



**\*CITY OF SANTA BARBARA  
COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION**

**DRAFT INITIAL STUDY/ENVIRONMENTAL CHECKLIST  
MST2003-00032; MST2006-00331; MST2000-00707; MST2002-00676;  
MST2002-00004; MST2006-00330**

**PROJECT: 500 NIÑOS DRIVE**

This Initial Study has been completed for the project described below because the project is subject to review under the California Environmental Quality Act (CEQA) and was determined not to be exempt from the requirement for the preparation of an environmental document. The information, analysis and conclusions contained in this Initial Study are the basis for deciding whether a Negative Declaration (ND) is to be prepared or if preparation of an Environmental Impact Report (EIR) is required to further analyze impacts. Additionally, if preparation of an EIR is required, the Initial Study is used to focus the EIR on the effects determined to be potentially significant. **TO VIEW ONLINE with all attachments:** Go to our website [www.santabarbaraca.gov](http://www.santabarbaraca.gov) and under Quick Links on the right hand side, click on Major Planning Efforts.

**APPLICANT/PROPERTY OWNER**

Applicant: Santa Barbara Zoological Gardens  
Agent: Cameron Carey, Tynan Group  
Owner: City of Santa Barbara

**PROJECT ADDRESS/LOCATION (See Exhibit A - Vicinity Map)**

The 23.6-acre site of the Santa Barbara Zoological Gardens (Zoo) is located at the southeast end of the City of Santa Barbara on Niños Drive. The site is in the East Beach neighborhood of the City of Santa Barbara.

**PROJECT DESCRIPTION (See Exhibits B & C – Applicant Letter & Project Plans)**

**Project Components:** The Zoo includes several parcels leased from the City of Santa Barbara. As an allowed use in the P-R Zone, the Zoo receives approximately 425,000 to 450,000 visitors annually. Visitors can walk the Zoo grounds and gardens and observe many animal species. There is also a train which allows visitors to see the back of house functions, exhibits and other areas of the Zoo not accessible from the pathways. The Zoo has a restaurant and various snack carts throughout the campus. The Zoo offers a variety of educational classes and tours for school children, lectures for adults, research opportunities and Zoo Camp for kids in the summer. It also hosts weddings, corporate events, balls and Old Spanish Days events. The applicant proposes an updated Master Plan for the Santa Barbara Zoo for the next five years. The proposed Master Plan consists of six project components: 1) the California Condor Exhibit; 2) the Lemur/Langur Exhibit Renovation; 3) the Discovery Pavilion; 4) the Wave; 5) the Service Yard; and 6) the Channel Island Fox Renovation.

The new **California Condor Exhibit** and holding area would be located on the site of the original Bald Eagle exhibit between the existing Channel Island Foxes and Bald Eagle Exhibits.

The existing **Lemur/Langur Complex** would be renovated to conform with new federal regulations and would include demolition of the existing animal holding and exhibit spaces and replacing them with two new holding buildings and exhibit spaces.

The **Discovery Pavilion** facility is proposed as a place for conservation education and the exploration of science in two flexible classroom spaces, as well as administrative offices. Phase I is designed to accommodate 18-20 existing staff members including education, collections and animal food preparation, consolidating them with the Zoo's administrative staff. Many of these staff and facilities are currently located in temporary trailers on site. These trailers will be removed upon completion of the project. Proposed construction consists of two separate phases of renovation and addition to existing one and two story administration and staff lounge buildings.

The first phase will require removal of two single-story keeper offices and two animal holding cages, totaling 3,038 sq. ft. of demolition. The existing single-story 1,880 sq. ft. Staff Lounge building will be renovated. The staff lounge facilities will be relocated to an existing 275 sq. ft. feed storage enclosure with 100 sq. ft. of added construction and reconfiguration

of the adjacent outdoor patio spaces. New staff restrooms would be built within a 116 sq. ft. addition to the adjacent Administration Building. A new 7,344 sq. ft. single story addition will accommodate two new multi-purpose classrooms of 60 students each, exhibit rooms, animal food kitchen with feed storage, and new education staff administrative office space.

Phase II of the Discovery Pavilion will include renovation of the 5,753 sq. ft., two-story Administration and Retail building with 1,008 sq. ft. of new office construction. Also included will be the addition of an exterior second-story building linkage and accessible elevator. Completion of both phases of the Discovery Pavilion will result in a net increase of 5,480 sq. ft.

**The Wave:** The Zoo proposes to demolish the existing building and trellis courtyard. The new structure will house a concessions facility, catering room, restrooms, storage, and a bridal changing room for a total of 1,450 sq.ft.

The **Service Yard** project would consolidate and better organize Zoo service facilities, maintenance, and public program storage at the existing service yard. It includes the removal of several temporary storage containers from various locations on the Zoo site, and construction of new storage units, relocation of the existing wood and metal shops and existing office space, a new employee restroom, relocation of the train barn from the northern part of the campus to the service yard, landscape and exhibit materials storage areas and a new estate wall along portions of the Zoo's Cabrillo Blvd. frontage.

The **Channel Island Fox Exhibit** first opened in 1999. The outdoor enclosure needs a complete renovation. The proposed exhibit spaces will be 880 sq. ft. and 1170 sq. ft. respectively. They will also upgrade the mesh enclosure to a finely woven 1"x1" steel mesh.

**Master Plan Phasing:** The Master Plan will be implemented in three phases.

**Phase 1:** The applicant estimates beginning construction of the Wave, Condor and Channel Island Fox projects in early 2007. It is anticipated that these projects will be done concurrently and should be completed by Spring 2008. Project staging and construction parking would occur on-site.

**Phase 2:** The second phase of construction will begin at the end of the first, Spring of 2008 and will continue through the Fall of 2009. Projects included in this phase will be the Discovery Pavilion and Lemur/Langur.

**Phase 3:** The third construction phase in the late 2009 or early 2010. This phase will include the construction of the Service Yard.

**Required Permits:** In order for the project to proceed, the following discretionary approvals are required:

The following discretionary applications will be required for each project in addition to those specifically noted under each item:

1. A Coastal Development Permit for new development in the Appealable jurisdiction of the City's Coastal Zone (SBMC §28.45.009);
2. PR Park & Recreation Zone Findings for the new development (SBMC §28.37.010) by the Planning Commission, and the Parks and Recreation Commission; and
3. Historic Landmarks Commission design review for all exterior changes.

*Discovery Pavilion & The Wave*

4. A Development Plan for construction of non-residential square footage from the Community Priority Category (SBMC §28.87.300);
5. A Recommendation to City Council for a final Community Priority Designation from the Community Priority Category. (SBMC §28.87.300); and
6. A Final Community Priority Designation from the City Council pursuant to SBMC §28.87.300.

*Service Facilities Yard*

7. A Preliminary Community Priority Designation from the City Council pursuant to SBMC §28.87.300;

8. A Development Plan for construction of non-residential square footage from the Community Priority Category (SBMC §28.87.300);
9. A Recommendation to City Council for a final Community Priority Designation from the Community Priority Category. (SBMC §28.87.300); and
10. A Final Community Priority Designation from the City Council pursuant to SBMC §28.87.300.

**ENVIRONMENTAL SETTING**

**Existing Site Characteristics**

Topography: The topography of the site varies throughout from generally flat areas to gentle slopes.

Archaeological Resources: The project site is located in a prehistoric watercourse cultural resources sensitivity area. An archaeological report has been prepared and accepted by the Historic Landmarks Commission providing a comprehensive overview of previous archaeological research and guidelines for future projects within the Zoo.

Biological Resources: The project site is located within an urban area, next to the Andree Clark Bird Refuge. It is vegetated with mostly non-native specimen trees and vegetation of limited habitat value.

Noise: The project site is currently subject to noise levels of 60 to greater than 70 Ldn dBA. The primary noise source affecting the site is vehicular traffic on Highway 101 and the railroad.

Fire Hazard: The project site is not located in the High Fire Hazard Area of the City.

Flooding/Drainage: Sycamore Creek abuts the entrance of the Zoo and the Andree Clark Bird Refuge is located along the east side of the Zoo. The project site is located within the tsunami run up Zone and within the AE, AE floodway, and X zones on the Flood Insurance Rate maps.

Seismic/Geologic Conditions: Geologic conditions onsite are characterized by artificial fill, gravel, and stiff clay to clayey silt. In some areas, groundwater was found at 13 feet below the surface. The City’s Master Environmental Assessment (MEA) identifies a minimal to high potential for liquefaction to occur as a result of earthshaking, depending on the location. The potential for seismic hazards is low.

**PROPERTY CHARACTERISTICS**

<b>Assessor's Parcel Number:</b>	017-362-005, 017-363-001 & -002; 017-372-001, & 017-382-001 & -002	<b>General Plan Designation:</b>	Open Space, Community Park, Public Parking
<b>Existing Land Use:</b>	Zoo	<b>Parcel Size:</b>	23.6 acres
<b>Zoning:</b>	PR/SD-3	<b>Proposed Land Use:</b>	Zoo
<b>Slope:</b>	Varying topography		
<b>SURROUNDING LAND USES:</b>			
<b>North:</b>	Union Pacific Railroad; Highway 101		
<b>South:</b>	Residential condominiums; Cabrillo Boulevard; East Beach		
<b>East:</b>	Andree Clark Bird Refuge		
<b>West:</b>	Residential condominiums; Dwight Murphy Park		

## **PLANS AND POLICY DISCUSSION**

### **Land Use and Zoning Designations**

The project site is designated Open Space, Community Park and Public Parking by the General Plan Land Use Element. The project is located in the East Beach neighborhood, which is bounded on the north by Highway 101; on the south by Cabrillo Boulevard; on the east by the City limits; and on the west by Santa Barbara Street. This area is comprised of hotel and apartment developments adjacent to a substantial number of public facilities, such as the Santa Barbara Zoological Gardens, Andree Clark Bird Refuge, Dwight Murphy Field, Cabrillo Ball Park, and the adjoining beaches beyond Chase Palm Park.

The site is zoned P-R/SD-3 (Park & Recreation/Coastal Overlay Zones). Permitted uses in the P-R zone include various types of parks, sports facilities and other recreational uses. The P-R zone identifies the project site as a Regional Park.

### **General Plan Policies**

Initial analysis of project consistency with adopted City plans and policies indicates that the project could be found potentially consistent with the existing General Plan Land Use Element designation of Open Space, Community Park, and Public Parking. Various sections of this Initial Study make reference to applicable General Plan policies and ordinance provisions. The Planning Commission Staff Report will provide a further analysis of potential project consistency or inconsistency with the City General Plan elements, including the Land Use Element, Circulation Element, Conservation Element, Scenic Highways Element, Noise Element, Seismic Safety-Safety Element and other applicable plans and policies. Final determinations of project consistency with applicable policies will be made by the decision-makers as part of their action to approve or deny the project proposal.

#### ***I. Conservation Element***

City Conservation Element policies provide that significant environmental resources of the City be preserved and protected. The Conservation Element requires implementation of resource protection measures for archaeological, historic and architectural resources; protection and enhancement of visual, biological and open space resources; protection of specimen and street trees; maintenance of air and water quality; and minimizing potential drainage, erosion and flooding hazards. The project may be found potentially consistent with applicable policies of the Conservation Element through adherence to the identified project design and mitigation measures as detailed in this Initial Study, such that the City's environmental resources are preserved and protected to the maximum extent feasible.

With respect to cultural resources, Conservation Element policies speak to the preservation and protection of archaeological, historic, or architectural resources. A Comprehensive Archaeological Resources Assessment was prepared by SAIC in July 2003 and accepted by the Historic Landmarks Commission. The assessment provides a comprehensive overview of previous archaeological research, estimated sensitivity zones, and guidelines for each sensitivity zone that include mitigation measures to be employed depending on the nature of proposed construction projects. The guidelines were designed to streamline the review of future construction projects within the Zoo, and ensure a consistent approach to addressing potential impacts on archaeological resources on the property; thereby protecting remaining resources on the site. The proposed Zoo Master Plan has complied with the guidelines for archaeological resources and therefore is potentially consistent with the Conservation Element policies relative to archaeological resources.

A historic structures report was prepared and accepted by the Historic Landmarks Commission evaluating the historic value of a utility building that once served as shower facilities for the Hobo Village on the site. While the structure was not found to merit preservation, a memorial was recommended to recognize the Hobo Village's prominence in the City's history. With inclusion of the memorial, the proposed Zoo Master Plan is potentially consistent with the Conservation Element policies relative to historic resources.

