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

## 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:	Core5 In	dustrial Partners	Project Site Name: Core5 at Route 100							
Surface Wat	er Name(s	): Cherith Brook via existing swale	Surface Water Use(s	s): HQ-CWF, MF						
		PCSM PL	AN INFORMATION							
1. Identify all structural and non-structural PCSM BMPs that have been selected and provide the information requested.										
Discharge Point(s)			BMP Manual	Latitude	Longitude	DA Treated (ac)				
001	1	Detention Basin #1	6.6.3	40.614765	-75.648962	10.63				
001	2	Riparian Buffer Restoration	6.7.1	40.615795	-75.648679	12.54				
Undetained	Areas:	0.0 acre(s)								
☐ The Proj	ect Qualifie	es as a Site Restoration Project (25	Pa. Code §102.8(n))							
		uence of PCSM BMP implementa critical stages of PCSM BMP install		th disturbance	activities and a	a schedule of				
The overall sequence of construction is shown on sheet 5 of the PCSM Plans and individual PCSM BMP sequence of construction is shown on sheet 9 of the PCSM Plans, with critical stages identified, are shown on the PCSM Plan drawings. The individual PCSM BMP sequences of construction are provided on Sheet DN-1.										

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3.	Plan drawings have been developed for the project and will be available on-site.	
4.	☐ Plan drawings have been developed for the project and are attached to the NOI/application.	
5.	Recycling and proper disposal of materials associated with PCSM BMPs are addressed as part of long-term or and maintenance of the PCSM BMPs.	eration
6.	dentify naturally occurring geologic formations or soil conditions that may have the potential to cause pollution after disturbance activities are completed and PCSM BMPs are operational and the applicant's plan to avoid or material pollution and its impacts.	
	While minerals may be present at this location, geologic formations present are not expected to be exposed expected to impact the receiving streams' water quality. The soil conditions present on-site are not consideracid producing soil, to further justify no expected impact to the water quality of the receiving streams. Evironmental Due Dilligence (Clean Fill) notes can be found under the General Notes shown on the cover state PCSM Plans.	ered
7.	Identify whether the potential exists for thermal impacts to surface waters from post-construction stormwater. potential exists, identify BMPs that will be implemented to avoid, minimize, or mitigate potential thermal impacts.	If such
	Potential thermal impacts associated with the proposed site improvements have been minimized to the maxextent practicable. The proposed detention basins will allow storage of the difference in runoff from pre- to development. The runoff leaving the basin is proposed to discharge at a slow rate, which further promotes cooling. Permanent seed and stabilization shall be applied immediately after final grading of disturbed areaste has been designed to be compact and utilize the least amount of impervious surface that is practical, we constructing a safe and functional site. In addition, the stormwater runoff will have to travel several hundred before it enters the receiving water, giving extra time to lower the water temperature.	post- water s. The hile
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: Cherith Brook via existing swale								Discha	rge Point(s):	001	
1.	1. 🔲 The design standard is based on volume management requirements in an Act 167 Plan approved by DEP within the past five years.										
2. X The	2. 🗵 The design standard is based on managing the net change for storms up to and including the 2-year/24-hour storm.										
3.	3. 🔲 An alternative design standard is being used.										
4. 🛛 A pri	ntout of DEP	's PCSM S	Spreadsheet – Vo	olume Worksl	heet is attache	ed.					
5. 2-Year/2	4-Hour Storn	n Event:	<b>3.23</b> in	ches So	ource of precip	oitation data:	NOAA				
6. Stormwa	6. Stormwater Runoff Volume, Pre-Construction Conditions: CF 🖂 Calculations attached										
7. Stormwa	iter Runoff V	olume, Po	st-Construction C	Conditions:		CF	Calcu     Calcu	lations attached			
8. Net Cha	nge (Post-Co	nstruction	- Pre-Construct	ion Volumes)	:	CF					
9. Identify a	all selected s	tructural P	CSM BMPs and	provide the in	nformation req	uested.	⊠ Calcu	lations attached			
DP No.	BMP ID	Series	Vol. Routed to BMP (CF)	Inf. Area (SF)	Inf. Rate (in/hr)	Inf. Period (hrs)	Veg?	Media Depth (ft)	Storage Vol. (CF)	Inf. Credit (CF)	ET Credit (CF)
	Total Infiltration & ET Credits (CF):										

