

Earl Township

517 North Railroad Avenue
New Holland, PA 17557
(717) 354-0773 - Fax (717) 355-0599

NOTICE TO ALL PERMIT APPLICANTS...

ANY PERMIT APPROVAL ISSUED BY THE ZONING OFFICER IS BASED UPON INFORMATION PROVIDED BY THE APPLICANT. THE TOWNSHIP HAS NOT PERFORMED A TITLE SEARCH AND HAS NOT DETERMINED WHETHER THE PROPOSED CONSTRUCTION ENCROACHES INTO ANY EASEMENTS OF RECORD.

THE APPLICANT IS ASSUMING ALL RISKS THAT THE HOLDER OF AN EASEMENT, IN EXERCISING RIGHTS UNDER ITS EASEMENT, MAY DAMAGE OR REMOVE THE IMPROVEMENTS AUTHORIZED BY THIS PERMIT. IF THE HOLDER OF ANY EASEMENT, INCLUDING, BUT NOT LIMITED TO THE TOWNSHIP, EXERCISES RIGHTS UNDER SUCH EASEMENT AND DAMAGES OR DESTROYS IMPROVEMENTS AUTHORIZED BY THIS PERMIT, THE TOWNSHIP SHALL HAVE NO LIABILITY.

ANY CHANGES TO ANY EXISTING STORM WATER MANAGEMENT FACILITIES MUST COMPLY WITH ALL APPLICABLE TOWNSHIP ORDINANCES REGULATING EARTH DISTURBANCE AND STORM WATER MANAGEMENT, AND IT IS THE APPLICANT'S RESPONSIBILITY TO IDENTIFY ALL STORM WATER MANAGEMENT FACILITIES AND TO PRESERVE AND MAINTAIN SUCH FACILITIES UNLESS THE APPLICANT OBTAINS THE NECESSARY APPROVALS TO ALTER STORM WATER MANAGEMENT FACILITIES.

EARL TOWNSHIP

PERMIT # _____

APPLICATION FOR ZONING PERMIT

DATE OF RECEIPT: _____

Applicant's Name: _____ Telephone No. _____

Address: _____

Owner's Name: _____ Telephone No. _____

Address: _____

Address of Property: _____

If lot is shown on a recorded subdivision plan, indicate the name of the plan and the book, volume, and page number of the recorded plan: _____

Description of New Structure or Modification: _____

Structure/Modification will contain _____ square feet and a height of _____ from grade to the highest point.
Dimension: _____ Value of the Completed Structure or Modification: _____
(excluding land)

Proposed Use: _____

Date of Completion: _____

Contractor's Pa Registration No.: _____

PROVIDE THREE (3) SETS OF PLANS WHICH CLEARLY SHOW...

1. The dimensions and shape of the lot to be built upon.
2. The location and dimensions (length & width) of all existing buildings on the lot.
3. The location and dimensions (length, width, & height) of all proposed buildings or additions to buildings and off-street parking and/or loading facilities.
4. The setback dimensions for all proposed buildings or additions to buildings, measured from the side and rear property lines and the abutting street centerline.
5. The location of sanitary sewer and water supply facilities.
6. A statement indicating the existing and proposed use.
7. Altering or constructing a new driveway requires completing a driveway permit application.
8. \$450.00 non-refundable deposit required for commercial applications submitted.

_____ Date

_____ Applicant's Signature

FOR ZONING OFFICERS USE ONLY

This application is: Approved () Denied ()

_____ Date

_____ Zoning Officers Signature

Comments: _____

Deposit Paid: _____ Zoning Permit Fee: _____ Inspection Fees: _____ Other: _____

Total Fee Due: _____ Fee Paid On: _____ Check Number: _____ Cash: _____

Zoning District: _____ Tax Map Number: _____ County Account Number: _____

Earl Township Contractor Listing

Permit No. _____

Site Address _____

General Contractor

Business Name		
Contact	Telephone	
Address		
City	State	Zip
Fax	Mobile	Pager

Electrical Contractor

Business Name		
Contact	Telephone	
Address		
City	State	Zip
Fax	Mobile	Pager

Plumbing Contractor

Business Name		
Contact	Telephone	
Address		
City	State	Zip
Fax	Mobile	Pager

HVAC Contractor

Business Name		
Contact	Telephone	
Address		
City	State	Zip
Fax	Mobile	Pager

Workers' Compensation Insurance Coverage Information
(attach to building permit application)

A. The applicant is

A contractor within the meaning of the Pennsylvania Workers' Compensation Law
 Yes No

If the answer is "yes," complete Sections B and C below as appropriate.

B. Insurance Information

Name of Applicant _____

Federal or State Employer Identification No. _____

Applicant is a qualified self-insurer for workers' compensation.
 Certificate attached

Name of Workers' Compensation Insurer _____

Workers' Compensation Insurance Policy No. _____
 Certificate attached

Policy Expiration Date _____

C. Exemption

Complete Section C if the applicant is a contractor claiming exemption from providing workers' compensation insurance

The undersigned swears or affirms that he/she is not required to provide workers' compensation insurance under the provisions of Pennsylvania's Workers' Compensation Law for one of the following reasons, as indicated:

Contractor with no employees. Contractor prohibited by law from employing any individual to perform work pursuant to this building permit unless contractor provides proof of insurance to the township.

Religious exemption under the Workers' Compensation Law.

Subscribed and sworn to before me this
_____ day of _____ 20_____

(Signature of Notary Public)

My commission expires: _____

(seal)

Signature of applicant _____

Address _____

County of _____

Municipality of _____

EARL TOWNSHIP

PA UNIFORM CONSTRUCTION CODE INSPECTION AGENCY INFORMATION SHEET

Earl Township allows the selection of one of the following three inspection agencies for residential and commercial projects.

Please initial and date your selection of Inspection agency you wish to utilize.

_____ ASSOCIATED BUILDING INSPECTIONS, INC
www.weknowcodes.com

717-733-1654

_____ CODE ADMINISTRATORS, INC
www.codeadministrators.com

717-859-3350

_____ TECHNICON ENTERPRISES, INC
e-mail receptionist@technicon2.com

610-286-1622

A Zoning/Building Permit Applications must be completed and three sets of construction plans shall be attached and submitted to the Municipal Office along with the appropriate non-refundable deposit. A plot plan must also be provided. The submitted plans will be reviewed by the selected agency for completeness and code compliancy, after which the applicant will be notified of deficiencies and/or when the Permit is available for issue along with the applicable fees. The inspections shall be scheduled directly between the owner/contractor and the inspection agency. After all work is properly completed and inspected the Certificate of Occupancy will be issued.

