

**BRIGHTON TOWNSHIP SMALL DEVELOPMENT STORMWATER MANAGEMENT  
PLAN APPLICATION – PART 1**

**\*\*\*TO BE COMPLETED IF PROJECT IS OVER 500 SQUARE FEET\*\*\***

**Small Project Stormwater Management Submission**

**Calculation of Impervious Area**

In accordance with the Township Stormwater Management Ordinance, small developments are eligible for submission of a simplified stormwater management plan. Small developments propose creation of 5,000 or fewer square feet of impervious surface area. The calculations of proposed impervious area shall cumulatively include all new impervious area constructed within the last five years. An impervious surface is a surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs, additional indoor living spaces, patios, garages, storage sheds, porches, decks and similar structures, and any new driveways or sidewalks.

**Table 1: Calculation of Impervious Surfaces**

Surface Type		Length (ft)	X	Width (ft)	=	Proposed Impervious Area (sq ft)
Building	Home		x		=	
	Addition		x		=	
	Garage		x		=	
	Porch/deck		x		=	
			x		=	
			x		=	
			x		=	
Driveway			x		=	
			x		=	
			x		=	
Parking Areas			x		=	
			x		=	
			x		=	
Patios and Sidewalks			x		=	
			x		=	
			x		=	
			x		=	
Other			x		=	
			x		=	
			x		=	
			x		=	
			x		=	
<b>Total Impervious Surface Area to Managed</b>						

**If the Total Impervious Surface Area is LESS THAN 1,000 Square Feet, please read, acknowledge and sign below.**

Based Upon the information you have provided a *Stormwater Management Plan IS NOT required* for this regulated activity. The Township of Brighton may request additional information and/or SWM for any reason.

Property Owner Acknowledges that submission of inaccurate information may result in a stop work order or permit revocation. Acknowledgement of such is by signature below. I declare that I am the owner or owner's legal representative. I further acknowledge that the information provided is accurate and employees of the Township of Brighton are granted access to the above described property for review and inspection as may be required.

**Property Owner** \_\_\_\_\_

**Date** \_\_\_\_\_

**BRIGHTON TOWNSHIP SMALL DEVELOPMENT STORMWATER MANAGEMENT  
PLAN APPLICATION – PART 2**

**\*\*\*TO BE COMPLETED IF PROJECT EXCEEDS 1,000 SQUARE FEET\*\*\***

**If the Total Impervious Surface Area EXCEEDS 1,000 Square Feet, complete the remainder of the Application, accompanied by a fee of \$200.**

**If the Total Impervious Surface Area EXCEEDS 5,000 Square Feet, a complete stormwater management plan, prepared by a registered professional engineer must be submitted.**

