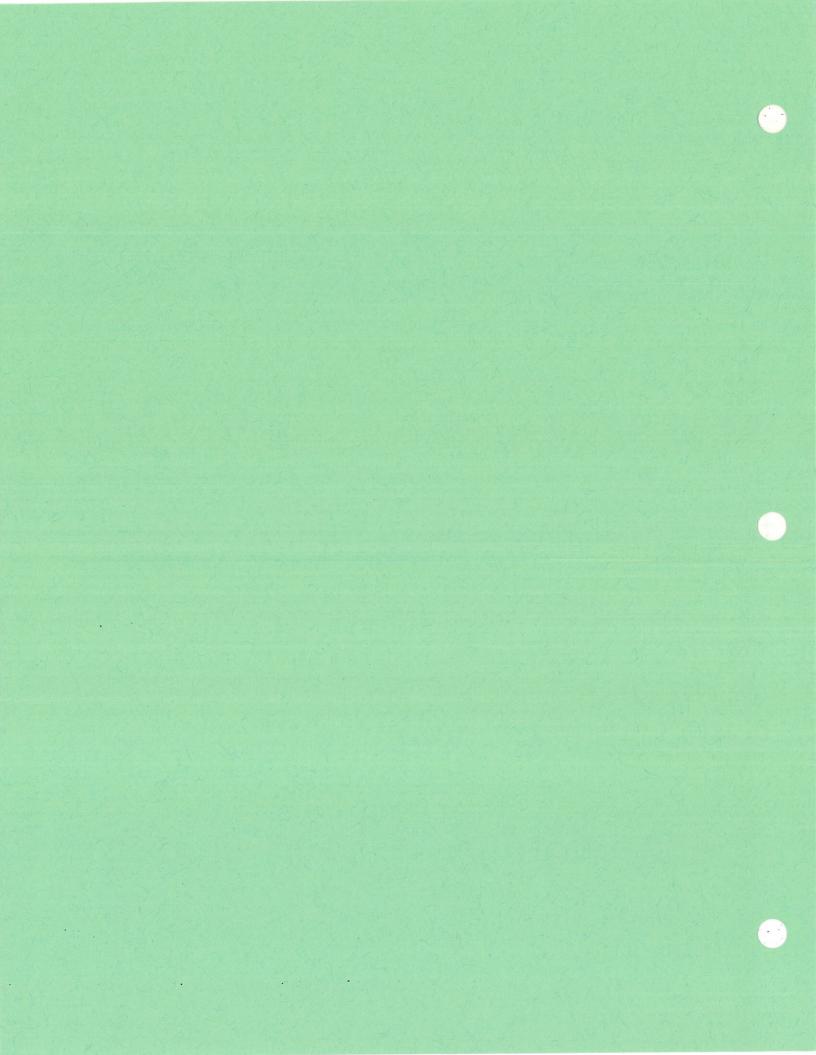
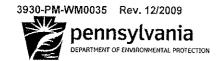
NOTICE OF INTENT FORM





COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATERSHED MANAGEMENT

OFFICIAL USE ONLY	
ID#	
Date Received	
	l

PERMIT APPLICATION NOTICE OF INTENT FOR COVERAGE UNDER THE GENERAL (PAG-02) NPDES PERMIT OR

APPLICATION FOR AN INDIVIDUAL NPDES PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

PLEASE READ THE PERMIT SUMMARY SHEET AND INSTRUCTIONS PROVIDED IN THIS PERMIT APPLICATION PACKAGE BEFORE COMPLETING THIS FORM. COMPLETE THE ATTACHED CHECKLIST AND WORKSHEETS 1 THROUGH 5 REFERENCED AFTER APPENDIX B OF THIS PERMIT APPLICATION. COMPLETE ALL OTHER APPLICABLE WORKSHEETS REFERENCED IN THE APPLICATION CHECKLIST.

APPLICATION CHECKLIST.							
1 acre to less than 5			•	-	⊠ 5a	cres or larger	disturbance
PLEASE PRINT OR TYPE							
CHECK APPROPRIATE BOX		AL 🗌	INC	OIVIDUAL 🛛			
APPLICATION TYPE	NEW 🛛	RENEWAL	. 🗆	MAJOR MO	DIFICATION	1 □ F	PHASED [
	SEC	CTION A. AP	PLICANT I	NFORMATION	1		
Applicant's Last Name		Fir	st Name	MI	Phon	e	
					FAX		
Email Address			,				
Organization Name or Re	gistered Fictitious	Name			Phon	e 570-802-81	111
PPL Bell Bend, LLC					FAX	570-802-81	119
Mailing Address		Cit	y		State	ZIP + 4	
38 Bomboy Lane		Ве	rwick		PA	18603	
Suite 2							
Co-Applicant's Last Name	(if applicable)	Fir	st Name		MI Phon	e	
					FAX		
Email Address							
Organization Name or Reg	gistered Fictitious I	Vame			Phon	е	
					FAX		
Mailing Address		City	У		State	ZIP + 4	
					Anna I ann an		7 - 4 - 2
	SECTION B.	PROJECT IN	IFORMATIO	N AND SITE AN	IALYSIS		
Project Name: PPL Bell I	Bend Nuclear Po	wer Plant					
2. Project Description							
PPL Bell Bend, LLC is p total of approximately 6 other access and securi support the proposed po	87 Ac. The eartl ity roads, a railro	n moving acti	vities will co	nsist of constr	ucting a ma	ain access road	off of US11.
Residential Subdivis	ion	☐ Sewerag	ge/Water Sy	rstem	☐ Pri	vate Road/Resi	dence
Commercial/Industria	al	☐ Public R	oad		☐ Go	vernment Facili	ty

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	☑ Utility Facility/Transn	nission 🔲 Red	creational	☐ Remedia	ation/Restoration	
3.	Total Project Area (Acres):	1218				
4.	Project Location or Physica	al Address (if available):				
	I-81 North, exit onto US93 St. The project site is on you		North in Berwick. Turn left	onto Market St. Bear rigt	nt and continue on Market	
5.	County	Municipality		City Boi	o Twp	
	Luzerne	Salem				
6.	Latitude: <u>41 °/ 05</u>	<u>'</u> / <u>21.19 "</u>	Longitude: <u>76 °/</u> 0	9 '/ <u>57.34 "</u>		
	Collection Method: 🛛 E	MAP HGIS	GISDR ITPMP	☐ GPS ☐ WA	AS LORAN	
	Check the horizontal reference known datum and do not re		datum) employed in the] NAD27 ☑ NAD8			
Ent	er the date of collection if the	e lat and long coordinates v	vere derived from GPS, W	AAS or LORAN. <u>09</u> mm <u>0</u>	9 dd <u>2010</u> уууу	
7.	U.S.G.S. Quad Map Name	Berwick				
8.	Existing and Previous Uses	of the Land Proposed for	Construction (use separate	sheet if necessary):		
Exis	sting Land Uses:	griculture ⊠ Forest/W	oodland Barren	☐ Urban ☐ Bro	wnfield 🛛 Other	
Des	cription: The land is primari	ly used as farmland and ma	ade of open fields, wetland	ls, forest, and passive rec	reation.	
Pre	vious Land Uses: 🔲 A	griculture 🛛 Forest/W	oodland Barren	☐ Urban ☐ Bro	wnfield 🛛 Other	
Des	cription: The land has been	primarily used as farmland	and made of open fields,	wetlands, forest, and pass	sive recreation.	
9.	Site Analysis					
	 Describe how Natural were considered in: Lonecessary) 	Resources features on the ocation and Design of the	e site (Worksheets 2 and project, E & S Plan Desí	3 referenced in the Pa. S gn, PCSM Plan Design.	Stormwater BMP Manual) (attach additional sheet if	
	The site also contains v	er Run and its tributaries a woodland and steep slopes to those features, was a ke	. Avoidance of disturbanc	e to wetlands and stream:		
		ring geologic formations of nd include BMPs to avoid o				
	construction. The imple	d soil conditions vary throementation of numerous E.c. will minimize the potentia	&S BMP's such as sedin			
10.	Potential Toxic or Hazardo provides a potential for conta	us Pollutants: (Submit the properties of the pro	ne following data if soil c oject site) N/A 🏻	ontaminant, geology or p Use additional sheet		
	Pollutant	Concentration w/Units	Source	Sample Type	Date(s) / Number of Samples	
				·		
	Fill Material					
	Based on a cut/fill analysis of the project site, will the site need to import fill, export fill or will the site balance? Be sure to read the instructions before completing this section. Clean Fill can not be placed in or on waters of the Commonwealth.					
Che	ck the appropriate box					
	fill imported to the site n	or will, in most situations, b neets the department's def responsibility and provide tl	inition of clean fill. The pla	an designer must include a	a note on the drawings to	

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Export fill – the Applicant is responsible for performing environmental due diligence at the time this application was submitted to determine that any fill exported from the site will be certified as clean fill.						
☐ Balance a	all cuts and fills with the ar	nount of rock and soil ava	ilable on the site.			
12. Total Disturbe	d Area (Acres) to be perm	itted: <u>687</u>				
13. Estimated Tim	neframe for completion of	project: I	Project Start Date	April 2013	Project End Dat	e <u>Dec 2019</u>
14. Estimated Tim	etable for Phased Project	s Build Out (Complete for	phased projects	only)		
Phase No. or Name	Proposed Ty	pe of Activity	Total Area	Disturbed Area	Start Date	End Date
N/A						
	-					
15. Stormwater Di	scharges to (during const	ruction): Impaired Wat	ers According to	Chapter 303(d)	List 🗍	<u> </u>
	· · · · · · · · · · · · · · · · · · ·	icipal Separate Storm Se	_	e Storm Sewer		ce Waters 🔲
Receiving Water/M		Chapter 93 Receiving V			Use (if diffe	rent from the
Walker Run ar	nd Susquehanna nanna River Basin	(Designated usé) CWF-MF/WWF-MF		Designate N/A		
1	Storm Sewer Operator:	Name of Private Storm	Sewer Operator:	Other: (in	cluding off-site di	scharges)
Salem Townsh	nip	N/A		N/A		
SEC	TION C. E & S AND P	OST CONSTRUCTION	STORMWATE	R MANAGEN	IENT (PCSM) F	PLAN
	s involving multiple wat	ershed boundaries, plea	ase submit a co	nplete, separa	te Section C for	each additional
watershed.						
	ng information applies to					
and their app	ef summary of propose plication do not follow nual, provide document	the guidelines refere	nced in the Pa	a. Érosion an	d Sediment Po	ollution Control
E & S BMPs						
The sedimentation controls proposed consist of Silt Barrier Fence, Super Silt Fence, Sediment Traps, Sediment Basins, Slope Protection, Rock Filter Berms, and Rock Construction Entrances. The Silt Barrier Fence will be used along the toe of the soil stockpiles and the toe of the fill slopes at locations shown on the E&S plans to prohibit sediment from leaving the construction area. The Super Silt Fabric Fence will be placed around the designated wetlands on site. The installation of the Super Silt Fabric Fence will protect these wetland areas during construction activities.						
PCSM Plan Information - The PCSM Plan should be designed to maximize volume reduction technologies, eliminate (where possible) or minimize point source discharges to surface waters, preserve the integrity of stream channels, and protect the physical, biological and chemical qualities of the receiving surface water. The DEP recommends the use of Control Guideline 1 (CG1) referenced in the Pa. Stormwater BMP Manual to achieve this goal.						
Design standar	ds applied to develop the	PCSM Plan. Check thos	e that apply.			
the Munic	an - The attached PCSM cipal or County Engine s referenced in the applications.	er should be provide	d with the app	lication. Con	nplete and subn	nit all applicable
Complete the necessary)	following table for all ap	oplicable approved Act	167 Stormwater	Management I	Plans. (use ad	ditional sheets if

