

APPENDIX A

**OPERATION AND MAINTENANCE (O&M) AGREEMENT
STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (SWM
BMPs)**

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between _____, (hereinafter the "Landowner"), and _____, _____ County, Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of _____ County, Pennsylvania, Deed Book _____ at page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the SWM BMP O&M Plan approved by the Municipality (hereinafter referred to as the "Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

WHEREAS, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

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

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the SWM Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the Plan in good working order in accordance with the specific maintenance requirements noted on the approved SWM Site Plan.

3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the BMPs whenever necessary. The Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
5. 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 for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.
8. The Municipality shall inspect the BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of _____ County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

For the Landowner:

ATTEST:

_____ (City, Borough, Township)

County of _____, Pennsylvania

I, _____, a Notary Public in and for the county and state aforesaid, whose commission expires on the _____ day of _____, 20____, do hereby certify that

_____ whose name(s) is/are signed to the foregoing Agreement bearing date of the _____ day of _____, 20____, has acknowledged the same before me in my said county and state.

GIVEN UNDER MY HAND THIS _____ day of _____, 20____.

NOTARY PUBLIC

(SEAL)

APPENDIX B

STORMWATER MANAGEMENT PERMIT APPLICATION

Anyone performing a regulated activity must complete the accompanying Stormwater Management Permit Application, and submit to the Municipality. A regulated activity is defined by this Ordinance as:

Regulated Activity - Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

This includes but is not limited to: the clearing of wooded areas, grading and excavating, placement of pavement (driveways, parking areas, roads), construction of buildings and other structures (homes, sheds, garages, commercial and industrial buildings), and other activities which alter the way stormwater runs off of the landscape. Impervious area is defined by this Ordinance as:

Impervious Surface (Impervious Area) - A surface that prevents the infiltration of water into the ground. Impervious surfaces include, but are not limited to, streets, sidewalks, pavements, parking lots, driveways, roofs, stone patios. See definition of "Gravel (Crushed Stone)" for when gravel classifies as impervious area.

Gravel (Crushed Stone) - Considered to be impervious when the intended use of the stone is for transportation purposes, parking areas, construction areas, trails, or if the gravel is compacted at any time during or after its placement; landscaping stone is not considered as impervious area.

Depending on the amount of impervious area placed and the amount of earth disturbance to the project site, this Ordinance requires different levels of stormwater management, and correspondingly different levels of design and review.

Level 1: Proposed impervious area is less than 1,000 sq. ft. and total earth disturbance is less than 5,000 sq. ft.

Stormwater Management Controls: Ensure that adverse downstream impacts do not occur due to redirecting stormwater flows towards nearby structures.

Submission: Submit the Stormwater Management Permit Application and Project Sketch; the easiest mechanism is to include the application with Building Permits.

Review: Reviewing the application will not likely require a qualified professional.

Level 2: Proposed impervious area is between 1,000 sq. ft. and 5,000 sq. ft. or total earth disturbance is between 5,000 sq. ft. and 10,000 sq. ft.

Stormwater Management Controls: Utilize Disconnected Impervious Area (DIA) for stormwater controls as outlined in Ordinance Appendix C.1; if DIA cannot be achieved, utilize stormwater management controls for small projects as outlined in Ordinance Appendix E.

Submission: Submit the Stormwater Management Permit Application and computations for DIA; the worksheet in this Ordinance Appendix C.1 may be used and submitted as is, or may be modified as the Municipality sees fit. If DIA cannot be achieved, submit computations for Stormwater Management for Small Projects; the worksheet in this Ordinance Appendix E may be used and submitted as is, or may be modified as the Municipality sees fit; the easiest mechanism is to include the application with Building Permits.

Review: Reviewing the application and computations may require a qualified professional if the person responsible for issuing Building Permits is not comfortable with performing the review.

Level 3: Proposed impervious area is between 5,000 sq. ft. and 10,000 sq. ft. or total earth disturbance is between 10,000 sq. ft. and 20,000 sq. ft.

Stormwater Management Controls: Capture and permanently remove the first 2 inches of runoff over all proposed impervious areas; infiltrate at least the first 0.5 inches.

