Appendix C
Simplified Approach

STORMWATER MANAGEMENT DESIGN ASSISTANCE MANUAL

For Minor Land Development Activities in Adams County, Pennsylvania

Simplified Approach

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Introduction

This design manual has been created as a tool to help property owners manage stormwater on their property and streamline the process of designing on-site stormwater management facilities for new, relatively minor residential and accessory structure projects. Through the use of this manual, residents have the ability to determine the appropriate facilities for their property, project and budget. This design method is not intended to be used with large-scale subdivision/ land development or activities that include infrastructure such as roadways.

The best management practices (BMPs) listed in this manual should be used as a guide and are not a comprehensive list of options. Residents should contact the municipality or Conservation District to discuss alternative solutions for site specific applications.

Importance of Stormwater Management

Stormwater is the runoff produced by precipitation, snow melt, or ice melt. When land is developed or changed, the flow patterns of water and quality of water are also changed. Land development activities can affect characteristics of stormwater runoff, including the rate of runoff, volume of runoff, and quality of runoff. When runoff is not managed, the increased volume may aggravate flooding.

The objective of stormwater management is to prevent or mitigate the adverse impacts of the increase in rate and volume of stormwater runoff, while also protecting health, safety, and property. Stormwater Best Management Practices aim to maintain water quality, encourage infiltration in appropriate areas, promote groundwater recharge, maintain the natural drainage characteristics of the site to the maximum extent practicable, and protect stream banks and beds.

Standard Terms Used in the Manual

Best Management Practice (BMP) - Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance.

Disconnected Impervious Area (DIA) - An impervious or impermeable surface that is disconnected from any stormwater drainage or conveyance system and is redirected or directed to a pervious area, which allows for infiltration, filtration, and increased time of concentration.

Disturbed Area - An unstabilized land area where an earth disturbance activity is occurring or has occurred.

Flow Path – The path that stormwater flows from the discharge point to the nearest property line or channelized flow (ie stream, drainage ditch, etc.). The length of the path is measured along the ground slope.

Impervious Surface (Impervious Area) - A surface that prevents the infiltration of water into the ground. Impervious surfaces and areas include but are not limited to roofs, additional indoor living spaces, patios and decks, garages, storage sheds and similar structures, streets, driveways, access drives, parking areas, and sidewalks. Any areas designed to be covered by loose surfacing materials such as gravel, stone and/or crushed stone, and intended for storage of and/or travel by vehicles, or pedestrians shall be considered impervious. Surfaces or areas designed, constructed and maintained to permit infiltration may be considered pervious.

Karst - A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on carbonate rocks, such as limestone or dolomite.

Minor Stormwater Site Plan – A site plan prepared and submitted to the municipality for proposed projects which qualify to use the Simplified Approach. The plan depicts existing conditions on the property, proposed impervious areas, and, if required, the location of proposed BMPs.

Regulated Activit(ies)y - Any earth disturbing activity or any activity that involves the alteration or development of land in a manner that may affect stormwater runoff.

Runoff - Any part of precipitation that flows over the land.

Determining What Type of Stormwater Management Plan is Needed

The chart on the following page provides a guide to determine what type of stormwater plan is needed. Some projects will be exempt from preparing a stormwater management plan, but documentation of the project must still be filed with the municipality. Completion of the **Municipal Stormwater Management Worksheets** will determine what type of documentation is required for each project.

This manual is designed to assist those with projects that qualify for the use of a minor stormwater site plan. If a formal stormwater management plan is required, **please consult a qualified person (ex. Engineer, Surveyor)!**

SMP Plan Requirement	Impervious Area	Disturbed Area*	Next Steps
Exempt	Up to 1,000 ft²	Less than 1 acre	File Municipal Stormwater Management Worksheet with municipality
May be Exempt	1,000 to ≤ 10,000 ft², if disconnected from impervious areas	Less than 1 acre	File Municipal Stormwater Management Worksheet with municipality
Minor Stormwater Site Plan	1,000 ft² to ≤ 5,000 ft² IF connected to impervious areas	Less than 1 acre	Prepare a Minor Stormwater Site Plan
Formal Stormwater Management Plan	Greater than 5,000 ft²	Greater than 1 ac.	Consult a Qualified Person

Using Municipal Stormwater Management Worksheets

Determining the impervious area of a proposed project is the first step in using this Manual. Municipal Stormwater Management Worksheets have been included in the Simplified Approach, which will assist the property owner, or applicant, and municipality determine the impervious area of a proposed project and provide guidance through the next steps.

