DRAINAGE & WASTEWATER CONTROL PLAN REQUIREMENTS

THIS PLAN SHALL SHOW A SITE PLAN INCLUDING ALL DRAINAGE FEATURES (HARD SURFACES, BMPS, DRAIN LINES, CATCH BASINS, INLETS, PUMPS, ETC.) AND ALL SIDE SEWER FEATURES (SERVICE DRAIN SIDE SEWERS AND SANITARY SIDE SEWERS AND THEIR APPROVED POINTS OF CONNECTION).

SEE THE INSTRUCTIONS FOR THE DRAINAGE AND WASTEWATER CONTROL PLAN ON THE SDCI STORMWATER CODE WEBPAGE AND VOLUME 1, CHAPTER 8 OF THE 2016 SEATTLE STORMWATER MANUAL FOR SITE PLAN AND DRAINAGE ELEMENTS REQUIRED ON THIS PLAN.
http://www.seattle.gov/dpd/codesrules/codes/stormwater/default.htm

THE DETAILS SHOWN IN THIS ARE A SELECTION OF COMMONLY USED ON-SITE STORMWATER MANAGEMENT BMPs. SEE THE CITY OF SEATTLE STORMWATER MANUAL, VOLUME 3, CHAPTER 5 (DIRECTOR'S RULE DPD 21-2016/SPU DWW-200) FOR ADDITIONAL ON-SITE STORMWATER MANAGEMENT BMPs AND AND ADDITIONAL REQUIREMENTS FOR ALL BMPs.

SITE AND DRAINAGE CONTROL SUMMARY SHEET

COMPLETE THE ELECTRONIC ON-SITE STORMWATER MANAGEMENT CALCULATOR AND INSERT THE SITE AND DRAINAGE CONTROL SUMMARY SHEET BELOW. THE ELECTRONIC DOCUMENT IS AVAILABLE ON THE DPD STORMWATER CODE WEBSITE.
http://www.seattle.gov/dpd/codesrules/codes/stormwater/default.htm

On-site Stormwater Management - List Approach Calculator
Site and Drainage Control Summary

Version 11-20-2015

To use the On-Site List Calculator you must select "Enable Content" when the Security Warning appears.

Project Information

Site Address | DPD Project Number
Primary Contact | SDOT Project Number
Project Type | Primary Contact E-mail or Phone

Total Site Area ____ sf
Total New plus Replaced Hard Surface Area ____ sf
Existing Hard Surface Area ____ sf
Total New and/or Replaced Lawn and Landscaping ____ sf
Undisturbed and protected site area ____ sf
Was the project lot created after Jan 1, 2016?
Project Engineer ____ Email

On-site Performance Standard will be used (professional engineer required)?

Site Information

Note: If required for your project, reference the Preliminary Assessment Report (PAR) to complete this section. If the total areas proposed are different form those provided in the PAR, requirements may change.

Approved Point of Stormwater Discharge
Drainage Basin
Is the downstream drainage system considered capacity constrained by SPU?
Approved Point of Wastewater Discharge
Approved Point of Sub-Drainage Discharge
Flow Control is required
Flow Control Standard
Water Treatment for pollution-generating surfaces is required
Select required treatment ☐ Oil Control ☐ Phosphorus ☐ Enhanced ☐ Basic
Total Pollution Generating Hard Surface Area ____ sf
Total Pollution Generating Pervious Surface ____ sf
Source Control is required
Environmentally Critical Areas
☐ Steep Slope ☐ Potential Slide ☐ Riparian Corridor ☐ Wetland ☐ Liquefaction ☐ Flood Prone
☐ Landfill ☐ Known Landslide ☐ Fish / Wildlife ☐ Peat / Groundwater Management ☐ Shoreline Habitat
Temporary dewatering required ☐ Permanent dewatering required
A licensed professional recommends discharge not be used anywhere within the project site due to reasonable concerns of erosion, slope failure, or flooding.

