



Virginia Conservation Assistance Program

Presented by Virginia Association of Soil & Water Conservation Districts

Application Number

APPLICATION

VCAP Form 1

Part A. Application

I, _____ (PRINT) hereby make application to _____ Soil & Water Conservation District for cost-share assistance to purchase and install a best management practice as described in part B below.

I agree that all best management practice(s) approved will be installed, operated, and maintained in accordance with the practice(s) standard(s) and the Landowner Agreement (VCAP Form 3). I agree not to use the BMP for purposes of Nutrient Trading or regulatory compliance. I shall indemnify and save the District harmless from any and all claims for damages to persons or property arising from the installation, maintenance, repair, operation or use of the BMP(s).

I understand that it is my responsibility to pay in full all bills for work completed under this agreement prior to submission of eligible bills for reimbursement.

I understand that VCAP cost-share funds may be combined with other grant or cost-share resources, but may not exceed one hundred percent (100%) of total costs for the practice.

Mailing Address: _____	Phone: _____
Address of Practice (if different from mailing address): _____	Email: _____
Applicant Signature _____	Are you receiving any other funding assistance for this project? Yes or <input checked="" type="radio"/> No
SSN / Tax ID (Attach IRS Form W-9): _____	

The local Soil and Water Conservation District (SWCD) is required to issue a 1099-MISC to the Internal Revenue Service (IRS) for any individual to whom it issues a check for \$600.00 or greater. Because the IRS uses the Social Security number or Federal Tax ID number as a unique identifier, the SWCD must collect that information from any individual to whom it issues a check. The SWCD does not use the Social Security number or Federal Tax ID number for any purpose other than that stated above.

Part B. Technical Determination and District Approval (To be completed by District Staff)

Practice Code & Title	Practice Size (sq. ft., lin. ft., gal)	Total Estimated Cost	Approved Estimated Cost-Share	Required Completion Date
PERMEABLE PAVEMENT	1,840 ft ²	\$28,450.00	\$10,000	

I have reviewed this application and all supporting documentation and have indicated the quantity authorized based on technical need. This practice must be installed and certified by the completion date.

X _____
 District Employee Signature Date

Approval to Forward Application: X _____
 District Director Signature Date



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JOB SHEET VCAP Form 2

This Job Sheet is to be filled out by District technical staff. Please document any information that helps to describe any unique aspects of the project from design to completion. The Job Sheet is an active document and will need to be updated as the project progresses. It will document the installed practice and must be submitted to the Program Coordinator at project completion. If completed project differs from the original design approved by the Steering Committee, explain and justify the changes on this Job Sheet.

Tracking and Reporting:

Property Owner: [REDACTED] Address: [REDACTED]
 Representative (if applicable): [REDACTED] Phone Number: [REDACTED]
 Hydrologic Unit Code: [REDACTED] GPS Coordinates: [REDACTED]
 Practice Code & Description: PERMEABLE PAVEMENT
 Dominant Land Use Treated: DRIVEWAY, WALK, ROOF
 Contributing Drainage Area (sq. ft.): 5,100 ft² Impervious Area Treated (sq. ft.): 3,140 ft²
 Practice Size (sq. ft., lin. ft., gal.): 1,840 ft² Impervious Surface Removed (sq. ft.): 1,840 ft²
 Installation Date: SPRING 2021

Site Assessment: Describe the current conditions of the site, landowner goals/concerns, resource concern needing to be addressed, and the proposed water quality benefit of the project. Note all ranking considerations and attach ranking spreadsheet. Include photo documentation of site conditions and resource concerns. (Describe or attach.) Ranking Score: 87.2

SITE HAS TOO MANY IMPERVIOUS SURFACES THAT CONTRIBUTE TO SHEET FLOW RUNOFF INTO ADJOINING STREET AND STORM DRAIN SYSTEM. PLAN IS TO CAPTURE AND DISCONNECT RUNOFF INTO THE SYSTEM AND DECREASE STORMWATER RUNOFF.

