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Los Angeles Field Office
611 W. 6th Street, 8th Floor
Los Angeles, CA 90017

FINAL
Environmental Assessment
for HUD-funded Proposals

Recommended format per 24 CFR 58.36, revised February 2004

Project Identification: River Avenue Storm Drain Improvements Project

Preparer: City of Long Beach

Responsible Entity: City of Long Beach

Month/Year: September 2009

FINAL

PART II

ENVIRONMENTAL ASSESSMENT

River Avenue Storm Drain Improvements Project

LEAD AGENCY:

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September 8, 2009

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ENVIRONMENTAL ASSESSMENT

Responsible Entity: City of Long Beach

Certifying Officer: Ms. Angela Reynolds, Manager, Neighborhood Services Bureau

Project Name: River Avenue Storm Drain Improvements Project

Project Location: The proposed project is located within the City of Long Beach (City), generally located in the southern portion of Los Angeles County; refer to Exhibit 2-1, *Regional Vicinity* of the IS/MND. The proposed project involves approximately 1,800 linear feet of improvements. The River Avenue Storm Drain Project (herein referenced as the "project") proposes pipeline infrastructure improvements, generally from the intersection of Wardlow Road and River Avenue to a Southern California Edison (SCE) easement, located to the south of Arlington Street; refer to Exhibit 2-2, *Local Vicinity* of the IS/MND.

Estimated Total Project Cost:	$1.4 Million
Grant Recipient:	City of Long Beach
Recipient Address:	333 West Ocean Boulevard, 3rd Floor, Long Beach, California 90802
Project Representative:	Ms. Angela Reynolds, Manager, Neighborhood Services Bureau
Telephone Number:	562.570.6771

Conditions of Approval: (List all mitigation measures adopted by the responsible entity to eliminate or minimize adverse environmental impacts. These conditions must be included in project contracts or other relevant documents as requirements).

AIR QUALITY

AQ-1 During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions must be controlled by regular water or other dust preventive measures using the following procedures, as specified in the SCAQMD Rule 403.

- Limit on-site vehicle speed to 15 miles per hour.
- Water material excavated or graded sufficiently to prevent excessive amounts of dust. Water at least twice daily with complete coverage, preferably in the late morning and after work is done for the day.
- Water or securely cover material transported on-site or off-site sufficiently to prevent generating excessive amounts of dust.

- Minimize area disturbed by clearing, grading, earth moving, or excavation operations so as to prevent generating excessive amounts of dust.

- Indicate these control techniques in project specifications. Compliance with the measure will be subject to periodic site inspections by the City.

- Prevent visible dust from the project from emanating beyond the property line, to the maximum extent feasible.

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).

- Trucks transporting soil, sand, cut or fill materials, and/or construction debris to or from the site must be tarped from the point of origin.

AQ-2 Ozone precursor emissions from construction equipment vehicles must be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Compliance with this measure must be subject to periodic inspections of construction equipment vehicles by the City and included in construction bid documents.

AQ-3 All trucks that are to haul material must comply with California Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. This provision must be provided in construction bid documents.

AQ-4 Construction hours, allowable work days, and phone numbers of the job superintendent must be clearly posted at all construction entrances to allow for surrounding property owners and residents to contact the job superintendent. If the job superintendent receives a complaint, appropriate corrective actions must be implemented immediately and a report taken to the reporting party.

AQ-5 Backup generators shall be used only for emergency operations. All backup generators shall be selected in consultation with the SCAQMD from their list of certified internal combustion engines.

CULTURAL RESOURCES

CUL-1 If cultural materials or archeological remains are encountered during the course of grading or construction activities, the project contractor shall cease any ground disturbing activities near the find. A qualified archaeologist, approved by the City of Long Beach, shall be retained to evaluate significance of the resources and recommend appropriate treatment measures. Treatment measures may include avoidance,

preservation, removal, data recovery, protection, or other measures developed in consultation with the City of Long Beach.

GEOLOGY AND SOILS

GEO-1 Prior to grading operations, a soils report shall be prepared for the proposed development to identify the potential for liquefaction, expansive soils, ground settlement, and slope failure. The report shall also:

- Specify loose alluvium that shall be excavated and removed from the site, as it is considered unsuitable for reuse as structural fill.
- Specify remedial measures that could be feasibly implemented to minimize potential impact.
- Analyze the potential for groundwater within the study area and recommend measures to remediate associated conditions.
- Determine the need for dewatering of areas during construction to remove all water within the excavation perimeter and recommend appropriate method of dewatering.

HAZARDS AND HAZARDOUS MATERIALS

HAZ-1 Prior to construction activities, an Environmental Professional shall conduct Phase II sampling on the Southern California Edison property within the area of disturbance to confirm or deny the presence of pesticides. Should sampling deny the presence of pesticides, sampling procedures would be deemed complete. Should sampling confirm the presence of pesticides, the Environmental Professional shall recommend further site characterization and/or remedial actions, if necessary.

HAZ-2 Prior to construction activities, the exact location of petroleum pipelines along River Avenue and within the footprint of the proposed detention unit on the Southern California Edison property shall be identified. The City of Long Beach shall confirm the locations with the following petroleum pipeline owners: ConcoPhillips, Defense Energy Support Center, Kinder Morgan, Pacific Pipeline System, and Paramount.

NOISE

N-1 Prior to site mobilization, a construction management plan shall be prepared which includes the following:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers;
- Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied

residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible;

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers;

- During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors;

- Operate earthmoving equipment on the construction site, as far away from vibration sensitive sites as possible; and

- Property owners and occupants located within 100 feet of the project boundary shall be sent a notice, at least 15 days prior to commencement of construction of each phase, regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the project construction site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints.

FINDING:

✗ **Finding of No Significant Impact**
(The project will not result in a significant impact on the quality of the human environment)

☐ **Finding of Significant Impact**
(The project may significantly affect the quality of the human environment)

Preparer Signature: _____ Date: July 31, 2009
Title/Agency: Ms. Angela Reynolds, Manager, Neighborhood Services Bureau, City of Long Beach

RE Approving Official Signature: _____ Date: July 31, 2009
Title/Agency: Ms. Angela Reynolds, Manager, Neighborhood Services Bureau City of Long Beach

1.0 STATEMENT OF PURPOSE AND NEED FOR THE PROPOSAL

1.1 INTRODUCTION

The proposed River Avenue Storm Drain Project (herein referenced as the "project") involves pipeline and catch basin improvements, and construction of additional catch basins and a detention unit within the City of Long Beach (Long Beach). The proposed project involves approximately 1,800 linear feet of improvements generally from the intersection of Wardlow Road and River Avenue to the Southern California Edison (SCE) easement, located south of Arlington Street.

The City of Long Beach determined that the proposed improvements are subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). The City has prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the project under the provisions of CEQA. Enclosed as Part 1 of this document is the project IS/MND, which was prepared in compliance with the guidelines and regulations of CEQA. As the City is seeking project funding from the U.S. Department of Housing and Urban Development (HUD), the proposed project is also subject to environmental review under the National Environmental Policy Act (NEPA).

This Environmental Assessment (EA) addresses the environmental effects of the project, as proposed, under NEPA. The analysis contained within the EA includes several references to the project IS/MND where similar impacts have been previously analyzed.

1.2 STATEMENT OF PURPOSE AND NEED FOR THE PROPOSAL

The purpose of the project is to alleviate flooding occurrences to residents in the low-lying 2300 block of Arlington Street (located in a sump), which have experienced damage to homes and vehicles as a result of flooding events along the River Avenue storm drain segment.

The existing storm drain system provides drainage for a 237-acre watershed from Carson Street, at the upstream end of the watershed area, to Dominguez Channel (along McHelen Avenue, River Avenue, and the previous Orange County Nursery). The existing storm drain design was based on hydrology that was completed in 1957 and consists of the following components:

- 5,700 feet of 42- to 60-inch reinforced concrete pipe (RCP);
- Various lengths of 8- to 21-inch RCP connector pipes;
- Catch basin curb inlets located on Arlington Street and River Avenue; and
- A surface drain on the Southern California Edison (SCE) property.

The 5-year flow rate for the mainline on River Avenue, upstream from Arlington Street, is 105 cubic feet per second (cfs). Based on 2005 hydrologic conditions, it was determined that the existing storm drain has a capacity of approximately 80 cfs at the intersection of Arlington Street and River Avenue. However, the catch basins along River Avenue are restricted and collect only 65 cfs. As the flow approaches the intersection of River Avenue and Arlington Street, the

surface flow partially diverts toward the sump along Arlington Street (a 50 percent split occurs). The excess surface flow (approximately 40 cfs) that is not accommodated by the drainage system flows into a sump area on Arlington Street and onto adjacent properties (i.e., adjoining residential uses). The inadequate drainage system has resulted in several flooding occurrences.

Recurring flooding incidents have resulted in tens of thousands of dollars in home renovations and subsequent litigation. Flooding severity did increase when a retaining wall was built on the SCE property. Excess surface flows drained into the fields south of Arlington Street. However, the development to the south of Arlington Street has enclosed the neighborhood and restricted flows.

In 2007, the Los Angeles County Department of Public Works, Storm Drain Division, conducted a drainage study of the area for the City of Long Beach. The report concluded that the existing 60-inch storm drain pipe that collects storm water from the project area, as well as the adjoining SCE property and carries storm water flows to the Dominguez Channel, is undersized, providing less than a five year protection level. The proposed project would increase flood protection to a 10-year level in the Arlington Street neighborhood and alleviate current flooding hazards.

1.3 NATIONAL ENVIRONMENTAL POLICY ACT

This Environmental Assessment (EA) has been prepared by the City of Long Beach (Lead Agency), in accordance with the United States Department of Housing and Urban Development (HUD) guidelines. This EA is a concise document containing an analysis of the potential environmental impacts of the proposed action. The purpose of the document is to aid the Agency's compliance with the National Environmental Policy Act (NEPA).

The process of preparing an EA is designed to involve the public in federal decision-making. Comments from agencies have been solicited to help identify the potential environmental issues associated with the proposed project; refer to Section 8.0 (Consultation and Coordination).

1.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000-21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR), the City of Long Beach, acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine whether the proposed project would have a significant environmental impact.

If the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration (or Mitigated Negative Declaration) for that project. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080(c), Public Resources Code).

The City of Long Beach has prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed action in accordance with CEQA (Public Resources Code Sections 21000-21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR). The IS/MND is provided as Part 1 of this document.

2.0 DESCRIPTION OF THE PROPOSAL

2.1 PROJECT LOCATION AND SETTING

The City of Long Beach (City) is located in the southern portion of Los Angeles County; refer to Exhibit 2-1, *Regional Vicinity* of the IS/MND. The proposed project involves approximately 1,800 linear feet of improvements. The River Avenue Storm Drain Project (herein referenced as the "project") proposes pipeline infrastructure improvements, generally from the intersection of Wardlow Road and River Avenue to the SCE easement, located to the south of Arlington Street; refer to Exhibit 2-2, *Local Vicinity* of the IS/MND.

An existing storm drain facility extends along River Avenue and continues in a south-southwestern direction, within the SCE property. The following are located adjacent in the vicinity of the project area:

- North. Land uses to the north include single-family residential uses. Wardlow Road/223rd Street is located to the north and trends east/west. Interstate 405 (I-405) trends north of the project area.

- East. Single- and multi-family residential uses, institutional uses, and the Union Pacific Railroad (UPRR) are in proximity to the east.

- South. Land uses to the south include SCE property (with a substation facility). To the south of the project area is the Dominguez Channel, and Pacific Ocean.

- West. Land uses to the west include single-family residential, the Union Pacific Intermodal Transfer Container Facility, and UPRR.

The existing River Avenue Storm Drain system traverses the cities of Long Beach, Los Angeles, and Carson and includes approximately 5,700 linear feet of 42- to 60-inch reinforced concrete pipe (RCP). The system provides drainage for a 237-acre watershed from Carson Street, at the upstream end of the watershed area, to Dominguez Channel (along McHelen Avenue, River Avenue, and the previous Orange County Nursery). The existing storm drain design was based on hydrology that was completed in 1957 and consists of the following components:

- 5,700 feet of 42- to 60-inch RCP;
- Various lengths of 8- to 21-inch RCP connector pipes;
- Catch basin curb inlets located on Arlington Street and River Avenue; and
- A surface drain on the SCE property.

The 5-year flow rate for the mainline on River Avenue, upstream from Arlington Street, is 105 cubic feet per second (cfs). Based on 2005 hydrologic conditions, it was determined that the existing storm drain has a capacity of approximately 80 cfs at the intersection of Arlington Street and River Avenue. However, the catch basins along River Avenue are restricted and collect only 65 cfs. As the flow approaches the intersection of River Avenue and Arlington Street, the surface flow partially diverts toward the sump along Arlington Street (a 50 percent split occurs). The excess surface flow (approximately 40 cfs) that is not accommodated by the drainage system flows into a sump area on Arlington Street and onto adjacent properties (i.e., adjoining residential uses). The inadequate drainage system has resulted in several flooding occurrences.

2.2 PROJECT CHARACTERISTICS

The inadequate River Avenue drainage system has resulted in flooding to adjacent residents. The project proposes to bring the flood protection in this area to a full 10 year protection level. The proposal involves construction of a parallel storm drain system along River Avenue (north of Arlington Street) that would connect to an underground storage (detention) basin proposed on the SCE property. The detention basin would temporarily hold two acre-feet of storm water during heavy flows and then release the flows as the storm abates. The proposed detention basin would allow the downstream pipe to no longer flow full.

The existing storm drain system was analyzed to determine the level of flooding if a 10-year frequency storm occurred. The 10-year reported flow rate at the intersection of River Avenue and Arlington Street is 144 cfs. The proposed retention system combined with the existing drain system is anticipated to accept 105 cfs at the intersection. The excess surface runoff of 39 cfs would be above the property lines. To provide the desired 10-year frequency flood protection, a retention system consisting of 3,148 linear feet of 72-inch diameter RCP or high-density polyethylene (HDPE) and 317 linear feet of 30-inch diameter RCP or HDPE with seven additional catch basins would be necessary; refer to Exhibit 2-3, *Site Plan* of the IS/MND. The City has elected to proceed with the 10-year frequency flood level protection. The project consists of the following elements:

- Construction of 1,021 feet of 48-inch reinforced concrete pipe along River Avenue, from Wardlow Road to the SCE property.
- Modification of five street level catch basins along River Avenue including the installation of trash and bacteria filters.
- Construction of six new street level catch basins along River Avenue including the installation of trash and bacteria filters.
- Construction of a detention system consisting of five 84-inch corrugated metal pipes, each 430 feet in length to be located within a dedicated easement on property owned by SCE in order to retain two acre-feet of storm drain flows.
- Modification of a surface inlet on the SCE property with a debris deflector.
- Construction of connecting pipes from the existing storm drain system to the detention system.
- Relocation of waterlines and gas lines along River Avenue.
- Preparation of a traffic control plan.

Construction equipment staging would be located on the SCE property. The proposed construction would consist of a 5-foot wide trench on River Avenue, from Wardlow Road to the SCE property, as well as 5-foot wide trenches on the SCE property to accommodate the detention pipes. Approximately 1,250 square feet of asphalt would be hauled to an off-site location. Approximately 4,500 cubic yards of excavated soil would be excavated and deposited on the SCE property.