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	ACT 167 Plan Name	Date Adopted	Consistency Letter Included							
	The attached PCSM plan is consistent with all applicable local stormwater management ordinances, including MS4 (NPDES Permit to Discharge Stormwater Through a Municipal Separate Storm Sewer System) ordinances. A letter of consistency from the Municipal or County Engineer must be provided with the application. Complete and submit all applicable worksheets referenced in the application checklist as part of the permit application.									
Comple	ete the following table for all applicable Municipalitie	s. (use additional sheets if necessar	ry)							
	Municipality Name	Ordinance Number	Consistency Letter Included							
	Salem Township	SALDO93-1, Amnd.01-1, Strm.	Mang. Ord. # 2011-04							
The PC	SM Plan must satisfy either subparagraph a <u>or</u> b be	elow. Check those that apply.								
A 🗀	Act 167 Plan approved on or after January 2005 pertaining to rate, volume, and water quality from January 2005.	– The attached PCSM Plan, in its e m an Act 167 Stormwater Managel	ntirety, is consistent with all requirements ment Plan approved by DEP on or after							
OR										
B. The	PCSM Plan must satisfy one or both of the following	ng requirements:								
\boxtimes	PA Stormwater BMP Manual - The attached P presented in the Pennsylvania Stormwater BMP M	CSM plan is consistent with wate lanual. CG 1 has been met.	r quality design features and BMPs as							
	Other Design Standard – The attached PCSM pla standard. Demonstrate/explain in the space provi Stormwater Management Policy Document 392-03	ded how this standard meets the cri	oliance with the above standards or other teria described in the PA Comprehensive							
	•									
			!							

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2. SUMMARY TABLE FOR SUPPORTING CALCULAT	TION AND MEASURE	MENT DATA	
Please reference the Stormwater Methodology used (i.e.	. SCS Method) SCS N	M ethod	
	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 24.62	2 104.24	3 +79.62
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 1996896.61	5 2632741.27	6 +635844.66
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 1598393.28	8 (-428468.27)
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 200.07	10 183.80	¹¹ (-16.27)

- Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- Box 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

	3. SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs (consistent with Worksheets 3 and 5 referenced in the Pa. Stormwater BMP Manual)						
r	Key: RC = Rate Control	VC = \	/olume Co	ontrol	WQ = Water	Quality	
In the lists below, check the BMPs identified in the PCSM Plan, and their function(s) using the above Key. More than one function may be checked for a BMP. List the stormwater volume and area of runoff to be treated by each BMP type. If any BMP in PCSM Plan is not listed below, describe it in the space provided after "Other".							
	ВМР		Function	(s)	Volume of stormwater treated	Acres treated	
☐ We	et ponds	☐ VC	☐ RC	☐ WQ	NA	NA	
☐ Co	onstructed wetlands	□ vc	☐ RC	□ WQ	NA	NA	
Re	etention basins	□ vc	☐ RC	☐ WQ	NA	NA	
☐ De	tention basin	□ vc	☐ RC	□ WQ	NA	NA	
🛛 🖾 Un	derground detention	□ vc	⊠ RC	WQ	3.382Acft.	17.13	
Dry	y Extended detention basin	□ vc	☐ RC	☐ WQ	NA	NA	
☐ Se	diment fore bay	□ vc	☐ RC	☐ WQ	NA	.NA	
☐ Infi	iltration trench	□ vc	☐ RC	□ WQ	NA ·	NA	
☐ Infi	iltration Berm/Retentive Grading	□ vc	☐ RC	☐ WQ	NA	NA	
⊠ Sul	bsurface Infiltration bed	⊠ vc	⊠ RC	⊠ WQ	19.675Acft.	178.589	
☐ Infi	iltration basin	□ vc	☐ RC	☐ WQ	NA	NA	
☐ Pei	rvious pavement	□ vc	☐ RC	☐ WQ	NA	NA	
☐ Dry	/ well/Seepage pit	□ vc	☐ RC	□ WQ	NA	NA	
☐ Bio	infiltration areas	☐ VC	☐ RC	□ WQ	NA	NA	
☐ Rai	in gardens/Bio-retention	□ vc	☐ RC	☐ WQ	NA	. NA	
⊠ Veç	getated swales	□ vc	☐ RC	⊠ WQ	7.29 Acft.	74.10	
☐ Coi	nstructed filters	□ vc	☐ RC	□ WQ	NA	NA [*]	
☐ Pro	tect Sensitive & Special Value Features	□ vc	☐ RC	□ WQ	NA	NA	
☐ Pro	tect/Conserve/Enhance Riparian areas	□ vc	☐ RC	☐ WQ	NA	NA	
☐ Res	storation: Buffers/ Landscape/Floodplain	□ vc	☐ RC	□ WQ	NA	NA	
☐ Dis	connection from storm sewers	□ vc	☐ RC	□ WQ	NA	NA	
☐ Roo	oftop disconnection	□ vc	☐ RC	□ wa	NA	NA	
☐ Veg	getated roofs	□ vc	☐ RC	□ wa	NA .	NA	
Rur	noff capture/Reuse	□ vc	☐ RC	□ WQ	NA	NA	
☐ Oil/	grit separators			□ wq	NA	NA	
☐ Wa	ter quality inserts/inlets			□ WQ	, NA	NA	
☐ Stre	eet sweeping			□ WQ	NA	NA	
⊠ Oth	er <u>Snouts</u>	☐ VC	☐ RC	⊠ wa	23.057Acft.	195.719	
☐ Oth		□ vc	☐ RC	□ wa	NA	NA	
D lf							

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SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 15.63	2 33.94	3 +18.31
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	₄ 757459.45	5 1025288.58	6 +267829.13
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 834900.85	8 +77441.40
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 39.83	10 33.76	¹¹ (-6.07)

- Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
 - **Net change of impervious area**: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- **Box 4.** Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
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- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3.	3. SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs (consistent with Worksheets 3 and 5 referenced in the Pa. Stormwater BMP Manual)						
	Key: RC = Rate Control	VC = \	√olume Co	ontrol	WQ = Water	Quality	
In the lists below, check the BMPs identified in the PCSM Plan, and their function(s) using the above Key. More than one furnay be checked for a BMP. List the stormwater volume and area of runoff to be treated by each BMP type. If any BMP PCSM Plan is not listed below, describe it in the space provided after "Other".							
	ВМР		Function	(s)	Volume of stormwater treated	Acres treated	
	Wet ponds	□ vc	☐ RC	□ WQ	NA	NA	
	Constructed wetlands	☐ VC	☐ RC	☐ WQ	NA	NA	
	Retention basins	☐ VC	RC	WQ WQ	NA	NA	
	Detention basin	□ vc	☐ RC	☐ WQ	NA	NA	
\boxtimes	Underground detention	□ vc	⊠ RC	WQ	1.712 Acft.	14.73	
	Dry Extended detention basin	□ vc	☐ RC	☐ WQ	NA	АИ,	
	Sediment fore bay	□ vc	☐ RC	☐ WQ.	NA	NA	
	Infiltration trench	□ vc	☐ RC	□ wa	NA	NA	
	Infiltration Berm/Retentive Grading	□ vc	☐ RC	□ WQ	NA	NA	
\boxtimes	Subsurface Infiltration bed	⊠ vc	⊠ RC	⊠ WQ	5.215 Acft.	52.02	
	Infiltration basin	□ vc	☐ RC	□ WQ	NA	NA	
	Pervious pavement	☐ VC	☐ RC	☐ WQ	. NA	NA .	
	Dry well/Seepage pit	☐ VC	☐ RC	□ WQ	NA	NΑ	
	Bio-infiltration areas	☐ VC	☐ RC	☐ WQ	NA	NA	
	Rain gardens/Bio-retention	☐ VC	☐ RC	□ WQ	NA	NA	
\boxtimes	Vegetated swales	☐ VC	☐ RC	☑ WQ	2.68 Acft.	19.41	
	Constructed filters	☐ VC	☐ RC	□ WQ	, NA	NA	
	Protect Sensitive & Special Value Features	□ vc	☐ RC	□ WQ	NA	NA	
	Protect/Conserve/Enhance Riparian areas	☐ VC	☐ RC	□ WQ	NA	NA	
	Restoration: Buffers/ Landscape/Floodplain	☐ VC	☐ RC	□ WQ	NA	NA	
	Disconnection from storm sewers	☐ VC	☐ RC	☐ WQ	. NA	NA	
	Rooftop disconnection	☐ VC	☐ RC	□ WQ	NA	NA	
	Vegetated roofs	□ vc	☐ RC	□ WQ	NA	NA	
	Runoff capture/Reuse	☐ VC	☐ RC	☐ WQ	NA	NA	
	Oil/grit separators			□ wa	NA	NA	
	Water quality inserts/inlets			□ WQ	NA	NA	
	Street sweeping			□ wq	NA	NA	
\boxtimes	Other Snouts	□ vc	☐ RC	⊠ wq	6.927 Acft.	66.75	
	Other	☐ VC	☐ RC	□ WQ	NA	NA	
4.	OFF SITE DISCHARGE ANALYSIS				· · · · · · · · · · · · · · · · · · ·		
•	Does the project propose any off-site disch	arges to	areas o	ther than	surface waters? TVes	⊠ No	
	If yes, describe the type of easement that p				· ·		
	that the discharge will not cause erosion, di					a acmonstration	
	<u>-</u>	.			• • •		

Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check

Stormwater peak discharge rate for the design

frequency storm (cubic feet per second)

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feet with pla appropriate box)

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA Please reference the Stormwater Methodology used (i.e. SCS Method) SCS Method **Net Change** Pre-construction **Post Construction** Design storm frequency 2 years Rainfall amount 3.0 inches +6.501 7.44 0.94 Impervious area (acres) +247994.06 368755.43 Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)

229.84

0.01

10

8 (-123464.07)

(-16.65)

Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.

