Carmel Hotel; Santa Monica Mall/ 3rd Street; 3000 Block Third Street Historic District; 3rd Street Neighborhood Historic District; 3rd Street Promenade Historic District; Embassy Apartments; Ralphs Grocery Store; Criterion Apartments, Extension Design Center; S.H. Kress & Company; Modern Woman; El Miro Theater; Keller Block; Sunshine Court; Louise S. Stark House; El Cortez Apartments; Devonshire Apartments; Arthur Apartments; York House; Santa Monica Bay Woman's Club; Unity by the Sea; Central Tower Building; Wild West; Lido Hotel; Builders Exchange Building; John W. George Residence and Garage; Oregon Avenue Sidewalk Sign; Midas Muffler Shop; 2nd Roy Jones House; Henry Weaver House; Bishop T. Contay House/Minter House; C.A. Collins House; Isaac Millbank House; E.W. Halliday House; H.M. Goram House; R.C. Gillis House; Williard & Anna Morse House; Jack Donovan House; Ralph Wolff Houses # 1 and 2; The Palama; Dr. Bachman House; Mel Ule House; King Jr. House; Wyman House; Jackson House; Thomas Blanchard House; A.E. Jackson House; Symington House; Blatz House; Adam Brown House; A.D. Williams House; M.E. Sayre House; Witworth Historic Block; Dr. Nathaniel Huns House; Georgina Avenue Historic District; R.D. Farquhar House; A. Weber House; Byrd Nebecker House; Richard Donovan House; Cecil Vesy House; Julius Brown House; A. McFadden House; A.H. Flemming House; MacBennett House; J.B. Proctor House; Arthur Thompson House; A.W. Morgan House; George Franklin House; James Lloyd House; Herbert North House; Hellman House; Del Valle House; Ocean Park Methodist Church; Horatio West Court; Pacific Electric Business Barn; Alice Eaton House; J.W. Lyon House; H.M. Ehrlich House; Sutyns House; Duffield House; Welcher House; Montana Streamline Historic District; Linda Vista Park; Weyse House; Province House; Sunset Beach Tract; Bungalow Courts; Tywman House; Boehme House; Sontag House; M.E. Wood House; Witback House; D.D. Smith House; Duckler House; J.P. Johnson House; Prien House; McPhearson House; Torrence House; George B. Dickenson House; William Pigott House; John G. Mehring House; F.R. Siebert House; E.P. Smith House; Alice Noel House; Roosevelt Highway; The Beach Club; R. P. Sherman/Isaac Jours House; Saltain Club; J. Paul Getty Home; Marion Davies Estate; Marion Davies Swimming Pool; North House; San and Sea Club Building; Fence and Bulkhead; Harold Lloyd Beach Estate; there are over 100 listed historic structures located between Ocean-Lincoln Streets heading north-south and San Vicente-Grant heading east-west (none of these resources are located within the APE).

Historical information (maps and documents) was obtained from The Geography Department Map Reference Center, California State University Northridge; data on file with the Los Angeles County Archives Project (Guide to the Historical Records of Los Angeles County); and, the City of Los Angeles, Bureau of Engineering, as follows: Township-Range Plat Map Surveys (1853-1895); Map of Private Grants and Public Lands Adjacent to Los Angeles and San Diego, California (Clinton Day - 1869); Map of the County of Los Angeles, California (Stevenson - 1881); Sanborn Fire Insurance Maps for Santa Monica (1887, 1888, 1891, 1895, 1902, 1909, 1918, 1918-1961); Map of the County of Los Angeles, California (Rowan - 1888); Map of the Reservoir Lands in the County of Los Angeles (Seebold - 1891); Map of Santa Monica, Ocean Park and Vicinity (James - 1905); Map of Rancho Boca de Santa Monica (Ruxton/Rey - 1916); Map of Santa Monica including Venice (Sanborn Atlas - 1925); Map of Santa Monica and Vicinity (Phelps - 1940); and, Topanga, California 7.5-minute USGS topographic map (1952).

The archaeological survey was performed for the APE on May 11, 2006. The survey was directed by Principal Investigator, Robert Wlodarski with the assistance of Survey Archaeologists Wayne Bonner and Diane Bonner. The project area occupies an extremely disturbed and previously developed location. Prior man-made disturbances to the bluff area over the past 120 years include grading, prior stabilization efforts, construction of roads, walkways, paths and landscaping, have most likely destroyed any prehistoric archaeological resources that may have once existed within the project boundaries. Survey transects trending northwest-southeast never exceeded three meters between surveyors during the course of the field investigation. The entire APE was thoroughly inspected for visible signs of heritage resources. Soil within the APE consisted of paved roadways, parking areas, trails, park facilities, landscaping and grassy areas. All open space, visible ground surface and fortuitous exposures such as rodent burrows, cuts or cleared areas and landscaped terrain were thoroughly inspected for signs of cultural resources.

Based on the results of the record search conducted at the South Central Coastal Information Center (SCCIC), and a pedestrian survey, one National Register resource is documented encompassing the project area: Linda Vista Park was established in 1892 through a gift to the city of the land along the Santa Monica bluffs by Senator John P. Jones, Arcadia de Baker and the Santa Monica Land and Water Company. The park's name was changed to Palisades Park in 1915. The park extends from Colorado Boulevard on the south to the city limits on the north. The park features include grass lawns, paths, palm and other trees, a pergola, monuments, cannons, sundial, totem pole, statue, a Camera Obscura, gates and a concrete wall at the bluff edge. It was formally determined eligible for listing on the National Register of Historic Places in 1998 under Criterion A (historical events) through a Section 106 procedure, with concurrence by the California State Historic Preservation Officer (SHPO). The individual resources were noted and photographed (see below for individual photographic recordation). This property should be regarded as a historic resource for purposes of CEQA and a historic property for purposes of Section 106.

The character-defining features of Palisades Park identified by the NRHP Section 106 determination of eligibility in 1998 include lawns, paths, palm and other trees, pergola, monuments, cannons, sundial, totem pole, statue, the Camera Obscura, gates, the concrete wall at the bluff edge and the California Incline. None of these features are proposed to be altered or removed as a part of the bluff stabilization project. All of the proposed activities will be confined to stabilizing the vertical face, rim, and toe of the bluffs. Consequently, the "physical characteristics... that convey its historical significance" of the park will not be materially altered, nor will the integrity of the park features which "qualify the property for inclusion in the National Register" be diminished. Therefore, this project will not have a significant adverse impact on historic resources, in terms of the standards and procedures of CEQA. It will have no adverse effect on an historic property in terms of the standards and procedures of Section 106.

It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if the site(s) cannot be avoided by the project. If buried cultural materials are encountered during construction, it is Caltrans' policy that work must stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. The Caltrans District 07 Historic Resources Coordinator shall be notified of any such find. After the find has been appropriately mitigated, work in the area may resume.

An appropriate Native American representative shall be retained to monitor any mitigation work associated with uncovered prehistoric cultural material. Additional survey work will be required if the project changes to include areas not previously surveyed. If human remains are unearthed during ground disturbing activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. The Caltrans District 7 Historic Resources Coordinator shall be notified of any such find.

Archaeological Survey Report - Finding of No Adverse Affect with Standard Conditions

For the City of Santa Monica Palisades Bluffs Improvement Project.

City of Santa Monica, County of Los Angeles, California

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I. Introduction

The purpose of this study is to evaluate the potential impacts to archaeological resources and buildings over 45 years of age by the proposed implementation of the City of Santa Monica Palisades Bluffs Improvement Project in order to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). To achieve this goal, a field reconnaissance was conducted by H.E.A.R.T., for the Area of Potential Effect (APE). The Vicinity Map, Location Map and the APE Map are appended to the document as Maps: Figures 1-3. The APE was established and approved in consultation with BranDee Bruce, District 07 Caltrans PQS, Co-Principal Investigator, Architectural Historian and Gary Iverson District 07 Environmental Branch Chief. The APE was developed using the engineering plans created for the project by Caltrans and Rincon Consultants, Inc.

II. Location and Description of the Project

The project is located north of the Pacific Ocean, south of the San Fernando Valley, east of Oxnard and west of San Pedro within the City of Santa Monica and County of Los Angeles, California (Maps: Figure 1). The project is depicted within Township 2 South, Range 15 West, on the Topanga, California 7.5-minute USGS topographic map (1952), and the Beverly Hills California 7.5-minute USGS topographic map (1995) (Maps: Figure 2). The bluffs extend about 1.6 miles along Pacific Coast Highway (PCH) from the McClure Tunnel northwest to the City's northern limits (Maps: Figure 3). Palisades Park, which sits atop the bluff, has been an important recreational and visual resource for the city for over 100 years. Project objectives include: Protection of public and private property; enhancement of public safety; improvement of traffic flow along PCH; and, the preservation and enhancement of the Palisades Park's historical character. The City proposes to use federal funds available from the Federal Highway Administration (FHWA) and the Department of Transportation (Caltrans). Because of the potential use of federal funding, this project requires compliance with the NEPA and CEQA. The proposed project includes several techniques intended to improve the stability of the Bluffs and Palisades Park. The following description includes methods for overall bluff stability and safety, and techniques intended to individually stabilize the bluff rim, bluff face, and bluff toe.

- **Improvement Methods for Overall Bluff Stability:** Horizontal Drains or Hydraugers: Horizontal drains or hydraugers would be installed by drilling 100 to 300 feet into the bluff from the toe. Boreholes are drilled at an angle of 5 to 20 degrees from horizontal. Then perforated pipes (usually 1 to 3 inches in diameter) are inserted to serve as drains for groundwater to dissipate by gravity flow. The collected water would be routed to storm drain catch basins along PCH. Such systems were installed as part of the slope repair following the 1998 landslide and proved to be successful in removing excess water. In evaluating the effectiveness of hydraugers, it is important to realize that it is not necessarily the quantity of water removed which counts. Instead, the main objective is to reduce pore water pressure within the saturated soil or rock materials. Depending on whether the permeability of these materials is low or high, such pressure reduction is accomplished by small or large volumes of flow, respectively. In low-permeability materials, such as some of the fine-grained soil formations encountered in the Santa Monica Palisades bluffs, for example, even hydraugers that are merely dripping are likely to be effective.
- **Improvement Methods for Bluff Rim:** The upper surface edge, or rim area, of the Bluffs is subjected to surface erosion from storm water runoff and direct impact from rainfall, but may also experience slope failure. The latter develops as the rim gradually deepens and/or is being undermined by the sloughing of deeper soil layers, which intersect the bluff face below the rim. The improvement measures for the bluff rim are aimed at increasing the resistance to surface erosion, as well as strengthening the soils in the upper 20 to 30 feet of the bluff face by mechanical means. As such, the improvement of the bluff rim may be accomplished by implementing a combination of some, or all, of the measures discussed below.
 - ***Surface Treatment by Chemical Grouting:*** In order to increase erosion resistance of exposed surfaces along the Bluffs, including pinnacles, noses and peninsulas, a form of "spray on" chemical grouting developed for in-situ soil treatment would be used. This involves saturating a surficial soil layer with grout consisting of water-reactive polyurethane prepolymer by means of surface spray. Once sprayed on the soil surface, the grout is absorbed by capillary action as it displaces existing air or fluid in the pores of the soil and bonds to soil particles forming a thin crust a half inch to an inch thick, depending on the soil type. In larger areas, the protective surface layer would be anchored to the underlying soil by a pattern of short soil nails, or "stitches."

- of natural soil and grout to restore the natural look of the surface. Additionally, short perforated moisture-relief pipes or breather tubes would be drilled or driven into the grouted surface in approximately 10-foot intervals to provide drainage for water accumulating behind the treated surface.
- ***Soil Nailing:*** Installation of soil nails involves drilling arrays of small-diameter holes in the bluff face, installing galvanized steel or fiberglass pipes, and grouting the boreholes to establish a bond between the pipes and the surrounding soil. In order to help maintain the natural appearance of the Bluff's surface the soil nails may be installed without washers. Soil nails would be used to stabilize the Bluff's from the toe up the bluff face to the bluff rim. Installation of the 20 to 30 foot long soil nails can occur from remote-controlled extensions of equipment operating from Palisades Park, except at the toe of the bluff. The soil nails would be used in combination with the other measures to increase stability of bluff face, erosion pockets, gullies, peninsular columns, overhanging blocks and tension cracks along the entire length of the Bluffs.
- **Improvement Methods for Bluff Face**
 - ***Surface Grouting and Soil Nailing:*** Surface grouting and soil nailing, which are described above, are also applicable for improving the stability of the bluff face.
 - ***Steel Cable Nets or Wire Mesh:*** A system of steel-cable nets or wire mesh on the surface of the Bluffs would be installed to minimize the impact and eliminate the surprise factor of potential future bluff failures. With openings of two to four feet, these cable nets can be draped from the top of the slope and anchored to the bluff face. Shallow blocks of the bluff that break loose from the surface can be contained between the bluff face and the net, thus being prevented from gaining momentum in a free fall onto PCH.
 - ***Stabilization of Gullies:*** Deep gullies the pose a potential risk of undermining the Park rim would be protected from further erosion by partially filling them with "groutcrete," a mixture of water, water-reactive polyurethane resin and native soils, designed to protect the walls and bottom of the gullies. This mixture, which would roughly match the color of the bluff face, would be applied by means of a shotcrete machine. The groutcrete would also be anchored in place by the soil nails.
 - ***Stabilization of the "Peninsular" Bluff Columns:*** The peninsular columns separating the near-vertical erosion gullies arguably are the most unique features of the Bluffs. Hence, protecting these columns is an important step towards the objective of preserving the Bluffs' visual character. As discussed previously, loss of lateral and vertical support for these columns would be included as part of the bluff improvement program. The lateral support of these columns would be improved by grouting the tension cracks and/or anchoring the columns with soil nails as discussed above. The loss of vertical support appears to be due to enlargement of erosion pockets on the bluff face. Therefore, the erosion pockets would be filled at the base of the bluff columns with groutcrete. Short perforated pipes will be inserted and grouted before placing groutcrete, and left in place to provide support as "stitches." In addition, "breather" tubes would be installed.
- **Improvement Methods for Bluff Toe**
 - ***Surface Grouting and Soil Nailing:*** Surface grouting and soil nailing, as described above, would also be used for improving the stability of the bluff toe.
 - ***Vegetation.*** To assist in stabilizing bluff soil against erosion, native Southern Coastal Bluff Scrub habitat plant species would be used for planting and landscaping of the Bluffs. The use of native plants would require little or no watering after the initial planting, or once the plants are established. The plant species chosen would be characteristic of, and endemic to, southern coastal bluffs where they are constantly exposed to winds with high salt content, on poorly developed soils.
 - ***Low Retaining Walls:*** Low retaining walls to a maximum height of 4 feet can be installed along the toe of the bluffs to prevent debris flow onto sidewalk and PCH. Such retaining walls would most likely be founded on drilled piers that provide lateral resistance.
 - ***Anchor Blocks "Hidden" on Talus Slope:*** Relatively large reinforced-concrete anchor blocks with pre-stressed tiebacks would be installed at locations on the talus slope up-coast from the California Incline. These anchor blocks, while being hidden between the tall vegetation along the toe of the Bluffs, would strengthen the talus slope, thereby providing additional buttressing support to the adjacent near-vertical bluff face.

III. Record Search Results

A record search was conducted by professional archaeologist, Wayne Bonner at the South Central Coast Information Center (SCCIC) located at California State University Fullerton on May 9, 2006. The record search process included a **Archaeological Survey Report - Finding of No Adverse Affect with Standard Conditions**

For the City of Santa Monica Palisades Bluffs Improvement Project.

City of Santa Monica, County of Los Angeles, California

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review of all recorded archaeological site information and survey reports within a 0.5-mile radius of the project APE. The record search identified the following cultural resources within the record search radius.

- One prehistoric archaeological site is noted: CA-LAN-135 – a possible campsite recorded by N.C. Nelson.
- Two historic archaeological sites are identified: 19-002392H – 1920s residential trash dump recorded in 1996 by Greenwood & Associates; CA-LAN-016 – Loeff Pier/Santa Monica Pier.
- One National Register resource is documented: Linda Vista Park was established in 1892 through a gift to the city of the land along the Santa Monica bluffs by Senator John P. Jones, Arcadia de Baker and the Santa Monica Land and Water Company. The park's name was changed to Palisades Park in 1915. The 26.41 acre city park is located between Ocean Avenue on the west and Palisades Beach Road (Pacific Coast Highway) at the foot of a roughly 150 foot high bluff on the west, a width varying between 50 and 150 feet. The park is nearly two miles and 14 city blocks long, extending from Colorado Boulevard on the south to the city limits on the north. The park features grass lawns, paths, palm and other trees, a pergola, monuments, cannons, sundial, totem pole, statue, a Camera Obscura, gates and a concrete wall at the bluff edge. Palisades Park, including the California Incline, was formally determined eligible for listing on the National Register of Historic Places in 1998 under Criterion A (historical events) through a Section 106 procedure, with concurrence by the California State Historic Preservation Officer (SHPO). This property should therefore be regarded as an historic resource for purposes of the California Environmental Quality Act and as an historic property for purposes of Section 106.
- Sixteen prior investigations have been conducted as follows: D'Altroy (1978); Duke (2000, 2001, 2002); Greenwood & Associates (n.d., 1996; Lapin (2000); Larson (1991a,b) Maki (2004) Padon (1981); Rice (1974); Singer (1986); Wlodarski, Robert J. (2003); Woodward, (1985).
- One prior study (Larson 1991b) encompassed the central part of the project area (between Wilshire & Montana).
- Six National Register of Historic Places (2003) are identified: Santa Monica Loeff Hippodrome, 276 Santa Monica Pier; and, Club Casa Del Mar, NR-00001169; Charmont Apartments, 330 California Ave. – NR-96000777; Horatio West Court, 140 Hollister Ave. – 19-178224; Henry Weaver House, 142 Adelaide Drive – NR-89002114 and 19-177918; Sovereign Hotel, 205 Washington Avenue – NR-97001236).
- One California Historical Landmarks (California Department of Parks and Recreation 2003) of the Office of Historic Preservation was identified: CHL 881 – Site of Port of Los Angeles Long Wharf.
- No California Points of Historical Interest (California Department of Parks and Recreation 1992), are identified.
- No Los Angeles County Historical Landmarks are noted.
- The Directory of Historic Properties Data File, Office of Historic Preservation (12-22-2005) was consulted and the following listings were noted: California Avenue Incline; Santa Monica Pier Sign; The Palisades Tract Historic District; South Beach Historic District; Turn-of-the-Century Thematic Historic District; 2000-210 Block Third Street Historic District; Central Business Historic District; Miramonte Apartments (demolished); Mar Vista Apartments; Santa Monica Eagles Hall; William Rapps Los Angeles Beer Garage; Rapp Saloon; Carmel Hotel; Santa Monica Mall/ 3rd Street; 3000 Block Third Street Historic District; 3rd Street Neighborhood Historic District; 3rd Street Promenade Historic District; Embassy Apartments; Ralphs Grocery Store; Criterion Apartments, Extension Design Center; S.H. Kress & Company; Modern Woman; El Miro Theater; Keller Block; Sunshine Court; Louise S. Stark House; El Cortez Apartments; Devonshire Apartments; Arthur Apartments; York House; Santa Monica Bay Woman's Club; Unity by the Sea; Central Tower Building; Wild West; Lido Hotel; Builders Exchange Building; John W. George Residence and Garage; Oregon Avenue Sidewalk Sign; Midas Muffler Shop; 2nd Roy Jones House; Henry Weaver House; Bishop T. Contay House/Minter House; C.A. Collins House; Isaac Millbank House; E.W. Halliday House; H.M. Goram House; R.C. Gillis House; Williard & Anna Morse House; Jack Donovan House; Ralph Wolff Houses # 1 and 2; The Palama; Dr. Bachman House; Mel Ule House; King Jr. House; Wyman House; Jackson House; Thomas Blanchard House; A.E. Jackson House; Symington House; Blatz House; Adam Brown House; A.D. Williams House; M.E. Sayre House; Witworth Historic Block; Dr. Nathaniel Huns House; Georgina Avenue Historic District; R.D. Farquhar House; A. Weber House; Byrd Nebecker House; Richard Donovan House; Cecil Vespy House; Julius Brown House; A. McFadden House; A.H. Flemming House; MacBennett House; J.B. Proctor House; Arthur Thompson House; A.W. Morgan House; George Franklin House; James Lloyd House; Herbert North House; Hellman House; Del Valle House; Ocean Park Methodist Church;

House; Province House; Sunset Beach Tract; Bungalow Courts; Tywman House; Boehme House; Sontag House; M.E. Wood House; Witback House; D.D. Smith House; Duckler House; J.P. Johnson House; Prien House; John G. Mehring House; McPhearson House; Torrence House; George B. Dickenson House; William Pigott House;; F.R. Siebert House; E.P. Smith House; Alice Noel House; Roosevelt Highway; The Beach Club; R. P. Sherman/Isaac Jours House; Saltain Club; J. Paul Getty Home; Marion Davies Estate and Swimming Pool; North House; San and Sea Club Building; Fence and Bulkhead; Harold Lloyd Beach Estate; there are over 100 listed historic structures between Ocean-Lincoln Streets heading north-south and San Vicente-Grant heading east-west (none of these resources lie within the APE).

Historical information was obtained from the Geography Department Map Reference Center, California State University Northridge, the Los Angeles County Archives Project; and the City of Los Angeles, Bureau of Engineering as follows: Township-Range Plat Map Surveys (1853-1895); Map of Private Grants and Public Lands Adjacent to Los Angeles and San Diego, California (Clinton Day - 1869); Map of the County of Los Angeles, California (Stevenson - 1881); Sanborn Fire Insurance Maps for Santa Monica (1887, 1888, 1891, 1895, 1902, 1909, 1918-1961); Map of the County of Los Angeles, California (Rowan - 1888); Map of the Reservoir Lands in the County of Los Angeles (Seebold - 1891); Map of Santa Monica, Ocean Park and Vicinity (James - 1905); Map of Rancho Boca de Santa Monica (Ruxton/Rey - 1916); Map of Santa Monica including Venice (1925); Map of Santa Monica and Vicinity (Phelps - 1940); and, Topanga, California 7.5-minute USGS topographic map (1952).

A letter dated May 9, 2006, was submitted to Rob Wood, Native American Heritage Commission requesting a determination of any Native American/Sacred Lands Issues that might affect the project. A telephone reply on May 11, 2006 indicated that there are no Native American concerns or issues pertinent to this project.

IV. Historical Synopsis

Prehistory

At the time of European contact, the region was inhabited by the Shoshonean-speaking Gabrielino, a name that was applied due to their association with Mission San Gabriel (founded in 1771). The Gabrielino are considered one of the most distinctive tribes in California, occupying an area bordered by Topanga and Malibu, the San Fernando Valley, the greater Los Angeles Basin, the coastal strip down to Aliso Creek south of San Juan Capistrano, and the islands of Catalina, San Clemente, and San Nicolas. They are credited with an extensive and elaborate material culture, their expert craftsmanship in quarrying and manufacturing soapstone and constructing the plank canoe (see Bibliography).

History

In general, the northern sections of the City of Santa Monica once belonged to Rancho San Vicente y Santa Monica and Rancho Boca de Santa Monica. Jose del Carmen Sepulveda sold 38,409 acres in 1872 to Colonel Robert A. Baker and his wife, Arcadia Bandini de Stearns Baker. Nevada Senator John P. Jones bought a half interest in Baker's property in 1874. The first lots in Santa Monica were sold on July 15, 1875. The residents voted to incorporate November 30, 1886. The first town hall built in 1873, later became a beer hall and is Santa Monica's oldest extant structure. The southwestern section of the city originally belonged to the Rancho la Ballona of the Machado and Talamantes families. Mrs. Nancy A. Lucas purchased 861 acres in 1874. The property was farmed by her sons, and 100 acres was sold to W.D. Vawter for subdivision in 1884. Abbott Kinney acquired deed to the coastal strip and named the area Ocean Park in 1895. It became his first amusement park and residential project. A racetrack and golf course were built on the Ocean Park Casino. Kinney later made a portion of his investment, Venice of America.

The 125-room "Arcadia Hotel" opened on January 25, 1887. Named for Arcadia Bandini, it was one of the great hotels on the Pacific Coast of its era. The hotel was the site where Colonel Griffith shot his wife in 1904. Senator Jones built his mansion, Miramar, and his wife planted a Moreton Bay Fig tree in its front yard in 1889. The Long Wharf was built in 1893 in anticipation of being named the new Los Angeles seaport. The US Congress ultimately selected San Pedro Bay in 1897. The rail line to Santa Monica Canyon was sold to the Pacific Electric Railroad, and was in use from 1891-1933. The Santa Monica Pier, the last remaining amusement pier on the North Bay was constructed circa 1909. The United States Grand Prix was held in Santa Monica in 1914 and 1916. By 1919 the events were attracting 100,000 people, at which point they were halted. Donald W. Douglas founded the Douglas Aircraft Company in 1921

built a plant at 1922 Clover Field (Santa Monica Airport) which was in use for 46 years. The Douglas Company (later McDonnell Douglas) kept facilities in the city until the 1960s. By the 1920s the population increased from 15,000 to 32,000 and The Henshey's Department Store, Criterion Theater, Miramar Hotel and Club Casa del Mar opened. Stiles

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O. Clements designed the 13-story art deco Bay City Building, with a four-faced clock that was finished in 1930. La Monica Ballroom opened in 1924 on the Santa Monica Pier. Comedian Will Rogers bought a substantial ranch in Santa Monica Canyon in 1922. In 1928 Will Rogers sold a parcel with two large houses on the beach at the base of the bluffs to William Randolph Hearst, who then gave it to Marion Davies. Architect Julia Morgan oversaw the construction of the \$7 million, 5-building, 118-room Ocean House. Davies sold the property in 1945 for \$600,000 after a failed attempt at a hotel. Most of the property was demolished in 1958, leaving only the North House with a marble pool and tennis courts. The area around the Davies Mansion became known as the Gold Coast. Stretching along PCH between Santa Monica Canyon and the Santa Monica Pier it became fashionable in the 1930s for beach homes of discrete celebrities. Following the lead of Rogers and Davies, other actors with homes there have included Norma Talmadge, Greta Garbo and Cary Grant. Douglas Fairbanks spent his last years living there. The late 1920s-early 1930s ushered in gambling and the Mafia. Merle Norman founded her cosmetic business in 1931. Both the former home of Marion Davies and her 1933 Streamline-styled business headquarters are well maintained.

The federal Works Project Administration helped build the City Hall, the main Post Office and Barnum Hall (Santa Monica High School auditorium). The Sears building was constructed in 1947. Papermate opened its Santa Monica factory in 1957. The 3,000-seat Santa Monica Civic Auditorium opened in 1958. From 1961-1968 the Academy of Motion Picture Arts and Sciences held its annual Oscar awards ceremony there. Pacific Ocean Park, the last of the great amusement piers, opened in 1958. By 1967 the park was foreclosed for back taxes and was removed in 1974. The Santa Monica Freeway was completed in 1966. Third Street in downtown was converted into the Santa Monica Mall in 1965. The Douglas plant closed in 1968. In the 1980s the city put together the plan for turning the failed Santa Monica Mall into the Santa Monica Promenade. The project, completed in 1989 has proven to be a huge success and is a major regional shopping and entertainment center. During the 2000's, the MTA developed plans to return rail transit to Santa Monica, which was gone after the dismantling of the Pacific Electric Railway during the 1960's.

V. Field Reconnaissance Program

The field survey was performed for the APE on May 11, 2006. The Principal Investigator was **Robert Wlodarski** who meets the *Standards and Guidelines for Archaeology and Historic Preservation* (National Park Service 1983). Wlodarski has a B.A. in History and Anthropology and an M.A. in Anthropology from California State University Northridge. Wlodarski is certified in field archaeology and theoretical/archival research by the Register of Professional Archaeologists (RPA), is qualified as a historian by the California Committee for the Promotion of History, and has over 34 years cultural resource management experience in California, having completed over 1400 individual investigations. Wlodarski was assisted in the field by Survey Archaeologists: **Wayne Bonner** who meets the Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983) and is certified in field archaeology by the Register of Professional Archaeologists (RPA) with over 36 years of experience in southern California archaeology with an MA in Anthropology from California State University Long Beach; and, **Diane Bonner** meets the Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983) and has an MS, in Geology, over 28 years of experience in geology, 19 years of experience in geoarchaeology, and is a member of the Geological Society of America.

The project area occupies an extremely disturbed and previously developed location. Prior man-made disturbances to the bluff area over the past 120 years include grading, prior stabilization efforts, construction of roads, walkways, paths and landscaping, have most likely destroyed any prehistoric archaeological resources that may have once existed within the project boundaries. Survey transects trending northwest-southeast never exceeded three meters between surveyors during the course of the field investigation. The entire APE was thoroughly inspected for visible signs of heritage resources. Soil within the APE consisted of paved roadways, parking areas, trails, park facilities, landscaping and grassy areas. All open space, visible ground surface and fortuitous exposures such as rodent burrows, cuts or cleared areas and landscaped terrain were thoroughly inspected for signs of cultural resources.

VI. Study Findings and Conclusions

Based on the results of the record search conducted at the South Central Coastal Information Center (SCCIC), and a pedestrian survey, one National Register resource is documented encompassing the project area: Linda Vista Park was

established in 1892 through a gift to the city of the land along the Santa Monica bluffs by Senator John P. Jones, Arcadia de Baker and the Santa Monica Land and Water Company. The park's name was changed to Palisades Park in 1915. The park extends from Colorado Boulevard on the south to the city limits on the north. It was formally

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determined eligible for listing on the National Register of Historic Places in 1998 under Criterion A (historical events) through a Section 106 procedure, with concurrence by the California State Historic Preservation Officer (SHPO). The individual resources were noted and photographed (see below for individual photographic recordation). This property should be regarded as a historic resource for purposes of CEQA and a historic property for purposes of Section 106.

The character-defining features of Palisades Park identified by the NRHP Section 106 determination of eligibility in 1998 include lawns, paths, palm and other trees, pergola, monuments, cannons, sundial, totem pole, statue, the Camera Obscura, gates, the concrete wall at the bluff edge and the California Incline. None of these features are proposed to be altered or removed as a part of the bluff stabilization project. All of the proposed activities will be confined to stabilizing the vertical face, rim, and toe of the bluffs. Consequently, the "physical characteristics... that convey its historical significance" of the park will not be materially altered, nor will the integrity of the park features which "qualify the property for inclusion in the National Register" be diminished.

This project will not have a significant adverse impact on historic resources, in terms of the standards and procedures of CEQA. It will have no adverse effect on an historic property in terms of the standards and procedures of Section 106.



L: Stone wall – northernmost end of the park; M: Totem pole donated by J. Walter Todd in 1926; R: Light standard



L: Concrete railing in NW portion of the park; M: Modern public toilet; R: Millennium Plaque dedicated on October 2, 1999



L: Typical section of concrete wall in park; M: Looking NW from San Vicente; R Looking SE from San Vicente

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L: Margarita St. where park widens looking SE; M: Rose Garden looking SE; R: Arcadia Bandini monument



L: Gesthon III sculpture; M: 1986 ceramic wall/sculpture –Julia Kelmek/Leslie Robbins; R: Entry gate at Idaho



L: Close up of Idaho entry gate tiles; M: modern pergola SE of Idaho; R: Blue Mast Art Work



1942 Plaque for Anniversary of Santa Monica Bay; L: 10th Anniversary Rededication U.N. (1976); R: George T. Hastings 1963 Plaque



L: Grace Heintz Plaque; M: Monument to Santa Monica founder John P. Jones; R: Monument to St. Monica PWA 1934

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L: Plaque to Will Rogers Highway 1952; M: Sister City plaque with Mexico 1969; R: Modern Visitors Center



L: Canon; M: Modern Senior Center; R: "Chapin" 1932



L: Shuffleboard courts; M: Canon at SE end of park; R: Camera Obscura front shot



L: Front of Senior Center; M: Senior Center from Wilshire; R: General view looking NW from California Street

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It is Caltrans' policy to avoid cultural resources when possible. Further investigations may be needed if the site(s) cannot be avoided by the project. If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. The Caltrans District 07 Historic Resources Coordinator shall be notified of the find. After the find has been appropriately mitigated, work in the area may resume. An appropriate Native American representative shall be retained to monitor any mitigation work associated with uncovered prehistoric cultural material. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits. If human remains are unearthed during ground disturbing activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. The Caltrans District 7 Historic Resources Coordinator shall be notified of any such find.

The character-defining features of Palisades Park identified by the NRHP Section 106 determination of eligibility in 1998 include lawns, paths, palm and other trees, pergola, monuments, cannons, sundial, totem pole, statue, the Camera Obscura, gates, the concrete wall at the bluff edge and the California Incline. None of these features are proposed to be altered or removed as a part of the bluff stabilization project. All of the proposed activities will be confined to stabilizing the vertical face, rim, and toe of the bluffs. Consequently, the "physical characteristics... that convey its historical significance" of the park will not be materially altered, nor will the integrity of the park features which "qualify the property for inclusion in the National Register" be diminished. This project will not have a significant adverse impact on historic resources, in terms of the standards and procedures of CEQA. It will have no adverse effect on an historic property in terms of the standards and procedures of Section 106.

The amount of prior disturbances to the bluff area over the past 100 years, including grading, prior stabilization efforts, construction of roads, walkways, paths and landscaping, have most likely destroyed any prehistoric archaeological resources that may have once existed within the project boundaries.

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For the City of Santa Monica Palisades Bluffs Improvement Project

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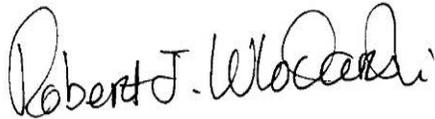
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IX. Certification



Prepared by: _____
 Robert Wlodarski, M.A./RPA Certified
 (Principal Investigator – H.E.A.R.T, West Hills, California)

November 22, 2006
 Date

Reviewed for approval by:
 District 07 Caltrans PQS _____
 BranDee Bruce, Co-Principal Investigator, Architectural Historian

 Date

Approved by:
 District 07 EBC Branch: _____
 Gary Iverson, Environmental Branch Chief

 Date

X. Maps

Vicinity Map
 Location of the Survey – Topanga/Beverly Hills USGS Topographic Map

Figure 1
 Figure 2

XI. Photographs

Forty-six photographs were taken of the APE by the Principal Investigator with the aid of Wayne and Diane Bonner.

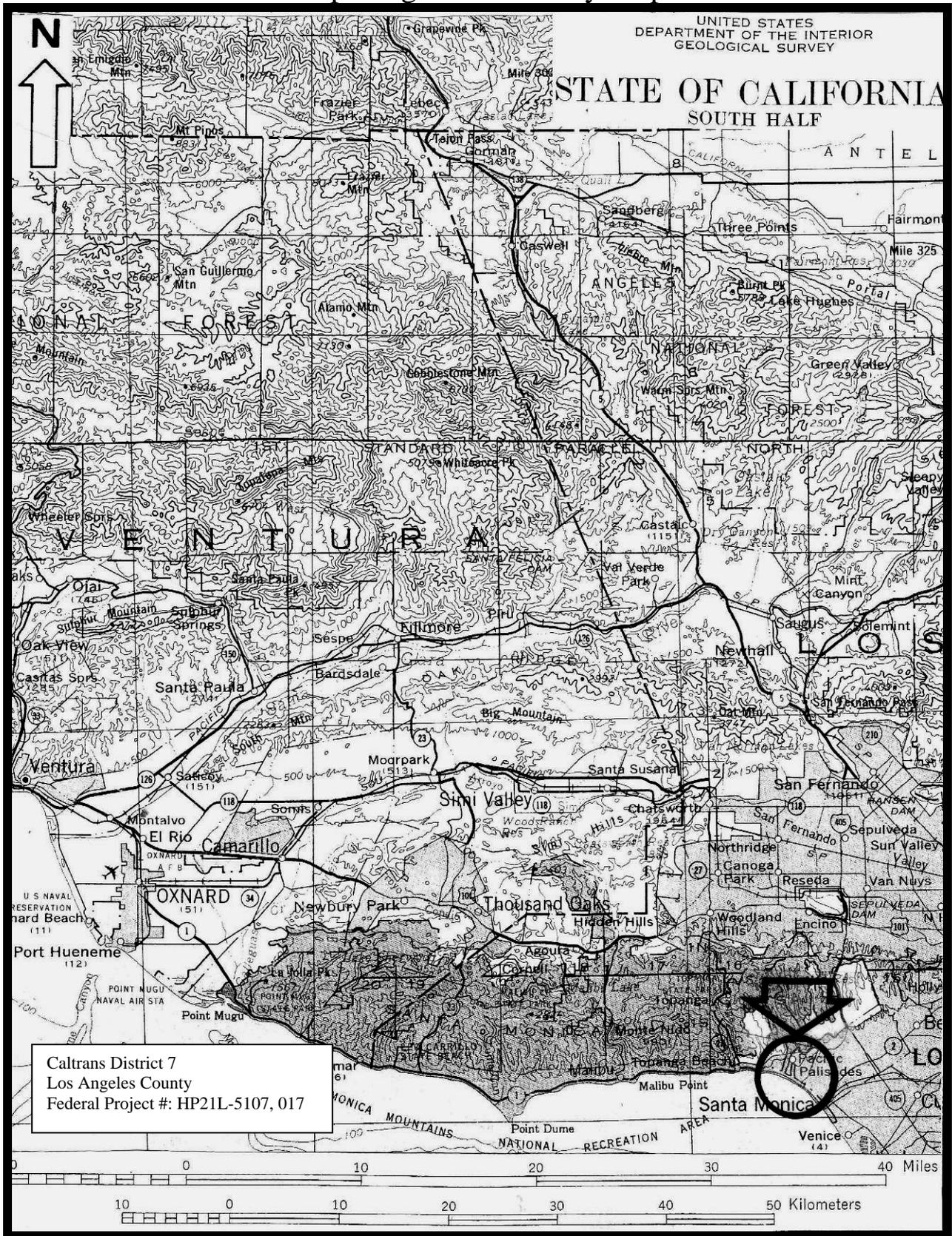
The photographs are on file at Historical, Environmental, Archaeological, Research, Team, 8701 Lava Place, West Hills, California 91304- 2126 - Phone/Fax (818) 340-6676 - E-mail: robanne@ix.netcom.com

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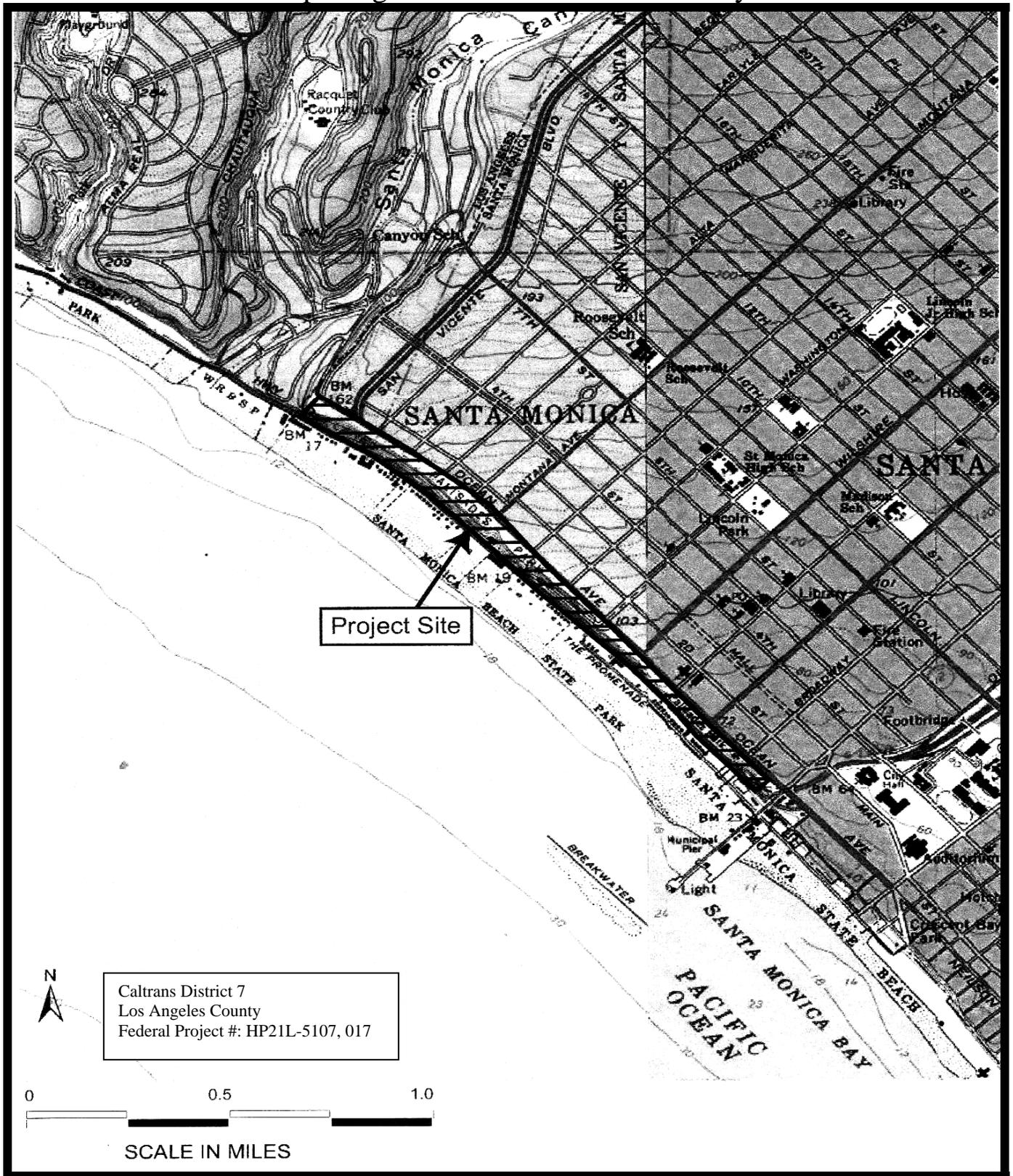
Archaeological Survey Report - Finding of No Adverse Affect with Standard Conditions

For the City of Santa Monica Palisades Bluffs Improvement Project
City of Santa Monica, County of Los Angeles, California

Maps: Figure 1: Vicinity Map



Maps: Figure 2: Location of the Survey



Township 2 South, Range 15 West, on the Topanga, California 7.5-minute USGS topographic map (1952)
Township 2 South, Range 15 West Beverly Hills California 7.5-minute USGS topographic map (1995)

Archaeological Survey Report - Finding of No Adverse Affect with Standard Conditions

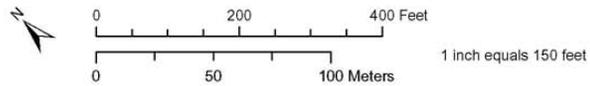
For the City of Santa Monica Palisades Bluffs Improvement Project.

City of Santa Monica, County of Los Angeles, California

Maps: Figure 3: Area of Potential Effects (APE) part 1 of 2



Aerial Source: City of Santa Monica, 2003.



Legend

- Area of Potential Effects
- Construction Equipment Staging Area
- Traffic Lanes Subject to Temporary Closure
- T-1** Treatment Zone

| | |
|---------------------|------|
| Approved by: | |
| | |
| Caltrans DLAE | Date |
| | |
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| Caltrans PQS\Level | Date |

Area of Potential Effects (1 of 2)

City of Santa Monica

Archaeological Survey Report - Finding of No Adverse Affect with Standard Conditions

For the City of Santa Monica Palisades Bluffs Improvement Project.

City of Santa Monica, County of Los Angeles, California

Maps: Figure 3: Area of Potential Effects (APE)

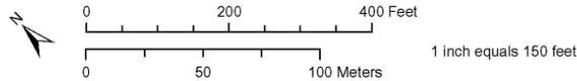


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| Approved by: | |
| _____ | _____ |
| Caltrans DLAE | Date |
| _____ | _____ |
| Caltrans PQS/Level | Date |

Aerial Source: City of Santa Monica, 2003.

Legend

- Area of Potential Effects
- Construction Equipment Staging Area
- Traffic Lanes Subject to Temporary Closure
- T-1** Treatment Zone



H.E.A.R.T. Fax Transmission

Number of pages including cover sheet 2

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Date: May 9, 2006

Native American Heritage Commission

915 Capitol Mall, Room 364, Sacramento, California 95814

Telephone: 916-653-4082 - Fax: 916-657-5390

E-mail: nahc@pacbell.net

Sent by: Rob Wlodarski

Principal Investigator

Historical, Environmental, Archaeological, Research, Team

M.A./RPA and CCPH Certified

8701 Lava Place, West Hills, California 91304-2126

Phone/Fax: 818-340-6676 - E-mail: robanne@ix.netcom.com

Dear Native American Heritage Commission,

I am contacting you regarding the following project: Archaeological Survey Report, Finding of No Historic Properties Affected, For the City of Santa Monica Palisades Bluffs Improvement Project, City of Santa Monica, County of Los Angeles, California

The project area is located north of the Pacific Ocean, south of the San Fernando Valley, east of Point Dume and west of San Pedro within the City of Santa Monica and County of Los Angeles, California. The subject property is located within Township 2 South, Range 15 West, on the Topanga, California 7.5-minute USGS topographic map (1952), and the Beverly Hills California 7.5-minute USGS topographic map (1995). The bluffs extend about 1.6 miles along Pacific Coast Highway (PCH) from the McClure Tunnel northwest to the City's northern limits. Palisades Park, which sits atop the bluff, has been an important recreational and visual resource for the City for over 100 years. Objectives of the project include but are not limited to: Protection of public and private property; Enhancement of public safety; Improvement of traffic flow along PCH; and, the preservation and enhancement of the Palisades Park's historical character (see attached USGS Map)

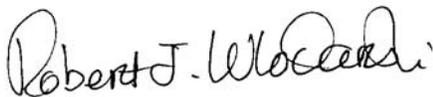
The City proposes to use federal funds available from the Federal Highway Administration (FHWA) and the Department of Transportation (Caltrans). Because of the potential use of federal funding, this project requires compliance with the NEPA and CEQA. The proposed project includes several techniques intended to improve the stability of the Bluffs and Palisades Park. Currently the subject property is entirely developed.

Would you please check you're sacred lands files and any other relevant data that you might have regarding this area. Please let me know if the NAHC has any concerns regarding potentially sensitive cultural resource remains, sacred lands and/or other features that may be of relevance to the implementation of this project.

I would appreciate a response as soon as possible.

Thank you for your time in this matter.

Sincerely,



Robert J. Wlodarski

Principal Investigator

M.A./RPA and CCPH Certified

Historical, Environmental, Archaeological, Research, Team

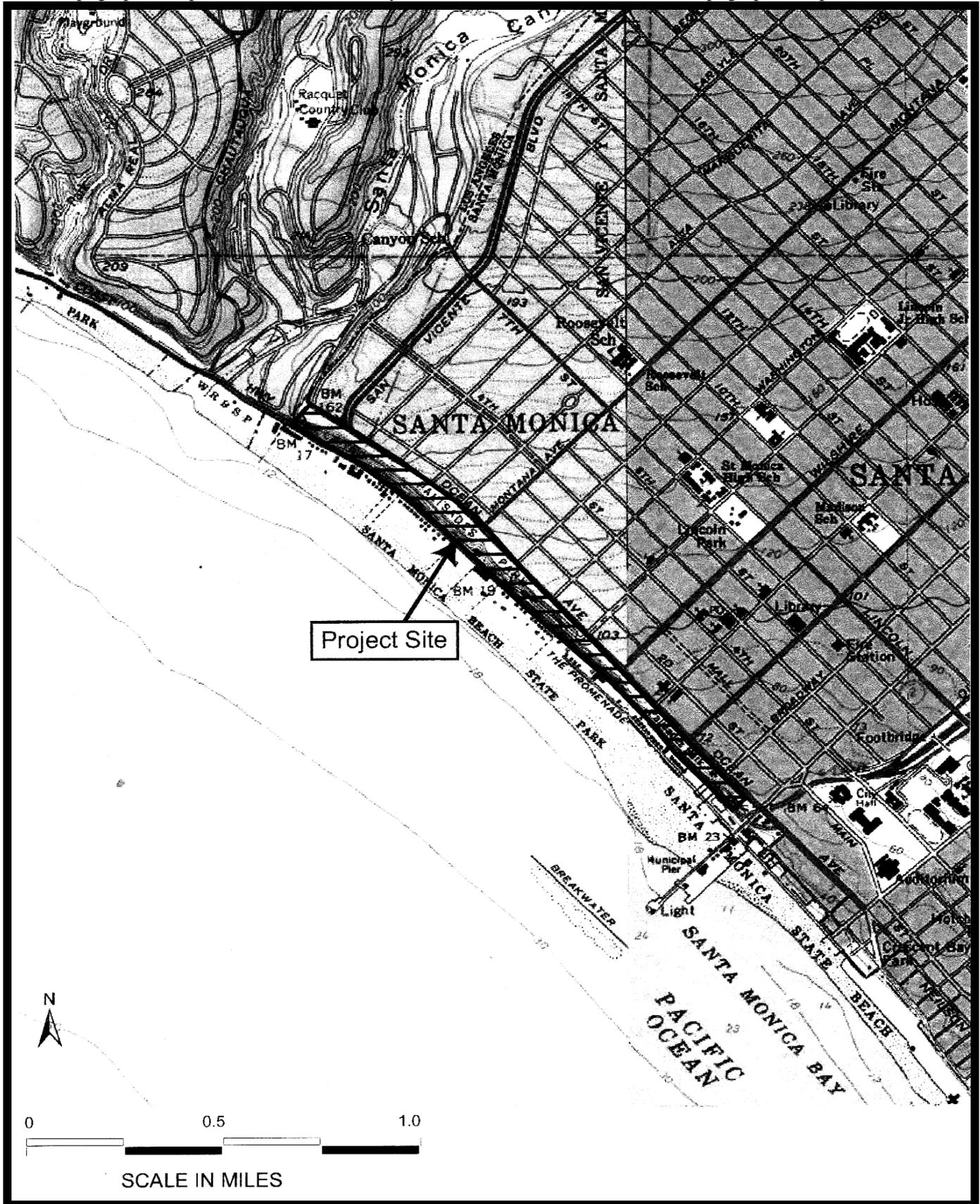
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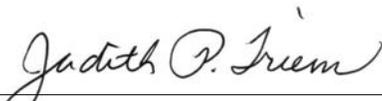
Location of the Survey

**Historic Property Survey Report
For the City of Santa Monica
Palisades Bluffs Improvement Project
City of Santa Monica
County of Los Angeles, California**

District: Caltrans District 7
County: Los Angeles
Federal Project No. HP21L-5107, 017
Expenditure Authorization No. 07-931938L

14 June 2007

Prepared by:



Judith P. Triem
Historian, San Buenaventura Research Associates

Reviewed for Approval by:

Claudia A. Harbert
Caltrans, District 7 PQS - Principal Architectural Historian

Date

Approved by:

Gary Iverson
Caltrans, District 7 Heritage Resources Coordinator

Date

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1. Summary of Findings

The purpose of this document is to request SHPO concurrence on Caltrans' determination of National Register eligibility or ineligibility for evaluated cultural resources.

No properties were evaluated within an HRER in connection with this undertaking. A previously HRER which included an evaluation of the properties within APE was prepared for the City of Santa Monica (Historic Resources Group, 2005). This report relied on a prior report prepared for the City of Santa Monica (Historic Resources Group, 1998).

Linda Vista Park, now known as Palisades Park, appears to have been determined eligible for listing in the National Register of Historic Places in 1994. Additionally, correspondence from the State Historic Preservation Officer (SHPO) dated October 13, 1998 states, "I concur that the California Incline Bridge is eligible for the reasons adduced in the HRER, as a contributor to Palisades Park." Evidence indicates Palisades Park has been determined eligible for listing in the National Register under Criterion A because it is highly significant in the history of parks and recreation in the City of Santa Monica. Palisades Park is therefore presumed to be a historical resource for the purposes of the California Environmental Quality Act (CEQA) by the lead agency (CEQA Public Resources Code Section 15064.5(3)).

2. Project Description and Location

The proposed project includes several techniques intended to improve the stability of the bluffs and Palisades Park in Santa Monica (see Project Location, Project Vicinity, and APE maps). The project includes methods for overall bluff stability and safety, and techniques intended to individually stabilize the bluff rim, bluff face, and bluff toe. These improvements, which are fully described in the Initial Study Mitigated Negative Declaration (ISMND), include:

- Horizontal drains or hydraugers would be installed by drilling 100 to 300 feet into the bluff from the toe. Bore-holes are drilled at an angle of 5 to 20 degrees from horizontal. Perforated pipes (1 to 3 inches in diameter) are inserted to serve as drains for groundwater to dissipate by gravity flow. The collected water would be routed to storm drain catch basins along Pacific Coast Highway.
- The upper surface edge, or rim area, of the bluffs is subject to surface erosion from storm water runoff and direct impact from rainfall, and may also experience slope failure. The improvement measures for the bluff rim are aimed at increasing the resistance to surface erosion, as well as strengthening the soils in the upper 20 to 30 feet of the bluff face by mechanical means. The improvement of the bluff rim are proposed to be accomplished through some or all of the following measures:
 - Surface Grouting and Soil Nailing
 - Stabilization of Gullies
 - Stabilization of the "Peninsular" Bluff Columns
- To facilitate project implementation, the Bluffs have been divided into 11 treatment zones. Each treatment zone would receive various treatment measures in order to address the major issues of each zone. Treatment Zone 1 (T-1) starts from the McClure Tunnel and Treatment Zone 11 (T-11) ends at the northwest end of the Bluffs. Further, Treatment Zone 8 (T-8) is designated as the central area below the Incline, and Treatment Zone (T-9) is designated as the area above the California Incline. Due to the variety of stability concerns along the Bluffs each zone would have a different combination of treatments.

3. Consulting Parties/Public Participation

A letter dated May 9, 2006, was submitted to Rob Wood, Native American Heritage Commission requesting a determination of any Native American/Sacred Lands Issues that might affect the project. A telephone reply on May 11, 2006 indicated that there are no Native American concerns or issues pertinent to this project

4. Summary of Identification Efforts

A record search was conducted by professional archaeologist, Wayne Bonner at the South Central Coast Information Center (SCCIC) located at California State University Fullerton on May 9, 2006. The record search process included a review of

all recorded archaeological site information and survey reports within a 0.5-mile radius of the project APE. The following additional sources were consulted:

- National Register of Historic Places
- California Register of Historical Resources
- California Inventory of Historic Resources
- California Historical Landmarks
- City of Santa Monica Historic Preservation Program

Only one property within the APE has been determined eligible for any designation, Linda Vista Park, which has been determined to be eligible for listing on the NRHP under Criterion A.

5. Properties Identified

No properties within the APE are currently listed on the National Register, or were previously determined to be ineligible for listing.

The following property has been determined through a previous Section 106 and concurrence process to be eligible for inclusion in the National Register at the local level of significance:

| Name | Address/Location | Community | OHP Status Code | Map Ref |
|----------------|-------------------|------------------|-----------------|---------|
| Palisades Park | 1415 Ocean Avenue | Santa Monica, CA | 2S2 | 1 |

Linda Vista Park, now known as Palisades Park, appears to have been determined eligible for listing in the National Register of Historic Places in 1994. Additionally, correspondence from the State Historic Preservation Officer (SHPO) dated October 13, 1998 states, "I concur that the California Incline Bridge is eligible for the reasons adduced in the HRER, as a contributor to Palisades Park." Evidence indicates Palisades Park has been determined eligible for listing in the National Register under Criterion A because it is highly significant in the history of parks and recreation in the City of Santa Monica. Palisades Park is therefore presumed to be a historical resource for the purposes of the California Environmental Quality Act (CEQA) by the lead agency (CEQA Public Resources Code Section 15064.5(3)).

The 26.41 acre city park is located between Ocean Avenue on the west and Palisades Beach Road (Pacific Coast Highway) at the foot of a roughly 150 foot high bluff on the west, a width varying between 50 and 150 feet. The park is nearly two miles and 14 city blocks in length, extending from Colorado Boulevard on the south to the city limits on the north. The park

features grass lawns, paths, palm and other trees, a pergola, monuments, cannons, sundial, totem pole, statue, a Camera Obscura, gates and a concrete wall at the bluff edge. The park is interrupted by the California Incline roadway, connecting Ocean Avenue to Pacific Coast Highway below.

6. Findings

Historical Resources

The only eligible property within the APE is Palisades Park. This property has previously been found eligible for listing on the NRHP. See Section 5, above, for clarification with respect to the date and method of determination.

7. Sources

Historic Resources Group. Historic Resource Evaluation Report (HRER) for Properties in the Beach Improvement Group (BIG): The California Avenue Incline (#53C-543), Robert E. McClure Tunnel (#53-08) (Coastal Corridor Gateway), The Santa Monica Pier Bridge and Pier Sign. City of Santa Monica, June 1998.

Historic Resources Group. Historic Property Survey Report (HPSR), Santa Monica Pier Access Improvements Project. City of Santa Monica, August, 2005.

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
 P.O. BOX 242896
 SACRAMENTO 94296-0001
 (916) 653-8824
 FAX: (916) 653-8824

October 13, 1998

Reply To: FHWA980923M



Mr. Ron Kosinski, Chief
 Environmental Planning Branch
 Department of Transportation
 District 07
 120 South Spring Street
 Los Angeles CA 90012-3606

| | | | | | |
|-------------------|----------------------|---------|----------------|------------|---|
| Post-It® Fax Note | 7671 | Date | 10/12 | # of pages | 2 |
| To | Laura Beck | From | Deane Kane | | |
| City/State | CITY OF SANTA MONICA | Project | CT DEFA | | |
| Phone | (310) 458-8341 | Phone | (310) 817-0782 | | |
| Fax | (310) 458-7365 | Fax | (310) 817-0685 | | |

Re: HRER For Properties in the Beach Improvement Group, Santa Monica, CA

Dear Mr. Kosinski:

Pursuant to Stipulation V. of the Programmatic Agreement (PA) executed for the Bridge Rehabilitation and Replacement Program in California, Caltrans has asked for my comments on the HRER cited above.

Based upon information in the HRER, Caltrans has made the following National Register of Historic Places eligibility determinations for properties located in the APE of the proposed undertaking:

- 1) The Santa Monica Pier Bridge is not eligible
- 2) The McClure Tunnel is not eligible
- 3) The California Incline is eligible
- 4) The Santa Monica Pier sign is eligible
- 5) The Santa Monica Pier is not eligible

I have the following comments on the foregoing determinations:

- 1) I concur that the Santa Monica Pier Bridge is not eligible for the specific reasons adduced in the HRER.
- 2) I concur that the McClure Tunnel is not eligible for the specific reasons adduced in the HRER.
- 3) I concur that the California Incline is eligible for the reasons adduced in the HRER, as a contributor to Palisades Park. I concur with the choice of the National Register Criteria under which significance was demonstrated. I do not yet concur that the period of significance ends in 1944 and would ask why 1948 was not chosen to be the end of the period of significance.
- 4) I concur that the Santa Monica Pier sign is eligible for the specific reasons adduced in the HRER. I concur with the choice of the National Register Criteria under which significance was demonstrated. I do not yet concur that the period of significance ends in 1944 and would

Mr. Ron Kosinski
October 13, 1998
Page 2

ask why 1948 was not chosen to be the end of the period of significance.

- 5) The Santa Monica Pier was previously determined ineligible (cf. HRER) under a process not connected with the present consultation. Caltrans has sustained this earlier determination and I concur in this decision.

In addition to requesting clarification of the period of significance (see above) for two properties, I would also ask Caltrans to explain why the HRER included a section (#6) pertaining to California Register Eligibility and why the Caltrans cover letter mentioned California Register eligibility under item #4. I see no evidence that the Programmatic Agreement under the terms of which the HRER was submitted, requires any sort of California Register related evaluation to be done. The California Register is mentioned under item 5 of the Short Form HPSR Instructions appended to the Programmatic Agreement; however, this merely refers to "sources consulted". Finally, I would ask Caltrans whether it believes the following statement, included in the last paragraph of the HRER's Introduction, is a correct representation of the terms of the Programmatic Agreement: "If the State Historic Preservation Officer (SHPO) does not object within fifteen (15) working days of the receipt of the Determination of Eligibility, the City of Santa Monica will request FHWA's approval of the undertaking."

I look forward to receiving your clarification of the questions listed above and to reviewing documentation prepared pursuant to Stipulation VI. of the Programmatic Agreement. Please direct any questions you may have in the interim to Hans Kreutzberg by calling (916) 653-9107.