Project Layout: Attach an aerial of site and sketch or outline the practice layout, contributing drainage area, impervious area treated, location and flow paths of downspouts/channels, and any known utilities or rights-of-way. Note the proximity to waterways or stormwater conveyance systems. (Describe or attach.)

ATTACHED

Application Number
[]

Design and Specification: Include sizing calculations, practice dimensions, soil evaluation results, site preparation plan, pretreatment measures, outlet and overflow, cross section and profile, planting plan (with scientific names), and cost estimates. (Describe or attach.)

ATTACHED

Construction and Installation: Include sizing calculations, practice dimensions, soil evaluation results, site preparation plan, pretreatment measures, outlet and overflow, cross section and profile, planting plan (with scientific names), and itemized cost estimates, including estimated volunteer labor time. (Describe or attach.)

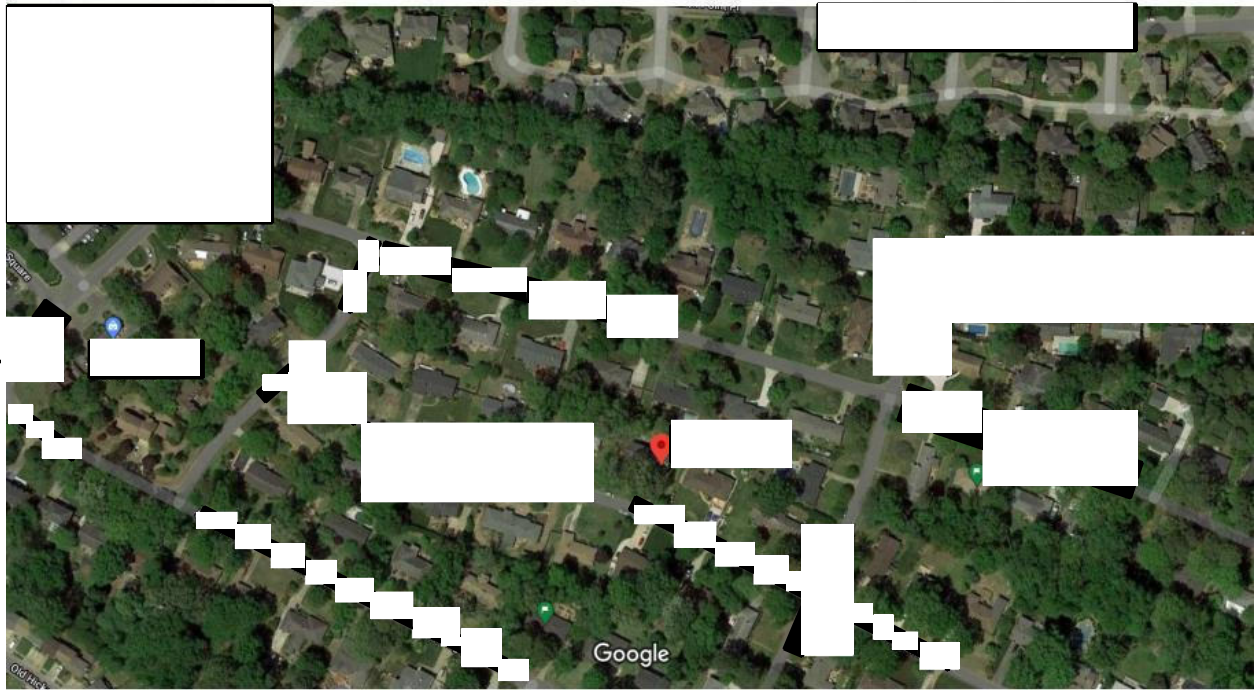
ATTACHED

Permits: Confirm local policies, such as land disturbance, grass heights, etc. (Describe or attach.)

N/A

Operation and Maintenance Plan: (Describe or attach.)

ATTACHED



Imagery ©2021

Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2021 100 ft

Contributing Drainage Area = 5,100 sq. ft.

