(R-99-303)

RESOLUTION NUMBER R- 290810

ADOPTED ON OCT 05 1998

BE IT RESOLVED, by the Council of The City of San Diego, that it is certified that Environmental Impact Report/Environmental Impact Statement No. DEP 91-0397, on file in the office of the City Clerk, has been completed in compliance with the California Environmental Quality Act of 1970 (California Public Resources Code section 21000 et seq.), as amended, and the State guidelines thereto (California Code of Regulations section 15000 et seq.), that the report reflects the independent judgment of The City of San Diego as Lead Agency and that the information contained in said report, together with any comments received during the public review process, has been reviewed and considered by this Council in connection with the approval of the Nobel Drive Extension and Interstate I-805 Interchange.

BE IT FURTHER RESOLVED, that pursuant to California Public Resources Code section 21081 and California Code of Regulations section 15091, the City Council adopts the findings made with respect to the project, a copy of which is on file in the office of the City Clerk and incorporated herein by reference.

BE IT FURTHER RESOLVED, that pursuant to California Code of Regulations section 15093, the City Council adopts the Statement of Overriding Considerations, a copy of which is on file in the office of the City Clerk and incorporated herein by reference, with respect to the project.

BE IT FURTHER RESOLVED, that pursuant to California Public Resources Code section 21081.6, the City Council adopts the Mitigation Monitoring and Reporting Program, or

alterations to implement the changes to the project as required by this body in order to mitigate or avoid significant effects on the environment, a copy of which is attached hereto and incorporated herein by reference.

APPROVED: CASEY GWINN, City Attorney

By _____
Jacqueline Mittelstadt
Deputy City Attorney

JM:pev
9/8/98
Or.Dept:E&CP
R-99-303
Form=eirl.frm

R-290810

MITIGATION, MONITORING, AND REPORTING PROGRAM

for the

NOBEL DRIVE/I-805 INTERCHANGE AND EXTENSION PROJECT

Prepared for:

City of San Diego
Engineering Department
1010 2nd Avenue, Suite 1200
San Diego, CA 92101

May 1998

1.0 INTRODUCTION

In order to reduce or eliminate significant impacts associated with proposed development, specific mitigation measures for identified environmental issues are outlined within the body of an environmental impact report. Mitigation measures are only effective if they are thoroughly carried out in a reasonable and timely manner. Mitigation, Monitoring, and Reporting Programs (AB 3180) are required to ensure that all mitigation measures are monitored for program compliance. This Mitigation, Monitoring, and Reporting Program is designed to ensure that, to the greatest extent possible, significant impacts or potentially significant impacts identified in the Nobel Drive/I-805 Interchange and Extension Project Final Environmental Impact Report/Environmental Impact Statement will be reduced through a documented monitoring program.

The Mitigation, Monitoring, and Reporting Program for the Nobel Drive/I-805 Interchange and Extension Project specifies what is to be monitored, how the monitoring shall be accomplished, the monitoring and reporting schedule, and completion requirements. The following program shall be incorporated into the construction plans and specifications for the Nobel Drive project. The CEQA Lead Agency, the City of San Diego Engineering Department, is responsible for ensuring that this program is carried out. Mitigation and monitoring measures for this project are identified for geology and soils; hydrology and water quality; biological resources; cultural resources; land use; traffic and circulation; noise; air quality; visual resources; socioeconomics; public health and safety; hazardous materials; and paleontological resources.

2.0 PROJECT DESCRIPTION

The proposed Nobel Drive/I-805 Interchange and Extension Project is located in the University City community of the City of San Diego and in NAS Miramar (Figure 1, Regional Map and Figure 2, Vicinity Map). The study area encompasses approximately 600 acres and includes an area from just north of Miramar Road/La Jolla Village Drive on the north, to Miramar Mall on the east, to Towne Centre Drive on the west, and to Governor Drive on the south.

The proposed action involves the extension of Nobel Drive from its current terminus at Shoreline Drive east to a connection to Miramar Road and will include the construction of two bridges; one over I-805 and one over a large drainage area to the east. A half-diamond interchange at Nobel Drive/I-805 will involve construction of on- and off-ramps south of the Nobel Drive bridge. Improvements will include widening I-805 by 12 feet in both directions, including the Rose Canyon bridges. Improvements will also be made to the I-805/La Jolla Village Drive/Miramar Road interchange, including changing from a full cloverleaf to a partial cloverleaf. Miramar Road will be widened from six lanes to eight lanes from I-805 to just east of Eastgate Mall. Construction will occur in two phases, with the Nobel Drive construction occurring in Phase I and I-805 widening, interchange improvements at I-805/La Jolla Village Drive/Miramar Road, and Miramar Road widening occurring in Phase II.

The purpose of and need for the proposed action are to: (1) improve the transportation network by extending a major east-west arterial to a new interchange with I-805 to accommodate planned growth within the University Community; (2) improve motorist safety by reducing traffic congestion and queues and constructing new roadway improvements in accordance with City standards; (3) alleviate current and projected traffic congestion by constructing a new road parallel to Miramar Road/La Jolla Village Drive; (4) accommodate projected traffic volumes by greatly increasing roadway capacity; and (5) minimize impacts on the environment.