**Small Project SWM Plan Worksheet**

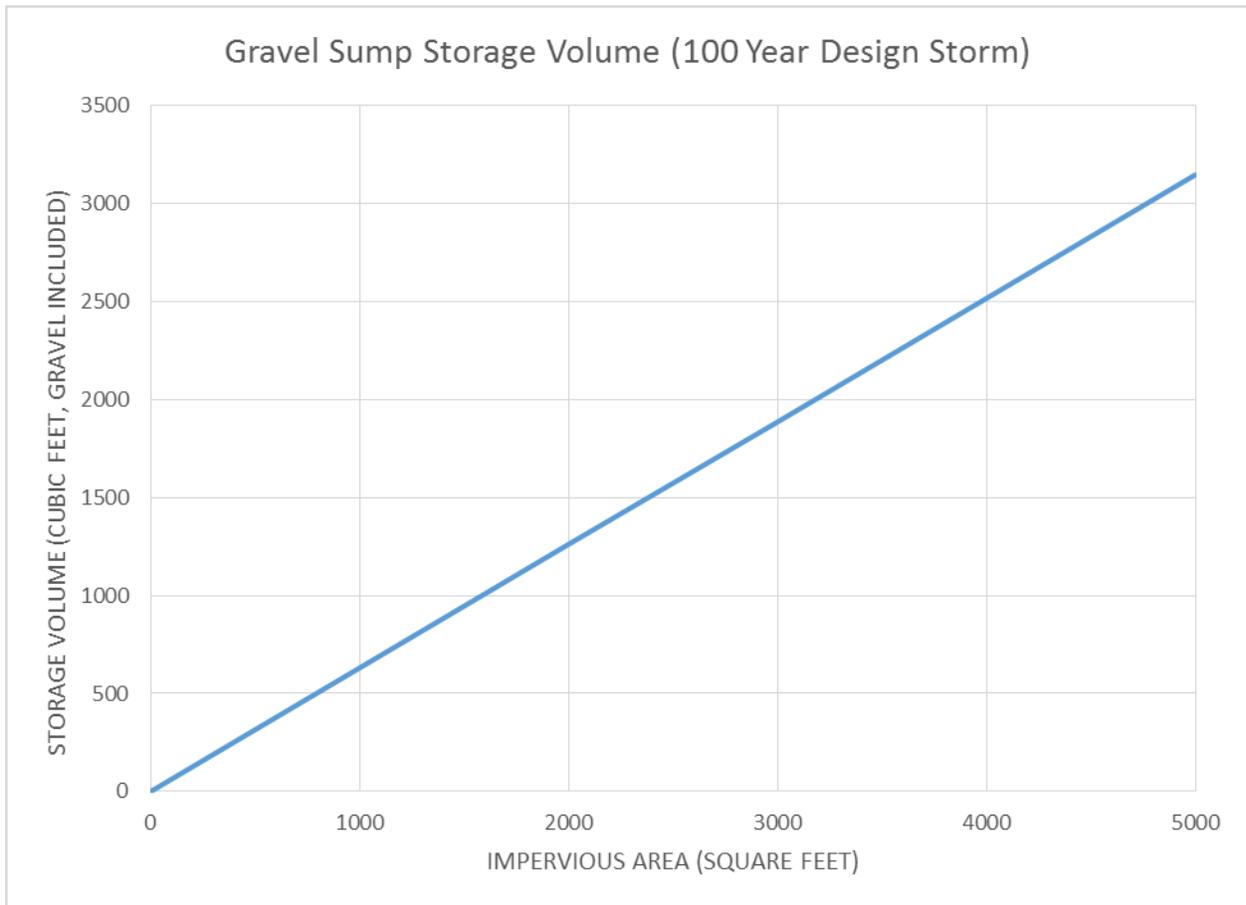
Based upon the information you have provided a *Stormwater Plan IS Required* for this development activity and the project is eligible for review as a small development. The Township Stormwater Management Ordinance allows for submission of a simplified stormwater management plan for small developments.

Regulated activities shall be conducted only after the Township approves a stormwater management plan. The Township Stormwater Management Ordinance will assist you in preparing the necessary information and plans for the Township to review and approve. **This document will constitute an approved plan if all of the relevant details are to be installed in their entirety AND no part of the stormwater system adversely affects any other property, nor adversely affect any septic systems or drinking water wells on this, or any other, parcel.** If an alternative system is to be used a plan will need to be submitted to Brighton Township for approval. A design by a qualified professional may be required for more complex sites.

**PLEASE INITIAL BELOW TO INDICATE THE STORMWATER MANAGEMENT PLAN FOR THIS SITE**

The relevant details from Township Stormwater Management Ordinance will be installed in their entirety AND the system will be located as not to adversely affect other property, nor any septic systems or drinking water wells on this, or any other, parcel.

To conform to the requirements of the Stormwater Management Ordinance, a gravel sump may be installed and maintained. Refer to Attachment A for the Township Standard Gravel Sump Detail. The sump shall be sized in accordance with the following figure:



**Figure 1: Gravel Sump Sizing Chart**

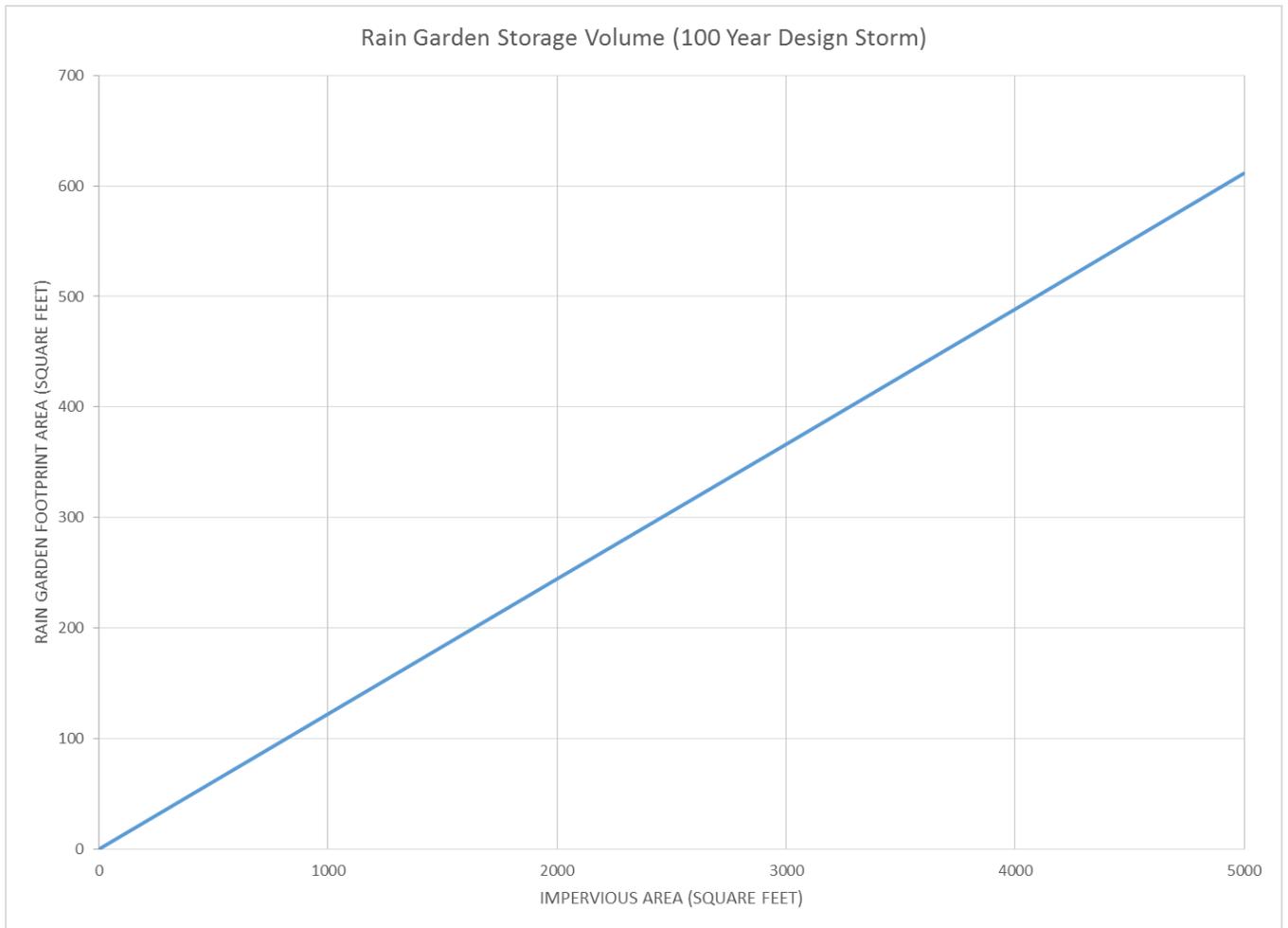
Total Proposed ImperVIOUS Area: \_\_\_\_\_ square feet (From Worksheet Page 1)

Required Gravel Sump Storage Volume: \_\_\_\_\_ cubic feet (L x W x D)

Proposed Gravel Sump Dimensions: \_\_\_\_ feet (length) x \_\_\_\_ feet (width) x \_\_\_\_ feet (depth)

Proposed Gravel Sump Storage Volume: \_\_\_\_\_ cubic feet (L x W x D)

Alternatively, in lieu of installation of a gravel sump, to conform to the requirements of the Stormwater Management Ordinance, a rain garden may be installed and maintained. The rain garden shall provide 12 inches of wet storage (ponding) and a 24 inch depth soil mix. Refer to Attachment B for the Township Standard Rain Garden Detail. The rain garden shall be sized in accordance with the following figure:



**Figure 2: Rain Garden Sizing Chart**

Total Proposed ImperVIOUS Area: \_\_\_\_\_ square feet (From Worksheet Page 1)

Required Rain Garden Footprint Area: \_\_\_\_\_ square feet (L x W)

Proposed Rain Garden Dimensions: \_\_\_\_\_ feet (length) x \_\_\_\_\_ feet (width)

Proposed Rain Garden Footprint Area: \_\_\_\_\_ square feet (L x W)



In lieu of providing either the above sump or rain garden, an alternative and/or professional design is attached for approval AND the system will be located as not to adversely affect other property, any septic systems or drinking water wells on this, or any other, parcel.



**Site Sketch Plan (Refer to Appendix C) showing:**

- Property Lines with dimensions
- Proposed buildings with dimensions
- Proposed impervious surfaces with dimensions
- Proposed sanitary sewer lateral or septic system, as applicable
- Proposed water service or well site, as applicable
- Proposed stormwater management system(s)
- Erosion and Sedimentation Controls to be installed and maintained during construction



**Operations and Maintenance Agreement**

- Execute and record a Stormwater Maintenance and Agreement (Refer to Attachment D)

**Condition of approval** - The stormwater management plan must be fully implemented prior to a request for final inspection of the building or zoning permit.

