

Agenda Report



Date: June 11, 2013
To: Jeffrey W. Collier, City Manager
From: David A. Pelsler, Director of Public Works
Aldo E. Schindler, Director of Community Development
Subject: MS4 Permit Compliance – Various Actions

RECOMMENDATION

It is recommended the City Council:

1. Receive and file this report;
2. Approve and authorize submittal of a Letter of Intent to the California Regional Water Quality Control Board – Los Angeles Region (LARWQCB);
3. Approve a Draft Whittier Green Streets Policy Manual and direct staff to circulate the Draft among stakeholders and the public for comment and return with a recommended Final Draft for adoption at a City Council meeting in October 2013; and
4. Approve a Draft Low Impact Development Ordinance and direct staff to circulate the Draft among stakeholders and the public for comment and return with a Final Draft for introduction at a City Council meeting in November 2013.

BACKGROUND

The Municipal Separate Storm Sewer System (MS4) Permit (LARWQCB Order No. R-2012-0175) was adopted by LARWQCB on November 8, 2012. This updated MS4 permit is a several hundred page document that contains many new requirements related to the management of surface water quality in Los Angeles County. The City of Whittier is one of the municipalities named as a permittee in the MS4 Permit. The City of Whittier is cooperating with other nearby cities in the San Gabriel River and Coyote Creek watersheds in order to comply with the requirements of the MS4 Permit. The City is a member of both the Gateway Regional Water Management Authority Joint Powers Agency (Agreement No. A07-321) and the Watershed Entities of Reach 1 of the Lower San Gabriel River Watershed and the Coyote Creek Watershed Metals TMDL (Agreement No. WUA 13-009). A new agreement for a Watershed Management Program replacing the Reach 1 Metals TMDL agreement is being prepared by the Gateway Regional Water Management Authority and will be presented to the Council at an upcoming meeting.

In cooperation with nearby cities, City staff recommends Whittier pursue a compliance path under the MS4 Permit that involves the preparation of a Watershed Management Program (WMP) which must be submitted to the LARWQCB by June 28, 2014. The MS4 Permit requires the City submit to the LARWQCB a Notice of Intent (NOI) describing: the City's intent to prepare a WMP, a list of priority pollutants (TMDLs) found in waters downstream of the City, discharge limitations, and a list of participating agencies. In addition, the MS4 Permit requires the adoption of a Green Streets Policy

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and a Low Impact Development (LID) Ordinance. This report presents for Council consideration a proposed NOI, Draft Whittier Green Streets Policy Manual, and Draft LID Ordinance.

DISCUSSION

Notice of Intent (NOI)

The MS4 Permit requires the City notify the LARWQCB by June 28, 2013 of its intent to comply with the permit by pursuing one of several possible compliance paths. In cooperation with the Gateway Water Management Authority (GWMA) and the cities that comprise the Watershed Entities of the Lower San Gabriel River watershed, City staff recommends Whittier follow a compliance path that involves preparation of a Watershed Management Plan. The Draft Letter of Intent (Attachment A) will meet this requirement. In addition, the Watershed Entities are planning to submit jointly a NOI that contains more specific details about the proposed compliance path under the MS4 Permit.

Staff recommends the City Council approve and authorize the submittal of the Letter of Intent.

Green Streets Policy

Permittees electing to prepare a Watershed Management Program or an Enhanced Watershed Management Program under the MS4 Permit are required to demonstrate that there are green streets policies in place and/or commence development of policies that specify the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have a draft policy within 6 months of the effective date of the Order. Whittier cooperated with the development of a model Green Streets Policy through the GWMA and its consultant. The Draft Whittier Green Streets Policy (Attachment B) is based on the model document of the GWMA.

Staff recommends the Draft Whittier Green Streets Policy be circulated for comment and reviewed by the City Attorney prior to its adoption. Staff intends to return to the City Council with a revised Draft by October 2013.

