

IV. Environmental Impact Analysis

G. Hydrology and Water Quality

1. Introduction

This section analyzes the Project's potential impacts with regard to hydrology and water quality, including water quality standards, drainage flow and associated erosion and/or flooding, and stormwater runoff. The analysis is, in large part, based on a Hydrology and Water Quality Report prepared for the Project by KPFF Consulting Engineers, included as **Appendix G** of this Draft EIR.¹ The analysis also is partly based on information from the Updated Geotechnical Engineering Investigation (Geotechnical Report) prepared by Geotechnologies Inc., provided in **Appendix E** of this Draft EIR.²

2. Environmental Setting

a) Regulatory Framework

There are several plans, policies, and programs regarding Hydrology and Water Quality at the federal, state, regional, and local levels that apply to the Project. Described below, these include:

- Clean Water Act
- Federal Antidegradation Policy
- Safe Drinking Water Act
- National Flood Insurance Program
- Porter-Cologne Water Quality Act (California Water Code)
- California Antidegradation Policy
- California Toxics Rule
- Sustainable Groundwater Management Act of 2014
- Water Replenishment District of Southern California
- County of Los Angeles Hydrology Manual

¹ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023. Provided in Appendix G of the Draft EIR.

² Geotechnologies, Inc., Geotechnical Engineering Investigation, Proposed Hilton Universal City Expansion Project, 555 Universal Hollywood Drive, Los Angeles, September 2022. Provided in Appendix E of this Draft EIR.

- NPDES Permit Program
- Los Angeles Municipal Code Section 62.105, Construction “Class B” Permit
- Los Angeles Municipal Code Sections 12.40 through 12.43, Landscape Ordinance
- Los Angeles Municipal Code Section 64.70, Stormwater and Urban Runoff Pollution Control Ordinance
- Los Angeles Municipal Code Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities
- Low Impact Development Ordinance
- Water Quality Compliance Master Plan for Urban Runoff
- Stormwater Program – Los Angeles County MS4 Permit Citywide Implementation

(1) Federal

(a) *Clean Water Act*

The Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act, was first introduced in 1948, with major amendments in the 1960s, 1970s and 1980s.³ The CWA authorizes Federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. Amendments to the CWA in 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program, which prohibits discharge of pollutants into the nation’s waters without procurement of a NPDES permit from the United States Environmental Protection Agency (USEPA). The purpose of the permit is to translate general requirements of the Clean Water Act into specific provisions tailored to the operations of each organization that is discharging pollutants. Although federally mandated, the NPDES permit program is generally administered at the State and Regional levels.

The USEPA NPDES Program requires NPDES permits for: (1) Municipal Separate Storm Sewer Systems (MS4) Permit generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs five acres or more of land. As of March 2003, Phase II of the NPDES Program extended the requirements for NPDES permits to numerous small municipal separate storm sewer systems, construction sites of one to five acres, and industrial facilities owned or operated by small municipal separate storm sewer systems, which were previously exempted from permitting.

³ United States Environmental Protection Agency, Clean Water Act, 2002.

(b) *Federal Antidegradation Policy*

The Federal Antidegradation Policy has been incorporated within the Clean Water Act and requires states to develop state-wide antidegradation policies and identify methods for implementing them.⁴ Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods must, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

(c) *Safe Drinking Water Act*

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of the Nation's drinking water.⁵ The SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. Under SDWA, the USEPA sets standards for drinking water quality and oversees the states, localities, and water suppliers that implement those standards. The SDWA regulates contaminants of concern in domestic water supply, including MCLs, and that the USEPA has delegated the Cal Dept. of Public Health the responsible agency for administering California's drinking water program. MCLs are established under CCR Title 22, Div. 4, Ch. 15, Article 4 (Title 22 Standards).

(d) *National Flood Insurance Program*

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards.⁶ FEMA provides flood insurance rate maps (FIRMs) for local and regional planners to promote sound land use and development practices, by identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies referred to as flood insurance studies (FIS). Using information gathered in these studies, FEMA engineers and cartographers delineate special flood hazard areas (SFHA) on FIRMs.

The Flood Disaster Protection Act requires owners of all structures within identified SFHAs to purchase and maintain flood insurance as a condition of receiving federal or federally-related financial assistance, such as mortgage loans from federally-insured

⁴ United States Environmental Protection Agency, Water Quality Standards Handbook - Chapter 4: Antidegradation, 2010.

⁵ United States Code, Title 42 – The Public Health and Welfare- Chapter 6A Public Health and Service, Safe Drinking Water Act. 2006 Edition, Supplement 4, 2006.

⁶ The National Flood Insurance Act of 1968, as amended, and The Flood Disaster Protection Act of 1973, 42 U.S.C. 4001 et. seq.

lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program (NFIP) afforded by FEMA.

(2) State

(a) *Porter-Cologne Water Quality Act (California Water Code)*

The Porter-Cologne Water Quality Control Act established the legal and regulatory framework for California's water quality control.⁷ The California Water Code (CWC) authorizes the State Water Resources Control Board (SWRCB) to implement the provisions of the CWA, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants. In California, the NPDES stormwater permitting program is administered by the SWRCB.

Under the CWC, the State of California is divided into nine Regional Water Quality Control Boards (RWQCBs), which govern the implementation and enforcement of the CWC and the CWA. The Project Site is located within Region 4, also known as the Los Angeles Region (LARWQCB). The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology. Each RWQCB is required to formulate and adopt a Water Quality Control Plan or Basin Plan for its region. The Basin Plan establishes beneficial use definitions for the various types of water bodies, and serves as the basis for establishing water quality objectives, discharge conditions and prohibitions, and must adhere to the policies set forth in the CWC and established by the SWRCB. In this regard, the LARWQCB issued the Los Angeles Basin Plan on August 29, 2014, for the Coastal Watersheds of Los Angeles and Ventura Counties, with subsequent amendments. The RWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality.⁸

(b) *California Antidegradation Policy*

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB in 1968.⁹ Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the State, not just surface waters. The policy states that, whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of the water resource.

⁷ State Water Resources Control Board, Porter-Cologne Water Quality Control Act, 2018.

⁸ United States Environmental Protection Agency, Clean Water Act, 2016.

⁹ California State Water Resources Control Board, State Board Resolution No. 68-16, 1968.

(c) *California Toxics Rule*

In 2000, the California Environmental Protection Agency (Cal-EPA) promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the State.¹⁰ Cal-EPA promulgated this rule based on Cal-EPA's determination that the numeric criteria of specific concentrations of regulated substances are necessary for the State to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

(d) *Sustainable Groundwater Management Act of 2014*

The Sustainable Groundwater Management Act of 2014 (SGMA) requires the designation of groundwater sustainability agencies (GSAs) by one or more local agencies and the adoption of groundwater sustainability plans (GSPs) for basins designated as medium- or high-priority by the California Department of Water Resources (DWR). SGMA grants new powers to GSAs, including the power to adopt rules, regulations, ordinances, and resolutions; regulate groundwater extractions; and to impose fees and assessments. SGMA also allows the State Water Resources Control Board (SWRCB) to intervene if local agencies will not or do not meet the SGMA requirements, in addition to mandating that critically overdrafted basins be sustainable by 2040, and medium- or high-priority by 2042.

(3) **Regional**

(a) *Water Replenishment District of Southern California*

The City of Los Angeles is included within the Water Replenishment District of Southern California (WRD). The WRD service area is categorized as a High Priority basin and pursuant to the SGMA must either: (a) form a groundwater sustainability agency (GSA) to prepare and submit a groundwater sustainability plan; or directly submit an Alternative Analysis in lieu of forming a GSA. The WRD, in conjunction with key stakeholders including the Los Angeles Department of Water and Power (LADWP), has prepared and submitted an Alternative Analysis that satisfies the requirements of the SGMA.¹¹ The Alternative Analysis demonstrates compliance with applicable portions of the CWC and provides adequate information to show that the applicable, underlying Central Subbasin has operated within its sustainable yield over a period of at least 10 years; and that the Alternative Analysis satisfies SGMA's objectives by promoting sustainable management of the groundwater in the Central Subbasin.

¹⁰ United States Environmental Protection Agency, Water Quality Standards, Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California, 2001.

¹¹ Board of Directors of the Water Replenishment District of Southern California, Resolution No. 16-1048, 2016.

(b) *County of Los Angeles Hydrology Manual*

Drainage and flood control in the City of Los Angeles (City) are subject to review and approval by the Department of Public Works, Bureau of Engineering (Bureau of Engineering). Storm drains within the City are constructed by both the City and the Los Angeles County Flood Control District (County Flood Control). The County Flood Control constructs and has jurisdiction over regional facilities such as major storm drains and open flood control channels, while the City constructs and is responsible for local interconnecting tributary drains.

Per the City's Special Order No. 007-1299, December 3, 1999, the City has adopted the Los Angeles County Department of Public Works' Hydrology Manual as its basis of design for storm drainage facilities.¹² The Department of Public Works' Hydrology Manual requires that a storm drain conveyance system be designed for a 25-year storm event and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event. Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flow from a 50-year storm event. The County also limits the allowable discharge into existing storm drain (MS4) facilities based on the County's MS4 Permit, which is enforced on all new developments that discharge directly into the County's MS4 system.

Drainage and flood control structures and improvements within the City are subject to review and approval by the City's Department of Public Works and Department of Building and Safety. As required by the Department of Public Works, all public storm facilities must be designed in conformity with the standards set forth by Los Angeles County. The Department of Public Works reviews and approves MS4 plans prior to construction. Any proposed increases in discharge directly into County facilities, or proposed improvements of County-owned MS4 facilities, such as catch basins and drainage lines, require approval from County Flood Control to ensure compliance with the County's Municipal NPDES Permit requirements.

(c) *NPDES Permit Program*

As indicated above, in California, the NPDES stormwater permitting program is administered by the SWRCB through its nine RWQCBs. This NPDES permit, referred to as General Permit for Stormwater Discharges from Construction Activities by the SWRCB, establishes a risk-based approach to stormwater control requirements for construction projects.

(i) *Construction: Stormwater Pollution Prevention Plan*

For all construction activities disturbing one acre of land or more, California mandates the development and implementation of Stormwater Pollution Prevention Plans (SWPPP). The SWPPP documents the selection and implementation of best management practices

¹² Los Angeles County Department of Public Works, Hydrology Manual, 2006.

(BMPs) to prevent discharges of water pollutants to surface or groundwater. The SWPPP also charges owners with stormwater quality management responsibilities. The developer or contractor for a construction site subject to the General Permit must prepare and implement a SWPPP that meets the requirements of the General Permit.¹³ The purpose of an SWPPP is to identify potential sources and types of pollutants associated with construction activity and list BMPs that would prohibit pollutants from being discharged from the construction site into the public stormwater system. BMPs typically address stabilization of construction areas, minimization of erosion during construction, sediment control, control of pollutants from construction materials, and post-construction stormwater management (e.g., the minimization of impervious surfaces or treatment of stormwater runoff). The SWPPP is also required to include a discussion of the proposed program to inspect and maintain all BMPs.