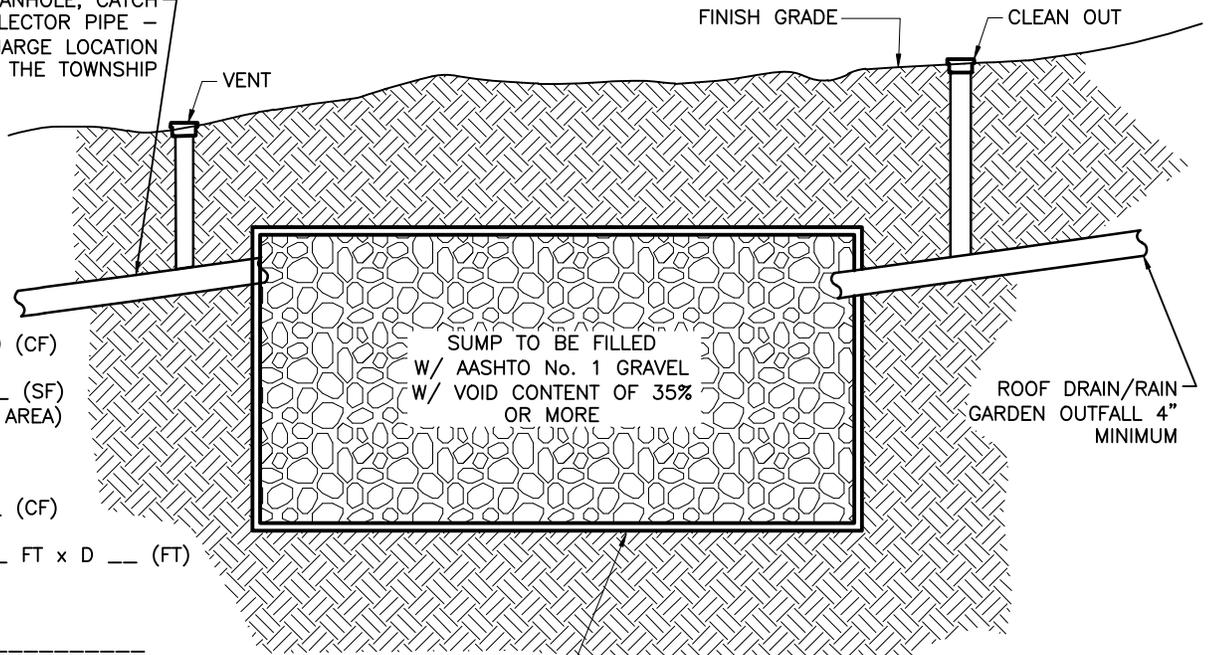
**Acknowledgement** – By executing below, the Owner acknowledges the following:

- I declare I am the owner of the property.
- The information provided is accurate.
- I further acknowledge that municipal representatives are granted access to the above described property for review and inspection as may be required.

**Owner** \_\_\_\_\_

**Date** \_\_\_\_\_

OVERFLOW TO STORM MANHOLE, CATCH BASIN, OR COMMON COLLECTOR PIPE - 4" MINIMUM - DISCHARGE LOCATION MUST BE APPROVED BY THE TOWNSHIP



S = STORAGE REQUIRED (CF)

I = \_\_\_\_\_ (SF)  
(PROPOSED IMPERVIOUS AREA)

S = I X 0.6285

S = \_\_\_\_\_ (CF)

