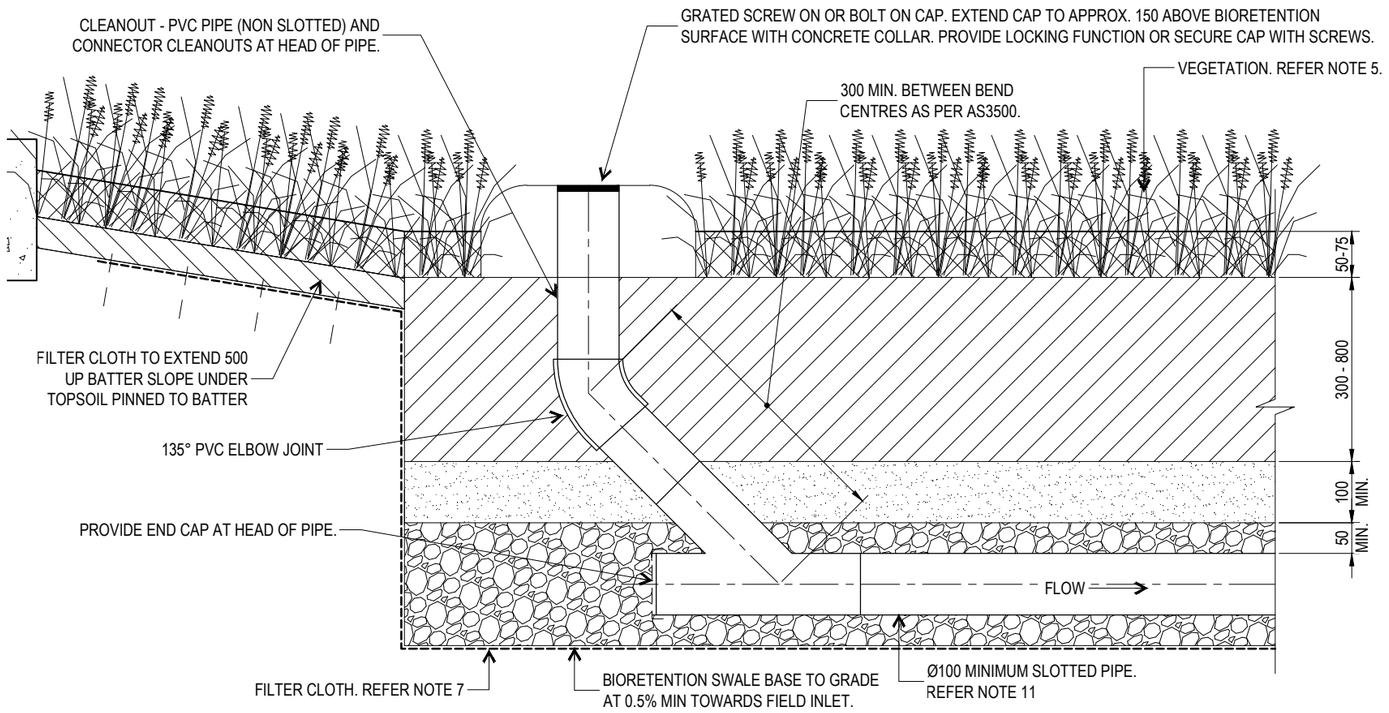
