

# ● CHAPTER 9

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## Mitigation Monitoring and Reporting Program

### 9.1 Introduction

When approving projects with mitigation measures that if implemented would avoid or lessen significant impacts, the California Environmental Quality Act (CEQA) requires public agencies to adopt monitoring and reporting programs or conditions of project approval to mitigate or avoid the identified significant effects (Public Resources Code Section 21081.6(a)(1)). A public agency adopting measures to mitigate or avoid the significant impacts of a proposed project is required to ensure that the measures are fully enforceable, through permit conditions, agreements, or other means (Public Resources Code Section 21081.6(b)). The mitigation measures required by a public agency to reduce or avoid significant project impacts not incorporated into the design or program for the project may be made conditions of project approval as set forth in a Mitigation Monitoring and Reporting Program (MMRP). The program must be designed to ensure project compliance with mitigation measures during project implementation.

The MMRP includes the mitigation measures identified in the UCSF Research Building and City Parking Garage Expansion at ZSFG EIR, which are required to address the significant impacts associated with the proposed project. The required mitigation measures are summarized in this MMRP; the full text of the impact analysis and mitigation measures are presented in the Final EIR (August 2016). This table also includes mitigation measures identified in the Initial Study, which is included as Appendix A of the Final EIR.

### 9.2 Format

The MMRP is organized in a table format (see Table 9-1), keyed to each significant impact and each mitigation measure. Only mitigation measures adopted to address significant impacts are included in this program. Each mitigation measure is set out in full, followed by a tabular summary of monitoring requirements. The column headings in the tables are defined as follows:

- **Environmental Impact:** This column presents the environmental impacts identified in the EIR.
- **Mitigation Measures:** This column identifies the mitigation measures associated with the impacts identified in the EIR.
- **Implementation Procedure:** This column identifies the procedure for implementing each mitigation measure.

- **Responsible Unit:** This column contains an assignment of responsibility for the implementation, monitoring and reporting tasks for the mitigation measure and identifies any regulatory agency approval needed.
- **Report Mechanism:** This column refers to the outcome from implementing the mitigation measure.

## 9.3 Enforcement

Under the proposed project, UCSF would develop the research building on the B/C Lot site, and if there is an expansion of the ZSFG parking garage, the Parking Authority would be responsible for its development. If the proposed UCSF research building is approved, the MMRP would be adopted by the Regents. Therefore, all mitigation measures applicable to the UCSF research building for significant impacts must be carried out by the designated public agency in order to fulfill the requirements of approval. A number of the mitigation measures would be implemented during the course of the development review process. These measures would be checked on plans, in reports, and in the field prior to construction. Most of the remaining mitigation measures would be implemented during the construction or implementation of the project. If the proposed City parking garage expansion at ZSFG is pursued and approved, implementation and enforcement of mitigation measures related to construction and operation of the parking garage expansion would be adopted by the Parking Authority and City and County of San Francisco approving bodies as applicable, which may include the Board of Supervisors, Planning Commission, Public Health Commission and Department of Public Health (DPH), San Francisco Municipal Transportation Agency (SFMTA), San Francisco Public Works (SFPW), and Building Department.

**TABLE 9-1  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<i>Aesthetics (from Initial Study)</i>				
<p>Would the project create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?</p>	<p><b>AES-1:</b> UCSF shall require a condition in construction contracts that flood or area lighting for construction activities be placed and directed so as to avoid potential disturbances to adjacent residences, Building 5 nighttime uses, or other uses.</p>	<p>Issue instructions to construction contractors to incorporate flood lighting restrictions in construction contracts.</p> <p>Require construction contractors to document how flood and area lighting measures are addressed and incorporated. Review construction plans for the placement and direction of flood and area lighting to ensure disturbances to adjacent residences are avoided.</p>	<p>UCSF Project Manager and Construction Teams (Research Building)</p> <p>Parking Authority and City and County of San Francisco (Parking Garage)<sup>1</sup></p>	<p>Review construction contracts prior to execution to ensure restrictions are in the contract. Monitor project sites during construction to verify appropriate placement of flood and area lighting and provide written report to verify compliance with this mitigation measure.</p>
	<p><b>AES-2:</b> Minimize light and glare resulting from the new research building and garage expansion through the orientation of the building, use of landscaping materials, and choice of primary façade materials. Design standards and guidelines to minimize light and glare shall include:</p> <ul style="list-style-type: none"> <li>• Reflective metal walls and mirrored glass walls shall not be used as primary building materials for façades.</li> <li>• Illuminated building signage shall be consistent with the more stringent of City Planning Code sign standards for illumination and/or UCSF design guidelines.</li> <li>• Exterior light fixtures shall be configured to emphasize close spacing and lower intensity light. Light fixtures shall use luminaries that do not direct the cone of light towards nearby campus structures and off-campus structures.</li> <li>• Design parking structure lighting to minimize off-site glare, consistent with the existing parking structure.</li> </ul>	<p>Issue instructions to design teams to incorporate design standards in all project plans and designs.</p> <p>Require architects and design professionals to document how design standards are addressed and incorporated. Review project plans to ensure that such features have been incorporated in the design to address the impacts.</p>	<p>UCSF Project Manager and Design Teams (Research Building)</p> <p>Parking Authority and City and County of San Francisco (Parking Garage)</p>	<p>Ensure project incorporates design standards prior to final project approval. After construction, the Project Manager shall provide written verification to the Monitor for the contract bid<sup>2</sup> that design standards have been incorporated to address the impacts.</p>

<sup>1</sup> Mitigation measures applicable to construction of the parking garage expansion would be carried out by the San Francisco department overseeing the construction contract unless otherwise stated.

<sup>2</sup> Documentation of compliance with mitigation measures applicable to construction of the parking garage expansion also would be submitted to the City’s ERO by the San Francisco department overseeing the construction contract.

