Post - Construction Hydromodification Development Requirements

I. PURPOSE

A. The purpose of these requirements is to:

1. Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, safeguarding of environmentally sensitive areas, mixing of land uses (e.g. homes, offices, and shops), transit accessibility, and better pedestrian and bicycle amenities.

2. Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of waterbodies in accordance with requirements under the California Environmental Quality Act (CEQA, Cal. Pub. Resources Code, Section 21100).

3. Minimize the percentage of effective impervious surfaces on land developments to mimic pre-development water balance through infiltration, evapotranspiration and reuse.

4. Minimize pollutant loadings from impervious surfaces such as roof-tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs, (including Source Control BMPs such as good housekeeping practices), Low Impact Development Strategies, and Treatment Control BMPs.

5. Properly select, design and maintain Treatment Control BMPs and Hydromodification Control BMPs to address pollutants that are likely to be generated, assure long-term function, and to avoid the breeding of vectors.

6. Prioritize the selection of BMP sites to remove storm water pollutants, reduce storm water runoff volume, and beneficially reuse storm water to support an integrated approach to protecting water quality and managing water resources in the following order of preference:

    a. Infiltration BMPs

    b. Storage and Reuse of storm water runoff

    c. Promote BMPs that use vegetation to remove pollutants, reduce runoff volume, and where possible integrate multiple uses on a site.

    d. Promote BMPs that percolate runoff through engineered soil, allowing it to discharge slowly.

e. Promote BMPs that utilize approved modular / proprietary treatment control BMPs that are based on LID / Hydromodification concepts and meet pollution removal goals.

II. DEFINITIONS

Automotive Service Facilities

Auto-related facilities, including, but not limited to: distribution and/or sale of motor vehicle parts and supplies, sales of vehicles, gasoline and oil sales at service stations, body repair shops, automotive repair.

Best Management Practices (BMPs)

BMPs are maintenance procedures, prohibitions of practices, and other management practices to prevent or reduce the pollution of 'Waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Biologically Significant Areas

Biologically Significant Areas are those identified on the Biologically Significant Areas map in the Resource Management Element of the City's General Plan.

Effective Impervious Area (EIA)

That portion of a new project site or redevelopment project site from which storm water run-off flows unimpeded over impermeable surfaces to the City's storm drain system. Effective Impervious Area can be reduced by directing flows from hard surfaces to pervious areas that meet the following criteria:

1. Will infiltrate, reuse or evapotranspire the volume of water that results from the 85^{th} percentile 24-hour runoff event determined as the maximized capture storm water volume for the area using a 48 to 72-hour drawdown time, from the formula recommended in Urban Runoff Quality Management WEF Manual of Practice NO. 23/ASCE Manual of Practice No. 87 (1998); or

2. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in the Ventura County Technical Guidance Manual for Storm Water Quality Control Measures (July 2002 and its revisions); or

3. Will infiltrate, reuse or evapotranspire the volume of runoff produced from a .75 inch storm event.

Hydromodification

Alterations of the hydrologic regime (natural flow of water through a landscape), as a result of land-use changes or dams (U.S. EPA 1997).

Low Impact Development (LID)

An approach to land development that uses land planning and design practices and technologies to increase infiltration of storm water in developed areas, in an effort to conserve and protect natural hydrology.

Maximum Extent Practicable (MEP)

MEP is the technology-based standard established in the Clean Water Act that establishes the level of pollutant reductions dischargers must achieve. MEP is an ever evolving, flexible and advancing concept, which considers technical and economic feasibility.

Storm Water Pollutants

Material exposed to rain water that can be dissolved or transported by storm water including but not limited to: hazardous materials, chemicals, concrete components, landscaping material, soil, leaves, trash, and metals.

Single-Family Hillside Homes

Single-family homes on properties that have average slopes of five (5%) to ten (10%) percent.

III. EFFECTIVE DATE

A. The new Interim Low Impact Development / Hydromodification requirements shall apply to any discretionary project which is deemed complete after October 17, 2009.

IV. LOW IMPACT DEVELOPMENT / HYDROMODIFICATION REQUIREMENTS

Type of Development	Square footage of impervious area	Percentage Effective Impervious Area (EIA)
New Development	10,000 square feet or more of new impervious area	Five (5) percent or less EIA.
New Streets, Alleys, Roads and Highways	10,000 square feet or more of new impervious area.	Incorporate USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets, to the maximum extent practicable.
New Retail Gasoline Outlets and Automotive Service Facilities	5,000 square feet or more of new impervious area	Five (5) percent or less EIA.
New Restaurants	5,000 square feet or more of new impervious area	Five (5) percent or less EIA.
New Parking Lots	5,000 square feet or more of new impervious area	Five (5) percent or less EIA.
New projects that are located in or directly adjacent to, or discharge directly into an Environmentally Sensitive Area (ESA), where the development will discharge storm water runoff likely to impact a sensitive biological species or habitat.	2,500 square feet or more of new impervious area	Five (5) percent or less EIA.
Redevelopment	5,000 square feet of redeveloped impervious area.	Five (5) percent or less EIA. If changes to the site impact less than 50% of pre-project impervious space, the Five (5) percent or less EIA requirement applies only to the new or changed portion.
Redevelopment of existing Single-family Hillside homes with an average slope of 5 to 10 percent.	10,000 square feet or more of new impervious area on an existing residential property.	Five (5) percent or less EIA.