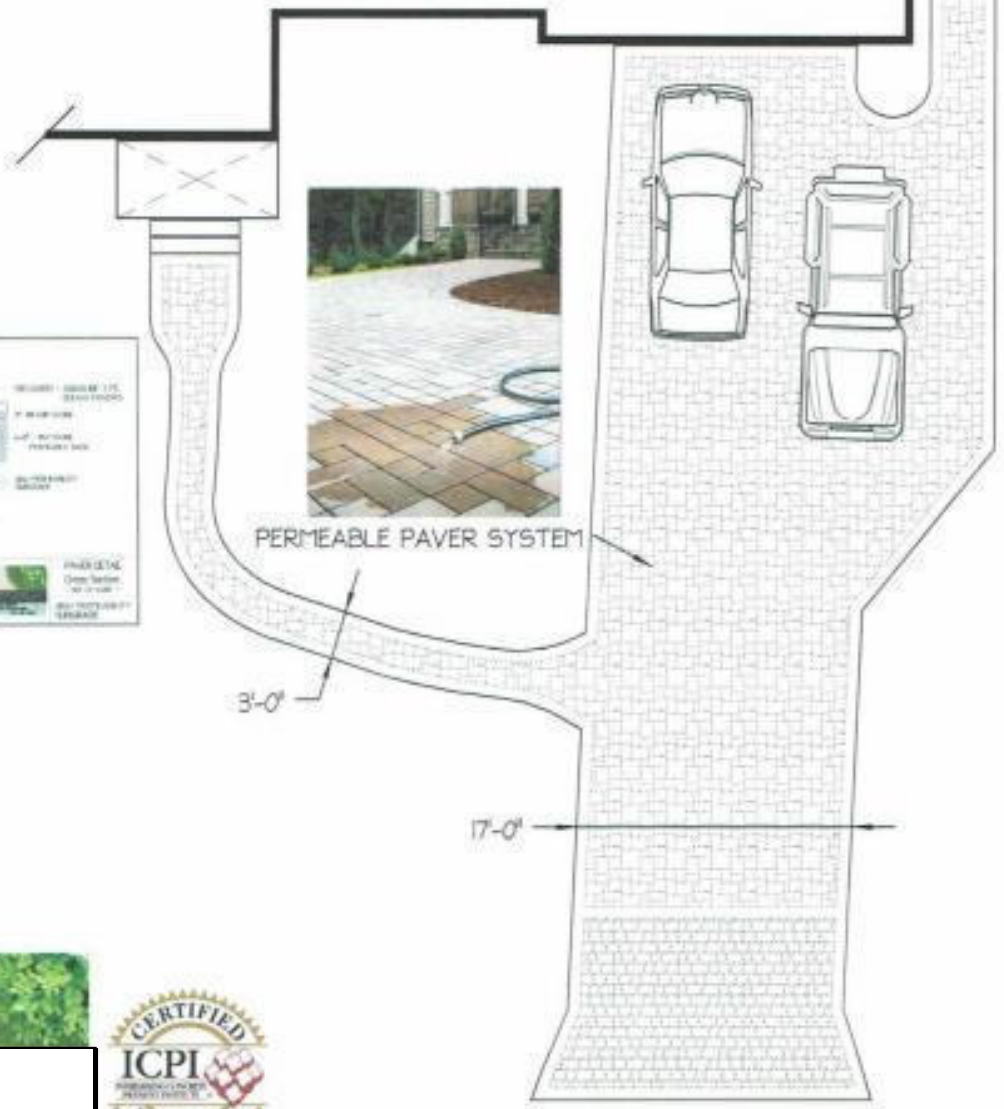


This Drawing & Design are Proprietary Property of _____ and
may not be Altered, Reproduced or Built without consent of.

