



working for a cleaner bay



Design Regulations, Construction Practices and Good Housekeeping
Requirements for new building projects and existing properties
to reduce urban runoff water pollution

Planning for a Cleaner Bay



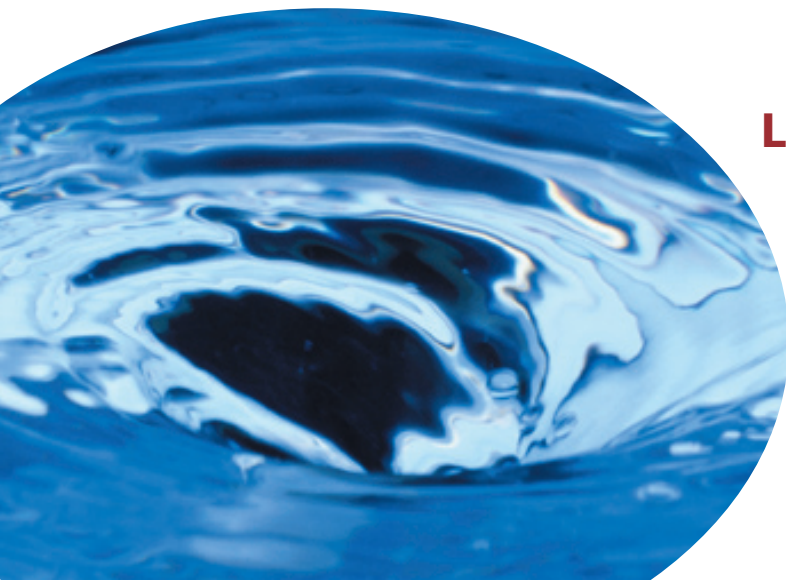
Design Regulations, Construction Practices and Good Housekeeping Requirements for new building projects and existing properties to reduce urban runoff water pollution

Urban runoff flowing through storm drains is the greatest single source of pollution to the beaches and nearshore waters of the Santa Monica Bay. Unlike sewage and discharges from industrial sources, urban runoff cannot always be adequately treated before it reaches the Bay and our beaches.

The City of West Hollywood has passed an Ordinance that is designed to reduce the amount of urban runoff pollution that reaches our storm drain system and the Santa Monica Bay. The Ordinance requires a 0.75" reduction in rainfall leaving all impermeable surfaces of all newly developed parcels or treatment of 0.2" of rainfall per hour within the City. The Ordinance also specifies guidelines for existing properties to reduce the level of contaminants that are carried by urban runoff into the Bay.



By reducing the quantity of runoff and improving the quality of runoff, we lower levels of harmful bacteria, toxics, and other forms of pollutants affecting the Bay. Reducing the amount of urban runoff and the amount of pollutants contained in the runoff are essential for the health and safety of our community. Runoff from West Hollywood goes directly into Ballona Creek and the Santa Monica Bay.

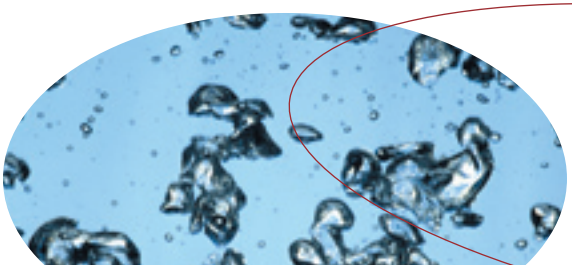


Let's
Keep
Our
WATER
Clean!



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Best Management Practices

Reducing Urban Runoff Pollution for a Cleaner Bay

Hazardous and toxic substances like automotive fluids and pesticides, debris and trash from residential and commercial construction, pet wastes, paint products and much more are washed into our storm drain system and into the Santa Monica Bay on a daily basis. This liquid waste, called urban runoff, is the single largest source of water pollution into the Bay, and it is a major threat to the health and safety of our residents and businesses, and to the marine ecosystem.