A. New Development.

1. New development projects, including single-family homes, proposing 10,000 square feet or more of impervious area shall have an Effective Impervious Area (EIA) of five percent (5%) or less.

2. New development of retail gasoline outlets, automotive service facilities, restaurants, and parking lots, proposing 5,000 square feet or more of impervious area shall have an Effective Impervious Area (EIA) of five percent (5%) or less.

B. Redevelopment.

1. Redevelopment projects that result in the creation, addition or replacement of 5,000 square feet or more of impervious area on an already developed site shall have an Effective Impervious Area (EIA) of five percent (5%) or less.

    a. Redevelopment projects that result in an alteration of less than fifty (50) percent of the impervious surfaces in a previously existing development, and the development was not subject to post development storm water quality control requirements, only the alteration must be mitigated, and not the entire development.

    b. Redevelopment does not include:

        1. 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.

        2. 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.

        3. The paving of existing roads to maintain original line and grade.

        4. Existing single-family residences and accessory structures are exempt, unless they create, add or replace 10,000 square feet or more of impervious area.

C. New Street, Road, Highway And Freeway Construction

1. New street, alley, road, highway and freeway construction involving creation of 10,000 square feet or more of new impervious surface area shall incorporate the following features into the project's design:

    a. Street design shall preserve wetlands, buffers, and high-permeability soils.
    b. Street and alley widths shall be minimized.
    c. Alleys shall drain to streets.

d. Street trees shall be planted.
e. Sidewalks shall be constructed of permeable pavement, where feasible.
f. Sidewalks which are not permeable shall drain in street storm drain inlets.
g. Filters shall be installed and maintained in street storm drain inlets.
h. Public storm drain inlets shall be stenciled or marked with approve language "No Dumping – Drains to the River".

(Source: USEPA guidance – Managing Wet Weather with Green Infrastructure: Green Streets")

E. General LID / Hydromodification Requirements

The following requirements shall be applicable to all new construction and redevelopment projects.

1. All storm water that flows from paved areas of vehicle travel, maintenance, parking or uncovered outdoor storage shall be filtered for trash, sediment, oil and grease, prior to discharge into City streets, storm drains, on-site basins, filter strips, landscaped areas, biologically sensitive areas or the Santa Ynez River and its tributaries. Filter(s) location(s) and type(s) shall be shown/detailed on grading and drainage plans.

2. Provisions shall be made to ensure adequate maintenance and replacement of private storm water filters. Filters shall be cleaned out at least twice a year, before and after the storm season. Filters shall be cleaned out and replaced, if necessary, at any time they are not functioning correctly.

3. Roof drains and gutters shall be directed to landscaping, unless to do so would result in foundation damage or slope instability, as verified by a qualified engineer. The property must be sloped away from the foundation, and in homes without a basement, the downspout should not discharge rainwater to landscaping any closer than two-feet from the building's foundation. The area in which the storm water is discharged should be large enough to provide good drainage. Do not place downspouts closer than five-feet to property lines, closer than three-feet to a sidewalk or within 10 feet of a retaining wall. Do not extend downspouts across areas of foot travel, in order to avoid creating a tripping hazard.

4. All landscaping shall be drought-tolerant and low maintenance.

5. Slopes, natural vegetation and existing natural drainage channels shall be preserved, to the maximum extent practicable.

6. Storm drain inlets on private property shall be stenciled or marked "No Dumping, Drains to the River". Stenciling or markers shall be adequately maintained in perpetuity.

V. ALTERNATIVE EIA MITIGATION

A. In circumstances where the required EIA is difficult to meet, and the following eligibility criteria are met, mitigation for the remaining EIA percentage needed can be provided using the alternative mitigation.

1. Eligibility Criteria:

a. The applicant shall show that the project has reduced the percentage of Effective Impervious Area to no more than 30-percent of the total project area and that the EIA achieved on-site is as close to the required percentage of EIA as is technically feasible, given the site's constraints.

b. The applicant must demonstrate that compliance with the applicable post-construction requirements would be technically infeasible by submitting a soils report and hydrologic analysis prepared by a registered professional engineer, hydrologist, geologist, architect and/or landscape architect.