Sincerely,



Daniel Abeyta
Acting State Historic Preservation Officer

Appendix F

Phase I Environmental Site Assessment



Revised Phase I Environmental Site Assessment

**Santa Monica
Palisades Bluffs
Improvement Project
Santa Monica, California**

Prepared for:

City of Santa Monica, California

Prepared by:

Rincon Consultants, Inc.
June 22, 2007

Revised Phase I Environmental Site Assessment

**Santa Monica
Palisades Bluffs
Improvement Project
Santa Monica, California**

Prepared for:

City of Santa Monica, California

Prepared by:

Rincon Consultants, Inc.
June 22, 2007

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CITY OF SANTA MONICA, CALIFORNIA

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- Appendix 3 – Interview Documentation (User Questionnaire and Transaction Screen Questionnaire)
- Appendix 4 – File Review- Kurumaya USA (1535 Ocean Avenue, Santa Monica, California)



EXECUTIVE SUMMARY

This report presents the findings of a Phase I ESA conducted for the property located in the City of Santa Monica, California and is known as the Palisades Bluffs (Bluffs). The Bluffs form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH) and is adjacent to Palisades Park, which is located on the upper surface of the Bluffs along Ocean Avenue. For the purpose of this report, the project site (site) includes both the Palisades Bluffs and Park, though the proposed improvement measures would only affect the slope face and toe of the Bluffs. The site consists of thirteen parcels further identified as Assessor's Parcel Numbers (APNs) 441-000-40-00, 429-301-69-00, 429-202-99-04, 429-202-99-05, 429-202-99-06, 429-103-29-05, 429-102-99-06, 429-102-99-07, 429-103-29-00, 429-103-29-01, 429-102-99-04, 429-202-99-01, and 429-202-99-02. The Phase I ESA was performed by Rincon Consultants, Inc. for the City of Santa Monica in general conformance with ASTM E 1527-05 and in conjunction with Santa Monica Palisades Bluffs Improvement Project.

On August 28, 2006 Rincon Consultants performed a site reconnaissance and observed the site and site vicinity. Palisades Park is an open park area with meandering pathways. The Bluffs are located along the western boundary of the Park. There are two structures located within Palisades Park; a public restroom facility and a Senior Center. The site is located in an area that is primarily comprised of residential and commercial land uses. Properties in the vicinity of the site include apartments, condominiums, retail stores, office buildings, restaurants, and open park space.

Review of an environmental records database search (FirstSearch) indicated that three sites with environmental listings are located adjacent to the subject site. These facilities include the Miramar Hotel Corp in the UST database, the Kurumaya USA Inc. facility in the LUST database, and the Unknown release at 1500 Pacific Coast Highway in the ERNS database. Based on the nature of the listing for the Miramar Hotel as a non-release site, this facility would not be expected to impact the subject property. Although the Kurumaya site is listed as a UST release site, the release was of hydraulic oil and affected soil only and the release case is currently closed. Based on the case status (closed), medium affected (soil), low concentrations of contamination left in place, and the concurrence of the City of Santa Monica Environmental Program Division, this facility does not represent a recognized environmental condition in connection with the project site. The unknown release at 1500 Pacific Coast Highway was reportedly 5-gallons of an unknown acid that was cleaned up by the Public Works Department. Based on small quantity of the release and the reported cleanup procedures, this location is not expected to impact the subject property.

Historical sources reviewed as part of the Phase I include aerial photographs from 1928, 1938, 1947, 1952, 1960, 1968, 1971, 1976, 1981, 1989, 1994, and 2002. In addition, historical topographic maps from 1925, 1932, 1952, 1966, 1967, 1972, 1981, 1991, 1994, and 1995 were reviewed. Further, Sanborn Fire Insurance Maps from 1887, 1888, 1895, 1902, 1909, and 1918-1950 were reviewed. The photos and maps reviewed indicate the site was undeveloped until 1938 when a rectangular building was constructed at the base of the Bluffs along Pacific Coast Highway. This building was present onsite until 1968 and it was reportedly a beach club known as the Sorrento Ruins. Three historic gasoline stations were identified immediately adjacent to the east of the subject site. One station was located on the southeast corner of the intersection of Ocean Avenue and Wilshire Blvd. and operated from approximately 1938 to 1976. A second



gasoline service station was located on the southeast corner of the intersection of Ocean Avenue and Santa Monica Blvd. and operated from approximately 1928 to 1968. The third gasoline service station was located on the southeast corner of Ocean Avenue and Broadway and operated from approximately 1928 to 1976. A fourth gasoline service station was identified on the south side of Wilshire Blvd. between Ocean Avenue and 2nd Street and operated from approximately 1938 to 1976.

Based on the findings of the Phase I ESA and additional in-person examinations of each of the current multi-story mixed-use buildings that occupy the locations of the four former gasoline stations, these facilities do not represent a recognized environmental condition at the site. At all four former gasoline service station locations there are two to five levels of underground parking. It is likely that any tanks or tank related contaminated soil would have been removed during the excavation of the multi-level subterranean parking garages.

Hydrocarbons and Volatile Organic Compounds (VOCs)

During the drilling of the boreholes into the Bluffs as part of the proposed Bluffs improvement project (to the west of the four former gasoline service stations), a 40-hour Hazwoper-trained environmental scientist shall be onsite to monitor the soil and groundwater for hydrocarbons and volatile organic compounds (VOCs). Although we found no indication of a release from these former gasoline service stations, these contaminants may be present in the soil or groundwater from an undocumented release.

Soil

The environmental scientist shall examine the excavated soil that is coming out of the boring for visual and olfactory indications of contamination. In addition, the scientist shall use a photoionization detector (PID) to measure VOC concentrations within the worker breathing zone and in the excavated soil to screen for contamination. If contaminants are suspected, soil samples shall be obtained and analyzed to determine whether there are contaminants, and if present, to determine the type and concentrations of contaminants. The sampling results are to be used to make a determination as to where to transport the material for offsite disposal, or to determine if the soils can be used onsite. If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (City of Santa Monica Environmental Program Division). The agency shall review the data and determine if any additional investigation or remedial activities are deemed necessary.

Groundwater

Discharges of treated or untreated groundwater from temporary or permanent dewatering operations shall be permitted under Los Angeles Regional Water Quality Control Board Order No. R4-2003-0111, Waste Discharge Requirements (WDRs) for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters. Application for coverage under this general permit for groundwater dewatering requires:

- A description of the discharge, including identification of the discharge locations (outfalls) to surface waters and an estimate of the maximum daily discharge volume in gallons per day
- Sampling and analysis to provide an initial characterization of groundwater quality
- Treatment processes, if necessary



- Start-up date and duration of the discharge

Compliance and continuing coverage under Order No. R4-2003-0111 requires implementation of a Monitoring and Reporting Program that typically consists of:

- Sampling and Analysis for designated parameters on a monthly, quarterly, semi-annual, and/or annual basis
- Reporting of laboratory analytical data on a quarterly basis

Groundwater dewatering effluent will be conveyed to the storm drain system associated with Pacific Coast Highway (PCH), which is owned, operated, and maintained by the California Department of Transportation (Caltrans) District 7. The City will obtain WDRs which will be in conformance with the Los Angeles Regional Water Quality Control Board under Order No. R4-2003-0111 for the groundwater dewatering effluent, the Caltrans Statewide Stormwater Permit (State Water Resources Control Board Order No. 99-06-DWQ, NPDES No. CAS000003), and the Caltrans Statewide Stormwater Management Plan.

Aerially Deposited Lead (ADL)

ADL is a potential concern in the surface soils at the site as a result of vehicle leaded-gasoline usage and wide-spread dispersal and deposition on unpaved areas. As mandated by Caltrans in a letter dated January 10, 2007, prior to issuance of permits for the proposed Bluff improvements, a Preliminary Site Investigation shall be performed in compliance with Caltrans ADL Testing Guidance (March 16, 2001). The Preliminary Site Investigation shall include soil borings in the locations of future Bluff improvement borings to a minimum depth of 2.5 feet below ground surface using hand auger sampling methods. All soil samples from the ADL investigation shall be analyzed for the presence of total lead following EPA Test Method 6010. The regulatory criteria for determining whether soils are to be classified as “hazardous waste” for materials handling and disposal purposes based on metal content are contained in the California Code of Regulations Title 22, Section 66261.24. The Total Threshold Limit Concentration (TTLC) for ADL is 1,000 milligrams per kilogram (mg/kg) and the Soluble Threshold Limit Concentration (STCL) for lead is 5.0 milligrams per liter (mg/l). In the event that ADL is discovered in excess of TTLC or STLC, the soil shall be excavated, put into 55-gallon drums, and transported to a licensed landfill for proper disposal. In addition:

- Handling of materials containing ADL shall result in no visible dust migration. The contractor shall have a means of dust control available at all times while handling material in work areas containing ADL.
- Project construction activities shall be conducted in compliance with Caltrans Guidelines associated with aerially deposited lead. This requirement shall be included in construction contracts.



INTRODUCTION

This report presents the findings of a Phase I ESA conducted for the property located in the City of Santa Monica, California and is known as the Palisades Bluffs (Bluffs). The Bluffs form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH) and includes Palisades Park. The site consists of thirteen parcels further identified as Assessor's Parcel Numbers (APNs) 441-000-40-00, 429-301-69-00, 429-202-99-04, 429-202-99-05, 429-202-99-06, 429-103-29-05, 429-102-99-06, 429-102-99-07, 429-103-29-00, 429-103-29-01, 429-102-99-04, 429-202-99-01, and 429-202-99-02. The Phase I ESA was performed by Rincon Consultants, Inc. for the City of Santa Monica in general conformance with ASTM E 1527-05 and in conjunction with Santa Monica Palisades Bluffs Improvement Project. The following sections present our findings and provide our opinion as to the potential presence and impact of environmental site conditions.

PURPOSE

The purpose of this Phase I ESA was to assess the environmental conditions of a property, for the City of Santa Monica. The City of Santa Monica would like to identify the possible presence of recognized environmental conditions (RECs) associated with possible soil and groundwater contamination at the site that may be encountered during the Bluffs Improvement Project.

A REC is defined pursuant to ASTM E 1527-05 as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

DETAILED SCOPE OF SERVICES

The scope of services conducted for this study is outlined below:

- Perform an on-site reconnaissance to identify obvious indicators of the existence of hazardous materials.
- Observe adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtain and review an environmental records database search from Track Info Services, LLC (FirstSearch) to obtain information about the potential for hazardous materials to exist at the site or at properties located in the vicinity of the site.
- Review the current U.S. Geological Survey (USGS) topographic map to obtain information about the site's topography and uses of the site and properties in the vicinity of the site.
- Review historic aerial photographs and topographic maps to obtain information about historic uses of the subject property and adjacent properties.



- Review fire insurance maps to obtain information about historic uses of the subject property and adjacent properties.
- Review California Division of Oil and Gas records to obtain information about historic oil and gas activity in the vicinity of the site.
- Provide an interview questionnaire to the property owner or a designated site representative identified to Rincon by the City of Santa Monica.
- Conduct a file review at the City of Santa Monica Environmental Program Division for the Kurumaya USA facility located at 1535 Ocean Avenue.

Our scope of services, pursuant to ASTM E 1527 practice, did not include any inquiries with respect to asbestos containing building materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents, mold or high voltage power lines.

SIGNIFICANT ASSUMPTIONS, LIMITATIONS, EXCEPTIONS, SPECIAL TERMS AND CONDITIONS

The City of Santa Monica has requested this assessment and will use the assessment to provide information to satisfy regulatory agency requirements. No other use or disclosure is intended or authorized by Rincon. The City of Santa Monica agrees to hold Rincon harmless for any inverse condemnation or devaluation of said property that may result if Rincon's report or information generated is used for other purposes. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

This work has been performed in accordance with good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No other guarantee or warranties, expressed or implied are provided.

The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used.

Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary analysis.

Rincon has not found evidence that hazardous materials or petroleum products exist at the site at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the site. Additional research, including surface or subsurface sampling and analysis, can reduce the City of Santa Monica's risks, but no techniques commonly employed can eliminate these risks altogether. In addition, in accordance with our authorized work scope and contract, no attempt was made to check for the presence of asbestos, lead-based paint, lead in drinking water, wetlands, regulatory compliance,



cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, or high voltage power lines.

USER RELIANCE

This Phase I ESA was prepared for use solely and exclusively by the City of Santa Monica. This report shall not be relied upon by or transferred to any other party without the express written authorization of Rincon Consultants.

SITE DESCRIPTION

LOCATION AND LEGAL DESCRIPTION

The site is located in the City of Santa Monica, California and is known as Palisades Park and Palisades Bluffs. The bluffs form an abrupt slope face parallel to the coastline along Pacific Coast Highway to the west and the upper portion of the site known as Palisades Park is bound by Ocean Avenue to the east (Figure 2, Site and Adjacent Land Use Map). The project area extends 1.6 miles from approximately the intersection of Ocean Avenue and Adelaide Drive in the north to halfway between the intersections of Ocean Avenue with Broadway and Colorado Avenues in the south near the McClure Tunnel. The site consists of thirteen parcels further identified as Assessor's Parcel Numbers (APNs) 441-000-40-00, 429-301-69-00, 429-202-99-04, 429-202-99-05, 429-202-99-06, 429-103-29-05, 429-102-99-06, 429-102-99-07, 429-103-29-00, 429-103-29-01, 429-102-99-04, 429-202-99-01, and 429-202-99-02.

SITE AND VICINITY GENERAL CHARACTERISTICS

The site consists of an open public park area and bluffs. The park area is located in an area that is primarily comprised of residential and commercial land uses. The bluffs area ranges in height from 50 to 150 feet and consist of alluvial deposits with vegetation along the lower portion of the site. The bluff area has restricted access due to safety concerns. Scattered trash and debris were observed along the western property boundary and include miscellaneous paper, plastic, glass and aluminum products. Properties in the vicinity of the site include apartments, condominiums, retail stores, office buildings, restaurants, and the beach.

CURRENT USE OF THE PROPERTY

The upper surface of the site is currently used as Palisades Park and has meandering jogging paths, restroom facilities, viewing areas, a senior citizens center, and open grass space with trees along the entire 1.6 miles of the site. The Palisades Bluffs extend down from the western boundary of the Park to Palisades Beach Road, also known as Pacific Coast Highway.

DESCRIPTIONS OF STRUCTURES, ROADS, OTHER IMPROVEMENTS ON THE SITE

The site has several structures including public bathroom facilities, a senior citizens center, and meandering pathways along the entire length of the upper portion of the site. Access to the upper portion of the site is available along Ocean Avenue and from several pedestrian bridges spanning Palisades Beach Road. Access to the bluffs portion of the site is not permitted and is restricted by fencing and other barriers. One road, California Incline, crosses the site and connects Ocean Avenue and Palisades Beach Road.



CURRENT USES OF THE ADJOINING PROPERTIES

Current adjacent land uses are described in Table 1 and depicted on Figure 2, Site and Adjacent Land Use Map.

Table 1 - Current Uses of Adjacent Properties

| Area | Use |
|-------------------|---|
| Northern Property | Multi-family residential complex |
| Eastern Property | Ocean Avenue then multi-family residential complexes and commercial buildings |
| Western Property | Palisades Beach Road (Highway 1) then residential, commercial, and parking lot areas then the beach and the Pacific Ocean |
| Southern Property | Park area then commercial and Santa Monica Pier |

USER PROVIDED INFORMATION

As described in ASTM-05 Section 6, Mr. Spiros Lazaris of The City of Santa Monica was interviewed for actual knowledge pertaining to the subject property to help identify the possibility of recognized environmental conditions in connection with the property. In addition, Mr. Lazaris completed the User Questionnaire as provided by ASTM-05 Appendix X3. A copy of the completed questionnaire is included as Appendix 3.

TITLE RECORDS

The City of Santa Monica did not provide Rincon with a copy of title records for the subject property.

ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

The City of Santa Monica did not provide Rincon with a copy of the judicial lien records for the subject property.

SPECIALIZED KNOWLEDGE

The City of Santa Monica is unaware of any information pertaining to specialized knowledge or experience regarding the property.

COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

The City of Santa Monica did not provide Rincon with any information pertaining to commonly known or reasonably ascertainable information about the property.

VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

The City of Santa Monica did not provide Rincon with any information pertaining to a valuation reduction for the subject property relative to any known environmental issues.

OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

Mr. Spiros Lazaris of the City of Santa Monica, indicated that based on his knowledge and experience related to the property, there are no obvious indicators that point to the presence or likely presence of contamination at the property.



REASON FOR PERFORMING PHASE I ESA

The purpose of this Phase I ESA was to assess the environmental conditions of a property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to CERCLA Liability.

OTHER

In addition, the City of Santa Monica would like to identify recognized environmental conditions associated with possible soil and groundwater contamination at the site that may impact the proposed Palisades Bluffs Improvement Project.

The client indicated that they are not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property. The client also indicated that they are not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property. In addition, they are not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

RECORDS REVIEW

PHYSICAL SETTING SOURCES

Topography

The current USGS topographic maps (Topanga and Beverly Hills Quadrangles, 1991 and 1995,) indicate that the upper portion of the site is situated at an elevation of about 72 feet above mean sea level in the southern area and up to 162 feet above mean sea level in the northern area. The lower portion of the site (bottom of the Bluffs) is situated at an elevation of about 23 feet above mean sea level in the southern portion and at 17 feet above mean sea level in the northern portion. Generally speaking the topography slopes to the southwest with abrupt slopes to the west along the Bluffs. The adjacent topography to the east consists of relatively flat coastal plain fully urbanized with the City of Santa Monica. The adjacent topography to the west of the site consists of a gentle sloping beach face to the Pacific Ocean.

Geology and Hydrogeology

Site Geology

The subject property is located in the Peninsular Ranges geologic province of California. The Peninsular Ranges are characterized by northwest trending faults, folds, and mountain ranges. The faulting of this area is dominated by the intersection of the San Andreas Fault and the Transverse Ranges fault systems. Peninsular Range faults generally reflect crustal shortening (reverse) as well as strike-slip faulting patterns. The Coastal Plain of Los Angeles County is created from the geologic environment of the regional fault system associated with the rapid uplift of the mountains surrounding the Coastal Plain and the rapid sedimentation rate. The area in the vicinity of the site is interpreted to consist of Quaternary-aged sediments that overlie Tertiary-aged rocks. The Tertiary material is principally composed of marine sediments of the Monterey, Topanga, and Fernando formations.

The Bluffs consist of poorly consolidated Pleistocene age alluvial deposits with near-vertical slopes and peninsular soil columns. Along the toe of the Bluffs, a densely vegetated, gently sloped mass of loose soil and debris (talus) from the Bluffs has accumulated, particularly



northwest of the California Avenue Incline. Over the years, the Bluffs have steadily receded due to natural causes including weathering, surface erosion during heavy rainstorms, localized slope failures caused by groundwater seepage, earthquake shaking, and animal burrows.

Regional Groundwater Occurrence and Quality

The site is located within the Coastal Plain of the Los Angeles Groundwater Basin. This basin is divided into several subbasins. The subject site is located in the Los Angeles-San Gabriel Hydrologic Unit (405.00), in the Coastal Plain Hydrologic Area (405.10), in the Santa Monica Hydrologic Subarea (5.13). As shown in the Groundwater Map for the Coast Plain of Los Angeles (County of Los Angeles, 1997) groundwater in this area is affected by the Inglewood Fault. Groundwater levels differ on each side of the fault. Based on the subject site's location near the Pacific Ocean, groundwater depth is anticipated to be at or very near to mean sea level. The anticipated groundwater flow is to the southwest towards the Pacific Ocean.

STANDARD ENVIRONMENTAL RECORD SOURCES

Track Info Services, LLC was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred and they prepared an Environmental FirstSearch Report dated August 28, 2006. The FirstSearch report was conducted for the subject property and included data from surrounding sites within a specified radius of the property. A copy of the FirstSearch report, which specifies the ASTM 05 search distance for each public list, is included as Appendix 1. As shown on the attached FirstSearch report, Federal, State and County lists were reviewed as part of the research effort.

The subject property was not listed in the databases searched by FirstSearch. Sites that were identified within the approximate minimum search distance of the subject property are listed in Table 2, FirstSearch Listing Summary of Sites Within 1/4 Mile of the Subject Property (see Appendix 1 for a complete listing of sites reported by FirstSearch) and include sites that appear in the following databases:

UST: The UST database contains registered USTs. This database is maintained by the State Water Resources Control Board.

LUST: LUST records contain an inventory of reported leaking underground storage tank incidents. This database is maintained by the State Water Resources Control Board.

RCRAGN: RCRAInfo is U.S. 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. RCRAInfo replaces the data and recording abilities of the Resource Conservation and Recovery Information System (RCRIS). The RCRAInfo database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by RCRA. Conditionally exempt small quantity generators (CESQG) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQG) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQG) generate over 1,000 kg of hazardous waste or over 1 kg of acutely hazardous waste per month. Transporters move hazardous wastes from the generator off-site to a facility that can recycle, treat, store or dispose of the waste. TSDFs treat store or dispose of the waste.



ERNS: Emergency Response Notification System. This database records and stores information on reported releases of oil and hazardous substances.

Table 2 - FirstSearch Listing Summary of Sites Within 1/4 Mile of the Subject Property

| Site Name | Site Address | Distance from Subject Property (miles) | Database Reference |
|---------------------------------------|----------------------------|--|--------------------|
| Miramar Hotel Corp. | 101 Wilshire Blvd. | 0.01 NE | UST |
| Kurumaya USA, Inc. | 1535 Ocean Avenue | 0.01 SE | LUST |
| Unknown | 1500 Pacific Coast Highway | 0.04 SW | ERNS |
| Unknown | 214 Santa Monica Blvd. | 0.09 NE | ERNS |
| Quality Photo Lab | 215 Broadway | 0.09 ND | RCRAGN |
| S.M. Moss Avenue Sewage Lift Stations | 1601 Appian | 0.09 SE | UST |
| FW Woolworths | 1322 3rd Street | 0.13 NE | RCRAGN |
| Sephora Store | 1349 Third Street | 0.14 NE | RCRAGN |
| Sears | 302 Colorado Avenue | 0.17 NE | LUST |
| All Sport USA, Inc. | 320 Wilshire Blvd. | 0.18 NE | RCRAGN |
| Chevron Station | 14791 Pacific Coast | 0.20 NW | UST |
| Lander Chiropractic Corp. | 1511 4th Street | 0.22 NE | RCRAGN |
| Fromex Photo Systems | 406 Broadway | 0.23 NE | RCRAGN |
| The Getty Research Institute | 401 Wilshire Blvd. | 0.24 NE | RCRAGN |
| Lowe's SM Beach Hotel | 1700 Ocean Avenue | 0.24 SE | UST |
| Santa Monica Cleaners | 419 Wilshire Blvd. | 0.25 NE | RCRAGN |
| Santa Monica Police Department | 1685 Main Street | 0.25 SE | LUST, UST |

Miramar Hotel Corp- 101 Wilshire Blvd-

This facility is listed on the UST database as a facility that operates an underground storage tank. This facility is adjacent to the east of the subject site. No further information or evidence of a release was provided. Based on the nature of the environmental listing and the lack of a reported release this facility would not be expected to impact the subject property.

Kurumaya USA Inc.- 1535 Ocean Avenue-

This facility is listed on the LUST database as a facility that has a leaking underground storage tank. This facility is adjacent to the east of the subject site. The release occurred in 1992 and was reportedly of waste oil and affected the soil only. The current case status is listed as "closed". Based on the reported medium affected (soil only), and case status (closed), the reported release from this facility would not be expected to impact the subject property. However, upon the request of Mr. Steve Chan of the Department of Transportation (CalTrans),



the file was requested for review. The file was reviewed on February 28, 2007 by Rincon personnel. Our findings are fully described below in the Additional Environmental Record Sources section.

Unknown- 1500 Pacific Coast Highway-

This location was listed on the ERNS database as the location where 5 gallons of unknown acid was spilled from a passing truck on August 23, 1993. Reportedly, only the land was affected and the spill was cleaned up by public works. No additional information is provided. Based on the small quantity of the release (5 gallons), medium affected (ground surface), and no reported follow-up action the reported release from this location would not be expected to impact the subject property.

Unknown- 214 Santa Monica Blvd-

This location was listed on the ERNS database as the location where 7 pounds of mercury was spilled on February 19, 1992 during the filming of a movie. Cleanup was conducted by United Pumping Service under the supervision of the County Health Department. No further information is provided in the database listing. Based on the small quantity of the release (7 pounds), clean up action, location in relation to the site, and no additional reported follow-up action the reported release from this location would not be expected to impact the subject site.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

Review of Agency Files

Because none of the FirstSearch database-listed sites that were identified on or adjacent to the project site were interpreted to adversely affect the subject site, no agency files were initially reviewed as part of this research effort. However, as indicated above, the file for the Kurumaya USA facility located at 1535 Ocean Avenue was reviewed on February 28, 2007 by Rincon personnel and is summarized below. A portion of the file and associated reports are included as Appendix 4 of this report.

Three borings to 30 feet below grade were advanced at the site on February 5, 1992. Soil samples were collected and analyzed for total recoverable petroleum hydrocarbons (TRPH) and purgable halocarbons. TRPH was reported in concentrations of 3 mg/kg to 25 mg/kg. No purgable halocarbon concentrations were reported. Later, nine hydraulic lifts and associated piping were removed from the site (former automobile repair facility) on April 16 and 17, 1992 under the supervision of Brian J. Johnson of the City of Santa Monica Environmental Program Division. Fifteen soil samples were collected from the bottoms off the excavations and sidewalls and were analyzed for TRPH, acetone, ethylbenzene and total xylenes. TRPH concentrations ranged from 25 mg/kg in HL-7B to 47,000 mg/kg in HL-9S. Acetone concentrations ranged from non-detect (ND) to 110 ug/kg. Ethylbenzene concentrations ranged from ND to 19 ug/kg. O-xylene concentrations ranged from ND to 28 ug/kg and m-xylene and p-xylene concentrations ranged from ND to 79 ug/kg. Soil beneath six of the nine lifts had (TRPH) concentrations above 100 parts per million (ppm). Removal of hydrocarbon contaminated soil beneath six of the floor lifts was conducted on July 6 and 7, 1992. Sampling was conducted at the base of each of the six excavations and contaminated soil was removed from the property. Concentrations of TRPH above 100 mg/kg were reported in samples collected in the vicinity of hydraulic lift 9. Soil in the vicinity of hydraulic lift 9 was excavated on September 21, 1992. The excavation measured 17 feet long by 9 feet wide by 24 feet deep. Seven soil samples were collected and analyzed for



TRPH by EPA Method 418.1. Three of the seven samples had concentrations of TRPH of 7.4 mg/kg to 10.7 mg/kg, below the 100 mg/kg acceptable range for the City of Santa Monica Environmental Programs Division requirements. The site was granted closure by the City of Santa Monica Environmental Programs Division in a letter dated October 22, 1992. Based on the case status (closed), medium affected (soil), low concentrations of contamination left in place, and the concurrence of the City of Santa Monica Environmental Program Division, this facility does not represent a recognized environmental condition in connection with the project site.

Review of State of California Division of Oil and Gas Records

According to website of the State of California, Division of Oil and Gas, two oil wells were drilled within 1 mile of the subject property. They are located to the northeast of the subject property and are both owned by Occidental Petroleum Co. They are further identified as 'Marquez EH' 1, and 'Riviera' 1. The wells were reportedly advanced and were abandoned as a dry hole.

OTHER ENVIRONMENTAL RECORDS SOURCES

The Geotracker website (an online listing by the Regional Water Quality Control Board of releases) was checked regarding releases and USTs in the immediate vicinity of the subject site. Three facilities were identified within 600 feet of the subject site. They were the Kurumaya facility listed above, a beach maintenance facility, and the Sears facility located at 302 Colorado Avenue. The two closest release cases were the Kurumaya facility and the beach maintenance facility. Both of these cases were listed as "closed." The Sears facility is listed as an open case and was reportedly soil only.

HISTORICAL USE INFORMATION ON THE PROPERTY AND THE ADJOINING PROPERTIES

The historic records review completed for this Phase I ESA includes aerial photographs, historic topographic maps, and fire and insurance maps as detailed in the following sections. Table 3 provides a summary of the historical use information available for the subject property and nearby areas dating back to 1887.

Review of Historic Aerial Photographs

Aerial photographs from the Geosearch aerial photograph collection were reviewed. Copies of the aerial photographs are included in Appendix 2 (Historical Documents).

Table 3 lists the historical uses of the site based on our review of the available aerial photographs.

Review of Fire Insurance Maps

Fire insurance maps were viewed online via the Los Angeles Public Library website. Copies of the fire insurance maps are included in Appendix 2.

Table 3 lists the historical uses of the site based on our review of the available fire insurance maps.



Review of Historic Topographic Maps

Historic topographic maps from Geo Search’s collection were reviewed. Copies of the historic topographic maps are included in Appendix 2. Topographic maps for the northern portion of the site were from the Topanga Quadrangle and topographic maps for the southern portion of the site were from the Beverly Hills Quadrangle.

Table 3 lists the historical uses of the site based on our review of the available topographic maps.

Table 3 - Historical Use of the Subject Property and Adjacent Properties

| Year | Use | Source |
|-------------------------------------|---|---|
| Subject Site- Palisades Park | | |
| 1895 | Vacant Land | Sanborn |
| 1902 | Vacant Land | Sanborn |
| 1909 | Vacant Land | Sanborn |
| 1918 | Known as Linda Vista Park- open area | Sanborn |
| 1925 | Vacant land with one structure noted south of the intersection of Ocean Avenue and Broadway Avenue | Historic Topographic Map- Sawdelle |
| 1928 | Open park space with walkways and trees and one rectangular building at the base of Bluffs between Idaho and Montana Ave. | Aerial Photograph- Fairchild |
| 1932 | Open area | Historic Topographic Map- Topanga Canyon Quadrangle |
| 1938 | Open park space with walkways and trees and one rectangular building at the base of Bluffs between Idaho and Montana Ave. and California Incline roadway is present trending NW to SE across the site. | Aerial Photograph- ASCS-USDA (5-22-38) |
| 1947 | Open park space with walkways and trees, one rectangular building at the base of the Bluffs between Idaho and Montana Ave. and one square building (or open park space) at the top of the Bluffs west of the intersection of Ocean Avenue and Palisades Avenue | Aerial Photograph- Fairchild (6-22-47) |
| 1952 | Open park with one structure south of the intersection of Ocean Ave and Montana Ave. at the base of the Bluffs and one structure northwest of the intersection of Ocean Ave. and Idaho Ave. (similar to present) and one structure southwest of the intersection of Ocean Ave. and Broadway | Historic Topographic Map- Topanga Quadrangle and Aerial Photograph- ASCS-USDA (11-4-52) |
| 1960 | Open park with one structure south of Montana Ave. at the base of the Bluffs and one structure northwest of the intersection of Ocean Ave. and Idaho (similar to present) and one structure northwest of the intersection of Ocean Ave. and Broadway (similar to present) | Aerial Photograph- Fairchild (5-12-60) |
| 1966 | Open park with one structure northwest of the intersection of Ocean Ave. and Broadway (similar to present) | Historic Topographic Map- Beverly Hills Quadrangle |
| 1967 | Open park with one structure south of the intersection of Ocean Ave. and Montana at the base of the Bluffs | Historic Topographic Map- Topanga Quadrangle 1952 (photo revised 1967) |



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| | | |
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| 1968 | Open park with pathways (former building at base of Bluffs not evident) and one structure at base of Idaho (similar to present) and one structure northwest of Broadway | Aerial Photograph- Teledyne (9-23-68) |
| 1971 | Park area with one large circular pathway to the west of the intersection of Ocean Ave. and Palisades Avenue and one structure at the base of Idaho | Aerial Photograph- Teledyne (4-1-71) |
| 1972 | Open park with one structure northwest of the intersection of Ocean Ave. and Broadway (similar to present) | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1972) |
| 1976 | Open park space with one structure northwest of the intersection of Ocean Ave. and Idaho and one structure northwest of the intersection of Ocean Ave. and Broadway (similar to present) | Aerial Photograph- Teledyne (3-12-76) |
| 1981 | Open park with one structure northwest of the intersection of Ocean Ave. and Broadway (similar to present) and beach access stairways onto site | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1981) and Topanga Quadrangle 1952 (photo revised 1981) and Aerial Photograph |
| 1989 | Similar to 1981 | Aerial Photograph- USGS (8-22-89) |
| 1991 | Open park with one structure southwest of Montana at the base of the Bluffs | Historic Topographic Map- Topanga Quadrangle |
| 1994 | Open park with one structure northwest of the intersection of Ocean Ave. and Broadway (similar to present) | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1994) and Aerial Photograph- USGS (6-1-94) |
| 1995 | Open park with one structure northwest of the intersection of Ocean Ave. and Broadway (similar to present) | Historic Topographic Map- Beverly Hills Quadrangle |
| 2002 | Similar to present | Aerial Photograph- USGS (6-10-02) |
| North | | |
| 1928 | Vacant | Aerial Photograph- Fairchild |
| 1932 | 2 residences | Historic Topographic Map- Topanga Canyon Quadrangle |
| 1952 | The area is depicted as urbanized and has a residence | Historic Topographic Map- Topanga Quadrangle and Aerial Photograph- ASCS-USDA (11-4-52) |
| 1960 | Residences | Aerial Photograph- Fairchild (5-12-60) |
| 1967 | The area is depicted as urbanized | Historic Topographic Map- Topanga Quadrangle 1952 (photo revised 1967) |
| 1976 | Apartments | Aerial Photograph- Teledyne (3-12-76) |
| 1989 | Apartments | Aerial Photograph- USGS (8-22-89) |
| 2002 | Similar to present | Aerial Photograph- USGS (6-10-02) |
| East | | |
| 1887 | Arizona Ave to Colorado (Railroad)- Vacant lots, residences, Boarding Houses, Beer & Lunch Garden, and the Santa Monica Hotel | Sanborn |
| 1888 | Wilshire to Colorado (Railroad) Ave.- Vacant Lots, residences, Lodging, Beer Gardens and Santa Monica Hotel | Sanborn |



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|-----------|---|---|
| 1891 | Washington Ave. to Colorado (Railroad) Ave.- Vacant Lots, residences, Senator Jones' Residence, The Lawrence boarding house and Cypress Grove offices | Sanborn |
| 1895 | Washington Ave. to Colorado (Railroad) Ave.- Vacant Lots, residences, Miramar, The Lawrence boarding house, The Windamere boarding house, Norwood boarding house, restaurant and Beer Garden, and the Pacific Beer Garden. North of Arizona Ave is a residence that has a feature marked gas holder. | Sanborn |
| 1902 | Montana to Colorado (Railroad) Ave.- Vacant Lots, residences, Miramar, residences, boarding houses, Billiards and Club store on Broadway (Utah) Ave., and Pacific Gardens retail complex with a shooting gallery, candy store, and saloon. | Sanborn |
| 1909 | Montana to Colorado (Railroad) Ave.- Vacant Lots, residences, B.P.D.E Hall, residences, Windamere Hotel, and commercial retail stores to the south | Sanborn |
| 1918 | San Vicente to Broadway (Utah) Avenue - Vacant Lots, Residences, Apartments, Westlake Military School, Tenements, Windamere Hotel, and commercial retail | Sanborn |
| 1918-1950 | San Vicente to Colorado Ave.- Vacant Lots, Apartments, Miramar Hotel Cottages, 2 gas station (corner of Ocean and Wilshire Blvd) and (south side of Wilshire Blvd between Ocean and 2nd Street), Shangri-La Apartment Hotel, Chamber of Commerce, gas station- (corner of Ocean and Santa Monica Blvd.), The Georgian, Hotel Windamere, restaurant, gas station (corner of Ocean and Broadway), | Sanborn |
| 1925 | Developed with residences | Historic Topographic Map- Sawdelle |
| 1928 | Vacant lots, residences, gas stations (corner of Ocean and Broadway, and corner of Ocean and Santa Monica Blvd), and commercial | Aerial Photograph- Fairchild |
| 1932 | Vacant lots and residences | Historic Topographic Map- Topanga Canyon Quadrangle |
| 1938 | Vacant lots (mostly in the north), apartments, gas stations on the corners of Ocean and Wilshire, Ocean and Santa Monica Blvd., and Ocean and Broadway Ave., and apartments, residences and commercial buildings | Aerial Photograph- ASCS-USDA (5-22-38) |
| 1947 | Vacant lots (mostly in the north), apartments, gas stations on the corners of Ocean Ave. and Broadway, Ocean Ave. and Santa Monica Ave, Ocean Ave. and Wilshire Ave., and Wilshire Ave. and 2nd Street, apartments, residences and commercial | Aerial Photograph- Fairchild (6-22-47) |
| 1952 | The area is depicted as urbanized with vacant lots, Residences, Residences, gas stations on the corners of Ocean and Wilshire and Ocean and Santa Monica Blvd. and Ocean and Broadway | Historic Topographic Map- Topanga Quadrangle and Aerial Photograph- ASCS-USDA (11-4-52) |



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| | | |
|-----------------------|---|---|
| 1960 | A vacant lot (between Marguerita and Alta Avenues), Residences, Residences, gas stations on the corners of Ocean and Wilshire and Ocean and Santa Monica Blvd. and Ocean and Broadway | Aerial Photograph- Fairchild (5-12-60) |
| 1967 | The area is depicted as urbanized | Historic Topographic Map- Topanga Quadrangle 1952 (photo revised 1967) |
| 1968 | Mostly developed with residences, and commercial and partial remaining vacant lot (between Marguerita and Alta Avenue), and two gas stations (Ocean and Wilshire Blvd. and Ocean and Broadway Ave.) | Aerial Photograph- Teledyne (9-23-68) |
| 1971 | Mostly developed with residences and commercial development and two gas stations (Ocean and Wilshire and Ocean and Broadway) | Aerial Photograph- Teledyne (4-1-71) |
| 1972 | The area is depicted as urbanized | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1972) |
| 1976 | Residences and commercial development | Aerial Photograph- Teledyne (3-12-76) |
| 1981 | The area is depicted as urbanized with residences (high rises), and commercial properties | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1981) and Topanga Quadrangle 1952 (photo revised 1981) and Aerial Photograph |
| 1989 | Residences and commercial development | Aerial Photograph- USGS (8-22-89) |
| 1991 | The area is depicted as urbanized | Historic Topographic Map- Topanga Quadrangle |
| 1994 | Residences and commercial development | Aerial Photograph- USGS (6-1-94) |
| 2002 | Similar to present | Aerial Photograph- USGS (6-10-02) |
| South Adjacent | | |
| 1925 | Open area | Historic Topographic Map- Sawdelle |
| 1928 | Park area | Aerial Photograph- Fairchild |
| 1938 | Park area | Aerial Photograph- ASCS-USDA (5-22-38) |
| 1947 | Park area- partially cleared of vegetation | Aerial Photograph- Fairchild (6-22-47) |
| 1952 | Open area with a pathway | Aerial Photograph-ASCS-USDA (11-4-52) |
| 1960 | Open area with circular path | Aerial Photograph- Fairchild (5-12-60) |
| 1966 | Open Area | Historic Topographic Map- Beverly Hills Quadrangle |
| 1968 | Open area with circular path | Aerial Photograph- Teledyne (9-23-68) |
| 1972 | Open Area | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1972) |
| 1976 | Open area | Aerial Photograph- Teledyne (3-12-76) |
| 1981 | Open Area | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1981) and Topanga Quadrangle 1952 (photo revised 1981) and Aerial Photograph |
| 1989 | Open Area | Aerial Photograph- USGS (8-22-89) |
| 1994 | Open Area | Historic Topographic Map and Aerial Photograph- USGS (6-1-94) |
| 1995 | Open Area | Historic Topographic Map- Beverly Hills Quadrangle |



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| | | |
|----------------------|---|---|
| 2002 | Similar to present | Aerial Photograph- USGS (6-10-02) |
| West Adjacent | | |
| 1891 | Row of shanties and bath houses for a half mile (southern portion) up the beach north of Colorado (Railroad) Ave. | Sanborn |
| 1895 | Port Los Angeles Branch Railroad along the base of the bluffs and North Beach Bath House west of Broadway (Utah) Avenue | Sanborn |
| 1902 | Railroad and roadway with North Beach Bath House and several residences west of the road in the southern portion. | Sanborn |
| 1909 | Roadway, North Beach Bath House, and residences. | Sanborn |
| 1925 | Residences and several large buildings | Historic Topographic Maps |
| 1928 | Roadway, vacant beach, residences, parking lots, and recreation facilities | Aerial Photograph- Fairchild |
| 1932 | Residences and several large buildings | Historic Topographic Map- Topanga Canyon Quadrangle |
| 1938 | Roadway, residences, parking lots, and recreation facilities | Aerial Photograph- ASCS-USDA (5-22-38) |
| 1947 | Roadway, residences, parking lots, and recreation facilities | Aerial Photograph- Fairchild (6-22-47) |
| 1952 | Residences and residences, and the Promenade | Aerial Photograph-ASCS-USDA (11-4-52) |
| 1960 | Residences, residences, and paved parking areas | Aerial Photograph- Fairchild (5-12-60) |
| 1966 | Beach structures and residences | Historic Topographic Map- Beverly Hills Quadrangle |
| 1967 | Residences and residences, and the Promenade | Historic Topographic Map- Topanga Quadrangle 1952 (photo revised 1967) |
| 1968 | Residences and residences, and paved asphalt parking areas | Aerial Photograph- Teledyne (9-23-68) |
| 1971 | Residences and residences, and paved asphalt parking areas | Aerial Photograph- Teledyne (4-1-71) |
| 1972 | Residences and residences, and the Promenade | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1972) |
| 1976 | Residences and residences, and paved asphalt parking areas | Aerial Photograph- Teledyne (3-12-76) |
| 1981 | Residences and residences, and the Promenade, and paved asphalt areas | Historic Topographic Map- Beverly Hills Quadrangle 1966 (photo revised 1981) and Topanga Quadrangle 1952 (photo revised 1981) and Aerial Photograph |
| 1989 | Residences and residences, and paved asphalt parking areas | Aerial Photograph- USGS (8-22-89) |
| 1991 | Residences and residences, and the Promenade | Historic Topographic Map- Topanga Quadrangle |
| 1994 | Residences and residences, and the Promenade, and asphalt paved parking areas | Historic Topographic Map and Aerial Photograph- USGS (6-1-94) |
| 1995 | Residences and residences, the Promenade, and paved asphalt parking areas | Historic Topographic Map- Beverly Hills Quadrangle |
| 2002 | Similar to present | Aerial Photograph- USGS (6-10-02) |



Several data gaps of greater than 5 years were identified for the subject property in the historical records reviewed. Data gaps for the years 1895 to 1902, 1902 to 1909, 1909 to 1918, 1918 to 1925, 1932 to 1938, 1938 to 1947, 1952 to 1960, 1960 to 1966, 1981 to 1989, and 1995 to 2002 were identified. These data gaps are considered insignificant because the site use appears to be in similar in years prior to and after the data gaps.

SITE RECONNAISSANCE AND INTERVIEWS

Rincon Consultants performed a reconnaissance of the site on August 28, 2006. The purpose of the reconnaissance was to observe existing site conditions and to obtain information indicating the possible presence of recognized environmental conditions in connection with the property.

INTERVIEWS

An interview questionnaire was provided to a representative of the property owner, Mr. Spiros Lazaris, a civil engineer with the City of Santa Monica. A copy of the completed questionnaire is included in Appendix 3.

Interview with Owner's Representative

The owner's representative indicated that he is not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property. The owner also indicated that he is not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property. In addition, he is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

SITE RECONNAISSANCE

Methodology and Limiting Conditions

The site reconnaissance was conducted by 1) observing the subject property from public thoroughfares, 2) observing the adjoining properties from public thoroughfares, 3) observing the interior of the onsite structures, 4) observing the exterior of the structures, 5) backtracking to correlate exterior features with interior features, as necessary, 6) observing the subject property from walking paths.

Because of the large size of the subject property, several east-west and north-south walking transects were completed across the upper portion of the subject property. In addition a portion of the western border of the subject property boundary along Palisades Beach Road traversed. Our observation of the subject property was limited by physical obstructions including slope along the Bluffs and concrete barriers.

General Site Setting

Current Use of the Property and Adjoining Properties

The site is currently used as public park space by the City of Santa Monica. Several restroom structures as well as a Senior Center site building were observed. A significant portion of the subject property consists of the Bluffs down to Palisades Beach Road. Surrounding site uses include multi-family high rise condominiums and apartments, restaurants, retail stores, and recreation beach development.



Past Use of the Property and Adjoining Properties

Based on our Site Reconnaissance, former past uses at the subject property and adjacent properties are not readily apparent.

Current or Past Uses in the Surrounding Area

Because the subject property is surrounded by residential and commercial land uses, the former uses of the subject property are not readily apparent.

Geologic, Hydrogeologic, Hydrologic and Topographic Conditions

With the exception of naturally occurring sloughing of the Bluffs, the site does not appear to have been altered or changed significantly in comparison with the most recent topographic map.

General Description of Structures

The site has two site buildings, a public bathroom to the northwest of the intersection of Ocean Avenue and Idaho Avenue and the Senior Center to the northwest of the intersection of Ocean Avenue and Broadway.

Access to the site is available Ocean Avenue and several stairways that lead from the beach area to the upper portion of the site. Access to the lower portion of the site including the Bluffs to Palisades Beach Road was restricted due to concrete barriers along the roadway.

Interior and Exterior Observations

The periphery of the subject property was observed from all adjacent public thoroughfares. In addition, paths present onsite were traversed to determine their purpose. Based on our observations, it does not appear that onsite roads or paths were utilized as an avenue for disposal of hazardous substances or petroleum products.

Hazardous Substances and Petroleum Products

No hazardous substances or petroleum products were identified at the subject property.

Unidentified Substance Containers

Unidentified substance containers or unidentified containers that might contain hazardous substances were not observed during the site reconnaissance. Rincon did not observe indications of potential releases on the site.

Storage Tanks

During the site reconnaissance, Rincon did not observe above-ground tanks or evidence of underground storage tanks. Mr. Lazaris indicated on his questionnaire, Appendix 3, that there have been no above or below ground storage tanks on the property.

Odors

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors. Mr. Lazaris indicated on his questionnaire, Appendix 3, that there have been no odors on the property.

Pools of liquid

During the site reconnaissance, Rincon did not identify any pools of liquid including standing surface water. In addition, sumps containing liquids likely to be hazardous substances or



petroleum products were not observed. Mr. Lazaris indicated on his questionnaire, Appendix 3, that there have been no pools of liquid, standing water or sumps on the property.

Drums

During the site reconnaissance, Rincon did not observe evidence of drums onsite. Mr. Lazaris indicated on his questionnaire, Appendix 3, that there have been no drums on the property.

Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, Rincon did not observe indications of PCB use onsite. Mr. Lazaris indicated on his questionnaire, Appendix 3, that there has been no use of PCBs on the property.

Other Conditions of Concern

During the site reconnaissance Rincon did not note any of the following interior or exterior observations:

- *heating/cooling systems*
- *stains or corrosion*
- *drains, clarifiers, and sumps*
- *pits, ponds, and lagoons*
- *stained soil or stained pavement*
- *stressed vegetation*
- *solid waste/debris/fill material*
- *waste water*
- *wells*
- *septic systems/effluent disposal system*

FINDINGS

Known or suspect environmental conditions associated with the property include the following:

- The former Kurumaya USA Inc. facility located at 1535 Ocean Blvd. is adjacent to the site and had a reported leaking underground storage (LUST) release case.
- Former adjacent gasoline station located at the southeast corner of Ocean Avenue and Wilshire Blvd. from approximately 1938 to 1976.
- Former adjacent gasoline station located at the southeast corner of Ocean Avenue and Santa Monica Blvd from approximately 1928 to 1968.
- Former adjacent gasoline station located at the southeast corner of Ocean Avenue and Broadway Avenue from approximately 1976.
- Former nearby gasoline service station located on the south side of Wilshire Blvd. between Ocean Avenue and 2nd Street from approximately 1938 to 1976.
- Aerially deposited lead (ADL) could be present in the surface soils at the site.



- Unknown releases from former gas stations or other sources may affect the quality of the water that is to be discharged from the Bluff's slope in the proposed drainage system.

OPINIONS

The former Kurumaya USA, Inc. facility had a release of hydraulic oil and was listed as a leaking underground storage tank (LUST) site. Based on the case status (closed), medium affected (soil), low concentrations of contamination left in place, and the concurrence of the City of Santa Monica Environmental Program Division, this facility does not represent a recognized environmental condition in connection with the project site. The four former gasoline service stations located adjacent to or near the subject property are no longer present. Each has been redeveloped with multi-story buildings and subterranean garages. These four former gasoline service stations do not represent a recognized environmental condition. There is the potential for aerially deposited lead (ADL) concentrations in the soil that will be disturbed as a part of the Palisades Bluffs Improvement Project. The potential presence of lead in soil represents a potential recognized environmental condition at the site. Further, unknown releases may affect the quality of the groundwater being discharged from the drainage system. This represents a potential recognized environmental condition at the site.

CONCLUSIONS

This report presents the findings of a Phase I ESA conducted for The Phase I ESA was performed by Rincon Consultants, Inc. for the City of Santa Monica in general conformance with ASTM E 1527-05 and in conjunction with Santa Monica Palisades Bluffs Improvement Project.

Rincon has performed a Phase I ESA in general conformance with the scope and limitations of ASTM Practice E 1527-05 of the property located in the City of Santa Monica, California known as the Palisades Bluffs (Bluffs). The Bluffs form an abrupt slope face parallel to the coastline along Pacific Coast Highway (PCH) and includes Palisades Park.

This assessment has revealed no evidence of recognized environmental conditions in connection with the property. However, it may be possible that aerially deposited lead (ADL) and impacted groundwater from an unknown source may exist onsite.

RECOMMENDATIONS

Based on the findings of the Phase I ESA and additional in-person examinations of each of the current multi-story mixed-use buildings that occupy the locations of the four former gasoline stations, these facilities do not represent a recognized environmental condition at the site. At all four former gasoline service station locations there are two to five levels of underground parking. It is likely that any tanks or tank related contaminated soil would have been removed during the excavation of the multi-level subterranean parking garages.

Hydrocarbons and Volatile Organic Compounds (VOCs)

During the drilling of the boreholes into the Bluffs as part of the proposed Bluffs improvement project (to the west of the four former gasoline service stations), a 40-hour Hazwoper-trained environmental scientist shall be onsite to monitor the soil and groundwater for hydrocarbons and volatile organic compounds (VOCs). Although we found no indication of a release from these



former gasoline service stations, these contaminants may be present in the soil or groundwater from an undocumented release.

Soil

The environmental scientist shall examine the excavated soil that is coming out of the boring for visual and olfactory indications of contamination. In addition, the scientist shall use a photoionization detector (PID) to measure VOC concentrations within the worker breathing zone and in the excavated soil to screen for contamination. If contaminants are suspected, soil samples shall be obtained and analyzed to determine whether there are contaminants, and if present, to determine the type and concentrations of contaminants. The sampling results are to be used to make a determination as to where to transport the material for offsite disposal, or to determine if the soils can be used onsite. If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (City of Santa Monica Environmental Program Division). The agency shall review the data and determine if any additional investigation or remedial activities are deemed necessary.

Groundwater

Discharges of treated or untreated groundwater from temporary or permanent dewatering operations shall be permitted under Los Angeles Regional Water Quality Control Board Order No. R4-2003-0111, Waste Discharge Requirements (WDRs) for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters. Application for coverage under this general permit for groundwater dewatering requires:

- A description of the discharge, including identification of the discharge locations (outfalls) to surface waters and an estimate of the maximum daily discharge volume in gallons per day
- Sampling and analysis to provide an initial characterization of groundwater quality
- Treatment processes, if necessary
- Start-up date and duration of the discharge

Compliance and continuing coverage under Order No. R4-2003-0111 requires implementation of a Monitoring and Reporting Program that typically consists of:

- Sampling and Analysis for designated parameters on a monthly, quarterly, semi-annual, and/or annual basis
- Reporting of laboratory analytical data on a quarterly basis

Groundwater dewatering effluent will be conveyed to the storm drain system associated with Pacific Coast Highway (PCH), which is owned, operated, and maintained by the California Department of Transportation (Caltrans) District 7. The City will obtain WDRs which will be in conformance with the Los Angeles Regional Water Quality Control Board under Order No. R4-2003-0111 for the groundwater dewatering effluent, the Caltrans Statewide Stormwater Permit (State Water Resources Control Board Order No. 99-06-DWQ, NPDES No. CAS000003), and the Caltrans Statewide Stormwater Management Plan.



Aerially Deposited Lead (ADL)

ADL is a potential concern in the surface soils at the site as a result of vehicle leaded-gasoline usage and wide-spread dispersal and deposition on unpaved areas. As mandated by Caltrans in a letter dated January 10, 2007, prior to issuance of permits for the proposed Bluff improvements, a Preliminary Site Investigation shall be performed in compliance with Caltrans ADL Testing Guidance (March 16, 2001). The Preliminary Site Investigation shall include soil borings in the locations of future Bluff improvement borings to a minimum depth of 2.5 feet below ground surface using hand auger sampling methods. All soil samples from the ADL investigation shall be analyzed for the presence of total lead following EPA Test Method 6010. The regulatory criteria for determining whether soils are to be classified as “hazardous waste” for materials handling and disposal purposes based on metal content are contained in the California Code of Regulations Title 22, Section 66261.24. The Total Threshold Limit Concentration (TTLC) for ADL is 1,000 milligrams per kilogram (mg/kg) and the Soluble Threshold Limit Concentration (STCL) for lead is 5.0 milligrams per liter (mg/l). In the event that ADL is discovered in excess of TTLC or STLC, the soil shall be excavated, put into 55-gallon drums, and transported to a licensed landfill for proper disposal. In addition:

- Handling of materials containing ADL shall result in no visible dust migration. The contractor shall have a means of dust control available at all times while handling material in work areas containing ADL.
- Project construction activities shall be conducted in compliance with Caltrans Guidelines associated with aerially deposited lead. This requirement shall be included in construction contracts.

DEVIATIONS

Deviations from ASTM Practice E 1527-05 were encountered during the completion of this Phase I ESA. Data gaps greater than five years were encountered. It is our opinion that the nature of the subject property did not significantly change from the uses noted in the years prior to and after the data gap. Therefore, the environmental significance is minimal.



REFERENCES

The following published reference materials were used in preparation of this Phase I ESA:

Environmental database: Track Info Services, LLC Environmental FirstSearch Report (FirstSearch) report dated August 28, 2006.

Topography: USGS topographic map Topanga Quadrangle (1991) and Beverly Hills Quadrangle (1995)

Oil and gas records: Division of Oil and Gas online website.

Aerial photographs: Photos provided by D&M Environmental

Fire insurance maps: Maps available via the Los Angeles Public Library website.

Historic topographic maps: Maps provided by D&M Environmental.



SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The qualified environmental professional that is responsible for preparing the report include Julie Marshall and Walt Hamann. Their qualifications are summarized in the following section.

“We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.”

| | |
|--|----------------------------------|
| _____ Signature | _____ June 22, 2007 Date |
| _____ Walt Hamann, PG, CEG, CHG, REA II Name | _____ Vice President Title |

| | |
|---|------------------------------------|
| _____ Signature | _____ June 22, 2007 Date |
| _____ Julie Welch Marshall, REA II Name | _____ Senior Associate Title |



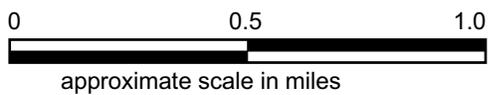
QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL(S)

The environmental professionals responsible for conducting this Phase I ESA and preparing the report include Julie Marshall and Walt Hamann. Their qualifications are summarized below.

| Environmental Professional Qualifications | 2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience | 2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries | 2.1.1 (2) (iii) - Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience | 2.1.1 (2) (iii) - Equivalent of 10 years of full-time relevant experience |
|---|---|--|---|---|
| Walt Hamann | PG | REA II | BS Geology 20 years exp. | 20 years exp. |
| Julie Welch Marshall | | REA II | BS Environmental Engineering 10 years exp. | 10 years exp. |

Walt Hamann, PG, CEG, CHG, REA II, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Science degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 20 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), Certified Hydrogeologist (#208) and Registered Environmental Assessor II (#20063) with the State of California.

Julie Welch Marshall, REA II, is an Environmental Engineer with Rincon Consultants. She holds a Bachelor of Science degree in environmental engineering from Rensselaer Polytechnic Institute, Troy, New York and a Hazardous Materials Management Certificate from the University of California, Santa Barbara Extension program. Ms. Marshall's responsibilities at Rincon include implementation of site assessments and development of site remediation programs within the Environmental Site Assessment and Remediation Group. Ms. Marshall has extensive experience performing Phase I and Phase II Environmental Site Assessments as well as Preliminary Endangerment Assessments. She has ten years of experience conducting research, assessment and remediation projects. Ms. Marshall is a Registered Environmental Assessor II with the State of California (#20259).



Vicinity Map

Figure 1
Rincon Consultants



Site and Adjacent Land Use Map

Figure 2



Photograph 1: View of the site (including bluffs) looking to the southwest with Palisades Beach Road below



Photograph 2: View of the "upper" park portion of the site looking to the south



Photograph 3: View of the site and the Senior Center at the site looking to the north.



Photograph 4: View of the site (hillside) beyond Palisades Beach Road looking to the southeast.

Site Photographs

Figure 3

Rincon Consultants





Photograph 5: View of the northern adjacent property.



Photograph 6: View of Ocean Avenue and typical eastern adjacent commercial and residential properties.



Photograph 7: View of the southern adjacent property looking to the southwest with Santa Monica Pier in the background.



Photograph 8: View of Palisades Beach Road facing and typical western adjacent multi-family residences and commercial properties.

Site Vicinity Photographs

Figure 4



Appendix 1

FirstSearch Database Report

TRACK ► INFO SERVICES, LLC

Environmental FirstSearch™ Report

TARGET PROPERTY:

COLORADO AND OCEAN AVE

SANTA MONICA CA 90405

Job Number: 04-57300

PREPARED FOR:

Rincon Consultants, Inc.