A site-specific SWPPP could include, but not be limited to the following BMPs:

- Erosion Control BMPs – to protect the soil surface and prevent soil particles from detaching. Selection of the appropriate erosion control BMPs would be based on minimizing areas of disturbance, stabilizing disturbed areas, and protecting slopes/channels. Such BMPs may include, but would not be limited to, use of geotextiles and mats, earth dikes, drainage swales, and slope drains.
- Sediment Control BMPs – are treatment controls that trap soil particles that have been detached by water or wind. Selection of the appropriate sediment control BMPs would be based on keeping sediments on-site and controlling the site boundaries. Such BMPs may include, but would not be limited, to use of silt fences, sediment traps, and sandbag barriers, street sweeping and vacuuming, and storm drain inlet protection.
- Wind Erosion Control BMPs – consist of applying water to prevent or minimize dust nuisance.
- Tracking Control BMPs – consist of preventing or reducing the tracking of sediment off-site by vehicles leaving the construction area. These BMPs include street sweeping and vacuuming. Project sites are required to maintain a stabilized construction entrance to prevent off-site tracking of sediment and debris.
- Non-Stormwater Management BMPs – also referred to as “good housekeeping practices,” involve keeping a clean, orderly construction site.
- Waste Management and Materials Pollution Control BMPs – consist of implementing procedural and structural BMPs for handling, storing, and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater runoff or discharges through the proper management of construction waste.

¹³ Construction Stormwater Program, State Water Resources Control Board. Updated September 7, 2022. https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Accessed September 2022.

The SWRCB adopted a General Permit for Stormwater Discharges from Construction Activities on September 2, 2009 and most recently amended the permit on July 17, 2012 (Order No. 2012-0006-DWQ, General NPDES Permit No. CAS000002). The Construction General Permit regulates construction activity, including clearing, grading, and excavation of areas one acre or more in size, and prohibits the discharge of materials other than stormwater, authorized non-stormwater discharges, and all discharges that contain a hazardous substance, unless a separate NPDES permit has been issued for those discharges.

To obtain coverage under the Construction General Permit, a developer is required to file a Notice of Intent (NOI) with the appropriate RWQCB and provide proof of the NOI prior to applying for a grading or building permit from the local jurisdiction, and must prepare a State SWPPP that incorporates the minimum BMPs required under the permit as well as appropriate project-specific BMPs. The SWPPP must be completed and certified by the developer and BMPs must be implemented prior to the commencement of construction, and may require modification during the course of construction as conditions warrant. When project construction is complete, the developer is required to file a Notice of Termination with the RWQCB certifying that all the conditions of the Construction General permit, including conditions necessary for termination, have been met.

(ii) NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering

Dewatering operations are practices that discharge non-stormwater, such as ground water, that must be removed from a work location to proceed with construction into the drainage system. Discharges from dewatering operations can contain high levels of fine sediments, which if not properly treated, could lead to exceedance of the NPDES requirements. A NPDES Permit for dewatering discharges was adopted by the LARWQCB on September 13, 2018 (Order No. R4-2018-0125, General NPDES Permit No. CAG994004). Similar to the Construction General Permit, to be authorized to discharge under this Permit; the developer must submit a NOI to discharge groundwater generated from dewatering operations during construction in accordance with the requirements of this Permit and shall continue in full force until it expires November 13, 2023.¹⁴ In accordance with the NOI, among other requirements and actions, the discharger must demonstrate that the discharges shall not cause or contribute to a violation of any applicable water quality objective/criteria for the receiving waters, perform reasonable potential analysis using a representative sample of groundwater or wastewater to be discharged. The discharger must obtain and analyze (using appropriate methods) a representative sample of the groundwater to be treated and discharged under the Order. The analytical method used shall be capable of achieving a detection limit at

¹⁴ Los Angeles Regional Water Quality Control Board, Order No. R4-2018-0125, General NPDES Permit No. CAG994004, Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, 2018.

or below the minimum level. The discharger must also provide a feasibility study on conservation, reuse, and/or alternative disposal methods of the wastewater and provide a flow diagram of the influent to the discharge point.¹⁵

(iii) Operation: Los Angeles County Municipal Stormwater NPDES Program

The County of Los Angeles and the City are two of the Co-Permittees under the Los Angeles County MS4 Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001). The Los Angeles County MS4 Permit has been determined by the State Water Resources Control Board to be consistent with the requirements of the Clean Water Act and the Porter-Cologne Act for discharges through the public storm drains in Los Angeles County to statutorily-defined waters of the United States (33 United States Code [USC] §1342(p); 33 CFR Part 328.11). On September 8, 2016, the LARWQCB amended the Los Angeles County MS4 Permit to incorporate modifications consistent with the revised Ballona Creek Watershed Trash Total Maximum Daily Load (TMDL) and the revised Los Angeles River Watershed Trash TMDL, among other TMDLs incorporated into the Los Angeles County MS4 Permit and the Basin Plan for the Coastal Waters of Los Angeles and Ventura Counties.

Under the amended Los Angeles County MS4 Permit, the County and City are both required to implement development planning guidance and control measures that control and mitigate stormwater quality and runoff volume impacts to receiving waters as a result of new development and redevelopment. The County and the City also are required to implement other municipal source detection and elimination programs, as well as maintenance measures.

Under the Los Angeles County MS4 Permit, permittees are required to implement a development planning program to address stormwater pollution. This program requires project applicants for certain types of projects to implement a Low Impact Development (LID) Plan, except where the Standard Urban Stormwater Mitigation Plan (SUSMP) is proven applicable. The purpose of the LID Plan is to reduce the discharge of pollutants in stormwater by outlining BMPs, which must be incorporated into the design of new development and redevelopment. These treatment control BMPs must be sufficiently designed and constructed to treat or retain the greater of an 85th percentile rain event or first 0.75 inch of stormwater runoff from a storm event.

The Los Angeles County MS4 Permit (Part VI.D.7.c, New Development/Redevelopment Project Performance Criteria) includes design requirements for new development and substantial redevelopment. These requirements apply to all projects that create or replace more than 5,000 square feet of impervious cover. Where redevelopment results in an

¹⁵ Los Angeles Regional Water Quality Control Board, Order No. R4-2013-0095, General NPDES Permit No. CAG994004, Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, 2013.

alteration to more than 50 percent of impervious surfaces of a previously existing development and the existing development was not subject to post-construction stormwater quality control requirements, the entire project would be subject to post-construction stormwater quality control measures.

This Enhanced Watershed Management Program for the Upper Los Angeles River (ULAR EWMP) describes a customized compliance pathway that participating agencies will follow to address the pollutant reduction requirements of the Los Angeles County MS4 Permit.¹⁶ By electing the optional compliance pathway in the MS4 Permit, the Upper Los Angeles River Watershed Management Group (EWMP Group) has leveraged this EWMP to facilitate a robust, comprehensive approach to stormwater planning for the Upper Los Angeles River watershed. The objective of the EWMP Plan is to determine the network of control measures (BMPs) that will achieve required pollutant reductions while also providing multiple benefits to the community and leveraging sustainable green infrastructure practices. The Permit requires the identification of Watershed Control Measures, which are strategies and BMPs that will be implemented through the EWMP, individually or collectively, at watershed-scale to address the Water Quality Priorities. The EWMP Implementation Strategy is used as a recipe for compliance for each jurisdiction to address Water Quality Priorities and comply with the provisions of the MS4 Permit. The EWMP Implementation Strategy includes individual recipes for each of the 18 jurisdictions and each watershed/assessment area – Los Angeles River above Sepulveda Basin, Los Angeles River below Sepulveda Basin, Compton Creek, Rio Hondo, Verdugo Wash, Arroyo Seco, Burbank Western Channel, Tujunga Wash, Bull Creek, Aliso Wash, Bell Creek, McCoy-Dry Canyon, and Browns Canyon Wash. Implementation of the EWMP Implementation Strategy will provide a BMP-based compliance pathway for each jurisdiction under the MS4 Permit. The Permit specifies that an adaptive management process will be revisited every two years to evaluate the EWMP and update the program. The EWMP strategy will evolve based on monitoring results by identifying updates to the EWMP Implementation Plan to increase its effectiveness.

The Los Angeles County MS4 Permit contains provisions for implementation and enforcement of the Stormwater Quality Management Program (SQMP). The objective of the SQMP is to reduce pollutants in urban stormwater discharges to the “maximum extent practicable,” to attain water quality objectives and protect the beneficial uses of receiving waters in Los Angeles County. Special provisions are provided in the Los Angeles County MS4 Permit to facilitate implementation of the SQMP. In addition, the Los Angeles County MS4 Permit requires that permittees implement a LID Plan, as discussed above, that designates BMPs that must be used in specified categories of development projects to infiltrate water, filter, or treat stormwater runoff; control peak flow discharge; and reduce the post-project discharge of pollutants into stormwater conveyance systems. In response to the Los Angeles County MS4 Permit requirements, the City adopted Ordinance No.

¹⁶ Upper Los Angeles River Watershed Management Group, Enhanced Watershed Management Program, 2016.

173,494 (Stormwater Ordinance), as authorized by Los Angeles Municipal Code (LAMC) Section 64.72.

The City supports the requirements of the Los Angeles County MS4 Permit through the City of Los Angeles' *Development Best Management Practices Handbook, Low Impact Development Manual, Part B: Planning Activities* (5th edition, May 2016) (LID Handbook)¹⁷, which provides guidance to developers to ensure the post-construction operation of newly developed and redeveloped facilities comply with the Developing Planning Program regulations of the City's Stormwater Program. The LID Handbook assists developers with the selection, design, and incorporation of stormwater source control and treatment control BMPs into project design plans, and provides an overview of the City's plan review and permitting process.

The City implements the requirement to incorporate stormwater BMPs, including LID BMPs, through the City's plan review and approval process. During the review process, project plans are reviewed for compliance with the City's General Plan, zoning ordinances, and other applicable local ordinances and codes, including stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address stormwater pollution prevention goals.

(4) Local

(a) *Los Angeles Municipal Code Section 62.105, Construction "Class B" Permit*

Proposed drainage improvements within the street rights-of-way or any other property owned by, to be owned by, or under the control of the City, require the approval of a B-permit (LAMC Section 62.105). Under the B-permit process, storm drain installation plans are subject to review and approval by the Bureau of Engineering. Additionally, connections to the MS4 system from a property line to a catch basin or a storm drain pipe require a storm drain permit from the Bureau of Engineering.

(b) *Los Angeles Municipal Code Sections 12.40 through 12.43, Landscape Ordinance*

In 1996, Ordinance No. 170,978 amended LAMC Sections 12.40 through 12.43 to establish consistent landscape requirements for new projects within the City. LAMC Section 12.40 contains general requirements, including a point system for specific project features and techniques in order to determine compliance with the Ordinance, and defines exemptions from the Ordinance. LAMC Section 12.41 sets minimum standards for water delivery systems (irrigation) to landscapes. LAMC Section 12.43 defines the

¹⁷ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2022.

practices addressed by the Ordinance, of which two are applicable to stormwater management. The Heat and Glare Reduction practice states among its purposes the design of vehicular use areas that reduce stormwater runoff and increase groundwater recharge. The Soil and Watershed Conservation practice is intended to encourage the restoration of native areas that are unavoidably disturbed by development; to conserve soil and accumulated organic litter and reduce erosion by utilization of a variety of methods; and to increase the “residence time of precipitation” (i.e., the time between the original evaporation and the returning of water masses to the land surface as precipitation) within a given watershed. Implementation guidelines developed for the Ordinance provide specific features and techniques for incorporation into projects, and include water management guidelines addressing runoff, infiltration, and groundwater recharge. This Ordinance is incorporated into the LID Ordinance discussed below.