Construction waste is one of the greatest sources of pollution into the Bay. Sediment, concrete pours and paint/other materials that leave the construction site are major contributors to clogged storm drains and polluted aquatic habitats.

By implementing Best Management Practices (BMPs) and Good Housekeeping Guidelines, and making these strategies part of our lives, we can make a genuine difference - - reduce the quantity of urban runoff pollution.



BMPs

Keep

POLLUTION

from
flowing
into

the

BAY.



<It doesn't get much worse than this!>



HELP
ME!

I'm
choking over
here...



By working together, we can all contribute to a cleaner Bay and a healthier way of life.



Design Requirements to Reduce Urban Runoff

Requirements for New Development

When submitting an application for a new development project for priority projects, you may be required to submit a Standard Urban Storm Water Mitigation Plan (SUSMP) to the City of West Hollywood's Environmental Services. The Standard Urban Storm Water Mitigation Plan you develop will ensure that the projected urban runoff from your proposed project is reduced by at least a volume equivalent to the surface area of all impermeable surfaces times 0.75" or treatment of 0.2" of rainfall per hour.

By incorporating specific design elements and principles, your plan will meet requirements outlined in the Stormwater and Urban Runoff Pollution Control Ordinance (15.56.095).

Contact Environmental Services at 323-848-6499 or refer to 15.56.095 in the Municipal Code to determine if you have a priority project.

Design Principles to Reduce Urban Runoff

Maximize Permeable Areas

(Ordinance Section 19.20.190)

One of the most effective ways to reduce urban runoff is to increase the percentage of permeable surfaces and landscaped areas in your project design: (1) porous materials will increase the amount of runoff that seeps into the ground, rather than being carried into storm drains, (2) natural drainage, and (3) swales, berms, green strip filters, gravel beds and french drains.

Reduce Parking Lot Pollution

Options to meet this requirement include curbless green strip filters and porous pavement to capture and percolate runoff where possible.

Penalties for Non-Compliance

(Ordinance Section 15.56.100)

Failure to implement an approved Standard Urban Storm Water Mitigation Plan and comply with all provisions of this ordinance shall constitute a misdemeanor punishable as set forth in subsection (a) of Section 1.08.010 of this code. Each day that a violation continues shall constitute a separate offense.

<Designers must incorporate in the design of new developments principles that reduce urban runoff!>



Design Requirements to Reduce Urban Runoff

Gutters/Downspouts Design Criteria

Downspouts shall be constructed in accordance with the California Best Management Practices Handbook for infiltration trenches. Downspouts will direct flow to paved areas and then to filter inserts or gravel beds.