EARL TOWNSHIP ADOPTED NEW STORM WATER ORDINANCE

ON MAY 5, 2014

(STATE MANDATED REGULATION)

THIS NEW MANDATE REQUIRES THAT ALL NEW IMPERVIOUS AREAS CREATED MUST BE DOCUMENTED AND THE RESULTING STORM WATER RUNOFF MANAGED PER REGULATIONS. THE FOLLOWING LEVELS OF STORM WATER MANAGEMENT HAVE BEEN CREATED TO ASSIST OUR RESIDENTS WITH THE REGULATIONS:

NEW IMPERVIOUS OF UP TO 1, 000 SQUARE FEET MAY UTILIZE AN EXEMPTION (ONE TIME EXEMPTION ACCUMULATIVE TO THE 1,000 SQUARE FEET) AND THE EXEMPTION APPLICATION SHALL BE EXECUTED AND SUBMITTED FOR APPROVAL BY THE TOWNSHIP.

NEW IMPERVIOUS OF 1 TO 4,999 SQUARE FEET MAY UTILIZE THE SMALL PROJECT APPLICATION FOR SMALL PROJECT STORM WATER MANAGEMENT TO BE SUBMITTED AND APPROVED BY THE TOWNSHIP.

NEW IMPERVIOUS OF 5, 000 SQUARE FEET AND OVER SHALL PLAN FULL STORM WATER MANAGEMENT PER THE CURRENT EARL TOWNSHIP STORM WATER ORDINANCE AND SUBMIT FOR REVIEW AND APPROVAL BY THE TOWNSHIP.

APPENDIX A-1

EXEMPTION APPLICATION

Date Received _____ File Number _____ Property Act # _____
Submitted Fees \$ _____ Approval of Application Date _____

Project Street Address: _____

Owner's Name: _____

Signature: _____

Phone # / Fax # / E-mail: _____

Person/Firm to be completing work: _____

Phone # / Fax # / E-mail: _____

Proposed Activity:

Are you removing existing impervious as part of this project?

No

Yes, Total area of existing impervious to be removed _____ sq. ft.

Removal of ground cover, grading, filling, or excavation of an area (1,000 square feet or less)

Total area of land disturbance: _____ sq. ft.

Type of Regulated Activity (check all that apply): Removal of ground cover,

Grading, Filling, Excavation, Other earth disturbance activity (please describe)

Addition of Impervious Surface (1,000 square feet or less)

• Total new impervious surface proposed _____ sq. ft.

Type of new impervious surface: driveway, shed, garage, deck, walkway,

other (please describe) _____

Check all items below that will be impacted by the project:

Floodplain

Wetlands

Slopes greater than 15%

Known bedrock within 6 feet of the ground surface

Riparian forest buffer

Natural water flow paths (creeks, streams, ponds, swales, etc.)

Existing known stormwater problem areas

Downstream property owners

Sketch

Provide a sketch of the proposed additional impervious area or land disturbance.

APPENDIX A-2

SMALL PROJECT APPLICATION

File Number _____

Date Received _____

Submitted Fees \$ _____

Approval of Application Date _____

Project Street Address: _____

Project Name: _____

Owner's Name and Address: _____

Phone # / Fax # / E-mail: _____

Please list the date of any previous Minor Land Disturbance or Small Project Applications for the subject property:

Proposed Activity:

Removal of ground cover, grading, filling or excavation of an area less than 5,000 square feet

Total area of land disturbance: _____ sq. ft.

Type of Regulated Activity (check all that apply):

- Removal of ground cover
- Grading
- Filling
- Excavation
- Other earth disturbance activity (please describe)

Addition of Impervious Surface (more than 1,000 SF but less than 5,000 SF)

Type of new impervious surface: driveway, shed, garage, deck, walkway,

other (describe) _____

Total new impervious surface proposed for construction: _____ sq. ft.

Are you removing existing impervious as part of this project?

No

Yes – Total area of existing Impervious to be removed _____ sq. ft.

Check all items below that will be impacted by the project:

- Mature trees
- Sinkholes
- Water wells
- Septic drainfields
- Alternate septic drainfields
- Creeks, streams, wetlands, or ponds
- Existing stormwater management facility (basin, swale, etc.)
- Easements

Total runoff volume to be permanently removed/managed on site from attached calculation worksheet: _____ gallons or _____ cubic feet

Proposed Stormwater Management Controls (Best Management Practice):

- Rain Garden
- Infiltration Trench
- Cistern
- Rain Barrel
- Other (describe) _____

Sketch

Provide a sketch of the proposed additional impervious area or land disturbance. Include the following on the sketch:

- Property boundary
- Location and approximate footprint of existing structures (buildings, patios, driveways, etc.)
- Approximate location of any of the following features which will be impacted by the project:
 - Mature trees
 - Sinkholes
 - Water wells
 - Septic drainfields
 - Alternate septic drainfields
 - Creeks, streams, wetlands, ponds
 - Existing stormwater management facilities (basins, swales, etc.)
- Location and approximate footprint of proposed impervious area or land disturbance.
- Approximate footprint and location of all structures on adjacent properties if located within 50 feet of the proposed impervious area or land disturbance
- Location and description of proposed stormwater management facilities (e.g., rain gardens, swales, rain barrels, etc.)
- Direction of proposed stormwater discharge (e.g., with arrows)
- Scale and North arrow

Person/Firm to be completing work: _____
Phone # / Fax # / E-mail: _____

Name of Person Submitting this Application: _____

Signature: _____

Date: _____

Small Project Application Calculation Worksheet

The applicant may use the following to calculate the amount of runoff which must be managed in accordance with § 17-302B of this chapter.

Project Name: _____

Owner Name: _____

Proposed Additional Impervious Area: _____ square feet

Impervious Area Calculations

Calculate the amount of runoff to be permanently removed (managed on site through reuse, evaporation, transpiration or infiltration):

Additional impervious area ÷ 12 = Permanently Removed Runoff Volume (PRV)

_____ square feet of additional impervious ÷ 12 = _____ cubic feet PRV

_____ cubic feet x 7.48 gallons per cubic foot = _____ gallons PRV

EXAMPLE
Small Project Application Calculation Worksheet

Landowner Name: Jane Doe (20 x 45' garage)

Owner Name: Jane Doe

Proposed Additional Impervious Area: 900 square feet

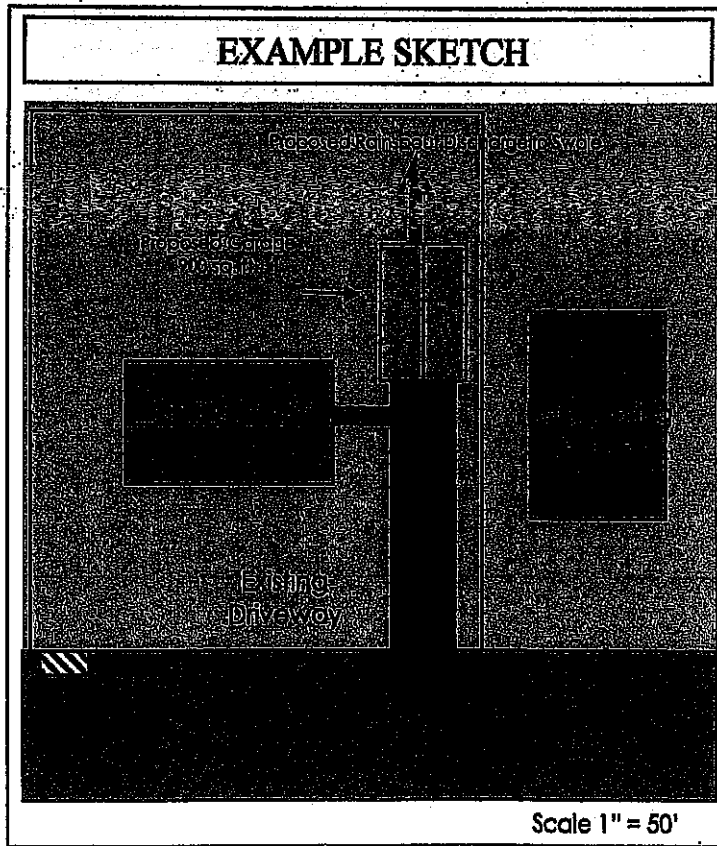
Impervious Area Calculations

Calculate the amount of runoff to be permanently removed (managed on site through reuse, evaporation, transpiration or infiltration) using the following formula:

