

Appendix F  
**Paleontological Resources  
Report**



**For Public Distribution**

**PROVIDENCE SAINT JOHN'S HEALTH CENTER  
PHASE II PROJECT, CITY OF SANTA MONICA,  
CALIFORNIA**

**Paleontological Resources Technical Report**

**Prepared for**

City of Santa Monica  
1685 Main Street, Room 212  
Santa Monica, CA 90401

**September 2018**





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CALIFORNIA**

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**Prepared for**

City of Santa Monica  
1685 Main Street, Room 212  
Santa Monica, CA 90401

**September 2018**

**Prepared by:**

ESA  
80 South Lake, Suite 570  
Pasadena, CA 91101

**Project Director:**

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**Principal Investigator:**

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**Report Author:**

Alyssa Bell, Ph.D.

**Project Location:**

Beverly Hills (CA) USGS 7.5-minute Topographic Quad  
Township 2 South, Range 15 West

**Acreage:** Approx. 5.17 acres

**Assessor Parcel Numbers:** 4275-007-003, 4275-007-002, 4276-027-018, 4275-007-001, 475-008-002, 475-008-001, 475-008-017, 475-008-020, 475-025-042, 475-025-003, 475-025-041, sections of 475-025-062

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# EXECUTIVE SUMMARY

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## Providence Saint John's Health Center Phase II Project, Paleontological Resources Technical Report

Environmental Science Associates (ESA) has been retained by the City of Santa Monica (City) to prepare a Paleontological Resources Technical Report for the Providence Saint John's Health Center Phase II Project (Project) in support of an Environmental Impact Report (EIR). The Project includes the Phase II Development Program, consisting of ten (10) Phase II Project buildings with related infrastructure improvements and open space. The Phase II Development Sites include 2C, 2I, 2D/E, Mullin Plaza Site, S1/S3, S2, S4 and Saint John's Square, and S5. As part of the Project, some existing buildings, structures, and parking lots would be demolished to make way for new construction. The Project includes the construction of both above-ground and below-ground facilities. The maximum height of new construction would be 105 feet and the maximum depth of ground disturbance would be 55 feet (up to five levels of subterranean parking). The City is the lead agency responsible for compliance with the California Environmental Quality Act (CEQA).

The Project is located in the City of Santa Monica, in the western portion of Los Angeles County. All Phase II Development Sites are located in the Mid-City area and within the Providence Saint John's Health Center (PSJHC) Campus, which itself is located within the City's Healthcare Mixed Use District in an area bounded by Arizona Avenue to the north, Broadway to the south, 20th Street to the west, and 23rd Street to the east (Project Site). The Project Site is located on Assessor Parcel Numbers (APNs): 4275-007-003, 4275-007-001, 475-007-009, 475-008-021, 475-008-020, 4276-027-018, 4276-025-062, 4276-025-042, and 4275-025-003, 4276-025-032, 4276-025-041. Specifically, the Project Site is located in an unsectioned portion of Township 2S, Range 15W on the Beverly Hills, CA U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle.

A database search for records of fossil localities within the Project Site was conducted by the Natural History Museum of Los Angeles County (LACM) on June 8, 2017. The database search results indicate that surface deposits in most of the Project Site (eastern portion) consist of younger Quaternary alluvium. Surface deposits in the remainder of the proposed project area (western portion) consist of older Quaternary alluvium. The database search returned no known localities within the Project Site. The closest fossil locality is LACM 5462, located about 0.45 miles from the Project Site, which produced a specimen of extinct lion at a depth of 6 feet below ground surface. Fossil locality LACM 7879, located about 1.9 miles from the Project Site, produced fossil specimens of horse and ground sloth at depths over 11 feet below ground surface.

Geological mapping indicates that the surface of the Project Site consists of younger Quaternary alluvium in the southern and eastern portions of the Project Site and older Quaternary alluvium in the northern and western portions of the Project Site. The younger Quaternary alluvium has a low-to-high paleontological sensitivity, increasing with depth. The older Quaternary alluvium has a high paleontological sensitivity.

Based on the results of this study, it is anticipated that fossils could be encountered within the Project Site at depths as shallow as 6 feet. Recommended mitigation measures, including retention of a Qualified Paleontologist, paleontological resources monitoring, and procedures to be followed in the event of the discovery of paleontological resources, are provided in the *Conclusions and Recommendations* section of this report in order to reduce impacts to unique paleontological resources to a less than significant level under CEQA.

# PROVIDENCE SAINT JOHN'S HEALTH CENTER PHASE II PROJECT

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## Paleontological Resources Technical Report

### Introduction

Environmental Science Associates (ESA) has been retained by the City of Santa Monica (City) to prepare a Paleontological Resources Technical Report for the Providence Saint John's Health Center Phase II Project (Project) in support of an Environmental Impact Report (EIR). The Project includes the Phase II Development Program, consisting of ten (10) Phase II Project buildings with related infrastructure improvements and open space. The Phase II Development Sites include 2C, 2I, 2D/E, Mullin Plaza Site, S1/S3, S2, S4 and Saint John's Square, and S5. As part of the Project, some existing buildings, structures, and parking lots would be demolished to make way for new construction. The Project includes the construction of both above-ground and below-ground facilities. The maximum height of new construction would be 105 feet and the maximum depth of ground disturbance would be 55 feet (up to five levels of subterranean parking). The City is the lead agency responsible for compliance with the California Environmental Quality Act (CEQA).

ESA personnel involved in the preparation of this report include: Monica Strauss, M.A., RPA, Project Director; Sara Dietler, B.A., Project Manager; Alyssa Bell, Ph.D., Principal Investigator and primary author; and Jessie Lee, GIS Specialist. Candace Ehringer, M.A., RPA, provided senior review of the report. Resumes of key personnel are provided in **Appendix A**.

### Project Location

The Project is located in the City of Santa Monica, in the western portion of Los Angeles County (**Figure 1**). All Phase II Development Sites are located in the Mid-City area and within the Providence Saint John's Health Center (PSJHC) Campus, which itself is located within the City's Healthcare Mixed Use District in an area bounded by Arizona Avenue to the north, Broadway to the south, 20th Street to the west, and 23rd Street to the east (Project Site) (**Figure 2**).

The Project will include improvements located on the following Assessor Parcel Numbers (APNs): 4275-007-003, 4275-007-002, 4276-027-018, 4275-007-001, 475-008-002, 475-008-001, 475-008-017, 475-008-020, 475-025-042, 475-025-003, 475-025-041, and sections of 475-025-062.

Specifically, the Project Site is located in an unsectioned portion of Township 2S, Range 15W on the Beverly Hills, CA U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (**Figure 3**).



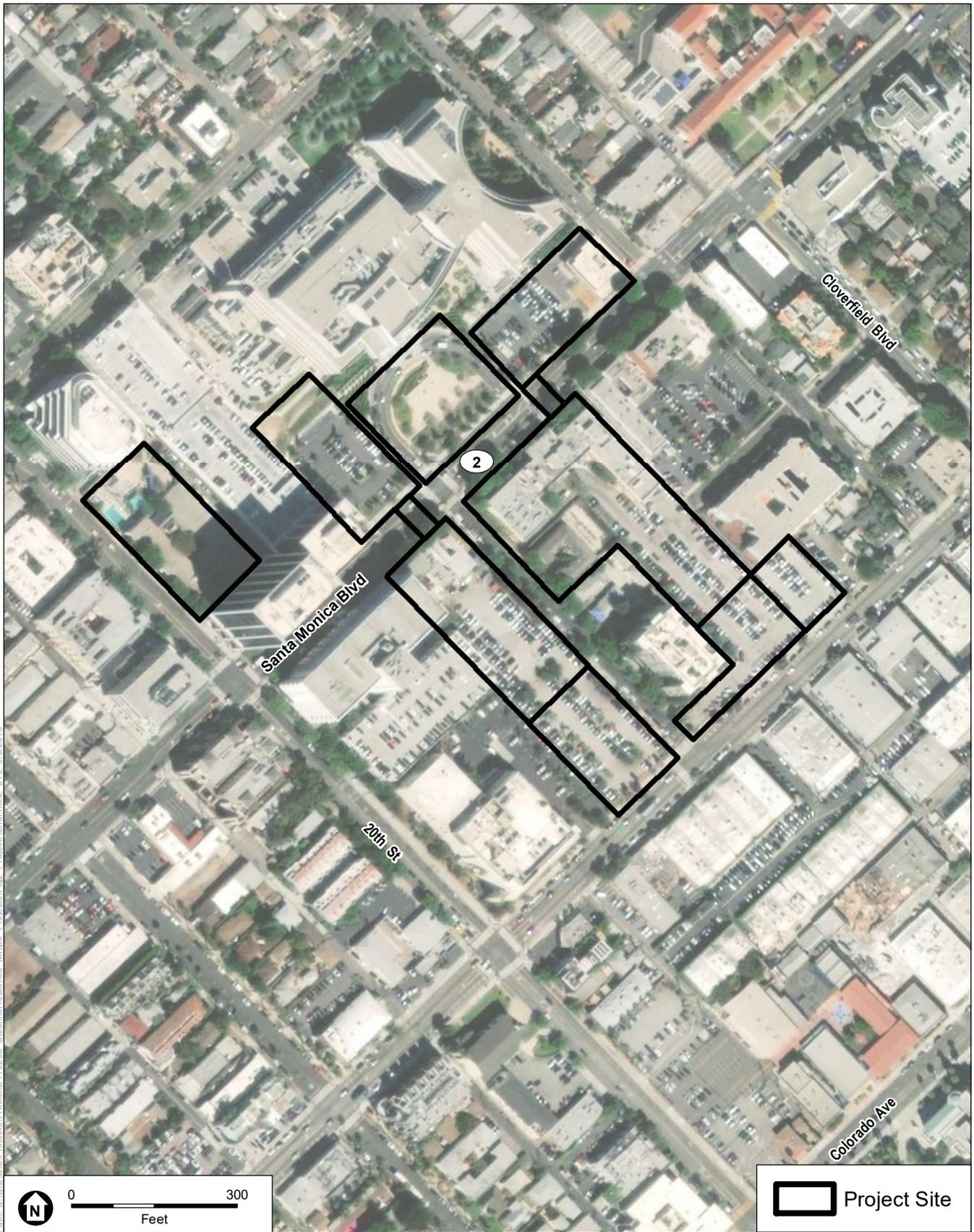
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SOURCE: ESRI