Regarding biological resources, Conservation Element policies encourage the protection of the City's critical ecological resources in order to provide a high-quality environment necessary to sustain the City's ecosystem. A biological assessment was prepared to identify the project's potential effects on the neighboring Andree Clark Bird Refuge. The project site was found to have limited value with limited influence on the Andree Clark Bird Refuge and with

implementation of recommended mitigations, the project is potentially consistent with the Conservation Element policies relative to biological resources.

The proposed project would not obstruct public scenic views to the ocean or lower elevations of the City nor would it obstruct upper foothill or mountain views from the beach or lower elevations of the City. The project site is surrounded by existing residential development, US 101, Andree Clark Bird Refuge, and Dwight Murphy Park, as well as significant vegetation that is proposed to remain. As demonstrated by site photos and photo-simulations, the proposed zoo Master Plan project components would be minimally visible from most of the surrounding area. The proposed Zoo Master Plan may be found potentially consistent with the Conservation Element policies relative to view protection.

## 2. *Seismic Safety/Safety Element*

The City's Seismic Safety/Safety Element requires that development be sited, designed and maintained to protect life, property, and public well-being from seismic and other geologic hazards, and to reduce or avoid adverse economic, social, and environmental impacts caused by hazardous geologic conditions. The Seismic Safety/Safety Element addresses a number of potential hazards including, geology, seismicity, flooding, liquefaction, tsunamis, high groundwater, and erosion.

The project site is subject to a number of geologic and environmental constraints. As discussed in this Initial Study analysis, potential impacts associated with these hazards would be adequately addressed by implementing the identified project design and specified mitigation measures such that construction of the proposed development would ensure seismic and geologic stability, and reduce or avoid potential environmental impacts associated with unstable geologic conditions. Therefore, the proposed Zoo Master Plan may be found potentially consistent with the Seismic Safety/Safety Element policies relative to potential hazards.

## 3. *Noise Element*

The City's Noise Element includes policies intended to achieve and maintain a noise environment that is compatible with the variety of human activities and land uses in the City. The proposed Zoo Master Plan projects would not generate a significant increase in existing noise levels or exceed noise guidelines. Short-term construction noise is minimized through implementation of standard mitigation measures. As such, the proposed project may be found potentially consistent with the applicable guidelines of the Noise Element.

## 4. *Circulation Element*

The Circulation Element of the General Plan contains goals and implementing measures to reduce adverse impacts to the City's street system and parking by reducing reliance on the automobile, encouraging alternative forms of transportation, reviewing traffic impact standards, and applying land use and planning strategies that support the City's mobility goals. As discussed in this Initial Study analysis, potential traffic and parking related impacts are less than significant. Additionally, the project will include public improvements to the pedestrian facilities abutting the site frontage, improvements to the on-site parking facilities, and requires implementation of a Transportation and Parking Management Plan to reduce traffic and parking impacts. Therefore, the proposed Zoo Master Plan may be found potentially consistent with the Circulation Element policies relative to traffic and circulation.

## **MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)**

A Mitigation Monitoring and Reporting Program has been prepared for the subject project in compliance with Public Resources Code §21081.6. The mitigation measures suggested in the Initial Study may be refined or augmented by decision-makers. Monitoring and reporting requirements would be adopted as conditions of project approval. The MMRP is attached herewith as shown in *Exhibit D*.

## **ENVIRONMENTAL CHECKLIST**

The following checklist contains questions concerning potential changes to the environment that may result if this project is implemented. If no impact would occur, NO should be checked. If the project might result in an impact, check YES indicating the potential level of significance as follows:

Significant: Known substantial environmental impacts. Further review needed to determine if there are feasible mitigation measures and/or alternatives to reduce the impact.

Potentially Significant: Unknown, potentially significant impacts that need further review to determine significance level and whether mitigable.

Potentially Significant, Mitigable: Potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures agreed-to by the applicant.

Less Than Significant: Impacts that are not substantial or significant.

1. AESTHETICS Could the project:	NO	YES <u>Level of Significance</u>
a) Affect a public scenic vista or designated scenic highway or highway/roadway eligible for designation as a scenic highway?		Less Than Significant
b) Have a demonstrable negative aesthetic effect in that it is inconsistent with Architectural Board of Review or Historic Landmarks Guidelines or guidelines/criteria adopted as part of the Local Coastal Program?		Less Than Significant
c) Create light or glare?		Less Than Significant

**Aesthetics - Discussion**

**Issues:** Issues associated with visual aesthetics include the potential blockage of important public scenic views, project on-site visual aesthetics and compatibility with the surrounding area, and changes in exterior lighting.

**Impact Evaluation Guidelines:** Aesthetic quality, whether a project is visually pleasing or unpleasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed. The significance of visual changes is assessed qualitatively based on consideration of the proposed physical change and project design within the context of the surrounding visual setting. First, the existing visual setting is reviewed to determine whether important existing visual aesthetics are involved, based on consideration of existing views, existing visual aesthetics on and around the site, and existing lighting conditions. Under CEQA, the evaluation of a project’s potential impacts to scenic views is focused on views from public (as opposed to private) viewpoints. The importance of existing views is assessed qualitatively based on whether important visual resources such as mountains, skyline trees, or the coastline, can be seen, the extent and scenic quality of the views, and whether the views are experienced from public viewpoints. The visual changes associated with the project are then assessed qualitatively to determine whether the project would result in substantial effects associated with important public scenic views, on-site visual aesthetics, and lighting.

Significant visual aesthetics impacts may potentially result from:

- Substantial obstruction or degradation of important public scenic views, including important views from scenic highways; extensive grading and/or removal of substantial amounts of vegetation and trees visible from public areas without adequate landscaping; or substantial loss of important public open space.
- Substantial negative aesthetic effect or incompatibility with surrounding land uses or structures due to project size, massing, scale, density, architecture, signage, or other design features.
- Substantial light and/or glare that poses a hazard or substantial annoyance to adjacent land uses and sensitive receptors.

**Aesthetics – Existing Conditions and Project Impacts**

***1.a) Scenic Views***

The project site is located in an urban environment in the East Beach neighborhood of the City of Santa Barbara. Existing development in the project vicinity includes a mix of one and two story hotels and residential development. The Zoo is located between parkland, Dwight Murphy Park to the west and the Andree Clark Bird Refuge to the east. The project site is located south of Highway 101, which has been identified as eligible for scenic highway designation. Photographs of the projects prepared by the applicant and included as ***Exhibit E*** in this Initial Study demonstrate that there would be minimal changes to the public scenic views from areas surrounding the project site including Andree Clark Bird Refuge, Old Coast Highway and Cabrillo Boulevard.

Given the individual project component locations, the overall size of the Zoo, and the amount and height of existing vegetation along the Zoo boundaries, of the six components in the Master Plan, the Condor Exhibit and the Discovery Pavilion would have the highest likelihood of being visible from surrounding areas.

The Condor Exhibit includes the construction of a steel mesh for the condor exhibit with the highest support being approximately 55 feet tall. The Condor Exhibit, existing vegetation would help to minimize the views of the proposed mesh, supporting structures, and buildings. The mesh has been successfully used in other exhibits in the Zoo with similar results.

The Discovery Pavilion includes two-story elements that reach close to 20 feet in height. The Discovery Pavilion may be visible from US 101 and the Salinas Street northbound on-ramp, although existing vegetation will screen much of the new building minimizing its effect as demonstrated in photographs provided (Exhibit E). In addition, it would not be out of context with existing development on the site.

The other components of the Master Plan would be screened by existing and proposed vegetation, making it difficult to be seen from surrounding areas as demonstrated in photographs provided (Exhibit E).

The project would not change existing skyline views as seen from Highway 101 nor would it significantly obstruct or change scenic views of the mountains and hillside areas of the City. This impact is considered *less than significant*.

***1.b) On-Site Aesthetics***

Buildings proposed as a part of the proposed Zoo Master Plan include the Discovery Pavilion, the Wave and the Service Facilities Yard. Exhibits proposed would be sensitive to the species inhabiting those spaces, yet remain in continuity with the overall Zoo design.

The proposed project designs for the Discovery Pavilion and the Wave incorporate Mediterranean style architecture with plaster finish. The Wave is a one-story building while the Discovery Pavilion has some two-story components. The projects have received positive comments from the Historic Landmarks Commission (***Exhibit F***) and will return for further refinements. The service yard facilities will be subject to approval by the Historic Landmarks Commission (HLC). The service yard will continue to be screened from public view and from the visitors of the zoo due to existing fencing and vegetation. The service yard is not accessible to the public. After Planning Commission and Park and Recreation Commission approval, all proposed Zoo Master Plan project components are required to receive preliminary and final approval by the HLC for consistency with design guidelines for views, visual aesthetics and compatibility, and lighting. The project's onsite aesthetics impacts are considered *less than significant*.

***1.c) Lighting***

The project is located near recreational facilities, hotels, and multi-residential development. Existing night lighting in the area is generally of parking lots and for security purposes. Lighting is anticipated for security purposes and during evening events. New exterior lighting would be required to comply with the requirements of the City's Outdoor Lighting and Design Ordinance (SBMC §22.75), which limits exterior lighting placement, height, and requires that lighting be hooded and directed so that it is not directed offsite. Compliance with this ordinance as enforced by HLC review of the lighting plan would ensure that exterior lighting does not result in a significant impact and would therefore be considered *less than significant*.

**Aesthetics – Recommended Mitigation**

- A-1 Design Review.** Prior to building permit issuance, proposed project grading and landform alteration, structural design, landscaping, and lighting is subject to preliminary and final review and approval by the Historic Landmarks Commission for consistency with design guidelines for views, visual aesthetics and compatibility, and lighting.
- A-2 Lighting.** Lighting design shall conform with City Lighting Ordinance requirements, including shielding and direction to the ground to avoid off-site lighting and glare effects, and shall be approved by the Historic Landmarks Commission.

**Aesthetics - Residual Impacts**

Project impacts to visual resources and aesthetics would be *less than significant* and would be further reduced with implementation of the measures identified above.

2. AIR QUALITY	NO	YES
Could the project:		<u>Level of Significance</u>
a) Violate any air quality standard or contribute to an existing or projected air quality violation?		Less than Significance (Long-term) Potentially Significant, Mitigable (Short-term)
b) Expose sensitive receptors to pollutants?		Potentially Significant, Mitigable
c) Create objectionable odors?		Less than Significant
Is the project consistent with the County of Santa Barbara Air Quality Attainment Plan? Yes		

**Air Quality - Discussion**

**Issues.** Air quality issues involve pollutant emissions from vehicle exhaust and industrial or other stationary sources that contribute to smog, particulates and nuisance dust associated with grading and construction processes, and nuisance odors.

Smog, or ozone, is formed in the atmosphere through a series of photochemical reactions involving interaction of oxides of nitrogen [NO<sub>x</sub>] and reactive organic compounds [ROC] (referred to as ozone precursors) with sunlight over a period of several hours. Primary sources of ozone precursors in the South Coast area are vehicle emissions. Sources of particulate matter (PM<sub>10</sub>) include demolition, grading, road dust, agricultural tilling and mineral quarries and vehicle exhaust (PM<sub>2.5</sub>).

The City of Santa Barbara is part of the South Coast Air Basin. The City is subject to the National Ambient Air Quality Standards and the California Ambient Air Quality Standards (CAAQS), which are more stringent than the national standards. The CAAQS apply to six pollutants: photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The Santa Barbara County Air Pollution Control District (SBCAPCD) provides oversight on compliance with air quality standards and preparation of the County Clean Air Plan.

Presently, Santa Barbara County is considered in attainment of the federal eight-hour ozone standard, but does not meet the state one-hour ozone standard or the standard for particulate matter less than ten microns in diameter (PM<sub>10</sub>). Insufficient data is available to determine our attainment status for either the federal standard for particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) or the state PM<sub>2.5</sub> standard. The state recently adopted a new eight-hour ozone standard that became effective in May 2006. Although the state has not yet issued attainment designations, the data indicate Santa Barbara County will be considered in nonattainment of this standard.