Low Impact Development Ordinance

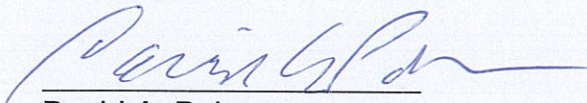
Permittees electing to prepare a Watershed Management Program or an Enhanced Watershed Management Program under the MS4 Permit are required to establish a LID Ordinance to lessen the impacts of development by using smart growth practices and to integrate LID practices and standards for stormwater pollution mitigation for new development and redevelopment projects. The LID Ordinance must be developed by June 28, 2013. Whittier cooperated with the development of model LID Ordinance through the GWMA and its consultant. The Draft LID Ordinance (Attachment C) is based on the model document of the GWMA.

Staff recommends the Draft LID Ordinance be circulated for comment and reviewed by the City Attorney prior to its introduction and adoption. Staff intends to return to the City Council with a revised Draft ordinance for introduction by October 2013.

FISCAL IMPACT

There is no direct fiscal impact of the recommended actions. However, adoption of a Green Streets Policy and a Low Impact Development ordinance in compliance with the MS4 Permit will likely increase costs of some future city street projects and some future private development projects. The costs of compliance with the MS4 Permit may be an unfunded State mandate.

Submitted by:



David A. Pelsler
Director of Public Works



Aldo E. Schindler
Director of Community Development

- Attachment A: Draft Notice of Intent
- Attachment B: Draft Green Streets Policy Manual
- Attachment C: Draft Low Impact Development Ordinance

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF [CITY NAME], CALIFORNIA, AMENDING [CITY NAME] MUNICIPAL CODE CHAPTER [MUNICIPAL CODE CHAPTER REFERENCE(S)], TO EXPAND THE APPLICABILITY OF THE EXISTING [NAME OF POST-CONSTRUCTION REQUIREMENTS] BY IMPOSING RAINWATER LOW IMPACT DEVELOPMENT (LID) STRATEGIES ON PROJECTS THAT REQUIRE BUILDING, GRADING AND ENCROACHMENT PERMITS

WHEREAS, the City is authorized by Article XI, Section 5 and Section 7 of the State Constitution to exercise the police power of the State by adopting regulations to promote public health, public safety and general prosperity; and

WHEREAS, the City is a permittee under the California Regional Water Quality Control Board, Los Angeles Region Order No. R4-2012-0175, issued on November 08, 2012 which establishes Waste Discharge Requirements for Municipal Separate Storm Sewer Systems (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except those Discharges Originating from the City of Long Beach MS4; and

WHEREAS, Order No. R4-2012-0175 contains requirements for municipalities to establish an LID Ordinance in order to participate in a Watershed Management Program and/or Enhanced Watershed Management Program; and

WHEREAS, the Regional Board has adopted Total Maximum Daily Loads (TMDLs) for pollutants which are numerical limits that must be achieved effectively through LID implementation; and

WHEREAS, the City has the authority under the California Water Code to adopt and enforce ordinances imposing conditions, restrictions and limitations with respect to any activity that might degrade waters of the State; and

WHEREAS, the City is committed to a stormwater management program that protects water quality and water supply by employing watershed-based approaches that balance environmental and economic considerations; and

WHEREAS, urbanization has led to increased impervious surface areas resulting in increased water runoff and less percolation to groundwater aquifers causing the transport of pollutants to downstream receiving waters; and

WHEREAS, is it the intent of the City to expand the applicability of the existing LID requirements by providing stormwater and rainwater LID strategies for all projects for Development and Redevelopment projects as defined under "Applicability."

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF [CITY NAME], CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

[MUNICIPAL CODE SECTION REFERENCE(S)] of the [CITY NAME] Municipal Code is shall be amended to add the following definitions in alphabetical order, and to renumber all existing definitions accordingly in alphabetical order. If the definition of any term contained in this chapter conflicts with the definition of the same term in Order No. R4-2012-0175, then the definition contained in Order No. R4-2012-0175 shall govern:

“Automotive Service Facility” means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes. For inspection purposes, Permittees need not inspect facilities with SIC codes 5013, 5014, 5511, 5541, 7532-7534, and 7536-7539 provided that these facilities have no outside activities or materials that may be exposed to stormwater (Order No. R4-2012-0175).

“Basin Plan” means the Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the Regional Water Board on June 13, 1994 and subsequent amendments (Order No. R4-2012-0175).