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Air Quality</b>				
<p><b>AQ-1:</b> The proposed project and its variants would result in increased emissions of dust and criteria air pollutants during demolition and construction activities.</p>	<p><b>AQ-1: Best Management Practices for Controlling Particulate Emissions during Construction of Research Building.</b></p> <p>The following BAAQMD Best Management Practices for particulate control will be required for all construction activities related to the research building (BAAQMD, 2012). These measures will reduce particulate emissions primarily during soil movement, grading and demolition activities but also during vehicle and equipment movement on unpaved project sites</p> <ol style="list-style-type: none"> <li>1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>4. All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, § 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</li> <li>7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> </ol> <p>Post a publically visible sign with the telephone number and person to contact at UCSF regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's telephone number shall also be visible to ensure compliance with applicable regulations.</p>	<p>Issue instructions in the bid package for contractors to incorporate the mitigation measure. The successful contractor will prepare a construction air pollution control strategy to report on the implementation of the mitigation measure.</p>	<p>UCSF Project Manager and Construction Teams</p> <p>Construction activities related to the Parking Garage would be subject to the requirements of the City's Construction Dust Control Ordinance</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that selected bid includes provision for construction air pollution control. Provide a report on construction air pollution control strategies and report to Monitor for the contract bid upon request, but no less than quarterly after beginning each construction phase.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Air Quality (cont.)</b>				
<p><b>AQ-3:</b> Construction and operation of the proposed project would generate toxic air contaminants, including diesel particulate matter, and could expose sensitive receptors to substantial air pollutant concentrations.</p>	<p><b>Mitigation Measure AQ-3: Construction Exhaust Emissions Reduction Measures during Construction of Research Building.</b></p> <p>The construction contractor shall implement the following measures during construction of the research building to further reduce construction-related exhaust emissions:</p> <p>All off-road equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements:</p> <ol style="list-style-type: none"> <li>1. Where access to alternative sources of power are available, portable diesel engines shall be prohibited; and</li> <li>2. All off-road equipment shall have: <ol style="list-style-type: none"> <li>a. Engines that meet or exceed either USEPA or CARB Tier 2 off-road emission standards, and</li> <li>b. Engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such are available.</li> </ol> </li> </ol>	<p>Issue instructions in the bid package for contractors to incorporate the mitigation measure. The successful contractor will ensure that off-road construction equipment complies with emissions standards listed in the mitigation measure.</p>	<p>UCSF Project Manager and Construction Teams</p> <p>Construction activities related to the Parking Garage would be subject to the requirements of the City's Clean Construction Ordinance.</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that off-road construction equipment complies with emission standards. Provide a report on construction air pollution control strategies and report to Monitor upon request, but no less than quarterly after beginning each construction phase.</p>
<p><b>AQ-5:</b> The proposed project could conflict with, or obstruct implementation of, the <i>2010 Clean Air Plan</i>.</p>	<p>Implement Mitigation Measure AQ-1 and AQ-3.</p>	<p>See Mitigation Measure AQ-1 and AQ-3.</p>	<p>See Mitigation Measure AQ-1 and AQ-3.</p>	<p>See Mitigation Measure AQ-1 and AQ-3.</p>
<b>Biological Resources (from Initial Study)</b>				
<p>Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<p><b>BIO-1: Nesting Bird Protection Measures.</b></p> <p>Should construction activities commence during the bird nesting season (February 15 through August 15), UCSF shall retain a qualified biologist to conduct preconstruction nesting bird surveys in surrounding habitat for nesting birds. UCSF shall implement specific measures to avoid and minimize impacts on nesting birds including, but not limited to, those described below:</p> <ul style="list-style-type: none"> <li>• To avoid and minimize potential impacts on nesting raptors and other birds, preconstruction surveys shall be performed not more than two weeks prior to initiating vegetation removal and/or construction and demolition activities during the breeding season (i.e., February 15 through August 15).</li> </ul>	<p>Issue instructions in the bid package for project managers and contractors to incorporate the mitigation measure. The successful construction project team will work with a qualified biologist to conduct preconstruction surveys, as specified, and report on biological resource avoidance procedures to implement the mitigation measure.</p>	<p>UCSF Project Manager and Design Teams (Research Building)</p> <p>Parking Authority and City and County of San Francisco (Parking Garage)</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that selected bid includes provision for biologist to prepare preconstruction surveys. Review preconstruction surveys to determine if buffer zones are required. If so, inspect construction site periodically to ensure that buffer zones are in place and observed. Provide a report on implementation of biological resource avoidance procedures and report to Monitor prior to the start of construction or tree removal activities.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Biological Resources (from Initial Study) (cont.)</b>				
	<ul style="list-style-type: none"> <li>To avoid and minimize potential impacts on nesting raptors and other birds, a no-disturbance buffer zone shall be established around active nests during the breeding season until the young have fledged and are self-sufficient, when no further mitigation would be required. Typically, the size of individual buffers ranges from a minimum of 250 feet for raptors to a minimum of 50 feet for other birds but can be adjusted based on an evaluation of the site by a qualified biologist in cooperation with the USFWS and/or CDFW.</li> <li>Birds that establish nests after construction starts are assumed to be habituated to and tolerant of the indirect adverse impacts resulting from construction noise and human activity. However, direct take of nests, eggs, and nestlings is still prohibited and an appropriate buffer shall be established around the nest according to species and proximity to project activities in order to avoid nest abandonment or destruction, as determined by a qualified biologist.</li> <li>If construction or demolition activities ceases for a period of more than two weeks, or vegetation removal is required after a period of more than two weeks has elapsed from the preconstruction surveys, then new nesting bird surveys shall be conducted.</li> </ul>			
	<p><b>BIO-2: Bird-Safe Building Treatments.</b></p> <ul style="list-style-type: none"> <li>Employ glazing options such as use of fritted glass, Dichroic glass, etched glass, translucent glass, or glass that reflects ultraviolet light in appropriate portions of the building façade. Any feature-related hazards, such as freestanding glass walls, glass wind barriers, or transparent building corners, must have 100% of the glass on the feature-related hazards treated with these glazing options.</li> <li>Minimize light and glare through the orientation of the building, use of landscaping materials, shielded lighting, and choice of primary façade materials. The building design shall prohibit use of reflective metal walls and mirrored glass walls as primary building materials for façades.</li> </ul>	<p>Issue instructions to design team to incorporate bird-safe building treatments in building design.</p> <p>Require architects and design professionals to document use of bird-safe treatments and review project plans to ensure that such features have been incorporated in the design.</p>	<p>UCSF Project Manager and Design Teams (Research Building)</p> <p>Parking Authority and City and County of San Francisco (Parking Garage)</p>	<p>Verify that project incorporates treatments prior to final project approval. After construction, the Project Manager shall provide written verification to the Monitor for the contract bid that treatments were installed according to the design.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources</b>				
<p><b>CP-1:</b> Construction of the proposed project could cause a substantial adverse change in the significance of the SFGH Historic District, a historical resource as defined in Section 15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code.</p>	<p><b>CP-1: Design Guidelines for the Research Building.</b> The design of the proposed research building shall adhere to the following design guidelines.</p> <p><b>Siting</b></p> <ol style="list-style-type: none"> <li>The west elevation of the building should be generally parallel to the north-south entry road that bisects the campus. At the ground level, the setback of the building from this north-south road should be similar in extent to the setbacks from this road exhibited by Building 1/1A/1B/1C, Building 9, Building 10/20, and Building 30/40.</li> <li>In keeping with the site's urban setting, the south elevation of the building should be generally rectilinear and parallel to Twenty-Third Street.</li> </ol> <p><b>Height, Scale and Massing</b></p> <ol style="list-style-type: none"> <li>The height of the building should be kept at or below the 85-foot-height of Buildings 10/20 and 30/40. This height is exclusive of rooftop mechanical equipment, assuming such equipment is sufficiently setback and differentiated in material that is does not "read" as a vertical extension of the façade.</li> <li>The façades of the new building should have a vertical orientation that is underscored by bays at the building corners that project relative to the central portions of the façades.</li> <li>Blank, mirrored, or opaque facades should be avoided.</li> <li>On the south and west façades, architectural elements should be used to divide the façades into intervals similar to those found elsewhere in the District, including Building 9 and the Building 30/40 "finger wards." This could be accomplished through a variety of means, including the use of bays, setbacks, horizontal belt courses, and/or changes in material or ornamentation.</li> </ol> <p><b>Materials and Cladding</b></p> <ol style="list-style-type: none"> <li>Given the prevalence of brick within the SFGH Historic District, the use of masonry (including brick and terra cotta) exclusively or in combination with other compatible exterior cladding materials is encouraged. Masonry should be a prominent material if used in combination with other materials.</li> </ol>	<p>Issue instructions to design team to incorporate design guidelines in project plan.</p> <p>Require architects and design professionals to document how design standards are addressed and incorporated. A qualified architectural historian will review the project plan to ensure that such features have been incorporated in the design.</p>	<p>UCSF Project Manager and Design Teams</p>	<p>Ensure project incorporates design standards prior to final project design approval. After construction, the Project Manager shall provide written verification to the Monitor for the contract bid that design standards have been incorporated.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<p><b>CP-1 (cont.)</b></p>	<p>2. New construction should use materials in a manner that creates details and textures that draw from the District and that give the building a three-dimensional character. Monolithic wall treatments should be avoided.</p> <p><b>Windows</b></p> <p>1. Fenestration patterns and proportions, as well as the percent of the façade devoted to fenestration, should be consistent with the District, especially adjacent contributory buildings (Buildings 9 and 30/40). Building 9 features recessed, double-hung, wood sash windows of either round arched or rectangular shape that are arranged singly and in pairs. Building 30/40 exhibits a variety of window types. Most of the building's windows are recessed, double-hung, wood sash windows of round arched or rectangular shape that are arranged either singly or in groups of three. The fifth floor (added in 1931) features wood sash, paired casement windows surmounted by arched transom and separated by terra cotta colennettes. The chamfered, east-facing bays of the building feature rectangular, wood sash, paired casement windows surmounted by rectangular transoms. These windows are arranged singly, in pairs and in groups of four. Accordingly, use of recessed, punched windows on at least substantial portions of the building exterior is encouraged. Uninterrupted expanses of full-height glazing should be avoided. Arranging windows into bands of two, three or more is encouraged.</p> <p>2. In keeping with the District contributors, windows should have a vertical orientation. Use of rectangular windows and/or round arched windows is encouraged.</p> <p><b>Street Frontage</b></p> <p>1. The south façade of the building should incorporate at least one prominent pedestrian entry.</p> <p><b>Site Features</b></p> <p>1. The brick Guardhouse and Gate Pillar should be retained in their current location. If temporary relocation is necessary to accommodate construction, a Historic Architect satisfying the Secretary of the Interior's Professional Qualifications Standards should be engaged to oversee the temporary relocation and reinstallation of these historic resources.</p>			