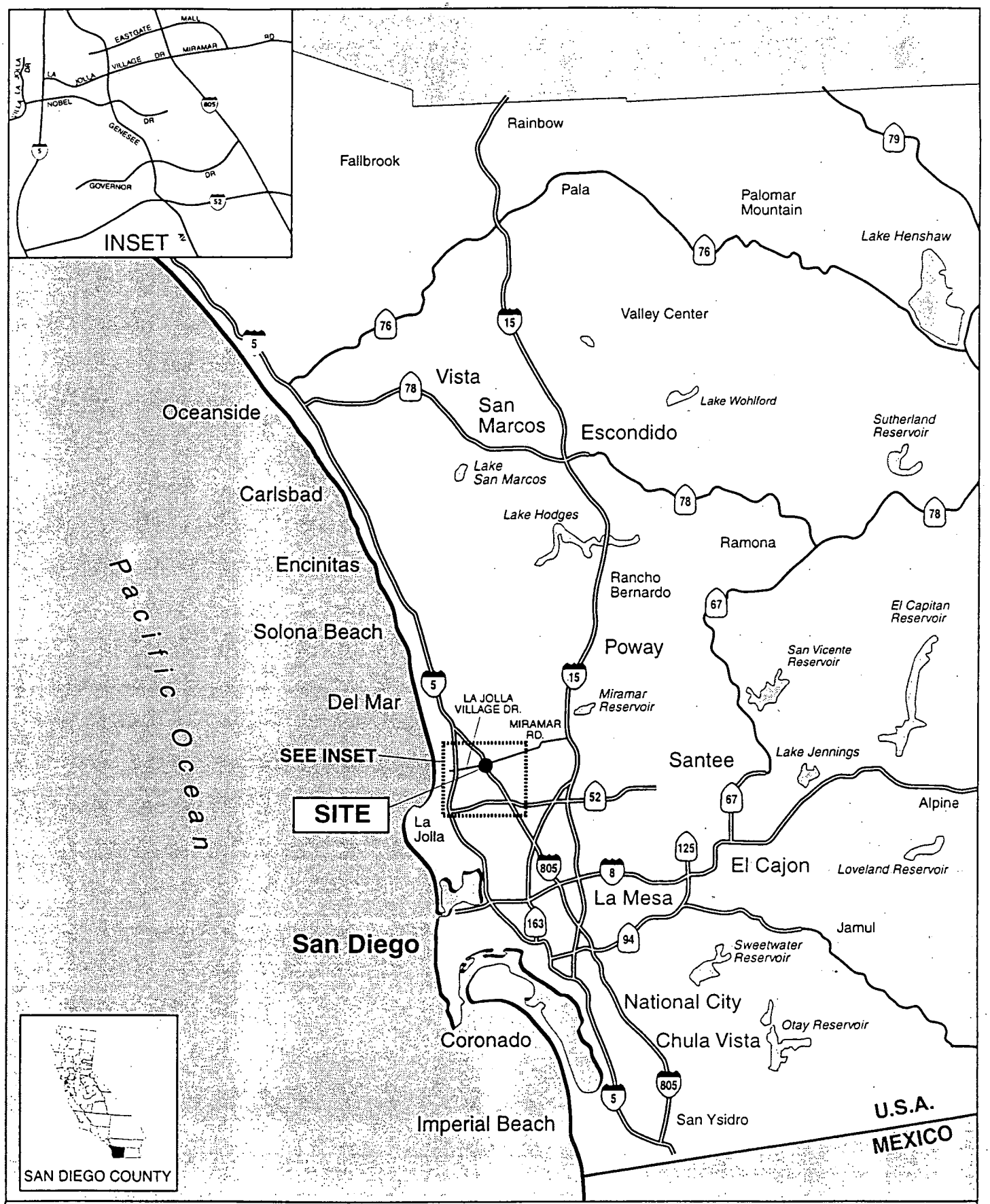

Figure 1
Regional Map

R-290810

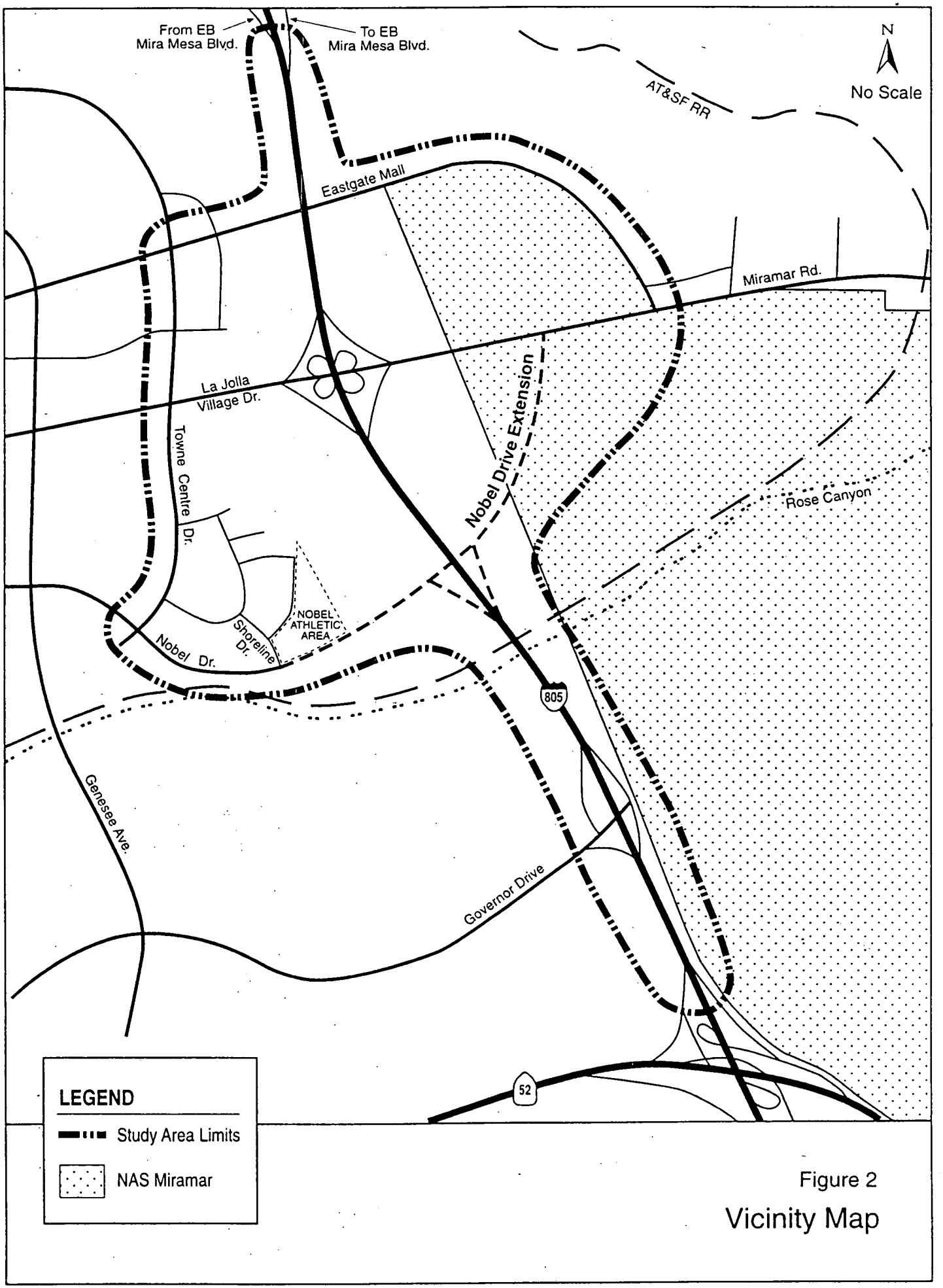

Figure 2

Vicinity Map

3.0 MITIGATION, MONITORING, AND REPORTING

3.1 GEOLOGY AND SOILS

Mitigation Measures

1. A detailed geotechnical investigation of the project study area shall be conducted by a qualified geologist or engineering geologist prior to project implementation. This investigation shall include surface, subsurface and laboratory analysis to identify site-specific hazards related to seismicity, geologic stability and construction. Specific methodology and level of analysis for these investigations shall be determined by the project geologist, with direction from the Lead Agencies. The results of site-specific studies shall be incorporated into project design as appropriate, including all measures recommended to preclude or mitigate adverse effects. Mitigation identified for adverse impacts will require monitoring. After finalization of the project geotechnical report, a detailed mitigation monitoring and reporting plan will be required to address specific mitigation measures.

Identified Measures for Project Design

Based on available data, the geotechnical investigation that is required as a mitigation measure will likely include the following types of requirements.

1. Unsuitable base materials shall be excavated and replaced with approved and properly compacted fill. Unsuitable base materials may include deposits subject to liquefaction, expansion, settlement and reactivity.

2. Appropriate measures shall be used to control expansive soils (e.g., moisture control or addition of chemical stabilizers), reactive deposits (e.g., use of corrosion resistant steel and concrete), and compressible materials (e.g., placement of foundations on bedrock) in areas where complete removal is impractical.

3. All fill materials used for proposed grading and construction activities shall meet the specifications of the project geotechnical engineer in terms of composition, size distribution,

moisture content, compaction, depth, and application methodology.

4. The use and/or disposal of oversize rock material shall be in accordance with direction by the project geotechnical engineer. Generally, this shall entail methods such as off-site disposal, placement in deeper on-site fills, crushing, or use in landscaping efforts of all rock exceeding approximately 24 inches in diameter.

5. Erosion control measures shall be implemented both during and after project construction, and shall include methods such as directing drainage away from manufactured slopes.