“Best Management Practice (BMP)” means practices or physical devices or systems designed to prevent or reduce pollutant loading from stormwater or non-stormwater discharges to receiving waters, or designed to reduce the volume of stormwater or non-stormwater discharged to the receiving water (Order No. R4-2012-0175).

“Biofiltration” means a LID BMP that reduces stormwater pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration and/or evapotranspiration, and filtration. Incidental infiltration is an important factor in achieving the required pollutant load reduction. Therefore, the term “biofiltration” as used in this Ordinance is defined to include only systems designed to facilitate incidental infiltration or achieve the equivalent pollutant reduction as biofiltration BMPs with an underdrain (subject to approval by the Regional Board’s Executive Officer). Biofiltration BMPs include bioretention systems with an underdrain and bioswales (Order No. R4-2012-0175).

“Bioretention” means a LID BMP that reduces stormwater runoff by intercepting rainfall on vegetative canopy, and through evapotranspiration and infiltration. The bioretention system typically includes a minimum 2-foot top layer of a specified soil and compost mixture underlain by a gravel-filled temporary storage pit dug into the in-situ soil. As defined in this Ordinance, a bioretention BMP may be designed with an overflow drain, but may not include an underdrain. When a bioretention BMP is designed or constructed with an underdrain it is regulated by Order No. R4-2012-0175 as biofiltration (Order No. R4-2012-0175).

“Bioswale” means a LID BMP consisting of a shallow channel lined with grass or other dense, low-growing vegetation. Bioswales are designed to collect stormwater runoff and to achieve a uniform sheet flow through the dense vegetation for a period of several minutes (Order No. R4-2012-0175).

“City” means the City of [City Name].

“Clean Water Act (CWA)” means the Federal Water Pollution Control Act enacted in 1972, by Public Law 92-500, and amended by the Water Quality Act of 1987. The Clean Water Act prohibits the discharge of pollutants to Waters of the United States unless the discharge is in accordance with an NPDES permit.

“Commercial Development” means any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities; mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes (Order No. R4-2012-0175).

“Commercial Malls” means any development on private land comprised of one or more buildings forming a complex of stores which sells various merchandise, with interconnecting walkways enabling visitors to easily walk from store to store, along with parking area(s). A commercial mall includes, but is not limited to: mini-malls, strip malls, other retail complexes, and enclosed shopping malls or shopping centers (Order No. R4-2012-0175).

“Construction Activity” means any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that result in land disturbance. Construction does not include emergency construction activities required to immediately protect public health and safety or routine maintenance activities required to maintain the integrity of structures by performing minor repair and restoration work, maintain the original line and grade, hydraulic capacity, or original purposes of the facility. See “Routine Maintenance” definition for further explanation. Where clearing, grading or excavating of underlying soil takes place during a repaving operation, State General Construction Permit coverage by the State of California General Permit for Storm Water Discharges Associated with Industrial Activities or for Stormwater Discharges Associated with Construction Activities is required if more than one acre is disturbed or the activities are part of a larger plan (Order No. R4-2012-0175).

“Control” means to minimize, reduce or eliminate by technological, legal, contractual, or other means, the discharge of pollutants from an activity or activities (Order No. R4-2012-0175).

“Development” means construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail, and other non-residential projects, including public agency projects; or mass grading for future construction. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety (Order No. R4-2012-0175).

“Directly Adjacent” means situated within 200 feet of the contiguous zone required for the continued maintenance, function, and structural stability of the environmentally sensitive area (Order No. R4-2012-0175).

“Discharge” means any release, spill, leak, pump, flow, escape, dumping, or disposal of any liquid, semi-solid, or solid substance.

“Disturbed Area” means an area that is altered as a result of clearing, grading, and/or excavation (Order No. R4-2012-0175).

“Flow-through treatment BMPs” means a modular, vault type “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain (Order No. R4-2012-0175).

“Full Capture System” means any single device or series of devices, certified by the Executive Officer, that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate Q resulting from a one-year, one-hour storm in the sub-drainage area (Order No. R4-2012-0175).

“General Construction Activities Storm Water Permit (GCASP)” means the general NPDES permit adopted by the State Board which authorizes the discharge of stormwater from construction activities under certain conditions (Order No. R4-2012-0175).