Submission: Submit the Stormwater Management Permit Application and computations for permanently removing the first 2 inches of runoff over all proposed impervious areas; the worksheet in this Ordinance Appendix D may be used and submitted as is, or may be modified as the Municipality sees fit.

Review: Reviewing the application and computations will most likely require a qualified professional.

Level 4: Proposed impervious area is greater than 10,000 sq. ft. or total earth disturbance is greater than 20,000 sq. ft.

Stormwater Management Controls: All requirements of this Ordinance are applicable, including water quality and volume controls as found in Article III Section 303 and peak rate controls as found in Article III Section 304.

Submission: Submit the Stormwater Management Permit Application and Stormwater Management (SWM) Site Plan as in Article IV of this Ordinance.

Review: Reviewing the application and SWM Site Plan requires a qualified professional.

Following the Stormwater Management Permit Application and accompanying sketch sheet are examples of common smaller projects which do not require the review by a qualified professional (review by a qualified professional is optional). An Alternative Stormwater Management Permit Application is also provided following the examples. Both forms may be modified by the Municipality before one is selected.

STORMWATER MANAGEMENT PERMIT APPLICATION

Applicant and Applicant Address:	Nature of Activity (i.e. driveway, single-lot structure, parking lot, road, trail, subdivision, etc.):
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Total Proposed Impervious Area (I) (sq. ft.): _____

Total Proposed Earth Disturbance (ED) (sq. ft.): _____

Level 1: (I) is less than 1,000 sq. ft. and (ED) is less than 5,000 sq. ft. _____

Level 2: (I) is between 1,000 sq. ft. and 5,000 sq. ft. or (ED) is between 5,000 sq. ft. and 10,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix C.1 or E (or equivalent)

→

Is worksheet attached?

No _____

Yes _____

Level 3: (I) is between 5,000 sq. ft. and 10,000 sq. ft. or (ED) is between 10,000 sq. ft. and 20,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix D (or equivalent)

→

Is worksheet attached?

No _____

Yes _____

Level 4: (I) is greater than 10,000 sq. ft. or (ED) is greater than 20,000 sq. ft.

Complete and submit SWM Site Plan in accordance with Ordinance Article IV

→

Is a SWM Site Plan included?

No _____

Yes _____

Show on the accompanying sketch that adverse downstream stormwater impacts are not created or worsened, and that additional stormwater runoff will not discharge towards adjacent property owners.

All requirements of the Ordinance have been met. Applicant Signature: _____ Date: _____