Providence Saint John's Health Center Phase II Project

**Figure 1**  
Regional Location





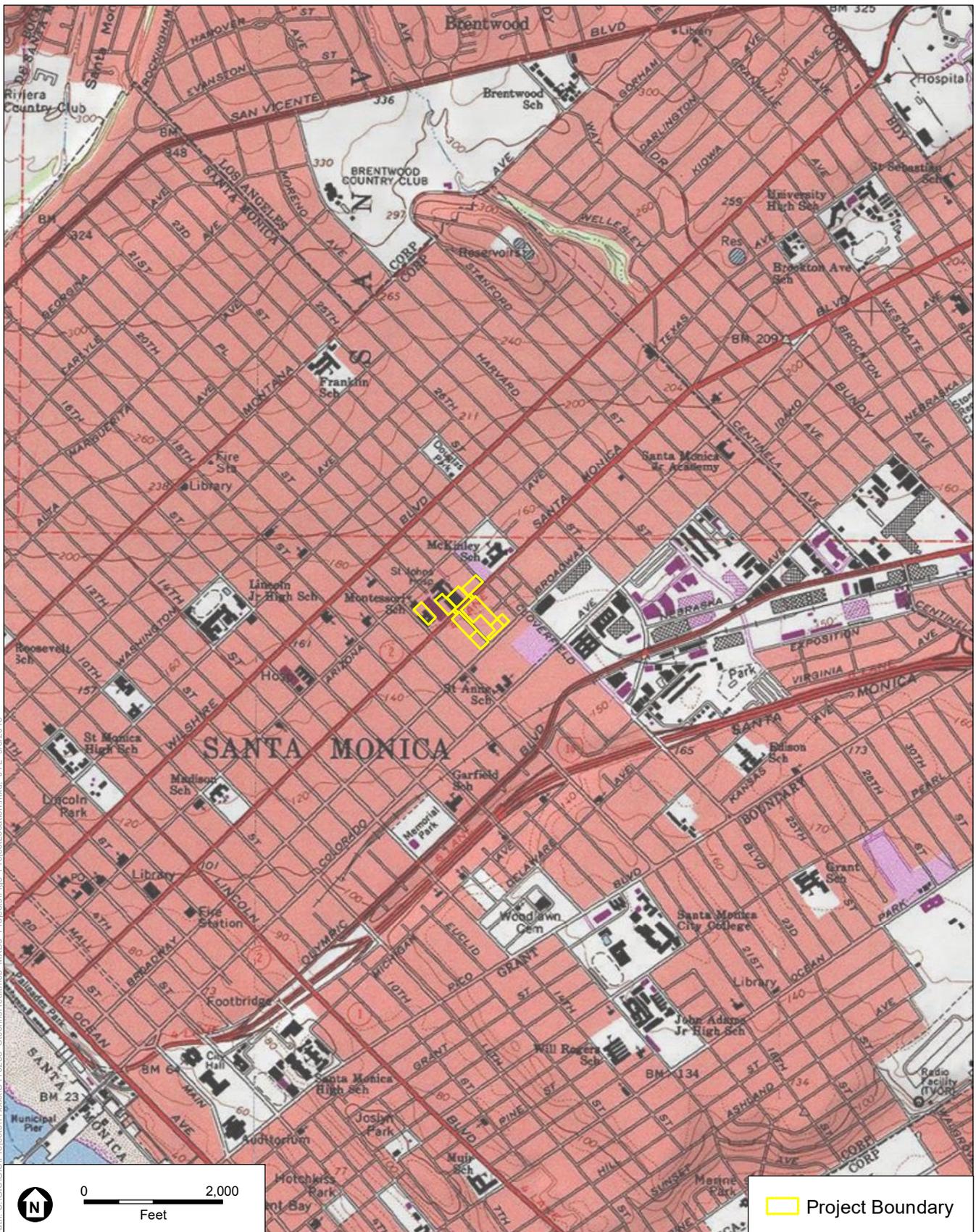
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SOURCE: ESRI

Providence Saint John's Health Center Phase II Project

**Figure 2**  
Project Site





SOURCE: USGS 7.5' Topo Quad Beverly Hills 1978, 1981

Providence Saint John's Health Center Phase II Project

**Figure 3**  
Project Location



The PSJHC Campus is located in the City's Healthcare Mixed-Use District, as indicated above, which is a district that includes the City's two hospitals (PSJHC and UCLA Medical Center, Santa Monica), as well as medical office buildings. Surrounding land uses include hospital, commercial, and residential buildings of one to twelve stories in height. The Project Site vicinity includes older residential structures ranging from one to eight stories (or up to 84 feet) in height, as well as newer hospital buildings (up to 92 feet in height), older commercial buildings ranging from one to twelve stories (up to 168 feet) in height, two hotels (the Best Western Plus Gateway Hotel Santa Monica at 1920 Santa Monica Boulevard and the Ambrose at 1255 20th Street), two schools (Santa Monica Malibu Unified School District's McKinley Elementary School and Saint Anne School), and newer condominium buildings.

## Project Description

### Existing Conditions

The Phase II Development Sites include 2C, 2I, 2D/E, Mullin Plaza Site, S1/S3, S2, S4 and Saint John's Square, and S5 (**Figure 4**). **Table 1** summarizes the existing improvements on the Phase II Development Sites. The buildings shaded blue are those that are proposed for demolition as part of the Project. A discussion of the existing conditions for each site is provided following the table.