5355 Avenida Encinas, Suite 103

Carlsbad, CA 92008

08-28-06



Tel: (866) 664-9981

Fax: (818) 249-4227

***Environmental FirstSearch
Search Summary Report***

Target Site: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

FirstSearch Summary

| Database | Sel | Updated | Radius | Site | 1/8 | 1/4 | 1/2 | 1/2> | ZIP | TOTALS |
|-------------|-----|----------|--------|------|-----|-----|-----|------|-----|--------|
| NPL | Y | 06-08-06 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CERCLIS | Y | 06-08-06 | 0.50 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| NFRAP | Y | 06-08-06 | 0.12 | 0 | 0 | - | - | - | 0 | 0 |
| RCRA TSD | Y | 04-16-06 | 0.50 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| RCRA COR | Y | 04-16-06 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RCRA GEN | Y | 04-16-06 | 0.25 | 0 | 1 | 7 | - | - | 2 | 10 |
| RCRA NLR | Y | 04-16-06 | 0.12 | 0 | 0 | - | - | - | 0 | 0 |
| ERNS | Y | 12-31-05 | 0.12 | 0 | 2 | - | - | - | 14 | 16 |
| State Sites | Y | 05-04-05 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Spills-1990 | Y | 07-01-03 | 0.12 | 0 | 0 | - | - | - | 0 | 0 |
| SWL | Y | 07-21-06 | 0.50 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| Permits | Y | 02-11-04 | 0.25 | 0 | 0 | 0 | - | - | 0 | 0 |
| Other | Y | 09-06-05 | 0.25 | 0 | 0 | 0 | - | - | 0 | 0 |
| REG UST/AST | Y | 08-16-06 | 0.25 | 0 | 2 | 6 | - | - | 0 | 8 |
| Leaking UST | Y | 07-21-06 | 0.50 | 0 | 1 | 2 | 6 | - | 0 | 9 |
| - TOTALS - | | | | 0 | 6 | 15 | 6 | 1 | 16 | 44 |

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to TRACK Info Services, certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in TRACK Info Services's databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although TRACK Info Services uses its best efforts to research the actual location of each site, TRACK Info Services does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of TRACK Info Services's services proceeding are signifying an understanding of TRACK Info Services's searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

**Environmental FirstSearch
Site Information Report**

Request Date: 08-28-06
Requestor Name: Chris Powers
Standard: ASTM

Search Type: AREA
Job Number: 04-57300

Filtered Report

TARGET ADDRESS: COLORADO AND OCEAN AVE
 SANTA MONICA CA 90405

Demographics

| | | |
|------------------|-------------------------|-----------------------|
| Sites: 44 | Non-Geocoded: 16 | Population: NA |
| Radon: NA | | |

Site Location

| | <u>Degrees (Decimal)</u> | <u>Degrees (Min/Sec)</u> | <u>UTMs</u> |
|-------------------|--------------------------|--------------------------|-----------------------------|
| Longitude: | -118.505959 | -118:30:21 | Easting: 360950.887 |
| Latitude: | 34.019696 | 34:1:11 | Northing: 3765167.84 |
| | | | Zone: 11 |

Comment

| |
|-----------------|
| Comment: |
|-----------------|

Additional Requests/Services

| | |
|--------------------------------------|------------------|
| Adjacent ZIP Codes: 1 Mile(s) | Services: |
|--------------------------------------|------------------|

| <u>ZIP Code</u> | <u>City Name</u> | <u>ST</u> | <u>Dist/Dir</u> | <u>Sel</u> | <u>Requested?</u> | <u>Date</u> |
|-----------------|-------------------|-----------|-----------------|------------|--------------------|-------------|
| 90272 | PACIFIC PALISADES | CA | 0.23 NW | Y | Sanborns | No |
| 90401 | SANTA MONICA | CA | 0.00 -- | Y | Aerial Photographs | No |
| 90402 | SANTA MONICA | CA | 0.00 -- | Y | Historical Topos | No |
| 90403 | SANTA MONICA | CA | 0.00 -- | Y | City Directories | No |
| 90404 | SANTA MONICA | CA | 0.53 NE | Y | Title Search | No |
| | | | | | Municipal Reports | No |
| | | | | | Online Topos | No |

Environmental FirstSearch Sites Summary Report

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

TOTAL: 44 **GEOCODED:** 28 **NON GEOCODED:** 16 **SELECTED:** 0

| Page No. | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|----------|---------|---|---|----------|--------|
| 1 | UST | MIRAMAR HOTEL CORP. SANTAMONICA12475 | 101 WILSHIRE BLVD SANTA MONICA CA | 0.01 NE | 17 |
| 2 | LUST | KURUMAYA USA INC T0603701373/CASE CLOSED | 1535 OCEAN AVE SANTA MONICA CA 90401 | 0.01 SE | 23 |
| 3 | ERNS | UNKNOWN 334097/HIGHWAY RELATED | 1500 PACIFIC COAST HWY SANTA MONICA CA 90401 | 0.04 SW | 11 |
| 4 | ERNS | UNKNOWN 256642/UNKNOWN (NRC) | 214 SANTA MONICA BLVD SANTA MONICA CA 90401 | 0.09 NE | 12 |
| 6 | RCRAGN | QUALITY PHOTO LAB CAD114262785/SGN | 215 BROADWAY SANTA MONICA CA 90401 | 0.09 NE | 5 |
| 7 | UST | S.M. MOSS AVE SEWAGE LIFT STA TISID-STATE24801/ACTIVE | 1601 APPIAN SANTA MONICA CA 90405 | 0.09 SE | 21 |
| 8 | RCRAGN | F W WOOLWORTHS CAD983649203/SGN | 1322 3RD ST SANTA MONICA CA 90401 | 0.13 NE | 2 |
| 9 | RCRAGN | SEPHORA STORE 26 SANTA MONICA CAR000147421/SGN | 1349 THIRD STREET SANTA MONICA CA 90401 | 0.14 NE | 7 |
| 10 | LUST | SEARS T0603701368/POST REMEDIAL ACTION | 302 COLORADO AVE SANTA MONICA CA 90401 | 0.17 NE | 10 |
| 11 | RCRAGN | ALLSPORT USA INC CA0000284265/SGN | 320 WILSHIRE BLVD UNIT 300 SANTA MONICA CA 90401 | 0.18 NE | 1 |
| 12 | UST | CHEVRON STATION 9-06391 TISID-STATE27868/ACTIVE | 14791 PACIFIC COAST SANTA MONICA CA 90402 | 0.20 NW | 14 |
| 13 | UST | 90639-CHEVRON STATION TISID-STATE26806/ACTIVE | 14791 PACIFIC COAST SANTA MONICA CA 90402 | 0.20 NW | 14 |
| 14 | RCRAGN | LANDER CHIROPRACTIC CORP CAD983662164/SGN | 1511 4TH ST SANTA MONICA CA 90401 | 0.22 NE | 4 |
| 15 | RCRAGN | FROMEX PHOTO SYSTEMS CAD982489932/SGN | 406 BROADWAY SANTA MONICA CA 90401 | 0.23 NE | 3 |
| 16 | RCRAGN | THE GETTY RESEARCH INSTITUTE CAD982480345/SGN | 401 WILSHIRE BLVD SANTA MONICA CA 90401 | 0.24 NE | 9 |
| 17 | UST | LOEW S S M BEACH HOTEL TISID-STATE24754/ACTIVE | 1700 OCEAN SANTA MONICA CA 90401 | 0.24 SE | 16 |
| 18 | UST | LOEWS SANTA MONICA BEACH HOTEL SANTAMONICA12451 | 1700 OCEAN AVE SANTA MONICA CA | 0.24 SE | 16 |
| 19 | RCRAGN | SANTA MONICA CLEANERS CAD982327272/SGN | 419 WILSHIRE BLVB SANTA MONICA CA 90401 | 0.25 NE | 6 |
| 20 | LUST | SANTA MONICA POLICE DEPARTMENT T0603701375/CASE CLOSED | 1685 MAIN ST SANTA MONICA CA 90401 | 0.25 SE | 22 |
| 21 | UST | S.M. POLICE DEPT. TISID-STATE24803/ACTIVE | 1685 MAIN SANTA MONICA CA 90401 | 0.25 SE | 22 |
| 22 | UST | SANTA MONICA POLICE DEPARTMENT SANTAMONICA12464 | 1685 MAIN ST SANTA MONICA CA | 0.25 SE | 22 |

***Environmental FirstSearch
Sites Summary Report***

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

TOTAL: 44 **GEOCODED:** 28 **NON GEOCODED:** 16 **SELECTED:** 0

| Page No. | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|-----------------|----------------|--|--|-----------------|---------------|
| 23 | LUST | SANTA MONICA/MALIBU SCHL. DIST T0603701361/POLLUTION CHARACTERI | 1723 004TH ST SANTA MONICA CA 90401 | 0.34 SE | 24 |
| 24 | LUST | SANTA MONICA MUNICIPAL BUS LINES M T0603701364/REMEDIAL ACTION | 1620 006TH ST SANTA MONICA CA 90401 | 0.37 NE | 20 |
| 25 | LUST | SHELL #204-6978-1502 T0603701377/CASE CLOSED | 729 MONTANA AVE SANTA MONICA CA 90403 | 0.42 NE | 8 |
| 26 | LUST | SANTA MONICA FIRE DEPT. T0603701371/CASE CLOSED | 1444 007TH ST SANTA MONICA CA 90401 | 0.45 NE | 15 |
| 27 | LUST | PIONEER FRENCH BAKERY T0603701374/CASE CLOSED | 1621 007TH ST SANTA MONICA CA 90401 | 0.46 NE | 19 |
| 28 | LUST | MOBIL #11-F24 T0603701369/CASE CLOSED | 731 SANTA MONICA BLVD SANTA MONICA CA 90401 | 0.48 NE | 18 |
| 29 | STATE | EDISON/SANTA MONICA MGP CAL19490228/VOLUNTARY CLEANUP AG | 819 COLORADO AVE SANTA MONICA CA 90404 | 0.55 NE | 13 |

Environmental FirstSearch Sites Summary Report

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

TOTAL: 44 **GEOCODED:** 28 **NON GEOCODED:** 16 **SELECTED:** 0

| Page No. | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|----------|---------|--|---|----------|--------|
| 31 | ERNS | 12628/UNKNOWN | SANTA MONICA NAT L SANTA MONICA CA | NON GC | |
| 32 | ERNS | UNKNOWN 465616/UNKNOWN (EPA REGIONS) | SANTA MONICA LIFE GUARD STN SANTA MONICA CA | NON GC | |
| 33 | ERNS | UNK (DUMPED) 72985/UNKNOWN | MESA RD=BTW:300/400BLK IN S SANTA MONICA CA | NON GC | |
| 33 | ERNS | UNK 112876/UNKNOWN | SANTA MONICA PIER SANTA MONICA CA | NON GC | |
| 34 | ERNS | UNK 107871/UNKNOWN | NB 405 HWY JUST N OF SANTA SANTA MONICA CA | NON GC | |
| 34 | ERNS | KIEWITT PACIFIC CONST CO 108037/UNKNOWN | OLD SANTA MONICA PIER SANTA MONICA CA | NON GC | |
| 34 | ERNS | KIEWIT PACIFIC CONSTRUCTION CO 117971/UNKNOWN | SANTA MONICA PIER SANTA MONICA CA | NON GC | |
| 35 | ERNS | KIEWIT PACIFIC CO 118980/UNKNOWN | SANTA MONICA PIER SANTA MONICA CA | NON GC | |
| 35 | ERNS | KEWITT CO/PATTERSON B 114661/UNKNOWN | END OF SANTA MONICA PIER SANTA MONICA CA | NON GC | |
| 35 | ERNS | HEWITT PACIFIC CONSTRUCTION 117418/UNKNOWN | END OF SANTA MONICA PIER SANTA MONICA CA | NON GC | |
| 36 | ERNS | HERZIG 565362/FIXED FACILITY | OCEAN AND SANTA MONICA SANTA MONICA CA | NON GC | |
| 37 | ERNS | CHEVRON/J J MONROE 112969/UNKNOWN | #4 BERTH OF SANTA MONIVA BA SANTA MONICA CA | NON GC | |
| 37 | ERNS | 116782/UNKNOWN | #4 MARINE BERTH SANTA MONIC SANTA MONICA CA | NON GC | |
| 37 | ERNS | KIEWIT PACIFIC CO/PATTERSON B 114387/UNKNOWN | END OF SANTA MONICA PIER SANTA MONICA CA | NON GC | |
| 38 | RCRAGN | SANTA YNEZ RESERVOIR CAR000155168/LGN | 1351 NORTH PALISADES DR PACIFIC PALISA CA 90272 | NON GC | |
| 39 | RCRAGN | L A 1 P M 37 00 40 77 CALTRANS CAP000103028/LGN | RTE 1 ENTRADA DR TO RTE 27 SANTA MONICA CA 90272 | NON GC | |

***Environmental FirstSearch
Site Detail Report***

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

RCRA GENERATOR SITE

SEARCH ID: 5

DIST/DIR: 0.09 NE

MAP ID: 5

NAME: QUALITY PHOTO LAB
ADDRESS: 215 BROADWAY
SANTA MONICA CA 90401
LOS ANGELES

REV: 6/6/06
ID1: CAD114262785
ID2:
STATUS: SGN
PHONE:

CONTACT:

SITE INFORMATION

UNIVERSE INFORMATION:

NAIC INFORMATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

***Environmental FirstSearch
Site Detail Report***

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

RCRA GENERATOR SITE

SEARCH ID: 7

DIST/DIR: 0.14 NE

MAP ID: 7

NAME: SEPHORA STORE 26 SANTA MONICA
ADDRESS: 1349 THIRD STREET
SANTA MONICA CA 90401
LOS ANGELES
CONTACT: SANDI BAKER

REV: 6/6/06
ID1: CAR000147421
ID2:
STATUS: SGN
PHONE: 415-348-3488

SITE INFORMATION

CONTACT INFORMATION: SANDI BAKER
525 MARKET STREET
SAN FRANCISCO CA 94105

PHONE: 415-348-3488

UNIVERSE INFORMATION:

NAIC INFORMATION

452111 - DEPARTMENT STORES (EXCEPT DISCOUNT DEPARTMENT STORES)

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

Ignitable waste

***Environmental FirstSearch
Site Detail Report***

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

RCRA GENERATOR SITE

SEARCH ID: 1

DIST/DIR: 0.18 NE

MAP ID: 1

NAME: ALLSPORT USA INC
ADDRESS: 320 WILSHIRE BLVD UNIT 300
SANTA MONICA CA 90401
LOS ANGELES
CONTACT: SCOTT RIDGWAY

REV: 6/6/06
ID1: CA0000284265
ID2:
STATUS: SGN
PHONE: 3103952955

SITE INFORMATION

CONTACT INFORMATION: SCOTT RIDGWAY
320 WILSHIRE BLVD UNIT 300
SANTA MONICA CA 90401

PHONE: 3103952955

UNIVERSE INFORMATION:

NAIC INFORMATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

***Environmental FirstSearch
Site Detail Report***

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

EMERGENCY RESPONSE NOTIFICATION SITE

SEARCH ID: 43

DIST/DIR: NON GC

MAP ID:

NAME:

ADDRESS: SANTA MONICA NAT L
SANTA MONICA CA
LOS ANGELES

CONTACT:

REV:

ID1: 12628

ID2:

STATUS: UNKNOWN

PHONE:

THERE ARE NO DETAILS AVAILABLE FOR THIS SITE

**Environmental FirstSearch
Site Detail Report**

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

EMERGENCY RESPONSE NOTIFICATION SITE

| | | |
|--|--------------------------------------|----------------|
| SEARCH ID: 42 | DIST/DIR: NON GC | MAP ID: |
| NAME: UNKNOWN | REV: 3/4/90 0:0 | |
| ADDRESS: SANTA MONICA LIFE GUARD STN. SANTA MONICA CA Los Angeles | ID1: 465616 | |
| CONTACT: | ID2: | |
| | STATUS: UNKNOWN (EPA REGIONS) | |
| | PHONE: | |

SPILL INFORMATION

DATE OF SPILL: 3/4/1990 **TIME OF SPILL:** 1500

PRODUCT RELEASED (1): TAR BALLS
QUANTITY (1): 0
UNITS (1): OTH

PRODUCT RELEASED (2):
QUANTITY (2):
UNITS (2):

PRODUCT RELEASED (3):
QUANTITY (3):
UNITS (3):

MEDIUM/MEDIA AFFECTED

| | |
|---------------------------------------|---------------------------|
| AIR: NO | GROUNDWATER: NO |
| LAND: YES | FIXED FACILITY: NO |
| WATER: NO | OTHER: NO |
| WATERBODY AFFECTED BY RELEASE: | PACIFIC OCEAN |

CAUSE OF RELEASE

| | |
|-------------------------------|------------------------------|
| DUMPING: NO | EQUIPMENT FAILURE: NO |
| NATURAL PHENOMENON: NO | OPERATOR ERROR: NO |
| OTHER CAUSE: NO | TRANSP. ACCIDENT: NO |
| UNKNOWN: YES | |

ACTIONS TAKEN:

RELEASE DETECTION: TARBALLS FLOATING UP ON BEACH

MISC. NOTES:

DISCHARGER INFORMATION

| | |
|------------------------------------|--------------------------------|
| DISCHARGER ID: 465616 | DUN & BRADSTREET #: |
| TYPE OF DISCHARGER: | |
| NAME OF DISCHARGER: UNKNOWN | |
| ADDRESS: | |

***Environmental FirstSearch
Site Detail Report***

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

RCRA GENERATOR SITE

SEARCH ID: 30

DIST/DIR: NON GC

MAP ID:

NAME: SANTA YNEZ RESERVOIR
ADDRESS: 1351 NORTH PALISADES DR
PACIFIC PALISADES CA 90272
LOS ANGELES
CONTACT: MARK J SEDLACEK

REV: 6/6/06
ID1: CAR000155168
ID2:
STATUS: LGN
PHONE: 213-367-0403

SITE INFORMATION

CONTACT INFORMATION: MARK SEDLACEK
111 N HOPE ST RM 1050
LOS ANGELES CA 90012

PHONE: 213-367-0403

UNIVERSE INFORMATION:

NAIC INFORMATION

22131 - WATER SUPPLY AND IRRIGATION SYSTEMS

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

Corrosive waste

***Environmental FirstSearch
Site Detail Report***

TARGET SITE: COLORADO AND OCEAN AVE
SANTA MONICA CA 90405

JOB: 04-57300

RCRA GENERATOR SITE

SEARCH ID: 29

DIST/DIR: NON GC

MAP ID:

NAME: L A 1 P M 37 00 40 77 CALTRANS
ADDRESS: RTE 1 ENTRADA DR TO RTE 27
SANTA MONICA CA 90272
LOS ANGELES

REV: 12/9/02
ID1: CAP000103028
ID2:
STATUS: LGN
PHONE:

CONTACT:

SITE INFORMATION

UNIVERSE TYPE:

LQG - LARGE QUANTITY GENERATORS: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

SIC INFORMATION:

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch Database Descriptions

NPL: *EPA* NATIONAL PRIORITY LIST - Database of confirmed, proposed or deleted Superfund sites.

CERCLIS: *EPA* COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM - Database of current and potential Superfund sites currently or previously under investigation.

NFRAP: *EPA* COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

RCRA TSD: *EPA* RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of facilities licensed to store, treat and dispose of hazardous waste materials.

RCRA COR: *EPA* RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of RCRA facilities with reported violations and subject to corrective actions.

RCRA GEN: *EPA* RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of facilities that generate or transport hazardous waste or meet other RCRA requirements. LGN - Large Quantity Generators SGN - Small Quantity Generators VGN – Conditionally Exempt Generator. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.

RCRA NLR: *EPA* RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of facilities not currently classified by the EPA but are still included in the RCRIS database. Reasons for non classification: Failure to report in a timely matter. No longer in business. No longer in business at the listed address. No longer generating hazardous waste materials in quantities which require reporting.

ERNS: *EPA/NRC* EMERGENCY RESPONSE NOTIFICATION SYSTEM - Database of emergency response actions. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

STATE SITES: *CA EPA* SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further

studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), also known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories. The categories are: 1. CalSites Properties (CS) 2. School Property Evaluation Program Properties (SCH) 3. Voluntary Cleanup Program Properties (VCP) 4. Unconfirmed Properties Needing Further Evaluation (RFE) Please Note: FirstSearch Reports list the above sites as DB Type (STATE). 5. Unconfirmed Properties Referred to Another Local or State Agency (REF) 6. Properties where a No Further Action Determination has been made (NFA) Please Note: FirstSearch Reports list the above sites as DB Type (OTHER). Each Category contains information on properties based upon the type of work taking place at the site. For example, the CalSites database is now one of the six categories within SMPBRD and contains only confirmed sites considered as posing the greatest threat to the public and/or the potential public school sites will be found within the School Property Evaluation Program, and those properties undergoing voluntary investigation and/or cleanup are in the Voluntary Cleanup Program. CORTESE LIST- Pursuant to Government Code Section 65962.5, the Hazardous Waste and Substances Sites List has been compiled by Cal/EPA, Hazardous Materials Data Management Program. The CAL EPA Dept. of Toxic Substances Control compiles information from subsets of the following databases to make up the CORTESE list: 1. The Dept. of Toxic Substances Control; contaminated or potentially contaminated hazardous waste sites listed in the CAL Sites database. Formerly known as ASPIS are included (CAL SITES formerly known as ASPIS). 2. The California State Water Resources Control Board; listing of Leaking Underground Storage Tanks are included (LTANK) 3. The California Integrated Waste Management Board; Sanitary Landfills which have evidence of groundwater contamination or known migration of hazardous materials (formerly WB-LF, now AB 3750). Note: Track Info Services collects each of the above data sets individually and lists them separately in the following First Search categories in order to provide more current and comprehensive information: CALSITES: SPL, LTANK: LUST, WB-LF: SWL

SPILLS-1990: CA EPA SLIC REGIONS 1 - 9- The California Regional Water Quality Control Boards maintain report of sites that have records of spills, leaks, investigation, and cleanups.

SWL: CA IWMB/SWRCB/COUNTY SWIS SOLID WASTE INFORMATION SYSTEM- The California Integrated Waste Management Board maintains a database on solid waste facilities, operations, and disposal sites throughout the state of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. For more information on individual sites call the number listed in the source field. Please Note: This database contains poor site location information for many sites in the First Search reports; therefore, it may not be possible to locate or plot some sites in First Search reports. WMUDS- The State Water Resources Control Board maintained the Waste Management Unit Database System (WMUDS). It is no longer updated. It tracked management units for several regulatory programs related to waste management and its potential impact on groundwater. Two of these programs (SWAT & TPCA) are no longer on-going regulatory programs as described below. Chapter 15 (SC15) is still an on-going regulatory program and information is updated periodically but not to the WMUDS database. The WMUDS System contains information from the following agency databases: Facility, Waste Management Unit (WMU), Waste Discharger System (WDS), SWAT, Chapter 15, TPCA, RCRA, Inspections, Violations, and Enforcement's. Note: This database contains poor site location information for many sites in the First Search reports; therefore, it may not be possible to locate or plot some sites in First Search reports. ORANGE COUNTY LANDFILLS LIST- A list maintained by the Orange County Health Department.

PERMITS: CA COUNTY SAN DIEGO COUNTY HE17 PERMITS- The HE17/58 database tracks establishments issued permits and the status of their permits in relation to compliance with federal, state, and local regulations that the County oversees. It tracks if a site is a hazardous waste generator, TSD, gas station, has underground tanks, violations, or unauthorized releases. For more information on a specific file call the HazMat Duty Specialist at the phone number listed in the source information field. SAN BERNARDINO COUNTY HAZARDOUS MATERIALS PERMITS- Handlers and Generators Permit Information Maintained by the Hazardous Materials Division.

OTHER: CA EPA/COUNTY SMBRPD / CAL SITES- The California Department of Toxic Substances Control (DTSC) has developed an electronic database system with information about sites that are known to be contaminated with hazardous substances as well as information on uncharacterized properties where further studies may reveal problems. The Site Mitigation and Brownfields Reuse Program Database (SMBRPD), also known as CalSites, is used primarily by DTSC's staff as an informational tool to evaluate and track activities at properties that may have been affected by the release of hazardous substances. The SMBRPD displays information in six categories. The categories are: 1. CalSites Properties (CS) 2. School Property Evaluation Program Properties (SCH) 3. Voluntary Cleanup Program Properties (VCP) 4. Unconfirmed Properties Needing Further Evaluation (RFE) Please Note: FirstSearch Reports list the above sites as DB Type (STATE). 5. Unconfirmed Properties Referred to Another Local or State Agency (REF) 6. Properties where a No Further Action Determination has been made (NFA) Please Note: FirstSearch Reports list the above sites as DB Type (OTHER). Each Category contains information on properties based upon the type of work taking place at the site. For example, the CalSites database is now one of the six categories within SMPBRD and contains only confirmed sites considered as posing the greatest threat to the public and/or the potential public school sites will be found within the School Property Evaluation Program, and those properties undergoing voluntary investigation and/or cleanup are in the Voluntary Cleanup Program. LA COUNTY SITE MITIGATION COMPLAINT CONTROL LOG- The County of Los Angeles Public Health Investigation Compliant Control Log. ORANGE COUNTY INDUSTRIAL SITE CLEANUPS- List maintained by the Orange County Environmental Health Agency. RIVERSIDE COUNTY WASTE GENERATORS- A list of facilities in Riverside County which generate hazardous waste. SACRAMENTO COUNTY MASTER HAZMAT LIST- Master list of facilities within Sacramento County with potentially hazardous materials. SACRAMENTO COUNTY TOXIC SITE CLEANUPS- A list of sites where unauthorized releases of potentially hazardous materials have occurred.

REG UST/AST: CA EPA/COUNTY/CITY ABOVEGROUND STORAGE TANKS LISTING- The Above Ground Petroleum Storage Act became State Law effective January 1, 1990. In general, the law requires owners or operators of AST's with petroleum products to file a storage statement and pay a fee by July 1, 1990 and every two years thereafter, take specific action to prevent spills, and in certain instances implement a groundwater monitoring program. This law does not apply to that portion of a tank facility associated with the production oil and regulated by the State Division of Oil and Gas of the Dept. of Conservation. SWEEPS / FIDS STATE REGISTERED UNDEGROUND STORAGE TANKS- Until 1994 the State Water Resources Control Board maintained a database of registered underground storage tanks statewide referred to as the SWEEPS System. The SWEEPS UST information was integrated with the CAL EPA's Facility Index System database (FIDS) which is a master index of information from numerous California agency environmental databases. That was last updated in 1994. Track Info Services included the UST information from the FIDS database in its First Search reports for historical purposes to help its clients identify where tanks may possibly have existed. For more information on specific sites from individual paper files archived at the State Water Resources Control Board call the number listed with the source information. INDIAN LANDS UNDERGROUND STORAGE TANKS LIST- A listing of underground storage tanks currently on Indian Lands under federal jurisdiction. California Indian Land USTS are administered by US EPA Region 9. CUPA DATABASES & SOURCES- Definition of a CUPA: A Certified Unified Program Agency (CUPA) is a local agency that has been certified by the CAL EPA to implement six state environmental programs within the local agency's jurisdiction. These can be a county, city, or JPA (Joint Powers Authority). This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. A Participating Agency (PA) is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A Designated Agency (DA) is an agency that has not been certified by the CUPA but is the responsible local agency that would implement the six unified programs until they are certified. Please Note: Track Info Services, LLC collects and maintains information regarding Underground Storage Tanks from majority of the CUPAS and Participating Agencies in the State of California. These agencies typically do not maintain nor release such information on a uniform or consistent schedule; therefore, currency of the data may vary. Please look at the details on a specific site with a UST record in the First Search Report to determine the actual currency date of the record as provided by the relevant agency. Numerous efforts are made on a regular basis to obtain updated records.

LEAKING UST: CA SWRCB/COUNTY LUSTIS- The State Water Resources Control Board maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks. Information for this database is collected from the states regional boards quarterly and integrated with this database. SAN DIEGO

COUNTY LEAKING TANKS- The San Diego County Department of Environmental Health maintains a database of sites with confirmed or unconfirmed leaking underground storage tanks within its HE17/58 database. For more information on a specific file call the HazMat Duty Specialist at phone number listed in the source information field.

RADON: *NTIS* NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE: COLORADO AND OCEAN AVE
 SANTA MONICA CA 90405

JOB: 04-57300

| Street Name | Dist/Dir | Street Name | Dist/Dir |
|--------------------|-----------------|--------------------|-----------------|
| 2nd St | 0.07 NE | Main St | 0.12 SE |
| 3rd St | 0.15 NE | Marguerita Ave | 0.00 -- |
| 3rd St Promenade | 0.15 NE | Mesa Rd | 0.18 NE |
| 4th St | 0.22 NE | Montana Ave | 0.01 NE |
| Adelaide Dr | 0.00 -- | Moss Ave | 0.13 SE |
| Alta Ave | 0.00 -- | Ocean Ave | 0.00 -- |
| Appian Way | 0.09 SE | Ocean Front | 0.03 SW |
| Arcadia Mtwy | 0.23 SE | Ocean Way | 0.00 -- |
| Arcadia Ter | 0.21 SE | Pacific Coast Hwy | 0.00 -- |
| Arizona Ave | 0.01 NE | Pacific Ter | 0.25 SE |
| Broadway St | 0.00 -- | Palisades Ave | 0.01 NE |
| California Ave | 0.00 -- | Sage Ln | 0.21 NE |
| California Incline | 0.00 -- | San Vicente Blvd | 0.00 -- |
| Channel Ln | 0.15 NW | Santa Monica Blvd | 0.01 NE |
| Chautauqua Blvd | 0.22 NW | Seaside Ter | 0.17 SE |
| Colorado Ave | 0.09 SE | Short St | 0.16 NW |
| E Rustic Rd | 0.20 NW | Sycamore Rd | 0.24 NW |
| EAST Rustic Rd | 0.20 NW | W Channel Rd | 0.19 NW |
| Entrada Dr | 0.15 NW | Washington Ave | 0.00 -- |
| Georgina Ave | 0.00 -- | WEST Channel Rd | 0.19 NW |
| I-10 | 0.09 SE | Wilshire Blvd | 0.00 -- |
| Idaho Ave | 0.00 -- | | |
| Mabery Rd | 0.03 NW | | |

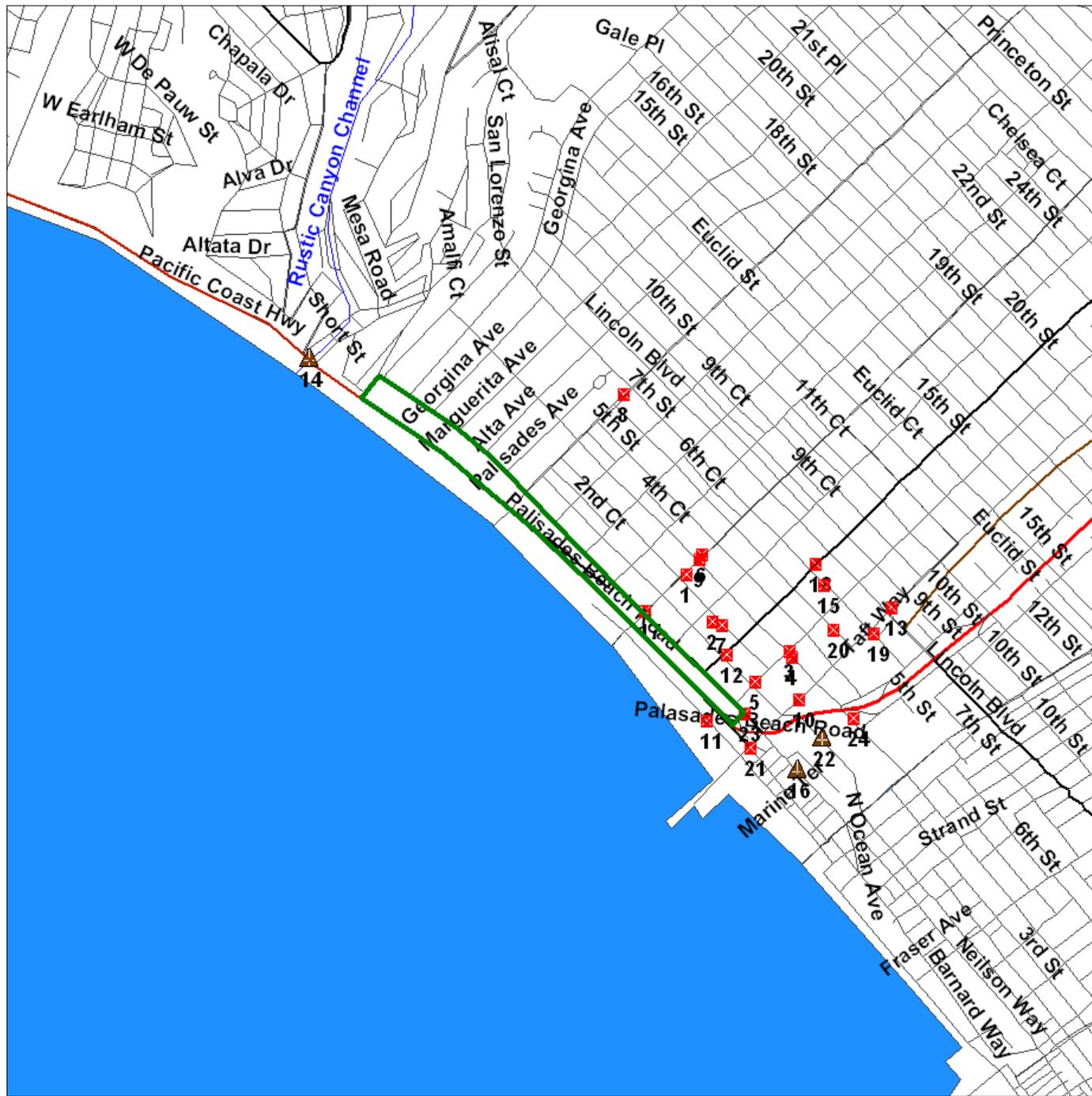


Environmental FirstSearch

1 Mile Radius from Area
Single Map:

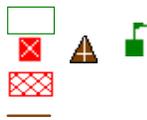


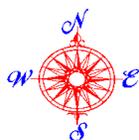
COLORADO AND OCEAN AVE, SANTA MONICA CA 90405



Source: U.S. Census TIGER Files

- Area Polygon
- Identified Site, Multiple Sites, Receptor
- NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste
- Railroads





Environmental FirstSearch

1 Mile Radius from Area
ASTM: NPL, RCACOR, STATE

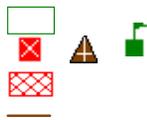


COLORADO AND OCEAN AVE, SANTA MONICA CA 90405



Source: U.S. Census TIGER Files

- Area Polygon
- Identified Site, Multiple Sites, Receptor
- NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste
- Railroads





Environmental FirstSearch

.5 Mile Radius from Area
 ASTM: CERCLIS, RCRATSD, LUST, SWL



COLORADO AND OCEAN AVE, SANTA MONICA CA 90405



Source: U.S. Census TIGER Files

- Area Polygon
- Identified Site, Multiple Sites, Receptor
- NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste
- Railroads





Environmental FirstSearch

.25 Mile Radius from Area
ASTM: RCAGEN, UST, PERMITS, OTHER



COLORADO AND OCEAN AVE, SANTA MONICA CA 90405



Source: U.S. Census TIGER Files

- Area Polygon
- Identified Site, Multiple Sites, Receptor
- NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste
- Railroads





Environmental FirstSearch

.12 Mile Radius from Area
ASTM: NFRAP, SPILLS90, ERNS, RCRANLR



COLORADO AND OCEAN AVE, SANTA MONICA CA 90405



Source: U.S. Census TIGER Files

- Area Polygon
- Identified Site, Multiple Sites, Receptor
- NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste
- Railroads



Appendix 2

**Historical Research Documentation
(Aerial Photographs, Fire Insurance Maps,
and Historical Topographical Maps)**

1928



1938



1947



1952



1952



1960



1968



1971



1976



1981



1989

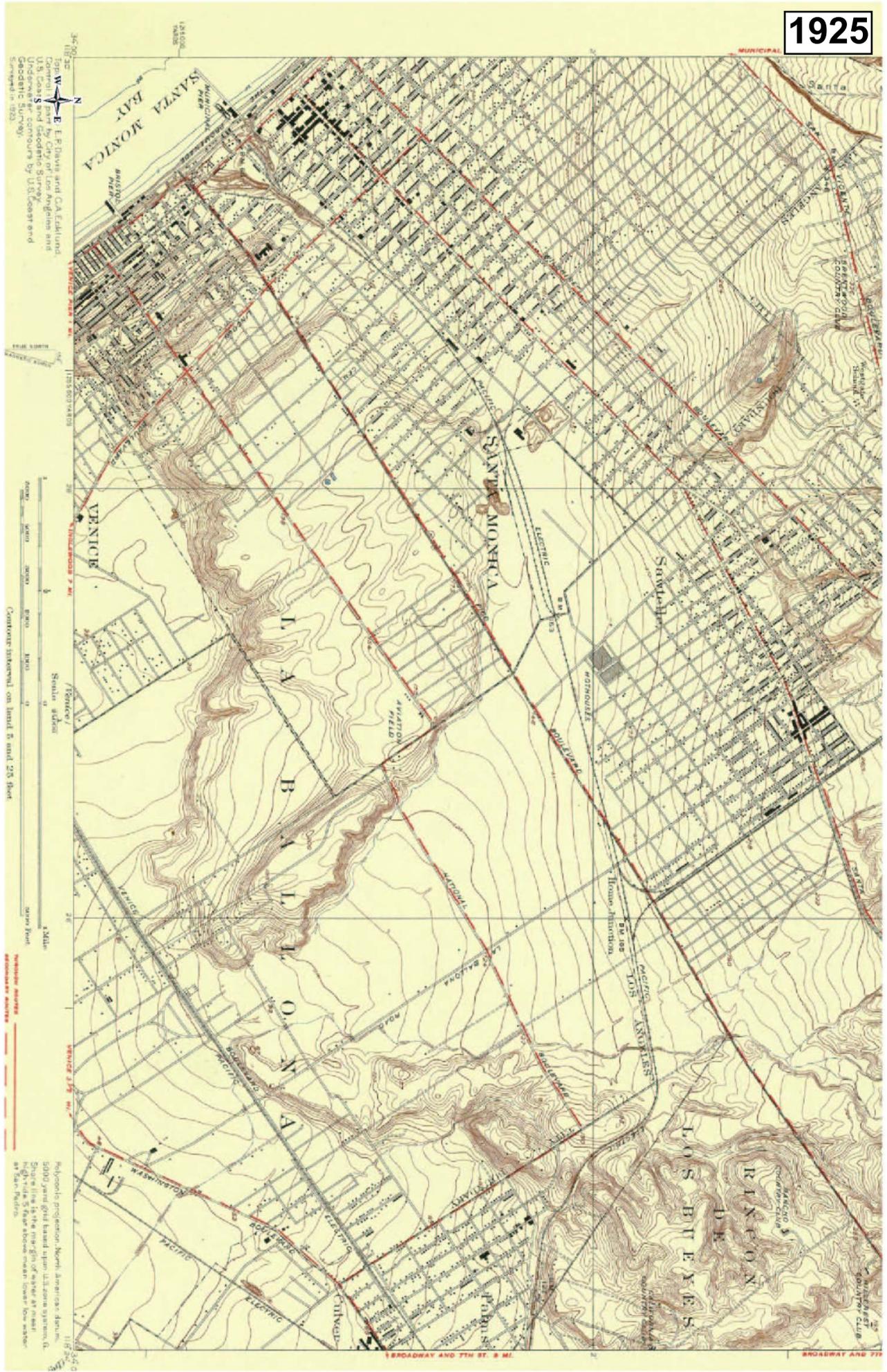


1994



2002





34° 20' 30" N
118° 29' 30" W
E. F. Davis and C. A. Ecklund
Geodesists
U.S. Coast and Geodetic Survey
Undermaster contours by U.S. Coast and
Geodetic Survey.
Surveyed in 1923.

Scale
0 1000 2000 3000 4000 5000
Feet
0 1 2 3 4 5
Miles

Contours shown on land 5 and 2 1/2 feet

Vertical scale
0 100 200 300 400 500
Feet

Hydrographic projection. North American datum.
5000 foot grid based upon U.S. zone system. D.
Shape line is the north-south line of the
at Santa Monica.



118
 Polyconic projection, North American datum.
 5000 yard grid based upon U.S. zone system, G.
 Shore line is margin of water at mean high
 tide, 5 feet above mean lower low water at San
 Pedro.



Scale
 1 Mile
 5000 Feet

Scale
 1 Mile
 5000 Feet

1:246,000 YARDS
 TRUE NORTH

34° 00' W 118° 36' E
 Topography by C. P. McKinley
 Underwater Soundings by U. S. Coast and Geodetic Survey
 Contouring by U. S. Geological Survey and U. S. Coast and Geodetic Survey
 Surveyed in 1925



1:246,000
 YARDS

1952

P A C I F I C

S A N T A M O N I C A

O C E A N

B A Y

2E

127 37'

1:80,000 FEET (M)

INTERIOR GEOLOGICAL SURVEY WASHINGTON, D. C. 20540



1952 PR 1967

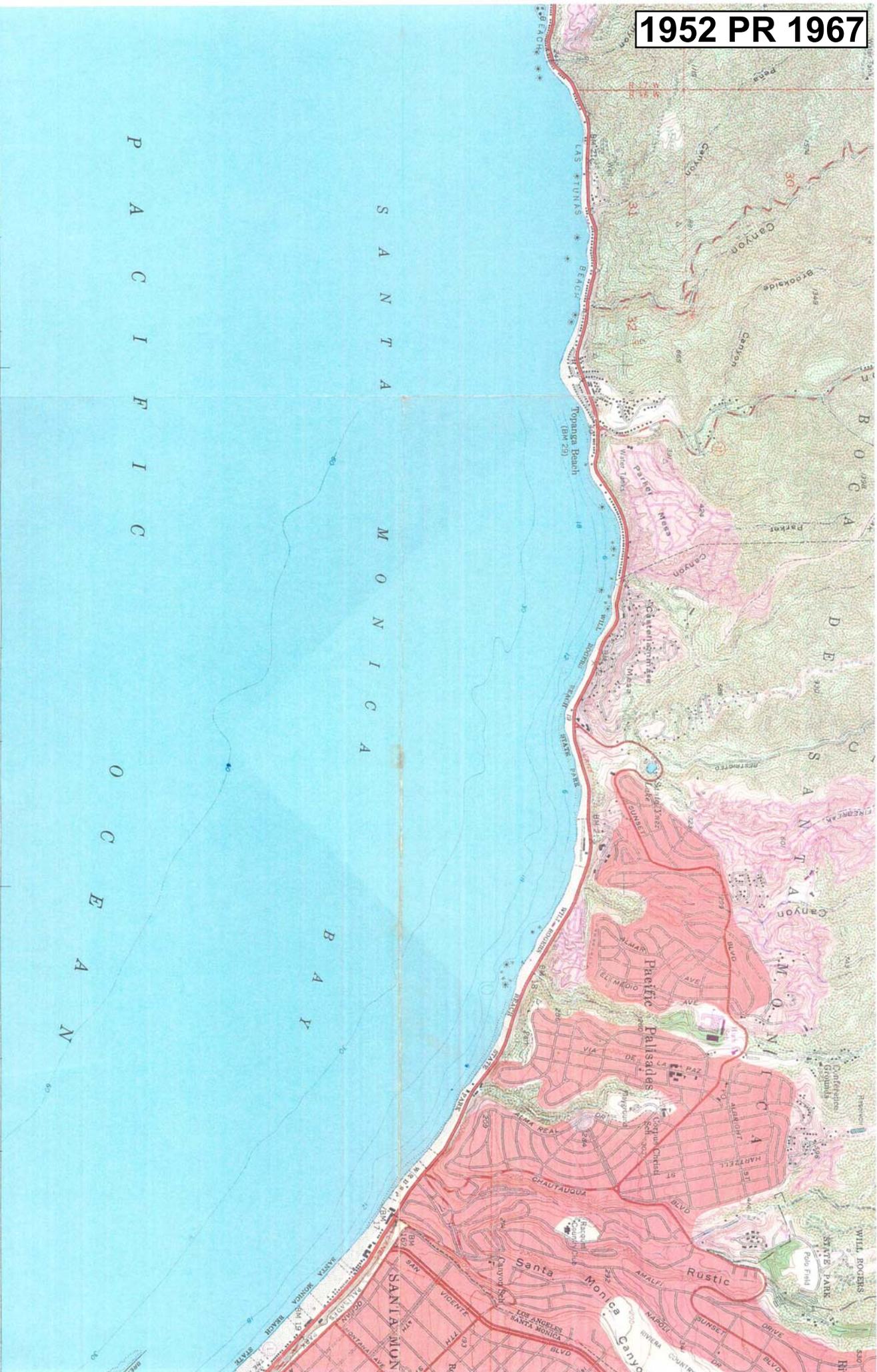
P A C I F I C
O C E A N

S A N T A
M O N I C A

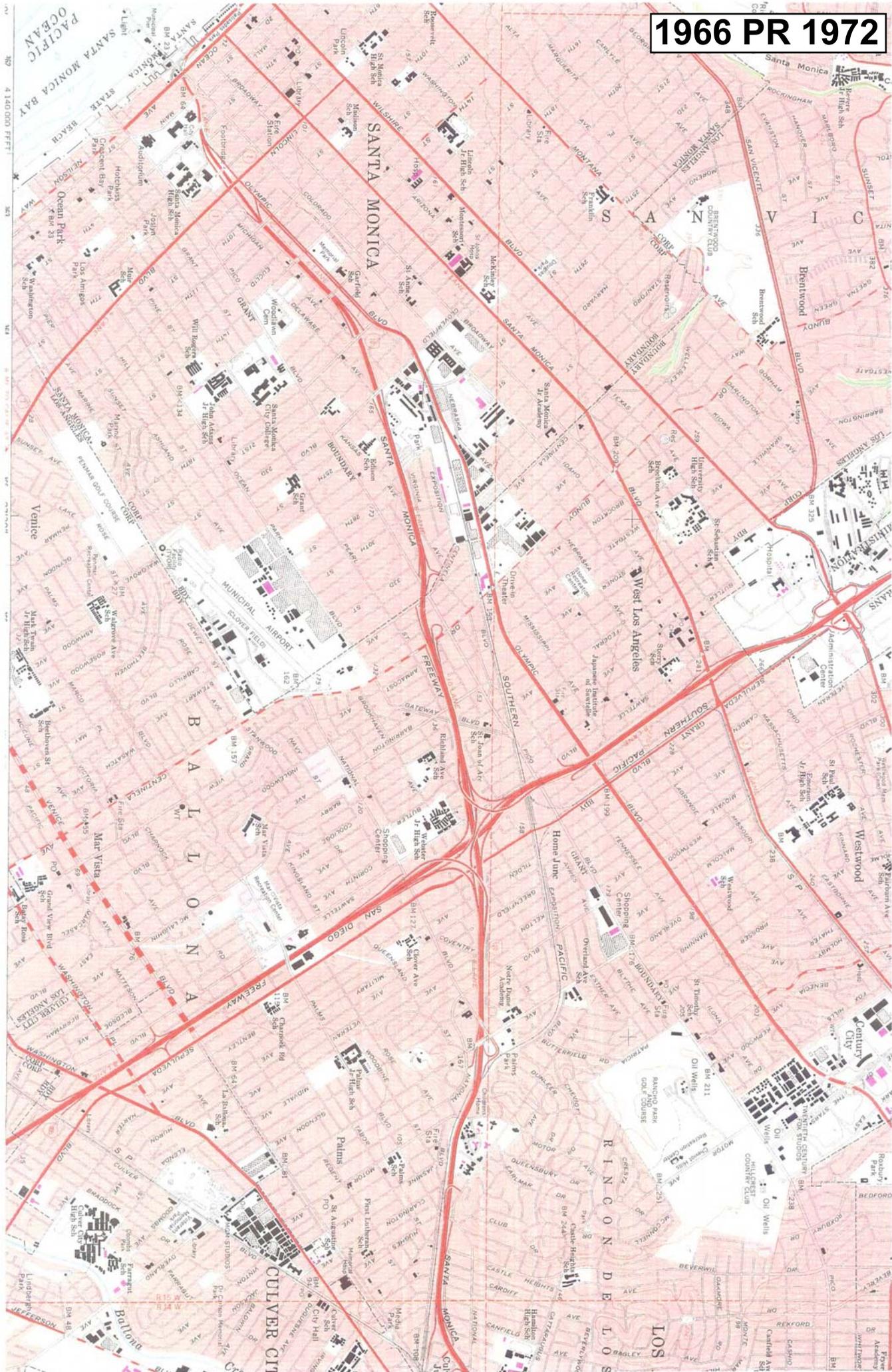
B A Y

152 153 154 155 156 157 32'30" 158 159

1 840 000 FEET (5) 1:50,000



1966 PR 1972



1966 PR 1981



P
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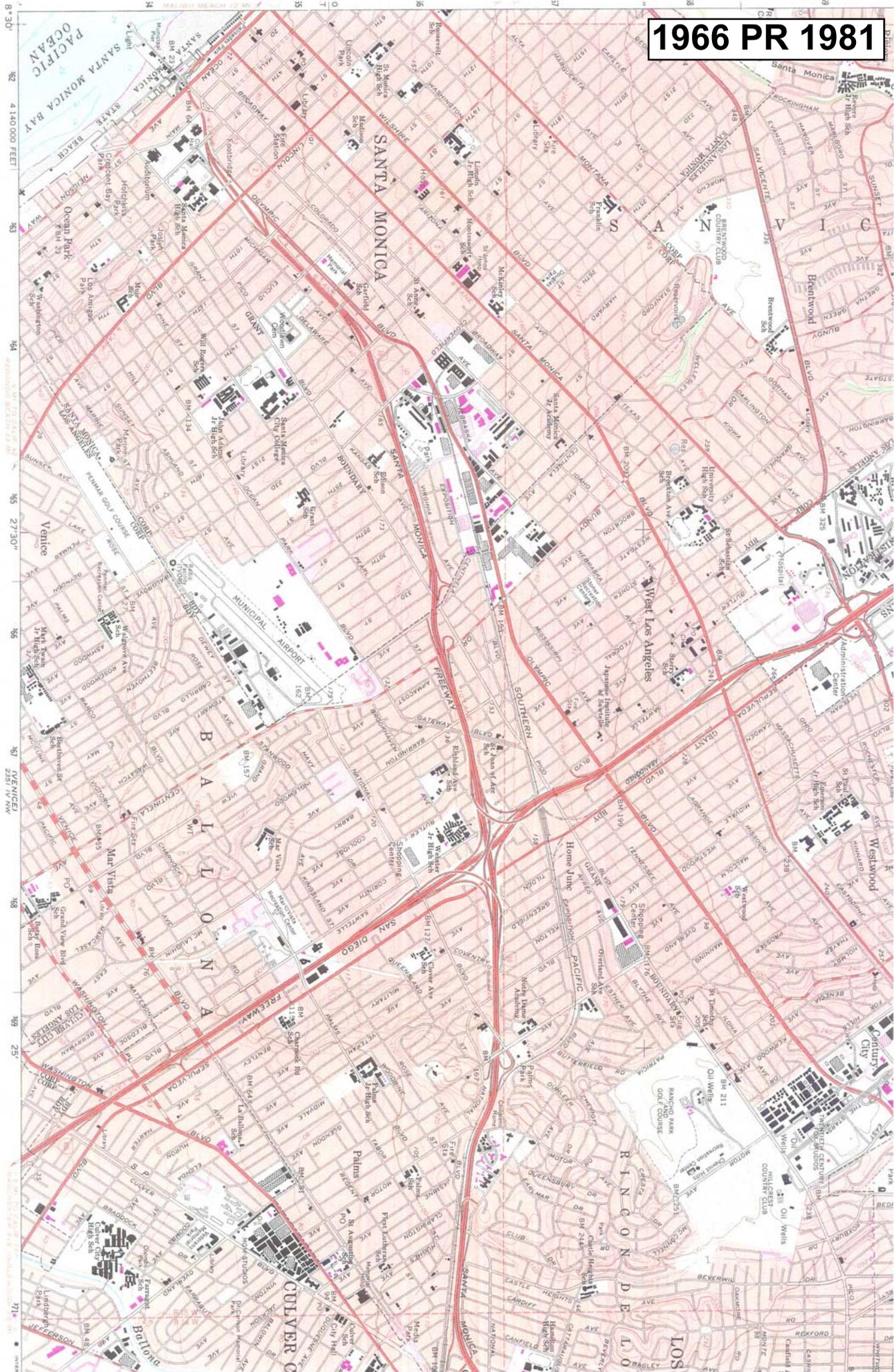
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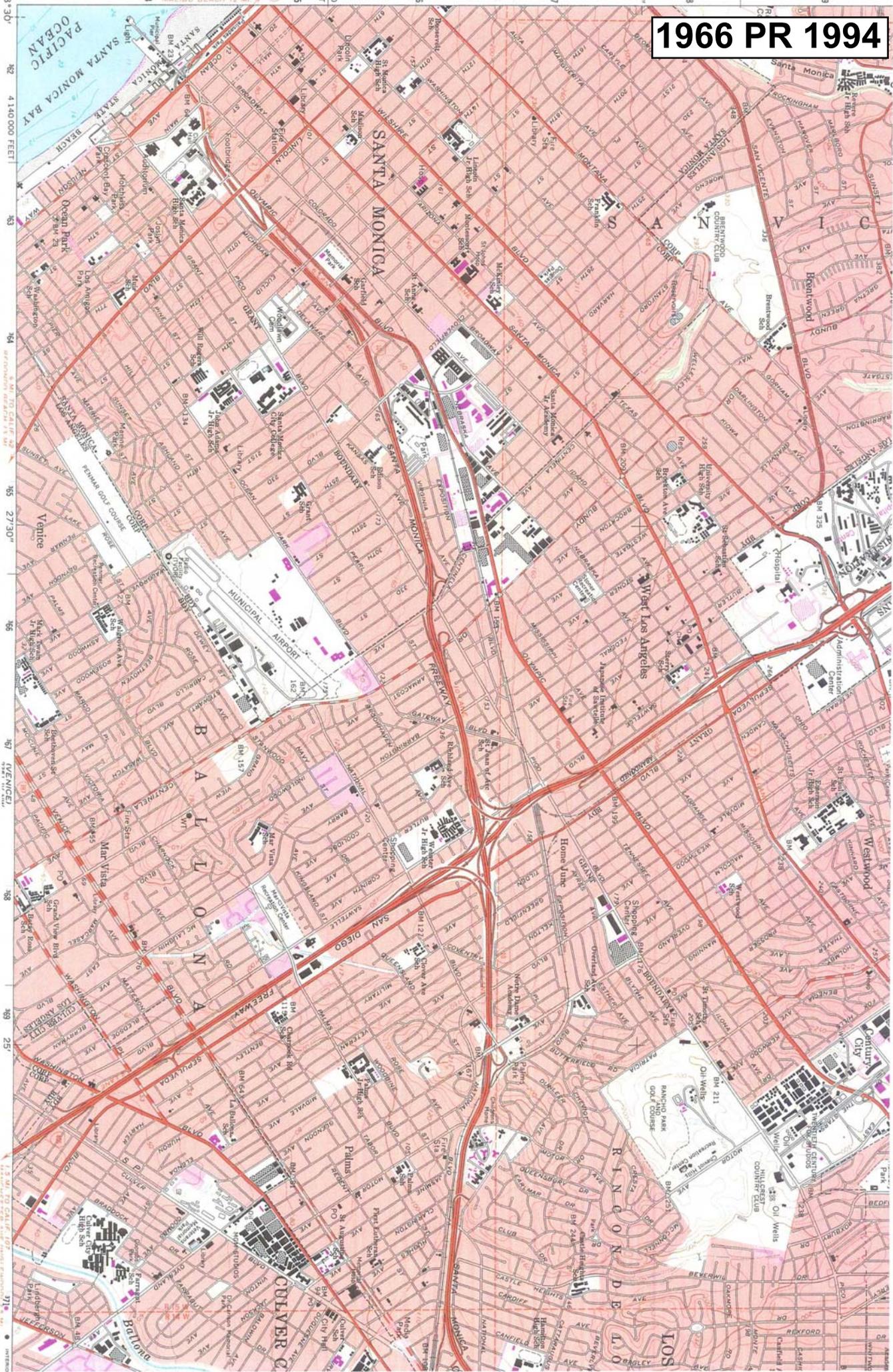
B
A
Y

LOS ANGELES INTERNATIONAL AIRPORT 9.2 MI
LONG BEACH AUDITORIUM 31 MI
LOS ANGELES (CITY HALL) 5.4 MI
LOS ANGELES (CITY HALL) 16 MI

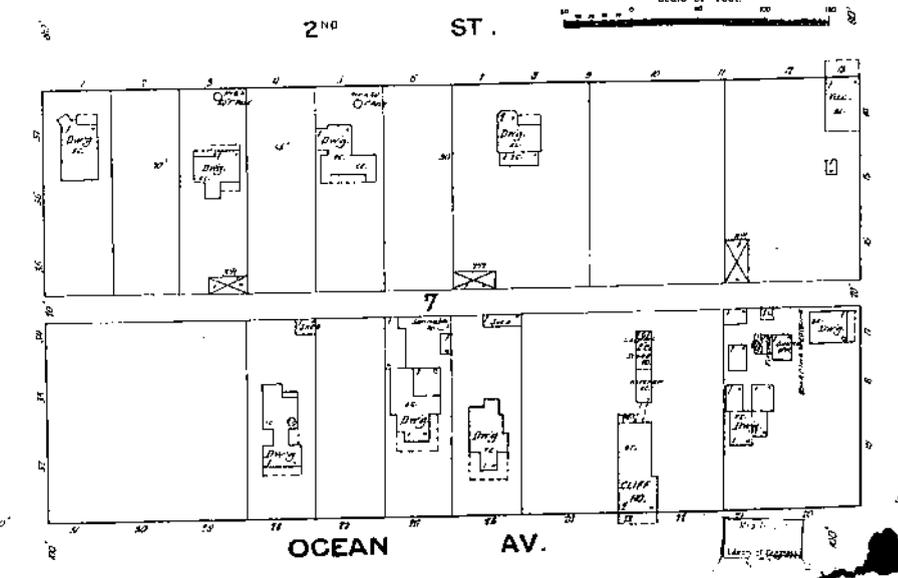
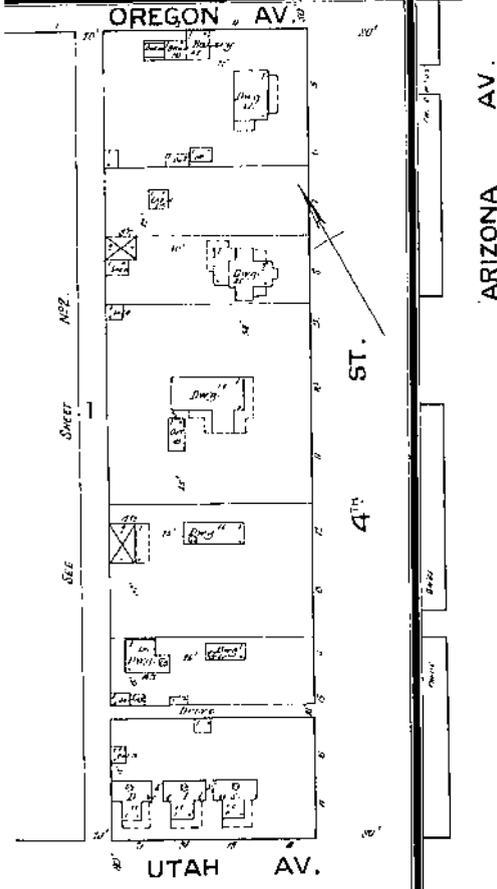
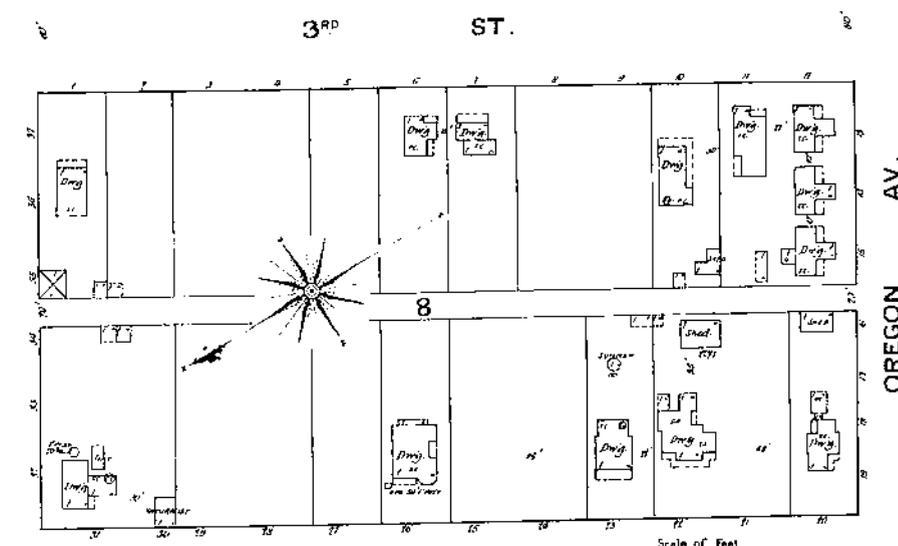
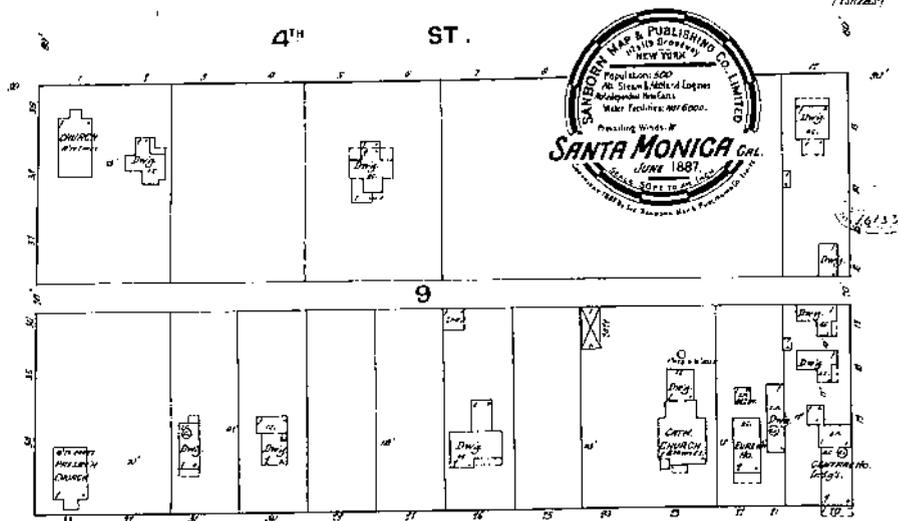
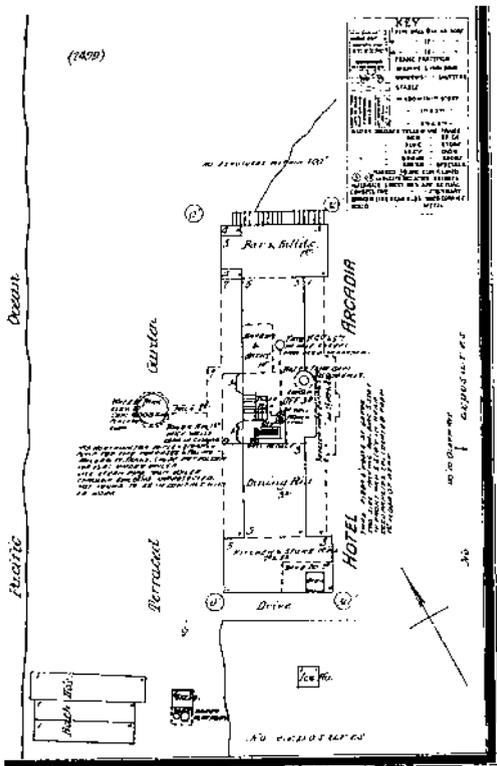
1966 PR 1981