6. Landscape plans shall be prepared for appropriate areas pursuant to direction by a qualified botanist or landscape architect. These plans shall be implemented as soon as possible after completion of grading operations to minimize potential erosion effects.

7. Compacted areas shall be treated by appropriate means (e.g., scarification) to facilitate revegetation and reduce erosion potential.

8. After generation of preliminary grading plans, subsurface evaluation, laboratory testing, and static and pseudo-static stability analysis shall be conducted for proposed cut and fill slopes to identify potential surficial and deep-seated failures. This analysis shall also include evaluation of potential ancient landslide features within the project study area.

9. All cut slopes shall be observed during grading as directed by the project geologist to ensure conformity with anticipated subsurface conditions.

10. Material disposal methods, locations and haul routes (if applicable) shall be designated as part of the project design, and shall include coordination with and approval by appropriate regulatory agencies.

11. Project design shall incorporate appropriate grading and construction measures to accommodate projected seismic loading (identified as 0.5g in the preliminary study), pursuant to direction by the project geologist. Design considerations shall also include consideration of potential ground rupture hazards, if determined applicable during detailed geotechnical

investigation.

12. The project geotechnical engineer shall review proposed grading plans prior to finalization to determine the need for additional recommendations or analysis.

Monitoring and Reporting Program

The following measure shall be incorporated into a monitoring and reporting program.

1. All project-related drainage facilities shall be regularly inspected and maintained to ensure proper working order.

2. Disposal of groundwater from dewatering operations (if necessary) shall be coordinated with the Regional Water Quality Control Board.

3.2 HYDROLOGY AND WATER QUALITY

Mitigation Measures

Prior to approval/sign-off by the Development Services Department, all improvement plans and specifications shall be reviewed and approved by the Principal Planner to ensure that all appropriate mitigation measures have been included.

1. Additional analysis of drainage restoration and erosion control methods shall be required prior to approval of final design. Specific requirements for handling of storm water and of extracted groundwater (if necessary) shall be determined by the City Engineering Inspector and as part of the required State Water Resources Control Board and Regional Water Quality Control Board permits.