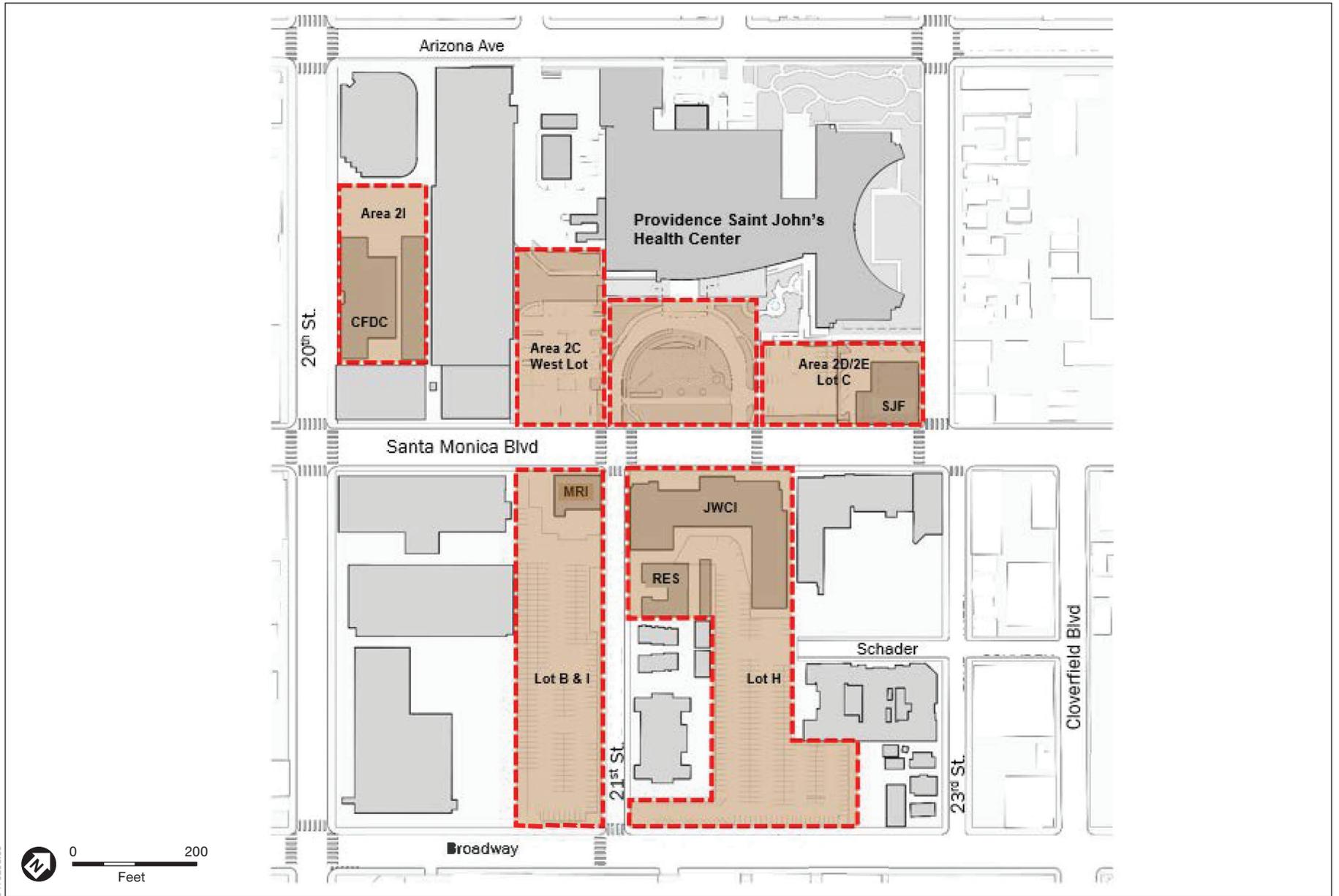
#### **Site 2C**

Site 2C is located on the PSJHC North Campus along Santa Monica Boulevard as shown in Figure 4, and is approximately 37,000 square feet of land area. This site is currently developed with a surface parking lot (the West Lot). Site 2C includes a landscaped area to the north of the West Lot, landscaping to buffer the West Lot from the sidewalk along Santa Monica Boulevard, and landscaping within the West Lot.

#### **Site 2D/E and Mullin Plaza Site**

Site 2D/E is located on the PSJHC North Campus at the northwest corner of 23rd Street and Santa Monica Boulevard, as shown in Figure 4, and has approximately 39,000 square feet of land area. Site 2D/E is developed with a surface parking lot (Lot C) and a two-story concrete office building of 10,800 square feet located at 2221 Santa Monica Boulevard with surface parking that serves the office building. Lot C is used for physician parking. The entire office building is occupied by the Saint John's Health Center Foundation.

The Mullin Plaza site is located on a portion of 2121 Santa Monica Boulevard (APN 4276-025-062) between Sites 2C and 2D/E, as shown on Figure 4, and has approximately 52,800 square feet of land area. The Mullin Plaza site includes the main vehicular access to the PSJHC Phase I development with a one-way semi-circle driveway. Within the semicircular driveway, there is an approximately 17,700-square-foot open space for use by patients, visitors, and employees. There are also landscaped areas located to the northeast and northwest and a landscaped area along Santa Monica Boulevard.



SOURCE: Perkins Eastman, 2018

Providence Saint John's Health Center Phase II Project

**Figure 4**  
Phase II Development Sites



**TABLE 1**  
**EXISTING IMPROVEMENTS/DEVELOPMENT ON PHASE II SITES SUMMARY**

| Site                       | Site Area | Existing Improvement   | Height                                      | Principal Uses  |
|----------------------------|-----------|--|---|---|
| 2C                         | 37,000 sf | West Parking Lot   | n/a   | Surface parking for visitors and patients                                     |
| 2I                         | 45,000 sf | Child & Family Development Center (CFDC)   | 2 Above-Grade Stories, 1 basement level     | Day care<br>Child & Family Development Center Use                             |
|                            |           | CFDC Pool house  | 1 Above-Grade Story                         | Maintenance and storage   |
| 2D/E                       | 39,000 sf | Saint John's Health Center Foundation Building (2221 Building) and related surface parking | 2 Above-Grade Stories                       | Office/meeting space for Saint John's Foundation                              |
|                            |           | Parking Lot C  | n/a   | Surface parking for physicians  |
| Mullin Plaza Site          | 52,800 sf | Entry plaza/vehicle drop-off/pick-up/open space  | n/a   | Entry plaza/vehicle drop-off/pick-up/open space                               |
| S1/S3                      |           | Temporary MRI Buildings  | 1 Above-Grade Story                         | Imaging   |
|                            |           | Parking Lot B  | n/a   | Surface parking for visitors and patients                                     |
|                            |           | Parking Lot I  | n/a   | Surface parking for employees/staff   |
| S2                         |           | Parking Lot H (portion)  | n/a   | Surface parking for employees/staff   |
| S4 and Saint John's Square |           | John Wayne Cancer Institute (2200 Santa Monica Boulevard)                                  | 2 Above-Grade Stories, 1 Subterranean Level | Medical Research, including clinics, laboratories, offices, and meeting space |
|                            |           | 10-unit Apartment Building (1417-1423 21st Street)   | 2 Above-Grade Stories                       | Multifamily dwelling units (Vacant)   |
|                            |           | Parking Lot H (portion)  | n/a   | Surface parking for employees/staff   |
| S5                         |           | Parking Lot H (portion)  | n/a   | Surface parking for employees/staff   |

### **Site 2I**

Site 2I is located on the PSJHC North Campus at 1339 20th Street (APN 4276-027-018), as shown in Figure 4, and has approximately 45,000 square feet of land area. Site 2I is developed with the existing Child & Family Development Center (CFDC), which consists of a two-story commercial building with a basement totaling approximately 34,670 square feet and a one-story, approximately 585-square-foot pool house.

### **Sites S1 and S3**

The S1 and S3 sites are located on the west side of the South Campus between Santa Monica Boulevard and Broadway, as shown in Figure 4. The S1 and S3 sites are currently improved with surface parking lots and a temporary building that was constructed during Phase I for PSJHC MRI facilities.

### **Site S2**

Site S2 is located on the southeast portion of the PSJHC Campus on two lots with the addresses 2207 and 2213 Broadway (APNs 4275-006-026, 4275-006-025,) as shown in Figure 4. Site S2 is developed with a portion of a surface parking lot that is used by PSJHC (Lot H).

