

DESIGN ASSESSMENT CHECKLIST: BIORETENTION SYSTEMS			
GENERAL INFORMATION			
Site ID			
Asset ID(s)			
Bioretention system location(s) and co-		Drawing reference(s)	
Date of assessment		Specification	
Primary function of bioretention system	Treatment		

CHECK	MDR	SUMMARY DETAILS'	ACCEPTABLE (Y/N)	COMMENTS/ REMEDIAL ACTIONS
DIMENSIONS (SECTION 18.2)				
Length (m)				
Width (m)				
Top surface area (m ²)				
Side slopes (1 in ?)				
Depth (m)				
Freeboard (m)				
Longitudinal slope (1 in ?)				
INFLOWS (SECTION 18.8.1)				
Provide a description of the contributing catchment land use and its size (m ²)				
Does the design include: <ul style="list-style-type: none"> a suitable flow spreading device appropriate drops from the runoff surface into the bioretention system appropriate energy dissipation? 				
OUTFALL ARRANGEMENTS (SECTION 18.8.2)				
Provide details of any flow control systems, overflow arrangements (for events greater than the treatment capacity) and limiting discharge rate from bioretention system				
Is the bioretention system designed to allow infiltration? If yes, attach infiltration assessment				
Is a geomembrane required to prevent infiltration? If yes, give reason				
Depth to maximum likely groundwater level (m)				
WATER QUALITY TREATMENT (SECTION 18.5)				
For the 1-year 30-minute event or water quality treatment volume confirm: <ul style="list-style-type: none"> Maximum depth of surface ponding is 150 mm Surface ponding is fully drained down in 40-48h Depth of filter bed (m) 				

CHECK	MDR	SUMMARY DETAILS ¹	ACCEPTABLE (Y/N)	COMMENTS/ REMEDIAL ACTIONS
STORAGE (SECTION 18.4)				
Design return period(s) (years)				
Maximum design water depth(s) and level(s)				
Maximum design storage volume(s) (m ³)				
LANDSCAPE/BIODIVERSITY (SECTIONS 18.6, 18.7 AND 18.10)				
Does the proposed planting have potential to create biodiverse habitats?				
Have native plant species been used? (Note: if ornamental species are proposed, give reasons, and describe measures that prevent their migration to natural water bodies)				
Is the proposed planting appropriate to the location, visually, relative to gradient, water depths etc and with respect to access and maintenance?				
Where relevant, confirm that planting design does not adversely impact highway visibility and safety requirements (check with highway authority)				
Is the proposed topsoil profile suitable to sustain the proposed plant species and as permeable as the filter bed?				
CRITICAL MATERIALS AND PRODUCT SPECIFICATIONS (SECTION 18.9)				
Geomembrane				
Geotextile (non-woven)				
Mulch layer				
Filter medium				
Transition layer				
Drainage layer				
Other (including proprietary systems):				
CONSTRUCTABILITY (SECTION 18.11)				
Are there any identifiable construction risks? If yes, state and confirm acceptable risk management measures are proposed				
MAINTAINABILITY (SECTION 18.12)				
Confirm that access for maintenance is acceptable and summarise details				
Are there specific features that are likely to pose maintenance difficulties? If yes, identify mitigation measures required				
BIORETENTION DESIGN ACCEPTABILITY		SUMMARY DETAILS INCLUDING ANY CHANGES REQUIRED	ACCEPTABLE (Y/N)	DATE CHANGES MADE

SuDS BIORETENTION SYSTEM CHECKLIST

Acceptable: Minor changes required: Major changes required/redesign:			
--	--	--	--

Note

1 If there is an MDR (as indicated) confirm whether or not this is met and provide details of any variations.