Mitigation Monitoring and Reporting Program
Pacific Highlands Ranch Subarea Plan
LDR No. 96-7918

The California Environmental Quality Act (CEQA), Section 21081.6, requires that a mitigation monitoring and reporting program be adopted upon certification of an environmental impact report (EIR) in order to ensure that the mitigation measures are implemented. The mitigation monitoring and reporting program specifies what the mitigation is, the entity responsible for monitoring the program, and when in the process it should be accomplished.

The mitigation monitoring and reporting program for Pacific Highlands Ranch Subarea III is under the jurisdiction of the City of San Diego and other agencies as specified below. The following is a description of the mitigation monitoring and reporting program to be completed for the project. Tables and figures from the MEIR for the project are referenced in the following text.

1) Land Use

a) **Impact:** ***Subarea Plans 1 and 2.*** Both proposed plans are generally consistent with the intent of the General Plan, environmental goals of the adopted NCFUA Framework Plan, Council Policy 600-40, and the North City LCP. The lack of compliance with the preservation of agricultural lands described in the Framework Plan, and the impacts to the circulation system represents a significant direct and cumulative land use impact.

a) **Mitigation:** ***Subarea Plans 1 and 2.*** The No Project alternative would avoid impacts to the General Plan agricultural lands preservation goal, and the NCFUA circulation system principles.

b) **Impact:** ***Subarea Plans 1 and 2.*** Both subarea plans have been prepared consistent with the requirements of City Council Policy 600-40. However, both plans would not be consistent with the encroachment provision of RPO as they apply to steep slopes, wetlands, and significant prehistoric sites. As such, this would represent a significant direct and cumulative land use impact.

b) **Mitigation:** ***Subarea Plans 1 and 2.*** Although both subarea plans have been designed to minimize impacts to RPO-sensitive resources, strict compliance with the development regulations of the ordinance would require a project redesign. The plans' inconsistency with the RPO encroachment provisions can be avoided with

implementation of the No Project alternative and mitigated to below a level of significance by adoption of a RPO alternative. These alternatives are discussed in Chapter 8 of this EIR.

Land Use Compatibility within Pacific Highlands Ranch

c) **Impact:** ***Subarea Plans 1 and 2.*** The identified potential internal land use compatibility impacts described above in conjunction with the SR-56 alignment are considered potentially significant. As noted above, the significance of this impact is also described in the Revised Draft EIR for the Middle Segment of SR-56. Also, the proposed extension of Carmel Valley Road could result in significant land use incompatibilities with the proposed Pacific Highlands Ranch residential developments along these roadways.

c) **Mitigation:** ***Subarea Plans 1 and 2.*** Mitigation for the potential internal land use compatibility impacts associated with proposed land uses and the SR-56 freeway would consist of the requirement for landscaping and noise attenuation measures at the time tentative maps are processed.

2) Transportation/Traffic Circulation

a) **Impact:** The following impacts are considered both direct and cumulatively significant:

- Development of 41 Phase I units east of the existing Del Mar Heights Estates.
- Project contribution of more than 2 percent traffic to Black Mountain Road/Park Village intersection.
- Additional traffic contribution to Black Mountain Road from SR-56 to Mercy Road (currently failing).
- Project contribution of more than 2 percent traffic to El Camino Real between Via de la Valle and Half Mile Drive (LOS F).
- Project contribution of 7.5 percent traffic to Camino Ruiz North or SR-56 at buildout without the third intersection (LOS E).
- Project contributions to freeway areas where wait already exceeds 15 minutes.
- Project contribution of more than 2 percent traffic to El Apajo from Via Santa Fe to San Dieguito Road.

a) **Mitigation:** Table 4B-14 includes all of the area's transportation improvements necessary to reduce project impacts to the extent feasible; however, not all impacts are reduced to below a significant level. Table 4B-14 includes the location of the

improvement, the type of the improvement, the party responsible for the improvement, and the level of significance after mitigation.

3) Biological Resources

a) Impact:

Subarea Plan 1. The direct, indirect, and cumulative impacts to sensitive biological resources described above are considered significant. The significant impacts include loss of MSCP Tier I (13.2 acres of southern maritime chaparral and 0.6 acre of native grasslands) and Tier II (10.4 acres of coastal sage scrub and 0.1 acre of coyote bush scrub) habitats, direct and cumulative loss of riparian scrub wetland habitats (approximately 0.4 acre), and impacts to the above-identified sensitive plant and animal species.

Subarea Plan 2. The direct, indirect, cumulative impacts to sensitive biological resources described above are considered significant. The significant impacts include loss of MSCP Tier I (12.9 acres of southern maritime chaparral and 0.6 acre of native grasslands) and Tier II (10.0 acres of coastal sage scrub) habitats, direct and cumulative loss of riparian scrub wetland habitats (approximately 0.7 acre), and impacts to the above-identified sensitive plant and animal species.

Both Plans. Although both plans would meet the MSCP requirement, cumulative wetland impacts would remain significant.