Step 1 of the Municipal Stormwater Management Worksheet provides a table and directions on how to figure out the impervious area created. If the total proposed surface area is up to 1,000 square feet, the project may be exempt from the requirements in this guide. The owner will sign the Acknowledgement at the top of the sheet and file it with the municipality. The municipality will use this as a record of exempt projects and keep a running total of proposed impervious area since the adoption of the Stormwater Management Ordinance.

If the proposed impervious area is between 1,000 square feet and 10,000 square feet, the applicant will go on to Step 2 to determine the Disconnected Impervious Area (DIA). DIA is explained on page C-6. The applicant will need to prepare a minor stormwater site plan to show how far the proposed project is from things like property lines and existing impervious surfaces. If DIA requirements can be met, projects of this size may be exempt from the requirement to prepare and submit a formal stormwater management (SWM) site plan. The applicant should take the worksheets and plan to the municipality for review and approval.

If stormwater runoff needs to be managed on the property, Best Management Practices (BMPs) will have to be installed if the project is between 1,000 square feet and 5,000 square feet. If the project is between 5,000 and 10,000 square feet and the entire volume of stormwater runoff cannot be managed within the property without using BMPs, then the project is not qualified to use the Simplified Approach. The applicant should fill out the rest of the worksheets and determine which BMPs will be used. The size and location

of proposed BMPs will be added to the minor stormwater site plan. The worksheets, site plan, and Owner Acknowledgement are brought to the municipality for approval. Each municipality has an approval process for exemptions and the minor stormwater site plans. The municipality may also require the submission of the Stormwater Management/ BMP Facilities & Maintenance Agreement.

Minor Stormwater Site Plan Requirements

A minor stormwater site plan depicts the existing conditions of a property and the location of proposed impervious surfaces. Depicting the relationship between the proposed activities and distances to things like property lines, streams, and vegetated areas will help determine if the stormwater runoff created by the proposed project can be managed naturally within the property or if additional best management practices (BMPs) are needed to accommodate the stormwater runoff.

If a project qualifies for use of a minor stormwater site plan, the applicant may prepare and submit to the Municipality a minor stormwater site plan and the Municipal Stormwater Management Worksheet. The Adams County GIS Office can also provide assistance to applicants to obtain property maps of existing features. A minor stormwater site plan depicting the key features of the site must be drawn, or depicted, to scale to show the following:

- Property boundary.
- Location of all existing and proposed structures (house, shed, addition, etc.) and any proposed downspouts. Include the dimensions of proposed structures.
- Site conditions (grassed areas, agricultural fields, direction of slope and stormwater flow on the property).
- Distance from proposed downspouts to property line.
- All existing and proposed driveways and impervious areas (stone and gravel driveways are considered impervious).
- Natural features such as streams, wetlands, tree lines and other vegetation on the property and within 50 feet of the property line for lots smaller than 5 acres.
- Distance from proposed structures or downspouts along the stormwater flow path to any stream or wooded area.
- Any other pertinent information that may be significant to the project site (existing drainage ways, steep slopes, etc.).
- Wells and on-site septic systems.

If BMPs are required, the following information must also be shown on the plan:

- Location and size of proposed stormwater BMPs.

Other Considerations for Minor Plans:

- While soil testing is not mandatory for the simplified approach, soil testing is highly recommended to select and apply the appropriate stormwater BMPs. The use of soil maps, infiltration tests, and/ or perc tests may provide the applicant basic information about soil characteristics.

- Proposed stormwater management facilities must be designed to handle flows from the contributing area.

- The site shall not have any pre-existing stormwater drainage-related problems (as verified by the municipality), at the discretion of the Municipality.

- Water quality shall be protected per Chapter 93 of PA Code.

- The municipality may inspect all BMPs during and after construction/ installation.