16.66

- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- ox 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
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Key:	RC = Rate Control	VC = 1	Volume C	ontrol	WQ = Water	Quality
may be o	s below, check the BMPs identific checked for a BMP. List the stor an is not listed below, describe it	mwater volume a	and area o	frunoff to I	n(s) using the above Key. Mo be treated by each BMP type	ore than one functions. If any BMP in the
	ВМР		Function	(s)	Volume of stormwater treated	Acres treated
☐ Wet ponds		│ □ vc	☐ RC	□ WQ	NA	NA
☐ Constructe	d wetlands	□ vc	☐ RC	☐ WQ	NA	NA
Retention b	pasins	☐ vc	☐ RC	☐ WQ	NA	NA
☐ Detention b	pasin	□ vc	☐ RC	☐ WQ	NA	NA
Undergrour	nd detention	│ □ vc	☐ RC	☐ WQ	NA	NA
Dry Extend	ed detention basin	☐ vc	☐ RC	☐ WQ	NA	NA
Sediment fo	ore bay	\	☐ RC	□ WQ	NA	NA
Infiltration t	rench	□ vc	☐ RC	□ wa	NA	NA
Infiltration E	Berm/Retentive Grading	□ vc	☐ RC	□ WQ	NA NA	NA
Subsurface	Infiltration bed	□ vc	☐ RC	☐ WQ	NA	NA
🗵 Infiltration b	asin	⊠ vc	⊠ RC	🛛 WQ	4.774Acft.	111.19
Pervious pa	vement	□ vc	☐ RC	□ wa	NA	NA
Dry well/Se	epage pit	□ vc	☐ RC	□ WQ	NA	NA
☐ Bio-infiltratio	on areas		☐ RC	☐ WQ	NA	NA
☐ Rain garder	ns/Bio-retention	□·vc	☐ RC	☐ WQ	· NA ·	NA.
⊠ Vegetated s	wales	□ vc	☐ RC		5.68 Acft.	57.28
☐ Constructed	filters	□ vc	☐ RC	☐ WQ	NA	NA
☐ Protect Sen	sitive & Special Value Features	□ vc	☐ RC	☐ WQ	NA	NA
☐ Protect/Con	serve/Enhance Riparian areas	□ vc	☐ RC	□ WQ	NA .	NA
Restoration	: Buffers/ Landscape/Floodplain	□ vc	☐ RC	□ WQ	NA	NA
☐ Disconnecti	on from storm sewers	☐ VC	☐ RC	□ WQ	NA	NA
☐ Rooftop disc	connection	□ vc	☐ RC	□ WQ	NA	NA
☐ Vegetated re	oofs	□ vc	☐ RC	□ WQ	NA	NA
☐ Runoff captı	ure/Reuse	□ vc	☐ RC	☐ WQ	NA	NA
] Oil/grit sepa	rators		***************************************	□ WQ	NA	NA
☐ Water qualit	y inserts/inlets			□ wa	NA	NA
Street swee	ping			□ WQ	NA	NA
Other		U VC	☐ RC	□ wa	NA	NA
			☐ RC	☐ WQ	NA	NA
Does the	EDISCHARGE ANALYSIS project propose any off-site scribe the type of easement					
that the d	lischarge will not cause eros	sion, damage,	or a nuis	ance to of	ff-site properties.	a demonstration

POI 3B

SUMMARY TARLE FOR	SUPPORTING CALCUL	LATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 0.77	2 0.00	3 (-0.77)
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	₄ 18994.69	5 0.00	6 (-18994.69)
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 0.00	8 (-18994.69)
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 0.00	10 0.00	11 0.00

- **Box 1. Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area. The total acres of impervious area on the project site after construction activities have been completed.
- ox 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

Key: RC = Rate Control	VC = Volume Control	WQ = Water	•
may be checked for a BMP. List th	lentified in the PCSM Plan, and their function e stormwater volume and area of runoff to be it in the space provided after "Other".	on(s) using the above Key. Mo be treated by each BMP type	ore than one function e. If any BMP in the
ВМР	Function(s)	Volume of stormwater treated	Acres treated
☐ Wet ponds	UC RC WQ	NA	NA ·
Constructed wetlands	UVC □RC □ WQ	NA NA	NA
Retention basins	UC RC WQ	NA ·	NA
Detention basin	□ VC □ RC □ WQ	NA	NA
Underground detention	UC RC WQ	NA	NA
☐ Dry Extended detention basin	□ VC □ RC □ WQ	NA	NA
Sediment fore bay	VCRCWQ	NA	NA
Infiltration trench	□ VC □ RC □ WQ	. NA	NA
☐ Infiltration Berm/Retentive Grading	□ VC □ RC □ WQ	NA	NA
☐ Subsurface Infiltration bed	UC □RC □WQ	NA	NA
☐ Infiltration basin	□ VC □ RC □ WQ	NA .	NA
Pervious pavement	□ VC □ RC □ WQ	NA	NA
☐ Dry well/Seepage pit	□ VC □ RC □ WQ	NA	NA
☐ Bio-infiltration areas	□ VC □ RC □ WQ	NA	NA
Rain gardens/Bio-retention	□ VC □ RC □ WQ	. NA	NA
☐ Vegetated swales	UVC RC WQ	NA	NA
Constructed filters	UVC RC WQ	NA	NA
] Protect Sensitive & Special Value Featu	res	NA	NA
] Protect/Conserve/Enhance Riparian are	as VC RC WQ	NA	NA
Restoration: Buffers/ Landscape/Floodp	lain	NA	NA
Disconnection from storm sewers	□ VC □ RC □ WQ	NA	NA
Rooftop disconnection	UVC RC WQ	NA	NA
] Vegetated roofs	□ VC □ RC □ WQ	NA	· NA
Runoff capture/Reuse	UC RC WQ	NA	NA
Oil/grit separators	□ wa	NA NA	NA
] Water quality inserts/inlets	□ wa	NA	NA
] Street sweeping	□ wa	NA NA	NA.
Other		NA NA	NA
Other	1	NA NA	NA NA
OFF SITE DISCHARGE ANALYSI	S	<u></u>	
Does the project propose any of	-site discharges to areas other than	surface watere? Vec	⊠ No
	ment that provides the legal authorit		
that the discharge will not cause	erosion, damage, or a nuisance to o	y ior una uischarge and : ff-eite properties	a demonstration

POI 3C

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 1.09	2 0.58	3 (-0.51)
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	₄ 11488.79	5 7345.47	6 (-4143.32)
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 7345.47 ;	8 (-4143.32)
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 0.00	10 0.00	11 0.00

- **Box 1. Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- **Net change of impervious area**: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- **Pre-construction stormwater runoff volume without planned BMPs**: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3. SUMMAR reference	Y DESCRIPTION OF POST CONS d in the Pa. Stormwater BMP Ma	STRUCTION STORMWATER BMPs nual)	(consistent with Workshee	ets 3 and 5
Key:	RC = Rate Control	VC = Volume Control	WQ = Water (Quality
may be ch	below, check the BMPs identified ecked for a BMP. List the stormy n is not listed below, describe it in	in the PCSM Plan, and their function water volume and area of runoff to b the space provided after "Other".	e treated by each BMP type	ore than one function e. If any BMP in the
	ВМР	Function(s)	Volume of stormwater treated	Acres treated
☐ Wet ponds		UC RC WQ	NA .	NA
Constructed		C C C RC WQ	NA	NA
Retention ba	sins	□ VC □ RC □ WQ	NA	NA
Detention ba	sin	□ VC □ RC □ WQ	NA	NA
Underground	detention	□ VC □ RC □ WQ	NA NA	NA
☐ Dry Extended	d detention basin	UVC RC WQ	NA	NA
☐ Sediment for	e bay	□ VC .□ RC □ WQ	NA	NA
Infiltration tre	nch	□ VC □ RC □ WQ	NA	NA
☐ Infiltration Be	rm/Retentive Grading	□ VC □ RC □ WQ	NA	NA
Subsurface li	nfiltration bed	☐ VC ☐ RC ☐ WQ	NA	NA
Infiltration ba	sin	UC RC WQ	NA	NA
Pervious pav	ement	UC RC WQ	NA	NA
☐ Dry well/Seep	page pit	□ VC □ RC □ WQ	. NA	NA
☐ Bio-infiltration	areas .	□ VC □ RC □ WQ	NA	NA
☐ Rain gardens	/Bio-retention	UC RC WQ	NA	NA
☐ Vegetated sw	rales	UC RC WQ	NA	NA
☐ Constructed f	ilters	UC RC WQ	NA	NA
☐ Protect Sensi	tive & Special Value Features	UVC RC WQ	NA	NA
☐ Protect/Consc	erve/Enhance Riparian areas	UC RC WQ	NA	NA
☐ Restoration: I	Buffers/ Landscape/Floodplain	UVC RC WQ	NA	NA
☐ Disconnection	n from storm sewers	UVC RC WQ	NA	NA
☐ Rooftop disco	nnection	·· UVC DRC WQ	NA	NA
☐ Vegetated roo	ofs	UVC RC WQ	NA	· NA
☐ Runoff captur	e/Reuse	UVC RC WQ	NA	NA
☐ Oil/grit separa		□ wa	NA	NA
☐ Water quality	inserts/inlets	□ wa	NA ·	NA
☐ Street sweepi	ng	□ wa	NA	NA
Other		_ VC RC WQ	. NA	NA
Other		_ UC RC WQ	NA	NA
Does the p	cribe the type of easement th	ischarges to areas other than s nat provides the legal authority on, damage, or a nuisance to of	for this discharge and	⊠ No a demonstration
	•			

frequency storm (cubic feet per second)

POI 4

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA Please reference the Stormwater Methodology used (i.e. SCS Method) SCS Method **Net Change** Pre-construction **Post Construction** Design storm frequency 2 years Rainfall amount 3.0 inches +0.652.43 3 1.78 Impervious area (acres) 5 177645.06 +25772.56 ₄ 151872.51 Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box) 8 +25772.56 Volume of stormwater runoff ☐ acre-feet or ☒ cubic 7 177645.06 BMPs (check feet with planned stormwater appropriate box) 11 10 (-0.40)0.12 Stormwater peak discharge rate for the design 0.52

- **Box 1. Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- **Pre-construction stormwater runoff volume without planned BMPs**: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