Carmel Valley Neighborhood 10 Precise Plan. The impacts to coastal sage scrub and non-grasslands would be a significant impact.

a) Mitigation: The significant direct and indirect impacts to upland biological resources would be mitigated to below a level of significance through conformance and implementation of the MSCP. The Pacific Highlands Ranch MSCP impacts and mitigation requirements are shown in Tables 4C-5 and 4C-6. Table 4C-5 shows the mitigation requirements for Plan 1 and Table 4C-6 shows the mitigation requirements for Plan 2. These tables separate the mitigation requirements for the Pardee ownership and the non-Pardee ownerships. The identified mitigation ratios are per the adopted MSCP based on the vegetation type (Tier Designation) being impacted. As these tables indicate, there is adequate acreage on-site to mitigate for Pardee's direct impacts within Pacific Highlands Ranch. There is also adequate acreage within Subarea II to mitigate for the 8.1 acres of impacts into Tier II and Tier III habitats previously designated as open space within Carmel Valley Neighborhood 10 Precise Plan. Other mitigation requirements identified to deal with direct and indirect impacts would be implemented at the time future tentative maps are processed and would include the following:

1. Staking and monitoring of grading activities shall be supervised by a qualified biologist to ensure no unanticipated impacts to sensitive habitats or species occur within the areas shown for permanent open space. This requirement should be noted on the grading plans prior to the issuance of a grading permit.

2. Brush management for Zone 2 shall be implemented as required by the City and shall be the responsibility of the adjacent landowner.

3. Lighting at perimeter lots adjacent to the open space shall be selectively placed, shielded, and directed away from that habitat.

4. Any fencing along property boundaries facing the open space corridors shall be designed and constructed of materials that are compatible with the open space corridors. Fencing shall be installed by the developer prior to the occupancy of the units in order to ensure uniformity. Locations where fencing are required are described in the Subarea Plan.

5. Restrictions for noise impacts on grading of lands adjacent to the MHPA consistent with the MSCP Subarea Plan should be implemented during the gnatcatcher breeding season. Grading inside the MHPA preserve or within 100 feet of the MHPA is prohibited during gnatcatcher breeding season. Grading can occur on land that was previously cleared.

Wetland impacts under both Plan 1 and Plan 2 would be mitigated through the creation/restoration within the Pacific Highland Ranch project site. Portions of the drainage bottoms with Deer Canyon and McGonigle Canyon have been disturbed by agricultural operations and can be utilized to accomplish wetland mitigation requirements on-site. Wetland restoration, at a ratio consistent with the MSCP, is a component in the conceptual revegetation plan prepared in conjunction with the mitigation land bank (see discussion below).

Other mitigation measures provided as extraordinary benefit to the City, negotiated as part of a contemplated development agreement for Subarea III would be the dedication of lands within Subarea V and the Carmel Valley community planning area. At Carmel Valley Neighborhood 8A (Parcels A and B), approximately 75 acres of Tier I habitat would be added to the MHPA. The addition of these lands to the MHPA would greatly increase the size of the habitat block planned for this particular geographic area, improving the overall preserve design and configuration, and providing greater assurances that scarce vegetation types (i.e., southern maritime chaparral) would be maintained over the long term. Additionally, future development potential at the Deer Canyon parcel within Subarea V would be avoided. Finally, Pardee has agreed to other provisions which would further enhance the MHPA function. These measures consist of the following:

1. No brush management activities would be performed within the preserve along the edges of several of the proposed encroachment areas as described in the Subarea Plan. Zone 2 brush management would be allowed in other areas of the MHPA.

2. All manufactured slopes along the edge of the MHPA would be included within the MHPA and would be revegetated in accordance with a Master Revegetation Plan.

3. Impacts to wetlands would be minimized, and mitigation would be per City Ordinance and the U.S. Army Corps of Engineers 404 Permit requirements.

4. Approximately 130 acres of disturbed land within the MHPA for Pacific Highlands Ranch would be restored per a Master Revegetation Plan with appropriate upland and wetland habitats and a mitigation bank established. Much of this revegetation area consists of a manufactured wildlife corridor that would connect and provide for wildlife movement between Gonzales Canyon and McGonigle Canyon.

5. Conveyance of acreage within Carmel Valley Neighborhood 8A and Subarea V (Deer Canyon).

Prior to the issuance of grading permits in conjunction with future tentative map approvals, Development Services shall review the grading and landscape plans for consistency with the mitigation measures for impacts to biological resources (grading and brush management). The above measures would be conditions of future development permits and landscape plans. After completion of grading and prior to the issuance of building permits, a site inspection by City staff would be required to ensure compliance with the brush management mitigation program.

Mitigation Land Banks

In order to effectuate the boundary adjustments to the MHPA, a mitigation bank would be established over approximately 130 acres of land within the Pardee ownership in Pacific Highlands Ranch. The bank will consist of disturbed land that will be revegetated in accordance with the master revegetation plan. Restored habitats will consist of appropriate wetland and upland habitats. It is anticipated that much of the upland habitat would consist of Tier II and Tier III habitats. The City will direct project applicants needing mitigation in the North City area to purchase credits in this bank, and will accept land from this bank into the MHPA upon purchase of credits by a third party. The bank will be processed and approved expeditiously by the City in a manner that will enable establishment costs to be kept to a minimum.

For areas to be restored, a conceptual revegetation summary which outlines the general criteria and maintenance requirements to be included in a more detailed master revegetation plan for Pacific Highlands Ranch is included as Appendix C2 to this EIR.

Restored lands included in the mitigation bank would be maintained as required in the master revegetation plan until credits are sold and the land conveyed to the City for MHPA purposes. Upon conveyance, the City would assume responsibility for management and maintenance.

A mitigation bank covering approximately 24 acres within Parcel A of Carmel Valley Neighborhood 8A would also be established as a component of the MHPA boundary adjustment process.

