



ENGINEERING AND ENVIRONMENTAL SERVICES

Stormwater Division

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DISCONNECTED IMPERVIOUS SURFACE AREA DESIGN SUMMARY

Stormwater Management Construction Plan Review:

A complete Stormwater management construction plan submittal includes a design summary for each Stormwater BMP, design calculations, plans and specifications showing BMP, inlet and outlet structure details.

I. PROJECT INFORMATION

For projects with multiple SCMs, specify which SCM this worksheet applies to:

Project Name: _____ Phase: _____

PIN: _____ Case #: _____

Legal Name of Owner: _____

Owner Contact: _____ Phone: _____

Owner Address: _____

Design Contact Person: _____ Phone: _____

II. GENERAL MINIMUM DESIGN CRITERIA FOR ALL SCMs *(Revised 1/3/2017)*

GENERAL MDC 1: SIZING

Design storm depth	ft	<i>(One year, 24 hour storm event)</i>
Design runoff volume	ft ³	<i>(Minimum calculation of entire drainage area)</i>

GENERAL MDC 2: CONTAMINATED SOILS

Contaminated soils within footprint?	Y / N	<i>(Brownfield location?)</i>
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GENERAL MDC 3: SIDE SLOPES

Maximum vegetated side slopes	: 1	<i>(Maximum 3:1 vegetated slopes)</i>
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GENERAL MDC 4: EROSION PROTECTION

10 year storm outlet discharge	cfs	<i>(Must be non-erosive)</i>
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GENERAL MDC 5: EXCESS FLOW

Emergency outlet elevation	ft
Emergency spillway width	ft
Emergency spillway side slopes	: 1
Emergency spillway slope	%

GENERAL MDC 6: DEWATERING

Dewatering method	
Drawdown orifice size	in

(If applicable)

GENERAL MDC 7: CLEAN OUT AFTER CONSTRUCTION

Every SCM impacted by sediment and erosion control during the construction phase shall be cleaned out and converted to its approved design state
In addition, installed SCM's should be inspected and cleaned after each heavy rainfall

GENERAL MDC 8: MAINTENANCE ACCESS

Maintenance access width	ft	<i>(Minimum width of 25 feet)</i>
Side slopes within maintenance access	: 1	<i>(Maximum 3:1)</i>
Access extend to public right of way	Y / N	

GENERAL MDC 9: EASEMENTS

All SCMs and associated maintenance accesses located in permanent recorded easement? (shown and labeled in easement)	Y / N	<i>(Does not include single family residential lots)</i>
Maintenance access width around SCM	ft	<i>(Minimum width of 10 feet)</i>

GENERAL MDC 10: SINGLE FAMILY RESIDENTIAL LOTS

Plats for residential lots that contain an SCM shall include: (a) The specific location of the SCM on the lot (b) A typical detail for the SCM to be used (c) A note that the SCM on the property has been required to meet stormwater regulations and that the property owner may be subject to enforcement actions if the SCM is removed, relocated, or altered without prior approval

GENERAL MDC 11: OPERATION AND MAINTENANCE AGREEMENT

Acknowledgement that the association shall continuously operate and maintain the stormwater control and management facilities	<input type="checkbox"/>
Establishment of an escrow account which can be spent solely for sediment removal, structural, biological or vegetative replacement, major repair, or construction of the SCM	<input type="checkbox"/>

(Check box when completed)

GENERAL MDC 12: OPERATION AND MAINTENANCE PLAN

Specify all operation and maintenance work necessary for the function of all SCM components	<input type="checkbox"/>
Specify methods to be used to maintain or restore the SCMs to design specifications in the event of failure	<input type="checkbox"/>
O&M plan shall be signed by the owner and notarized	<input type="checkbox"/>

(Check box when completed)

III. DISCONNECTED IMPERVIOUS SURFACE MINIMUM DESIGN CRITERIA *(Revised 1/3/2017)*

DIS MDC 1: VEGETATED RECEIVING AREA FOR DISCONNECTED ROOFS

Roof area draining to each downspout	SF	<i>(Not to exceed 500 SF per downspout)</i>
Length of vegetated receiving area	ft	<i>(Minimum of 0.04 x roof area draining to it)</i>
Width of vegetated receiving area	ft	<i>(1/2 length of vegetated area)</i>

DIS MDC 2: VEGETATED RECEIVING AREA FOR DISCONNECTED PAVEMENT

Length of pavement draining to VRA	ft	<i>(Maximum of 100 feet in flow direction)</i>
Length of vegetated receiving area	ft	<i>(Minimum of 10 feet in flow direction)</i>

DIS MDC 3: VEGETATED RECEIVING AREA SPECIFICATIONS

Slope of vegetated receiving area	%	<i>(Must be uniform and 8 percent or less)</i>
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IV. REQUIRED ITEMS CHECKLIST

The following checklist outlines design requirements. Initial in the space provided to indicate the following design requirements have been met and supporting documentation is attached.

Applicant's Initials

For Disconnected Roofs:

- _____ a. A maximum of 500 SF of roof shall drain to each disconnected downspout.
- _____ b. The receiving vegetated area shall be rectangular shape. The length of the rectangle in the direction of flow shall be a minimum of 0.04 times the area of the roof that drains to it. The width of the rectangle shall be one-half the length of the rectangle.
- _____ c. The downspout shall discharge in the center of the upslope end of the vegetated receiving area.
- _____ d. The downspout shall be equipped with a splash pad.
- _____ e. The vegetated receiving area shall not include any built-upon area.

For Disconnected Pavement:

- _____ a. The pavement draining to the vegetated receiving area shall be a maximum of 100 feet in length in direction of flow. This is not allowed to be increased.
- _____ b. The vegetated receiving area shall be a minimum of 10 feet in length in the direction of flow. Additional length may be added to additional credit per the SCM Credit Document.
- _____ c. A stone verge, concrete edge or other transition shall be provided between the edge of the pavement and the vegetated area.
- _____ d. The vegetated receiving area shall not contain any built-upon area (except incidental areas such as utility boxes, signs and lamp posts).

Disconnected Roofs and Disconnected Pavement:

- _____ a. Vegetated receiving areas shall have a uniform transverse slope of 8 percent of less, except in Hydrologic Soil Group A soils where slope shall be 15 percent of less.
- _____ b. The pH, compaction and other attributes of the first eight inches of soil shall be adjusted if necessary, to promote plant establishment and growth
- _____ c. The vegetated receiving area shall be planted with a non-clumping, deep-rooted grass species.
- _____ d. Soils shall be stabilized with temporary means such as straw or matting until permanent vegetative cover has been established.

NOTE: Executed Stormwater Facility Operations and Maintenance Permit Agreement and payment of surety are required prior to Stormwater Permit issuance.