Additional impervious area ÷ 12 = *Permanently Removed Runoff Volume (PRV)*

900 square feet of additional impervious ÷ 12 = 75 cubic feet PRV
75 cubic feet x 7.48 gallons per cubic feet = 561 gallons PRV

SAMPLE



Small Projects Guide-Sample Operation & Maintenance Plan

Construction:

1. Install erosion and sedimentation control facilities
2. Stormwater Management Facility (ies) shall be installed before impervious areas are completed. If earthwork is involved during the construction of the impervious area, then extreme caution shall be taken so that sediment does not wash into the SWM Facility (ies).
3. Mark the locations of the SWM facility (ies).
4. Excavate the SWM Facility to the required depth. Contact municipality for inspection prior to filling. If standing water is encountered, a SWM Site Plan may need to be submitted; contact Municipal Engineer. All excavated materials shall be removed from the site or stabilized.

For stone Infiltration Structures

5. Line excavation with Geotextile.
6. Backfill SWM facility with required stone. If required: Install piping, cleanouts and associated facilities as detailed.
7. If required: Close geotextile material over stone bedding.
8. If required: Place topsoil over trench.
9. Stabilize and seed all disturbed areas.

For Rain Gardens

10. Place topsoil over excavated area.
11. Install plantings as shown on the plan.
12. Stabilize and seed all disturbed areas.

Maintenance:

1. The SWM facility shall be checked regularly to ensure that no standing water exists in the facility 3 days after a rain event. If water is encountered, the facility may need to be modified. Notification of the municipality is required of facility is not functioning before any modifications are made.
2. Monitor the SWM facility to ensure that no sediment, grass clippings, leaves, and other similar accumulations occur on top of, and/or within, the SWM Facility.
3. Homeowner to submit an inspection report to the Township one year after construction and every 3rd year there afterwards.

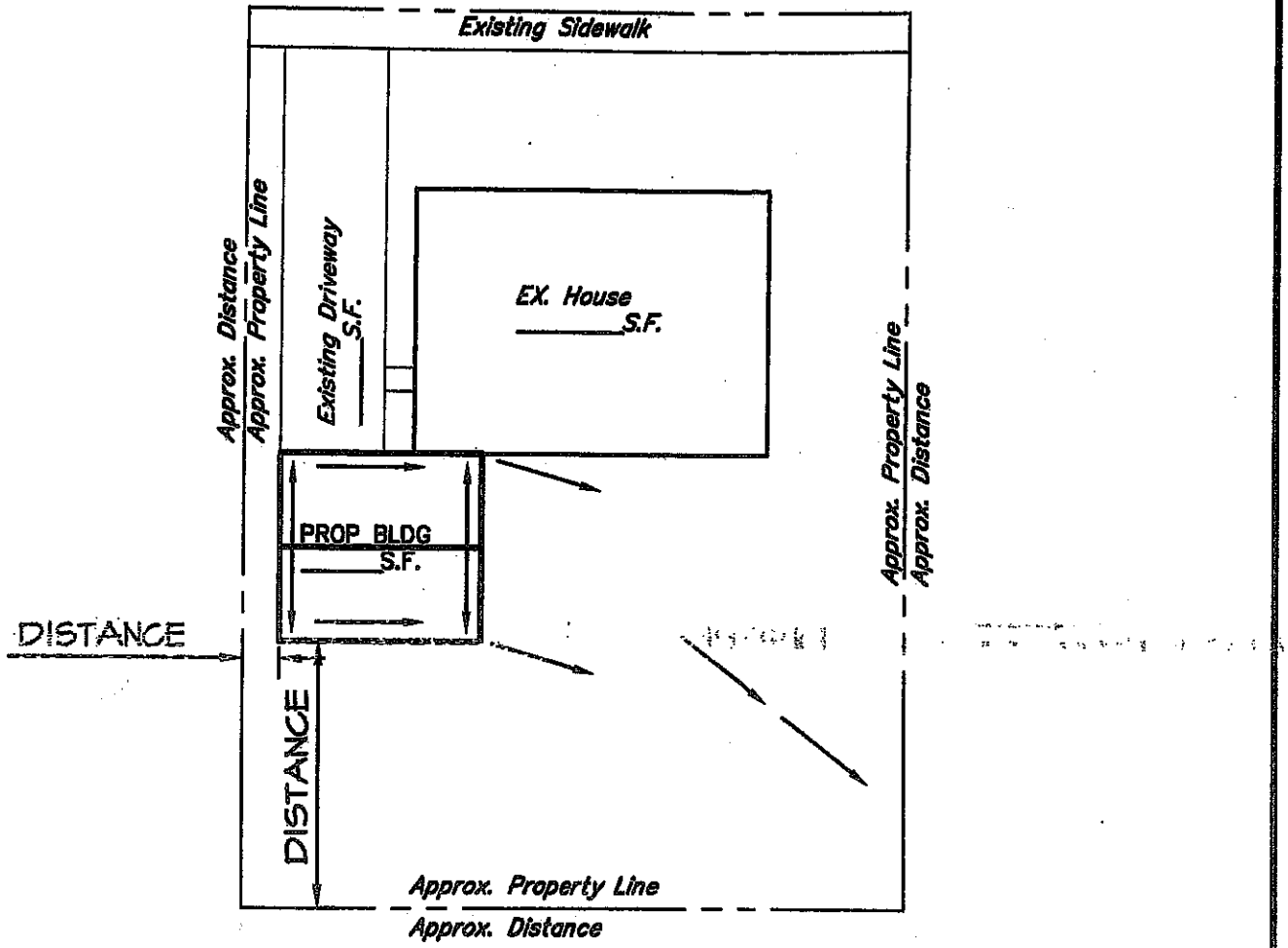
I have read and agree to the above Operation and Maintenance Plan. I, as the property owner, am responsible for the proper construction and operation and maintenance for the SWM Facilities. If I fail to adhere to any of these tasks, the Township may perform the services required and charge the appropriate fees. Nonpayment of the fees may result in a lien against my property.