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<p><b>CP-1 (cont.)</b></p>	<ol style="list-style-type: none"> <li>2. The brick and metal fence along the southern edge of the site should be retained in its current location. If temporary relocation of any portion of the fence is necessary to accommodate construction, a Historic Architect satisfying the Secretary of the Interior’s Professional Qualifications Standards should be engaged to oversee the temporary relocation and reinstallation of this historic resource.</li> <li>3. A conservator well-versed in the assessment of historic fountains and related statuary should be engaged to evaluate the feasibility of relocating the fountain, which exhibits noticeable wear and may be constructed of fairly porous cement.</li> <li>4. If deemed feasible, the fountain should be moved to a location elsewhere within the SFGH Historic District that reflects the character and prominence of its original location within the grass lawn courtyard of the Tubercular Ward (the fountain should not be located between parking spots). Accordingly, the fountain should be relocated to an area south or west of the proposed building, where it can continue its current use as a planter.</li> </ol>			
<p><b>CP-2:</b> Construction of the proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</p>	<p><b>CP-2: Archeological Research Design, Testing and Evaluation Plan, Archeological Monitoring Program and/or Archeological Data Recovery Program</b></p> <p><b>Archeological Research Design, Testing, and Evaluation Plan.</b> Because archeological resources may be present within the C-APE for both the B/C Lot and the parking garage expansion site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on archeological resources.</p> <p>UCSF shall retain the services of an archeological consultant to prepare and implement an Archeological Research Design, Testing, and Evaluation Plan (ARDTEP) prior to project construction of the research building. The City shall similarly retain the services of an archeological consultant to prepare and implement a separate ARDTEP prior to construction of the parking garage expansion.</p> <p>Each ARDTEP will guide fieldwork and help to determine if identified archeological remains qualify as significant. Each ARDTEP shall be prepared by professionals who meet the Secretary of the Interior’s Professional Qualifications Standards in historical archeology, prehistoric archeology, and history</p>	<p>Issue instructions in the bid package for contractors to incorporate the mitigation measure. The successful contractor will demonstrate knowledge of procedures and requirements when archeological resources are discovered during construction activities.</p>	<p>UCSF Project Manager and Design Teams (Research Building)</p> <p>Parking Authority and City and County of San Francisco (Parking Garage)</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that selected bid includes provisions for implementation of mitigation measure if archaeological resources are discovered during construction activities. Provide construction status report to Monitor upon request.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<b>CP-2 (cont.)</b>	<p>(36 CFR Part 61)<sup>3</sup>, and shall be reviewed and approved by UCSF for the research building site and the City's Environmental Review Officer (ERO) for the garage expansion site.</p> <p>Each ARDTEP shall address and ensure the following: (1) a geoarcheological landscape approach to identify potential presence of paleosols that may have provided living surfaces for prehistoric populations; (2) the appropriateness of specific protocols for the identification and evaluation of paleosol deposits; (3) the full exposure, documentation, and recordation of the former residences, businesses, and hospital related outbuildings; and (4) appropriate field investigation strategies for the identification and evaluation of other types of historical archeological deposits and/or features (e.g., burned structural/building contents debris, artifact filled privies, etc.).</p> <p>At a minimum, the <i>research design</i> component of each ARDTEP shall contain the following sections:</p> <ul style="list-style-type: none"> <li>• Introduction and Purpose</li> <li>• Project Location and Description</li> <li>• Regulatory Context</li> <li>• Methods and Sources</li> <li>• Holocene Landscape Evolution</li> <li>• Prehistory and Ethnography</li> <li>• History</li> <li>• Previous Archeological Research                             <ul style="list-style-type: none"> <li>– Prehistoric Archeology</li> <li>– Historical Archeology</li> </ul> </li> <li>• Archeological Research Design</li> <li>• Geoarcheology</li> <li>• Archival and Oral History Research                             <ul style="list-style-type: none"> <li>– Block Histories by Address</li> <li>– Research Context: Prehistoric Archeology</li> <li>– Research Themes and Issues</li> <li>– Data Requirements</li> </ul> </li> </ul>			