- Infiltration BMPs should not be constructed nor receive runoff until the entire contributory drainage area has achieved final stabilization.

- Ensure that infiltration in geologically susceptible areas such as, but not limited to, carbonate geology/ karst topography do not cause adverse effects. The minor stormwater site plan should incorporate steps to ensure that salt or chloride will not contaminate the groundwater.

- Selected BMPs shall be designed, constructed, and maintained in accordance with the manufacturer's recommendation, the BMP Manual, or other written guidance acceptable to the municipality.

- Proposed sump pumps shall discharge to infiltration or vegetative BMPs to the maximum extent practicable.

DISCONNECTED IMPERVIOUS AREA (DIA)

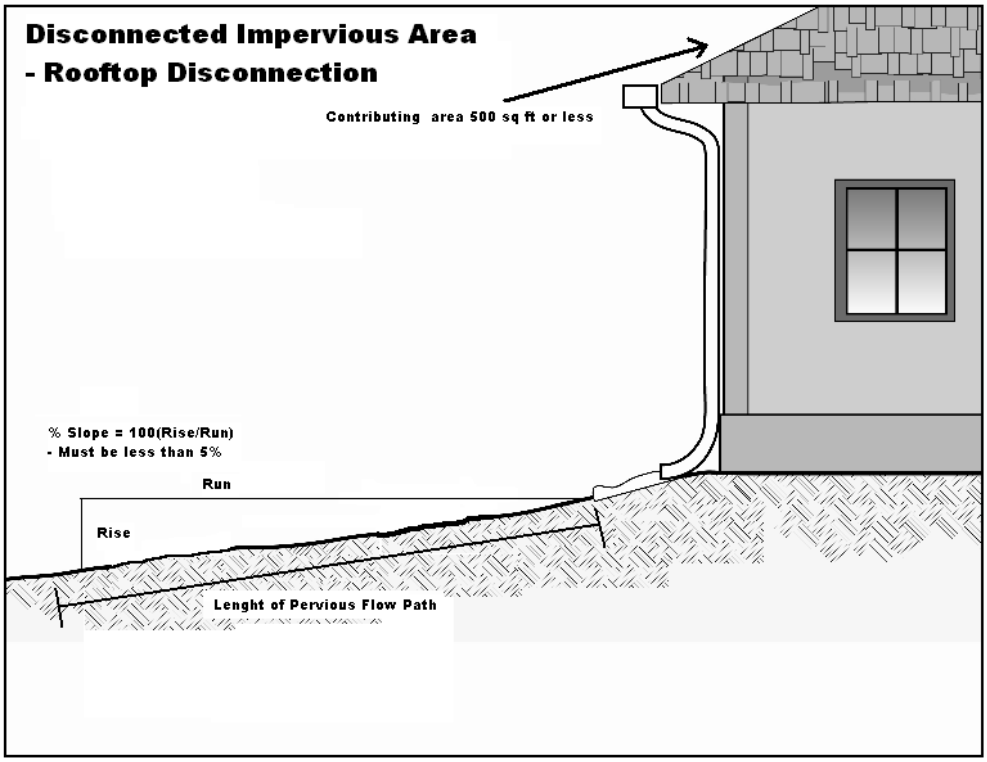
When impervious surface areas like rooftops and paved areas are directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the impervious surface areas may qualify to be treated as Disconnected Impervious Area (DIAs).

Impervious Area is defined as: A surface that prevents the infiltration of water into the ground. Impervious surfaces and areas shall include roofs, home additions, patios and

decks, garages, storage sheds and similar structures, driveways, access drives, parking areas, walkways and sidewalks. Any areas designed to be covered by loose surfacing materials such as gravel, stone and/or crushed stone, and intended for storage of and/or travel by vehicles, or pedestrians shall be considered impervious. Surfaces or areas designed, constructed and maintained to permit infiltration may be considered pervious.