4) Hydrology

a) **Impact:** ***Subarea Plans 1 and 2.*** Construction activities in Pacific Highlands Ranch could result in significant erosion, siltation, and water quality impacts. The increase in runoff volume and velocity due to the introduction of streets, roads, and other hardscape surfaces could result in significant adverse erosion, water quality, and flooding impacts to existing natural drainage courses and the Carmel Valley storm drain system. However, these impacts are mitigable to below a level of significance by incorporating the City's BMPs and the standard engineering practices listed below.

a) **Mitigation:** ***Subarea Plans 1 and 2.*** Incorporation of the following mitigation measures into project design would mitigate potential hydrology/water quality impacts to a level of less than significant. The exact locations and design of these measures will be determined in conjunction with future specific development proposals. As a condition of future tentative map approvals, the following mitigation measures shall be specified on the grading plan:

Short-term Construction Practices

1. As a condition of future VTMs and to be shown as a note on the grading permit, grading and other surface-disturbing activities either shall be planned to avoid the rainy season (i.e., November through March) to reduce potential erosion impacts or shall employ construction phase erosion control measures, including the short-term use of sandbags, matting, mulch, berms, hay bales, or similar devices along all graded areas to minimize sediment transport. The exact design, location, and schedule of use for such devices shall be conducted pursuant to direction and approval by the City Engineer.

2. Prior to the issuance of a grading permit, the grading plan shall locate temporary desilting basins at all discharge points adjacent to drainage courses or where substantial drainage alteration is proposed. The exact design and location of such facilities shall be conducted pursuant to direction by the City Engineer.

3. As condition of future VTMs, the developer shall within 90 days of completion of grading activities, hydroseed landscape graded and common areas with appropriate ground cover vegetation consistent with the biology section mitigation requirements (e.g., use of native or noninvasive plants). These revegetated areas shall be inspected monthly by a qualified biologist until vegetation has been firmly established as determined by the City's grading inspector.

4. Compacted areas shall be scarified, where appropriate, to induce surface water infiltration and revegetation as directed by the project geologist, engineer, and/or biologist.

5. General Construction Activity Storm Water Permits (NPDES No. CAS000002) shall be obtained from the SWRCB prior to project implementation. Such permits are required for specific (or a series of related) construction activities which exceed five acres in size and include provisions to eliminate or reduce off-site discharges through implementation of a SWPPP. Specific SWPPP provisions include requirements for erosion and sediment control, as well as monitoring requirements both during and after construction. Pollution control measures also require the use of best available technology, best conventional pollutant control technology, and/or best management practices to prevent or reduce pollutant discharge (pursuant to SWRCB definitions and direction).

6. A Dewatering Waste Discharge Permit (NPDES No. CA0108804) shall be obtained for the removal and disposal of groundwater (if necessary) encountered during construction. Such permits are intended to ensure compliance with applicable water quality, and beneficial use objectives, and typically entail the use of BMPs to meet these requirements. Discharge under this permit will require compliance with a number of physical, chemical, and thermal parameters (as applicable), along with pertinent site-specific conditions (pursuant to RWQCB direction).

7. Specified vehicle fueling and maintenance procedures and hazardous materials storage areas shall be designated to preclude the discharge of hazardous materials used during construction (e.g., fuels, lubricants and solvents). Such designations shall include specific measures to preclude spills or contain hazardous materials, including proper handling and disposal techniques and use of temporary impervious liners to prevent soil and water contamination.

Project Design

As conditions of future VTMs and to be included as notes and exhibits on the grading plan, the following mitigation measures would be required:

8. Postconstruction erosion control measures shall be implemented where proposed disturbance is adjacent to or encroaches within existing drainage courses and projected runoff velocities exceed 5 cfs.

9. Final project design shall incorporate all applicable BMPs contained in the City and State *Best Management Practices to be Considered in the Development of Urban Stormwater Management Plan.* Specifically, these may include measures such as the use of detention basins, retention structures, infiltration facilities, permeable pavements, vegetation controls, discharge controls, maintenance (e.g., street sweeping), and erosion controls.

10. Surface drainage shall be designed to collect and discharge runoff into natural stream channels or drainage structures. All project-related drainage structures shall be adequately sized to accommodate a minimum 50-year flood event (or other storm events pursuant to direction from the City).

11. Project operation and maintenance practices shall include a schedule for regular maintenance of all private drainage facilities within common development areas to ensure proper working condition. Public facilities shall be maintained by the City.

12. Surface and subsurface drainage shall be designed to preclude ponding outside of designated areas, as well as flow down slopes or over disturbed areas.

13. Runoff diversion facilities (e.g., inlet pipes and brow ditches) shall be used where appropriate to preclude runoff flow down graded slopes.

14. Energy-dissipating structures (e.g., detention ponds, riprap, or drop structures) shall be used at storm drain outlets, drainage crossings, and/or downstream of all culverts, pipe outlets, and brow ditches to reduce velocity and prevent erosion.

15. Long-term maintenance responsibility of the detention basin may be accepted by the City of San Diego or through other acceptable mechanisms (e.g., homeowners' association or assessment district).