FOR REVIEWER ONLY

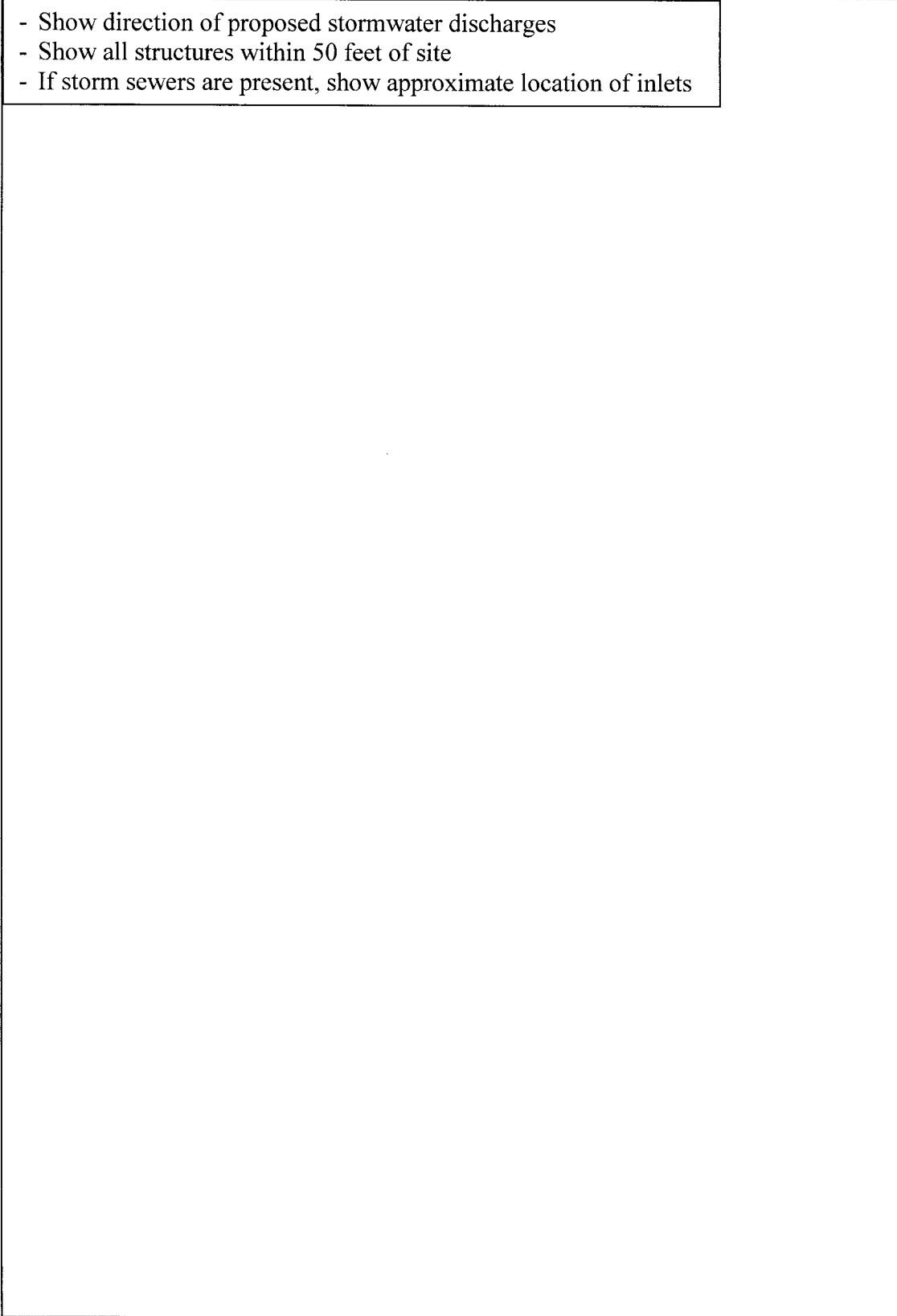
This stormwater management permit application has been APPROVED DENIED (circle one)

Reviewed by (print): _____ Reason for Denial: _____

Signature: _____ Date: _____

PROJECT SKETCH

- Show direction of proposed stormwater discharges
- Show all structures within 50 feet of site
- If storm sewers are present, show approximate location of inlets



EXAMPLE 1 STORMWATER MANAGEMENT PERMIT APPLICATION

Applicant and Applicant Address: Joe Homeowner 123 Site Street Anytown, PA 12345	Nature of Activity (i.e. driveway, single-lot structure, parking lot, road, trail, subdivision, etc.): Construction of one car garage
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Total Proposed Impervious Area (I) (sq. ft.): 300 square feet

Total Proposed Earth Disturbance (ED) (sq. ft.): 400 square feet

Level 1: (I) is less than 1,000 sq. ft. and (ED) is less than 5,000 sq. ft.

Level 2: (I) is between 1,000 sq. ft. and 5,000 sq. ft. or (ED) is between 5,000 sq. ft. and 10,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix C.1 or E (or equivalent)	Is worksheet attached? No _____ Yes _____
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Level 3: (I) is between 5,000 sq. ft. and 10,000 sq. ft. or (ED) is between 10,000 sq. ft. and 20,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix D (or equivalent)	Is worksheet attached? No _____ Yes _____
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Level 4: (I) is greater than 10,000 sq. ft. or (ED) is greater than 20,000 sq. ft.

Complete and submit SWM Site Plan in accordance with Ordinance Article IV	Is a SWM Site Plan included? No _____ Yes _____
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Show on the accompanying sketch that adverse downstream stormwater impacts are not created or worsened, and that additional stormwater runoff will not discharge towards adjacent property owners.