2. A Pollution Prevention Plan shall be approved by the City and Caltrans in conformance with the Pollution Prevention Act of 1990 prior to construction, including identification of responsible parties for plan implementation.

R-290810

3. A detailed Runoff Management Plan shall be prepared. The plan will (1) identify the project site location and show tributary and blueline streams as identified by the Army corps of Engineers; (2) show crossing culverts and 100-year impact, if any, for both existing and proposed conditions; (3) show on-site (street collection) systems and 100-year impacts, if any; (4) show hazardous spill and pollution mitigation measures; and (5) assess the potential for erosion due to changes in runoff volume and/or velocity of existing and proposed conditions.

Identified Measures for Project Design

The drainage analysis that is required as a mitigation measure will likely include the following types of requirements:

Surface Water

1. Altered drainage courses shall be restored to original contours to the maximum extent feasible.

2. Surface and subsurface drainage shall be designed to preclude ponding and flows over slopes or disturbed areas.

3. Storage of all vehicles, equipment, materials, and soil stockpiles shall be located outside of established drainage courses.

4. Project operation shall include a schedule for regular inspection and maintenance of all project-related drainage facilities to ensure proper working conditions.

5. Erosion control measures shall include techniques for both short- and long-term erosion hazards. These are likely to include the following types of measures, with final mitigation requirements to be determined as part of final project design:

    - Short-term use of sandbags, matting, mulches, berms, hay bales, or similar devices along all pertinent graded areas to minimize sediment transport;

- Use of temporary desilting basins to prevent off-site material transport;
- Temporary hydroseeding of all graded slopes (or other appropriate areas) to provide interim stability; and
- Scarification of applicable compacted areas to induce runoff infiltration and revegetation.

Groundwater

6. Removal and disposal of groundwater encountered during construction activities (if applicable) shall be coordinated with the Regional Water Quality Control Board (through acquisition of a groundwater discharge permit) to ensure proper disposal methods and locations. This may involve specific measures such as removal of sediment or contaminants, and limitation of discharge velocities.

Water Quality

7. Short- and long-term erosion control measures shall be implemented as described above for Surface Water.

8. Discharge of extracted groundwater shall be coordinated with the Regional Water Quality Control Board, as outlined above for Groundwater.

9. Storm runoff discharge shall be regulated pursuant to requirements of an approved State Water Resources Control Board General Construction Activity Storm Water Permit (Permit No. CAS000002).

10. Storage of all fuels, lubricants, solvents and other hazardous materials related to project construction shall be confined to specified areas designed to preclude off-site discharge through measures such as impervious liners and containment walls. The location and design of such facilities shall be coordinated with the City Engineering Department and the Regional Water Quality Control Board.

R- 290810

11. Vehicle refueling and maintenance activities shall be confined to designated areas as described above for hazardous material storage, or shall incorporate the use of temporary impervious liners and containment facilities to prevent the discharge of contaminants. The location and methodology for all refueling and maintenance activities shall be coordinated with the City Engineering Department and the Development Services Department, as well as the Regional Water Quality Control Board.

Monitoring and Reporting Program

Monitoring for the identified project design measures shall entail submittal of additional erosion control analysis and groundwater disposal authorization to the lead agencies for review and comment. All other measures shall require submittal of work plans (e.g., for drainage facility maintenance and construction schedules) and field monitoring reports. The latter shall be prepared and submitted to the lead agencies on a bi-weekly basis (or other time period pursuant to lead agency direction), and shall document mitigation goals, field activities and observed conformance.

3.3 BIOLOGICAL RESOURCES

The mitigation measures and monitoring described in this section include all of the requirements set forth by U.S. Fish & Wildlife Service in the Biological Opinion. The Biological Opinion was issued by the U.S. Fish & Wildlife Service on August 1, 1997 as result of a formal consultation pursuant to Section 7 of the Endangered Species Act.

Mitigation Measures

The mitigation of impacts resulting from construction of Phases I and II of the Nobel Drive extension will require both an off-site habitat-based mitigation program as well as on-site mitigation to avoid impacts to specific sensitive resources and to restore areas of temporary disturbance.

Off-site Mitigation

1. Permanent loss of 6.47 acres of Diegan coastal sage scrub, 7.10 acres of southern mixed chaparral, and 3.81 acres of valley needlegrass grassland will be entirely mitigated off-site

through contribution of funds for acquisition and conservation of land with similar or greater habitat values. The mitigation site will contribute to the conservation of regionally significant natural open space which benefits multiple species, including the California gnatcatcher. Off-site mitigation areas will be connected to larger ecosystems and will have at least the same species richness as the areas impacted by the Nobel Drive project. Habitat acquired shall support at least three pairs of California gnatcatchers to mitigate the project's direct territory impacts and edge effect impacts to California gnatcatchers. Mitigation land shall be acquired in a biologically defensible area. A Mitigation Fund Agreement was entered into by the City and U.S. Fish & Wildlife Service in the project's Section 7 consultation to ensure acquisition of suitable lands within the Multiple Species Conservation Program preserve. The city's mitigation fund will not include any federal-aid matching funds. Lands in the Del Mar Mesa area of San Diego are currently being considered for acquisition as offsite mitigation of this project's impacts. A concept plan has not been developed, but mitigation sites will be approved by U.S. Fish & Wildlife Service prior to acquisition. The mitigation site will be within the regional Multiple Species Conservation Program preserve and will contribute to the preservation of regionally significant open space lands.