[Redacted]		
DATE 1" = 10'	DATE 08 OCT '20	PROJECT 001
PROJECT NO. 2059	[Redacted]	

VCAP CONSTRUCTION NOTES:

1. SEE ATTACHED SCOPE OF WORK/TIMELINE PER ATTACHED QUOTE DOC
2. GRADE IN EXISTING TOPSOIL AT DISTURBED EDGES
3. CUSTOMER TO SEED/SOD TOPSOIL FOR SITE STABILIZATION
4. PROJECT HAS NO SITE CONSTRAINTS, MISS UTILITY TICKET TO BE ISSUED PRIOR TO COMMENCEMENT
5. SITE WILL BE CLEAN & ALL CONSTRUCTION DEBRIS REMOVED DAILY



PERMEABLE PAVER SYSTEM



[Redacted]



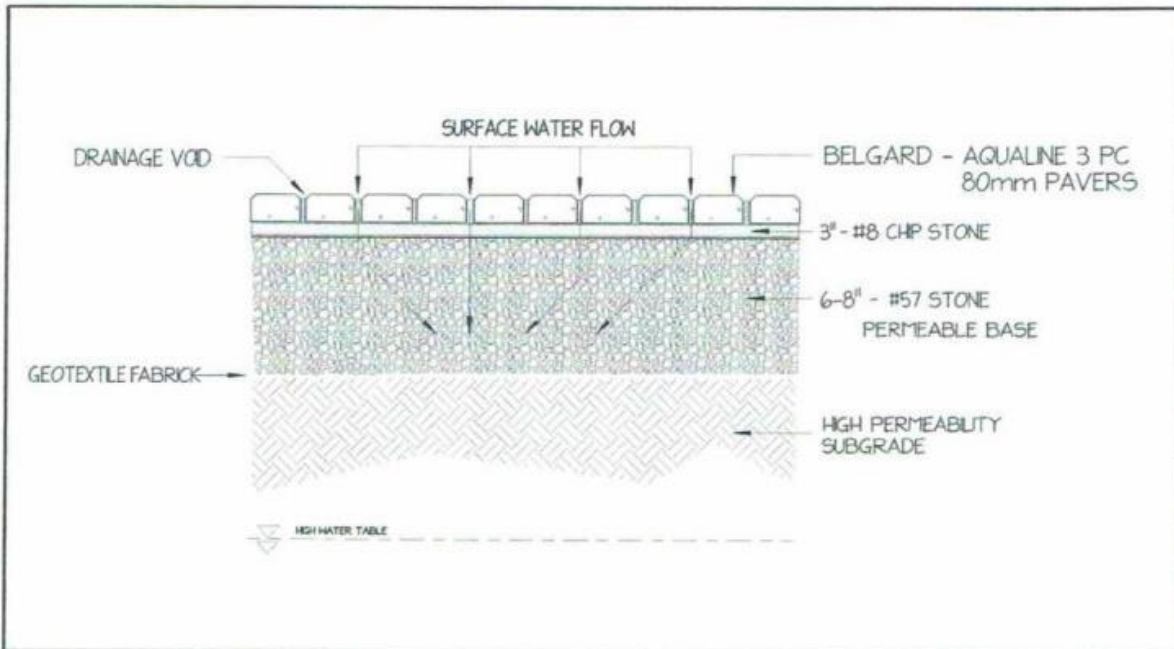




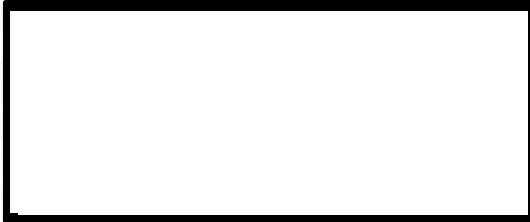




PERMEABLE PAVER CROSS SECTION



 <p>AQUALINE 3 PC</p>	<p>BELGARD - AQUALINE 3 PC PAVERS Permeable Pavers Collection and Disposal of Infiltration</p>		<p>PAVER DETAIL Cross Section - not to scale -</p> <p>HIGH PERMEABILITY SUBGRADE</p>
<p><small>This cross-section is intended for preliminary design purposes only. A qualified professional Engineer should approve the final design and construction conditions.</small></p>			