2.3 PHASING

The project phasing would be as follows:

- Phase 1: Construction of the parallel drain on River Avenue
- Phase 2: Construction of the storm drain retention system

The project construction time frame would be as follows:

- Demolition – November 1, 2009 to December 15, 2009
- Trenching – November 1, 2009 to February 1, 2010
- Paving – December 30, 2009

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3.0 EXISTING CONDITIONS AND TRENDS

This Section includes a discussion of the existing conditions for the character, features, and resources of the project area and its surroundings, as well as the trends likely to continue in the absence of the project. The following information is provided pursuant to 24 Code of Federal Regulations (CFR) 58.40(a).

3.1 LAND DEVELOPMENT

The *City of Long Beach General Plan* (*General Plan*), is the long-range planning guide for growth and development for the City. The *General Plan* sets forth the goals, policies, and directions the City will take in managing its future. The *General Plan* is the citizens' blueprint for development; the guide to achieving the City's vision.

The project is located within an existing roadway and an SCE easement. The project is designated as Rights-of-Way in the *General Plan* at the SCE easement and as a local roadway (River Avenue) in the Transportation Element.

The *City of Long Beach Municipal Code (Municipal Code)*, enacted April 21, 2009, consists of regulatory, penal, and administrative ordinances of the City. It is the method the City uses to implement control of land uses, in accordance with *General Plan* goals and policies. The City's *Zoning Code*, Title 21 of the *Municipal Code*, identifies land uses permitted and prohibited according to the zoning category of particular parcels. The purpose of the *Zoning Code* is "to promote and preserve the public health, safety, comfort, convenience, prosperity and general welfare of the people of Long Beach." The *Buildings and Construction Code* (Title 18 of the *Municipal Code*) specifies rules and regulations for construction, alteration, and building for uses of human habitation. Title 20, *Subdivisions*, is also regulated within the City's *Municipal Code*. The project site is located within an existing roadway, which are not applicable to zoning designations, and an SCE easement, which is zoned PR (Public Right-of-Way) and permits utility uses.

Title XII of Division A of the American Recovery and Reinvestment Act of 2009, which became effective on February 17, 2009, appropriates $1 billion to carry out the Community Development Block Grant (CDBG) program under Title I of the Housing and Community Development Act of 1974 on an expedited basis. Consequently, HUD has established a new program called the Community Development Block Grant-Recovery (CDBG-R). Under this program the City is eligible to receive $2,332,444 of federal funding.[1]

3.2 NOISE

NOISE SENSITIVE RECEPTORS

Certain land uses are particularly sensitive to noise, including schools, hospitals, rest homes, long-term medical and mental care facilities, and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours. Table 3.2-1, *Sensitive Receptors*, provides a listing showing the location of sensitive receptors within one mile of the project site.

[1] City of Long Beach, *City Council Supplemental Agenda*, June 2, 2009.

Table 3.2-1
Sensitive Receptors

Type	Name	Direction from Project Site	Distance from Project Site (miles)
Schools	First Baptist Preschool	North	0.57 miles
	Dominguez Elementary School	Northeast	0.86 miles
	Webster Elementary School	Southeast	0.46 miles
	Muir Elementary School	Southeast	0.90 miles
	Stephens Middle School	South	0.89 miles
Parks	Dominguez Park	Northeast	0.84 miles
Places of Worship	Harbor Baptist Church	North	0.01 miles
	Our Lady of Guadalupe Old Catholic Church	North	0.51 miles
	Dominguez United Methodist Church	North	0.63 miles
	Centro De Intercersion	East	0.40 miles
	Iglesia Misionera Pentecostal	East	0.42 miles
	St. Luke's Baptist Church	East	0.64 miles
	Filipino-American Baptist Church	East	0.64 miles
	Inter Faith Cogic	Southeast	0.55 miles
	Silverado United Methodist Church	Southeast	0.94 miles
	Word of God Ministries	Southeast	0.90 miles
	Lily of the Valley Church	Southeast	0.67 miles
	Faith Lutheran Church	Southeast	0.70 miles
	First Samoan Assembly of God	Southeast	0.71 miles
	Westside Church-The Nazarene	Southeast	0.85 miles
Residents	Single-family residential units	North, East, West	0.01-1.0 miles

Source: RBF Consulting field reconnaissance, June 2009, and Google Earth 2009.

NOISE SURVEY

Improvements within River Avenue are surrounded by sensitive residential uses. The improvements within the SCE property are surrounded by sensitive residential uses to the north.

In order to quantify existing ambient noise levels in the proposed project area, RBF Consulting (RBF) conducted one ten-minute (12:53 p.m. to 1:03 p.m.) noise measurement within the residential uses along River Avenue near Lincoln Street on June 16, 2009. The measured noise level was 57.8 dBA. The complete result of the field measurement is included in *Appendix E*, *Noise Data* of the IS/MND.

MOBILE NOISE SOURCES

Mobile noise sources in the project area include traffic-related noise from vehicles traveling along River Avenue and adjacent local streets, Wardlow Road/223rd Street, and Interstate 405 (I-405). Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3.0 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Although mobile noise sources exist in the project vicinity, they are not

significantly loud, as justified by the noise measurement conducted at the project site (57.8 dBA).

3.3 AIR QUALITY

The project site is located within the City, which is part of the South Coast Air Basin (Basin) and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is one of 35 air quality management districts that have prepared an *Air Quality Management Plan* (AQMP) to accomplish a five-percent annual reduction in emissions. The most recent AQMP was adopted in 2007.

Both the State of California and the Federal government have established health-based Ambient Air Quality Standards (AAQS) for criteria air pollutants. These pollutants include carbon monoxide (CO), ozone (O_3), nitrogen oxides (NO_X), sulfur oxides (SO_X), particulate matter up to 10 microns and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$, respectively), and lead (Pb). O_3 is formed by a photochemical reaction between NO_X and volatile organic compounds (VOCs). Thus, impacts from O_3 are assessed by evaluating impacts from NO_X and VOCs.

SENSITIVE RECEPTORS

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The California Air Resources Board (CARB) has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Sensitive receptors located within one mile of the project site are listed in Table 3.2-1, *Sensitive Receptors*, above.

3.4 ENVIRONMENTAL DESIGN

The Conservation Element of the *General Plan* identifies the following historical and cultural assets within the City: Rancho Los Cerritos, Rancho Los Alamitos, "Alamitos 1" (the first oil well), Civic Center Complex, Art Museum, Pacific Terrace Center, Queen Mary, California State University, Long Beach, and Long Beach City College. The project site is located within a residential neighborhood and an SCE easement, and no identified historical resources are known to be present within the immediate project area.

Refer also to Section 3.1, *Land Development*.

3.5 SOCIOECONOMIC

The City's 2000 population was an estimated 461,522 persons, representing a 7.5 percent increase over the 1990 population of 429,433 persons.[2] As of January 1, 2009, the City's population was an estimated of 492,682 persons.[3] Population growth is expected to continue in the City, with Southern California Association of Governments (SCAG) estimating that its

[2] Census 2000, accessed at www.census.gov in July 2009.
[3] State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark. Sacramento, California,* accessed in July 2009.

population will reach 503,251 persons by 2010, 517,226 persons by 2015, 531,854 persons by 2020 and 559,598 persons by 2030.[4] This projection would represent a population growth of approximately 13.6 percent between 2009 and 2030.

According to the Census 2000, the total housing stock in the City of Long Beach was an estimated 171,659 housing units.[5] This represents an increase of approximately eight percent over the estimated 158,975 housing units reported in the Census 1990. The City's housing stock as of January 2009 was an estimated 175,164 housing units and its vacancy rate was 4.98 percent. Comparatively, the County's vacancy rate is estimated to be 4.21 percent. The number of persons per household in the City was 2.898 (January 2009) [6]. According to SCAG projections, the number of housing units in the City is expected to increase to 169,739 units by 2010, 175,415 units by 2015, 181,397 units by 2020 and 190,576 units by 2030[7]. This increase in housing represents an approximately 8.8 percent increase between 2009 and 2030.

In 2000, the City of Long Beach's civilian labor force consisted of approximately 209,167 persons. At the time of the Census, an estimated 9.4 percent of the City's civilian labor force (19,680 persons) was unemployed. Similar to the County of Los Angeles, the majority of the City's labor force (approximately 34.3 percent) was employed in management, professional, and related occupations; a substantial portion (27.2 percent) was in sales and office occupations. [8] SCAG projects that the City's employment trends will continue to increase over the next twenty years with 185,938 employees by 2010, 189,987 employees by 2015, 192,614 employees by 2020, and 198,860 by 2030, representing a 6.9 percent increase over the next 20 years.[9]

3.6 COMMUNITY FACILITIES AND SERVICES

3.6.1 EDUCATIONAL FACILITIES

The project site is located within the Long Beach Unified School District (LBUSD). These districts provide educational services for approximately 90,000 students in 95 public schools, in kindergarten through 12th grade. The project site is approximately 0.46 miles northwest of Webster Elementary School and 0.89 miles north of Stephens Middle School, both of which are in the LBUSD. Cabrillo High School is located 1.95 miles south of the project site and is a part of the LBUSD. Additionally, California State University, Long Beach, is located approximately 6.5 miles southeast of the project site.

3.6.2 COMMERCIAL FACILITIES

The project site is located in the western portion of Long Beach, which is generally surrounded by residential, industrial, railroad, and public utility uses. Wardlow Road/223rd Street adjoins the project site to the north and contains general commercial/retail uses including supermarkets and

4 Southern California Association of Governments, *Adopted 2008 Regional Transportation Plan Growth Forecast, By City*, http://www.scag.ca.gov/forecast/index.htm, accessed in July 2009.
5 *Census 2000*, accessed at www.census.gov in July 2009.
6 State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark. Sacramento, California,* accessed in July 2009.
7 Southern California Association of Governments, *Adopted 2008 Regional Transportation Plan Growth Forecast, By City*, http://www.scag.ca.gov/forecast/index.htm, accessed in July 2009.
8 Census 2000, accessed at www.census.gov in July 2009.
9 Southern California Association of Governments, *Adopted 2008 Regional Transportation Plan Growth Forecast, By City*, http://www.scag.ca.gov/forecast/index.htm, accessed in July 2009.

restaurants. Also, commercial uses are prominent along Santa Fe Avenue, located approximately 0.40 miles east of the project site. Along Santa Fe Avenue, commercial uses are primarily comprised of retail commercial, restaurant and professional service uses.

3.6.3 HEALTH CARE

Three hospitals provide comprehensive medical service to Long Beach: Community Hospital of Long Beach, Long Beach Memorial Medical Center, and Pacific Hospital of Long Beach. Combined, these hospitals provide comprehensive services including Emergency and Urgent Care, Outpatient Surgery, Cardiac Care Unit (CCU), Intensive Care Unit (ICU), obstetrics, pediatrics, physical/occupational therapy, mental health services, respiratory therapy, radiology, ultrasound, and Magnetic Resonance Imaging (MRI). Additionally, private medical centers and clinics within Long Beach provide a comprehensive array of specialized medical services including emergency treatments.

3.6.4 SOCIAL SERVICES

Social service facilities located in the project vicinity include:

Center for Families and Youth (6355 Myrtle Avenue). The Center for Families and Youth is located approximately 3.9 miles northeast of the project site. Services provided at this facility include a variety of family support programs such as the family preservation program, family support program, and targeted case management program.

Central Facilities Center (1133 Rhea Street). The Central Facilities Center (located approximately 3.25 miles southeast of the project site) includes several services including child care services, helpline youth counseling, emergency food referrals, emergency housing, immediate need transportation, and rehabilitation services.

Homeless Services Division (1301 West 12th Street). The Homeless Services Division (located approximately 2.8 miles south of the project site) is responsible for coordinating homeless services and addressing the impacts of homelessness citywide. The Homeless Services Division administers grand funding for continuum of care, emergency shelter grant, homeless Veterans initiative, emergency food and shelter program, and emergency shelter services program.

Additional social services are provided to the residents of Long Beach, including adult services, children services, senior services, health services, mental health services, disabled services, and shelters.

3.6.5 SOLID WASTE

Solid waste (including recycled materials) in the area is handled and transported by the City's Refuse Collection Division. Most trash in the City is taken to the Southeast Resource Recovery Center (SERRF) to be incinerated and converted to electricity. The residue from this process is taken to landfills to be used as road base. The remainder of the City's trash is taken to the Puente Hills Landfill in the City of Whittier. The Puente Hills Landfill has a total permitted capacity of 106.4 million cubic yards, of which 49.4 million cubic yards is the remaining capacity.

The landfill is anticipated to close in 2013.[10] Additionally, the City has implemented a Construction and Demolition Recycling program (Section 18.97 of the *Municipal Code*) that requires certain demolition and/or construction projects to divert at least 60 percent of waste from landfills through recycling, salvage, or deconstruction.

3.6.6 WASTEWATER

Wastewater collected in the City initially flows through the local sewer pipelines owned by the City. In 1988, the Long Beach Water Department assumed the responsibility of the sanitary sewer system including operations and maintenance. The Long Beach Water Department operates and maintains nearly 765 miles of sanitary sewer line, delivering over 40 million gallons per day (gpd) to Los Angeles County Sanitation Districts facilities located on the north and south sides of the City. From these facilities, treated sewage is used for irrigation, to recharge the groundwater basin, or is pumped into the Pacific Ocean.

The majority of the City's wastewater is delivered to the Joint Water Pollution Control Plan (JWPCP) of the Los Angeles County Sanitation Districts. The remaining portion of the City's wastewater is delivered to the Long Beach Water Reclamation Plant. The JWPCP is located in the City of Carson and occupies approximately 350 acres. It provides advanced primary and partial secondary treatment for 350 million gallons of wastewater per day. The Long Beach Water Reclamation Plant is located at 7400 East Willow Street in Long Beach and occupies 17 acres west of the I-605 Freeway. The plant provides primary, secondary, and tertiary treatment for 25 million gpd of wastewater.

3.6.7 STORM WATER

The project proposes improvements to the existing storm drain system located within River Avenue. The existing storm drain system includes approximately 5,700 linear feet of 42- to 60-inch RCP. The system provides drainage for a 237-acre watershed from Carson Street, at the upstream end of the watershed area, to Dominguez Channel (along McHelen Avenue, River Avenue, and the previous Orange County Nursery). The existing storm drain design was based on hydrology that was completed in 1957 and consists of 5,700 feet of 42- to 60-inch RCP, various lengths of 8- to 21-inch RCP connector pipes, catch basin curb inlets located on Arlington Street and River Avenue, and a concrete ditch located at the SCE property.

The five-year flow rate for the mainline on River Avenue, upstream from Arlington Street, is 105 cfs. Based on 2005 hydrologic conditions, it was determined that the existing storm drain has a capacity of approximately 80 cfs at the intersection of Arlington Street and River Avenue. However, the catch basins along River Avenue are restricted and collect only 65 cfs. As the flow approaches the intersection of River Avenue and Arlington Street, the surface flow partially diverts toward the sump along Arlington Street (a 50 percent split occurs). The excess surface flow (approximately 40 cfs) that is not accommodated by the drainage system flows into a sump area on Arlington Street and onto adjacent properties (i.e., adjoining residential uses). The inadequate drainage system has resulted in several flooding occurrences and damage to adjoining residential units.

[10] Solid Waste Facility Listing: http://www.ciwmb.ca.gov/Swis/search.aspx, accessed in July 2009.

