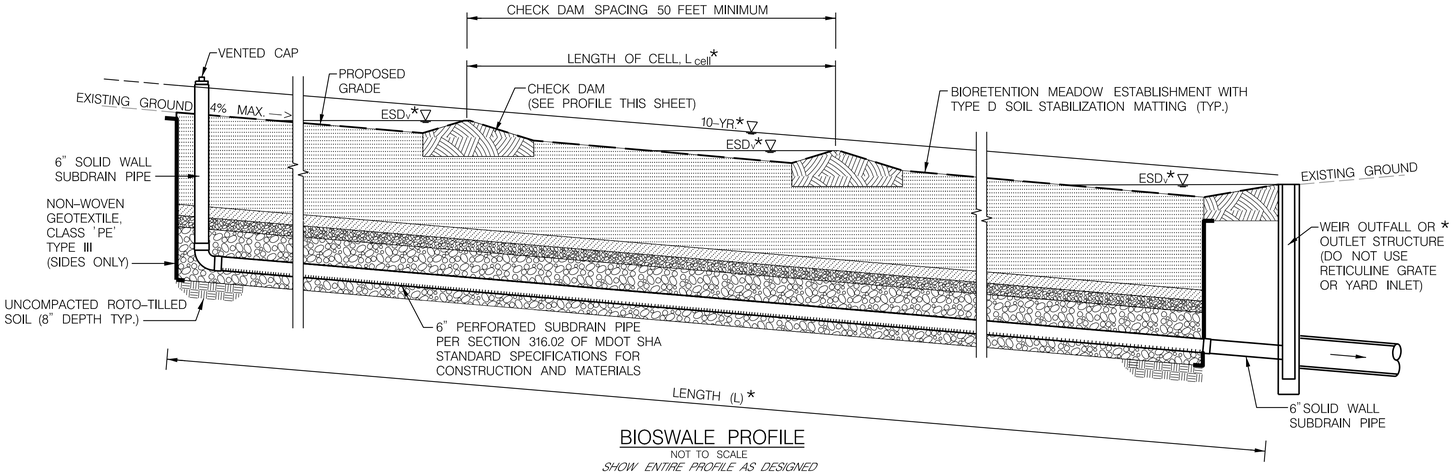
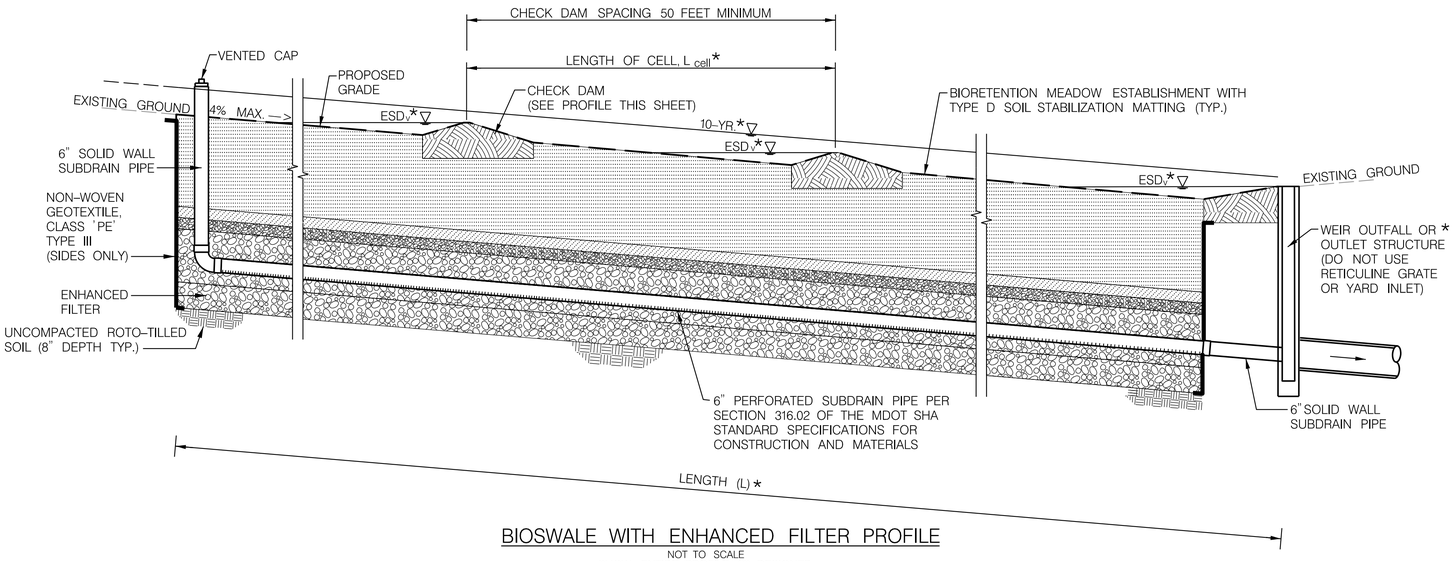