Permanent impacts to California gnatcatcher shall be mitigated through implementation of the off-site habitat conservation described above, provided that an adequate acreage of suitable gnatcatcher habitat is conserved. The permanent loss on-site of 8.84 acres of suitable California gnatcatcher habitat will be mitigated at a 2:1 ratio. Thus the off-site mitigation area must contain at least 17.68 acres of suitable California gnatcatcher habitat.

Impacts to the remaining vegetative habitats along the extended Nobel Drive roadway shall also be mitigated in the off-site conservation area. The adverse edge affects within the first 100 feet of habitat on both sides of the roadway total approximately 12 acres. These impacts shall be mitigated through conservation of coastal sage scrub and southern mixed chaparral habitats.

The off-site mitigation area will contain 30 acres as specified in the Biological Opinion, including at least 17.68 acres of suitable California gnatcatcher habitat.

On-Site Mitigation

Required on-site mitigation includes the following measures to protect nearby vernal pool resources, restrict access beyond the staging and construction areas, control erosion, avoid brushing during the California gnatcatcher breeding season, and reduce project lighting in adjacent habitat.

Vernal Pools

1. The roadway alignment and grading is designed to avoid vernal pools and their drainage areas. This has been confirmed by staking the alignment in the field and by a biologist's field review. The vernal pools (and their drainage areas) in the vicinity of Alignment B will be shown on the final construction plans, along with the limits of clearing.

2. Where roadway embankments will slope away from Nobel Drive toward a vernal pool, a brow ditch will be added at the toe of slope to avoid a change to the hydrology of the vernal pool.

3. Constructed embankments (both cut and fill) will be finished with erosion control consisting of native mixture hydroseed, straw, and stabilizing emulsion.

4. Staging Area No. 1 lies downslope and within 200 feet of identified vernal pool resources, while Staging Area No. 2 lies approximately 180 feet from existing pools. To ensure protection of resources, the staging areas shall be fenced with temporary chain link construction fence. The fenceline shall be verified in the field by the resident engineer and a qualified biological monitor prior to clearing of the fenceline.

Access Restrictions

5. Sensitive habitats will be shown on the final construction plans.

6. During construction, the entire limits of clearing will be physically defined. One of three methods will be used: 1) metal "T" stakes and nylon rope, 2) hay bales and silt fence, or 3) six-foot-high temporary chain link fence. Metal "T" stakes and nylon rope will be used to delineate both sensitive and non-sensitive habitat where surface runoff is not a problem (i.e., where it enters the

cleared area). Hay bales and silt fences will be used to delineate both sensitive and non-sensitive habitat where surface runoff would leave cleared areas. Temporary chain link fencing would be installed as described below.

7. During construction, temporary 6-foot-high chain link fencing will be installed along the limits of clearing when adjacent to sensitive habitats.

8. During construction, temporary erosion control measures including hay bales, silt fences, check dams, temporary desilting basins, etc. will be required of the construction contractor.

9. Prior to being allowed to work on the project, all contractor personnel will be required to attend an education program. The education program will review the requirements for working adjacent to the special habitats located along the roadway.

10. Upon project completion a permanent chain link fence, 8 feet high with three strands of barbed wire on top, shall be installed along both sides of Nobel Drive from I-805 to Miramar Road.

Erosion Control

11. The following erosion control measures will be applied to the staging areas and other temporarily disturbed areas on the site (except landscaped intersections):

    a. In non-weedy areas, the first 5-10 inches (depending on the depth of the A-horizon) of topsoil and crushed brush (duff) shall be salvaged and stock-piled for no longer than 12 months.

    b. During the appropriate season, as determined by the monitoring project biologist, the duff shall be reapplied on the affected sites as erosion control.

    c. If the site contains more than 30 percent exotic weeds, duff reapplication should not be performed to avoid the spread of weeds. Instead, the areas shall be hydroseeded with a native seed mix including plant species typically found in coastal sage scrub habitat.

Avoidance of California Gnatcatcher Impacts During Breeding Season

12. Potential construction impacts to California gnatcatchers shall be mitigated and monitored by the following measures:

    a. All clearing and grubbing activity in shrubland habitats shall occur prior to the California gnatcatcher nesting season (1 February-31 August). No construction shall occur within 500 feet of any active breeding territory. The city will determine the territories which are active during the years of construction by monitoring/surveying prior to initiation of construction work.

    b. Construction limits shall be adequately fenced with orange snow screen, or equivalent, to prevent habitat losses beyond the project boundaries.

    c. Adequate construction watering shall occur to ensure the control of dust dispersal to native vegetation and reduce the potential for fires initiated by construction activities.

    d. All street lights shall be shielded so as not to shine on native habitat.

    e. Unauthorized clearing of coastal sage scrub or other suitable California gnatcatcher habitat shall be offset at a 5:1 ratio.

Monitoring and Reporting Program

The final project design and specifications shall include guidelines for a monitoring and maintenance program. All monitoring programs recommended for the Nobel Drive project will have success criteria included.

3.4 CULTURAL RESOURCES

Mitigation Measures

The project would not adversely affect any sites which are on or eligible for listing in the National Register

of Historic Places. Because there will be no adverse effects to sites, no mitigation measures are required. However, during the brushing and grading of the selected Nobel Drive Alignment, unknown sites may be discovered and a mitigation monitoring program is necessary, as discussed below.

Monitoring and Reporting Program

A mitigation program for cultural resources is necessary only for monitoring the brushing of the project and the initial grading of any areas suspected to contain sensitive resources. The archaeological monitoring program is briefly described below.