(c) *Los Angeles Municipal Code Section 64.70, Stormwater and Urban Runoff Pollution Control Ordinance*

LAMC Section 64.70, the Stormwater and Urban Runoff Pollution Control Ordinance, was added by Ordinance No. 172,176 in 1998 and prohibits the discharge of unauthorized pollutants in the City. The Watershed Protection Program (Stormwater Program) for the City is managed by the Bureau of Sanitation along with all City Flood Protection and Pollution Abatement (Water Quality) Programs, including but not limited to, regulatory compliance, implementation, operations, reporting and funding. Section 64.70 sets forth uniform requirements and prohibitions for discharges and places of discharge into the storm drain system and receiving waters necessary to adequately enforce and administer all federal and state laws, legal standards, orders and/or special orders that provide for the protection, enhancement and restoration of water quality. Through a program employing watershed-based approaches, the regulation implements the following objectives:

1. To comply with all Federal and State laws, lawful standards and orders applicable to stormwater and urban runoff pollution control;
2. To prohibit any discharge which may interfere with the operation of, or cause any damage to the storm drain system, or impair the beneficial use of the receiving waters;
3. To prohibit illicit discharges to the storm drain system;
4. To reduce stormwater runoff pollution;
5. To reduce non-stormwater discharge to the storm drain system to the maximum extent practicable; and
6. To develop and implement effective educational outreach programs designed to educate the public on issues of stormwater and urban runoff pollution.

The Ordinance applies to all dischargers and places of discharge that discharge stormwater or non-stormwater into any storm drain system or receiving waters. While this practice is prohibited under the County’s Municipal NPDES Permit, adoption of the

Ordinance allows enforcement by the Department of Public Works as well as the levy of fines for violations. General Discharge Prohibitions require that no person shall discharge, cause, permit, or contribute to the discharge any hazardous materials and substances (liquids, solids, or gases) into the storm drain system or receiving waters that constitute a threat and/or impediment to life and the storm drain system, singly or by interaction with other materials. A specific list of prohibited substances can be found under LAMC Section 64.70.

Under LAMC Section 64.70.02.D, Requirement to Prevent, Control, and Reduce Stormwater Pollutants, any owner of a facility engaged in activities or operations as listed in the Critical Sources Categories, Section III of the Board's Rules and Regulations shall be required to implement BMPs as promulgated in the Rules and Regulations. The owner/developer of a property under construction shall be required to implement the stormwater pollution control requirements for construction activities as depicted in the project plans approved by the Department of Building and Safety. In the event a specified BMP proves to be ineffective or infeasible, the additional and/or alternative, site-specific BMPs or conditions deemed appropriate to achieve the objectives of this Ordinance as defined in Subsection B of LAMC Section 64.70.

(d) *Los Angeles Municipal Code Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities*

LAMC Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities, was added by Ordinance 173,494 (LID Ordinance) in 2000 and sets forth requirements for construction activities and facility operations of development and redevelopment projects to comply with the requirements of the NPDES permit SUSMP requirements. The provisions of this section contain requirements for construction activities and facility operations of development and redevelopment projects to comply with the Land Development requirements of the Los Angeles County MS4 permit through integrating LID practices and standards for stormwater pollution mitigation, and maximize open, green and pervious space on all developments and redevelopments consistent with the City's Landscape Ordinance and other related requirements in the Development Best Management Practices Handbook. The LID Ordinance (see below) applies first to a project in lieu of SUSMP. If a large project cannot meet the requirements of the LID Ordinance, then SUSMP measures are applied.

(e) *Low Impact Development Ordinance (No. 181,899)*

In 2011, the City adopted a Citywide Low Impact Development Ordinance (LID Ordinance) that amended the City's existing Stormwater Ordinance (LAMC Section Nos. 64.70 and 64.72, discussed above). The LID Ordinance, effective May 12, 2012, and updated in updated September 2015 (Ordinance No. 183,833), enforces the requirements of the Los Angeles County MS4 Permit. LID is a stormwater management strategy with goals to mitigate the impacts of increased runoff and stormwater pollution as close to their

source as possible; and that promotes the use of natural infiltration systems, evapotranspiration, and the reuse of stormwater.

LID is a storm water management strategy with goals to reduce the impacts of increased runoff and storm water pollution as close to its source as possible. LID promotes the use of natural infiltration systems, evapotranspiration, and the reuse of storm water. The goal of LID practices is to remove nutrients, bacteria, and metals from stormwater while also reducing the quantity and intensity of stormwater flows. Through the use of various infiltration strategies, LID is aimed at minimizing impervious surface area. Where infiltration is not feasible, the use of bioretention, rain gardens, green roofs, and rain barrels that will store, evaporate, detain, and/or treat runoff can be used.¹⁸

The intent of LID standards is to:

- Require the use of LID practices in future developments and redevelopments to encourage the beneficial use of rainwater and urban runoff;
- Reduce stormwater/urban runoff while improving water quality;
- Promote rainwater harvesting;
- Reduce off-site runoff and provide increased groundwater recharge;
- Reduce erosion and hydrologic impacts downstream; and
- Enhance the recreational and aesthetic values in our communities.

The Citywide LID strategy addresses land development planning as well as storm drain infrastructure. Toward this end, LID is implemented through BMPs that fall into four categories: site planning BMPs, landscape BMPs, building BMPs, and street and alley BMPs. While the LID Ordinance and the BMPs contained therein comply with Los Angeles County MS4 Permit requirements for stormwater management, the MS4 requirements apply only to proposed new development and redevelopment of a certain size, primarily address stormwater pollution prevention as opposed to groundwater recharge, and vary over time as the permit is reissued every five years. The LID Ordinance provides a consistent set of BMPs that are intended to be inclusive of, and potentially exceed, SUSMP standards, apply to existing as well as new development, and emphasize natural drainage features and groundwater recharge in addition to pollution prevention in receiving waters. The LID Ordinance requires the capture and management of the greater of an 85th percentile rain event or the first 0.75-inch of runoff flow during storm events defined in the City's LID BMPs, through one or more of the City's preferred LID improvements in priority order: on-site infiltration, capture and reuse, or biofiltration/biotreatment BMPs, to the maximum extent feasible.

¹⁸ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2022.

Per the City's 2016 LID Manual's Figure 3.3 and Section 4.1, the City's preferred LID improvement is on-site infiltration of stormwater, site since it allows for groundwater recharge and reduces the volume of stormwater entering municipal drains.¹⁹ If Project Site conditions are not suitable for infiltration, the City requires on-site retention via stormwater capture and reuse. Should capture and reuse be deemed technically infeasible, high efficiency bio-filtration/ bioretention systems should be utilized. Lastly, under the LID Ordinance (LAMC Section 64.72 (C) 6), as interpreted in the LID Manual, if no single approach listed in the LID Manual is feasible, then a combination of approaches may be used.²⁰

The LID Ordinance applies first to a project in lieu of SUSMP. If a large project cannot meet the requirements of the LID Ordinance, then SUSMP applies instead.

(f) *Water Quality Compliance Master Plan for Urban Runoff*

The Water Quality Compliance Master Plan for Urban Runoff (Water Quality Compliance Master Plan)²¹ was developed by the Department of Public Works, Bureau of Sanitation, Watershed Protection Division, and was adopted in April 2009.

The Water Quality Compliance Master Plan addresses planning, budgeting, and funding for achieving clean stormwater and urban runoff for the next 20 years and presents an overview of the status of urban runoff management within the City. The Water Quality Compliance Master Plan identifies the City's four watersheds; summarizes water quality conditions in the City's receiving waters as well as known sources of pollutants; summarizes regulatory requirements for water quality; describes BMPs required by the City for stormwater quality management; and discusses related plans for water quality that are implemented within the Los Angeles region, particularly TMDL Implementation Plans and Watershed Management Plans in Los Angeles.

¹⁹ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2022.

²⁰ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2022.

²¹ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2022.

(g) *Stormwater Program – Los Angeles County MS4 Permit
Citywide Implementation*

The Watershed Protection Division of the Department of Public Works, Bureau of Sanitation is responsible for stormwater pollution control throughout the City in compliance with the Los Angeles County MS4 Permit. The Watershed Protection Division administers the City's Stormwater Program, which has two major components: Pollution Abatement and Flood Control. The Watershed Protection Division publishes the two-part Development Best Management Practices Handbook that provides guidance to developers for compliance with the Los Angeles County MS4 permit through the incorporation of water quality management into development planning. The Development Best Management Practices Handbook, Part A: Construction Activities, provides specific minimum BMPs for all construction activities.²² The Development Best Management Practices Handbook, Low Impact Development Manual, Part B: Planning Activities (5th edition, May 2016) (LID Handbook) provides guidance to developers to ensure the post-construction operation of newly developed and redeveloped facilities comply with the Developing Planning Program regulations of the City's Stormwater Program.²³ The LID Handbook assists developers with the selection, design, and incorporation of stormwater source control and treatment control BMPs into project design plans, and provides an overview of the City's plan review and permitting process. The LID Handbook addresses the need for frequent and/or regular inspections of infiltration facilities in order to ensure on-site compliance of BMP standards, soil quality, site vegetations, and permeable surfaces. These inspections are required to guarantee that facilities follow all proprietary operation and maintenance requirements.

During the development review process, project plans are reviewed for compliance with the City's General Plan, zoning ordinances, and other applicable local ordinances and codes, including stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address stormwater pollution prevention goals.

Operations and maintenance requirements in the LID Handbook include the following:

- Frequent inspections of the infiltration facilities shall occur to ensure that surface ponding infiltrates into the subsurface completely within the design drawdown time following storms. If vector breeding is taking place at a site as a result of contained

²² City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2022.

²³ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2022.

stormwater or inadequately maintained BMPs, the Greater Los Angeles County Vector Control District has the ability to fine site owners for violating the California Health and Safety Code (Section 2060 – 2067).

- Regular inspections shall take place to ensure that the pretreatment sediment removal BMP/forebay is working efficiently. Sediment buildup exceeding 50 percent of the forebay sediment storage capacity shall be removed.
- The infiltration facility shall be maintained to prevent clogging. Maintenance activities include checking for debris/sediment accumulation and removal of such debris.
- Facility soil (if applicable) shall be maintained. Flow entrances, ponding areas, and surface overflow areas shall be inspected for erosion periodically. Soil and/or mulch shall be replaced as necessary to maintain the long-term design infiltration rate for the life of the project.
- Site vegetation shall be maintained as frequently as necessary to maintain the aesthetic appearance of the site as well as the filtration capabilities (where applicable). This includes the removal of fallen, dead, and/or invasive plants, watering as necessary, and the replanting and/or reseedling of vegetation for reestablishment as necessary.
- Pervious pavement areas that are damaged or clogged shall be replaced/repared per manufacture's recommendation as needed.
- Follow all proprietary operation and maintenance requirements.

The provisions of the LID Handbook are implemented through a Covenant and Agreement (C&A) that must be submitted, along with the design plans showing the project's stormwater measures, during the plan review and approval process. The C&A must include, as an attachment, an Operation and Maintenance (O&M) Plan describing the BMP operation and maintenance procedures, employee training program and duties, operating schedule, maintenance frequency, routine service schedule, and other activities. The O&M Plan requires a maintenance log be kept that can be inspected by the City upon request.

b) Existing Conditions

(1) Surface Water Hydrology (Drainage)

(a) Regional

The Project Site is located within the Los Angeles River Watershed (Watershed). The Watershed encompasses an area of approximately 834 square miles. The Watershed borders the crest of the San Gabriel Mountains on the north and the Ventura-Los Angeles County line on the west and extends south to Long Beach.