BIOSWALE PROFILE

NOT TO SCALE

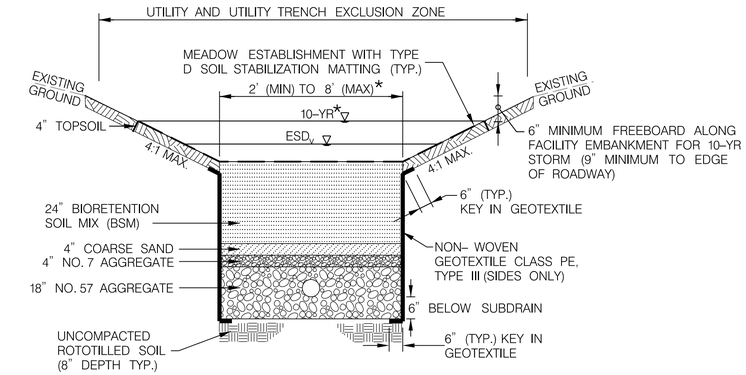
SHOW ENTIRE PROFILE AS DESIGNED



BIOSWALE WITH ENHANCED FILTER PROFILE

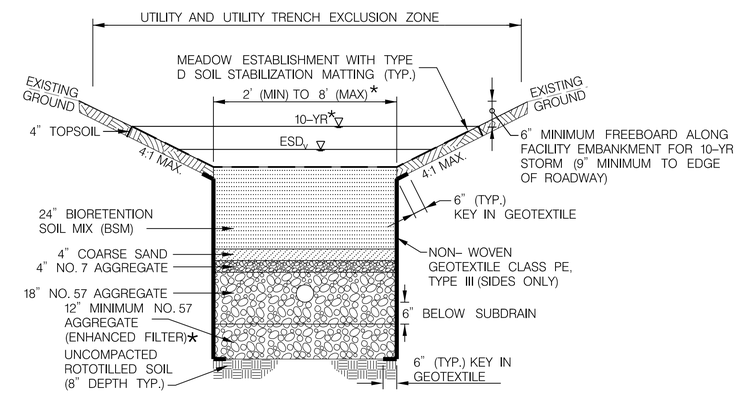
NOT TO SCALE

SHOW ENTIRE PROFILE AS DESIGNED



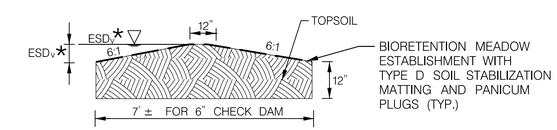
BIOSWALE TYPICAL SECTION

NOT TO SCALE



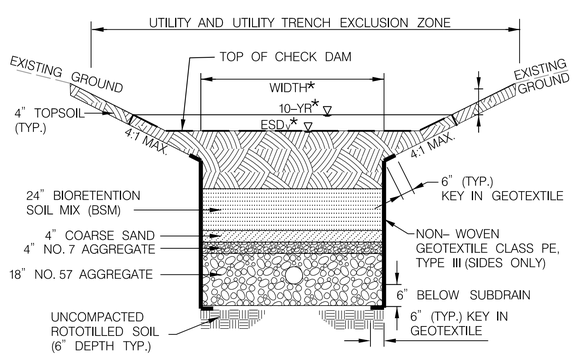
BIOSWALE TYPICAL SECTION WITH ENHANCED FILTER