All requirements of the Ordinance have been met. Applicant Signature: Joseph Homeowner Date: 6/30/2010

FOR REVIEWER ONLY

This stormwater management permit application has been **APPROVED** DENIED (circle one)

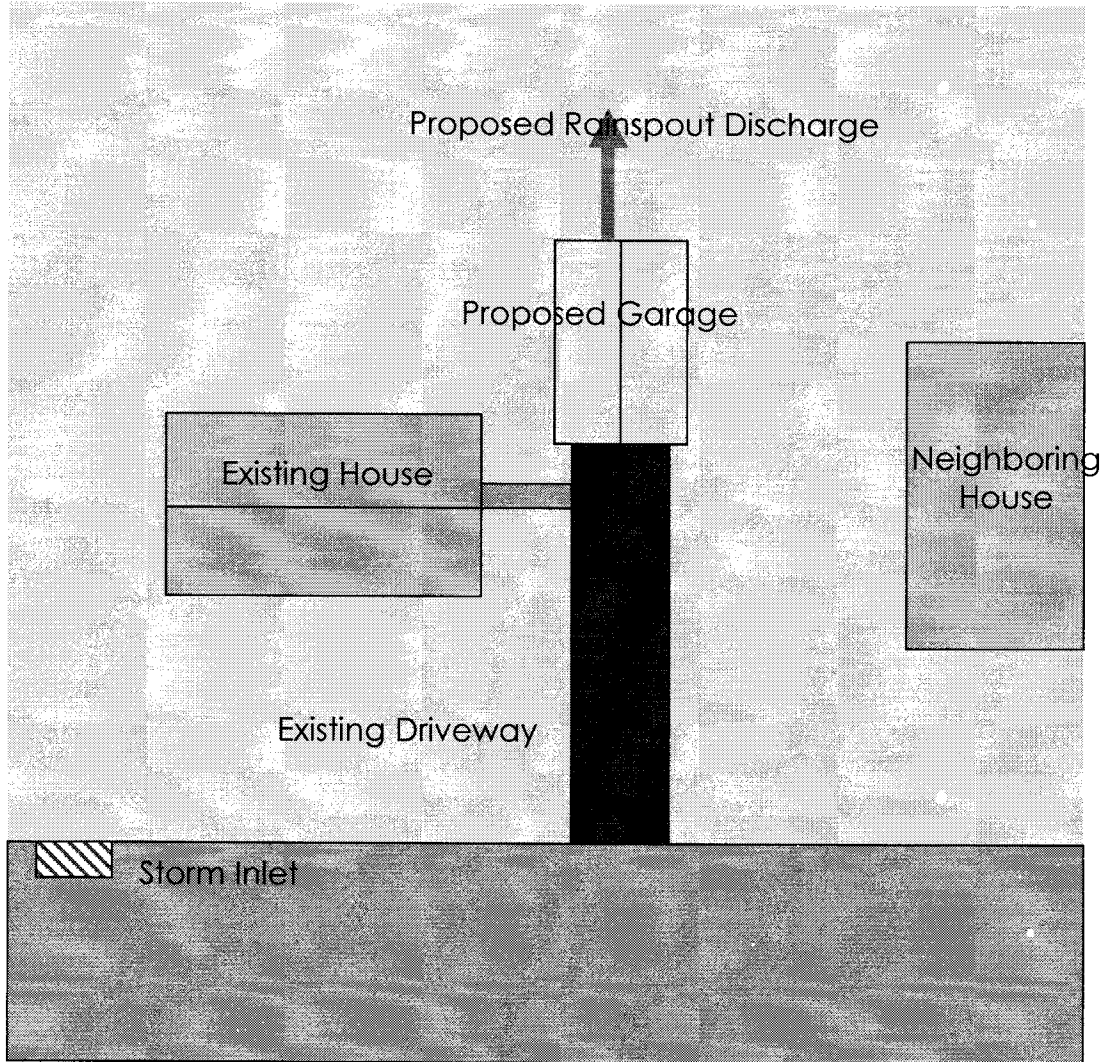
Reviewed by (print): Municipal Official Reason for Denial: N/A