The Los Angeles River is a 51-mile-long flood protection channel that drains the San Fernando Valley and portions of the Los Angeles basin, from the San Fernando Valley

on the north through downtown Los Angeles and to the Port of Long Beach. The major tributaries to the Los Angeles River include Bell Creek, Arroyo Calabazas, Tujunga Wash, Arroyo Seco, Rio Hondo, Compton Creek, and numerous storm drains.²⁴ The Los Angeles River flows generally southeast, ultimately discharging into the Pacific Ocean at the Port of Long Beach. The Los Angeles River is designed to carry approximately 64,773 cubic feet per second from a 50-year frequency storm event adjacent to the Project Site.²⁵

(b) *Local*

The Project vicinity has a network of existing underground storm drainage facilities, owned and maintained by the City of Los Angeles, that receive surface water runoff. Within Lankershim Boulevard, there is an existing 84-inch reinforced concrete pipe (RCP). The entire 7.26-acre Project Site has an approximately 75-percent impervious area and has a combined 50-year storm flow rate of 18.14 cubic feet per second (cfs).²⁶ The stormwater runoff from the Project Site is discharged into off-site catch basins and underground storm drainage pipes, which convey stormwater through underground pipe networks into the Los Angeles River ultimately discharging into the Port of Long Beach.

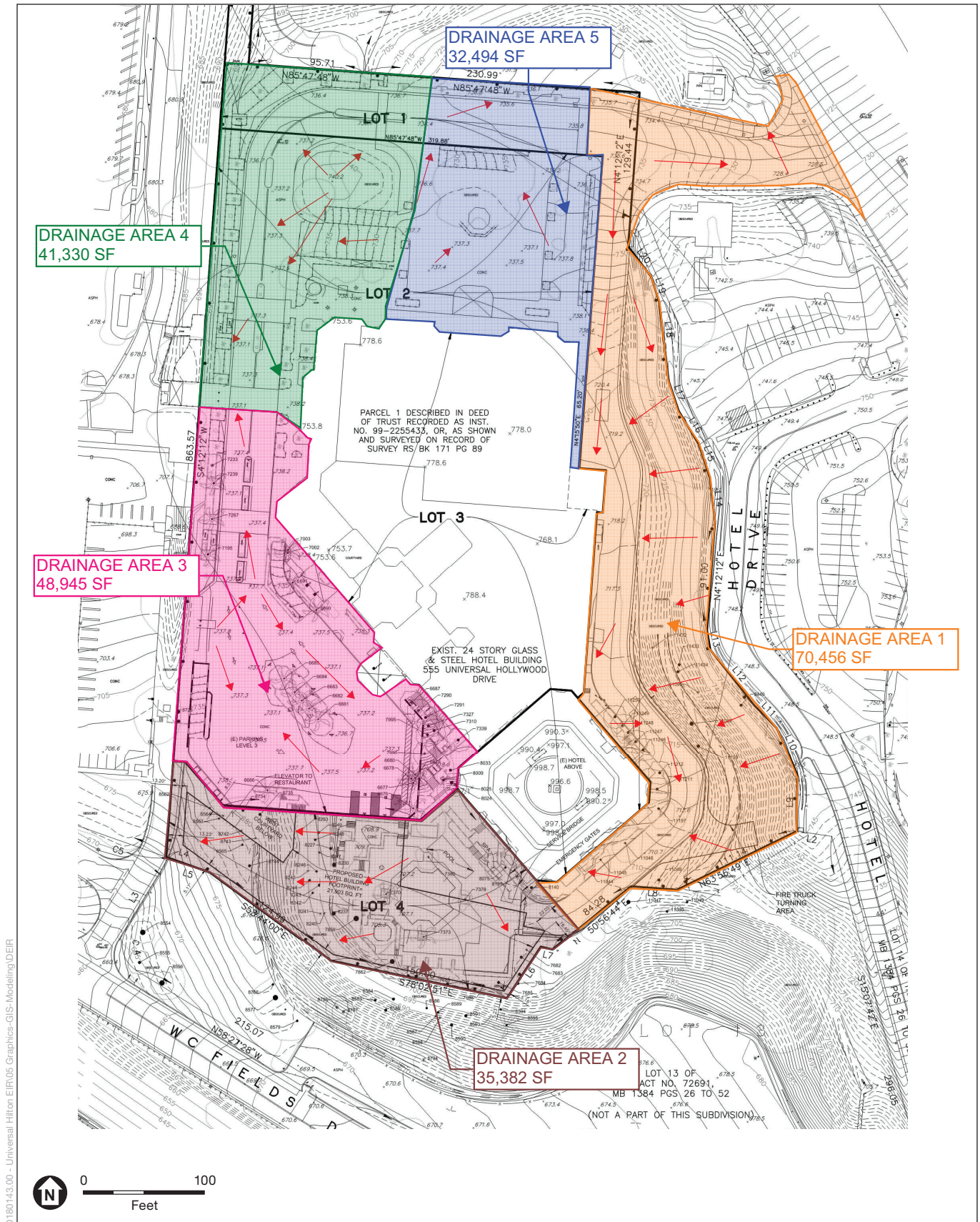
(c) *Project Site Overview*

For purposes of the Hydrology and Water Quality Report, the Project Site was divided into five drainage areas, which do not include runoff from the Existing Hotel Building and Existing Ancillary Hotel Building as these existing areas would not be redeveloped and drainage from these areas would not change as a result of the Project. Thus, the total acreage of the five drainage areas is reduced to 5.25 acres from the total Project Site area of 7.26 acres. The Project Site is not crossed by any water courses or rivers. The five drainage areas within the Project Site generally consist of an asphalt service road, surface parking areas, planter areas, structures, and the Existing Outdoor Pool Area with surrounding patio and landscaping. As shown in **Figure IV.G-1, Existing On-Site Drainage**, stormwater from the Project Site is conveyed by sheet flow toward the south and east. Runoff is collected in a series of private catch basins and storm drain and is then conveyed to the 84-inch RCP in Lankershim Boulevard.

²⁴ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023 p. 11.

²⁵ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023 p. 12.

²⁶ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 13.



SOURCE: KPFF, 2022

Hilton Universal City Project

Figure IV.G-1
Existing On-site Drainage

All stormwater runoff eventually drains to the City storm drain system. **Table IV.G-1, Existing Drainage Conditions**, shows the existing volumetric flow rate (measured in cfs) generated by a 50-year storm event²⁷ and a summary of existing imperviousness conditions for the five drainage areas within the Project Site. As shown in Table IV.G-1, the five drainage areas within Project Site are currently approximately 66.1 percent impervious, which, as stated above, does not include runoff from the Existing Hotel Building and Existing Ancillary Hotel Building.

**TABLE IV.G-1
EXISTING DRAINAGE CONDITIONS^A**

Drainage Area	Area (Acres)	Percent Imperviousness (%)	Q50 (cfs)^b
1	1.62	48.9	5.27a
2	0.81	49.9	2.87a
3	1.12	92.1	3.97a
4	0.95	66.7	3.37a
5	0.75	81.2	2.66a
Total	5.25	66.1	18.14^a

^a The calculations do not include runoff from Existing Hotel Building and Existing Ancillary Hotel Building as these existing areas would not be redeveloped and drainage from these areas would not change as a result of the Project. Therefore, total percent impervious (66.1 percent) is different than 75 percent impervious for the entire Project Site.

^b Volumetric flow rate is measured in cubic feet per second. Due to the rounding of numbers, the total may be slightly different.

SOURCE: KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 12.

(d) *Flooding and Inundation*

The Project Site is not located within a Special Flood Hazard Area (a 100-year floodplain) or Moderate Flood Hazard Area (500-year floodplain) identified by the Federal Emergency Management Agency (FEMA) and published in the Flood Insurance Rate Maps (FIRM).²⁸ The areas of minimal flood hazard, which are the areas outside the Special Flood Hazard Area and higher than the elevation of the 500-year floodplain, are

²⁷ A 50-year rainfall event has a one in 50 (two percent) chance of occurring in a given year.

²⁸ FIRMs depict the 100-year floodplain as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. FIRMs depict the 500-year floodplain as Zone B or Zone X. Information based on Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, <https://www.fema.gov/flood-insurance-rate-map-firm>, accessed May 16, 2020.

labeled Zone C or Zone X. The Project Site is located within Zone X and is, therefore, located outside of the 100- and 500-year floodplain.²⁹

(2) Surface Water Quality

(a) *Regional*

As stated above, the Project Site lies within the Los Angeles River Watershed. Constituents of concern listed for the Los Angeles River under California's Clean Water Act Section 303(d) List include cadmium (dissolved), lead (dissolved), chlordane, dichloroethylene, tetrachloroethylene, trichloroethylene, coliform bacteria, copper (dissolved), total aluminum, total lead, enterococcus, fecal coliform, total coliform, algae, ammonia, oil and grease, and zinc (dissolved).³⁰

(b) *Local*

In general, urban stormwater runoff occurs following precipitation events, with the volume of runoff flowing into the drainage system varying with intensity and duration of the rain event. Contaminants that may be found in stormwater from developed areas include sediments, trash, bacteria, metals, nutrients, organics and pesticides. The source of contaminants includes surface areas where precipitation falls, as well as the air it falls through. Contaminants on surfaces, such as roads, maintenance areas, parking lots, and buildings, which are usually contained in dry weather conditions, may be carried by rainfall runoff into drainage systems. The City has installed catch basins with screens to capture debris before entering the storm drain system. In addition, the City conducts routine street cleaning operations, as well as periodic cleaning and maintenance of catch basins, to reduce stormwater pollution within the City.³¹

(c) *Project Site*

As stated in the Hydrology and Water Quality Report, while the Project Site currently does not have structural BMPs for the treatment of stormwater runoff from existing impervious surfaces, such as building roof areas and pavements, there is a range of non-structural BMPs that are currently utilized at the Project Site to minimize the impact of pollutant sources. These include general housekeeping practices, such as regular trash collection; spill prevention and response activities; proper storage of hazardous materials and wastes; and substituting environmentally-friendly products for environmentally-hazardous products, such as soaps, solvents, and pesticides. In addition, stormwater runoff from existing pervious surfaces, such as island landscaped areas and planting areas, is naturally treated to some extent by existing vegetation and the absorptive properties of the existing soils. Based on the existing operations within the Project Site, the on-site

²⁹ Based on FIRM Number 0600137, effective on September 26, 2008.

³⁰ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 13.

³¹ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 14.

runoff likely contains the following pollutants of concern: sediment, nutrients, pesticides, metals, pathogens, and oil and grease.

(3) Groundwater Hydrology

(a) *Regional*

Groundwater use for domestic water supply is a major beneficial use of groundwater basins in Los Angeles County. The City of Los Angeles overlies the Los Angeles Coastal Plain Groundwater Basin (Basin). The Basin comprises the Hollywood, Santa Monica, Central, and West Coast Subbasins. Groundwater flow in the Basin is generally south-southwesterly and may be restricted by natural geological features. Replenishment of groundwater basins occurs mainly by percolation of precipitation throughout the region via permeable surfaces, spreading grounds, and groundwater migration from adjacent basins, as well as injection wells designed to pump freshwater along specific seawater barriers to prevent the intrusion of salt water.³²

(b) *Local*

The Project Site specifically overlies the San Fernando Valley Subbasin (Subbasin), which underlies the northeastern portion of the Basin. The Subbasin is bounded on the north by the Santa Monica Mountains and the Hollywood Fault, on the east by the Elysian Hills, on the west by the Inglewood Fault Zone, and on the south by the La Brea High, formed by an anticline that brings impermeable rocks close to the surface.