Non-Structural BMP Volume Credits (CF) (Attach Calculations):

Managed Release Credits (CF) (Attach MRC Design Summary):

Volume Required to Reduce/Manage (CF):

Total Credits (CF):

INFILTRATION INFORMATION								
BN	BMP ID: ☐ Soil/geologic test results are attached.							
1.	No. of infiltration tests completed: 5							
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:							
BN	<b>IP ID:</b> □ 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:							
BN	<b>IP ID:</b> □ 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: Cherith Brook via existing swale					Dis	charge Poir	nt(s): 00	1	
1. The design standard is based on rate requirements in an Act 167 Plan approved by DEP within the past five years.							ears.		
2.   The design sta	andard is base	ed on manaç	ging the net	change for 2	-, 10-, 50-, a	nd 100-yea	r/24-hour s	storms.	
3. An alternative	design standa	ard is being	used.						
4. A printout of DEP's PCSM Spreadsheet – Rate Worksheet is attached.									
5. Alternative rate calculations are attached.									
6. Identify precipitation	6. Identify precipitation amounts. Source of precipitation data:								
2-Year/24-Hour St	orm:			10-Yea	ır/24-Hour S	torm			
50-Year/24-Hour S	Storm:			100-Ye	ar/24-Hour	Storm			
7. Report peak disch	arge rates, pr	e- and post-	construction	(without BM	IPs), based	on a time of	concentra	tion analysis	S.
Design Storm Pre-Constructi			ak Rate	,			Difference (cfs)		
2-Year/24-Hour									
10-Year/24-Hour									
50-Year/24-Hour									
100-Year/24-Hour									
8. Identify all BMPs เ	used to mitigat	te peak rate	differences	and provide	the requeste	ed information	on.		
DMD ID			Inflow to	BMP (cfs)		Outflow from BMP (cfs)			
BMP ID		2-Yr	10-Yr	50-Yr	100-Yr	2-Yr	10-Yr	50-Yr	100-Yr
9. Report peak rates	for pre-constr	ruction and p	oost-constru	ction with BN	/IPs and ide	ntify the diffe	erences.		
Design Storm	Design Storm Pre-Construction Peak Rate (cfs)			Post-Construction Peak Rate (with BMPs) (cfs)  Difference (cfs)			fs)		
2-Year/24-Hour									
10-Year/24-Hour									
50-Year/24-Hour									
100-Year/24-Hour									

STORMWATER ANALYSIS – WATER QUALITY									
☑ A printout of DEP's PCSM Spreadsheet – Quality Worksheet is attached for all surface waters receiving discharges.									
LONG-TERM O&M									
Describe the	Describe the long-term operation and maintenance (O&M) requirements for each selected PCSM BMP.								
BMP ID	O&M Requirements								
1	PCSM BMP O&M requirements are shown on sheet 10 (DN-1) of the PCSM Plan								
2	PCSM BMP O&M requirements are shown on sheet 10 (DN-1) of the PCSM Plan								
	PCSM	PLAN DEVELOPER							
	ned and experienced in PCSM methods.	⊠ I am a licen:	sed professional.						
Name:	Alaric Busher	Title:	Principal Engineer						
Company:	BL Companies	Phone No.:	717-943-1686						
Address:	2601 Market Place, Suite 350	Email:	abusher@blcompanies.com						
City, State, Z	IP: Harrisburg, PA 17110	License No.:	PE 60320						
License Type	e: Professional Engineer	Exp. Date	9/30/2023						
	PCSM Plan Developer Signature	3/13/2023 Date							