Building Permit No: _____

Appendix C

Storm Water and Low Impact Development Assessment (LID) Checklist Development or Remodel Projects

Project Address: _____

Parcel Number: _____

Project Type:

☐ Residential ☐ Commercial ☐ Industrial

Project is a:

☐ New development ☐ Remodel

Project description: _____

_____

Proposed Development Area and Impervious Area:

Proposed Development Area: _____ acres

Pre-project impervious surface area: _____ sq ft

Amount of impervious surface area that will be **replaced**: _____ sq ft

Amount of new impervious surface area that will be **created**: _____ sq ft

Amount of impervious surface area **removed:** _____ sq ft

Change in amount of impervious surface area due to project: _____ **sq ft**

Applicant Information:

Company: _____

Contact Person: _____

Address: _____

Phone: _____ Email: _____

Signature: _____ Date: _____

All development and remodeling projects must fill out SECTION 1 of the LID checklist below.
Projects subject to Part 1, Tier 3 and Part 2 of the Storm Water Best Management Practices (BMPs) must also fill out SECTION 2. A Maintenance Agreement will be required for all structural BMPs installed on the property (see Appendix F of the Storm Water Best Management Practices)

SECTION 1. Please check site planning and LID design measures proposed to minimize storm water runoff and provide measure locations and descriptions.

Attach a site plan diagram showing applicable measure locations.

See page 4 of this checklist for definitions and resources on storm water BMP terminology.

Site Planning Measures Description/Location

☐ Conserve natural areas, riparian areas and wetlands

Location: _____

Description: _____

☐ Minimize impervious surfaces

Location: _____

Description: _____

☐ Detain and retain runoff throughout the site

Location: _____

Description: _____

☐ Use drainage as a design element

Location: _____

Description: _____

Site LID Design Measures Description/Location

☐ Pervious pavement (pervious concrete or asphalt, turf block, crushed aggregate, etc.)

Location: _____

Description: _____

☐ Direct roof downspouts to landscaped areas or bio-swales

Location: _____

Description: _____

☐ Disperse runoff from paved areas to adjacent pervious areas

Location: _____

Description: _____

SECTION 2. If the project is implementing one or more LID structural controls, please check the proposed structural control(s) and fill out measure details.

Attach: (1) a site plan diagram showing structural control locations and drainage areas,
(2) hydraulic calculations for sizing of the BMP,
(3) for vegetated systems, a list of proposed plant species.

See page 4 of this checklist for definitions and resources on storm water BMP terminology.

Site LID Structural Controls

LID Structural Control type	Proposed Y/N	Description (location, size, number, etc.)	Drainage Area
Roof drainage BMPs (rain barrel, planter box, green roof)			
Bioretention			
Biotreatment			
Infiltration BMPs (dry well, infiltration trench or basin)			
Other LID Structural Control			

Other Proposed Treatment Systems for Pollutant Removal from Storm Water

Proposed Treatment System(s)	Flow Control	Target Pollutants	Drainage Area

Please submit the completed checklist to: Agnes Topp, Environmental Projects Analyst
By email: atopp@cityofsantacruz.com
By mail: City of Santa Cruz, 809 Center Street, Room 201, Santa Cruz, CA 95060
Telephone: 831-420-5423

Storm Water Best Management Practices
Definitions and Resources

Bioretention: a structural storm water control measure designed to retain storm water runoff using vegetation depressions and soils engineered to collect, store, treat, and infiltrate runoff. Bioretention systems do not include underdrains.

Biotreatment or biofiltration treatment: a structural storm water control measure designed to detain and filter storm water runoff through soil media and plant roots, and release the treated runoff to the storm drain system. Biotreatment systems include an underdrain.

Bio-swale or vegetated swale: an open, shallow channel with low-lying vegetation covering the side slopes and bottom that collect and slowly convey runoff flow to downstream discharge points. Vegetated swales provide pollutant removal through settling and filtration in the vegetation lining the channels.

Impervious surface: a hard, non-vegetated surface area that prevents or significantly limits infiltration of water into the soil, as would occur under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, patios, and concrete or asphalt paving.

Infiltration BMPs: infiltration BMPs include infiltration basins, trenches, and drywells, and are constructed with a highly permeable base that is specifically designed to infiltrate runoff. Infiltration basins are usually shallow with flat vegetated bottoms and side-slopes. Infiltration trenches and drywells are rock-filled excavations that are designed to receive runoff from small drainage areas with limited sediment loading.

Permeable pavement: a pavement surface that allows varying amounts of storm water to infiltrate into the ground beneath it. Permeable pavements include porous concrete and porous asphalt, and modular paving systems such as interlocking concrete, grass pavers, and gravel pavers.

Roof drainage BMPs: roof drainage BMPs are designed to manage runoff from roof top surfaces and include rain barrels and cisterns, planter boxes, and green roofs. Rain barrels and cisterns are storage containers that collect and temporarily store runoff from rooftops for later use as irrigation or other non-potable uses. Planter boxes can be at ground level or elevated and are filled with gravel to house an underdrain, planting soil, and vegetation. Green roofs are roofing systems that layer a soil/vegetative cover over a waterproofing membrane.

Additional information on Storm Water BMPs and LID can be found at the following sites:

Resource Document	**Link**
California Stormwater Best Management Practices Handbook for New Development and	http://www.cabmphandbooks.com/Development.asp
CASQA California LID Portal	http://www.casqa.org/LID/tabid/240/Default.aspx
Slow It. Spread It. Sink It! A Homeowner's Guide to Greening Stormwater Runoff (Santa Cruz RCD)	http://www.rcdsantacruz.org/media/brochures/pdf/HomeDrainageGuide.v25.pdf
City of Santa Barbara Storm Water BMP Guidance	http://www.santabarbaraca.gov/Resident/Community/Cre
Central Contra Costa County Stormwater C.3.	http://www.cccleanwater.org/Publications/Guidebook/Sto