<sup>3</sup> Secretary of the Interior. Standards and Guidelines for Archeology and Historic Preservation, Professional Qualifications Standards.

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<p><b>CP-2 (cont.)</b></p>	<ul style="list-style-type: none"> <li>- Property Types: Prehistoric Archeology</li> <li>- Archeological Sensitivity: Prehistoric</li> <li>• Research Context: Historical Archeology                             <ul style="list-style-type: none"> <li>- Research Themes and Issues</li> <li>- Data Requirements</li> <li>- Property Types: Historical Archeology</li> <li>- Archeological Sensitivity: Historical Archeology</li> </ul> </li> </ul> <p>At a minimum, the <i>testing component</i> of each ARDTEP will contain the following sections:</p> <ul style="list-style-type: none"> <li>• Introduction and Purpose</li> <li>• Test Areas and their Potential Significance Fieldwork Methods</li> <li>• Hazardous Materials, Health, and Safety</li> <li>• Treatment of Human Remains and Burial Goods Public Involvement</li> <li>• Laboratory Work                             <ul style="list-style-type: none"> <li>- Laboratory Methods</li> </ul> </li> <li>• Archeological Evaluation Plan: Evaluation Procedures and Criteria Integrity</li> <li>• Infield Evaluation Post-field Evaluation</li> <li>• Reporting and Dissemination of Results                             <ul style="list-style-type: none"> <li>- Public Outreach</li> </ul> </li> <li>• Curation</li> </ul> <p>Each ARDTEP will be used to inform decisions regarding project design, and will be carried out prior to project construction.</p> <p>At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to UCSF for the research building site and the City or its designated representative for the garage expansion site. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, UCSF and the City or its designated representative in consultation with the archeological consultant shall determine if additional measures are warranted for each respective site. Additional measures that may be undertaken include additional</p>			

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<p><b>CP-2 (cont.)</b></p>	<p>archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of UCSF for the research building site and the City or its designated representative for the garage expansion site. If UCSF determines that a significant archeological resource is present on the research building site, or the City or its designated representative determines that a significant archeological resource is present on the garage expansion site, and that the resource could be adversely affected by the proposed project, at the discretion of UCSF or the City either:</p> <ul style="list-style-type: none"> <li>• The proposed research building or garage expansion shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or</li> <li>• A data recovery program shall be implemented, unless UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.</li> </ul> <p><b>Consultation with Descendant Communities.</b> On discovery of an archeological site<sup>4</sup> associated with descendant Native Americans, the Overseas Chinese, or other descendant group on the research building site or garage expansion site, an appropriate representative<sup>5</sup> of the descendant group and UCSF (for the research building site) and the City or its designated representative (for the garage expansion site) shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the sites and to consult with UCSF regarding the research building site, and the City or its designated representative for the garage expansion site, regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archeological Resources Report shall be provided to the representative of the descendant group.</p>			

<sup>4</sup> By the term “archeological site” is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

<sup>5</sup> An “appropriate representative” of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the Department archeologist.