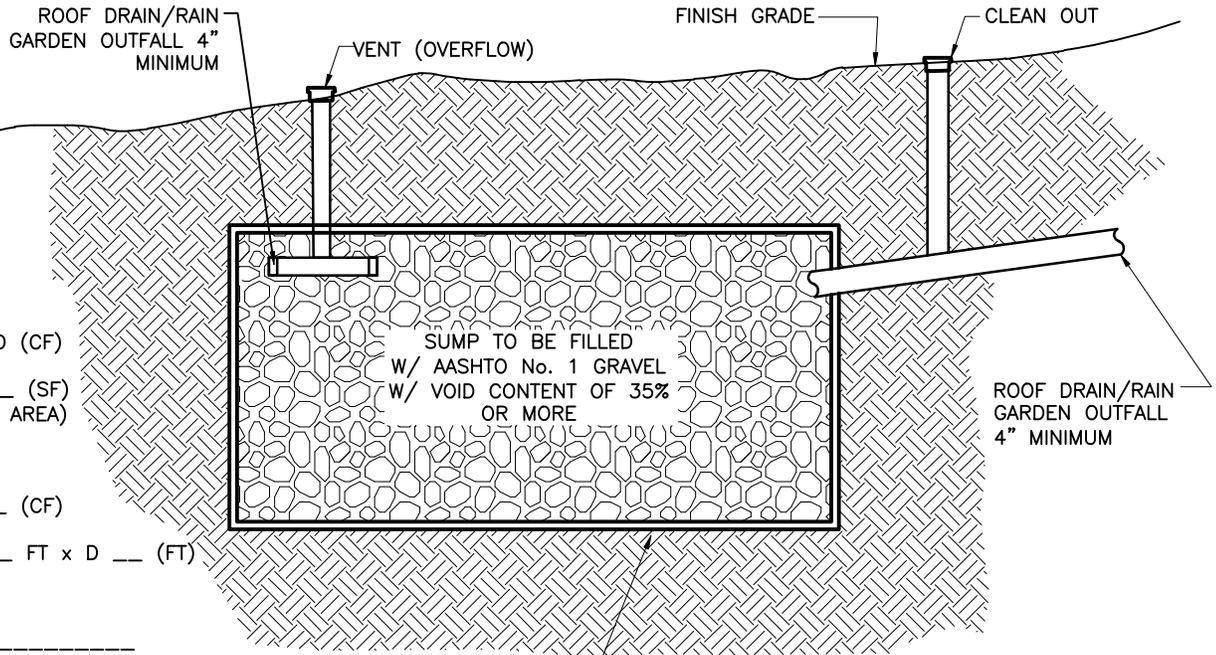
S = L \_\_\_ (FT) x W \_\_\_ FT x D \_\_\_ (FT)

APPLICANT \_\_\_\_\_

DATE \_\_\_\_\_

### GRAVEL SUMP WITH OUTFALL

N.T.S.



S = STORAGE REQUIRED (CF)

I = \_\_\_\_\_ (SF)  
(PROPOSED IMPERVIOUS AREA)

S = I X 0.6285

S = \_\_\_\_\_ (CF)

S = L \_\_\_ (FT) x W \_\_\_ FT x D \_\_\_ (FT)

APPLICANT \_\_\_\_\_

DATE \_\_\_\_\_

### GRAVEL SUMP WITHOUT OUTFALL

N.T.S.