Infiltration Information

Is infiltration investigation required?
Is infiltration on the site feasible?
Site Measured Infiltration Rate ____ x Infiltration Rate Correction Factor ____ = 0 Site Design Inf Rate

On-site Stormwater Management

Number of roof areas: 0
Number of other surface areas: 0

Surface	Surfaces Description	On-Site BMP	Contrib. Area (sf)	Vol Managed per Year (cf)	Facility Size (sf)	Facility Configuration
0				-	-	-

Total New/Replaced Roof Area	0	Total Roof Area Managed	0
Total New/Replaced Other Surface Area	0	Total Other Surface Managed	0
Total Area Managed	0	Total Volume Managed On Site	0 cf
Estimated compost required for soil amendment	0 cy	*Volume of compost required for soil amendment will be verified by the DPD Site Inspector for DPD permitted projects.*	

SAMPLE

seattle.gov

ON-SITE STORMWATER MANAGEMENT PLANTINGS

PLANTING GENERAL NOTES
1. PLANTS SHALL BE SITED ACCORDING TO SUN, SOIL, WIND AND MOISTURE REQUIREMENTS.
2. AT A MINIMUM, PROVISIONS MUST BE MADE FOR SUPPLEMENTAL IRRIGATION DURING THE FIRST TWO GROWING SEASONS.

BIORETENTION CELLS, PLANTERS AND RAIN GARDEN NOTES
1. FOR A LIST OF APPROVED PLANTS FOR BIORETENTION/RAIN GARDEN FACILITIES, SEE APPENDIX E, SECTION E-9 OF THE 2016 SEATTLE STORMWATER MANUAL.
2. VEGETATION COVERAGE OF SELECTED PLANS MUST ACHIEVE 90-PERCENT COVERAGE WITHIN 2 YEARS OR ADDITIONAL PLANTINGS SHALL BE PROVIDED. UNLESS DESIGNED BY A LICENSED LANDSCAPE ARCHITECT, PROVIDE A MINIMUM OF 1 PLANT PER EVERY 2 SQUARE FEET OF BIORETENTION BOTTOM AND SLOPED SIDE AREA.
3. PROVIDE A MINIMUM OF THREE DIFFERENT SPECIES OF SHRUBS AND HERBACEOUS PLANTS IN EACH FACILITY.

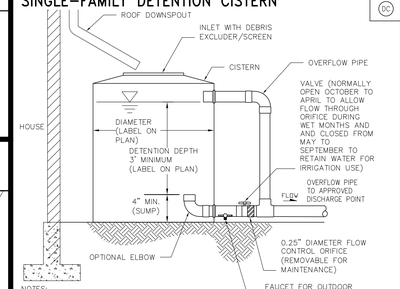
VEGETATED ROOF NOTES
1. APPROPRIATE PLANTS INCLUDE SUCCULENTS, GRASSES, HERBS, AND WILDFLOWERS THAT ARE ADAPTED TO HARSH CONDITIONS. PLANTS MAY BE INSTALLED AS PRE-GROWN MATS, INDIVIDUAL PLUGS, CUTTINGS, OR SPREAD AS SEEDS.
2. VEGETATION COVERAGE OF SELECTED PLANS MUST ACHIEVE 80-PERCENT COVERAGE WITHIN 2 YEARS OR ADDITIONAL PLANTINGS SHALL BE PROVIDED.
3. A LANDSCAPE MANAGEMENT PLAN SHALL BE DEVELOPED AND IMPLEMENTED.

SIDE SEWER AND DRAINAGE PERMIT NOTES

1. SIDE SEWERS AND DRAINAGE FACILITIES SHALL BE CONSTRUCTED PER THE "REQUIREMENTS FOR DESIGN OF SIDE SEWERS (DRAINAGE & WASTEWATER)" DIRECTORS' RULE DPD 4-2011/2011-004 AND PER THE "2016 SEATTLE STORMWATER MANUAL" DIRECTORS' RULE DPD 21-2015/SPU DWW-200.
2. A SEPARATE DRAINAGE AND SIDE SEWER PERMIT IS REQUIRED FOR ALL ONSITE DRAINAGE ELEMENTS AND SIDE SEWERS/SERVICE DRAINS. APPROVAL OF THIS PLAN IS REQUIRED PRIOR TO OBTAINING A DRAINAGE AND SIDE SEWER PERMIT.
3. RE-USE OF EXISTING SIDE SEWERS WHEN THERE WILL BE AN INCREASE IN LIVING UNITS REQUIRES THE EVALUATION AND CERTIFICATION (PE EVAL/CERT) OF THE EXISTING SIDE SEWER BY A PROFESSIONAL ENGINEER PRIOR TO FINALIZING THE SIDE SEWER AND DRAINAGE PERMIT. IN MOST CASES, THE SIDE SEWER MUST BE LINED ALL THE WAY TO THE MAIN. SEE DIRECTORS RULE 4-2011V.M AND SMC 21.16.240.
4. DEVIATIONS FROM THE APPROVED DRAINAGE AND WASTEWATER CONTROL PLAN MAY REQUIRE A FORMAL POST-SUBMITTAL REVISION FOR PLAN REVIEW AND APPROVAL. POST-SUBMITTAL REVISIONS MUST BE SUBMITTED ELECTRONICALLY THROUGH THE SDCI PROJECT PORTAL.