Signature: Municipal Official

Date: 6/30/2010

EXAMPLE 1 PROJECT SKETCH

- Show direction of proposed stormwater discharges
- Show all structures within 50 feet of site
- If storm sewers are present, show approximate location of inlets



EXAMPLE 2 STORMWATER MANAGEMENT PERMIT APPLICATION

Applicant and Applicant Address: Joe Homeowner 123 Site Street Anytown, PA 12345	Nature of Activity (i.e. driveway, single-lot structure, parking lot, road, trail, subdivision, etc.): Construction of single-family home, driveway, and stone patio
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Total Proposed Impervious Area (I) (sq. ft.): 3,300 square feet

Total Proposed Earth Disturbance (ED) (sq. ft.): 6,000 square feet

Level 1: (I) is less than 1,000 sq. ft. and (ED) is less than 5,000 sq. ft.

Level 2: (I) is between 1,000 sq. ft. and 5,000 sq. ft. or (ED) is between 5,000 sq. ft. and 10,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix C.1 or E (or equivalent)

Is worksheet attached?
 No _____
 Yes

Level 3: (I) is between 5,000 sq. ft. and 10,000 sq. ft. or (ED) is between 10,000 sq. ft. and 20,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix D (or equivalent)

Is worksheet attached?
 No _____
 Yes _____

Level 4: (I) is greater than 10,000 sq. ft. or (ED) is greater than 20,000 sq. ft.

Complete and submit SWM Site Plan in accordance with Ordinance Article IV

Is a SWM Site Plan included?
 No _____
 Yes _____

Show on the accompanying sketch that adverse downstream stormwater impacts are not created or worsened, and that additional stormwater runoff will not discharge towards adjacent property owners.

All requirements of the Ordinance have been met. Applicant Signature Joseph Homeowner Date: 6/30/2010

FOR REVIEWER ONLY

This stormwater management permit application has been **APPROVED** DENIED (circle one)