**Impact Evaluation Guidelines.** A project may create a significant air quality impact from the following:

- Exceeding an APCD pollutant threshold; inconsistency with District regulations; or exceeding population forecasts in the adopted County Clean Air Plan.
- Exposing sensitive receptors, such as children, the elderly, or sick people to substantial pollutant exposure.

- Substantial unmitigated nuisance dust during earthwork or construction operations.
- Creation of nuisance odors inconsistent with APCD regulations.

Long-Term (Operational) Impact Guidelines: The City of Santa Barbara uses the SBCAPCD thresholds of significance for evaluating air quality impacts. The APCD has determined that a proposed project will not have a significant air quality impact on the environment if operation of the project will:

- Emit (from all project sources, both stationary and mobile) less than 240 pounds per day for ROC and NO<sub>x</sub>, and 80 pounds per day for PM<sub>10</sub>;
- Emit less than 25 pounds per day of ROC or NO<sub>x</sub> from motor vehicle trips only;
- Not cause a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risks public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state air quality plans for Santa Barbara.

Short-Term (Construction) Impacts Guidelines: Projects involving grading, paving, construction, and landscaping activities may cause localized nuisance dust impacts and increased particulate matter (PM<sub>10</sub>). Substantial dust-related impacts may be potentially significant, but are generally considered mitigable with the application of standard dust control mitigation measures. Standard dust mitigation measures are applied to projects with either significant or less than significant effects.

Exhaust from construction equipment also contributes to air pollution. Quantitative thresholds of significance are not currently in place for short-term or construction emissions. However, SBCAPCD uses combined emissions from all construction equipment that exceed 25 tons of any pollutant except carbon monoxide within a 12-month period as a guideline threshold for determining significance of construction emission impacts.

Cumulative Impacts and Consistency with Clean Air Plan: If the project-specific impact exceeds the ozone precursor significance threshold, it is also considered to have a considerable contribution to cumulative impacts. When a project is not accounted for in the most recent Clean Air Plan growth projections, then the project's impact may also be considered to have a considerable contribution to cumulative air quality impacts. The Santa Barbara County Association of Governments and Air Resources Board on-road emissions forecasts are used as a basis for vehicle emission forecasting. If a project provides for increased population growth beyond that forecasted in the most recently adopted CAP, or if the project does not incorporate appropriate air quality mitigation and control measures, or is inconsistent with APCD rules and regulations, then the project may be found inconsistent with the CAP and may have a significant impact on air quality.

## Air Quality – Existing Conditions and Project Impacts

### *2.a-b) Air Pollutant Emissions*

Long-Term (Operational) Emissions: Substantial long-term project emissions could potentially stem from stationary sources which may require permits from the APCD and from motor vehicles associated with the project and from mobile sources including the automobile. The proposed project does not contain any stationary sources (gas stations, auto body shops, dry cleaners, oil and gas production and processing facilities, and water treatment facilities) which require permits from APCD. However, the proposed project will result in 58 new average daily trips (ADTs) and 7 PM peak hour trips (PHTs). Utilizing the URBEMIS 2002 ver. 8.7 computer model, it is estimated that the proposed Zoo Master Plan project will generate a total of 1.13 pounds per day of NO<sub>x</sub> and 0.79 pounds per day of ROC (*Exhibit G*). Therefore, the proposed project is anticipated to have a *less than significant* effect on the environment.

Short-Term (Construction) Emissions: The project would involve grading, paving, and landscaping activities which could cause localized dust related impacts resulting in increases in increases in particulate matter (PM<sub>10</sub>). Dust-related impacts are considered *potentially significant, but mitigable* with the application of standard dust control mitigation measures.

Construction equipment would also emit NO<sub>x</sub> and ROC. However, in order for NO<sub>x</sub> and ROC emissions from construction equipment to be considered a significant environmental impact, combined emissions from all construction equipment would need to exceed 25 tons of any pollutant (except carbon monoxide) within a 12-month period. Many of the components of the proposed Zoo Master Plan are renovations to existing exhibits and facilities that involve minor use of construction equipment that would generate minor amounts of pollutants. Other components of the proposed Zoo Master Plan that may involve use of construction equipment will be of a short-term nature and are therefore anticipated to not generate significant amounts of pollutants. Therefore, the proposed project is anticipated to have a *less than significant* effect on the environment.

Sensitive Receptors: Sensitive receptors are defined as children, elderly, or ill people that can be more adversely affected by air quality problems. The Zoo is a land use typically associated with sensitive receptors. Stationary sources are of particular concern to sensitive receptors, as is construction dust and particulate matter. The project would not include stationary sources, but sensitive receptors could be affected by dust and particulates during project site grading. Nuisance dust and particulates are considered potentially significant but would be reduced to a *less than significant* level through application of dust control mitigation measures. The insignificant amounts of these pollutants would result in an insignificant exposure of sensitive receptors to pollutants.

## 2.c) Odors

The project would not contain features with the potential to emit substantial odorous emissions, from sources such as combustion or evaporation of fuels, sewer systems, or solvents and surface coatings. The project does include improvements to existing commercial cooking equipment and cooking areas. The improvements are upgrades to existing equipment and no increase in use is anticipated. Due to the nature of the proposed land use and limited size of the project, project impacts related to odors would be considered *less than significant*.

Consistency with the Clean Air Plan: Direct and indirect emissions associated with the project are accounted for in the CAP emissions growth assumptions. Appropriate air quality mitigation measures, including construction dust suppression, would be applied to the project, consistent with CAP and City policies. The project could be found consistent with the Clean Air Plan.

## Air Quality – Mitigation

**AQ-1 Construction Dust Control – Minimize Disturbed Area/Speed.** Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.

**AQ-2 Construction Dust Control - Watering.** During site grading and transportation of fill materials, regular water sprinkling shall occur using reclaimed water whenever the Public Works Director determines that it is reasonably available. During clearing, grading, earth moving or excavation, sufficient quantities of water, through use of either water trucks or sprinkler systems, shall be applied to prevent dust from leaving the site. Each day, after construction activities cease, the entire area of disturbed soil shall be sufficiently moistened to create a crust.

Throughout construction, water trucks or sprinkler systems shall also be used to keep all areas of vehicle movement damp enough to prevent dust raised from leaving the site. At a minimum, this will include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency will be required whenever the wind speed exceeds 15 mph.

**AQ-3 Construction Dust Control – Tarping.** Trucks transporting fill material to and from the site shall be covered from the point of origin.

**AQ-4 Construction Dust Control – Gravel Pads.** Gravel pads shall be installed at all access points to prevent tracking of mud on to public roads.

**AQ-5 Construction Dust Control – Stockpiling.** If importation, exportation and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation.

**AQ-6 Construction Dust Control – Disturbed Area Treatment.** After clearing, grading, earth moving or excavation is completed, the entire area of disturbed soil shall be treated to prevent wind pickup of soil. This may be accomplished by:

- A. Seeding and watering until grass cover is grown;
- B. Spreading soil binders;
- C. Sufficiently wetting the area down to form a crust on the surface with repeated soakings as necessary to maintain the crust and prevent dust pickup by the wind;
- D. Other methods approved in advance by the Air Pollution Control District.

**AQ-7 Construction Dust Control – Paving.** All roadways, driveways, sidewalks, etc., should be paved as soon as possible. Additionally, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

**AQ-8 Construction Dust Control – PEC.** The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when construction work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading for the structure.

**AQ-9 Construction Ozone Precursors.** The following shall be adhered to during project grading and construction to reduce NOx and PM2.5 emissions from construction equipment:

- A. Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated “clean” diesel engines) shall be utilized wherever feasible.
- B. The engine size of construction equipment shall be the minimum practical size.
- C. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- D. Construction equipment shall be maintained in tune per the manufacturer’s specifications.
- E. Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or pre-combustion chamber engines.
- F. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- G. All diesel-powered equipment shall use ultra low sulfur diesel fuel.
- H. Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed, if available.
- I. Diesel powered equipment should be replaced by electric equipment whenever feasible.
- J. Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes; auxiliary power units should be used whenever possible.
- K. Construction worker trips shall be minimized by requiring carpooling and by providing for lunch onsite.

### **Air Quality - Residual Impacts**

Implementation of Mitigation Measures AQ-1 through AQ-8 would reduce the potentially significant impacts of dust generation during construction to *less than significant* levels. Insignificant construction-related NOx and ROC emissions would be further reduced by implementation of Mitigation Measure AQ-9.

3. BIOLOGICAL RESOURCES		NO	YES
Could the project result in impacts to:			<u>Level of Significance</u>
a)	Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	X	
b)	Locally designated historic, Landmark or specimen trees?	X	
c)	Natural communities (e.g. oak woodland, coastal habitat, etc.).		Less than Significant
d)	Wetland habitat (e.g. marsh, riparian, and vernal pool)?		Less than Significant
e)	Wildlife dispersal or migration corridors?	X	

**Biological Resources - Discussion**

**Issues:** Biological resources issues involve the potential for a project to substantially affect biologically-important natural vegetation and wildlife, particularly species that are protected as rare, threatened, or endangered by federal or state wildlife agencies and their habitat, native specimen trees, and designated landmark or historic trees.

**Impact Evaluation Guidelines:** Existing native wildlife and vegetation on a project site are qualitatively assessed to identify whether they constitute important biological resources, based on the types, amounts, and quality of the resources within the context of the larger ecological community. If important biological resources exist, project effects to the resources are qualitatively evaluated to determine whether the project would substantially affect these important biological resources. Significant biological resource impacts may potentially result from substantial disturbance to important wildlife and vegetation in the following ways:

- Elimination or substantial reduction or disruption of important natural vegetative communities and wildlife habitat or migration corridors, such as oak woodland, coastal strand, riparian, and wetlands.
- Substantial effect on protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.
- Substantial loss or damage to important native specimen trees or designated landmark or historic trees.

**Biological Resources – Existing Conditions and Project Impacts**

***3.a,d,e) Native Wildlife and Habitat***

While the project site is recognized by the City of Santa Barbara Master Environmental Assessment to be in an urban setting, it abuts the Andree Clark Bird Refuge. SAIC prepared a Biological Assessment for the proposed Santa Barbara Zoological Gardens Master Plan (***Exhibit H***). It analyzed the effects of the project components on the biological resources of the Andree Clark Bird Refuge and specifically analyzed the effect of the proposed loss of trees near the Bird Refuge.

The proposed Master Plan project component sites are used in varying degrees by wildlife species, although no federally or state listed rare, threatened, or endangered species or their habitats exist at the project sites. Few of the component sites support any of the mammalian, amphibian, or reptile species that are commonly observed at the Bird Refuge, therefore none of these species would be affected by any of the proposed actions. However, several common avian species found in the refuge are expected or known to use many of the trees within the Zoo as roost sites, foraging habitat, and potential nest sites. Except for the double-crested cormorant and black-crowned night heron, most of the aquatic bird species regularly observed at the refuge would not be affected by any of the proposed construction activities including tree removal or replacement. Construction noises and tree removal could have adverse, but *less than significant* effects on the double-crested cormorant and black-crowned night heron bird breeding if the project closest to the refuge (Condor and Fox Exhibits) or projects possessing suitable breeding habitat (Facilities Yard) were conducted during the bird breeding season

(March 15 through August 1). A recommended mitigation measure is included to reduce possible disturbances on double-crested cormorant and black-crowned night heron bird breeding.

**3.b,c) Designated or Specimen Trees**

Mature native and non-native specimen trees provide numerous benefits to the environment, including visual beauty, shade, soil stability, air quality, and localized habitat for urban-adapted wildlife species, such as birds. City policies address the protection and replacement of mature trees.

As a part of the Biological Assessment (*Exhibit H*), a tree inventory was performed. Most of the trees at the Zoo are non-native ornamental species that were selected for landscape and aesthetic value. With regard to ecological value, non-native trees are typically not considered valuable, with the exception of trees that provide nesting, roosting or other functions for wildlife.

Native trees including a small native redwood and four toyon (a native shrub or small tree), that were planted as part of landscaping would be removed. In addition, there are two native trees, a coast live oak and coast redwood that would be affected by project construction, but would not be removed. For those trees that are in poor or declining condition, removal would be beneficial, as it would eliminate a potential safety threat as well as a source of pests or disease.

The removal of the trees is considered a *less than significant* impact as the individual project components are designed to improve the Zoo and replacement landscaping is incorporated into the project design.