Rooftop Disconnection A rooftop is considered to be completely disconnected if it meets the requirements listed below:

- The contributing area of rooftop to each disconnected discharge (downspout) is 500 square feet or less.
- The overland flow path from roof runoff discharge point has a positive slope of five percent (5%) or less.
- The length of the overland flow path is greater than 75 feet.
- Soils along the overland flow path are not classified as hydrologic group "D" (See Plan Appendix B). i.e. infiltration is at least 1 inch per 24-hour day.
- The receiving pervious area shall not include another person's property unless written permission has been obtained from the affected property owner.



Note: Downspout not required.

Determining Status of DIA

Step 1: Determine contributing area of the roof to each disconnected discharge (downspout). If it's 500 ft^2 or less, continue to step 2. If it's greater than 500 ft^2, the area does not qualify as DIA.

Step 2: Determine the length of down slope pervious flow path available for each disconnected discharge.

Step 3: Determine the % slope of the pervious flow path, % slope = (rise/ run) x 100. Must be 5% or less.

Step 4: See the table on the next page to determine the percentage of the area that can be treated as disconnected. If the available length of the flow path is equal to or greater than 75 ft, the discharge qualifies as entirely disconnected.

Partial Rooftop Disconnection		
Length of Pervious Flow Path* (ft) Lots 10,000 ft^2 and Under	**Length of Pervious Flow Path* (ft)**	**Roof Area Treated as Disconnected**
0 – 7.9	0 – 14	0%
8 – 15.9	15 – 29	20%
16 – 22.9	30 – 44	40%
23 – 29.9	45 – 59	60%
30 – 34.9	60 – 74	80%
35 or more	75 or more	100%
*Pervious flow path must be at least 15 feet from any impervious surface and cannot include impervious surfaces.		

Paved Disconnection When runoff from paved surfaces is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the contributing pavement area may qualify as disconnected. This applies generally to only small or narrow pavement structures such as driveways and walkways. Paved surfaces can be considered disconnected if they, or the adjacent areas, meet the following requirements:

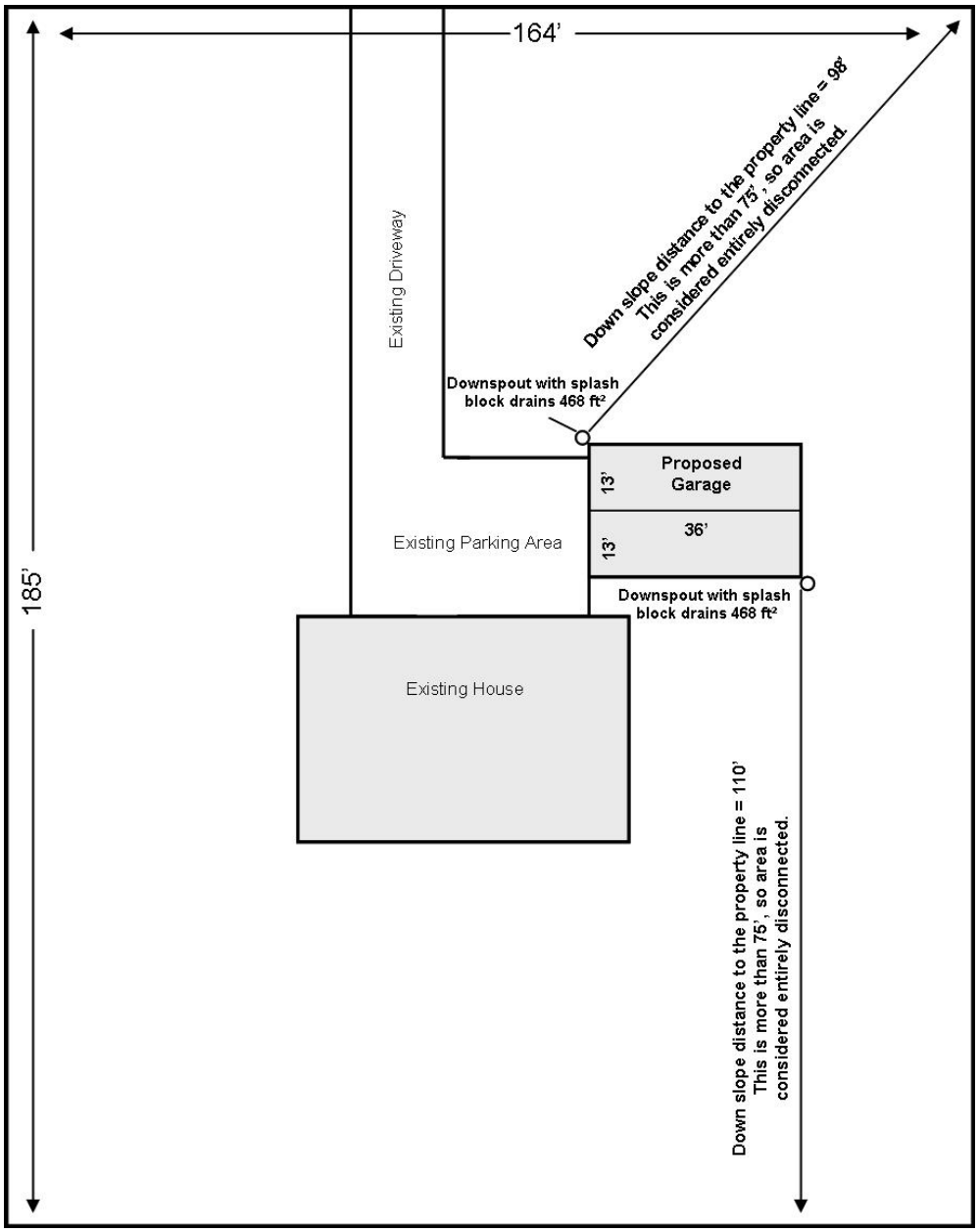
- The contributing flow path over the impervious area is not more than 75 feet
- The length of overland flow is greater than or equal to the maximum length of flow over the impervious area
- The slope of the contributing impervious area is five percent (5%) or less
- The slope of the overland flow path is five percent (5%) or less