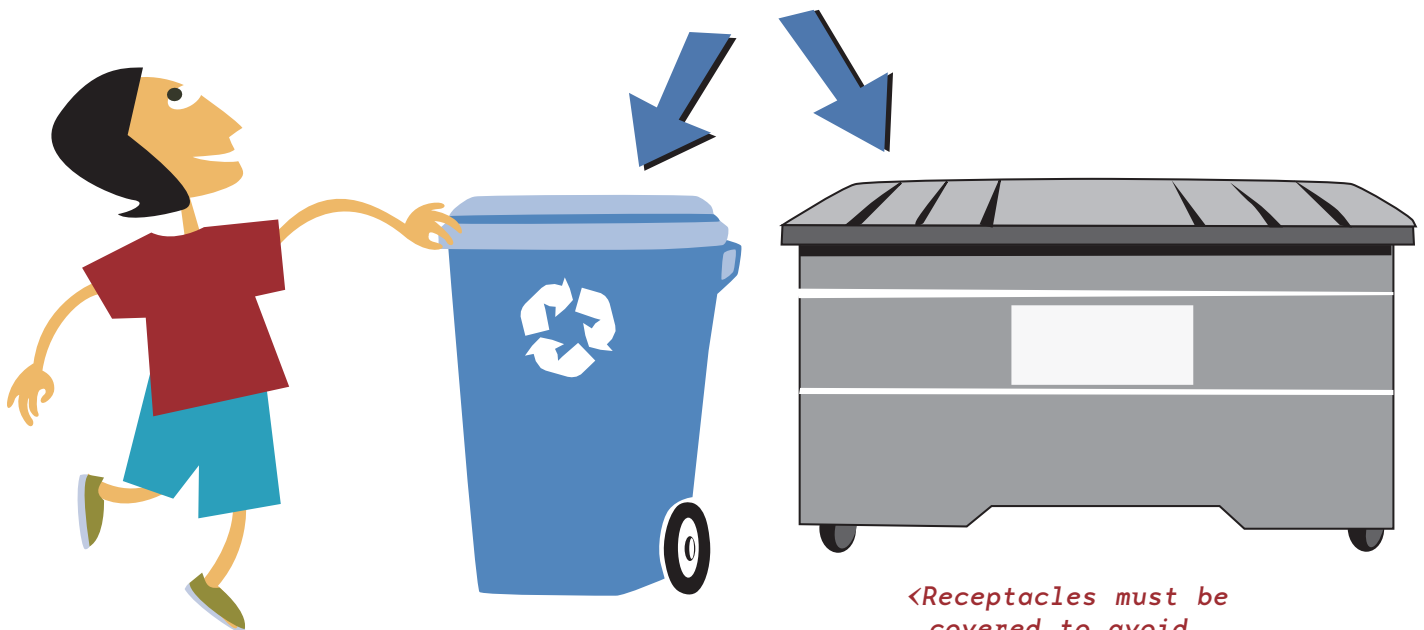
<The wrong way to design gutters and downspouts!>

Other Design Criteria

The design elements established in this subsection shall be required for all new development except single family residences. These design criteria deal with strategies to keep precipitation and urban runoff from the following areas:

- (i) Loading and unloading dock areas,
- (ii) Repair and maintenance bays,
- (iii) Vehicle and equipment wash areas,
- (iv) Fueling areas,
- (v) Trash areas.

Where new development will include outdoor areas for the storage of materials, including trash areas, that may contribute pollutants to the storm water conveyance system, these materials must be completely enclosed or covered thereby protecting them from contact with water.



<Receptacles must be covered to avoid contaminated runoff!>

Urban Runoff Mitigation Plan: Submission and Approval

When you submit your application for a new development or redevelopment, you may also be required to submit a Standard Urban Storm Water Mitigation Plan (Section 15.56.095). This plan will detail how your proposed project will comply with all applicable Ordinance requirements including a 0.75" reduction in total runoff from all impermeable areas on your site or treatment of 0.2" of rainfall per hour. This plan must also describe how your proposed Best Management Practices will be maintained annually to ensure their continued effectiveness and will be transferred during property sale.

Contact Environmental Services at (323) 848-6499 to see if your development must meet this requirement.

Forms to complete the Standard Urban Storm Water Mitigation Plan are available from Environmental Services. Each plan that is submitted will be evaluated according to particular characteristics of the project and of the site to be developed. No building permit will be issued for a project covered under the Ordinance until a mitigation plan has been approved by the City. The final Certificate of Occupancy will be issued only upon inspection and approval of the Plan's completed BMPs by the City.

Design Solutions

The following photos provide examples of BMPs that can be incorporated into new development to meet City urban runoff mitigation requirements.

Additional information is available for other design concepts, including drawings and references.