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<b>CP-2 (cont.)</b>	<p><b>Archeological Monitoring Program.</b> If UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program for each respective site shall minimally include the following provisions:</p> <ul style="list-style-type: none"> <li>• The archeological consultant and UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) shall meet and consult on the scope of the archeological monitoring program (AMP) reasonably prior to any project-related soils disturbing activities commencing. UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context;</li> <li>• The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource;</li> <li>• The archeological monitor(s) shall be present on each respective project site according to a schedule agreed upon by the archeological consultant and UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) until UCSF or the City or its designated representative has, in consultation with project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits;</li> <li>• The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;</li> <li>• If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to</li> </ul>			

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<b>CP-2 (cont.)</b>	<p>temporarily redirect demolition/excavation/pile driving/ construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with UCSF (for the research building site) or the City or its designated representative (for the garage expansion site). The archeological consultant shall immediately notify UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to UCSF or the City or its designated representative, respectively.</p> <ul style="list-style-type: none"> <li>Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to UCSF (for the research building site) or the City or its designated representative (for the garage expansion site).</li> </ul> <p><b>Archeological Data Recovery Program.</b> If UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) in consultation with the archeological consultant determines that an archeological data recovery program shall be implemented, the archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant and UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to UCSF (for the research building site) or the City or its designated representative (for the garage expansion site). The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the</p>			

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<b>CP-2 (cont.)</b>	<p>portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.</p> <p>The scope of the ADRP shall include the following elements:</p> <ul style="list-style-type: none"> <li>• Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.</li> <li>• Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures.</li> <li>• Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies.</li> <li>• Interpretive Program. Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program.</li> <li>• Security Measures. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.</li> <li>• Final Report. Description of proposed report format and distribution of results.</li> <li>• Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.</li> </ul> <p><b>Human Remains and Associated or Unassociated Funerary Objects.</b> The treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The archeological consultant and UCSF (for the research building site) or the City or its designated representative (for the garage expansion site), and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5[d]). The</p>			

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<b>CP-2 (cont.)</b>	<p>agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.</p> <p><b>Final Archeological Resources Report.</b> The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.</p> <p>Once approved by UCSF (for the research building site) or the City or its designated representative (for the garage expansion site), copies of the FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and UCSF (for the research building site) or the City or its designated representative (for the garage expansion site) shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR (for the garage expansion site) along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the City or its designated representative may require a different final report content, format, and distribution than that presented above for the garage expansion site.</p>			
<b>CP-3:</b> Construction of the proposed project could disturb any human remains, including those interred outside of formal cemeteries.	Implement Mitigation Measure CP-2.	See Mitigation Measure CP-2.	See Mitigation Measure CP-2.	See Mitigation Measure CP-2.
<b>CP-4:</b> Construction of the proposed project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074.	Implement Mitigation Measure CP-2.	See Mitigation Measure CP-2.	See Mitigation Measure CP-2.	See Mitigation Measure CP-2.

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<p><b>CP-5:</b> Construction of the proposed project could directly or indirectly destroy a unique paleontological resource or site, or a unique geologic feature.</p>	<p><b>CP-5: Inadvertent Discovery of Paleontological Resources.</b></p> <p>The following measures shall be implemented should construction result in the accidental discovery of paleontological resources:</p> <p>To reduce the potential for the proposed project to result in a significant impact on paleontological resources, UCSF (for the research building site) or and the Planning Department (for the garage expansion site) shall arrange for a paleontological training by a qualified paleontologist regarding the potential for such resources to exist in the project site and how to identify such resources. The training could consist of a recorded presentation of the initial training that could be reused for new personnel. The training shall also include a review of penalties for looting and disturbance of these resources. An alert sheet shall be prepared by the qualified paleontologist and shall include the following:</p> <ol style="list-style-type: none"> <li>1. A discussion of the potential to encounter paleontological resources.</li> <li>2. Instructions for reporting observed looting of a paleontological resource; and instructions that if a paleontological deposit is encountered within a project area, all soil disturbing activities in the vicinity of the deposit shall cease and UCSF (for the research building site) or the Planning Department (for the garage expansion site) shall be notified immediately.</li> <li>3. Who to contact in the event of an unanticipated discovery.</li> </ol> <p>If potential fossils are discovered by construction crews, all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately until the qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations shall be consistent with the Society of Vertebrate Paleontology 2010 guidelines and currently accepted scientific practice, and shall be subject to review and approval by UCSF (for the research</p>	<p>Issue instructions in the bid package for contractors to incorporate the mitigation measure. The successful contractor will demonstrate knowledge of procedures and requirements when paleontological resources are discovered during construction activities.</p>	<p>UCSF Project Manager and Design Teams (Research Building)</p> <p>Parking Authority and City and County of San Francisco (Parking Garage)</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that selected bid includes provisions for implementation of mitigation measure if paleontological resources are discovered during construction activities. Provide construction status report to Monitor upon request.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Cultural Resources (cont.)</b>				
<b>CP-5 (cont.)</b>	building site) or the City or designee (for the garage expansion site). If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds. UCSF (for the research building site) or the City (for the garage expansion site) shall be responsible for ensuring that treatment is implemented and reported. If no report is required, UCSF or the City shall nonetheless ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.			
<b>Greenhouse Gas Emissions</b>				
<b>GHG-1:</b> The proposed project and its variants would result in an increase in greenhouse gas emissions.	<b>GHG-1: Construction-Related GHG Reduction Measures during Construction of Research Building.</b> The following BAAQMD-suggested measures shall be implemented during demolition and construction activities related to the research building: <ul style="list-style-type: none"> <li>• Use alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment where feasible;</li> <li>• Use locally sourced building materials for at least 10% of overall materials brought to site; and</li> <li>• Recycle or reuse at least 50% of construction waste or demolition materials.</li> </ul>	Issue instructions in the bid package for contractors to incorporate the mitigation measure. The successful contractor will prepare a construction GHG reduction strategy to report on the implementation of the mitigation measure.	UCSF Project Manager and Construction Team (Parking Garage)  Construction activities related to the Parking Garage would be subject to the requirements of the City's Clean Construction Ordinance and would require preparation of a Construction and Demolition Debris Management Plan in accordance with the Green Building Requirements for City Buildings (San Francisco Environment Code, Chapter 7)	Provide written verification in report form to the Monitor for the contract bid to certify that selected bid includes provision for construction air pollution control. Provide a report on construction GHG reduction strategies and report to Monitor upon request, but no less than quarterly after beginning each construction phase.
<b>Hazards and Hazardous Materials (from Initial Study)</b>				
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<b>HAZ-1a:</b> A Subsurface Investigation (SI) Work Plan shall be prepared and implemented in accordance with San Francisco Health Code Article 22A and Building Code Section 106A.3.2.4. The Plan shall be prepared by a qualified consultant to characterize subsurface soils and groundwater, if applicable, that would be disturbed by construction activities. The plan shall detail the soil sampling and analysis efforts to adequately profile the site soils. Compliance with this plan shall be a condition of the construction contract for the project.	Issue instructions in the bid package of the Parking Garage construction contract to prepare a Subsurface Investigation Work Plan in accordance with San Francisco Health Code Article 22A and Building Code Section 106A.3.2.4.	Parking Authority and City and County of San Francisco (Parking Garage)  DPH – Bureau of Environmental Health (approves subsurface investigation work plan)	Provide written verification in report form to the Monitor for the contract bid to certify that Subsurface Investigation Work Plan was prepared and implemented in accordance with San Francisco Health Code Article 22A and Building Code Section 106A.3.2.4.