Reviewed by (print): Municipal Official Reason for Denial: N/A

Signature: Municipal Official

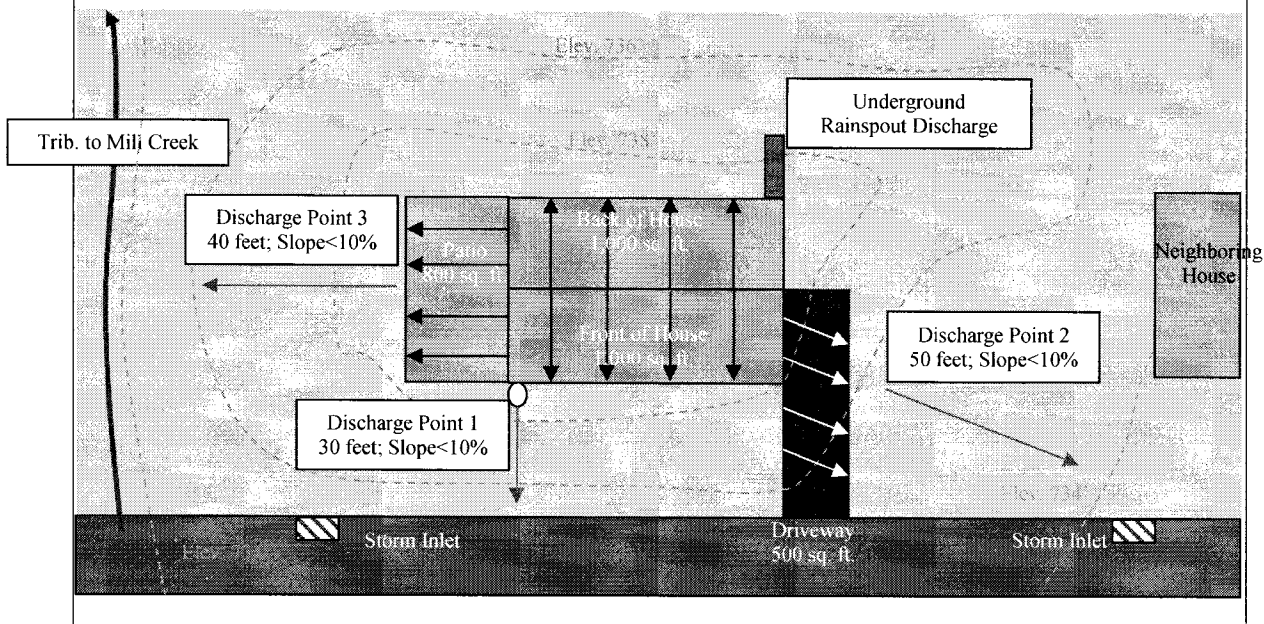
Date: 6/30/2010

EXAMPLE 2 PROJECT SKETCH – Homeowner opted to utilize the worksheet provided in Appendix C.1 to show stormwater management for DIA.

Applicant Address: Joe Homeowner 123 Site Street Anytown, PA 12345	Brief Description of Project: Construction of 2,000 sq. ft. (40' x 50') single-family home with 500 sq. ft. driveway (10' x 50') and 800 sq. ft. stone patio (20' x 40'). The back half of the house discharges to rainspouts underground.				
Nearest waterbody: Tributary to Mill Creek	No more than 1,000 sq. ft. can discharge to one point on the surface. Number of surface discharge points required: 3				
Total Proposed Impervious Area (A): 3,300 sq. ft. Total Earth Disturbance: 6,000 sq. ft.	Discharge Point 1: Front of Home	Discharge Point 2: Driveway	Discharge Point 3: Patio	Discharge Point 4: N/A	Discharge Point 5: N/A
	Area: 1,000 sq. ft.	Area: 500 sq. ft.	Area: 800 sq. ft.	Area: N/A	Area: N/A
Are rainspouts discharged underground? (Y/N) Yes If yes, contributing impervious area (B): 1,000 sq. ft.	Impervious Path Length: 20 ft	Impervious Path Length: 10 ft	Impervious Path Length: 20 ft	Impervious Path Length: N/A	Impervious Path Length: N/A
	Pervious Path Length: 30 ft	Pervious Path Length: 50 ft	Pervious Path Length: 40 ft	Pervious Path Length: N/A	Pervious Path Length: N/A
Total Impervious Area Discharged on Surface (A) – (B): 3,300 – 1,000 = 2,300 sq. ft.	Pervious Path Slope <10%? (Y/N) Yes	Pervious Path Slope <10%? (Y/N) Yes	Pervious Path Slope <10%? (Y/N) Yes	Pervious Path Slope <10%? (Y/N) N/A	Pervious Path Slope <10%? (Y/N) N/A

HSG Soil Group from Appendix F.2 Hydrologic Soils Group Map (Cannot be “D” Soils): HSG “C”

Project sketch:



EXAMPLE 3 STORMWATER MANAGEMENT PERMIT APPLICATION

Applicant and Applicant Address: Joe Homeowner 123 Site Street Anytown, PA 12345	Nature of Activity (i.e. driveway, single-lot structure, parking lot, road, trail, subdivision, etc.): Construction of single-family home, driveway, and stone patio
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Total Proposed Impervious Area (I) (sq. ft.): 3,300 square feet

Total Proposed Earth Disturbance (ED) (sq. ft.): 6,000 square feet

Level 1: (I) is less than 1,000 sq. ft. and (ED) is less than 5,000 sq. ft.

Level 2: (I) is between 1,000 sq. ft. and 5,000 sq. ft. or (ED) is between 5,000 sq. ft. and 10,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix C.1 or E (or equivalent)

Is worksheet attached?
 No _____
 Yes _____

Level 3: (I) is between 5,000 sq. ft. and 10,000 sq. ft. or (ED) is between 10,000 sq. ft. and 20,000 sq. ft.

Complete and attach worksheet contained in Ordinance Appendix D (or equivalent)

Is worksheet attached?
 No _____
 Yes _____

Level 4: (I) is greater than 10,000 sq. ft. or (ED) is greater than 20,000 sq. ft.

Complete and submit SWM Site Plan in accordance with Ordinance Article IV

Is a SWM Site Plan included?
 No _____
 Yes _____

Show on the accompanying sketch that adverse downstream stormwater impacts are not created or worsened, and that additional stormwater runoff will not discharge towards adjacent property owners.