1. Prior to the start of construction, the contractor shall provide verification that a qualified archaeologist and/or an archaeological monitor has been retained to implement the archaeological monitoring program. This verification shall be presented in a letter to the City and Caltrans. A qualified archaeologist is defined as an individual certified by the Society of Professional Archaeologists with at least 200 hours of field experience in southern California. Uncertified individuals who meet the requirements for certification may be considered to be qualified if they submit evidence of their experience to the City Development Services Department. An archaeological monitor is defined as an individual who has expertise in the collection and salvage of cultural resources and who is working under the direction of a qualified archaeologist. All persons involved in the archaeological monitoring of this project shall be approved by the City and Caltrans prior to the pre-construction meetings.

2. The archaeologist shall attend any pre-construction meetings to make comments and/or suggestions concerning the monitoring program and discuss excavation plans with the contractors. The archaeologist's duties shall include monitoring, evaluation, analysis of collected materials, and preparation of a monitoring report in conformance with the City's "Guidelines for the Determination of Significance of Archaeological Sites."

3. In the event that additional cultural resources are discovered during construction, the archaeologist shall have the authority to divert or temporarily halt ground disturbing operations in the area of discovery to allow the evaluation of archaeological resources. At the time of discovery, the archaeologist shall contact the City and Caltrans. The importance of the discovered resources shall be determined by the archaeologist in consultation with the City and Caltrans, who

must concur with the evaluation procedures to be performed before construction activities will be allowed to resume. For important cultural resources, a research design shall be prepared and a data recovery program shall be carried out to mitigate potential impacts according to CEQA and National Historic Preservation Act (Section 106) standards. Any human remains of Native American origin shall be turned over to the appropriate Native American group for reburial.

4. The monitoring archaeologist shall attempt to prevent equipment from straying beyond the recommended construction corridor. All ground disturbing activities shall be monitored by an archaeologist until a depth is achieved which exceeds the potential depth of buried materials (i.e., culturally sterile geological strata).

5. Upon completion of the monitoring program, a report shall be filed within three months which summarizes the results of the archaeological program. This report shall include a discussion of the program, a record of any discoveries made and additional studies conducted, and any additional mitigation measures which may be necessary.

Implementation of the described monitoring program will satisfy the provisions of AB 3180 for archaeological mitigation, monitoring and reporting.

3.5 LAND USE

Mitigation Measures

The measures listed below would reduce the adverse effects associated with the project to acceptable levels.

1. For the existing gas station use, compensation would be given for right-of-way acquisition as required by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Compensation would also be given for redevelopment of a landscape strip. No further mitigation would be required.

2. For the proposed site plan for a gas station, a CUP would be approved which would accommodate future road widening without impacting the proposed use.

3. No mitigation is required for the commercial center parking lot other than compensation for the right-of-way acquisition and a zoning variance, if necessary.

4. Construction staging areas for Phase I improvements will be restored to their original condition as soon as feasible after completion of the construction activities.

Monitoring Activities

No monitoring activities are required.

3.6 TRAFFIC AND CIRCULATION

The preferred alternative is designed to accommodate projected traffic in accordance with the *University Community Plan* Transportation Element and SANDAG forecasts. A number of adverse traffic effects would occur despite these improvements (under all project alternatives), and mitigation measures are identified to reduce impacts to an acceptable level. Additional measures are also identified for non-project generated impacts.

Identified potential mitigation measures involve road widening activities along La Jolla Village Drive/ Miramar Road, and construction of the partial cloverleaf configuration at I-805/La Jolla Village Drive/ Miramar Road. These measures include altering the construction schedules of currently proposed improvements (to provide additional capacity at an earlier date), as well as the potential construction of additional facilities.

Mitigation Measures

Adverse traffic-related impacts identified during Phase II are limited to vehicle queues at the I-805/La Jolla Village Drive/Miramar Road interchange. These effects are considered unmitigated due to the length of several queues and requirements related to ramp meter rates even though queue lengths would not be as long as with the No Project alternative. That is, potential mitigation would entail increasing ramp meter rates to speed up the flow of traffic onto the freeway (and decrease the number of vehicles on the ramps). Ramp meter rates are controlled, however, to limit the flow of traffic onto the freeway and maintain acceptable freeway LOS. In addition, several of the identified queues exhibit extensive lengths, with impact

conditions (i.e., the extension of queues onto adjacent surface streets) likely to remain regardless of ramp meter rates.

Short-term construction impacts along Miramar Road, Nobel Drive, La Jolla Village Drive, and Eastgate Mall will require a Traffic Control Plan which shall be approved by the City of San Diego Traffic Engineering Division.

Monitoring Activities

Monitoring requirements would entail submission and review of facility workplans by the City Development Services Department and Engineering Department prior to approval.

3.7 NOISE

Mitigation Measures

FHWA procedures (23 CFR 772), require that if a noise impact is identified, abatement measures must be considered, and require the identification of :

(1) Noise abatement measures which are reasonable and feasible, and which are likely to be incorporated into the project, and

(2) Noise impacts for which no apparent solution is available.

Governor Drive

A noise impact was identified at the homes north of Governor Drive and west of I-805. Sound wall heights of between eight and fourteen feet were modeled to determine the noise reduction benefits to the residences. Sound walls combined with berms were also analyzed (with the berm located where space allows within the existing freeway right-of-way). In addition, a berm located entirely on the freeway right-of-way was analyzed.

The noise reductions for the various barrier height and types were evaluated in a Reasonable and Feasible Analysis for Suggested Noise Mitigation. Based upon this analysis, a noise barrier 10 to 12 feet high was

suggested to optimize noise reduction and visual impact. The results of the Reasonable and Feasible Analysis and input from homeowners are summarized below.

1. I-805 in this area was completed and opened to traffic in 1972. These residences along I-805 were built in 1970 before the freeway was opened to traffic and, it is assumed, did not account for the projected noise levels.