<Commercial biofilter walkway>



<Parking lot runoff enters biofilter for treatment and percolation>



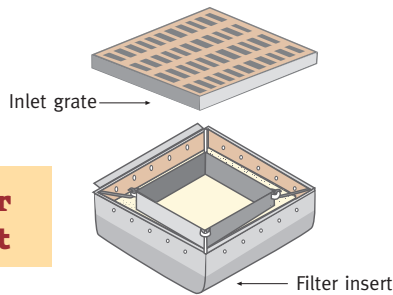
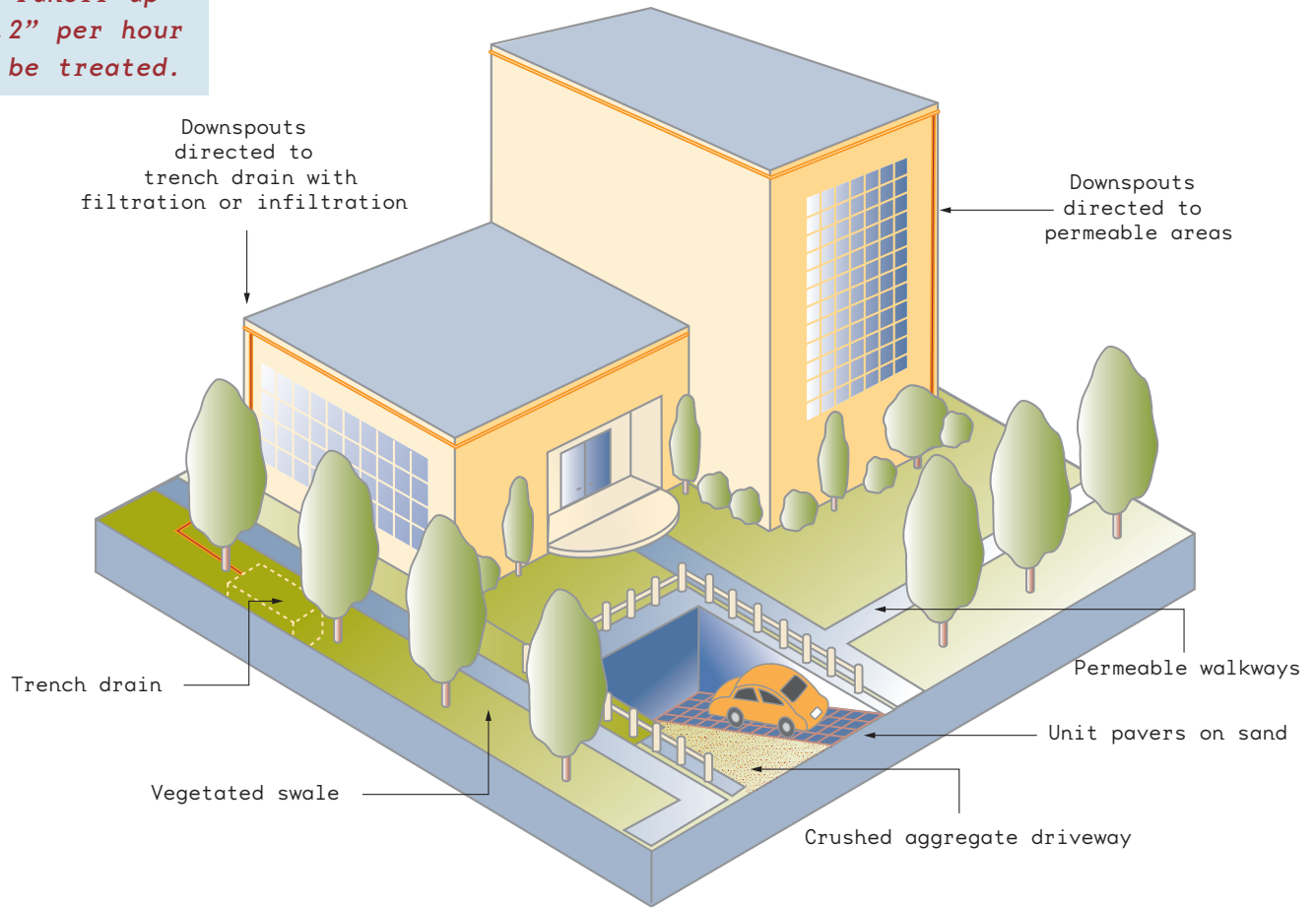
<Institutional parking lot biofilter>



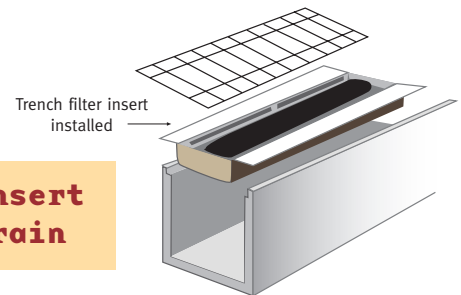
<Commercial parking lot porous pavement>

Multi-Family Residential Development and Commercial Development Design Ideas

All runoff up to 0.2" per hour must be treated.