### **Site S4**

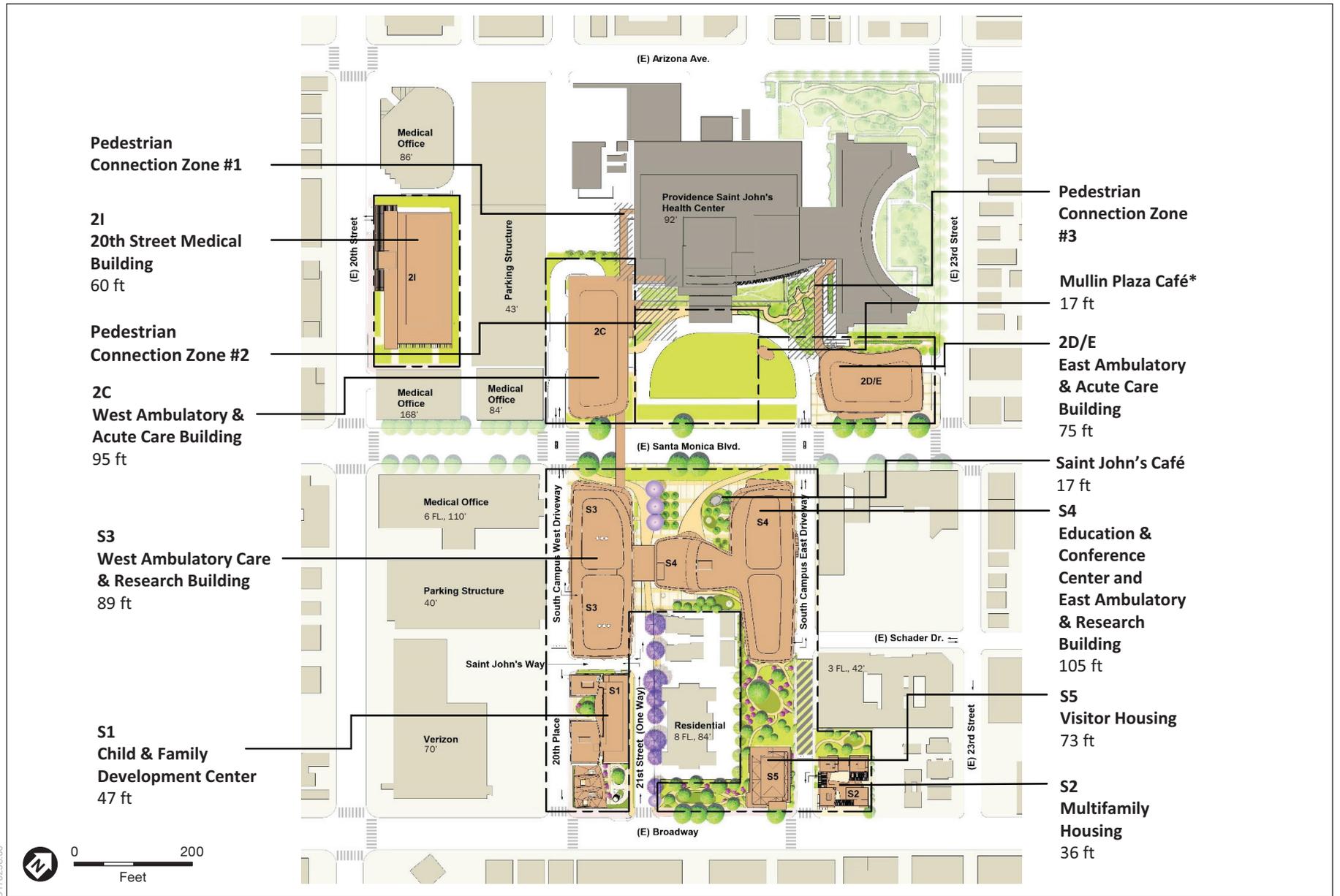
Site S4 is located at 1417-1423 21st Street, 2200 Santa Monica Boulevard, and 2201 Broadway (APNs 4275-007-002, 4275-007-001, 4275-007-003), as shown on Figure 4. Site S4 is developed with the existing two-story John Wayne Cancer Institute Building (2200 Santa Monica Boulevard) (hereafter referred to as the Cancer Institute), an existing vacant ten-unit multifamily apartment building (1417-1423 21st Street or Courtyard Apartment), and a paved surface parking lot (a portion of Lot H) that is used by PSJHC. The Cancer Institute Building (2200 Santa Monica Boulevard) has approximately 51,055 square feet of floor area located within two above-grade stories and one subterranean level.

### **Site S5**

Site S5 is located at 2201 Broadway and 1453 21st Street (APNs 4275-007-001, 4275-007-009), as shown on Figure 4. This site is developed with a surface parking (a portion of Lot H) that is used by PSJHC.

## **Phase II Development Program**

The Project includes the Phase II Development Program, consisting of ten (10) Phase II Project buildings with related infrastructure improvements and open space. The Phase II Development Sites for each of the ten (10) buildings and associated infrastructure and open space improvements are shown in **Figure 5** and summarized in **Table 2**. Each development site is described in detail following the table. The maximum height of new construction would be 105 feet and the maximum depth of ground disturbance would be approximately 55 feet (up to five levels of subterranean parking).



SOURCE: Perkins Eastman, 2018

Providence Saint John's Health Center Phase II Project

**Figure 5**  
Phase II Site Plan

**TABLE 2  
PHASE II DEVELOPMENT SUMMARY**

| Building Name                             |  | Types of DA Vested Uses in Building                                   | Floor Area/<br>Units per Use                              | Max. Building Floor Area   | Max. Height            |
|---|--|---|---|--|------------------------|
| S1  | Child & Family Development Center  | Child & Family Development Center                                     | 25,500 sf   | <b>34,500 sf</b>   | 47 feet<br>(3 floors)  |
|   |  | Day Care  | 15,000 sf   |  |                        |
|   |  | Up to five levels of subterranean parking                             |   |  |                        |
| S2  | Multifamily Housing  | Multifamily Housing   | 10 units  | 10 units plus <b>800 sf</b> commercial   | 36 feet<br>(3 floors)  |
|   |  | Neighborhood Commercial Uses  | 800 sf  |  |                        |
|   |  | Up to two levels of subterranean parking                              |   |  |                        |
| S3  | West Ambulatory Care & Research Building                                   | Hospital/Health Care  | 65,000 sf   | <b>123,000 sf</b>  | 89 feet<br>(5 floors)  |
|   |  | Medical Research Facilities (JWCI)                                    | 115,000 sf  |  |                        |
|   |  | Restaurant or Neighborhood Commercial Uses or Health Related Services | 5,000 sf  |  |                        |
|   |  | Up to five levels of subterranean parking                             |   |  |                        |
| S4  | Education & Conference Center and East Ambulatory Care & Research Building | Education & Conference Center   | 60,000 sf   | <b>199,000 sf</b>  | 105 feet<br>(6 floors) |
|   |  | Hospital/Health Care  | 120,000 sf  |  |                        |
|   |  | Health & Wellness Center  | 35,000 sf   |  |                        |
|   |  | Medical Research Facilities   | 50,000 sf   |  |                        |
|   |  | Health-Related Services   | 10,000 sf   |  |                        |
|   |  | Restaurant or Neighborhood Commercial Uses                            |   |  |                        |
| Up to five levels of subterranean parking |  |   |   |  |                        |
| S5  | Visitor Housing  | Visitor Housing   | 30-34 units   | <b>38,000 sf</b>   | 73 feet<br>(6 floors)  |
|   |  | Up to five levels of subterranean parking                             |   |  |                        |
|   | Saint John's Café  | Restaurant or Neighborhood Commercial Uses                            | 900 sf  | <b>900 sf</b>  | 17 feet<br>(1 floor)   |
| 2C  | West Ambulatory & Acute Care Building                                      | Hospital/Health Care  | 117,500 sf  | <b>123,350 sf</b> above-grade<br>(including 9,350 sf of Pedestrian Connections)<br><b>6,150 sf</b> below-grade<br>(including 2,650 sf of Pedestrian Connections) | 95 feet<br>(5 floors)  |
|   |  | Health-Related Services   | 5,500 sf  |  |                        |
|   |  | Restaurant or Neighborhood Commercial Uses                            |   |  |                        |
|   |  | Pedestrian Connections  | 12,000 sf<br>(9,350 sf above-grade,<br>2,650 below-grade) |  |                        |
| Up to four levels of subterranean parking |  |   |   |  |                        |

| Building Name                             |  | Types of DA Vested Uses in Building                                      | Floor Area/<br>Units per<br>Use                                  | Max. Building Floor Area  | Max.<br>Height        |
|---|--|--|--|---|-----------------------|
| 2D/E                                      | East<br>Ambulatory &<br>Acute Care<br>Building | Hospital/Health Care   | 78,500 sf  | <b>65,800 sf</b> above-grade<br>(including 3,300 sf of<br>Pedestrian Connections) | 75 feet<br>(4 floors) |
|   |  | Health-Related Services  | 3,000 sf   |   |                       |
|   |  | Restaurant or Neighborhood<br>Commercial Uses                            |  | <b>16,400 sf</b> below-grade<br>(including 400 sf of<br>Pedestrian Connections)   |                       |
|   |  | Pedestrian Connections   | 3,700 sf<br>(3,300 sf<br>above-grade,<br>400 sf below-<br>grade) |   |                       |
| Up to four levels of subterranean parking |  |  |  |   |                       |
| 2I  | 20th Street<br>Medical<br>Building             | Medical Office   | 50,000 sf  | <b>73,300 sf</b>  | 60 feet<br>(3 floors) |
|   |  | Health-Related Services  | 4,500 sf   |   |                       |
|   |  | Restaurant or Neighborhood<br>Commercial Uses                            |  | 18,800 sf   |                       |
|   |  | Above- Grade Parking (Vehicle<br>and Bicycle) and Vehicle<br>Circulation |  |   |                       |
| Up to four levels of subterranean parking |  |  |  |   |                       |
|   | Mullin Plaza<br>Café                           | Restaurant or Neighborhood<br>Commercial Uses                            | 1,500 sf   | <b>1,500 sf</b>   | 17 feet<br>(1 floor)  |

Source: PSJHC, 2017

### ***Sites S1 and S3: Child & Family Development Center and West Ambulatory Care & Research Building***

The development program for sites S1 and S3 includes demolishing the existing temporary MRI Building (c. 2000) and existing surface parking Lots B and I, and replacing them with the Child & Family Development Center (S1), the West Ambulatory Care & Research Building (S3), subterranean parking, and open space. As part of the S1 and S3 construction, new streets 20th Place and Saint John's Way would be created. A new driveway from Santa Monica Boulevard, South Campus West Driveway, would also be created.