Key:	RC = Rate Control	VC = Volume Control	WQ = Wate	er Quality	
may be d	thecked for a BMP. List the stor	ed in the PCSM Plan, and their fur mwater volume and area of runo in the space provided after "Other	ff to be treated by each BMP to	More than one function ype. If any BMP in the	
	ВМР	Function(s)	Volume of stormwater √treated	Acres treated	
☐ Wet ponds	•	□ VC □ RC □	WQ NA	· NA	
Constructed		UVC RC U	WQ NA	NA	
Retention b	pasins	□ VC □ RC □ V	WQ NA	NA	
Detention b	asin	□ VC □ RC □ V	WQ NA	NA	
-	nd detention	□ VC □ RC □ \	WQ NA	NA	
☐ Dry Extended	ed detention basin	UC RC I	NQ NA	NA	
Sediment fo	ore bay	UC RC V	NQ NA	NA	
Infiltration tr	ench	UC RC V	VQ NA	NA	
	erm/Retentive Grading	□VC □RC □V	VQ NA	NA	
☐ Subsurface	Infiltration bed	UC RC V	VQ NA	NA	
☐ Infiltration b	asin	UC RC V	VQ NA	NA	
Pervious pa	vement	□ VC □ RC □ V	VQ NA	NA	
☐ Dry well/See	epage pit	UC RC V	VQ NA	NA	
☐ Bio-infiltratio	on areas	□ VC □ RC □ V	VQ NA	NA	
☐ Rain garden	s/Bio-retention	UC RC V	VQ NA	· NA	
☑ Vegetated s	wales	□ VC □ RC ☑ V	VQ 2.024Acft.	. 22.799	
☐ Constructed	filters	□ VC □ RC □ V	VQ: NA	NA	
Protect Sen:	sitive & Special Value Features	□ VC □ RC □ V	VQ NA	NA	
☐ Protect/Con:	serve/Enhance Riparian areas	□ VC □ RC □ V	VQ NA	NA .	
☐ Restoration:	Buffers/ Landscape/Floodplain	UVC RC V	VQ NA	NA	
Disconnection	on from storm sewers	UC □RC □V	VQ NA	NA	
Rooftop disc	connection	□ VC □ RC □ V	VQ NA	NA	
] Vegetated ro	oofs	□ VC □ RC □ W	VQ NA	NA	
] Runoff captu	re/Reuse	□ VC □ RC □ W	VQ NA	NA	
] Oil/grit separ	ators		VQ NA	NA	
☐ Water quality	/ inserts/inlets	□ w	/Q NA	NA	
] Street sweep	ping	□ w	/Q NA	NA NA	
Other		UC RC W	/Q NA	NA	
Other		VCRC _ W	/Q NA	NA	
OFF SITE	DISCHARGE ANALYSIS				
		discharges to areas other th	nan surface waters? 🏻 🗸	s 🗵 No	
		that provides the legal auth			
that the d	ischarge will not cause eros	sion, damage, or a nuisance	to off-site properties.	a a acmonstrativii	
		- -	• • • • • • • • • • • • • • • • • • • •		

POI₅

. SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA Please reference the Stormwater Methodology used (i.e. SCS Method) SCS Method

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 1.45	-2 8.71	3 +7.26
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 114921.99	5 241435.38	6 +126513.39
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		. 7 342.70	₈ (-114579.29)
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 2.59	10 0.02	¹¹ (-2.57)

- **Box 1. Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- **Net change of impervious area**: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- **Box 4. Pre-construction stormwater runoff volume without planned BMPs**: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- **Box 11. Net change stormwater discharge rate**: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

	Key:	RC = Rate Control	V/C = 1	Volume C	antra!	18/O - 18/otor /	Ounlife:
	· ·····	below, check the BMPs identified				WQ = Water (•
	may be cl	hecked for a BMP. List the storm an is not listed below, describe it in	water volume a	and area c	of runoff to b		
		ВМР		Function	(s)	Volume of stormwater treated	Acres treated
	Wet ponds		□ vc	☐ RC	□ WQ	NA	NA
	Constructed	wetlands	□ vc	☐ RC	☐ WQ	NA	ŇΑ
	Retention ba	asins	□ vc	RC	☐ WQ	NA	NA
	Detention ba	asin	□ vc	☐ RC	☐ WQ	NA	NA
	Undergroun	d detention	│ □ VC	☐ RC	☐ WQ	NA	NA
	Dry Extende	ed detention basin	□ vc	☐ RC	□ WQ	NA	NA
	Sediment fo	re bay	□ vc	☐ RC	□ WQ	NA	NA
	Infiltration tre	ench	□ vc	☐ RC	☐ WQ	NA	NA
	Infiltration Be	erm/Retentive Grading	□ vc	☐ RC	□ wa	NA	NA
\boxtimes	Subsurface	Infiltration bed	⊠ vc	⊠ RC	⊠ WQ	4.221Acft.	44.310
	Infiltration ba	asin	□ vc	☐ RC	□ WQ	NA	NA
	Pervious par	vement	□ vc	☐ RC	□ WQ	NA	NA
	Dry well/See	page pit	□ VC	☐ RC	☐ WQ	NA	NA
	Bio-infiltratio	n areas	□ vc	☐ RC	☐ WQ	NA	NA
	Rain garden	s/Bio-retention	□ vc	☐ RC	□ wa	NA	NA .
\boxtimes	Vegetated sv	wales	□ vc	☐ RC	⋈ wa	4.09 Acft.	35.93
	Constructed	filters	□ vc	☐ RC	□ WQ	NA	NA
	Protect Sens	sitive & Special Value Features	□ vc	☐ RC	□ wa	NA	NA
	Protect/Cons	serve/Enhance Riparian areas	□ vc	□ RC	□ wo	NA	NA
	Restoration:	Buffers/ Landscape/Floodplain	□ vc	☐ RC	□ WQ	NA	NA
	Disconnectio	n from storm sewers	□ vc	☐ RC	□ WQ	NA	NA
	Rooftop disc	onnection	□ vc	☐ RC	□ WQ	NA	NA
	Vegetated ro	ofs	□ vc	RC	□ wa	NA NA	NA
	Runoff captu	re/Reuse	│□ vc	☐ RC	□ WQ	NA	NA
	Oil/grit separ	ators			□ WQ	NA	NA
	Water quality	/ inserts/inlets			□ WQ	NA	NA
	Street sweep				□ WQ	NA	NA
	Other Snou	t	D vc	☐ RC	⊠ WQ	4.221Acft.	44.310
	Other		D vc	☐ RC	□ wq	NA	NA
4.	OFF SITE	DISCHARGE ANALYSIS					
••		project propose any off-site of	discharges to	areas o	ther than	surface waters? 🗍 Ves	⊠ No
		scribe the type of easement t	_			•	
	that the d	ischarge will not cause erosi	on, damage.	or a nuis	ance to o	ff-site properties.	a demonstration
	-		,,			4 4 1 - 1 - 1 - 1	

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 77.29	2 99.78	3 +22.49
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 912029.94	5 1112330.71	6 +200300.77
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 1069110.56	8 +157080.62
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 98.29	10 96.55	¹¹ (-1.74)

- Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
 - **Post construction impervious area**: The total acres of impervious area on the project site after construction activities have been completed.
- Box 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- **Pre-construction stormwater runoff volume without planned BMPs**: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- **Box 6. Net change in stormwater volume without planned BMPs**: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
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- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
 - **Net change stormwater discharge rate**: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3. SUMMARY DESCRIPTION OF POST CONS referenced in the Pa. Stormwater BMP Mar		(consistent with Worksheets 3 and 5		
Key: RC = Rate Control	VC = Volume Control	WQ = Water	Quality	
In the lists below, check the BMPs identified i may be checked for a BMP. List the stormw PCSM Plan is not listed below, describe it in t	vater volume and area of runoff to b	e treated by each BMP typ		
ВМР	Function(s)	Volume of stormwater treated	Acres treated	
☐ Wet ponds	UVC RC WQ	NA NA	NA	
Constructed wetlands	□ VC □ RC □ WQ	NA NA	NA	
Retention basins	C C C RC C WQ	NA	NA	
Detention basin	□ VC □ RC □ WQ	NA	NA	
☐ Underground detention	□ VC □ RC □ WQ	NA	NA	
☐ Dry Extended detention basin	□ VC □ RC □ WQ	NA	NA	
☐ Sediment fore bay	□ VC □ RC □ WQ	NA	NA	
☐ Infiltration trench	☐ VC ☐ RC ☐ WQ	NA	NA	
☐ Infiltration Berm/Retentive Grading	□ VC □ RC □ WQ	NA	NA	
☐ Subsurface Infiltration bed	□ VC □ RC □ WQ	NA	NA	
	☑ VC ☑ RC ☑ WQ	0.588Ac.ft.	12.72	
Pervious pavement	· UC RC WQ	NA	NA	
☐ Dry well/Seepage pit	□ VC □ RC □ WQ	NA	NA	
☐ Bio-infiltration areas	□ VC □ RC □ WQ	NA	NA	
☐ Rain gardens/Bio-retention	□ VC □ RC □ WQ	NA	NA	
	☐ VC ☐ RC ☑ WQ	1.07 Acft.	9.45	
☐ Constructed filters	□ VC □ RC □ WQ	NA	NA	
☐ Protect Sensitive & Special Value Features	□ VC □ RC □ WQ	NA	NA	
☐ Protect/Conserve/Enhance Riparian areas	UVC RC WQ	NA NA	NA.	
Restoration: Buffers/ Landscape/Floodplain	UC RC WQ	NA	NA	
☐ Disconnection from storm sewers	□ VC □ RC □ WQ	NA	NA	
Rooftop disconnection	□ VC □ RC □ WQ	NA	NA	
☐ Vegetated roofs	UC RC WQ	NA	NA	
☐ Runoff capture/Reuse	UC RC WQ	NA	NA	
☐ Oil/grit separators	□ wa	NA	NA	
☐ Water quality inserts/inlets	□wa	NA	NA	
☐ Street sweeping .	. 🗆 wa	NA	NA	
☑ Other <u>Snout</u>	_ □ vc □ RC 🛛 wa	0.588Ac.ft.	12.72	
Other	_ DVC. DRC DWQ	NA	NA	
4. OFF SITE DISCHARGE ANALYSIS Does the project propose any off-site d If yes, describe the type of easement th that the discharge will not cause erosio	nat provides the legal authority	for this discharge and		

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 1.04	2 1.10	з +0.06
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 24991.43	5 24718.37	6 (-273.06)
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 24718.37	₈ (-273.06)
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 0.00	10 0.00	11 0.00

