

Model BMP CONSTRUCTION CHECKLIST

LAYOUT (to be confirmed prior to beginning excavation)

- ☐ Square footage of the facility meets or exceeds minimum shown in Project-Specific WQMP
- ☐ Site grading and grade breaks are consistent with the boundaries of the tributary Drainage Management Area(s) (DMAs) shown in the Project-Specific WQMP
- ☐ Inlet elevation of the facility is low enough to receive drainage from the entire tributary DMA
- ☐ Locations and elevations of overland flow or piping, including roof leaders, from impervious areas to the facility have been laid out and any conflicts resolved
- ☐ Rim elevation of the facility is laid out to be level all the way around, or elevations are consistent with a detailed cross-section showing location and height of interior dams
- ☐ Locations for vaults, utility boxes, and light standards have been identified so that they will not conflict with the facility
- ☐ Facility is protected as needed from construction-phase runoff and sediment

EXCAVATION (to be confirmed prior to backfilling or pipe installation)

- ☐ Excavation conducted with materials and techniques to minimize compaction of soils within the facility area
- ☐ Excavation is to accurate area and depth
- ☐ Slopes or side walls protect from sloughing of native soils into the facility
- ☐ Moisture barrier, if specified, has been added to protect adjacent pavement or structures.
- ☐ Native soils at bottom of excavation are ripped or loosened to promote infiltration

OVERFLOW OR SURFACE CONNECTION TO MS4 FACILITY

(to be confirmed prior to backfilling with any materials)

- ☐ Overflow is at specified elevation (typically no lower than two inches below facility rim)
- ☐ No knockouts or side inlets are in overflow riser
- ☐ Overflow location selected to minimize surface flow velocity (near, but offset from, inlet recommended)
- ☐ Grating excludes mulch and litter (beehive or atrium-style grates with ¼" openings recommended)
- ☐ Overflow is connected to storm drain or downstream channel or swale via appropriately sized piping

UNDERGROUND CONNECTION TO MS4 FACILITY/OUTLET ORIFICE

(to be confirmed prior to backfilling BMP with any materials)

- ☐ Perforated pipe underdrain (PVC SDR 35 or approved equivalent) is installed with holes facing down
- ☐ Perforated pipe is connected to MS4 facility (treatment only)
- ☐ Underdrain pipe is at elevation shown in plans. In facilities allowing infiltration, preferred elevation is above native soil but low enough to be covered by at least 2 inches of Class 2 perm; in bioretention facilities that are sealed or with liners, preferred elevation is as near bottom as possible
- ☐ Cleanouts are in accessible locations
- ☐ Structures (arches or large diameter pipes) for additional surface storage are installed as shown in plans and specifications and have the specified volume

(continued)

Model BMP CONSTRUCTION CHECKLIST (CONTINUED)

DRAIN ROCK/SUBDRAIN (to be confirmed prior to installation of soil mix)

- ☐ Rock is installed as specified. Class 2 permeable, Caltrans specification 68-1.025 recommended, or 4"-6" pea gravel is installed at the top of the crushed rock layer
- ☐ Rock is smoothed to a consistent top elevation. Depth and top elevation are as shown in plans
- ☐ Slopes or side walls protect from sloughing of native soils into the facility
- ☐ No filter fabric is placed between the subdrain and soil mix layers

SOIL MIX (FOR BIORETENTION FACILITIES)

- ☐ Soil mix is as specified. Quality of mix is confirmed by delivery ticket or on-site testing as appropriate to the size and complexity of the facility
- ☐ Mix installed in lifts not exceeding 12"
- ☐ Mix is not compacted during installation but may be thoroughly wetted to encourage consolidation
- ☐ Mix is smoothed to a consistent top elevation. Depth of mix (18" min.) and top elevation are as shown in plans, accounting for depth of mulch to follow and required reservoir depth

IRRIGATION

- ☐ Irrigation system is installed so it can be controlled separately from other landscaped areas. Smart irrigation controllers and drip emitters are recommended
- ☐ Spray heads, if any, are positioned to avoid direct spray into outlet structures

PLANTING

- ☐ Plants are installed consistent with approved planting plan
- ☐ Any trees and large shrubs are staked securely
- ☐ No fertilizer is added; compost tea may be used
- ☐ No native soil or clayey material are imported into the facility with plantings
- ☐ 1"-2" mulch may be applied following planting; mulch selected to avoid floating
- ☐ Final elevation of soil mix maintained following planting
- ☐ Curb openings are free of obstructions

FINAL ENGINEERING INSPECTION

- ☐ Drainage Management Area(s) are free of construction sediment and landscaped areas are stabilized
- ☐ Inlets are installed to provide smooth entry of runoff from adjoining pavement, have sufficient reveal (drop from the adjoining pavement to the top of the mulch or soil mix, and are not blocked)
- ☐ Inflows from roof leaders and pipes are connected and operable
- ☐ Temporary flow diversions are removed
- ☐ Rock or other energy dissipation at piped or surface inlets is adequate
- ☐ Overflow outlets are configured to allow the facility to flood and fill to near rim before overflow
- ☐ Plantings are healthy and becoming established
- ☐ Irrigation is operable
- ☐ Facility drains rapidly; no surface ponding is evident
- ☐ Any accumulated construction debris, trash, or sediment is removed from facility
- ☐ Certification Statement from design professional that all treatment control BMPs have been constructed in accordance with the approved plans and specs.