- If discharge is concentrated at one or more discrete points, no more than 500 ft² may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. For non-concentrated discharges along the entire edge of paved surface, a level spreader is not required; however, there must be provisions for the establishment of vegetation along the paved edge and temporary stabilization of the area until the vegetation is established.

REFERENCE: Philadelphia Water Department. 2006 & 2011. Stormwater Management Guidance Manual. Section 4: Integrated Site Design. Philadelphia, PA.

The following example determines the status of DIA for a proposed 936 ft² garage.

This example meets the criteria to use the Simplified Approach.



Step 1: Determine the area to each disconnected discharge. The area draining to each downspout is 468 ft^2. This is less than 500 ft^2, proceed to step 2.

Step 2: The discharge on the north side of the garage has a 98 ft pervious flow path available. The south discharge has 110 ft pervious flow path available.

Step 3: The rise of the north discharge is 2 ft and the run is 75 ft for a slope of 2.6%. This is 5% or less so it qualifies. For the south discharge the rise is 4 ft and the run is 100 ft equaling a slope of 4%. This is 5% or less, so it qualifies.

Step 4: Both of these discharges have pervious flow paths greater than 75 ft, so they qualify as entirely disconnected.

Selecting BMPs

If BMPs are required, the Owner/ Designer should review the compiled information in the enclosed "Guide to Choosing Stormwater BMPs", as taken from the *PA Handbook of Best Management Practices for Developing Areas* and the *PA Stormwater Management BMP Manual*. These documents identify stormwater BMPs that have been deemed to be of a nature and cost that will accomplish the goals of the Adams County Stormwater Management Plan, while not unduly burdening the residents. It will then be the Owner's responsibility to select a facility, determine the appropriate size and agree to construct and maintain that facility or facilities. The property owner is encouraged to utilize both multiple and hybrid versions of the facilities, as outlined in the documents mentioned above.

Municipal Stormwater Management Worksheets

Municipal Stormwater Management Worksheet

For Municipal Use and Record of Project Area

Property Owner's Name _____

Address of Property_____

Parcel ID #_____ Municipality _____

Phone Number _____ New Impervious Area Associated with this Project _____

Stormwater Project Type: _____ Exempt _____ Minor Plan _____ Project Requires Formal SWM Plan

Total New Impervious Area Since Adoption of SWM Plan _____

Acknowledgement - I declare that I am the property owner, or representative of the owner, and that the information provided is accurate to the best of my knowledge. I understand that stormwater may not adversely affect adjacent properties or be directed onto another property without written permission. I also understand that false information may result in a stop work order or revocation of permits. Municipal representatives are also granted reasonable access to the property for review and/ or inspection of this project if necessary.

