FILTRATION RAIN GARDEN NOTES

DESIGN NOTES:

1. PLANT WITH PLANTS PER COBG ST-13.13. NATIVE PLANTS ARE PREFERRED, BECAUSE NON-NATIVE AND INVASIVE SPECIES CAN MOVE DOWNSTREAM AND DAMAGE HABITAT. IF NON-NATIVES ARE CHOSEN, BE SURE THAT THEY WILL NOT DAMAGE DOWNSTREAM HABITAT.

CONSTRUCTION NOTES:

2. BUILD AND VEGETATE RAIN GARDEN AS EARLY AS POSSIBLE TO ESTABLISH PLANTINGS BEFORE DIRECTING STORMWATER RUNOFF TO IT OR DIVERT STORMWATER AROUND FACILITY. PREFERABLY, THIS PERIOD WOULD LAST A MINIMUM OF 3 MONTHS.
3. INFILTRATION AREAS (THE AREA OF THE RAIN GARDEN AS DEFINED BY THE TOP ELEVATION OF THE FACILITY) SHALL BE FENCED OFF FROM THE FIRST DAY OF EARTH MOVING UNTIL PROJECT COMPLETION TO PREVENT COMPACTION OF THE SUBGRADE, DIRT TRACKING ONTO ANY LAYER OF THE FACILITY AND STOCKPILING OF CONSTRUCTION MATERIALS THAT MAY CLOG THE SURFACE.
4. DURING EXCAVATION OF NATIVE SOILS TO THE BOTTOM OF THE FACILITY, RAINFALL MAY CAUSE FINES TO CLOG THE SURFACE OF THE FACILITY. IF THE NATIVE SOIL HAS BEEN EXPOSED TO RAINFALL, HAND RAKE THE SURFACE TO A DEPTH OF 3" TO RESTORE INFILTRATION CAPACITY.
5. NOTIFY INSPECTOR 24 HOURS IN ADVANCE OF CONSTRUCTING THIS FACILITY.
6. DURING AREA DRAIN INSTALLATION, DISTURB NATIVE SOILS AS LITTLE AS POSSIBLE.

AMENDED PLANTING SOIL MIX SPECIFICATIONS

1. AMENDED PLANTING SOIL MIX SHALL HAVE THE FOLLOWING CHARACTERISTICS:
   a. 60% LOAMY SAND AND 40% COMPOST.
   b. ORGANIC CONTENT MATTER FROM 5-8% BY WEIGHT
   c. CATION EXCHANGE CAPACITY (CEC) GREATER THAN OR EQUAL TO 5 MILLIEQUIVALENTS/100 GRAMS OF DRY SOIL
   d. 2-5% MINERAL FINES CONTENT
   e.

US STANDARD SIEVE SIZE	PERCENT PASSING
3/8"	100
#4	95-100
#10	75-90
#40	25-40
#100	4-10
#200	2-5

   MINIMUM LONG-TERM HYDRAULIC CONDUCTIVITY OF 1 INCH/HOUR PER ASTM D2434 AT 85% COMPACTION PER ASTM D 1557.
   f. MAXIMUM IMMEDIATE HYDRAULIC CONDUCTIVITY OF 12 INCHES/HOUR.
2. AMENDED PLANTING SOIL MIX MAY BE CREATED BY TESTING ON-SITE NATIVE SOILS AND MIXING MATERIALS FROM OFF-SITE AS NEEDED TO ACHIEVE THE CHARACTERISTICS DESCRIBED IN NOTE 1 ABOVE.
3. AMENDED PLANTING SOIL MIX SHOULD BE UNIFORMLY MIXED WITH A SOIL MIXER.
4. PLACEMENT OF AMENDED PLANTING SOIL MIX SHALL OCCUR PER THE FOLLOWING GUIDELINES:
   a. PLACE SOIL IN 12" LIFTS TO A DEPTH OF 24" TOTAL (AFTER COMPACTION) WITH MACHINERY ADJACENT STORMWATER QUALITY FACILITY.
   b. DO NOT PLACE SOILS IF SATURATED.
   c. COMPACT EACH LIFT TO 85% COMPACTION WITH WATER UNTIL SATURATED. DO NOT COMPACT WITH HEAVY MACHINERY OR WITH VIBRATORY COMPACTION. BOOT PACKING THE LIFTS IS ACCEPTABLE.

FILTRATION RAIN GARDEN WITHOUT IMPERMEABLE LINER (2)

STANDARD DETAIL

THE CITY OF BATTLE GROUND

CITY OF BATTLE GROUND
APPROVED

Mark Henry 06/11/2018

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:
1	01/23/17	KDU	KDU
2	02/09/17	CAS	KDU

ST-13.09