

Table 10-1 Mitigation Monitoring and Reporting Program Matrix

Impact	Mitigation Measures	Time Frame/ Monitoring Milestone	Responsible Monitoring Party
<p><b>Biological Resources</b></p> <p><b>Impact 3.3-6</b> Implementation of the project could, through habitat modifications, result in a potential reduction in nesting opportunities for resident and migratory avian species of special concern, including raptors or the loss of a active avian nest.</p>	<p><b>MM 3.3-1</b> To ensure that avian species of concern, protected migratory species (e.g., MBTA), or raptors species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures:</p> <ul style="list-style-type: none"> <li>■ When feasible, all tree removal shall occur between August 30 and February 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks or bats from nesting/roosting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the DFG; or if it is not feasible to remove trees outside this window then, prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees and potential burrowing owl habitat within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to disturbance. If active raptor nests are found, and the site is within 350 feet of potential construction activity, a fence shall be erected around the tree at a distance of up to 350 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFG.</li> <li>■ No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones), unless directly related to the management or protection of the legally protected species.</li> <li>■ In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hocking (controlled release of captive reared young) of the nesting(s).</li> </ul> <p>If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30th, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.</p>	<p>Prior to issuance of grading permit</p>	<p>Planning and Development Department</p> <p>Public Works Department</p>
<p><b>Impact 3.3-7</b> Implementation of the proposed project could be inconsistent with Pasadena's Tree Ordinance in that the proposed project would cause the loss of native and/or specimen trees and would conflict with local policies protecting biological resources.</p>	<p><b>MM 3.3-2(a)</b> The Applicant, prior to being issued a grading permit, shall submit a tree report prepared by a certified arborist that meets the requirements of the Pasadena City Tree Ordinance identifying trees to be removed and trees to be saved. It shall specifically identify, by number according to the tree inventories prepared in March 2004 and March 2005, all trees that are candidates for relocation as well as the best and most feasible locations where the trees shall be replanted. It shall also include the preparation and submission of a tree protection and replacement plan. The tree replacement plan shall include replanting for increased canopy and include a minimum replacement ratio for removed or damaged trees of 1:1. Native plant species shall be used to the maximum extent feasible. The</p>	<p>Prior to issuance of grading permit; weekly during construction</p>	<p>Planning and Development Department</p> <p>Public Works</p>

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	<p>plan shall be prepared and approved by the City prior to grading or construction and shall include the following:</p> <ul style="list-style-type: none"> <li>■ Identification of specific best management practices for those trees to be relocated, including specific removal and replanting procedures to maximize successful relocation.</li> <li>■ The details and procedures required to prepare the restoration site for planting (i.e. grading, soil preparations, soil stocking, etc.)</li> <li>■ The methods and procedures for the installation of the plant materials.</li> <li>■ Guidelines for the maintenance of the mitigation site during the establishment phase of the plantings. The maintenance program shall contain guidelines for the control of nonnative plant species and the replacement of plant species that have failed to recolonize.</li> <li>■ The revegetation plan shall provide for monitoring to evaluate the growth of the trees. Annual monitoring of the replacement trees shall occur for the first five years after which it shall be performed on the seventh and tenth year. Specific success criteria for replaced trees shall include the following:                             <ul style="list-style-type: none"> <li>○ For a replacement ratio greater than 1:1: 90 percent or more of the transplanted/ replacement trees surviving 10 years after transplantation with overall no net loss of trees</li> <li>○ For replacement ratio of 1:1: 100 percent survival</li> </ul> </li> <li>■ Contingency plans and appropriate remedial measures shall also be outlined in the replacement plan should the plantings fail to meet designated success criteria and planting goals.</li> </ul> <p>When construction activities occur near protected tree species that are proposed to be saved, Best Management Practices (BMPs) to avoid damage to the trees shall be implemented, and verified by the developer. The BMPs will include, but are not limited to (1) installing protective fencing prior to and during construction, using wire mesh or plastic barrier fencing placed at 2.25 times the canopy of the tree; (2) avoiding disturbance and trenching within the tree drip line; (3) maintaining the surface grade around the tree; and (4) prohibiting the placement of paving or landscaping requiring summer irrigation in the vicinity of trees.</p> <p><b>MM 3.3-2(b)</b> A drainage plan shall be designed in such a way as to avoid changes to hydrology in the vicinity of the protected trees.</p> <p><b>MM 3.3-2(c)</b> Construction staging areas shall be designated on the construction plans and parking, loading, and grading during all construction activities prohibited within the root zone of the protected trees.</p> <p><b>MM 3.1-3</b> also applies to this impact.</p>		

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<p><b>Impact 3.3-8</b> Increases in nighttime illumination could disturb nighttime activities of local wildlife species, and alter local species composition.</p>	<p><b>MM 3.3-3</b> All lighting along the perimeter of natural areas such as the channel shall be downcast luminaries with light patterns directed away from natural areas, as coordinated with a certified lighting engineer and project biologist.</p>	<p>At design review and plan check</p>	<p>Planning and Development Department</p>
<p><b>Cultural Resources</b> <b>Impact 3.4-1</b> Construction activities associated with implementation of the proposed project could cause a substantial adverse change in the significance of an archaeological resource.</p>	<p><b>MM 3.4-1(a)</b> Prior to site preparation or grading activities, the Applicant shall retain a qualified (ROPA-listed) archaeologist to inform construction personnel of the potential for encountering unique archaeological resources and the regulatory framework of cultural resources protection. All construction personnel shall be instructed to stop work within 50 feet of a potential discovery until a qualified (ROPA-listed) archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of archaeological resources is prohibited.</p> <p><b>MM 3.4-1(b)</b> The Applicant shall retain a qualified archaeologist to provide spot-checks—on a schedule approved by the City—during grading and excavation activity and to be available on-call in the event of a discovery. In the event of a discovery, the archaeologist shall first determine whether an archaeological resource uncovered during construction is a “unique archaeological resource” under Public Resources Code Section 21083.2(g). If the archaeological resource is determined to be a “unique archaeological resource,” the archaeologist shall formulate a mitigation plan in consultation with the City that satisfies the requirements of Section 21083.2.</p> <p>If the archaeologist determines that the archaeological resource is not a unique archaeological resource, the archaeologist shall record the site and submit the recordation form to the California Historic Resources Information System South Central Coastal Information Center, and no further investigation of the particular find would be required.</p> <p>The archaeologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the City and to the California Historic Resources Information System South Central Coastal Information Center.</p>	<p>Prior to issuance of grading permit, monthly during construction period</p>	<p>Planning and Development Department</p>