October 8, 2020



Re: Permeable Paver Patio/Walkway - VCAP Specifications

SCOPE OF WORK/TIMELINE

- Excavate concrete Driveway/walkways and set grade to allow for & placement of base & **Geotextile Fabric for Erosion/Site Stabilization**
- Supply and install compacted base material 8" of #57 Stone base
- Supply and install 3" of #8 Stone cap
- Supply and install pavers with soldier course
- Supply and install edge restraint as needed
- Sweep #8 Stone in joints of pavers & compact, Grade in existing topsoil at edges, to be seeded by Customer for **Site Stabilization**
- **Project has No Site Constraints, Miss Utility Ticket will be issued**
- Clean up & removal of debris Daily

Permeable Pavers per dwg 1,840 ft² @ 15/ft²	\$27,600.00
Demo/Haul Existing Concrete	850.00
Project Total	\$28,450.00
Contract Deposit	8,000.00
Balance due upon completion	\$20,450.00

5 Year Warranty - Labor • Lifetime Warranty on Product

Thank you for the opportunity to work with you on this project. Please feel free to contact me directly at _____

Best Regards,



Site Constraints

There are no known site constraints to the proposed project. Prior to commencement of construction, the applicant will notify Miss Utility to determine what – if any – underground utilities are present in and near the proposed project site.

Landscape Plan

Appropriate measures shall be undertaken to ensure adequate erosion and sedimentation protection occurs during construction. Following completion of construction, the contractor and/or property owner will regrade all disturbed areas to adjoin grades and these areas will either be seeded or sodded with turf grass, or the areas will be mulched and landscaped to tie into existing planting beds.

Computations

Impervious Area Tv

$$.95/12 * 3,140 = 248.58 \text{ cu ft}$$

Pervious Area Tv

$$.22/12 * 1,960 = 35.93 \text{ cu ft}$$

Total Tv

$$248.58 + 35.93 = 284.51$$

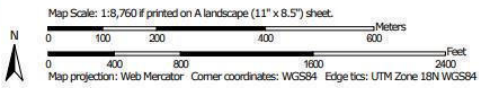
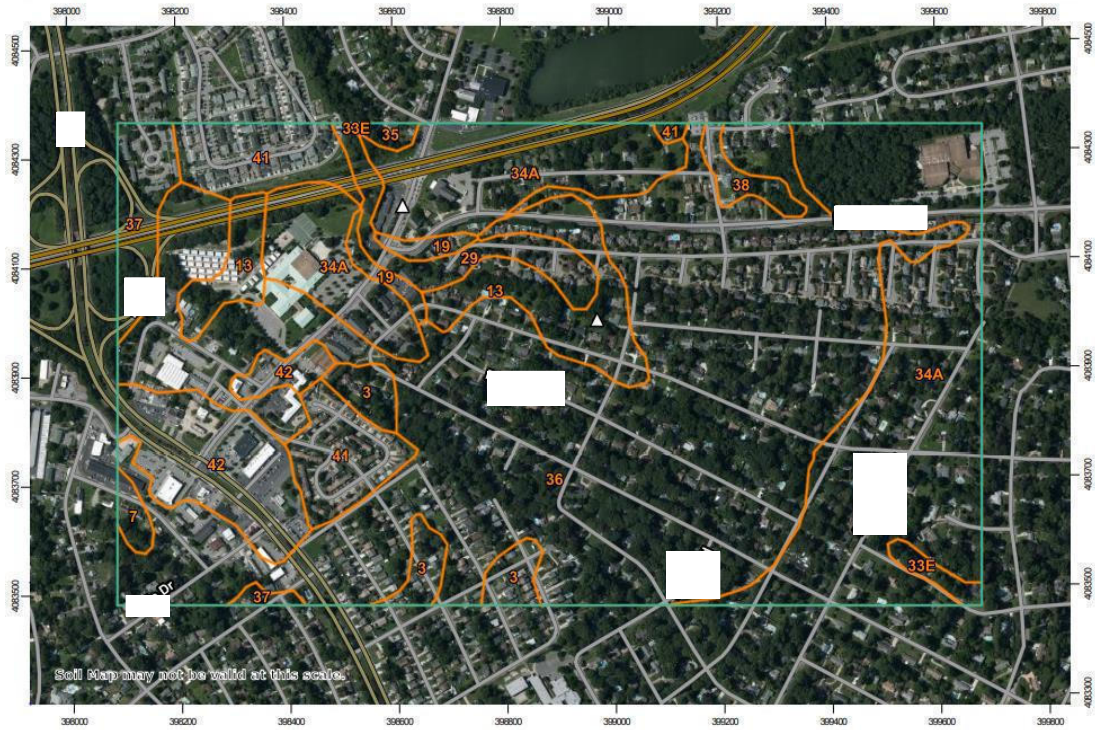
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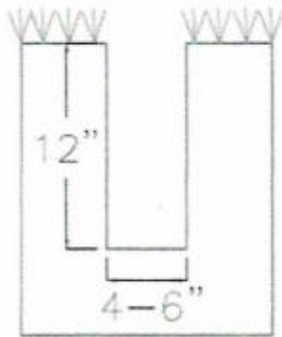
$$1 * 0.4 = 0.4$$