NOT TO SCALE



CHECK DAM PROFILE

NOT TO SCALE



BIOSWALE TYPICAL SECTION AT CHECK DAM

NOT TO SCALE

DESIGNER NOTES:

1. REFER TO SECTION 316 OF THE MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS FOR MORE INFORMATION.
2. INCLUDE SWMFAC NUMBER ON SWM SHEETS.
3. DESIGN SWALES TO CONVEY 10-YR FLOW AT NON-EROSIVE VELOCITIES (<5 FPS).
4. MAXIMUM CHECK DAM HEIGHT IS 12 INCHES BEYOND THE CLEAR ZONE. WITHIN THE CLEAR ZONE CHECK DAM HEIGHT IS LIMITED TO 6 INCHES. CHECK DAM HEIGHTS WITHIN THE CLEAR ZONE MAY INCREASE TO 12 INCHES WITH DESIGNER VERIFICATION THAT THE CHECK DAM ISN'T A ROADSIDE HAZARD.
5. SIDE SLOPES NO STEEPER THAN 4:1.
6. MAXIMUM LONGITUDINAL SLOPE ALONG CHECK DAM IS 6:1 WITHIN THE CLEAR ZONE AND 4:1 BEYOND THE CLEAR ZONE.
7. SPACE CHECK DAMS NO CLOSER THAN 50 FT APART.
8. BOTTOM WIDTH 2-8 FT.
9. CONNECT SUBDRAIN TO OUTLET STRUCTURE OR OUTFALL. PROVIDE RODENT CONTROL SCREEN WHEN SUBDRAIN DAYLIGHTS TO OUTFALL.
10. UTILITY (INCLUDING GUY-WIRES) AND UTILITY TRENCH EXCLUSION ZONE EXTENDS A MINIMUM OF 10 FEET FROM THE BOTTOM OF MEDIA. 10 FEET FROM TOP OF EMBANKMENT IS PREFERABLE.
11. REFER TO BIOSWALE WELL DRAINING SOILS' DESIGN GUIDANCE DRAWING FOR EXAMPLE OF WEIR OUTFALL.
12. ENHANCED FILTER SHOULD EXTEND AT LEAST 12" MINIMUM BENEATH THE SUBDRAIN PER PRACTICE M-9 IN THE MARYLAND STORMWATER DESIGN MANUAL.
13. SEE LANDSCAPE PLANS FOR PLANTINGS. THE TYPICAL COVER IS BIORETENTION MEADOW ESTABLISHMENT AND TYPE 'D' SOIL STABLIZATION MATTING.
14. 9" MIN. FREEBOARD (AS MEASURED FROM EDGE OF SHOULDER FOR 10 YR. STORM).
15. ALL SUBDRAINS, CLEANOUTS, OBSERVATION WELLS AND OUTFALLS SHOULD BE SHOWN ON PLAN VIEW DRAWINGS.

*DETERMINE BY DESIGN

MARYLAND DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY ADMINISTRATION

DESIGN GUIDANCE DRAWING

M-8 BIOSWALE WITH CHECK DAMS POORLY DRAINING SOILS

REVISION DATE: JUNE 1, 2022

*** NOTE: THIS DRAWING IS ONLY TO BE USED AS A DESIGN GUIDE AND IS NOT A SUBSTITUTE FOR PROJECT-SPECIFIC PROFILES AND SECTIONS IN CONTRACT DOCUMENTS***