1966 PR 1994

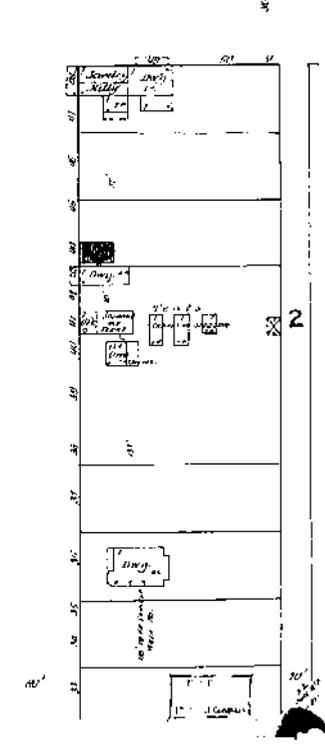
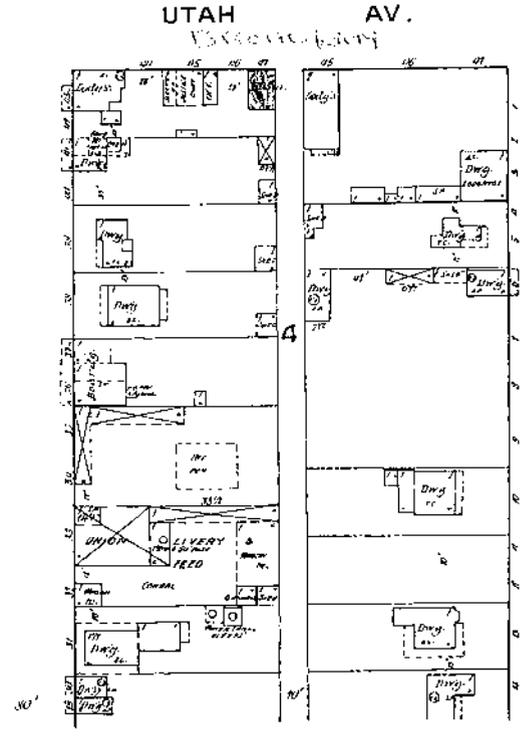
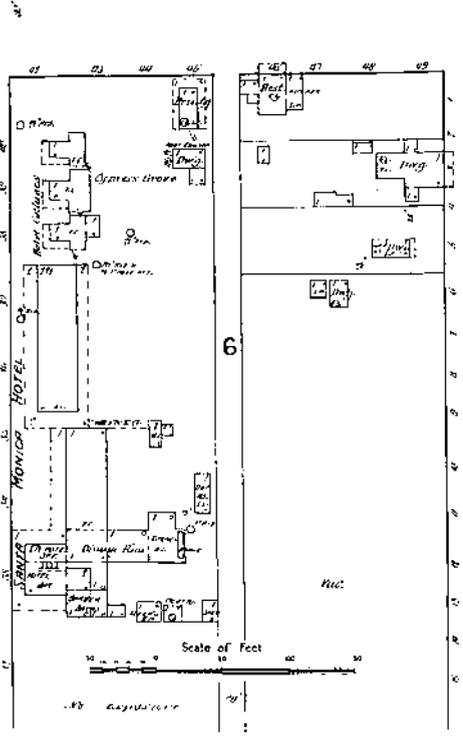
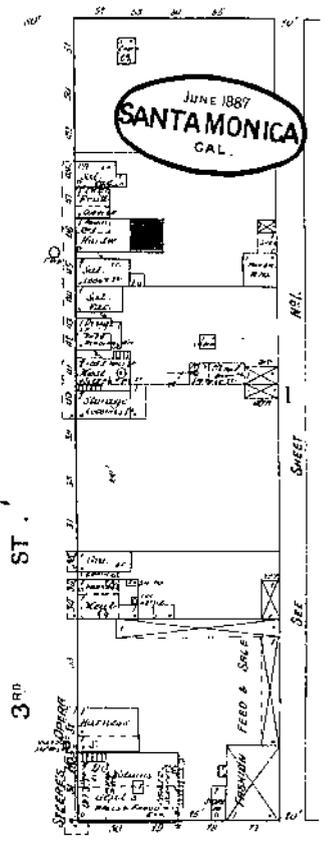
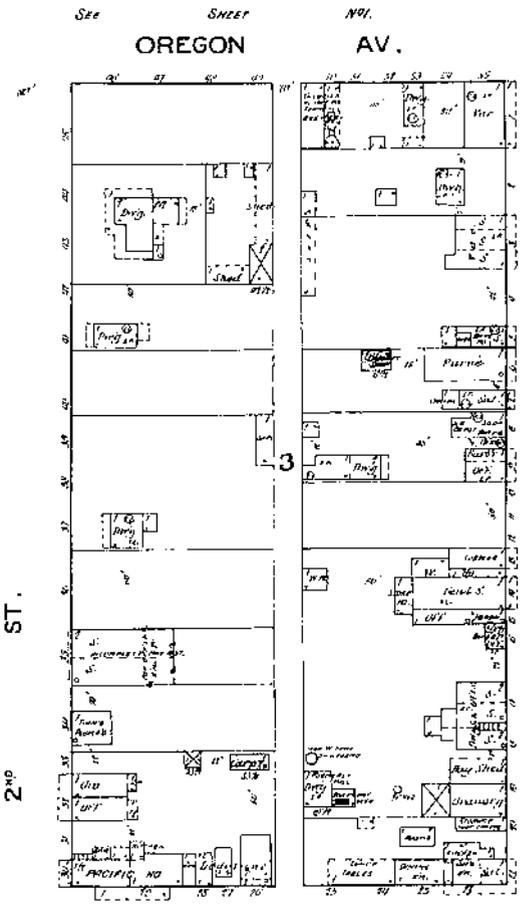
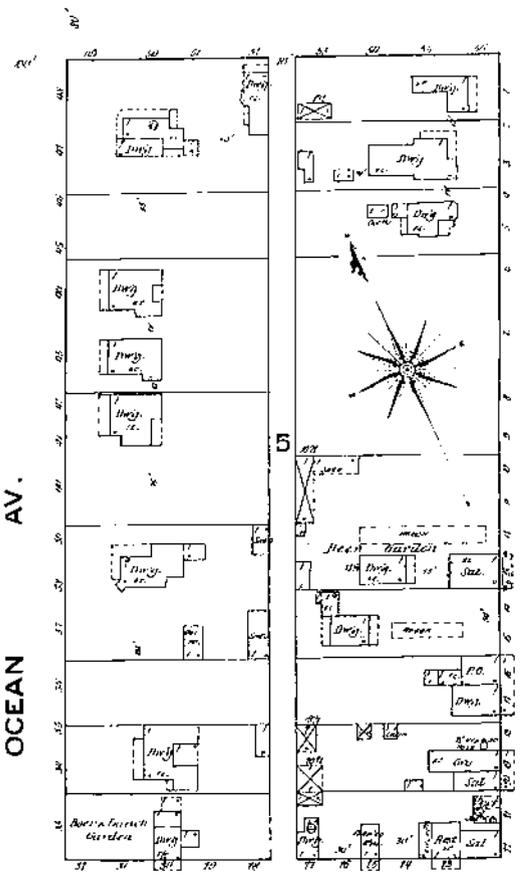


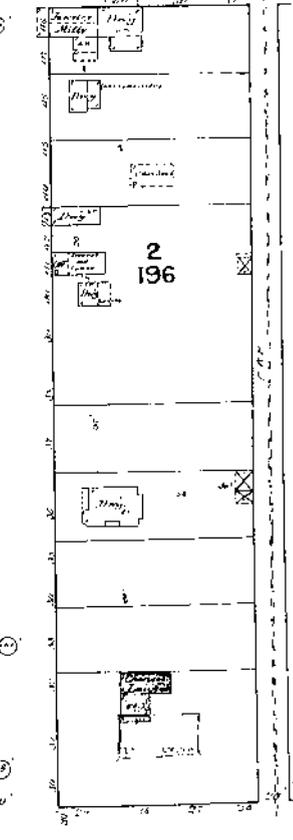
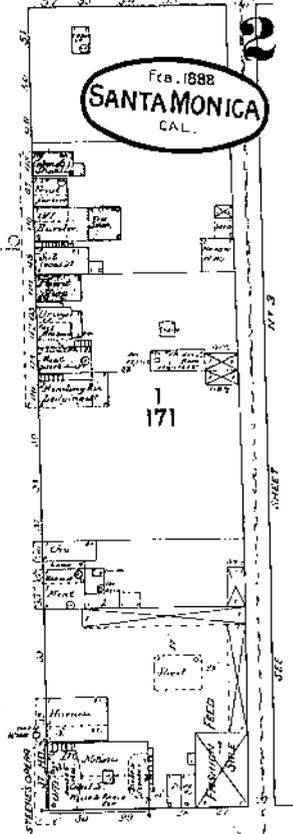
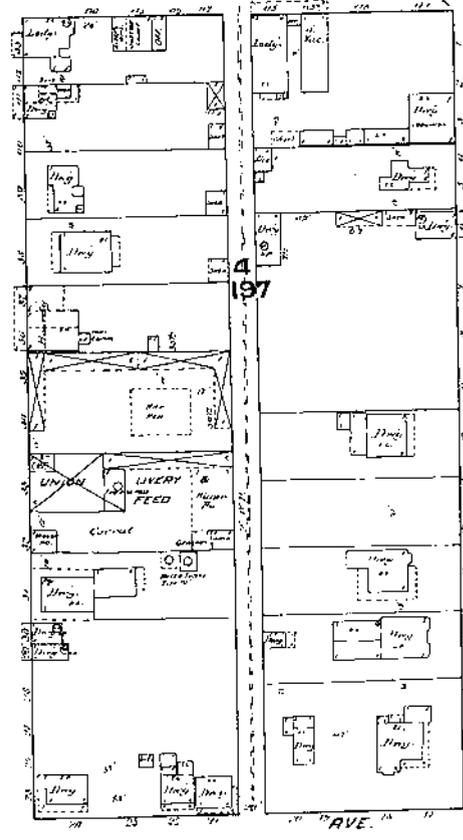
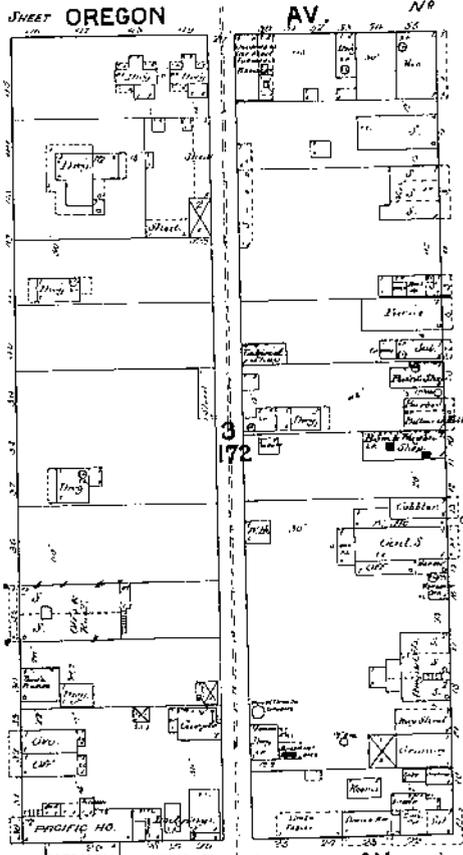
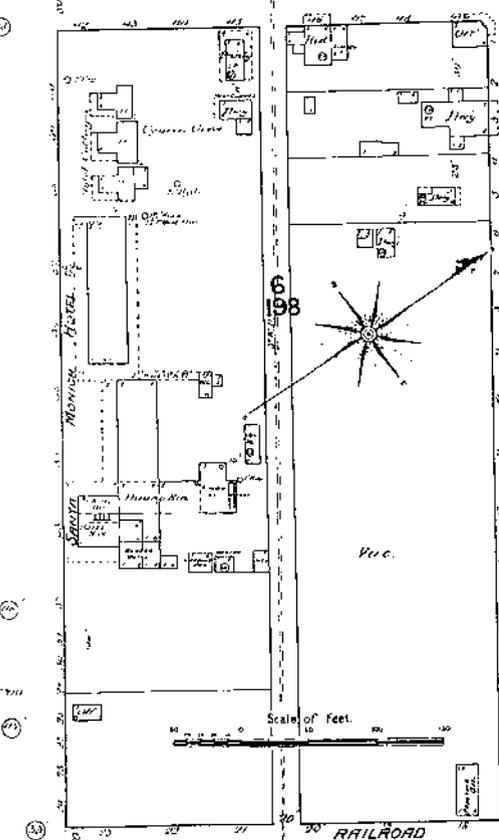
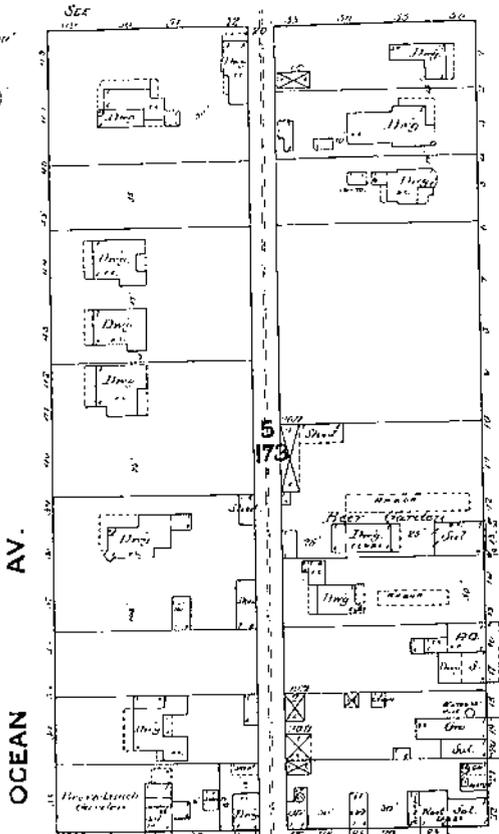
(1887)



OREGON AV.

SEE

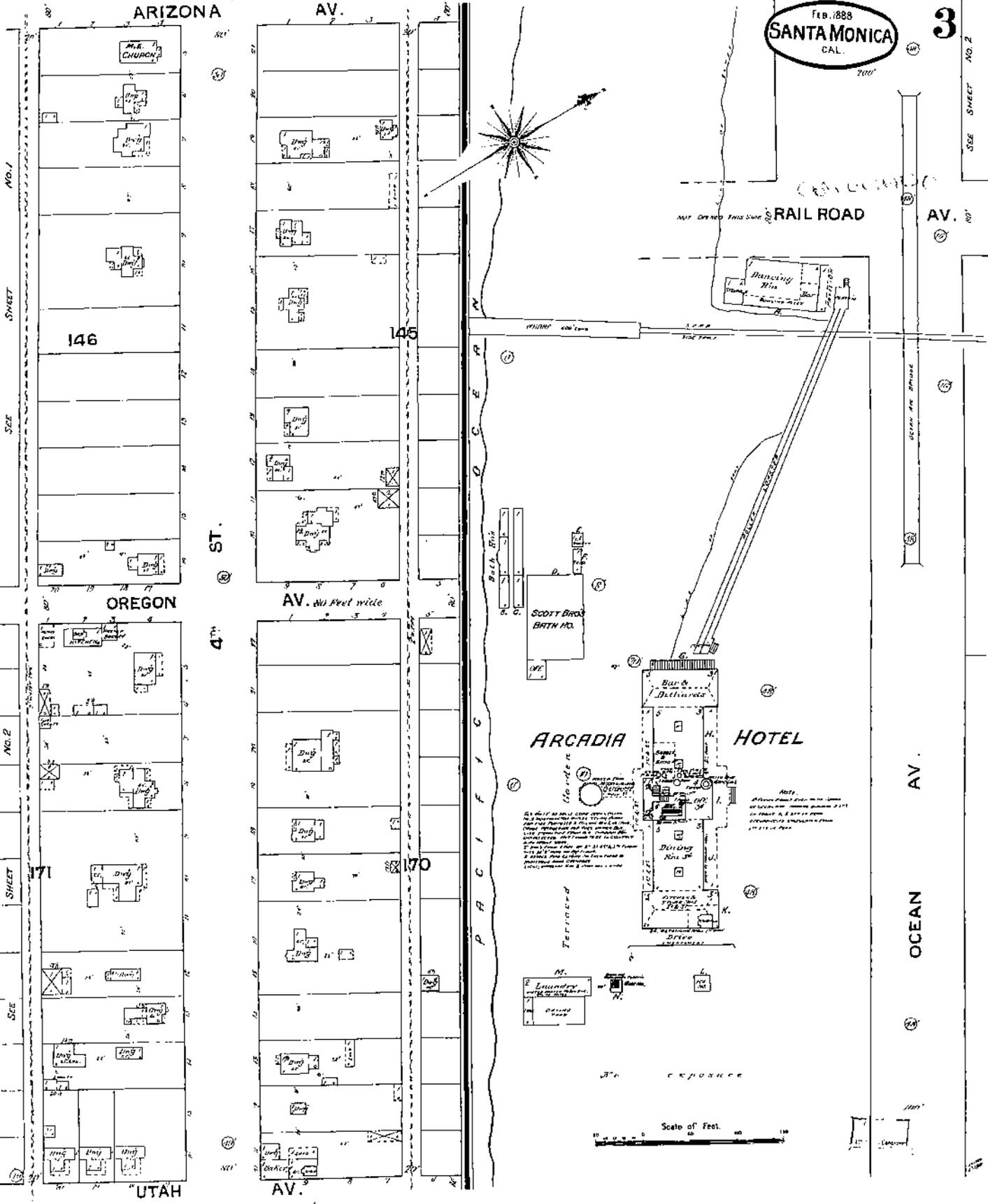




FEB. 1888
SANTA MONICA
CAL.

3

SEE SHEET NO. 2



ARIZONA AV.

ARIZONA AV.

146

146

4TH ST.

OREGON AV.

AV. No feet wide

NO. 2

SHEET

SEE

171

170

UTAH AV.

UTAH AV.

ARCADIA HOTEL

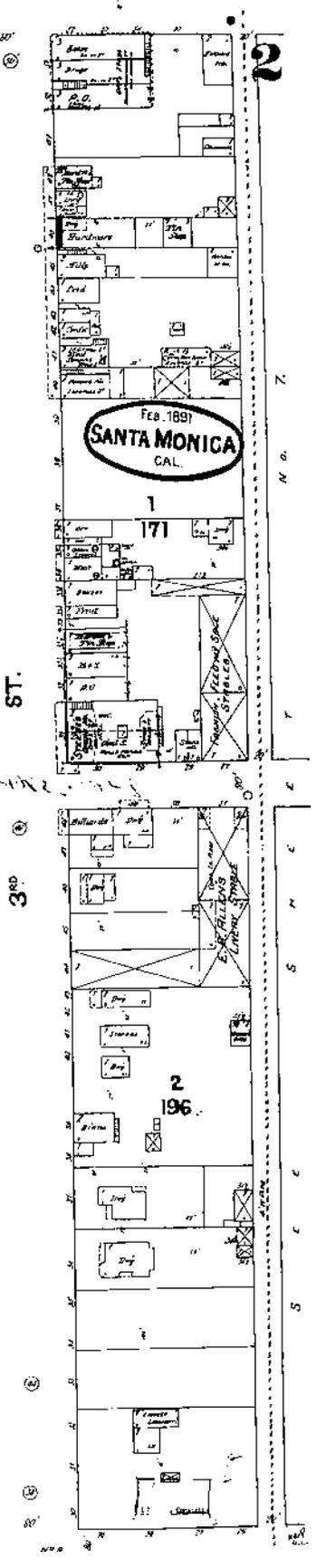
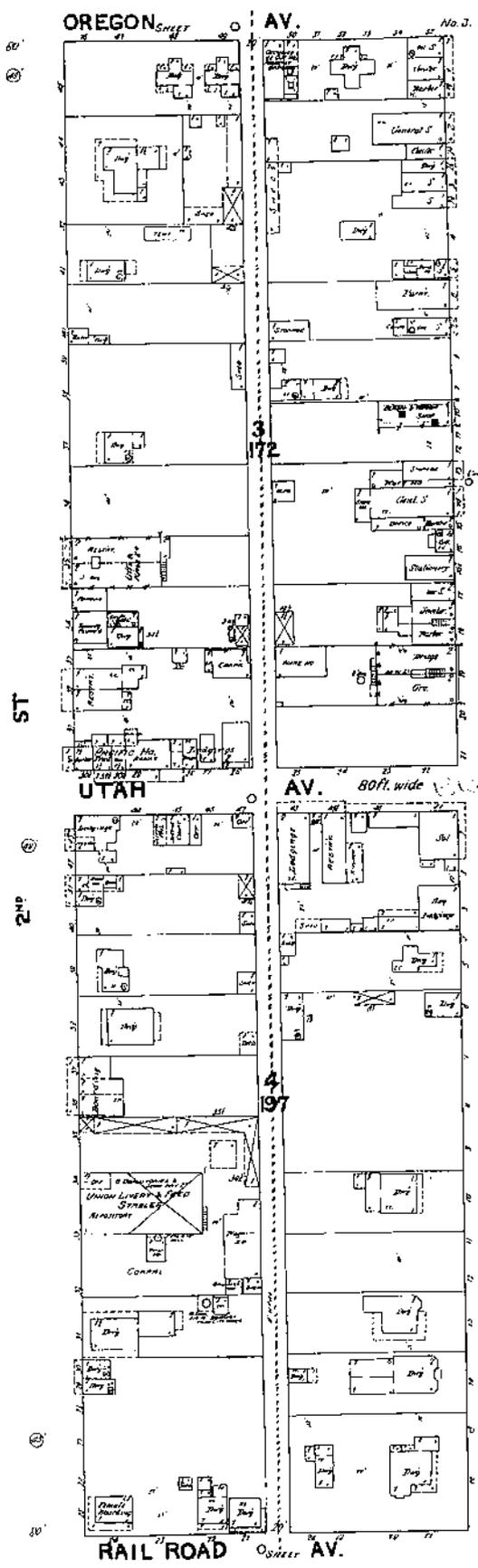
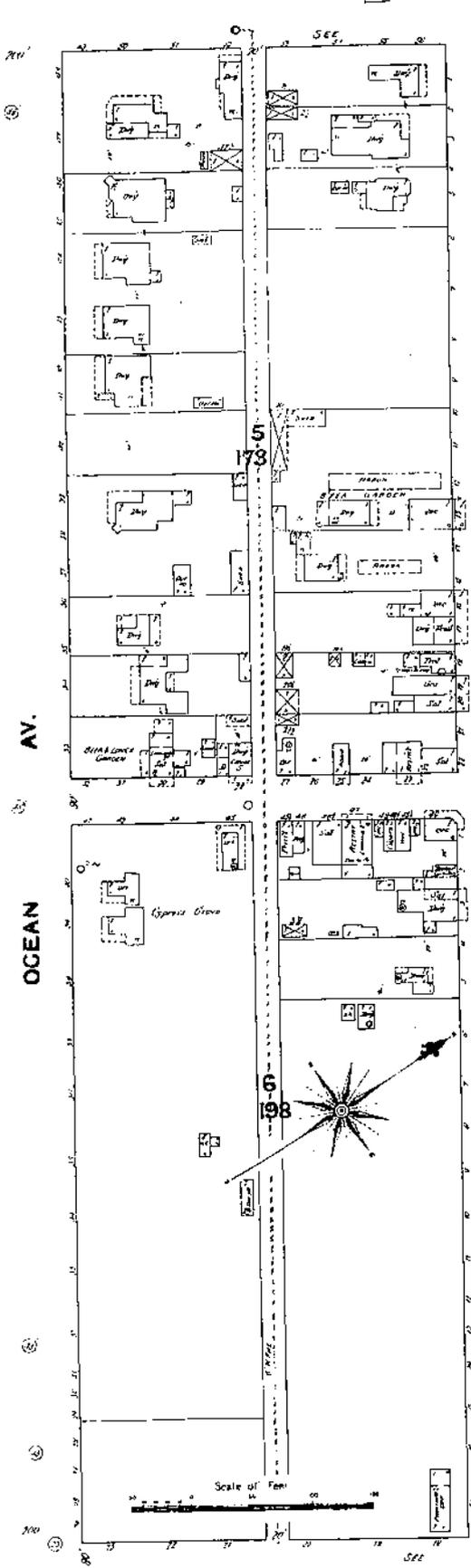
HOTEL

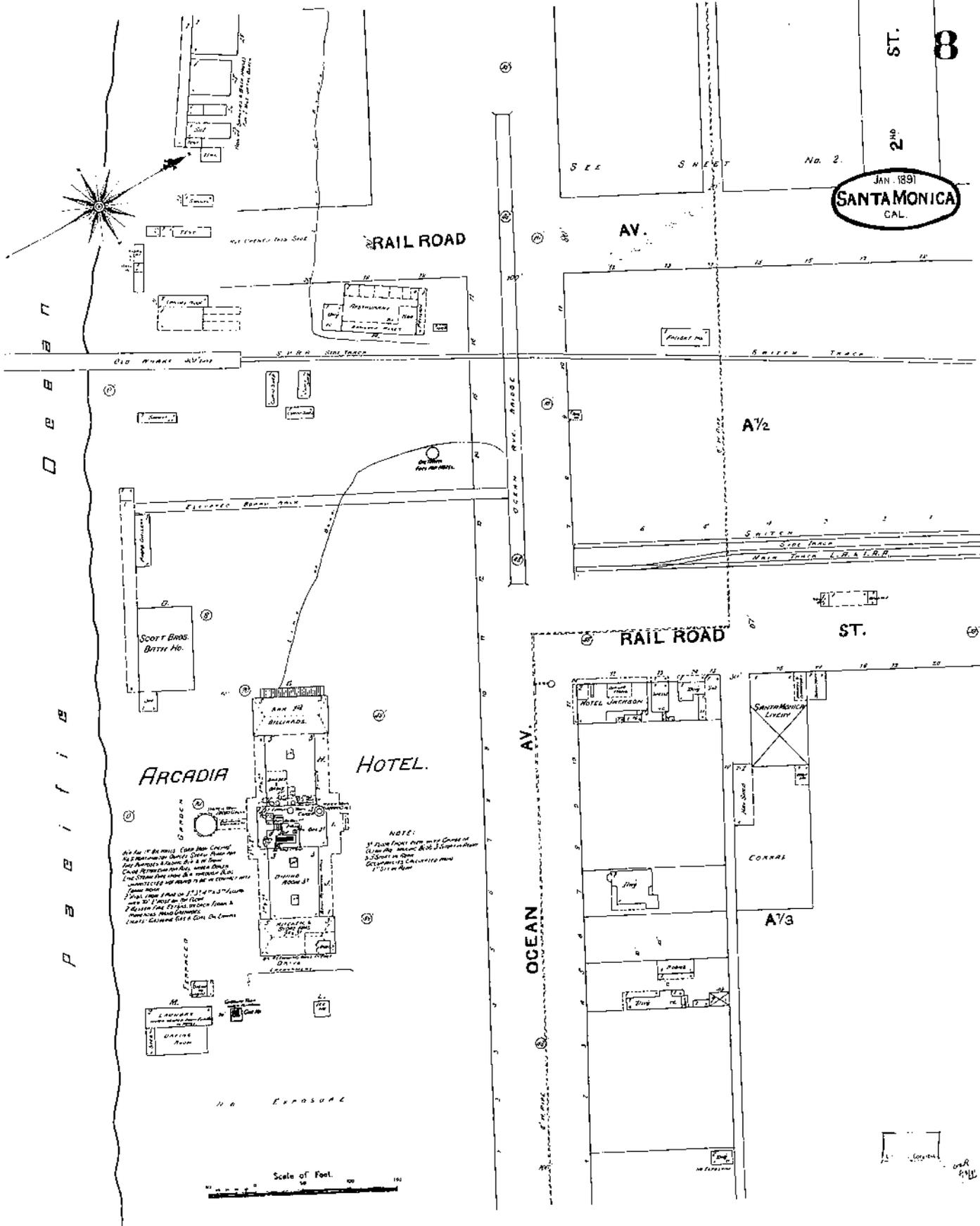
As well as the above mentioned buildings, there are also a number of small buildings, some of which are shown on this map. The buildings shown on this map are those which are shown on the map of Santa Monica, California, published by the Santa Monica Land & Water Co. in 1887. The buildings shown on this map are those which are shown on the map of Santa Monica, California, published by the Santa Monica Land & Water Co. in 1887.

Note: All buildings shown on this map are shown on the map of Santa Monica, California, published by the Santa Monica Land & Water Co. in 1887. The buildings shown on this map are those which are shown on the map of Santa Monica, California, published by the Santa Monica Land & Water Co. in 1887.

1. Laundry
2. Bathing House
3. Office
4. Store

Scale of Feet
0 20 40 60 80 100





JAN. 1891
SANTA MONICA
 CAL.

NOTE:
 1. The front of the building is to be covered by a veranda or porch, which shall be of iron and glass, and shall be supported by columns. The veranda shall be of iron and glass, and shall be supported by columns. The veranda shall be of iron and glass, and shall be supported by columns.

NOTE:
 1. The front of the building is to be covered by a veranda or porch, which shall be of iron and glass, and shall be supported by columns. The veranda shall be of iron and glass, and shall be supported by columns. The veranda shall be of iron and glass, and shall be supported by columns.

Scale of Feet.

INSURANCE MAPS Santa Monica Los Angeles County CALIFORNIA

Population 2000. Prevailing Winds, West.

Water Facilities. Gravity system of water from Santa Monica Water Co. Concrete Reservoir, Cap. 1,000,000 Gals., located at Nevada St., 2 miles east of Ocean St. Reservoir filled by two tunnels about 1000 feet, 8 1/2 feet diameter, which open water into four openings, 1 1/4 miles S. E. and 1/2 about same, across Normal springs, about 20000 Gals. per Day. Water flows to town through 2 miles of 18 inch 50 steel pipe, on Nevada St. to Ocean St. then South by 6 inch through pipe and Ocean St. to South Santa Monica. Cistern mains are 2 1/2 inch diam. 20 degree rise. Hydraulic pressure 35 lbs. per Sq. Inch.

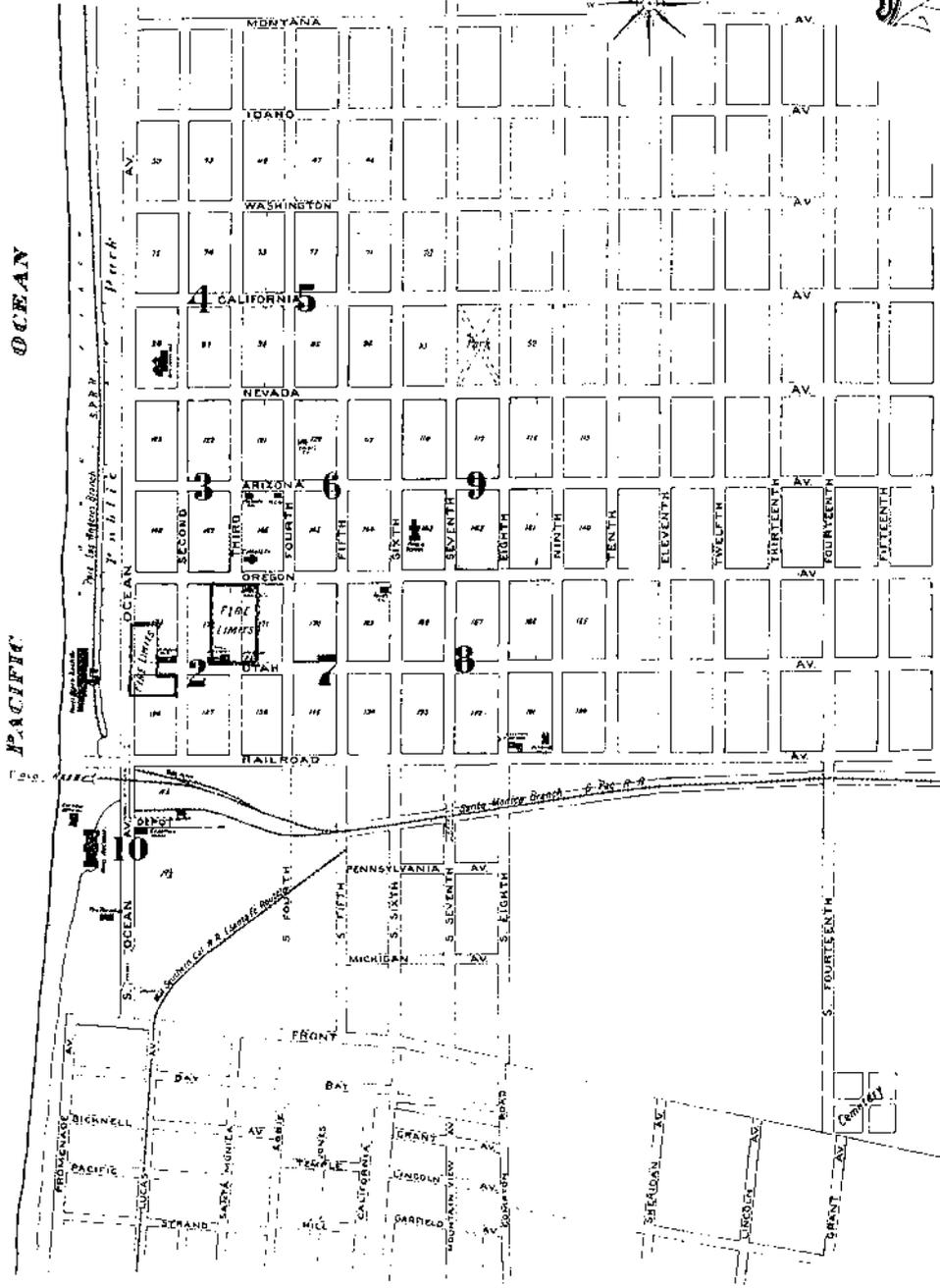
Fire Department. Volunteer, 22 members. 1 Hand Pump Cell Hand Pump, carrying capacity 300 & 1000, of Hand operated 1860's. 2 1/2" diameter Engine Hose in all. 1 Hook & Ladder, hook fully equipped. 1 Hand Engine, not used, and 1 repair apparatus, used in fire on Ocean St. (Block 17). Hand Fire Alarm bell on Ocean St. 1 Alarm outposts & 1 night watchman. Elevations quoted above sea level.

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

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Scale 50' to an inch
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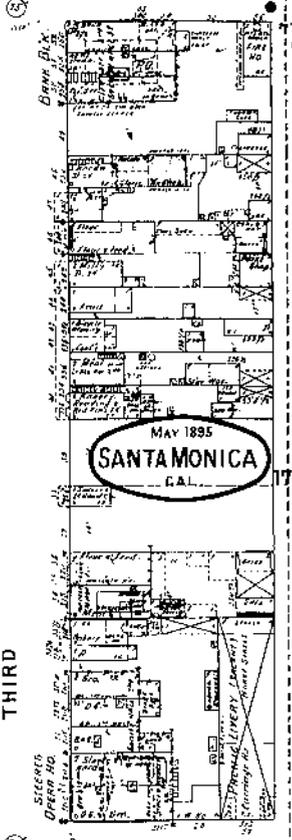
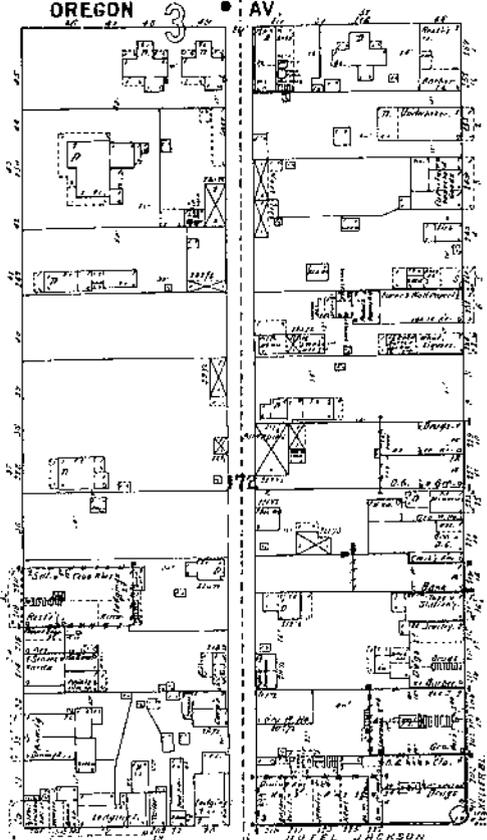
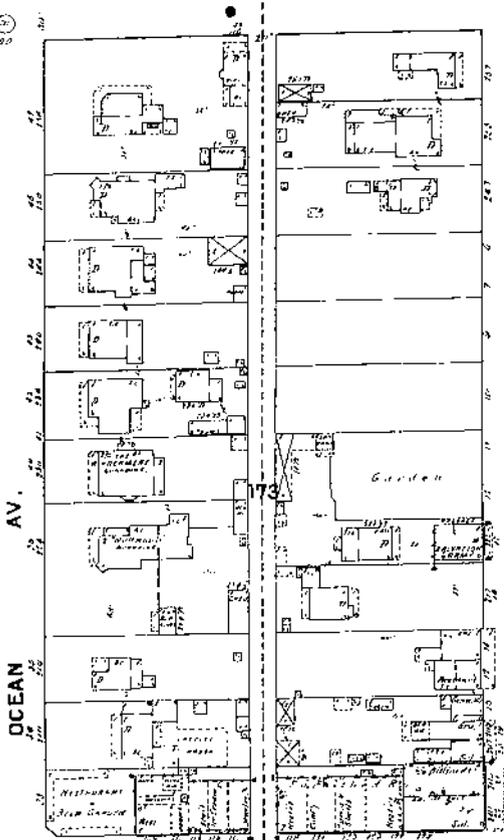
May 1895

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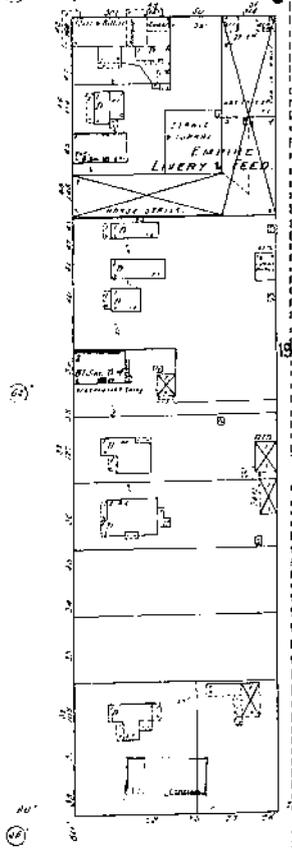
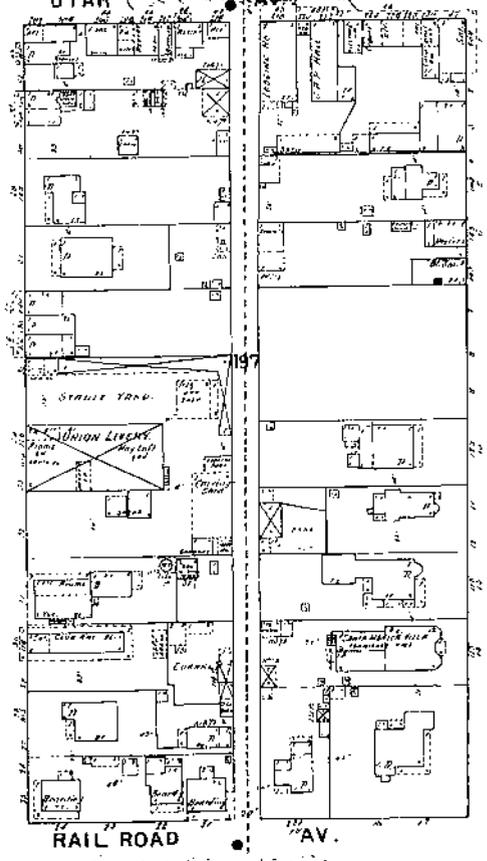
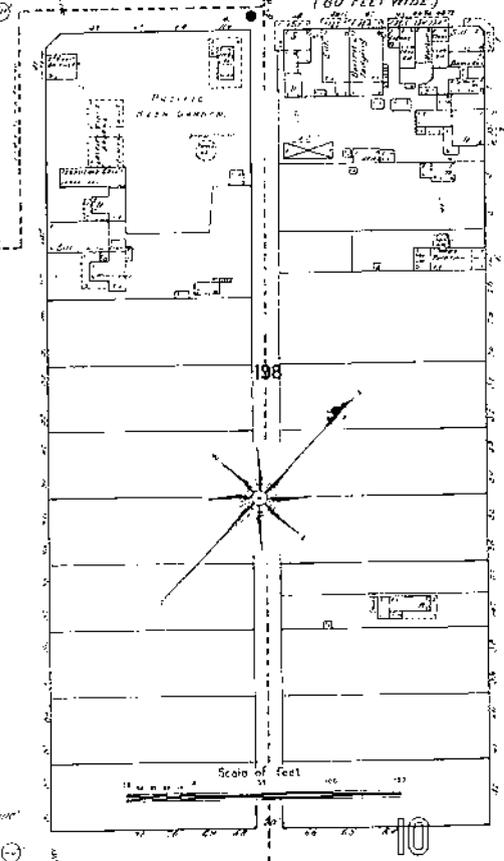


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| Six Hundred and Seventy-sixth to Six Hundred and Seventy-eighth | 181 | Six Hundred and Seventy-eighth to Six Hundred and Eightieth | 182 |
| Six Hundred and Eightieth to Six Hundred and Eighty-second | 182 | Six Hundred and Eighty-second to Six Hundred and Eighty-fourth | 183 |
| Six Hundred and Eighty-fourth to Six Hundred and Eighty-sixth | 183 | Six Hundred and Eighty-sixth to Six Hundred and Eighty-eighth | 184 |
| Six Hundred and Eighty-eighth to Six Hundred and Ninetieth | 184 | Six Hundred and Ninetieth to Six Hundred and Ninety-second | 185 |
| Six Hundred and Ninety-second to Six Hundred and Ninety-fourth | 185 | Six Hundred and Ninety-fourth to Six Hundred and Ninety-sixth | 186 |
| Six Hundred and Ninety-sixth to Six Hundred and Ninety-eighth | 186 | Six Hundred and Ninety-eighth to Seven Hundred | 187 |
| Seven Hundred to Seven Hundred and Second | 187 | Seven Hundred and Second to Seven Hundred and Fourth | 188 |
| Seven Hundred and Fourth to Seven Hundred and Sixth | 188 | Seven Hundred and Sixth to Seven Hundred and Eighth | 189 |
| Seven Hundred and Eighth to Seven Hundred and Tenth | 189 | Seven Hundred and Tenth to Seven Hundred and Twelfth | 190 |
| Seven Hundred and Twelfth to Seven Hundred and Fourteenth | 190 | Seven Hundred and Fourteenth to Seven Hundred and Sixteenth | 191 |
| Seven Hundred and Sixteenth to Seven Hundred and Eighteenth | 191 | Seven Hundred and Eighteenth to Seven Hundred and Twentieth | 192 |
| Seven Hundred and Twentieth to Seven Hundred and Twenty-second | 192 | Seven Hundred and Twenty-second to Seven Hundred and Twenty-fourth | 193 |
| Seven Hundred and Twenty-fourth to Seven Hundred and Twenty-sixth | 193 | Seven Hundred and Twenty-sixth to Seven Hundred and Twenty-eighth | 194 |
| Seven Hundred and Twenty-eighth to Seven Hundred and Thirtieth | 194 | Seven Hundred and Thirtieth to Seven Hundred and Thirty-second | 195 |
| Seven Hundred and Thirty-second to Seven Hundred and Thirty-fourth | 195 | Seven Hundred and Thirty-fourth to Seven Hundred and Thirty-sixth | 196 |
| Seven Hundred and Thirty-sixth to Seven Hundred and Thirty-eighth | 196 | Seven Hundred and Thirty-eighth to Seven Hundred and Fortieth | 197 |



2

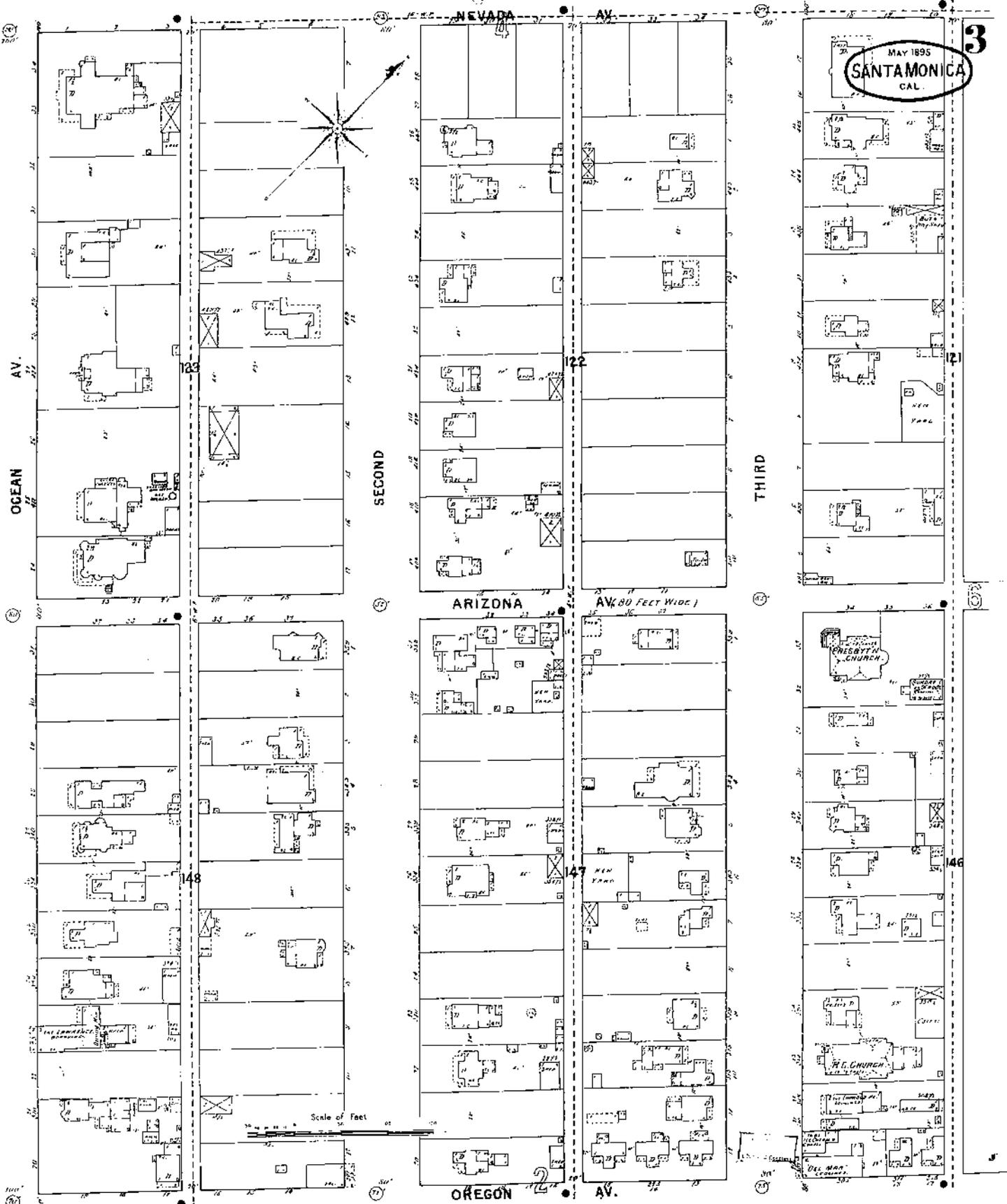


7

SECOND

THIRD

RAIL ROAD AV.



MAY 1895
SANTAMONICA
CAL.

3

NEVADA AV.

AV.

AV.

OCEAN

SECOND

THIRD

ARIZONA

AV. (80 FEET WIDE)

OREGON

AV.

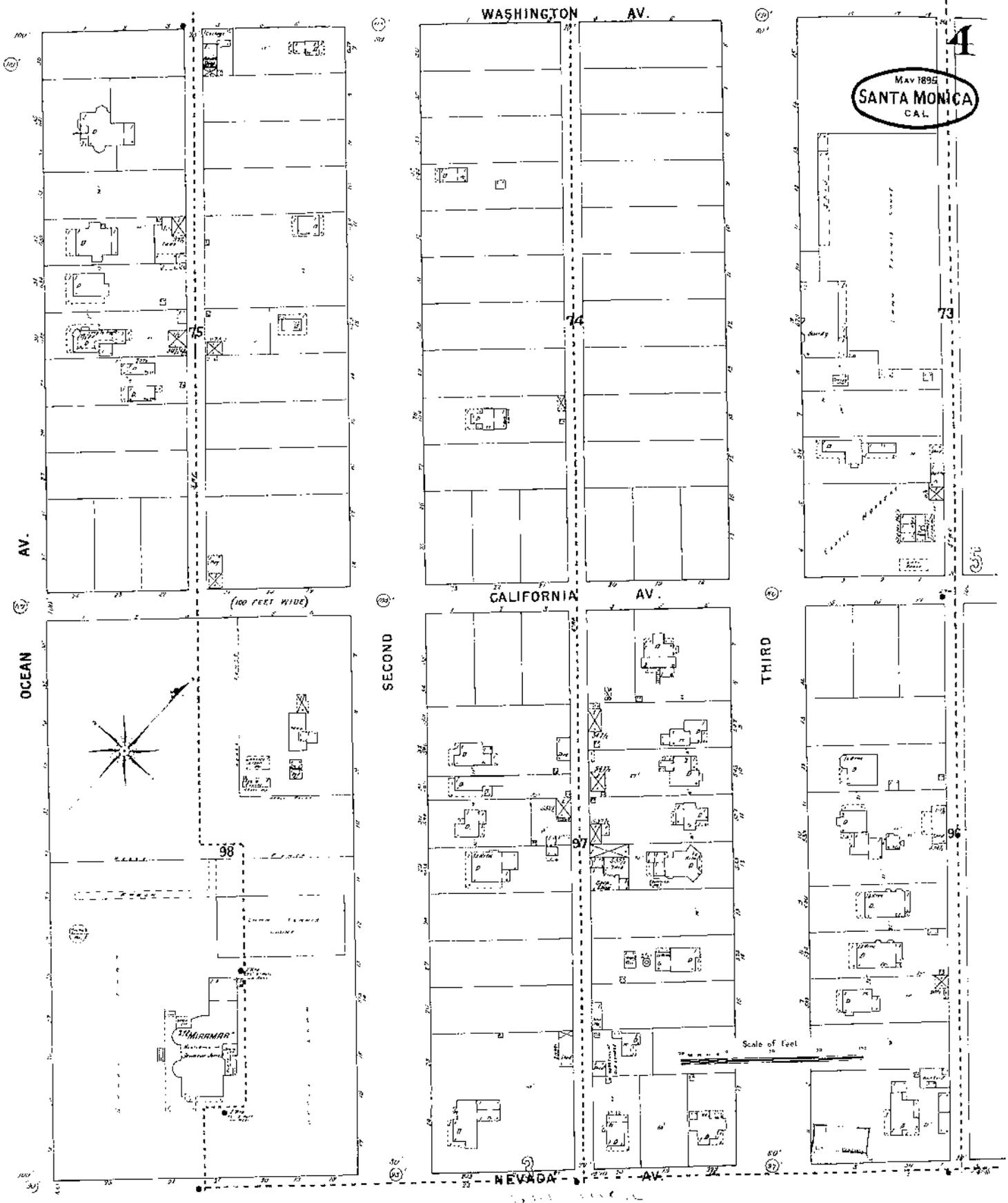
Scale of Feet

148

147

146

2



MAY 1895
SANTA MONICA
CAL.

Scale of Feet

AV.

OCEAN

WASHINGTON AV.

CALIFORNIA AV.

NEVADA AV.

SECOND

THIRD

4

73

74

(100 FEET WIDE)

99

98

97

99

100

100

100

100

100

100

100

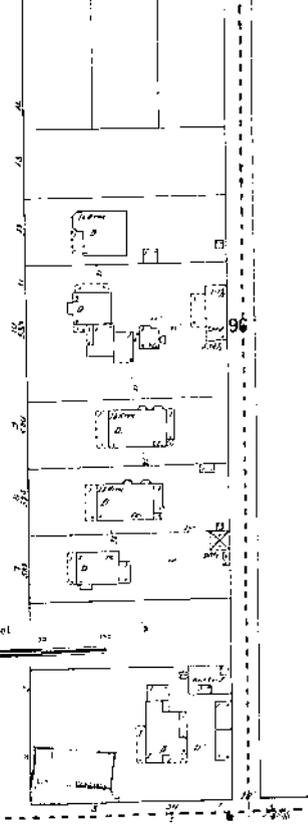
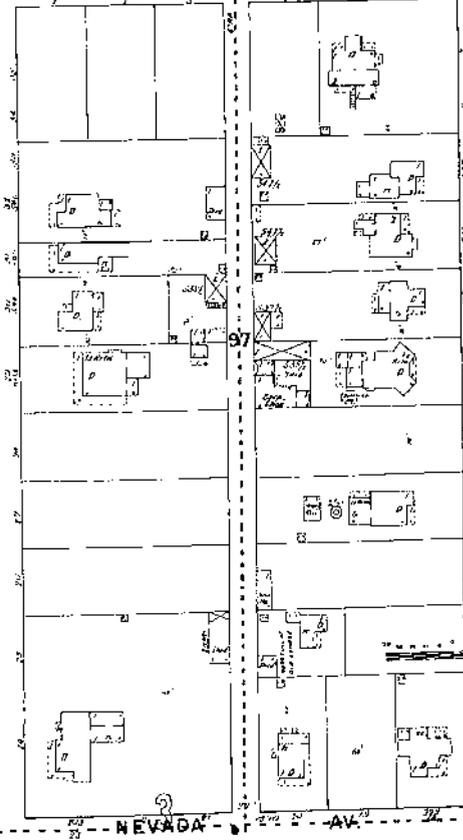
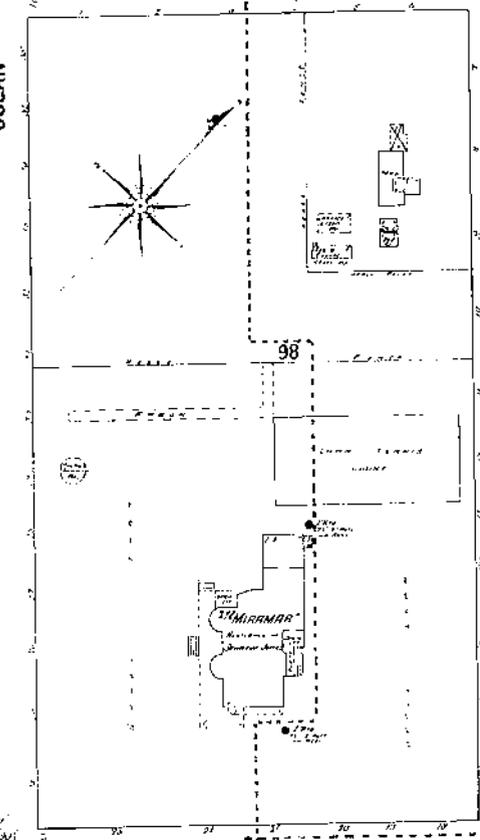
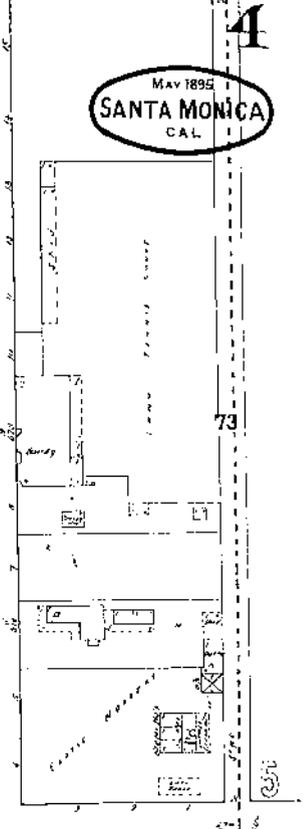
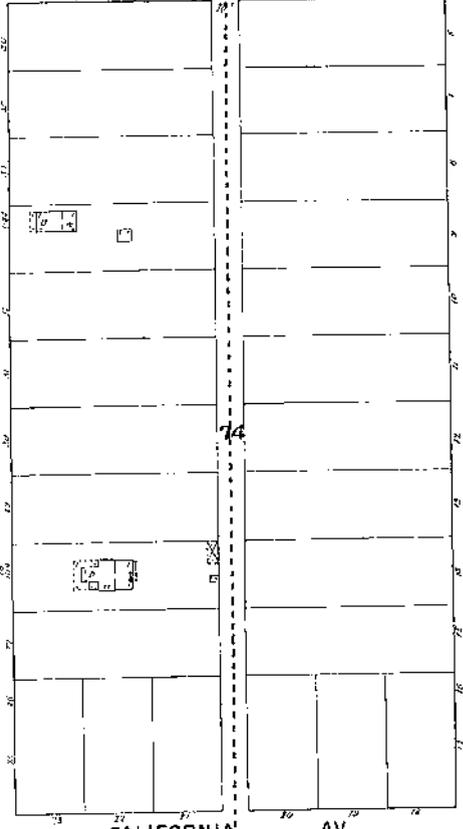
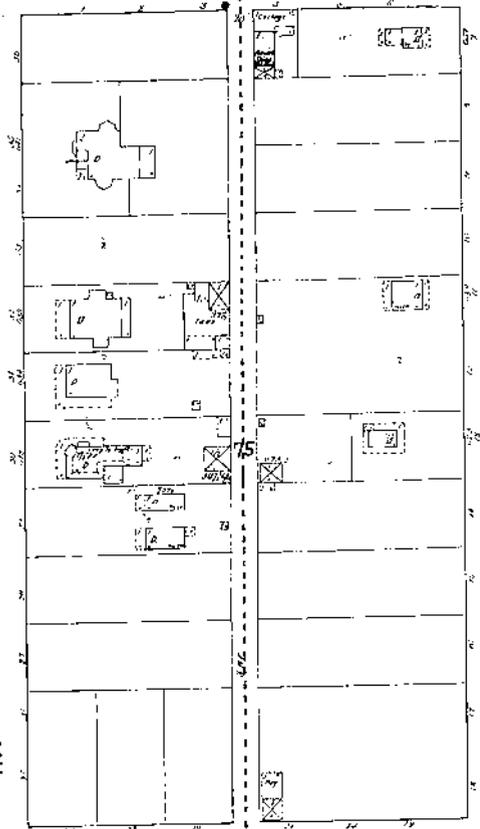
100

100

100

100

100



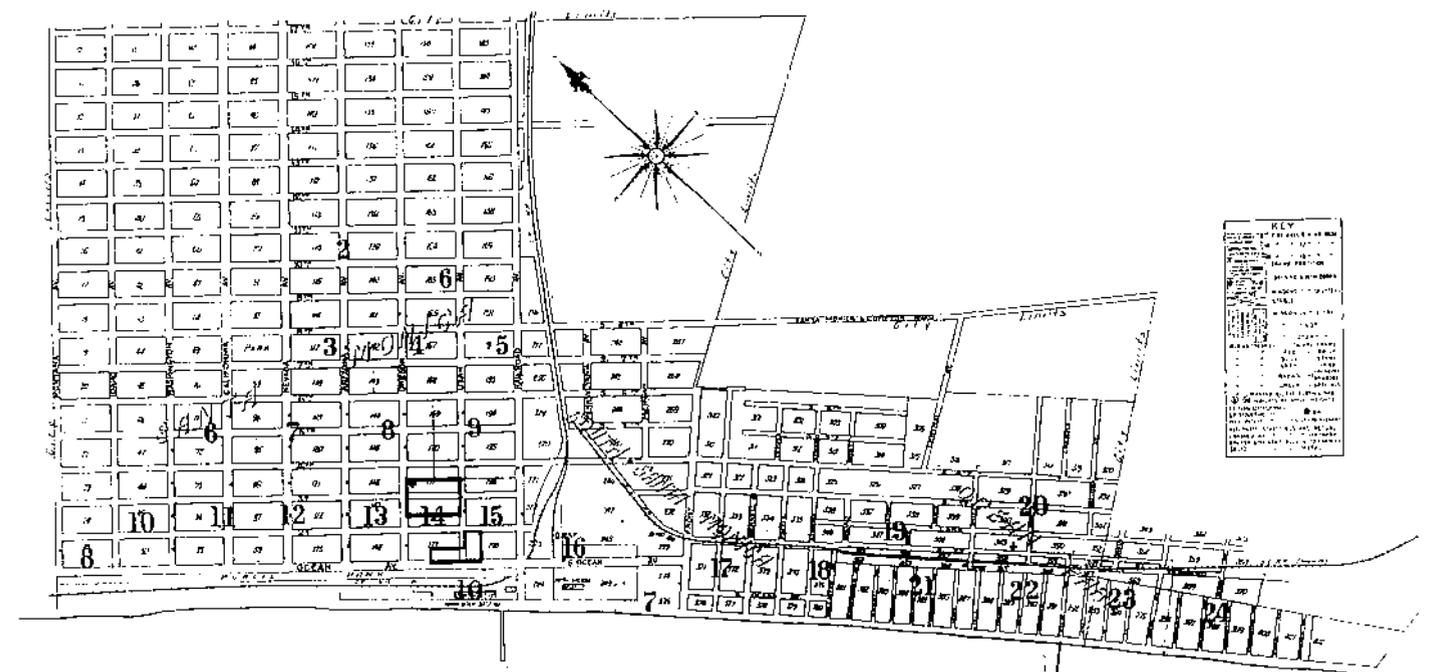
INDEX.