3.6.8 WATER SUPPLY

The Long Beach Water Department is the water provider for the City. The City receives its potable water from groundwater wells and treated surface water purchased from the Metropolitan Water District of Southern California (MWD). This water originates from the Colorado River via the Colorado River Aqueduct, and from Northern California's Bay-Delta region via the California Aqueduct.

3.6.9 PUBLIC SAFETY

The Long Beach Fire Department (LBFD) provides fire protection and emergency response to the City. Twenty-five fire stations serve the City. LBFD headquarters is located at 3205 Lakewood Boulevard, approximately 4.8-miles east of the project site. The nearest fire station to the project site is Fire Station 13, located at 2475 Adriatic Avenue (approximately 1.40-miles southeast of the project site).

The City of Long Beach Police Department (LBPD) provides police protection to the City. The police station headquarters is located at 400 West Broadway, approximately 3.9-miles southeast of the project site.

3.6.10 EMERGENCY MEDICAL

In addition to fire protection services, LBFD provides emergency medical services to the City. Fire Stations 1, 2, 9, 10, 11, 12, 13 (nearest to the project site), 14, and 17 have paramedic rescue ambulances, and Fire Stations 3, 4, 11, 16, and 17 are equipped with basic life support ambulances. All paramedic rescue ambulances are manned by two firefighters/paramedics. The LBFD responded to 38,677 medical-related calls in 2007.[11] Emergency medical treatment is provided by local hospitals and private medical facilities; refer to Section 3.6.3 (Health Care).

3.6.11 OPEN SPACE AND RECREATION

The City of Long Beach Parks, Recreation, and Marine Department supervise and maintain park, recreational and marine facilities in the City. The Parks, Recreation, and Marine Department operates 152 parks with 25 community centers, two major tennis centers, five golf courses, and the largest municipally operated marina system in the nation with 3,800 boat slips and 6 miles of beaches. More than 3,066 acres within the City's 50 square miles are developed for recreation. The park nearest to the project site is Silverado Park, located approximately 0.60 miles to the southeast.

3.7 TRANSPORTATION

3.7.1 ACCESS

According to the *General Plan*, street classifications in the City include freeway, regional corridor, major arterial, minor arterial, collector street, and local street. River Avenue is designated as a local street.

[11] City of Long Beach Fire Department, accessed at http://www.longbeach.gov/civica/filebank/blobdload.asp?BlobID=21340 in July 2009.

Transit services within the City are provided by Long Beach Transit (fixed-route bus service), Los Angeles County Metropolitan Transportation Authority (bus transit and the Metro Blue Line), Orange County Transportation Authority, Torrance Transit, and the Commuter Express operated by the City of Los Angeles Department of Transportation. The nearest transit stop to the project site is the Long Beach Transit Bus Routes 191 and 193 stop located at the intersection of Wardlow Road/223rd Street and McHelen Avenue (approximately 175 feet north of River Avenue). This transit stop is not located within the project site.

The City adopted the Bicycle Master Plan in December 2001. Bikeways within the City include Class I, Class II, and Class III bikeways. There are no bikeways located within the project site. The nearest bikeway to the project site is a Class I bikeway along the Los Angeles River, approximately 0.93 miles to the east.

3.7.2 BALANCE

The existing transportation system provides for travel by private automobile, public transit, or bicycle. Private automobile trips to and from the project site would be served by a grid system of local collector streets. Further, the Metrolink Rail Station (located at Wardlow Avenue and Pacific Place) provides commuter train service to and from the City with connections to surrounding counties within southern California.

3.7.3 SAFETY

Roadways serving the project area are controlled by traffic control devices (traffic signals, stop signs, speed restriction signs, street name signs, and striping on the roadway). Section 10.08 (*Traffic-Control Devices*) of the *Municipal Code*, regulates the operation and maintenance of traffic control devices within the City. In addition, existing roadways in the project vicinity are improved with curbs, gutters, sidewalks, and paving.

3.7.4 LEVEL OF SERVICE

The Transportation Element of the *General Plan* establishes Level of Service (LOS) D as being the acceptable LOS standard. The *General Plan* identifies several roadways that are congested. However, none of these roadways traverse through the project limits.

3.8 NATURAL FEATURES

3.8.1 WATER RESOURCES AND SURFACE WATER

The City receives its water from local groundwater, the Colorado River, and Northern California's Bay-Delta. The City receives its potable water from groundwater wells and treated surface water that is purchased from the MWD.

No surface water features are located within the project area. Refer also to Section 3.6.8, *Water Supply*.

3.8.2 UNIQUE NATURAL FEATURES AND AGRICULTURAL LANDS

No unique natural features or scenic resources exist on the project site or in the project area. The project site is located in the western portion of the City and is zoned PR (Public Right-of-Way). The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No farmland exists in the project area.

3.8.3 VEGETATION AND WILDLIFE

The project area is generally located within a developed area of the City. The project site consists of roadway uses and areas of utility easement. As a result of the disturbed and developed nature of the project site and the lack of significant native habitats, these improvement areas have limited value to native plants and wildlife. The Conservation Element of the *General Plan* identifies the following habitats in the City:

- Riparian;
- Ponds and Lakes;
- Freshwater Streams and Rivers;
- Freshwater Marsh;
- Salt Marsh and Estuaries;
- Mudflat (Tidal);
- Rocky Coastal;
- Sandy Coastal;
- Open Sea;
- Open Space; and
- El Dorado Preserve and Nature Center.

The project site is not located within a habitat area of the City, according to the Conservation Element. No Federally listed or proposed threatened and endangered species (i.e., plants, animals, fish, or invertebrates), nor designated or proposed critical habitats exist in the project vicinity. Additionally, no Federally protected wetlands occur within the project area; refer also to Section 6.8.3.1, *Vegetation*.

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4.0 STATUTORY CHECKLIST

4.1 EVALUATION OF DETERMINATIONS

Pursuant to 24 CFR Section 58.5, this section analyzes the proposed project's compliance for each listed statute, executive order, or regulation. The Environmental Assessment determination and sources used to verify compliance are provided. It should be noted that information contained in the River Avenue Storm Drain Improvements Project Initial Study/Mitigated Negative Declaration (IS/MND) (enclosed as Part 1 of this document), was used for informational purposes throughout this EA. Where a potentially significant adverse impact is identified (relative to the identified statute, executive order, or regulation), mitigation measures are recommended to reduce the impact.

Factors	Determinations and Compliance Documentation
Historic Preservation [36 CFR 800]	In Compliance. The project site consists of a roadway (River Avenue) and a Southern California Edison (SCE) easement. Project implementation would not impact historic properties or potentially historic properties located within the vicinity of the project site. Study: Refer to Section 6.4.2, *Historic, Cultural and Archaeological Resources* and Section 4.5, *Cultural Resources* of the IS/MND.
Floodplain Management [24 CFR 55, Executive Order 11988]	In Compliance. The project site is not located within a 100-year floodplain and does not involve property acquisition, land management, construction, or improvement within a 100-year floodplain identified by Federal Emergency Management Agency maps; additionally, the project does not involve a "critical action" (e.g., emergency facility, facility for mobility impaired persons, etc.) within a 500-year floodplain. Printed: FIRM Community Panel Number 06037C1955F, September 26, 2008 Panel 1955 of 2350. Study: Refer to Section 6.1.6.3, *Flood Hazards*, and Section 4.8, *Hydrology and Water Quality* of the IS/MND.
Wetlands Protection [Executive Order 11990]	In Compliance. No Federally protected wetlands occur within the project area. The project does not involve new construction within or adjacent to a wetland identified by or delineated on maps issued by the U. S. Department of Interior, Fish and Wildlife Service. Printed: Wetland Maps, The National Wetlands Inventory http://www.fws.gov/wetlands/data/index.html.
Coastal Zone Management Act [Sections 307 (c), (d)]	In Compliance. The project does not involve the placement, erection, or removal of materials, nor does it increase the intensity of a use within the Coastal Zone. Study: Refer to Section 6.8.1, *Water Resources and Surface Waters* and Section 4.9, *Land Use and Planning* of the IS/MND.
Sole Source Aquifers [40 CFR 149]	In Compliance. The project site is not located within an area designated by the Environmental Protection Agency (EPA) as being supported by a sole source aquifer. The proposed project does not require any source of water, other than for temporary construction activities. Printed: *Designated Sole Source Aquifers in EPA Region IX*, www.epa.gov/safewater/sourcewater/pubs/qrg_ssamap_reg9.pdf.

Factors	Determinations and Compliance Documentation
Endangered Species Act [50 CFR 402]	In Compliance. The project would not affect Federally listed or proposed threatened and endangered species (i.e., plants, animals, fish, or invertebrates), nor designated or proposed critical habitat. Study: Refer to Section 6.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.
Wild and Scenic Rivers Act [Sections 7 (b), (c)]	In Compliance. The project site is not located within 1.0 mile of a listed Wild and Scenic River, as identified by the U.S. Department of Interior or National Park Service. Printed: U.S. Department of Fish and Wildlife Services, *National Wild and Scenic Rivers*, http://www.rivers.gov/ Study: Refer to Section 6.8.1.7.
Air Quality [Clean Air Act, Sections 176 (c)and (d), and 40 CFR 6, 51, 93]	In Compliance. The project conforms with the EPA-approved State Implementation Plan (SIP). Study: Refer to Section 6.3, *Air Quality* and Section 4.3, *Air Quality* of the IS/MND.
Farmland Protection Policy Act [7 CFR 658]	In Compliance. The project site does not include prime farmland or unique farmland or other farmland of statewide or local importance, as identified by the U.S. Department of Agriculture, Natural Resources Conservation Service. Printed: U.S. Department of Agriculture, Natural Resources Conservation Service. Study: Refer to Section 6.8.2, *Unique Natural Features and Agricultural Lands* and Section 4.2, *Agricultural Resources* of the IS/MND.
Environmental Justice [Executive Order 12898]	In Compliance. The project proposes storm drain improvements to alleviate current flooding hazards within a low- to moderate-income neighborhood in the City. The improvements would be beneficial and would not pose an environmental justice issue. Refer to Section 6.5, *Socioeconomic*.

HUD Environmental Standards	Determinations and Compliance Documentation
Noise Abatement and Control [24 CFR 51 B]	In Compliance. The project would not create objectionable noise during project operations. Refer to Section 6.2, *Noise* and Section 4.11, *Noise* of the IS/MND. Study: Refer to Refer to Section 6.2, *Noise* and Section 4.11, *Noise* of the IS/MND.
Toxic or Hazardous Substances and Radioactive Materials [HUD Notice 79-33]	In Compliance. The project is not located on or adjacent to any known or suspected sites contaminated with toxic chemicals or radioactive materials. Study: Refer to Section 6.1.7.2, *Toxic Chemicals and Radioactive Materials* and Section 4.7, *Hazards and Hazardous Materials* of the IS/MND.

HUD Environmental Standards	Determinations and Compliance Documentation
Siting of HUD-Assisted Projects near Hazardous Operations [24 CFR 51 C]	In Compliance. The project would not expose people or buildings to hazardous operations. Study: Refer to Section 6.1.7.3, *Explosive and Fire Hazards* and Section 4.7, *Hazards and Hazardous Materials* of the IS/MND.
Airport Clear Zones and Accident Potential Zones [24 CFR 51 D]	In Compliance. The project site is not located within an FAA-designated civilian airport Runway Clear Zone (RCZ), within a military airfield Clear Zone (CZ), or Accident Potential Zone (APZ). Study: Refer to Section 6.1.7, *Man-Made Hazards and Nuisances* and Section 4.7, *Hazards and Hazardous Materials* of the IS/MND.

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5.0 ENVIRONMENTAL ASSESSMENT CHECKLIST

5.1 EVALUATION OF ENVIRONMENTAL IMPACTS

[Environmental review Guide HUD CPD 782, 24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27]

The following is an evaluation of the significance of the proposal on the character, features, and resources of the project area. Relevant base data and verifiable source documentation has been provided to support the finding; refer to Section 6.0, *Environmental Consequences*, for detailed discussions. The appropriate impact code has been entered from the following list to make a finding of impact. Impact Codes: (1) – No impact anticipated; (2) – Potentially beneficial; (3) – Potentially adverse; (4) – Requires mitigation; (5) – Requires project modification. The names, dates of contact, telephone numbers, and page references, have been noted. It should be noted that information from the River Avenue Storm Drain Improvements Project Initial Study/Mitigated Negative Declaration (IS/MND), dated July 27, 2009, enclosed as Part 1 of this document, and associated technical appendices, was used for informational purposes throughout this EA.

Land Development	Code	Source or Documentation
Conformance with Comprehensive Plans and Zoning	1	*City of Long Beach General Plan*; *Zoning Code*; and Exhibit 2-3, *Site Plan* of the IS/MND
Compatibility and Urban Impact	1	*City of Long Beach General Plan*; *Zoning Code*; and Exhibit 2-3, *Site Plan* of the IS/MND
Slope	1	*City of Long Beach General Plan;* Section 4.6, Geology and Soils of the IS/MND*;* and Appendix B, *Geotechnical Investigation* of the IS/MND
Erosion	3	*Municipal Code*; and Site Visits/Photos
Soil Suitability	4	Section 4.6, *Geology and Soils* of the IS/MND*;* and Appendix B, *Geotechnical Investigation* of the IS/MND
Natural Hazards and Nuisances (Including Site Safety)	4	*City of Long Beach General Plan*; *City of Lancaster Municipal Code*; Section 4.6, *Geology and Soils* of the IS/MND; Appendix B, *Geotechnical Investigation* of the IS/MND*;* Section 4.7, *Hazards and Hazardous Materials* of the IS/MND; Appendix C, *Phase I Environmental Site Assessment* of the IS/MND; and Flood Insurance Rate Maps
Energy Consumption	1	Exhibit 2-3, *Site Plan* of the IS/MND
Noise Contribution to Community Noise Levels	4	*Municipal Code*; Exhibit 2-3, *Site Plan* of the IS/MND; Section 4.11, *Noise* of the IS/MND; and Appendix E, *Noise Data* of the IS/MND
Air Quality Effects of Ambient Air Quality on Project and Contribution to Community Pollution levels	4	SCAQMD CEQA Handbook; Exhibit 2-3, *Site Plan* of the IS/MND; Section 6.3, *Air Quality*; Section 4.3, *Air Quality* of the IS/MND; and Appendix A, *Air Quality Data* of the IS/MND
Environmental Design Visual Quality – Coherence, Diversity, Compatible Use and Scale	1	*City of Long Beach General Plan*; *Municipal Code*; and Exhibit 2-3, *Site Plan* of the IS/MND
Historic, Cultural, and Archaeological Resources	1	*City of Long Beach General Plan*

Socioeconomic	Code	Source or Documentation
Demographic Character Changes	1	California Department of Finance; U.S. Census Data 1990 and 2000; and Exhibit 2-3, *Site Plan* of the IS/MND
Displacement	1	California Department of Finance; U.S. Census Data 1990 and 2000; and Exhibit 2-3, *Site Plan* of the IS/MND
Employment and Income Patterns	1	California Department of Finance; U.S. Census Data 1990 and 2000; and Exhibit 2-3, *Site Plan* of the IS/MND