Applicant Name (Printed)


Signature

Date

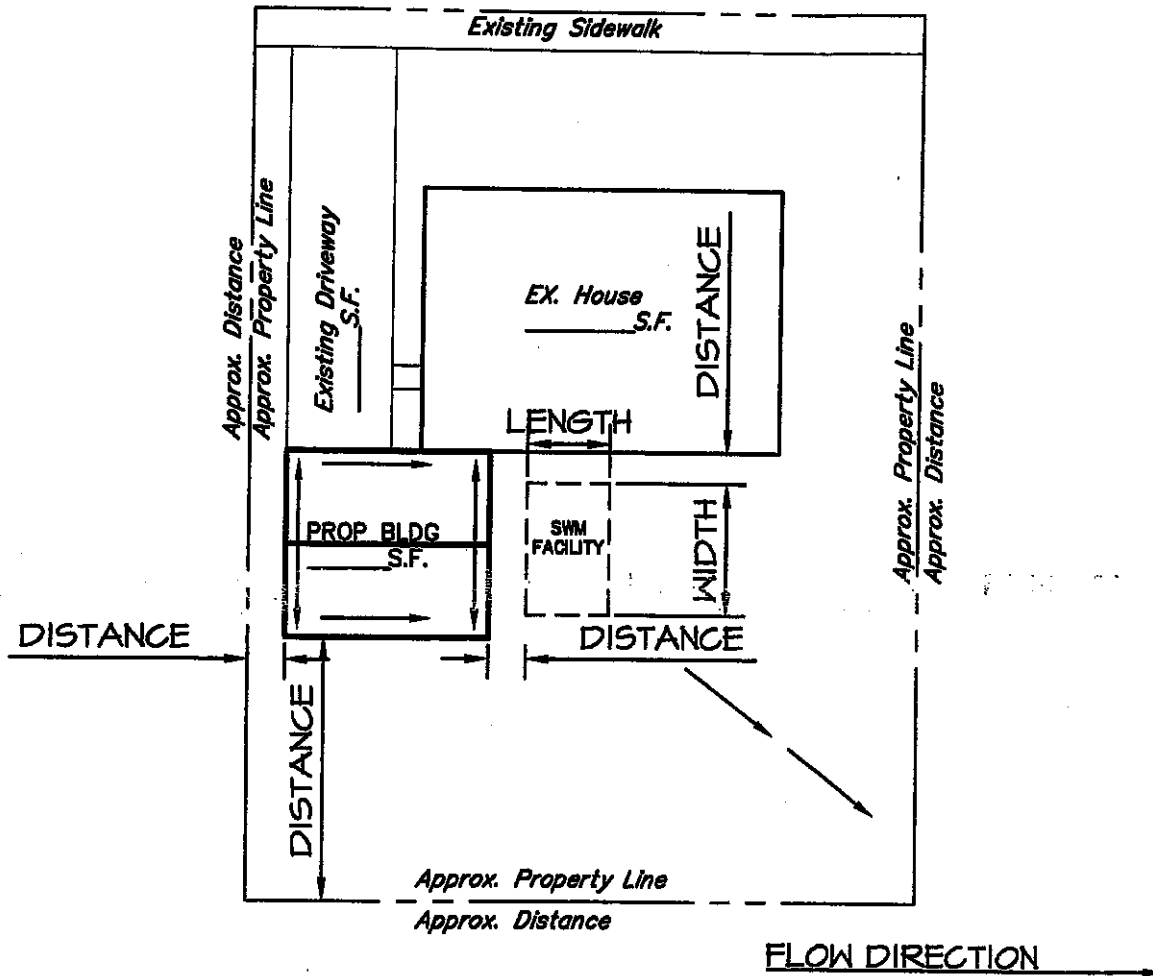
Main Street



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EARL TOWNSHIP ATTACHMENT I SAMPLE SKETCH/SITE PLAN		JOB NUMBER:
 E.A. GROUP INC. ENGINEERS & LANDSCAPE ARCHITECTS	743 SOUTH BROAD STREET LITITZ, PA 17543 (717) 626-7271 FAX (717) 626-7040 www.eagroup.com	SCALE: N.T.S. DRAWING: N/A SKETCH:
	DRAWN BY:	DATE: 2014
	DATE: 2014	1 OF 1

Main Street



Sample Alley

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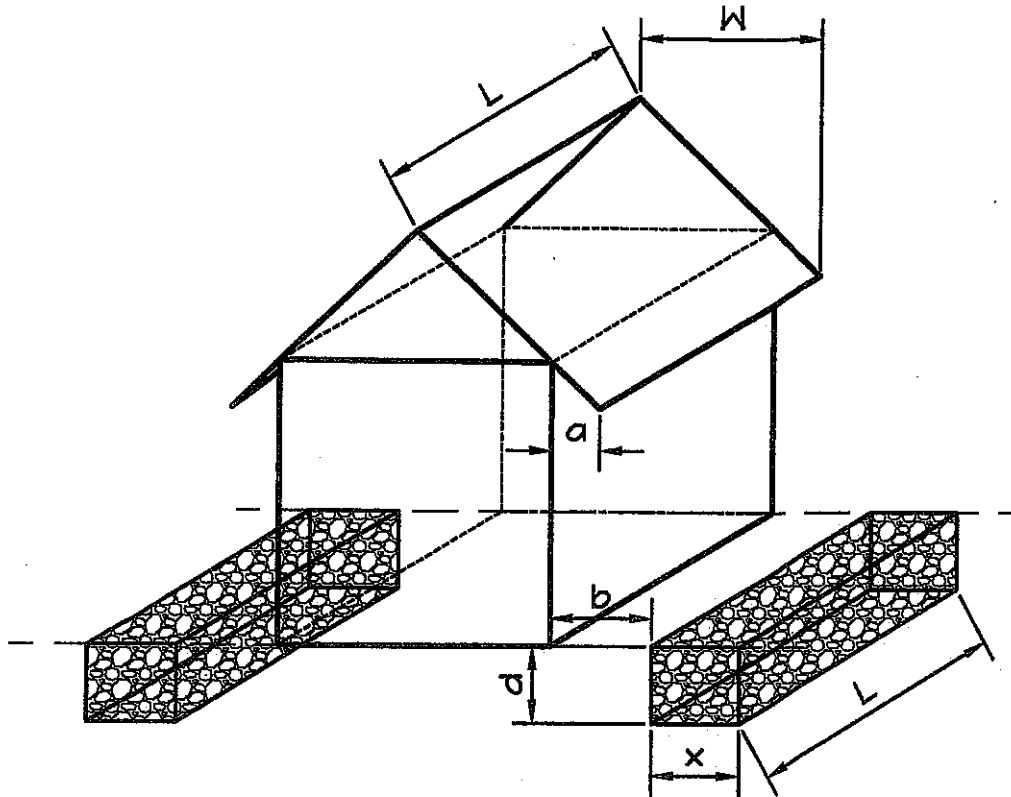
EARL TOWNSHIP
ATTACHMENT 2 SAMPLE SWM SITE PLAN

JOB NUMBER:

Earl Group Inc.
743 SOUTH BROAD STREET
LITITZ, PA 17543
(717) 626-1271 FAX (717) 626-7040
www.earlgroup.com
ENGINEERS & LANDSCAPE ARCHITECTS

SCALE: N.T.S.
DRAWN BY:
DATE: 2014

DRAWING: N/A
SKETCH:
1 OF 1



KEY

- L = LENGTH OF STRUCTURE ROOF = LENGTH OF SEEPAGE TRENCH (FT)
- W = WIDTH OF ONE SIDE OF THE ROOF (FT)
- a = EAVE/OVERHANG (FT)
- b = DISTANCE FROM STRUCTURE WALL TO SEEPAGE TRENCH (FT)
= a + 1 FT => PLACE FROM EDGE OF TRENCH ONE FOOT PAST EAVES
- x = WIDTH OF SEEPAGE TRENCH (FT)
- d = DEPTH OF SEEPAGE TRENCH (FT)

REQUIRED VOLUME OF TRENCH => $L*W*1/12 = L*X*d*0.4$ => $X=0.14W$ for $d=1.5'$

Ratio: 3.6 to 1
(IMPERVIOUS TO INFILTRATION)

NOTES

- 1.) TRENCH MUST BE PROVIDED ON EACH SIDE OF STRUCTURE.
- 2.) SIDE AND BOTTOM OF TRENCH TO BE WRAPPED IN CLASS 1 GEOTEXTILE.
- 3.) TRENCH TO BE FILLED WITH CLEAN STONE (3/4" MIN. SIZE).
- 4.) TRENCH TO BE CONSTRUCTED AT 0% SLOPE ON UNDISTURBED SOIL.
- 5.) TRENCH TO BE CHECKED REGULARLY TO MAINTAIN PROPER OPERATION

EARL TOWNSHIP
ATTACHMENT 3 STORMWATER MANAGEMENT STRUCTURES WITHOUT GUTTERS

JOB NUMBER:

-

LAGRANGE inc.
143 SOUTH BROAD STREET
LITITZ, PA 17543
(717) 626-7271 FAX (717) 626-7040
www.lagrange.com
ENGINEERS & LANDSCAPE ARCHITECTS

SCALE: N.T.S.

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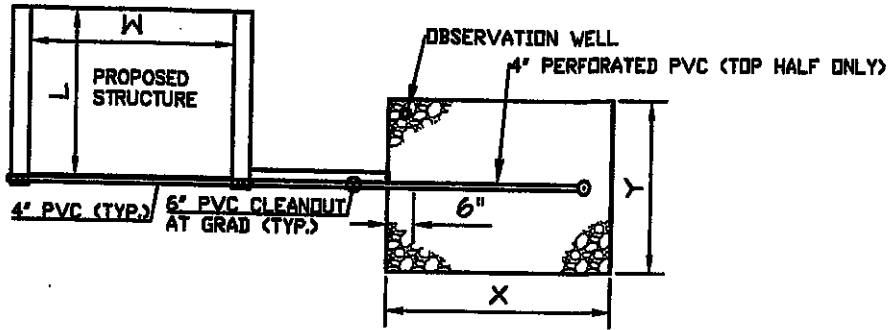
N/A

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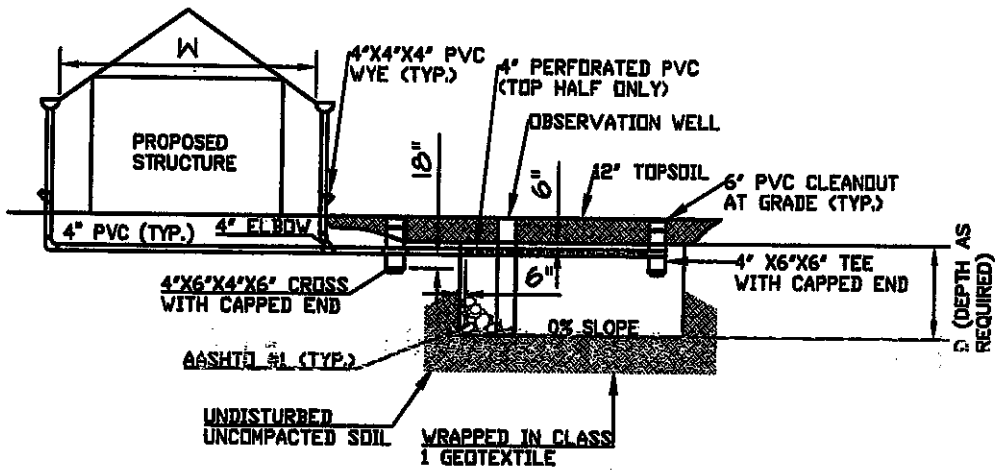
SKETCH:

DATE: 2014

1 OF 1



PLAN VIEW



SECTION VIEW

KEY

- L = LENGTH OF STRUCTURE ROOF (FT)
- W = WIDTH OF ENTIRE ROOF (FT)
- X = WIDTH OF INFILTRATION BED (FT)
- Y = LENGTH OF INFILTRATION BED (FT)

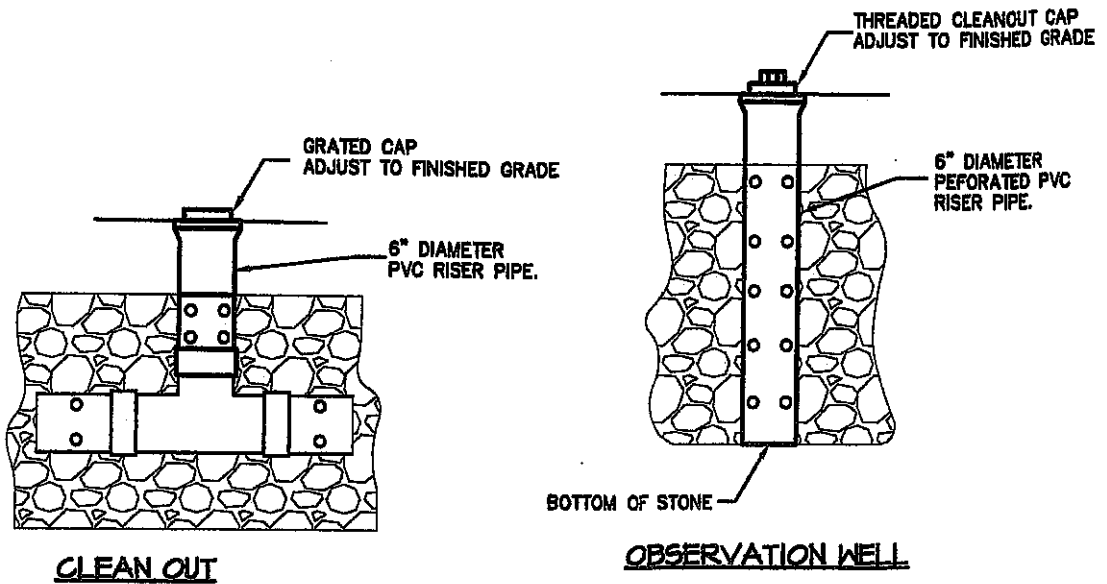
REQUIRED VOLUME OF BED = $L \cdot W \cdot 1/12 = X \cdot Y \cdot D \cdot 0.4$ [ASSUME $X=W$ $D=2'$]
 $Y=0.11L$
 RATIO 4.76 TO 1
 (IMPERVIOUS TO INFILTRATION)