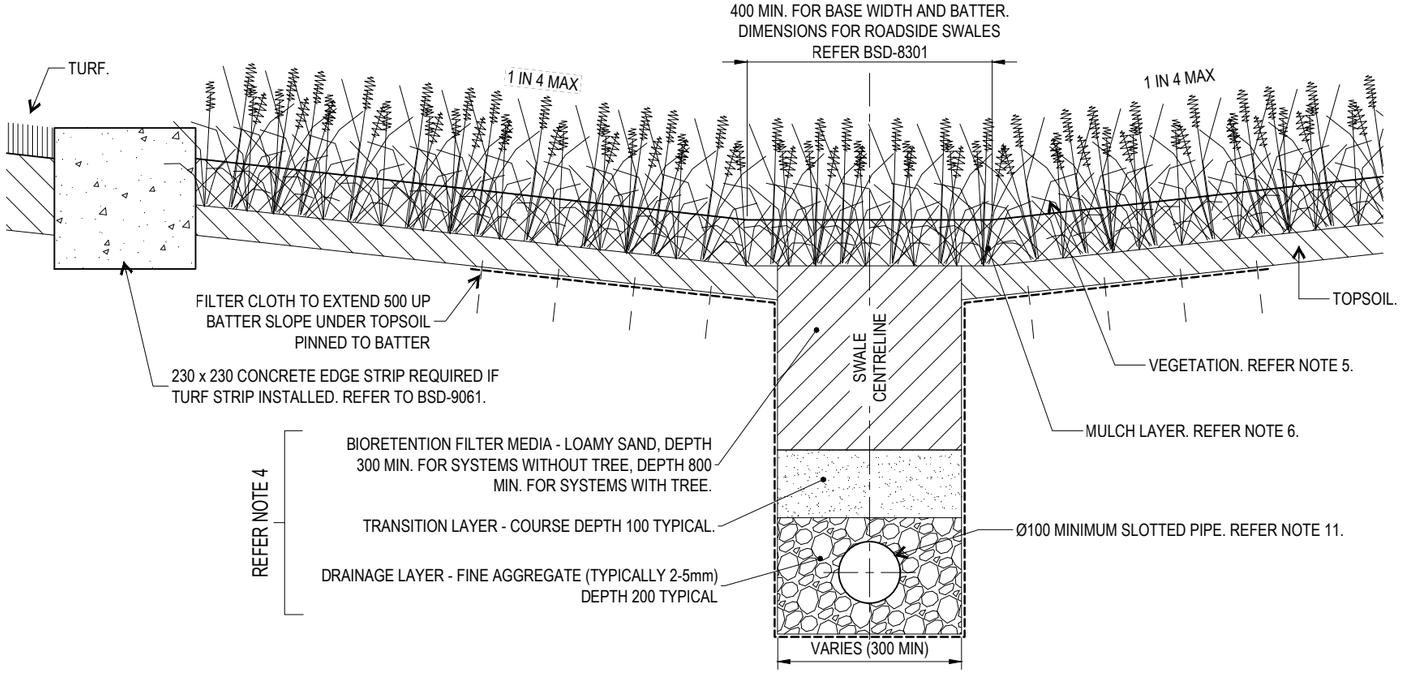