No locally designated historic or landmark trees exist on the project site.

**Biological Resources – Recommended Mitigation**

**B-1 Aviary Habitat Protection.** The applicant shall implement all recommendations specified in the Biological Resource Assessment as listed below:

- A. Schedule tree removal at the Channel Island Fox and Condor Exhibits to occur between August 15 and March 1 to avoid the bird breeding season. If tree removal or pruning is to occur at any of the other project sites during the breeding season (April through August), survey the site immediately prior to any disturbances to ensure that no nests have been, or are in the process of being built in any of the trees proposed for removal.
- B. Activities involving tree removal should not begin each day until all of the birds have left the roost sites.
- C. Replace the removed trees with species that provide the same functions as the eucalyptus tree. Replacement trees should eventually be of the same stature (e.g., over 30 feet tall), and contain an open canopy with exposed branches and be planted in the same vicinity as the removed trees and should not be located in any areas where a roost or rookery site could be later construed as a nuisance.
- D. Conduct tree removal in a timely fashion to reduce noise impacts to birds nesting in the general area.
- E. Conduct several nights of surveys at the cormorant roosting site within two weeks prior to tree removal activities to record the use of the trees at the time of the removal and to ensure that no nests have been built in the trees proposed for removal. Conduct periodic surveys of the rookery/roosting site during the tree removal activities to ensure that cormorants are continuing to use the site in the same fashion as they were prior to initiation of tree removal activity, and that there are no impacts on breeding activities such as nest abandonment. If noticeable changes occur, consult with biologist conducting surveys to modify activities to reduce effects. Surveys should also be conducted several times later in the breeding season to ensure that cormorants continues to nest at the site in numbers similar to pre-disturbance levels.

**B-2 Tree Protection and Replacement.** The applicant shall implement all recommendations specified in the Biological Resource Assessment and Tree Protection Plan as listed below:

- A. Construction areas will be designated. All ground disturbances including grading for buildings, access ways, easements, subsurface grading, etc., shall be prohibited outside construction envelopes.

- B. Equipment storage and staging areas shall be designated on approved grading and building plans. No construction equipment shall be parked, stored or operated within six feet of any tree dripline.
- C. No grading or development shall occur within the driplines of existing trees with the exception of those trees designated for removal. Any trenching required within the dripline or sensitive root zone of any specimen tree shall be done by hand. Any construction activity required within three feet of a tree's dripline shall be done with hand tools.
- D. All equipment, personnel and construction activities will be restricted to areas outside dripline of existing trees with the exception of those trees designated for removal.
- E. All trees within 25 feet of proposed ground disturbances shall be temporarily fenced with chain-link or other material satisfactory to the Planning Division throughout all grading and construction activities. Designate the location and extent of dripline for all trees to be protected during construction with fencing or other suitable material. The fencing shall be installed six feet outside the dripline of each tree, and shall be staked every six feet.
- F. No fill soil, rocks, or construction materials shall be stored or placed within six feet of the dripline of all trees.
- G. No artificial surface, pervious or impervious, shall be placed within six feet of the dripline of any trees.
- H. Any roots encountered that are one inch in diameter or greater shall be cleanly cut. This shall be done under the direction of a Planning Division approved arborist/biologist.
- I. Only designated trees shall be removed.
- J. Any trees which are removed and/or damaged (more than 25% of the root zone disturbed) shall be replaced.
- K. Where necessary to remove a tree and feasible to replant, trees shall be boxed and replanted. A drip irrigation system with a timer shall be installed. Trees shall be planted immediately after removal and shall be irrigated and maintained until established (five years). The plantings shall be protected from predation by wild and domestic animals, and from human interference by the use of staked, chain link fencing (or other suitable material) and gopher fencing during the maintenance period.
- L. Maintenance of trees shall be accomplished through water-conserving irrigation techniques.
- M. Any unanticipated damage that occurs to trees or sensitive habitats resulting from construction activities shall be mitigated in a manner approved by the Planning Division. This mitigation may include but is not limited to posting of a performance security, tree replacement on a 10:1 ratio and hiring of an outside consultant biologist to assess the damage and recommend mitigation.

### **Biological Resources – Residual Impacts**

Implementation of the identified mitigation measure would further reduce *less than significant* impacts to biological resources and trees.

4. CULTURAL RESOURCES Could the project:	NO	YES <u>Level of Significance</u>
a) Disturb archaeological resources?		Potentially Significant, Mitigable
b) Affect a historic structure or site designated or eligible for designation as a National, State or City landmark?		Less than Significant
c) Have the potential to cause a physical change which would affect ethnic cultural values or restrict religious uses in the project area?		Potentially Significant, Mitigable

**Cultural Resources – Discussion**

**Issues:** Archaeological resources are subsurface deposits dating from Prehistoric or Historical time periods. Native American culture appeared along the channel coast over 10,000 years ago, and numerous villages of the Barbareño Chumash flourished in coastal plains now encompassed by the City. Spanish explorers and eventual settlements in Santa Barbara occurred in the 1500’s through 1700’s. In the mid-1800’s, the City began its transition from Mexican village to American city, and in the late 1800’s through early 1900’s experienced intensive urbanization. Historic resources are above-ground structures and sites from historical time periods with historic, architectural, or other cultural importance. The City’s built environment has a rich cultural heritage with a variety of architectural styles, including the Spanish Colonial Revival style emphasized in the rebuilding of Santa Barbara’s downtown following a destructive 1925 earthquake.

**Impact Evaluation Guidelines:** Archaeological and historical impacts are evaluated qualitatively by archeologists and historians. First, existing conditions on a site are assessed to identify whether important or unique archaeological or historical resources exist, based on criteria specified in the State CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.

If important archaeological or historic resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

**Cultural Resources – Existing Conditions and Project Impacts**

***4.a,c) Archaeological and Ethnic/Religious Resources***

The project site is located within a prehistoric watercourse area and thus considered to have the potential for archaeological resources to be present. In addition, the Zoo property was utilized/occupied by Chumash and may have been used for ethnic/religious purposes. Numerous reports have been done over the history of the Zoo’s existence. In 2003, a Comprehensive Archaeological Resources Assessment report was prepared by SAIC, and reviewed and accepted by the HLC. The 2003 assessment report provides a comprehensive overview of previous archaeological research and integrates the results of previous investigations to define three zones of archaeological sensitivity (Low, Medium, High) based on the potential for encountering intact, potentially significant deposits associated with the recorded prehistoric archaeological site and the Vega Mar mansion built in 1897. The archaeological sensitivity zones are designed to formalize the way in which proposed future development and associated impacts on archaeological resources are reviewed. Guidelines are also established for each sensitivity zone and include mitigation measures to be employed depending on the nature of the proposed construction project. The guidelines are designed to streamline the review of future construction projects within the Zoo, and ensure a consistent approach to addressing potential impacts on archaeological resources on the property.

Consistent with the sensitivity zones and guidelines of the 2003 Comprehensive Archaeological Resources Assessment, each project component of the proposed Zoo Master Plan is addressed below:

- The Discovery Pavilion and Lemur/Langur renovations are located in a low sensitivity area, therefore, no monitoring is required. Those areas have been extensively disturbed and previous reports do not indicate a high likelihood of finding archaeological resources.
- The Channel Island Fox and Condor Exhibits are located in a medium sensitivity area, therefore, monitoring is required for all ground disturbance. While most prior excavations have mainly uncovered low density deposits from highly disturbed contexts, small patches of intact soil with potentially significant archaeological deposits have been uncovered and additional patches may exist within this zone.
- The Service Facilities Yard project is primarily located in a low sensitivity area; however, additional measures have been added given its proximity to an adjacent high sensitive area. These are precautionary measures enlisted to minimize any impacts to potentially significant archaeological resources.
- The Wave is located in a highly sensitive area. Tests of the site indicate that the area has been substantially disturbed during the construction and demolition of the Child Estate mansion and the construction of the existing facility, landscaping, and utility lines. However, prehistoric material was found in association with historic and modern construction debris that is unique compared to other excavation projects. In addition to minimizing impacts to the site and including monitoring during all soil disturbance activities, data recovery of the excavations already done is recommended.

Impacts to archaeological resources resulting from implementation of the proposed Zoo Master Plan are considered *potentially significant, mitigable*. Mitigation measures are included that comply with the approved guidelines for archaeological resource protection at the Zoo, as described above.

#### **4.b) Historic Resources**

The use of the Zoo property dates to the 1840s, when Captain George Nidever, a Yankee otter hunter and sharpshooter, built an adobe on the main knoll. In 1897, John Beale, a New England tea and coffee merchant, built a larger residential mansion on the main knoll, and called it the Vega Mar mansion.

After Mr. Beale's death, hobos were allowed to move on to the property. The hobos built shacks overlooking Cabrillo Boulevard but were later moved north of Canada Street, facing the railroad tracks. The Hobo Village became known as "Jungleville," "Childville," and "Shacktown." The village was razed in 1958.

In 1921 Mrs. Beale married John Howard Child and the mansion and surrounding land became known as the Child's Estate. The mansion was destroyed by fire in 1959. Some of the pathways associated with the historic mansion and gardens still exist at the Zoo. Mrs. Child willed the estate to the Santa Barbara Foundation, who subsequently donated the property to the City of Santa Barbara in 1953. The Zoo opened for the general public in 1963.

The construction of the Discovery Pavilion includes demolition of two single-story Zoo keeper offices, and two animal holding cages. The larger of the two adjoining Zoo keeper offices was built in 1955 as a utility (restroom and shower) building for the homeless village. A historic structures report was prepared to analyze the historical significance of the structure (*Exhibit I*).

In 1955 the City approved and oversaw the construction of the utility building, thus constituting one of the first public projects undertaken on behalf of the homeless in Santa Barbara. The project was instigated by concerned citizens within the community, who donated time, expertise and money to its cause. This represents an early philanthropic attitude on the part of individual Santa Barbarans toward the homeless. Despite the symbolism of the structure, the report found that the structure failed to meet the criteria for significance of a historical resource according to the MEA (Master Environmental Assessment); therefore, no impacts would occur as a result of the proposed project.

However, in light of the Hobo Village's prominence in the collective memories of Santa Barbarans, and the ongoing homelessness controversy, a memorial commemorating the village is recommended. This should be placed as close to the location of the former Hobo Village as possible, yet also in a prominent area accessible to the public.

**Cultural Resources – Mitigation**

**CR-1 Discovery Procedures and Mitigation.** Standard discovery measures shall be implemented on all projects per the City Master Environmental Assessment throughout grading and construction:

Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts.

If during any grading or construction on the site such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and a City-approved archaeologist shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, including but not limited to redirection of grading and/or excavation activities. If the findings are potentially significant, further analysis and/or other mitigation shall be prepared and accepted by the Environmental Analyst and the Historic Landmarks Commission, and implemented by the project Work in the area may only proceed after the Environmental Analyst grants authorization.

If prehistoric or other Native American remains are encountered, a Native American representative shall be consulted, and the archaeologist and Native American representative shall monitor all further subsurface disturbances in the area of the find.

If the discovery consists of potentially human remains, the Santa Barbara County Coroner and the California Native American Heritage Commission must also be contacted.

A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to the issuance of final City permits.

**CR-2 Channel Island Fox.** The Channel Island Fox exhibit which is located in the Medium Sensitivity Zone is subject to the following:

A City-qualified archaeologist and City-qualified Chumash observer shall be retained to monitor all ground disturbing activities during construction. If intact archaeological materials are identified, construction shall be temporarily suspended until the extent of the find is determined and an appropriate treatment plan is proposed and approved by the City Environmental Analyst, following City MEA Guidelines for Archaeological and Historic Structures and Sites.

**CR-3 California Condor.** The California Condor exhibit which is located in the Medium Sensitivity Zone is subject to the following:

- A. A City-qualified archaeologist shall be consulted to determine if the proposed project has the potential for impacting potentially significant archaeological deposits. This determination shall take into consideration the aerial extent and proposed depth of ground disturbance of the proposed project, any obvious soil disturbance within the project footprint (i.e., signs of past grading, presence of existing structures or utilities, relation to the footprint of the historic mansion), presence/absence of archaeological material on any exposed ground surface, and the results of any nearby archaeological excavations.
- B. If it is highly unlikely that the proposed project would encounter a potentially significant archaeological deposit, then the following mitigation measure shall apply due to the possibility of encountering individual diagnostic artifacts in the disturbed deposits and due to the heritage value of the archaeological material to the Native American community and the potential presence of isolated human remains.