Community Facilities Socioeconomic	Code	Source or Documentation
Educational Facilities	1	Long Beach Unified School District
Commercial Facilities	1	Exhibit 2-3, *Site Plan* of the IS/MND; and Site Visits/Photos
Health Care	1	City of Long Beach website; and Long Beach Fire Department
Social Services	1	Exhibit 2-3, *Site Plan* of the IS/MND
Solid Waste	1	City of Long Beach Public Works; and California Integrated Waste Management Board
Wastewater	1	Long Beach Water Department
Storm Water	2	Site Plan; Section 4.8, *Hydrology and Water Quality* of the IS/MND; and Appendix D, *Hydrology Report* of the IS/MND
Water Supply	1	Long Beach Water Department
Public Safety		
- Police	1	Long Beach Police Department; and Exhibit 2-3, *Site Plan* of the IS/MND
- Fire	1	Long Beach Fire Department; and Exhibit 2-3, *Site Plan* of the IS/MND
- Emergency Medical	1	Long Beach Fire Department; and Exhibit 2-3, *Site Plan* of the IS/MND
Open Space and Recreation - Open Space - Recreation - Cultural Facilities	1	City of Long Beach Parks, Recreation, and Marine Department; and Exhibit 2-3, *Site Plan* of the IS/MND
Transportation	1	*City of Long Beach General Plan*; Long Beach Transit; Los Angeles County Metropolitan Transportation Authority; and Exhibit 2-3, *Site Plan* of the IS/MND

Natural Features	Code	Source or Documentation
Water Resources	1	Long Beach Water Department; and Metropolitan Water District of Southern California
Surface Water	1	Long Beach Water Department; and Metropolitan Water District of Southern California
Unique Natural Features and Agricultural Lands	1	U.S. Department of Fish and Wildlife Services; National Park Service; and California Department of Conservation
Vegetation and Wildlife	1	*City of Long Beach General Plan*; Exhibit 2-3, *Site Plan* of the IS/MND

Other Factors	Code	Source or Documentation
Flood Disaster protection Act [Flood Insurance] [58.6(a)]	1	Flood Insurance Rate Map Community Panel Number 06037C1955F, September 26, 2008 Panel 1955 of 2350; and Exhibit 2-3, *Site Plan* of the IS/MND
Coastal Barrier Resources Act/Coastal Barrier Improvement Act [58.6(c)]	1	Exhibit 2-3, *Site Plan* of the IS/MND
Airport Runway Clear Zone or Clear Zone Disclosure [58.6(d)]	1	Los Angeles County Airport Land Use Commission, *Airport Influence Area*, May 13, 2003; and Exhibit 2-3, *Site Plan* of the IS/MND
Other Factors	N/A	N/A

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6.0 ENVIRONMENTAL CONSEQUENCES

Section 6.0, *Environmental Consequences*, of the Environmental Assessment, contains a detailed analysis of the project's impacts pursuant to *Environmental Review Guide HUD CPD 782, 24 CFR 58.40,* and *Ref. 40 CFR 1508.8 and 1508.27*. As part of the proposed project, environmental impacts were also analyzed per the guidelines and regulations of the California Environmental Quality Act (CEQA). Per CEQA, an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared in order to address the direct, indirect, and cumulative environmental effects of the project, as proposed.

Section 6.0 contains references to the River Avenue Storm Drain Improvements Project IS/MND enclosed as Part 1 of this document. Specific instances of reference are identified where information from the IS/MND was utilized in the preparation of the Environmental Assessment (EA).

6.1 LAND DEVELOPMENT

6.1.1 CONFORMANCE WITH COMPREHENSIVE PLANS AND ZONING

Finding: No Impact Anticipated.

1. *Is the proposal consistent or compatible with completed components of the local or regional comprehensive plan?*

   Yes. As stated in Section 4.9, *Land Use and Planning* of the IS/MND, the project would be consistent with the SCE property's land use designation (Rights-of-Way). The portion of the project site within River Avenue does not include an existing land use designation. River Avenue is designated in the Transportation Element as a local roadway. Therefore, the proposed project is consistent/compatible with the *City of Long Beach General Plan* (*General Plan*).

2. *Is there a state plan and is the proposal consistent?*

   Yes. The proposal is consistent with the State Implementation Plan (SIP); refer to Section 6.3, *Air Quality*, for a detailed discussion regarding the proposal's consistency with the SIP.

3. *Is the proposed project consistent with other plans including those prepared by areawide planning agencies, special districts and boards in various functional areas?*

   Yes. The purpose of the project is to alleviate current flooding hazards in the project area and would not increase capacity beyond what is necessary to alleviate current flooding events.

   Also, Title XII of Division A of the American Recovery and Reinvestment Act of 2009, which became effective on February 17, 2009, appropriates $1 billion to carry out the Community Development Block Grant (CDBG) program under Title I of the Housing and Community Development Act of 1974 on an expedited basis. Consequently, the department of Housing and Urban Development (HUD) has established a new program called the Community Development Block Grant-Recovery (CDBG-R). Under this program the City is eligible to

receive $2,332,444 of federal funding. The City proposes that 90 percent of the CDBG-R funds be made available for infrastructure projects that benefit low and moderate income neighborhoods, projects that can be under construction within 120 days of the release of funds, and projects that assist with job creation and retention objectives. The project proposes improvements that would alleviate flooding to the Arlington residential neighborhood. The Arlington neighborhood is considered to be a low- to moderate-income residential neighborhood in the City. Therefore, the proposed project would meet these criteria and would, therefore, be eligible for CDBG-R funding.

6.1.2 COMPATIBILITY AND URBAN IMPACT

Finding: No Impact Anticipated.

1. *What are the existing land uses adjacent to the proposed project and will the proposed project be compatible with the existing development?*

   Yes. The project is generally bounded by single-family residential uses and Wardlow Road/223rd Street on the north, an SCE easement, utility, and industrial uses on the south and southwest, and single-family residential uses on the east and west. A storm drain system is currently located along River Avenue. The proposed project would be compatible with surrounding uses, as utility uses along River Avenue and the SCE easement are permitted under the City's *Zoning Code*. The project would also alleviate current flooding hazards within the neighborhoods along River Avenue.

   Refer to Section 6.1.7.4, *Other Hazards*, Section 6.2, *Noise*, and Section 6.3, *Air Quality* for a discussion of general factors addressing compatibility.

2. *Will the project introduce elements or induce development, which is out of character or scale with the existing physical environment?*

   No. The proposed project would not introduce elements or induce development, which is out of character or scale with the existing physical environment. The proposed project would consist of underground storm drain improvements River Avenue and within the SCE property. Upon completion of construction, the project site would be similar to existing conditions.

   Also, refer to Section 6.1.1.1, above.

3. *Will the project location, appearance, construction, or activities which it will generate, detract from the aesthetic appeal of natural or man-made surroundings?*

   No. As stated in Section 4.1, *Aesthetics* of the IS/MND, there are no scenic vistas or visual resources located within the vicinity of the project site. During project operation, views in the project area would remain similar to existing conditions, as the proposed improvements would be located underground. The project's construction activities may be visible from adjoining residents. However, construction impacts are short-term and would cease upon project completion. Additionally, implementation of the required permits for the Regional Water Quality Control Board (RWQCB), such as the National Pollution Discharge Elimination System (NPDES), and the required Best Management Practices (BMPs), would reduce potential impacts from visible dust and dirt track out areas. Therefore, the project

(both short-term and long-term operations) would not detract from the aesthetic appeal of the man-made surroundings.

4. *Is the project protected from incompatible uses by proper zoning?*

   Yes. The project is protected from incompatible uses by proper zoning; refer to Section 6.1.2.1, above.

5. *Are the approaches to the project convenient, adequate, safe, and attractive?*

   Yes. Vehicle access to the project site would be primarily from River Avenue. Pedestrian access would primarily occur from River Avenue, Wardlow Road/223rd Street, Cameron Street, Lincoln Street, and Arlington Street. The project site is served by a closely spaced grid system of streets that provide multiple paths of travel for vehicles and can be easily crossed by pedestrians. Project implementation would not alter the existing roadway network or adversely affect the levels of service of the nearby intersections; refer to Section 6.7, *Transportation*.

6. *Is the site location readily accessible to employment, shopping and service areas?*

   Yes. The project site is located within the western portion of the City, which primarily consists of residential, utility, railroad, and industrial uses. Some areas of employment, shopping, and services are located along Wardlow Road/223rd Street (adjacent to the north of the project site), and along Santa Fe Avenue (approximately 0.4 miles west of the project site). As the project would not result in an increase of population at the project site either directly, or indirectly, the project would not impact accessibility of persons to employment, shopping, and service areas; refer to Section 3.6, *Community Facilities and Services*.

7. *Is access to the site free from impediments such as railroad crossings at grade, steep hills, prone to flash floods?*

   Yes. Access to the project site is free from impediments. The Union Pacific Railroad and Southern Pacific Railroad (located east and west of the project site, respectively) do not obstruct access to the site. The project site is generally flat; however, the project site and adjacent neighborhoods experience flooding during storm events. The proposed project would alleviate current flooding hazards in the project area. Also, the project would not generate an increase in population. Therefore, no impact would result in this regard.

8. *Does the site plan make arrangements for necessary street and road improvements to serve the residents, and to decrease the possible hazards to pedestrians in the area?*

   Yes. Refer to Section 6.1.2.5.

9. *Is the project an addition to already existing development or will it be completely new? Will the project be isolated from all services and have to provide its own access roads and streets?*

   Yes/No. The project area is developed with residential and utility uses. The project site consists of River Avenue and an SCE easement; both of which have been previously disturbed for the construction of the River Avenue storm drain system. The proposed project would construct an additional parallel storm drain pipeline within River Avenue and

an underground detention unit on the SEC property. The project site is served by an existing system of local streets. The surrounding area is urbanized and a variety of services are available within the surrounding area. Upon project implementation, the existing street system would remain. Refer to Section 3.6, *Community Facilities and Services* and Section 6.1.2.5.

6.1.3 SLOPE

Finding: No Impact Anticipated.

1. *Does the proposal call for development on a steep slope and, if so, does its design plan include measures to overcome potential erosion, slope stability, and runoff problems?*

   No. The project site is generally flat, ranging from 22 feet above mean sea level (msl) to 26 feet above msl, sloping slightly to the north. The proposal would not involve development on a steep slope. Also refer to Section 4.6, *Geology and Soils* of the IS/MND.

2. *Does the county, local, or site-specific soil survey mention that slopes are unstable for any of the soils on the site?*

   No. Refer to Section 6.1.3.1, Section 6.1.5, *Soil Stability*, and Section 4.6, *Geology and Soils* of the IS/MND.

3. *Is there a history of slope failure in the project area environs?*

   No. Refer to Section 6.1.3.1 and Section 6.1.3.2.

4. *Is there visual indications of previous slides or slumps in the project area, such as cracked walls or tilted trees or fences?*

   No. The project site is generally flat, and no indications of previous slides or slumps were visible on the project site during the June 16, 2009 site visit; refer to Section 6.1.3.1.

6.1.4 EROSION

Finding: Potentially Adverse.

1. *Does the site clearance require vegetation removal? How many acres will be cleared and for how long? Are temporary control facilities provided?*

   Yes. The project would not require clearance of structures or vegetation. Project construction would occur over approximately three months. Construction activities may expose soils to short-term wind and water erosion. The proposed project would implement temporary erosion control measures pursuant to the Los Angeles Regional Water Quality Control Board, the *Municipal Code*, and the National Pollutant Discharge Elimination System (NPDES) permit for construction activities. With implementation of erosion control measures as stated in the *Municipal Code* and adherence to all NPDES requirements, a minor impact would occur in this regard. Also, refer to Section 3.6.7, *Stormwater* and Section 4.9, *Hydrology and Water Quality* of the IS/MND, for further discussion with respect to the erodibility of soils.

2. *Is there evidence of previous erosion or sedimentation on the site?*

   No. The portion of the project site within River Avenue is paved with asphalt and the surrounding area is developed, and there is no evidence of erosion or sedimentation. The SCE easement contains utility uses and currently consists of vacant land and a plant nursery atop bare soil.

6.1.5 SOIL SUITABILITY

Finding: Requires Mitigation.

1. *Is there any visible evidence of soil problems—foundations cracking or settling, basement flooding, etc.—in the neighborhood of the project site?*

   No. Refer to Section 6.1.5.2.

2. *Have soil studies or borings been made for the area? Do they indicate marginal or unsatisfactory soil conditions?*

   Yes/No. Soil borings were conducted as part of the *Geotechnical Investigation* for the project, prepared by Kleinfelder on May 16, 2008. Soil deposits encountered during the investigation generally consist of alternating layers of loose to medium dense silty sand/sandy silt underlain by medium stiff sandy clay and by dense sand with silt. Based on field exploration, laboratory testing, and geotechnical analyses conducted for the project, it is geotechnically feasible to construct the project as proposed. The project would not be subject to a hazard from settlement, slippage, or landslide, and would not adversely affect the geologic stability of the site or adjacent properties. Additionally, Mitigation Measure GEO-1 contained within the IS/MND requires a soils report to be conducted prior to site disturbance.

3. *Is there evidence of high water table or poor soil conditions where septic systems are to be installed?*

   No. The project would not involve the use of septic tanks or alternative wastewater disposal systems.

6.1.6 NATURAL HAZARDS AND NUISANCES (INCLUDING SITE SAFETY)

Finding: Potentially Adverse.

6.1.6.1 SEISMIC HAZARDS

Ground Shaking

1. *Will the site be near a natural hazard [relative to ground shaking] involving a potential risk to project residents?*

   No. As stated in Section 4.6, *Geology and Soils* in the IS/MND, the project site is not located within, or immediately adjacent to, an Alquist-Priolo Earthquake Fault Zone.

According to the Seismic Safety Element of the *General Plan,* two active faults have the greatest potential to create significant ground shaking, including the Newport-Inglewood and the Palos Verdes Fault Zones. Strong seismic ground shaking may result in damage to the proposed storm drain pipelines. Damage resulting from ground shaking along the Newport-Inglewood Fault and the Palos Verdes Fault could be reduced effectively through compliance with California Building Code requirements.

Numerous controls imposed on the project through the permitting process would lessen potential impacts associated with seismically-induced ground shaking. Adherence to standard engineering practices and Code requirements relative to seismic and geologic hazards would minimize potential impacts pertaining to potential damage to the proposed storm drain pipelines. Also, the project does not include the construction or modification of structures. Therefore, project implementation would result in less than significant impacts associated with the exposure of people or structures to potential substantial adverse effects involving strong seismic ground shaking.

2. *Can the project be protected [from ground shaking] by mitigation measures?*

   Yes. Refer to Section 6.1.6.1.1.

Liquefaction

3. *Will the site be near a natural hazard [relative to liquefaction] involving a potential risk to project residents?*

   No. Based on the *Geotechnical Investigation*, the project site is located within a seismic hazard zone for liquefaction potential, as designated by the State of California and County of Los Angeles. Due to the City's geological, geotechnical, and groundwater conditions, the potential exists for the occurrence of liquefaction which may result in damage to storm drain pipelines. With implementation of Mitigation Measure GEO-1 contained within the IS/MND, the project would require a soils report to identify the potential for liquefaction, expansive soils, ground settlement, slope failure, and groundwater (refer to Section 4.6, *Geology and Soils* of the IS/MND).

4. *Can the project be protected [from liquefaction] by mitigation measures?*

   Yes. Refer to Section 6.1.6.1.3.

