LOW IMPACT DEVELOPMENT REVIEW SHEET
(2017 Los Angeles County Building Code, Residential Code, and Green Building Standards Code)

GENERAL PROJECT INFORMATION

PLAN CHECK: 0 DISTRICT No: 0.00
JOB ADDRESS: 0 CITY: 0.00
APPLICANT: 0 EMAIL: 0

INSTRUCTIONS

● Corrections shown below apply to this plan check. See plans and calculations for additional comments.
● In the right hand column, please indicate the sheet number and detail or note number on the plan where the corrections are made. Resubmit PDF copies of corrected plans, calculations, and this plan review list with annotation.
● Incorporate all comments as marked on checkset set of plans, calculations, and these correction sheets.

LOW IMPACT DEVELOPMENT (LID) Requirements

All development must comply with the County of Los Angeles’ Title 12, Chapter 12.84 (LID).

LID standards are intended to distribute stormwater and urban runoff across developed sites to help reduce adverse water quality impacts and replenish groundwater supplies. The County of Los Angeles, LID Manual 2014 is available at the following link: http://dpw.lacounty.gov/ldd/web/

Under the County of Los Angeles LID Ordinance, Title 12, Section 12.84.430, designated projects are required to prohibit the discharge of pollutants from property developments. Preventing these pollutants from entering stormwater discharge system will be accomplished by requiring the installation and maintenance of post-construction treatment controls. (Best Management Practices (BMPs))

LID Requirement (Priority and Non-Priority Projects):

<table>
<thead>
<tr>
<th>Date of Maintenance Agreement:</th>
<th>Proposed Impervious Area:</th>
<th>sq. ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Storm: (check box)</td>
<td>85th percentile</td>
<td>0.75-inch</td>
</tr>
<tr>
<td>SW/QDV:</td>
<td>% to retain onsite</td>
<td></td>
</tr>
<tr>
<td>LID Solution: (check box)</td>
<td>Infiltration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biofiltration</td>
<td></td>
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</table>

NON-RESIDENTIAL DEVELOPMENTS (Commercial or Industrial) must comply with LID as follows:

2. The following is a list of new development and redevelopment projects/activities that require compliance with LA County's LID ordinance. (See LID manual for additional information)

- All development projects equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area
- Residential new or redeveloped projects that creates, adds, or replaces >10,000 square feet of impervious surface area.
o Industrial parks 10,000 square feet or more of surface area.
o Commercial malls 10,000 square feet or more area.
o Retail gasoline outlets 5,000 square feet or more of surface area.
o Restaurants (SIC 5812) 5,000 square feet or more of surface area.
o Parking lots 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces.
o Street and road construction of 10,000 square feet or more of impervious surface area.
o Automotive service facilities with 5,000 square feet or more of surface area.
o
- Projects located in or directly adjacent to, or discharging directly to a Significant Ecological Area (SEA), where the development will discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and Create 2,500 square feet or more of impervious surface area.
o Redevelopment projects identified below*:
  ● Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area.
  ● Development which alters less than 50% of impervious surfaces. Only proposed re-development needs to meet NPDES requirements.
  ● Development which alters 50% or more of impervious surfaces. Entire site shall meet NPDES requirements.

*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.

REQUIREMENTS

a. New Development and Re-Development Projects must control runoff through infiltration, bioretention, and/or rainfall harvest and use. Project must retain onsite the Stormwater Quality Design Volume (SWQDv) as defined by the greater of the following:
   • The 0.75-inch, 24 hour rain event or
   • The 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map (www.dpw.lacounty.gov/wrd/hydrologygis).

b. Bioretention and biofiltration systems shall meet the design specifications provided in Appendix E (BIO-1) of LA County’s LID manual. (See http://dpw.lacounty.gov/ldd/web/). Biofiltration systems shall be entirely open-bottom.

c. When evaluating the potential for onsite retention, each projects must consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and reuse for both indoor and outdoor use.

d. To demonstrate technical infeasibility, it must be shown that a project site cannot reliably retain 100 percent of the SWQDv onsite. Technical infeasibility may result from the following:
   i. The infiltration rate of saturated in-situ soils less than 0.3 inch per hour.
   ii. Seasonal high ground water is within 5 to 10 feet of the surface.
   iii. Locations within 100 feet of a ground water well used for drinking water.
   iv. Brownfield development sites where infiltration poses a risk of pollutant mobilization.
   v. Locations with potential geotechnical hazards.