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<p><b>Impact 3.4-2</b> Construction activities associated with implementation of the proposed project could directly or indirectly result in damage to, or the destruction of, unique paleontological resources on the site.</p>	<p><b>MM 3.4-2(a)</b> Prior to site preparation or grading activities, the Applicant shall retain a qualified paleontologist to inform construction personnel of the potential for encountering paleontological resources and the regulatory framework of cultural resources protection. All construction personnel shall be instructed to stop work within 50 feet of a potential discovery until a qualified paleontologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of paleontological resources is prohibited.</p> <p><b>MM 3.4-2(b)</b> The Applicant shall retain a qualified paleontologist to provide spot-checks on a schedule approved by the City—during grading and excavation activities and, in the event of a discovery, shall first determine whether a paleontological resource uncovered during construction meets the definition of a "unique archaeological resource" under Public Resources Code Section 21083.2(g). If the paleontological resource is determined to be a "unique archaeological resource," the paleontologist shall formulate a mitigation plan in consultation with the campus that satisfies the requirements of Section 21083.2.</p> <p>If the paleontologist determines that the paleontological resource is not a unique resource, the paleontologist shall record the site and submit the recordation form to the Natural History Museum of Los Angeles County, and no further investigation of the particular find would be required.</p> <p>The paleontologist shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the City and to the Natural History Museum of Los Angeles County.</p>	<p>Prior to issuance of grading permit; monthly during construction</p>	<p>Planning and Development Department</p>
<p><b>Impact 3.4-4</b> Implementation of the proposed project could result in the demolition or adverse modification of contributing elements to the Rose Bowl, a National Register property, and could result in a substantial loss of historic status of the bowl.</p>	<p><b>MM 3.4-3(a) Compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties.</b> MM 3.4-3(c) only applies to the existing character defining features of the Rose Bowl that are proposed for retention and does not apply to the new construction. The scope of work is currently conceptual and will be defined further as the project progresses. All work on elements of the Rose Bowl to be retained shall be designed for maximum possible compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties. This shall be accomplished through the oversight of an independent historic preservation consultant and City staff, as described below.</p> <p>■ <b>Historic Preservation Consultant.</b> The City shall retain the services of a qualified historic preservation consultant with experience in architectural preservation. The role of the historic preservation consultant shall be review of structural designs and construction activities that could potentially affect character-defining features as identified in this EIR</p>	<p>At design review and plan check; weekly during construction</p>	<p>Planning and Development Department</p>

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	<p>and the Historic Structure Report. All reviews by the historic preservation consultant shall be carried out by a person or persons meeting the Secretary of the Interior's Professional Qualification Standards. Knowledge of historic architecture, materials, surface finishes, and historic restoration techniques is required. This consultant shall have a structural engineer and conservator available for consultation. The consultant's main responsibility shall be to monitor and advise the City regarding compliance with the Secretary of Interior's Standards with respect to elements of the Rose Bowl that would be retained, as well as approved design criteria. Through a series of development, design, and specification review meetings, as well as construction monitoring, the historic preservation consultant shall work in conjunction with City and with the Applicant's project and construction management teams. In addition, the consultant shall review the historic record and photo documentation, protection of historic fabric, mock-ups, and test panels of treatments to historic fabric. In consultation with other experts, the consultant shall approve the materials and replica designs used in the restoration, rehabilitation and new construction related to the historic resources.</p> <p>■ <b>Construction Monitoring.</b> On-site construction monitoring by a historic preservation consultant shall be undertaken throughout the construction phase to ensure protection of historic fabric and compliance with the Standards and approved design and construction documents. Monitoring will be scheduled based on potential construction impacts and specific scope of work and will vary between daily and weekly visits upon approval by the City. In addition, all submittals, mock-ups, and change orders that affect historic fabric shall be reviewed by the consultant. On-site changes that might affect historic fabric shall be undertaken in consultation with the historic consultant. If the historic preservation consultant determines that construction does not substantially conform to the approved criteria, the historic preservation consultant will immediately notify the City. The City will require any contractors, vendors etc. to take all reasonable measures to avoid or minimize harm to the property until the issue is resolved. The historic preservation consultant, design team, and construction management will work cooperatively and diligently to resolve issues in a timely manner.</p> <p><b>MM 3.4-3(b) Documentation.</b> A Historical Resource Documentation Report shall be prepared for the Rose Bowl. The resources shall be described photographed in a manner that conforms to Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Level 1 documentation standards, as well as the HABS/HAER Guidelines for HABS Historical Reports. The documentation shall amend the photographic content of the existing HABS report for the Rose Bowl in the Library of Congress collection, focusing on those areas that would be directly affected by the proposed project. The documentation shall be donated to suitable repositories selected by the City, one of which shall include the main branch of the Pasadena Library.</p>		