Settlement

5. *Will the site be near a natural hazard [relative to settlement] involving a potential risk to Project residents?*

   No. Based on the *Geotechnical Investigation*, the total and differential settlements due to liquefaction along the storm drain alignment may be approximately 1.5 inches and 0.75 inches, respectively. The project site would be subject to differential settlement due to intense shaking associated with seismic events. Mitigation Measure GEO-1 within the IS/MND would require a soils report to identify the potential for liquefaction, expansive soils, ground settlement, slope failure, and groundwater. Following compliance with controls established through the permitting process, *Municipal Code* Title 18, *Buildings and Construction*, and *State of California Building Code* provisions adopted by reference in the

Municipal Code, project implementation would result in a minor impact from potential risk as a result of a natural hazard (relative to settlement).

6. *Can the project be protected [from settlement] by mitigation measures?*

   Yes. Refer to Section 6.1.6.1.5.

6.1.6.2 WILDLAND FIRE HAZARDS

1. *Will the site be near a natural hazard [relative to wildland fires] involving a potential risk to Project residents?*

   No. According to the Public Safety Element of the *General Plan*, the project site is located in an area of the City categorized as a "least critical" fire hazard area. Therefore, the site would not expose surrounding residents to potential wildland fire risk.

2 *Can the project be protected [from wildland fires] by mitigation measures?*

   Not Applicable. Refer to Section 6.1.6.2.1.

6.1.6.3 FLOOD HAZARDS

1. *Will the project be located in the 100-year floodplain?*

   No. According to the Public Safety Element of the *General Plan*, the project site is located within one of the 19 flood hazard areas within the City, based on a 10-year recurrence probability. The published Flood Insurance Rate Maps (FIRMs) for the project site are included on Community Panel No. 06037C1955F (September 26, 2008). The purpose of the FIRM is to show the areas of a community located in a 100-year floodplain (an area that has a one percent or greater chance of flooding in any given year). These areas are known as Special Flood Hazard Areas (SFHAs). The project site is located in Other Flood Areas-Zone X, which are areas of 0.2 percent annual chance flood. Therefore, the project would not be located in SFHAs inundated by a 100-year floodplain.

2. *Is the project in compliance with Executive Order 11988 and implementing HUD procedures?*

   Yes. Refer to Section 6.1.6.3.1.

3. *Will the project change the 100-year floodplain or affect the floodway?*

   No. Refer to Section 6.1.6.3.1.

4. *Are there practicable alternatives to locating the project or activity in the floodplain?*

   Not Applicable. Refer to Section 6.1.6.3.1.

6.1.7 MAN-MADE HAZARDS AND NUISANCES (INCLUDING SITE SAFETY)

Finding: Requires Mitigation.

6.1.7.1 AVIATION HAZARDS

1. *Is there a military airfield or commercial service airport near (in the vicinity of) the proposed project site?*

   No. As stated in Section 4.7, *Hazards and Hazardous Materials* of the IS/MND, the Long Beach Municipal Airport is located approximately 3.4 miles east of the project site. The project site is located approximately 3.10 miles west of the Long Beach Airport Influence Area, and would, therefore, not result in a safety hazard. Additionally, since the proposed project does not include the construction of any habitable structures, a safety hazard for people residing in the project area, as a result of the project, would not occur. The proposed storm drain improvements would not result in any permanent activity that would be adversely affected by airport operations.

2. *If the project is located in a Runway Clear Zone or Clear Zone, will the project be frequently used or occupied by people?*

   Not Applicable. Refer to Section 6.1.7.1.1.

3. *If the project is located in the Accident Potential Zone at a military airfield, is the project type generally consistent with the Department of Defense's land use compatibility guidelines?*

   Not Applicable. Refer to Sections 6.1.7.1.1.

6.1.7.2 TOXIC CHEMICALS AND RADIOACTIVE MATERIALS

1. *Will the proposed project be placed on filled land and what materials were used for the fill?*

   No. A Phase I Environmental Site Assessment (Phase I ESA) was prepared for the project site, by Kleinfelder on May 16, 2008 (refer to Appendix C of the IS/MND). Based on the findings of the Phase I ESA, no areas of fill dirt from a known or unknown sources was identified.

2. *Is the project on or near a site suspected of posing a potential environmental hazard?*

   Yes. Refer to Section 4.7, *Hazards and Hazardous Materials* of the IS/MND.

6.1.7.3 EXPLOSIVE AND FIRE HAZARDS

1. *Is the project site located near or in an area where conventional petroleum fuels (such as gasoline), hazardous gases (e.g., propane), or chemicals (e.g., benzene or hexane) of a flammable nature are stored? If yes, will the project be located at an acceptable distance from the hazardous situation or activity? If it cannot, will appropriate mitigating measures be taken?*

No. The southern portion of the project site located within the SCE easement and has been currently used as a plant nursery and is still currently used for utility uses. No hazardous substances or petroleum fuels have been identified to be stored within the project vicinity.

2. *Will the project need special structural or design considerations to make it acceptable?*

Not Applicable. Refer to Section 6.1.7.3.1.

6.1.7.4 OTHER HAZARDS

1. *Does the project involve any potential hazards [such as the following]?*

a. *Site Hazards: inadequate street lighting, uncontrolled access to lakes and streams, improperly screened drains or catchment areas, drilling operations, pipelines, steep stairs or walks, overgrown brush, lack of access for emergency vehicles.*

Yes. The project would not involve any new potential site or traffic hazards. As stated in Section 4.7, *Hazards and Hazardous Materials* of the IS/MND, it is anticipated that traffic flow along River Avenue would be temporarily impacted during construction of the proposed improvements. However, construction of the proposed project would not obstruct emergency operations. Upon completion of construction, operation of the project would not obstruct traffic flow or emergency operations. Additionally, the project would be required to comply with all City and State Safety Codes, and project plans would be reviewed by the City's Public Works Department.

b. *Traffic: circulation conflicts, heavy traffic, hazardous cargo transportation routes, and road safety.*

Yes. Refer to Section 6.1.7.4(a).

c. *Neighborhood hazards/nuisances: vibration, glare from parking lots, odors, and proximity of the project to aerial transmission lines, power plants, transformers, drainage canals, junk yards, and industrial activities.*

Yes. Vibration associated with construction would be short-term and would not be significant. Overhead power lines are located along River Avenue and within the SCE easement. However, existing transmission lines would not be affected by project construction and would not be required to be removed or relocated.

2. *Are there project users or neighboring populations whose special health and safety needs are not anticipated in the project design? Have actions been taken to protect children from "attractive" nuisances? Have measures been taken to reduce the potential risk to the elderly from dust, and to provide temporary walkways and traffic around construction sites?*

No/Not Applicable/Yes. The infrastructure improvements would not involve users or neighboring populations. The project does not involve any "attractive" nuisances, as the project consists of underground storm drain improvements. Construction activities associated with the proposed project would be subject to compliance with *Municipal Code* provisions relative to construction-related safety measures (including dust control). Additionally, Section 4.3, *Air Quality* of the IS/MND, contains Mitigation Measures AQ-1

through AQ-5 which would ensure compliance with South Coast Air Quality Management District (SCAQMD) standards.

3. *Can the problems, which may generate nuisances, be alleviated by designs or plan changes?*

   Yes. Refer to Section 6.1.7.4.1 and Section 6.1.7.4.2.

4. *Will the project need special design or engineering criteria, which bring into question its feasibility?*

   No. Refer to Section 6.1.7.4.1.

6.1.8 ENERGY CONSUMPTION

Finding: No Impact Anticipated.

1. *Does the location of the site have any special energy related advantages or disadvantages and can these be maximized or overcome.*

   Not Applicable. Project operation would not generate an increase in population, new vehicular trips, and does not include significant energy consumption.

2. *Have the plans taken full advantage of potential energy saving measures, such as proper orientation, insulation, window design and placement, lighting, heating, cooling and hot water systems? If district heating and cooling is available, will it be used? Is the project in conformance with other applicable energy saving codes?*

   Not Applicable. Refer to Section 6.1.8.1.

3. *Are utilities already installed, and will they be available for use by the project? If district heating and cooling is a good future possibility, can the building be adapted to use it without expensive retrofit costs?*

   Not Applicable. Refer to Section 6.1.8.1.

6.2 NOISE

Finding: Requires Mitigation.

1. *Given the existing noise levels and estimated future noise levels at the site, will the project be exposed to noise levels, which exceed HUD's noise standards?*

   No. HUD has identified exterior noise standards for new housing construction; refer to Table 6.2-1, *HUD Site Acceptability Standards*. As indicated in Table 6.2-1, sites with sound levels of 65 CNEL and below are "acceptable" and are allowable. Construction of new noise sensitive uses is prohibited generally for projects with "unacceptable" noise exposures and is discouraged for projects with "normally unacceptable" noise exposure.

Table 6.2-1
HUD Site Acceptability Standards

Approval	Ldn or CNEL dBA[2]	Requirements
Acceptable[1]	≤65[3]	None.
Normally Unacceptable	65 – 75	Special Approvals[4] Environmental Review[5] Attenuation[6]
Unacceptable	> 75	Special Approvals[4] Environmental Review[5] Attenuation[7]

Notes:
1. The noise environment inside a building is considered acceptable if: (i) The noise environment external to the building complies with these standards, and (ii) the building is constructed in a manner common to the area or, if of uncommon construction, has at least the equivalent noise attenuation characteristics.
2. Where the building location is determined, the standards shall apply at a location 6.5 feet from the building housing noise sensitive activities in the direction of the predominant noise source. Where the building location is undetermined, the standards shall apply 6.5 feet from the building setback line nearest to the predominant noise source. However, where quiet outdoor space is desired at a site, distances should be measured from important noise sources to the outdoor area in question. (It is assumed that quiet outdoor space includes single-family private yards and multi-family patios or balconies that are greater than six feet in depth).
3. Acceptable threshold may be shifted to 70 dBA in special circumstances pursuant to Section 51.105 (a).
4. See Section 51.104(b) (Special Requirements) for requirements.
5. See Section 51.104(b) (Special Requirements) for requirements.
6. Five (5.0) dBA additional attenuation required for sites above 65 dB but not exceeding 70 dBA, and 10 dBA additional attenuation required for sites above 70 dBA but not exceeding 75 dB; see Section 51.104(a).
7. Attenuation measures can be submitted to the Assistant Secretary for CPD for approval on a case-by-case basis.

Source: Title 24 (Housing and Urban Development [HUD]), Part 51 (Environmental Criteria and Standards), Subpart B (Noise Abatement and Control), Section 51.103 (Criteria and Standards).

The proposed project involves improvements to the storm drain system along River Avenue and construction of a detention unit within the adjoining SCE property. The project does not propose the construction of new noise sensitive uses and would, therefore, not expose new sensitive uses to "normally unacceptable" or "unacceptable" noise levels. Additionally, as stated in Section 4.11, *Noise* of the IS/MND, RBF Consulting conducted one ten-minute (12:53 p.m. to 1:03 p.m.) noise measurement within the residential uses along River Avenue near Lincoln Street on June 16, 2009. The measured noise level was 57.8 dBA.

The proposed project would not generate any new vehicular trips during operation. Construction related noise impacts would not result in a significant impact, as construction activities would be short-term and would cease upon project completion. As stated in Section 4.11, *Noise* of the IS/MND, Section 8.80.330 of the *Municipal Code* contains an exemption from the Noise Ordinance for public health, safety, and welfare activities, which includes activities associated with catch basins and storm drains. Additionally, implementation of the recommended Mitigation Measure N-1 contained within Section 4.11, *Noise* of the IS/MND, would ensure construction related noise impacts are minimized to the extent feasible. As such, with implementation of N-1 and compliance with the City's *Municipal Code*, Title 8, *Health and Safety*, construction noise impacts would be less than significant.

Upon project completion, noise in the project area would remain similar to existing noise levels (approximately 58 dBA). The proposed facilities would not involve any sources of stationary noise (i.e., pumps, generators, etc.).

2. *If there is a potential noise problem, what kinds of mitigation measures are proposed for the project?*

   Not Applicable. Refer to Section 6.2.1.

6.3 AIR QUALITY

Finding: Requires Mitigation.

1. *Is the project located in the vicinity of heavy industry, incinerators, power generating plants, oil refineries, parking facilities for 1,000 cars (inside an SMSA) or 2,000 cars (outside an SMSA), or near a highway with six or more traffic lanes?*

   Yes. The project is located within approximately 400 feet of a substation facility, and approximately 650 feet of a railroad yard. The existing substation does not directly emit pollutants. It is anticipated that the existing railroad yard does emit diesel particulates from train and truck traffic. Also, the project site is located approximately 300 feet south of I-405.

   The proposed project involves storm drain improvements and would not place new housing within the project site. Therefore, less than significant impacts are anticipated in this regard.

2. *Are the project users particularly sensitive to existing or projected air pollution levels? Has the project been designed to mitigate possible adverse effects?*

   No/Yes. There would be no project users associated with the proposed project, as the project consists of underground storm drain improvements. Although short-term air quality impacts would occur during grading and construction operations associated with development of the proposed project, these are considered minor due to the nature of the proposed project. Refer to Section 4.3, *Air Quality* of the IS/MND, which indicates that localized air quality emissions are less than significant.

3. *Is the project located in the vicinity of a monitoring station where air quality violations have been registered?*

   Yes. As noted within Table 6.3-1, *Local Air Quality Levels*, violations have occurred in regards to the one- and eight-hour ozone standards, as well as PM_{10} and Federal $PM_{2.5}$ standards.

Table 6.3-1
Local Air Quality Levels

Pollutant	Primary Standard		Year	Maximum[1] Concentration	Number of Days State/Federal Std. Exceeded
	California	Federal			
Carbon Monoxide (CO)[2]	9 ppm for 8 hours	9 ppm for 8 hours	2006 2007 2008	3.36 ppm 2.59 2.49	0/0 0/0 0/0
Ozone (O_3) (1-Hour)[2]	0.09 ppm for 1 hour	NA[4]	2006 2007 2008	0.081 ppm 0.099 0.093	0/0 1/0 0/0
Ozone (O_3) (8-Hour)[2]	0.07ppm for 8 hours	0.075 ppm for 8 hours	2006 2007 2008	0.059 ppm 0.074 0.074	0/0 1/0 1/0
Nitrogen Dioxide (NO_2)[2]	0.18 ppm for 1 hour	0.053 ppm annual average	2006 2007 2008	0.102 ppm 0.107 0.125	0/NA 0/NA 0/NA

Table 6.3-1 (Continued)
Local Air Quality Levels

Pollutant	Primary Standard		Year	Maximum[1] Concentration	Number of Days State/Federal Std. Exceeded
	California	Federal			
Particulate Matter (PM_{10}) [2,4,5]	50 µg/m³ for 24 hours	150 µg/m³ for 24 hours	2006 2007 2008	78.0 µg/m³ 232.0 62.0	5/0 6/1 1/0
Fine Particulate Matter ($PM_{2.5}$) [2,5]	No Separate State Standard	35 µg/m³ for 24 hours	2006 2007 2008	58.5 µg/m³ 82.8 39.4	NM/5 NM/12 NM/2

ppm = parts per million
µg/m³ = micrograms per cubic meter
NM = Not Measured
PM_{10} = particulate matter 10 microns in diameter or less
$PM_{2.5}$ = particulate matter 2.5 microns in diameter or less
NA = Not Applicable

Notes:
1 – Maximum concentration is measured over the same period as the California Standard.
2 – Measurements taken at the North Long Beach Monitoring Station (located at 3648 North Long Beach Boulevard, Long Beach, California 90807).
3 – The United States Environmental Protection Agency revoked the Federal 1-hour Standard in June of 2005.
4 – PM_{10} exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
5 – PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.

Source: California Air Resources Board, *ADAM Air Quality Data Statistics*, http://www.arb.ca.gov/adam/welcome.html, accessed on July 21, 2009.