NOTES

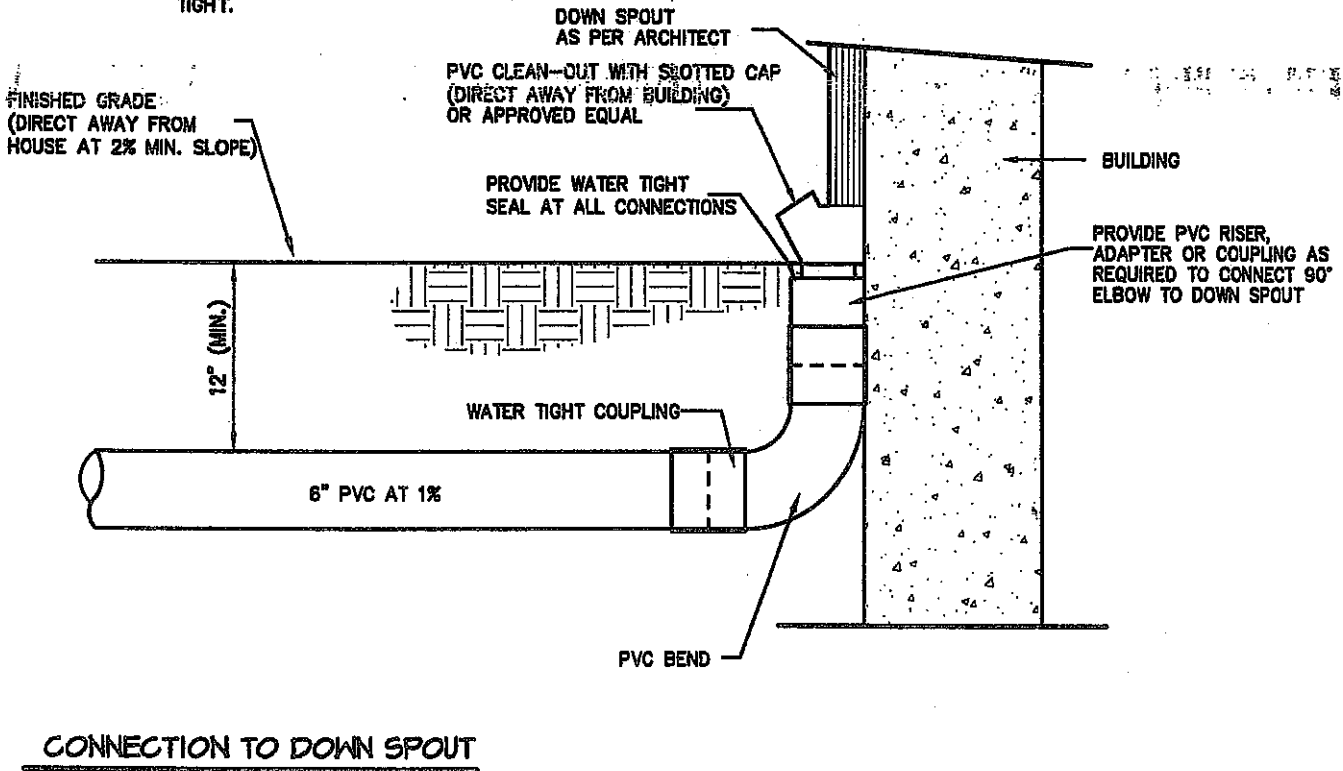
- 1.) BOTTOM OF BED TO BE D+1' BELOW GRADE TO ACCOUNT FOR 1' OF TOPSOIL.
- 2.) PIPING AND CLEANOUTS TO BE CENTERED WITHIN INFILTRATION BED.
- 3.) BED TO BE CHECKED REGULARLY TO MAINTAIN PROPER OPERATION.
- 4.) SEE SHEET 2 OF 2 FOR ADDITIONAL DETAILS

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EARL TOWNSHIP		JOB NUMBER:
ATTACHMENT 4 STORMWATER MANAGEMENT SAMPLE STRUCTURE WITH GUTTERS		-
	SCALE: N.T.S.	
	DRAWN BY:	DRAWING: N/A
	DATE: 2014	SKETCH: 1 OF 2



NOTE:
CONTRACTOR SHALL PROVIDE ALL
FITTINGS, ADAPTERS, COUPLINGS AND
OTHER APPURTENANCES AS REQUIRED TO
CONNECT STORM CONVEYANCE SYSTEM.
ALL CONNECTIONS SHALL BE WATER
TIGHT.



EARL TOWNSHIP
ATTACHMENT 4-DOWNSPOUT/CLEAN OUT/OBSERVATION WELL DETAILS

JOB NUMBER:

-

743 SOUTH BROAD STREET
LITITZ, PA 17543
(717) 626-1271 FAX (717) 626-1040
www.ealgroup.com

Earl Group Inc.
ENGINEERS & LANDSCAPE ARCHITECTS

SCALE: N.T.S.

DRAWING:

N/A

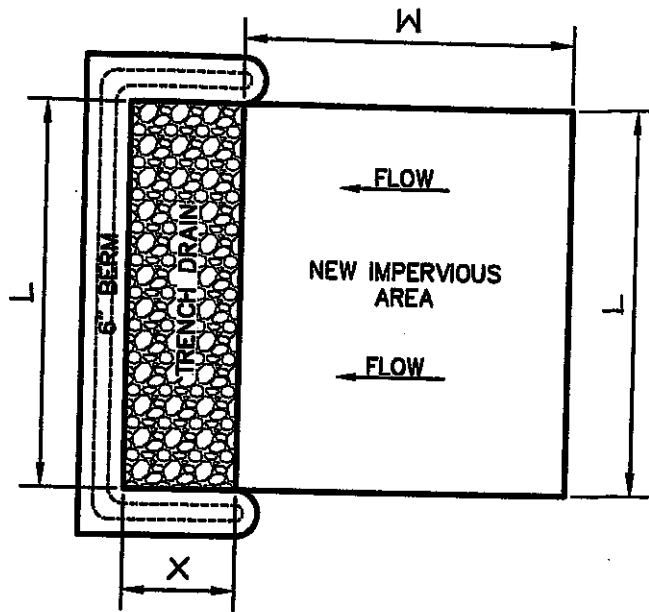
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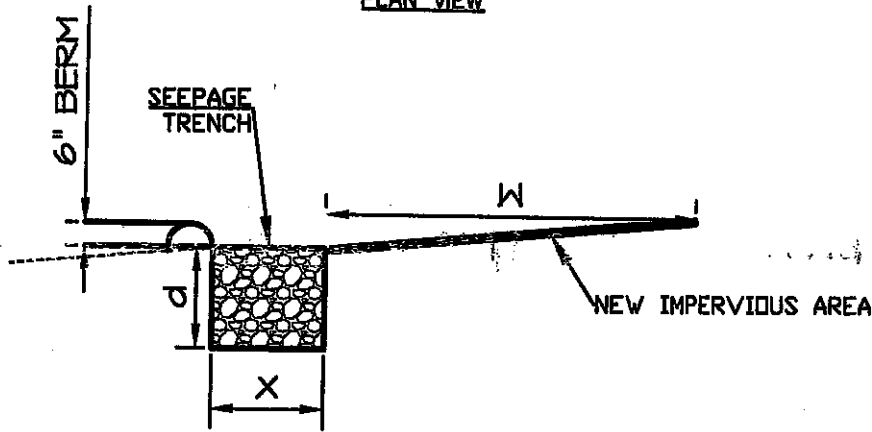
DATE:

2014

2 OF 2



PLAN VIEW



SECTION VIEW

KEY

- L = LENGTH OF NEW IMPERVIOUS SURFACE (FT) =LENGTH OF SEEPAGE TRENCH
- W = WIDTH OF NEW IMPERVIOUS SURFACE -MAY NOT EXCEED 75'
- X = WIDTH OF SEEPAGE TRENCH (FT)
- d = DEPTH OF SEEPAGE TRENCH (FT)

REQUIRED VOLUME OF TRENCH => $L*W*1/12=X*L*d*0.4$ => $X=0.14W$ FOR $d=1.5'$

NOTES

- 1.) SIDE AND BOTTOM OF TRENCH TO BE WRAPPED IN CLASS 1 GEOTEXTILE
- 2.) TRENCH TO BE FILLED WITH CLEAN STONE (3/4" MIN. SIZE).
- 3.) TRENCH TO BE CONSTRUCTED AT 0% SLOPE ON UNDISTURBED SOIL.
- 4.) TRENCH TO BE CHECKED REGULARLY TO MAINTAIN PROPER OPERATION.

EARL TOWNSHIP
ATTACHMENT 5 STORMWATER MANAGEMENT AT GRADE IMPERVIOUS

JOB NUMBER:

 743 SOUTH BROAD STREET
LITITZ, PA 17543
(717) 626-7121 FAX (717) 626-7040
www.slogroup.com

SCALE: N.T.S.

DRAWING:

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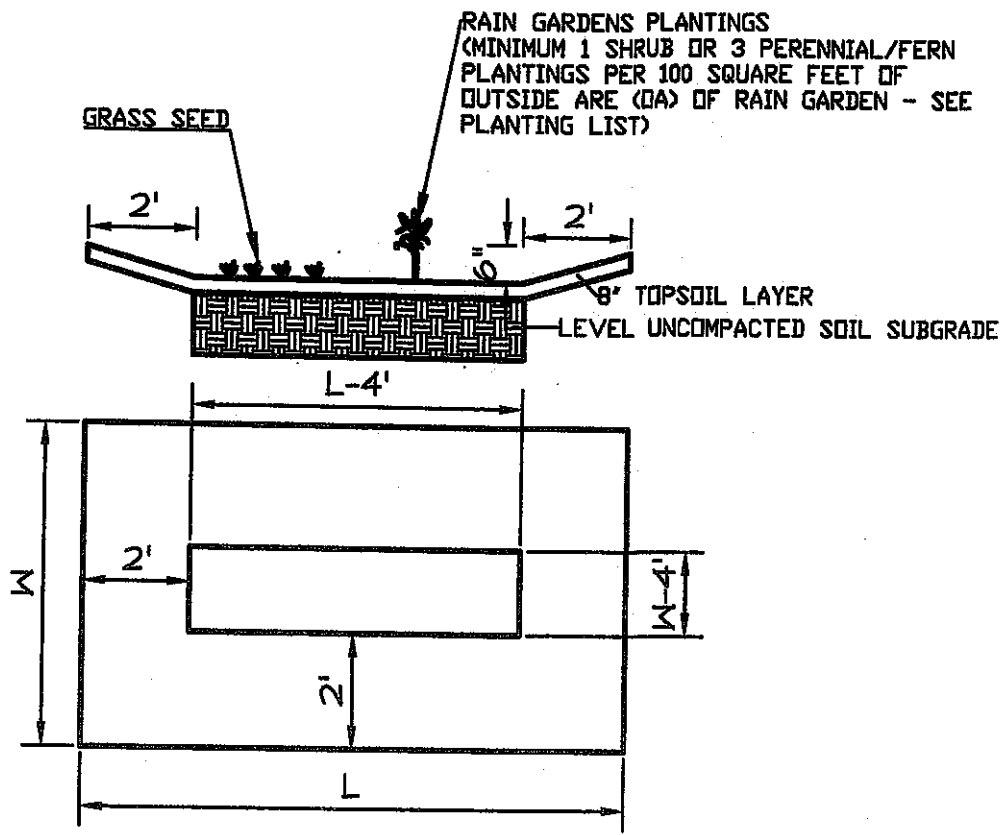
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2014

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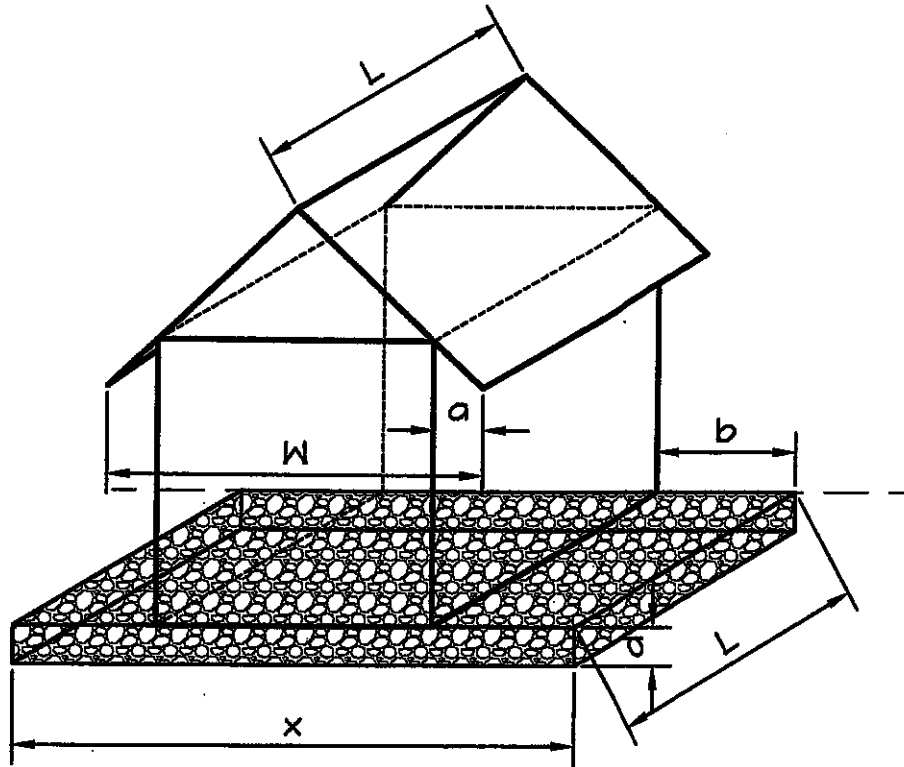