Groundwater in the Subbasin is replenished by percolation of precipitation and stream flow from the Santa Monica Mountains to the north. Urbanization in this area has decreased the amount of pervious surface area allowing direct percolation. Therefore, natural recharge is somewhat limited. The natural safe yield of the Subbasin is estimated to be approximately 3,000 acre-feet per year.³³

The primary producer from the Subbasin is the City of Beverly Hills, which currently owns and operates 4 groundwater production wells in the Subbasin. These wells have a combined capacity of 2,083 gallons per minute. Groundwater flow within the Subbasin generally flows east to west.³⁴

³² KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 14.

³³ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 14.

³⁴ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 14.

(c) *Project Site*

The Project Site slopes generally to the southwest at varying gradients with an elevation of approximately 740 feet above mean sea level (amsl) on the northwestern corner of the Project Site to approximately 675 feet amsl on the southwestern corner.

Based on on-site explorations conducted as part of the geotechnical investigation for the Project Site and reported in the Geotechnical Report, encountered fill materials range from approximately 3 to 25 feet in thickness.³⁵ The fill thickens from east to west on the south side of the existing parking structure. Deeper fill may be encountered to the west. Fill materials consisted of silty sand and sand, which are dark brown, moist, and medium dense. The bedrock underlying the fills on-site consists of interbedded siltstone and sandstone with beds of coarse grained conglomerate of the Upper Topanga Formation. The shallower depth weathered rock is generally dark and yellowish brown, greenish gray, and grayish brown in color. With increasing depth, the rock is generally gray to dark gray in color. The rock is moderately hard to hard, moist, and moderately to poorly bedded.³⁶

According to the Geotechnical Report, the bedrock that underlines the Project Site is well bedded and moderately fractured. Water generally follows bedding planes and fractures with the bedrock.

As described in the Geotechnical Report, the historically highest groundwater levels are not shown within 0.3 mile of the Project Site. A depth of “0” is provided which indicates the groundwater level is at the surface and suggests the underlying soils are not of sufficient permeability to transmit water. However, groundwater seepage is anticipated at the bedrock contacts, from fractures, and from coarse sandstone beds. As described in the Geotechnical Report, groundwater was encountered at depths ranging between 14 to 36 feet below grade.

(4) Groundwater Quality

(a) *Regional*

As stated above, the Basin falls under the jurisdiction of the LARWQCB. As described above, the LARWQCB’s Basin Plan identifies numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State’s anti-degradation policy. Objectives from the LARWQCB’s Basin Plan that apply to all ground

³⁵ Geotechnologies, Inc., Geotechnical Engineering Investigation, Proposed Hilton Universal City Expansion Project, 555 Universal Hollywood Drive, Los Angeles, September 2022, pgs. 11-13. Provided in Appendix E of this Draft EIR.

³⁶ Bedded refers to layering that occurs in rock formation, layers of sediment or rock may be bound above or below by more or less well-defined layers or “bedding” surfaces.

waters of the region include bacteria, chemical constituents and radioactivity, mineral quality, nitrogen (nitrate, nitrite), and taste and odor.³⁷

(b) *Local*

As stated above, the Project Site specifically overlies the San Fernando Valley Subbasin. Based upon LARWQCB's Basin Plan, constituents of concern listed for the Hollywood Subbasin include boron, chloride, sulfate, Total Dissolved Solids (TDS), and nitrate.³⁸

(c) *Project Site*

Since the Project Site is primarily fill material overlying bedrock, no appreciable infiltration of potential contaminants described above is expected to occur. Additionally, the combination of good housekeeping practices described above and compliance with all existing hazardous waste regulations, ensures groundwater quality is not significantly impacted by existing activities at the Project Site.³⁹ Other types of risk, such as underground storage tanks, have a greater potential to impact groundwater. As discussed in the Initial Study (**Appendix A** of this Draft EIR), a Phase I Environmental Site Assessment (ESA) was prepared for the Project (Geosyntec, 2020), which identified two underground storage tanks formerly containing diesel fuel were removed from the Project Site. With this removal, no underground storage tanks currently exist on the Project Site.

(5) Inundation, Tsunami, and Seiche Hazard Areas

According to the City of Los Angeles General Plan Safety Element, Exhibit G: Inundation & Tsunami Hazard Areas, the Project Site is not located in a potential dam inundation area.⁴⁰ With respect to seiche and tsunami hazards, the Project Site is located approximately 12 miles inland (northeast) from the Pacific Ocean, is not located in a City-designated tsunami hazard area,⁴¹ and, as described above, is at an elevation of approximately 740 feet amsl. The Hollywood Reservoir, the nearest standing body of water, is located approximately 1.6 miles southeast, and is located downstream from the Project Site.⁴² Additionally, there is intervening development in all directions around the Project Site. Therefore, the Project Site is not at risk of tsunami inundation or seiche

³⁷ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 15.

³⁸ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 15.

³⁹ KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 16.

⁴⁰ City of Los Angeles Department of City Planning, General Plan Safety Element, adopted November 26, 1996, p. 59.

⁴¹ City of Los Angeles Department of City Planning, General Plan Safety Element, adopted November 26, 1996, p. 59.

⁴² California Department of Water Resources, Division of Safety of Dams (DSOD), California Dam Breach Inundation Map Viewer, https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2. Accessed September 15, 2022.

based on its proximity to the Pacific Ocean and being outside of an inundation, tsunami, or seiche hazard area.

3. Project Impacts

a) Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, a project would have a significant impact related to hydrology and water quality if it would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;***
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;***
- c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***
 - i. result in substantial erosion or siltation on- or off-site;***
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;***
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or***
 - iv. Impede or redirect flood flows***
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or***
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.***

For this analysis, the Appendix G Thresholds are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions. The factors to evaluate hydrology and water quality impacts include whether the Project would:

- Surface Water Hydrology
 - Cause flooding during the projected 50-year developed storm event which would have the potential to harm people or damage property or sensitive biological resources;

- Substantially reduce or increase the amount of surface water in a water body; or
- Result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow.
- Surface Water Quality
 - Result in discharges that would create pollution, contamination or nuisance as defined in Section 13050 of the CWC or would cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body.
 - Groundwater Quality
 - Affect the rate or change the direction of movement of existing contaminants;
 - Expand the area affected by contaminants;
 - Result in an increased level of groundwater contamination (including that from direct percolation, injection or salt water intrusion); or
 - Cause regulatory water quality standards at an existing production well to be violated, as defined in the California Code of Regulations (CCR), Title 22, Division 4, and Chapter 15 and in the Safe Drinking Water Act.

b) Methodology

The analysis in this section addresses potential Project impacts on hydrology (drainage) and surface water quality. The analysis is based, in large part, on the Hydrology and Water Quality Report provided in Appendix G of this Draft EIR, and the Geotechnical Investigation provided in Appendix E of this Draft EIR. A summary of the analytical methodology for hydrology and surface water quality is provided below.

(1) Hydrology (Drainage)

The analysis of potential impacts to the existing hydrologic drainage system includes a calculation of existing (pre-Project) and post-Project runoff rates during a 50-year storm event. Potential impacts to the storm drain system for this Project were analyzed by comparing the calculated existing runoff rates to the calculated post-Project runoff rates to determine the Project's effect on drainage flows. The Project's proposed on-site stormwater treatment system is evaluated for consistency with applicable regulatory measures for reducing drainage impacts.

The Project Site's drainage collection, treatment and conveyance are regulated by the City. Per the City's Special Order No. 007-1299, December 3, 1999, the City has adopted the County's Hydrology Manual as its basis of design for storm drainage facilities. The County's Hydrology Manual requires projects to have drainage facilities that meet the "Urban Flood" level of protection. The Urban Flood is runoff from a 25-year frequency design storm falling on a saturated watershed. A 25-year frequency design storm has a

probability of 1/25 of being equaled or exceeded in any year. The 2006 L.A. CEQA Thresholds Guide, however, establishes the 50-year frequency design storm event as the threshold to analyze potential impacts on surface water hydrology as a result of development. To provide a more conservative analysis, this report analyzes the larger storm event threshold (i.e., the 50-year frequency design storm event).

The Modified Rational Method (MODRAT) was used to calculate stormwater runoff as required by the County's Hydrology Manual. MODRAT uses the design storm and time of concentration to calculate runoff at different times throughout the storm and allows for consideration of attenuation through channel storage, retention basins, etc., to reduce peak flows.

The County's Department of Public Works has developed a time of concentration calculator, Hydrocalc, to automate time of concentration calculations, as well as the peak runoff rates and volumes using the MODRAT design criteria as outlined in the Hydrology Manual. The data input requirements include sub-area size, soil type, land use, flow path length, flow path slope and rainfall isohyet. The Hydrocalc Calculator was used to calculate the storm water peak runoff flow rate for the Project conditions by evaluating an individual sub-area independent of all adjacent subareas.

(2) Water Quality

Water quality impacts were assessed by characterizing the types of pollutants and/or effects on water quality likely to be associated with temporary construction and long-term operation of the Project. Potential impacts to water quality taken into consider project design features that are intended to treat contaminants as well as any expected contaminant flows that would result from Project implementation. Project consistency with relevant regulatory permits/requirements, including BMPs and applicable plans, is evaluated to demonstrate how compliance would reduce potential Project impacts.

Under Section 3.1.3 of the City's LID Manual, post-construction stormwater runoff from a new development must be, in order of desirability, infiltrated, captured and used, and/or treated through high efficiency on-site biofiltration/bioretenion systems for at least the volume of water produced by the greater of the 85th percentile storm or the 0.75-inch storm event. In accordance with these requirements, the feasibility of the different potential BMPs outlined in the LID is evaluated in the analysis, and the required capacity of the identified preferred feasible BMP is calculated.

(3) Groundwater

Impacts to groundwater quality and groundwater level were assessed by identifying the types of pollutants and/or effects on water quality likely to be associated with construction and operation of the Project. The analysis includes a review of the existing levels, quality, direction of flow, and existing uses for the water within the San Fernando Valley Subbasin.

Analysis of the Project impact on groundwater levels includes assessing the pre- and post-site permeability, construction dewatering, determining the projected reduction in groundwater resources and any existing wells within a one-mile radius of the Project Site, and projecting the change in local or regional groundwater flow patterns.

(4) Water Quality and Sustainable Groundwater Management Plans

The evaluation of Project consistency with applicable water quality and sustainable groundwater management plans is based on a summary of the preceding analyses of Project impacts on water quality and groundwater resources. The analysis below under Threshold (e) identifies applicable plans and regulations and the Project characteristics that conform to those regulatory standards.

c) Project Design Features

No specific Project Design Features are proposed with regard to hydrology and water quality.

d) Analysis of Project Impacts

Threshold a) Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

(1) Impact Analysis

(a) Construction Impacts

Construction of the Project would require grading and excavation activities down to a depth of approximately 50 feet below existing grade for the parking garage expansion, new structures, hardscape and landscape around the structures. An estimated 87,000 net cubic yards of soil would be excavated and exported off-site. As concluded in the Initial Study (Appendix A of this Draft EIR), impacted soil concentrations from two former underground storage tanks reported were below the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) for Direct Exposure Human Health Risk Levels, Residential Shallow Soil Exposure.⁴³ Therefore, contaminated soils would be below screening levels and any contaminated soils captured within that volume of excavated material, would be removed from the Project Site and remediated at an approved disposal facility in accordance with applicable regulatory requirements.