Filter Insert



Filter Insert Trench Drain

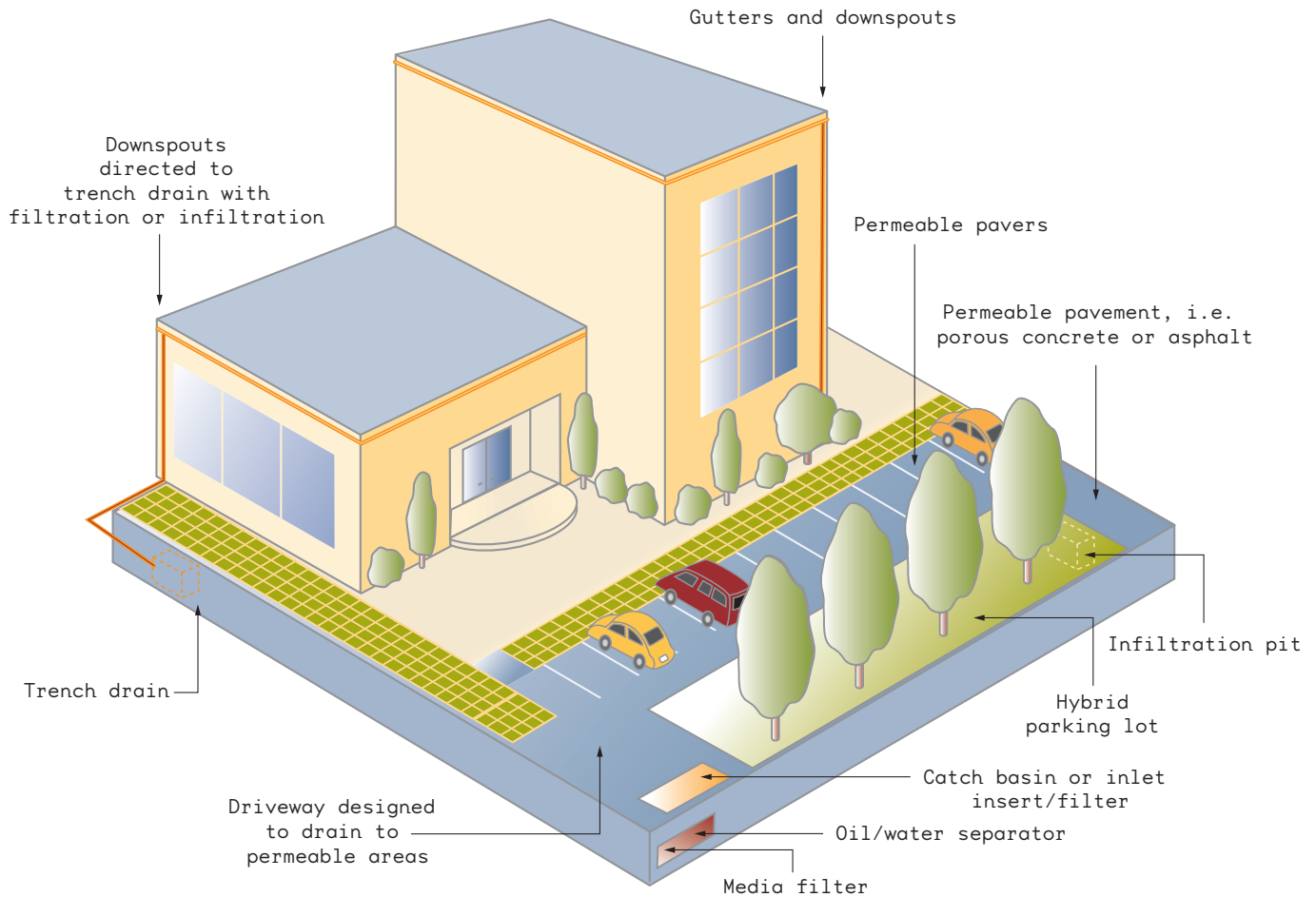
New Development and Design



<Parking lot of small office building made of concrete permeable pavers>

See www.bmp1a.org
Your Yellow Pages for BMPs!