SA

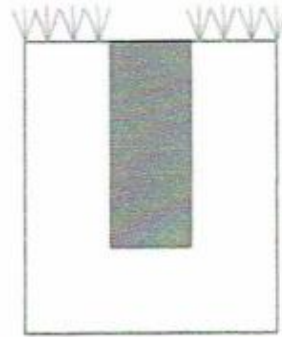
$$284.51 / 0.4 = 711.28 \text{ sq ft permeable pavers with 1 ft reservoir layer}$$

Soil Map: Virginia

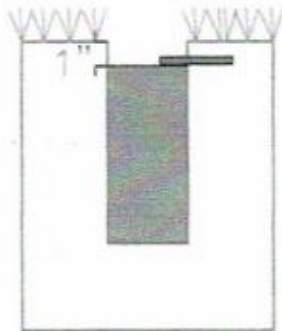




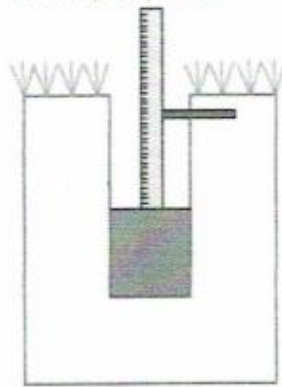
1. Dig a hole in the proposed location, approximately 12 inches in depth and four to six inches in diameter. A standard post hole digger is the typical tool of choice.



2. Presoak the hole. Fill with water to saturate the soil and then let stand until all the water has drained into the soil. If presoak drains away within 1 hour, repeat presoak.



3. Once the water has drained, refill the empty hole again with water so that the water level is about one inch from the top of the hole. Use a stick to indicate the location of the starting water level. Record the time using a watch. Measure the depth of water with a ruler.



4. Check the depth of water with a ruler every hour for at least four hours. If presoak drains within 1 hour, measure every 10 minutes or less.

5. Record Measurements. Depth, d is the difference between measurements. Infiltration Rate is the depth, d divided by the time interval, usually 1 hour. Use the lowest steady state infiltration rate.

Time (hours)	Measurement, m (inches)	Depth, d (inches)	Infiltration Rate, i (inches/hour)
0	12.00	0.00	0.00
1	8.00	4.00	4.00
2	6.00	6.00	3.00
3	5.00	7.00	2.33
4	3.00	9.00	2.25
5			
6			

Falling Head Infiltration Test

This is the approved infiltration test for the Virginia Conservation Assistance Program.