The City Engineer shall verify that the precise plan mitigation measures are conditions for the approval of future proposed VTMs. The measures shall be completed prior to issuance of the Certificate of Occupancy.

b) Impact: ***Subarea Plans 1 and 2.*** Impacts to the course and flow of floodwaters are mitigable to a level of less than significant through the incorporation of the mitigation measures and BMPs identified previously under Issue 1 (Impact A).

b) **Mitigation:** ***Subarea Plans 1 and 2.*** Impacts to floodwaters would be mitigated to a level of less than significant by incorporating the mitigation measures and BMPs identified for Issue 1 (Impact A) above. All flood control measures shall be reviewed and approved by the City's Transportation and Drainage Design Division of the Public Works Business Center prior to construction.

c) **Impact:** ***Subarea Plans 1 and 2.*** The proposed development of Pacific Highlands Ranch has the potential to significantly impact water quality (both directly and cumulatively) in the San Dieguito River and Lagoon, Carmel Valley, and Los Peñasquitos Lagoon. Specifically, such impacts may be associated with short- and long-term erosion and sedimentation and construction-related contaminant discharge. The proposed project's effects would be less adverse overall than those currently resulting from commercial agricultural activities on-site. The runoff of urban-generated pollutants is not considered significant (on a direct basis) due to the presence of existing regulatory controls and the anticipated incremental nature and extent of such pollutants, though the incremental contribution of urban pollutants would be cumulatively significant.

c) **Mitigation:** ***Subarea Plans 1 and 2.*** Direct impacts to water quality would be mitigated to a level of less than significant by incorporating the mitigation measures identified for Issue 1 above. Current plans call for the construction of desilting basins in the subarea (see Figure 4D-3 for alternative desilting basin locations) to reduce erosion and sedimentation during and after development. The exact number, size, design, and location of desiltation/retention basins will be determined in conjunction with future tentative map proposals. Monitoring and maintenance programs for these facilities would be prepared by future developers and after approval by the City, would be incorporated into the CC&Rs for the developments with these facilities in their common areas.

Implementation of the mitigation measures outlined in Issue 1 would not mitigate fully the associated cumulative effects to water quality in the subarea. These impacts would remain significant and unmitigated. Only the No Project alternative would avoid the potential cumulative impacts to water quality.

5) Landform Alteration/Visual Quality

a) **Impact:** The substantial change in aesthetic character described above would occur under both land use scenarios. This change represents a significant direct and cumulative impact from on- and off-site locations. The development of the project site would incrementally contribute to the change of the aesthetic character of the subregion in conjunction with the existing and planned development in Carmel Valley and Subareas IV and V.

a) **Mitigation:** The preservation of MSCP and urban amenity open space along with implementation of the landscaping concept as future tentative subdivision maps are

processed within Pacific Highlands Ranch and would reduce the identified aesthetic impacts. These measures would not reduce the impacts to below a level of significance. Avoidance of the impact would be accomplished by the No Project alternative.

Specific mitigation measures would be required at the future tentative map stage; specifically, prior to issuance of a grading permit, the Development Services Development Coordinator shall review the grading and landscape plans for consistency with the subarea plan guidelines. Upon completion of the grading for any future tentative map within Pacific Highlands Ranch, and associated off-site conditions, the developer shall submit a letter to Development Services from a qualified consultant certifying that all landscaping for the major manufactured slopes (e.g., roadway slopes) has been implemented. Monitoring shall be required to assure the long-term establishment of the landscaping. The maintenance program shall be effective for a three-year period following the installation of the plantings or until such time as all plantings are established. The long-term monitoring shall establish an inspection schedule, establish replanting specifications, and require written notification once a year to Development Services Department Development Coordinator by the applicant-hired consultant to verify the status of the revegetation.

If the revegetation effort includes the reestablishment of native habitat within or adjacent to the MHPA, a five-year monitoring program would be required. For erosion control or other revegetation outside the MHPA and not part of any biological mitigation, the revegetation plan must conform with the City's Landscape Technical Manual with a monitoring period of 25 months.

b) Impact:

Subarea Plans 1 and 2. Both grading concepts associated with the proposed land use scenarios would require substantial alteration of the topography to develop and access the site. The amount of earthwork anticipated under both Subarea Plans would substantially exceed the City's significance threshold for grading impacts of 2,000 cubic yards per graded acre. The filling of drainages and grading of the broad mesa areas would represent alterations to the existing topography and are considered to be significant direct and cumulative landform alteration impacts.

Carmel Valley Neighborhood 10 Precise Plan. The additional area of grading (canyon fill and associated manufactured slope) within Neighborhood 10 would represent a significant landform alternation impact.

b) Mitigation:

Subarea Plans 1 and Plan 2. Specific mitigation measures which would be required at the future tentative map stage include that prior to issuance of a grading permit,

Development Services shall review the grading plans for consistency with the subarea plan guidelines. These measures include using slope rounding and blending techniques where manufactured slopes meet natural slopes, varying slope gradient and width, and contouring edges to achieve a more natural appearance. Implementation of these measures would reduce the landform alteration impact, but not to below a level of significance. However, only implementation of the No Project alternative would avoid the landform alteration impact. These adverse effects comprise significant and unmitigable direct and cumulative impacts of the proposed project.