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<p><b>Impact 3.4-5</b> Implementation of the proposed project could result in direct and indirect effects to the significance of historical resources in the project vicinity.</p> <p><b>Geology and Soils</b></p> <p><b>Impact 3.5-1</b> Buildings and infrastructure associated with the implementation of the proposed project would be subject to potentially damaging seismically induced ground shaking during the life of the project.</p>	<p><b>MM 3.4-3(c)</b> The arroyo stone berms and landscaping on the south side shall be photographed and recorded before removal and replaced in kind, replicating the original intent, look, and function.</p> <p><b>MM 3.4-4</b> The design of the project shall be modified as shown on Attachment C of the staff report presented to the City Council on May 9, 2005 and as described in the Errata to the Final EIR dated May 9, 2005.</p> <p><b>MMs 3.4-3(a)</b> through (c) would also apply to this impact.</p>	<p>At design review and plan check; weekly during construction</p>	<p>Planning and Development Department</p>
<p><b>Impact 3.5-1</b> Buildings and infrastructure associated with the implementation of the proposed project would be subject to potentially damaging seismically induced ground shaking during the life of the project.</p>	<p><b>MM 3.5-1</b> The Applicant shall incorporate site-specific ground motion criteria, as described in the current Pasadena Building Code Chapters 16, 18, and A33, and reviewed by the City's California-registered geotechnical and/or structural engineer, in the design of trenches, slopes, foundations, and structures for the project. Implementation of this measure is required by the Building Code and includes the following provisions:</p> <ul style="list-style-type: none"> <li>■ The minimum seismic-resistant design standards for all proposed facilities shall conform to the California Building Code Seismic Zone 4 Standards</li> <li>■ Additional seismic-resistant earthwork and construction design criteria shall be incorporated in the project as necessary, based on the site-specific recommendations of a California Certified Engineering Geologist in cooperation with California-registered geotechnical and structural engineering professionals</li> <li>■ During site preparation, the registered geotechnical professional shall be on the site to supervise implementation of the recommended criteria</li> <li>■ The California Certified Engineering Geologist consultant shall prepare an "as built" map/report, to be filed with the City, showing details of the site geology, the location and type of seismic-restraint facilities, and documenting the following requirements, as appropriate                         <ul style="list-style-type: none"> <li>■ Engineering analyses shall demonstrate satisfactory performance of compacted fill or natural unconsolidated sediments where either forms part or all of the support for any structures, especially where the possible occurrence of liquefiable soils exists</li> </ul> </li> </ul> <p>Access roads, foundations, and underground utilities in fill or alluvium shall be designed to accommodate settlement or compaction estimated by the site-specific geotechnical investigations of the geotechnical consultant</p>	<p>At design review and plan check; Prior to issuance of grading permits</p>	<p>Planning and Development Department</p>

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<p><b>Impact 3.5-2</b> The use of expansive, weak or slide-prone soils for foundation or roadway support without prior treatment could create unstable soil conditions at the construction site, thus threatening the integrity of completed construction.</p>	<p><b>MM 3.5-2</b> Site-specific soil suitability analysis and stabilization procedures, and design criteria for foundations and road bases (described in the current Pasadena Building Code Chapters 16, 18, and A33) shall be required, as recommended by a California-registered soil engineer, during the design phase for each site where the existence of unsuitable soil conditions is known or suspected. During the design phase, where the existence of unsuitable soil conditions is known or suspected, the Developer's registered soil engineering consultant shall provide documentation to the City that:</p> <ul style="list-style-type: none"> <li>■ Site-specific soil suitability and stability analyses have been conducted in the area of the proposed foundations and road bases to establish the design criteria for appropriate foundation or road base type and support</li> <li>■ The recommended criteria have been incorporated in the design of foundation</li> </ul> <p>During grading, the registered soils professional shall be on the site to do the following:</p> <ul style="list-style-type: none"> <li>■ Observe areas of potential soil unsuitability or instability</li> <li>■ Supervise the implementation of soil remediation or reconstruction programs</li> <li>■ Verify final soil conditions prior to setting the foundations</li> </ul> <p>The registered soils engineering consultant shall prepare an "as built" map/report, to be filed with the City, showing details of the site soils, the location of foundations, retaining walls, sub-drains, clean-outs, etc., and the results of suitability/stability analyses and compaction tests.</p>	<p>At design review and plan check; Prior to issuance of grading permits</p>	<p>Planning and Development Department</p>
<p><b>Impact 3.5-3</b> Construction activities on the project site would not result in increased potential for short- or long-term increases in erosion.</p>	<p><b>MM 3.5-3</b> The following actions shall be taken:</p> <p>To the extent practicable, project site grading shall be scheduled for the dry season (April through September). In addition, NPDES permit requirements shall be fulfilled prior to issuance of building permits. The Applicant shall submit a soil erosion and sedimentation control plan for the project to the City of Pasadena prior to grading, subject to the following recommendations:</p> <ul style="list-style-type: none"> <li>■ The Erosion and Sediment Transport Control Plan (as part of the overall SWPPP) shall be submitted, reviewed, implemented, and inspected as part of the approval process for the grading plans</li> <li>■ The Plan shall be designed by the Applicant's erosion control consultant, using concepts similar to those formulated by the California, as appropriate, based on the specific erosion and sediment transport control needs of the site where grading, excavation, and construction is to occur. Those concepts include some that apply generically to the entire project area and some that would be appropriate only for specific sites. The possible methods are not necessarily limited to the following items: <ul style="list-style-type: none"> <li>■ Confine grading and activities related to grading (demolition, excavation, construction,</li> </ul> </li> </ul>	<p>At design review and plan check; Prior to issuance of grading permits</p>	<p>Planning and Development Department  Public Works Department</p>