Signature _____ Date _____

Step 1: Determine the amount of new impervious area created by the proposed project. This includes any new surface areas that prevent infiltration of stormwater into the ground. New stone and gravel areas are considered impervious. Impervious areas existing before November 23, 2011 are not included in this calculation. Use additional sheets if necessary

Calculate new impervious area by completing this table.

Surface	Length (ft)	x	Width (ft)	=	Impervious Area (ft^2)
Buildings		x		=	
Driveway		x		=	
Parking Areas		x		=	
Patios/ walkways		x		=	
Other		x		=	
Total Proposed Impervious Surface Area (Sum of all impervious areas)					

- If the total new impervious surface area is **up to 1,000 ft^2**, the project is exempt from the requirement to submit a plan for approval. Sign Acknowledgement and file this sheet with municipality.
- If total impervious surface area is **1,001 ft^2 to 10,000 ft^2**, continue to Step 2.

  - If project area can be entirely disconnected, sign Acknowledgement and file worksheets with municipality.
  - If project is between 1,000 ft^2 and 5,000 ft^2 and requires BMPs, complete step 3.
  - If project area is 5,000 ft^2 - 10,000 ft^2 and can't be disconnected, the project does not qualify for the Simplified Approach.

Municipal Stormwater Management Worksheet

Step 2: Determine Disconnected Impervious Area (DIA). All or parts of proposed impervious surfaces may qualify as Disconnected Impervious Area if runoff is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration. The volume of stormwater that needs to be managed could be reduced through DIA. Prepare a minor stormwater site plan (see pg C-5 for requirements).

Criteria

- Overland flow path from the discharge area or impervious area has a positive slope of 5% or less.
- Contributing area to each rooftop discharge (downspout) is 500 ft² or less.
- Soils are not classified as hydrologic soil group "D".
- The receiving pervious area shall not include another person's property unless written permission has been obtained from the affected property owner.

Partial Rooftop Disconnection		
Length of Pervious Flow Path (ft) Lots ≤ 10,000 ft²	**Length of Pervious Flow Path (ft)**	**DIA Credit Factor**
35 or more	75 or more	0
30 – 34.9	60 – 74	0.2
23 – 29.9	45 – 59	0.4
16 – 22.9	30 – 44	0.6
8 – 15.9	15 – 29	0.8
0 – 7.9	0 - 14	1.0
Pervious flow path must be at least 15 feet from any impervious surface		

Paved Disconnection Criteria: Paved surfaces (driveways, walkways, etc.) and gravel can be considered disconnected if it meets the criteria above and:

- Runoff does not flow over impervious area for more than 75 feet.
- The length of overland flow is greater than or equal to the contributing flow path.
- The slope of the contributing impervious areas is 5% or less.
- If discharge is concentrated at one or more discrete points, no more than 1,000 ft² may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. Non-concentrated discharges along the entire edge of paved surface must include provisions for the establishment of vegetation along the paved edge and temporary stabilization of the area until the vegetation is established.
- If these criteria can be met, the DIA credit = 0

Using the calculations from Step 1, complete the table below. This will determine the impervious area that may be excluded from the area that needs to be managed through stormwater BMPs. If the total impervious area to be managed =0, the area can be considered entirely disconnected.

Surface	Proposed Impervious Area	x	DIA Credit	=	Impervious Area (ft²) to be Managed
Buildings (area to each downspout)		x		=	
Driveway		x		=	
Parking Areas		x		=	
Patios/ walkways		x		=	
Other		x		=	
Total Proposed Impervious Surface Area to be managed (Sum of all impervious areas)					

If total surface area to be managed if greater than 0, continue to Step 3.

Municipal Stormwater Management Worksheet

Step 3: Calculate the volume of stormwater runoff created by proposed impervious surfaces or see Simple BMP Sizing in Step 4.