“General Industrial Activities Storm Water Permit (GIASP)” means the general NPDES permit adopted by the State Board which authorizes the discharge of stormwater from certain industrial activities under certain conditions (Order No. R4-2012-0175).

“Green Roof” means a LID BMP using planter boxes and vegetation to intercept rainfall on the roof surface. Rainfall is intercepted by vegetation leaves and through evapotranspiration. Green roofs may be designed as either a bioretention BMP or as a biofiltration BMP. To receive credit as a bioretention BMP, the green roof system planting medium shall be of sufficient depth to provide capacity within the pore space volume to contain the design storm depth and may not be designed or constructed with an underdrain (Order No. R4-2012-0175).

“Hillside” means a property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 25% or greater and where grading contemplates cut or fill slopes (Order No. R4-2012-0175).

“Industrial/Commercial Facility” means any facility involved and/or used in the production, manufacture, storage, transportation, distribution, exchange or sale of goods and/or commodities, and any facility involved and/or used in providing professional and non-professional services. This category of facilities includes, but is not limited to, any facility defined by either the Standard Industrial Classifications (SIC) or the North American Industry Classification System (NAICS). Facility ownership (federal, state, municipal, private) and profit motive of the facility are not factors in this definition (Order No. R4-2012-0175).

“Industrial Park” means land development that is set aside for industrial development. Industrial parks are usually located close to transport facilities, especially where more than one transport modalities coincide: highways, railroads, airports, and navigable rivers. It includes office parks, which have offices and light industry (Order No. R4-2012-0175).

“Infiltration BMP” means a LID BMP that reduces stormwater runoff by capturing and infiltrating the runoff into in-situ soils or amended onsite soils. Examples of infiltration BMPs include infiltration basins, dry wells, and pervious pavement (Order No. R4-2012-0175).

“Low Impact Development (LID)” consists of building and landscape features designed to retain or filter stormwater runoff (Order No. R4-2012-0175).

“Municipal Separate Storm Sewer System (MS4)” means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying stormwater;

- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR Section 122.2.

(40 CFR Section 122.26(b)(8)) (Order No. R4-2012-0175)

“National Pollutant Discharge Elimination System (NPDES)” means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA Section 307, 402, 318, and 405. The term includes an “approved program” (Order No. R4-2012-0175).

“Natural Drainage System” means a drainage system that has not been improved (e.g., channelized or armored). The clearing or dredging of a natural drainage system does not cause the system to be classified as an improved drainage system (Order No. R4-2012-0175).

“New Development” means land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision (Order No. R4-2012-0175).

“Non-Stormwater Discharge” means any discharge to a municipal storm drain system that is not composed entirely of stormwater (Order No. R4-2012-0175).

“Outfall” means a point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances with connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR Section 122.26(b)(9)) (Order No. R4-2012-0175).

“Parking Lot” means land area or facility for the parking or storage of motor vehicles used for businesses, commerce, industry, or personal use, with a lot size of 5,000 square feet or more of surface area, or with 25 or more parking spaces (Order No. R4-2012-0175).

“Pollutant” means any “pollutant” defined in Section 502(6) of the Federal Clean Water Act or incorporated into the California Water Code Section 13373 (Order No. R4-2012-0175).

“Project” means all development, redevelopment, and land disturbing activities. The term is not limited to "Project" as defined under CEQA (Pub. Resources Code Section 21065) (Order No. R4-2012-0175).

“Rainfall Harvest and Use” means a LID BMP system designed to capture runoff, typically from a roof but can also include runoff capture from elsewhere within the site, and to provide for temporary storage until the harvested water can be used for irrigation or non-potable uses. The harvested water may also be used for potable water uses if the system includes disinfection treatment and is approved for such use by the local building department (Order No. R4-2012-0175).

“Receiving Water” means “water of the United States” into which waste and/or pollutants are or may be discharged (Order No. R4-2012-0175).

“Redevelopment” means land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of routine maintenance activity; and land disturbing activity related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original

purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety (Order No. R4-2012-0175).

“Regional Board” means the California Regional Water Quality Control Board, Los Angeles Region.

