DRAWING NOT TO BE USED FOR CONSTRUCTION

IMBRIUM
PROPOSAL
DRAWING

SEQUENCE OF CONSTRUCTION OF BIORETENTION BASIN WITH SORBTIVE MEDIA

Bioretention Basin preparation
1. Remove all soil and accumulated sediment, and excavate Bioretention Area to proposed depth per drawings. During all construction activities, use relatively light, tracked equipment to avoid compaction of the basin floor and Bioretention Area. After final grading is completed, deeply till the basin floor with rotary tillers or disc harrows to provide a well-aerated, highly porous surface texture.
2. If applicable, install the infiltration chambers, piping, manifolds, drains, cleanouts, and infiltration stone as specified on the plan.
3. Line all sides of the Bioretention Basin with a non-woven geotextile filter fabric.

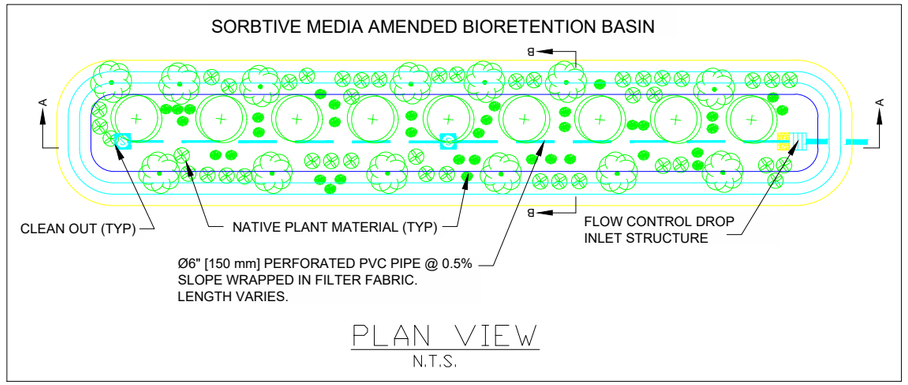
Specified Sorbtive MEDIA Amended Bioretention soil (sand, organic, Sorbtive Media)
4. Fill Bioretention Basin with specified Sorbtive MEDIA Amended Bioretention soil (sand, organic, Sorbtive Media) as shown in the plans and detailed in the specifications.
5. Install mulch or stone layer as called out in the design.
6. Install vegetation and ground cover specified in the planting plan for Bioretention Area.
7. Place sod, erosion control fabric, or non erosive lining in the inlet channel.
8. Upon stabilization of all disturbed areas, remove all sediment controls, unblock curb openings, and provide drainage to the Bioretention Areas.

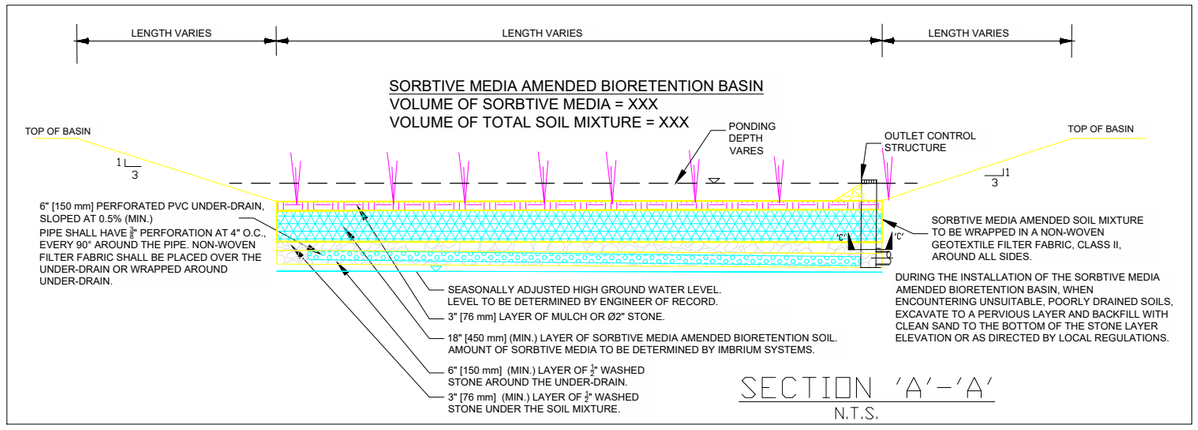
BIORETENTION AREA PLANTING SPECIFICATION

1. Sorbtive MEDIA Amended Bioretention Soil
The Bioretention Basin shall contain a soil mixture amended with Sorbtive Media specified by the Engineer of Record. The Sorbtive Media Amended Bioretention Soil varies per project. A typical Sorbtive MEDIA Amended Bioretention Soil mixture by volume is 5 to 15% Sorbtive Media, 65 to 85% sand, and 10 to 20% organic.
2. Mulch
A natural hardwood shredded mulch layer 3-inches (75 mm) in depth, uniform in color, and free of foreign material including plant material, without dyes shall be provided on top of the Bioretention Basin, or 1-2 inch diameter stone as called out in the design.
3. Sand
The sand used to produce the Sorbtive MEDIA Amended Bioretention soil mixture shall be ASTM C-33 Concrete Sand or equivalent and free of deleterious material.
4. Compaction
Soil shall be placed in lifts less than 12 inches (300 mm) and lightly compacted (minimal compaction effort) by tamping or rolled with a hand-operated landscape roller.