A City-qualified archaeologist and City-qualified Chumash observer shall be retained to monitor all ground disturbing activities during construction. If intact archaeological materials are identified, construction shall be temporarily suspended until the extent of the find is determined and an appropriate treatment plan is proposed and approved by the City Environmental Analyst, following City MEA Guidelines for Archaeological and Historic Structures and Sites.

- C. If the proposed project has the potential for encountering intact soil deposits that could contain significant archaeological remains, then the following mitigation measure shall apply:

A City-qualified archaeologist shall be retained to conduct Extended Phase 1 excavations to determine the presence and integrity of potential prehistoric deposits. If an archaeological resource is encountered, it shall be documented and its potential significance evaluated by a Phase 2 Significance Assessment investigation prior to any construction activities. A City-qualified Chumash observer shall monitor all archaeological excavations. Resources considered significant shall be avoided or subject to a Phase 3 Data Recovery program and construction monitoring, consistent with City MEA Guidelines for Archaeological and Historic Structures and Sites.

**CR-4 Service Yard Facilities.** The Service Yard Facilities which are partially located in the Low and Medium Sensitivity Zones are subject to the following:

- A. If at a future date it is determined that any project related ground disturbance within the service yard would exceed five feet deep or there are ground disturbing activities associated with public bathroom construction, pathway improvements and sewer line construction, such activities have a slight potential of impacting intact, significant archaeological resources that could exist underneath the imported soil deposits. The following recommendation would then apply:

A City-qualified archaeologist and City-qualified Chumash observer shall be retained to monitor all ground disturbing activities in the service yard that exceed five feet deep. If intact archaeological materials are identified, construction shall be temporarily suspended until the extent of the find is determined and an appropriate treatment plan is proposed and approved by the City Environmental Analyst following City MEA Guidelines for Archaeological and Historic Structures and Sites.

**CR-5 The Wave.** The Wave project which is located in the High Sensitivity Zone is subject to the following:

- A. A City-qualified archaeologist shall conduct an Artifact Analysis of all archaeological material that was recovered during the Extended Phase 1 excavations for the proposed Wave project. This shall include analyses of bone and shell to determine the range of species and habitats represented in the collection. The analyses shall be presented within the context of a research design that would relate the data to broader regional research questions about prehistoric occupants within South Coastal Santa Barbara County.
- B. Project plans shall be designed to limit all construction-related ground disturbance to the maximum extent feasible.
- C. A City-qualified archaeologist and City-qualified Chumash observer shall be retained to monitor all ground disturbing activities. If intact archaeological materials are identified, construction shall be temporarily suspended until the extent of the find is determined and an appropriate treatment plan is proposed and approved by the City Environmental Analyst following City MEA Guidelines for Archaeological and Historic Structures and Sites.
- D. If any portion of the proposed project, such as installation of utility lines, involves ground disturbance located beyond the existing barbecue facility footprint, then the following measure is required:

A City-qualified archaeologist shall be retained to conduct Extended Phase 1 test excavations to determine the presence and integrity of potential prehistoric deposits for any project component that involves ground disturbance located outside the existing barbecue facility. If an archaeological resource is encountered during testing, it shall be documented and its potential significance evaluated prior to any construction activities. Resources considered significant shall be avoided or subject to a Phase 3 Data Recovery program, consistent with Santa Barbara City MEA guidelines. A City-qualified Chumash observer shall monitor all archaeological excavations.

**Cultural Resources – Recommended Mitigation**

**CR-6 Historic Structure Mitigation.** Construct a memorial commemorating the Hobo Village. This should be placed as close to the location of the former village as possible, yet also in a prominent area accessible to the public. The memorial shall be subject to review and approval by the Historic Landmarks Commission as to location and design and shall be included on the building plans submitted for building permit review and approval for the Discovery Pavilion.

**Cultural Resources - Residual Impacts**

Potentially significant impacts associated with archaeological resources would be reduced to a *less than significant* level with implementation of identified mitigation measures CR-1 to CR-5.

Impacts associated with historic resources are considered *less than significant*. Recommended mitigation measures would further reduce impacts to historic resources.

5. GEOPHYSICAL CONDITIONS Could the project result in or expose people to:	NO	YES Level of Significance
a) Seismicity: fault rupture?	X	
b) Seismicity: ground shaking or liquefaction?		Less than Significant
c) Seismicity: seiche or tsunami?		Less than Significant
d) Landslides or mudslides?	X	
e) Subsidence of the land?		Less than Significant
f) Expansive soils?		Less than Significant
g) Excessive grading or permanent changes in the topography?	X	

**Geophysical Conditions - Discussion**

**Issues:** Geophysical impacts involve geologic and soil conditions and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, ground-shaking, liquefaction (a condition in which saturated soil loses shear strength during earthquake shaking); or seismic sea waves; unstable soil or slope conditions, such as landslides, subsidence, expansive or compressible/collapsible soils; or erosion; and extensive grading or topographic changes.

**Impact Evaluation Guidelines:** Potentially significant geophysical impacts may result from:

- Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismically-induced waves.
- Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.
- Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

### **Geophysical Conditions – Existing Conditions and Project Impacts**

Three separate geotechnical reports were submitted for the individual sites that comprise this project. (*See Exhibits J through L*). The reports evaluated soils and geologic conditions and hazards in the vicinity of the sites that could adversely affect the construction. The reports include a description of the geologic conditions and recommendations for the design and construction of the projects. The analysis is summarized below.

#### **5.a-b) Seismic Hazards**

The reports prepared found that no mapped faults traverse through the project area. The closest mapped fault to the site is the Red Mountain fault approximately 2 kilometers from the site. Therefore no impacts associated with fault rupture are anticipated.

A contour map of the estimated magnitude of earthquake that causes the dominant hazard for peak ground acceleration of 10% probability of exceedance in 50 years with alluvial site conditions was also prepared as part of the statewide seismic hazard assessment survey. The Zoo plots within a zone of magnitude 6.0 – 7.0. This is a typical seismic groundshaking condition for California, where structural damage could occur. The Uniform Building Codes provide construction standards to address earthquake groundshaking that address structural integrity. Due to the variation of geologic consistency and structure of the underlying materials at the numerous individual sites, varying levels of liquefaction may occur at some of the project sites. Areas with older alluvial deposits were found to be less affected by liquefaction than younger deposits. Additionally, uncertified fill was found in some testing areas. Recommendations on grading and structural design are included in the study for the specific sites to reduce any liquefaction hazards to less than significant levels.

#### **5.c) Seiche or Tsunami**

The project site is located within the tsunami run-up zone as identified in the City's Master Environmental Assessment. The proposed project consists of renovations and new infill development which would not substantially change the level of public exposure nor result in increased tsunami risks beyond existing levels. Impacts are considered less than significant.

A seiche hazard is present in all lakes and uncovered reservoirs located in the City. The Zoo property abuts the Andree Clark Bird Refuge. Due to the relatively small size of the Andree Clark Bird Refuge and the limited amount of development surrounding it, it does not present a serious seiche risk to the project site. The closest proposals near the Bird Refuge consist of exhibit improvements and would not substantially change the level of public exposure nor result in increased seiche risks beyond existing levels. Impacts are considered less than significant.

#### **5.d-f) Geologic or Soil Instability**

**Landslides:** According to the City's Master Environmental Assessment, the project site topography has varying gentle slopes and would not be subject to landslide hazards. Therefore, impacts of landslides would be less than significant.

**Subsidence:** The project site has not previously been used for groundwater or resource extraction or mining activities, and there is no evidence that subsidence has occurred on the project site. Minimal subsidence could occur but would be widespread and not affect proposed development structural integrity or public safety. Therefore, the potential for subsidence on the project site is considered low, and impacts are considered less than significant.

**Expansive Soils:** Minimal expansive soils were found in the testing site. Overexcavation will be required in order to minimize differential settlement and differential expansion. As shown on the City's MEA, the site is not subject to soil creep. Impacts are considered less than significant.

#### **5.g) Topography; Grading**

**Grading:** The property has variable topography characterized by gentle slopes. Site grading and preparation would potentially include some excavation and replacement of artificial fill. The proposals do not include significant changes in the topography. No impacts associated with significant alteration of the natural landform or substantial change of the existing topography of the site are anticipated. Impacts are considered less than significant.

**Geophysical Conditions – Recommended Mitigation**

**G-1 Geotechnical Recommendations.** Site preparation and project construction related to soil conditions and seismic hazards shall be in accordance with the recommendations contained in the site-specific geotechnical engineering reports and as required by the Building and Safety Division. Compliance shall be demonstrated on plans submitted for grading and building permits.

**Geophysical Conditions – Residual Impacts**

Less than significant impact associated with geophysical conditions would be further reduced with implementation of identified mitigation measure G-1 outlining site preparation and structural design techniques.

6. HAZARDS Could the project involve:	NO	YES <u>Level of Significance</u>
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?		Less than Significant
b) The creation of any health hazard or potential health hazards?		Less than Significant
c) Exposure of people to existing sources of potential health hazards?		Less than Significant
d) Increased fire hazard in areas with flammable brush, grass, or trees?		Less than Significant

**Hazards - Discussion**

Issues: Hazardous materials issues involve the potential for public health or safety impacts from exposure of persons or the environment to hazardous materials or risk of accidents involving combustible or toxic substances.

**Impact Evaluation Guidelines:** Significant impacts may result from the following:

- Siting of incompatible projects in close proximity to existing sources of safety risk, such as pipelines, industrial processes, railroads, airports, etc.
- Exposure of project occupants or construction workers to unremediated soil or groundwater contamination.
- Exposure of persons or the environment to hazardous substances due to improper use, storage, or disposal of hazardous materials.
- Siting of development in a high fire hazard areas or beyond adequate emergency response time, with inadequate access or water pressure, or otherwise in a manner that creates a fire hazard

**Hazards – Existing Conditions and Project Impacts**

**6.a-c) Public Health and Safety**

The project site is not located in close proximity to pipelines, industrial processes, or airports. However, the Zoo is located in close proximity to the Union Pacific Railroad tracks. The UPRR maintains adequate right-of-way clearance to minimize possible conflicts with adjacent land uses and is required to comply with all safety requirements and regulations. The Zoo maintains an emergency evacuation plan which provides direction for emergency situations. The likelihood that the public would be exposed to a safety risk from the UPRR is minimal and therefore health and safety impacts are anticipated to be *less than significant*.

The project site has no known contamination and is not listed on the County Fire Department Hazardous Materials parcel listings. Compliance with State and local requirements for management and disposal of hazardous materials would ensure hazardous wastes impacts of the proposed project are *less than significant*.

**6.d) Fire Hazard**

The project site is not located in a City designated high fire hazard area. The existing site conditions include extensive vegetation as part of exhibits and its surrounding neighborhood. Some existing vegetation would be replaced with building and limited ornamental landscaping. The project would be subject to Fire Department and City Ordinance requirements for adequate access, structural design and materials and onsite water for fire protection. Adherence to the standard requirements of the Uniform Fire Code with respect to building design would ensure that fire hazard impacts for the proposed project would be *less than significant*.

7. NOISE Could the project result in:	NO	YES <u>Level of Significance</u>
a) Increases in existing noise levels?	X	
b) Exposure of people to severe noise levels?		Less than Significant

**Noise - Discussion**

**Issues:** Noise issues are associated with siting of a new noise-sensitive land use in an area subject to high ambient background noise levels, siting of a noise-generating land use next to existing noise-sensitive land uses, and/or short-term construction-related noise.

The primary source of ambient noise in the City is vehicle traffic noise. The City Master Environmental Assessment (MEA) Noise Contour Map identifies average ambient noise levels within the City.