STA BIORETENTION SWALE - UNDERDRAIN LONGITUDINAL SECTION



STA BIORETENTION SWALE - UNDERDRAIN SECTION

BIORETENTION SWALE NOTES:

1. DESIGN: STORMWATER TREATMENT ASSET (STA) BIORETENTION SYSTEM TO BE DESIGNED IN ACCORDANCE WITH "BIORETENTION TECHNICAL DESIGN GUIDELINES" (WATER BY DESIGN).
2. CONSTRUCTION: STORMWATER TREATMENT ASSET (STA) BIORETENTION SYSTEM TO BE CONSTRUCTED IN ACCORDANCE WITH "CONSTRUCTION AND ESTABLISHMENT GUIDELINES" (WATER BY DESIGN).
3. BIORETENTION SWALE MAY BE USED IN THE CENTRE MEDIAN AND IN THE FOOTPATH AT PARK FRONTAGES. BIORETENTION SWALES SHALL NOT BE USED IN THE FOOTPATH AT RESIDENTIAL FRONTAGES.
4. FOR BIORETENTION SWALE FIELD INLET DETAILS REFER TO BSD-8308, FOR VERGE SWALES AND MEDIAN SWALES REFER TO BSD-8308.
5. THE DEPTH VELOCITY PRODUCT (d_S . V_{AVG}) IN THE SWALE SHALL BE LIMITED IN ACCORDANCE WITH QUDM SECTION 7.4.2 GENERAL REQUIREMENTS FOR PEDESTRIAN SAFETY (TYPICALLY 0.6m^2/s, OR 0.4m^2/s IN HIGH RISK AREAS).
6. BIORETENTION FILTER MEDIA, TRANSITION LAYER AND DRAINAGE LAYER IN ACCORDANCE WITH THE "GUIDELINES FOR SOIL MEDIA IN BIORETENTION SYSTEMS", FACILITY FOR ADVANCING WATER BIORETENTION (FAWB).
7. VEGETATION: PLANT SPECIES, TO BE DETERMINED ON A PROJECT BY PROJECT BASIS. PLANT SPECIFICATION AND DENSITY SHALL BE IN ACCORDANCE WITH "BIORETENTION TECHNICAL DESIGN GUIDELINES" (WATER BY DESIGN) AND BRISBANE CITY COUNCIL'S INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY. TREE SPECIES TO BE SELECTED AS PER THE CENTRES DETAIL DESIGN MANUAL AND ALSO CONSIDERING THEIR SUITABILITY FOR WET AND DRY CONDITIONS. VEGETATION TO BE INSTALLED ON 300 MINIMUM TOPSOIL LAYER.
8. MULCH: 50-75mm MULCH LAYER TO BE ORGANIC AND FRIABLE, SUCH AS SUGARCANE. USE JUTE MESH OR SIMILAR BIODEGRADABLE NETTING OVER. SIDES OF MESH TO BE BURIED IN 300mm TRENCH. EACH JOIN IS TO BE OVER LAPPED BY 100mm. 300mm BIODEGRADABLE PEGS ARE TO BE USED AND INSTALLED AT 500mm CENTRES OR AS PER MANUFACTURERS SPECIFICATION.
9. FILTER CLOTH: NON-WOVEN GEOTEXTILE. FILTER CLOTH NOT TO BE PLACED BETWEEN ANY FILTER LAYERS. IMPERVIOUS LINER MAY BE REQUIRED ADJACENT TO ROADS AND MAY ALSO BE REQUIRED SUBJECT TO SOIL TESTING REQUIREMENTS IN ACCORDANCE WITH THE "BIORETENTION TECHNICAL DESIGN GUIDELINES" (WATER BY DESIGN).
10. EROSION CONTROL AND PUBLIC SAFETY RISKS NEED TO BE CONSIDERED AND MANAGED. VEGETATED BATTERS SHOULD BE NO STEEPER THAN 1V:4H IF USED IN THE STREETSCAPE.
11. UNDERDRAIN: SLOTTED RIGID PIPE (UPVC, HDPE, OR SIMILAR TO AS 2439.1) OR APPROVED EQUIVALENT, 0.5% MINIMUM GRADE. 2-3mm SLOTS, DIAMETER TYPICALLY 100 TO 150mm. PIPE JOINS SHALL BE SEALED INTO PITS USING GROUTS OR OTHER APPROVED WATERTIGHT SEAL. 50mm MIN DRAINAGE LAYER (FINE AGGREGATE) COVER OVER SLOTTED PIPE.
12. STREET FURNITURE AND LAYOUT TO BE DETERMINED ON A PROJECT BY PROJECT BASIS.
13. ALL DIMENSIONS IN MILLIMETRES (U.N.O.).

VERIFY LOCATION OF SERVICES PRIOR TO EXCAVATION.

BRISBANE CITY COUNCIL STANDARD DRAWING

STORMWATER TREATMENT ASSET (STA)
BIORETENTION SWALE
UNDERDRAIN DETAILS

PUBLISH DATE	JUN 2023
SCALE	NOT TO SCALE
DRAWING NUMBER	BSD-8335
ORIGINAL SIZE	A3
REVISION	A