- **Box 1. Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- ox 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- **Box 4.** Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
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- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3.	SUMMARY DESCRIPTION OF POST CONSTRU referenced in the Pa. Stormwater BMP Manual)		BMPs (consistent	with Worksheet	s 3 and 5
	Key: RC = Rate Control	VC = Volume Control		WQ = Water Q	uality
	In the lists below, check the BMPs identified in the may be checked for a BMP. List the stormwater PCSM Plan is not listed below, describe it in the s	volume and area of runo	iff to be treated by	above Key. Mor each BMP type.	re than one function If any BMP in the
	ВМР	Function(s)		stormwater ated	Acres treated
	Wet ponds	□ VC □ RC □	WQ I	NΑ	NA
	Constructed wetlands	□ VC □ RC □	WQ I	NA .	NA
	Retention basins	UVC RC	wa ı	NA.	NA
	Detention basin	□ VC □ RC □	wa 1	NÁ .	NA
	Underground detention	□ VC □ RC □	wa i	4A	NA
	Dry Extended detention basin	□ VC □ RC □	1 pw	NA A	NA
	Sediment fore bay	☐ VC ☐ RC ☐	1 DW	√ A	NA
	Infiltration trench	□ VC □ RC □	wa pw	IA	NA
	Infiltration Berm/Retentive Grading	UVC RC	n pw	IA A	NA
	Subsurface Infiltration bed	□ VC □ RC □	WQ N	IA A	NA
	Infiltration basin	UVC RC	WQ DW	IA AI	NA
	Pervious pavement	UC RC	WQ 1	IA	NA
	Dry well/Seepage pit	□ VC □ RC □	WQ N	IA	NA
	Bio-infiltration areas	□ VC □ RC □	WQ N	IA	NA
	Rain gardens/Bio-retention	UC RC	WQ N	IA	NA -
	Vegetated swales	UC RC	WQ N	IA	NA
	Constructed filters	UC RC	WQ N	IA	NA
	Protect Sensitive & Special Value Features	□ VC □ RC □	WQ N	IA .	NA
	Protect/Conserve/Enhance Riparian areas	□ VC □ RC □	WQ N	IA	NA
	Restoration: Buffers/ Landscape/Floodplain	□ VC □ RC □	WQ N	iA	NA
	Disconnection from storm sewers	□ VC □ RC □	WQ N	IA	NA
	Rooftop disconnection	□ VC □ RC □	VQ N	IA	NA
	Vegetated roofs	□ VC □ RC □	NQ N	IA	NA
	Runoff capture/Reuse	□ VC □ RC □	NQ N	A	NA
	Oil/grit separators		NQ N	Α	NA
	Water quality inserts/inlets		NQ N	Α	NA
	Street sweeping	□ v	NQ N	A	NA
	Other	□ VC □ RC □ 1	NQ N	Α	NA
	Other	□ VC □ RC □ V	NQ N	Α	NA ·
4.	OFF SITE DISCHARGE ANALYSIS				
1.	Does the project propose any off-site disch	arges to areas other t	han surface wat	are? Vae	⊠ No
	If yes, describe the type of easement that p	provides the legal aut	hority for this di	scharge and a	
	that the discharge will not cause erosion, d	amaye, or a nuisance	to on-site prop	aues.	
				-	
	•				

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency 2 years Rainfall amount 3.0 inches			
Impervious area (acres)	1 1.29	2 1.61	3 +0.32
Volume of stormwater runoff ☐ acre-feet or ☐ cubic feet without planned stormwater BMPs (check appropriate box)	₄ 185426.19	5 181540.67	6 (-3885.52)
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 181540.67	8 (-3885.52)
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 65.78	10 64.49	¹¹ (-1.29)

- **Box 1. Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
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- ox 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
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- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

Key:	RC = Rate Control	VC = Volume Control	WQ = Water	•
may be d	checked for a BMP. List the stor	ed in the PCSM Plan, and their funct mwater volume and area of runoff t in the space provided after "Other".	ion(s) using the above Key. Mo to be treated by each BMP type	ore than one funct e. If any BMP in
	ВМР	Function(s)	Volume of stormwater treated	Acres treated
☐ Wet ponds		□ VC □ RC □ WC	Q NA	NA .
Constructed	d wetlands	□ VC □ RC □ WC	Q NA	NA
Retention b	pasins	VC RC W	Q NA	NA
Detention b	pasin	□ VC □ RC □ WC	Q NA	NA
Undergrour	nd detention	UC RC W	Q NA	NA
Dry Extende	ed detention basin	□ VC □ RC □ WC	NA NA	NA
Sediment fo	ore bay	VC 🗆 RC 🗀 WG	NA NA	NA
Infiltration tr	rench	□ VC □ RC □ WG	NA NA	NA
Infiltration B	Berm/Retentive Grading	UC RC WC	NA NA	NA
] Subsurface	Infiltration bed	UC □RC □WC	NA NA	NA
Infiltration b	asin	UVC RC WC	NA NA	NA
] Pervious pa	vement	│□ ∨c □ Rc □ wc	NA NA	NA
Dry well/See	epage pit	□ VC □ RC □ WC	. NA	NA
Bio-infiltratio	on areas	UVC RC WC	NA NA	NA
Rain garden	s/Bio-retention	UC RC WG	NA ·	NA
Vegetated s	wales	UVC RC WQ	i !	NA
Constructed	filters	UVC RC WQ	NA	NA
Protect Sens	sitive & Special Value Features	UC RC WQ	NA	NA
Protect/Con:	serve/Enhance Riparian areas	VC RC WQ		NA
Restoration:	Buffers/ Landscape/Floodplain	UVC DRC DWQ		NA
Disconnection	on from storm sewers	□ VC □ RC □ WQ		NA
Rooftop disc	connection	UC RC WQ	NA	NA
Vegetated ro	oofs	□ VC □ RC □ WQ	NA	· NA
Runoff captu	ire/Reuse	□ VC □ RC □ WQ	NA	NA
Oil/grit separ	rators	□ wa	NA NA	NA NA
	y inserts/inlets	☐ wa	NA NA	NA
Street sweep			NA NA	NA
Other			NA	NA
		•	NA NA	NA
	DISCHARGE ANALYSIS			
		alima hanna a 4		K*****
		discharges to areas other than		
that the d	scribe the type of easement ischarge will not cause eros	that provides the legal author sion, damage, or a nuisance to	ity for this discharge and a	a demonstration
uio u		non, damage, or a nuisance to	on-site properties.	

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 0.84	2 2.00	3 +1.16
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 153503.90	5 187750.16	6 +34246.25
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 161232.87	8 +4308.57
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 53.10	10 44.57	¹¹ (-8.53)

- **Box 1. Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
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- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
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3.	 SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs (consistent with Worksheets 3 and 5 referenced in the Pa. Stormwater BMP Manual) 							
	Key:	RC = Rate Control	VC = \	olume Co	ontrol	WQ = Water (Quality	
	may be chec	low, check the BMPs identified in the ked for a BMP. List the stormwate a not listed below, describe it in the s	r volume a	ind area o	f runoff to b			
	•	ВМР		Function	(s)	Volume of stormwater treated	Acres treated	
	Wet ponds		☐ VC	☐ RC	□ WQ	NA	NA	
	Constructed we	tlands	│ □ vc	☐ RC	□ WQ	NA	NA	
	Retention basin	s	☐ VC	☐ RC	□ WQ	NA	NA	
	Detention basin	·	□ vc	☐ RC	□ WQ	NA	NA	
	Underground de	etention	☐ VC	☐ RC	☐ WQ	NA	NA	
	Dry Extended d	etention basin	│ □ vc	☐ RC	□ WQ	NA	NA	
	Sediment fore b	ay	☐ VC	☐ RC	□ WQ	NA	NA .	
	Infiltration trenc	h	□ vc	☐ RC	□ WQ	NA	NA	
	Infiltration Berm	/Retentive Grading	☐ VC	☐ RC	☐ WQ	NA	NA	
\times	Subsurface Infil	tration bed	⊠ vc	⊠ RC	⊠ WQ	1.268Acft.	8.66	
	Infiltration basin		□ VC	☐ RC	□ wa	NA ·	NA	
	Pervious pavem	ent	□ vc	☐ RC	□ WQ	NA	NA	
	Dry well/Seepag	ge pit	│ □ vc	☐ RC	□ WQ	NA	NA	
	Bio-infiltration a	eas	☐ VC	☐ RC	□ WQ	NA	NA	
	Rain gardens/Bi	o-retention	□ vc	☐ RC	□ wq	NA	NA	
	Vegetated swale	es	□ vc	☐ RC	□ wa	NA	NA	
	Constructed filte	ers	□ vc	☐ RC	□ WQ	NA	NA	
	Protect Sensitive	e & Special Value Features	□ vc	☐ RC	□wQ	NA	NA	
	Protect/Conserv	e/Enhance Riparian areas	□ vc	☐ RC	□ WQ	NA	. NA	
	Restoration: Buf	fers/ Landscape/Floodplain	□ vc	☐ RC	□ wa	NA	NA	
	Disconnection fr	om storm sewers	☐ VC	☐ RC	□ wa	NA	NA	
	Rooftop disconn	ection	□ vc	☐ RC	□ wa	NA	NA	
	Vegetated roofs		□ vc	☐ RC	□ wa	NA	NA	
	Runoff capture/F	Reuse .	□ vc	☐ RC	□ wa	NA	NA	
	Oil/grit separator	·s			□ WQ	NA	NA	
	Water quality ins	erts/inlets			□ wa	NA	NA	
	Street sweeping				□ wa	NA	NA	
\boxtimes	Other Snout		□ vc	☐ RC	⊠ wq	1.268Ac,-ft.	8.66	
	Other		□ vc	☐ RC	□ wq	NA ·	. NA .	
4.	OFF SITE DI	SCHARGE ANALYSIS						
	Does the pro	ject propose any off-site disc	harges to	areas of	ther than s	surface waters? 🗌 Yes	⊠ No	
		be the type of easement that harge will not cause erosion, or					a demonstration	
		,	. • ,			• •		

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches	at the Affective Action to the Control of the		
Impervious area (acres)	1 5.82	2 7.63	3 +1.81
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 733297.48	5 742156.85	6 +8859.37
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 742156.85	8 +8859.37
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 127.45	¹⁰ 126.82	11 (~0.63)

- **Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
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3.	 SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs (consistent with Worksheets 3 and 5 referenced in the Pa. Stormwater BMP Manual) 							
	Key: RC = Rate Control	VC = 1	Volume Co	ontrol	WQ = Water 0	⊋uality		
	In the lists below, check the BMPs identified in the may be checked for a BMP. List the stormwater PCSM Plan is not listed below, describe it in the space of the storm of of the	volume a	and area o	of runoff to b	function(s) using the above Key. More than one funct noff to be treated by each BMP type. If any BMP in her".			
	ВМР		Function	(s)	Volume of stormwater treated	Acres treated		
	Wet ponds	☐ VC	☐ RC	☐ WQ	NA	NA		
	Constructed wetlands	☐ VC	☐ RC	☐ WQ	NA	NA		
	Retention basins	☐ VC	RC	☐ WQ	NA	NA		
	Detention basin	☐ VC	☐ RC	☐ WQ	NA	NA		
	Underground detention	□ vc	☐ RC	□ WQ	NA	NA		
	Dry Extended detention basin	☐ VC	☐ RC	☐ WQ	NA	NA		
	Sediment fore bay	□ vc	☐ RC	☐ WQ	NA	NA		
	Infiltration trench	☐ vc	☐ RC	□ WQ	NA	NA		
	Infiltration Berm/Retentive Grading	□ vc	☐ RC	□ wa	NA	NA		
	Subsurface Infiltration bed	□ vc	☐ RC	☐ WQ	NA	NA		
	Infiltration basin	│ □ vc	☐ RC	□ wa	NA	NA		
	Pervious pavement	□ vc	☐ RC	□ WQ	NA	NA		
	Dry well/Seepage pit	□ vc	☐ RC	□ WQ	NA	NA		
	Bio-infiltration areas	□ vc	☐ RC	□ WQ	NA	NA		
	Rain gardens/Bio-retention	□ vc	☐ RC	□ wa	NA	NA		
	Vegetated swales	□ vc	☐ RC	□ wa	NA	NA		
	Constructed filters	□ vc	☐ RC	□ wa	NA	NA		
	Protect Sensitive & Special Value Features	☐ VC	RC	□ wa	NA	NA		
	Protect/Conserve/Enhance Riparian areas	□ vc	☐ RC	□ wa	NA	NA		
	Restoration: Buffers/ Landscape/Floodplain	□ vc	☐ RC	□ wq	NA	NA .		
	Disconnection from storm sewers	□ vc	☐ RC	□ wa	NA	NA		
	Rooftop disconnection	□ vc	☐ RC	□ wa	NA	NA		
	Vegetated roofs	□ vc	☐ RC	□ wa	NA	NA		
	Runoff capture/Reuse	□ vc	☐ RC	□ wq	NA	NA		
	Oil/grit separators	:		□ wa	NA .	NA		
	Water quality inserts/inlets	ı		□ wa	NA	NA		
	Street sweeping	ı		□ wq	NA	NA		
	Other	□ vc	☐ RC	□ wa	NA	NA		
	Other	☐ VC	☐ RC	□ wa	NA	NA		
4.	OFF SITE DISCHARGE ANALYSIS							
	Does the project propose any off-site disch	iarges to	areas of	ther than s	surface waters? 🗌 Yes	⊠ No		
	If yes, describe the type of easement that p that the discharge will not cause erosion, d	orovides lamage,	the lega or a nuis	I authority ance to of	for this discharge and f-site properties.	a demonstration		