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	<p>preparation and use of equipment and material storage areas and staging areas) to the dry season, whenever possible</p> <ul style="list-style-type: none"> <li>■ Locate staging areas outside streams and drainage ways</li> <li>■ Keep the lengths and gradients of constructed slopes (cut or fill) as low as possible</li> <li>■ Discharge grading and construction runoff into small drainages at frequent intervals to avoid buildup of large potentially erosive flows</li> <li>■ Prevent runoff from flowing over unprotected slopes</li> <li>■ Keep disturbed areas (areas of grading and related activities) to the minimum necessary for demolition or construction of the project</li> <li>■ Keep runoff away from disturbed areas during grading and related activities</li> <li>■ Stabilize disturbed areas as quickly as possible, either by vegetative or mechanical methods</li> <li>■ Direct runoff over vegetated areas prior to discharge into public storm drainage systems, whenever possible</li> <li>■ Trap sediment before it leaves the site with such techniques as check dams, sediment ponds, or siltation fences</li> <li>■ Use interceptor ditches, drainage swales, or detention basins to prevent storm runoff from transporting sediment into drainage ways and to prevent sediment-laden runoff from leaving any disturbed areas</li> <li>■ Install silt fences to prevent sedimentation in areas adjacent to grading and down gradients into drainage ways. Design fences using the Universal Soil Loss Equation to calculate their proper storage capacity. The contractor shall implement installation by prior to mass grading and other soil disturbing construction activities on site</li> <li>■ The contractor shall be responsible for the removal and disposal of all project-related sedimentation in off-site retention ponds</li> <li>■ Use landscaping and grading methods that lower the potential for down-stream sedimentation. Modified drainage patterns, longer flow paths, encouraging infiltration into the ground, and slower storm-water conveyance velocities are examples of effective methods</li> <li>■ Control landscaping activities carefully with regard to the application of fertilizers, herbicides, pesticides, or other hazardous substances. Provide proper instruction to all landscaping personnel on the construction team</li> </ul> <p>During the installation of the erosion and sediment transport control structures, the erosion control professional shall be on the site to supervise the implementation of the designs, and the maintenance of the facilities throughout the demolition, grading, and construction period</p>		



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<p><b>Hydrology and Water Quality</b></p> <p><b>Impact 3.7-3</b> The proposed project is not expected to substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or situation on or off site.</p>	<p><b>MM 3.7-1</b> Prior to the issuance of a grading permit, the project Applicants shall file a Notice of Intent (NOI) with the state and comply with the requirements of the NPDES General Construction Permit, including the preparation of a SWPPP and a SUSMP incorporating BMPs for construction and post-construction control of runoff. A Civil Engineer shall prepare the SWPPP and SUSMP for City review and approval. The plans shall reduce the discharge of pollutants, including sediment, to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and such other provisions that are appropriate. The plans shall include applicable post-construction measures such as the following:</p> <ul style="list-style-type: none"> <li>■ Control of impervious area runoff, including installation of detention basins, retention areas, filtering devices, energy dissipaters, pervious drainage systems, porous pavement alternatives</li> <li>■ Implement regular sweeping of impervious surfaces such as streets and driveways</li> <li>■ Use of efficient irrigation practices</li> <li>■ Provision of infiltration trenches and basins</li> <li>■ Linings for urban runoff conveyance channels</li> <li>■ Vegetated swales and strips</li> <li>■ Protection of slopes and channels</li> <li>■ Landscape design such as xeriscape or other design minimizing use of fertilizers</li> </ul> <p><b>MM 3.7-2</b> Prior to the issuance of a grading permit, the Applicant shall submit and obtain approval of construction drainage and erosion control plans for in connection with site grading activities. The control measures contained in the plan shall be approved by the City of Pasadena prior to starting construction. The plans shall serve as the basis for the construction portion of the SWPPP and shall include the applicable measures such as the following:</p> <ul style="list-style-type: none"> <li>■ Diversion of off-site runoff away from the construction site</li> <li>■ Prompt revegetation of proposed landscaped areas</li> <li>■ Perimeter sandbagging and silt fences and/or temporary basins to trap sediment</li> <li>■ Regular sprinkling of exposed soils to control dust during construction</li> <li>■ Installation of a minor retention basin(s) to alleviate discharge of increase flows</li> <li>■ Specifications for construction waste handling and disposal, including wheel washing activities</li> <li>■ Erosion control measures maintained throughout the construction period</li> </ul>	<p>Prior to issuance of grading permits</p>	<p>Planning and Development Department</p> <p>Public Works Department</p>