Impervious Area (ft^2) to be Managed (Sum of Step 2)	X	3.0 in/12 in = 0.25 (3.0 in is 2-year 24-hour rainfall amount)	=	Amount of Stormwater to be Managed (ft^3)
	X	0.25	=	

Best Management Practices need to be used to manage the volume of stormwater created by the proposed impervious areas. The cubic feet of stormwater that need to be managed may also be further reduced by planting new trees. If the criteria below can be met, the amount of stormwater to be managed can be reduced per the following:

Deciduous Trees = 6 ft^3 per tree **Evergreen Trees = 10 ft^3 per tree**

Criteria:

- Trees must be PA native species (See PA Stormwater BMP Manual for a list)
- Trees shall be a minimum 1" caliper tree and 3 feet tall shrub (min)
- Trees shall be adequately protected during construction
- No more than 25% of the required capture volume can be mitigated through the use of trees
- Dead trees shall be replaced by the property owner within 12 months
- Please consider the specifications for each tree species when determining location and spacing

Amount of Stormwater to be Managed (ft^3) (Sum of Step 3)	-	Tree Planting Credit (ft^3)	=	Amount of Stormwater to be Managed (ft^3)
	-		=	

Step 4: Select BMPs and size according to the volume of stormwater that needs to be managed. The Guide to Choosing Stormwater BMPs, included in the Simplified Approach, includes sizing calculations for specific techniques. ***Simple BMP Sizing*** **-** Sizing BMPs may also be simplified through the use of this chart. Take the sum of Step 2 and match it to the "Amount of New Impervious Area to be Managed" in white boxes in the table below (rounding **up** to the next value if the number is between two values). Then look in the light grey box to determine the cubic footage based on the type of BMP (bioretention or infiltration). For example, if a proposed 1,000 square foot impervious area must handle 240 cubic feet of stormwater in a bioretention system, a 13'x 13'x 1.5' rain garden or a 36'x 2'x 3.5' vegetated swale could be used. Show the location and size of proposed BMPs on the minor stormwater site plan. (The following was based on a chart from the Lycoming Co. Planning Dept)

BMP Type		Simple BMP Sizing - Amount New Impervious Area to be Managed (ft^2)											
		250	500	750	1000	1500	2000	2500	3000	3500	4000	4500	5000
Bioretention	Ex. Rain garden, Vegetated swale	60 ft^3 or	120 ft^3 or	180 ft^3 or	240 ft^3 or	360 ft^3 or	480 ft^3 or	600 ft^3 or	720 ft^3 or	840 ft^3 or	960 ft^3 or	1,080 ft^3 or	1,200 ft^3 or
Infiltration	Ex. Dry well, Infiltration trench	180 ft^3	360 ft^3	540 ft^3	720 ft^3	1,080 ft^3	1,440 ft^3	1,800 ft^3	2,160 ft^3	2,520 ft^3	2,880 ft^3	3,240 ft^3	3,600 ft^3

Bring the worksheets, plan, Owner Acknowledgement, and BMP Facilities and Maintenance Agreement (if applicable) to your municipality. If an area greater than 5,000 square feet of earth is disturbed, an erosion and sedimentation (E & S) control plan must be prepared. The municipality may require that the E&S plan be submitted to, reviewed, and approved by the Adams County Conservation District.

Municipal Stormwater Management Worksheet

The minor stormwater site plan assists the owner / applicant in preparing the necessary information for the municipality to review and approve.

OWNER ACKNOWLEDGMENT

(Municipality may decide if the Owner Acknowledgement should be notarized and/ or recorded, based on municipal process)

- Development activities shall begin only after the municipality approves the plan.
- The installed BMPs will not adversely affect any property, septic systems, or drinking water wells on this or any other property.
- If a stormwater management alternative to the approved minor stormwater site plan is used, the applicant will submit a revised plan to the municipality for approval. If a site requires a more complex system or if problems arise, the applicant may need the assistance of a licensed professional.
- The applicant acknowledges that the proposed stormwater management BMPs will be a permanent fixture of the property that can not be altered or removed without approval by the Township.