Carmel Valley Neighborhood 10 Precise Plan. As described in the previous EIRs for Neighborhood 10 (City of San Diego 1993 and 1997), mitigation for landform alteration impacts include that all manufactured slopes greater than 10 feet in height be contour graded and minimized during the final engineering design. As with the landform alteration impacts associated with the Subarea Plans, these measures would not reduce the impact to below a level of significance. Implementation of the contour grading measures would occur at the time grading permits are approved.

c) **Impact:** ***Subarea Plan 1 and Plan 2.*** Based on the steep slope encroachment analysis prepared for both subarea plans (see Land Use, Chapter 4A, Issue 2), significant impacts are anticipated on canyons, bluffs, or hillsides in Pacific Highlands Ranch.

c) **Mitigation:** ***Subarea Plan 1 and Plan 2.*** Although both subarea plans have been designed to minimize impacts to steep slopes strict compliance with the encroachment thresholds in the development regulations of RPO would require a project redesign. Both plans' inconsistency with the RPO encroachment provisions can be avoided with implementation of the No Project alternative and mitigated to below a level of significance by adoption of a RPO alternative. These alternatives are discussed in Chapter 8 of this EIR.

6) Cultural Resources

a) **Impact:** Twenty-four sites have been found not significant, six sites are in open space areas and should be indexed prior to recording tentative maps for future projects, two sites are in open space and may be potentially significant and require additional evaluation, and one site is located outside of the project boundaries and will require some evaluation when a project is proposed for this property.

The resulting loss of all of the sites on this project is considered a significant cumulative loss of cultural resource information. The destruction of a number of these sites prior to indexing or testing of any kind constitutes a significant impact as important information, which may have been present in these sites, has been lost without record.

There are four sites (CA-SDI-6912, loci B&E, -13,096, -14,003, and -14,562) which have been found to be important/significant resource areas; therefore, impacts to these sites would be considered significant. As presently designed, all of these sites will be destroyed by construction grading. Mitigation of impacts to these sites can be accomplished if they are not found to be significant under the City of San Diego's Resource Protection Ordinance. The current findings for these sites are that they are potentially eligible for nomination to the National Register and are significant under criteria of CEQA. A finding of National Register importance would be viewed as meeting one of the criteria of RPO importance. The State Historic Preservation Officer (SHPO) has not made a finding on the eligibility of these sites as yet. Destruction of a site that is considered to be important under RPO would constitute a significant unmitigated impact. In the event that federal money or federal actions are elements of project development, sites within the project area would be evaluated under Section 106.

a) **Mitigation:** Mitigation, monitoring, and reporting steps are a requirement for any site that is found to be significant and where direct or indirect project impacts cannot be avoided. The devising of a project impact mitigation plan is uniquely tied to the particular resource under consideration. The preferred alternative for any significant or important resource area is avoidance. In the event that avoidance is not feasible, some type of impact mitigation should be completed. The level of work is dependent upon the nature, size, and content of the cultural resource site and upon the types of research that can be accomplished through the recovery and analysis of data from the site.

Resource sites CA-SDI-13091, CA-SDI-13095, CA-SDI-13097, CA-SDI-13099, CA-SDI-13101H, CA-SDI-14001H, CA-SDI-7202, CA-SDI-7204, and CA-SDI-6697/H are avoided by the present construction grading design which places these sites in open space. As specific project plans are proposed some level of site assessment would be required. In the event that these sites will remain in open space the minimal treatment would be the completion of a site indexing which would provide a baseline of information on the deposit content. Indexing would involve the excavation of a minimum of two sample units and a report of findings with updated site record information and recommendations for permanent preservation.

Testing and survey reconnaissance indicate that CA-SDI-13093, CA-SDI-13098, CA-SDI-6914, and CA-SDI-7205 do not contain meaningful information and that additional sampling will not provide the scientific community or public with previously unknown information regarding the prehistoric past. No further work is recommended for these sites.

CA-SDI-14002 (-6916, -6917), CA-SDI-13092, and CA-SDI-6913 are considered potentially significant until fieldwork can be completed to assess their condition and data content. This work is presently being accomplished.

Eight recorded sites were not relocated because they no longer exist. These sites do not require any additional investigation. These sites include CA-SDI-10138, CA-SDI-6701, CA-SDI-6915, CA-SDI-6919, CA-SDI-6920H, CA-SDI-6921, CA-SDI-7201, and CA-SDI-7203. An additional eight sites within the Ranch project area were found to not require any additional investigation as they have previously been determined to be nonsignificant resource areas. These include CA-SDI-10221, CA-SDI-13099, CA-SDI-6696, CA-SDI-6698, CA-SDI-6700, CA-SDI-6911, CA-SDI-6918, and CA-SDI-7206.

7) Air Quality

a) **Impact:** The proposed project would result in significant cumulative air quality impacts under the City's significance thresholds as discussed in Chapter 6 of this EIR.

a) **Mitigation:** No mitigation is available for cumulative air quality impacts at the project level. The project's contribution to cumulative air quality impacts is discussed in Chapter 6, Cumulative Effects. The No Project alternative would avoid potential significant air quality impacts.

8) Geology/Soils/Erosion

a) **Impact:** There are no significant soil or geologic conditions that were observed or known to exist on the project site which would preclude development on the property. However, potentially significant geologic conditions exist which require mitigation, including ancient landslides, expansive soils, unstable cut slopes, alluvial soils, poorly consolidated soils, and ground shaking due to an earthquake.

a) **Mitigation:** For each specific development application in Pacific Highlands Ranch, the City will require the applicant to submit a detailed geotechnical study by a qualified geotechnical firm. The conclusions and implementation of the recommendations provided in these reports would mitigate the potentially significant effects of soil and geologic conditions for future developments in Pacific Highlands Ranch to below a level of significance. The types of mitigation requirements which the feasibility studies are likely to contain are summarized below.