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<p><b>Impact 3.7-7</b> Development of the Rose Bowl Stadium Renovation Project would increase impervious surfaces in the project area, which could exceed the capacity of existing stormwater drainage systems and require expansion or construction of existing storm drainage facilities.</p>	<ul style="list-style-type: none"> <li>■ Construction stabilized construction entrances to avoid trucks from imprinting debris on City roadways</li> <li>■ Construction timing to minimize soil exposure to storm events</li> <li>■ Training of subcontractors on general site housekeeping</li> </ul> <p>The SWPPP is a "live" document and shall be kept current by the person responsible for its implementation.</p> <p>MMs 3.13-2, 3.7-1 and 3.7-2 would also apply to this impact.</p>	<p>Prior to issuance of grading permit</p>	<p>Planning and Development Department</p>
<p><b>Land Use</b></p>			
<p><b>Impact 3.8-3</b> The proposed project could interfere with existing other uses of the immediate area.</p>	<p><b>MM 3.8-1</b> If the parking areas that currently accommodate the monthly Flea Market are unavailable due to construction of the proposed project, the RBOC shall make an alternate location available, and shall notify the Flea Market operators in writing at least 90 days in advance of any such unavailability as well as to advise of the alternate location.</p> <p><b>MM 3.8-2</b> During project operation, if the event schedule conflicts with the monthly Flea Market held on the second Sunday of each month in the parking area at the south end of the stadium, the RBOC shall make an alternative location available to the Flea Market or schedule an alternate day for the Flea Market, and shall provide the operators of the Flea Market at least 90 days' written notice of the unavailability of the parking area and the location and date of the rescheduled Flea Market operation.</p> <p><b>MM 3.8-3</b> The City and the NFL shall ensure, through provisions in the lease agreement, that the Tournament of Roses and Rose Bowl game activities will be accommodated in a manner consistent with traditional operating circumstances, needs, and locations. (This is the same as MM 3.11-3)</p> <p>MM 3.7-1, MM 3.7-2, MM 3.10-1, MM 3.10-2, MM 3.12-1, and MM 3.12-2 also apply to this impact.</p>	<p>During construction MM 3.8-3 prior to issuance of grading permits</p>	<p>Planning and Development Department</p>
<p><b>Impact 3.8-4</b> The proposed project would adversely affect adjacent neighborhoods.</p>		<p>During construction; semi-annually upon implementation</p>	<p>City Transportation Department</p>

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<p><b>Noise</b></p> <p><b>Impact 3.9-5</b> Construction activities associated with the proposed project could generate noise levels that exceed the standards established in the City of Pasadena Noise Regulations.</p>	<p><b>MM 3.9-1</b> To mitigate potential pile driving or other extreme noise-generating impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. This plan shall be submitted for review and approval by the City to ensure that feasible noise attenuation is achieved to satisfy standards contained in the City of Pasadena Noise Ordinance. These attenuation measures shall include as many of the following control strategies as feasible and shall be implemented prior to any required pile driving activities:</p> <ul style="list-style-type: none"> <li>■ Implement "quiet" pile driving technology (e.g., cast-in-drilled hole piles, soil-mix wall technology, shielded pile drivers, vibratory pile driving or pre-drilled pile holes), where feasible, in consideration of geotechnical and structural requirements and conditions</li> <li>■ Erect temporary plywood noise barriers around the entire construction site</li> <li>■ Adjust the scheduling and duration of pile driving</li> <li>■ Monitor the effectiveness of noise attenuation measures by taking noise measurements during pile driving activities</li> </ul> <p><b>MM 3.9-2</b> Prior to the issuance of each building permit, along with the submission of construction documents, the Project Applicant shall submit to the City a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include the following:</p> <ul style="list-style-type: none"> <li>■ A procedure for notifying City staff</li> <li>■ A plan for posting signs on the project site pertaining to permitted construction days and hours, complaint procedures, and who to notify in the event of a problem</li> <li>■ A listing of telephones numbers (during regular construction hours and off hours)</li> <li>■ The designation of an on-site construction complaint manager for the proposed project</li> </ul> <p>Notification of residents within 800 feet of the proposed project construction area at least 30 days in advance of pile-driving along with the estimated duration of the activity</p>	<p>Prior to issuance of grading permits</p>	<p>Planning and Development Department</p>

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<p><b>Impact 3.9-6</b> Operation of the proposed project could generate noise levels that exceed the standards established in the City of Pasadena Noise Regulations.</p>	<p><b>MM 3.9-3</b></p> <p>(a) Prior to installation of the new sound system, the project operator shall present a noise analysis to the City that demonstrates that the new sound system will meet the City's Noise Regulations.</p> <p>(b) Stadium noise level in the residential areas surrounding the project site shall be monitored periodically during the first year of operation by the operator in cooperation with the City.</p> <p>(c) Based on the monitoring results, the operator shall modify operation of the loudspeaker system to reduce noise levels observed at the residential areas to meet City Noise Regulations. Modifications may include adjustments to volumes or relocation of individual loudspeakers and shall ensure any necessary modifications provide the maximum feasible reduction of noise to the surrounding community.</p> <p>(d) Prior to the first special event associated with a NFL football game at the Rose Bowl, the operator shall retain a qualified acoustical consultant to develop noise performance standards for the stadium loudspeaker system to minimize noise effects at the residential areas surrounding the Rose Bowl. The performance standards shall specify a noise limit and may include suggestions for sound equipment orientation or other measures. The performance standards shall be subject to review and approval by the Director of Community Development.</p>	<p>Prior to issuance of occupancy permits; quarterly during implementation</p>	<p>Planning and Development Department</p> <p>City Health Department</p>
<p><b>Impact 3.9-7</b> Operation of the proposed project could expose nearby noise-sensitive land uses to substantial temporary or periodic increases in ambient noise levels.</p>	<p>MMs 3.12-1 and 3.12-2 would also apply to this impact.</p>	<p>Prior to issuance of occupancy permits</p>	<p>Planning and Development Department</p>
<p><b>Impact 3.9-8</b> The increase in local traffic volumes during weekdays resulting from implementation of the proposed project would cause a substantial periodic increase in off-site roadway noise levels.</p>	<p>MMs 3.12-1 and 3.12-2 would also apply to this impact.</p>	<p>Annually upon implementation</p>	<p>Planning and Development Department</p> <p>City Transportation Department</p>