POI 1-1

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

Please reference the Stormwater Methodology used (i.e. SCS Method) SCS Method

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 0*	2 0.16	з 0.16
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 0*	5 2276	6 2276
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 N A	8 NA
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 0*	10 0.7	11 0.7

*INCLUDED IN PRE POI I-5

- **Pre-construction impervious area**: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
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- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- **Box 11. Net change stormwater discharge rate**: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3.	 SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs (consistent with Worksheets 3 and 5 referenced in the Pa. Stormwater BMP Manual) 								
	Key: RC = Rate Control	C = Volume Control WQ:	= Water Quality						
	In the lists below, check the BMPs identified in the may be checked for a BMP. List the stormwater v PCSM Plan is not listed below, describe it in the spa	me and area of runoff to be treated by each provided after "Other".	BMP type. If any BMP in the						
	ВМР	Function(s) Volume of store treated	mwater Acres treated						
	Wet ponds	JVC RC WQ NA	NA						
	Constructed wetlands	JVC RC WQ NA	NA						
	Retention basins	VC RC WQ NA	NA NA						
	Detention basin] VC □ RC □ WQ NA	NA						
	Underground detention	JVC RC WQ NA	NA						
	Dry Extended detention basin	JVC RC WQ NA	NA						
	Sediment fore bay	UC RC WQ NA	NA						
	Infiltration trench	UC □ RC □ WQ NA	NA						
	Infiltration Berm/Retentive Grading	JVC RC WQ NA	NA						
	Subsurface Infiltration bed	JVC RC WQ NA	NA						
	Infiltration basin]VC □ RC □ WQ NA	NA						
	Pervious pavement]VC □ RC □ WQ NA	NA						
	Dry well/Seepage pit]VC □ RC □ WQ NA	NA						
	Bio-infiltration areas	JVC RC WQ NA	NA						
	Rain gardens/Bio-retention]VC □ RC □ WQ NA	NA						
	Vegetated swales]VC □ RC □ WQ NA	NA						
	Constructed filters]VC 🗌 RC 🔲 WQ NA	NA						
	Protect Sensitive & Special Value Features	C RC WQ NA	NA						
	Protect/Conserve/Enhance Riparian areas	JVC RC WQ NA	NA						
	Restoration: Buffers/ Landscape/Floodplain .	JVC 🗌 RC 🔲 WQ NA	NA						
	Disconnection from storm sewers]VC □.RC. □ WQ . NA	NA						
	Rooftop disconnection]VC 🗌 RC 🔲 WQ NA	NA						
	Vegetated roofs]VC 🗌 RC 🗌 WQ NA	· NA						
Q	Runoff capture/Reuse]VC 🗌 RC 🗌 WQ NA	NA						
	Oil/grit separators	□ WQ NA	NA						
	Water quality inserts/inlets	□ WQ NA	NA						
	Street sweeping	□ WQ NA	NA						
	Other]VC RC WQ NA	NA						
	Other]VC. □ RC □ WQ NA	NA						
4.	OFF SITE DISCHARGE ANALYSIS								
	Does the project propose any off-site discha	es to areas other than surface waters?	☐ Yes						
	If yes, describe the type of easement that pr								
	that the discharge will not cause erosion, da								

POI I-2

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA Please reference the Stormwater Methodology used (i.e. SCS Method) SCS Method

		Pre-co	nstruction	Post	Construction	N	et Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u>	nches						
Impervious area (acres)		1	0*	2	0.57	3	0.57
Volume of stormwater runoff acre-feet feet without planned stormwater BN appropriate box)		4	0*	5	6949	6	6949
Volume of stormwater runoff acre-feet feet with planned stormwater BMPs (check box)				7	NA	8	· NA
Stormwater peak discharge rate for frequency storm (cubic feet per second)	the design	9	0*	10	2.2	11	2.2

*INCLUDED IN PRE POI I-5

- Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
 - **Net change of impervious area**: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- **Pre-construction stormwater runoff volume without planned BMPs**: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3.	3. SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs (consistent with Worksheets 3 and 5 referenced in the Pa. Stormwater BMP Manual)							
	Key: RC = Rate Control	VC = Volume Control WQ = Wate	r Quality					
	In the lists below, check the BMPs identified in the may be checked for a BMP. List the stormwater of PCSM Plan is not listed below, describe it in the spirit	CSM Plan, and their function(s) using the above Key. slume and area of runoff to be treated by each BMP ty be provided after "Other".	More than one function pe. If any BMP in the					
	ВМР	Function(s) Volume of stormwate treated	r Acres treated					
	Wet ponds	□ VC □ RC □ WQ NA	NA					
	Constructed wetlands	□ VC □ RC □ WQ NA	NA					
	Retention basins	□ VC □ RC □ WQ NA	NA					
	Detention basin	□ VC □ RC □ WQ NA	NA					
	Underground detention	□ VC □ RC □ WQ NA	NA					
	Dry Extended detention basin	UC RC WQ NA	NA					
	Sediment fore bay	□ VC □ RC □ WQ NA	NA					
	Infiltration trench	□ VC □ RC □ WQ NA	NA					
	Infiltration Berm/Retentive Grading	□ VC □ RC □ WQ NA	NA					
	Subsurface Infiltration bed	UC RC WQ NA	NA					
	Infiltration basin	□ VC □ RC □ WQ NA	NA					
	Pervious pavement	□ VC □ RC □ WQ NA	NA					
	Dry well/Seepage pit	□ VC □ RC □ WQ NA	NA					
	Bio-infiltration areas	□ VC □ RC □ WQ NA	NA					
	Rain gardens/Bio-retention	□ VC □ RC □ WQ NA	NA					
	Vegetated swales	□ VC □ RC □ WQ NA	NA					
	Constructed filters	□ VC □ RC □ WQ NA	NA					
	Protect Sensitive & Special Value Features	□ VC □ RC □ WQ NA	NA					
	Protect/Conserve/Enhance Riparian areas	□ VC □ RC □ WQ NA	NA					
	Restoration: Buffers/ Landscape/Floodplain	□ VC □ RC □ WQ NA	NA					
	Disconnection from storm sewers	□ VC □ RC □ WQ NA	NA					
	Rooftop disconnection	□VC □RC □WQ NA	NA					
	Vegetated roofs	□ VC □ RC □ WQ NA	NA					
	Runoff capture/Reuse	□ VC □ RC □ WQ NA	NA					
	Oil/grit separators	⊡ WQ NA	NA					
	Water quality inserts/inlets	□ WQ NA	NA					
	Street sweeping	□ WQ NA	NA					
	Other	□ VC □ RC □ WQ NA	NA					
	Other	□VC □RC □WQ NA	NA					
4.	OFF SITE DISCHARGE ANALYSIS							
т.		ges to areas other than surface waters? 🔲 Ye	.a. 571 N.a.					
			· · · · · · · · · · · · · · · · · · ·					
	that the discharge will not cause erosion, da	vides the legal authority for this discharge and	u a demonstration					
	and the second s	ge, e. a nationalist to off-site properties.						

POI I-3

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA

	Pre-construction	Post Construction	Net Change
Design storm frequency <u>2 years</u> Rainfall amount <u>3.0</u> inches			
Impervious area (acres)	1 0.00	2 0.00	3 0.00
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	4 2748	5 8515	6 5767
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)		7 NA	8 NA
Stormwater peak discharge rate for the design frequency storm (cubic feet per second)	9 0.5	10 3.3	11 2.8

- Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3.	3. SUMMARY DESCRIPTION OF POST CONSTRUCTION STORMWATER BMPs (consistent with Worksheets 3 and 5 referenced in the Pa. Stormwater BMP Manual)							
	Key: RC = Rate Control	VC = V	olum	e Coi	ntrol		WQ = Water 0	⊋uality
	In the lists below, check the BMPs identified in the may be checked for a BMP. List the stormwater of PCSM Plan is not listed below, describe it in the spiritual control of the process of the stormwater of the	∕olume ai	nd are	ea of	runoff to	tion(s o be) using the above Key. Mo	ore than one function
	ВМР		Fun	ction	(s)		Volume of stormwater treated	Acres treated
	Wet ponds	│ □ ∨c		RC	□ V	VQ	NA	NA
	Constructed wetlands	│ □ VC		RC	□ V	VQ	NA	NA
	Retention basins	│ □ ∨c		RC	□ v	VQ	NA	NA
	Detention basin	□ vc		RC	□ ∧	VQ	NA	NA
	Underground detention	☐ VC		RC	□ W	VQ	NA	NA
	Dry Extended detention basin	│ □ vc		RC	□v	va	NA	NA
	Sediment fore bay	□ vc		RC	□ W	vq	NA	NA
ו 🗆 ו	nfiltration trench	☐ VC		RC	□ N	VQ	NA	NA
🗆	nfiltration Berm/Retentive Grading	│ □ vc		RC	□ N	va	NA	NA
	Subsurface Infiltration bed	□ vc		RC	□ N	va	NA	NA
🗆	nfiltration basin	□ vc		RC	□ w	va	NA	NA
☐ F	^o ervious pavement	□ vc		RC	□v	va	NA	NA
	Dry well/Seepage pit	□ vc		RC	□ w	/Q	NA	NA
E	Bio-infiltration areas	□ vc		RC	□ w	/Q	NA	NA
☐ F	Rain gardens/Bio-retention	□ vc		RC	□ W	/Q	NA	NA ·
	/egetated swales	□ vc		RC	□w	/Q	NA	NA
	Constructed filters	□ vc		RC	□w	/Q	NA	NA
□ F	Protect Sensitive & Special Value Features	□ vc		RC	□ w	/Q	NA	NA
F	Protect/Conserve/Enhance Riparian areas	□ vc		RC	□w	/Q	NA	· NA
□F	Restoration: Buffers/ Landscape/Floodplain	□ vc		RC	□w	/Q	NA	NA
	Disconnection from storm sewers	□ vc		RC	□w	/Q	NA	NA
□F	Rooftop disconnection	□ vc		RC	□w	/Q	NA	NA
□ ∨	/egetated roofs	□ vc		RC	□w	a l	NA	NA
	Runoff capture/Reuse	□ vc		RC	□W	/Q	NA	NA .
	Dil/grit separators				□w	a l	NA	NA
□ V	Vater quality inserts/inlets				□w	a l	NA	NA
□s	treet sweeping				□W	a l	NA	NA
	other	□ vc		RC	□ W	'Q	NA	NA
	Other	□ vc		RC	□ W	'Q	NA	NA
	OFF SITE DISCHARGE ANALYSIS Does the project propose any off-site discharges to areas other than surface waters? Yes No If yes, describe the type of easement that provides the legal authority for this discharge and a demonstration that the discharge will not cause erosion, damage, or a nuisance to off-site properties.							
	<u>_</u>	J . , .		- *-			p p	

frequency storm (cubic feet per second)