All requirements of the Ordinance have been met. Applicant Signature Joseph Homeowner Date: 6/30/2010

FOR REVIEWER ONLY

This stormwater management permit application has been APPROVED **DENIED** (circle one)

Reviewed by (print): Municipal Official Reason for Denial: Rainpout discharges to driveway, and driveway discharges to street

Signature: Municipal Official

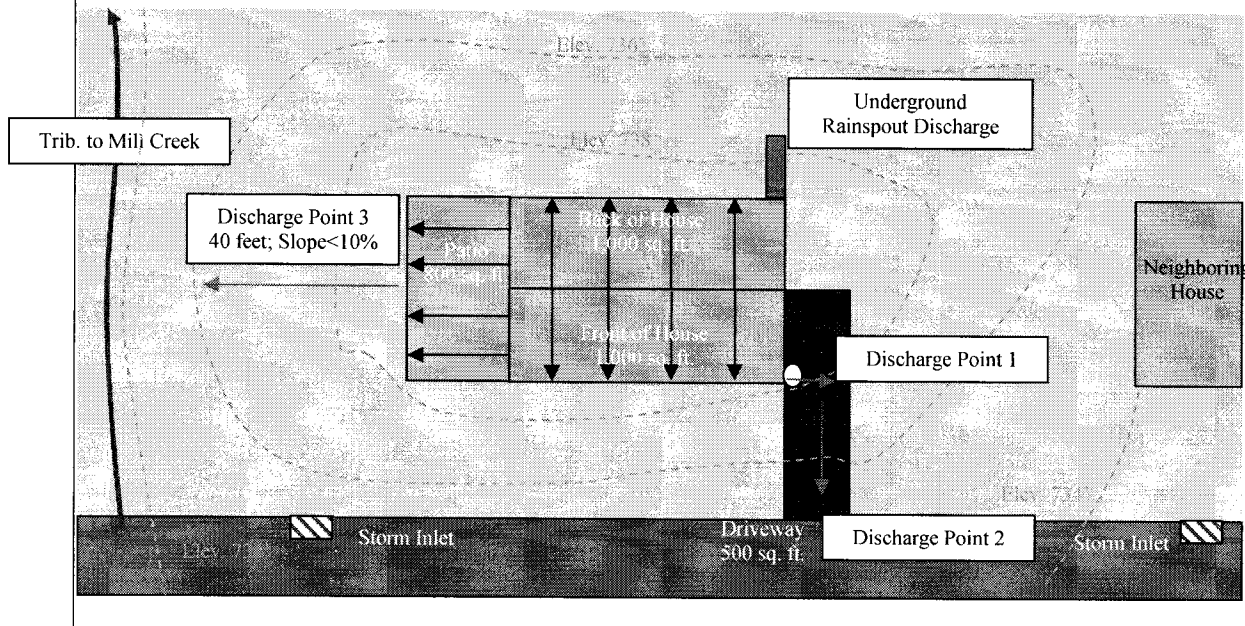
Date: 6/30/2010

EXAMPLE 3 PROJECT SKETCH – Homeowner opted to utilize the worksheet provided in Appendix C.1 to show stormwater management for DIA.