Table listing streets and their corresponding page numbers. Columns include street names (A-Z), page numbers, and a 'SPECIALS' section for specific locations like 'Academy of the Holy Name' and 'Bank Building'.

* Indicate only one side of street shown.

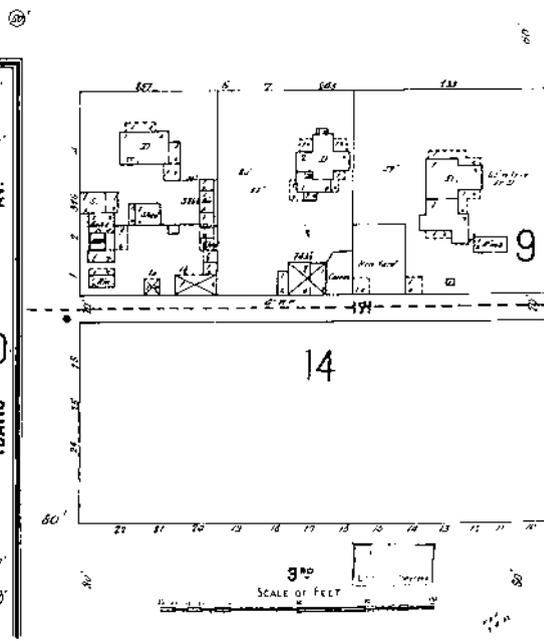
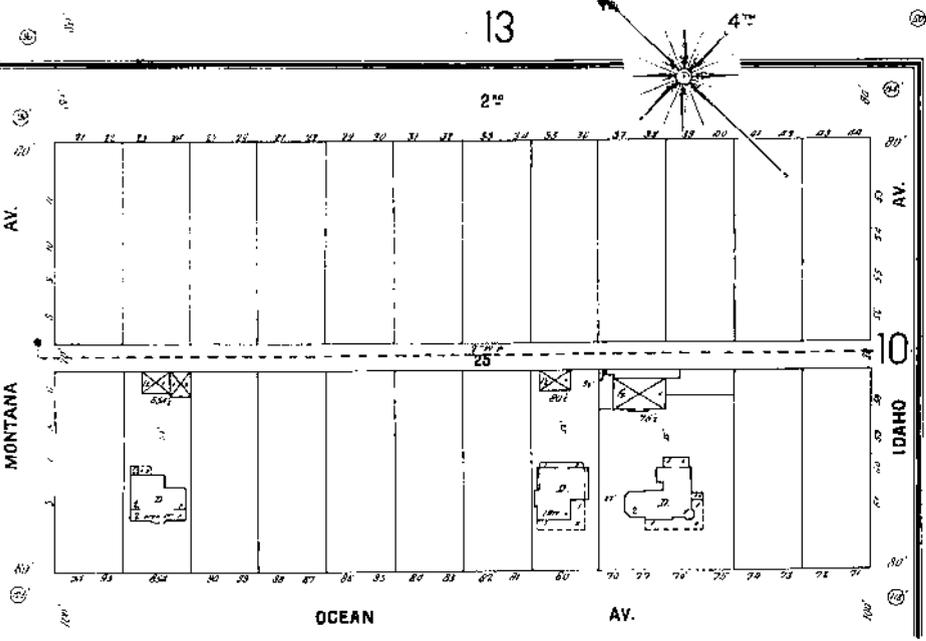
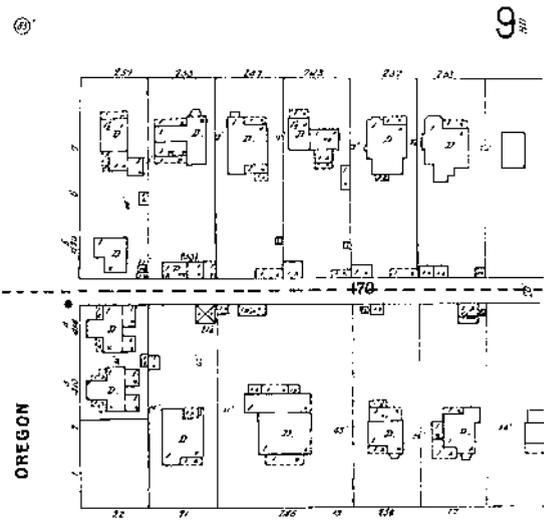
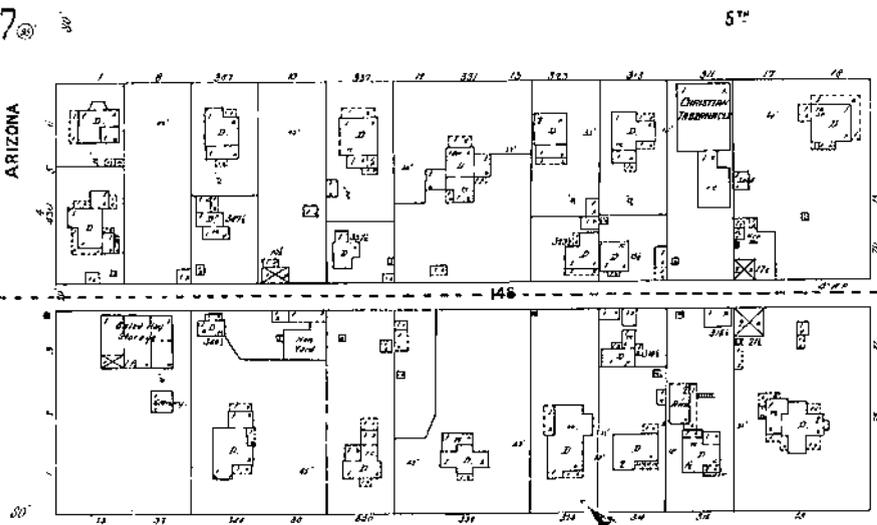
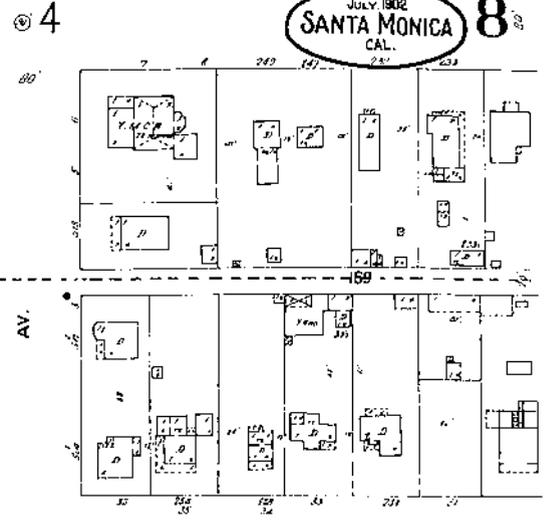
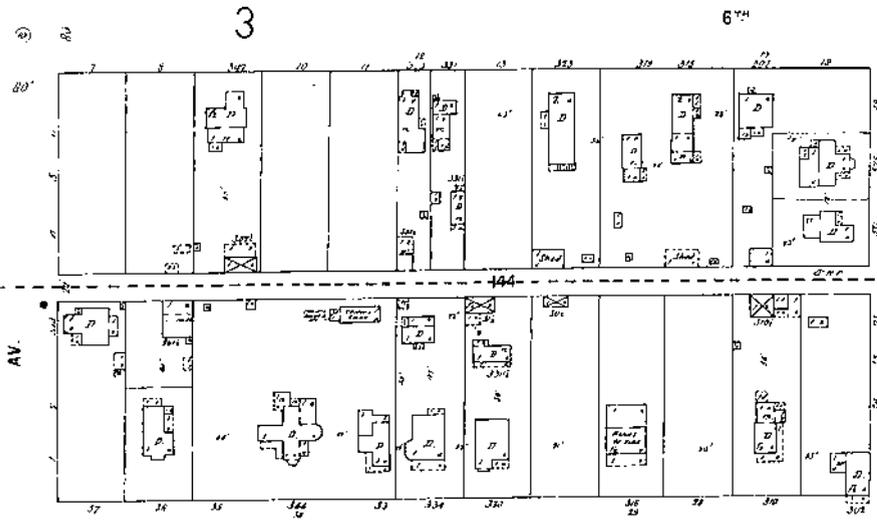
Santa Monica Ocean Park logo with 'INCLUDING' text. Below it is the 'California Steamship Map Co.' logo and 'JULY, 1902' date. Includes a circular seal and 'Copyright 1902 by the Seaborn Map Co.' text.

Population: 3500 Prev. Winds: S.W.
Water Facilities: Description of water supply and sewage treatment.
Fire Dept: Description of fire department services and equipment.



PACIFIC OCEAN

JULY 1902
SANTA MONICA
CAL. 8

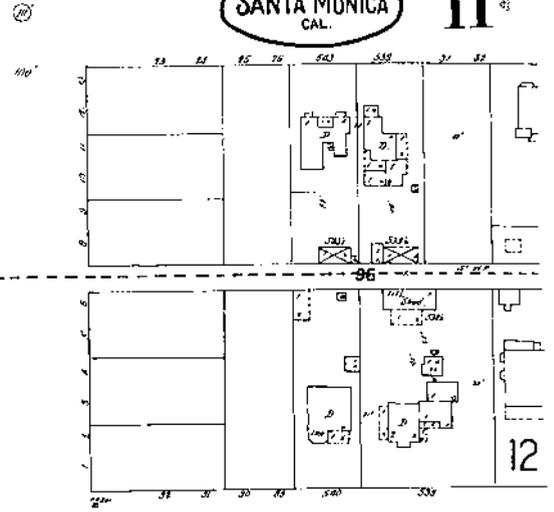
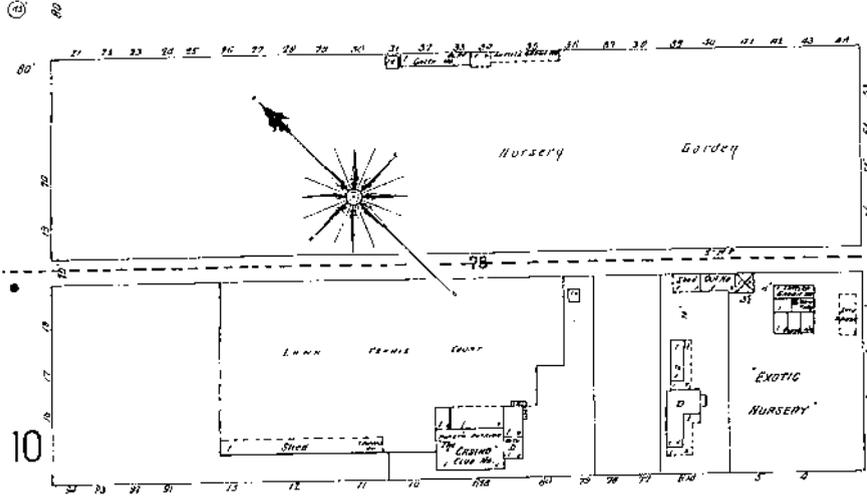


3" = 100'
SCALE OF FEET

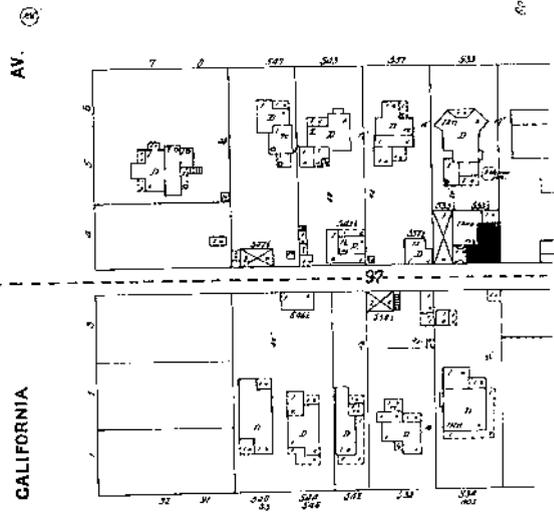
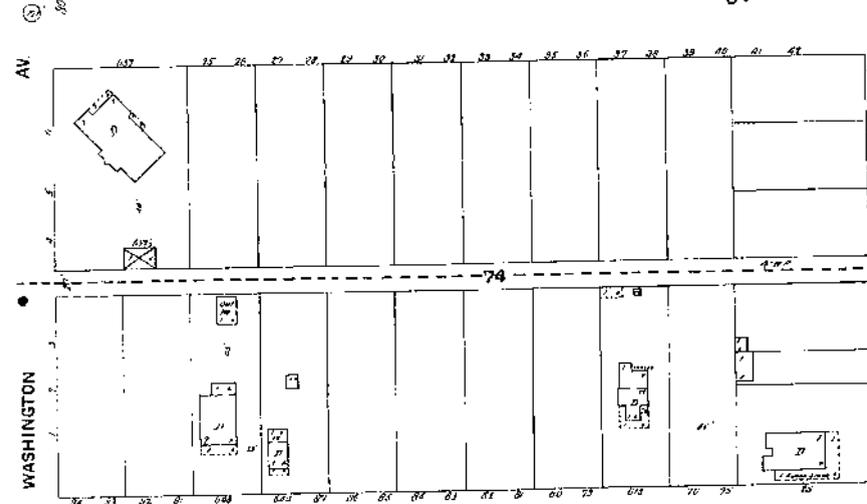
4th 6

JULY 1902
SANTA MONICA
CAL.

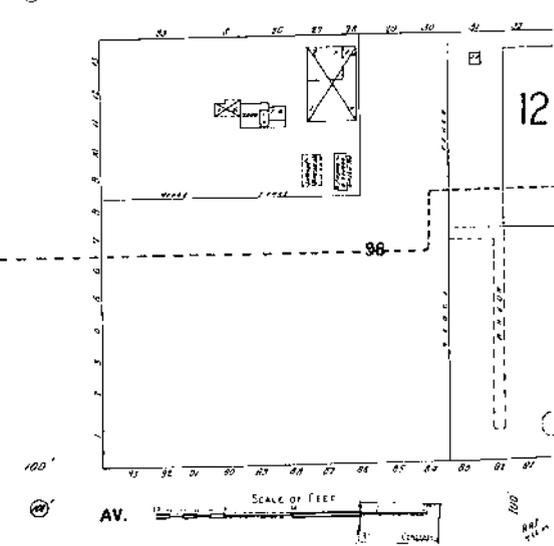
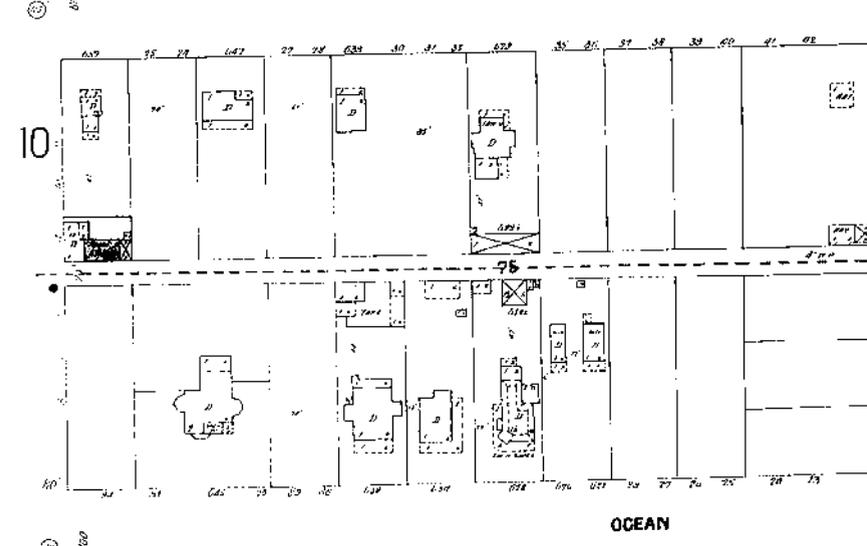
11



3rd



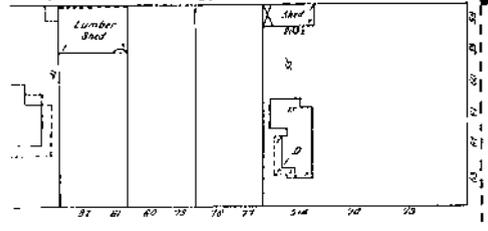
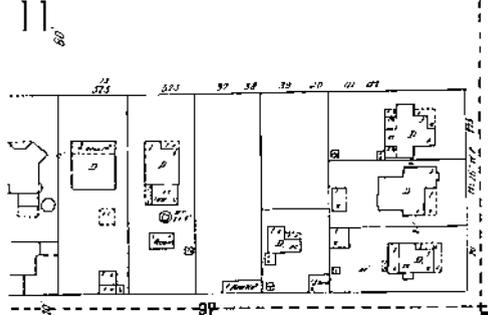
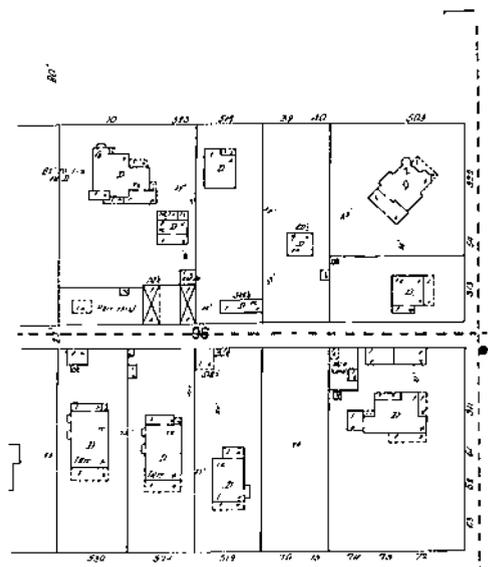
2nd



JULY 1902
SANTA MONICA
CAL.

12

7 4th



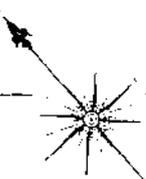
8 4"

13

JULY 1902
SANTA MONICA
CAL.

8

12



146

3"

14

AV.

AV.

ARIZONA

OREGON

2"

12

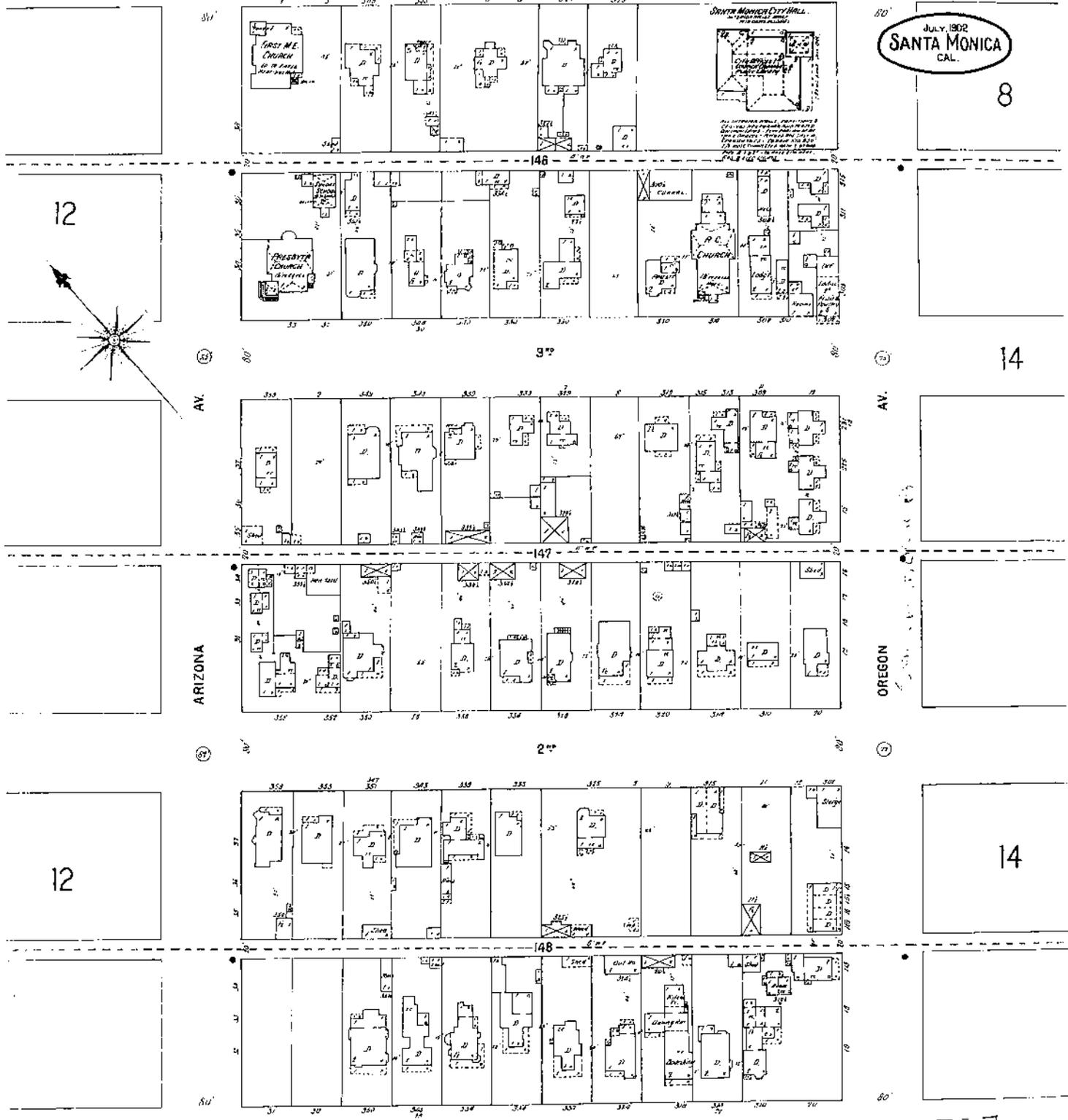
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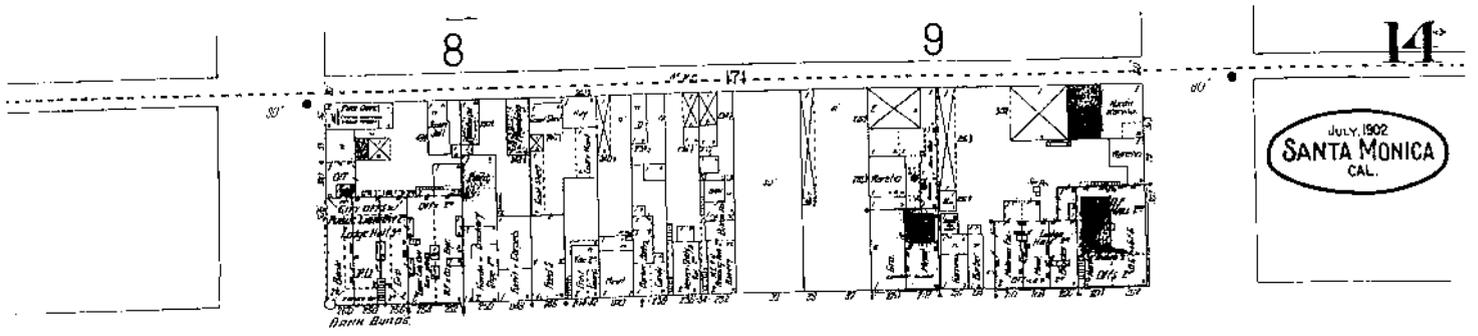
148

OCEAN

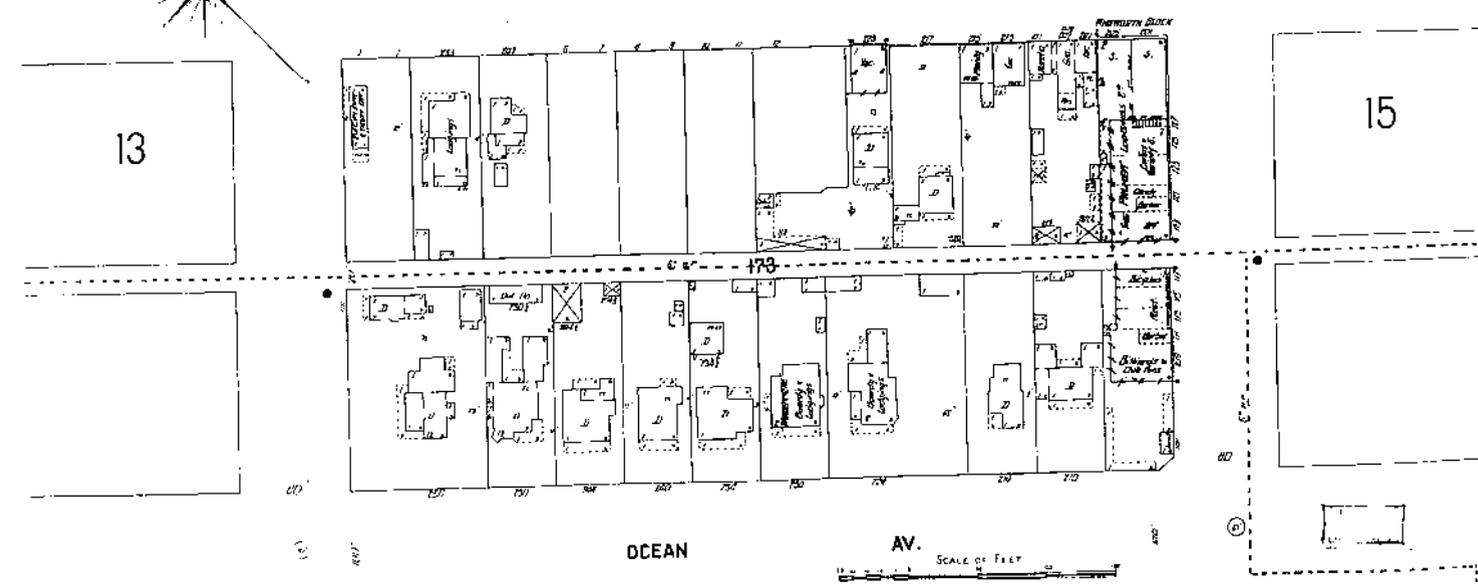
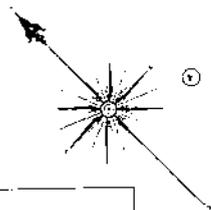
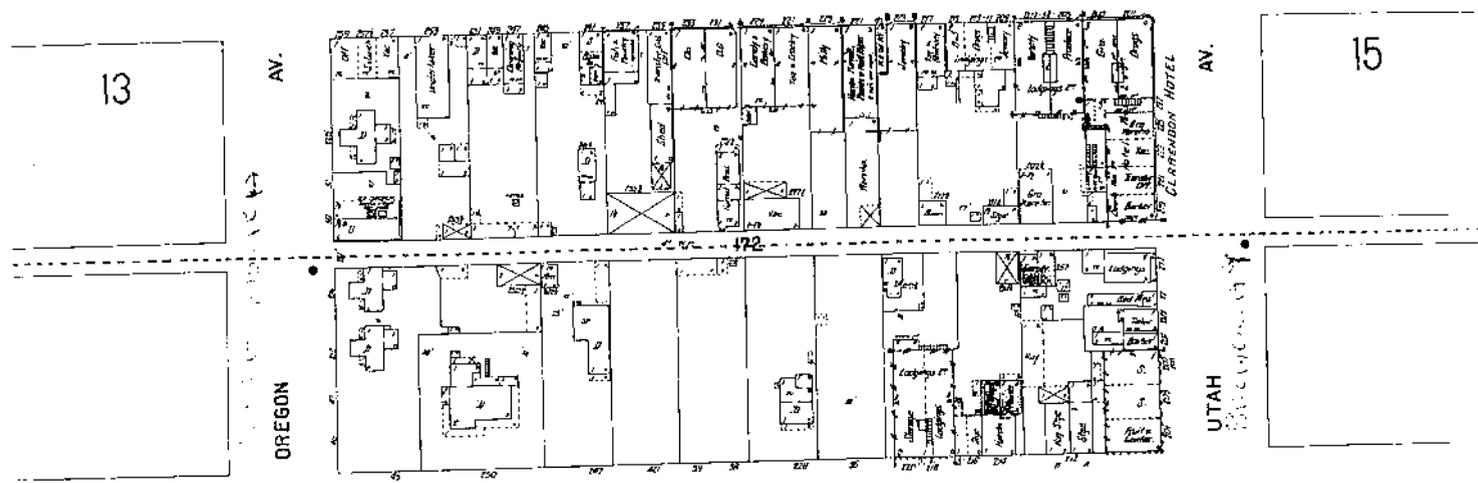
AV.

SCALE OF FEET.



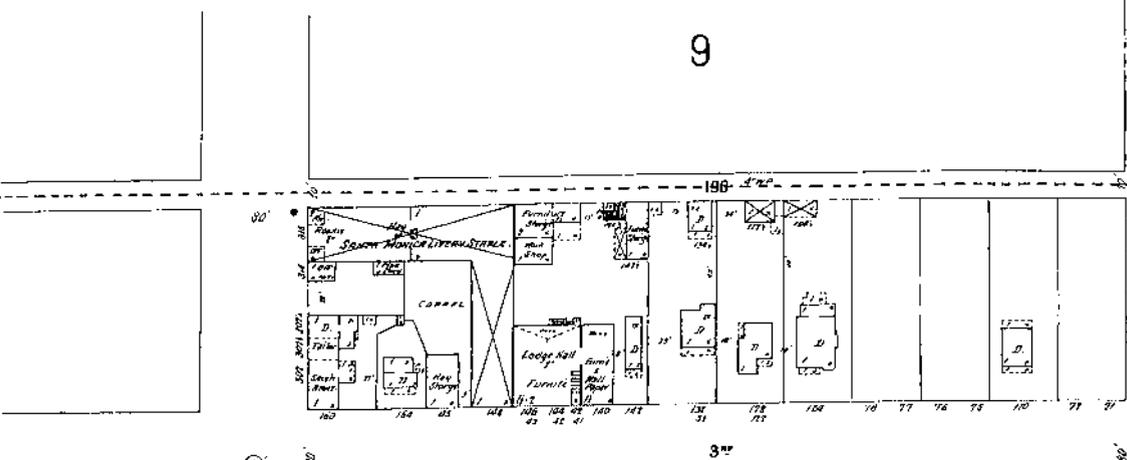


JULY, 1902
SANTA MONICA
 CAL.



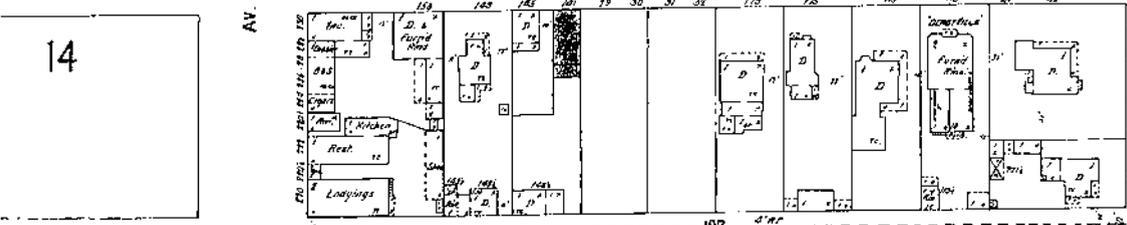
JULY 1902
SANTA MONICA
CAL.

9



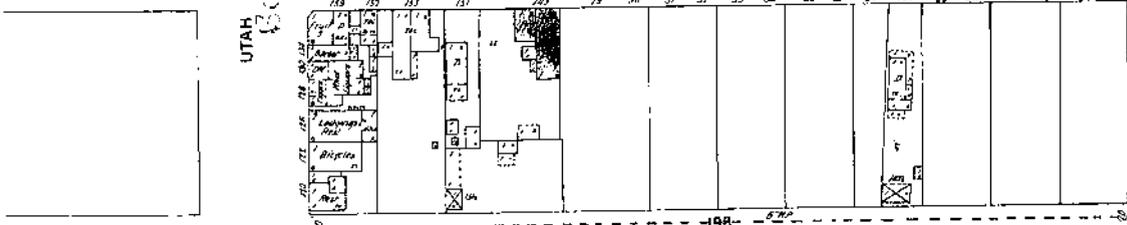
3"

14



2"

14



198

OCEAN

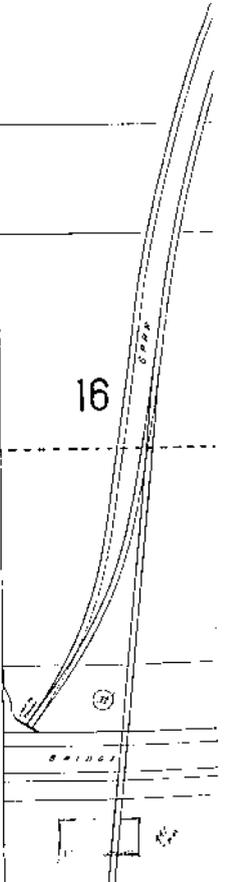
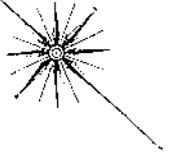
AV.

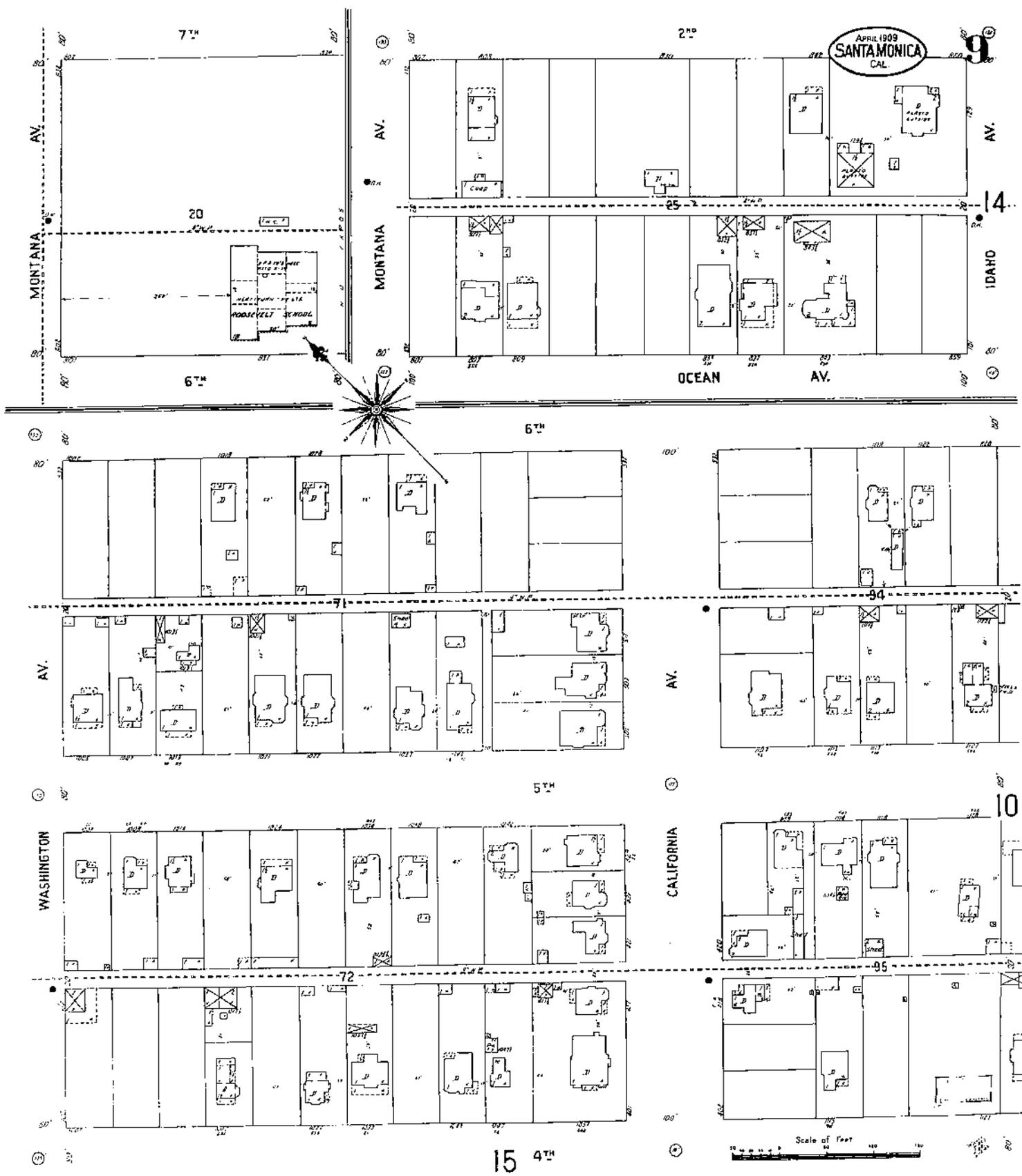
SCALE OF FEET

AV.

RAILROAD

16





APRIL 1909
SANTA MONICA
CAL.

9

14

IDAHO

OCEAN AV.

6TH

AV.

AV.

5TH

WASHINGTON

CALIFORNIA

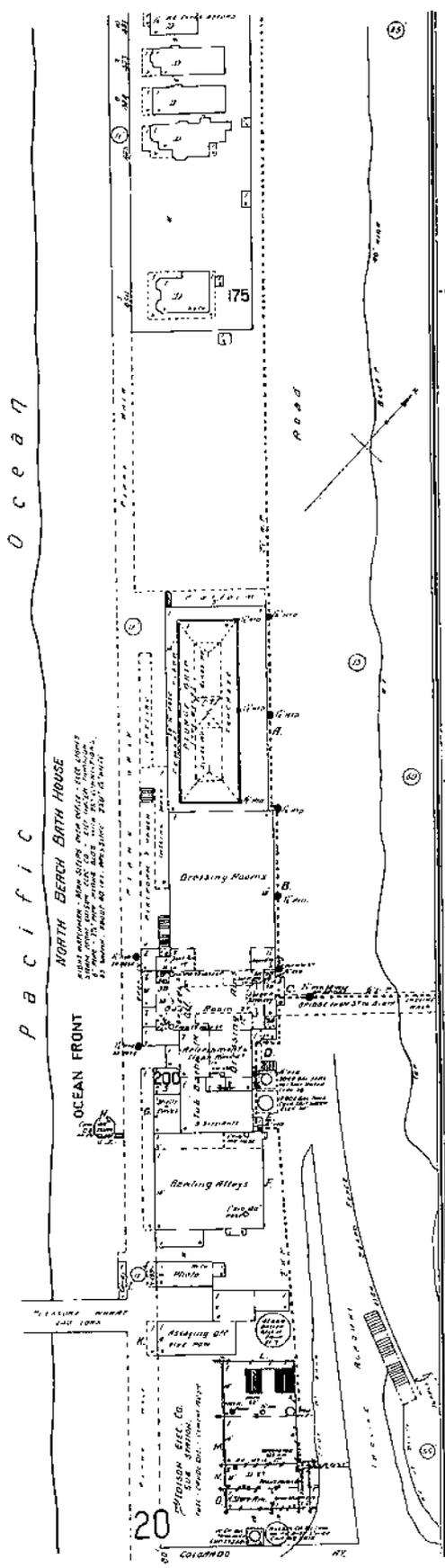
10

15 4TH

Scale of Feet

APRIL 1909
SANTAMONICA
CAL.

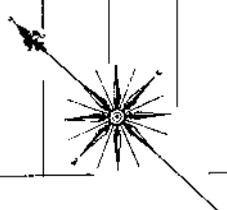
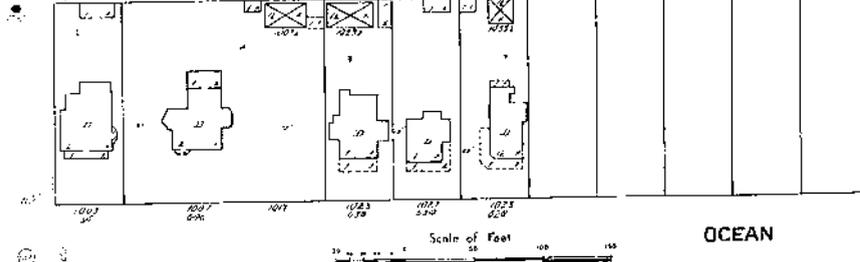
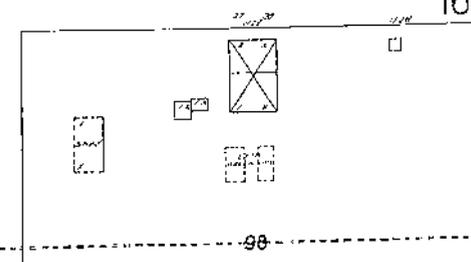
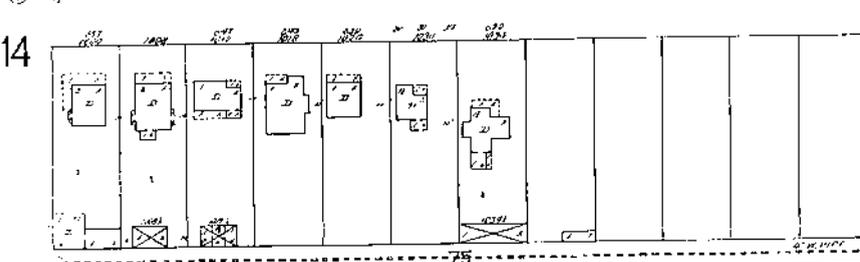
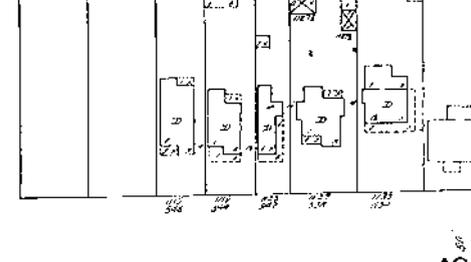
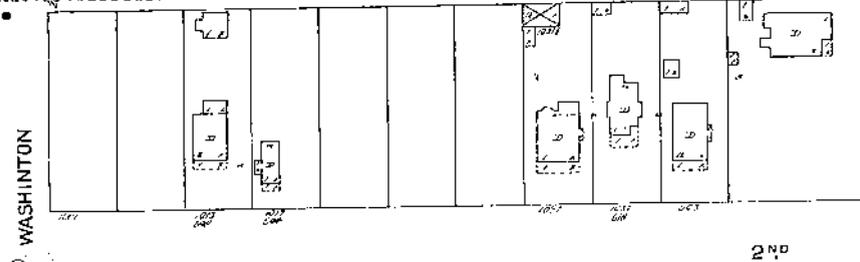
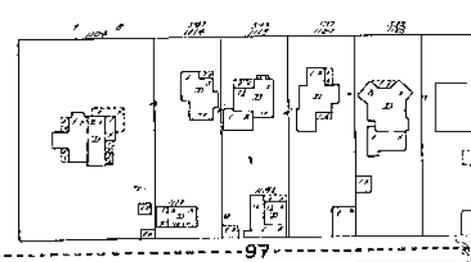
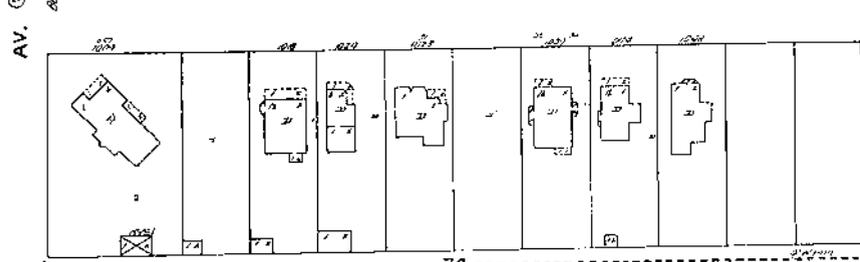
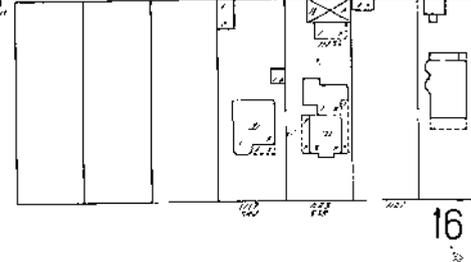
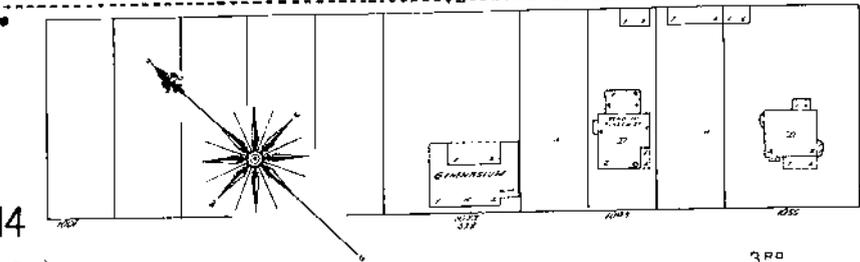
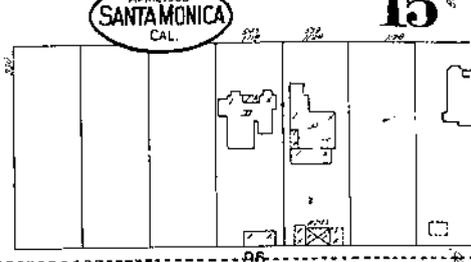
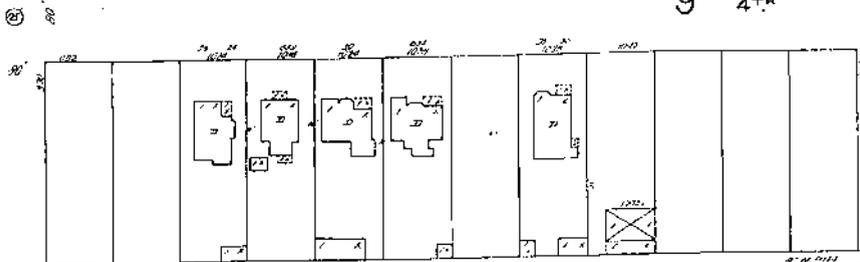
14



9 4TH

APRIL 1909
SANTA MONICA
CAL.

15



14

16

AV.

AV.

WASHINGTON

CALIFORNIA

14

16

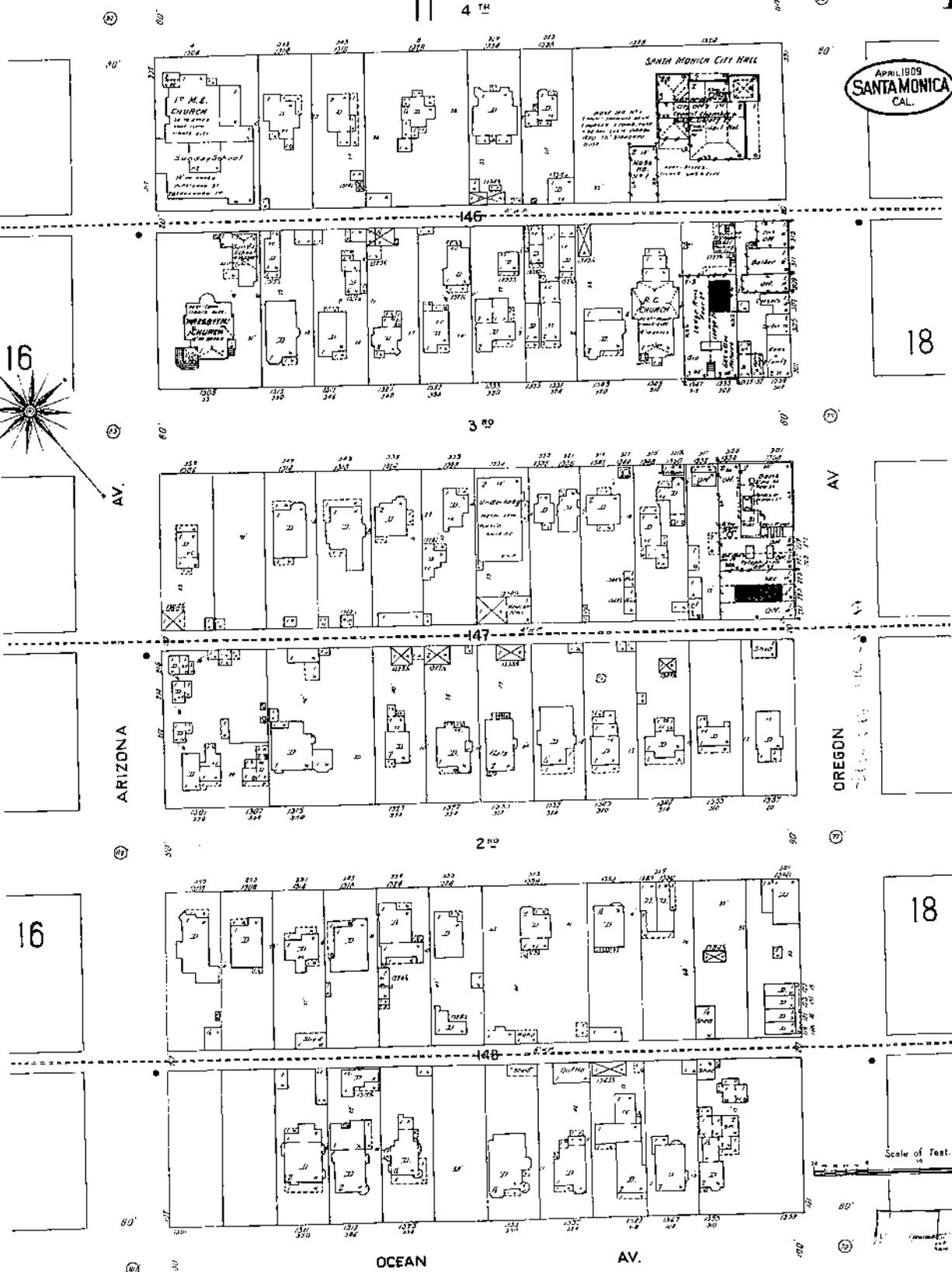
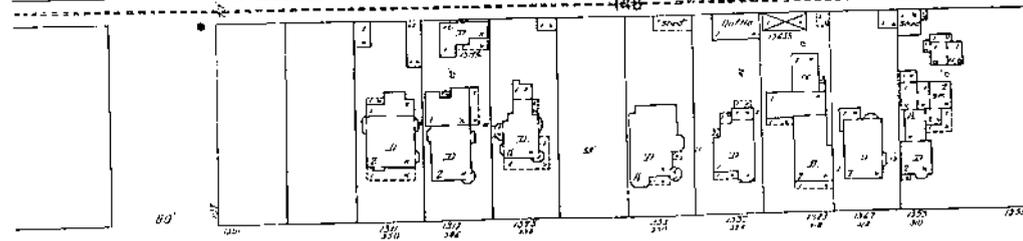
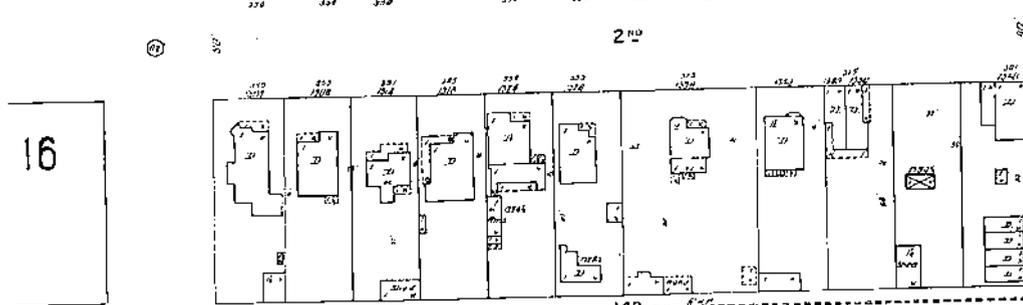
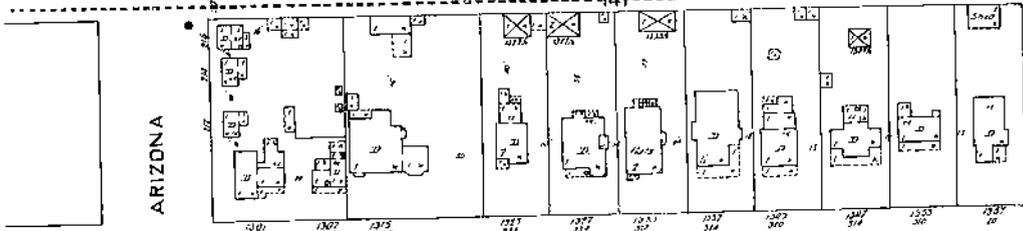
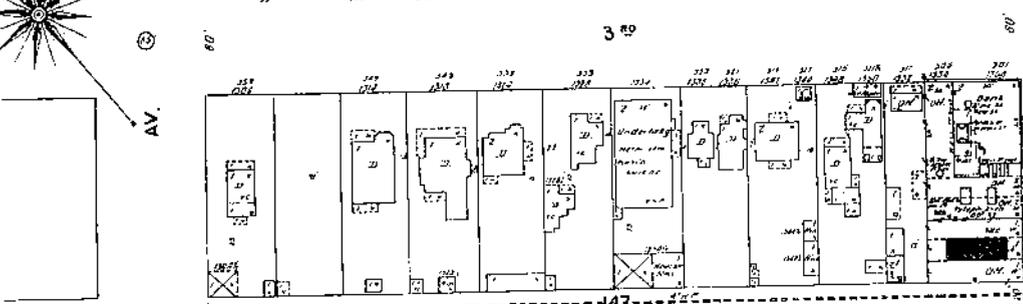
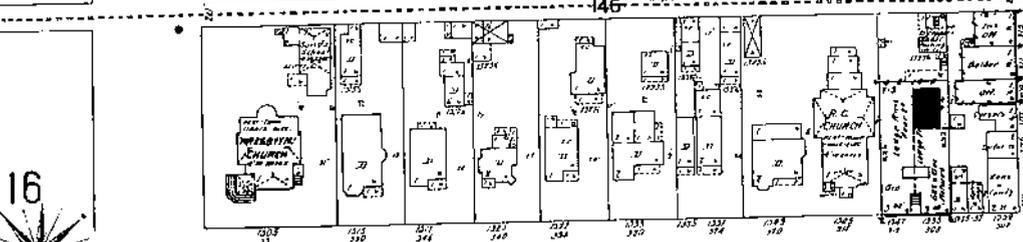
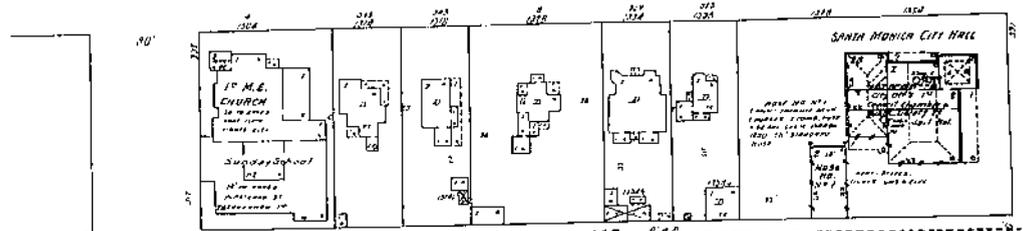
OCEAN

AV.



11 4TH

APRIL 1909
SANTA MONICA
CAL.

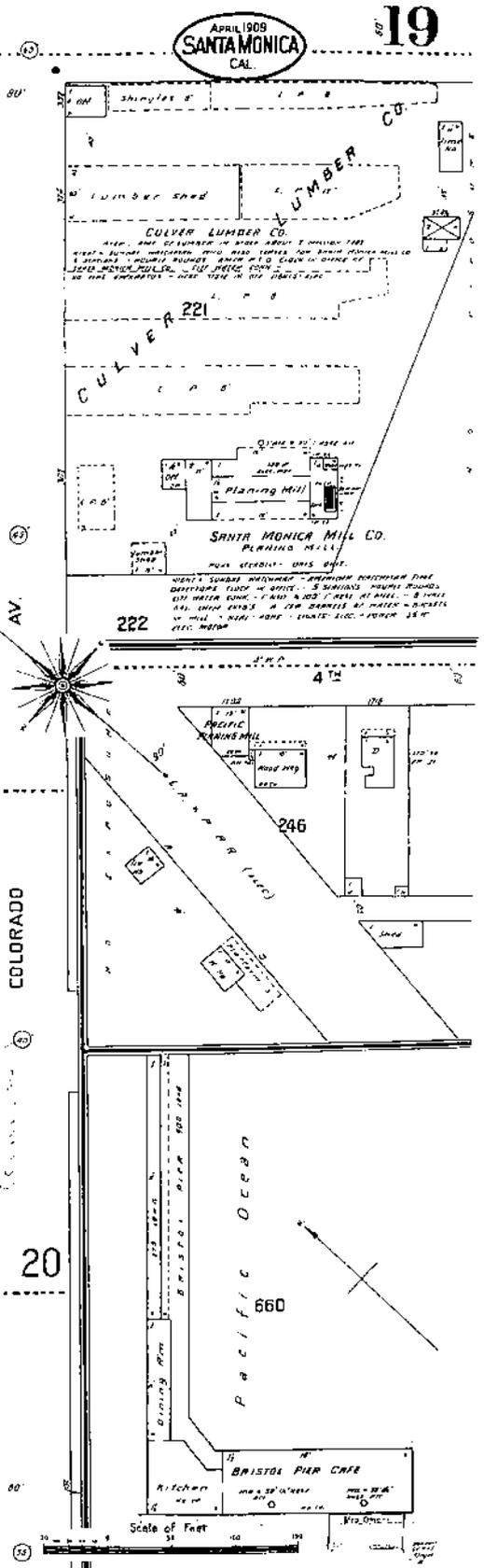
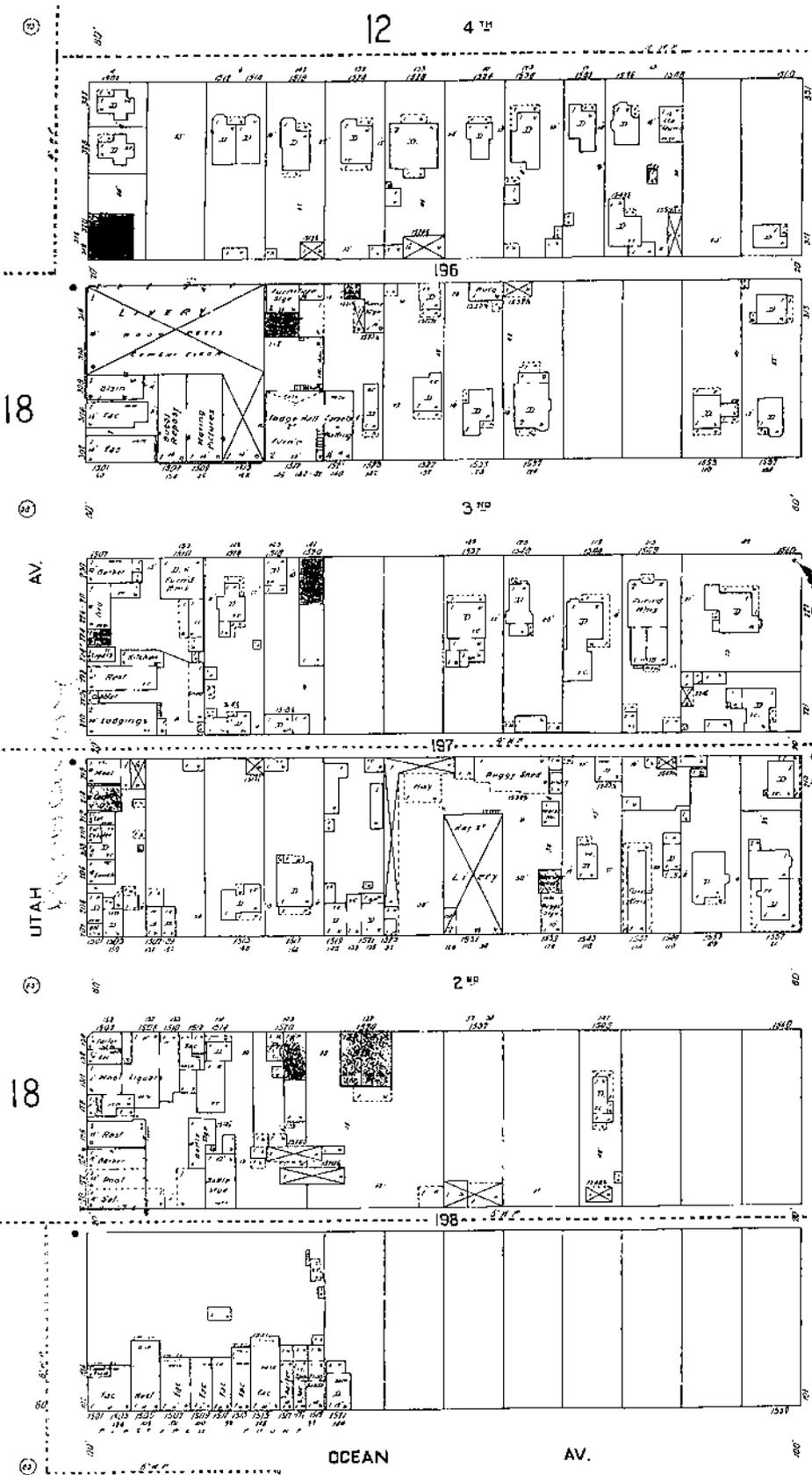


16

18

OCEAN

AV.