2. Construction of a noise barrier (consisting entirely of a wall, or a combination of a wall and berm, or consisting entirely of a berm) was found to be feasible based upon a review of engineering considerations.

3. Forty homes were represented by the noise model. Of the forty, at least 36 would achieve noise reductions varying from 5 to 14 dBA, depending upon barrier location and configuration. A minimum of 5 dBA noise reduction is needed for a noise barrier to be considered reasonable, and all but four residences would have at least 5 dBA reduction. The four remaining residences would achieve reductions from one to three dBA, and the resulting noise levels would not exceed the NAC. Constructing the barrier to provide additional noise reduction for these residences would not be feasible because of the relative elevations of the homes and roadways, the orientation of the homes, and existing decks constructed in these back yards.

4. Without a barrier, future noise levels are projected to vary (depending upon location) from 73 to 80 dBA. With a barrier, future noise levels are projected to vary (depending upon location and barrier configuration) from 63 to 71 dBA.

5. Noise barrier cost estimates range from $12,589 to $35,639 per benefitting home. A benefitting home is a home that receives a 5 dBA minimum noise reduction. Note that the Caltrans guideline for maximum expenditure per home is $35,000.

6. In response to a mailer sent (on December 29, 1997) to 32 affected homeowners, 19 homeowners responded, with 17 stating that they are opposed to construction of a noise wall on their property. This lead to consideration of an earthen berm constructed entirely on the freeway right-of-way.

7. At this time, the likely noise mitigation to be incorporated into the project is a ten-foot-high

earthen berm constructed entirely on the freeway right-of-way. This barrier would:

- Achieve a noise reduction of more than 5 dBA for 36 homes.
- Avoid impacts to homeowners' properties.
- Blend in with the existing terrain.
- Not block homeowner's views or cast shadows on their back yards.
- Cost less than a 12-foot high wall that would be required to achieve the same noise reduction.

A final determination on noise barrier construction for the Governor Drive area will be made during an ongoing public outreach program with the affected homeowners. It is FHWA policy that, "Barriers should definitely not be built if most of the impacted residents do not want them" (FHWA 1995).

Construction Noise

A short-term construction noise impact was identified at the homes near the east end of existing Nobel Drive. These construction noise effects shall be mitigated by implementation of the following measures:

- Avoid nighttime and weekend work in proximity to residences when feasible.

- Comply with the City's Noise Ordinance and Caltrans Standard Specification 7-1.01I (January 1988) *Sound Control Requirements.*

Monitoring Activities

No monitoring activities are required.

3.8 AIR QUALITY

Mitigation Measures

Major construction activities for Phases I and II cannot be undertaken without some release of air pollutants. In a non-attainment area, such as the San Diego Air Basin, the additional small volumes

of air pollution will have an incremental, short-term cumulative impact. Aggressive measures must, therefore, be taken to reduce emissions as much as possible; simply meeting minimum regulatory requirements may not be sufficient. The following mitigation measures would reduce impacts during the construction phase of the project:

1. Adequate water or other dust palliatives shall be utilized on all disturbed areas, including staging areas.

2. All paved streets from which site access is taken shall be washed down or swept to remove dirt carried from the site to the street in order to keep vehicles from pulverizing the dirt into fine particles.

3. All vehicles shall be covered with tarps when hauling dirt to the project site on public roadways unless additional moisture is added to prevent material blow-off during transport.

4. Construction equipment shall be maintained, kept properly tuned and operated in an efficient manner to reduce peak emission levels.

5. Obstruction of through traffic lanes from construction equipment or activities shall be minimized to the greatest extent possible to reduce traffic congestion.

6. Traffic control measures shall be followed to reduce congested or detoured traffic conditions during construction as outlined in Section 5.6, Traffic.

7. The project construction contractor for all phases shall adhere to all Air Pollution Control District Rules and Regulations and to standard Caltrans construction specifications for control of dust and equipment exhaust.

Monitoring Activities

No monitoring activities are required.

3.9 VISUAL RESOURCES

Mitigation Measures

1. Horizontal and vertical slope rounding shall be utilized on all slopes. Slope edges shall be gradually rounded back to flow into the undisturbed topography. The surface plane of the slopes shall also be rounded. Natural undulations are desirable; the objective is to avoid a flat face on the slopes.

2. Cut slopes with 2:1 gradients or steeper shall be stepped. In addition to interrupting the visual flatness of a cut slope, this grading technique aids in the revegetation process and reduces erosion.

3. The interchange shall be planted in accordance with Caltrans standards for highway planting. All excavation and embankment areas shall be landscaped.

4. Landscaping within City jurisdiction shall be subject to the City of San Diego Landscape Technical Manual. A landscaping plan for disturbed areas shall be developed by a registered landscape architect, and shall be reviewed and approved by both the Caltrans District Landscape Architect and the City of San Diego Development Services Department. Landscaping within Caltrans jurisdiction shall be subject to Caltrans requirements for highway planting. A landscaping plan for disturbed areas shall be developed by a registered landscape architect and shall be reviewed and approved by the Caltrans District 11 landscape architect.

5. All landscaping shall be planted within two years after construction is completed. Erosion control materials shall be applied as required during construction. Seed species should include vegetation for soil stabilization.

6. Trees shall be replaced at a minimum 1:1 ratio. Trees over 10 years old should be replaced at a 3:1 ratio. This measure especially pertains to the mature landscaping adjacent to homes on the Governor Drive southbound off-ramp. (A comprehensive tree survey will be conducted during preliminary design to assess the quantity, size, and species of all trees potentially affected by the project.)

7. Plantable retaining walls shall be used as directed by the District Landscape Architect.

8. The Nobel Drive interchange design shall continue the architectural theme of the existing Eastgate Mall overpass and La Jolla Village Drive/Miramar Road interchange.

