

MANAGED RELEASE CONCEPT (MRC) DESIGN SUMMARY

Complete One Design Summary Sheet for Each BMP Designed for MRC

GENERAL INFORMATION

Applicant Name: _____ Project Name: _____
 Applicant Address: _____ Municipality: _____
 City, State, Zip: _____ County: _____
 Permit Type: NPDES PAG-02 NPDES IP ESCGP ESP

	Pre-Development	Post-Development	Change
Impervious Area (acres):			

MRC BMP INFORMATION

MRC BMP Type: _____ Stormwater BMP Manual Section: _____

Will the BMP Include Vegetation? Yes No

If Yes, Identify Proposed Vegetation: _____

For Non-Vegetated BMPs Will There Be Pre- or Post-Treatment? Yes (Pre-) Yes (Post-) No

If Yes, Identify Proposed Pre- or Post-Treatment: _____

Name of Surface Water to Receive MRC BMP Discharges: _____

Designated Use of Surface Water: _____ Existing Use of Surface Water (if different): _____

Is the Surface Water Impaired? Yes No

If Yes, Identify Cause(s): _____

Will the BMP have an impermeable liner? Yes No

If Yes, explain why a liner is proposed: _____

BMP Media Description: _____

Are Any Deviations from MRC Design Standards Proposed? Yes No

If Yes, Identify Deviations: _____

MRC BMP DESIGN VALUES AND STANDARDS

Parameter	Design Value	Design Standard
Actual Contributing Impervious Area to BMP (acres)		
Equivalent Contributing Impervious Area to BMP (acres)		
Total Drainage Area to BMP (acres)		
MRC BMP Release Rate (cfs)		No greater than 0.01 cfs / acre of equivalent contributing impervious
Underdrain Outflow Rate During 1.2-Inch/2-Hour Storm (cfs)		<= MRC BMP Release Rate (cfs)
Maximum Storm Event Routed to MRC BMP		

MRC BMP Design Summary
Revised, August 25, 2020

Parameter	Design Value	Design Standard
BMP Footprint Area (ft ²)		
Bottom BMP Elevation (Native Soils) (ft)		
2-Yr/24-Hr Storm Ponding Depth (ft)		1 ft (recommended) (2 ft max)
Maximum Ponding Depth (ft)		4 ft (max)
Overflow Bypass Elevation (ft)		
Media Depth (ft)		2 ft (min) – 4 ft (max)
Media Void Space (%)		
Internal Water Storage (IWS) Depth (ft)		1 ft recommended
Top of IWS Elevation (ft)		
Underdrain Pipe Diameter (in)		
Underdrain Orifice Diameter (in)		
Underdrain Outlet Elevation (ft)		
IWS Available for Routing (%)		50% max
Separation Distance (Groundwater) (ft)		1 ft (min) (2 ft recommended)
Infiltration Rate (in/hr)		
Volume of Overflow During 1.2-Inch/2-Hour Storm (cf)		0 (No overflow allowed)
1-Yr/24-Hr Pre -Development Peak Rate (cfs)		
2-Yr/24-Hr Post -Development Peak Rate (cfs)		1-Yr/24-Hr Pre-Development Peak Rate (or per approved Act 167 Plan)
10-Yr/24-Hr Post -Development Peak Rate (cfs)		10-Yr/24-Hr Pre-Development Peak Rate
50-Yr/24-Hr Post -Development Peak Rate (cfs)		50-Yr/24-Hr Pre-Development Peak Rate
100-Yr/24-Hr Post -Development Peak Rate (cfs)		100-Yr/24-Hr Pre-Development Peak Rate
Total 2-Yr/24-Hr Runoff Volume Managed by BMP (cf)		
Ponding Time @ 2-Yr/24-Hr Storm (hrs)		72 hrs (surface), 7 days (underground)
Ponding Time @ 10-Yr/24-Hr Storm (hrs)		72 hrs (surface), 7 days (underground)
Ponding Time @ 50-Yr/24-Hr Storm (hrs)		72 hrs (surface), 7 days (underground)
Ponding Time @ 100-Yr/24-Hr Storm (hrs)		72 hrs (surface), 7 days (underground)

Licensed P.E. Name

Licensed P.E. Signature

License No.

Date

*Licensed
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