**NOTES:**

1. ALL PIPE SHALL BE PVC SCHEDULE 40
2. ALL SUMPS MINIMUM 10' FROM HOUSE

**SW-07**

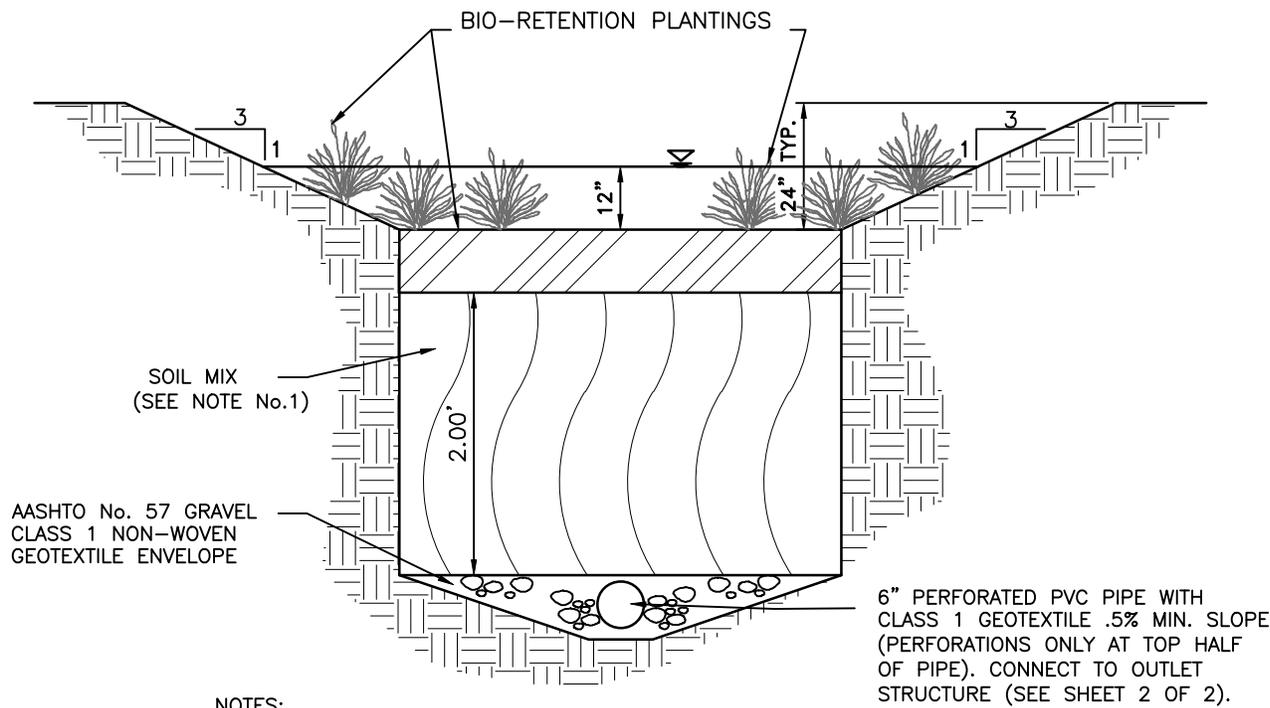
# Attachment A - Gravel Sump

SCALE: N.T.S.

DATE: August 2016 FILE: SW-07 Gravel Sump.dwg



Brighton Township  
Beaver County, Pennsylvania  
1300 Brighton Road  
Beaver, PA 15009



**NOTES:**

- 1. DO NOT COMPACT SOIL MIX ONCE PLACED.
- 2. PROVIDE A MINIMUM OF 6" OF STONE ABOVE AND BELOW THE PERFORATED PIPE.

F = REQUIRED FOOTPRINT AREA (SF)

I = \_\_\_\_\_ (SF)  
 (PROPOSED IMPERVIOUS AREA)

$F = I \times 0.1225$

F = \_\_\_\_\_ (SF)

F = L \_\_\_\_ (FT) X W \_\_\_\_ (FT)

\_\_\_\_\_  
 APPLICANT

\_\_\_\_\_  
 DATE

SW-09

# Attachment B - Rain Garden (1 of 2)

SCALE: N.T.S.

DATE: August 2016 FILE: SW-09 Rain Garden.dwg



Brighton Township  
 Beaver County, Pennsylvania  
 1300 Brighton Road  
 Beaver, PA 15009

F = REQUIRED FOOTPRINT AREA (SF)

I = \_\_\_\_\_ (SF)  
(PROPOSED IMPERVIOUS AREA)

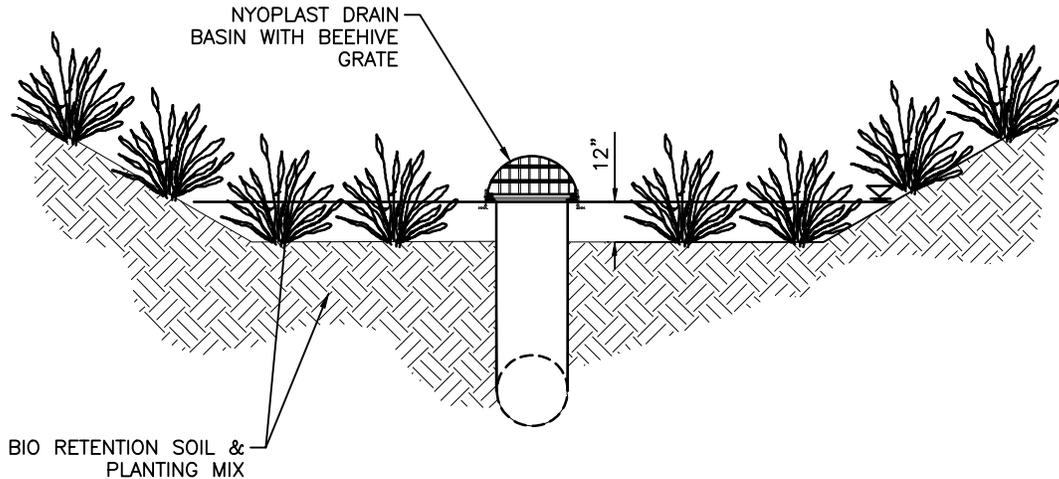
F = I X 0.1225

F = \_\_\_\_\_ (SF)

F = L \_\_\_ (FT) X W \_\_\_ (FT)

APPLICANT \_\_\_\_\_

DATE \_\_\_\_\_



## BIO-RETENTION FACILITY OUTLET STRUCTURE DETAIL

N.T.S.