General Measures

1. In areas of proposed development, landslides, improperly compacted fill soil, weak claystone beds, and potentially compressible deposits of alluvium and colluvium may require special attention. Buttresses, stabilizing fill material, or other methods of stabilization will probably be required in developed areas where weak claystone beds or landslides are encountered. In areas where landslides exist off-site, and where stabilization is not feasible, setbacks may be required.

2. The Mission Valley and Friars Formations, and some areas of topsoil, may include highly expansive soil. Based on this review of geologic units on the site, it is anticipated that an adequate quantity of low expansive soil exists on the site to mitigate the adverse impact of expansive soil, when it is encountered.

3. If there are proposed improvements that will be sensitive to potential settlement, partial removal and recompaction of compressible alluvium and colluvium will be necessary.

4. It is anticipated that areas of perched groundwater may exist within low-lying alluvial areas. Subdrains or other remedial measures will be necessary where drainage courses are proposed to be filled.

5. For the purpose of preliminary design, it is recommended that portions of the site that are subject to inundation due to a dam failure upstream be located and considered for restricted usage.

Grading

For the purpose of preliminary design, cut and fill slopes shall be designed no steeper than 2:1. The shear strengths of existing soil and rock units will generally limit safe allowable slope height. The potential impact of geologic conditions on slope stability shall be evaluated in areas of proposed high cut slopes.

Foundations

The dominant soil conditions on the site are generally suitable for supporting conventional spread footings, if the soil is in a dense and undisturbed condition or in a properly compacted condition. The actual soil characteristics and proposed design parameters for structures on the site will determine minimum footing dimensions and requirements for reinforcement. These factors are not currently known; however, it is estimated at this time that spread footings that are designed in accordance with the Uniform Building Code will be designed for an allowable soil bearing pressure of at least 2,000 pounds per square foot.

Drainage and Maintenance

Proper surface drainage shall be provided and maintained, as it is essential to soil stability and to reduce the potential for erosion. Drainage swales shall be installed on graded pads to conduct storm or irrigation runoff to controlled drainage facilities and away from buildings and the tops of slopes. Measures shall be taken to ensure that storm and irrigation water does not flow over the tops of cut or fill slopes.

Consultation and Plan Review

A more comprehensive soil and geologic evaluation shall be performed prior to providing final grading plans for the site. This evaluation shall be required to be implemented as a condition of final maps and grading plans. A geotechnical engineer shall also perform an on-site reconnaissance. A report shall be submitted for review and approval to the City's Engineering and Development Department prior to issuing grading permits.

b) **Impact:** Future grading activities for the implementation of specific development projects in Pacific Highlands Ranch would result in a potentially significant increase in soil erosion.

b) **Mitigation:** Prior to approval of a grading permit, each applicant for a specific development project in Pacific Highlands Ranch shall prepare a grading/construction management plan. The following mitigation measures, in addition to those listed in the Hydrology/Water Quality section of this MEIR (Chapter 4.D), shall be incorporated into the plan, if appropriate. The City's Development Services must approve the grading/construction management plans before a grading permit is issued and grading will commence. The geotechnical engineer shall inspect all cut and fill slopes and foundation work. A landscape architect will observe the revegetation of graded slopes. Each of these experts shall submit a report to the City.

1. Areas that have been stripped of native vegetation or areas of fill material shall require particular attention. These areas may require desilting basins, improved surface drainage, or planting of ground covers early in the improvement process, to reduce the potential for erosion.

2. Short-term measures for controlling erosion shall be incorporated into grading plans for the site. These measures shall include sandbag placement and temporary detention basins, as required by the City's Engineering and Development Department.

3. Catch basins shall be provided during grading activities.

4. Grading activities may be restricted during the rainy season, depending on the size of the specific operation. This season typically encompasses November through March. Grading activities may otherwise be restricted by their proximity to sensitive wildlife habitat.

5. After grading, slopes shall be immediately revegetated or hydroseeded with erosion-resistant species. These plants should be carefully irrigated to ensure coverage of the slopes prior to the next rainy season.

6. Measures to control construction sediment shall be implemented in areas near watercourses. These measures may include interim desiltation basins, sandbags, hay bales, or silt fences, which shall be placed at the toe of slopes to prevent erosion. Punch straw or matting shall be installed to stabilize graded slopes and prevent the slope or construction material from sloughing into watercourses.

9) Natural Resources

a) **Impact:** As described in the NCFUA Framework Plan EIR, the direct impacts to prime agricultural resources on the project site from open space preservation and development are considered significant. The incremental loss of land being used for agriculture is also considered a significant cumulative impact and is identified as such in Chapter 6 of this MEIR.

a) **Mitigation:** Only implementation of the No Project alternative would reduce the identified agricultural resources impact associated with potential future development to below a level of significance.

10) Paleontological Resources

a) **Impact:** The potential for significant fossils to occur in the formations of the subarea plan is moderate to high in all areas planned for development of the Pacific Highlands Ranch Plan; therefore, the grading necessary to implement the subarea plan could result in significant impacts to paleontological resources.

a) **Mitigation:** The Pacific Highlands Ranch Plan would require that all future tentative maps and VTMs approved include a condition for the implementation of a monitoring and salvage program for the recovery of paleontological resources during development. This program would reduce potential impacts to paleontological resources to below a level of significance and shall include the following steps:

1. Prior to any grading activities and/or the issuance of permits, the applicant shall provide a letter of verification to the Environmental Review Manager of the Land Development Review Division (LDR) stating that a qualified paleontologist and/or paleontological monitor has been retained to implement the paleontological monitoring program. The requirement for monitoring shall be noted on grading plans. All persons involved in the paleontological monitoring of grading activities shall be approved by LDR.

