KROC COMMUNITY CENTER MITIGATION MONITORING PROGRAM

SCH NO. 2008071085

PREPARED FOR:



CITY OF LONG BEACH DEPARTMENT OF DEVELOPMENT SERVICES 333 WEST OCEAN BOULEVARD, 5th FLOOR LONG BEACH, CALIFORNIA 90802

PREPARED BY:

SAPPHOS ENVIRONMENTAL, INC. 430 NORTH HALSTEAD STREET PASADENA, CALIFORNIA 9 I 1 07

JUNE 8, 2009

TABLE OF CONTENTS

SECTIO	ONS	PAGE
I	INTRODUCTION	l-1
II	PROJECT DESCRIPTION	Il-1
	II.1 Project Location	II-1
III	MONITORING PROGRAM	III-1
TABLES	s	PAGE
II.5-1 II.6.1-1 II.6.2-1 II.6.3-1 II.6.4-1 III-1	Anticipated Construction Equipment	
II.1-1 II.1-2 II.1-3 II.1-4 II.3-1 II.6-1	Regional Vicinity Map Topographic Map Local Vicinity Map Aerial Photograph Map Site Plan Kroc Community Center Grading Plan	

SECTION I INTRODUCTION

The California Environmental Quality Act [CEQA; Public Resources Code (PRC), Section 21000 et seq.] requires a lead agency or responsible agency that approves or carries out a project, where an Environmental Impact Report has identified significant environmental effects, to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment" [PRC, Section 21081.6 (a)(1)]. The City of Long Beach is the lead agency for the Kroc Community Center (project). The Salvation Army, Southern California Division is the project applicant and project sponsor. CEQA [PRC, Section 21081.6 (b)] requires that a public agency "shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents that address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design."

This section of the Mitigation Monitoring Program describes the location of the project, project objectives, project elements approved by the City of Long Beach (City), Leadership in Energy and Environmental Design (LEED) elements, and the construction scenario that was used as the basis of the environmental analysis contained in the Environmental Impact Report (EIR). The information contained in this section should be used as the basis for making a determination regarding substantial conformance of the project during construction, operation, and maintenance.

The Kroc Community Center (project) will principally involve the following elements.

II.1 PROJECT LOCATION

The project site is located in the central part of the City on a site known as the Hamilton Bowl / Chittick Field approximately 1.9 miles north of the Pacific Ocean, 2 miles east of the 710 Freeway, 1.5 miles south of the 405 Freeway, and 4.7 miles west of the 605 Freeway (Figure II.1-1, Regional Vicinity Map). The project site is located on the U.S. Geological Survey 7.5-minute series Long Beach topographic Quadrangle (Figure II.1-2, Topographic Map). The elevation of the project site is 3 feet to 16 feet above mean sea level (MSL). The project is located on a roughly 19-acre site at 1900 Walnut Avenue in the City of Long Beach, County of Los Angeles, California, and is directly south of the City of Signal Hill (Figure II.1-3, Local Vicinity Map). The project site is bounded by local residential streets. These streets consist of East 20th Street and the City of Signal Hill to the north; a 12'0" alley between Rose Avenue and Gardenia Avenue to the east; commercial parcels fronting on East Pacific Coast Highway to the south; and Walnut Avenue to the west (Figure II.1-4, Aerial Photograph).

II.2 STATEMENT OF OBJECTIVES

The underlying purpose and need of the project is to provide facilities, programs, and services that encourage positive life-changing experiences for children and adults, strengthen families, and enrich the lives of individuals in the central area of Long Beach, California, and the neighboring City of Signal Hill.

II.2.1 Objectives

The Salvation Army and the City identified 12 objectives that are requisite to the achievement of the project goals:

- Provide a safe recreational facility that meets the needs and interests of the residents in an underserved community.
- Provide services to individuals in the central area of the City and the southwestern portion of the City of Signal Hill. The primary service area would be U.S. Census Tract Numbers 5733.00, 5752.02, 5751.01, 5751.02, and 5752.01 in the City, and 5734.02 in the City of Signal Hill.²

¹ U.S. Geological Survey. [1964] Photo revised 1981. 7.5-Minute Series, Long Beach, California, Topographic Quadrangle. Reston, VA.