General Conformity Analysis

This analysis has been structured to illustrate how the proposed project would meet the requirements of the Federal Clean Air Act (FCAA) General Conformity requirements, as well as those set forth by the South Coast Air Quality Management District (SCAQMD). The project site is located within the South Coast Air Basin (Basin) and is designated non-attainment for O_3, $PM_{2.5}$, and PM_{10}. The following outlines the screening level analysis consistent with the General Conformity process:

i) If the applicant's project is located in a nonattainment area or an attainment area subject to a maintenance plan (maintenance area) the environmental document should include a description of the air quality status for each criteria pollutant for which an area has been designated nonattainment or maintenance. Provide an estimate of the annual emissions that are expected from both the construction and operation of the project for each criteria pollutant. Projects in an attainment area not under a maintenance plan or in an unclassified area are not subject to a conformity analysis.

The Basin fails to meet the Federal and State air quality standards for O_3, $PM_{2.5}$, and PM_{10}. Atmospheric concentrations of the other criteria pollutants do not exceed Federal or State standards.

The majority of ozone formation occurs when nitrogen oxides (NO_X) and volatile organic gases (VOCs), react in the atmosphere in the presence of sunlight. NO_X and VOCs are called ozone precursors. Therefore, this analysis will quantify NO_X and VOCs with the

URBEMIS 2007 model to determine ozone impacts. $PM_{2.5}$ and PM_{10} emissions are directly quantified with the URBEMIS 2007 model.

ii) Compare these emissions to the de minimis (applicability) levels specified for each nonattainment or maintenance area pollutant. See 40 C.F.R. Section 93.153(b) (Applicability).

Per 40 C.F.R. Section 93.153(b), the de minimus concentrations of ozone are limited to 25 tons/year (50 tons/year of VOC and 100 tons/year of NO_X), and PM_{10} is limited to 70 tons/year and $PM_{2.5}$ is limited to 100 tons/year. Implementation of the proposed project would not create operational emissions, and therefore would only introduce an increase in emissions during construction activities; refer to Table 6.3-2, *Clean Air Act – Step A*. As these compounds speciate in the troposphere and are not necessarily additive, predicted ozone levels are not expected to exceed the de minimus thresholds. Additionally, as stated above, construction would occur in 2009 and 2010. Construction activities in 2009 would emit 0.07 tons of VOC, 0.56 tons of NO_X, 0.03 tons of $PM_{2.5}$, and 0.01 tons of PM_{10}; construction activities in 2010 would emit 0.02 tons of VOC, 0.20 tons of NO_X, 0.03 tons of $PM_{2.5}$, and 0.01 tons of PM_{10}, which are all below the de minimus thresholds.

Table 6.3-2
Clean Air Act Conformity – Step A

Criteria	Non-Attainment Pollutants (tons/year)			
	Ozone[3]		PM_{10}	$PM_{2.5}$
	VOC	NO_X		
2009				
Construction Emissions[1]	0.07	0.56	0.03	0.03
De Minimus Levels[2]	*50*	*100*	*70*	*100*
Are De Minimus Levels Exceeded?	*No*	*No*	*No*	*No*
2010				
Construction Emissions[1]	0.02	0.20	0.01	0.01
De Minimus Levels[2]	*50*	*100*	*70*	*100*
Are De Minimus Levels Exceeded?	*No*	*No*	*No*	*No*

Notes:
1. Project emissions derived from URBEMIS 2007 version 9.2.4 computer model; refer to Appendix A, *Air Quality Data* of the IS/MND. Emissions have been quantified for "worst case" construction scenarios. Operational emissions are minor, and are less than the construction related emissions. Therefore, they are not presented in this table.
2. De minimus levels are established within 40 C.F.R. Section 93.153.
3. The majority of ozone formation occurs when nitrogen oxides (NO_X) and volatile organic compounds (VOCs), react in the atmosphere in the presence of sunlight. NO_X and VOCs are called ozone precursors. Therefore, this analysis quantifies NO_X and VOCs to determine ozone impacts.

iii) If the projects emissions are below the appropriate de minimis level, compare the emissions to the emissions inventory for the nonattainment or maintenance area to ensure the project's emissions are less than 10% of the inventory. See 40 C.F.R. Section 93.153(i) (Regional Significance). Emissions inventories can be obtained from the local air pollution control agency.

The predicted emissions are compared to the 2009 annual average emissions by source category in the *2007 Air Quality Management Plan* for the Basin. As shown in Table 6.3-3, *Clean Air Act Conformity – Step B*, the project emissions for non-attainment pollutants would be below ten percent of the emissions inventory. Therefore, project-related emissions would be less than significant.

Table 6.3-3
Clean Air Act Conformity – Step B

South Coast Air Basin Non-Attainment Pollutants	South Coast Air Basin Emission Inventory (tons/year)[1]	Project Emissions (tons/year)[2]	Project Exceed Ten Percent of Inventory?
2009			
VOC	210,970	0.07	*No*
NO_X	296,745	0.56	*No*
PM_{10}	101,105	0.03	*No*
$PM_{2.5}$	36,500	0.03	*No*
2010			
VOC	210,970	0.02	*No*
NO_X	296,745	0.20	*No*
PM_{10}	101,105	0.01	*No*
$PM_{2.5}$	36,500	0.01	*No*

Notes:
1. South Coast Air Basin Annual Average Emission Budgets in the 2007 Air Quality Management Plan for the year 2009.
2. Project emissions derived from URBEMIS 2007 version 9.2.4 computer model; refer to Appendix A, *Air Quality Data* of the IS/MND. Emissions have been quantified for "worst case" construction scenarios. Operational emissions are minor, and are less than the construction related emissions. Therefore, they are not presented in this table.

iv) If emissions are below the de minimis levels and are less than 10% of the area's inventory the project is not subject to any further general conformity analysis.

The URBEMIS 2007 model was utilized to estimate emissions of air pollutants associated with short-term construction; refer to Appendix A, *Air Quality Data* of the IS/MND. The URBEMIS 2007 model was used to estimate project-related construction. Default values representative of the proposed project were used when project-specific data were not available. As discussed above, the proposed project would be less than significant in relation to the SCAQMD thresholds and Federal de minimus levels, and less than ten percent of the emissions inventory for the Basin; refer to Table 6.3-2 and Table 6.3-3. Therefore, the proposed project would not be subject to a further general conformity analysis.

6.4 ENVIRONMENTAL DESIGN

6.4.1 VISUAL QUALITY – COHERENCE, DIVERSITY, COMPATIBLE USE AND SCALE

Finding: No Impact Anticipated.

1. *Physical Alteration: Will there be demonstrable destruction or physical alteration of the natural or man-made environment?*

   Yes. The project would result in excavation activities along River Avenue and within the SCE easement. However, construction impacts are short-term and would cease upon project completion. Additionally, implementation of the required permits for the Regional Water Quality Control Board (RWQCB) and the required Best Management Practices (BMPs), would reduce potential impacts from visible dust and dirt track out areas. Upon completion of construction, the project site would appear similar to existing conditions. Therefore, although physical alteration of the man-made environment would occur during construction, these impacts would be considered minimal. The project site would appear similar to existing conditions during project operations.

2. *Nonconformity with the Existing Environment: Will there be intrusion of elements out of character or scale with existing physical environment?*

   No. Refer to Section 6.1.2, *Compatibility and Urban Impact*. Also, the project proposes underground storm drain improvements, similar to existing conditions. Therefore, no intrusive elements would be visible above ground that would appear out of character or scale with the existing physical environment.

3. *Will the proposed structure block views or degrade them, change the skyline or create a new focal point? Is objectionable visual pollution introduced directly or indirectly due to loading docks, trash collectors, and parking? Is this mitigated visually?*

   No/No. Refer to Section 6.1.2.3. The project proposes underground storm drain improvements. No view blockage of degradation would occur. Due to the nature and scope of the proposed project, objectionable visual pollution would not be introduced.

4. *Disruption of the Ambient Environment: Will there be an interface with or impairment of ambient (or existing background) conditions necessary for the enjoyment of the physical environment?*

   No. Refer to Section 6.2, *Noise* and Section 6.3, *Air Quality*.

6.4.2 HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES

Significance: No Impact Anticipated.

1. *Does the project area and its environs contain any properties listed on the National Register of Historic Places? Does the locality have an inventory of historic places?*

No/No. The project site consists of River Avenue and the SCE easement, and does not contain any structures; therefore, the project site does not contain any properties listed on the National Register of Historic Places. Additionally, the project would not affect any structures, as the project is limited to subsurface activities within the roadway right-of-way and the SCE easement.

Refer to Section 3.4, *Environmental Design* and Section 4.5, *Cultural Resources* of the IS/MND.

2. *What information on the project area does the State Historic Preservation Office (SHPO) have and has a survey of local historic properties been conducted? If the SHPO lacks information, is there a local historical society or commission that can provide historic information?*

   No. No known survey of historic properties has been conducted in the project site area. Refer to Section 6.4.2.1.

3. *Are there other properties within the boundaries or in the vicinity of the project that appear to be historic and thus require consultation with the SHPO as to eligibility for the National Register?*

   No. Refer to Section 6.4.2.1.

4. *If historic property in the project's environment has been identified, does the SHPO believe these will be affected by the project? Adversely affected?*

   No/No. Refer to Section 6.4.2.1.

5. *Has the department of the Interior been requested to make a determination of eligibility on properties the SHPO deems eligible and affected?*

   No. Refer to Section 6.4.2.1.

6. *Does the Advisory Council on Historic Preservation need to be given opportunity to comment because properties that are on or have been found eligible for the National Register would be affected by the project?*

   No. Refer to Section 6.4.2.1.

7. *Does the Advisory Council response indicate that a Memorandum of Agreement is needed to avoid or reduce affects?*

   No. Refer to Section 6.4.2.1.

8. *If so, has the Advisory Council's "106 Process" been completed?*

   Not Applicable. Refer to Section 6.4.2.1.

6.5 SOCIOECONOMIC

6.5.1 DEMOGRAPHIC CHARACTER CHANGES

Finding: No Impact Anticipated.

1. *What is/are the identifiable neighborhoods within the sphere of likely impact of the proposed project?*

   The project site is located within the Arlington residential neighborhood.

2. *Will the proposed project significantly alter the demographic characteristics of the neighborhood?*

   No. The project would not result in new jobs, population growth, or construct housing or any type of growth-inducing development. Therefore, implementation of the project would not alter the demographic characteristics of the neighborhood.

3. *Will the proposed project result in physical barriers or reduced access, which will isolate a particular neighborhood or population group, making access to local services, facilities and institutions or other parts of the city more difficult or extremely inconvenient?*

   No. As stated in Section 4.9, *Land Use and Planning* in the IS/MND, the proposed project would not result in physical barriers or reduced access, and would not physically divide an established community. Upon completion of construction, the project site and surrounding street access would appear similar to existing conditions. Therefore, the project would not create a physical barrier or reduce site access.

4. *Will the proposed project substantially alter residential, commercial or industrial uses?*

   No. No residential, commercial, or industrial structures or areas of activity would be altered as a result of project implementation.

6.5.2 DISPLACEMENT

Finding: No Impact Anticipated.

1. *Will the project require the demolition of existing occupied structures?*

   No. The project would involve the demolition of asphalt for trenching activities to accommodate the new storm drain pipeline. The project would not require the demolition of any structures; refer to Section 4.12, *Population and Housing* in the IS/MND.

2. *Will the project require current occupants of structures to leave?*

   No. There are no structures located within the project site; no occupants would be required to leave. Also refer to Section 4.12, *Population and Housing* in the IS/MND.

3. *Will the project displace businesses or other private, quasi-public or public uses?*

   No. Implementation of the project would not displace businesses or other private, quasi-public, or public uses.

6.5.3 EMPLOYMENT AND INCOME PATTERNS

Finding: No Impact.

1. *Will the project either significantly increase or decrease employment opportunities? Will it create conditions favorable or unfavorable to commercial, industrial, or institutional operation or development?*

   No/Not Applicable. Project implementation would not increase employment opportunities (other than temporary construction-related jobs), since employment-generating land uses are not proposed. The proposed storm drain improvements would create neither favorable nor unfavorable conditions in regards to commercial, industrial, or institutional operations, as the infrastructure improvements would be located underground.

2. *How many temporary and how many permanent jobs will be created by the project?*

   The proposed project would create temporary construction-related jobs. However, the proposal would not involve employment-generating land uses. Therefore, no permanent employment would be created.

3. *What is the profile of new jobs created by the project? What is the distribution across the skills and income scale? How do these relate to the skills and income profile of project area residents?*

   Not Applicable. Refer to Section 6.5.3.2.

4. *Will the new jobs likely go to area residents, to lower income, unemployed and minority group members? Will construction jobs likely go to union or non-union workers?*

   Yes. The proposed project would only create new jobs during construction, and would not result in employment opportunities during project operation. As the project would obtain funding through the Community Block Grant from the United States Department of Housing and Urban Development (HUD), the project would be required to be compliant with Section 3 of the Federal Regulations. Compliance with Section 3 would ensure that a portion of the new construction jobs created as part of the project would go to lower-income/minority group members. Also, refer to Section 6.1.1.3.

5. *Where are the new employees likely to come from (i.e., inner city, suburb, outside SMSA)?*

   Yes. Refer to Section 6.5.3.4.

6.5.4 PHYSICAL SITE SUITABILITY

Finding: Requires Mitigation.

1. *Will the proposed project be compatible with surrounding development?*

   Yes. Refer to Section 6.1.2, *Compatibility and Urban Development*.

2. *Is the project site served with adequate roads and streets so that residents have acceptable access to employment, shopping, and services?*

   Yes. Refer to Section 6.1.2, *Compatibility and Urban Development*.

3. *Will the site be affected by potential threats from natural or man-made hazards?*

   Yes. Refer to Section 6.1.6, *Natural Hazards and Nuisances*.

4. *Does the proposed project create slopes by cut and fill?*

   No. The project site is generally flat and the proposal would not create slopes; refer also to Section 6.1.3, *Slope*.

5. *Are subsurface minerals being extracted, such as coal, oil, gas or water?*

   No. As stated in Section 4.10, *Mineral Resources* of the IS/MND, known mineral resources in the City are concentrated within the Wilmington Oil Field, located approximately 1.50 miles south of the project site. Therefore, project implementation would not result in the extraction of subsurface minerals. Also, the project would not result in the extraction of water resources during project operation.

6. *Is there evidence that the site has been used as a sanitary landfill or mine waste disposal area?*

   No. Refer to Section 6.1.7, *Man-made Hazards and Nuisances*.

7. *Does the site have a high water table?*

   No. According to the *Geotechnical Investigation,* groundwater was encountered at a depth of 25 feet. Refer to Section 4.6, *Geology and Soils* of the IS/MND.

8. *Are there potential hazards related to slope failure or falling rock?*

   No. Refer to Section 6.1.3, *Slope*.

9. *Is there evidence of ground subsidence on the site or is there a history of ground subsidence in the area?*

   No. Refer to Section 6.1.6.1, *Seismic Hazards*.

10. *Are there other unusual conditions on the site?*

No. Based on field observations conducted by RBF, and the existing land use and site conditions, no other unusual conditions exist on the project site. However, Mitigation Measure GEO-1 contained in Section 4.6, *Geology and Soils* of the IS/MND, recommends a soils report be prepared for the proposed improvements to identify the potential for liquefaction, expansive soils, ground settlement, and slope failure. Also, refer to Section 6.1, *Land Development*.