9. Freeway appurtenances such as light standards, signs and sign structures, etc., shall be consistent in design with the existing items north and south of the project length.

10. Architectural treatment to wall faces shall be incorporated to add scale and visual interest. Building materials shall be used which discourage graffiti.

11. Long walls (e.g., walls of more than 100 feet) shall be designed with pilasters or other appropriate architectural surface textures, off-setting the alignment of the wall at intervals to avoid a continuous flat surface.

12. Walls shall be designed and laid out to provide plantable areas at both the base and the top of the wall. This will allow the planting of vines and shrubs on the face of the wall to reduce visual impacts and as a means of graffiti abatement.

13. A public involvement program shall be instituted with affected residents near the I-805/Governor Drive interchange to determine the preferred noise barrier height. Factors to be considered shall include noise attenuation and homeowners views for various wall heights.

14. The noise barrier shall be of an appropriate color and texture to reduce its visual scale and to blend with the existing, surrounding natural and man-made environment. Landscaping shall be used to screen the barrier.

Monitoring Activities

No monitoring activities are required.

5.10 SOCIOECONOMICS

Mitigation Monitoring

1. For the existing gas station use, compensation would be given for right-of-way acquisition as required by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Compensation would also be given for redevelopment of a landscape strip. No further mitigation would be required.

2. No mitigation is required for the commercial center parking lot other than compensation for the right-of-way acquisition and a zoning variance, if necessary.

Monitoring Activities

No monitoring activities are required.

3.11 PUBLIC HEALTH AND SAFETY

Mitigation Measures

Project design will include chain link fencing of the Alternative A and B alignments on City and NAS Miramar land to minimize the potential for increased public access from Nobel Drive into NAS Miramar.

Monitoring Activities

No monitoring activities are required.

3.12 HAZARDOUS WASTES

Mitigation Measures

1. Construction activities for Phase I shall be coordinated with existing operational permits

involving hazardous wastes in the vicinity of the Miramar Road/Eastgate Mall intersection. This shall include coordination of construction plans with permit holders and pertinent jurisdictional agencies (i.e., those issuing the operational permits) to ensure that project-related construction does not threaten hazardous waste storage or transport facilities, or cause (directly or indirectly) the release of hazardous wastes.

2. If unexpected hazardous wastes are encountered at any time during Phase I construction activities, construction shall cease until the appropriate lead and regulatory agencies have been notified and have provided direction in terms of avoidance, remediation or other mitigation requirements.

3. Testing for aerially deposited land is required for excavation in unpaved areas under the jurisdiction of Caltrans. The testing and landing of the extractable and total land is revealed by that testing will be coordinated with Caltrans.

Monitoring and Reporting Program

1. Documentation shall be submitted of the coordination of construction plans with permit holders and appropriate jurisdictional agencies (i.e., those issuing the operational permits) to the City of San Diego Development Services Department, Caltrans, and the Department of the Navy (Lead and Cooperating Agencies) prior to beginning of construction activities of Alternative A, Phase I and Alternative B, Phase II in the vicinity of the Miramar Road/ Eastgate Mall intersection.

2. Construction activities for Alternative A, Phase I and Alternative B, Phase II, in the vicinity of the Miramar Road/Eastgate Mall intersection shall be monitored to ensure avoidance of hazardous waste sites and/or facilities. Monitoring shall consist of submitting weekly (or as needed, depending on Lead Agency direction) compliance reports to the Lead Agencies to document the described monitoring activities.

3. Monitoring of unexpectedly encountered hazardous wastes during construction activities shall consist of notifying the Lead Agencies in writing of the site conditions encountered and the direction received from the appropriate regulatory agencies.

3.12 PALEONTOLOGICAL RESOURCES

Mitigation Measures

Measures to mitigate construction-related impacts to paleontological resources are fairly standard and would be the same for all alternative designs and project phases.

1. Prior to issuance of development permits, the City of San Diego shall retain a qualified paleontologist to carry out the required mitigation program. (A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological field procedures and techniques.) A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall work under the direction of a qualified paleontologist.

2. A letter of agreement between the paleontologist and the City of San Diego or its agent shall be on file with the City.

3. The paleontological resource mitigation requirement shall be placed on the cover sheet of the construction plans.

4. When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In most cases this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage time. In these instances, the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for recovering small fossil remains such as isolated mammal teeth, it may be necessary, in certain instances, to set up a screen-washing operation on the site.

5. Prepared fossils, along with copies of all pertinent field notes, photos, and maps shall then be deposited (with the appropriate agency's permission) in a scientific institution with paleontological collections, such as the San Diego Natural History Museum. Donation of the fossils shall be accompanied by financial support for specimen storage.

Monitoring Activities

1. At the pre-grade meeting, the City's construction inspector and the grading contractors shall meet with the paleontologist to discuss the monitoring program.

2. During actual construction of the project, the City's construction inspector shall make sure that the paleontologist and/or the paleontological monitor are on site as specified in the construction documents.

3. A paleontological monitor shall be on the site at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic deposits (i.e., Scripps Formation) to inspect cuts for contained fossils. The paleontological monitor shall be on the site on at least a part-time basis during the original cutting of previously undisturbed sediments of moderately sensitive geologic deposits (i.e., Lindavista Formation) to inspect cuts for contained fossils.

   In the event that fossils are discovered in these formations, it may be necessary to increase the per/day field monitoring time. Conversely, if fossils are not being found, monitoring time should be reduced.

4. Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and cataloged.

5. Following completion of all field and laboratory work, a final summary report shall be submitted to the City Development Services Department, which outlines the results of the mitigation program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and the importance of recovered fossils.