



Virginia Conservation Assistance Program

Presented by Virginia Association of Soil & Water Conservation Districts

Contract Number

CONTRACT 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/We agree not to use the BMP for purposes of Nutrient Trading or regulatory compliance. I/We 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/our 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:
Participant Signature:	Circle one: Landowner or Representative
SSN / Tax ID (Attach IRS Form W-9)	

The local Soil and Water Conservation District (SWCD) is required to issue a 1099-form 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
PP - Permeable Pavement	579 sq.ft.	\$ 22,990.00	\$ 15,000.00	

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

Application Approval:

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: _____ Address: _____
Representative (if applicable): _____ Phone Number: _____
Hydrologic Unit Code: 020802040401 GPS Coordinates: _____
Practice Code & Description: _____ PP - Permeable Pavement
Dominant Land Use Treated: _____ Impervious Surface
Contributing Drainage Area (sq. ft.): 1450 sq.ft. Impervious Area Treated: (sq. ft.): 1450 sq.ft.
Practice Size (sq. ft., lin. ft., gal.): 579 sq.ft. Impervious Surface Removed (sq. ft.): _____
Installation Date: _____

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:** 97.4

Driveway is currently asphalt in deteriorating condition. Homeowners want to replace existing driveway. They also want to reduce stormwater runoff on property, will connect portion of the roof to planned permeable pavement practice.

Photos attached.

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.)

See Attached.

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.)**

See 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.)**

Well draining soils, overflow will outlet to planned conservation landscaping in front yard.

See attached for other details

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

Property owner and contractor are responsible for all necessary permits.

Operation and Maintenance Plan: **(Describe or attach.)**

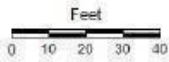
Home currently has leaf gutter guards installed. Will continue to maintain to act as a pretreatment for diverted rooftop runoff to PP.

Will follow Eco-Bay paver maintenance recommendations and schedule.

Legend

- Parcels
- Addresses
- City Limits
- Impervious Area
- Elevation Contour Lines - 2ft (2006)