I (we) _____, hereby acknowledge the above statements and agree to assume full responsibility for the implementation, construction, operation, and maintenance of the proposed stormwater management facilities. Furthermore, I (we) also acknowledge that the steps, assumptions, and guidelines provided in this simplified approach package (minor stormwater site plan & Municipal Stormwater Worksheet(s)) will be adhered to.

Signature: _____ Date: _____

Signature: _____ Date: _____

STORMWATER MANAGEMENT/ BMP FACILITIES & MAINTENANCE AGREEMENT

STORMWATER MANAGEMENT/ BMP

FACILITIES & MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into this ____ day of _____, 20___, by and between _____ hereinafter called the "Landowner", and < Municipality>, Adams County, Pennsylvania, hereinafter called the "Municipality".

WHEREAS, the Landowner is the owner of certain real property described as (Adams County tax Map/Parcel Identification Number) _____ as recorded by deed in the land records of Adams County, Pennsylvania, Book _____ Page _____, hereinafter called the "Property".

WHEREAS, the Landowner is proceeding to build on and develop the property; and WHEREAS, the minor stormwater site plan hereinafter called the "Plan", which is expressly made a part hereof, as approved or to be approved by the Municipality, provides for detention of stormwater within the confines of the property through the use of Best Management Practices (BMPs); and

WHEREAS, the Municipality and the Landowner, its successors and assigns, agree that the health, safety, and welfare of the residents of Adams County, Pennsylvania, require that on-site stormwater management/ BMP facilities be constructed and maintained on the Property; and

WHEREAS, the Municipality requires that on-site stormwater management/ BMP facilities as shown on the Plan be constructed and adequately maintained by the Landowner, its successors and assigns. Any additional requirements imposed by the Municipality are considered part of the Plan.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner in accordance with the specifications identified within the Plan shall construct the onsite BMP facilities.

2. The Landowner, its successors and assigns, shall adequately maintain the BMP facilities. This includes all pipes and channels built to convey stormwater to the facility, as well as all structures, improvements, and vegetation provided to control the quantity and quality of the stormwater. Adequate maintenance is herein defined as good working condition so that these facilities are performing their design functions.

3. The Landowner, its successors and assigns, shall inspect the BMP facility after all rainfall events exceeding one inch of precipitation in a 24-hour period.

4. The Landowner, its successors and assigns, hereby grant permission to the Municipality, its authorized agents and employees, to enter upon the Property without prior notification at reasonable times and upon presentation of proper identification to inspect the BMP facilities whenever the Municipality deems necessary.

5. In the event the Landowner, its successors and assigns, fails to maintain the BMP facilities as shown on the Plan and in good working condition, the Municipality may enter upon the Property and take whatever action is deemed necessary to maintain said BMP facilities and to charge the costs of such repairs to the Landowner, its successors and assigns. This provision shall not be construed to allow the Municipality to erect any structure of permanent nature on the land of the Landowner unless such structures were part of the approved Plan. It is expressly understood and agreed that the Municipality is under no obligation to routinely maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.

6. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality within thirty (30) days of receipt of invoice for all expenses incurred. The municipality has the right to file a municipal lien for unpaid costs and expenses that have not been reimbursed thirty (30) days after receipt of invoice.

7. The intent and purpose of this Agreement is to ensure the proper maintenance of the BMP facilities by the Landowner. This Agreement shall not be deemed to create any additional liability of any party for damage alleged to result from or be caused by nonpoint source pollution runoff. This Agreement imposes no liability of any kind whatsoever on the Municipality and the Landowner agrees to hold the Municipality harmless from any liability in the event the stormwater management BMP facilities fail to operate properly. In the event that a claim is asserted against the municipality, its designated representatives or employees, the municipality shall promptly notify the Landowner and the Landowner shall defend, at his own expense, any suit based on the claim. If any judgment or claims against the municipality shall be allowed, the Landowner shall pay all costs and expenses regarding said judgment.

8. This Agreement shall be binding to the Landowner, its administrators, executors, assigns, heirs and any other successors in interests, in perpetuity.

Landowner signatures:

_____ _____
(Print Landowner Name)

_____ _____
(Print Landowner Name)

Witnessed By:

_____ _____
(Municipal Representative)

Guide to Choosing Stormwater BMPs