POI I-4

-						
SUMMARY TABLE FOR SUPPORTING CALCULAT	ION AI	ND MEASURE	MENT [DATA		
Please reference the Stormwater Methodology used (i.e.	SCS N	Method) SCS M	ethod	•		
	Pre-	construction	Post	Construction	N	et Change
Design storm frequency 2 years Rainfall amount 3.0 inches						
Impervious area (acres)	t	0	2	0	3	0
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet without planned stormwater BMPs (check appropriate box)	,	362	5	362	6	0
Volume of stormwater runoff ☐ acre-feet or ☒ cubic feet with planned stormwater BMPs (check appropriate box)			. 7	NA	8	NA
Stormwater peak discharge rate for the design	q	0.04	10	0.04	11	0.0

- Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
 - Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

Key:	RC = Rate Control	VC = Volume Control	WQ = Water	Quality
may be o	checked for a BMP. List the storr	d in the PCSM Plan, and their functi nwater volume and area of runoff to n the space provided after "Other".	on(s) using the above Key. Mo be treated by each BMP type	ore than one funct e. If any BMP in
	ВМР	Function(s)	Volume of stormwater treated	Acres treated
] Wet ponds		UVC RC W	/Q NA	NA
Constructe	d wetlands	UC RC W	/Q NA	NA
Retention b	pasins	UC RC W	'Q NA	NA
Detention b	pasin	□ VC □ RC □ W	'Q NA	[*] NA
Undergrou	nd detention	UC RC W	Q NA	NA
Dry Extend	ed detention basin	UVC RC W	'Q NA,	NA
Sediment for	ore bay	UC RC W	Q NA	NA
Infiltration t	rench	□ VC □ RC □ W	Q NA	NA
Infiltration E	Berm/Retentive Grading	□ VC □ RC □ W	Q NA	NA
Subsurface	Infiltration bed	UC RC W	Q NA	NA
Infiltration b	asin	UVC RC W	Q NA	NA
Pervious pa	vement	UVC RC W		NA
Dry well/Se	epage pit	UVC RC W		NA
Bio-infiltration	on areas	□ VC □ RC □ W		NA
Rain garder	ns/Bio-retention	VC RC W		NA
Vegetated s	wales	□ VC □ RC □ W		NA
Constructed	l filters	□ VC □ RC □ W	l	NA
Protect Sen	sitive & Special Value Features	□ VC □ RC □ W		NA
	serve/Enhance Riparian areas	□ VC □ RC □ W		NA NA
	Buffers/ Landscape/Floodplain	VC RC W	.,	NA.
	on from storm sewers	UC DRC W		NA
Rooftop disc	connection .	UVC DRC DW		NA
Vegetated re		□ VC □ RC □ W		NA
Runoff captu		UC RC W		NA
Oil/grit sepa	·			NA NA
	y inserts/inlets		!	NA
Street sweet				NA
		DVC RC W	!	NA
Other				NA
OFF CITE	DISCHARGE ANALYSIS			
		atia a la successión de la de	• • • •	<u>~</u>
		discharges to areas other than		⊠No
that the d	summe the type of easement is charge will not cause proci	that provides the legal authori ion, damage, or a nuisance to	ty for this discharge and	a demonstration
and the u	ioonarge will not cause eros	on, damaye, or a nuisance to	on-site properties.	

Volume of stormwater runoff ☐ acre-feet or ☒ cubic

feet with planned stormwater BMPs (check appropriate

Stormwater peak discharge rate for the design

frequency storm (cubic feet per second)

POI 1-5

box)

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA Please reference the Stormwater Methodology used (i.e. SCS Method) SCS Method **Post Construction** Net Change Pre-construction Design storm frequency 2 years Rainfall amount 3.0 0.06 3 -0.91 0.15 2 Impervious area (acres) -1537Volume of stormwater runoff ☐ acre-feet or ☒ cubic 12850 5 11314 6 feet without planned stormwater BMPs (check appropriate box)

NA

2.6

7

10

NA

0.4

11

Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.

2.2

- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- ox 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3. SUMMARY DESCRIPTION OF POST CONSTR referenced in the Pa. Stormwater BMP Manua	UCTION STORMWATER BMPs (consistent with Workshee	ts 3 and 5
Key: RC = Rate Control	VC = Volume Control	WQ = Water 0	Quality
In the lists below, check the BMPs identified in the may be checked for a BMP. List the stormwate PCSM Plan is not listed below, describe it in the	r volume and area of runoff to be	s) using the above Key. Mo	ore than one function
ВМР	Function(s)	Volume of stormwater treated	Acres treated
☐ Wet ponds	· UC RC WQ	NA	NA
☐ Constructed wetlands	UC RC WQ	NA	NA
Retention basins	UC RC WQ	NA	NA
☐ Detention basin	□ VC □ RC □ WQ	NA	NA
☐ Underground detention	□ VC □ RC □ WQ	NA	NA
Dry Extended detention basin	UC RC WQ	NA	NA
☐ Sediment fore bay	UC RC WQ	NA	NA
☐ Infiltration trench	□ VC □ RC □ WQ	NA	NA
☐ Infiltration Berm/Retentive Grading	UC RC WQ	NA	NA
☐ Subsurface Infiltration bed	□ VC □ RC □ WQ	NA	NA .
☐ Infiltration basin	□ VC □ RC □ WQ	NA	NA
Pervious pavement	□ VC □ RC □ WQ	NA	NA
☐ Dry well/Seepage pit	UVC RC WQ	NA	NA
☐ Bio-infiltration areas	□ VC □ RC □ WQ	NA -	NA
Rain gardens/Bio-retention	UVC RC WQ	NA	NA .
☐ Vegetated swales	□ VC □ RC □ WQ	NA	NA
☐ Constructed filters	UVC RC WQ	NA	NA
☐ Protect Sensitive & Special Value Features	☐ VC ☐ RC ☐ WQ	NA	NA
☐ Protect/Conserve/Enhance Riparian areas	UVC RC WQ	NA	NA .
Restoration: Buffers/ Landscape/Floodplain	UVC RC WQ	NA	NA
☐ Disconnection from storm sewers	. VC RC WQ	NA	NA
☐ Rooftop disconnection	□ VC □ RC □ WQ	NA	NA
☐ Vegetated roofs	UVC RC WQ	, NA	NA ·
☐ Runoff capture/Reuse	UC RC WQ	NA	NA
Oil/grit separators	□ wa	ΝA	NA
☐ Water quality inserts/inlets	□ wa l	NA	NA
☐ Street sweeping	□ wa	NA	NA
Other	UC RC WQ	NA	NA .
Other	UC RC WQ	NA	NA
4. OFF SITE DISCHARGE ANALYSIS	_		
Does the project propose any off-site discl	narges to areas other than s	urface waters? 🗌 Yes	⊠ No ·
If yes, describe the type of easement that that the discharge will not cause erosion, or	provides the legal authority i lamage, or a nuisance to off	for this discharge and a	a demonstration
·	- ·	• •	

frequency storm (cubic feet per second)

POI 1-6

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA Please reference the Stormwater Methodology used (i.e. SCS Method) SCS Method **Post Construction** Net Change Pre-construction Design storm frequency 2 years Rainfall amount 3.0 inches 1 0 0 0 3 Impervious area (acres) 2 Volume of stormwater runoff ☐ acre-feet or ☒ cubic 7400 9267 ค 1867 feet without planned stormwater BMPs (check appropriate box) Volume of stormwater runoff ☐ acre-feet or ☐ cubic NΑ NA 8 feet with planned stormwater BMPs (check appropriate box) 11 10 1.8 0.7 Stormwater peak discharge rate for the design 1.1

- Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin, based on land use for five years preceding the planned project.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
 - Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2. Zero or negative values are acceptable.
- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin, based on land use for five years preceding the project.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
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- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.

3.	SUMMARY DESCRIPTION OF POST CONSTI referenced in the Pa. Stormwater BMP Manu		(consistent with Workshee	ts 3 and 5
	Key: RC = Rate Control	VC = Volume Control	WQ = Water (Quality
	In the lists below, check the BMPs identified in may be checked for a BMP. List the stormwa PCSM Plan is not listed below, describe it in the	ter volume and area of runoff to b	e treated by each BMP type	
	ВМР	Function(s)	Volume of stormwater treated	Acres treated
	Wet ponds	□ VC □ RC □ WQ	NA	NA
	Constructed wetlands	UC RC WQ	NA NA	NA
	Retention basins	UC RC WQ	NA	NA
	Detention basin	□ VC □ RC □ WQ	NA NA	NA
	Underground detention	□ VC □ RC □ WQ	NA	NA
	Dry Extended detention basin	UC RC WQ	NA	NA
	Sediment fore bay	□ VC □ RC □ WQ	· NA	NA
	Infiltration trench	□ VC □ RC □ WQ	NA	NA
	Infiltration Berm/Retentive Grading	□ VC □ RC □ WQ	NA	NA
	Subsurface Infiltration bed	□ VC □ RC □ WQ	NA	NA
. 🗆	Infiltration basin .	☐ VC ☐ RC ☐ WQ	NA	NA
	Pervious pavement	UC RC WQ	NA	NA
	Dry well/Seepage pit	□ VC □ RC □ WQ	NA	NA
	Bio-infiltration areas	□ VC □ RC □ WQ	NA	NA
	Rain gardens/Bio-retention	☐ VC ☐ RC ☐ WQ	NA	NA
	Vegetated swales	□ VC □ RC □ WQ	NA	NA
	Constructed filters	UVC RC WQ	NA	NA
	Protect Sensitive & Special Value Features	☐ VC ☐ RC ☐ WQ	NA	NA
	Protect/Conserve/Enhance Riparian areas	☐ VC ☐ RC ☐ WQ	NA	NA
	Restoration: Buffers/ Landscape/Floodplain	□ VC □ RC □ WQ	NA	NA
	Disconnection from storm sewers	□ VC □ RC □ WQ	NA	NA
	Rooftop disconnection	□ VC □ RC □ WQ	NA	NA
	Vegetated roofs	UC RC WQ	NA	NA
	Runoff capture/Reuse	□ VC □ RC □ WQ	NA	NA
	Oil/grit separators	☐ WQ	NA	NA
	Water quality inserts/inlets	□ wa	NA	NA
	Street sweeping	□ wa	, NA	· NA
	Other	□ VC □ RC □ WQ	NA	NA
	Other	UC RC WQ	NA	NA
4.	OFF SITE DISCHARGE ANALYSIS		1	
	Does the project propose any off-site dis	charges to areas other than s	surface waters? 🗌 Yes	⊠ No
	If yes, describe the type of easement that that the discharge will not cause erosion.	t provides the legal authority	for this discharge and	a demonstration

5. THERMAL IMPACTS ANALYSIS

Please explain how thermal impacts associated with this project were avoided.