The maximum floor area of the Child & Family Development Center would be 34,500 square feet with a maximum height of 47 feet (three floors). The maximum floor area of the West Ambulatory Care & Research Building would be 123,000 square feet with a maximum height of 89 feet (five floors). An above-grade pedestrian connection would be located between the West Ambulatory Care & Research Building (S3) and the Education & Conference Center and East Ambulatory Care & Research Building (S4). This connection would be developed as part of the S4 development and is described below. An up to 2,100-square-foot above-grade enclosed Pedestrian Connection over Santa Monica Boulevard connecting the West Ambulatory Care & Research Building (S3) and the West Ambulatory & Acute Care Building (2C) is also proposed. This element (along with the tunnel connection underneath Santa Monica Boulevard described below) would either be constructed as part of the S3 development or as part of the 2C development, depending on which development proceeds first.

As part of development on sites S1 and S3, a subterranean parking garage with up to five levels of underground parking would be provided beneath the S1 and S3 sites. A subterranean tunnel connection beneath Santa Monica Boulevard connecting the S1/S3 parking garage and the 2C parking garage is also proposed. As with the above-grade Pedestrian Connection over Santa Monica Boulevard, this element would either be constructed as part of the S3 development or as part of the 2C development, depending on which development proceeds first.

### ***Site S2: Multifamily Housing***

The development program for site S2 includes removal of the southeast corner of Lot H and replacing it with a multifamily residential building with subterranean parking, the Multifamily Housing, and on-site open space located north of the Multifamily Housing. As part of development on site S2, Southeast Driveway would be created. The building would include ten (10) two-bedroom residential units and up to 800 square feet, and would have a maximum height of 36 feet (three floors). There would be up to two levels of subterranean parking beneath the Multifamily Housing.

### ***Site S4: Education & Conference Center and East Ambulatory Care & Research Building and Saint John's Café***

The development program for site S4 includes the removal of the existing surface parking (Lot H) to allow for the construction of two buildings, the Education & Conference Center and East Ambulatory Care & Research Building and Saint John's Café. The development program also includes the creation of the new South Campus East Driveway and the creation of the new open space area called Saint John's Square.

The existing buildings located on site S4, the 10-unit multifamily housing building (Courtyard Apartment, 1947) and the Cancer Institute building, would be demolished after their new facilities are constructed (the Multifamily Housing (S2) and the West Ambulatory Care & Research Building (S3)). After demolition, this land area would be used for construction staging and interim parking until construction for the Site S4 development program begins.

The maximum floor area of the Education & Conference Center and East Ambulatory Care & Research Building (S4) would be 199,000 square feet and the maximum height of the building would be 105 feet (six floors). The Education & Conference Center and East Ambulatory Care & Research Building (S4) floor area includes an above-grade, two-level pedestrian connection between the West Ambulatory Care & Research Building (S3) and the Education & Conference Center and East Ambulatory Care & Research Building (S4).

As part of development on site S4, a new open space area, Saint John's Square, would be created along Santa Monica Boulevard between the S3 and S4 buildings. This open space would have a minimum dimension of 110 feet (north/south) by 150 feet (east/west). The maximum floor area of Saint John's Café would be 900 square feet with a maximum height of 17 feet (one floor).

Also as part of development on site S4, a subterranean parking garage with up to five levels of underground parking would be provided beneath both the S4 and S5 sites as well under the vacated/northern portion of 21st Street. Construction of the subterranean parking garage would

require the removal of the remaining portion of the existing surface parking Lot H. A subterranean tunnel connection beneath Santa Monica Boulevard connecting the S4 parking garage and the 2D/E parking garage is also proposed. This element would be constructed as part of the 2D/E development.

### ***Site S5: Visitor Housing***

The development program for Site S5 includes the construction of an up to 34-unit Visitor Housing building and the creation of two new open space areas. The Visitor Housing building would include up to 34 units (maximum of 38,000 square feet of floor area) of Visitor Housing. The Visitor Housing building would have a maximum height of 73 feet (six floors). In addition, two new open space areas would be created as part of the Site S5 development: the Sun Garden (135 feet by 90 feet) and the South Garden (50 feet by 145 feet).

### ***Site 2C: West Ambulatory & Acute Care Building***

The development program for site 2C includes removal of the existing West Lot and landscaping and construction of the West Ambulatory & Acute Care Building with subterranean parking. The 2C development also includes enclosed Pedestrian Connections between the West Ambulatory & Acute Care Building (2C) and the existing Phase I Keck Building that would be constructed on and across Phase I land area, and would require the removal of two existing one-story cinder block buildings (built c. 2008) commonly referred to as the “technology docks.”

The maximum floor area of the West Ambulatory & Acute Care Building (2C) would be 123,350 square feet above-grade and 6,150 square feet below-grade. The maximum building height would be 95 feet (five floors). There would be up to four levels of subterranean parking beneath the West Ambulatory & Acute Care Building (2C). The above-grade Pedestrian Connections in Pedestrian Zones #1 and #2 would each have a maximum width of 16 feet and a maximum height of 60 feet (excluding parapet).

The West Ambulatory & Acute Care Building also includes an up to 2,100 square feet above-grade enclosed Pedestrian Connection over Santa Monica Boulevard connecting the West Ambulatory & Acute Care Building (2C) to the West Ambulatory Care & Research Building (S3). Structural columns to support this Pedestrian Connection would be located on both Sites 2C and S3. A subterranean tunnel connection underneath the subterranean parking garages beneath both buildings would allow for vehicular circulation between the two garages without having to utilize Santa Monica Boulevard. These elements would either be constructed as part of the 2C development or as part of the S3 development, depending on which development proceeds first.

### ***Sites 2D/E and Mullin Plaza: The East Ambulatory & Acute Care Building***

The development program for site 2D/E includes the demolition of the single-story office building located at 2221 Santa Monica Boulevard (currently used by the Saint John’s Health Center Foundation, c. 1975-1980), and the existing surface parking lots, followed by the construction of the East Ambulatory & Acute Care Building and associated subterranean parking. As part of the Site 2D/E development, the existing Mullin Plaza open space would be expanded and redesigned.

The maximum floor area of the East Ambulatory & Acute Care Building (2D/E) would be 65,800 square feet above-grade and 16,400 square feet below-grade. The maximum height of the building would be 75 feet (four floors). There would be up to four levels of subterranean parking beneath the East Ambulatory & Acute Care Building (2D/E).

The East Ambulatory & Acute Care Building (2D/E) includes up to 3,700 square feet of floor area for above-grade and below-grade Pedestrian-Connections to the existing Phase I CSS Building. The above-grade Pedestrian Connection in Pedestrian Zone #3 would have a maximum width of 16 feet and a maximum height of 24 feet (excluding parapet). A subterranean tunnel connection underneath the subterranean parking garages beneath Site 2D/E and Site S4 would allow for vehicular circulation between the two garages without having to utilize Santa Monica Boulevard.

As part of development on Site 2D/E, the existing open space area within the Mullin Plaza driveways would be expanded to approximately 23,000 square feet when the existing curb cut on Santa Monica Boulevard for the Mullin Plaza ingress driveway is shifted east to align with the new South Campus East Driveway. The redesigned plaza may include a commercial kiosk, the Mullin Plaza Café, which would have a maximum floor area of 1,500 square feet with a maximum height of 17 feet (one floor).

### **Site 2I: 20th Street Medical Building**

The development program for site 2I includes demolishing the existing CFDC and pool house (built in 1961 and 1989, respectively) and construction of the 20th Street Medical Building (2I). The maximum floor area of the 20th Street Medical Building (2I) would be 73,300 square feet. The maximum height of the building would be 60 feet (three floors) and there would be up to four levels of subterranean parking. Site 2I would also be improved with ground level open space as part of construction of the 20th Street Medical Building.

## **Regulatory Framework**

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value that are afforded protection under state laws and regulations. The following section summarizes the applicable state and local laws and regulations, as well as professional standards provided by the Society for Vertebrate Paleontology (SVP).

### **State**

#### **California Environmental Quality Act**

The CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations, Section 15000 *et seq.*), define the procedures, types of activities, individuals, and public agencies required to comply with CEQA. As part of CEQA's Initial Study process, one of the questions that must be answered by the lead agency relates to paleontological resources: "Will the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (CEQA Guidelines Section 15023, Appendix G, Section XIV, Part a).

The loss of any identifiable fossil that could yield information important to prehistory, or that embodies the distinctive characteristics of a type of organism, environment, period of time, or geographic region, would be a significant environmental impact. Direct impacts to paleontological resources primarily concern the potential destruction of nonrenewable paleontological resources and the loss of information associated with these resources. This includes the unauthorized collection of fossil remains. If potentially fossiliferous bedrock or surficial sediments are disturbed, the disturbance could result in the destruction of paleontological resources and subsequent loss of information (significant impact). At the project-specific level, direct impacts can be mitigated to a less than significant level through the implementation of paleontological mitigation.