² U.S. Census. 2000. Available at: http://www.census.gov/

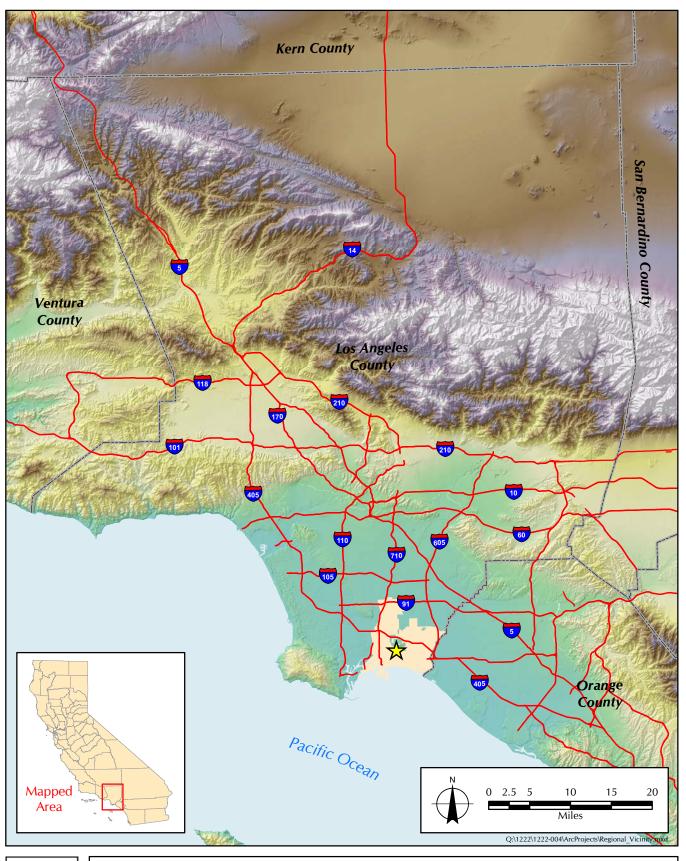






FIGURE II.1-1

Regional Vicinity Map

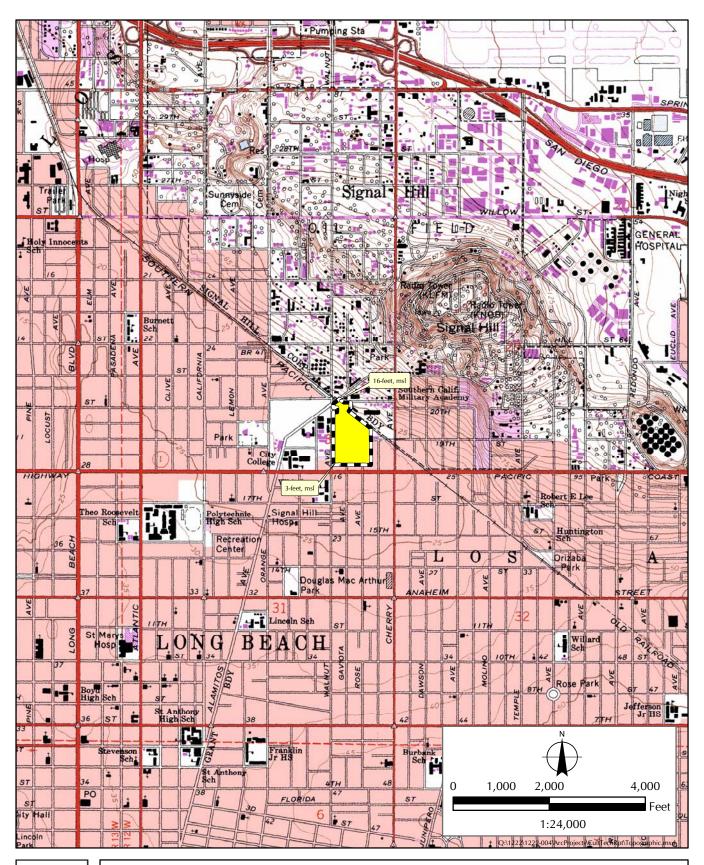






FIGURE II.1-2

Topographic Map

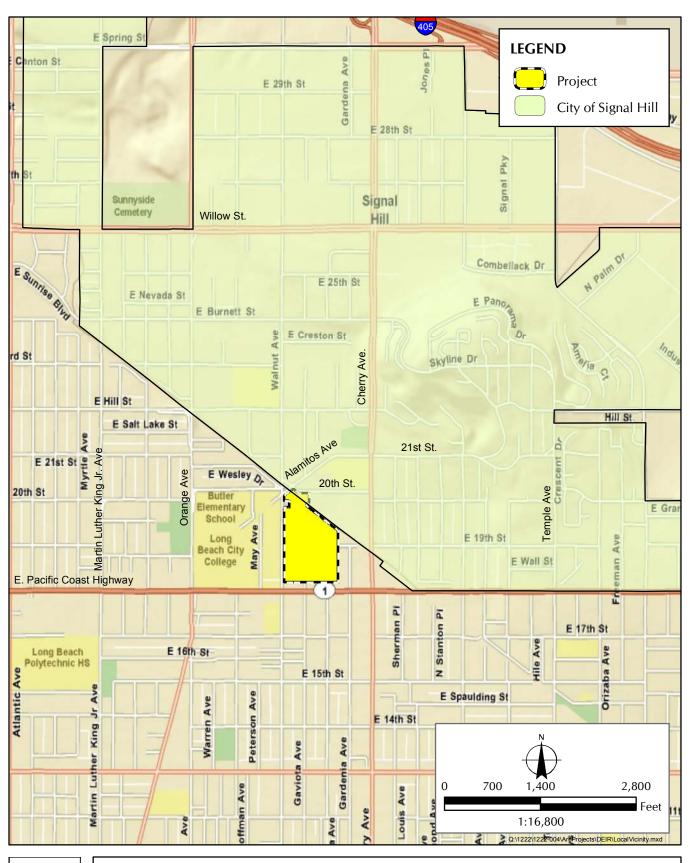




FIGURE II.1-3 Local Vicinity Map

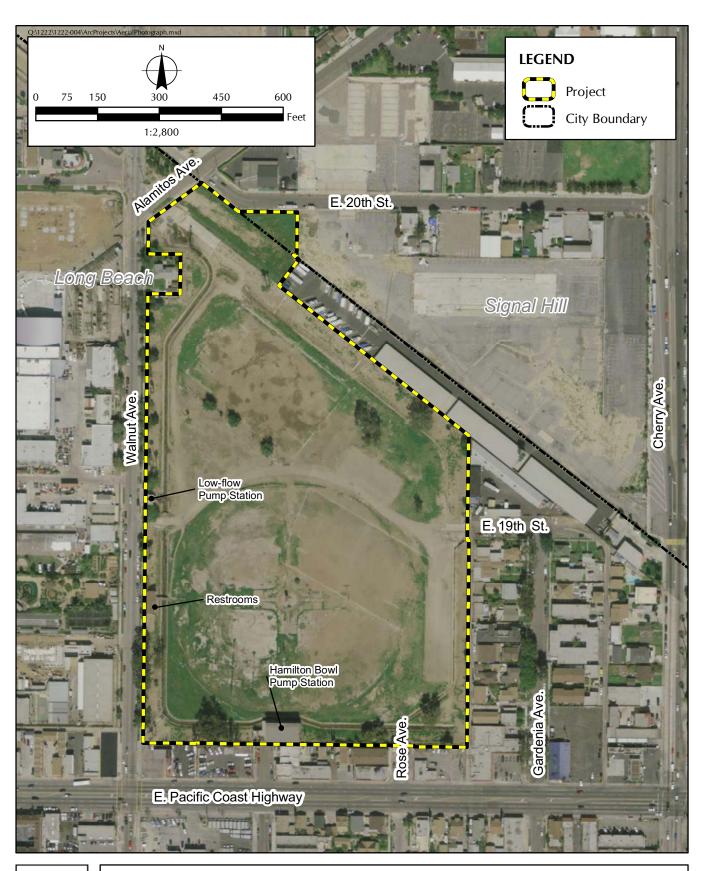




FIGURE II.1-4

Aerial Photograph

- Contain the passive and active recreation for a minimum of 32,000 square feet of gymnasium, 25,000 square feet for aquatic recreation, and 4 acres of playing fields.
- Have the ability to provide educational programming for a minimum of 300 adults and 100 children at one time and the capacity to serve a minimum of 100 families within the same facility.
- Offer social programs (such as job training, family resources, and health seminars) to accommodate up to 450 people at one time.
- Be accessible to public transit.
- Encourage positive social and recreational opportunities to an ethnically diverse community.
- Stimulate stability and growth in an economically challenged neighborhood.
- Create a sustainable facility that reflects the requirements of the City interim Green Building Requirements for Private Development.
- Be consistent with Kroc Foundation Grant requirements.
- Be consistent with NPDES permit requirements.
- Maintain water detention capability of approximately 160 acre feet.

II.3 PROJECT ELEMENTS

The project consists of a recreational facility that includes both indoor and outdoor components (Figure II.3-1, *Site Plan*). Up to 7 acres of the Hamilton Bowl / Chittick Field site will be developed to accommodate a three-building complex of up to 170,536 square feet, atop 304,920 square feet of raised building pads. Approximately 12 acres of land located around and below the building pads will continue to serve as a flood control detention basin for the City of Signal Hill and the City. The pump station located at the southern ends of the Hamilton Bowl / Chittick Field site will be expanded and will remain in operation. Development of the project will not conflict with the existing potable water system / sanitary sewer system.³ Furthermore, wastewater generated and flowing from the project site will be treated by the existing sanitation system and will not require the construction or alteration of additional or existing sewage services.⁴

The Kroc Community Center and main entrance to the facility will be situated along the western side of Hamilton Bowl / Chittick Field off Walnut Avenue. A secondary access to the project site will be located at Rose Avenue off East Pacific Coast Highway. In addition, there will be an emergency-only access located on 19th Street that will also be used as a point of access to relieve traffic to and from the site during special events.

The project will be designed to complement the surrounding neighborhood and will be constructed to conform to all applicable County, City, state, and federal statutes and regulations.

³ Long Beach Water Department. 28 November 2007. Correspondence to Jefferey Winklepleck, City of Long Beach, Long Beach, CA.

⁴ County Sanitation Districts of Los Angeles County. 21 July 2008. Correspondence to Jill Griffiths, City of Long Beach, Long Beach, CA.

II.3.1 Buildings

The Kroc Community Center recreational facility includes a three-building complex that consists of approximately 170,536-square-foot, three- to four-story buildings organized in three components:

- Chapel / Auditorium building. This roughly 12,455-square-foot structure will be located at the southwest corner of the project site near East Pacific Coast Highway and Walnut Avenue. This two-story building will include a lobby, lecture halls, stage, and backstage areas.
- Administration/Education building. The building will be roughly 73,910 square feet set
 back from Walnut Avenue and situated off the northeast corner of the chapel /
 auditorium building. This three- to four-story building will house a drop-in daycare, a
 3,500-square-foot kitchen, art studios, multipurpose rooms, classrooms, a library, a
 computer lab, and administrative offices.
- Recreation Center. This two-story building will be located to the north of the administration/education building and will consist of approximately 84,171 square feet, including a gymnasium, classrooms, a fitness center, exercise rooms, a weight room, locker rooms, a game room, and an indoor therapy pool.

II.3.2 Outdoor Components

There are three primary outdoor components of the project:

- Outdoor Recreation. This space will consist of a playing field (discussed below) and 2 acres of gardens, play yards, and horticulture areas. The outdoor aquatics complex will include a 50-meter pool, a warm-up pool, a leisure pool with fountains and slides, and a children's area. Other site amenities will include a playground, walking trails, a roughly 10,000-square-foot amphitheater, an outdoor climbing wall, a challenge course, an exterior patio, and a horticulture area. In an effort to be consistent with Long Beach Water Department goals for water conservation, pools shall be required to be covered when not in use for extended periods of time, pools shall be equipped with a high-quality system for filtering pool water, and hot water lines shall be fitted with water recirculation systems.
- Recreation "Soccer" Field. This space will be a 4-acre field that will accommodate up to 5,000 spectators. It will be adjacent to a 10,000-square-foot amphitheater that will accommodate up to 750 spectators in a bowl-shaped seating area.⁵
- Landscaping. Landscaping at the project site will be consistent with the plant species and vegetation for the area. Planting of vegetation will consist of plant species that would continue to support the presence of the identified lepidopteran (specifically butterfly) species at the project site, as well as the additional wildlife that will be

-

⁵ Salvation Army, Southern California Division. 30 July 2007. Kroc Facilities and Program Design. Los Angeles, CA.

supported by these plants.⁶ The landscaping and irrigation system will be designed for moderate to draught tolerant plants for conservation purposes.⁷

The project will offer a safe recreational space and to the underserved neighborhoods bordering the project site. The individuals served will include residents of the central area of Long Beach and the southwestern portion of the City of Signal Hill.