Construction activities for the Project, such as earth moving, maintenance/operation of construction equipment, potential dewatering as described below, and handling/storage/disposal of materials, could contribute to pollutant loading in stormwater runoff. However,

⁴³ The ESLs, which are published by the SF-RWQCB, are the most commonly referenced screening levels for petroleum hydrocarbons throughout California, including within the LARWQCB area.

the Project would be required to obtain coverage under the NPDES Construction General Permit (Order No. 2009-0009-SWQ). In accordance with the requirements of the permit, the Project would be required to prepare and implement a site-specific SWPPP that adheres to the California Stormwater Quality Association BMP Handbook. The SWPPP would specify BMPs to be used during construction. BMPs would include, but not be limited to, erosion control, sediment control, non-stormwater management, and materials management BMPs.

Dewatering operations are practices that discharge groundwater that must be removed from a work location into the storm drain system to proceed with construction. Discharges from dewatering operations can contain high levels of fine sediments, which, if not properly treated, could lead to exceedance of the NPDES requirements. If groundwater is encountered during construction, temporary pumps and filtration would be utilized in compliance with the NPDES permit. The temporary system would comply with all relevant NPDES requirements related to construction and discharges from dewatering operations. If dewatering is required, the treatment and disposal of the dewatered water would occur in accordance with the requirements of LARWQCB's Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watershed of Los Angeles and Ventura Counties. Additional details regarding requirements associated with dewatering are provided under Threshold (c) below. Therefore, as the Project would comply with the NPDES' and LARWPCB's dewatering requirements, the Project construction related impacts on groundwater quality would be less than significant.

With the implementation of site-specific BMPs included as part of the SWPPP, the Project would reduce or eliminate the discharge of potential pollutants from the stormwater runoff. In addition, the Applicant would be required to comply with the City's grading permit regulations set forth in LAMC, Chapter IX, Article 1, which include standard erosion control measures and inspections to reduce sedimentation and erosion (such measures would also be included in the construction SWPPP). Also, if construction should occur during the rainy season (October 1 to April 14), a wet weather erosion control plan (WWECP) would be prepared. As discussed above, BMPs for non-stormwater discharge management and materials management would be incorporated into the SWPPP.

Therefore, with compliance with NPDES requirements and City grading regulations, construction of the Project would not result in discharge that would violate any water quality standard or waste discharge requirements, or otherwise substantially degrade water quality. Furthermore, construction of the Project would not result in discharges that would cause regulatory standards to be violated in the Los Angeles River.

During on-site grading and building construction activities associated with the Project, hazardous materials, such as fuels, paints, solvents, and concrete additives, could be used and would, therefore, require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the opportunity for hazardous materials releases into groundwater, should an accidental spill occur. Compliance with all applicable federal, state, and local requirements concerning the

handling, storage and disposal of hazardous waste, would reduce the potential for the construction of the Project to release contaminants into groundwater that could affect existing contaminants, expand the area or increase the level of groundwater contamination, or cause a violation of regulatory water quality standards at an existing production well. Implementation of the BMPs in the SWPPP in accordance with LARWQCB's discharge requirements would further ensure that any discharge of groundwater during construction would not impact groundwater quality.

As such, construction of the Project would not violate any water quality standards or waste discharge requirements. Therefore, surface water quality and groundwater quality impacts resulting from Project construction would be less than significant.

(b) Operational Impacts

Stormwater discharge is generated by rainfall that runs off the land and impervious surfaces, such as paved streets, parking lots, and rooftops. Stormwater discharge may include pollutants of concern, which are expected to be generated by the Project that could affect stormwater quality. During Project operation, pollutants of concern within runoff may include, but are not limited to, pollutants, such as sediment, nutrients, pesticides, metals, pathogens, and oil and grease. This runoff can flow directly into storm drains and continue untreated. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats.

The Project Site was developed prior to the enforcement of storm water quality BMP design, implementation, and maintenance. The Project Site currently does not implement structural BMPs for treatment of stormwater runoff. However, as discussed under Subsection IV.G.2.b) *Existing Conditions* above, there is a range of non-structural BMPs that are currently utilized at the Project Site to minimize the impact of pollutant sources, which would continue under the Project. Source control measures under the City's LID, including good housekeeping, removal of trash and maintenance of driveways and parking areas, proper use and storage of pesticides, and substituting environmentally-friendly products for environmentally-hazardous products, such as soaps, solvents, and pesticides would continue on the Project Site to reduce surface water quality impacts and prevent pollutants from entering the local groundwater supply by percolation into landscaped areas with permeable surfaces. In addition, similar to existing conditions, Project landscaping would naturally treat stormwater runoff from impervious surfaces. Any on-site use of hazardous materials to be used in association with continued operation of the Project, such as small quantities of potentially hazardous materials in the form of cleaning solvents, painting supplies, pesticides for landscaping, and pool maintenance, as well as fuel storage associated with an on-site generator, would be continue to be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations such that no hazardous materials be exposed to or otherwise would adversely impact groundwater quality.

Under Section 3.1. of the City's LID Manual, post-construction stormwater runoff from a new development must be infiltrated, evapotranspired, captured and used, and/or treated through high efficiency BMPs on-site for at least the volume of water produced by the greater of the 85th percentile storm or the 0.75-inch storm event. As stated in the Geotechnical Report and the Hydrology and Water Quality Report, infiltration is infeasible due to the slope and the shallow occurrences of bedrock within the Project Site. Therefore, the Project would implement capture and reuse for managing stormwater runoff in accordance with current LID requirements. However, if the capture and reuse system is subsequently determined not feasible due to other site constraints, then different LID BMPs would be implemented upon LASAN's approval. The temporary storage of stormwater runoff would also reduce the runoff volume from the Project Site and would reduce the peak runoff velocity for small storms that flows into the stormwater conveyance systems. As a result, because there are no existing structural BMPs in place at the Project Site, upon Project buildout, less pollutants would be transported through the conveyance systems into local watersheds and the ocean.

The proposed water quality capture and reuse system would be constructed pursuant to the standards established by LASAN's Watershed Protection Division to ensure the treatment of contaminants without allowing seepage into the underlying soil, as required. The final drainage and treatment system design would be finalized as part of the grading and building permit process. Proper functioning of the system would require regular inspection and maintenance, performed pursuant to the recommended procedures established by LASAN, to ensure that it is not clogged or otherwise defective and is performing as expected.

With implementation of the capture and reuse system, along with compliance to applicable LID requirements, the Project would reduce or eliminate the discharge of potential pollutants from stormwater runoff. Operation of the Project would result in a net reduction of pollutants compared to existing conditions as the Project Site currently has no structural BMPs for treatment of stormwater runoff. Operation of the Project would not result in discharges that would cause: (1) pollution which would alter the quality of the waters of the State (i.e., Los Angeles River) to a degree that unreasonably affects beneficial uses of the waters; (2) contamination of the quality of the Waters of the State by waste to a degree that creates a hazard to the public health through poisoning or through the spread of diseases; or (3) nuisance that would be injurious to health; affect an entire community or neighborhood, or any considerable number of persons; or occurs during or as a result of the treatment or disposal of wastes. The Project would be required to comply with the LARWQCB's water quality standards as implemented through the City's LID regulations.

Based on the above, operation of the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, impacts with respect to surface water quality and groundwater quality resulting from the Project operation would be less than significant.

(2) Mitigation Measures

Impacts regarding water quality were determined to be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts regarding water quality were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold b) Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

As discussed in Section VI, *Other CEQA Considerations*, and in the Initial Study (**Appendix A**) of this Draft EIR, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. As described above, while dewatering has the potential to occur, should it occur, it would be temporary and only during Project construction activities. Further, as described above, the existing soils have low infiltration potential and, thus, the Project Site has not been identified as a groundwater recharge site. Accordingly, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. **Therefore, the Project would result in a less-than-significant impact with respect to Threshold (b), and no further analysis is required.**

Threshold c) Would the Project substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- i. Result in substantial erosion or siltation on- or off-site?***
- ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?***
- iii. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***
- iv. Impede or redirect flood flows?***

(1) Impact Analysis

(a) Construction Impacts

(i) Erosion or Siltation On- or Off-Site

The Project would include excavation activities to a maximum depth of approximately 50 feet bgs. The Project would also result in a net export of an estimated 87,000 cubic yards of existing soil material, which would be temporarily exposed to potential erosion.

These activities could temporarily alter existing drainage patterns and flows on the Project Site by exposing the underlying soils, modifying flow direction, and making the Project Site temporarily more permeable. Exposed and stockpiled soils could be subject to erosion and conveyance into nearby storm drains during storm events. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff.

Since the construction site would be greater than one acre, the Project would be required to obtain coverage under the NPDES Construction General Permit. In accordance with the requirements of this permit, the Project would implement a SWPPP that specifies BMPs and erosion control measures to be used during construction to manage runoff flows and prevent pollution. BMPs would be designed to reduce runoff and pollutant levels in runoff during construction. The NPDES and SWPPP measures are designed to contain and treat, as necessary, stormwater or construction watering on the Project Site so runoff does not impact off-site drainage facilities or receiving waters. Further, if the Project requires grading activities during the rainy season (October 1 through April 14), a WVECP would be prepared that would include BMPs to address potential erosion effects. Construction activities would be temporary, and flow directions and runoff volumes during construction would be controlled.

In addition, the Project would be required to comply with all applicable City grading permit regulations that require necessary measures, plans, and inspections to reduce sedimentation and erosion. Thus, through compliance with all NPDES Construction General Permit requirements, including preparation of a SWPPP, implementation of BMPs, and compliance with applicable City grading regulations, the Project would not substantially alter the Project Site drainage patterns in a manner that would result in substantial erosion or siltation on- or off-site. **Therefore, construction of the Project would not result in alteration of drainage patterns resulting in substantial erosion or siltation and impacts would be less than significant.**

(ii) Increase Rate or Amount of Surface Runoff

Erosion control measures required under the Project's mandated SWPPP and BMPs would control surface runoff and prevent uncontrolled storm water runoff from the Project Site during Project construction. In addition, water used for dust control would not be applied in quantities that would form surface runoff. No other Project construction

activities would require an increase in the use of water that would result in increased surface runoff. **Therefore, the Project would not result in the alteration of drainage patterns increasing the rate and amount of surface runoff resulting in flooding and impacts would be less than significant.**

(iii) Exceed Capacity of Existing or Planned Stormwater Drainage Systems

During construction-related ground disturbing activities, the pervious area on the Project Site would temporarily increase due to demolition of existing impervious surfaces (i.e., structures, hardscape), which would temporarily reduce off-site runoff from the Project Site, but not eliminate it entirely. As the construction site would be greater than one acre, the Project would be required to obtain coverage under the NPDES Construction General stormwater permit. In accordance with the requirements of this permit, the Project would implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flows and would prohibit pollutants from being discharged from the construction site into the City's storm drain system. In addition, the Project would be required to comply with all applicable City grading permit regulations that require necessary measures, plans, and inspections to control runoff from the construction site and avoid on- and off-site flooding during the construction period. Lastly, construction activities and any associated hydrology (drainage) impacts would be temporary.