Ambient noise levels are determined as averaged 24-hour weighted levels, using the Day-Night Noise Level ( $L_{dn}$ ) or Community Noise Equivalence Level (CNEL) measurement scales. The  $L_{dn}$  averages the varying sound levels occurring over the 24-hour day and gives a 10 decibel penalty to noises occurring between the hours of 10:00 p.m. and 7:00 a.m. to take into account the greater annoyance of intrusive noise levels during nighttime hours. Since  $L_{dn}$  is a 24-hour average noise level, an area could have sporadic loud noise levels above 60 dB(A) which average out over the 24-hour period. CNEL is similar to  $L_{dn}$  but includes a separate 5 dB(A) penalty for noise occurring between the hours of 7:00 p.m. and 10:00 p.m. CNEL and  $L_{dn}$  values usually agree with one another within 1 dB(A). The Equivalent Noise Level ( $L_{eq}$ ) is a single noise level, which, if held constant during the measurement time period, would represent the same total energy as a fluctuating noise.  $L_{eq}$  values are commonly expressed for periods of one hour, but longer or shorter time periods may be specified. In general, a change in noise level of less than three decibels is not audible. A doubling of the distance from a noise source will generally equate to a change in decibel level of six decibels.

Guidance for appropriate long-term background noise levels for various land uses are established in the City General Plan Noise Element Land Use Compatibility Guidelines. Building codes also establish maximum average ambient noise levels for the interiors of structures.

High construction noise levels occur with the use of heavy equipment such as scrapers, rollers, graders, trenchers and large trucks for demolition, grading, and construction. Equipment noise levels can vary substantially through a construction period, and depend on the type of equipment, number of pieces operating, and equipment maintenance. Construction equipment generates noise levels of more than 80 or 90 dB(A) at a distance of 50 feet, and the shorter impulsive noises from other construction equipment (such as pile drivers and drills) can be even higher, up to and exceeding 100 dB(A). Noise during construction is generally intermittent and sporadic, and after completion of the initial demolition, grading and site preparation activities, tends to be quieter.

The Noise Ordinance (Chapter 9.16 of the Santa Barbara Municipal Code) governs short-term or periodic noise, such as construction noise, operation of motorized equipment or amplified sound, or other sources of nuisance noise. The

ordinance establishes limitations on hours of construction and motorized equipment operations, and provides criteria for defining nuisance noise in general.

**Impact Evaluation Guidelines:** A significant noise impact may result from:

- Siting of a project such that persons would be subject to long-term ambient noise levels in excess of Noise Element land use compatibility guidelines.
- Substantial noise from grading and construction activity in close proximity to noise-sensitive receptors for an extensive duration.

### Noise – Existing Conditions and Project Impacts

#### *7.a-b) Increased Noise Level; Exposure to High Noise Levels*

##### Long-Term Operational Noise:

The Zoo is currently subject to noise levels of 60 to greater than 70 Ldn dBA, as shown on the City's Master Environmental Assessment noise contour maps. The primary noise source affecting the site is vehicular traffic on Highway 101 and the railroad. Portions of the project site closest to the railroad tracks and US 101 have the highest ambient noise levels (greater than 70 dBA Ldn), while areas towards the interior of the Zoo have noise levels of 60-65 dBA Ldn.

Uses proposed closest to the railroad tracks and US 101 include the Discovery Pavilion. Most activity would take place within the building where according to the Noise Element guidelines, interior noise levels are normally acceptable if within the 45-50 dBA Ldn range for classroom and office use. Exterior to interior noise reduction to comply with the normally acceptable noise guideline is achievable with building design. Long-term operational noise exposure associated with the Discovery Pavilion is considered *less than significant*.

Uses proposed in other areas of the Zoo include exhibits and the Wave where visitors would be exposed to noise levels in the 60-65 dBA Ldn and consolidation of service facilities where employees would be exposed to noise levels in the 60-65 dBA Ldn. These noise levels are consistent with the Noise Element guidelines for neighborhood parks where noise levels are normally acceptable up to 65 dBA Ldn and for commercial uses where noise levels are normally acceptable up to 80 dBA Ldn. Therefore, long-term operational noise impacts associated with exhibits, the Wave, and the service facility yard considered *less than significant*.

“Noise generating” functions at the Zoo would not increase substantially as no increase in outdoor events is anticipated. The Service Facilities Yard component is the closest project component to existing residential uses. No substantial long term noise generation is anticipated to occur as a result of the Service Facilities Yard component of the proposed project. Therefore, no long-term operational increases in noise level impacts are anticipated.

##### Short-Term Construction Noise:

Noise during construction is generally intermittent and sporadic, and after completion of initial grading and site clearing activities, tends to be quieter. Noise generated during project-grading activities would result in a short-term adverse construction impact to sensitive receptors in the area. Construction is anticipated to result in use of heavy equipment. Construction noise is limited by City ordinance to the hours between 7:00 a.m. and 8:00 p.m. daily for noise generating activities that would increase noise levels at the nearest residential property line by 5 decibels. The project is limited in scope and the potential impact due to construction noise would be *less than significant*. However, the level of potential adverse effect would be further reduced through recommended measures below, including construction scheduling, further limiting grading activities to daytime hours on weekdays, and use of equipment mufflers.

### Noise – Recommended Mitigation

**N-1 Construction Notice.** At least 30 days prior to commencement of construction, the contractor shall provide written notice to all property owners and building occupants within 450 feet of the project area. The notice shall contain a description of the proposed project, a construction schedule including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) who can answer questions, and

provide additional information or address problems that may arise during construction. A 24-hour construction hot line shall be provided. Informational signs with the PEC's name and telephone number shall also be posted at the site.

**N-2 Construction Hours.** Noise-generating construction activities (which may include preparation for construction work) shall be permitted weekdays between the hours of 8:00 a.m. and 5:00 p.m., excluding holidays observed by the City as legal holidays: New Year's Day (January 1<sup>st</sup>); Martin Luther King Jr.'s Birthday (3<sup>rd</sup> Monday in January); President's Day (3<sup>rd</sup> Monday in February); Memorial Day (Last Monday in May); Independence Day (July 4<sup>th</sup>); Labor Day (1<sup>st</sup> Monday in September); Thanksgiving Day (4<sup>th</sup> Thursday in November); Day Following Thanksgiving Day (Friday following Thanksgiving); Christmas Day (December 25<sup>th</sup>). \*When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday respectively shall be observed as a legal holiday.

Occasional night work may be approved for the hours between 5 p.m. and 8 a.m. weekdays by the Chief of Building and Zoning per Section 9.13.015 of the Municipal Code). In the event of such night work approval, the applicant shall provide written notice to all property owners and occupants within 450 feet of the project property boundary and the City Planning and Building Divisions at least 48 hours prior to commencement of night work. Night work shall not be permitted on weekends and holidays.

**N-3 Construction Equipment Sound Control.** All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.

**N-4 Sound Barriers.** As part of the building plan submittal, prepare and submit a sound control plan including devices and techniques such as noise shields and blankets in order to reduce noise impacts to surrounding sensitive noise receptors.

**Noise – Residual Impact**

Implementation of the identified mitigation measures would further reduce adverse but not significant construction noise impacts to a *less than significant* level.

8. POPULATION AND HOUSING Could the project:	NO	YES <u>Level of Significance</u>
a) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	X	
b) Displace existing housing, especially affordable housing?	X	

**Population and Housing - Discussion**

**Impact Evaluation Guidelines:** Issues of potentially significant population and housing impacts may involve:

- Growth inducement, such as provision of substantial population or employment growth or creation of substantial housing demand; development in an undeveloped area, or extension/ expansion of major infrastructure that could support additional future growth.
- Loss of a substantial number of housing units, especially loss of more affordable housing.

**Population and Housing – Existing Conditions and Project Impacts**

**8.a) Growth-Inducing Impacts**

The project site is located in an existing developed urban area already served by urban infrastructure. No extensions of infrastructure or urban services would be necessary to serve the project site. The components of the Zoo Master Plan are designed to enhance existing services and goals of the Santa Barbara Zoological Gardens, resulting in six new full-time

staff and seven new part-time staff. This would not be considered a significant growth inducement. Growth inducing impacts as a result of the project would be *less than significant*.

8.b) No housing will be displaced on the site. Therefore, no impacts to existing housing will occur.

9. PUBLIC SERVICES Could the project have an effect upon, or result in a need for new or altered services in any of the following areas:	NO	YES <u>Level of Significance</u>
a) Fire protection?		Less than Significant
b) Police protection?		Less than Significant
c) Schools?		Less than Significant
d) Maintenance of public facilities, including roads?		Less than Significant
e) Other governmental services?		Less than Significant
f) Electrical power or natural gas?		Less than Significant
g) Water treatment or distribution facilities?		Less than Significant
h) Sewer or septic tanks?		Less than Significant
i) Water distribution/demand?		Less than Significant
j) Solid waste disposal?		Less than Significant

**Public Services - Discussion**

**Issues:** This section evaluates project effects on fire and police protection services, schools, road maintenance and other governmental services, utilities, including electric and natural gas, water and sewer service, and solid waste disposal.

**Impact Evaluation Guidelines:** The following may be identified as significant public services and facilities impacts:

- Creation of a substantial need for increased police department, fire department, road maintenance, or government services staff or equipment.
- Generation of substantial numbers of students exceeding public school capacity where schools have been designated as overcrowded.
- Inadequate water, sewage disposal, or utility facilities.
- Substantial increase in solid waste disposal to area sanitary landfills.

**Public Services – Existing Conditions and Project Impacts**

***9a-b,d-g) Facilities and Services***

The project site is located in an urban area where all public services are available. In 2005, the City prepared a General Plan Update: 2030 Condition, Trends, and Issues Report (September 2005) that examined existing conditions associated with fire protection, police protection, library services, public facilities, governmental facilities, electrical power, and natural gas. The CTI Report specifically analyzed whether there were deficiencies existing or anticipated for each of the public services. The CTI report determined that police and fire protection services, and library services are being provided at acceptable levels to the City. In addition, the CTI Report determined that electricity, natural gas, telephone, and cable telecommunication services are being provided at acceptable service levels and utility companies did not identify any deficiencies in providing service in the future. Finally, the CTI Report determined that demand for City buildings and facilities will continue to be impacted by growth, although no appropriate/acceptable levels of service have been established.

The project would be served with connections to existing public services for gas, electricity, cable, and telephone traversing the site, as well as access to existing roads. The project is not anticipated to create a substantially different demand on fire or police protection services, library services, or City buildings and facilities than that anticipated in the CTI Report. Therefore, impacts to fire protection, police protection, library services, City buildings and facilities, electrical power, natural gas, telephone, and cable telecommunication services are anticipated to be less than significant.

**9.c) Schools**

The project site is served by the Santa Barbara Elementary and High School Districts for elementary and high school. The project would provide an increase of six full-time and seven part-time new employees.

The project may result in a minor increase in area employees. It would be expected that most of the added employees would already reside in the area. Some portion of new employees may in-migrate. The commercial portion of the proposed project may generate new elementary and secondary students to the extent that new employment created by the project results in new residents to the area. However, students resulting from the proposed projects could live and attend a school in any area of the South Coast. Some students could also live outside the boundaries of the Santa Barbara School Districts or attend private schools.

None of the school districts in the South Coast have been designated "overcrowded" as defined by California State law. School impact fees would be applied to the project in accordance with State law. Project impacts to schools would be less than significant.

**9.h,1) Water and Sewer**

The City of Santa Barbara's water supply comes from the following sources, with the actual share of each determined by availability and level of customer demand: Cachuma Reservoir and Tecolote Tunnel, Gibraltar Reservoir and Mission Tunnel, 300 Acre Feet per Year (AFY) of contractual transfer from Montecito Water district, groundwater, State Water Project entitlement, desalination, and recycled water. Conservation and efficiency improvements are projected to contribute to the supply by displacing demand that would otherwise have to be supplied by additional sources. In 1994, based on the comprehensive review of the City's water supply in the Long Term Water Supply Alternatives Analysis (LTWSAA), the City Council approved the Long Term Water Supply Program (LTWSP). The LTWSP outlines a strategy to use the above sources to meet the projected demand of 17,900 AFY (including 1,500 AFY of demand projected to be met with conservation) plus a 10 percent safety margin for a total of 19,700 AFY. Therefore, the target for the amount of water the system will actually have to supply, including the safety margin, is 18,200 AFY. The 2003 Water Supply Management Report documents an actual system demand of 13,460 AFY and a theoretical commitment of 16,170 AFY. Of the total system production, 95% was potable water and 5% was reclaimed water.

In 2005, the City prepared a General Plan Update: 2030 Condition, Trends, and Issues Report (September 2005) that examined existing conditions associated with water supply, treatment, and distribution system, and specifically analyzed and determined that there were no existing or anticipated deficiencies for the next 20-year planning period based on a growth rate of 0.7% per year.