II.4 LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN ELEMENTS

The Long Beach City Council adopted interim Green Building Requirements for Private Development on November 21, 2006.⁸ The interim policy applies to all new projects that apply for development entitlements and meet the policy thresholds beginning November 22, 2006, until the date that a permanent policy is adopted and becomes effective.

According to the interim Green Building Requirements for Private Development in the City, "all private development projects that receive direct city funding or benefit from other direct city incentives will be required, prior to the issuance of a Certificate of Occupancy, to have registered their project with the U.S. Green Building Council with the intent to achieve a minimum level of LEED certified in their final building design or to provide third-party verification that they meet the equivalent of the minimum requirements of LEED certification in the final building design to the satisfaction of the Director of Planning and Building."

The project will be designed in a manner that is consistent with the interim Green Building Requirements for Private Development for the City. LEED elements will be incorporated in the construction and operational phases of the project to ensure that it is eligible to attain the minimum level of LEED certification.

II.5 INTENDED USES OF THE EIR

The City is the lead agency for the project. The Salvation Army is the project applicant. The City Planning Commission will consider certification of the EIR. The City Council will consider the EIR before rendering a decision on the General Plan Amendment and Zone Change for the project.

Specific project elements may be subject to additional permits (Table II.5-1, Permit Requirements).

⁶ Sapphos Environmental, Inc. 22 October 2008. Memorandum for the Record, 1222-004, No. 3. Pasadena, CA.

⁷ Long Beach Water Department. 28 November 2007. Correspondence to Jeffery Winklepleck, City of Long Beach. Long Beach, CA.

⁸ City of Long Beach. Accessed 24 November 2007. Web site. "Green Building for Private Development (Green Ribbon Committee)." Available at: http://www.ci.long-beach.ca.us/plan/pb/apd/green/default.asp#privdev

⁹ City of Long Beach. Accessed 24 November 2007. Web site. "Green Building for Private Development (Green Ribbon Committee)." Available at: http://www.ci.long-beach.ca.us/plan/pb/apd/green/default.asp#privdev

TABLE II.5-1 PERMIT REQUIREMENTS

Agency	Permit	How to Obtain the Permit
City of Long Beach	Building Permit / Grading Permits / Development Plan / Plan Approval	Application
County of Los Angeles	Notification	Letter / Lease
County of Los Angeles Department of Public Works	Construction Permit	Detention Basin Analysis (including project design, water quality assessment, improvement plan, hydrology impacts, demonstration of building pads elevation clearing requirements, and flood protection)
South Coast Air Quality Management District	Notification and Operating Permit	Application
NPDES Program	NPDES Permit / SUSMP / SWPPP	Application
California Department of Transportation	Approval for Traffic Signal at Rose Avenue and Pacific Coast Highway and associated signing and striping modifications	Application
California Department of Transportation	Encroachment Permit	Application
California Department of Transportation	Transportation Permit for the use of oversized vehicles on state highways	Application
County of Los Angeles Flood Control District	Amendment to Lease Agreement No 76300	Request for Lease Amendment
Advisory Council on Historic Preservation	Notification	Letter

KEY: SUSMP = Standard Urban Storm Water Management Plan; SWPPP = Storm Water Pollution Prevention Plan

Table II.5-1 reflects a list of the required permits necessary for the approval of the project. This list includes the responsible agencies for the project as they relate to permit approval, which were completed to the best of the knowledge of the City.

II.6 CONSTRUCTION SCENARIO

While the construction of the project is envisioned as a single continuous process to be completed in 29 months between the years of 2009 and 2012, the construction of the project will consist of two distinct stages: the reconfiguration of the existing detention basin and the development of the facility buildings and the associated site improvements. The two stages will include four phases for the development of the 885,795-gross-square-foot project.

Specifically, Stage 1 will consist of Phase I - Demolition, Phase II - Earthwork, and Phase III - Drainage Improvements. The three phases will be performed in a concurrent manner, such that throughout the duration of Stage 1, the storm water detention and pumping capabilities of the Hamilton Bowl Pump Station will not be impaired. At the completion of Stage 1, the Hamilton Bowl Detention Basin will have been reconfigured and a single, large building pad will have been created.

As specified in a letter from the City of Long Beach to the City of Signal Hill,¹⁰ the applicant shall be required to complete construction, grading, and improvements to the flood control and water quality control facilities related to the Hamilton Bowl Detention Basin in a manner that ensures that there is no net loss or compromise of the existing flood detention capacity or water quality during construction or operation of the proposed (Figure II.6-1, *Kroc Community Center Grading Plan*):

- 1. Construction of the new Low-flow Pump Station located just northeast of the existing Hamilton Bowl Pump Station
- 2. Construction of the site's proposed perimeter crib and caisson walls
- Construction of the relocated Fresh Creek Technologies Trash Net Systems on all incoming storm drains to the Hamilton Bowl Detention Basin; the newly constructed trash net systems would be located in adjoining streets to the proposed project site
- 4. Removal of existing concrete swales and regrading of the Hamilton Bowl Detention Basin to its finished elevation

Note: The invert of the existing Low-flow Pump Station located on Walnut Avenue is lower than the proposed new finished grade of the reconfigured Hamilton Bowl Detention Basin. The existing Low-flow Pump Station would remain operational throughout most of the Hamilton Bowl Detention Basin's reconfiguration.

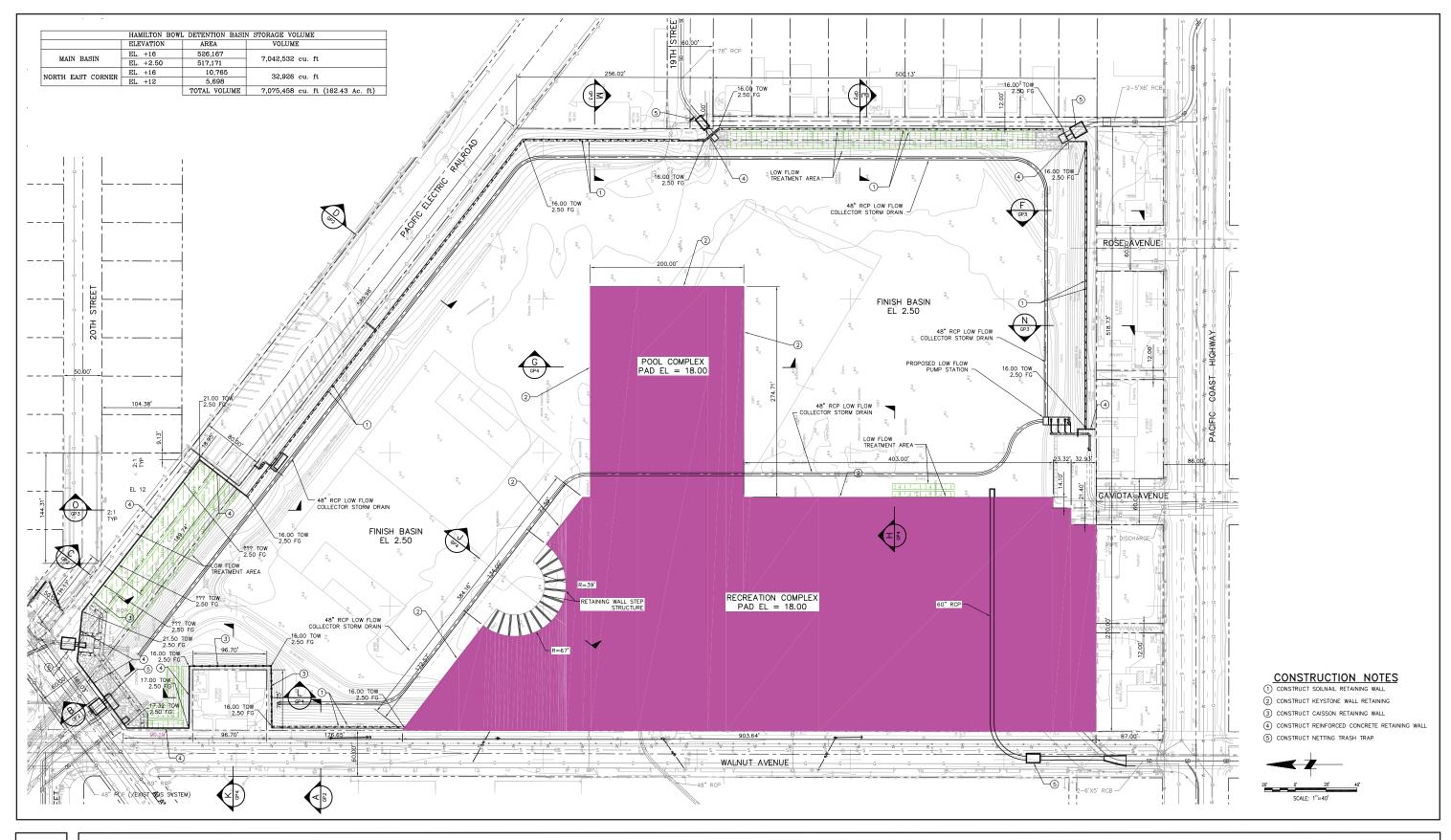
- 5. Construction of land mass key stone retaining walls and associated earthwork during the Hamilton Bowl Detention Basin's regrading
- 6. With the completion of the new Low-flow Pump Station, the existing Low-flow Pump Station located on Walnut Avenue would be demolished, and the key stone retaining walls and associated land mass would be completed.
- 7. With the Hamilton Bowl Detention Basin reconfigured, the new below-grade storm drain system would be constructed.
- 8. Simultaneous construction of the new storm drain system and the proposed bio-filtration planters to remove bacteria and heavy metals from an incoming storm's first flush