“Restaurant” means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812) (Order No. R4-2012-0175).

“Retail Gasoline Outlet” means any facility engaged in selling gasoline and lubricating oils (Order No. R4-2012-0175).

“Routine Maintenance” includes, but is not limited to projects conducted to:

1. Maintain the original line and grade, hydraulic capacity, or original purpose of the facility.
2. Perform as needed restoration work to preserve the original design grade, integrity and hydraulic capacity of flood control facilities.
3. Includes road shoulder work, regrading dirt or gravel roadways and shoulders and performing ditch cleanouts.
4. Update existing lines* and facilities to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity.
5. Repair leaks

Routine maintenance does not include construction of new** lines or facilities resulting from compliance with applicable codes, standards and regulations.

* Update existing lines includes replacing existing lines with new materials or pipes.

** New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines (Order No. R4-2012-0175).

“Significant Ecological Areas (SEAs)” means an area that is determined to possess an example of biotic resources that cumulatively represent biological diversity, for the purposes of protecting biotic diversity, as part of the Los Angeles County General Plan. Areas are designated as SEAs, if they possess one or more of the following criteria:

1. The habitat of rare, endangered, and threatened plant and animal species.
2. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.
3. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County.
4. Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or within Los Angeles County.
5. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent an unusual variation in a population or community.

6. Areas important as game species habitat or as fisheries.
7. Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.
8. Special areas (Order No. R4-2012-0175).

"Site" means land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity (Order No. R4-2012-0175).

"Storm Drain System" means any facility or any parts of the facility, including streets, gutters, conduits, natural or artificial drains, channels and watercourse that are used for the purpose of collecting, storing, transporting or disposing of stormwater and are located within the City.

"Storm Water or Stormwater" means runoff and drainage related to precipitation events (pursuant to 40 CFR Section 122.26(b)(13); 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

"Urban Runoff" means surface water flow produced by storm and non-storm events. Non-storm events include flow from residential, commercial or industrial activities involving the use of potable and non-potable water.

[MUNICIPAL CODE SECTION REFERENCE(S)] LOW IMPACT DEVELOPMENT MEASURES FOR NEW DEVELOPMENT AND/OR REDEVELOPMENT PLANNING AND CONSTRUCTION ACTIVITIES.

- A. **Objective.** The provisions of this Section establish requirements for construction activities and facility operations of Development and Redevelopment projects to comply with the current "Order No. R4-2012-0175," lessen the water quality impacts of development by using smart growth practices, and integrate LID practices and standards for stormwater pollution mitigation through means of infiltration, evapotranspiration, biofiltration, and rainfall harvest and use. LID shall be inclusive of new development and/or redevelopment requirements.
- B. **Scope.** This Section contains requirements for stormwater pollution control measures in Development and Redevelopment projects and authorizes the City to further define and adopt stormwater pollution control measures, and to develop LID principles and requirements, including but not limited to the objectives and specifications for integration of LID strategies, grant waivers from the LID requirements, and collect funds for projects that are granted waivers. Except as otherwise provided herein, the City shall administer, implement and enforce the provisions of this Section.
- C. **Applicability.** Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - (1) All development projects equal to 1 acre or greater of disturbed area that adds more than 10,000 square feet of impervious surface area.
 - (2) Industrial parks 10,000 square feet or more of surface area.
 - (3) Commercial malls 10,000 square feet or more of surface area.
 - (4) Retail gasoline outlets with 5,000 square feet or more of surface area.
 - (5) Restaurants (Standard Industrial Classification (SIC) of 5812) with 5,000 square feet or more of surface area.

- (6) Parking lots with 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces.
- (7) Streets and roads construction of 10,000 square feet or more of impervious surface area. Street and road construction applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.
- (8) Automotive service facilities (Standard Industrial Classification (SIC) of 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) 5,000 square feet or more of surface area.
- (9) Projects located in or directly adjacent to, or discharging directly to an Environmentally Sensitive Area (ESA), where the development will:
 - a. Discharge stormwater runoff that is likely to impact a sensitive biological species or habitat; and
 - b. Create 2,500 square feet or more of impervious surface area
- (10) Single-family hillside homes.
- (11) Redevelopment Projects
 - a. Land disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on Planning Priority Project categories.
 - b. Where Redevelopment results in an alteration to more than fifty 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 must be mitigated.
 - c. Where Redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, only the alteration must be mitigated, and not the entire development.
 - d. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.
 - e. Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.