The maximum capacity of the El Estero Treatment Plant is 11 million gallons per day, with current average daily flow 8.5 MGD. The Treatment Plant is designed to treat the wastewater from a population of 104,000.

The proposed project receives water and sewer service from the City of Santa Barbara. Under an existing lease agreement with the City of Santa Barbara, the Zoo is entitled annually to 30,000 potable water and sewer units<sup>1</sup> (or 68.13 AFY). The Zoo submits annual reports to the City to confirm water and sewer usage. A review of annual reports on file shows that the Zoo's water and sewer usage has historically remained below their allowed annual consumption by 5,000 to 10,000 potable water and sewer units. The project also is within the anticipated growth rate for the City and therefore, the City's long-term water supply, existing water treatment and distribution facilities, and sewage treatment facilities would adequately serve the proposed project. The proposed Zoo Master Plan projects are not anticipated to generate a demand beyond the Zoo's permitted entitlement.

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<sup>1</sup> Each unit equals 740 gallons.

The potential increase in demand from the proposed project would constitute a *less than significant* impact to the City water supply, treatment, and distribution facilities. Additionally increased sewage treatment associated by the project can be accommodated by the existing City sewer system and sewage treatment plant, and would represent a *less than significant* impact.

**9.j) Solid Waste Generation/Disposal**

Most of the waste generated in the City is transported on a daily basis to seven landfills located around the County. The County of Santa Barbara, which operates the landfills, has developed impact significance thresholds related to the impacts of development on remaining landfill capacity. The County thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The County assumes a 1.2% annual increase (approximately 4000 tons per year) in solid waste generation over the 15-year period.

The County's threshold for project specific impacts to the solid waste system is 196 tons per year (this figure represents 5% of the expected average annual increase in solid waste generation [4000 tons/year]). Source reduction, recycling, and composting can reduce a project's waste stream by as much as 50%. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable.

Proposed projects with a project specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the expected average annual increase in solid waste generation [4000 tons/year], which equates to 40 tons per year, is considered an adverse cumulative impact.

Long-Term (Operational). The cumulative project uses are estimated to generate 59.21 tons per year of solid waste. With application of source reduction, reuse, and recycling, landfill disposal of solid waste could be reduced to 29.61 TPY. The project specific impact is considered *less than significant* because the 196 TPY threshold is not exceeded.

Short-Term (Demolition and Construction). Project grading would not require export of non-structural fill. Construction-related waste generation would be short-term and *less than significant*. Application of recommended standard mitigation to reduce, re-use, and recycle construction waste to the extent feasible would minimize this effect.

**Public Services – Recommended Mitigation**

- PS-1 Trash Enclosure Provision.** A trash enclosure with equal area for recycling containers shall be provided on the Real Property and screened from view from surrounding properties and the street. Dumpsters and containers with a capacity of 1.5 cubic yards or more shall not be placed within five (5) feet of combustible walls, openings, or roofs, unless protected with fire sprinklers.
- PS-2 Recyclable Material Use and Collection.** Zoo operators shall provide sufficient and appropriate receptacles, such as recycling containers along public corridors, at special events, and in eatery operations. Recyclable material and green waste collection and pick-up areas shall be provided on-site for Zoo operations.
- PS-3 Construction Materials Recycling.** Recycling and/or reuse of construction materials shall be carried out to the extent feasible, and containers shall be provided on site for that purpose, in order to minimize construction-generated waste conveyed to the landfill. Indicate on the plans the location of an appropriately sized container for collection of demolition/construction materials.

**Public Services – Residual Impacts**

Project specific impacts would be *less than significant*. Implementation of the identified mitigation measures would minimize cumulative solid waste impacts.

10. RECREATION	NO	YES
Could the project:		<u>Level of Significance</u>
a) Increase the demand for neighborhood or regional parks or other recreational facilities?	X	
b) Affect existing parks or other public recreational facilities?	X	

**Recreation - Discussion**

**Issues:** Recreational issues are associated with increased demand for recreational facilities, or loss or impacts to existing recreational facilities.

**Impact Evaluation Guidelines:** Recreation impacts may be significant if they result in:

- Substantial increase in demand for park and recreation facilities in an area under-served by existing public park and recreation facilities.
- Substantial loss or interference with existing park space or other public recreational facilities such as hiking, cycling, or horse trails.

**Recreation – Existing Conditions and Project Impacts**

***10.a-b) Recreational Facilities***

The proposed Zoo Master Plan projects involve enhancements to an existing recreational facility. The proposal includes components to provide more efficient services and additional improved exhibits. Therefore, the project would have no impact on demand for recreational facilities or otherwise negatively affect parks or other public recreation facilities.

11. TRANSPORTATION/CIRCULATION	NO	YES
Could the project result in:		<u>Level of Significance</u>
a) Increased vehicle trips?		Less than Significant
b) Hazards to safety from design features (e.g. sharp curves, inadequate sight distance or dangerous intersections)?	X	
c) Inadequate emergency access or access to nearby uses?	X	
d) Insufficient parking capacity on-site or off-site?		Potentially Significant, Mitigable
e) Hazards or barriers for pedestrians or bicyclists?	X	

**Transportation - Discussion**

**Issues:** Transportation issues include traffic, access, circulation, safety, and parking. Vehicle, bicycle and pedestrian, and transit modes of transportation are all considered, as well as emergency vehicle access. The City General Plan Circulation Element contains policies addressing circulation, traffic, and parking in the City.

**Impact Evaluation Guidelines:** A proposed project may have a significant impact on traffic/ circulation/ parking if it would:

**Vehicle Traffic**

- Cause an increase in traffic that is substantial in relation to the existing traffic load and street system capacity (see traffic thresholds below).
- Cause insufficiency in transit system.

- Conflict with the Congestion Management Plan (CMP) or Circulation Element or other adopted plan or policy pertaining to vehicle or transit systems.

Circulation and Traffic Safety

- Create potential hazards due to addition of traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) or that supports uses that would be incompatible with substantial increases in traffic.
- Diminish or reduce safe pedestrian and/or bicycle circulation.
- Result in inadequate emergency access on-site or to nearby uses.

Parking

- Result in insufficient parking capacity for the projected amount of automobiles and bicycles.

**Traffic Thresholds of Significance:** The City uses Levels of Service (LOS) “A” through “F” to describe operating conditions at signalized intersections in terms of volume-to-capacity (V/C) ratios, with LOS A (0.50-0.60 V/C) representing free flowing conditions and LOS F (0.90+ V/C) describing conditions of substantial delay. The City General Plan Circulation Element establishes the goal for City intersections to not exceed LOS C (0.70-0.80 V/C).

For purposes of environmental assessment, LOS C at 0.77 V/C is the threshold Level of Service against which impacts are measured. An intersection is considered “impacted” if the volume to capacity ratio is 0.77 V/C or greater.

Project-Specific Significant Impact: A project-specific significant impact results when:

- (a) Project peak-hour traffic would cause a signalized intersection to exceed 0.77 V/C, or
- (b) The V/C of an intersection already exceeding 0.77 V/C would be increased by 0.01 (1%) or more as a result of project peak-hour traffic.

*For non-signalized intersections, delay-time methodology is utilized in evaluating impacts.*

Significant Cumulative Contribution: A project would result in a significant contribution to cumulative traffic impacts when:

- (a) Project peak-hour traffic together with other cumulative traffic from existing and reasonably foreseeable pending projects would cause an intersection to exceed 0.77 V/C, or
- (b) Project would contribute traffic to an intersection already exceeding 0.77 V/C.

Transportation – Existing Conditions and Project Impacts

*11.a) Traffic*

Long-Term Traffic

A Traffic and Parking Assessment of the project was prepared by Associated Transportation Engineers dated May 2, 2006 and is included as *Exhibit M*.

The project would generate approximately 58 average daily trips (ADT) and 7 p.m. peak-hour trips (PHT). The trips generated by the additional visitors and new employees were distributed based on existing trip patterns. The events proposed at the Discovery Pavilion were evaluated starting and ending outside the PM and Summer Sunday peak periods. No event restrictions are proposed for the Wave facility as the facility currently operates at capacity and no additional events are anticipated.

Of the six intersections identified in the traffic study that additional trips will utilize, five intersections have a LOS A and one intersection (Cabrillo Boulevard and US 101 Southbound ramp) has a LOS F and exceeds the 0.77 V/C ratio during peak hours of the weekday morning and evening commutes (7-9 a.m. and 4-6 p.m.).

When distributed to the surrounding street system, less than five PHT will travel through the intersection of Cabrillo Boulevard and US 101 Southbound ramp. The Master Plan would add less than 0.01 V/C to this intersection during the

P.M. peak hour; therefore, according to City thresholds, the project-specific and cumulative impact levels are considered *less than significant*. In addition, a Transportation and Parking Management Plan has been developed for the proposed Zoo Master Plan that further reduces adverse traffic impacts.

#### Short-Term Construction Traffic

The overall construction process for all six projects is estimated to occur over four to five years. Working hours during the construction process are proposed to be 7 a.m. – 5 p.m. weekdays excluding holidays. Staging, equipment, materials storage, and temporary construction worker parking would occur on-site.

The project would generate construction-related traffic that would vary depending on the stage of construction. Temporary construction traffic is generally considered an adverse, but *less than significant* impact. Standard mitigation measures would be applied as appropriate, including restrictions on the hours permitted for construction trips and approval of routes for construction traffic.

#### **11.b) Access/Circulation**

Access drives meeting minimum width standards of the Fire Department are proposed on Niños Drive. Adequate line of sight distance from these ingress/egress points has been provided. Traffic safety impacts of the project would be *less than significant*.

#### **11.c) Emergency Access**

The Fire Department has reviewed the site plan for the proposed project and indicates that emergency vehicle maneuvering areas are adequate and access/distance from fire-fighting equipment to the proposed structures meets standards. Emergency access impacts of the project would be *less than significant*.

#### **11.d) Parking**

Currently, there are 326 marked parking spaces and a curb parking area for large vehicles (approximately 6 bus spaces) for a total of 332 parking spaces. The Municipal Code parking requirement for the project is based on the parking demand. ATE has estimated that the Zoo generates a total parking demand of 242 spaces during the weekday peak demand period and 363 spaces during the weekend peak demand period. The analysis of the existing conditions takes into account a list of all events currently held at the zoo, including those at the Wave. The Wave is currently booked to capacity and there are no limitations on the number of events held at the Zoo. The components of the proposed Zoo Master Plan would generate an additional peak demand of 22 spaces on weekdays and 8 spaces on weekends.

The proposed special events at the Discovery Pavilion were evaluated separately from the day-to-day operations in order to provide a better picture of the parking demands. The lectures would generate a parking demand of up to 50 parking spaces and the Adult Education programs would generate a parking demand of 17 spaces. Private events at the Discovery Pavilion would generate a parking demand of 50 spaces. Since these events are scheduled after the Zoo is closed, the parking lot could accommodate the parking demands generated by these events. The study did note that on weekends private events at the Discovery Pavilion could begin at 4:15 pm since the Zoo closes at 5:00 pm and an analysis of the on-site parking availability demonstrated that there would be sufficient parking available at that time.

The existing curb parking area that is used for bus parking on weekdays was reviewed by ATE and determined that it could be restriped to provide 20 spaces with 90 degree parking during weekend periods when buses are not present. This is an increase of 14 spaces from existing conditions.

Based on on-site parking demand, the Zoo would need to provide an additional 25 spaces to accommodate both existing and increased parking demands related to the Master Plan during the peak demand period on Summer weekend days and holidays. This includes the additional spaces that are created through the restriping.

The Zoo has developed a Transportation and Parking Management Plan (TPM Plan) to be implemented with the Master Plan. The elements of the Plan would reduce both existing traffic and Master Plan parking demands generated at the Zoo. As presented in the study, the Plan would result in a reduction of 34 parked vehicles on weekdays and 40 parked vehicles on weekends. These parking reductions would off-set the future parking demands generated by the Master Plan. Thus the restriping and TPM Plan would fully mitigate *potentially significant* parking increases generated by the Master Plan.