Parking Lot Design Ideas



Parking Lots

Parking lots create pollutants from oil and grease leaks, brake pad linings and other metals and toxics that can enter the Bay. Lots with 25 or more spaces or 5,000 sq. ft. or over must install Best Management Practices (BMPs) to filter and contain pollutants.

Examples:

Filter insert in area drain

Porous pavement

Infiltration trench with rock filter

Turf irrigation biofilter

BMPs must be maintained annually.

Ongoing Maintenance

For spills and leaks, use absorbent material such as kitty litter to contain the spill. Never hose into the street!

Use a mop to clean spills; dump mop water into the sink or floor drain.

Sweep lots once a month and vacuum sweep at least quarterly.

Use a waterbroom or pressure washer that captures wash water to clean lots. (Waterbroom source: www.watermiser.com)

No car washing allowed in parking lots.

Restaurants and Outdoor Dining Areas



Fats
OILS
GREASES and
cigarette butts
are illegal discharges
that can
close
beaches
when
pollutants
reach
the **BAY.**



Restaurants and Outdoor Dining Areas

All Restaurants

Must Prepare Standard Urban Storm Water Mitigation Plan (SUSMP).

Must have an industrial waste permit issued by Los Angeles County (626-458-3517).

Must safely collect and dispose of cooking grease.

Maintenance

Hosing down outdoor dining areas with a hose is prohibited by the City's Municipal Code. Sweep the area or use a waterbroom with no water reaching the street.

Mop water must be discharged to the sanitary sewer (sink or floor drain).

Floor drains must be connected to the sanitary sewer.

Trash area must be clean with tight fitting lids on bins.



<Utilizing a Waterbroom is an allowable alternative to hosing off sidewalks and walkways!>

Projects Under Construction: Requirements to Reduce Urban Runoff

All projects regardless of size under-going construction in the City of West Hollywood must follow specific Best Management Practices (BMPs). BMPs insure that pollutants do not come in contact with rain or runoff and stay onsite. BMPs should insure that pollutants do not get washed or dumped into the storm drain system. The BMPs listed below are required by this Ordinance. BMPs must be put into practice at the time of demolition of an existing structure, or at the start of new construction. BMPs are to remain implemented until a Certificate of Occupancy has been issued.

Best Management Practices (BMPs)

Runoff, sediment, and construction waste from construction sites and parking areas must not leave the site (Ordinance Section 15.56.060).

Any sediments or other materials that are tracked off the site must be cleaned and removed the same day.

A plastic covering shall be used to prevent erosion of any unprotected area, such as mounds of dirt or dumpsters, along with devices designed to intercept and safely divert runoff. Precipitation and wind-transported sediments, and other debris carried off-site cause pollution.



<Catch basin protection to reduce sediment loading>



For any cement-concrete mixing, paint removal and preparation, sandblasting or hard surface cutting activities (i.e. sidewalks) that will result in particles entering the air or landing on the ground, BMP steps shall be implemented to prevent or minimize such particle releases into the environment.

Washing of construction or other industrial vehicles will not be allowed adjacent to the construction site. Commercial vehicle wash facilities must be used. No polluted runoff from the washing of vehicles on a construction site shall be allowed to leave the site.

Penalties for Non-Compliance

Failure to implement Best Management Practices at construction sites shall constitute a violation of the city's stormwater ordinance. Each day that a violation occurs will constitute a separate offense. Construction sites may also be subject to stoppage of work for violation of these requirements.

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For more information contact 323-848-6499
email us at environment@weho.org
or visit www.weho.org



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