3800-PM-BCW0406b Rev. 12/2019 PCSM Module 2

## COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER



## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) MODULE 2

Applicant:	CRG Serv	vices Management, LLC	Project Site Name: 2951 Betz Court Site							
Surface Wat	er Name(s)	: 002 - UNT to Jordan Creek (via onsite Wetland L)	Surface Water Use(s	): HQ-CWF,	MF					
		PCSM PL	AN INFORMATION							
Identify all structural and non-structural PCSM BMPs that have been selected and provide the information requested.										
Discharge Point(s)	BMP ID	BMP Name	BMP Manual	Latitude	Longitude	DA Treated (ac)				
002	2	SWM/BMP Dry Extended Detention Facility #2	on 6.6.3	40.619742	-75.644305	11.0				
002	3	Forested Riparian Buffer	5.4.2	40.619779	-75.645088	11.0				
Undetained Areas: acre(s)										
☐ The Proj	ect Qualifie	s as a Site Restoration Project (25	Pa. Code §102.8(n))							
2. Describe the sequence of PCSM BMP implementation in relation to earth disturbance activities and a schedule of inspections for the critical stages of PCSM BMP installation.										
See PCSM Plan Set sheet SW 15.1 - "Critical Stages of BMP Implementation" headings.										
3. ∐ Plar	3. Plan drawings have been developed for the project and will be available on-site.									
4. 🛛 Plar	n drawings h	nave been developed for the projec	ct and are attached to the	e NOI/applicati	on.					
	Recycling and proper disposal of materials associated with PCSM BMPs are addressed as part of long-term operation and maintenance of the PCSM BMPs.									

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6.	Identify naturally occurring geologic formations or soil conditions that may have the potential to cause pollution after earth disturbance activities are completed and PCSM BMPs are operational and the applicant's plan to avoid or minimize potential pollution and its impacts.
	See PCSM Plan Set sheet SW 15.1 - "Geologic Soil Formations & Potential Pollution" heading.
7.	Identify whether the potential exists for thermal impacts to surface waters from post-construction stormwater. If such potential exists, identify BMPs that will be implemented to avoid, minimize, or mitigate potential thermal impacts.
	See PCSM Plan Set sheet SW 15.1 - "Thermal Impacts Analysis" heading.
8.	The PCSM Plan has been planned, designed, and will be implemented to be consistent with the E&S Plan.
9.	A pre-development site characterization has been performed.

STORMWATER ANALYSIS – RUNOFF VOLUME											
Surface Water Name: 002 - UNT to Jordan Creek Discharge Point(s): via onsite Wetland								ıd L			
1. The design standard is based on volume management requirements in an Act 167 Plan approved by DEP within the past five years.											
2. 🛛 The	design stand	lard is bas	ed on managing t	the net chang	ge for storms ι	up to and includ	ling the 2	-year/24-hour st	orm.		
3.	Iternative de	sign stand	ard is being used	l.							
4. 🛛 A printout of DEP's PCSM Spreadsheet – Volume Worksheet is attached.											
5. 2-Year/24-Hour Storm Event: inches Source of precipitation data:											
6. Stormwater Runoff Volume, Pre-Construction Conditions:											
7. Stormwater Runoff Volume, Post-Construction Conditions:											
8. Net Cha	nge (Post-Co	nstruction	- Pre-Constructi	ion Volumes)	:	CF					
9. Identify all selected structural PCSM BMPs and provide the information requested.   Calculations attached											
DP-No.	BMPID	Series	Vol. Routed to BMP (GF)	Inf. Area (SF)	Inf. Rate (in/hr)	Inf. Period (hrs)	Veg?	Media Depth	Storage Vol.	Inf. Credit (CF)	ET Credit (CF)
							X				
							X				
							X				
							X				
				$\backslash$			M				
		$\nearrow$		$\mathbf{R}$	$\backslash\!$		X	$\nearrow$	$\nearrow$		
				$\nearrow$	$\nearrow$			> <	$\nearrow$		
		$\nearrow$		$\left\langle \right\rangle$	$\langle$		M	$\nearrow$	$\nearrow$		
				>	>						
Total Infiltration & ET Credits (CF):											
Non-Structural BMP Volume Credits (CF) (Attach Calculations):											
Managed Release Credits (CF) (Attach MRC Design Summary):											
								Volume Red	quired to Redu	ce/Manage (CF):	
Total Credits (CF):											