11. *Is site suitability a concern?*

No. As described in Section 6.1.6, *Natural Hazards and Nuisances*, Section 6.2, *Noise*, Section 6.3, *Air Quality*, and Sections 6.5.4.1 through 6.5.4.10, no significant environmental health effects are anticipated with development of the project at the proposed site. The proposed project would not affect, generate, or displace any existing residents in the project area. Additionally, project improvements are proposed in areas which have been previously disturbed for the construction of the existing River Avenue storm drain system.

6.6 COMMUNITY FACILITIES AND SERVICES

6.6.1 EDUCATIONAL FACILITIES

Finding: No Impact Anticipated.

1. *Will the additional school age children in the proposed development exceed the capacity of the school?*

   No. As stated in Section 4.9, *Land Use and Planning* of the IS/MND, the project would not generate an increase in population or student generation, and would not result in impacts to school services. Therefore, the project would not create additional school age children and would not exceed the capacity of the school.

2. *Does the potentially affected schools have adequate existing facilities (i.e., classroom space, buses) for the projected population increase?*

   Not Applicable. The proposed project would not result in an increase in population. Refer to Section 6.6.1.1.

3. *Will additional or alternative facilities have to be provided to ensure adequate programs?*

   No. Refer to Section 6.6.1.1.

4. *What measures will be taken by the school agency or governing body to resolve potential problems?*

   Refer to Section 6.6.1.1.

6.6.2 COMMERCIAL FACILITIES

Finding: No Impact Anticipated.

1. *Is there adequate and convenient access to retail services? In the case of the elderly, this means that shopping for such essential items as food and medicine and services such as banks and other convenience shopping should be within walking distance.*

   Yes. Refer to Section 3.6.2, *Commercial Facilities*. Also, the project would not generate an increase in population. Therefore, the project would not impact retail services.

2. *Do local retail services meet the needs of project occupants/users?*

   Not Applicable. As the project is an infrastructure project, there would be no occupants or users. Refer to Section 6.6.2.1.

3. *Will existing retail and commercial services be adversely impacted or displaced by the proposed project?*

No. Refer to Section 6.6.2.1. Also, the project site does not traverse existing or proposed retail or commercial uses. Therefore, the project would not impact or displace existing retail or commercial uses.

6.6.3 HEALTH CARE

Finding: No Impact Anticipated.

1. *Are emergency health care providers located within reasonable proximity to the proposed project?*

   Yes. The proposed project would not generate an increase in population. Therefore, project implementation would not result in deficiencies in this regard. Also, refer to Section 6.6.10.1, regarding ambulance and paramedic service to the project area.

2. *Can ambulance trips to a hospital or other health care center be made within reasonable time?*

   Yes. Refer to Section 6.6.3.1. Also, refer to Section 6.6.10.2, regarding ambulance and paramedic access and transport.

3. *Will project residents/users require special medical services or skills such as geriatric or pediatric clinics that will require very specialized skills and services? Cardiac pulmonary resuscitation (CPR), which is especially important for elderly is one example of an emergency medical skill which may be needed.*

   Not Applicable. Project implementation would not result in deficiencies to special medical services/skills.

6.6.4 SOCIAL SERVICES

Finding: No Impact Anticipated.

1. *Will residents have specific social service needs?*

   Not Applicable. As the project consists of an underground storm drain system, the project would not generate an increase in population. Therefore, the project would not impact specific social service needs.
2. *If so, are social services currently located within a "convenient" and a "reasonable" distance of residents?*

   Not Applicable. Refer to Sections 6.6.4.1 and Section 6.1.2, *Compatibility and Urban Impact*.

3. *Are the social services available "matched" to the potential users?*

   Yes. Refer to Section 6.6.4.1.

6.6.5 SOLID WASTE

Finding: No Impact Anticipated.

1. *Will the existing or planned solid waste disposal system adequately service the proposed development?*

   Yes. Refer to Section 3.6.5, *Solid Waste*, and Section 4.16, *Utilities and Service Systems* of the IS/MND. The proposed project would only generate solid waste during construction. Most solid waste in the City is taken to the SERRF to be incinerated and converted to electricity. The remainder of the City's solid waste is taken to the Puente Hills Landfill in the City of Whittier which as a total permitted capacity of 106.4 million cubic yards, of which 49.4 million cubic yards is the remaining capacity. Additionally, the City has implemented a Construction and Demolition Recycling program (Section 18.97 of the *Municipal Code*) that requires certain demolition and/or construction projects to divert at least 60 percent of waste from landfills through recycling, salvage, or deconstruction. No solid waste disposal activities would occur for the project during operation.

2. *Will the proposed development overload these facilities?*

   No. Refer to Section 6.6.5.1.

3. *Will the proposed project be adversely affected by proximity to these facilities?*

   No. The project site is not located in proximity to any solid waste facilities; no impact is anticipated in this regard.

4. *Does the community provide collection service either directly or by contract?*

   Yes. Solid waste (including recycled materials) in the area is handled and transported by the City's Refuse Collection Division. No impact is anticipated in this regard.

6.6.6 WASTEWATER

Finding: No Impact Anticipated.

1. *Will the existing or planned wastewater disposal systems provide satisfactory service to the proposed development?*

   Yes. Project implementation would not result in wastewater generation. Refer to Section 3.6.6, *Wastewater*, and Section 4.16, *Utilities and Service Systems* of the IS/MND.

2. *Will the design capacity of the treatment plant be exceeded by the project as proposed?*

   Not Applicable. Refer to Section 6.6.6.1.

3. *Will the proposed project be adversely affected by the proximity of sewage disposal facilities?*

No. The project site is not located in proximity to any wastewater disposal facilities; no impact is anticipated in this regard.

4. *In areas remote from existing sewer systems are the soil conditions suitable for on-site septic systems?*

   Not Applicable. Refer to Section 6.1.5.3.

6.6.7 STORMWATER

Finding: Potentially Beneficial.

1. *Will existing or planned system adequately service the proposed development?*

   Yes. The proposed project would involve improvements to the currently deficient storm drain system along River Avenue in order to bring the system to a full 10-year flood protection level. The project involves the construction of 1,021 feet of 48-inch RCP along River Avenue, modification of five catch basins, construction of six new catch basins, and construction of a detention system of five 84-inch (430 feet in length) underground pipelines. The project would alleviate current flooding hazards in the project area and would not increase storm water runoff.

   Refer to Section 3.6.7 *Stormwater*, and Section 4.16, *Utilities and Service Systems* of the IS/MND.

2. *Can storm water be disposed of on-site?*

   Yes. Refer to Section 6.6.7.1.

3. *Will surface water be channeled directly into a closed storm drainage system rather than to recharge aquifers?*

   Yes. The River Avenue storm drain system outlets approximately 0.7 miles southwest of the project site into the Dominguez Channel. Refer to Section 6.6.7.1.

6.6.8 WATER SUPPLY

Finding: No Impact Anticipated.

1. *Will either the municipal water utility or on-site water supply system be adequate to serve the proposed project?*

   Yes. Project operations would not require water supplies beyond those typically required during standard construction practices. Construction impacts would be minimal and would cease upon completion.

2. *If a public system is not available, will individual wells meet HUD's standards?*

   Not Applicable. Refer to Section 3.6.8, *Water Supply*.

3. *Will the project affect a sole source or other aquifer?*

   No. Refer to Section 6.6.8.1.

6.6.9 PUBLIC SAFETY

6.6.9.1 POLICE

Finding: No Impact Anticipated.

1. *Does the project location provide adequate access to police services? Does the project design provide easy access for emergency vehicles and individuals? Are there existing obstacles to project access such as one-way roads, narrow bridges, waterways, expressways, railroads which would prohibit access in an emergency situation? Does the design of the project create such obstacles or isolated areas?*

   Yes/Yes/No/No. The proposed project does not increase population or include uses that would require additional police services or facilities.

   Also, refer to Section 6.1.2, *Compatibility and Urban Impact*, Section 6.1.7.4, *Other Hazards*, and Section 4.13, *Public Services* of the IS/MND.

2. *Are police protection services available to the project adequate to meet project needs?*

   Not Applicable. It is not anticipated that implementation of the proposed project would cause a significant impact on law enforcement services, as the project consists of storm drain improvements. Refer to Section 6.6.9.1.1.

3. *Does the area have a particularly high crime rate? Are there special plans for a security system which have been approved by the police department? Can the development be patrolled easily by the police from the street?*

   No/No/Yes. The project vicinity does not require significant law enforcement resources, and there are currently no special plans for a security system. The proposed project would not alter the LBPD's ability to patrol the area from the street. Construction activities may temporarily affect access to the project area; however, this would be short-term and would cease upon project completion. Also, emergency access would be maintained at all times. Project implementation would not result in deficiencies in this regard.

4. *Will the project create a burden on existing facilities in terms of personnel and/or equipment? Can services either be expanded or be provided by the project, such as an in-house security force?*

   No. Refer to Sections 6.6.9.1.1 and 6.6.9.1.2.

6.6.9.2 FIRE

Finding: No Impact Anticipated.

1. *Does the project location provide adequate access for fire vehicles? Does the project design provide easy and unrestricted access for fire emergency vehicles and individuals? Are there existing obstacles to access to the project such as one-way roads, narrow bridges, waterways, expressways, railroads which would limit access in an emergency situation? Will the project create such obstacles?*

   Yes/Yes/No/No. Refer to Section 6.1.2, *Compatibility and Urban Impact*, Section 6.1.7.4, *Other Hazards*, and Section 4.13, *Public Services* of the IS/MND. The Long Beach Fire Department (LBFD) provides fire protection and emergency response to the City. The nearest fire station to the project site is Fire Station 13 located at 2475 Adriatic Avenue, approximately 1.40-miles southeast of the project site.

   The proposed storm drain improvements would be located underground and would not restrict access during project operation. Access in the project area may be temporarily affected by construction activities; however, this would be a short-term impact which would cease upon project completion. Additionally, LBFD would require standard conditions of approval, which would ensure that access to fire trucks is not impeded in the project vicinity during construction.

2. *Will the project create a burden on existing facilities in terms of manpower and/or equipment?*

   Not Applicable. The proposed storm drain improvements would not create a greater demand on existing fire protection resources. Additional manpower, equipment, and facilities are would not be necessary as a result of project implementation.

3. *If so, can services be expanded?*

   Not Applicable. Refer to Section 6.6.9.2.2.

4. *Is the water supply and water pressure adequate for fighting fires?*

   Not Applicable. The proposed project would not affect water supply or pressure in the area. Refer to Section 6.6.8, *Water Supply*.

6.6.10 EMERGENCY MEDICAL

Finding: No Impact Anticipated.

1. *Are emergency health care providers located within reasonable proximity to the proposed project?*

   Yes. The LBFD operates Fire Station 13 (located at 2475 Adriatic Avenue, approximately 1.40-miles southeast of the project site), which provides emergency medical services to the project area. All paramedic rescue units are manned by two firefighters/paramedics. Also, refer to Section 6.6.3.1, regarding the location of hospitals in the project area.

2. *Can ambulance trips to a hospital or other health care center be made within reasonable time?*

   Yes. The project site is located approximately two miles northwest of Pacific Hospital of Long Beach. Due to the proximity of the project site to nearby hospitals, ambulance trips would be made within reasonable time. Project implementation would not result in deficiencies in this regard.

3. *Will project residents/users require special medical services or skills such as geriatric or pediatric clinics that will require very specialized skills and services? Cardiac pulmonary resuscitation (CPR), which is especially important for elderly is one example of an emergency medical skill, which may be needed.*

   Not Applicable. The project involves underground storm drain improvements and does not propose any use or facility that would create a user population.

6.6.11 OPEN SPACE AND RECREATION

Finding: No Impact Anticipated.

1. *Are open space, recreational and cultural facilities within reasonable walking distance to the project area? Or is adequate public transportation available from the project to these facilities?*

   Yes. Refer to Section 3.6.11, *Open Space and Recreation* and Section 3.7.1, *Access*. Project implementation would not result in deficiencies in this regard.

2. *Will the proposed project overload existing facilities?*

   No. The project does not propose any growth-inducing uses that would overload existing facilities or require additional facilities. Refer to Section 4.13, *Public Services* of the IS/MND.

3. *If the project includes special groups such as small children, or the elderly and handicapped, are there convenient facilities to meet their particular needs? For example, are there tot lots for very small children, playgrounds for elementary school children, drop-in centers for senior citizens and ball fields for teenagers?*

   Not Applicable. Refer to Sections 6.6.11.1 and 6.6.11.2.

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6.7 TRANSPORTATION

6.7.1 ACCESS

Finding: No Impact Anticipated.

1. *Will transportation facilities and services be adequate to meet the needs of the project's users? Is off-street parking available and adequate? Is adequate public transportation available?*

   Not Applicable/No/Yes. Access to the project site is provided via River Avenue, Wardlow Road/223rd Street, Cameron Street, Lincoln Street, and Arlington Street. I-405, located north of the project site, provides regional access to the project area. Since the proposed project consists of underground storm drain improvements, there are no project users (no traffic trips would be generated as part of the proposed project). As stated in Section 4.15, *Transportation/Traffic* of the IS/MND, the nearest transit stop to the project site is the Long Beach Transit Bus Routes 191 and 193 stop located at the intersection of Wardlow Road/223rd Street and McHelen Avenue (approximately 175 feet north of River Avenue). Project construction would not impact these off-site transportation facilities.

   Refer also to Section 3.7.1, *Access* and Section 3.7.2, *Balance*.

2. *Are there special transportation needs (programs for the elderly and handicapped, bridge clearances for trucks, emergency vehicle access), which have not been adequately provided for?*

   Not Applicable. The project does not propose any type of development that would generate population growth or provide any type of facility that would create a destination location. Also, the project does not involve the permanent alteration of a roadway, bridge, or sidewalk. It is anticipated that traffic flow along River Avenue would be temporarily impacted during construction of the proposed improvements. However, these impacts would cease upon completion of construction activities. Upon completion of construction, operation of the project would not obstruct traffic flow or emergency operations.

   Refer also to Section 3.7.2, *Balance*, Section 6.1.7.4.1, and Section 6.6.9.2.1 regarding emergency vehicle access.

3. *Will the project serve to reduce the mobility of any group?*

   No. The proposed project would not reduce the mobility of any group. Refer to Section 6.7.1.2 and Section 4.15, *Transportation/Traffic* of the IS/MND.

6.7.2 BALANCE

Finding: No Impact Anticipated.

1. *Will the project encourage additional private vehicle trips?*

   No. No additional vehicle trips following completion of construction would be created. Refer to Section 4.15, *Transportation/Traffic* of the IS/MND.

6.7.3 SAFETY

Finding: No Impact Anticipated.

1. *Will the project create any safety hazards? For example, have curbs been designed with wheelchair ramps, have pedestrian activated signal lights or pedestrian overpasses been included in plans where needed? Is traffic light timing adequate for elderly pedestrians?*

   No. As stated in Section 4.15, *Transportation/Traffic* of the IS/MND, the project would not alter the existing lane configurations or curb lines along River Avenue. All proposed improvements would be underground or within curb and gutter areas of River Avenue. In areas where trenching would occur, River Avenue would be rehabilitated to its pre-construction condition.

6.7.4 LEVEL OF SERVICE

Finding: No Impact Anticipated.