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Hazards and Hazardous Materials (from Initial Study) (cont.)</b>				
	<p><b>HAZ-1b:</b> An Excavation Management Plan shall be prepared by a qualified consultant to guide all earthwork activities in the characterization of all soils that are targeted for offsite disposal. Compliance with this plan shall be a condition of the construction contract for the project. Based on the findings of the January 14, 2015 Iris Environmental In-Situ profiling and any subsequent findings on the garage site, excavated soils shall be isolated, protected from potential runoff, and sampled in accordance with the requirements of the receiving disposal facilities requirements.</p>	<p>Issue instructions in the bid package of construction contracts to prepare an Excavation Management Plan for soils targeted for offsite disposal.</p>	<p>UCSF Project Manager and Design Teams (Research Building)  Parking Authority and City and County of San Francisco (Parking Garage)  DPH - Bureau of Environmental Health (approve excavation management plan)</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that Excavation Management Plan was prepared and implemented.</p>
<p>Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</p>	<p>Implement Mitigation Measures HAZ-1a and HAZ-1b.</p>	<p>See Mitigation Measures HAZ-1a and HAZ-1b.</p>	<p>See Mitigation Measures HAZ-1a and HAZ-1b.  Applies only to City.</p>	<p>See Mitigation Measures HAZ-1a and HAZ-1b.</p>
<b>Noise</b>				
<p><b>NO-1:</b> Construction of the proposed project could cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.</p>	<p><b>NO-1: Construction Noise Control Measures.</b>  Contractors shall employ site-specific noise attenuation measures during construction to reduce the generation of construction noise to less than 10 dBA over existing noise levels. These measures shall be included in a Noise Control Plan that shall be submitted for review and approval by UCSF for construction of the research building and the City or its designated representative for the garage expansion to ensure that construction noise is reduced to the degree feasible. Measures specified in the Noise Control Plans and implemented during project construction shall include, at a minimum, the following noise control strategies:  Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).  • Construction equipment with lower noise emission ratings shall be used whenever possible, particularly for air compressors.</p>	<p>Issue instructions in the bid package for contractors to incorporate the mitigation measure. The successful contractor will prepare a construction noise control plan to report on the implementation of the mitigation measure.</p>	<p>UCSF Project Manager and Design Teams (Research Building)  Parking Authority and City and County of San Francisco (Parking Garage)</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that selected bid includes provisions for construction noise control. Provide a report on construction noise control to Monitor upon request, but no less than quarterly after beginning each construction activity.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Noise (cont.)</b>				
<b>NO-1 (cont.)</b>	<ul style="list-style-type: none"> <li>• Sound-control devices no less effective than those provided by the manufacturer shall be provided on all construction equipment.</li> <li>• Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used where feasible.</li> <li>• Stationary noise sources such as material stockpiles and vehicle staging areas shall be located as far from adjacent receptors as possible.</li> <li>• Enclosures and mufflers for stationary equipment shall be provided, impact tools shall be shrouded or shielded, and barriers shall be installed around particularly noisy activities at the construction sites so that the line of sight between the construction activities and nearby sensitive receptor locations is blocked to the extent feasible.</li> <li>• Unnecessary idling of internal combustion engines shall be prohibited.</li> <li>• Construction-related vehicles and equipment shall be required to use designated truck routes to travel to and from the project sites as determined with consultation with the SFMTA as part of the permit process prior to construction.</li> <li>• The project sponsor shall designate a point of contact to respond to noise complaints. The point of contact must have the authority to modify construction noise-generating activities to ensure compliance with the measures above and with the San Francisco Noise Ordinance.</li> </ul>			