APRIL 1909
SANTA MONICA
 CAL.

19

12

4TH

3RD

2ND

AV.

COLORADO

20

OCEAN

AV.

Pacific Ocean

660

Scale of Feet

BRISTOL PIER CAFE

Kitchens
 40' x 30' x 10'
 10' x 10' x 10'

Scale of Feet

14

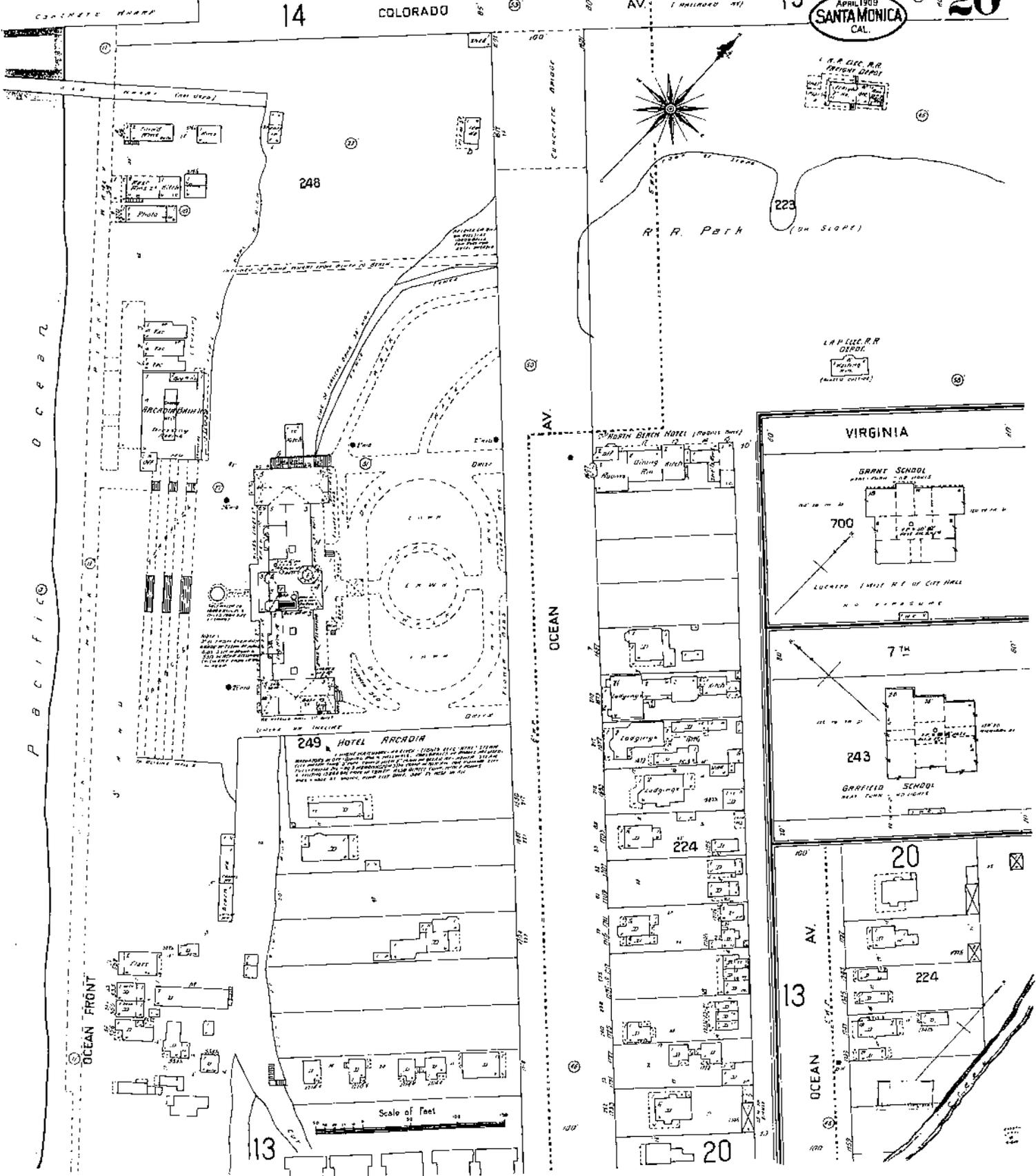
COLORADO

AV. (IMBROVED 1911)

19

APRIL 1909
SANTAMONICA
CAL.

20



248

223

R.R. Park (ON SLOPE)

L.A. ELEC. R.R. DEPOT
1. TRACKS
2. BUILDING
3. WATER TOWER
(PARTLY OUT-OF-PLAT)

AV.

OCEAN

OCEAN

VIRGINIA

GRANT SCHOOL
NEAR TURN - 1/2 BLOCK
700

700

LOCATED 1/2 MILE N.E. OF CITY HALL
NO APPROPRIATE

7TH

243

GARFIELD SCHOOL
NEAR TURN - 1/2 BLOCK

20

AV.

13

OCEAN

224

224

20

13

Scale of Feet

CONCRETE BRIDGE

PACIFIC

OCEAN FRONT

Hotel Arcadia
Kitchen
Bath
Dining Room
Living Room
Bed Room
Bathroom
Staircase
Elevator
Garage

Hotel Arcadia
Kitchen
Bath
Dining Room
Living Room
Bed Room
Bathroom
Staircase
Elevator
Garage

249 HOTEL ARCADIA
NEAR TURN - 1/2 BLOCK
249

NORTH BEACH HOTEL (NEAR TURN)
223

Living Room
Dining Room
Kitchen
Bath
Bed Room
Bathroom
Staircase
Elevator
Garage

224

20



INSURANCE MAPS

of

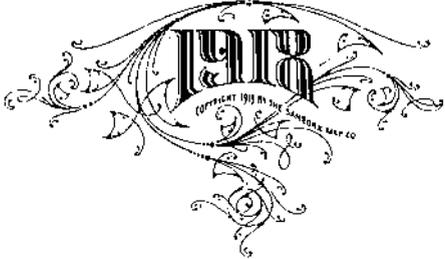


San Francisco

INCLUDING
VENICE
CALIFORNIA

Published by the
Sanborn
Map Company

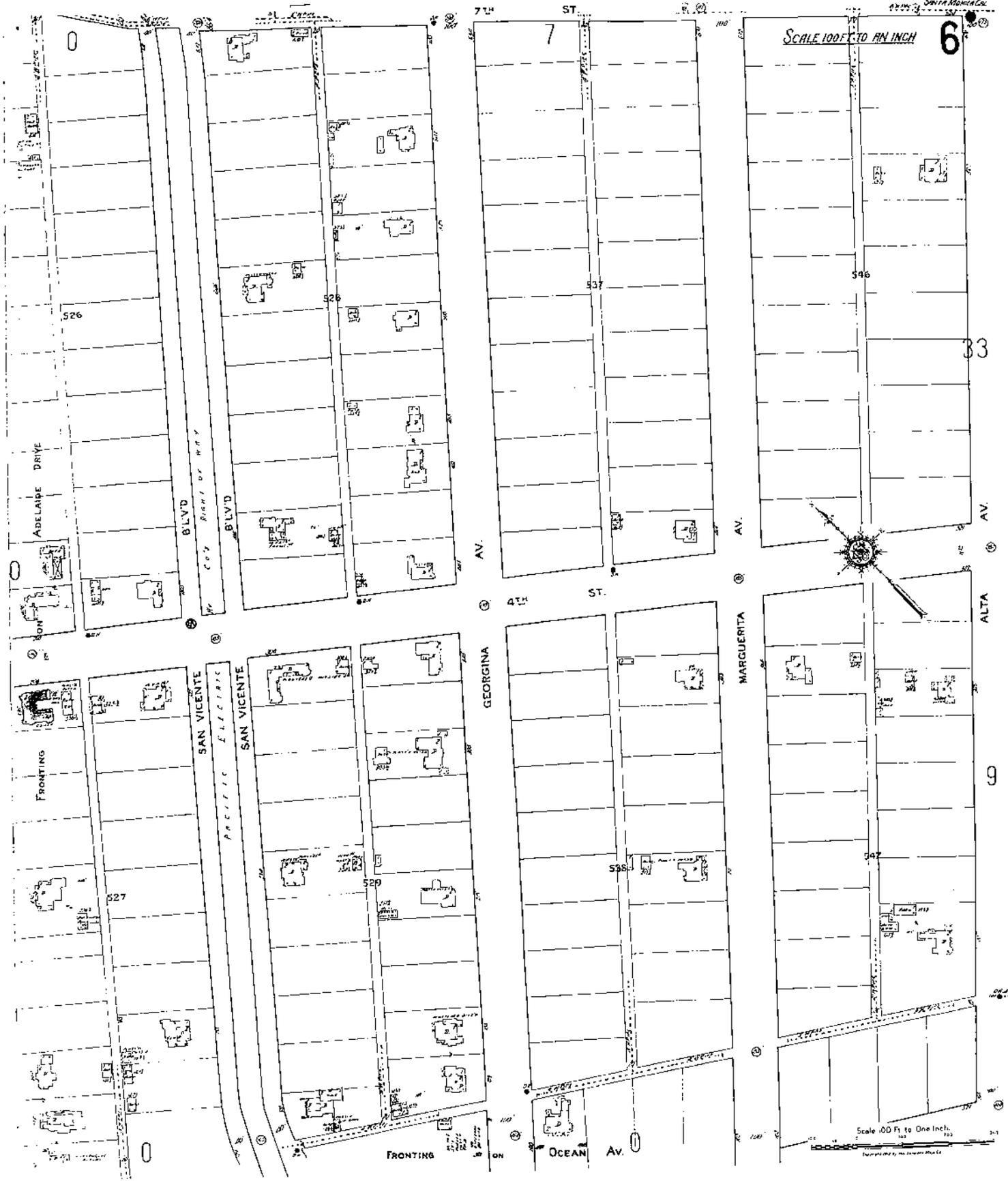
11 BROADWAY, NEW YORK



1918

COPYRIGHT 1918 BY THE SANBORN MAP CO.

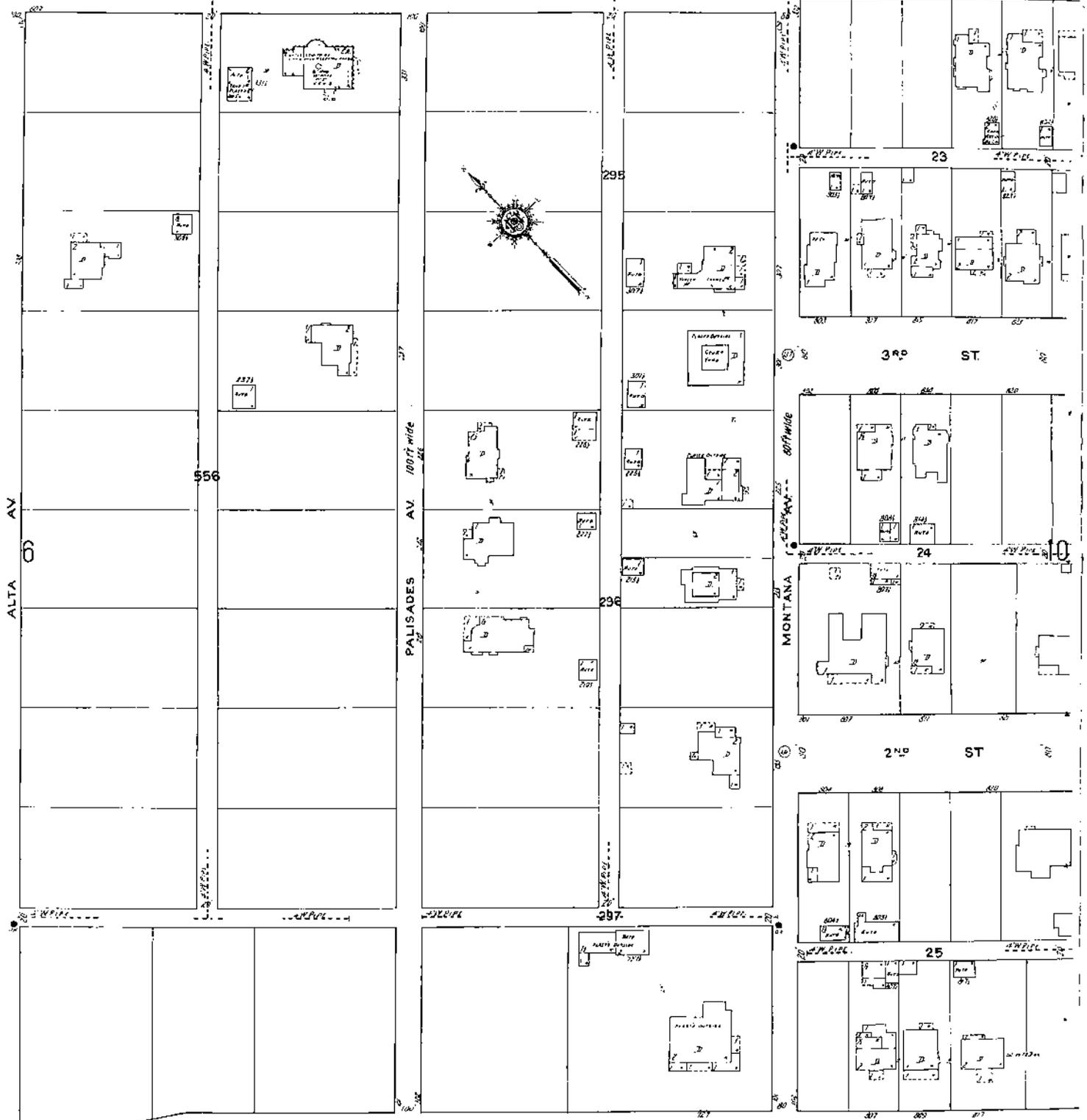
San Mateo Co.



SOUTH MONROE CHL

9

4TH 33 ST

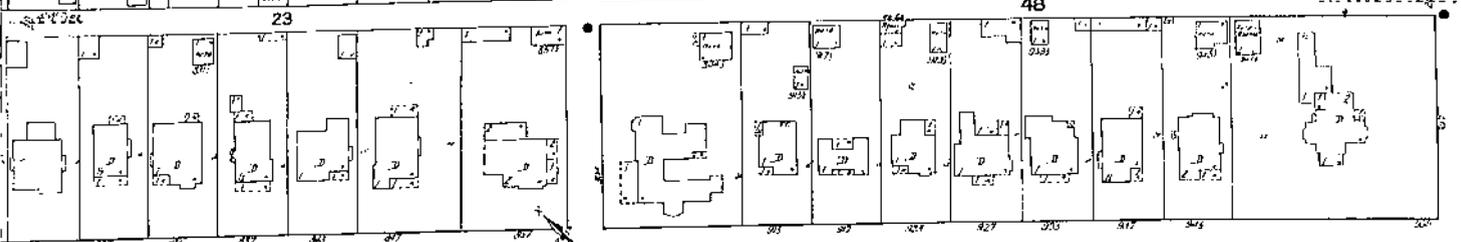
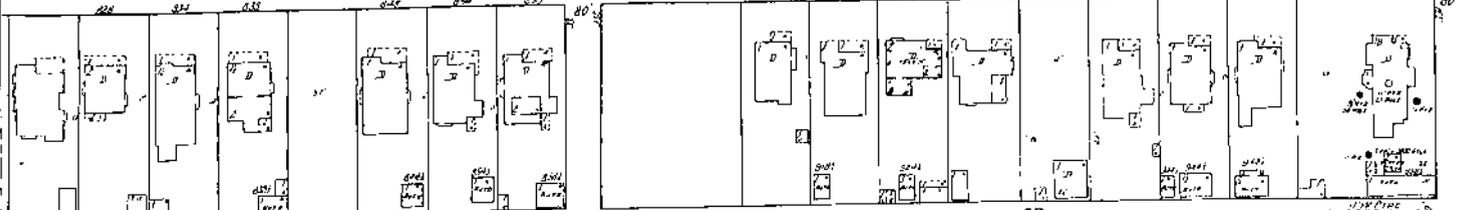


Scale of feet

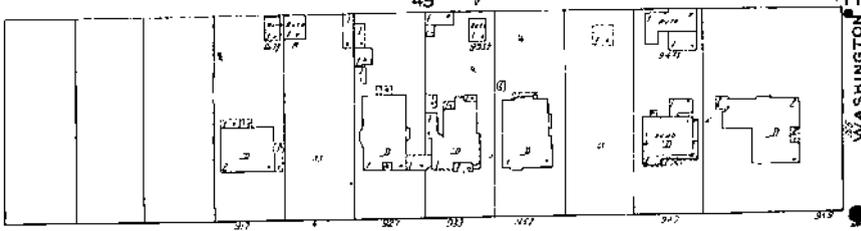
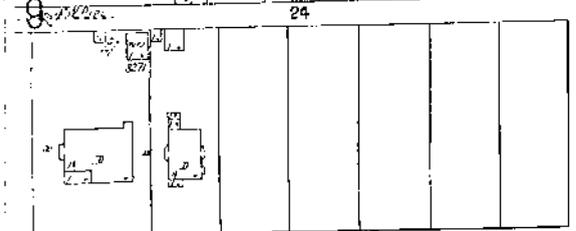
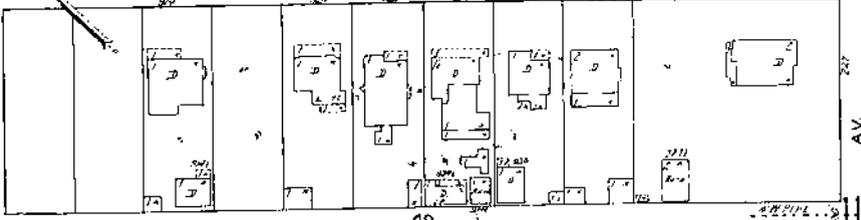
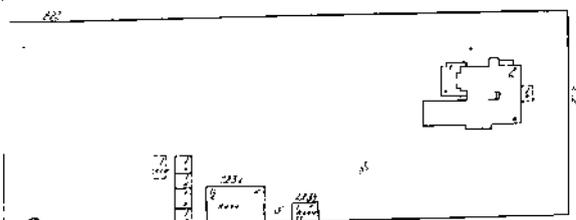
OCEAN AV

LINDA VISTA PARK OPPOSITE

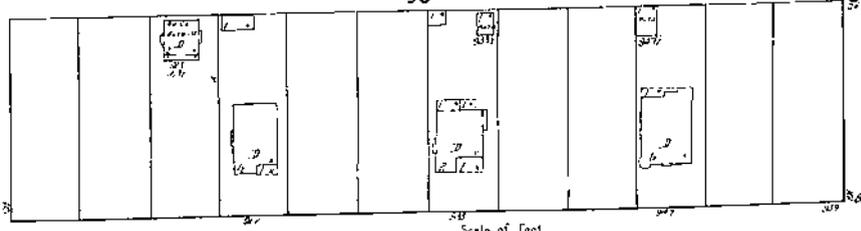
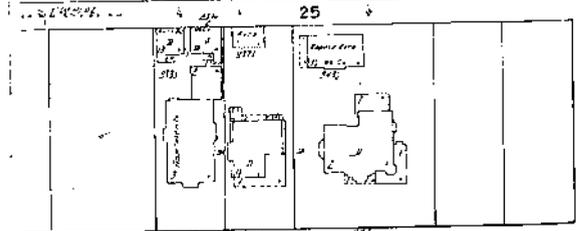
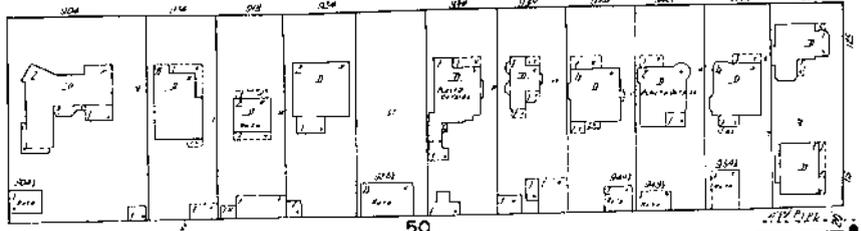
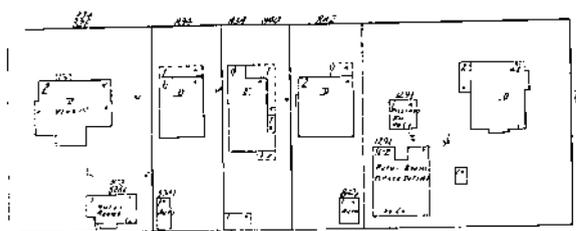
34TH ST



3RD ST



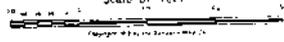
2ND ST



OCEAN AV

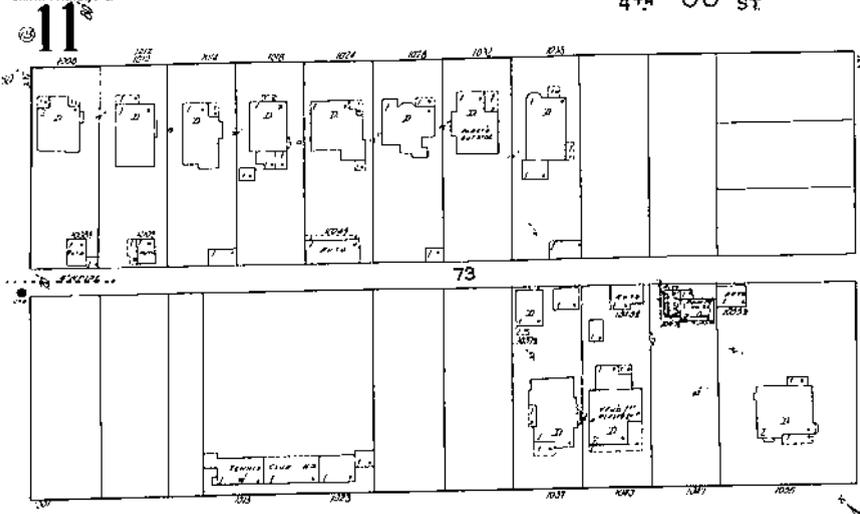
LINOR DIST & PARK OPPOSITE

Scale of Feet

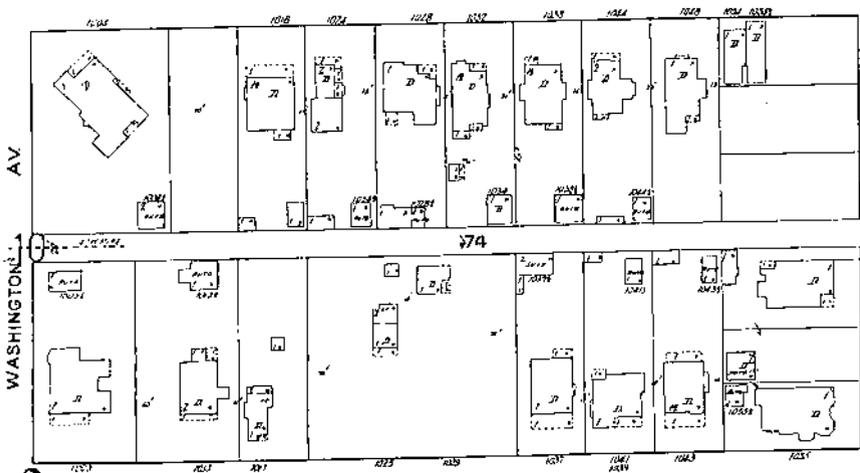


SANTA MONICA, CALIF.

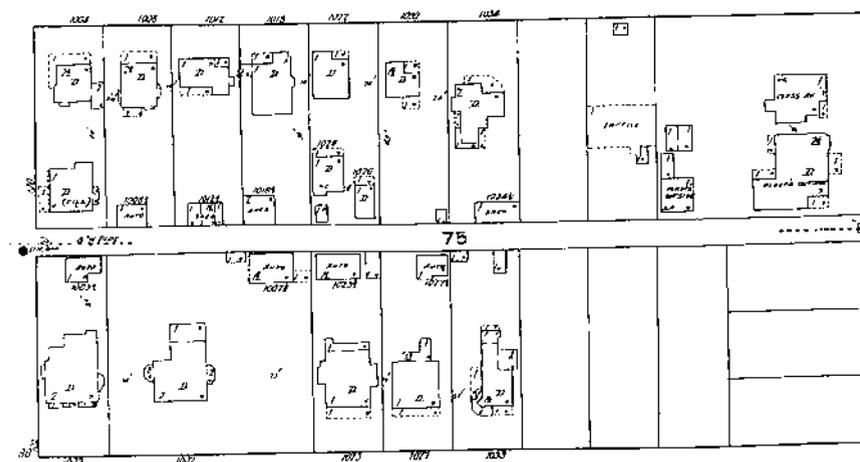
4TH 35 ST



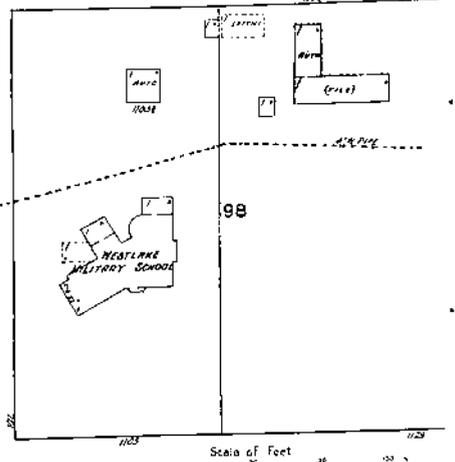
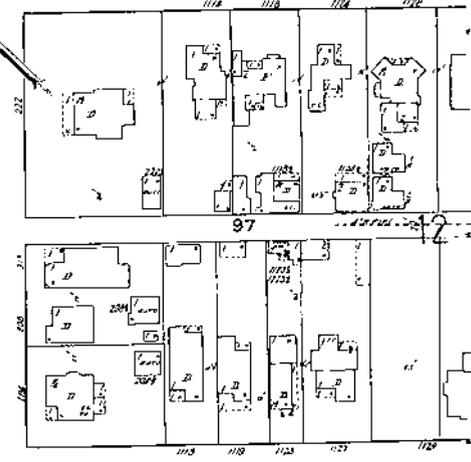
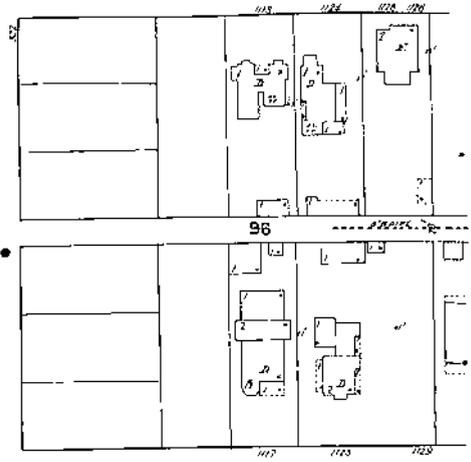
3RD ST.



2ND ST.



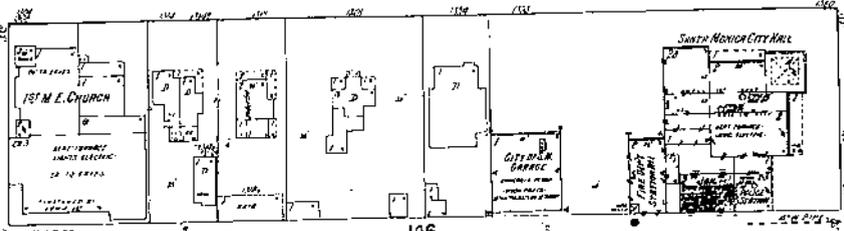
OCEAN AV. 0



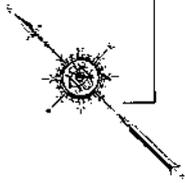
San Francisco City

13

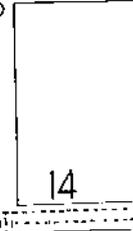
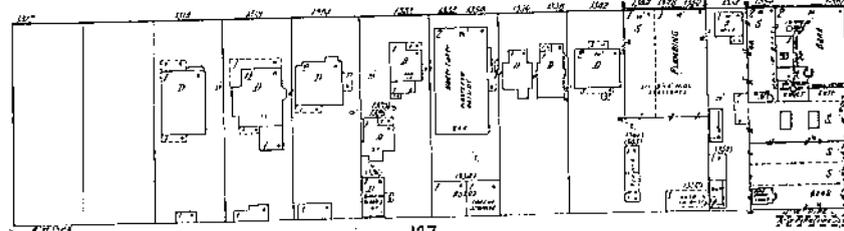
4TH 37 ST



146th St
 146th St is a street that runs north-south through the city. It is located between 4th 37 St and 4th 38 St. The street is named in honor of the 146th Street.



3rd ST



147th St
 147th St is a street that runs north-south through the city. It is located between 3rd St and 4th St. The street is named in honor of the 147th Street.

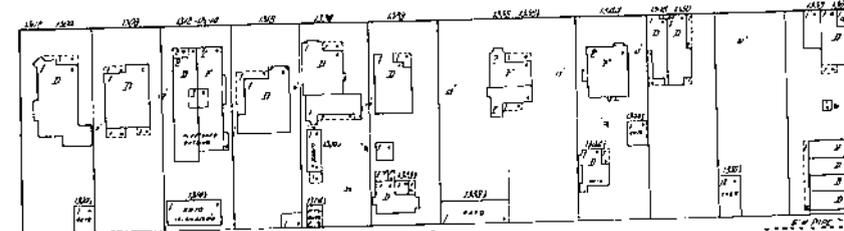
12

ARIZONA AV.

SANTA MONICA BLVD.

14

2nd ST



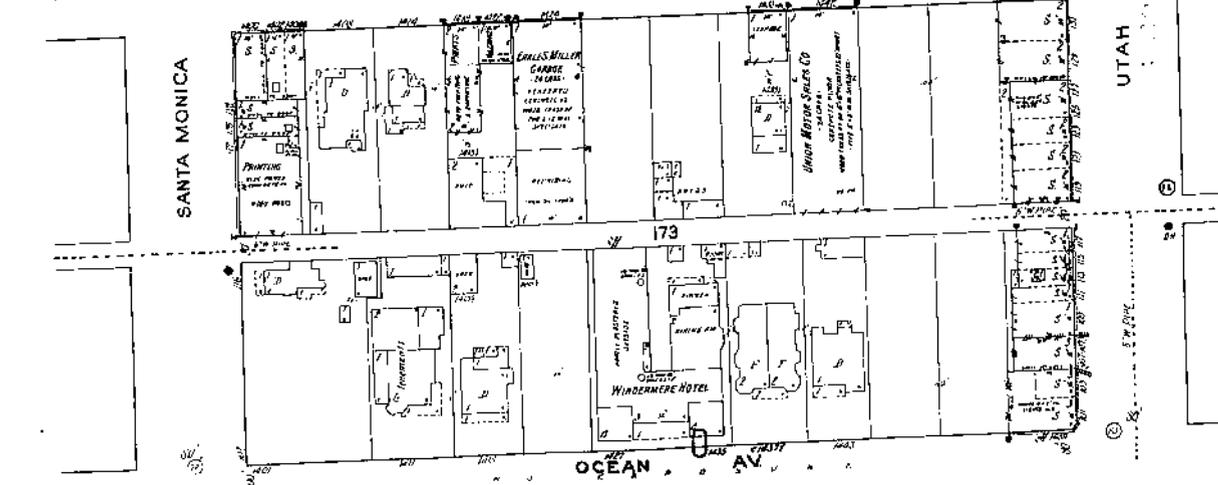
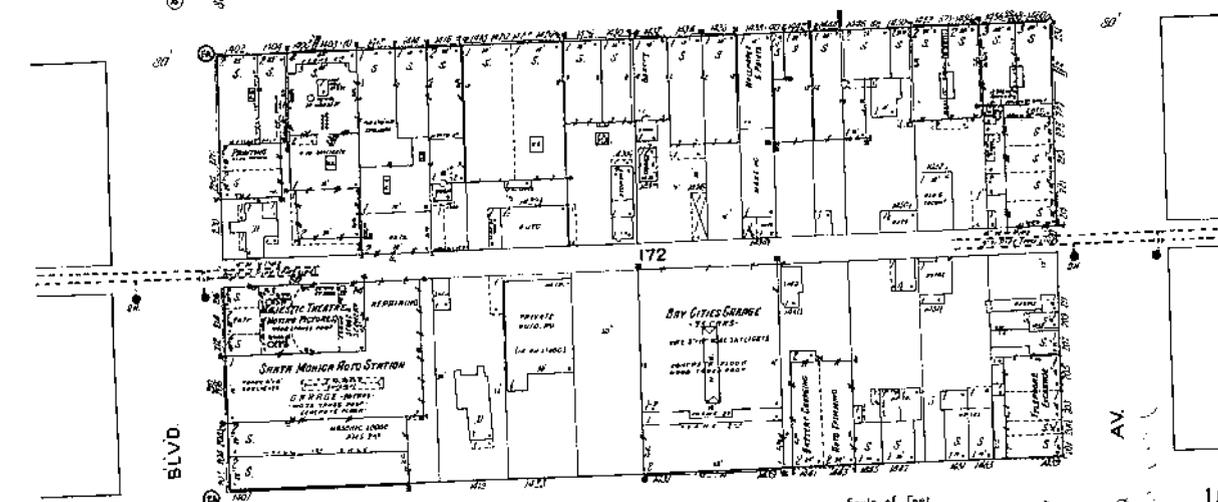
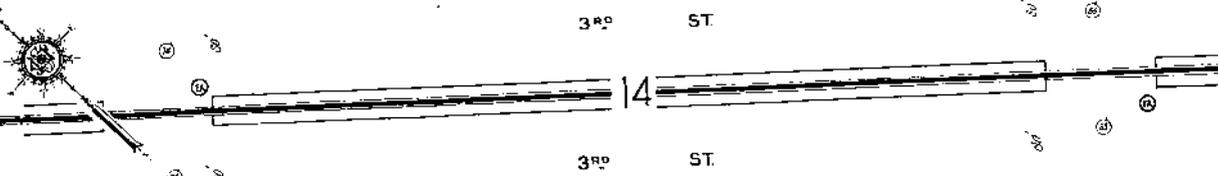
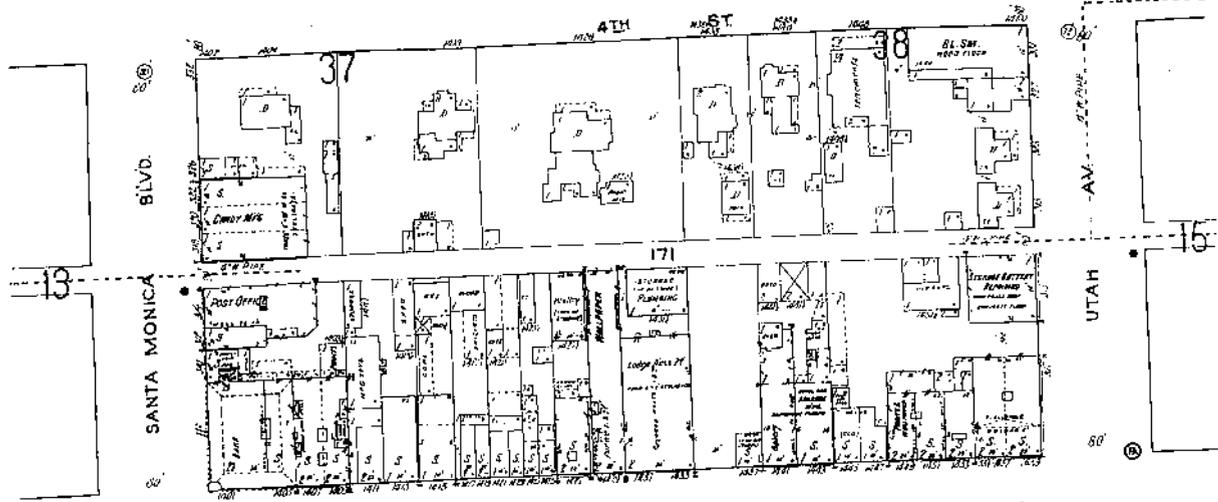
148

OCEAN AV. LINDA VISTA PARK OPPOSITE

Scale of Feet
 0 50 100 150

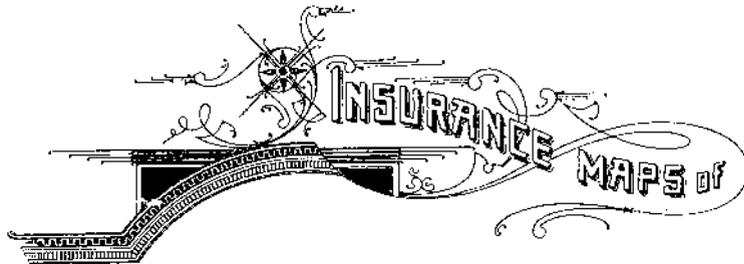
SANTA MONICA, CAL.

14



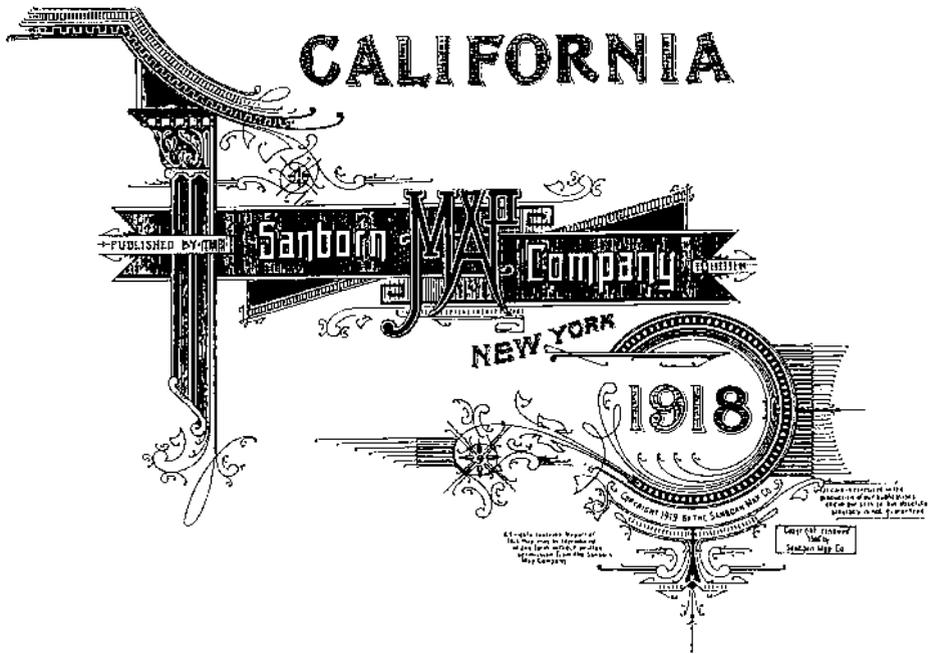
15

UTAH AV



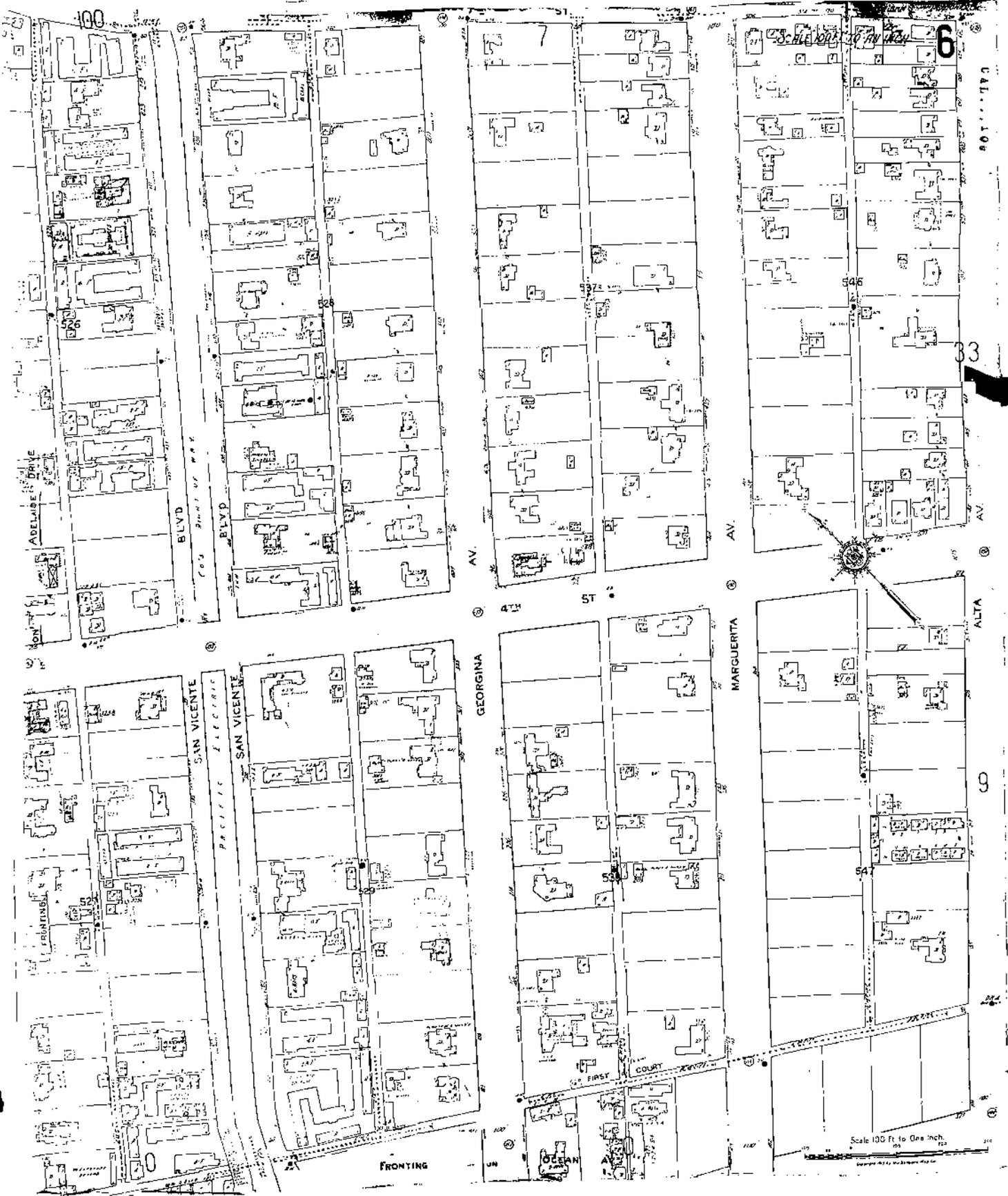
SANTA MONICA

CALIFORNIA



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Published by the Sanborn Map Co., New York, N.Y.

042...108
JUL 11 1914



ADELAIDE DRIVE

BLVD

SAN VICENTE

PACIFIC ELECTRIC

SAN VICENTE

GEORGIA

AV

ST

MARGUERITA

AV

ALTA

CO

6

7

100

CAL. 108

3

Scale 100 Ft. to One Inch

FRONTING

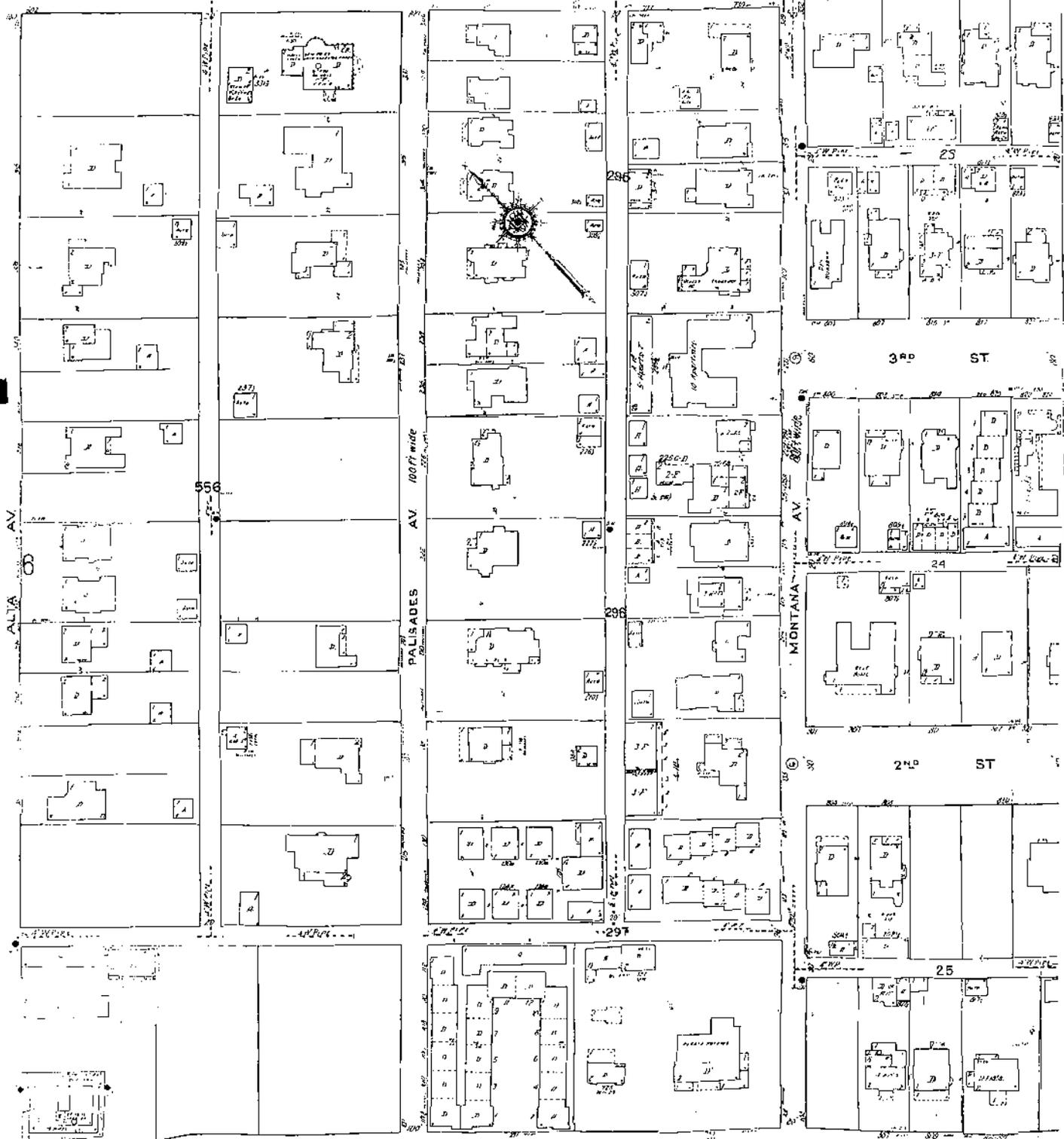
OCEAN

FIRST COURT

SOUTH MONTER CAL.

9 CAL. 109

4TH 33 ST.



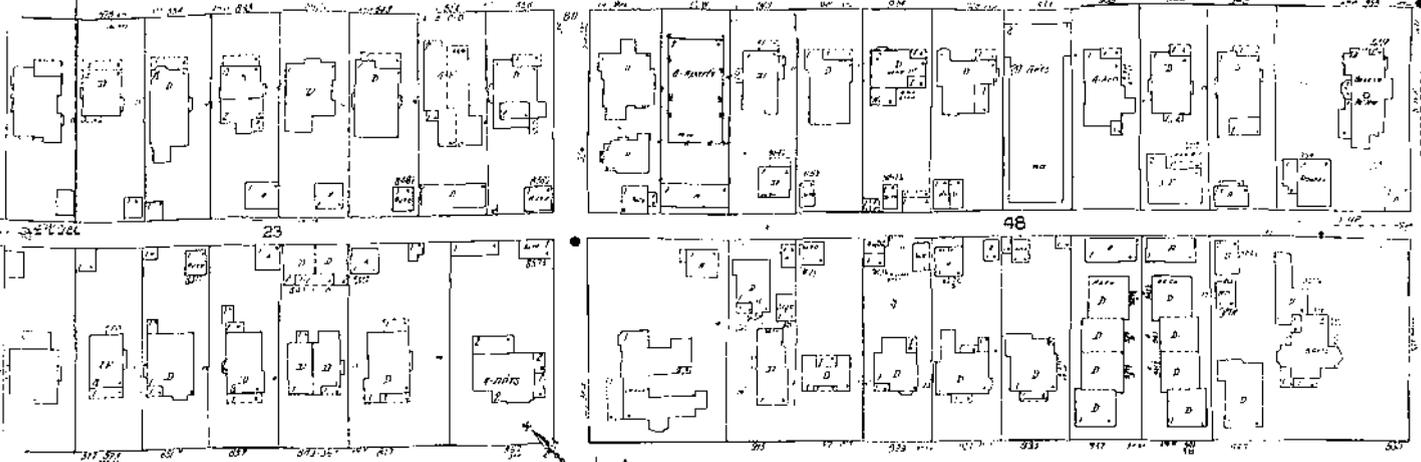
Scale of Feet

OCEAN AV

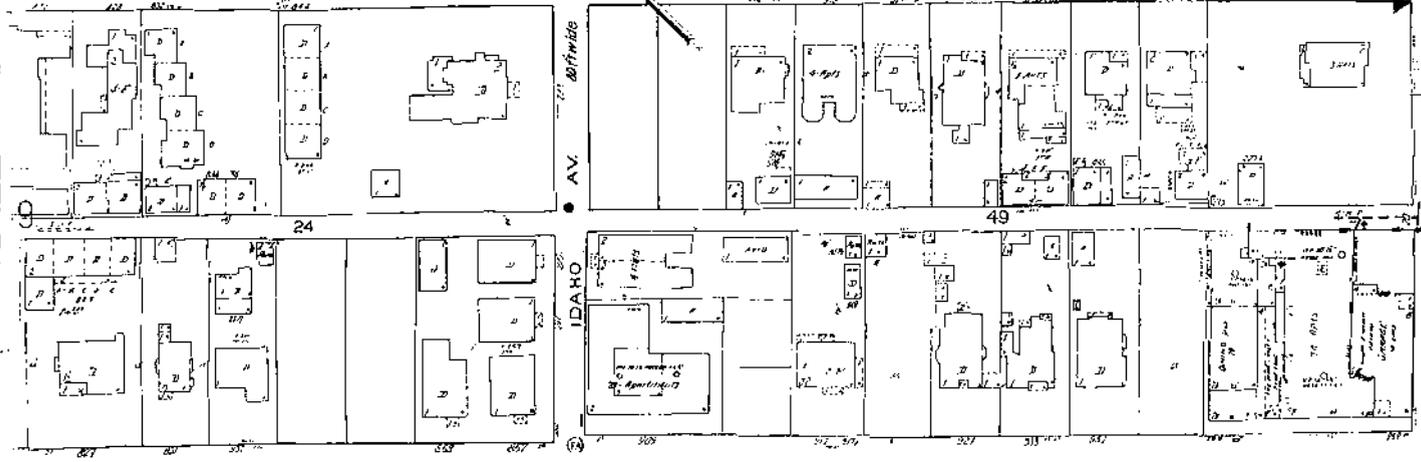
LINDA VILVA PARK OPPOSITE

34TH ST.

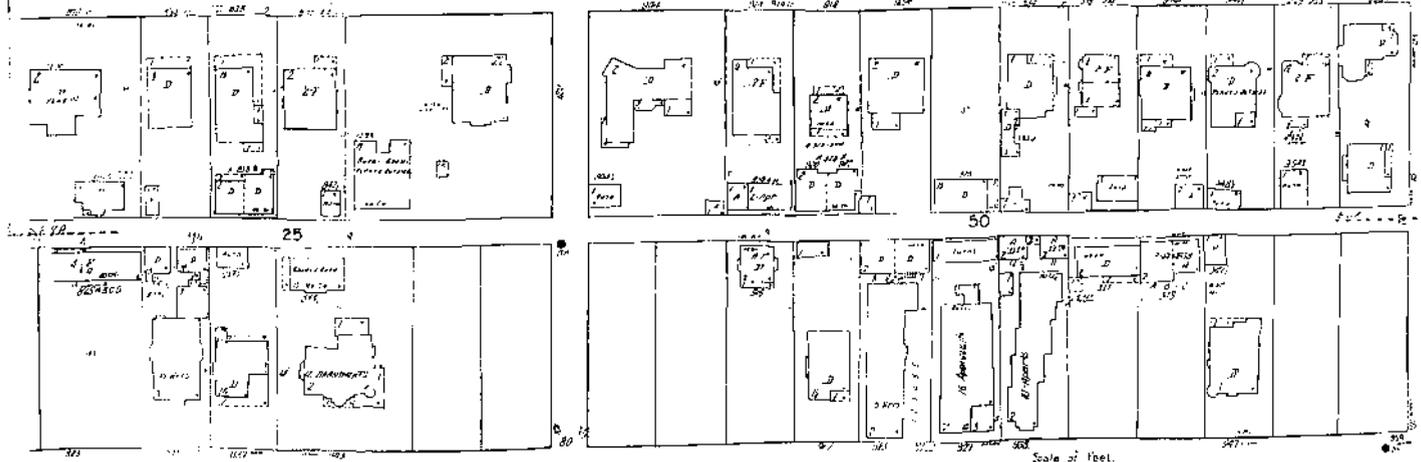
SWTA MOUNTAIN CO. 10



3RD ST.



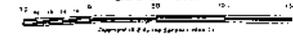
2ND ST.



OCEAN AV.

LINDA VICKER PARK OPPOSITE

Scale of feet.

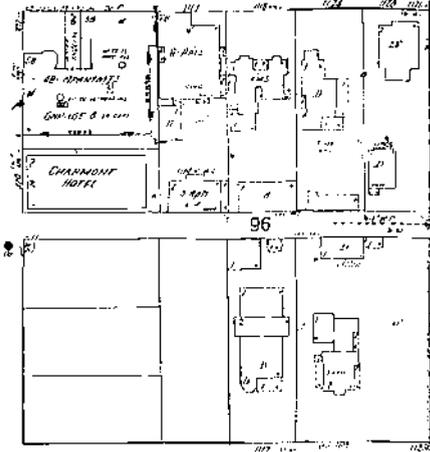
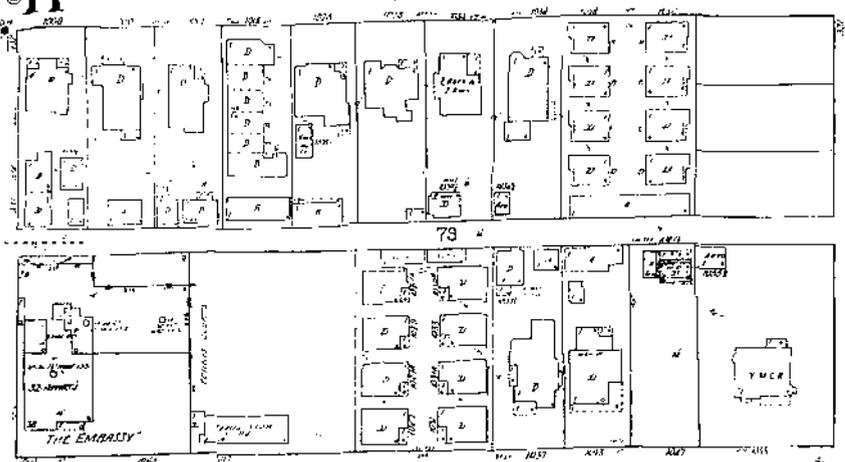


SARIN MOONEY, C.E.

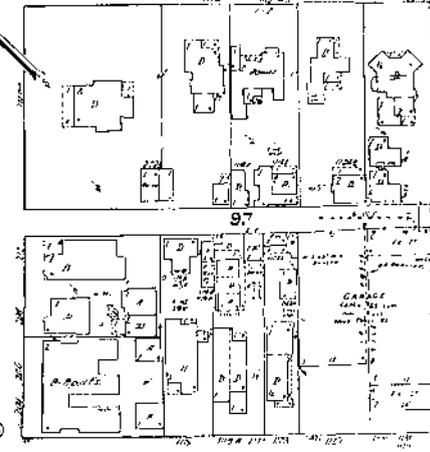
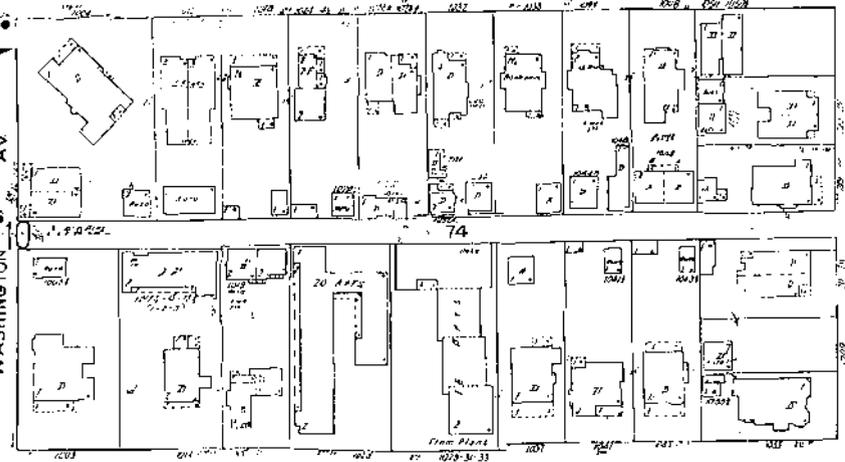
642 1113

4TH 35 ST

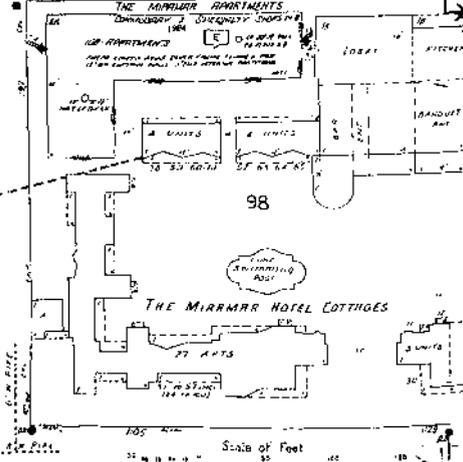
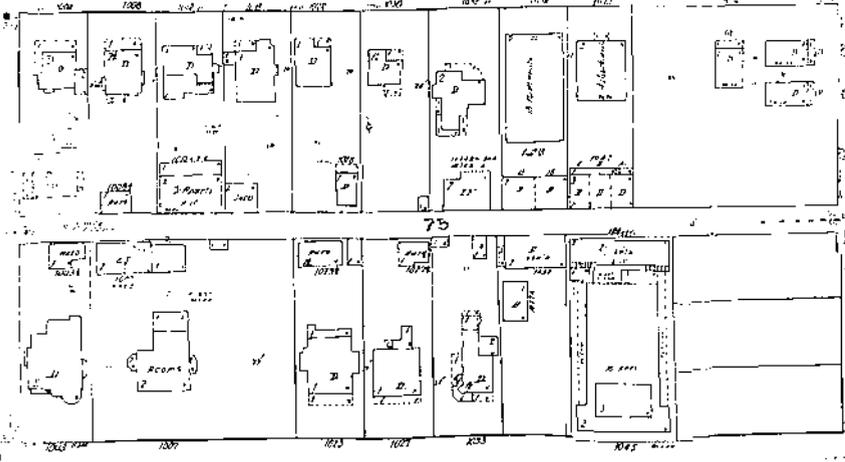
11



3RD ST



2ND ST



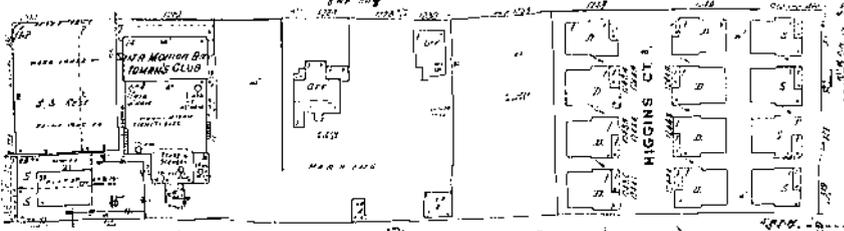
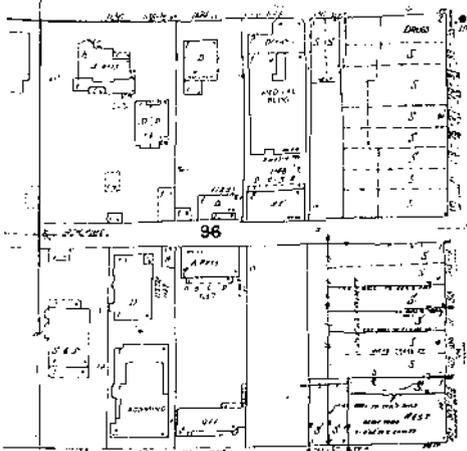
OCEAN AV

Scale of Feet

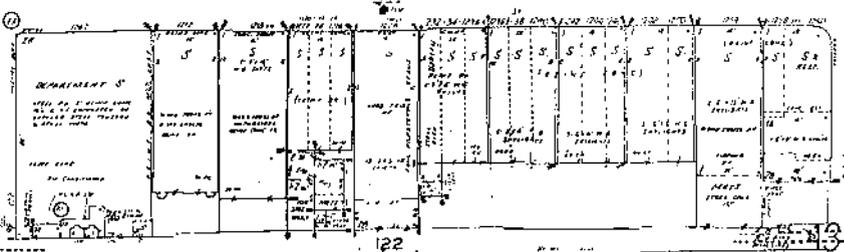
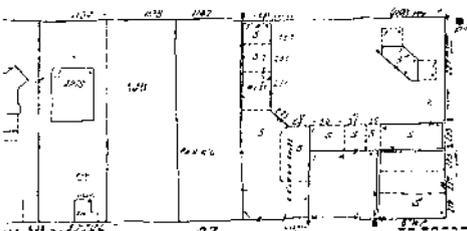
4TH 36 ST

848...1108 SANTA MONICA, CAL.