If required, dewatering would require the discharge of removed groundwater to the City's storm drain system. Discharges from dewatering operations can contain high levels of fine sediments, which if not properly treated, could lead to exceedance of the NPDES requirements. Thus, a NPDES Permit for Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2018-0125, General NPDES Permit No. CAG994004) would be required. In accordance with the requirements of this permit, the Project would need to demonstrate that the discharges would not cause or contribute to a violation of any applicable water quality objective/criteria for the receiving waters from any receiving storm drains, perform reasonable potential analysis using a representative sample of groundwater or wastewater to be discharged, and provide a feasibility study on conservation, reuse, and/or alternative disposal methods of the wastewater.⁴⁴ Further, the Permit would confirm that the capacity of any receiving storms would not be exceeded due to dewatering activities.

The Project would comply with all applicable requirements (compliance with NPDES permits, implementation of a SWPPP, adherence to City grading requirements, etc.) during construction which would limit polluted stormwater discharges into the City's

⁴⁴ LARWQCB, Order No. R4-2018-0125, General NPDES Permit No. CAG994004, Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, September 13, 2018.

storm drain system from the construction site during Project construction. **Therefore, Project construction would not create or contribute runoff water which would exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff, and impacts would be less than significant.**

(iv) *Impede or Redirect Flood Flows*

The Project Site is located within Zone X and is, therefore, located outside of the 100- and 500-year floodplain.⁴⁵ As such, flood flows across the Project Site are not anticipated. In addition, the Project Site is currently developed with structures, which do not allow the free flow of water from off-site sources across the Project Site. Further, construction BMPs would prevent any water from off-site sources from freely flowing into or across the Project Site. **As such, construction of the Project's would not change the direction of flow of, or impede, any floodwater from off-site sources. Therefore, Project construction impacts with respect to impediment or redirection of flood flows would be less than significant.**

(b) *Operational Impacts*

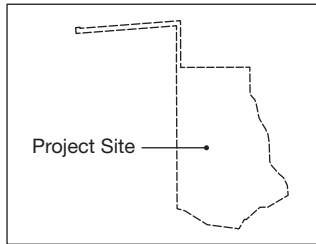
(i) *Erosion or Siltation On- or Off-Site*

As shown in Figure IV.G-1, above, the Project Site is divided into five drainage areas that include impervious surfaces, including an asphalt service road, surface parking areas, planter areas, structures, and the Existing Outdoor Pool Area with surrounding patio and landscaping.

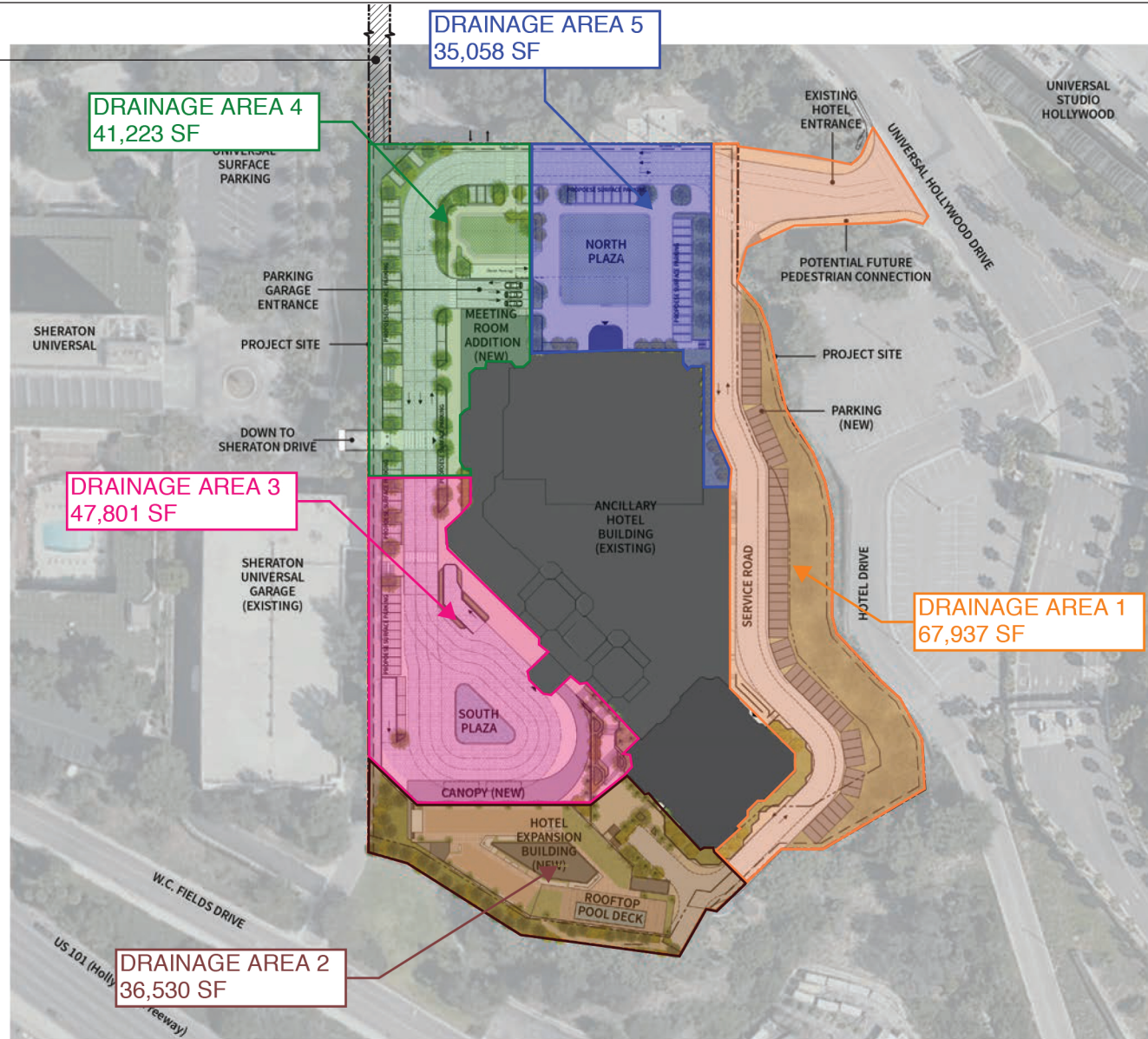
As described above in Subsection IV.G.2.b, *Existing Conditions*, runoff is collected in a series of private catch basins and storm drain and is then conveyed to the 84-inch RCP in Lankershim Boulevard and eventually drains to the City's storm drain system.

Figure IV.G-2, *Proposed Site Drainage*, shows the proposed drainage conditions that would occur with implementation of the Project.

⁴⁵ Based on FIRM Number 0600137, effective on September 26, 2008.



NOTE: No improvements would occur on the L-shaped portion of the Project Site that extends from the northwest corner of the property approximately 200 feet to the north, turns towards the west and extends approximately 325 feet.



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SOURCE: KPFF, 2022

Hilton Universal City Project

Figure IV.G-2
Proposed Site Drainage

While the Project would add new structures on the Project Site, the drainage areas⁴⁶ would largely remain the same. Each drainage area would include a dedicated stormwater system that would comply with LID requirements and would include the installation of catch basins, planter drains, and building roof drain downspouts to collect runoff and direct stormwater away from structures through a series of underground storm drain pipes that would serve to prevent on-site flooding and nuisance water on the Project Site. In addition, the Project would implement a combination of pre-treatment and capture and reuse systems to collect and store the first flush of stormwater runoff in tanks, and reuse the water for various purposes on-site, which would be implemented upon LASAN's approval and provide a slight reduction in stormwater runoff. These proposed BMPs for bioretention such as catch basins and planter drains are consistent with the LID BMPs identified under Section 3.2 of the City's LID Manual.⁴⁷ Implementation of these measures would serve to minimize the potential for both on- and off-site erosion or siltation.

As discussed below, with the overall increase in impervious surface area on the Project Site, the volume of stormwater runoff would be increased by 0.054% compared to existing conditions with implementation of the Project. However, the proposed LID BMPs would improve the quality of stormwater runoff leaving the Project Site. **As such, Project operation would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation, and the impact would be less than significant.**

(i) Increase Rate or Amount of Surface Runoff

As discussed above, as part of the LID requirements of the Project, to manage post-construction stormwater runoff, the Project would include the installation of catch basins, planter drains, and building roof drain downspouts to collect runoff and direct stormwater away from structures through a series of underground storm drain pipes. This on-site stormwater conveyance system, together with the LID BMPs that would capture and treat the first flush of rainfall, would serve to prevent an increase in the rate or amount of surface runoff which would result in on-site and off-site flooding on the Project Site.

The Project would include development of new buildings, paved areas, and landscaped areas. With implementation of the Project, the amount of impervious area would increase. The proposed flow rate during a 50-year flood event (Q50) for the 5.25-acre overall drainage area that would be impacted by the Project (same overall area as evaluated for

⁴⁶ The drainage areas are determined by the drainage patterns and flow paths of stormwater that are tributary to a common point or area.

⁴⁷ City of Los Angeles. 2016. Planning and Land Development Handbook for Low Impact Development (LID). TABLE OF CONTENTS (lacitysan.org) Accessed September 23, 2022.

existing conditions), is shown in **Table IV.G-2, *Proposed Drainage Conditions***.⁴⁸ As shown therein, the proposed Q50 (18.15 cfs) for the 5.25-acre drainage area is 0.054-percent higher than the existing Q50 (18.14 cfs) presented in Table IV.G-1 above.

**TABLE IV.G-2
PROPOSED DRAINAGE CONDITIONS¹**

Drainage Area	Area (acres)	Pre-development Q50 (cfs) (volumetric flow rate measured in cubic feet per second)	Post-development Q50 (cfs) (volumetric flow rate measured in cubic feet per second)	Incremental Increase from Existing to Proposed Condition
Total	5.25	18.14	18.15	0.054%

¹ The calculations do not include runoff from Existing Hotel Building and Existing Ancillary Hotel Building as no changes would occur to these uses and no resulting change in drainage would occur in these areas.

² Due to the rounding of numbers, the total may be slightly different than shown in Hydrology and Water Quality Report.

SOURCE: KPFF Consulting Engineers, Hilton Universal City Hydrology and Water Quality Report, June 2023, p. 28.

As discussed above, the Q50 from the Project Site upon buildout would increase under the Project by less than one percent. In addition, as part of LID compliance for the Project to manage post-construction stormwater runoff, the Project would include the installation of catch basins, planter drains, and building roof drain downspouts throughout the Project Site to collect roof and site runoff and direct stormwater away from structures through a series of underground storm drain pipes. This on-site stormwater conveyance system would serve to prevent onsite flooding and nuisance water on the Project Site. In addition, with implementation of the proposed BMPs, the Project would implement a combination of pre-treatment and capture and use systems to collect and store the first flush of stormwater runoff in tanks, and re-use the water for various purposes onsite implemented upon LA Sanitation's approval. As shown in Figure IV.G-2, the proposed drainage pattern associated with the Project would not substantially change the direction of any surface flow from off-site sources or cause a new significant impediment to any runoff from off-site sources. Given these factors, the volume of stormwater runoff from the Project Site would decrease under the Project.