Use this method for Rain Gardens, Dry Wells and any practice without an underdrain. This is a 3-dimensional flow percolation test, actual vertical infiltration rates may be less, divide the rate by 2 if the failure of the practice will exacerbate existing resource concerns or create new ones. Infiltration rates should be greater than 0.5 inches per hour.

This form is to be filled out by District Staff for each application submitted for ranking approval to the VCAP Steering Committee. Include the Contract Number (District## - CY## - Application Number###), Practice Code (abbreviation), Estimated Cost, Cost-Share Requested and Resource Concern.

Practice
Estimated Cost
Cost-Share Requested
What is the Resource Concern?

PP	
	\$28,450.00
	\$10,000.00
Excess Runoff	

****Please only enter data in the "Input" column. "Points Earned" will be automatically generated.****

RANKING CRITERIA	Input (1/0)	POINT VALUE	POINTS EARNED
Site Assessment			
Resource Concern Identified and Addressed by the Selected BMP - Select One			
Erosion Impact Area (visible erosion and/or deposition); or	0	20	0
Poor Vegetative Cover (Density <=75%); or	0	15	0
Excess Runoff (Land cover contributes to increased runoff volume and flow rate)	1	10	10
Ownership - Select One			
The practice is for an individual Private Residence; or	1	10	10
The practice is for a HOA or Business or Non-Profit; or	0	7	0
The practice is for a Public Park or School or Facility.	0	5	0
Presence of Stormwater Management Facilities Downstream of the Site			
The site runoff is currently untreated	1	10	10
Proximity to Stormwater Conveyance System or Waterway - Select One if applicable			
Resource Concern within 40 feet; or	0	20	0
Resource Concern within 100 feet	0	10	0
Slope - Select One if applicable			
The practice treats poorly vegetated or eroding slope equal to or greater than 15%; or	0	10	0
The practice mitigates concentrated runoff to a slope equal to or greater than 15%	0	5	0
TMDL Implementation Plan, MS4 Locality, or Comprehensive Stormwater Management Plan			
Practice addresses local sediment or nutrient goals	1	10	10
BMP Selection			
BMP Type - Select One if applicable			
Is the proposed BMP structural (e.g. RG, DW, CW, VSC, RH, BR, IF, PP, GR)?, or	1	10	10
Converting Impervious Surface to Conservation Landscaping; or	0	10	0
Impervious Surface Removed; or	0	5	0
Living Shoreline proposed on unprotected lands; or	0	10	0
Living Shoreline replaces failing stabilization practices; or	0	5	0
Forested Riparian Buffer (minimum 35 feet wide); or	0	10	0
Vegetated Filter Strip (minimum 35 feet wide)	0	5	0
Proposed BMP provides Alternative Disconnection			
Selected BMP disconnects and disperses impervious runoff	1	10	10
Treatment Area (Does Not apply to LS or CL unless configured as Filter Strip with 35 feet minimum length)			
Input Impervious Area Treated in square feet; and	3140	3.14	3.1
Input Total Contributing Drainage Area in square feet	5100	12.3	12.3
Installed Area - Select One			
Input Surface Area of the Practice; or	1840	3.7	3.7
Input Gallons of Storage; or	0	0.0	0.0
Input Linear Foot of Practice installed	0	0.0	0.0
Application Strength			
Partnership			
Applicant is working with a partner agency or Non-Profit	0	5	0
Educational Value			
Practice is publicly accessible or is part of an educational program	0	10	0
Cost Effectiveness			
Cost per Impervious Area Treated (\$/SF), and	9.06	6.6	6.6
Cost per Installed Area (\$/SF or \$/Gal or \$/LF)	15.46	1.3	1.3
Pollutant Removal			
BMP Pollutant Removal Efficiency (EFF)	0.59		
Contributing Drainage Area Weighted Runoff Value (Rv)	0.680980392		
Pollutant Load (PL), Lbs Phosphorus per year	0.18	2.1	2.1
TOTAL RANKING POINTS			89.2