The next step will be Stage 2, which will consist of Phase IV - Construction. This phase will include the actual development of the 170,536-gross-square-foot buildings and the remaining 715,259-square-foot space for the parking lots, gardens, aquatic center, and sports fields.¹¹

_

¹⁰ Christoffels, Mark. 23 March 2009. Storm Water Quality and Storage/Operational Concerns Regarding the Proposed Kroc Community Center Site in Hamilton Bowl. Long Beach, CA.

¹¹ Some tasks associated with the various construction phases may be completed concurrently with tasks from other phases.





Construction will be scheduled in compliance with the City regulations and will commence no earlier than 7:00 a.m. and cease no later than 7:00 p.m. on weekdays. Work could be conducted on Saturdays and will commence no earlier than 9:00 a.m. and cease no later than 6:00 p.m. The information contained in the construction scenarios for reasonably anticipated project elements was developed in coordination with Heery International and Moffatt & Nichol Engineers and was used in the assessment of potential construction impacts to air quality, ambient noise levels, and traffic and circulation.

Noise levels in the project area exceeding a decibel level of 45 (dBA) between the hours of 10:00 p.m. and 7:00 a.m. and a decibel level of 50 (dBA) between the hours of 7:00 a.m. and 10:00 p.m. ¹² are prohibited. While it is understood that construction noise is a temporary by-product of new development and urban redevelopment, ¹³ the contractor will conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed established noise levels.

The construction contractor will be required to incorporate best management practices consistent with the guidelines provided in the *California Stormwater Best Management Practice Handbooks: Construction*. ¹⁴ Should the construction period continue into the rainy season, supplemental erosion measures will need to be implemented, including, but not limited to, the following:

- Mulching
- Geotextiles and mats
- Earth dikes and drainage swales
- Temporary drains and gullies
- Silt fence
- Straw bale barriers
- Sandbag barrier
- Brush or rock filter
- Sediment trap
- Velocity dissipation devices

Wherever possible, grading activities will be undertaken outside the normal rainy season (i.e., October 15 through April 15 for most of Southern California), thus minimizing the potential for increased surface runoff and the associated potential for soil erosion. A recommended construction period will begin in late April or early May and be completed in late January, assuming the majority of the construction will be completed in this recommended nine-month period. Best management practices to control surface runoff and soil erosion will be required for construction taking place during rainy periods.

Construction equipment will be turned off when not in use and drip pans will be required under parked construction equipment. The construction contractor will ensure that all construction and

¹² City of Long Beach. *The Long Beach Municipal Code, Noise*. Section 8.80.160, Exterior Noise Limits – Correction for Character of Sound. Available at: http://www.longbeach.gov/cityclerk/

¹³ City of Long Beach, Department of Planning and Building. 25 March 1975. City of Long Beach General Plan, Noise Element . Long Beach, CA.

¹⁴ California Stormwater Quality Association. 2003. *California Stormwater Best Management Practice Handbooks:* Construction. Menlo Park, CA. Available at: http://www.cabmphandbooks.com/Documents/Construction/Section 3.pdf

grading equipment is properly maintained. All vehicles and compressors will utilize exhaust mufflers and engine enclosure covers (as designed by the manufacturer) at all times.

The type and quantity of equipment that will potentially be used in construction of the project is listed below in tables prepared for each of the anticipated phases of construction.

II.6.1 Phase I: Demolition

The first phase of construction involves three efforts to remove existing structures and utilities to accommodate the project:

- Removal of existing utilities on site, including light poles, electrical services, underground water mains, and existing irrigation systems.
- Removal of the existing low-flow concrete drainage swales that are located along the Walnut Avenue and East Pacific Coast Highway project limits.
- Removal of existing storm-drain outlets that will interfere with the earthwork phase of the project. These storm-drain outlets will be reconstructed when the site-drainage improvements are constructed.

While the current site plan reveals that all structures located on the project site, with the exception of the Hamilton Bowl Pump Station, will be removed in preparation of the project, plans to demolish the restrooms and the Low-flow Pump Station may need to be avoided or delayed due to the historical significance of these structures.

It is anticipated that the demolition subphase of the detention basin's reconfiguration will last approximately one month and use eight types of heavy equipment, or comparable equipment (Table II.6.1-1, *Anticipated Construction Equipment*).

TABLE II.6.1-1
ANTICIPATED CONSTRUCTION EQUIPMENT

Approximate Quantity	Type of Equipment/Vehicle						
1	Loader / Caterpillar 966, 250 HP						
2	End dump trucks (25 ton)						
1	Flat bed truck (6 ton)						
1	Water truck (4,000 gallon)						
1	Crane (100 ton)						
1	Excavator with hydraulic hammer / Caterpillar 350, 300 HP						
1	Bulldozer / Caterpillar D-9, 400 HP						
1	Pickup truck						

Key: HP = horse power

II.6.2 Phase II: Earthwork

The second phase of construction consists of three types of earthwork at the project site:

- Mass grading of those portions of the existing detention basin that are to be deepened.
 It is anticipated that these portions of the detention basin will be deepened between 24 and 36 inches.
- Over-excavation and initial re-compaction of those portions of the detention basin that are to become the project's new land mass.
- Using the on-site materials (and limited off-site materials) from the mass-grading operation to create the base of the project's land mass, including compaction of the material.

The new project land mass will be completed when the project site's elevation reaches a measurement of 16 feet above MSL.

It is anticipated that the earthwork during this phase of the detention basin's reconfiguration will last approximately four months and require the use of four types of heavy equipment, or comparable equipment, and various trucks (Table II.6.2-1, *Anticipated Construction Equipment*).

TABLE II.6.2-1
ANTICIPATED CONSTRUCTION EQUIPMENT

Approximate Quantity	Type of Equipment/Vehicle					
7	Scrapers / Caterpillar 631, 500 HP 30 CY capacity					
1	Grader / Caterpillar 14G, 200 HP					
2	Bull Dozers / Caterpillar D-9, 400 HP					
3	Water trucks					
1	Dozer / Caterpillar 834C, 500 HP Compactor					
20	Bottom dump trucks (25 ton)					
1	Loader / Caterpillar 980, 300 HP (off site)					
3	Pickup trucks					

Key: HP = horse power

II.6.3 Phase III: Drainage Improvements

The third phase of construction consists of drainage improvements to facilitate simultaneous operation of the project and protection of the existing function as a detention basin. A Preliminary Conceptual Level Detention Basin Analysis¹⁵ prepared for the Hamilton Bowl / Chittick Field site provides recommendations for the improvement and reconfiguration of the existing site in order to accommodate the development of the project. The recommendations provided in the analysis have been incorporated into the project design for the site and will be implemented during Phase III of the construction of the site:

¹⁵ Moffatt & Nichol. October 2006. Hamilton Bowl Pump Station / Detention Basin Hydrology Analysis. Long Beach, CA.