e. When technical infeasibility has been demonstrated the site must biofiltrate using the following equation for volume required:

   \[ Bv = 1.5 \times (\text{SWQDv} - \text{Rv}) \]

Where: 
   \( Bv = \) Biofiltration volume
   \( \text{SWQDv} = \) Stormwater runoff as defined in 85 A
   \( \text{Rv} = \) Volume reliably retained onsite (amount infiltrated)

*** Show volumes and flow rates on plans as applicable.

Note: For additional alternative compliance measures see Regional Water Quality Control Board Order No. R4-2012-0175 section VI.D.7.c.iii (http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/index.shtml)

f. Project sites that outlet to natural drainage systems that are subject to hydromodification shall be in compliance with LA County’s LID manual, Section 8. (available at http://dpw.lacounty.gov/ldd/web/)
6. An Infiltration Report by a Soils Engineer and the grading plans must be reviewed and recommended for approval by the Geology and Soils Section prior to approval of an Infiltration/Retention - Low Impact Development (LID) BMP. The Infiltration Report must comply with GMED Geotechnical Memo GS 200.1 and should be presented as its own report. All recommendations and notes as indicated in the soils engineering report and/or GMED review sheets must be incorporated into the grading plans. The GS 200.1 memo can be found at: http://dpw.lacounty.gov/gmed/permits/docs/policies/GS200.1.pdf

4. For LID compliance, all catch basins and inlets that discharge into an existing or proposed storm drain must be labeled to discourage illegal dumping of pollutants. Stencils are available at your local Building and Safety office.

5. All infiltration basins, dry wells, or planters must comply with the following setbacks

<table>
<thead>
<tr>
<th>Infiltration Facility Setbacks*</th>
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<tbody>
<tr>
<td>Setback from</td>
<td>Distance in feet</td>
</tr>
<tr>
<td>Property lines &amp; Public Right of Way</td>
<td>5' minimum</td>
</tr>
<tr>
<td>Any Foundation</td>
<td>15' or within a 1.1 plane drawn up from the bottom of foundation</td>
</tr>
<tr>
<td>Face of any slope</td>
<td>H/2.5' minimum (H is height of slope)*</td>
</tr>
<tr>
<td>Seasonal high ground water</td>
<td>10' minimum depth to invert</td>
</tr>
<tr>
<td>Water wells</td>
<td>100' minimum</td>
</tr>
</tbody>
</table>

*unless otherwise recommended by a Soils Engineer and approved by Geotechnical and Materials Engineering Division.

Note: Infiltration is not allowed in areas where pollutant mobilization is a documented concern, or where undisturbed soil infiltration rates are less than 0.3 inches per hour, or where infiltration could cause adverse impacts to biological resources.

6. An Infiltration Report by a Soils Engineer and the grading plans must be reviewed and recommended for approval by the Geology and Soils Section prior to approval of an Infiltration/Retention - Low Impact Development (LID) BMP. The Infiltration Report must comply with GMED Geotechnical Memo GS 200.1 and should be presented as its own report. All recommendations and notes as indicated in the soils engineering report and/or GMED review sheets must be incorporated into the grading plans. The GS 200.1 memo can be found at: http://dpw.lacounty.gov/gmed/permits/docs/policies/GS200.1.pdf

7. Rainwater harvest and reuse systems that are NOT gravity fed require approval from LA County Public Health, Cross Connection & Water Pollution Control Program. The application and further information is found at http://publichealth.lacounty.gov/eh/EP/cross_con/cross_con_main.htm. In addition, approval from LA County, Building and Safety Plumbing Section is required. Rainwater harvest design and plans must comply with County of Los Angeles, Plumbing Code, Chapter 16 – Non-Potable Rainwater Catchment Systems.
8. Different types of infiltration facilities such as dry wells, unlined sumps, seepage pits, and infiltration galleries are some of the terms used to describe Class V injection wells as defined by the EPA. Register the proposed infiltration facility at the following online registration form: http://www.epa.gov/uic/forms/underground-injection-wells-registration.

9. A recorded covenant indicating that the owner of the subject development is aware and agrees to maintain all stormwater BMP features for this project is required. The covenant shall include operation and maintenance guidelines prepared by the project civil engineer/architect. See attached LID Covenant Preparation and Recordation instructions. A draft copy of the covenant including all exhibits must be reviewed prior to recordation.

10. A Statement of Understanding and/or O&M Guidelines must be provided for Capital Projects.