SINGLE-FAMILY DETENTION CISTERN

SYMBOL DC

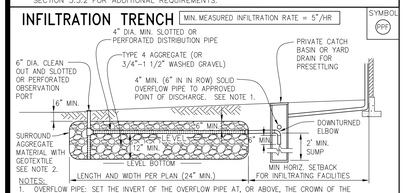


NOTES:
1. OVERFLOW PIPE CAN BE INTERIOR OR EXTERIOR TO CISTERN.
2. SEE THE SEATTLE STORMWATER MANUAL VOLUME 3, SECTION 5.5.2 FOR ADDITIONAL REQUIREMENTS.

INFILTRATION TRENCH

MIN. MEASURED INFILTRATION RATE = 5"/HR

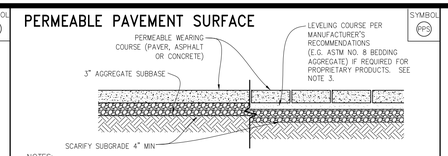
SYMBOL PIT



NOTES:
1. OVERFLOW PIPE: SET THE INVERT OF THE OVERFLOW PIPE AT, OR ABOVE, THE CROWN OF THE DISTRIBUTION PIPE. ALTERNATIVELY, THE OVERFLOW PIPE MAY BE A 5" MIN. LONG PERFORATED/SLOTTED PIPE IN THE GRAVEL RESERVOIR WITH CAPPED FREE ENDS THAT IS SEPARATED FROM THE DISTRIBUTION PIPE AND IS SET ABOVE THE INVERT OF THE DISTRIBUTION PIPE. IN THIS CASE, THE OVERFLOW MUST BE ROUTED THROUGH A SEPARATE CATCH BASIN PRIOR TO CONNECTING WITH WITH A PUBLIC DRAINAGE SYSTEM.
2. GEOTEXTILE SHALL BE LOW SURVIVABILITY, CLASS C PER CGS STD SPEC 9-37 TABLES 1 AND 2.
3. SCARIFY SUBGRADE TO A MIN. DEPTH OF 4" BEFORE FILLING TRENCH WITH WASHED GRAVEL.
4. SEE THE SEATTLE STORMWATER MANUAL VOLUME 3, SECTION 5.4.2, FOR ADDITIONAL REQUIREMENTS.

PERMEABLE PAVEMENT SURFACE

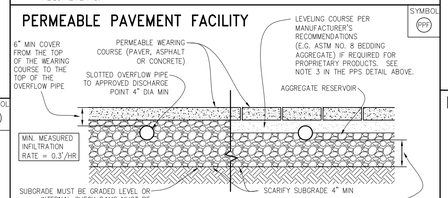
SYMBOL PPS



NOTES:
1. PERMEABLE PAVEMENT SURFACE AREA DIMENSIONS AND PAVEMENT SLOPE MUST BE SHOWN ON DRAINAGE CONTROL PLAN.
2. AGGREGATE SUBBASE SHALL BE CLEAN, CRUSHED GRAVEL OR CRUSHED ROCK – TYPE 22 OR 24 FOR WALKWAYS AND TYPE 13 FOR VEHICULAR APPLICATIONS.
3. THE LEVELING COURSE SHALL BE A FREE DRAINING AGGREGATE AND SHALL NOT RESTRICT THE INFILTRATION RATE THROUGH THE SYSTEM. FRACTURED JOINTING SAND IS NOT ALLOWED.
4. THE SUBGRADE SLOPE MUST BE LESS THAN 6% SLOPE TO BE USED FOR ON-SITE STORMWATER MANAGEMENT.
5. PERMEABLE PAVEMENT SURFACES DO NOT REQUIRE THE SETBACKS FOR INFILTRATING FACILITIES.
6. SEE THE SEATTLE STORMWATER MANUAL VOLUME 3, SECTION 5.6.2, FOR ADDITIONAL REQUIREMENTS.