- Construction of a perimeter low-flow drainage system using a large-diameter, reinforced, gasketed concrete pipe. This system will be located along the deepened portions of the reconfigured detention basin. In general, this system will be located along Walnut Avenue and the basin's northern, eastern, and southern limits. This system will terminate at the location of the existing Hamilton Bowl Pump Station.
- Construction of a new low-flow pump station, below ground, in the vicinity of the
 existing Hamilton Bowl Pump Station. This new low-flow pump station will be
 equipped with its own emergency electrical power system should a loss of off-site
 power occur.
- Construction of a new discharge line for the new low-flow pump station. This discharge line will start at the new low-flow pump station, head west, and tie into the existing 48-inch storm drain located west of Walnut Avenue at East Pacific Coast Highway.
- Construction of crib walls around the perimeter of the reconfigured and deepened detention basin, including the edges of the project's land mass.
- Reconstruction of the numerous storm drain outlets entering the detention basin and their connections to the new low-flow drainage system. These new storm drain outlets will be fitted with debris-retention devices to capture and retain incoming storm water conveyed debris.

It is anticipated that the drainage improvement subphase of the detention basin's reconfiguration will last approximately six months. A list of the type and quantity of equipment that will potentially be used in this phase of the construction of the basin's reconfiguration is shown in (Table II.6.3-1, Anticipated Construction Equipment).

TABLE II.6.3-1
ANTICIPATED CONSTRUCTION EQUIPMENT

Approximate Quantity	Type of Equipment/Vehicle					
1	Backhoe / Caterpillar 446, 100 HP					
1	Excavator with hydraulic hammer / Caterpillar 350, 300 HP					
1	Loader / Caterpillar 966, 250 HP					
1	Water truck (4,000 gallon)					
1	Delivery truck					
1	Concrete transit mix truck, 10 CY capacity					
1	End dump truck (25 ton)					
1	Crane (30 ton)					
3	Pickup trucks					
2	Diesel-powered hand compactors, 5 HP					

Key: HP = horse power

II.6.4 Phase IV: Construction

The 170,536-gross-square-foot, three-building complex will be constructed in one phase, and a traditional building process will be employed. After the site grading, earthwork, and 304,920 square feet of building pads are completed, the underground utilities and foundations will be constructed. The structural system, vertical and horizontal utilities, floors, and roof will then be constructed. Following this, the exterior walls, windows, doors, and other waterproofing elements will be constructed simultaneously. Interior construction and final finish materials will be installed. The exterior aquatics center, patios, and open areas will be constructed as the building is being constructed.

Parking lots and fields will be constructed toward the end of the building construction phase and completed at the same time as all other structures.

It is anticipated that the construction of the buildings, pools, and parking facilities will last approximately 18 months and require the use of nine types of heavy equipment, or comparable equipment, and various trucks (Table II.6.4-1, *Anticipated Construction Equipment*).

TABLE II.6.4-1
ANTICIPATED CONSTRUCTION EQUIPMENT

Approximate Quantity	Type of Equipment/Vehicle
1	Loader / Caterpillar 966, 250 HP
1	End dump truck (25 ton)
3	Flat-bed trucks (6 ton)
2	Water trucks (4,000 gallon)
3	Cranes (100 ton)
3	Forklifts (20 ton)
2	Man lifts (40-foot reach)
1	Backhoe Caterpillar 446, 100 HP
3	Grader Caterpillars 14G, 200 HP
1	Delivery truck
1	Steel roller (20 ton)
1	Asphalt paver 200 HP
5	Pickup trucks
1	Concrete pump (36 meters)
1	Concrete transit mix truck, 10 CY capacity

Kev: HP = horse power

The Mitigation Monitoring Program (MMP) contained herein satisfies the requirements of the California Environmental Quality Act as they relate to the Environmental Impact Report (EIR) for the Kroc Community Center (project). The Draft EIR, dated March 26, 2009, was circulated for a 45-day public review and comment period through May 11, 2009.

The EIR identifies mitigation measures that have been incorporated into the project to avoid, reduce, and mitigate significant impacts to: aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, National Pollution Discharge Elimination System, land use and planning, noise, recreation, transportation and traffic, and utilities and service systems. This MMP has been designed to ensure compliance with mitigation measures defined in the EIR during implementation of the project. This MMP will be adopted by the City of Long Beach Board of Supervisors. Table III-1, *Mitigation Monitoring Program for Kroc Community Center*, lists those mitigation measures required by City of Long Beach to mitigate or avoid significant impacts anticipated in association with the EIR project description. It shall be the responsibility of City of Long Beach and The Salvation Army, Southern California Division, to carry out the MMP by imposing the requirements of the mitigation measures throughout the implementation of the project.

The Monitoring Program element of the MMP describes each required mitigation measure organized by impact area, with an accompanying delineation of the following:

- The agency or agencies (or private parties) responsible for implementation
- The period of the project during which implementation of the mitigation measure is to be monitored
- The Enforcement Agency (the agency with the power to enforce the mitigation measure)
- The Monitoring Agency (the agency to whom the reports are made)

As the indicated mitigation measures are completed, the Monitoring Agency will sign and date the MMP to indicate that the required mitigation measure has been completed for the subject period. The Monitoring Agency will also note the documentation (title of the monitoring report) that was submitted for each mitigation measure.

	Responsible				Documentatio	n of Compliance
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Aesthetics						
Impacts related to the loss of an historical resource, the Low-flow Pump Station, shall be reduced through archival documentation of as-found conditions. Prior to issuance of demolition permits, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that documentation of the Low-flow Pump Station is completed by the applicant in the form of a Historic American Buildings Survey that shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The documentation shall include large-format photographic recordation; a detailed historic narrative report including description, history, and statement of significance; measured architectural drawings (as built and/or current conditions); and a compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for Historian and/or Architectural History. The original archival-quality documentation shall be offered as donated material to the National Park Service Heritage Documentation Program, Historic American Buildings Survey, for inclusion in the Library of Congress. Archival copies of the documentation also would be submitted to the Long Beach Public Library; the Historical Society of Long Beach; California State University, Long Beach; the Office of Historic Preservation; and the South Central Coastal Information Center where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Development Services.		Preconstruction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications, Historic American Building Survey, and Archival Documentation	(Signature/Date of Monitoring Agency)
Air Quality					ı	
Water or a stabilizing agent that will not cause or contribute to water pollution shall be applied to exposed surfaces in sufficient quantity two times a day to prevent generation of dust plumes. Soil moistening shall be required to treat exposed soil during construction of each element of the project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications submitted for review include the requirement for the construction contractor to ensure that soil shall be moistened not more than 15 minutes prior to the daily commencement of soil-moving activities and three times a day, or four times a day under windy conditions, in order to maintain a soil moisture content of 12 percent. The applicant shall demonstrate compliance with this measure through the submission of weekly monitoring reports to the City of Long Beach Department of Development Services. At a minimum, active operations shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type that is part of the active operation.		Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications and Weekly Monitoring Reports	(Signature/Date of Monitoring Agency)

	Responsible				Documentatio	n of Compliance
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Measure Air-2 Moistening or covering of excavated soil piles shall be required to treat grading areas during construction of the project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications for each phase of the project include the requirement for the construction contractor to ensure that excavated soil piles are watered hourly for the duration of construction or covered with temporary coverings.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Air-3 Discontinuing construction activities that occur on unpaved surfaces during windy conditions shall be required to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications for each phase of the project include the requirement for the construction contractor to cease construction activities that occur on unpaved surfaces during periods when winds exceed 25 miles per hour.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Air-4 A wheel washing system shall be installed and used to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site. Washing of wheels leaving the construction site during construction of each phase of the project shall be required to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. Water used for wheel washing will be filtered to remove fine sediment before release to the storm drain system. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications for each phase of the project include the requirement for the construction contractor to clean adjacent streets of tracked dirt at the end of each workday or install on-site wheel-washing facilities.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Air-5 Track out shall not extend 25 feet or more from an active operation, and track out shall be removed at the conclusion of each workday. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications for each phase of the project include the requirement for the construction contractor to ensure that the track out shall not extend 25 feet or more from an active operation and that it would be removed at the conclusion of each workday.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)