**Transportation – Mitigation**

- T-1 Construction Traffic.** The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through residential neighborhoods and minimize congestion.
- T-2 Construction Parking.** Construction parking and vehicle/equipment/materials storage shall be provided as follows:
- A. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager.
  - B. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles. Storage of construction materials within the public right-of-way is prohibited.
- T-3 Restriping Plan.** The applicant shall restripe the existing curb parking on site (subject to Transportation Staff approval) to create 20 new parking spaces for weekend use.
- T-4 Transportation and Parking Management Plan.** The applicant shall implement a Transportation and Parking Management Plan subject to approval from the Transportation Manager.
- T-5 Discovery Pavilion Events.** The events at the Discovery Pavilion are limited as identified in the Traffic study and as outlined below:
- Children’s Classes - 1 teacher/class, 40 students/class, 20 classes/month. Operating March – June, Mon-Fri 9:00 AM – 1:00 PM
  - Children’s Workshop - 1 teacher/class, 5 students/class, 12 workshops/month. Operating 3 times per week, Tue-Sat 9:00 AM – 1:00 PM and 1:00 PM – 4:00 PM
  - Lectures - 1 teacher/class, 100 guests/lecture, 5 lectures/year. Operating Mon-Fri 7:00 PM – 9:00 PM
  - Adult Education Classes - 1 teacher/class, 25 students/class, 5 classes/year. Operating Mon-Fri 7:00 PM – 9:00 PM
  - Private Events – 100 guests/event, 10 events/year. Operating Mon-Fri 6:15 PM – 11:00 PM & Sat–Sun 4:15 PM – 10:00 PM

**Transportation – Residual Impact**

Potentially significant impacts associated with parking would be reduced to a *less than significant* level with implementation of identified mitigation measures T-1 to T-5.

Less than significant impacts associated with increased vehicle trips will be further reduced with implementation of identified mitigation measures T-1, T-4, and T-5.

12. WATER ENVIRONMENT Could the project result in:	NO	YES <u>Level of Significance</u>
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		Potentially Significant, Mitigable
b) Exposure of people or property to water related hazards such as flooding?		Less than Significant
c) Discharge into surface waters?		Potentially Significant, Mitigable
d) Change in the quantity, quality, direction or rate of flow of ground waters?	X	
e) Increased storm water drainage?		Potentially Significant, Mitigable

**Water – Discussion**

**Issues:** Water resources issues include changes in offsite drainage and infiltration/groundwater recharge; storm water runoff and flooding; and water quality.

**Impact Evaluation Guidelines:** A significant impact would result from:

Water Resources and Drainage

- Substantially changing the amount of surface water in any water body or the quantity of groundwater recharge.
- Substantially changing the drainage pattern or creating a substantially increased amount or rate of surface water runoff that would exceed the capacity of existing or planned drainage and storm water systems.

Flooding

- Locating development within 100-year flood hazard areas; substantially altering the course or flow of flood waters or otherwise exposing people or property to substantial flood hazard

Water Quality

- Substantial discharge of sediment or pollutants into surface water or groundwater, or otherwise degrading water quality, including temperature, dissolved oxygen, or turbidity.

**Water Resources – Existing Conditions and Project Impacts**

**12.a,c,e) Drainage and Surface Runoff Rate and Quality**

Drainage: The project site is located within an AE, AE floodway, X and shaded X flood zones as shown on the Flood Insurance Rate maps (**Exhibit N**). Flowers & Associates prepared a Preliminary Drainage Analysis, dated May 22, 2006 (**Exhibit O**), which is summarized by the following discussion.

There are five regions of discharge on the Zoo property. Off-site drainage does not appear to make a significant contribution to overall site drainage. The Wave, Channel Island Fox Exhibit, and California Condor Exhibit sites are located in Region 1. The Discovery Center and Lemur/Langur Building Renovation sites are located within the boundary of Region 2. The Service Yard site is located within Region 3 with the perimeter partially located in Region 4. No improvements are proposed with the limits of Region 5. The areas drain to the Bird Refuge, the northern property line, the railroad property, and Sycamore Creek.

The total existing condition runoff generated within the existing project sites in the five regions during 25-year and 100-year precipitation events was estimated to be 33.48 and 42.43 cubic feet per second (cfs), respectively. While the results vary between the specific regions, the cumulative precipitation runoff for a 25-year and 100-year event for the proposed projects was estimated to be 33.87 and 42.92 cfs. Thus, it is estimated that for both storm events, an additional 0.39 and

0.49 cfs would result. This represents a one percent peak flow increase from the overall project site. Analysis of the individual project sites show that the Lemur/Langer improvements have the largest increase in runoff, while the Condor Exhibit shows a reduction in runoff. According to City policy, post construction run-off levels cannot exceed pre-construction levels. The proposed Zoo Master Plan is anticipated to result in an increase in run-off which is a *potentially significant impact*. However, this impact is mitigable to a less than significant level through on-site detention. The Preliminary Drainage Analysis (*Exhibit O*) indicates that adequate site area is available to design and implement on-site detention. As the individual proposed Zoo Master Plan project components come forward, on-site detention facilities shall be required and incorporated into final design and building plans that would be subject to hydrology calculations, City Ordinance provisions, and review by the HLC, City Building and/or Public Works Engineering Divisions.

Surface Water Quality: The Zoo has an existing Storm Water Management and Pollution Prevention Plan which includes existing bio-basins and pollution interceptors in the various zones that have been incorporated as part of earlier projects to minimize effects on water quality (*Exhibit P*). Additional pollution interceptors and similar best management practice improvements are proposed with the proposed Zoo Master Plan project components to reduce pollutants from the project sites which could degrade water quality. In compliance with City SWMPP Plan and Construction Erosion/Sedimentation Control Plan requirements, the use of storm drain surface pollutant interceptors, as well as erosion and sedimentation control best management practices would be required to minimize potential impacts to water quality to *less than significant* levels.

#### **12.b) Flooding**

The Zoo is located within an AE, AE floodway, X and shaded X flood zones as shown on the Flood Insurance Rate maps. The proposed Zoo Master Plan project components are consistent with the various flood zones in which they are proposed. Flood related impacts are therefore considered *less than significant*.

#### **12.d) Groundwater**

Testing of groundwater levels had varying results. In some areas no groundwater was found. In other areas groundwater was found at 13 feet below the surface. Direct contact with shallow groundwater is not anticipated to occur during ground disturbance activities. The project paving would reduce areas of infiltration to groundwater but would not result in substantial changes in the quantity, quality, direction or rate of flow of ground waters, and no direct groundwater extractions are proposed. No project impacts on groundwater resources are anticipated.

### **Water Resources - Mitigation**

- W-1 Stormwater Detention Plan.** All project runoff waters resulting from the proposed Zoo Master Plan project components shall be detained on-site. Final design and building plans shall incorporate detention facilities in compliance with recommendations included in the Preliminary Drainage Analysis, prepared by Flowers & Associates and dated May 22, 2006.
- W-2 Construction Erosion/Sedimentation Control Plan.** Project grading and construction shall be conducted in accordance with an approved erosion control plan to protect water quality throughout the site preparation, earthwork, and construction process. The applicant shall submit and obtain Building Division or Public Works Department approval of a detailed erosion control plan for the project prepared by a licensed or certified professional soil erosion and sediment control specialist, a California licensed civil engineer, landscape architect, registered geologist, or a licensed architect. The erosion control plan shall specify appropriate best management practices to control erosion and sedimentation based on the Association of Bay Area Governments Manual of Standards for Erosion and Sediment Control, the Erosion and Sediment Field Control Manual, and/or the California Stormwater Best Management Practices Handbook. Construction site operators shall be responsible for implementation of sedimentation control and good housekeeping measures in accordance with the approved erosion control plan and the Public Works Department Procedures for the Control of Runoff into Storm Drains and Watercourses. City (Building Division or Public Works Department) staff will site inspect to ensure proper installation, ongoing implementation, and effectiveness of approved BMPs, and may adjust requirements in the field if necessary to protect water quality.

**W-3 Minimization of Storm Water Pollutants of Concern.** The applicant shall implement approved plans incorporating long-term storm water best management practices (BMPs) to minimize identified storm water pollutants of concern including automobile oil, grease and metals. The applicant shall submit project plans incorporating long-term BMPs to minimize storm water pollutants of concern to the extent feasible, and obtain approval from Public Works Engineering. The Zoo shall maintain approved facilities in working order for the life of the project, and shall inspect annually and submit report to City annually.

**W-4 Trash Storage Area Design.** Project trash container areas shall incorporate approved long-term structural storm water best management practices (BMPs) to protect water quality: Trash containers shall have drainage from adjoining roofs and pavement diverted around the areas; and trash container areas shall be screened or walled to prevent off-site transport of trash. The applicant shall submit project plans to the satisfaction of Public Works Engineering and Solid Waste that incorporate long-term structural best management practices for trash storage areas to protect storm water quality. The owners association shall maintain these structural storm water quality protections in working order for the life of the project, and shall inspect at least annually and report to City annually.

**Water Resources – Residual Impact**

Implementation of the identified mitigation measures would reduce potentially significant stormwater run-off impacts to a *less than significant* impact.

<b>MANDATORY FINDINGS OF SIGNIFICANCE.</b>		<b>YES</b>	<b>NO</b>
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		X
c)	Does the project have potential impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X
d)	Does the project have potential environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X

**INITIAL STUDY CONCLUSION**

On the basis of this initial evaluation it has been determined that the proposed project may have a significant effect on the environment, and further study in an Environmental Impact Report is required.

Case Planner/Initial Study Preparer: \_\_\_\_\_ Marisela Salinas, Associate Planner

Environmental Analyst: \_\_\_\_\_ Debra Andaloro Date: \_\_\_\_\_

**Exhibits:**

- A. Vicinity Maps
- B. Applicant Letter, dated July 13, 2005
- C. Project Plans
- D. Mitigation Monitoring and Reporting Program

- E. Site Photographs and Photo-simulations
- F. Historic Landmarks Commission Minutes
- G. Urbemis Results, dated October 26, 2006
- H. Bird Refuge Biological Resource Assessment and Tree Protection Plan for the Proposed Santa Barbara Zoological Gardens Improvements, dated July 2003, prepared by Science Applications International Corporation
- I. Historic Structures Report: Former Utility Building, dated September 16, 2002, prepared by LECG, LLC
- J. Geotechnical Engineering Report, dated July 12, 2001, prepared by Earth Systems
- K. Geotechnical Engineering Report, dated December 20, 2001, prepared by Earth Systems
- L. Geotechnical Study, dated July 10, 2002, prepared by Earth Systems
- M. Traffic and Parking Assessment for the Santa Barbara Zoological Gardens Master Plan, dated May 2, 2006, prepared by Associated Transportation Engineers
- N. Flood Insurance Rate Map
- O. Santa Barbara Zoological Gardens Overall Site Drainage Update, dated May 22, 2006, prepared by Flowers & Associates
- P. Santa Barbara Zoological Gardens Permanent Pollution Prevention Plan

**LIST OF SOURCES USED IN PREPARATION OF THIS INITIAL STUDY**

The following sources used in the preparation of this Initial Study are located at the Community Development Department, Planning Division, 630 Garden Street, Santa Barbara and are available for review upon request.

California Environmental Quality Act (CEQA) & CEQA Guidelines

General Plan Circulation Element

General Plan Conservation Element

1995 Housing Element

General Plan Land Use Element

General Plan Noise Element w/appendices

General Plan Map

General Plan Seismic Safety/Safety Element

General Plan Update 2030: Conditions, Trends and Issues Report

Geology Assessment for the City of Santa Barbara

Institute of Traffic Engineers Parking Generation Manual

Institute of Traffic Engineers Trip Generation Manual

Master Environmental Assessment

Santa Barbara Municipal Code

Special District Map

Uniform Building Code as adopted by City

Archaeological Impacts of the Proposed Renovations to the Channel Island Fox Exhibit, dated June 19, 2002, prepared by Science Application International Corporation

Extended Phase 1 Cultural Resources Investigation for the Proposed Wave Project, dated February 2002, prepared by Science Application International Corporation

Extended Phase 1 Cultural Resources Investigation for the Proposed Improvements in the Service Yard, dated January 2002, prepared by Science Application International Corporation

Extended Phase 1 Cultural Resources Investigation for the Proposed Discovery Pavilion and the Proposed Off-Exhibit Gibbon Building, dated April 2001, prepared by Science Application International Corporation

Comprehensive Archaeological Resources Assessment, dated July 2003, prepared by Science Application International Corporation