Therefore, Project operation would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner

⁴⁸ As noted in Subsection IV.G.2.b) Existing Conditions above, the Existing Hotel Building and Existing Ancillary Building are excluded from the drainage area calculations as no construction activities or operational changes would occur in these areas resulting in alterations to the surface areas or drainage patterns. The analysis herein reflects only the changes that would occur as a result of the Project.

that would result in flooding on- or off-site, and impacts would be less than significant.

(ii) Exceed capacity of existing or planned stormwater drainage systems/Polluted runoff

As discussed above under Threshold (c)(ii) and shown in Figure IV.G-2, Project Site runoff patterns would be slightly altered as the result of Project implementation (including BMPs), as the required first flush runoff would be captured and reused on-site, and the Q50 from the Project Site upon buildout would slightly increase under the Project.

Runoff in excess of the volume captured and re-used by the LID BMP system would be discharged off-site and would continue to be directed into the municipal storm drain system, as discussed under Threshold (a). Required on-site drainage infrastructure would be designed in accordance with the California Building Code requiring grading and drainage away from buildings, and the City's Mechanical Plan Check requirements for on-site utilities, and would safely convey stormwater from the Project Site to the municipal storm drain system upon approval by the City's Department of Public Works. In addition, with implementation of the proposed LID BMPs, the increase in volume of water leaving the Project Site would be minimized and the Project would result in a minor increase in runoff (0.054%) compared to existing conditions.

The on-site stormwater conveyance system, together with LID BMPs that would capture and treat the first flush of rainfall, would serve to ensure runoff discharged from the Project Site would not exceed the capacity of the municipal stormwater infrastructure during a larger storm event. Therefore, no new off-site storm drainage infrastructure is required or proposed. As the first flush typically holds most of the pollutants and would be retained and infiltrated on-site, no substantial additional sources of polluted runoff would contribute to the runoff water.

Based on the above, Project operation would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

(iii) Impede or Redirect Flood Flows

The Project Site is located within Zone X, and is, therefore, located outside of the 100- and 500-year floodplain.⁴⁹ The Project would not substantially change the direction of surface flow from off-site sources or cause a new impediment to flood flow from off-site sources compared to existing conditions. As such, the Project is not anticipated to change the direction of flow or impede any floodwater from off-site sources. Impacts with respect

⁴⁹ Based on FIRM Number 0600137, effective on September 26, 2008.

to impediment or redirection of flood flow would be less than significant. **Therefore, Project operation would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows, and impacts would be less than significant.**

(2) Mitigation Measures

Impacts related to erosion and siltation were determined to be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to erosion and siltation were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold d) Would the Project risk release of pollutants due to project inundation by flooding, tsunami, or seiche?

As discussed in Section VI, *Other CEQA Considerations*, and in the Initial Study (Appendix A) of this Draft EIR, the Project would not be subject to significant hazards associated with inundation by flooding, tsunami, or seiche, and, as such, there would be minimal, if any, risk of release of pollutants due to Project inundation. **Therefore, a less-than-significant impact would occur with respect to Threshold (d), and no further analysis is required.**

Threshold e) Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

(1) Impact Analysis

The Project Site is in the San Fernando Valley Subbasin of the Los Angeles Coastal Plain Groundwater Basin, which is classified as a very low priority and therefore is not required to develop a specific subbasin groundwater sustainability plan.⁵⁰ Thus, the Project would not obstruct or conflict with a sustainable groundwater management plan.

As discussed in Subsection IV.G.2.a, *Regulatory Framework*, and elaborated upon in the subsequent impact analyses, the Project falls within the jurisdiction of water quality plans with related regulations and permitting requirements that assure that development projects are in compliance with clean water policies. Most notably, the Project falls under the jurisdiction of the LARWQCB (Region 4) Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties and the Upper Los Angeles River Watershed EWMP,

⁵⁰ California Department of Water Resources. 2022. Basin Prioritization. Basin Prioritization (ca.gov) Accessed September 23, 2022.

and the RWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality. In California, the NPDES stormwater permitting program is administered by the SWRCB, and the County of Los Angeles and the City are two of the Co-Permittees under the Los Angeles County NPDES MS4 Permit and, as such, are required to implement development planning guidance and control measures regarding water quality impacts from new development.

The Los Angeles County MS4 Permit contains provisions for implementation and enforcement of the SQMP and includes a LID Plan that designates BMPs that must be used by projects to address water infiltration, filtering, treatment and peak-flow discharge. The City supports the requirements of the Los Angeles County MS4 Permit through the City's LID Handbook, which provides guidance to developers of newly developed projects for compliance with regulatory standards. The Project is also within the jurisdiction of the Water Quality Compliance Master Plan for Urban Runoff, which was developed by the City's Department of Public Works and includes within its provisions the description of BMPs required by the City for stormwater quality management.

The Project would incorporate into its design an on-site drainage system that would meet regulatory requirements of the applicable plans for the protection of water resources. The Project would install a capture and reuse system, in compliance with the City's LID requirements. The detention would temporarily store the captured stormwater and reuse the water for various purposes on-site, which would be implemented upon LASAN's approval. The on-site drainage system would also provide BMPs in accordance with the City's LID requirements.

The Project's potential impacts regarding water quality are evaluated under Threshold (a) above. As indicated in that analysis, with the implementation of the Project's on-site drainage system, the Project would have less-than-significant impacts on both surface and groundwater quality during construction and operation phases. As described under Threshold (b), above, the Project's potential impacts regarding groundwater supplies and groundwater recharge are evaluated in the Initial Study (Appendix A) of this Draft EIR and, as described therein, the Project would have a less-than-significant impact. As further indicated in those analyses, with Project implementation, the stormwater runoff quality would be improved as compared to existing conditions.

Therefore, in conjunction with the implementation of necessary BMPs to support the applicable plans, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

(2) Mitigation Measures

Impacts regarding conflicts with or obstructing the implementation of a water quality control plan or sustainable groundwater management plan were determined to be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts regarding conflicts with or obstructing the implementation of a water quality control plan or sustainable groundwater management plan were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

e) Cumulative Impacts

(1) Impact Analysis

As noted in the Hydrology and Water Quality Report (Appendix G of this Draft EIR), stormwater runoff enters off-site catch basins and underground storm drainage pipes which convey stormwater through underground pipe networks into the Los Angeles River, which ultimately discharges into the Pacific Ocean at the Port of Long Beach. Therefore, any proposed project within the Los Angeles River Watershed could cumulatively increase stormwater runoff flows and cumulatively increase the amount of pollutants entering the City storm drain system. Furthermore, as identified in Chapter III, *Environmental Setting*, of this Draft EIR, there are fifteen (15) related projects within a 1.15-mile radius of the Project Site, including fourteen in the City of Los Angeles and one in the County of Los Angeles. Related Project 1, the NBC Universal Evolution Plan, is the most proximate of the related projects to the Project Site. While the NBC Universal Evolution Plan is the only related project in close enough proximity to have construction site runoff or pollutants that might reach the Project Site, all of the identified related projects have the potential to cumulatively impact the capacity of the storm drain system and the overall water quality within the Los Angeles River Watershed.

As with the Project, the related projects are located within the highly urbanized area of Los Angeles County, Universal City, and the surrounding vicinity, which include mostly hard-surface project sites. Accordingly, the potential for the related projects to generate a substantial amount of new impermeable surfaces, and subsequently contribute to a substantial change in drainage patterns within the Los Angeles River Watershed is limited. The related projects would also be subject to the same regulatory requirements as the Project, including, where applicable, the NPDES/Waste Discharge Requirements permits discussed above including a site-specific SWPPP with construction BMPs and the City's LID Ordinance, which would require the related projects to capture and manage their stormwater in accordance with City's LID Guidelines. With construction BMPs and erosion control measures outlined in site-specific SWPPPs, construction of the Project and related projects would not substantially alter the drainage patterns resulting in erosion, siltation or flooding. The City of Los Angeles Department of Public Works or the

County of Los Angeles Public Works Department would also review each future development project on a case-by-case basis to ensure that sufficient local and regional drainage capacity is available to accommodate the project's stormwater runoff. Accordingly, the related projects are not anticipated to result in cumulatively considerable impacts with respect to hydrology and drainage quantities/patterns. Moreover, as shown above, while the Project would result in an increase in impervious surface area and an increase in stormwater water flow, this increase in stormwater flow would be less than 1% and the Project would not significantly alter or increase stormwater flows from the Project Site or alter drainage patterns in the area. **As such, the Project's contribution to cumulative impacts would not be cumulatively considerable, and cumulative impacts on hydrology and drainage patterns would be less than significant.**

All related projects that anticipate new construction have the potential to contribute to pollutant loading during construction and operation, which could potentially result in cumulative impacts to water quality. However, as with the Project, all new construction would be subject to NPDES Waste Discharge Requirements permits for both construction and, where applicable, dewatering activities. Each related project greater than one acre in size would be required to develop a SWPPP for construction and grading activities. In addition, all new construction plans would be evaluated individually to determine the appropriate BMPs and treatment measures to minimize the related projects impacts to water quality. Operation of the related projects would also be subject to applicable LID requirements, including implementation of operational BMPs to address the quality of water runoff from surfaces, such as driveways, parking lots, and parking structures. Pursuant to the City's LID Ordinance, related projects would be required to implement LID BMPs through one or more of the City's preferred improvements, including on-site infiltration, capture and reuse, or biofiltration/biotreatment BMPs, to the maximum extent feasible. As described above, the Project would implement LID BMPs in addition to source control and treatment control BMPs, consistent with applicable regulatory requirements, that would ensure less-than-significant Project impacts on surface water and groundwater quality. With compliance to existing applicable regulations, such as the City's LID Ordinance requirements, the related projects would also be unlikely to cause or increase surface or groundwater contamination. In cases where the related projects would require dewatering during excavation, groundwater dewatering, treatment and disposal would be conducted in accordance with the LARWQCB's Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties. Compliance with these regulations would ensure less-than-significant effects on surface water, as well as groundwater quality. **Therefore, with adherence to applicable regulations, the Project's contribution to cumulative impacts would not be cumulatively considerable, and cumulative impacts on water quality would be less than significant.**

Furthermore, as demonstrated above, through compliance with applicable regulatory requirements via site -specific construction BMPs, site-specific drainage systems, and

storm water management, the Project and related projects would not substantially conflict with or obstruct implementation of a water quality control plan. Also, as discussed above, given the urbanized nature of Universal City and surrounding area, the potential for the related projects to generate a substantial amount of new impermeable surfaces and thereby affecting the groundwater table is limited. None of the related projects are known to include significant quantities of permanent, ongoing groundwater withdrawal, but some could include infiltration as a means of LID compliance, where feasible and possible. **Accordingly, with these considerations, the Project's contribution to cumulative impacts would not be cumulatively considerable, and cumulative impacts on conflicts with or obstructing implementation of a water quality control plan or sustainable groundwater management plan would be less than significant.**

With regards to pollutant releases during flooding, the Project Site and the areas immediately surrounding the Project Site are not located within a 100-year floodplain and would not increase runoff or change drainage patterns that would result in off-site flooding. **As such, the Project's contribution to cumulative impacts would not be cumulatively considerable, and cumulative impacts with respect flooding would be less than significant**

Overall, based on the above, the Project's contribution to cumulative impacts would not be cumulatively considerable, and cumulative impacts on hydrology and water quality would be less than significant.

(2) Mitigation Measures

Cumulative impacts regarding hydrology and water quality were determined to be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts regarding hydrology and water quality were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.