	Responsible				Documentation of Compliance	
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Measure Air-6 All trucks hauling soil, sand, and other loose materials on site or through neighboring streets shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions). All transport of soils to and from the project site for each phase of the project shall be conducted in a manner that avoids fugitive dust emissions, ensures compliance with current air quality standards, and avoids contributions to cumulative increases in criteria pollutants. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications for each phase of the project include the requirement for the construction contractor to cover all loads of dirt leaving the site or to leave sufficient freeboard capacity in the truck to prevent fugitive dust emissions en route to the disposal site.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Air-7 Traffic speeds on unpaved roads shall be limited to 15 miles per hour. Prior to issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications for each phase of the project include the requirement for the construction contractor to ensure a traffic speed limited to 15 miles per hour.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Air-8 Heavy-equipment operations shall be suspended during first- and second-stage smog alerts. Prior to issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications for each phase of the project include the requirement for the construction contractor to ensure heavy equipment operations be suspended during first and second stage smog alerts.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
In order to mitigate the air quality impact caused by NO _x emissions from construction equipment, all construction equipment not expected to be used for a period in excess of 5 minutes shall be turned off as a means of reducing NO _x emissions to the maximum extent practicable. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications require the construction contractor to shut off engines when not in use. Specifications shall require the construction contractor to certify monthly to the Department of Development Services that construction equipment is being maintained in peak operating condition.		Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications and Monthly Monitoring Reports	(Signature/Date of Monitoring Agency)

					Dogumentatio	n of Compliance
Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Measure Air-10 In order to mitigate the air quality impact caused by NO _x emissions from construction equipment, all off-road diesel construction equipment shall use particulate filters. The applicant shall also ensure that cooled, exhaust gas recirculation devices are installed on all off-road diesel equipment where feasible. Prior to the issuance of permits for each phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications require the construction contractor to use particulate filters on all off-road diesel equipment and install cooled, exhaust gas recirculation devices on all off-road diesel equipment where feasible.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Cultural Resources						
Measure Cultural–1 Paleontological Resources The impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource from the project shall be reduced to below the level of significance through the salvage and disposition of paleontological resources that result from all earthmoving activities involving disturbances of the older Quaternary terrace deposits. Ground-disturbing activities include, but are not limited to, drilling, excavation, trenching, and grading. If paleontological resources are encountered during ground-disturbing activities, the applicant, under the direction of the City of Long Beach Department of Development Services, shall be required to and be responsible for salvage and recovery of those resources consistent with standards for such recovery established by the Society of Vertebrate Paleontology:¹ Because the precise depth of strata considered highly sensitive for paleontological resources is unknown, the applicant, under the direction of the City of Long Beach Department of Development Services, shall be responsible for and shall ensure implementation of construction monitoring by a qualified paleontological monitor during all earthmoving activities that involve disturbance of native soil (i.e., soil that has not been artificially introduced and has not accumulated through Hamilton Bowl's function as a flood control basin). The paleontological monitor shall coordinate a pre-construction briefing to provide information regarding the protection of paleontological resources. Construction personnel shall be trained in procedures to be followed in the event that a fossil site or fossil occurrence is encountered during construction. An information package shall be provided for construction personnel not present at the initial pre-construction briefing. Should a potentially unique paleontological resource be encountered, a qualified paleontologist shall be contacted and retained by the City of Long Beach. The Society for Vertebrate Paleontolog	Project Applicant	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications, Daily Monitoring Logs, and Final Monitoring and Mitigation Report	(Signature/Date of Monitoring Agency)

¹ Society of Vertebrate Paleontology. Accessed 11 December 2008. "Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines." Available at: http://www.vertpaleo.org/society/polstatconformimpactmigig.cfm

² Society of Vertebrate Paleontology. Accessed 11 December 2008. "Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines." Available at: http://www.vertpaleo.org/society/polstatconformimpactmigig.cfm

³ Society of Vertebrate Paleontology. Accessed 11 December 2008. "Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines." Available at: http://www.vertpaleo.org/society/polstatconformimpactmigig.cfm

	Responsible				Documentatio	n of Compliance
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
1. Institutional affiliations or appropriate credentials, 2. Ability to recognize and recover vertebrate fossils in the field, 3. Local geological and biostratigraphic expertise, 4. Proficiency in identifying vertebrate fossils, and 5. Publications in scientific journals." If fossil localities are discovered, the paleontologist shall proceed according to guidelines offered by the Society for Vertebrate Paleontology. This includes the controlled collection of fossil and geologic samples for processing, screen washing to recover small specimens (if applicable), and specimen preparation to a point of stabilization and identification. All significant specimens collected shall be appropriately prepared, identified, and catalogued prior to their placement in a permanent accredited repository, such as the Natural History Museum of Los Angeles County. The qualified paleontologist shall be required to secure a written agreement with a recognized repository, regarding the final disposition, permanent storage, and maintenance of any significant fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (e.g., preparation, identification, curation, and cataloguing) required before the fossil collection would be accepted for storage. In addition, a technical report shall be completed. If the fossil collection is unable to be placed in an accredited repository, the collection may be donated by the City of Long Beach Department of Development Services to local schools for educational purposes. Daily logs shall be kept by the qualified paleontological monitor during all monitoring activities. The daily monitoring log shall be keyed to a location map to indicate the area monitored, the date, and the assigned personnel. In addition, this log shall include information of the type of rock encountered, fossil specimens recovered, and associated specimen data. Wit						
Measure Cultural-2 Historical Resources Impacts related to the loss of an historical resource, the Low-flow Pump Station, shall be reduced through archival documentation of as-found conditions. Prior to issuance of demolition	Project Applicant	Preconstruction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications, Historic American Building Survey, and Archival Documentation	(Signature/Date of Monitoring Agency)
permits, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that documentation of the Low-flow Pump Station is completed by the applicant in the form of a Historic American Buildings Survey that shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The documentation shall include large-format photographic recordation; a detailed historic narrative report including description, history, and statement of significance; measured architectural						

	- "				Documentatio	n of Compliance
Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
drawings (as built and/or current conditions); and a compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to the National Park Service Heritage Documentation Program, Historic American Buildings Survey, for inclusion in the Library of Congress. Archival copies of the documentation also would be submitted to the Long Beach Public Library; the Historical Society of Long Beach; California State University, Long Beach; the Office of Historic Preservation; and the South Central Coastal Information Center where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Development Services.						
Measure Cultural-3 Human Remains	Project Applicant	Construction	City of Long Beach Department of	City of Long Beach Department of	Final Plans and Specifications	(Signature/Date of Monitoring
Although the discovery of human remains is not anticipated during ground-disturbing activities for the project, a process has been delineated by the State of California for addressing the unanticipated discovery of human remains:			Development Services	Development Services		Agency)
Unanticipated Discovery of Human Remains (Public Resources Code 5097): The Los Angeles County Coroner shall be notified within 24 hours of the discovery of human remains. Upon discovery of human remains, there shall be no further excavation or disturbance of the site or any of that area reasonably suspected to overlie adjacent human remains until the following conditions are met:						
The Los Angeles County Coroner has determined that no investigation of the cause of death is required, and						
If the remains are of Native American origin, the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.						
Geology and Soils						
Measure Geology-1 Exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving surface fault rupture from the operation of the project, shall be minimized through the applicant's compliance with the City of Long Beach General Plan, California Building Code, Long Beach Municipal Code, and Uniform Building Code.	Project Applicant	Preconstruction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)

	D				Documentatio	n of Compliance
Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving seismic ground shaking from the operation of the project, shall be minimized through conformance with California Geological Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California and all applicable City of Long Beach codes and regulations related to seismic activity. The applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the site-specific geotechnical investigations for the project are incorporated into the project plans and specifications. The City of Long Beach Department of Development Services shall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.	Project Applicant	Preconstruction	City of Long Beach (Department of Development Services and Department of Public Works)	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Geology-3 The applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that best management practices implemented for the project are consistent with the National Pollution Discharge Elimination System Permit No. CAS 004003 to avoid soil erosion during construction of the project. Prior to approval of final plans and specifications, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the requirement to comply with National Pollution Discharge Elimination System Permit No. CAS 004003 is included in the specifications. The City of Long Beach Department of Development Services shall monitor construction to ensure compliance with National Pollution Discharge Elimination System Permit No. CAS 004003.	Project Applicant	Preconstruction and Construction	City of Long Beach (Department of Development Services and Department of Public Works)	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Hazards and Hazardous Materials						
Measure Hazards-1 To reduce impacts related to routine transport, use, or disposal of hazardous materials hazardous materials during construction, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that all contractors transport, store, and handle construction-required hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended by the California Department of Transportation; the California Regional Water Quality Control Board, Los Angeles Region; the Los Angeles County Municipal Storm Water Permit (National Pollutant Discharge Elimination System Permit No. CAS004003, Board Order No. 99-060; County of Los Angeles MS4 Permit); and the County of Los Angeles Fire Department. These agencies shall regulate through the permitting process the monitoring and enforcement of this mitigation measure as required by law. Standard personal protective equipment shall be worn during construction operations where warranted.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Project Permits (Construction)	(Signature/Date of Monitoring Agency)