D. Effective Date. The Planning and Land Development requirements contained in Section 7 of Order No. R4-2012-0175 shall become effective 90 days from the adoption of the Order (February 6, 2013). This includes Planning Priority Projects that are discretionary permit projects or project phases that have not been deemed complete for processing, or discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals within 90 days of adoption of the Order. Projects that have been

deemed complete within 90 days of adoption of the Order are not subject to the requirements Section 7.

E. Specific Requirements. The Site for every Planning Priority Project shall be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest and use.

- (1) A new single-family hillside home development shall include mitigation measures to:
 - a. Conserve natural areas;
 - b. Protect slopes and channels;
 - c. Provide storm drain system stenciling and signage;
 - d. Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability; and
 - e. Direct surface flow to vegetated areas before discharge, unless the diversion would result in slope instability.
- (2) Street and road construction of 10,000 square feet or more of impervious surface shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets (December 2008 EPA-833-F-08-009) to the maximum extent practicable.
- (3) The remainder of Planning Priority Projects shall prepare a LID Plan to comply with the following:
 - a. Retain stormwater runoff onsite for the Stormwater Quality Design Volume (SWQDv) defined as the runoff from:
 - i. The 85th percentile 24-hour runoff event as determined from the Los Angeles County 85th percentile precipitation isohyetal map; or
 - ii. The volume of runoff produced from a 0.75 inch, 24-hour rain event, whichever is greater.
 - b. Minimize hydromodification impacts to natural drainage systems as defined in Order No. R4-2012-0175.
 - c. To demonstrate technical infeasibility, the project applicant must demonstrate that the project cannot reliably retain 100 percent of the SWQDv on-site, even with the maximum application of green roofs and rainwater harvest and use, and that compliance with the applicable post-construction requirements would be technically infeasible by submitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect. Technical infeasibility may result from conditions including the following:
 - i. The infiltration rate of saturated in-situ soils is less than 0.3 inch per hour and it is not technically feasible to amend the in-situ soils to attain an infiltration rate necessary to achieve reliable performance of infiltration or bioretention BMPs in retaining the SWQDv onsite.
 - ii. Locations where seasonal high groundwater is within five to ten feet of surface grade;

- iii. Locations within 100 feet of a groundwater well used for drinking water;
 - iv. Brownfield development sites or other locations where pollutant mobilization is a documented concern;
 - v. Locations with potential geotechnical hazards;
 - vi. Smart growth and infill or redevelopment locations where the density and/ or nature of the project would create significant difficulty for compliance with the onsite volume retention requirement.
- d. If partial or complete onsite retention is technically infeasible, the project Site may biofiltrate 1.5 times the portion of the remaining SWQDV that is not reliably retained onsite. Biofiltration BMPs must adhere to the design specifications provided in Order No. R4-2012-0175.
- i. Additional alternative compliance options such as offsite infiltration and groundwater replenishment projects may be available to the project Site. The project Site should contact the [APPROVING AGENCY] to determine eligibility.
- e. The remaining SWQDV that cannot be retained or biofiltered onsite must be treated onsite to reduce pollutant loading. BMPs must be selected and designed to meet pollutant-specific benchmarks as required per Order No. R4-2012-0175. Flow-through BMPs may be used to treat the remaining SWQDV and must be sized based on a rainfall intensity of:
- i. 0.2 inches per hour, or
 - ii. The one year, one-hour rainfall intensity as determined from the most recent Los Angeles County isohyetal map, whichever is greater.

Optional

- F. Additional Requirements.** The site for projects not classified with general applicability listed in Section C of this Ordinance, but resulting in the creation or addition or replacement of 500 square feet or more of impervious surface area shall be designed to control pollutants, pollutant loads, and runoff volume per the [SPECIFIC GOVERNING MANUAL].
- G. Validity.** If any provision of this Ordinance is found to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect remaining provisions of this Ordinance are declared to be severable.