12

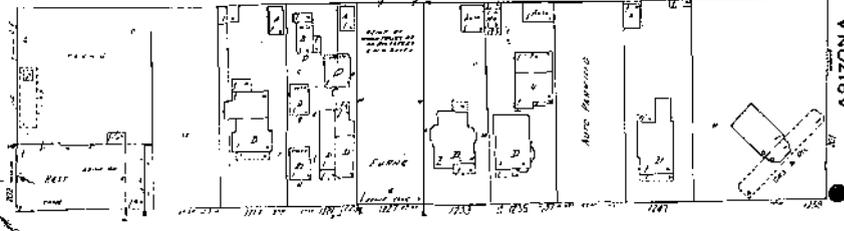
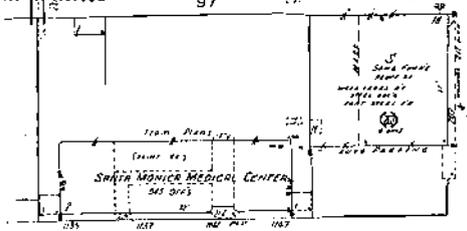


3RD ST

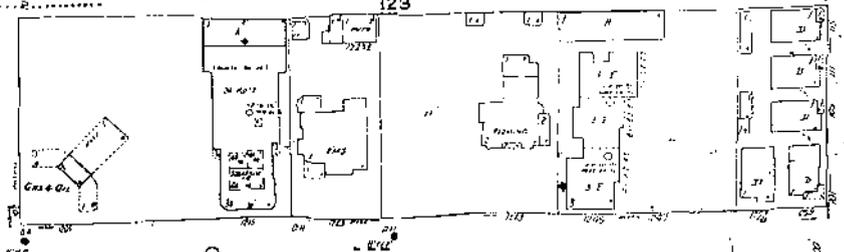
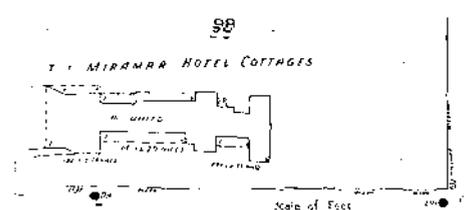
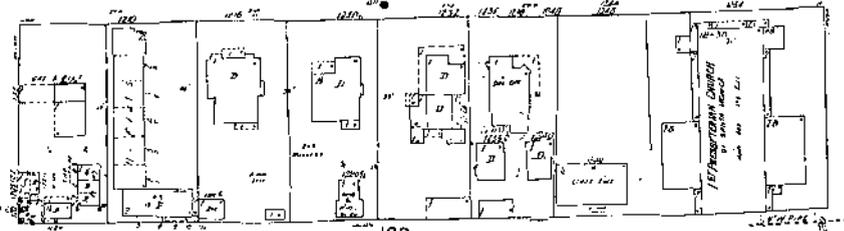
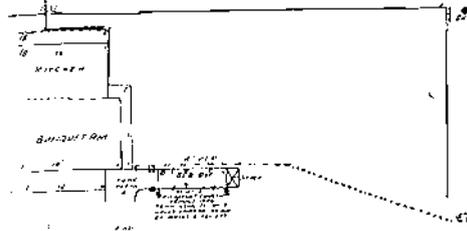


WILSHIRE BLVD.

ARIZONA AV



2ND ST



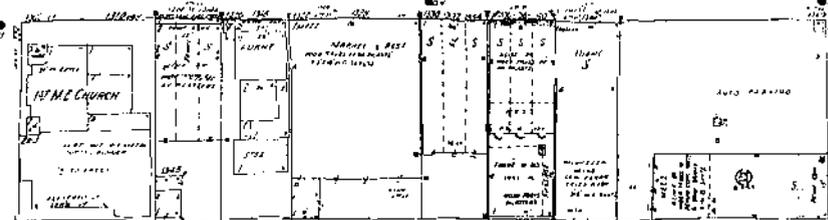
OCEAN 0 AV

Scale of Feet

Santa Monica, Cal. 041 103

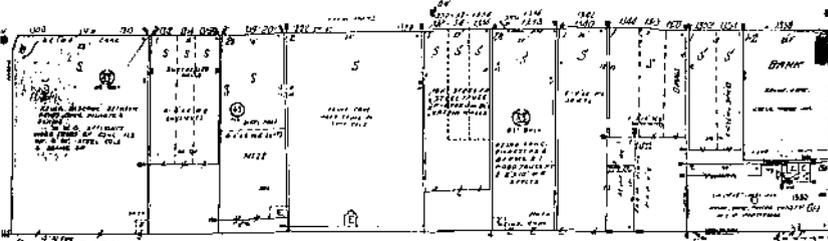
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4TH 37 ST.



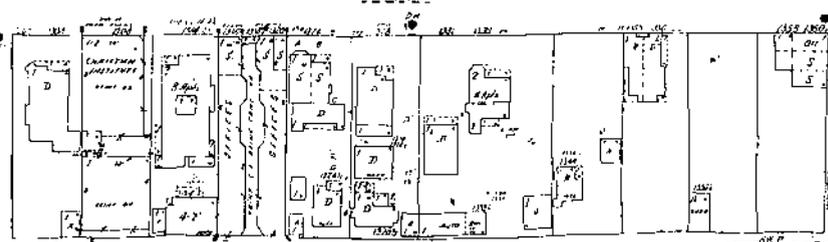
146

3RD ST.



147

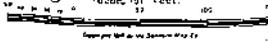
2ND ST.



148

OCEAN AV. LINDA VISTA OPPOSITE

Scale, of Feet.

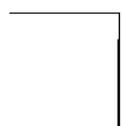


ARIZONA AV.

SANTA MONICA BLVD.

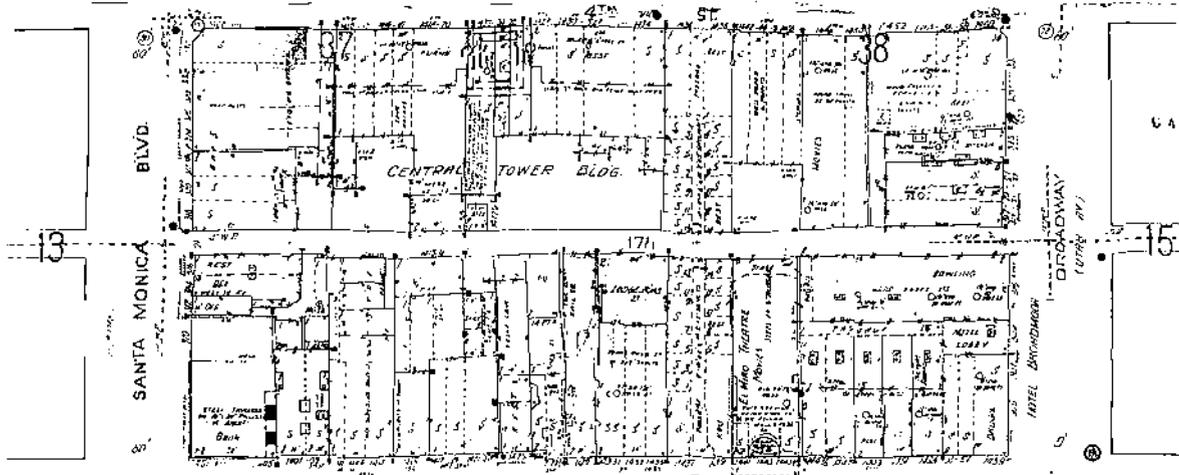
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14



14

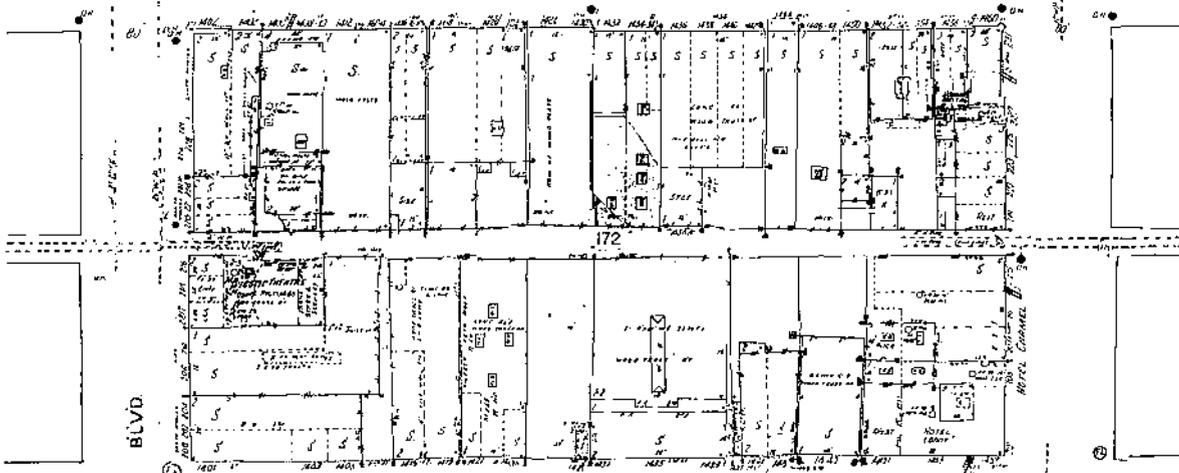
CAL... 103



3RD ST.

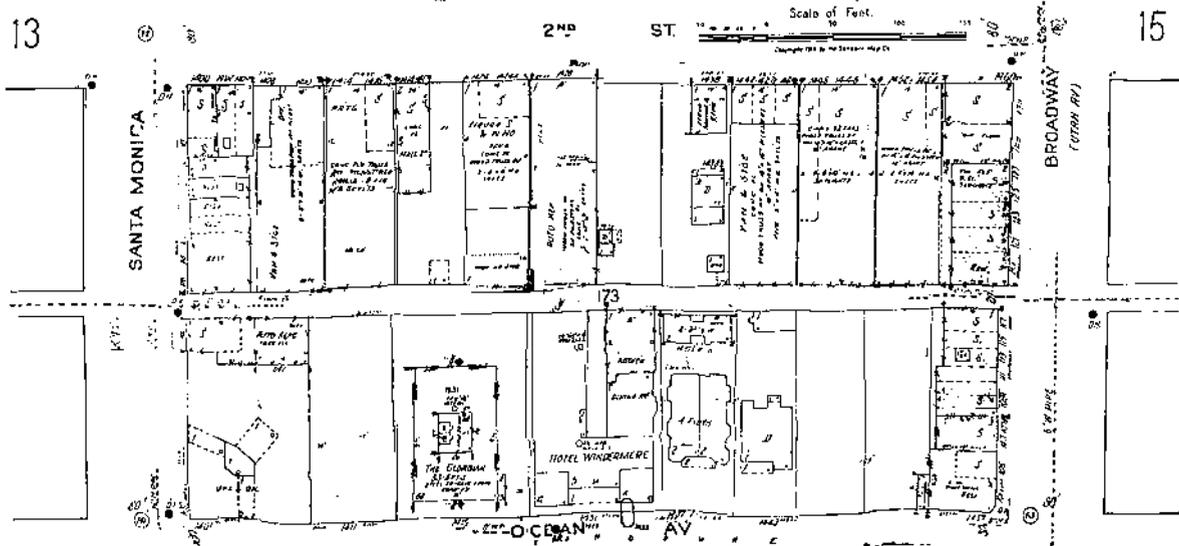
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3RD ST.



2ND ST.

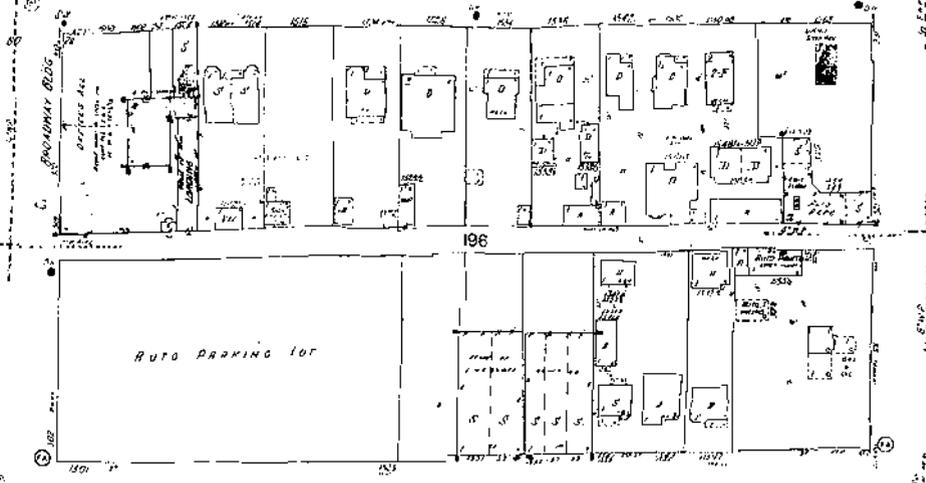
Scale of Feet.



Santa Monica Co. 047.1103

15

4TH 38 ST



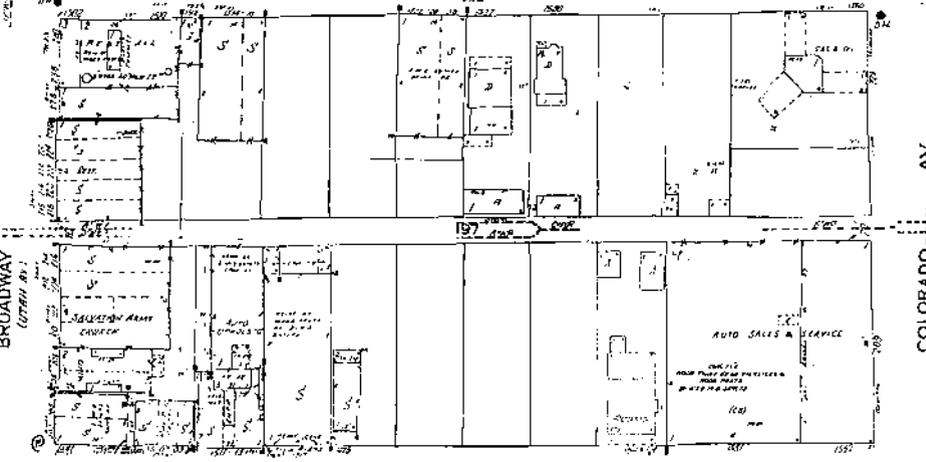
3RD ST

14

BROADWAY (Lorenz St.)

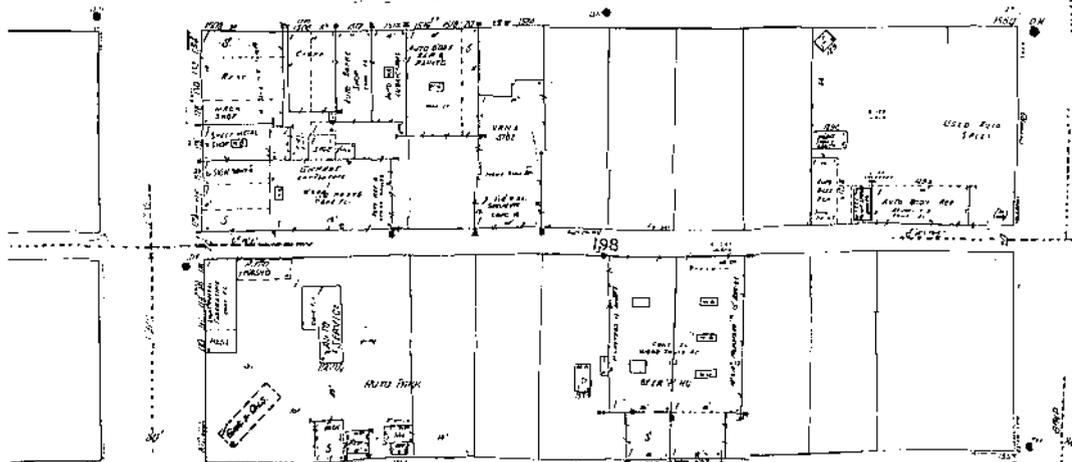
COLORADO AV

17



2ND ST

Scale of Feet



OCEAN AV

LINDER VISION PARK APPROPRIATE

Appendix 3

**Interview Documentation
(User Questionnaire and
Transaction Screen Questionnaire)**

Transaction Screen Questionnaire

Rincon Project: 04-57300 - Palisades Bluffs Stabilization Project - Santa Monica, CA

This questionnaire should be completed by an individual considered to be knowledgeable of the subject property. We respectfully request that you fill out and return this form (via fax 760-918-9449) to us within one week from the date of this transmittal.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|--|--|---|---|---|---|---|--|---|---|--|---------------------------------|--|
| 1) | <p>Was the subject property or any adjoining property ever used as:</p> <table border="0"> <tr> <td><input type="checkbox"/> a gasoline or other fueling station</td> <td><input type="checkbox"/> a junkyard or landfill</td> </tr> <tr> <td><input type="checkbox"/> a motor vehicle repair facility</td> <td><input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility</td> </tr> <tr> <td><input type="checkbox"/> a commercial printing facility</td> <td><input type="checkbox"/> a machine shop</td> </tr> <tr> <td><input type="checkbox"/> a dry cleaners</td> <td><input type="checkbox"/> a manufacturing facility</td> </tr> <tr> <td><input type="checkbox"/> a photo developing laboratory</td> <td><input type="checkbox"/> any other industrial use</td> </tr> <tr> <td><input type="checkbox"/> a metal plating facility</td> <td></td> </tr> <tr> <td><input type="checkbox"/> a farm</td> <td></td> </tr> </table> <p>(please check all that apply and describe) <i>NONE</i></p> | | <input type="checkbox"/> a gasoline or other fueling station | <input type="checkbox"/> a junkyard or landfill | <input type="checkbox"/> a motor vehicle repair facility | <input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility | <input type="checkbox"/> a commercial printing facility | <input type="checkbox"/> a machine shop | <input type="checkbox"/> a dry cleaners | <input type="checkbox"/> a manufacturing facility | <input type="checkbox"/> a photo developing laboratory | <input type="checkbox"/> any other industrial use | <input type="checkbox"/> a metal plating facility | | <input type="checkbox"/> a farm | |
| <input type="checkbox"/> a gasoline or other fueling station | <input type="checkbox"/> a junkyard or landfill | | | | | | | | | | | | | | | |
| <input type="checkbox"/> a motor vehicle repair facility | <input type="checkbox"/> a waste treatment, storage, disposal, processing or recycling facility | | | | | | | | | | | | | | | |
| <input type="checkbox"/> a commercial printing facility | <input type="checkbox"/> a machine shop | | | | | | | | | | | | | | | |
| <input type="checkbox"/> a dry cleaners | <input type="checkbox"/> a manufacturing facility | | | | | | | | | | | | | | | |
| <input type="checkbox"/> a photo developing laboratory | <input type="checkbox"/> any other industrial use | | | | | | | | | | | | | | | |
| <input type="checkbox"/> a metal plating facility | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> a farm | | | | | | | | | | | | | | | | |
| 2) | <p>Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.</p> | | | | | | | | | | | | | | | |
| 2a | <p>Current use of Subject Property (please check all that apply)</p> <table border="0"> <tr><td><input type="checkbox"/> Commercial (retail, offices, etc.)</td></tr> <tr><td><input checked="" type="checkbox"/> Residential (single family or apartments)</td></tr> <tr><td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td></tr> <tr><td><input type="checkbox"/> Other-Please Describe</td></tr> </table> | <input type="checkbox"/> Commercial (retail, offices, etc.) | <input checked="" type="checkbox"/> Residential (single family or apartments) | <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | <input type="checkbox"/> Other-Please Describe | <p>(please include a brief description of current operation) <i>OPEN SPACE - PARK</i></p> | | | | | | | | | | |
| <input type="checkbox"/> Commercial (retail, offices, etc.) | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Residential (single family or apartments) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Other-Please Describe | | | | | | | | | | | | | | | | |
| 2b | <p>Current use of Northern Adjoining Properties (please check all that apply)</p> <table border="0"> <tr><td><input type="checkbox"/> Commercial (retail, offices, etc.)</td></tr> <tr><td><input checked="" type="checkbox"/> Residential (single family or apartments)</td></tr> <tr><td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td></tr> <tr><td><input type="checkbox"/> Other-Please Describe</td></tr> </table> | <input type="checkbox"/> Commercial (retail, offices, etc.) | <input checked="" type="checkbox"/> Residential (single family or apartments) | <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | <input type="checkbox"/> Other-Please Describe | <p>(please include a brief description of current operation) <i>OPEN SPACE - PARK</i></p> | | | | | | | | | | |
| <input type="checkbox"/> Commercial (retail, offices, etc.) | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Residential (single family or apartments) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Other-Please Describe | | | | | | | | | | | | | | | | |
| 2c | <p>Current use of Southern Adjoining Properties (please check all that apply)</p> <table border="0"> <tr><td><input type="checkbox"/> Commercial (retail, offices, etc.)</td></tr> <tr><td><input checked="" type="checkbox"/> Residential (single family or apartments)</td></tr> <tr><td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td></tr> <tr><td><input type="checkbox"/> Other-Please Describe</td></tr> </table> | <input type="checkbox"/> Commercial (retail, offices, etc.) | <input checked="" type="checkbox"/> Residential (single family or apartments) | <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | <input type="checkbox"/> Other-Please Describe | <p>(please include a brief description of current operation) <i>OPEN SPACE - PARK</i></p> | | | | | | | | | | |
| <input type="checkbox"/> Commercial (retail, offices, etc.) | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Residential (single family or apartments) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Other-Please Describe | | | | | | | | | | | | | | | | |
| 2d | <p>Current use of Western Adjoining Properties (please check all that apply)</p> <table border="0"> <tr><td><input type="checkbox"/> Commercial (retail, offices, etc.)</td></tr> <tr><td><input type="checkbox"/> Residential (single family or apartments)</td></tr> <tr><td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td></tr> <tr><td><input type="checkbox"/> Other-Please Describe</td></tr> </table> | <input type="checkbox"/> Commercial (retail, offices, etc.) | <input type="checkbox"/> Residential (single family or apartments) | <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | <input type="checkbox"/> Other-Please Describe | <p>(please include a brief description of current operation) <i>Open space</i></p> | | | | | | | | | | |
| <input type="checkbox"/> Commercial (retail, offices, etc.) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Residential (single family or apartments) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Other-Please Describe | | | | | | | | | | | | | | | | |
| 2e | <p>Current use of Eastern Adjoining Properties (please check all that apply)</p> <table border="0"> <tr><td><input type="checkbox"/> Commercial (retail, offices, etc.)</td></tr> <tr><td><input checked="" type="checkbox"/> Residential (single family or apartments)</td></tr> <tr><td><input type="checkbox"/> Industrial (manufacturing, warehousing, processing)</td></tr> <tr><td><input type="checkbox"/> Other-Please Describe</td></tr> </table> | <input type="checkbox"/> Commercial (retail, offices, etc.) | <input checked="" type="checkbox"/> Residential (single family or apartments) | <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | <input type="checkbox"/> Other-Please Describe | <p>(please include a brief description of current operation) <i>Open space -</i></p> | | | | | | | | | | |
| <input type="checkbox"/> Commercial (retail, offices, etc.) | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Residential (single family or apartments) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Other-Please Describe | | | | | | | | | | | | | | | | |

Transaction Screen Questionnaire

Rincon Project: 04-57300 - Palisades Bluffs Stabilization Project - Santa Monica, CA

| | | |
|-----------|---|---|
| 3) | Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known. | |
| 3a | Previous use of Subject Property (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other-Please Describe | (please include a brief description of previous operations, former property owners, and dates of operation) <i>Open space - park</i> |
| 3b | Previous use of Northern Adjoining Properties (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other-Please Describe | (please include a brief description of previous operations) <i>Open space - park</i> |
| 3c | Previous use of Southern Adjoining Properties (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other-Please Describe | (please include a brief description of previous operations) <i>open space - park</i> |
| 3d | Previous use of Western Adjoining Properties (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other-Please Describe | (please include a brief description of previous operations) <i>open space</i> |
| 3e | Previous use of Eastern Adjoining Properties (please check all that apply) <input type="checkbox"/> Commercial (retail, offices, etc.) <input type="checkbox"/> Residential (single family or apartments) <input type="checkbox"/> Industrial (manufacturing, warehousing, processing) <input type="checkbox"/> Other-Please Describe | (please include a brief description of previous operations) <i>open space</i> |

| | | |
|-----------|--|-----------------------------|
| 4) | Who is the current owner of the facility? | <i>city of Santa Monica</i> |
|-----------|--|-----------------------------|

| | | |
|-----------|--|----------|
| 5) | When did current ownership begin? | <i>?</i> |
|-----------|--|----------|

| | | |
|-----------|---|----------|
| 6) | What is the age of the on-site facility? | <i>?</i> |
|-----------|---|----------|

| | | |
|-----------|---|----------|
| 7) | Who is the previous owner of the property? | <i>?</i> |
|-----------|---|----------|

Transaction Screen Questionnaire

Rincon Project: 04-57300 - Palisades Bluffs Stabilization Project - Santa Monica, CA

| | | |
|----|---|----------------------|
| 8) | Please indicate the property's current | |
| | electrical service provider - | |
| | water service provider - | City of Santa Monica |
| | natural gas service provider - | |
| | sewer service provider - | City of Santa Monica |
| | solid waste hauler - | City of Santa Monica |

| | | |
|--|---|----|
| 9) | To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate? (if yes or unknown, include how many, type, and size) | |
| | <input type="checkbox"/> Damaged or discarded automotive or industrial batteries | No |
| | <input type="checkbox"/> Pesticides | No |
| | <input type="checkbox"/> Paints | No |
| | <input type="checkbox"/> Oils or solvents | No |
| | <input type="checkbox"/> Motor vehicle fuel | No |
| | <input type="checkbox"/> Pesticides or Herbicides | No |
| <input type="checkbox"/> Other Chemicals or hazardous substances | No | |

| | | | |
|-----|--|------------------|-------------------------|
| 10) | Please indicate any wastes generated at the facility. | | |
| | Hazardous waste: | Quantity: | Disposal Method: |
| | NONE | | |
| | | | |
| | | | |

| | | |
|-----|--|------------------------------------|
| 11) | Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| | <input checked="" type="checkbox"/> No | |
| | <input type="checkbox"/> Unknown | |
| | | |

Transaction Screen Questionnaire

Rincon Project: 04-57300 - Palisades Bluffs Stabilization Project - Santa Monica, CA

| | |
|-----|---|
| 12) | Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin? |
| | <input type="checkbox"/> Yes if Yes or Unknown, please describe <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown |

| | |
|-----|--|
| 13) | Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal? |
| | <input type="checkbox"/> Yes if Yes or Unknown, please describe <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown |

| | |
|-----|---|
| 14) | Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property? |
| | <input type="checkbox"/> Yes if Yes or Unknown, please describe <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown |

| | |
|-----|---|
| 15) | Are there currently or to the best of your knowledge have there been previously, any stained soil on the property? |
| | <input type="checkbox"/> Yes if Yes or Unknown, please describe <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown |

| | |
|-----|--|
| 16) | Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property? |
| | <input type="checkbox"/> Yes if Yes or Unknown, please describe <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown |

| | |
|-----|---|
| 17) | Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property? |
| | <input type="checkbox"/> Yes if Yes or Unknown, please describe <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown |

Transaction Screen Questionnaire

Rincon Project: 04-57300 - Palisades Bluffs Stabilization Project - Santa Monica, CA

| | | |
|-----|--|------------------------------------|
| 18) | If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| | <input checked="" type="checkbox"/> No | |
| | <input type="checkbox"/> Unknown | |

| | | |
|-----|---|------------------------------------|
| 19) | Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| | <input checked="" type="checkbox"/> No | |
| | <input type="checkbox"/> Unknown | |

| | | |
|-----|---|------------------------------------|
| 20) | To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| | <input checked="" type="checkbox"/> No | |
| | <input type="checkbox"/> Unknown | |

| | | |
|-----|---|----|
| 21) | Have any of the following ever been dumped above grade, buried and/or burned on the property? (please check all that apply and describe if possible) | |
| | <input type="checkbox"/> hazardous substances | NO |
| | <input type="checkbox"/> petroleum products | NO |
| | <input type="checkbox"/> unidentified waste materials | NO |
| | <input type="checkbox"/> tires | NO |
| | <input type="checkbox"/> automotive or industrial batteries | NO |
| | <input type="checkbox"/> other waste materials (please describe) | NO |

| | | |
|-----|--|------------------------------------|
| 22) | Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| | <input checked="" type="checkbox"/> No | |
| | <input type="checkbox"/> Unknown | |

Transaction Screen Questionnaire

Rincon Project: 04-57300 - Palisades Bluffs Stabilization Project - Santa Monica, CA

| | | |
|--|---|------------------------------------|
| 23) | Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| <input checked="" type="checkbox"/> No | | |
| <input type="checkbox"/> Unknown | | |

| | | |
|--|---|------------------------------------|
| 24) | Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| <input checked="" type="checkbox"/> No | | |
| <input type="checkbox"/> Unknown | | |

| | | |
|--|--|------------------------------------|
| 25) | Do you have any environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| <input checked="" type="checkbox"/> No | | |
| <input type="checkbox"/> Unknown | | |

| | | |
|--|---|------------------------------------|
| 26) | Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| <input checked="" type="checkbox"/> No | | |
| <input type="checkbox"/> Unknown | | |

| | | |
|--|---|------------------------------------|
| 27) | Do you have any knowledge of any environmental site assessments of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| <input checked="" type="checkbox"/> No | | |
| <input type="checkbox"/> Unknown | | |

| | | |
|--|---|------------------------------------|
| 28) | Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property? | |
| | <input type="checkbox"/> Yes | if Yes or Unknown, please describe |
| <input checked="" type="checkbox"/> No | | |
| <input type="checkbox"/> Unknown | | |

Transaction Screen Questionnaire

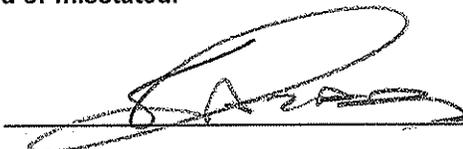
Rincon Project: 04-57300 - Palisades Bluffs Stabilization Project - Santa Monica, CA

| This questionnaire was completed by (please print) | |
|--|-----------------------------|
| Name | SPIROS A. LAZARIS |
| Title | CIVIL ENGINEER |
| Firm | CITY OF SANTA MONICA - EPWM |
| Street Address | 1918 MAIN STREET #300 |
| City, State, Zip Code | SANTA MONICA, CA 90405 |
| Phone Number | (310) 458-2283 |
| Fax Number | (310) 393-4425 |
| What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.) ? | |

Copies of the completed questionnaire should be faxed (preferably) or mailed to:

Rincon Consultants, Inc.
5355 Avenida Encinas, Suite 103
Carlsbad, CA 92008
Attention: Environmental Site Assessment Division
Fax: 760-918-9449

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.

Signature  Date 2/25/06

User Questionnaire

Rincon # 04-57300 - Palisades Bluffs Stabilization Project- Santa Monica, CA

To qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

*We respectfully request that you fill out this form and fax it to **Greg Stull at Rincon Consultants, Inc. (fax 760-918-9449)** within one week from the date of this transmittal.*

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law? (40 CFR 312.25)

Please checkmark the most appropriate response:

- I have not reviewed the records and *do not know* if there are any filed or recorded environmental liens.
- I have reviewed the records, and *No, there aren't any* filed or recorded environmental liens.
- I have reviewed the records, and *Yes, there are* environmental liens. Explain:

2. Are you aware of any activity and land use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls, that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law? (40 CFR 312.26)

Please checkmark the most appropriate response:

- I have not reviewed the records and *do not know* if there are any filed/recorded AULs or any AULs in place at the site.
- I have reviewed the records, and *No, there aren't any* filed/recorded AULs or any AULs in place at the site.
- I have reviewed the records, and *Yes, there are* AULs filed, recorded, and/or in place at the site. Explain:



User Questionnaire

Rincon # 04-57300 - Palisades Bluffs Stabilization Project- Santa Monica, CA

3. Does the Title Report provide any information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property?

Please checkmark the most appropriate response:

- I *have not* reviewed the Title Report and *do not know* if it provides environmental cleanup liens or AULs information.
- I *have* reviewed the Title Report, and *No, it does not* provide environmental cleanup liens or AULs information.
- I *have* reviewed the Title Report, and *Yes, it does provide* environmental cleanup liens or AULs information. Explain:

4. As the user of this ESA and the person seeking to qualify for the LLP, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? (40 CFR 312.28)

Please checkmark the most appropriate response:

- No*, I *do not* have any specialized knowledge and/or experience related to the property or nearby properties.
- Yes*, I *do* have specialized knowledge and/or experience related to the property or nearby properties. Explain:



User Questionnaire

Rincon # 04-57300 - Palisades Bluffs Stabilization Project- Santa Monica, CA

5. As the user of this ESA, based on your knowledge and experience related to the property, are you aware of any information pertaining to a reduction in value for the subject property relative to any known environmental issues?

Please checkmark the most appropriate response:

- No, I do not* have any information about a reduction in property value relative to environmental issues.
- Yes, I do* have information about a reduction in property value relative to environmental issues. Explain:

6. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? *Does not apply*

Please checkmark the most appropriate response:

- Yes, I do* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Skip to question #7.
- No, I do not* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Proceed to question #6a.

- a. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? (40 CFR 312.29)

Please checkmark the most appropriate response:

- No, I have not* considered the idea that known or believed contamination at the site has caused the lower purchase price.
- Yes, I have* considered the idea that known or believed contamination at the site has caused the lower purchase price. Explain.



User Questionnaire

Rincon # 04-57300 - Palisades Bluffs Stabilization Project- Santa Monica, CA

7. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? (40 CFR 312.30)

a. What are the past uses of the property?

I do not know.

I do know. Explain: *park area*

b. What (if any) specific chemicals are present, or once were present, at the property?

I do not know.

I do know. Explain:

c. What (if any) spills or other chemical releases have taken place at the property?

I do not know.

I do know. Explain:

d. What (if any) environmental cleanups have taken place at the property?

I do not know.

I do know. Explain:



8. The purpose of this Phase I ESA is . . . (checkmark all that apply)

- to assess the environmental conditions of a property, taking into account commonly and reasonably ascertainable information, and to qualify for Landowner Liability Protections under the Brownfields Amendments to CERCLA Liability.
- to identify the possible presence of recognized environmental conditions associated with possible soil and groundwater contamination at the site.
- to understand potential environmental conditions that could materially impact the operation of business associated with the parcel.
- to identify the possible presence of recognized environmental conditions that could materially impact the operation of the business associated with the parcel of commercial real estate.

9. As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property? (40 CFR 312.31)

Please checkmark the most appropriate response:

- No, I do not know and/or do not have any experience with any obvious indicators that point to the presence or likely presence of contamination at the property.*
- Yes, I do know of and/or do have experience with obvious indicators that point to the presence or likely presence of contamination at the property. Explain:*



User Questionnaire

Rincon # 04-57300 - Palisades Bluffs Stabilization Project- Santa Monica, CA

This questionnaire was completed by (please print):

| | |
|---|----------------------------|
| Name | SPROS LAZARIS |
| Title | CIVIL ENGINEER |
| Firm | CITY OF SANTA MONICA, EPWM |
| Street Address | 1918 MAIN ST. SUITE 300 |
| City, State, Zip Code | SANTA MONICA, CA 90405 |
| Phone Number | (310) 458-2283 |
| Fax Number | (310) 393-4425 |
| What is the preparer's relationship to the property (i.e., seller, buyer, occupant, property manager, employee, agent, consultant, etc.)? | |

The preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct, and to the best of the preparer's knowledge, no material facts have been suppressed or misstated.

Signature



Date

9/24/06

Please fax this form to **Greg Stull at Rincon Consultants, Inc. (fax 760-918-9449)** or mail a copy to the following address.

Rincon Consultants, Inc.
5355 Avenida Encinas, Suite 103
Carlsbad, California 92008
Attention: Greg Stull
Phone: (760) 918-9444



Rincon Consultants, Inc.

Appendix 4

**File Review Documentation
(Kurumaya USA, Inc.- 1535 Ocean Ave.**

SANTA

CITY OF



MONICA

Environmental Programs Division
(310) 458-2213
FAX (310) 393-1279

200 Santa Monica Pier, Suite C
Santa Monica, CA 90401

October 22, 1992

Mr. Kenny Hosokawa
Ito Investment
17870 Castleton
Suite 260
Industry, CA 91784

Subject: Hydraulic Lift Closure at 1535 and 1537 Ocean Avenue, Santa Monica

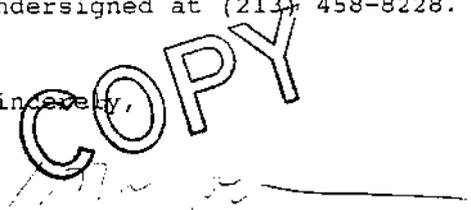
Dear Mr. Hosokawa:

This correspondence documents receipt and review by this office of "Remediation of Hydraulic Fluid Contaminated Soil Beneath Hydraulic Lift HL-9, 1535 and 1537 Ocean Avenue, Santa Monica, California" dated September 29, 1992 (as appended in a letter dated October 16, 1992) which was submitted on your behalf by Pacific Soils Environmental. The hydraulic system removal activities performed at the above noted location, as described in the submitted report, constitute compliant closure of the subject system.

If the City receives any new information regarding the environmental quality of the site, an investigation shall be conducted and this letter shall in no way limit enforcement action by the City or any other government agency or limit the property owner's responsibility for the integrity of the site.

If you have any questions regarding this correspondence, please contact the undersigned at (213) 458-8228.

Sincerely,


Brian J. Johnson
Environmental Coordinator

cc: Mr. Jack M. Collender, Pacific Soils Environmental

**REMEDICATION OF HYDRAULIC FLUID
CONTAMINATED SOIL BENEATH
HYDRAULIC LIFT HL-9
1535 AND 1537 OCEAN AVENUE
SANTA MONICA, CALIFORNIA**



PACIFIC SOILS ENVIRONMENTAL

6867 AIRPORT DR., BUILDING 100, RIVERSIDE, CA 92504-1963
TELEPHONE: (714) 358-0403, FAX: (714) 358-0592

ITO Investment
17870 Castleton
Suite 260
Industry, CA 91784

Work Order 600002F
September 29, 1992

Attention: Mr. Kenny Hosokawa

**Subject: Remediation of Hydraulic Fluid Contaminated Soil Beneath Hydraulic Lift
HL-9, 1535 and 1537 Ocean Avenue, Santa Monica, California**

References: See Appendix I

1.0 INTRODUCTION

Presented herein are the results of the remediation of hydraulic fluid contaminated soil beneath Hydraulic Lift HL-9. The Site Assessment and Remediation Work Plan for the project was submitted to the City of Santa Monica (Reference 2) and subsequently approved as related in their September 3, 1992 transmittal (Reference 1). Hydraulic Lifts HL-1 through HL-8 have been recommended for closure based on analytical results of soil beneath the lifts taken during lift removal (Reference 10) and site remediation (Reference 6). Soil contaminated with hydraulic fluid beneath Lift HL-9 was encountered to explored depths of 20 feet in Boring BR-4 (Reference 2). The contaminated soil has been excavated and removed from the property for recycling.

2.0 SOIL EXCAVATION

Soil in the vicinity of Hydraulic Lift HL-9 was excavated on September 21, 1992 by Excell Excavating. The excavation measured 17 feet long by 9 feet wide by 24 feet deep and is displayed on the attached site plan (Plate 1, in pocket). The excavated soil was stockpiled on and covered with visqueen prior to transportation from the site.

3.0 ANALYTICAL SOIL TESTING

Soil sampling was directed by Mr. Brian Johnson, Environmental Coordinator for the City of Santa Monica Environmental Programs Division. Two (2) samples were obtained from the bottom of the excavation. Sample S-1 was obtained prior to Mr. Johnson's arrival in order to determine that sufficient soil had been removed. Sample HL9-R1 was obtained from the bottom of the excavation as directed by Mr. Brian Johnson. Five (5) sidewall samples were obtained from the excavation. Soil samples were analyzed for total

recoverable petroleum hydrocarbons (TRPH, EPA Method 418.1) using a California State Certified mobile lab provided by Diversified Analytical Services, Inc. of Inglewood. Table 1 summarizes the sample locations, depths and analytical results. The analytical report and chain of custody form are appended hereto (Appendix II). Analytical results were within the acceptable range of below 100 parts per million (ppm) based on City of Santa Monica Environmental Programs Division requirements.

TABLE 1. SUMMARY OF ANALYTICAL RESULTS

| <u>Sample Number</u> | <u>Location (from plan north)</u> | <u>Depth (feet)</u> | <u>418.1 Results (mg/kg)</u> |
|-----------------------------|--|----------------------------|-------------------------------------|
| S-1 | Bottom | 24 | 12.3 |
| HL9-R1 | Bottom | 24 | 7.4 |
| HL9-R2 | East Sidewall | 22 | 10.7 |
| HL9-R3 | North Sidewall | 22 | ND |
| HL9-R4 | West Sidewall | 20 | ND |
| HL9-R5 | South Sidewall | 20 | ND |
| HL9-R6 | East Sidewall | 17 | ND |

ND - Not Detected

4.0 SOIL REMOVAL

Excavated soil was loaded into trucks using a backhoe and transported from the property by Protrans Trucking of Lake Forest. The soil was transported as non-hazardous to Pomona Valley Equipment, Inc. for incorporation into an asphalt process. A total of 81.64 tons of soil was removed from the property. Non-Hazardous Waste Data Forms are appended hereto (Appendix III).

5.0 BACKFILL COMPACTION

The pea gravel backfill for hydraulic lifts HL-1 through HL-8 was excavated and compacted to 90% relative compaction using a vibratory plate attached to a backhoe. The backfill for hydraulic lift HL-9 was also compacted to 90% relative compaction as per the requirement stated on the permit application to remove the underground storage tanks. A

compaction report for the backfill was prepared by Pacific Soils Engineering, Inc. This report is appended hereto (Appendix IV).

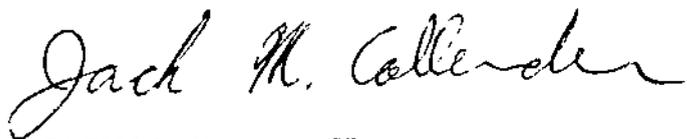
6.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on analytical test results and observations made during the removal of hydraulic oil contaminated soil beneath hydraulic lift HL-9 and on information presented in the referenced reports.

- 1) Analytical testing of soil sampled beneath Hydraulic Lift HL-9 resulted in TRPH concentrations ranging from not detected to 12.3 mg/kg. These results are well below 100 ppm as required by the City of Santa Monica Environmental Programs Division. Closure is recommended for Hydraulic Lift HL-9.
- 2) Based on information presented in the referenced reports, closure is recommended for Hydraulic Lifts HL-1 through HL-8.

This report is subject to review and approval by the regulatory agency for the subject project.

Respectfully submitted,
PACIFIC SOILS ENVIRONMENTAL



JACK M. COLLENDER,
Project Geologist
CEG 1440, EXP: 6/30/94
REA 2284, EXP: 6/30/93



L. WADE WILMARTH,
Vice President/Division Manager
CEG 1308, EXP: 6/30/94
REA 1628, EXP: 6/30/93
CHMM 3351, EXP: 12/92

Encl.

Dist: (3) Addressee
(2) City of Santa Monica, attn: Mr. Brian Johnson
(1) Lawrence and Harding, attn: Ms. Ann Lederer

JMC:LWW:02F01

I-T-O INVESTMENTS
17870 CASTLETON STREET
SUITE 260
INDUSTRY, CA 91748
PHONE: (818) 913-8895
FAX: (818) 913-2551

Mr. Brian J. Johnson
City of Santa Monica
Environmental Programs Division
200 Santa Monica Pier, Suite C
Santa Monica, CA 90401

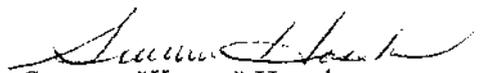
September 23, 1992

**SUBJECT: Name Change of Property Owner, Remediation of Hydraulic Oil
Contaminated Soil, 1535 and 1537 Ocean Avenue, Santa Monica, California**

Dear Mr. Johnson:

This transmittal is to request a name change of the property owner for 1535 and 1537 Ocean Avenue from Kurumaya USA, Inc. to I-T-O Investments. Kurumaya USA, Inc. is the property management company while I-T-O Investments is the property owner. Correspondence should still be sent to my attention. Please excuse this inadvertent mistake. Thank you for your cooperation.

Respectfully submitted,


Susumu "Kenny" Hosokawa

RECEIVED 7/29/92

**ADDENDUM ENVIRONMENTAL REPORT,
REMEDICATION OF CONTAMINATED SOIL
BENEATH SIX (6) HYDRAULIC FLOOR LIFTS,
1535 AND 1537 OCEAN AVENUE,
SANTA MONICA, CALIFORNIA**

**WORK ORDER 600002D
JULY 29, 1992
KURUMAYA USA, INC.**



PACIFIC SOILS ENVIRONMENTAL
6867 AIRPORT DR., BUILDING 100, RIVERSIDE, CA 92504-1963
TELEPHONE: (714) 358-0403. FAX: (714) 358-0592

Kurumaya USA, Inc.
17870 Castleton
Suite 260
Industry, CA 91784

Work Order 600002D
July 29, 1992

Attention: Mr. Kenny Hosokawa

Subject: Addendum Environmental Report, Remediation of Contaminated Soil Beneath Six (6) Hydraulic Floor Lifts, 1535 and 1537 Ocean Avenue, Santa Monica, California

Reference: Environmental Report for Removal of Nine (9) Hydraulic Floor Lifts at 1535 and 1537 Ocean Avenue, Santa Monica, California; by Pacific Soils Environmental, dated May 1, 1992 (W.O. 600002C)

1.0 INTRODUCTION

Presented herein are the results of contaminated soil removal remediation beneath six (6) hydraulic lifts at 1535 and 1537 Ocean Avenue, Santa Monica, California. Nine (9) hydraulic lifts and associated piping were removed from the site on April 16 and 17, 1992 (see Referenced Report). Soil beneath three (3) of the nine (9) lifts had Total Recoverable Petroleum Hydrocarbon (TRPH, EPA Method 418.1) concentrations below 100 parts per million (ppm) and were recommended for closure in the Referenced Report. Soil beneath six (6) of the nine (9) lifts had TRPH concentrations above 100 parts per million (ppm). The City of Santa Monica Environmental Programs Division required the removal of soil with TRPH concentrations in excess of 100 ppm.

Removal of hydrocarbon contaminated soil beneath the six (6) floor lifts was performed July 6 and 7, 1992. Contaminated soil was removed from the property and the excavations were backfilled on July 7 and 8, 1992. Environmental sampling was performed under the direction of Mr. Brian Johnson, Environmental Coordinator for the City of Santa Monica. Presented herein are the results of the site mitigation operations.

2.0 SOIL EXCAVATION

Excavation of soil beneath hydraulic lifts HL-1, HL-2, HL-4, HL-5, HL-6 and HL-9 was performed using a backhoe. Excavation locations are displayed on the Environmental Site Plan (Plate 1, pocket enclosure). Excavated soil was stockpiled and covered with Visqueen prior to removal from the property. Excavations were backfilled with clean pea gravel delivered to the site by Excell Excavating.

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

| | | | | | | |
|--|--|--|--|--|---|--|
| EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE. | | |
| REPORT DATE 0 M 5 M 1 D 3 D 9 Y 2 Y | | CASE # | | SIGNED _____ DATE 5/13/92 | | |
| REPORTED BY | NAME OF INDIVIDUAL FILING REPORT Brian J. Johnson | | PHONE (310) 458-8227 | | SIGNATURE | |
| | REPRESENTING <input checked="" type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OTHER | | COMPANY OR AGENCY NAME City of SANTA MONICA | | | |
| | ADDRESS 200 Santa Monica Pier - Suite E Santa Monica, CA 90401 | | | | | |
| RESPONSIBLE PARTY | NAME Ken Hosokawa | | CONTACT PERSON <input type="checkbox"/> UNKNOWN | | PHONE (818) 913-8895 | |
| | ADDRESS 17870 Castleton - Suite 260 Industry, CA 91784 | | | | | |
| SITE LOCATION | FACILITY NAME (IF APPLICABLE) KURUMAYA USA, INC. | | OPERATOR Ken Hosokawa | | PHONE (818) 913-8895 | |
| | ADDRESS 1535-1537 Ocean Ave. Santa Monica LA 90401 | | | | | |
| | CROSS STREET | | TYPE OF AREA <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> RURAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> OTHER | | TYPE OF BUSINESS <input type="checkbox"/> RETAIL FUEL STATION <input type="checkbox"/> FARM <input checked="" type="checkbox"/> OTHER auto repair | |
| IMPLEMENTING AGENCIES | LOCAL AGENCY City of SANTA MONICA | | AGENCY NAME | | CONTACT PERSON Brian J. Johnson | |
| | REGIONAL BOARD LA Region | | | | PHONE (310) 458-8227 | |
| SUBSTANCES INVOLVED | (1) NAME hydraulic oil | | QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN | | | |
| | (2) NAME acetone | | QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN | | | |
| DISCOVERY/ABATEMENT | DATE DISCOVERED 0 M 4 M 1 D 6 D 9 Y 2 Y | | HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input type="checkbox"/> TANK TEST <input checked="" type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER | | | |
| | DATE DISCHARGE BEGAN _____ M _____ M _____ D _____ D _____ Y _____ Y <input checked="" type="checkbox"/> UNKNOWN | | METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> REPLACE TANK <input checked="" type="checkbox"/> CLOSE TANK <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> OTHER | | | |
| | HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 0 M 4 M 1 D 6 D 9 Y 2 Y | | | | | |
| SOURCE/CAUSE | SOURCE OF DISCHARGE <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER | | TANKS ONLY/CAPACITY _____ GAL. AGE _____ YRS <input checked="" type="checkbox"/> UNKNOWN | | MATERIAL <input type="checkbox"/> FIBERGLASS <input type="checkbox"/> STEEL <input type="checkbox"/> OTHER | |
| | CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> CORROSION <input type="checkbox"/> UNKNOWN <input type="checkbox"/> SPILL <input checked="" type="checkbox"/> OTHER | | | | | |
| CASE TYPE | CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED) | | | | | |
| CURRENT STATUS | CHECK ONE ONLY <input checked="" type="checkbox"/> SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) <input type="checkbox"/> CLEANUP IN PROGRESS <input type="checkbox"/> SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> NO FUNDS AVAILABLE TO PROCEED <input type="checkbox"/> EVALUATING CLEANUP ALTERNATIVES | | | | | |
| REMEDIAL ACTION | CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> OTHER (OT) | | | | | |
| COMMENTS | _____ | | | | | |

SANTA

CITY OF

MONICA



Environmental Programs Division
General Services Department
(310) 458-2213

200 Santa Monica Pier, Suite C
Santa Monica, CA 90407
FAX (310) 393-1279

May 11, 1992

Mr. Kenny Hosokawa
17870 Castleton
Suite 260
Industry, CA 91784

CERTIFIED

SUBJECT: Subsurface contamination from hydraulic floor lifts located at 1535 and 1537 Ocean Avenue, Santa Monica

Dear Mr. Hosokawa:

This correspondence documents receipt and review by this office of "Environmental Report for Removal of Nine Hydraulic Floor Lifts at 1535 and 1537 Ocean Avenue, Santa Monica, California" dated May 1, 1992 submitted on your behalf by Pacific Soils Environmental .

On or about April 16, 1992, nine hydraulic floor lifts were excavated and removed from the ground at the above referenced location. Visual and olfactory evidence suggested that contamination of the subsurface soils had occurred as a result of failure of the hydraulic system. Soil samples taken from the lift excavations and spoils pile were subsequently analyzed for hydrocarbon contamination by Applied P & CH Laboratory (APCL). Analysis results from APCL confirmed the presence of hydrocarbon contamination at levels up to 47,000 parts per million. In addition, acetone has been detected in one soil sample at 110 parts per million. The City of Santa Monica has established an action level of 100 parts per million total petroleum hydrocarbons. Analysis of soils at the above referenced site have exceeded the action level.

This Department, which is authorized to enforce underground tank regulations (Chapters 6.5 and 6.7 of the California Health and Safety Code as adopted by City of Santa Monica Municipal Code Sections 8600 et.seq.) directs you or your designate to develop and submit a site assessment plan to this office within 30 days of receipt of this certified letter. The plan must include the proposed methods to obtain the following information:

- 1) Identification of the nature, source and estimated volume of the released contamination.
- 2) Identification of the lateral and vertical extent of the soil and groundwater contamination and the concentration of the contaminants;
- 3) Proposed number and location of samples and borings;
- 4) Proposed laboratory analyses and methods;
- 5) Depth to groundwater and groundwater gradient;
- 6) Description of soil profile;

- 7) Hydrogeological setting;
- 8) Present and future uses of groundwater and surface water that may be impacted by the contaminant material.

Further field investigations may begin only after the submission of results from the approved site assessment. Based on these results, the following remedial actions must be followed as applicable:

- 1) Demonstrate to the satisfaction of this office that the contaminated soil, if left in place would not present a potential public health or environmental hazard. This demonstration shall be made by conducting an environmental fate and risk determination analysis for the contaminants at the subject site. This analysis shall evaluate the potential for movement of the contaminants into adjoining soil or groundwater and the associated public health or environmental effects.
- 2) Render the contaminated soil non-hazardous. A proposal describing the treatment process must be submitted to this office for approval prior to initiation of such process. In addition, permits must be obtained from all appropriate regulatory agencies.
- 3) Remove all contaminated sub-surface materials and dispose of the materials in an approved manner. If any material is removed as hazardous waste (as defined in Chapter 6.5 of the California Health and Safety Code or Title 22 of the California Administrative Code), a State registered hazardous waste hauler must be employed. A legible photocopy of every Uniform Hazardous Waste Manifest signed by the receiving facility must be submitted to this office for disposal verification.

The soil excavated in conjunction with the lifts (and piled next to the lift pits) is contaminated and may not be placed back in the excavation. This material must be disposed of offsite in an appropriate manner. Documentation of the disposal of this material shall be submitted to this office.

Conclusions and recommendations stated in the above referenced report suggest a site cleanup level of 1,000 parts per million Total Recoverable Petroleum Hydrocarbons. Please be advised that the City of Santa Monica has established a guideline cleanup level of 100 parts per million total recoverable petroleum hydrocarbons. Please submit a remedial proposal based upon this cleanup level. In addition, background levels of petroleum hydrocarbons shall be established by sampling and analysis of soils outside the vehicle maintenance area.

Enclosed please find a completed Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report for your records.

Please submit the proposed site investigation plans to this office within 30 days of receipt of this letter. If you have any questions regarding these requirements, please contact me at (213) 458-8228.

Sincerely,

Brian J. Johnson
Environmental Coordinator

enclosure

**ENVIRONMENTAL REPORT FOR REMOVAL OF
NINE (9) HYDRAULIC FLOOR LIFTS AT
1535 AND 1537 OCEAN AVENUE,
SANTA MONICA, CALIFORNIA**



PACIFIC SOILS ENVIRONMENTAL

6867 AIRPORT DR., BUILDING 100, RIVERSIDE, CA 92504-1963
TELEPHONE: (714) 358-0403. FAX: (714) 358-0592

Kurumaya USA, Inc.
17870 Castleton
Suite 260
Industry, CA 91784

Work Order 600002C
May 1, 1992

Attention: Mr. Kenny Hosokawa

Subject: Environmental Report For Removal of Nine (9)
Hydraulic Floor Lifts at 1535 and 1537 Ocean
Avenue, Santa Monica, California

1.0 INTRODUCTION

Removal of nine (9) hydraulic floor lifts, associated piping and an underground hydraulic oil tank at the closed automobile repair facility at 1535 and 1537 Ocean Avenue in Santa Monica was performed on April 16 and 17, 1992. An underground hydraulic oil tank occurred near Hydraulic Lift HL-3. Removal of the hydraulic lifts, tank and associated piping was performed under the regulation and permitting of the City of Santa Monica Environmental Division. Mr. Brian J. Johnson, Environmental Coordinator, directed the tank removal and soil sampling. Location of the floor lifts and soil samples are plotted on the attached Environmental Map (Plate 1). A plan north arrow has been added to the map, per the request of Mr. Brian Johnson. The plan north was chosen for convenience and not a reflection of true north.

2.0 LIFT REMOVAL

Hydraulic lift removal was performed by Excell Excavating on April 16, 1992. Concrete surrounding the lifts and associated piping was broken using a vibratory breaker attached to a Caterpillar backhoe. Soil around the lifts was excavated and the lifts were pulled using the Caterpillar backhoe. The underground hydraulic oil tank was left in the ground until Mr. Brian Johnson from the City of Santa Monica could observe its removal.

May 1, 1992

The hydraulic lifts, underground tank and associated piping were rinsed on April 17, 1992 by A.M. Pumping Environmental Services. The rinseate was transported from the site to Gibson Oil and Refinery Company, Inc. as non-RCRA regulated liquid waste under Uniform Hazardous Waste Manifest 90496416, appended hereto (Appendix I). The lifts, piping and underground tank were transported as non-hazardous waste to Adams International Metals Corporation and scrapped. The Certificate of Destruction is appended hereto (Appendix I).

3.0 SOIL SAMPLING

Soil sampling was performed under the direction of Mr. Brian Johnson, Environmental Coordinator, City of Santa Monica Environmental Division. Soil encountered near the lifts consisted of moderate brown silty clay. Petroleum related stained soil was observed in the excavation for Hydraulic Lifts HL-1 and HL-9. A strong petroleum-like odor was detected in the excavation for Hydraulic Lift HL-1. Drive tube samples were obtained beneath each of the hydraulic lifts. Drive tube side wall samples were obtained from the plan west wall of Lifts HL-1 and the plan south wall of Lift HL-9 where obvious petroleum related stained soil occurred. Grab samples were obtained from the spoil piles. A grab sample was taken from the spoil for Lift HL-1 (Sample C-HL1), HL-9 (Sample C-HL9) and composites were taken from spoil piles for lifts HL-2 through HL-5 (Sample C-HL2-5) and HL-6 through HL-8 (Sample C-HL6-8). Sample locations are summarized in Table 1 and plotted on the attached Environmental Map (Plate 1).

The soil samples were placed in an ice chest, cooled with blue ice and transported to the laboratory for analyses. A copy of the laboratory Chain of Custody Form, laboratory

May 1, 1992

TABLE 1

SUMMARY OF SAMPLE LOCATIONS

| Sample Number | Sample Type | Location | Distance From Bearing Wall (feet) | Depth (feet) |
|---------------|-------------|------------------------------------|-----------------------------------|--------------|
| HL-1B | Drive Tube | Bottom | 11.5 | 7.0 |
| HL-1S | Drive Tube | Plan West Sidewall | 12.0 | 3.5 |
| HL-2B | Drive Tube | Bottom | 10.0 | 7.5 |
| HL-3B | Drive Tube | Bottom | 12.0 | 7.5 |
| HL-4B | Drive Tube | Bottom | 12.0 | 7.5 |
| HL-5B | Drive Tube | Bottom | 11.0 | 8.0 |
| HL-6B | Drive Tube | Bottom | 14.0 | 8.0 |
| HL-7B | Drive Tube | Bottom | 14.0 | 7.0 |
| HL-8B | Drive Tube | Bottom | 13.0 | 7.5 |
| HL-9B | Drive Tube | Bottom | 13.0 | 7.5 |
| HL-9S | Drive Tube | Plan West Sidewall | 12.0 | 4.0 |
| C-HL1 | Grab | Lift HL-1 Spoil Composite | — | — |
| C-HL2-5 | Grab | Lifts HL-2 to HL-5 Spoil Composite | — | — |
| C-HL6-8 | Grab | Lifts HL-6 to HL-8 Spoil Composite | — | — |
| C-HL9 | Grab | Lift HL-9 Spoil Composite | — | — |

May 1, 1992

QA/AC report and the analytical results are appended hereto (Appendix II). All samples were analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH, EPA Test Method 418.1). Samples HL-1S, HL-1B, HL-9S, HL-9B, C-HL1 and C-HL9 from Lifts HL-1 and HL-9 were also analyzed for Volatile Organics (EPA Test Method 8240) at the request of Mr. Brian Johnson. Analytical results are summarized in Table 2.