Thermal impacts to the EV Wetlands were avoided to the greatest extent possible through the redirection of post construction runoff. Mitigation for the Post Construction runoff that does occur is explained below.

If thermal impacts cannot be avoided, describe how impacts were minimized and the BMPs that will mitigate such impacts in a manner that will protect and maintain water quality in receiving surface waters in accordance with 25 Pa. Code Chapter 93.

The potential sources of thermal impact for this development include runoff from the proposed access drives, parking lots and buildings. Runoff from the warm impervious areas will be mitigated by routing the stormwater through a series of grass-lined swale, and deep, low sloping pipes before draining into a series of subsurface infiltration/detention basins. The infiltration/detention basins areas will provide for permanent storage of the first flush storms, thus limiting the discharge of the warmer waters. Many of the basins will discharge via level spreaders to existing wetlands and other vegetated areas before entering the adjacent watercourses. These features will combine to mitigate any thermal impacts and allow the runoff to return to ambient temperature. This is reiterated in section X. of the PCSM Narrative pg24.

SECTION D. ANTIDEGRADATION ANALYSIS MODULE

This Section is to be completed for Special Protection Watershed Only. (HQ/EV and EV Wetlands)

PART 1 NON-DISCHARGE ALTERNATIVES EVALUATION

The applicant must consider and describe any and all non-discharge alternatives for the entire project area which are environmentally sound and will:

- Minimize accelerated erosion and sedimentation during the earth disturbance activity
- Achieve no net change from pre-development to post-development volume, rate and concentration of pollutants in water quality

E & S Plan Check off the environmentally sound non-discharge Best Management Practices (BMPs) listed below to be used prior to, during, and after earth disturbance activities that have been incorporated into your E & S Plan based on your site analysis. For BMPs not checked, provide an explanation of why they were not utilized. (attach additional sheets if necessary) See page 20 of the PCSM Narrative	Official Use Only	PCSM Plan Check off the environmentally sound non-discharge Best Management Practices (BMPs) listed below to be used after construction that have been incorporated into your PCSM Plan based on your site analysis. For BMPs not checked, provide an explanation of why they were not utilized. (attach additional sheets if necessary) See page 20 of the PCSM Narrative	Official Use Only
Non-discharge BMPs ☐ Alternative Siting ☐ Alternative location ☐ Alternative configuration ☐ Alternative location of discharge ☐ Limited Disturbed Area ☐ Limiting Extent & Duration of Disturbance (Phasing, Sequencing) ☐ Vegetated Riparian Buffers (100 ft min) ☐ Other		Non-discharge BMPs ☐ Alternative Siting ☐ Alternative location ☐ Alternative configuration ☐ Alternative location of discharge ☐ Low Impact Development (LID / BSD) ☐ Vegetated Riparian Buffers (100 ft min) ☐ Infiltration ☐ Water Reuse ☐ Other	

3930-PM-WM0035 Rev. 12/2009 Part 2 Antidegradation Best Available Combination of Technologies (ABACT) If the net change in stormwater discharge from or after construction is not fully managed by non-discharge BMPs, the applicant mu utilize ABACT BMPs to manage the difference. The Applicant must specify whether the discharge will occur during construction, postconstruction or both, and identify the technologies that will be used to ensure that the discharge will be a non-degrading discharge. ABACT BMPs include but are not limited to: Official Official Use Use **PCSM Plan** Only E & S Plan Only Treatment BMPs: Treatment BMPs: \bowtie Infiltration Practices Sediment basin with skimmer Sediment basin ratio of 4:1 or greater (flow Wet ponds length to basin width) Created wetland treatment systems \boxtimes Sediment basin with 4-7 day detention \boxtimes Vegetated swales Flocculants \boxtimes Manufactured devices Land disposal: Bio-retention/infiltration Vegetated filters П Green Roofs П Vegetated Riparian buffers <100ft. Land disposal: Immediate stabilization \boxtimes Vegetated filters Pollution prevention: Vegetated Riparian Buffers <100ft. PPC Plans \times $\overline{}$ Disconnection of roof drainage Street sweeping Bio-retention/bio-infiltration Channels, collectors and diversions lined with \boxtimes Pollution prevention: permanent vegetation, rock, geotextile or other Street sweeping non-erosive materials Nutrient, pesticide, herbicide or other chemical Stormwater reuse technologies: application plan alternatives Sediment basin water for dust control **PPC Plans** \boxtimes Sediment basin water for irrigation \boxtimes Non-structural Practices Other_ Land Preservation

Restoration BMPs
Stormwater reuse technologies:

Spray/Drip Irrigation

Dry hydrant with underground storage

Are the ABACT BMPs selected sufficient to achieve no

net change to the extent that existing or designated

☐ Yes ☐ No. If no, and the project is located in a

Cisterns

Rain barrels

surface water uses are protected?

HQ water, proceed to Part 3.

Other

Part 3 Social or Economic Justification (SEJ) (for projects in high quality waters only)

Are the ABACT BMPs selected sufficient to minimize E & S discharges to the extent that existing or

If no, and the project is located

designated surface water uses are protected?

Yes No. If no, and in a HQ water, proceed to Part 3.

If the applicant cannot demonstrate that the net change in discharge will protect the existing quality of the receiving surface waters, for projects in HQ waters, the applicant may pursue the SEJ process for demonstrating that lowering water quality is necessary to accommodate important economic or social development in the area in which the waters are located, in accordance with Chapter 10 of the Water Quality Antidegradation Implementation Guidance Manual, DEP Document ID No. 391-0300-002.

JESTION E.	. CONSULTAN	II FUR IHI	SPROJECT	
ast Name	First Nam	е		ML
Mullen	Joseph			
Title .	Consulting	g Firm		OWNEAU
Office Principal/Division Manager	Pennoni A	ssociates, Ind		POSEPM P. WALLEN ESSINCER IN. PHORATER TO SEPAN P. WALLEN
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City	State	ZIP+4)
Wilkes-Barre	PA	18702		and the same and t
Email		Phone	5708242200	Ext
jmullen@pennoni.com		FAX	5708240800	
SECTION	F. COMPLIANO	CE HISTORY	REVIEW	
If yes, list each permit or project that is/was in provide information on all permits). Permit Program or Activity: Brief description of non-compliance:	violation and pr		ance status of the	
Steps taken to achieve compliance		Date(s) C	ompliance Achieve	ed
Current Compliance Status: ☑ In-Compliance	e □ In N	lon-Complian		

		SECTION G. PERMIT COORDINA	ATION
Do ad	nes the applicant (owner and/or ditional planning requirements?	operator) have, have pending, or require any	other environmental permits for this project and a
\boxtimes	Yes ☐ No If yes, list e	ach permit or approval, permit number, and de	scription.
•	Combined License Applica	tion to construct and operate a nuclear po	wer plant - Nuclear Regulatory Commission
•		Use, Surface Water Withdrawal, and Grou	ındwater Withdrawal - SRBC
• :	CWA Section 404 Permit -	US ACE	
•	NPDES Discharge Permit	PADEP	
•	Air Quality Plan Approval -	PADEP	
•	CWA Section 401 Water Q	uality Certification - PADEP	
٠	Chapter 105 Water Obstru	ction and Encroachment Permit - PADEP	
Co	ordination Questions		
1.	Does the project involve any along, across, or projecting in	of the following: Placement of fill, excavation to a water course, floodway or body of water (i	on within or a placement of a structure located in, including wetlands)?
	⊠ Yes ☐ No If yes, id	entify which authorization under Chapter 105 is	applicable.
	⊠ Joint Permit	☐ General Permit	☐ Waiver
2.	•	us? Please note that 537 Plan approval is of Salem Township's approved Act 537 pla ot.	s required prior to permit issuance. an. A Sewage Facilities Planning Module wij'
3.		with a Brownfield's Remediation? ☐ Yes Environmental Cleanup Program (Act 2 or Supe	☑ No If yes, please indicate any erfund).
		•	
4.	Are there any additional peplease list them.	rmits or approvals that may be required fo	or this project? ⊠ Yes □ No If yes,
•	Land Development Plan –	Salem Township	
•	Submerged Land License	Agreement - PADEP	
	Highway Occupancy Perm	t - PennDOT	

SECTION H. CERTIFICATION

Applicant Certification

I certify under penalty of law that this application and all related attachments were prepared by me or under my direction or supervision by qualified personnel to properly gather and evaluate the information submitted. Based on my own knowledge and on inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. The responsible official's signature also verifies that the activity is eligible to participate in the NPDES permit, and that BMP's, E&S Plan, PPC Plan, PCSM Plan, and other controls are being or will be, implemented to ensure that water quality standards and effluent limits are attained. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment or both for knowing violations pursuant to Section 309(c)(4) of the Clean Water Act and, 18 Pa. C.S. §§4903-4904.

Applicant	Co-Applicant (if applicable)
Terry L. Harpster, VP-Bell Bend Project Development	
Print Name and Title of Person Signing	Print Name and Title of Person Signing
· (570) 802-8111	()
Telephone Number of Person Signing	Telephone Number of Person Signing
Signature of Applicant	Signature of Co-Applicant
Date Signed	Date Signed
Please note below the name, address and telephone number of the indiane: Chad M. Lello, P.E., Pennoni Associates Inc. ddress: 100 North Wilkes-Barre Boulevard, Wilkes-Barre, PA 18702	ividual that should be contacted in the event additional information is required.
	FAX: (570) 824-0800
Notarization:	Commonwealth of Pennsylvania
Notarization: Sworn to and Subscribed to Before Me This	Commonwealth of Pennsylvania County of NOTARY
Sworn to and Subscribed to Before Me This	County of
Sworn to and Subscribed to Before Me This	County ofNOTARY
Sworn to and Subscribed to Before Me This	County ofNOTARY
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