The CEQA threshold of significance for a significant impact to paleontological resources is reached when a project is determined to “directly or indirectly destroy a significant paleontological resource or unique geologic feature” (CEQA Guidelines Section 15023, Appendix G, Section XIV, Part a). In general, for project sites that are underlain by paleontologically sensitive geologic units, the greater the amount of ground disturbance, the higher the potential for significant impacts to paleontological resources. For project sites that are directly underlain by geologic units with no paleontological sensitivity, there is no potential for impacts on paleontological resources unless sensitive geologic units which underlie the non-sensitive unit are also affected.

### **Public Resources Code Section 5097.5 and Section 30244**

Other state requirements for paleontological resource management are included in PRC Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, district) lands.

### **Society for Vertebrate Paleontology**

The SVP has established standard guidelines (SVP, 1995; 2010) that outline professional protocols and practices for conducting paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional vertebrate paleontologists adhere closely to the SVP’s assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most state regulatory agencies with paleontological resource-specific Laws, Ordinances, Regulations, and Standards (LORS) accept and use the professional standards set forth by the SVP.

As defined by the SVP (1995:26), significant nonrenewable paleontological resources are:

*Fossils and fossiliferous deposits here restricted to vertebrate fossils and their taphonomic and associated environmental indicators. This definition excludes invertebrate or paleobotanical fossils except when present within a given vertebrate assemblage. Certain invertebrate and plant fossils may be defined as*

*significant by a project paleontologist, local paleontologist, specialists, or special interest groups, or by lead agencies or local governments.*

As defined by the SVP (1995:26), significant fossiliferous deposits are:

*A rock unit or formation which contains significant nonrenewable paleontologic resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces, and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (ichnites and trace fossils generated by vertebrate animals, e.g., trackways, or nests and middens which provide datable material and climatic information). Paleontologic resources are considered to be older than recorded history and/or older than 5,000 years BP [before present].*

Based on the significance definitions of the SVP (1995), all identifiable vertebrate fossils are considered to have significant scientific value. This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely will a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to provide significant new information on the taxon it represents, its paleoenvironment, and/or its distribution. Furthermore, all geologic units in which vertebrate fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

A geologic unit known to contain significant fossils is considered to be “sensitive” to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or indirectly disturb or destroy fossil remains. Paleontological sites indicate that the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case (SVP, 1995).

Fossils are contained within surficial sediments or bedrock, and are therefore not observable or detectable unless exposed by erosion or human activity. In summary, paleontologists cannot know either the quality or quantity of fossils prior to natural erosion or human-caused exposure. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if these remains are significant, successful mitigation and salvage efforts may be undertaken in order to prevent adverse impacts to these resources.

## Paleontological Sensitivity

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its “Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources,” the SVP (2010) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential:

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rock units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcanoclastic formations (e. g., ashes or tephra), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.). Paleontological potential consists of both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, plant, or trace fossils and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data. Rock units which contain potentially datable organic remains older than late Holocene, including deposits associated with animal nests or middens, and rock units which may contain new vertebrate deposits, traces, or trackways are also classified as having high potential.
- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e. g. basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.
- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist (see “definitions” section in this document) to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.

- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources. [SVP, 2010; 1-2]

For geologic units with high potential, full-time monitoring is generally recommended during any project-related ground disturbance. For geologic units with low potential, protection or salvage efforts will not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist should be conducted to specifically determine the paleontological potential of the rock units present within the study area.

## Paleontological Resources Significance Criteria

Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life; or
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer 2003, Scott et al. 2004).

## Setting

### Natural Setting

The City of Santa Monica (City) is located just south of the boundary between the Transverse Ranges and Peninsular Ranges geomorphic provinces. The Transverse Ranges geomorphic province to the north is characterized by east-west trending mountain ranges that include the Santa Monica Mountains. The Santa Monica, Hollywood, Raymond, Sierra Madre, and

Cucamonga faults mark the southern boundary of the province. The Peninsular Range province is characterized by northwest/southeast trending alignments of mountains and hills and intervening basins, reflecting the influence of northwest trending major faults and folds controlling the general geologic structural fabric of the region. This province extends northwesterly from Baja California into the Los Angeles Basin and westerly into the offshore area, including Santa Catalina, Santa Barbara, San Clemente and San Nicolas islands. This province is bounded on the east by the San Jacinto fault zone. The Los Angeles Basin is the northernmost part of the Peninsular Ranges province.

The Los Angeles Basin, which is an alluviated lowland sometimes referred to as the coastal plain, is underlain by a structural depression that is important for its structural relief and complexity in relation to its small size and for its abundant oil production. The basin was formed about 15 million years ago during the Neogene, when the land was underwater and during a crustal disruption caused by a clockwise shift in the surrounding mountains. This weakening led to the formation of a large bowl of the basin and sediment from the sea and rivers accumulated in thick layers in the undersea bowl. Then, about 5 million years ago, the crustal stretching collapsed and the basin was forced to the surface (Yerkes et al., 1965).

## Geologic Setting

The Project Site is located at the western-most edge of the Los Angeles Basin. The Los Angeles Basin forms a significant structural depression between the Transverse Ranges geomorphic province to the north and the Peninsular Ranges province to the south (Norris and Webb, 1990). Thousands of feet of sediment have been intermittently deposited into the basin since the Late Cretaceous, with continual settling and deposition taking place since the Miocene. In the central region of the basin, the geologic makeup consists of Mesozoic basement of igneous and metamorphic origin unconformably overlain by thousands of feet of clastic terrestrial and marine sedimentary rocks ranging in age from the Late Cretaceous to the Pleistocene with interbedded volcanic horizons of Miocene age (Yerkes et al., 1965).

## Archival Research

### LACM Records Search

A database search for records of fossil localities within the Project Site was conducted by the Natural History Museum of Los Angeles County (LACM) on June 8, 2017 (McLeod, 2017). The purpose of the museum records search was to: (1) determine whether any previously recorded fossil localities occur in the area; (2) assess the potential for disturbance of these localities during construction; and (3) assist in evaluating the paleontological sensitivity of the area.

The database search results indicate that surface deposits in most of the Project Site (eastern portion) consist of younger Quaternary alluvium. Surface deposits in the remainder of the proposed project area (western portion) consist of older Quaternary alluvium. Both of these deposits are derived broadly as alluvial fan deposits from the Santa Monica Mountains to the north. The Quaternary deposits typically do not contain significant vertebrate fossils in the

uppermost layers, but may contain significant fossil vertebrate remains at relatively shallow depths.

The database search returned no known localities within the Project Site; however, a number of vertebrate fossils are known from similar sedimentary deposits (McLeod, 2017). The closest locality from older Quaternary sediments is LACM 5462, located about 0.45 miles from the Project Site. This locality produced a specimen of extinct lion, *Felix atrox*, at a depth of 6 feet below ground surface. Fossil locality LACM 7879, located about 1.9 miles from the Project Site produced fossil specimens of horse, *Equus*, and ground sloth, *Paramylodon*, at depths over 11 feet below ground surface.