4.0 GEOLOGY/HYDROLOGY

The site location is plotted on the enclosed portions of the Beverly Hills and Topanga United States Geological Survey (USGS) 7.5 minute Quadrangle Topographic Maps (Figure 1). The elevation of the property is approximately 60 feet. Topography ascends at a gentle gradient to the north. Palisades Park and the Pacific Ocean are across Ocean Avenue from the site.

Terrace deposits underlie the site (State of California, 1961). These deposits consist of interbedded sand, silt, clay and gravel. Bedrock underlying the terrace deposits is assigned to the upper Pleistocene Lakewood Formation and consists of interbedded sandstone, siltstone and claystone.

Regional ground water data for the site and vicinity is limited owing to lack of ground water resource development in the Santa Monica area. The site is located within the Santa Monica Plain which comprises the northern portion of the Santa Monica Basin. This basin is bounded by the Santa Monica Mountains to the north, the Newport-Inglewood fault zone to the east, the West Coast Basin to the south and the Pacific Ocean to the west. The Santa Monica Plain is not designated as an active ground water basin in the Hydrologic Data Report for 1985 (State of California, 1988). Ground

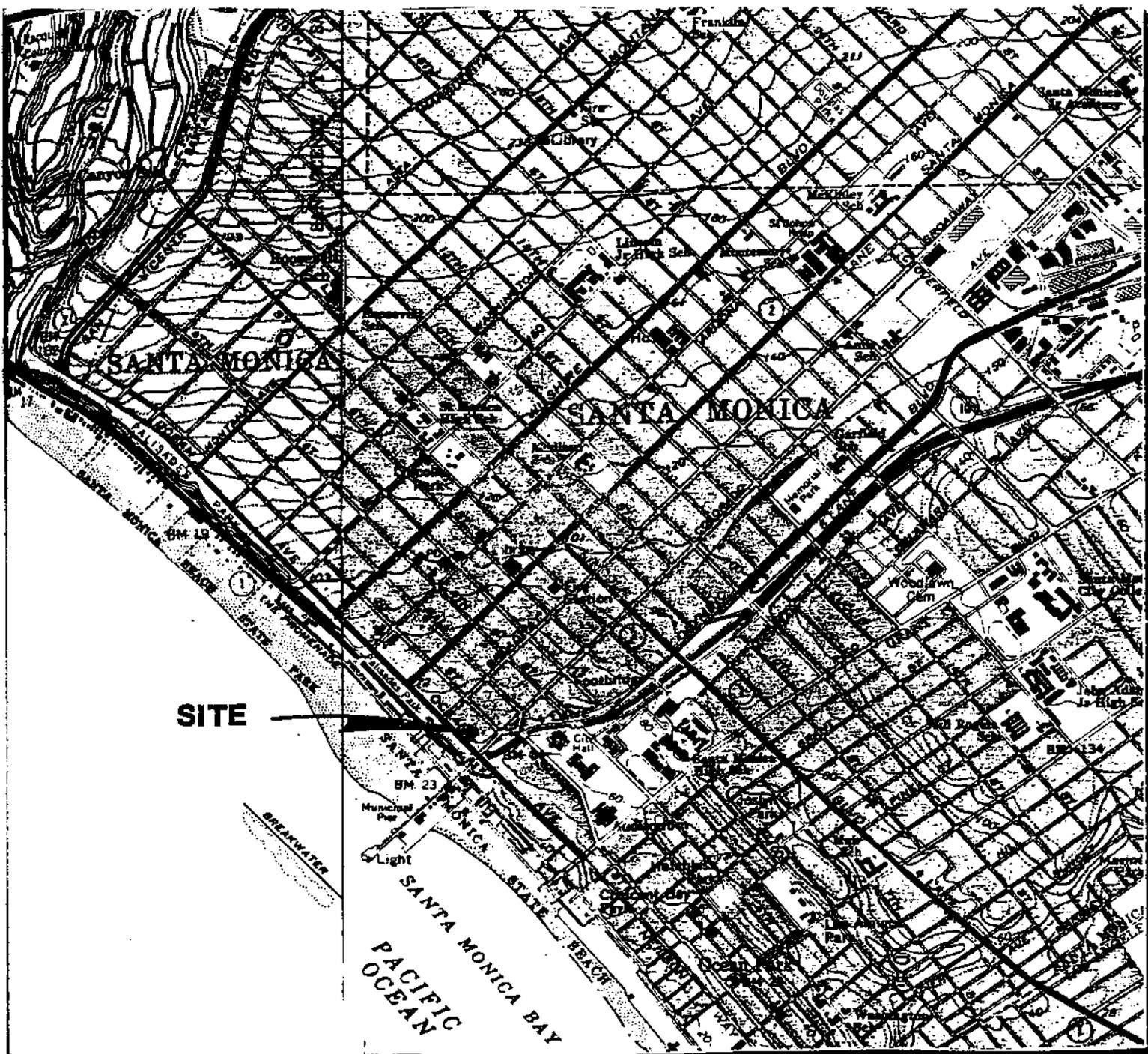
May 1, 1992

TABLE 2LABORATORY RESULTS

| <u>Sample Number</u> | <u>TRPH 418.1 mg/kg</u> | <u>Acetone 8240 ug/kg</u> | <u>Ethylbenzene 8240 ug/kg</u> | <u>o-xylene 8240 ug/kg</u> | <u>m-xylene p-xylene 8240 ug/kg</u> |
|--------------------------|---------------------------------|-----------------------------------|--|------------------------------------|---|
| HL-1S | 17,125 | ND | 19 | 28 | 79 |
| HL-1B | 21,800 | 110 | 13 | 15 | 45 |
| HL-2B | 2,200 | - | - | - | - |
| HL-3B | 41 | - | - | - | - |
| HL-4B | 1,950 | - | - | - | - |
| HL-5B | 115 | - | - | - | - |
| HL-6B | 412 | - | - | - | - |
| HL-7B | 25 | - | - | - | - |
| HL-8B | 34 | - | - | - | - |
| HL-9S | 47,000 | ND | ND | ND | ND |
| HL-9B | 21,250 | ND | ND | ND | ND |
| C-HL1 | 2,100 | ND | 18 | 27 | 72 |
| C-HL2-5 | 340 | - | - | - | - |
| C-HL6-8 | 68 | - | - | - | - |
| C-HL9 | 42,500 | ND | ND | ND | ND |

- = Not tested

ND = Not Detected



SITE LOCATION MAP



SCALE: 1" = 2000'

SOURCE: USGS: BEVERLY HILLS AND TOPANGA QUADRANGLES

FIGURE 1

PACIFIC SOILS ENVIRONMENTAL

W.O. 60002C

DATE 5/1/92

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water contours based on historic records suggest ground water flows to the south away from the Santa Monica Mountains and to the west toward the Pacific Ocean (Poland and others, 1959). In the vicinity of the site, ground water data is scarce. Ground water is assumed to flow southwest toward the ocean based on interpolation of ground water contours from the Map of the Torrance-Santa Monica area showing water level contours for March, 1933 (Figure 2 from Plate 9 of Poland and others, 1959). Ground water level beneath the site is interpreted to be between sea level and ten feet above sea level.

The California Department of Water Resources (DWR) and the Los Angeles County Department of Public Works (DDPW) Hydrology Division were contacted to obtain water well records in the vicinity of the property. The only current information was obtained from the DPW. The nearest well to the site is Well Number 2539L, approximately 1.6 miles to the east at the intersection of 16th and Marine. The ground surface elevation at this well is 26 feet and the depth to water measured on April 30, 1990 was 20 feet.

Precipitation totaling 7.84 inches was recorded at the Santa Monica Pier for the 1984-1985 year (State of California, 1988). Average annual rainfall for the Los Angeles Civic Center is 14.82 inches/year (County of Los Angeles, 1990).

5.0 PREVIOUS INVESTIGATION

A previous subsurface investigation associated with the purchase of the property was performed at the site on Wednesday, February 5, 1992 per the request of Kurumaya USA, Inc. Three borings were completed to a depth of 30 feet using a B-47 hollow stem auger. Boring locations are plotted on the enclosed Environmental Map (Plate 1, pocket enclosure). Boring B-101

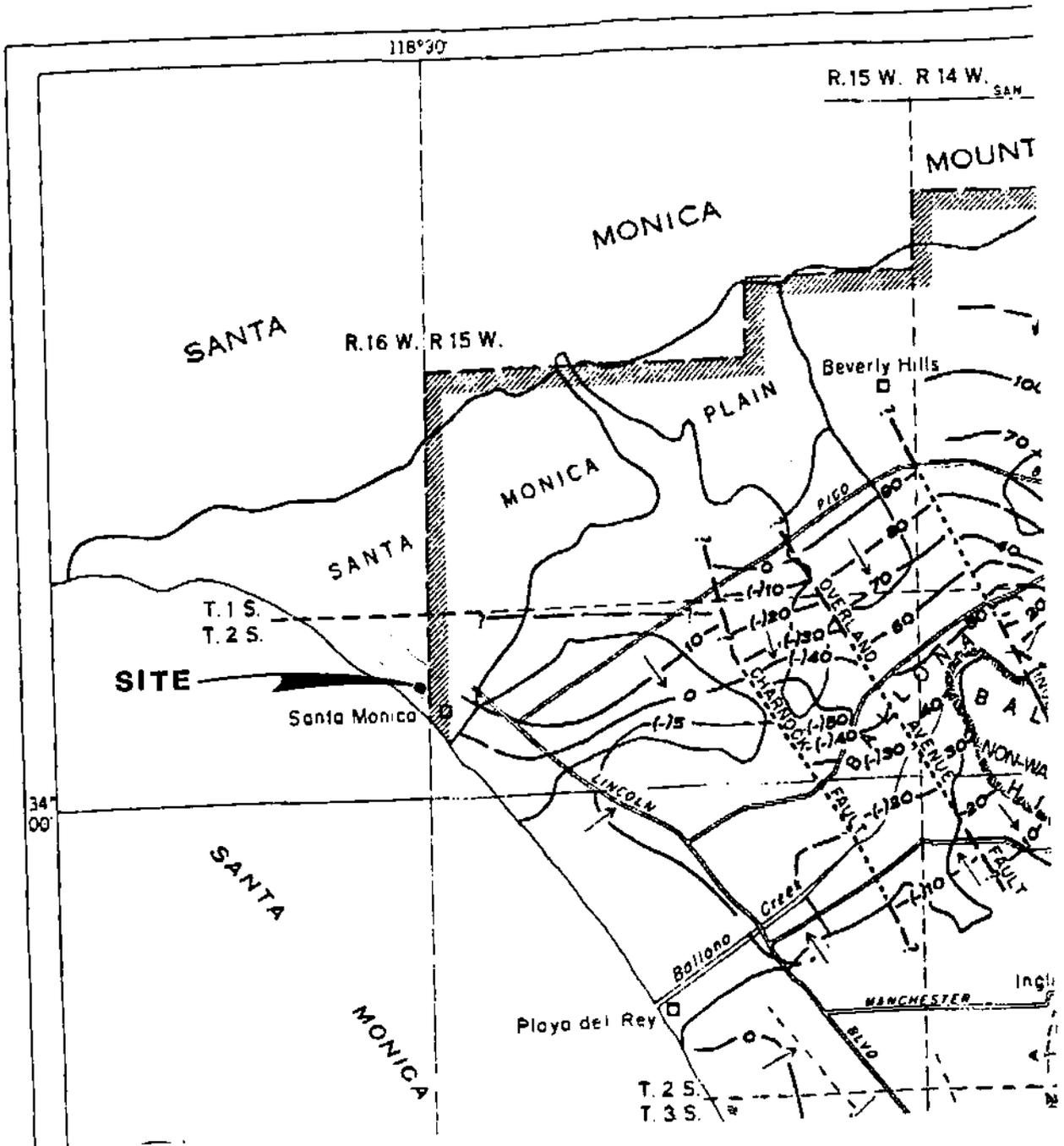


Figure 2. Water level contours for March, 1933. Datum is mean sea level (from Plate 9, Poland and others, 1959).

May 1, 1992

was sited between Hydraulic Lifts HL-2 and HL-3. Boring B-102 was located between the floor drain and the wood covered pit and B-103 was in the plan northern portion of the building. Boring Logs, Laboratory Chain of Custody Form and the analytical results are appended hereto (Appendix III). The analytical results are also summarized in Table 3.

Based on the Boring Logs, approximately 15 feet of moderate brown silty clay underlies the site. Beneath the silty clay, interbedded clayey gravel, silty sand and silty clay was encountered. No ground water occurred in the borings. Selected soil samples were tested for TRPH (EPA Test Method 418.1) and Purgable Halocarbons (EPA Test Method 8010). Analytical results from the TRPH testing are interpreted to reflect background concentrations in the soil. Purgable Halocarbons were not detected in the soil samples tested.

TABLE 3

SUMMARY OF LABORATORY RESULTS

| <u>Boring Number</u> | <u>Sample Number</u> | <u>Analysis Method</u> | <u>Results (mg/kg)</u> |
|----------------------|----------------------|------------------------|------------------------|
| B-101 | 101-3 @ 10' | 418.1 | 60 |
| | 101-5 @ 15.5' | 418.1 | 3 |
| | 101-6 @ 20' | 418.1 | 10 |
| | 101-7 @ 30' | 418.1 | 6 |
| B-102 | 102-2 @ 10' | 418.1, 8010 | 25, N.D. |
| | 102-3 @ 16' | 418.1 | 14 |
| | 102-4 @ 20' | 418.1, 8010 | 14, N.D. |
| | 102-6 @ 30' | 418.1 | 25 |
| B-103 | 103-1 @ 5' | 418.1, 8010 | 21, N.D. |
| | 102-3 @ 10' | 418.1 | 14 |
| | 103-3 @ 25' | 418.1, 8010 | 10, N.D. |
| | 103-4 @ 30' | 418.1 | 25 |

N.D. - Not Detected

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6.0 CONCLUSIONS AND RECOMMENDATIONS

The site at 1535 and 1537 Ocean Avenue in Santa Monica is underlain by terrace deposits. The upper 15 feet of these deposits consist of silty clay. The site elevation is 60 feet. Ground water is assumed to occur between sea level and ten (10) feet above sea level. Recent water well records within one mile of the property are unavailable, most probably due to the very limited development of ground water resources in the Santa Monica Plain. Precipitation in Los Angeles averages 14.82 inches per year. The area surrounding the building is developed and sealed by paving, diverting much of the rainwater to storm drains.

The only volatile organics detected on the property were from soil samples taken near Hydraulic Lift HL-1. No volatile organics were detected in the sample with the highest TRPH reading of 47,000 mg/kg (Sample HL-9S). Due to the low permeability of the clay soil, limited infiltration from precipitation, absence of volatile organics and depth to ground water in excess of 25 feet, a TRPH cleanup level of 1,000 parts per million (ppm) is suggested based on guidelines presented in Table 2-1 of the Leaking Underground Fuel Tank (LUFT) Field Manual (State Water Resources Control Board, 1989). However, due to the expected amount of contamination derived from the floor lifts most probably, upon removal of the contaminated soil areas, TRPH levels of in-place materials should probably be significantly lower than 1,000 ppm.

Soil contamination in excess of 1,000 mg/kg was detected at the site. This soil contamination is limited to the vicinity of the hydraulic lifts and is expected to be minor. It is proposed that this contaminated soil be excavated and placed in sealed 55 gallon steel drums to be removed from the

May 1, 1992

property for proper treatment and disposal. A mobile lab is recommended to accomplish testing during the removal operations.

- 1) Volatile organics including acetone, ethylbenzene and xylene were detected in samples obtained near Hydraulic Lift HL-1. All other sample tests for volatile organics resulted in non-detects. This contaminated soil is to be excavated and removed from the property for proper treatment and disposal. Verification of cleanup to be based upon additional testing (EPA Methods 8020 and/or 8240).
- 2) The highest TRPH concentration of 47,000 mg/kg was detected in Sample HL-9S from Hydraulic Lift HL-9. This soil is to be excavated and removed from the property for proper disposal.
- 3) TRPH levels in excess of 1,000 mg/kg were also detected in Samples HL-2B and HL-4B obtained beneath Hydraulic Lifts HL-2 and HL-4. The contaminated soil beneath these lifts is to be excavated and removed from the property for proper treatment and disposal.
- 4) Soil Samples HL-3B, HL-5B, HL-6B, HL-7B and HL-8B had TRPH concentrations ranging between 25 mg/kg to 412 mg/kg. Based upon these low detect levels, which range from normal background concentrations to levels which pose no environmental threat, closure is requested for Hydraulic Lifts HL-3, HL-5, HL-6, HL-7 and HL-8 where these samples were obtained.

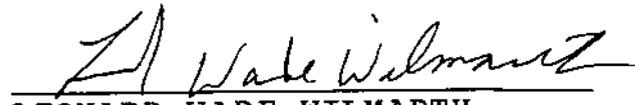
May 1, 1992

- 5) Composite grab samples were obtained from spoil piles generated from the removal of the hydraulic lifts. Volatile organics were only detected in Sample C-HL1. Elevated TRPH concentrations were detected in Samples C-HL1, C-HL2-5 and C-HL9. In the case of C-HL2-5, a composite of the spoil generated from Hydraulic Lifts HL-2 through HL-5, additional testing is warranted to determine if the elevated TRPH concentration is associated with one or more specific lifts. The TRPH concentration of 68 mg/kg from Sample C-HL8 is considered to represent background concentrations in the soil. Since spoil dirt is a composite of excavations, selective partitioning of different contaminant levels is tenuous at best, therefore, spoil containing TRPH concentrations above background levels are to be removed from the property for proper treatment and disposal.

This report is subject to review by the controlling authorities of the subject property.

Respectfully submitted,
PACIFIC SOILS ENVIRONMENTAL


 JACK M. COLLENDER,
 Project Geologist
 CEG 1440, REA 2284
 EXP: 6-30-92


 LEONARD WADE WILMARTH,
 Vice President/Division Manager
 CEG 1308, REA 1628
 EXP: 6-30-92
 CHMM 3351, EXP: 12/92

Dist: (4) Addressee
(2) City of Santa Monica, attn: Mr. Brian Johnson

JMC:LWW/pjh-03

Appendix G

Mitigation Monitoring and Reporting Plan



Mitigation Monitoring and Reporting Program

Santa Monica Palisades Bluffs Improvement Project IS/MND

Prepared for:

**City of Santa Monica EPWM
Civil Engineering and Architecture Department**
1918 Main Street, Suite 300
Santa Monica, CA 90405

Prepared by:

Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, California 93001

July 2007

Mitigation Monitoring and Reporting Program

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Santa Monica Palisades Bluffs Improvement Project proposed in the City of Santa Monica, California. Public Resources Code Section 21081.6(a) requires that a Lead Agency adopt an MMRP prior to approving a project in order to mitigate or avoid significant impacts that have been identified in an Initial Study/Mitigated Negative Declaration. The purpose of the MMRP is to ensure that the required mitigation measures identified in the Initial Study/Mitigated Negative Declaration are implemented as part of the overall project implementation. In addition to ensuring implementation of mitigation measures, the MMRP provides feedback to agency staff and decision-makers during project implementation, and identifies the need for enforcement action before irreversible environmental damage occurs.

The following table summarizes the mitigation measures for each issue area identified in the Initial Study/Mitigated Negative Declaration for the Santa Monica Palisades Bluffs Improvement Project. The table identifies each mitigation measure; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring frequency; and the agency or party responsible for ensuring that the monitoring is performed. In addition, the table includes columns for compliance verification. These columns would be filled out by the monitoring agency or party and would document monitoring compliance. Where an impact was identified to be less than significant, no mitigation measures were required.

This MMRP will be used by City staff or the City's consultant to determine compliance with permit conditions. Violations of these conditions may cause the City to revoke the operating permit.



Santa Monica Palisades Bluffs Improvement Project IS/MND
Mitigation Monitoring and Reporting Program

| Mitigation Measure/Condition of Approval | Action Required | When Monitoring to Occur | Monitoring Frequency | Responsible Agency or Party | Compliance Verification | | |
|--|--|---|---|---|-------------------------|------|----------|
| | | | | | Initial | Date | Comments |
| AESTHETICS | | | | | | | |
| AES-1 Vegetated Covering of Groutcrete. Areas of large groutcrete implementation shall be revegetated with native hydroseed, or covered with a native vegetation mat or blanket. The vegetated covering shall use native species matching the existing bluff habitat including but not limited to: <i>Atriplex spp.</i> [spp. means several species], Saltbushes; <i>Calystegia cyclostegi</i> , Morning Glory; <i>Calystegia macrostegia</i> ; <i>Castilleja affinis</i> , Indian Paintbrush; <i>Chorizanthe orcuttiana</i> , Spineflower; <i>Coreopsis gigantean</i> , Giant Coreopsis; <i>Coreopsis maritime</i> , Sea-Dahlia; <i>Dudleya spp.</i> ; <i>Encelia californica</i> , California; <i>Erigeron glaucus</i> , Seaside Daisy; <i>Eriophyllum staechadifolium</i> , Woolly Sunflower; <i>Haploppappus spp.</i> , Goldenbush; <i>Malacothrix saxatilis</i> ; <i>Marah macrocarpus</i> , Wild Cucumber; <i>Opuntia littoralis</i> , Cholla; and <i>Rhus integrifolia</i> , Lemonadeberry. The revegetation shall be used to soften and blend the treated areas with the surrounding natural areas to ensure that a viewer from Pacific Coast Highway or the California Incline would not be able to discern the difference between the treated and natural areas and shall be subject to the review and approval of a licensed landscape architect. This treatment process shall first only be undertaken in areas that are not visible from Pacific Coast Highway or the California Incline and shall only be undertaken in other areas if the initial treatment process is successful. | Installation of vegetation covering, and verification by landscape architect that vegetation covering obscures difference between treated and untreated areas. | After groutcrete application. | Periodically after groutcrete application, and upon project completion. | Landscape Architect approved by Santa Monica EPWM, Civil Engineering and Architecture | | | |
| BIOLOGICAL RESOURCES | | | | | | | |
| BIO-1 Nesting Season Survey. If the construction of the proposed bluff improvements are to occur during the nesting season (March 1 through September 15), a search for active nests shall be conducted within one week prior to construction by a qualified biologist. If active nests are located within 250 feet of the proposed improvements and are potentially sensitive, then construction work should be delayed in that area until after the nesting season or until the young are no longer dependent upon the nest site. | Survey for active nests within 250 feet of proposed improvements. | Within one week prior to any construction occurring during March 1- September 15. | Once prior to project activity occurring during nesting season. | Santa Monica EPWM, Civil Engineering and Architecture | | | |



| Mitigation Measure/Condition of Approval | Action Required | When Monitoring to Occur | Monitoring Frequency | Responsible Agency or Party | Compliance Verification | | |
|--|--|--|--|---|-------------------------|------|----------|
| | | | | | Initial | Date | Comments |
| CONSTRUCTION EFFECTS | | | | | | | |
| <p>CON-1 Construction Traffic Management Plan. In consultation with Caltrans, the City shall prepare and implement a Construction Traffic Management Plan to provide for traffic management during bluff improvement activities. The TMP shall focus on informing the motoring public and affected parties of construction activities and dates. This plan shall be subject to review and approval by the City and, at a minimum, shall include the following:</p> <ul style="list-style-type: none"> • A public information program to advise motorists of impending construction activities (e.g., mailed notices to properties in the surrounding area, portable message signs, and information signs at the construction site); • Approval from the City for any construction detours or construction work requiring encroachment into public rights-of-way, or any other street use activity (e.g., haul routes); • Timely notification of construction schedules to all affected agencies (e.g., Police Department, Fire Department, Department of Environmental and Public Works Management, and Department of Planning and Community Development); • Coordination of construction work with affected agencies five to ten days prior to start of work; • A traffic control plan for the streets surrounding the work area, including specific information regarding the project's construction and activities that will disrupt normal traffic flow; • Avoiding dirt and demolition material hauling and construction material delivery during the morning and afternoon peak | <p>Review and approval of construction traffic management plan.</p> <p>Field verification during construction.</p> | <p>Prior to issuance of permits.</p> <p>During construction.</p> | <p>Once prior to issuance of permits.</p> <p>Periodically during construction.</p> | <p>Santa Monica EPWM Building and Safety Division</p> | | | |



| Mitigation Measure/Condition of Approval | Action Required | When Monitoring to Occur | Monitoring Frequency | Responsible Agency or Party | Compliance Verification | | |
|--|--|--|--|---|-------------------------|------|----------|
| | | | | | Initial | Date | Comments |
| <p>traffic periods and cleaning of streets and equipment as necessary;</p> <ul style="list-style-type: none"> Scheduling and expediting of work to minimize disruption of and interference with the adjacent vehicular and pedestrian traffic flow. Weekday daytime work on City streets shall primarily be performed between the hours of 9:00 AM and 3:00 PM; Limiting of queuing of trucks to onsite to the extent feasible; Scheduling of preconstruction meetings with affected agencies to properly plan methods of controlling traffic through work areas; Storage of construction material and equipment within the designated staging area and limitation of equipment and material visibility to the public; Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City of Santa Monica; and The City of Santa Monica shall coordinate construction activity associated with the Bluffs project with activities associated with the California Incline Replacement Project. In particular, improvements associated with the Bluffs Improvement project shall be completed prior to the commencement of construction activities associated with the California Incline. | | | | | | | |
| CULTURAL RESOURCES | | | | | | | |
| <p>CR-1 Stop Work Order. If cultural resource remains or paleontological resources are encountered during construction or land modification activities, the</p> | <p>Review and approval of cultural resource assessment and, if</p> | <p>If cultural resources are encountered</p> | <p>Once for review of the cultural</p> | <p>Santa Monica EPWM, Civil Engineering and</p> | | | |



Santa Monica Palisades Bluffs Improvement Project IS/MND
Mitigation Monitoring and Reporting Program

| Mitigation Measure/Condition of Approval | Action Required | When Monitoring to Occur | Monitoring Frequency | Responsible Agency or Party | Compliance Verification | | |
|---|---|--|--|---|-------------------------|------|----------|
| | | | | | Initial | Date | Comments |
| applicable procedures established under CEQA shall be followed. In this event, work shall stop, and the City shall be notified at once to assess the nature, extent, and potential significance of any cultural or paleontological resources. If such resources are determined to be significant, appropriate actions to mitigate impacts to the resources shall be implemented. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. | necessary, verification of compliance with any remediation plan. | during grading or construction. | resources assessment and, if necessary, periodically during remediation. | Architecture. | | | |
| CR-2 Procedures for Discovery of Human Remains. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then identify the person(s) thought to be the Most Likely Descendent (MLD) of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains. | Verification that procedures in Section 7050.5 of the California Health and Safety Code are followed. | In the event that human remains are discovered during grading or construction. | If necessary, periodically during construction. | Santa Monica EPWM, Civil Engineering and Architecture | | | |
| HAZARDS AND HAZARDOUS MATERIALS | | | | | | | |
| HAZ-1 Aerially Deposited Lead (ADL) Soil Sampling. Prior to issuance of permits for the proposed Bluff improvements, a Preliminary Site Investigation shall be performed in compliance with Caltrans ADL Testing Guidance (March 16, 2001). The Preliminary Site Investigation shall include soil borings in the locations of future Bluff improvement borings to a minimum depth of 2.5 feet below ground surface (bgs) using hand auger sampling methods. All soil samples from the ADL investigation shall be analyzed for the presence of total lead following EPA Test Method 6010. The regulatory criteria for determining whether soils are to be classified as "hazardous waste" for materials handling and disposal purposes based on metal content | Sampling and analysis of suspected soil. Determination of proper handling and disposal of contaminated soil if found. | Prior to issuance of permits. | Once prior to issuance of permits. | Santa Monica EPWM, Civil Engineering and Architecture | | | |



| Mitigation Measure/Condition of Approval | Action Required | When Monitoring to Occur | Monitoring Frequency | Responsible Agency or Party | Compliance Verification | | |
|--|---|-----------------------------------|----------------------|--|-------------------------|------|----------|
| | | | | | Initial | Date | Comments |
| <p>are contained in the California Code of Regulations Title 22, Section 66261.24. The Total Threshold Limit Concentration (TTLC) for ADL is 1,000 milligrams per kilogram (mg/kg) and the Soluble Threshold Limit Concentration (STCL) for lead is 5.0 milligrams per liter (mg/l). In the event that ADL is discovered in excess of TTLC or STCL, the soil shall be excavated, put into 55-gallon drums, and transported to a licensed landfill for proper disposal. In addition:</p> <ul style="list-style-type: none"> • Handling of materials containing ADL shall result in no visible dust migration. The contractor shall have a means of dust control available at all times while handling material in work areas containing ADL. • Project construction activities shall be conducted in compliance with Caltrans Guidelines associated with aerially deposited lead. This requirement shall be included in construction contracts. | | | | | | | |
| <p>HAZ-2 Construction Monitoring. During the drilling of the boreholes into the Bluffs as a part of the proposed Bluffs improvement project (to the west of the four former gasoline service stations) a 40-hour Hazwoper-trained environmental scientist shall be onsite to monitor the soil for hydrocarbons and volatile organic compounds (VOCs). These contaminants may be present in the soil or groundwater from an undocumented release from one of the four former gasoline service stations. The environmental scientist shall examine the excavated soil that is coming out of the boring for visual and olfactory indications of contamination. In addition, the scientist shall use a photoionization detector (PID) to measure VOC concentrations within the worker breathing zone and in the excavated soil to screen for contamination. If contaminants are suspected, soil samples shall be obtained and analyzed to determine whether there are contaminants, and if present, to determine the type and</p> | <p>Qualified environmental scientists shall be onsite to monitor and sample soil during bore hole drilling.</p> | <p>During bore hole drilling.</p> | <p>Ongoing.</p> | <p>Santa Monica Civil Engineering and Architecture</p> | | | |



| Mitigation Measure/Condition of Approval | Action Required | When Monitoring to Occur | Monitoring Frequency | Responsible Agency or Party | Compliance Verification | | |
|--|---|--|--|---|-------------------------|------|----------|
| | | | | | Initial | Date | Comments |
| concentrations of contaminants. The sampling results are to be used to make a determination as to where to transport the material for offsite disposal, or to determine if the soils can be used onsite. If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (City of Santa Monica Environmental Program Division. The agency shall review the data and determine if any additional investigation or remedial activities are deemed necessary. | | | | | | | |
| HAZ-3 Procedure for Suspected Contaminants. If contamination is identified in the water that is to be discharged from the Bluff's slope that will be collected through the proposed drainage system, it shall be treated prior to discharging to the storm drain system. Please note that any discharge to the storm drain system requires and NPDES permit issued by the Regional Water Quality Control Board. Treatment options include the use of granulated activated carbon. The water being discharged from the slope would be piped into the carbon units. The system would be gravity fed to allow the water to flow through the canisters for treatment of organic chemicals. Periodic monitoring and maintenance of the carbon filtration system would be needed in accordance with an NPDES permit that would need to be obtained from the Regional Water Quality Control Board. | Sampling and analysis of suspected groundwater discharge, if necessary. | In the event that draining groundwater is discolored, odorous or suspected of contamination. | If necessary periodically during construction. | Santa Monica EPWM, Civil Engineering and Architecture | | | |
| NOISE | | | | | | | |
| N 1 Diesel Equipment Mufflers. All diesel equipment shall be operated with closed engine doors and shall be equipped with factory recommended mufflers. | Field verification of compliance. | During construction. | Periodically during construction. | Santa Monica EPWM, Civil Engineering and Architecture | | | |
| N 2 Electrically-Powered Tools. Electrical power shall be used to run air compressors and similar power tools. | Field verification of compliance. | During construction. | Periodically during construction. | Santa Monica EPWM, Civil Engineering and Architecture | | | |



Santa Monica Palisades Bluffs Improvement Project IS/MND
Mitigation Monitoring and Reporting Program

| Mitigation Measure/Condition of Approval | Action Required | When Monitoring to Occur | Monitoring Frequency | Responsible Agency or Party | Compliance Verification | | |
|--|-----------------------------------|--------------------------|-----------------------------------|---|-------------------------|------|----------|
| | | | | | Initial | Date | Comments |
| N 3 Timing Restrictions. The noisiest phases of construction shall be restricted to between the hours of 10:00 AM and 3:00 PM, Monday through Friday, in accordance with Section 4.12.110(d) of the Santa Monica Municipal Code. | Field verification of compliance. | During construction. | Periodically during construction. | Santa Monica EPWM, Civil Engineering and Architecture | | | |
| N-4 Additional Noise Attenuation Techniques. For all noise generating construction activity on the project site, additional noise attenuation techniques shall be employed to reduce noise levels to City of Santa Monica noise standards. Such techniques may include, but are not limited to, the use of sound blankets on noise generating equipment and the construction of temporary sound barriers between construction sites and nearby sensitive receptors. | Field verification of compliance. | During construction. | Periodically during construction. | Santa Monica EPWM, Civil Engineering and Architecture | | | |
| N-5 Construction Sign Posting. In accordance with Santa Monica Municipal Code Section 4.12.120, the project applicant shall be required to post a sign informing all workers and subcontractors of the time restrictions for construction activities. The sign shall also include the City telephone numbers where violations can be reported and complaints associated with construction noise can be submitted. | Field verification of compliance. | During construction. | Periodically during construction. | Santa Monica EPWM, Civil Engineering and Architecture | | | |



Appendix H

Comments and Responses



COMMENTS and RESPONSES

This section of the Mitigated Negative Declaration (MND) for the Santa Monica Palisades Bluffs Improvement Project contains all of the written comments received in response to the Draft MND during the 30-day public review period that concluded on March 7, 2007. Each comment received by the City of Santa Monica has been included within this report. Responses to all comments have been prepared to address the concerns raised by the commenters and to indicate where and how the MND addresses environmental issues.

Specific comments contained within any particular written letter have been numbered in order to provide a reference to it in the response. Each letter is presented first, with the responses following.

If comments have resulted in modified text of the MND, additions have been indicated by underline and deletions by strikeout text.

COMMENTERS on the DRAFT MND

The City of Santa Monica received 3 written comments on the Draft MND. These letters are listed as follows and will be used for referencing in this section.

| | <u>Commenter</u> | <u>Page</u> |
|----|--|-------------|
| 1. | Dave Singleton, Program Analyst, Native American Heritage Commission | H-2 |
| 2. | Joy Fullmer, Resident | H-7 |
| 3. | Charles Levy, Resident | H-9 |

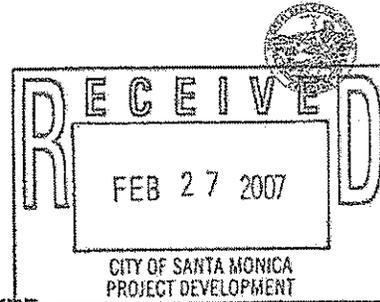


NATIVE AMERICAN HERITAGE COMMISSION

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

1

February 20, 2007



Mr. Spiros Lazaris
CITY OF SANTA MONICA CIVIL ENGINEERING & ARCHITECTURE
 1918 Main Street, Suite 100
 Santa Monica, CA 90405

Re: SCH#2007021027; CEQA Notice of Completion; Negative Declaration for Palisades Bluff Improvement Project; City of Santa Monica; Los Angeles County, California

Dear Mr. Lazaris:

Thank you for the opportunity to comment on the above-referenced document. The Native American Heritage Commission is the state's Trustee Agency for Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

- √ Contact the appropriate California Historic Resources Information Center (CHRIS). Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ <http://www.ohp.parks.ca.gov/1068/files/IC%20Roster.pdf> The record search will determine:
 - If a part or the entire APE has been previously surveyed for cultural resources.
 - If any known cultural resources have already been recorded in or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- √ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological information center.
- √ Contact the Native American Heritage Commission (NAHC) for:
 - A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section.
 - The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE).
- √ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
 - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
 - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- √ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

D

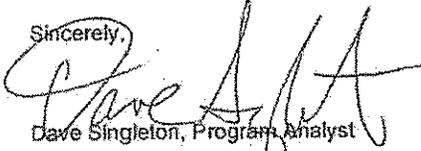
* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

√ Lead agencies should consider avoidance, as defined in § 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton, Program Analyst

Cc: State Clearinghouse

Attachment: List of Native American Contacts

Native American Contacts
Los Angeles County
February 20, 2007

Beverly Salazar Folkles
1931 Shadybrook Drive
Thousand , CA 91362
805 492-7255

Chumash
Tataviam
Fernandeño

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez
981 N. Virginia
Covina , CA 91722
(626) 339-6785

Yowlumne
Kitanemuk

Owl Clan
Dr. Kote & Lin A-Lul'Koy Lotah
48825 Sapaque Road
Bradley , CA 93426
(805) 472-9536

Chumash

Diane Napoleone and Associates
Diane Napoleone
6997 Vista del Rincon
La Conchita , CA 93001
dnaassociates@sbcglobal.net
805-643-7492

Chumash

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles , CA 90020
(213) 351-5324
(213) 386-3995 FAX

Gabrieleno/Tongva Tribal Council
Anthony Morales, Chairperson
PO Box 693
San Gabriel , CA 91778
gttribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

Gabrielino Tongva

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Administrator
4712 Admiralty Way, Suite 172
Marina Del Rey , CA 90292
310-570-6567

Gabrielino Tongva

Gabrielino/Tongva Council / Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
761 Terminal Bldg 1, 2nd floor
Los Angeles , CA 90021
lcandalaria@gabrielinotribe.org
(213) 489-5001 - Officer
(909) 262-9351 - cell
(213) 489-5002 Fax

Gabrielino Tongva

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

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2007021027; CEQA Notice of Completion; Negative Declaration for Palisades Bluff Improvement Project; City of Santa Monica; Los Angeles County, California.

Native American Contacts
Los Angeles County
February 20, 2007

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
5450 Slauson, Ave, Suite 151 PMB Gabrielino Tongva
Culver City , CA 90230
gtongva@earthlink.net
562-761-6417 - voice
562-920-9449 - fax

Gabrielino Tongva Indians of California Tribal Council
Mercedes Dorame, Tribal Administrator
20990 Las Flores Mesa Drive Gabrielino Tongva
Malibu , CA 90265
Pluto05@hotmail.com

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

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed CH#2007021027; CEQA Notice of Completion; Negative Declaration for Paliades Bluff Improvement Project; City of Santa Monica; Los Angeles County, California.

Letter 1

COMMENTER: Dave Singleton, Program Analyst, Native American Heritage Commission

DATE: February 20, 2007

RESPONSES:

Response 1A

The first comment from the Native American Heritage Commission recommends that the City of Santa Monica contact the California Historic Resources Information Center (CHRIS) for a records search to determine potential impacts on historic resources. As noted in Section 3.6, *Cultural Resources*, of the MND, an Archeological Survey Report, which included a records search conducted by the South Central Coastal Information Center (SCCIC), was conducted for the project site. The result of the record search identified one prehistoric archaeological site, 2 historic archaeological site, 6 resources on the National Register of Historic Places within a 0.5-radius of the site, and one National Register historic resource, Linda Vista (Palisades) Park on the site itself. A summary of the SCCIC record search is included in the Archeological Survey Report included in Appendix E of the MND.

Response 1B

As noted in Response 1A, an Archeological Survey Report was conducted for the site. As part of this report, an archeological inventory survey was conducted for the site in May 2006. In May 2006, a Phase I Archeological Survey for the proposed project site was conducted by Robert Wlodarski of H.E.A.R.T. The Phase I survey indicated that none of the character-defining features of Palisades Park would be altered or moved by the project. Therefore, it was determined unlikely that the proposed project would result in a substantial adverse change in the significance of an archeological or historic resource. The final report, containing the site forms, site significance, and proposed mitigation measures was submitted to the South Central Coastal Information Center at California State University, Fullerton.

Response 1C

As part of the archeological research and analysis conducted for the project site, a request for a Sacred Lands File (SLF) search of the project area and information on tribal contacts was submitted to the Native American Heritage Commission in May 2006. A telephone reply on May 11, 2006 indicated that there were no known Native American concerns.

Response 1D

The comment mentions that the lack of surface evidence of archaeological resources does not preclude their subsurface existence, and recommends that lead agencies should include in their mitigation plans provisions for the identification and evaluation of accidentally discovered archaeological resources, Native American human remains, and any other discovery of human



remains. Mitigation Measures CR-1 and CR-2 found in Section 3.6, *Cultural Resources*, include requirements and procedures to be followed in the event that previously unknown archaeological resources or human remains are discovered onsite.



(2)

Joy M. Fullmer
1616 Ocean #17
Santa Monica, CA 90401

Engineering firm
Santa Monica CA 90405
I am not against this project, I am very against the noise and vibrations that are causing in large part the problem (like Joshua at Joshua) - both on PCH and Ocean One. There should be no big trucks or buses on these roads - perhaps cars, get most on station wagons. It will be a constant financial drain if not + occasional falls.

Joy Fullmer

Please forward this public comment, from a resident, Joy Fullmer, to the Engineer working on the Bluffs Stabilization Project. Thanks
- Brett
X5618

RECEIVED
FEB 22 2007
CITY OF SANTA MONICA
PROJECT DEVELOPMENT

Letter 2

COMMENTER: Joy Fullmer

DATE: February 22, 2007

RESPONSE:

The comment states that while she does not oppose the proposed project, she is opposed to the noise and vibration caused by trucks and buses that travel on Pacific Coast Highway and Ocean Avenue. The comment does not raise environmental concerns regarding the project. The scope of the proposed project includes improvement measures intended to stabilize the Palisades Bluffs against continued erosion. The project would not result in any long-term adverse environmental effects or affect long-term vehicular travel on either Pacific Coast Highway or Ocean Avenue.



3

-----Original Message-----

From: Charles M. Levy [mailto:clevy@lsl-la.com]
Sent: Tuesday, March 06, 2007 10:35 PM
To: Spiros Lazaris
Cc: Marisa Barber
Subject: IF IT AIN'T BROKE, DON'T FIX IT!!! (EIR Report re: Palisades in Santa Monica)
Importance: High

dear mr. lazaris

At the main library, i reviewed the e.i.r. report for the work the city proposes to do to the palisades. i am deeply concerned.

A

the city proposes to apply a material to the upper portion of the palisades, and to cavities within the palisades, to stop future erosion. although the report claims the material to be used will be the same color as the palisades, the report cautions that there will be a noticeable difference between the areas that will be treated and those that will be not. according to the report, the treated areas will look like they have no vegetation.

B

i am confident that the treated areas will be conspicuously different and unattractive.

i do not think this work is necessary. i live almost directly across from the landslide area that came down in 1995. the city did a surprisingly good job correcting the problem some years later when they changed the slope of palisades park so that the rain water now drains away from the palisades and onto ocean avenue where it flows into storm drains. this prevents the rain water from flowing over the palisades, thereby preventing small landslides.

i do not see the erosion the e.i.r. report claims will be prevented by the planned work. indeed, there is actually a sidewalk on the east side of p.c.h. and it does not evidence significant accumulated erosion (dirt build up) since the excellent remedial work the city performed after the 1995 landslide.

the bluffs have stood for thousands of years. they are not, i submit, in danger of eroding away. and i am confident we will all be distressed at the future esthetics of the bluffs if the city is allowed to coat the bluffs with an artificial material.

C

in addition to the above, which is my principal complaint about the proposed project, I have the following concerns:

1. It is extremely difficult to access information regarding this project. Why wasn't the EIR Report placed on the internet? When the City Council holds a meeting, there is available, for those who are interested, prior to the meeting, the staff reports that will be

C | considered at that council meeting, the agenda, and other information, all via the internet. In this important instance, the EIR Report could, and should, have been placed on the internet but was not. Why not?

D | 2. To the extent the EIR Report was available, it was difficult to access. I went to the main library, got the EIR Report, and was studying it when the librarian came to me and said that two other people had arrived and wanted to review the EIR Report. As a result, I was required to return the EIR Report to the reference desk in half an hour. Those two people, I am told, tired of waiting and went to the Montana branch of the library to review it. That only one report was available at the main library is simply amazing.

E | 3. One can only conclude from this limited availability of a document this important, that there was a decided effort to restrict the number of people who would have access. The City of Santa Monica is well-known for not providing sufficient notice to its citizens of its planned activities. This EIR Report falls within that general scope of keeping the citizens in the dark with regard to the intended activities of the City.

F | 4. I also find the placement of the staging area highly inconvenient and a vast potential disruption to traffic. While the staging area will work if workers are going to utilize it for taking materials up and down the sidewalk on the east side of Pacific Coast Highway, it is highly disadvantageous if it is intended to be used for vehicular ingress and egress from Pacific Coast Highway. That would cause substantial interference with the flow of traffic. I submit that, if vehicular ingress and egress is intended, it would be far better to place the staging area next to the Pier, which has been used in the past for many construction projects along Pacific Coast Highway or to have, as a staging area, the north parking lot of the old Marion Davies estate at 415 Pacific Coast Highway.

G | 5. Finally, and this is extremely important, I am absolutely amazed, and very disappointed, that no public meetings have been set for citizens to discuss this matter. I have many questions regarding this project that were not answered by studying the EIR. In fact, studying the EIR raised more questions for me than it answered. Why have you not scheduled any public meetings in order to discuss this very important matter? Is your reason because this falls, again, in the category of something that the City wants to accomplish with as little advance notice--and possible opposition--as possible? and that the best way to accomplish that is to keep the citizenry in the dark?

H | The Palisades Beach Property Owners Association just recently settled a lawsuit it filed against the City with respect to the EIR for the restoration of the old Marion Davies estate at 415 Pacific Coast Highway. I hope that our association will not be compelled to file another lawsuit, this time with respect to the proposed palisades project. The best way to guard against that would be to immediately set public hearings with regard to this matter, explain the project and the need for it in full, and extend the time for comments by a concerned citizenry.

Thank you.

Sincerely,

Charles M. Levy,
President
Palisades Beach Property Owners Association

P.S. i have two other concerns:

I [A. the proposed closures of the california incline during
construction.
i do not believe the impact is sufficiently dealt with in the EIR
report; and

4 [B. the fact that i was compelled to review the EIR Report at the
library, but do not have a copy of it to refer to as i prepare this
email to you. copies of this document should have been made available
to members of the general public to take home with them. i am at a
great disadvantage having to comment on a document i do not have before
me.

CML|mb

Letter 3

COMMENTER: Charles M. Levy, Resident

DATE: March 6, 2007

RESPONSES:

Response 3A

The comment suggests that the environmental document states that there would be a noticeable difference between the areas that will be treated with grouting and the areas left in a natural state, and that the treated areas will look like they have no vegetation. It is accurate that Section 3.1, *Aesthetics*, of the Mitigated Negative Declaration (MND) explains that the treated areas may be visible. Consequently, because of this possibility, this aspect of the project was determined to have a potentially significant visual impact.

As detailed in the MND, the surface treatments would consist of measures such as the application of a spray-on chemical grout and a soil/chemical grout mixture. This surface treatment is intended to reduce erosion of exposed surfaces along the Bluffs. Mitigation Measure AS-1 (Vegetated Covering of Groutcrete) would be required to reduce any potential visual impacts associated with this treatment to a less than significant level. More specifically, this measure would require re-vegetation of any treated areas with vegetation native to the Bluffs. The mitigation measure would minimize the appearance of increased exposed soil on the Bluffs, and lengthen the lifetime of the groutcrete application. The mitigation measure would require that this revegetation soften and blend the treated areas with the surrounding natural areas to the extent that a viewer from Pacific Coast Highway or the California Incline would not be able to discern the difference from the treated and natural areas. Therefore, upon implementation of AES-1, potential impacts to visual resources would be less than significant.

In addition, subsequent to the time when the Draft MND was circulated for public review, the Santa Monica EPWM Department has decided to reduce the scope of work for the surface treatments on the Bluff face. Limited demonstrations of surface treatments would be installed at various locations along the Bluffs from the McClure Tunnel to the northern City limit. This limited surface treatment will be undertaken only in demonstration areas that are not visible from PCH or the California Incline and will be assessed by a licensed landscape architect to determine their aesthetic impact. If the demonstration installations are successful (a viewer from Pacific Coast Highway or the California Incline could not discern the difference between the treated areas and natural area), staff will implement more extensive surface treatments as a second phase of the project consistent with the mitigation measures adopted in the MND.

In response to this comment, the following text will be added to Mitigation Measure AES-1, found on page 3-2 of the MND:

AES-1 **Vegetated Covering of Groutcrete.** Areas of large groutcrete implementation shall be revegetated with native hydroseed, or covered with a native vegetation mat or blanket ~~when feasible~~. The



vegetated covering shall use native species matching the existing bluff habitat including but not limited to: *Atriplex* spp. [spp. means several species], Saltbushes; *Calystegia cyclostegi*, Morning Glory; *Calystegia macrostegia*; *Castilleja affinis*, Indian Paintbrush; *Chorizanthe orcuttiana*, Spineflower; *Coreopsis gigantea*, Giant Coreopsis; *Coreopsis maritime*, Sea-Dahlia; *Dudleya* spp.; *Encelia californica*, California; *Erigeron glaucus*, Seaside Daisy; *Eriophyllum staechadifolium*, Woolly Sunflower; *Haploppappus* spp, Goldenbush; *Malacotrhix saxatilis*; *Marah macrocarpus*, Wild Cucumber; *Opuntia littoralis*, Cholla; and *Rhus integrifolia*, Lemonadeberry. The revegetation shall be used to soften and blend the treated areas with the surrounding natural areas to ensure that a viewer from Pacific Coast Highway or the California Incline would not be able to discern the difference between the treated and natural areas and shall be subject to the review and approval of a licensed landscape architect. This treatment process shall first only be undertaken in areas that are not visible from Pacific Coast Highway or the California Incline and shall only be undertaken in other areas if the initial treatment process is successful.

Response 3B

The commenter states an opinion that the proposed improvement measures for the Palisades Bluffs are not necessary, and that the City of Santa Monica's efforts to reduce erosion at a location that sustained a landslide in 1995 was adequate to reduce landslide potential in the area. However, commenter does not provide evidence to support the conclusion that the City's efforts thus far have been adequate to ensure the future stability of the Bluffs.

The City of Santa Monica has enlisted the assistance of geotechnical experts to assess the condition of the Palisades Bluffs. A Geotechnical Study for the Santa Monica Palisades Bluffs was conducted for the City of Santa Monica by URS, Corp. in October 2004. This report was identified in the Draft MND for this project, and as noted on page 3-19 of the MND, is available at the City of Santa Monica EPWM Department for review. The geotechnical study included a comprehensive review of existing data; field reconnaissance and geologic mapping; drilling of vertical and horizontal borings; installation of observation wells and horizontal drains; laboratory and field testing of soils; assessment of potential slope-failure mechanisms; and development of improvement options for improving the Bluffs and preserving their natural character. The study concluded that the proposed Bluffs improvement project was necessary.

As stated in Section 2.4, *Purpose and Need for the Project*, debris has steadily accumulated along the toe of the Bluffs. Over the years, the Bluffs have steadily receded due to natural causes, including weathering, surface erosion during heavy rainstorms, localized slope failures caused by groundwater seepage, earthquake shaking, and animal burrows. Some of the slope failures have been large enough for slide debris to cover several traffic lanes of PCH. Based on the conclusions of the extensive geotechnical study, this project is necessary to stabilize the Bluffs and reduce the risk of landslide failure that would potentially affect the residences along PCH.



Response 3C

The commenter states concern about perceived difficulty in accessing information regarding the proposed project. However, the City followed the standard protocol for public reviewing and noticing as specified in the CEQA Statutes and Guidelines, which state that the notice of intent to adopt a Mitigated Negative Declaration must specify the review period, identify any public meetings or hearing on the project, briefly describe the project, and state where the proposed Mitigated Negative Declaration and all reference documents are available for review [California Pub. Res. Code §21092(b)(1)]. A copy of the Notice of Intent and the proposed Negative Declaration must be mailed to responsible and trustee agencies and agencies with jurisdiction by law and to all parties previously requesting notice (CEQA Guidelines §15073, 15072). When the MND is sent to the State Clearinghouse for review, the public review period must be 30 days [California Pub. Res. Code §21091(b)].

The Notice of Intent to Adopt the Mitigated Negative Declaration for the Santa Monica Palisades Bluffs Project was distributed to the State Clearinghouse, the Los Angeles County Clerk, interested parties, and residents in the vicinity of the project site. It was also published in the Santa Monica Daily Press on February 19, 2007. Copies of the document were available at the 7 locations stated in the Notice. The public comment period lasted for 30 days, from February 5 – March 7, 2007. Therefore, the City complied with all applicable CEQA Statutes and Guidelines.

In addition, prior to the public hearing held for adoption of the MND, the notice of the hearing will be published in the Santa Monica Daily Press and provided on the City of Santa Monica's website. It is the City's standard practice to publish the staff report, agenda, and other information on the City Council website (<http://www.smgov.net/cityclerk/council/agendas>) prior to the hearing. All interested parties are encouraged to participate at the public hearing for the project.

Response 3D

The commenter again states concerns about perceived difficulty in accessing the Mitigated Negative Declaration. As noted in Response 3C, a copy of the MND was available at four City libraries. In addition, additional copies of the MND were available at the City's Planning Counter and Environmental and Public Works Management Department.

Response 3E

The commenter states an opinion that it was the intent of the City of Santa Monica to restrict access to the environmental document. While the City of Santa Monica regrets that the commenter had difficulty accessing the project documentation, the City fully complied with CEQA Statutes and Guidelines (see Response 3C) for public availability and publication of the draft MND, and encourages its citizens to access all public documents. Despite these stated difficulties, the commenter was able to timely submit the subject substantive comment letter.



Response 3F

The commenter states an opinion that the placement of the staging area is inconvenient and disruptive to traffic. The commenter states a preference to have the vehicular staging area next to the Santa Monica Pier or on the northern parking lot of the 415 PCH site. The placement of the proposed staging area was chosen for best access and storage of construction equipment for the project. The proposed staging area is a relatively flat open area, which is centrally located on the Bluffs beneath the Montana Avenue stairway. Both locations suggested by the commenter are situated in parking lots that are west of PCH (the side nearest the ocean). Construction workers and equipment would therefore need to cross PCH to get to the Bluffs, which are east of PCH. These locations would potentially result in a worse disruption of traffic than the proposed location, which is within the Bluffs area itself (as shown on Figure 2-4), where the construction workers and equipment have direct access to the Bluffs without having to cross PCH. In addition, the northern parking lot of the 415 PCH site is no longer available.

The construction period traffic control measures for the project were recommended by Fehr & Peers/Kaku Associates traffic consultants, who provided a memorandum on the subject that is contained in Appendix D of the MND. The traffic assessment noted that the City should coordinate with Caltrans to obtain an encroachment permit for the project and identified a number of measures to be included in the Construction Traffic Management Plan for the project. These measures were included as part of the MND, in Section 3.5, *Construction Effects*. Construction activity associated with the Bluffs improvements would necessitate temporary lane closures along Pacific Coast Highway north of the California Incline, as well as a portion of the Incline itself in the right-hand northbound lane. The lane closures would be done in stages, for stretches of approximately 1,000 feet at a time, and would shift monthly as the construction work moves along the toe of the Bluffs. Construction activity would last approximately 10 months. Mitigation Measure CON-1 would require the City of Santa Monica to develop a Construction Traffic Management Plan (TMP) for the project that would include several features to minimize temporary construction traffic impacts. These features include a public information program to advise motorists of impending construction activities, a traffic control plan for streets surrounding the work area, timely notification of all potentially affected agencies, and scheduling and expediting of work to minimize disruption of and interference with the adjacent vehicular and pedestrian traffic flow. Implementation of the Construction TMP would ensure that the proposed project would not obstruct or impede existing traffic flow or cause unsafe conditions, and therefore temporary impacts associated with construction activity would be reduced to a less than significant level.

Response 3G

The commenter states disappointment that no public hearings have been arranged to encourage public opinion on the proposed project.

During the course of project development and review, several public informational meetings have been held about the proposed Palisades Bluffs Improvement Project. These include meetings with the Santa Monica Canyon Civic Association on June 12, 2007, the Palisades Neighborhood Council on June 14, 2007, and the PCH Homeowners Association on June 18, 2007.



In addition, the public hearing for the adoption of the Mitigated Negative Declaration will be scheduled and published per standard City procedures, and the public is encouraged to attend and comment on the project and environmental document.

Response 3H

The commenter explains that the property owners association that he belongs to (the Palisades Beach Property Owners Association) recently settled a lawsuit it filed with the City for a different project along Pacific Coast Highway. The commenter states that the best way for the City of Santa Monica to prevent a similar lawsuit taken against the proposed project would be to set public hearings and extend the time period for public comments on the Mitigated Negative Declaration.

As noted in Response 3C, the City of Santa Monica has complied with all requirements in the CEQA Statutes (Public Resources Code) as well as following the CEQA Guidelines. The project has been subject to numerous public meetings and the proposed MND will be reviewed by the City Council at a public hearing. Members of the public are invited to attend and address the City Council.

Response 3I

The comment states an opinion that the impact of the proposed closure of the California Incline during construction is not sufficiently assessed. While the proposed project would result in temporary closure of the right-hand northbound lane of California Avenue to provide access to the adjacent portion of the bluffs, as discussed on page 3-14 of the MND, it would not require the full closure of the California Incline during any period. Please also see Response 3F regarding discussion of potential traffic impacts during project construction.

As a separate project, the City has proposed the California Incline Replacement Project which would reconstruct and rehabilitate that bridge. Construction of that project would require full closure of the California Incline for approximately ten months, according to the Environmental Impact Report (EIR) for this project, which is available on the City's website.

The City of Santa Monica EPWM Department would coordinate the Palisades Bluffs improvements with construction activities associated with the California Incline Replacement Project. In particular, activities associated with the Bluffs Improvement Project would be completed prior to closure of the California Incline.

The following clarification will be added to the MND on page 3-14, following the second paragraph:

It should be noted that another project proposed by the Santa Monica EPWM Department is the California Incline Replacement Project, which would reconstruct and rehabilitate the Incline Bridge. The California Incline is located within Treatment Zones T-7 and T-8 (as shown on Figure 2-3). Construction of the Incline project would take approximately ten months, and would occur subsequent to the construction activities associated with the Palisades Bluffs Improvement Project.



The following text will be added to Mitigation Measure CON-1 on page 3-15:

CON-1 Construction Traffic Management Plan. In consultation with Caltrans, the City shall prepare and implement a Construction Traffic Management Plan to provide for traffic management during bluff improvement activities. The TMP should focus on informing the motoring public and affected parties of construction activities and dates. This plan shall be subject to review and approval by the City and, at a minimum, shall include the following:

- *A public information program to advise motorists of impending construction activities (e.g., mailed notices to properties in the surrounding area, portable message signs, and information signs at the construction site);*
- *Approval from the City for any construction detours or construction work requiring encroachment into public rights-of-way, or any other street use activity (e.g., haul routes);*
- *Timely notification of construction schedules to all affected agencies (e.g., Police Department, Fire Department, Department of Environmental and Public Works Management, and Department of Planning and Community Development);*
- *Coordination of construction work with affected agencies five to ten days prior to start of work;*
- *A traffic control plan for the streets surrounding the work area, including specific information regarding the project's construction and activities that will disrupt normal traffic flow;*
- *Avoiding dirt and demolition material hauling and construction material delivery during the morning and afternoon peak traffic periods and cleaning of streets and equipment as necessary;*
- *Scheduling and expediting of work to minimize disruption of and interference with the adjacent vehicular and pedestrian traffic flow. Weekday daytime work on City streets shall primarily be performed between the hours of 9:00 AM and 3:00 PM;*
- *Limiting of queuing of trucks to onsite to the extent feasible;*
- *Scheduling of preconstruction meetings with affected agencies to properly plan methods of controlling traffic through work areas;*
- *Storage of construction material and equipment within the designated staging area and limitation of equipment and material visibility to the public; and*
- *Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City of Santa Monica.*
- *The City of Santa Monica shall coordinate construction activity associated with the Bluffs project with activities associated with the California Incline Replacement Project. In particular, improvements associated with the Bluffs Improvement project shall be completed prior*



to the commencement of construction activities associated with the California Incline.

The following clarification will be added to the MND on page 3-15:

Implementation of the Traffic Control Plan will ensure that the proposed project does not interfere with existing traffic flow or cause unsafe traffic conditions during the construction period. Short-term construction traffic impacts would therefore be reduced to a less than significant level. Provided that the above mitigation measure is implemented, temporary traffic impacts during project implementation would be less than significant.

Response 3J

The comment states that copies of the MND should have been made available to members of the general public to take home with them. Please refer to Responses 3C - 3E regarding the public availability of the document.