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Transportation and Traffic</b>				
<p><b>TRAF-1:</b> Construction of the proposed project could cause substantial adverse impacts to traffic flow, circulation and access as well as to transit, pedestrian, and parking conditions during demolition and construction activities.</p>	<p><b>IM-TR-1: Construction Coordination and Monitoring Measures.</b></p> <p><b>Traffic Control Plan for Construction.</b> In order to reduce potential conflicts between construction activities and pedestrians, transit and autos during construction activities at ZSFG, UCSF shall require construction contractor(s) for the proposed Research Building to prepare a traffic control plan for major phases of project construction (e.g. demolition, construction, or renovation of individual buildings). UCSF and their construction contractor(s) will meet with DPH and relevant City agencies to coordinate feasible measures to reduce traffic congestion, including temporary transit stop relocations, and other measures to reduce potential traffic and transit disruption and pedestrian circulation effects during major phases of construction of the proposed Research Building. For any work within the public right-of-way, the contractor would be required to comply with the City of San Francisco's Regulations for Working in San Francisco Streets, which establish rules and permit requirements so that construction activities can be done safely and with the least possible interference with pedestrians, bicyclists, transit, and vehicular traffic. The Parking Authority would be responsible for approving and implementing the expanded 23rd Street Garage, and therefore would be responsible for coordinating with UCSF, DPH, and other City agencies before and during its construction.</p> <p>In the event that the construction timeframes of the major phases and other development projects adjacent to the ZSFG campus site overlap, including the 23rd Street garage expansion, UCSF and the City should coordinate with City Agencies through the Transportation Advisory Staff Committee (TASC) to minimize the severity of any disruption to adjacent land uses and transportation facilities from overlapping construction transportation impacts. UCSF and the City shall propose a construction traffic control plan that includes measures to reduce potential construction traffic conflicts, such as staggering start and end times, coordinated material drop offs, collective worker parking and transit to job site and other measures.</p> <p><b>Reduce SOV Mode Share for Construction Workers.</b> In order to minimize parking demand and vehicle trips associated with construction workers for the proposed research building, UCSF and the City shall require the construction contractors to include in the Traffic Control Plan for Construction methods to encourage walking, bicycling, carpooling, and transit access to</p>	<p>Issue instructions in the bid package for contractors to incorporate the mitigation measure. The successful contractor will prepare a traffic control plan to reduce impacts from construction traffic and report on the implementation of the mitigation measure.</p>	<p>UCSF Project Manager and Design Teams (Research Building)</p> <p>Parking Authority and City and County of San Francisco (Parking Garage)</p> <p>SFMTA (approve traffic plans)</p>	<p>Provide written verification in report form to the Monitor for the contract bid to certify that selected bid includes provisions for traffic control plan (including plan to reduce construction worker SOV mode share, and to provide updates to adjacent residents). Provide a report on traffic control plan implementation to Monitor upon request; but no less than quarterly after beginning each construction activity.</p>

**TABLE 9-1 (Continued)**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Transportation and Traffic (cont.)</b>				
<b>TRAF-1 (cont.)</b>	<p>the campus sites by construction workers in the coordinated plan. The SFMTA would be responsible for the development of this measure before and during the construction of the 23rd Street garage.</p> <p><b>Project Construction Updates for Adjacent Residents and Businesses.</b> In order to minimize construction impacts on access for nearby residences, institutions, and businesses, UCSF and the City shall provide nearby residences and adjacent businesses with regularly-updated information regarding project construction, including construction activities, peak construction vehicle activities (e.g., concrete pours), travel lane closures, and lane closures via a newsletter and/or website.</p>			
<b>TRAF-2:</b> Development of the proposed project would increase traffic at intersections on the adjacent roadway network.	<p><b>TR-1: Restripe 24th Street at Potrero Avenue to Provide a Westbound Left-Turn Pocket.</b></p> <p>Restripe the westbound approach on 24th Street at Potrero Avenue as two lanes: a 10-foot-wide left-turn pocket approximately 50 feet in length and a 10-foot-wide shared through/right-turn lane. This would require the removal of three or four parking spaces on the southern side of 24th Street at the intersection of Potrero Avenue and the restriping of the eastbound lane adjacent to the removed parking spaces to be 12 feet wide. This mitigation measure would not include the addition of new signal phases or other alterations due to the existing timing plan, although the SFMTA may choose to do so as part of the mitigation measure.</p> <p>This mitigation measure would require that large trucks or buses making the northbound right-turn movement would sweep into the westbound left-turn lane. As such, the final design of this intersection should include placement of the stop bar on the westbound turn lane approximately one car length back from the current intersection to accommodate larger turning vehicles. UCSF and the City and County of San Francisco would contribute a proportional share to the costs of implementation of this mitigation measure.</p>	Implement proposed improvements to 24th Street at Potrero Avenue in accordance with the mitigation measures.	UCSF Project Manager and Design Teams  SFMTA (approve restriping and removal of parking spaces)	<p>Completion of proposed improvements prior to opening of Research Building.</p> <p>Note: Mitigation Measure TR-1 would reduce the impact at Potrero Avenue / 24th Street to less than significant, but UCSF does not have the authority to implement it without SFMTA's approval and assistance.</p>
	<p><b>TR-2: Open 23rd Street exit of 23rd Street Garage during the PM Peak Period.</b></p> <p>Open the 23rd Street exit to the 23rd Street Garage to traffic at 3:00 PM instead of 6:00 PM. Currently, both the entrance and exit at 23<sup>rd</sup> Street are closed to vehicles from 6:00 AM to 6:00 PM. Opening the exit at 3:00 PM to coincide with a major hospital employee shift change would allow some vehicles to shift away from the 24th Street exit and thus improve the</p>	Implement proposed improvements in accordance with the mitigation measure.	UCSF Project Manager and Design Teams  DPH (conduct education of employees)  Parking Authority (approve 23rd Street parking garage exit operation)	<p>Completion of proposed improvements prior to opening of Research Building.</p> <p>Note: TR-2 would be implemented if TR-1 is not approved by SFMTA. The effectiveness of TR-2 to reduce the impact at Potrero Avenue / 24th Street to less than</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
Transportation and Traffic (cont.)				
<p><b>TRAF-2 (cont.)</b></p>	<p>operating condition of the intersection of Potrero Avenue / 24th Street. It is not known how many people would use this exit if given the option; although there is only one exit lane, which would naturally limit the number of vehicles that can exit during this period. This analysis assumes that not enough vehicles would use this alternative exit to reduce the intersection impact to a less than significant level. In conjunction with the earlier opening of the 23rd Street exit, which would increase the amount of traffic on 23rd Street, the pedestrian crossing that connects the 23rd Street Garage to the east side of the West ZSFG Driveway should be improved. Although SFMTA staff would need to concur on a final design, this should include evaluation of signal phasing prior to implementation, and it could include shifting the eastern edge of the crosswalk to the east by ten feet in order to double the width of the crosswalk to 20 feet, repainting the crosswalk in the continental style to be more visible, and shifting the westbound 48 Quintara/24th Street in the same location 20 feet to the east to increase the visibility of pedestrians. Other potential measures to increase pedestrian visibility and reduce vehicle-pedestrian collision risks include the following measures as noted below:</p> <ul style="list-style-type: none"> <li>• Consider converting intersection of Utah Street and 23rd Street to all-way stop controlled,</li> <li>• Signalize the ZSFG driveway and associated pedestrian crossing,</li> <li>• Add signage on Potrero Avenue directing vehicles to use 24th Street to reduce circling for visitors,</li> <li>• Increase employee education regarding appropriate pick-up and drop-off locations to minimize any additional double-parking at the corner of 23rd Street / San Bruno Avenue, which can obscure visibility of pedestrians, and</li> <li>• Coordinate with the appropriate enforcement agencies (SFMTA, SFPD) to increase pedestrian safety as well as reduce instances of double-parking.</li> </ul> <p>UCSF and the City and County of San Francisco would contribute a proportional share to the costs of implementation of this mitigation measure.</p>		<p>SFMTA (approve intersection and driveway control changes, pedestrian improvements, new signage)</p>	<p>significant is not known given the uncertainty over the volume of vehicles choosing to exit the northern egress, and UCSF does not have the authority to implement it without Parking Authority and SFMTA approval and assistance.</p>