	Responsible				Documentation of Compliance		
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date	
Measure Hazards-2 To reduce impacts related to routine transport, use, or disposal of hazardous materials during construction, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that all contractors immediately control the source of any unauthorized release of hazardous materials using appropriate release containment measures, and remediate any unauthorized release using the methodologies mandated by the City of Long Beach throughout the construction period. The City of Long Beach shall monitor and enforce regulations pertaining to the containment, disposal, and unauthorized release of hazardous materials. Engineering and administrative controls shall be utilized to reduce the potential of accidental releases from hazardous materials during the construction phase.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Project Permits (Construction)	(Signature/Date of Monitoring Agency)	
Measure Hazards-3 To reduce impacts related to routine transport, use, or disposal of hazardous materials, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that all contractors are adhering to the appropriate regulations established by the South Coast Air Quality Management District, the Department of Toxic Substances Control, and other relevant guidelines regarding the release of hazardous emissions into the atmosphere and the off-site disposal of contaminated soils throughout the construction period. Engineering and administrative controls shall be utilized to reduce the potential of accidental releases from hazardous materials during the construction phase as well as during normal working hours.	Project Applicant and Construction Contractor	Preconstruction, Construction, and Operation	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Project Permits (Construction)	(Signature/Date of Monitoring Agency)	
Measure Hazards-4 The applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that all contractors adhere to all federal, state, and local requirements in a manner consistent with relevant public safety regulations and guidelines. Engineering and administrative controls and reporting procedures shall be used to reduce the potential of accidental releases.	Project Applicant and Construction Contractor	Preconstruction, Construction, and Operation	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Project Permits (Construction)	(Signature/Date of Monitoring Agency)	
Hydrology and Water Quality				,	<u>'</u>		
Measure Hydrology-1 In order to mitigate impacts related to surface water quality caused by construction at the project site to below the level of significance, the City of Long Beach Department of Development Services shall require the construction contractor to implement best management practices consistent with National Pollutant Discharge Elimination System Permit No. CAS 004003 prior to completion of final plans and specifications. The construction contractor for each construction phase shall be required to submit a Storm Water Pollution Prevention Plan to the City of Long Beach for review and approval at least 30 days prior to the anticipated need for a grading permit. The applicant shall complete a water quality assessment prior to the issuance of permits. The City of Long Beach Department of Development Services shall monitor construction to ensure compliance with National Pollutant Discharge Elimination System Permit No. CAS 004003. Such compliance measures would, at a minimum, include preparation and implementation of a local Storm Water Quality Management Plan and a wet Season Erosion Control Plan (for work between October 15 and April 15). These plans shall incorporate all applicable best management practices described in the California Storm Water Best	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	NPDES permit documentation (incorporating Storm Water Quality Management Plan and a wet Season Erosion Control Plan)	(Signature/Date of Monitoring Agency)	

Kroc Community Center
June 8, 2009
S:\1222-004\MMP\SECTION 3.1_MITIGATION MONITORING TABLE.DOC

	Responsible				Documentatio	n of Compliance
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Management Practice Handbook, Construction Activity into the construction phase of the project. Prior to construction, temporary measures must be implemented in order to prevent transport of pollutants of concern from the construction site to the storm drainage system. The best management practices should apply to both the actual work areas as well as contractor staging areas. Selection of construction-related best management practices would be in accordance with the requirements of the City of Long Beach Department of Development Services. The City of Long Beach Department of Development Services shall ensure compliance throughout the duration of the project.						
Measure Hydrology-2 In order to mitigate impacts related to surface water quality caused by construction at the project site, prior to the issuance of permits for all phases of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the plans and specifications require the construction contractor to prepare a Standard Urban Storm Water Mitigation Plan for construction activities and implement best management practices for construction, construction material handling, and waste handling activities, which include the following:	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications and Standard Urban Storm Water Mitigation Plan	(Signature/Date of Monitoring Agency)
 Schedule excavation, grading, and paving activities for dry weather periods. Control the amount of runoff crossing the construction site by means of berms and drainage ditches to divert water flow around the site. Identify potential pollution sources from materials and wastes that will be used, stored, or disposed of on the job site. Inform contractors and subcontractors about the clean storm water requirements and enforce their responsibilities in pollution prevention. 						
The construction contractor shall incorporate Standard Urban Storm Water Mitigation Plan requirements and best management practices to mitigate storm water runoff, which include the following:						
 The incorporation of bio-retention facilities located within the project area. The incorporation of catch basin filtration systems. The use of porous pavements to reduce runoff volume. 						
Measure Hydrology-3 In order to mitigate impacts related to surface water quality caused by construction at the project site, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that the construction contractor is undertaking daily street sweeping and trash removal throughout the construction of the project to avoid degradation of water quality.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services and County of Los Angeles Department of Public Works	Final Plans and Specifications and Weekly Monitoring Reports	(Signature/Date of Monitoring Agency)
						(Signature/Date of Monitoring Agency)

	Responsible					on of Compliance		
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date		
NPDES								
Measure NPDES-1 The applicant shall be required to demonstrate that the construction contractor is implementing best management practices consistent with National Pollutant Discharge Elimination System Permit No. CAS 004003 to reduce transport of pollutants of concern from the construction site to the storm drainage and waterway system for each construction phase of the project as well as during the operation of the project. Prior to the issuance of permits for each construction phase of the project, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that final plans and specifications require compliance with National Pollutant Discharge Elimination System Permit No. CAS 004003 throughout the life of the project. The construction contractor for each construction phase shall be required to submit a Standard Urban Storm Water Management Plan to the City of Long Beach Department of Development Services for review and approval at least 30 days prior to the anticipated need for a grading permit. The City of Long Beach Department of Development Services shall monitor construction to ensure compliance with National Pollutant Discharge Elimination System Permit No. CAS 004003. The City of Long Beach Department of Development Services shall ensure National Pollutant Discharge Elimination System compliance throughout the duration of the project.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Standard Urban Storm Water Management Plan	(Signature/Date of Monitoring Agency)		
Land Use and Planning								
Impacts related to the loss of an historical resource, the Low-flow Pump Station, shall be reduced through archival documentation of as-found conditions. Prior to issuance of demolition permits, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that documentation of the Low-flow Pump Station is completed by the applicant in the form of a Historic American Buildings Survey that shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The documentation shall include large-format photographic recordation; a detailed historic narrative report including description, history, and statement of significance; measured architectural drawings (as built and/or current conditions); and a compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to the National Park Service Heritage Documentation Program, Historic American Buildings Survey, for inclusion in the Library of Congress. Archival copies of the documentation also would be submitted to the Long Beach Public Library; the Historical Society of Long Beach; California State University, Long Beach; the Office of Historic Preservation; and the South Central Coastal Information Center where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Development Services.		Preconstruction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications, Historic American Building Survey, and Archival Documentation	(Signature/Date of Monitoring Agency)		
Noise								
Measure Noise-1 All construction equipment shall be equipped with mufflers and other suitable noise attenuation devices.	Project Applicant and Construction Contractor	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)		