### PLANT LIST - BIO RETENTION AND STORMWATER MANAGEMENT FACILITIES

BOTANIC NAME	COMMON NAME	SIZE	SPACING
Retention Basin Floor Seeding Low Maintenance Grass Like Species (ERNMIX-126)	N/A	N/A	SEEDING RATE: 1/3-1/2lb per 1,000 S.F.
Rain Garden Seed Mix (ERNMIX-180)	N/A	N/A	SEEDING RATE: 1/3-1/2lb per 1,000 S.F.

\*SOIL MIX MUST CONTAIN AND BE INSTALLED AS FOLLOWS:

- (1) 20% ORGANIC MATERIAL SUCH AS COMPOST OR SHREDDED HARDWOOD  
30% SAND, PEA GRAVEL, OR CRUSHED SLAG  
50% TOPSOIL.
- (2) SOIL MIX MUST CONTAIN NO MORE THAN 10% CLAY.
- (3) SOIL MIX MUST NOT BE COMPACTED.
- (4) SOIL MIX MUST BE PLACE AT A 2-FOOT DEPTH MINIMUM.
- (5) SOIL MIX TO BE PLACED AT THE ENTIRE BOTTOM OF THE BIO-RETENTION FACILITY.

**SW-10**

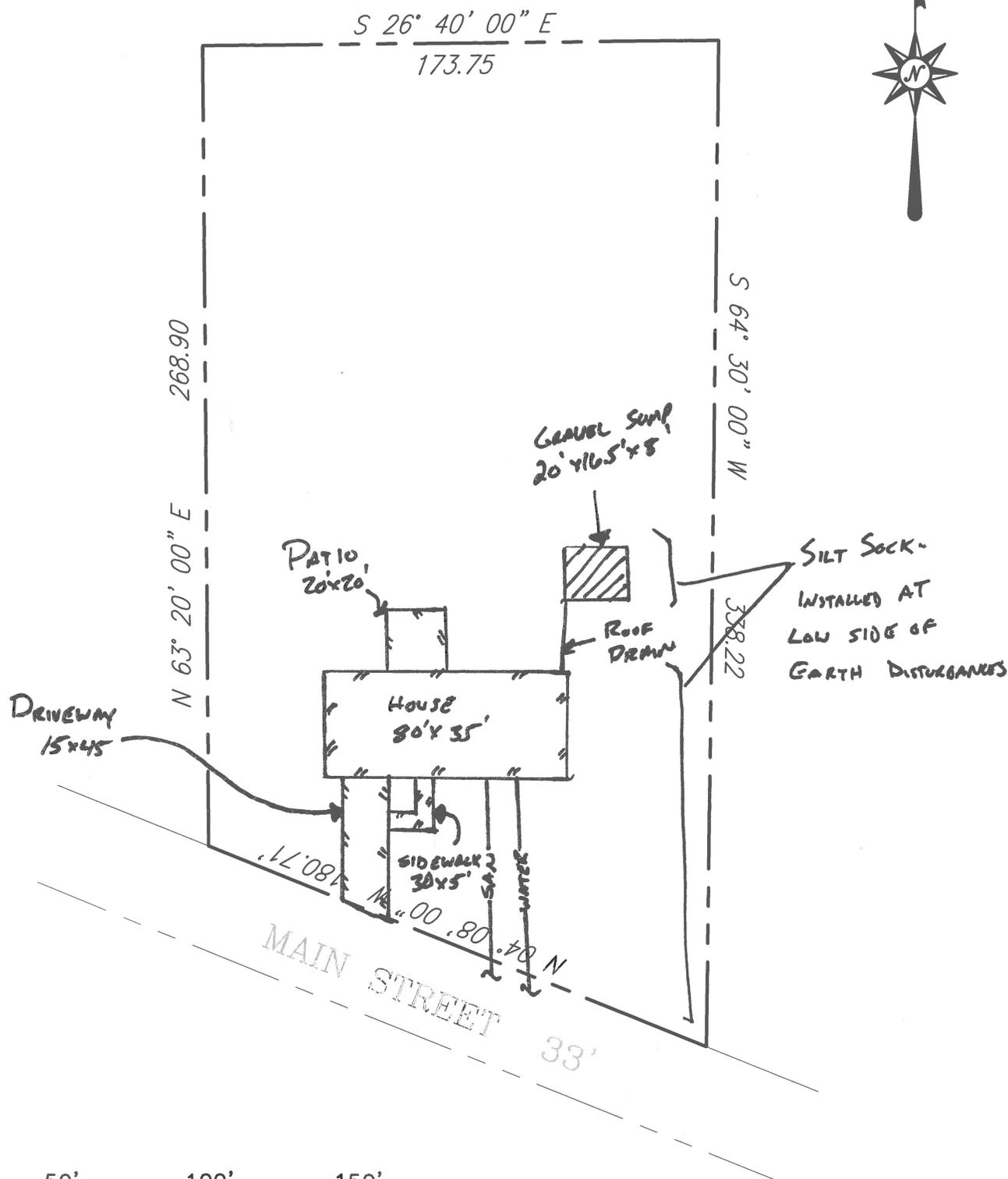
# Attachment B - Rain Garden (2 of 2)