2. The qualified paleontologist or paleontological monitor shall attend any preconstruction/pregrading meetings to consult with the excavation contractor.

3. The paleontologist or paleontological monitor shall be on-site full time during excavation into previously undisturbed formations. The monitoring time may be decreased at the discretion of the paleontologist in consultation with LDR, depending on the rate of excavation, the materials excavated, and the abundance of fossils.

4. If fossils are encountered, the paleontologist shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains. The paleontologist shall contact LDR at the time of discovery. LDR shall concur with the salvaging methods before construction activities are allowed to resume.

5. The qualified paleontologist shall be responsible for preparation of fossils to a point of identification as defined in the City of San Diego Paleontological Guidelines, and submittal of a letter of acceptance from a local qualified curation facility. The paleontologist shall record any discovered fossil sites at the San Diego Natural History Museum.

6. The qualified paleontologist shall be responsible for the preparation of a monitoring results report with appropriate graphics summarizing the results (even if negative), analyses, and conclusions of the above program. The report shall be submitted to LDR prior to the issuance of building permits and/or certificates of occupancy. If building plans are not required, the paleontologist shall submit the report to LDR within three months following the termination of the monitoring program.

Prior to subarea plan approval, the Development Services Business Center shall verify that the above mitigation measures are incorporated in appropriate sections of the subarea plan. These measures shall be conditions of subsequent tentative maps and VTMs and development proposals.

11) Noise

a) **Impact:** As indicated, noise levels are anticipated to exceed applicable standards for all residential uses immediately adjacent to SR-56 and the major roadways, as well as to proposed school and park uses. Noise levels could exceed 70 CNEL for professional and office building land uses depending on their placement relative to the roadways. Noise levels for commercial retail land uses are not expected to be exceeded unless they are located immediately adjacent to SR-56. Where noise levels exceed applicable exterior standards, noise impacts would be significant.

a) **Mitigation:** Mitigation of noise levels could be accomplished through the construction of noise barriers. However, due to the limited grading detail available at this stage of planning, it is not possible to determine specific barrier heights and locations.

The draft EIR prepared by the City for the middle section of SR-56 indicates that wall heights varying between 12 and 16 feet would be required to mitigate noise levels at existing residential uses (City of San Diego 1996b). Similar wall heights would be anticipated for future sensitive uses located along the SR-56 right-of-way within Pacific Highlands Ranch.

As a general rule of thumb, a barrier provides five decibels of attenuation when it just breaks the line-of-sight between the source and receiver, and adds one decibel of attenuation for each foot above the height required to break the line-of-sight. Therefore, it is anticipated that noise barriers varying from five to eight feet will be required along the other major roadways within Pacific Highlands Ranch where the roadways are located adjacent to sensitive land uses.

At the time that detailed grading plans are available for the future subdivisions within Pacific Highlands Ranch, detailed acoustical analyses shall be performed to determine the exact barrier heights and locations where required. If exterior noise levels within residential areas are found to be above 60 CNEL after mitigation, then detailed interior noise analyses shall be required as well.

12) Public Services/Facilities

a) **Impact:** Currently, all schools in the Del Mar Union and San Dieguito Union High School Districts are operating above capacity within the project area. The generation of additional elementary school students resulting from development of the proposed project, either under Subarea Plan 1 or Subarea Plan 2 would add to the already overcrowded schools. This is considered a significant direct and cumulative impact.

Currently, there is insufficient capacity at Earl Warren Junior High School to accommodate the additional junior high students generated by buildout of the proposed project, either under Subarea Plan 1 or Subarea Plan 2. This is considered a significant direct and cumulative impact of the project.

Currently, Torrey Pines High School is operating above capacity. The estimated generation of additional high school students would contribute to the overcrowding of the school. This is considered a significant direct and cumulative impact.

Development of the subarea plan would incrementally increase the demand for fire services; however, both subarea plans provide a site for a double fire station. Until the new fire station is operating, the Fire Department's potential inability to provide a maximum six-minute first response time would be considered an interim significant impact.

a) **Mitigation:** The development of the proposed on-site elementary, junior high, and high schools would accomplish mitigation of the project's direct impact to schools from the subarea plan. School facilities financing and mitigation agreements between the affected school districts and the project applicant would be required at the time the Subarea Plan is approved by the City Council to ensure that the impacts on school facilities are mitigated to a level less than significant. In addition, prior to granting a ministerial or discretionary entitlement for a parcel, such parcel shall be subject to the terms of a mitigation agreement entered into by the landowner and the applicable School Districts or included in a community facilities district established by the applicable School Districts and authorized to fund the acquisition of school sites and construction of schools.

Until the new fire station is operating, developers shall demonstrate to the satisfaction of the City Fire Department that a response time of six minutes or less from Fire Station 24 to all portions of new developments can be achieved. For those areas of such new developments where a six-minute response time cannot be provided, individual sprinkler systems or other construction or site design safeguards, approved by the Fire Department, shall be required prior to the issuance of building permits.

b) Impact:

Water and Sewer Facilities

Potentially significant impacts to water and sewer facilities are anticipated with the development of the subarea due to a lack of existing facilities to serve the area.