1450 sq.ft. Total Impervious Surface Treated

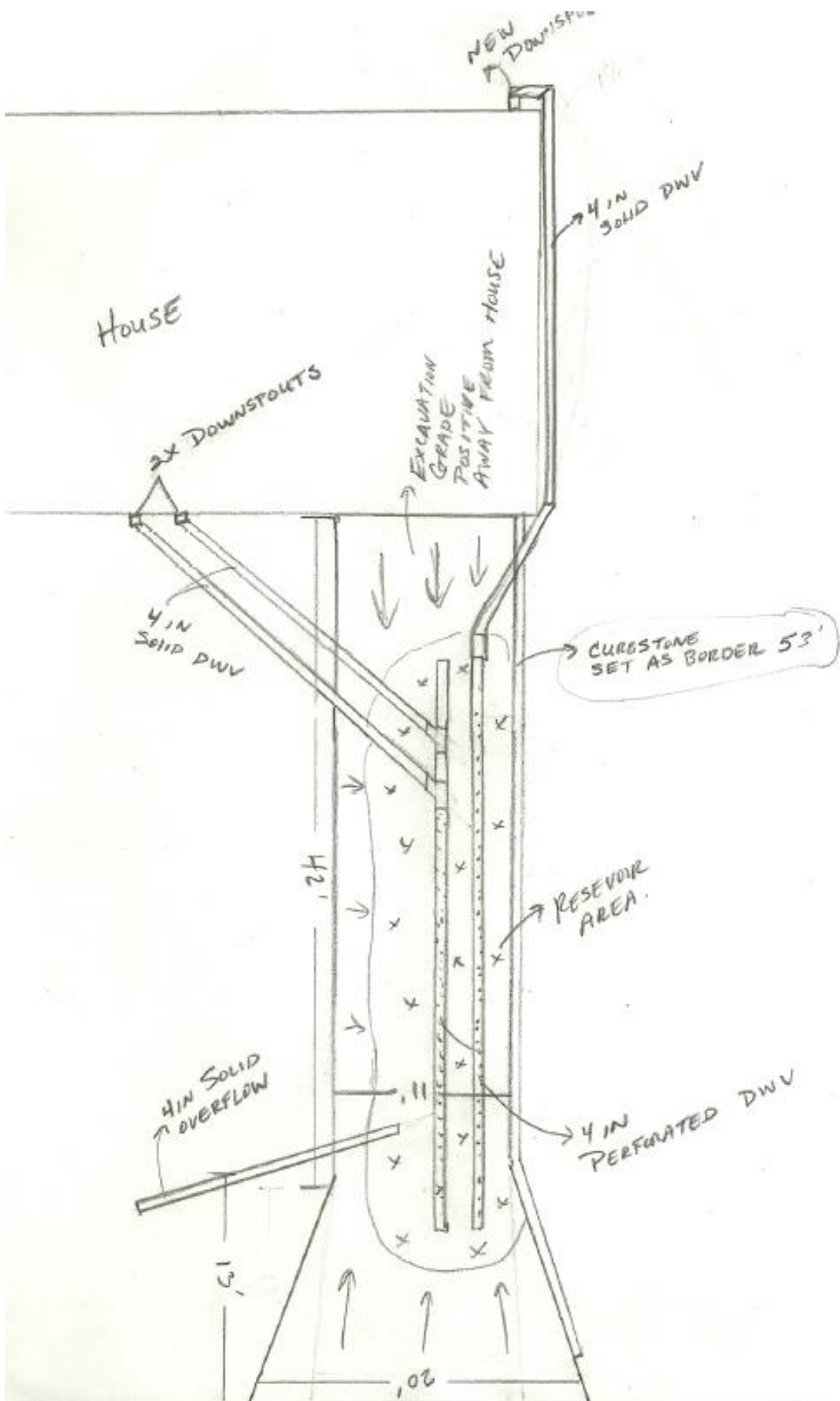


Title:

Date: 9/19/2019

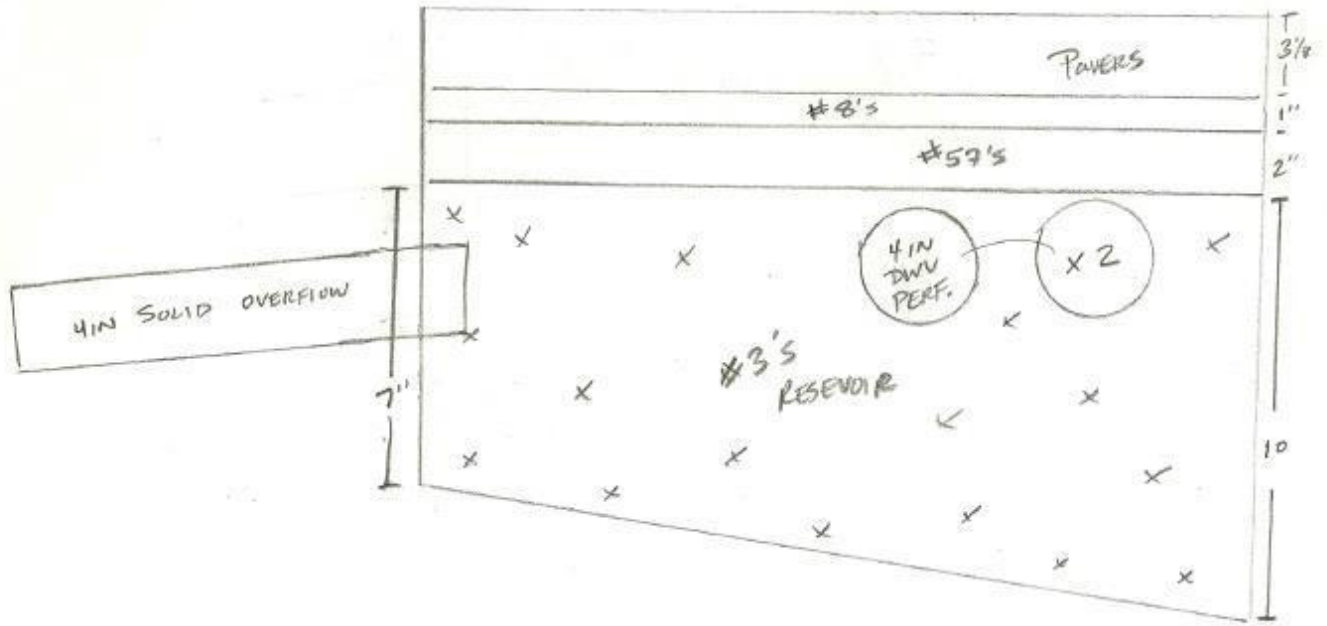
DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as information displayed is a compilation of records, information, and data obtained from various sources, and is not responsible for its accuracy or how current it may be.





RESIDENCE

SIDE VIEW DRAIN & EXCAVATION DEPTHS



Proposal

6/30/19

TO: _____

FOR:
Installation of permeable driveway
Gutter addition.

DESCRIPTION	HOURS	RATE	AMOUNT
1.) Labor and disposal fees for removal of existing asphalt driveway. (Asphalt will be hauled off site and disposed of at a proper disposal facility.)	1 day	Job rate	1,400.00
2.) Materials necessary to complete a permeable driveway in place of the existing asphalt drive. The footprint of new driveway will be approximately 55' linear by 11' wide with a 20' wide apron meeting Wellford Street as it does currently. The proposed pavers to be used are the Eagle Bay Eco bay type (2) 80mm permeable pavers. Other materials necessary to complete are: Soil separation fabric, #3s reservoir gravel, #57's, #8's, solid 4" DWV piping, Perforated DWV piping, fittings, paver restraints, spikes, Curbstone for Hillside to prevent contamination of system.	N/A	Quote	8,340.00
3.) Labor charges for the construction of proposed system using the above quoted materials and following the attached sketch to complete. (All soil will be disposed of on site filling low spots and adjusting grade. These areas will be seeded and strawed after work is completed)	2 weeks	Job rate	12,500.00
4.) Labor charges for the removal and reworking of gutter to set level to drain into new downspout that will be tied into driveway.	6 hrs.	75 per	450.00
5.) Materials and labor charges for the addition of (1) downspout to be put on the end of house to be tied into the new driveway system.	N/A	Quote	300.00
		Project total	22,990.00

This invoice is for cash or check only

THANK YOU FOR YOUR BUSINESS!

