



# County of San Diego – Watershed Protection Program

## BMP Installation Verification Photo Guidance

The County of San Diego’s **BMP Installation Verification Package** (PDP SWQMP Attachment 10) documents construction of a project’s permanent stormwater Best Management Practices (BMPs). In addition to completing the Installation Verification Form, applicants must also submit photos which verify that their BMPs have been constructed in compliance with construction plans and BMP performance standards that apply to their project.

To increase the likelihood that your Installation Verification Package is accepted by the County, please follow the recommendations in this guidance when taking photos of your project’s BMPs.

### Document BMP Construction Process

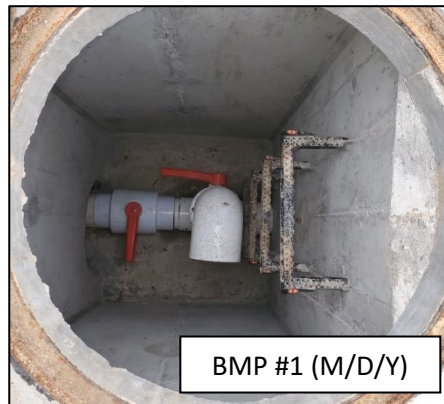
Some BMP elements will not be visible in final BMP photos. Use mid-construction photos to document that all BMP elements are installed correctly. See the example photos below documenting the installation of sub-surface BMP elements:



*Figure 1. BMP Floor to Riser Measurement*



Sub-surface liner, underdrain, and outlet structure



Sub-surface drain elements



Finished BMP with soil media, surface mulch, and vegetation

### Photo Requirements for BMP Verification

- 1) **Label photos with date and BMP identifier.** Photo documentation should include: (1) the date the picture was taken, and (2) the BMP IDs that match those used in the PDP SWQMP and in Part 2 of the BMP Installation Verification Form.
- 2) **Final BMP photos should be taken shortly before submittal of the verification package,** and should accurately reflect the condition of the fully constructed BMP at the time of submittal. Mid-construction photos showing subsurface elements should also be submitted with the verification package.
- 3) **Photograph all BMP elements.** Use photos to demonstrate that all BMP elements have been constructed as planned. Table 1 on the following page lists which elements are likely to be associated with common BMP types.



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**Table 1. BMP Elements Associated with Common BMP Types**

<b>BMP Type</b>	<b>BMP Element</b>	Inlet/Outlet Structures	Vegetation Cover	Mulch Layer	Filter Course Layer	Biofiltration Soil Media	Sub-Surface Liners	Excavation Depths	BMP Surrounding Area	Curb Cuts	Aggregate Layer	Underdrains	Riprap Energy Dissipators	Riser Pipes or Outlets <sup>1</sup>	Hydromodification Orifices <sup>2</sup>	Check Dams <sup>3</sup>	Vault	Media Filters	Inspection Ports	Manhole Access Point	Forebay / Pre-treatment	Sand Filter Bed	Low Flow Channel	Cleanout	Maintenance Access	Tree	Tree Well Soil	Root Barrier	
Tree Wells		X	X					X	X	X		O	X													X	X	O	
Impervious Area Dispersion		X	X						X	X			X	X															
Cistern		X						X	X					X	X		X		X	X	X					X			
Infiltration Basin		X						X	X	X			X	X							X				X				
Bioretention		X	X	X	X	X		X	X	X	X		X	X	X	O									X				
Permeable Pavement		X			O	O		X	X	X	X	O												O					
Dry Wells		X						X			X	X																	
Biofiltration		X	X	X	X	X	X	X	X	X	X	X	X	X	X	O										X			
Biofiltration w/ Partial Retention		X	X	X	X	X		X	X	X	X	X	X	X	X	O									X				
Proprietary Biofiltration		X	X			X	X	X	X	X		X		X			X		X	X									
Vegetated Swales		X	X		O			X	X	X	O					O													
Media Filters		X						X	X			X					X	X	X	X									
Sand Filters		X					O	X	X	X	X	X		X	X							O	X						
Detention Basin		X	O				O	X	X				X	X	X							O		X		X			
Proprietary Flow-Thru Device		X	X			X	X	X	X	X		X		X			X	X	X	X									

**X = Required element      O = Optional element**

<sup>1</sup> For BMPs with riser pipes/outlets, use a measuring tape to illustrate the available ponding depth (see Figure 1 on the previous page).

<sup>2</sup> When photographing hydromodification orifices, include a tape measure in the photo as a size reference.

<sup>3</sup> Check Dams may be included in linear BMPs with steep slopes.