**TABLE 9-1 (Continued)  
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
Transportation and Traffic (cont.)				
<p><b>TRAF-2 (cont.)</b></p>	<p><b>TR-3: Implement Additional TDM Strategies to Reduce Single Occupancy Vehicle Trips.</b></p> <p>UCSF and DPH shall each pursue potential TDM measures that they can feasibly implement targeted at reducing SOV trips to and from ZSFG. UCSF and DPH staff have worked collaboratively with transportation consultants, the SFMTA, and other City departments to identify a list of potential TDM strategies in addition to those already in place. The implementation of this mitigation measure could improve traffic operations in the immediate vicinity of ZSFG, including at Potrero Avenue / 24th Street by reducing SOV trips to and from ZSFG. Additionally, implementation of other TDM strategies not included in this list would have a similar effect of reducing SOV trips to and from ZSFG.</p> <p>As outlined in Section 2.2 (of the TIS), UCSF and DPH each already have TDM plans in place and an internal planning process with UCSF, DPH, the SFMTA, and transportation consultants will yield a list of potential TDM strategies that UCSF and DPH could pursue in addition to those already in place. A combination of these measures could potentially reduce single-occupant vehicle (SOV) trips for UCSF and DPH employees. To accomplish this goal, UCSF and DPH shall coordinate and each implement the following policies to the extent feasible:</p> <ul style="list-style-type: none"> <li>• Parking Policy/Pricing                             <ul style="list-style-type: none"> <li>– Adjust hourly parking rate structure to discourage all-day parking and provide spaces for patients/visitors (Parking Authority)</li> <li>– In order to discourage driving, increase hourly and monthly parking rates to be more in line with prevailing San Francisco market rates (Parking Authority)</li> </ul> </li> <li>• Transit and Shuttle Systems                             <ul style="list-style-type: none"> <li>– Expand UCSF and DPH Shuttle Service to Caltrain, Transbay Transit Terminal (applies to UCSF and DPH; would require coordination with SFMTA)</li> <li>– Maintain a dialogue with SFMTA regarding ZSFG's strong desire to see that the transit connection between the Mission District and the ZSFG campus remains (applies to UCSF and DPH; would require coordination with SFMTA)</li> </ul> </li> </ul>	<p>Implement proposed TDM strategies in accordance with the mitigation measure.</p> <p>Establish the annual TDM budget to fund a TDM program.</p>	<p>UCSF Project Manager and Design Teams</p> <p>DPH - ZSFG</p> <p>Parking Authority</p>	<p>Implement feasible proposed TDM strategies prior to opening of Research Building.</p> <p>Note: TR-3 would be implemented if TR-1 is not approved by SFMTA. While TR-3 can reduce traffic impacts, even full implementation of Mitigation Measure TR-3 with identified feasible elements would not fully eliminate the significant impact at this intersection for the project or Variants 1 to 3. Implementation of the full suite of TDM strategies identified in TR-3 would reduce the impact at Potrero Avenue / 24th Street to less than significant under Variant 4.</p>

**TABLE 9-1 (Continued)**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation/Improvement Measures	Implementation Procedure	Responsible Unit	Report Mechanism
<b>Transportation and Traffic (cont.)</b>				
<b>TRAF-2 (cont.)</b>	<ul style="list-style-type: none"> <li>– Allow patients/visitors to ride DPH Shuttle and advertise the shuttle as a last-mile option (applies to DPH)</li> <li>– Expand additional last-mile service by alternate means, including reimbursing employees for taxi use or ride hail companies as a bridge from transit stations (applies to DPH)</li> <li>– Add Bike racks on DPH shuttles (applies to DPH)</li> <li>• Commute Vehicle Trip Reduction <ul style="list-style-type: none"> <li>– Hire a TDM Program Manager for ZSFG to meet modal goals (applies to DPH)</li> <li>– Expand number of car share vehicles on-site (applies to DPH)</li> <li>– Create more robust carpool matching program (applies to UCSF and DPH)</li> <li>– Create vanpool service or coordinate with existing UCSF vanpool (applies to DPH)</li> <li>– Provide showers and locker facilities on campus and in the new UCSF Research Building (applies to UCSF and DPH)</li> <li>– Install Bay Area Bike Share Station on campus</li> <li>– Install transportation kiosk(s) overseen by the new TDM Program Manager (applies to DPH)</li> <li>– Advertise existing pre-tax commuter accounts (applies to UCSF and DPH)</li> <li>– Promote bicycle safety along 23rd Street and Potrero Avenue to prevent conflicts with vehicles (applies to DPH)</li> <li>– Provide signage indicating the location of bicycle parking at points of access (applies to DPH)</li> <li>– Facilitate access to carshare spaces through on-site garage (applies to DPH)</li> </ul> </li> </ul>			
<b>TRAF-9:</b> Development of the proposed project, in combination with reasonably foreseeable future developments, would increase traffic at intersections on the adjacent roadway network.	Implement Mitigation Measures TR-1, TR-2, and TR-3.	See Mitigation Measures TR-1, TR-2, and TR-3.	See Mitigation Measures TR-1, TR-2, and TR-3.	See Mitigation Measures TR-1, TR-2, and TR-3.