Bioretention Area Planting Specifications:
1. Plantings are site specific. Native plant vegetation to be specified by the Engineer of Record.
2. Root stock of the plant material shall be kept moist during transport from the source to the job site and until planted.
3. Walls of planting pit shall be dug so that they are vertical.
4. The diameter of the planting pit must be a minimum of six inches (6") larger than the diameter of the root ball.
5. The planting pit shall be deep enough to allow 1/8 of the overall dimension of the root ball to be above grade. Loose soil at the bottom of the pit shall be tamped by hand.
6. The plant shall be removed from the container and placed in the planting pit by lifting and carrying the plant by its' ball (never lift by branches or trunk).
7. Set the plant straight and in the center of the pit so that approximately 1/8 of the diameter of the root ball is above the final grade.
8. Backfill planting pit with existing Bioretention Media Mixture soil.
9. Make sure plant remains straight during backfilling procedure.

Maintenance/Inspection Guidelines:
1. Never cover the top of the root ball with Bioretention Media Mixture soil. Mound Bioretention Media Mixture soil around the exposed ball.
2. Trees shall be braced by using 2" by 2" white oak stakes. Stakes shall be placed parallel to walkways and buildings. Stakes are to be equally spaced on the outside of the tree root ball. Utilizing hose and wire to protect the tree, the tree is braced to the stakes.
3. Because of the high levels of nutrients transported in the stormwater runoff to be treated, Bioretention basin plants should not require chemical fertilization.





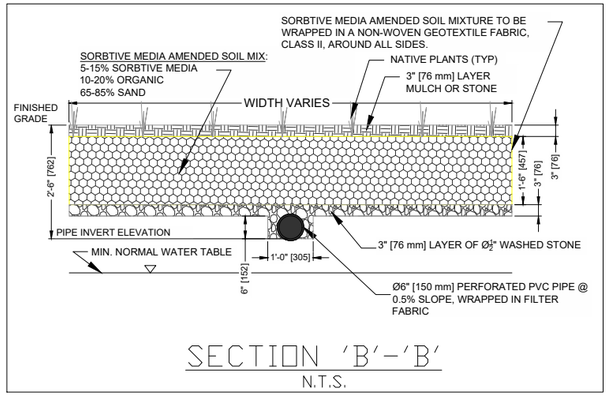
SITE SPECIFIC DATA REQUIREMENTS	
SORBTIVE MEDIA AMENDED BIORETENTION BASIN	
STRUCTURE ID	*
WATER QUALITY FLOW RATE (L/s)	XXX
PEAK FLOW RATE (L/s)	XXX
VOLUME OF SORBTIVE MEDIA REQUIRED (CF)	XXX
ESTIMATED BED LIFE (yrs)	XXX
SORBTIVE MEDIA GRADATION	7X14
ESTIMATED DISSOLVED P TREATMENT (%)	XXX

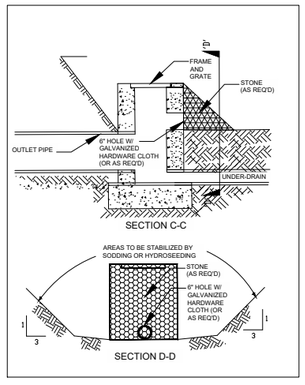
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

* PER ENGINEER OF RECORD

INFORMATION TO BE SUPPLIED BY ENGINEER OF RECORD

FOR SITE SPECIFIC DRAWINGS PLEASE CONTACT YOUR LOCAL SORBTIVE MEDIA REPRESENTATIVE. SITE SPECIFIC DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME. SOME FIELD REVISIONS TO THE SYSTEM LOCATION OR CONNECTION PIPING MAY BE NECESSARY BASED ON AVAILABLE SPACE OR SITE CONFIGURATION REVISIONS. ELEVATIONS SHOULD BE MAINTAINED EXCEPT WHERE NOTED ON BYPASS STRUCTURE.





MATERIAL LIST

COUNT	DESCRIPTION	PROVIDED BY
XXX m³	SORBTIVE MEDIA *	IMBRIUM
XXX m³	SAND	OTHERS
XXX m³	ORGANIC	OTHERS
XXX m³	½" WASHED STONE	OTHERS
XXX m	Ø6" PERFORATED SCH 40 PVC PIPE	OTHERS
XXX	FLOW CONTROL STRUCTURE	OTHERS
XXX m³	MULCH OR STONE	OTHERS
XXX m²	NON-WOVEN GEOTEXTILE FABRIC	OTHERS

* 0.858 m³ (30.3 CF) = 1 SUPERSACK (2,000 LBS) SORBTIVE MEDIA

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MARK	DATE	REVISION DESCRIPTION	BY

SORBTIVE MEDIA AMENDED BIORETENTION BASIN

Sorbtive Media

Scale = 1:40

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DATE:	########
DESIGNED: BSF	DRAWN: BSF
CHECKED: SP	APPROVED: BSF
PROJECT No.:	#####
SHEET:	1 OF 1