## Geological Map Review

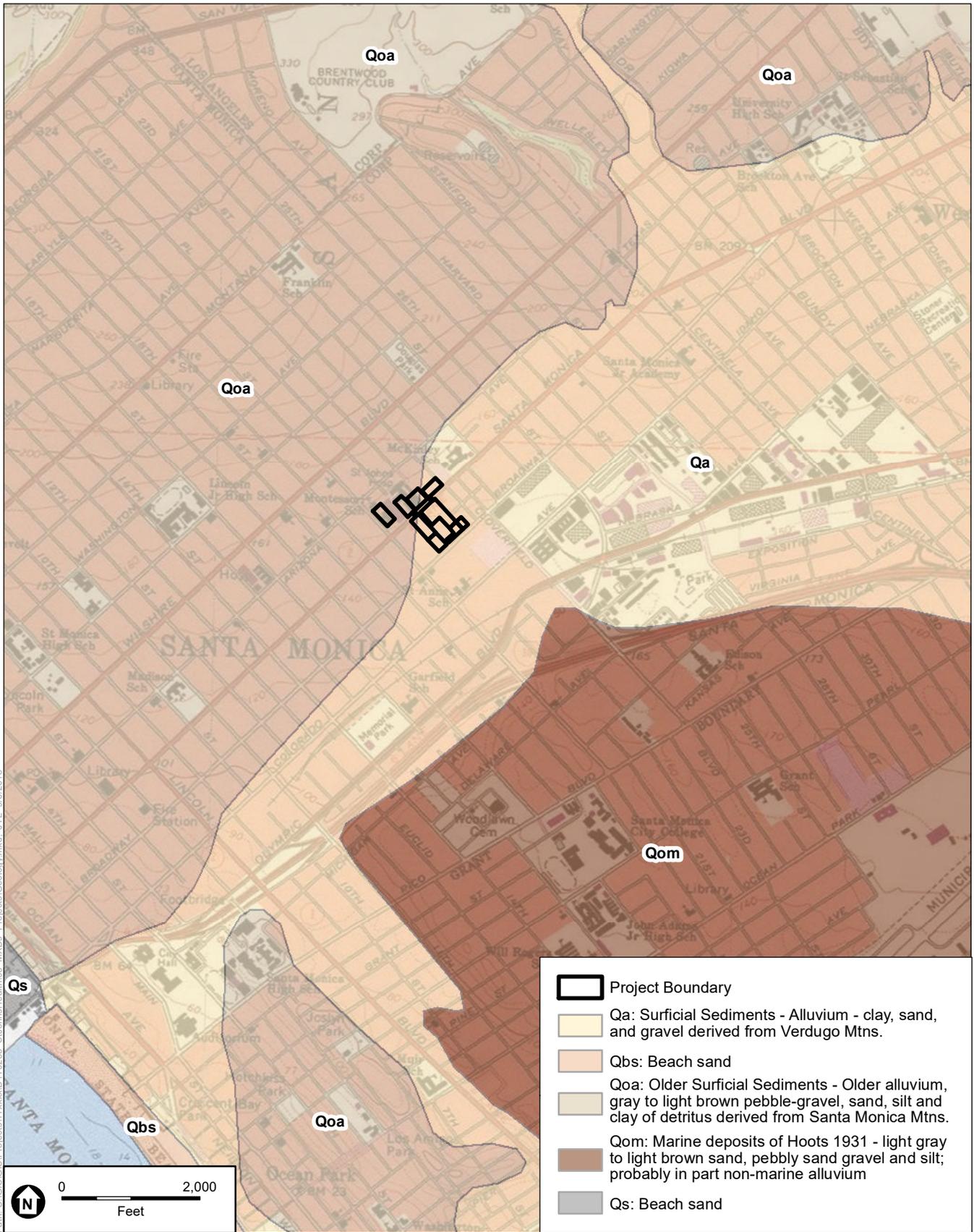
Geological mapping by Dibblee and Ehrenspeck (1991) indicates that the surface of the Project Site consists of two geologic units: younger Quaternary alluvium (Qa) and older Quaternary alluvium (Qoa) (**Figure 6**).

**Younger Quaternary Alluvium (Qa).** Younger Quaternary alluvium is mapped at the surface of the southern and eastern portions of the Project Site. These sediments consist of gravel, sand, and silt-clay derived primarily from the Santa Monica Mountains to the north, and dates to the Holocene (11,700 years ago to present) (Dibblee and Ehrenspeck, 1991).

**Older Quaternary Alluvium (Qoa).** Older Quaternary alluvium is mapped at the surface of the northern and western portions of the Project Site, and is likely present in the subsurface throughout the Project Site. These deposits date to the Pleistocene (2,588,000 to 11,700 years ago) and consist of slightly consolidated pebble-gravel, sand, silt, and clay. They are also derived from the Santa Monica Mountains to the north (Dibblee and Ehrenspeck, 1991).

## Review of Geotechnical Report

ESA reviewed the *Report of Preliminary Geotechnical Consultation* prepared for the Project (Wood Environment & Infrastructure Solutions, Inc., 2014). The geotechnical report indicates that fill soils were found up to 5 feet thick (during their current and prior borings) within or near the development sites north of Santa Monica Boulevard. Fill soils were encountered up to 6 feet thick, within or near the development sites located south of Santa Monica Boulevard. The fill soils consist of clayey silt, sandy silt, silty clay, silty sand, and sand with some gravel, concrete and brick fragments. Report Figure 3, Local Geology Map, indicates that the southeastern half of the Project Site is comprised of young alluvium deposits (Qya) (Holocene to late Pleistocene, approx. 11,700 years ago to present). The northwestern half of the Project Site is comprised of Old Alluvial fan deposits (Qof) (late to middle Pleistocene, approx. 126,000 to 11,700 years ago). Pleistocene alluvial fan deposits were encountered at approximately 40 to 90 feet below surface and consist of sandy silt, clayey silt and silty sand (Wood Environment & Infrastructure Solutions, Inc., 2014).



SOURCE: Dibblee Geological Foundation

Providence Saint John's Health Center Phase II Project

**Figure 6**  
Geology

## Paleontological Sensitivity Analysis

The younger Quaternary alluvium present within the Project Site is assigned a low-to-high paleontological sensitivity, increasing with depth. These sediments are generally too young to preserve fossil resources at the surface; however, they increase in age with depth, and may preserve fossil resources in the subsurface. While the specific depth at which this transition occurs is not known, the presence of a lion fossil at 6 feet below ground surface 0.45 miles from the Project Site indicates the age of these sediments increases rapidly with depth.

The older Quaternary alluvium is assigned a high paleontological sensitivity. A review of the scientific literature indicates that older Quaternary alluvium is well known for preserving significant fossil resources across Southern California. Ice Age taxa, such as mammoths, ground sloths, camels, and many others, are commonly found in such sediments (Jefferson, 1991a and b; Scott, 2010; Scott and Cox, 2008).

## Conclusions and Recommendations

### Conclusions

Younger quaternary alluvium, present at the surface of the southern and eastern portion of the Project Site, is too young to preserve fossils near the surface, and therefore has low-to-high paleontological sensitivity, increasing with depth. Older Quaternary alluvium, present at the surface of the northern and western portions of the Project site and in the subsurface throughout the Project site, has high paleontological potential. It is anticipated that fossils could be encountered at depths as shallow as 6 feet.

### Recommendations

The following mitigation measures are recommended in order to reduce impacts to unique paleontological resources to a less than significant level:

**Mitigation Measure PALEO-1: Retention of a Qualified Paleontologist.** Prior to start of any ground-disturbing activities (i.e., demolition, pavement removal, pot-holing or auguring, boring, drilling, grubbing, vegetation removal, brush clearance, weed abatement, grading, excavation, trenching, or any other activity that has potential to disturb soil), the Applicant shall retain a Qualified Paleontologist meeting the Society of Vertebrate Paleontology standards (SVP, 2010). The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training for all construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the project area and the procedures to be followed if they are found. The Applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

**Mitigation Measure PALEO-2: Paleontological Monitoring.** Full-time paleontological resources monitoring shall be performed by a qualified paleontological monitor under the direction of the Qualified Paleontologist (SVP, 2010) for all ground disturbance in undisturbed soils below a depth of 6 feet. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils, in a radius of at least 50 feet, in order to recover the fossil specimens. Any significant fossils collected during Project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. The Qualified Paleontologist shall prepare a final monitoring and mitigation report to be submitted to the City.

**Mitigation Measure PALEO-3: Inadvertent Discoveries of Paleontological Resources.** If construction or other Project personnel discover any potential fossils during construction, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and made recommendations as to the appropriate treatment. If the find is deemed significant, it shall be salvaged following the standards of the SVP (2010) and curated with a certified repository.

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# Appendix A

## **Personnel**



# Alyssa Bell, PhD

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## Paleontologist

### EDUCATION

Ph.D., Vertebrate  
Paleontology;  
University of Southern  
California

M.S., Environmental  
Microbiology;  
University of  
Tennessee

B.A. with honors,  
Ecology and  
Systematics; William  
Jewell College &  
Homerton College,  
Cambridge University

### 10 YEARS EXPERIENCE

Dr. Alyssa Bell has supervised and performed field work, authored project reports, and provided scientific and compliance direction and quality control for paleontological projects throughout Southern California. Dr. Bell has accumulated a wealth of field experience, working with crews from a variety of institutions on field sites in California, Arizona, New Mexico, South Dakota, and Utah, and has led her own expeditions in Montana. She has performed all manner of investigations from surveys and assessments to monitoring and fossil identification over the last 15 years as a part of her academic pursuits and professional consultation, with the last three years being exclusively professional endeavors.

In addition to consulting, Dr. Bell serves as a postdoctoral fellow at the Dinosaur Institute of the Natural History Museum of Los Angeles County (LACM). There she is involved in pursuing her own research into fossil birds as well as working with the Institute's field projects and museum-wide education and outreach initiatives. She has also published peer-reviewed articles and book chapters and given numerous presentations at scientific conferences on both her paleontological and microbiological research.

### Relevant Experience

**County of Los Angeles, Rancho Los Amigos South Campus EIR, Los Angeles, CA.** *Principal Investigator.* The County of Los Angeles Department of Public Works (County) proposes redevelopment of a portion of the Rancho Los Amigos (RLA) South Campus which is located in the City of Downey. ESA is preparing a Historic District Evaluation, archaeological surveys, and all other CEQA-required topics. ESA is also serving in an Executive Consultant role to the County, to advise on other potential future projects at the RLA Campus. Dr. Bell conducted the paleontological assessment and authored the Paleontological Resources Technical Report.