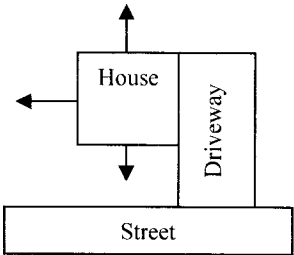
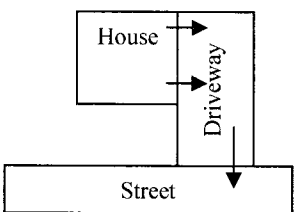
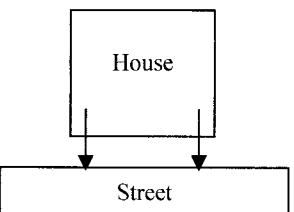
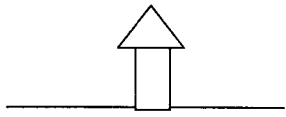
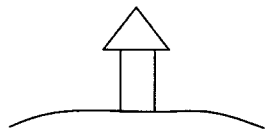
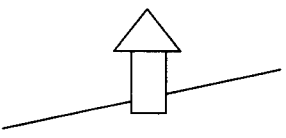
Applicant Address: Joe Homeowner 123 Site Street Anytown, PA 12345	Brief Description of Project: Construction of 2,000 sq. ft. (40' x 50') single-family home with 500 sq. ft. driveway (10' x 50') and 800 sq. ft. stone patio (20' x 40'). The back half of the house discharges to rainspouts underground.				
Nearest waterbody: Tributary to Mill Creek	No more than 1,000 sq. ft. can discharge to one point on the surface. Number of surface discharge points required: 3				
Total Proposed Impervious Area (A): 3,300 sq. ft. Total Earth Disturbance: 6,000 sq. ft.	Discharge Point 1:	Discharge Point 2:	Discharge Point 3:	Discharge Point 4:	Discharge Point 5:
	Front of Home	Driveway	Patio	N/A	N/A
	Area: 1,000 sq. ft.	Area: 500 sq. ft.	Area: 800 sq. ft.	Area: N/A	Area: N/A
Are rainspouts discharged underground? (Y/N) Yes If yes, contributing impervious area (B): 1,000 sq. ft.	Impervious Path Length: 20 ft	Impervious Path Length: 50 ft	Impervious Path Length: 20 ft	Impervious Path Length: N/A	Impervious Path Length: N/A
	Pervious Path Length: N/A	Pervious Path Length: N/A	Pervious Path Length: 40 ft	Pervious Path Length: N/A	Pervious Path Length: N/A
Total Impervious Area Discharged on Surface (A) – (B): 3,300 – 1,000 = 2,300 sq. ft.	Pervious Path Slope <10%? (Y/N) N/A	Pervious Path Slope <10%? (Y/N) N/A	Pervious Path Slope <10%? (Y/N) Yes	Pervious Path Slope <10%? (Y/N) N/A	Pervious Path Slope <10%? (Y/N) N/A

HSG Soil Group from Appendix F.2 Hydrologic Soils Group Map (Cannot be “D” Soils): HSG “C”

Project sketch:



ALTERNATIVE STORMWATER MANAGEMENT PERMIT APPLICATION

Applicant Name and Address:		
What is the nature of your project? (check all that apply)		
<input type="checkbox"/> Single Family Home	<input type="checkbox"/> Paved Driveway	<input type="checkbox"/> Deck (w/ roof)
<input type="checkbox"/> Addition to Home	<input type="checkbox"/> Gravel Driveway	<input type="checkbox"/> Earthwork (fill or excavation)
<input type="checkbox"/> Garage	<input type="checkbox"/> Outdoor Stone Patio	<input type="checkbox"/> Subdivision/Land Development
<input type="checkbox"/> Storage Shed	<input type="checkbox"/> Deck (no roof)	<input type="checkbox"/> Other (explain) _____
What is the total amount of disturbed area for the project? (limits of fill placement, excavation, tree/shrub clearing)		
Length (feet)		
Area = Length x Width	<input style="width: 100px; height: 20px;" type="text"/>	Width (feet) Area = _____ (sq. ft.)
What is the total amount of impervious area for the project? (asphalt, concrete, compacted gravel, stone, roofs)		
Length (feet)		
Area = Length x Width	<input style="width: 100px; height: 20px;" type="text"/>	Width (feet) Area = _____ (sq. ft.)
If the project involves roofing, are gutters and rainspouts used? Yes No (circle one)		
If rainspouts are used, select the sketch below that approximates where they are directed:		
<p style="text-align: center;">To back, front, and side lawns Not directed to driveway</p> 	<p style="text-align: center;">To driveway and out to street</p> 	<p style="text-align: center;">No driveway present Directed to street or storm sewer</p> 
Indicate the slope of the site the project is located on by selecting one of the sketches below:		
 <p>Mild slopes or flat</p>	 <p>Perched project – slopes in all directions</p>	 <p>Steep slope in one general direction</p>
**** Include additional sketches and sheets as necessary ****		
Reviewer Signature: _____ Date: _____ APPROVED DENIED		