PERMEABLE PAVEMENT FACILITY

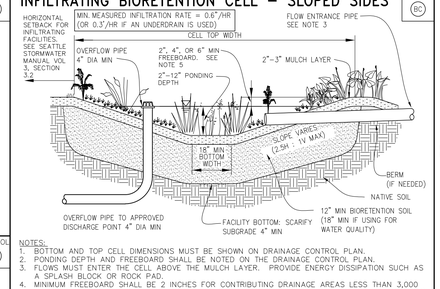
SYMBOL PPF



NOTES:
1. PERMEABLE PAVEMENT SURFACE FACILITY DIMENSIONS AND PAVEMENT SLOPE MUST BE SHOWN ON DRAINAGE CONTROL PLAN.
2. AGGREGATE SUBBASE SHALL BE CLEAN, CRUSHED GRAVEL OR CRUSHED ROCK – TYPE 22 OR 24 FOR WALKWAYS AND TYPE 13 FOR VEHICULAR APPLICATIONS.
3. CHECK DAMS SHALL BE INSTALLED TO ENSURE THE DESIGN PONDING DEPTH IN THE STORAGE RESERVOIR IF THE SUBGRADE SLOPE IS GREATER THAN 1%.
4. PERMEABLE PAVEMENT FACILITIES MUST MEET THE SETBACK REQUIREMENTS FOR INFILTRATING FACILITIES (E.G. 5' FROM BUILDINGS W/O BASEMENT, 10' FROM BUILDINGS W/ BASEMENTS, 5' FROM PROPERTY LINES EXCEPT ABUTTING R.O.W, 10' FROM OTHER INFILTRATION FACILITIES, ETC. PER SEATTLE STORMWATER MANUAL VOLUME 3, SECTION 3.2)
5. THE PONDING/STORAGE RESERVOIR SHALL BE COMPLETELY BELOW THE ELEVATION OF THE SURROUNDING GRADE UNLESS CONTAINED WITH AN IMPERMEABLE STRUCTURE SUCH AS A CONCRETE RETAINING WALL.
6. SEE THE SEATTLE STORMWATER MANUAL VOLUME 3, SECTION 5.4.6, FOR ADDITIONAL REQUIREMENTS.

INFILTRATING BIORETENTION CELL – SLOPED SIDES

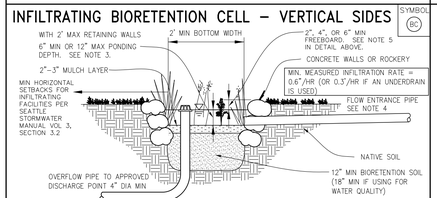
SYMBOL BC



NOTES:
1. BOTTOM AND TOP CELL DIMENSIONS MUST BE SHOWN ON DRAINAGE CONTROL PLAN.
2. PONDING DEPTH AND FREEBOARD SHALL BE NOTED ON THE DRAINAGE CONTROL PLAN.
3. FLOWS MUST ENTER THE CELL ABOVE THE MULCH LAYER. PROVIDE ENERGY DISSIPATION SUCH AS A SPLASH BLOCK OR ROCK PAD.
4. MINIMUM FREEBOARD SHALL BE 2 INCHES FOR CONTRIBUTING DRAINAGE AREAS LESS THAN 3,000 SF, 4 INCHES FOR AREAS 3,000 SF TO 5,000 SF AND 6 INCHES FOR AREAS GREATER THAN 5,000 SF. FREEBOARD SHALL BE NOTED ON THE DRAINAGE CONTROL PLAN.
5. SEE THE SEATTLE STORMWATER MANUAL VOL. 3, SECTION 5.4.4, FOR ADDITIONAL REQUIREMENTS.

INFILTRATING BIORETENTION CELL – VERTICAL SIDES

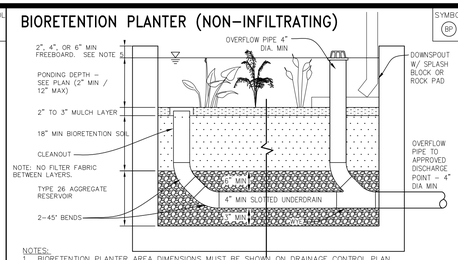
SYMBOL BC



NOTES:
1. BOTTOM AND TOP CELL DIMENSIONS MUST BE SHOWN ON DRAINAGE CONTROL PLAN.
2. PONDING DEPTH AND FREEBOARD SHALL BE NOTED ON THE DRAINAGE CONTROL PLAN.
3. THE MINIMUM PONDING DEPTH MAY BE REDUCED TO 2" IF CONTINUOUS STORMWATER MODELING IS USED.
4. FLOWS MUST ENTER THE CELL ABOVE THE MULCH LAYER. PROVIDE ENERGY DISSIPATION SUCH AS A SPLASH BLOCK OR ROCK PAD.
5. SEE THE SEATTLE STORMWATER MANUAL VOL. 3, SECTION 5.4.4, FOR ADDITIONAL REQUIREMENTS.