	Responsible			Documentation of Compliance		
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Measure Noise-2 The applicant shall require that grading and construction contractors use equipment with rubber tires rather than tracks to the extent possible, to minimize the impacts of excavation and grading noise upon the adjacent neighborhood.	Project Applicant and Construction Contractor	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Noise-3 A 10-foot sound attenuation blanket shall be installed along the eastern portion of the property line such that the line of sight is blocked from construction activity to the residential land uses, which would include the area for the proposed 6–8 Middle School scheduled to open in 2011 northeast of the project. The blankets shall remain in place as long as construction activity utilizing heavy duty equipment is located within 200 feet of the property line.	Project Applicant and Construction Contractor	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Noise-4 A 10-foot sound attenuation blanket shall be installed along the northwestern portion of the property line such that the line of sight is blocked from construction activity to the single-family residence. The blankets shall remain in place as long as construction activity utilizing heavy duty equipment is located within 130 feet of the property line.	Project Applicant and Construction Contractor	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Noise-5 A 10-foot sound attenuation blanket shall be installed along the southern portion of the property line such that the line of sight is blocked from construction activity to the multi-family residence. The blankets shall remain in place as long as construction activity utilizing heavy duty equipment is located within 100 feet of the property line.	Project Applicant and Construction Contractor	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Noise-6 A 10-foot sound attenuation blanket shall be installed along the northern portion of the property line such that the line of sight is blocked from construction activity to the Alvarado (Juan Bautista) Elementary School and the new 6–8 Middle School if it is in operation during construction activities. The blankets shall remain in place as long as construction activity utilizing heavy duty equipment is located within 50 feet of the property line.	Project Applicant and Construction Contractor	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Noise-7 A noise disturbance coordinator shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable.	Project Applicant	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
Measure Noise-8 A 6-foot-high solid wall shall be constructed along the eastern portion of the outdoor aquatics area such that the line of sight is blocked from the swimming pools to residential land uses.	Project Applicant	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)

	Responsible				Documentation of Compliance				
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date			
Measure Noise-9 A 6-foot-high solid wall shall be constructed along the eastern property line of the project site such that the line of sight is blocked from the parking lot to residential land uses.	Project Applicant	Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)			
Recreation									
Impacts related to the loss of an historical resource, the Low-flow Pump Station, shall be reduced through archival documentation of as-found conditions. Prior to issuance of demolition permits, the applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that documentation of the Low-flow Pump Station is completed by the applicant in the form of a Historic American Buildings Survey that shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The documentation shall include large-format photographic recordation; a detailed historic narrative report including description, history, and statement of significance; measured architectural drawings (as built and/or current conditions); and a compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to the National Park Service Heritage Documentation Program, Historic American Buildings Survey, for inclusion in the Library of Congress. Archival copies of the documentation also would be submitted to the Long Beach Public Library; the Historical Society of Long Beach; California State University, Long Beach; the Office of Historic Preservation; and the South Central Coastal Information Center where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Development Services.	Project Applicant	Preconstruction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications and Archival Documentation	(Signature/Date of Monitoring Agency)			
Transportation and Traffic									
In order to mitigate the impact related to substantially increasing hazards due to a design feature or incompatible uses, the project applicant shall install a traffic signal at the intersection of Rose Avenue and East Pacific Coast Highway. The installation of a traffic signal at this key intersection, and associated signing and striping modifications inclusive of crosswalks to facilitate pedestrian access to the site, is subject to the approval of the City of Long Beach and the California Department of Transportation.	Project Applicant	Preconstruction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications and Construction Management Plan	(Signature/Date of Monitoring Agency)			

	Responsible				Documentatio	n of Compliance
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Measure Transportation-2 To ensure that impacts to the surrounding street system are minimized, it is recommended that the construction management plan for the project be developed in coordination with the City of Long Beach and, at a minimum, address the following:	Project Applicant	Preconstruction	City of Long Beach Department of Development Services and California Department of Transportation	City of Long Beach Department of Development Services	Final Plans and Specifications	(Signature/Date of Monitoring Agency)
 Address traffic control for any street closure, detour, or other disruption to traffic circulation. Identify the routes that construction vehicles shall utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.) and to access the site, traffic controls and detours, and construction phasing plan for the project. Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts to adjacent streets. Require the applicant to keep all haul routes clean and free of debris including but not limited to gravel and dirt as a result of its operations. The applicant shall clean adjacent streets, as directed by the City Engineer (or representative of the City Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas. 						(Signature/Date of Monitoring Agency)
• Limit hauling or transport of oversize loads to between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Engineer. No hauling or transport shall be allowed during nighttime hours, weekends, or federal holidays.						
 Prohibit use of local streets. Ensure that haul trucks entering or exiting public streets shall at all times yield to public traffic. 						
 Ensure that, if hauling operations cause any damage to existing pavement, street, curb, and/or gutter along the haul route, the applicant shall be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer. Keep all constructed-related parking and staging of vehicles on site and out of the adjacent public roadways. Ensure that the plan shall meet standards established in the current California Manual on Uniform Traffic Control Device as well as City of Long Beach 						
requirements. • Limit hauling or transport of oversize loads to between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Engineer. No hauling or transport shall be allowed during nighttime hours, weekends, or federal holidays.						

	Responsible				Documentatio	n of Compliance
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date
Utilities and Service Systems						
Measure Utilities-1 The City of Long Beach shall require the construction contractor to comply with the California Department of Transportation construction site best management practices, as identified in the Storm Water Quality Handbook Best Management Practices Manual, when installing or repairing wastewater treatment facilities. The City of Long Beach Department of Development Services shall require the construction contractor to implement best management practices consistent with National Pollutant Discharge Elimination System Permit No. CAS 004003 to reduce transport of pollutants of concern from the construction site to the storm drainage and waterway system for each construction phase of the project, as well as during operation of the project. The construction contractor for each phase of the project shall be required to submit a Standard Urban Storm Water Management Plan to the City of Long Beach for review and approval at least 30 days prior to the anticipated need for a grading permit. The Department of Development Services shall monitor construction to ensure compliance with National Pollutant Discharge Elimination System Permit No. CAS 004003.	Project Applicant and Construction Contractor	Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications and Standard Urban Storm Water Management Plan	(Signature/Date of Monitoring Agency)
Measure Utilities-2 The City of Long Beach has incorporated Leadership in Energy and Environmental Design elements into the project that would reduce the potable water demand at the site and increase the efficiency of the water used for the project. This would include water conservation requirements for the proposed project, namely the installation of high-efficiency toilets (HET) in which the applicant may receive a \$30 rebate per HET installed; the installation of ultra-low flush or zero-water urinals; and compliance with the State of California Model Landscape Ordinance, which only allows for the use of water-efficient irrigation equipment, has strict limits on the use of turf grass, and places strict limits on the expected quantity of water required per square foot of landscape. The applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that consultation with the County of Los Angeles and Long Beach Water Department is conducted to incorporate other best management practices to address the increase in water demand, with the potential of implementing ordinances and regulations that would promote the efficient use of water at the project site. Degradation of water quality during construction of the project shall be reduced to below the level of significance through the requirement to conduct a detailed hydrology study based on the final site plans and to implement the recommendations, or comparable measures, into the plans and specifications for each project element prior to final approval by the City of Long Beach Department of Development Services. A Senate Bill 610 water supply assessment or comparable study shall be prepared by a certified civil engineer, and a draft report, including recommendations, shall be submitted to the Department of Development Services for review. The Department of Development Services shall provide comments, if any, within 14 days of receiving the draft hydrology study. A Senate Bill 610 water supply assessment or comparable	Project Applicant	Preconstruction	City of Long Beach Department of Development Services	City of Long Beach, Department of Development Services, County of Los Angeles, and Long Beach Water Department	Final Plans and Specifications, Senate Bill 610 water supply assessment or comparable study	(Signature/Date of Monitoring Agency) (Signature/Date of Monitoring Agency) (Signature/Date of Monitoring Agency)

	Responsible				Documentation of Compliance		
Mitigation Measure	Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Source	Signature/Date	
Measure Utilities-3 The applicant shall demonstrate to the satisfaction of the City of Long Beach Department of Development Services that at least 50 percent of the construction solid waste from the project is being diverted to comply with applicable federal, state, and local statutes related to solid waste and reduce direct and cumulative impacts from construction to below the level of significance. To ensure conformance with the Solid Waste Management Act of 1989, the City of Long Beach shall further require the construction contractor to manage the solid waste generated during construction of each element of the project by diverting at least 50 percent of it from disposal in landfills, particularly Class III landfills, through source reduction, reuse, and recycling of construction and demolition debris. The construction contractor shall submit a construction Solid Waste Management Plan to the City of Long Beach prior to construction of the project. The construction contractor shall demonstrate compliance with the Solid Waste Management Plan through the submission of monthly reports during demolition activities that estimate the total solid waste generated and diversion of 50 percent of the solid waste.		Preconstruction and Construction	City of Long Beach Department of Development Services	City of Long Beach Department of Development Services	Final Plans and Specifications, Construction Solid Waste Management Plan, and Monthly Reports	(Signature/Date of Monitoring Agency)	