**Table 10-1 Mitigation Monitoring and Reporting Program Matrix**

Impact	Mitigation Measures	Time Frame/ Monitoring Milestone	Responsible Monitoring Party
<p><b>Impact 3.9-9</b> The increase in local traffic volumes during weekends resulting from implementation of the proposed project would cause a substantial periodic increase in off-site roadway noise levels.</p>	<p>MMs 3.1.2-1 and 3.1.2-2 would also apply to this impact.</p>	<p>Annually upon implementation</p>	<p>Planning and Development Department</p>
<p><b>Public Services</b></p>			
<p><b>Impact 3.10-2</b> When fully operational, the estimated increase in visitor population as a result of project implementation could impact police service levels within the project area, but would not require the construction of new or physically altered police facilities to accommodate the increased demand.</p>	<p><b>MM 3.10-1</b> Prior to issuance of a building permit, the City and the Developer shall consult with the Pasadena Police Department to develop a security plan indicating detailed Crime Prevention Design and event security measures, including specific duties with regard to prohibition of tailgating activities other than in areas specified for that purpose, and shall incorporate the Department's recommendations into the Plan. <b>MM 3.10-2</b> The operator of the proposed project shall provide sufficient private-sector security (licensed, uniformed, and insured) and video surveillance camera systems to meet the project's needs and include coverage for all of the project area in order to prevent crime and offset potential impacts to police services.</p>	<p>Prior to issuance of building permit</p>	<p>Pasadena Police Department  Planning and Development Department</p>
<p><b>Recreation</b></p>			
<p><b>Impact 3.11-2</b> The proposed project would significantly interfere with or prohibit use of existing recreational facilities in the Central Arroyo.</p>	<p><b>MM 3.11-1</b> The RBOC shall ensure that the Arroyo Seco Trail (also known as the Rim of the Valley Trail) and the Recreation Loop shall remain open during construction and operation of the proposed project. <b>MM 3.11-2</b> Notification of major stadium events shall be posted by the RBOC along the Arroyo Seco Trail and Recreation Loop at least thirty (30) days prior to the events; notice for playoff games may be less than 30 days and shall be posted as soon as possible <b>MM 3.11-3</b> The City and the NFL shall ensure, through provisions in the lease agreement, that the Tournament of Roses and Rose Bowl game activities will be accommodated in a manner consistent with traditional operating circumstances, needs, and locations. (This is the same as MM 3.8-3) <b>MM 3.11-4</b> The project operator or their designees shall be responsible for timely repair of damaged turf areas as a result of parking during displacement events.</p>	<p>Annually upon implementation</p>	<p>Planning and Development Department  Recreation &amp; Parks Department</p>

IMPACT	MITIGATION MEASURES	TIME FRAME/ MONITORING MILESTONE	RESPONSIBLE MONITORING PARTY
Recreation con't	<p>To provide additional mitigation of the impact of the Project on the users of Area H by creating additional recreational opportunities, revenue and/ or cost savings from the NFL shall be used to create new recreational opportunities to counterbalance the impacts to existing facilities. In the first five years of the Rose Bowl Renovation Development Agreement, The City shall implement the following projects with revenue and/or cost savings:</p> <ol style="list-style-type: none"> <li>1. Installation of artificial turf on an existing sports field;</li> <li>2. Construction of a field at Sycamore Grove in Hahamongna Park;</li> <li>3. Construction of a multi-use field at Hahamongna Park;</li> <li>4. Construction of a new field at Robinson Park;</li> <li>5. Restoration of trail and rock walls in the Lower Arroyo; and</li> <li>6. Investment in maintenance, security and/or other improvements to make school grounds available for use for non-organized recreational use.</li> </ol>	Annually upon implementation	City Council and City Manager

**Table 10-1 Mitigation Monitoring and Reporting Program Matrix**

Impact	Mitigation Measures	Time Frame/ Monitoring/Milestone	Responsible Monitoring Party
<p><b>Transportation/Traffic</b></p> <p><b>Impact 3.12-7</b> Implementation of the proposed project would result in significant adverse impacts on traffic and circulation at the study intersections during both weekday and weekend special events at the Rose Bowl stadium.</p>	<p><b>MM 3.12-1</b> The traffic control measures and traffic management strategies currently employed during large-scale events at the Rose Bowl (i.e., UCLA football games) should continue to be implemented along with new strategies during the weekday and weekend special events associated with the proposed project to effectively move vehicles into and out of the Rose Bowl stadium parking areas. These traffic management strategies include the following:</p> <p><u>Offset/Reversible Traffic Flow Along Key Street Segments</u></p> <p>Continue to provide offset traffic flow along Salvia Canyon Road, Seco Street (both near Rosemont Avenue and just north of Linda Vista Avenue) and Rosemont Avenue. Traffic cones and barricades will be placed to provide an additional lane for motorists offset from the normal centerline (e.g., two inbound and two outbound lanes become three inbound and one outbound lane).</p> <p><u>Use of Police Helicopter to Assist Traffic Control Operations</u></p> <p>A City of Pasadena Police helicopter is utilized to assist traffic control operations staff on the ground for events that are anticipated to draw more than 20,000 persons. Police personnel should continue to be positioned at key traffic decision points on the perimeter of the arrival/departure travel routes. Arriving traffic can be diverted to another travel route to obtain a better distribution of parking loading, as the traffic personnel are in direct radio contact with the Police helicopter and the police stationed in the Rose Bowl Traffic Control Center (located in the press box).</p> <p><u>Command Center at the Rose Bowl Stadium</u></p> <p>The Rose Bowl stadium renovation will include upgrades to provide a state-of-the-art traffic command center that will be linked to the traffic management center in City Hall. The traffic command center will be equipped with closed circuit television (CCTV) monitors with camera coverage of the entire Arroyo Seco, strategic locations within Pasadena and at shuttle stops.</p> <p><u>Temporary Freeway Changeable Message Signs</u></p> <p>Continue implementing the freeway changeable message signs for large-scale events at the Rose Bowl. These signs, in conjunction/coordination with the police helicopter and the Rose Bowl Stadium Traffic Control Command Center would divert arriving traffic to another travel route to obtain a better distribution of parking loading. Traffic personnel would also be in direct radio contact with the Police helicopter and the police stationed in the Rose Bowl Traffic Control Command Center (located in the</p>	<p>Annually</p>	<p>City Transportation Department</p> <p>Pasadena Police Department</p>