Waste Management Services

The project could generate a significant amount of construction debris during the construction phase. Also, during the ongoing use of the site solid waste generation would exceed the 60 tons/year and 52 tons/year threshold of significance for solid waste impacts for residential and non-residential projects, respectively, established by the City's ESD. The project would affect City waste management programs and services; however, impacts could be minimized by incorporation of recycling and waste reduction measures in project design.

b) Mitigation:

Water

Future developers shall be required to provide appropriate water studies consistent with the findings and conclusions of the Miramar 712/North City 610 Water Study. Each developer shall be responsible for installing all those facilities identified in the accepted studies which are necessary to serve their developments. All public water facilities shall

be designed and constructed according to the most current edition of the City of San Diego Water and Sewer Design Guide.

Sewer

Prior to any new development within the subarea, developers shall be required to provide sewer studies showing the proposed sewer system for the subarea. All public sewer facilities shall be designed and constructed according to the most current edition of the City of San Diego Water and Sewer Design Guide.

Solid Waste

The project's prime contractor in cooperation with the City of San Diego's Environmental Services Department shall develop a comprehensive waste management plan. The plan shall describe programs that would be implemented to reduce the potential for direct and cumulative impacts to the City's waste management services to below a level of significant. The plan shall address construction phase as well as long-term waste management issues. The Development Services shall review this plan to ensure that the ESD has signed the plan and certified that it is consistent with City policy regarding its waste management services.

Following is a list of options that could be considered for the construction phase of the project and specified in the waste management plan:

1. Source separation for all construction debris such as wood, aggregate, drywall, and other discarded products including glass, plastics, and cardboard at the project sites and subsequent recycling of the materials.

2. Buying recycled or using recycled content construction material, such as acoustical ceiling tiles made from newsprint, tiles made from recycled glass, insulation made from mixed paper, as well as many landscaping products such as pavement made from recycled asphalt and tires, and mulch and compost made from green waste.

3. Use of postconsumer aggregate base and mulch in project landscaping;

4. Use of drought-tolerant landscaping to minimize the amount of green waste generated.

Following is a list of options that could be considered to address long-term waste management issues:

1. Provision of each single-family unit with kitchens designed to facilitate recycling;

2. Source separation and recycling of demolition debris;

3. Provision of yard composters designed to encourage backyard composting.

4. Provide devices or chutes in multi-family residential units for convenient separation and recycling of materials.

The project applicant shall develop a solid waste management plan explaining how these options will be incorporated. The plan shall describe the location of exterior and interior storage areas for the collection of recyclables in multi-family residential and non-residential areas as required per Municipal Code Section 101.2001. The project proponent shall ensure the storage areas are located in areas convenient for use by residents or tenants and service providers.

13) Water Conservation

a) Impact: ***Subarea Plans 1 and 2.*** The project's contribution to the cumulative impact associated with water supplies would be reduced to a nominal level by the mitigation measures outlined below.

a) Mitigation:

Subarea Plans 1 and 2. The following mitigation measures shall be incorporated into project design guidelines to address cumulative water usage concerns.

1. Limit grading in areas where no construction is proposed; thereby reducing the need for planting and irrigation of graded areas.

2. Provide lifts of low-clay content soil in landscaped areas to improve infiltration.

3. Reduce runoff potential from landscaped areas by using berming, raised planters, and drip irrigation systems.

4. Install soil moisture override systems in all common irrigation areas to avoid sprinkling when the ground is already saturated.

5. Identify in the plant materials list in the project design guidelines whether or not plants are native or naturalize easily and incorporate a list of local California sources for native plants.

6. Incorporate low-flush toilets, low-flow faucets, and timers on sprinklers (including nighttime watering) into project design.

7. Provide information regarding water conservation measures to new residents at the time of lot purchase.

The Development Services Development Coordinator shall review grading, landscape, and building permits to ensure the above measures have been noted on plans.

14) Public Safety

Vectors

a) **Impact:** Because the proposed project contains on-site detention basins to serve the subarea, the potential for public health and safety impacts to future residents within the project site are considered potentially significant.

a) **Mitigation:** Mitigation measures for potential increased mosquito populations which will decrease potentially significant impacts to below a level of significance are described below. Prior to any grading activities, the applicant shall provide a letter from the County Environmental Health Department Vector Surveillance and Control Division (VSCD) to the environmental review manager of LDR verifying that a vector control program has been designed. Elements of the program may include, but not be limited to the following:

1. The detention basins shall be kept free of debris, high concentrations of nutrients which could contribute to alga blooms, and organic floatage. Any emergent vegetation (e.g., cattails and bulrushes) shall be removed only as necessary to control the mosquito problem.

2. Non-natural runoff to the detention basin shall be minimized by proper drainage patterns to prevent excessive organic material from entering.

3. Although the above measures are designed to minimize the potential for mosquito breeding in the on-site retention basins and control mosquito populations, active control measures may be necessary at times. This would include the application of a mosquito fog or insecticide spray. The use of this measure should be minimized to avoid reducing populations of other insects. Use of spray application shall be *minimal and shall require coordination with VSCD, USFWS, and CDFG.*

4. Maintenance of the detention basins shall be the responsibility of a homeowners association or similar maintenance district.