BIORETENTION PLANTER (NON-INFILTRATING)

SYMBOL BP

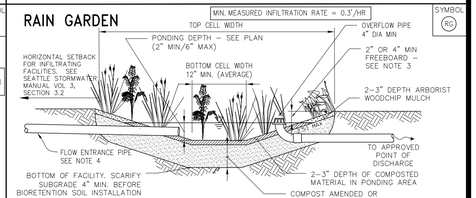


NOTES:
1. BIORETENTION PLANTER AREA DIMENSIONS MUST BE SHOWN ON DRAINAGE CONTROL PLAN.
2. AGGREGATE RESERVOIR SHALL BE TYPE 26 MINERAL AGGREGATE (WASHED SANDY GRAVEL / FILTER MATERIAL).
3. PLANTER SHALL BE A MINIMUM WIDTH OF 2 FEET.
4. SLOTTED DRAIN PIPE SHALL RUN THE LENGTH OF THE PLANTER.
5. MINIMUM FREEBOARD SHALL BE 2 INCHES FOR CONTRIBUTING DRAINAGE AREAS LESS THAN 3,000 SF, 4 INCHES FOR AREAS 3,000 SF TO 5,000 SF AND 6 INCHES FOR AREAS GREATER THAN 5,000 SF. FREEBOARD SHALL BE NOTED ON THE DRAINAGE CONTROL PLAN.
6. SEE THE SEATTLE STORMWATER MANUAL VOL. 3, SECTION 5.8.2, FOR ADDITIONAL REQUIREMENTS.

RAIN GARDEN

MIN. MEASURED INFILTRATION RATE = 0.3"/HR

SYMBOL RG



NOTES:
1. BOTTOM AND TOP CELL DIMENSIONS MUST BE SHOWN ON DRAINAGE CONTROL PLAN.
2. PONDING DEPTH AND FREEBOARD SHALL BE NOTED ON THE DRAINAGE CONTROL PLAN.
3. MINIMUM FREEBOARD SHALL BE 2 INCHES FOR CONTRIBUTING DRAINAGE AREAS LESS THAN 3,000 SF AND 4 INCHES FOR AREAS 3,000 SF TO 5,000 SF. NOTE THE FREEBOARD ON THE DRAINAGE CONTROL PLAN.
4. FLOWS MUST ENTER THE CELL ABOVE THE MULCH LAYER. PROVIDE ENERGY DISSIPATION SUCH AS A SPLASH BLOCK OR ROCK PAD.
5. SEE THE SEATTLE STORMWATER MANUAL VOL. 3, SECTION 5.4.5, FOR ADDITIONAL REQUIREMENTS.

AS-BUILT MEASUREMENTS / NOTES

THIS SECTION IS TO BE COMPLETED AFTER THE DRAINAGE, WASTEWATER, AND SIDE SEWER FEATURES HAVE BEEN INSTALLED. FOR INSTRUCTIONS TO PREPARE THE AS-BUILT PLAN, SEE SDCI TIP #504.

SDCI SIDE SEWER AND DRAINAGE PERMIT # ____

MEASUREMENTS IN THE RIGHT-OF-WAY
(TO BE TAKEN BY A REGISTERED SIDE SEWER CONTRACTOR (RSSC))

1. DISTANCE FROM CENTERLINE OF DOWSTREAM MH TO CENTERLINE OF NEW SERVICE CONNECTION ____
2. SIDE SEWER INTERSECTION WITH PROPERTY LINE – DEPTH ____
3. SIDE SEWER INSTERSECTION WITH PROPERTY LINE – DISTANCE ____

STORMWATER FACILITIES/CONTROL OPERATIONS & MAINTENANCE REQUIREMENTS

ALL STORMWATER FACILITIES/CONTROLS SHALL BE OPERATED AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2016 SEATTLE STORMWATER MANUAL, APPENDIX G.

DRAINAGE AND WASTEWATER CONTROL PLAN

0 1" 2"
SCALE: 1" = --'
NORTH ARROW

DPD APPROVAL STAMP

TEMPLATE VERSION: 2017-02-03

STANDARD DRAINAGE AND WASTEWATER CONTROL (DWC) PLAN

APPLICANT PLAN SET

CITY OF SEATTLE
DEPARTMENT OF CONSTRUCTION AND INSPECTIONS

DATE: 00/00/0000

STANDARD DWC PLAN

SHEET DWC

Address: 1234 SEATTLE

Project Number: 6