1. *Will the project be provided with an adequate level of transportation service? Will it overload existing or proposed transportation services or conversely, create a situation whereby facilities are seriously underused?*

   Yes/No. The proposed project would not create additional trips in the project area. Refer to Section 6.7.2, *Balance*, and Section 4.15, *Transportation/Traffic* of the IS/MND.

6.8 NATURAL FEATURES

6.8.1 WATER RESOURCES AND SURFACE WATER

Finding: No Impact Anticipated.

1. *If the project is to use groundwater from the site, is there evidence that supplies are adequate and free from pollution?*

   Not Applicable. The project would not utilize groundwater from the project site as water is not required for project operation. With adherence to standard construction measures, the project would be required to obtain applicable permits from the RWQCB pertaining to waste discharge requirements. Therefore, no impact is anticipated in this regard; refer to Section 6.6.8, *Water Supply* and Section 4.8, *Hydrology and Water Quality* of the IS/MND.

2. *Are there visual or other indications of water quality problems on or near the site?*

   No. The project site currently experiences flooding during large storm events as a result of a deficient storm drain system. However, there are no visual or other indications that the project area experiences water quality problems.

3. *Will the project involve discharge of sewage effluent into surface water bodies? If so, will the effluent meet State, Federal and other applicable standards?*

   No. The proposed storm drain improvement project would not involve discharge of sewage effluent; refer to Section 6.6.6, *Wastewater*, and Section 4.16, *Utilities and Service Systems* of the IS/MND.

4. *Will the project involve a substantial increase in impervious surface area, and if so, have runoff control measures been included in the design?*

   No. Surface areas of River Avenue and the SCE property would be similar to existing conditions upon completion of construction. Therefore, there would not be an increase in impervious surface area. Additionally, runoff from off-site areas entering the project site are controlled by compliance with standard construction measures and applicable RWQCB permits. Refer to Section 6.6.7, *Stormwater* and Section 4.8, *Hydrology and Water Quality* of the IS/MND.

5. *Will the project affect surface water flows or water levels in ponds as a result of groundwater well pumping?*

   No. There are no streams or ponds located on or in proximity to the project site and the project would not require groundwater well pumping.

6. *Will the project involve the impoundment of over 10 acres or divert or change a stream or lake?*

   No. The proposed project would not involve the impoundment of water or change a stream or lake. The River Avenue storm drain system outlets approximately 0.7 miles southwest of

the project site into the Dominguez Channel. Upon completion of construction, the storm drain system's ultimate outlet would not change. No impact is anticipated in this regard.

7. *Will the project affect a Wild and Scenic River or a river in the Nationwide Rivers inventory?*

   No. The project site is not located in proximity to a listed Wild and Scenic River.[1] Further, the project does not involve a river in the Nationwide Rivers Inventory.[2] No impact is anticipated in this regard.

6.8.2 UNIQUE NATURAL FEATURES AND AGRICULTURAL LANDS

Finding: No Impact Anticipated.

6.8.2.1 UNIQUE NATURAL FEATURES

1. *Will the project location, construction or activities affect unique natural features or resource extraction on or near the site?*

   No. The project is located in a developed area of the City and there are no unique natural features or resources on or near the project site. Refer to Section 3.8.2, *Unique Natural Features and Agricultural Lands*, Section 4.2, *Agricultural Resources* of the IS/MND, and Section 4.10, *Mineral Resources* of the IS/MND.

2. *Will the project either destroy or isolate the unique natural feature from public or scientific access?*

   Not Applicable. Refer to Section 6.8.2.1.1, Section 3.8.2, *Unique Natural Features and Agricultural Lands*, Section 4.2, *Agricultural Resources* of the IS/MND, and Section 4.10, *Mineral Resources* of the IS/MND.

3. *Will the unique feature or resource extraction activity pose safety hazards for a proposed development?*

   Not Applicable. Refer to Section 6.8.2.1.1, Section 3.8.2, *Unique Natural Features and Agricultural Lands*, Section 4.2, *Agricultural Resources* of the IS/MND, and Section 4.10, *Mineral Resources* of the IS/MND.

6.8.2.2 AGRICULTURAL LANDS

1. *Will the proposed project be located on or directly adjacent to land that is categorized as prime, unique, or of State or local importance?*

   No. The project site and surrounding area are located in an urbanized area of the City. The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as designated by the California Department of Conservation. Refer to

[1] U.S. Department of Fish and Wildlife Services, *National Wild and Scenic Rivers*, accessed at http://www.rivers.gov/, on July 22, 2009.
[2] National Park Service- U.S. Department of the Interior, *Nationwide Rivers Inventory*, accessed at http://www.nps.gov/ncrc/programs/rtca/nri/ on July 22, 2009.

Section 3.8.2, *Unique Natural Features and Agricultural Lands* and Section 4.2, *Agricultural Resources* of the IS/MND.

2. *Will the project location, construction or activities of project users adversely affect farmland on or near the site by conversion?*

   No. Refer to Section 6.8.2.2.1, Section 3.8.2, *Unique Natural Features and Agricultural Lands*, and Section 4.2, *Agricultural Resources* of the IS/MND.

3. *Will drainage from the project adversely affect farmland?*

   No. The project improvements would enhance the current storm drain system in the project area. Also, farmland would not be adversely affected, as there is no farmland on or near the project site. Refer to Section 6.8.2.2.1.

4. *Will the project create problems by introducing nuisance species of vegetation, which may spread to adjacent farmland?*

   No. No species of vegetation would be introduced as part of the proposed project. Also, there is no farmland on or near the project site.

6.8.3 VEGETATION AND WILDLIFE

Finding: No Impact Anticipated.

6.8.3.1 VEGETATION

1. *Will the project damage or destroy existing plant communities, listed as rare or endangered species?*

   No. There are no existing plant communities within the project site, other than existing ornamental landscaping. Refer to Section 3.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.

2. *Will it damage or destroy trees without replacement landscaping?*

   No. The project would not require the removal of trees within the vicinity of the project site.

3. *Will the project create environmental conditions which might threaten the survival of existing vegetation, particularly changes in the native plant community habitats?*

   No. Ornamental landscaping is the only vegetation type within the project area, and the project would not require the removal of any existing trees. Refer to Section 3.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.

4. *Will it create conditions favorable to nuisance species?*

   No. Due to the nature and scope of the proposed underground storm drain improvements, project implementation would not create conditions favorable to nuisance species. No impact is anticipated in this regard.

6.8.3.2 WILDLIFE

1. *Will the project create special hazards for animal life? What types of animal will be affected and how?*

   No. The project site does not currently support animal life, and does not propose any type of use that would support animal life. Refer to Section 3.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.

2. *Will the project damage or destroy existing wildlife habitats?*

   No. Refer to Section 3.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.

3. *Will the project threaten any animal species listed by either State or Federal agencies as rare or endangered?*

   No. Refer to Section 3.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.

4. *Will the project damage game fish habitats or spawning grounds?*

   No. The project site does not contain habitat to support any migratory fish or wildlife species. Refer to Section 3.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.

5. *Will the project create conditions favorable to the proliferation of pest species?*

   No. Due to the nature and scope of the proposed storm drain improvements, project implementation would not create conditions favorable to the proliferation of pest species. No impact is anticipated in this regard.

6. *Will excessive grading alter the groundwater level and thus cause the destruction of trees and ground cover, which serves as animal habitats?*

   No. According to the *Geotechnical Investigation* prepared for the project by Kleinfelder on May 16, 2008, (refer to Appendix B of the IS/MND), groundwater was encountered at 25 feet below ground surface (bgs) at the project site. Trenching activities to allow for the laying of the storm drain pipelines and detention unit would extend to approximately 12 feet in depth and are not anticipated to encounter groundwater. Therefore, the project is not anticipated to indirectly affect potential animal habitats. Refer to Section 3.8.3, *Vegetation and Wildlife* and Section 4.4, *Biological Resources* of the IS/MND.

7.0 ALTERNATIVES TO THE PROPOSED ACTION

The following analysis is prepared pursuant to 24 CFR 58.40(e), Ref. 40 CFR 1508.9, which requires that other reasonable courses of action that were considered and not selected be identified, or other uses of the project site. In addition to the proposed action, which is being considered, the "No Action" and "Aboveground Detention Basin," alternatives are addressed below. The purpose of the alternatives analysis is to provide an environmental perspective to alternatives review and a format for documentation of that analysis.

7.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the River Avenue Storm Drain Improvements Project would not be implemented and the project site would remain in its current state, and flooding events would continue to occur within the Arlington residential neighborhood during a large storm event.

7.1.1 LAND DEVELOPMENT

This Alternative would remain consistent with the Right-of-Way land use designation, and the visual appearance of the project site would not be altered.

7.1.2 NOISE

Implementation of this Alternative would not result in an increase in stationary or mobile noise.

7.1.3 AIR QUALITY

Unlike the proposed project, emissions associated with construction activities would not occur with this Alternative, as the storm drain improvements would not be developed.

7.1.4 ENVIRONMENTAL DESIGN

The physical man-made environment would not be altered with this Alternative, since the existing storm drain system would not be updated to accommodate flooding hazards along the Arlington residential neighborhood.

7.1.5 SOCIOECONOMIC

Direct population growth would not occur under this Alternative (similar to the proposed project), as no new development would be constructed.

7.1.6 COMMUNITY FACILITIES AND SERVICES

Similar to the proposed project, an increased demand for health care and/or social services would not occur, as the area's population would not increase with this Alternative. Also, an increased demand for community facilities and services would not occur with this Alternative (similar to the proposed project). Unlike the proposed project, potential long-term flooding hazards to surrounding residential uses would remain with this Alternative.

7.1.7 TRANSPORTATION

This Alternative would not generate population growth or provide any type of facility that would create a destination location. Unlike the proposed project, traffic flow along River Avenue would not be temporarily impacted, as construction of the proposed storm drain improvements would not occur.

7.1.8 NATURAL FEATURES

As with the proposed project, no impacts to unique natural features, agricultural lands, vegetation, or wildlife would occur with this Alternative, as these resources do not exist on the project site or area.

7.2 ALTERNATIVES AND PROJECT MODIFICATIONS CONSIDERED

7.2.1 ABOVE GROUND DETENTION BASIN

The Above ground Detention Basin Alternative would involve similar improvements to the pipeline along River Avenue. However, an above ground detention basin would be constructed at the SCE parcel instead of an underground detention unit. The above ground basin would be located at the same location as the detention unit.

7.2.1.1 LAND DEVELOPMENT

Similar to the proposed project, this Alternative would be consistent with the Right-of-Way land use designation, as the project site would remain roadway and utility easement uses. Construction activities may disrupt the visual character of the area due to trenching activities, as with the proposed project. These impacts would be short-term and would cease upon completion. The proposed above ground basin would not be visible to surrounding residents due to an existing perimeter wall that is located between the SCE easement and surrounding residents.

Potential neighborhood hazards/nuisances, which exist within or adjacent to the project area (i.e., SCE Substation and aerial transmission lines), would continue to exist with this Alternative. Also similar to the proposed project, the existing flood hazard that currently occurs along the Arlington residential neighborhood would be alleviated with implementation of this Alternative, resulting in a beneficial impact.

Similar to the project, there would be no increase in demand for natural gas, electrical service, and fuel (i.e., gasoline/diesel) consumption associated with long-term operations of this Alternative. Short-term construction activities would require fuel consumption for operations of construction equipment (similar to the project). These impacts would be minimal and would cease upon completion of construction.

7.2.1.2 NOISE

Similar to the proposed project, temporary construction noise impacts would result with implementation of this Alternative. These impacts would be short-term and would cease upon completion of construction. Implementation of the recommended Mitigation Measure N-1 contained within Section 4.11, *Noise* of the IS/MND, would ensure construction related noise impacts are minimized to the extent feasible. As such, with implementation of N-1 and compliance with the City's *Municipal Code*, Title 8, *Health and Safety*, construction noise impacts would be less than significant, as with the proposed project.

7.2.1.3 AIR QUALITY

As the population of the project area would not increase with this Alternative, additional people would not be exposed to CO "hot spots," similar to the proposed project. This Alternative would not result in increased operational emissions (combined mobile source and area emissions) within the project area (as with the proposed project), as the proposed storm drain improvements would not generate an increase in population or vehicle trips.

7.2.1.4 ENVIRONMENTAL DESIGN

Implementation of this Alternative would result in similar impacts to the physical man-made environment, as the proposed project. This Alternative would construct an above ground detention basin at the SCE easement (to the south of the Arlington residential neighborhood), rather than an underground detention unit. The proposed above ground basin would not be visible to surrounding residents due to an existing perimeter wall that is located between the SCE easement and surrounding residents.

7.2.1.5 SOCIOECONOMIC

Direct population growth would not occur under this Alternative (similar to the proposed project), as the proposed storm drain improvements would not result in the development of new land uses, other than proposed utilities. With implementation of this Alternative, an above ground detention basin and associated underground piping would be placed on the SCE easement. These impacts would be slightly increased, as compared to the proposed project (as the project would place all the utility features underground). As the SCE easement is currently utilized for utility purposes, implementation of this Alternative is not anticipated to result in socioeconomic impacts to the SCE easement.

7.2.1.6 COMMUNITY FACILITIES AND SERVICES

Similar to the proposed project, an increased demand for health care and/or social services would not occur, as the area's population would not increase with this Alternative. Also, an increased demand for community facilities and services would not occur with this Alternative (similar to the proposed project), as no development uses, other than utilities, are proposed.

As with the project, the existing flooding events along the Arlington residential neighborhood would be alleviated with implementation of this Alternative. Thus, potential long-term flooding hazards to surrounding residential uses would result in a beneficial impact with this Alternative (similar to the proposed project).

7.2.1.7 TRANSPORTATION

This Alternative would not generate population growth or provide any type of facility that would create a destination location. This Alternative would not create additional trips in the project area during operations. Also, this Alternative does not involve the permanent alteration of a roadway, bridge, or sidewalk, similar to the proposed project. Long-term operations of this Alternative would not obstruct traffic flow or emergency operations.

7.2.1.8 NATURAL FEATURES

As with the proposed project, no impacts to unique natural features, agricultural lands, vegetation, or wildlife would occur with this Alternative, as these resources do not exist on the project site or area.

8.0 CONSULTATION AND COORDINATION

8.1 LEAD AGENCY

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Ms. Angela Reynolds, Manager, Neighborhood Services Bureau
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8.2 RESPONSIBLE AGENCIES

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8.3 PREPARERS OF THE ENVIRONMENTAL ASSESSMENT

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Mr. Eddie Torres, INCE, Project Manager
Ms. Kristen Bogue, CEI, Environmental Analyst
Ms. Kelly Chiene, Environmental Analyst
Mr. Achilles Malisos, Air Quality and Noise Specialist
Ms. Linda Bo, Document Producer and Graphic Artist

8.4 LOCAL AGENCIES/OTHER PERSONS CONSULTED

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Ms. Christina Nuanez, Right of Way Agent

8.5 BIBLIOGRAPHY

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9.0 ADDITIONAL STUDIES PERFORMED

Refer to the *River Avenue Storm Drain Improvements Project Initial Study/Mitigated Negative Declaration* (*IS/MND*), enclosed as Part 1 of this document, for the additional studies utilized in this Environmental Assessment (EA).

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10.0 APPENDICES

Refer to the *River Avenue Storm Drain Improvements Project Initial Study/Mitigated Negative Declaration* (*IS/MND*), enclosed as Part 1 of this document, for the Technical Appendices referenced in this Environmental Assessment (EA).

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