**Table 10-1 Mitigation Monitoring and Reporting Program Matrix**

Impact	Mitigation Measures	Time Frame/ Monitoring Milestone	Responsible Monitoring Party
	<p>press box).</p> <p>Continue Utilization of Shuttle Buses from the Parsons Complex</p> <p>Continue the current Rose Bowl stadium shuttle program for major special events.</p> <p><u>Wayfinding Guide Signs</u></p> <p>Continue implementing the current wayfinding signage program that exists in the vicinity of the Rose Bowl stadium.</p> <p><u>Deployment of Traffic Control Officers at Key Intersections</u></p> <p>Continue stationing traffic control officers at many of the key intersections during the weekday and weekend special events, so as to better direct predominant entering and exiting traffic flows. Based on coordination with the PDD, uniformed officers are typically deployed to approximately 30 posts at all major intersections in the Arroyo Seco and along roadways leading to and from the regional freeway system for UCLA football games to manage and direct the reversible lane operations.</p> <p><u>Neighborhood Traffic Management</u></p> <p>All residential streets surrounding the Arroyo Seco that are not designated as access to the Rose Bowl should continue to be closed to event traffic on special event days. This will continue to be implemented through the use of barricades at over 60 locations and will be manned by either Explorer Scouts (consistent with UCLA games), or by uniformed employees of the parking management company. Patrols of the neighborhoods should occur and residents should be given a hotline number to call so as to report any event-related concerns to which patrols can respond.</p> <p>Designated routes to and from the Arroyo Seco area should be signed approximately 72 hours in advance for temporary special event "No Parking", which will be enforced by towing. Residents of the neighborhoods surrounding the Arroyo Seco will continue to be able to obtain residential passes for their cars that allow free access to roadways otherwise closed via the implementation of barricades.</p> <p><u>Design and Implementation of a Pre-Paid/Pre-Assigned Parking Program for Events</u></p> <p>Initiate and implement the design of a pre-paid, pre-assigned on-site parking program for all season-ticket holders. This program would be implemented for all suite ticket holders, all club level season ticket holders, and some general admission season ticket holders. With this program, patrons would receive directions to a designated parking area via a designated travel route. Pre-paid parking could be demonstrated through the use of dashboard placards, and preferential parking in close proximity to the stadium could be provided for suite holders and club level ticket holders.</p>		



**Table 10-1 Mitigation Monitoring and Reporting Program Matrix**

Impact	Mitigation Measures	Time Frame/ Monitoring Milestone	Responsible Monitoring Party
	<p><u>Design and Implementation of Pre-Assigned Ingress Travel Routes</u></p> <p>With implementation of this measure, patrons would receive directions to a designated parking area via a designated travel route in advance of an event.</p> <p><u>Marketing/Public Information/Media Outreach Programs</u></p> <p>A comprehensive marketing effort should be undertaken so as to provide event patrons with ample public information regarding transportation issues, aimed at reducing impacts associated with the proposed project to the greatest extent possible. The target audiences would be season ticket holders that purchase pre-paid parking passes, season ticket holders that park at the Parsons complex, single game ticket patrons, regional media, employees, charter bus operators, and area commuters.</p> <p>Season ticket holders who purchase on-site parking would receive a ticket package that contains detailed information with respect to their designated parking area, the designated ingress travel route, and egress travel route suggestions. A dashboard parking pass/placard to display on event days would also be provided. Detailed maps should be provided on the back side of parking passes/placards that illustrate the pre-assigned route to the designated parking area. In the infrequent event of rain, the information packets should contain special directions for those patrons pre-assigned to an area of turf parking. Use of the Parsons complex parking and use of the shuttle should be encouraged. In addition, season ticket holders that park off site or take transit should be provided with informational brochures containing detailed information on parking access and shuttle bus operations.</p> <p>Furthermore, key public messages should be provided via the established Rose Bowl stadium website, public radio and other forms of media. These public announcements should include the following key messages: (1) arrive early, (2) vehicles should use the routes shown on their parking pass/placard, (3) if patrons do not have parking passes/placards, they should head to the Parsons complex, (4) in the event of rain, consider parking at the Parsons complex, (5) the shuttle is a short route and it is an efficient and convenient alternative to driving, and (6) charter buses and other transit (i.e., Gold Line) are encouraged.</p> <p><u>Deployment of Additional Traffic Control Officers at Key Intersections</u></p> <p>In addition to the current deployment levels, additional traffic control officers should be stationed at the following intersections during the weekday and weekend special events, so as to better direct predominant entering and exiting traffic flows:</p> <ul style="list-style-type: none"> <li>■ Rosemont Ave. &amp; Washington Blvd.</li> <li>■ North Arroyo Blvd. &amp; I-210 WB Ramps</li> <li>■ North Arroyo Blvd. &amp; I-210 EB Ramps</li> </ul>		