**City of Burbank, Avion Project EIR, Burbank, CA.** *Principal Investigator.* ESA is preparing an Environmental Impact Report (EIR) in support of the General Plan Amendment to change the General Plan land use designation from Airport to Golden State Commercial/Industrial for the western most 18-acre portion of the 60-acre project site. Dr. Bell conducted the paleontological assessment.

**The Onni Group, Los Angeles Times Mirror Square EIR, Los Angeles, CA.** *Project Paleontologist.* ESA is preparing an EIR for the Times Mirror Square project which includes the development of two mixed-use residential towers and rehabilitation of the historic Los Angeles Times structures located within the Center City/Historic Core District of Downtown Los Angeles. Dr. Bell conducted the paleontological assessment and authored the Paleontological Resources Technical Report.

**Shafter Wasco Irrigation District Natural and Cultural Resource Evaluations and Air Quality, Kern County CA.** *Principal Investigator.* Dr. Bell provided paleontological studies and developed recommendations for the monitoring and mitigation of paleontological resources for the project.

**Valentine EIR, Kern County, CA.** *Principal Investigator.* Dr. Bell provided paleontological resources support for a 2,000-acre solar PV project in the Mojave Desert. Deliverables included comprehensive technical reports, GIS impact analysis, strategic and permitting support, and a paleontological field survey in the preparation of an EIR and other permitting requirements.

**Valentine Solar EIR 115MW Supplemental Reports, Kern County, CA.** *Principal Investigator.* Dr. Bell provided paleontological studies in support of changes to the previously established Valentine Solar project.

**Valentine Solar Biological and Paleontological Study Updates, Rosamond, Kern County, CA.** *Principal Investigator & Project Paleontologist.* Dr. Bell provided paleontological studies, carried out a paleontological survey, and developed monitoring and mitigation guidelines for the Valentine Solar project.

**Washington National Archaeological and Paleontological Monitoring (Access Culver City), Culver City, CA.** *Principal Investigator & Project Paleontologist.* Dr. Bell managed the curatorial process for fossils collected during monitoring of pre-construction activities at the Washington national site in Culver City, CA and authored the final report.

**OTO Hotels Santa Monica Archaeological and Paleontological Service, Santa Monica, CA.** *Principal Investigator.* Dr. Bell supervised paleontological monitoring and mitigation services during construction excavations and grading. Services included implementation of a paleontological mitigation monitoring program and reporting.

**Sacred Heart Specific Plan Environmental Impact Report (EIR), La Canada Flintridge, CA.** *Principal Investigator.* Dr. Bell prepared paleontological studies and developed monitoring & mitigation recommendations for the Sacred Heart development project.

**Sixth & Bixel Paleontological Monitoring Services Project, Los Angeles, CA.** *Principal Investigator & Project Paleontologist.* Dr. Bell supervised paleontological monitoring of preconstruction activities in support of a development project encompassing two parcels in downtown Los Angeles. During these activities, monitors identified and recovered numerous significant vertebrate fossils. Dr. Bell supervised the excavation of fossilized whale remains discovered on-site, and oversaw the collection and curation of all fossil specimens.

**Natural and Cultural Support for the Gordon Mull Subdivision EIR, Glendora, CA.** *Principal Investigator.* Dr. Bell collected the necessary data to prepare the technical sections and mitigation recommendations to support an EIR prepared by another firm to address the Gordon Mull Subdivision in the city of Glendora. The project proposes to redevelop a 71-acre, 19-lot located in the San Gabriel Foothills.



# Monica Strauss, RPA

Director, Southern California  
Cultural Resources Group

## EDUCATION

M.A., Archaeology,  
California State  
University, Northridge

B.A., Anthropology,  
California State  
University, Northridge

AA, Humanities, Los  
Angeles Pierce College

## 19 YEARS EXPERIENCE

### SPECIALIZED EXPERIENCE

Treatment of Historic  
and Prehistoric Human  
Remains

Archaeological  
Monitoring

Complex Shell Midden  
Sites

Groundstone Analysis

### PROFESSIONAL AFFILIATIONS

Register of Professional  
Archaeologists (RPA),  
#12805

Society for California  
Archaeology (SCA)

Society for American  
Archaeology (SAA)

### QUALIFICATIONS

Exceeds Secretary of  
Interior Standards

CA State BLM  
Permitted

Monica has successfully completed dozens of cultural resources projects throughout California and the greater southwest, where she assists clients in navigating cultural resources compliance issues in the context of CEQA, NEPA, and Section 106. Monica has extensive experience with archaeological resources, historic buildings and infrastructure, landscapes, and Tribal resources, including Traditional Cultural Properties. Monica manages a staff of cultural resources specialists throughout the region who conduct Phase 1 archaeological/paleontological and historic architectural surveys, construction monitoring, Native American consultation, archaeological testing and treatment, historic resource significance evaluations, and large-scale data recovery programs. She maintains excellent relationships with agency staff and Tribal representatives. Additionally, Monica manages a general compliance monitoring team who support clients and agencies in ensuring the daily in-field compliance of overall project mitigation measures.

## Relevant Experience

**Los Angeles Department of Water and Power, Scattergood Olympic Transmission Line Monitoring, Los Angeles County.** *Cultural Resources Principal Investigator.* The Los Angeles Department of Water and Power (LADWP) is proposing to construct and operate approximately 11.4 miles of new 230 kilovolt (kv) underground transmission line that would connect the Scattergood Generation Station and Olympic Receiving Station. The project includes monitoring of potential vault location testing. Monica currently coordinates and provides daily oversight to archaeological, Native American, and paleontological monitors. An Archaeological Resources Monitoring Report and a Paleontological Resources Monitoring Report documenting the monitoring findings will be submitted, together with daily monitoring logs, at the close of the project.

**Los Angeles Department of Water and Power Lone Pine Landfill Paleontological Resources Recovery, Inyo County, CA.** *Cultural Resources Project Director.* At the request of LADWP, ESA responded to a discovery of large mammal bone at the Lone Pine Landfill in an area where borrow materials were being excavated. ESA conducted geologic map research and recovered what was identified as a mammoth tusk. The tusk was stabilized, prepared for curation, and transported to a storage facility. Monica provided senior oversight of the paleontological resources recovery team and conducted paleontological resources sensitivity training and guidance to landfill staff in the event additional material are encountered.



# Sara Dietler

## Archaeologist

### EDUCATION

B.A., Anthropology,  
San Diego State  
University

### 19 YEARS EXPERIENCE

### CERTIFICATIONS/ REGISTRATION

California BLM Permit,  
Principal Investigator,  
Statewide

Nevada BLM Permit,  
Paleontology, Field  
Agent, Statewide

### PROFESSIONAL AFFILIATIONS

Society for American  
Archaeology (SAA)

Society for California  
Archaeology (SCA)

Sara is a senior archaeology and paleontology lead with 20 years of experience in cultural resources management in Southern California. As a senior project manager, she manages technical studies including archaeological and paleontological assessments and surveys, as well as monitoring and fossil salvage for many clients, including public agencies and private developers. She is a cross-trained paleontological monitor and supervisor, familiar with regulations and guidelines implementing the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and the Society of Vertebrate Paleontology guidelines. She has extensive experience providing oversight for long-term monitoring projects throughout the Los Angeles Basin for archaeological, Native American, and paleontological monitoring compliance projects and provides streamlined management for these disciplines.

### Relevant Experience

**Southern California Edison On-Call Master Services Agreement for Natural and Cultural Resources Services; *Cultural Resources Task Manager.*** Sara provided project management and senior archaeological support for an on-call Master Services Agreement with Southern California Edison for cultural and natural resources consulting services. This contract included numerous surveys and monitoring projects for pole replacements and small- to mid-size reconductoring projects, substation maintenance, and construction projects. Sara was responsible for oversight of archaeological and paleontological monitors, serving as report author and report manager.

**Scattergood Olympic Transmission Line, Los Angeles, CA. *Report Author.*** The Los Angeles Department of Water and Power is proposing to construct and operate approximately 11.4 miles of new 230 kilovolt (kv) underground transmission line that would connect the Scattergood Generation Station and Olympic Receiving Station. The project includes monitoring of construction activities occurring in street rights-of-way. Sara is providing final reporting for the long-term monitoring and QA/QC of the field data.

**Long Beach Courthouse Project; Long Beach, CA. *Senior Project Archaeologist and Project Manager.*** Under contract to Clark Construction Sara directed the paleontological and archaeological monitoring for the construction of the New Long Beach Courthouse. She supervised monitors inspecting excavations up to 25 feet in depth. Nine archaeological features were recovered. Sara completed an assessment of the artifacts and fossil localities in a technical report at the completion of the project.