Technical infeasibility may result from conditions including the following:

i. Seasonal high groundwater within five feet of the surface;

ii. Project site within 100-feet of a groundwater well used for drinking water;

iii. The project is on or adjacent to a Brownfield site or a site where the presence of pollutants or pollutant mobilization is a documented concern;

iv. Potential geotechnical hazards;

v. Smart growth and infill or redevelopment locations where the allowable density and/or nature of the proposed project would create significant difficulty in complying with the on-site volume retention requirement; and

vi. Other site or implementation constraints identified in the Ventura County Technical Guidance Manual or the City of Santa Barbara Storm Water BMP Guidance Manual or other technically-based BMP design criteria.

vii. Project sites where it can be shown that compliance with the on-site volume retention requirement would result in damage to the existing structures on the subject site or on adjacent developed sites.

2. Alternative Mitigation Compliance Measures:

If technical infeasibility has been demonstrated, A project applicant can propose alternative compliance measures to substitute for the remaining EIA percentage not achieved on-site in the project's design. The mitigation provided shall be equivalent to the percentage of the EIA provided in the project, above that which was required. All off-site mitigation projects must be accomplished within the sub-watershed in which the project is located.

For example: A project that provides 30% EIA on-site will need to mitigate for 25% EIA off-site (that portion over 5% and under 30%).

Mitigation can be accomplished by either:

a. Performing off-site mitigation that is pre-approved by the City, or

b. Providing funding sufficient to achieve equivalent storm water volume and pollutant load reduction through infiltration, reuse and/or evapo-transpiration.

A schedule of completion shall be prepared for each off-site mitigation project, including milestone dates to: identify funding, design and construct the projects. Off-site mitigation projects shall be completed as soon as possible and at the latest, within four (4) years of the certificate of occupancy.

VI. MAINTENANCE REQUIREMENTS

A. All projects subject to LID / Hydromodification standards shall be conditioned to provide verification of ongoing maintenance provisions, as well as an Operation and Maintenance Plan (OMP) to ensure the ongoing maintenance of all LID / Hydromodification Best Management Practices (BMPs).

Verification shall require the developer's signed statement accepting responsibility for BMP maintenance until the responsibility for maintenance is legally transferred and a condition of approval addressing the requirement for ongoing maintenance, whether it is to be performed by the property owner, a Homeowner's or Property Owners Association, the City or other entity.

The OMP shall follow the examples found in Ventura County's Technical Guidance Manual, Appendix D, "Maintenance Plan Guidance" for each BMP Component, or specific BMP maintenance guidance found in Santa Barbara's Storm Water BMP Guidance Manual. In the alternative, the OMP shall follow the recommendations of the manufacturer or designer of the equipment or BMP used to achieve the required EIA. Details on the operation and maintenance of structural and treatment controls, including storm water filters, rain gardens, basins, vaults, roof drains and related features shall be included.

Operation and Maintenance Plans prepared for off-site mitigation projects shall be submitted to the Community Development Department, prior to issuance of grading permits and / or building permits. Such plans shall include provisions for maintenance, repair, replacement and re-vegetation, as necessary. The City shall review Operation and Maintenance Plans to ensure their provisions can be expected to keep the approved BMPs in working order.

Maintenance requirements shall be recorded on the deeds of newly created properties and included in the Covenants, Conditions and Restrictions of Homeowners Associations and Property Owners Associations, as applicable. If the City has agreed to accept transfer of an off-site mitigation project for ownership and maintenance, the Plan for that project shall identify all relevant costs for BMP maintenance.

VII. APPLICATION REQUIREMENTS

A. Each application subject to LID / Hydromodification standards shall identify the structural and treatment controls, at a concept level, through which the relevant EIA requirement will be met.

B. If alternative mitigation is proposed to address unmet EIA percentages, a detailed proposal for off-site mitigation of the required EIA percentage not provided on-site shall be submitted at the time of initial development application.

C. Each submittal for a grading permit shall identify any grading necessary for implementation of the approved structural and treatment controls.

D. Improvement plans and building plans shall detail the construction of the approved private LID / Hydromodification structural and treatment controls. Verification shall be submitted, prepared, signed and stamped by a qualified professional engineer, that the structural and treatment controls are adequately sized and designed to meet the requirements for EIA.

E. Prior to Issuance of Occupancy Permits, privately owned on-site treatment structures and controls shall be inspected by the City to ensure they are in place, per the approved plans.

F. Private projects shall be conditioned to require the property owner, property manager, or their representative to submit annual reports detailing activity during the prior year related to the maintenance, repair, replacement and re-vegetation, as necessary, of the approved treatment structures and controls.