**Table 10-1 Mitigation Monitoring and Reporting Program Matrix**

Impact	Mitigation Measures	Time Frame/ Monitoring Milestone	Responsible Monitoring Party
	<ul style="list-style-type: none"> <li>■ Lincoln Ave. &amp; I-210 WB Ramps</li> <li>■ I-210 EB Ramps &amp; Mountain St.</li> <li>■ I-210 WB Ramps &amp; Mountain St.</li> <li>■ Linda Vista Dr. &amp; Highland Dr.</li> <li>■ Linda Vista Dr. &amp; Oak Grove Dr.</li> </ul> <p>These officers will manually direct motorists at key intersections so as to minimize potential delays during peak inbound and outbound special event time periods (with the number of traffic control officers and the duration of deployment at each location to be determined by the Traffic Lieutenant of the PPD). For those locations involving freeway ramps, coordination with Caltrans and/or the California Highway Patrol (CHP) will continue to be necessary.</p> <p><u>Enhanced Wayfinding Guide Sign Program</u></p> <p>Implement an enhanced wayfinding program as part of the proposed Rose Bowl Stadium Renovation project. The wayfinding program should be developed in consultation with the cities of Pasadena and La Canada-Flintridge, as well with the California Department of Transportation. The wayfinding program should include an updated inventory of existing Rose Bowl guide signs and directional freeway guide signs. Furthermore, the wayfinding program should identify opportunities to improve the dissemination of directional information for approaching motorists, including identification and location of specific access roadways. For motorists departing the Rose Bowl area, information regarding access to the regional freeway system should also be enhanced. The enhanced wayfinding plan should be guaranteed prior to the issuance of the building permit for the Rose Bowl Stadium Renovation project and would be implemented prior to project completion.</p> <p><u>Consideration of Modifications to the Lot 9 Turf Area Access Point</u></p> <p>An increase in the driveway/gate width for the Lot 9 turf parking area should be considered to increase efficiency associated with vehicular entry. The increased width may require slight modification to the existing rock walls.</p> <p><u>Consideration of Additional Changeable Message Signs</u></p> <p>The placement of additional changeable message signs on the arterial system should be considered at other locations in order to continue to provide motorists with real-time information regarding preferred routes.</p> <p><b>MM 3.12-2</b> Additional traffic control officers should be deployed during large scale special events at intersections within the Parsons complex vicinity and these efforts should be coordinated through the City's Police Department and integrated with Rose</p>		

**Table 10-1 Mitigation Monitoring and Reporting Program Matrix**

Impact	Mitigation Measures	Time Frame/ Monitoring/Milestones	Responsible Monitoring Party
	Bowl Stadium Traffic Control Command Center.		
	<p><b>MM 3.12-3</b> Prior to issuance of grading permits, the project operator shall be required to develop a construction traffic management plan, to be approved by the City, that provides an overview of the project, lists the general contractor contact information, outlines contract responsibilities (e.g., mobilization, any demolition, excavation, grading or shoring work, concrete or steel placement work, etc.), construction hours, material storage and construction trailer locations, truck/haul routes, traffic control, parking, and clean-up.</p> <p><b>MM 3.12-4</b> The project operator shall provide plans and specifications, prepared by a civil engineer, regarding any proposed modifications, improvements, or realignments to features in the public right-of-way or on adjacent public land and submit them to the City for approval. The submission shall be made in a timely manner and City approval granted before the issuance of grading permits.</p>		City Transportation Department
<p><b>Impact 3.12-8</b> Utilization of off-site parking at the Parsons complex during the weekday P.M. arrival peak period would result in significant adverse impacts on traffic and circulation at the study intersections in the vicinity of the complex.</p>	<p>MMs 3.12-1 and 3.12-2 would also apply to this impact.</p>	Quarterly monitoring	City Transportation Department
<p><b>Impact 3.12-9</b> Implementation of the proposed project would result in significant adverse impacts on average daily traffic on specified street segments.</p>	<p>MMs 3.12-1 and 3.12-2 would also apply to this impact.</p>	Quarterly monitoring	City Transportation Department
<p><b>Impact 3.12-10</b> Implementation of the proposed project would impair implementation of the highway congestion management plan.</p>	<p>MMs 3.12-1 and 3.12-2 would also apply to this impact.</p>	Quarterly monitoring	City Transportation Department

Table 10-1 Mitigation Monitoring and Reporting Program Matrix

Impact	Mitigation Measures	Time Frame/ Milestones	Responsible Monitoring Party
<p><b>Utilities and Service Systems</b></p> <p><b>Impact 3.13-8</b> Implementation of the proposed project could require an increase in electricity and natural gas, but would not require the construction of new energy production or transmission facilities, the construction of which could cause significant environmental effects.</p>	<p><b>MM 3.13-1</b> Project design and construction shall be coordinated with SCG and the City's Public Works Department, and improvements provided if necessary in order to ensure that connections are adequate and capacity is available to accommodate estimated demand for gas and electric utilities.</p>	<p>At design review and plan check</p>	<p>Public Works Department</p>
<p><b>Impact 3.13-8</b> Development of the Rose Bowl Stadium Renovation Project could incrementally increase impervious surfaces in the project area, which could require expansion or construction of existing storm drainage facilities.</p>	<p><b>MM 3.13-2</b> The project Applicant shall provide a storm drainage analysis to ensure that storm drain lines and connections are adequate and that capacity is available to accommodate the anticipated increase in stormwater flows. If the report provides recommendations for on-site storm drainage improvements, the recommendations must be followed and implemented. If found that off-site improvements would be necessary, the project Applicant shall pay in-lieu fees to the City for the future construction of those facilities.</p>	<p>At design review and plan check</p>	<p>Public Works Department</p>

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