Water Infiltration Test (9/9/19)

Time	Minutes Elapsed	Water Depth (Inches)	Change (Inches)	Rate of Infiltration (Inches per Hour)
17:58	0	14	NA	NA
18:08	10.00	5	9.00	54.00
18:18	10.00	2.75	2.25	13.50
18:28	10.00	2.25	0.50	3.00
18:48	20.00	1.75	0.50	1.50
19:08	20.00	1.5	0.25	0.75
19:28	20.00	1.25	0.25	0.75
20:58	90.00	0	1.25	0.83

Avg Infiltration Rate by Listed Measurements

10.62 in/hr

Infiltration Rate by Total Time Elapsed

4.67 in/hr

Design requirements, BMP sizing and costs estimates spreadsheet
VCAP Manual Section 3.10 Permeable Pavement (PP)

Item		N/A			
Design including:					
BMP Location	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Pervious and impervious drainage area	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Inflow / outflow type and location	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Cross section & plan view	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Drainage area soil map	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Measured infiltration rate (in/hr)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
A statement regarding compliance with any required permit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Professional Eng. stamp	<input type="checkbox"/>	<input checked="" type="checkbox"/>			

Sizing calculations					
Total impervious drainage area (SF)	1450.00				
Design storm (inches)	1.0				
Area of permeable pavement (sf)	579.0				
Stone depth (ft)	0.70				

BMP Cost estimates					
Material & Services	Depth (inches)	Vol (CY)	Unit price (\$)/CY	Costs	
Stone depth (ft)	0.70				
Area of permeable pavement (sf)	579.00				
Total excavation depth (ft)	0.95	20.46	\$0.00	\$0.00	
stone layer material		15.10	\$0.00	\$0.00	
Pavers		579.00		\$0.00	
under drain & other pumbing accessories			\$0.00	\$0.00	
Filter fabric (add the total cost)				\$0.00	
Additional costs including installation				\$0.00	
Total construction costs				\$0.00	
VCAP cost share				\$0.00	

Notes:

Sizing computation is based on VA Stormwater BMP Clearinghouse Version 2.0, Permeable Pavement Design Spec. No. 7, Le

Design storm added as a constant value but can vary

Soil Map



Map Scale: 1:782 if printed on A landscape (11" x 8.5") sheet.
 0 10 20 40 60 Meters
 0 35 70 140 210 Feet
 Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
127B	Elioak - Urban land complex, 2 to 7 percent slopes	1.5	67.3%
127C	Elioak - Urban land complex, 7 to 15 percent slopes	0.7	32.7%
Totals for Area of Interest		2.2	100.0%

VCAP Practice Ranking Sheet (VCAP Form - 6)

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

Contract #	
Practice	PP
Estimated Cost	\$22,990.00
Cost Share Requested	\$15,000.00
What is the Resource of Concern?	Too Much Impervious Runoff

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

RANKING CRITERIA	Input (1/0)	POINT VALUE	TOTAL 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
Impervious surface runoff; or	1	10	10
managed turf runoff.	0	5	0
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; or	0	10	0
Slope - Select One if applicable			
The practice treats poorly vegetated or eroding slope equal to or greater than 15 %	0	10	0
The practice mitigates concentrated runoff to a slope equal to or greater than 15 %	0	5	0
TMDL Implementation Plan, M34 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	1450	1.45	1.5
Input Total Contributing Drainage Area in square feet	1450	20.0	20.0
Installed Area - Select One			
Input Surface Area of the Practice; or	579	1.2	1.2
Input Gallons 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 NonProfit	0	5	0
Educational Value			
Practice is publicly accessible; or is part of an educational program	1	10	10
Cost Effectiveness			
Cost per Impervious Area Treated (\$/SF), and	15.86	3.8	3.8
Cost per Installed Area (\$/SF or \$/Gal or \$/LF)	39.71	0.2	0.2
Pollutant Removal			
BMP Pollutant Removal Efficiency (EFF)	0.59		
Contributing Drainage Area Weighted Runoff Value (Rv)	0.95		
Pollutant Load (PL), Lbs Phosphorus per year	0.07	0.9	0.9
TOTAL RANKING POINTS			97.4

*points for publicly accessible to be updated, no longer would receive credit in this instance