SCALE: N.T.S.

DATE: August 2016 FILE: SW-10 Rain Garden 2.dwg



Brighton Township  
Beaver County, Pennsylvania  
1300 Brighton Road  
Beaver, PA 15009



## Attachment C - Sample Site Plan

SCALE: N.T.S.

DATE: January 2016 FILE: Small SWM Brighton Border.dwg



Brighton Township  
Beaver County, Pennsylvania  
1300 Brighton Road  
Beaver, PA 15009

**Attachment D**

**Stormwater Best Management Practices  
Operations and Maintenance Agreement**

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_, (hereinafter the "Landowner"), and Brighton Township, Beaver County, Pennsylvania, (hereinafter "Township");

**WITNESSETH**

**WHEREAS**, the Landowner is the owner of certain real property as recorded by deed in the land records of Beaver County, Pennsylvania, Instrument Number \_\_\_\_\_ or Deed Book \_\_\_\_\_ at Page \_\_\_\_\_, Tax Parcel Number \_\_\_\_\_ located at the following address \_\_\_\_\_(hereinafter "Property"); and

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

**WHEREAS**, the stormwater management BMP Operations and Maintenance Plan approved by Brighton Township (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 Township, provides for management of stormwater within the confines of the Property through the use of Best Management Practices (BMPs); and

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

**WHEREAS**, for the purposes of this agreement, the following definitions shall apply:

- **BMP** - "Best Management Practice;" activities, facilities, designs, measures or procedures used to manage stormwater impacts from land development, to protect and maintain water quality and groundwater recharge and to otherwise meet the purposes of the Municipal Stormwater Management Ordinance, including but not limited to infiltration trenches, seepage pits, filter strips, bioretention, wet ponds, permeable paving, rain gardens, grassed swales, forested buffers, sand filters and detention basins.
- **Infiltration Trench** - A BMP surface structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer,
- **Seepage Pit** - An underground BMP structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer,

- **Rain Garden** - A BMP structure overlain with appropriate mulch and suitable vegetation designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or underground aquifer; and

**WHEREAS**, the Township requires, through the implementation of the Plan, that stormwater management BMPs as required by said Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, his successors and assigns, and

**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 BMPs shall be constructed by the Landowner in accordance with the plans and specifications identified in the Plan, i.e. Appendix A.
2. The Landowner shall operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Township and in accordance with the specific maintenance requirements noted on the Plan.
3. The Landowner hereby grants permission to the Township, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper identification, to inspect the BMP(s) whenever it deems necessary. Whenever possible, the Township shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Township, the Township or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). This provision shall not be construed to allow the Township to erect any permanent structure on the land of the Landowner. It is expressly understood and agreed that the Township 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 Township.
5. In the event the Township, 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 Township for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Township and in default of payment, the Township may file a municipal lien for such expenses.
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMP(s) by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability on 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 Township's employees and designated representatives 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 Township. In the event that a claim is asserted against the Township, its designated representatives or employees, the Township 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 Township's employees or designated representatives shall be allowed, the Landowner shall pay all costs and expenses regarding said judgment or claim.

- 8. The Township shall inspect the BMP(s) 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 Beaver 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 his successors in interests, in perpetuity.

WITNESS the following signatures and seals:

ATTEST:

(SEAL)

Secretary:

For Brighton Township:

\_\_\_\_\_

\_\_\_\_\_

(WITNESS)

For the Landowner:

\_\_\_\_\_ (SEAL)

\_\_\_\_\_

Commonwealth of Pennsylvania

County of \_\_\_\_\_

On, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_ known to me (or satisfactorily proven) to be the person\_\_ whose name(s) is/are signed to the foregoing Agreement bearing date of the \_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, and having acknowledged the same before me in my said County and State.

In witness whereof, I hereunto set my hand and official seal.

\_\_\_\_\_  
Notary Public