INFILTRATION INFORMATION								
BMP ID: 2 (SWM/BMP Dry Extended Detention Facility #2)  Soil/geologic test results are attached.								
1.	No. of infiltration tests completed: 4							
2.	Method(s) used for infiltration testing: Double-Ring Infiltrometer							
3.	Test Pit Identifiers (from PCSM Plan Drawings): IT-1, IT-2, IT-3, IT-4							
4.	Avg Infiltration Rate: <b>0.0</b> in/hr 5. FOS: <b>N/A</b> : 1							
6.	Infiltration rate used for design: N/A in/hr							
7.	Separation distance between the BMP bottom and bedrock: >2 feet							
8.	Separation distance between the BMP bottom and seasonal high-water table: >2 feet							
9.	Due to a shallow limiting zone and very low infiltration testing results, infiltration is not proposed within this facility.							
RM	IP ID: Soil/geologic test results are attached.							
1.	No. of infiltration tests completed:							
2.	·							
	•							
3.	Test Pit Identifiers (from PCSM Plan Drawings):							
4.	Avg Infiltration Rate: in/hr 5. FOS: : 1							
6.	Infiltration Rate Used for Design: in/hr							
7.	Separation distance between the BMP bottom and bedrock: feet							
8.	. Separation distance between the BMP bottom and seasonal high-water table: >2 feet							
9.	Comments:							
BN	IP ID: Soil/geologic test results are attached.							
1.	No. of infiltration tests completed:							
2.	Method(s) used for infiltration testing:							
3.	Test Pit Identifiers (from PCSM Plan Drawings):							
4.	Avg Infiltration Rate: in/hr 5. FOS: : 1							
6.	Infiltration Rate Used for Design: in/hr							
7.	Separation distance between the BMP bottom and bedrock: feet							
8.	Separation distance between the BMP bottom and seasonal high-water table: feet							
9.	Comments:							

STORMWATER ANALYSIS – PEAK RATE									
Surface Water Name: 002 - UNT to Jordan Creek					Discharge Point(s): via onsite Wetland L				
1. The design standard is based on rate requirements in an Act 167 Plan approved by DEP within the past five years.									
2.   The design sta	2.   The design standard is based on managing the net change for 2-, 10-, 50-, and 100-year/24-hour storms.								
3. An alternative	design standa	ırd is being ı	used.						
4. A printout of DEP's PCSM Spreadsheet – Rate Worksheet is attached.									
5. Alternative rate	5. Alternative rate calculations are attached.								
6. Identify precipitation amounts. Source of precipitation data:									
2-Year/24-Hour St	orm:			10-Yea	r/24-Hour S	form			
50-Year/24-Hour S	50-Year/24-Hour Storm: 100-Year/24-Hour Storm								
7. Report peak disch	7. Report peak discharge rates, pre- and post-construction (without BMPs), based on a time of concentration analysis.								
Design Storm	Design Storm Pre-Construction Peak Rate (cfs) Post-Construction Peak Rate				eak Rate	Difference (cfs)			
2-Year/24-Hour									
10-Yea <del>r/24-</del> Hour									
50-Year/24-Hour									
100-Year/24-Hour									
8. Identify all BMPs u	sed to mitigat	e peak rate	differences	and provide	the request	ed information	on.		
BMP4D		Inflow to			BMP (cfs) 0			m BMP (cfs	
BIVIT-IU		2-Y1	10-Yr	50-Yr	100-Yr	2-Y1	10-Yr	50-Yr	100-Yr
Report peak rates for pre-construction and post-construction with BMPs and identify the differences.									
Design-Storm	Pre-Cons	Pre-Construction Peak Rate (cfs)  Post-Construction Peak Rate (with BMPs) (cfs)					Difference (cfs)		
2-Year/24-Hour									
10-Yea <del>r/24-</del> Hour									
50-Year/24-Hour									
100-Year/24-Hour									

	STORMWATER ANA	LYSIS – WATER O	QUALITY						
	DEP's PCSM Spreadsheet – Quality Worksh	eet is attached for a	all surface waters receiving discharges.						
	LONG-	TERM O&M							
Describe the long	-term operation and maintenance (O&M) red	quirements for each	selected PCSM BMP.						
BMP ID	O&M Requirements								
1 See	See PCSM Plan Set sheet SW 15.1 - "Ownership and Maintenance of Stormwater / BMP Facilities" heading								
2 See	See PCSM Plan Set sheet SW 15.1 - "Ownership and Maintenance of Stormwater / BMP Facilities" heading								
3 See	See PCSM Plan Set sheet SW 15.1 - "Ownership and Maintenance of Stormwater / BMP Facilities" heading								
		N DEVELOPER							
☐ I am trained a	and experienced in PCSM methods.		sed professional.						
Name:	Joshua D. Hoffman, P.E.	Title:	Senior Engineer						
Company:	Snyder Secary & Associates, A Division of Pennoni	Phone No.:	717-975-7863						
Address:	2000 Linglestown Road, Suite 304	Email:	jhoffman@pennoni.com						
City, State, ZIP:	Harrisburg, PA 17110	License No.:	PE083268						
License Type:	Professional Engineer	Exp. Date	September 30, 2023						
	oshra D. Hoffman	06/23/2023							
<b>∲C</b> :	SM Plan Developer Signature	Date							