- 1.) CALCULATE REQUIRED RAIN GARDEN VOLUME (V)
 $(RV) = \text{SQUARE FEET OF NEW IMPERVIOUS AREA} \times (0.085')$ $RV = \underline{\hspace{2cm}} \text{ FT}^3$
- 2.) CALCULATE OUTSIDE AREA OF RAIN GARDEN (OA)
 $(OA) = \text{LENGTH (L)} \times \text{WIDTH (W)}$ $OA = \underline{\hspace{2cm}} \text{ FT}^2$
- 3.) CALCULATE INSIDE AREA OF RAIN GARDEN (IA)
 $(IA) = [(L)-4'] \times [(W)-4']$ $IA = \underline{\hspace{2cm}} \text{ FT}^2$
- 4.) CALCULATE AVERAGE AREA OF RAIN GARDEN (AA)
 $(AA) = (OA)/2 + (IA)/2$ $AA = \underline{\hspace{2cm}} \text{ FT}^2$
- 5.) CALCULATE STORAGE VOLUME (SV)
 $(SV) = (AA) \times 0.5'$ $SV = \underline{\hspace{2cm}} \text{ FT}^3$
- 6.) CHECK FOR ADEQUATE STORAGE
 STORAGE VOLUME (SV) MUST BE GREATER THAN REQUIRED VOLUME (RV)
 $RV = \underline{\hspace{2cm}} \text{ FT}^3 > SV = \underline{\hspace{2cm}} \text{ FT}^3$
- 7.) ADJUST RAIN GARDEN SIZE
 IF STORAGE VOLUME (SV) IS NOT GREATER THAN REQUIRED VOLUME (RV), INCREASE THE SIZE
 OF THE RAIN GARDEN AND REPEAT STEPS 2-6.

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EARL TOWNSHIP		JOB NUMBER:
ATTACHMENT 6 RAIN GARDEN		
743 SOUTH BROAD STREET LITITZ, PA 17543 (717) 626-7211 FAX (717) 626-7040 www.lagroup.com ENGINEERS & LANDSCAPE ARCHITECTS	SCALE: N.T.S.	DRAWING: N/A
	DRAWN BY:	SKETCH:
	DATE: 2014	1 OF 1

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KEY

- L = LENGTH OF STRUCTURE ROOF = LENGTH OF SEEPAGE TRENCH (FT.)
- W = WIDTH OF ONE SIDE OF THE ROOF (FT)
- a = EAVE/OVERHANG (FT)
- b = DISTANCE FROM STRUCTURE WALL TO SEEPAGE TRENCH (FT)
= a + 1 FT => PLACE FROM EDGE OF TRENCH ONE FOOT PAST EAVES
- x = WIDTH OF SEEPAGE TRENCH (FT)
x = W + 2FT
- d = DEPTH OF SEEPAGE TRENCH (FT)
D = 6" TO 8" (AVERAGE)

NOTES

- 1.) TRENCH MUST BE PROVIDED ON EACH SIDE OF STRUCTURE.
- 2.) SIDE AND BOTTOM OF TRENCH TO BE WRAPPED IN CLASS 1 GEOTEXTILE.
- 3.) TRENCH TO BE FILLED WITH CLEAN STONE (3/4" MIN. SIZE).
- 4.) TRENCH TO BE CONSTRUCTED AT 0% SLOPE ON UNDISTURBED SOIL.
- 5.) TRENCH TO BE CHECKED REGULARLY TO MAINTAIN PROPER OPERATION

EARL TOWNSHIP
ATTACHMENT 7 STORMWATER MANAGEMENT STRUCTURES WITHOUT GUTTERS

JOB NUMBER:



143 SOUTH BROAD STREET
LITITZ, PA 17543
(717) 628-7121 FAX (717) 628-7040
earl@earlgroup.com

ENGINEERS & LANDSCAPE ARCHITECTS

SCALE: N.T.S.

DRAWN BY:

DATE:

N.T.S.

N/A

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2014

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1 OF 1

Rain Garden Native Planting List

Perennials and Ferns

Blue false indigo (*Baptista Australis*)
Blue flag iris (*Iris Versicolor*)
Blue star (*Amsonia tabernaemontana*)
Blue vervain (*Verbena hastata*)
Boltonia (*Boltonia asteroides*)
Boneset (*Eupatorium perfoliatum*)
Bottlebrush grass (*Hystrix patula*)
Broomsedge (*Andropogon virginicus*)
Cardinal flower (*Lobelia cardinalis*)
Cinnamon fern (*Osmunda cinnamomea*)
Culvers root (*Veronicastrum virginicum*)
Golden ragwort (*Senecio aureus*)
Goldenrod (*Solidago patula*, *S. rugosa*)
Great blue lobelia (*Lobelia siphilitica*)
Green bullrush (*Scirpus atrovirens*)
Horsetail (*Equisetum species*)
Marsh marigold (*Caltha palustris*)
Mistflower (*Eupatorium coelestinum*)
Monkey flower (*Mimulus ringens*)
New England aster (*Aster novae-anglia*)
New York aster (*aster novi-belgii*)
Obedient plant (*Physotegia virginiana*)
Royal fern (*Osmunda regalis*)
Seedbox (*Ludwigia alternifolia*)
Sensitive fern (*Onoclea sensibilis*)
Sneezeweed (*Helenium autumnale*)
Soft rush (*Juncus effusus*)
Swamp milkweed (*Asclepias incarnata*)
Swamp rose mallow (*Hibiscus moscheutos*)
Swamp sunflower (*Helianthus angustifolius*)
Switchgrass (*Panicum virgatum*)
Threadleaf coreopsis (*Coreopsis Verticillata*)
Tussock sedge (*Carex stricta*)
White turtlehead (*Chelone glabra*)
Woolgrass (*Scirpus cyperinus*)

Shrubs

American beautyberry (*Callicarpa americana*)
Arrowwood (*Viburnum dentatum*)
Black chokeberry (*Aronia melanocarpa*)
Broad-leaved meadowsweet (*Spirea latifolia*)
Buttonbush (*Cephalanthus occidentalis*)
Elderberry (*Sambucus canadensis*)
Inkberry (*Ilex glabra*)
Narrow-leaved meadowsweet (*Spirea alba*)
Ninebark (*Physocarpus opulifolius*)
Possumhaw (*Viburnum nudum*)
Red-osier dogwood (*Cornus sericea*)
St. Johnswort (*Hypericum densiflorum*)
Silky dogwood (*Cornus amomum*)
Smooth alder (*Alnus serrulata*)
Spicebush (*Lindera benzoin*)
Swamp azalea (*Rhododendron viscosum*)
Swamp rose (*Rosa palustris*)
Sweet pepperbush (*Clethra alnifolia*)
Wild raisin (*Viburnum cassinoides*)
Winterberry (*Ilex verticillata*)
Virginia sweetspire (*Itea virginica*)