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 the Borough of Penn Lake Park, Luzerne County, Pennsylvania;

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of Luzerne 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 Penn Lake Park Borough (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 Penn Lake Park Borough, provides for management of stormwater within the confines of the Property through the use of BMPs; and

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

WHEREAS, Penn Lake Park Borough 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 Penn Lake Park Borough, 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. Penn Lake Park Borough 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, Penn Lake Park Borough 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 Penn Lake Park Borough 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 Penn Lake Park Borough.

5. In the event Penn Lake Park Borough, 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 Penn Lake Park Borough for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from Penn Lake Park Borough.

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 Penn Lake Park Borough 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. Penn Lake Park Borough 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 Luzerne 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 Penn Lake Park Borough:

_____

For the Landowner:

_____

ATTEST:

_____ (Penn Lake Park Borough)

County of Luzerne, 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 it to Penn Lake Park Borough. A regulated activity is 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. The applicant shall be responsible to reimburse Penn Lake Park Borough for any review costs incurred by Penn Lake Park Borough for the services of a qualified professional.

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

Submit Level 1 Application documenting the proposed impervious area is less than 1,000 sq. ft. Upon providing such documentation, no further application or plan shall be required.

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 Penn Lake Park Borough 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 Penn Lake Park Borough sees fit; the easiest mechanism is to include the application with Building Permits.

Review: At the sole discretion of Penn Lake Park Borough the review of the application and computations may require the services of a qualified professional. The application must be approved prior to the issuance of any building permit.

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 Penn Lake Park Borough sees fit.
Review: Reviewing the application and computations shall be performed by a qualified professional. The application must be approved prior to the issuance of any building permit.

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 shall be performed by a qualified professional. The application must be approved prior to the issuance of any building permit.

Level 1
Small Project Stormwater Management Application

Per Penn Lake Park Borough's Act 167 Stormwater Management Ordinance, a stormwater management plan is required whenever more than 1,000 square feet of impervious surfaces are proposed. Impervious surfaces are areas that prevent the infiltration of water into the ground and shall include, but not be limited to, roofs, patios, garages, storage sheds and similar structures, and any new streets or sidewalks.

To Calculate Impervious Surfaces Please Complete This Table					
Surface Type	**Length**	**X**	**Width**	**=**	**Proposed Impervious Area**
Building (area per downspout)		X X X X		= = = =	
Driveway		X X X		= = =	
Parking Areas		X X X		= = =	
Patios/Walks		X X X X		= = = =	
Other		X X X		= = =	
Total Impervious Surface Area to be managed (sum of all areas)					

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. 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 Penn Lake Park Borough are granted access to the above described property for review and inspection as may be required.

OWNER	ADDRESS	DATE

APPENDIX C.1

DISCONNECTED IMPERVIOUS AREA (DIA) AND WORKSHEET

When a regulated activity creates impervious areas between 1,000 sq. ft. and 5,000 sq. ft., or total earth disturbance between 5,000 and 10,000 sq. ft., the stormwater management requirements follow Appendix C.1 – Disconnected Impervious Areas (DIAs), of this Ordinance. If site conditions prevent the requirements of Appendix C.1 from being met, then the first 1 inch of runoff shall be captured and controlled in a manner consistent with Appendix E – Stormwater Management for Small Projects, of this Ordinance.

When rooftop or pavement runoff is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the contributing rooftop or pavement area may qualify as a Disconnected Impervious Area (DIA). A rooftop or pavement area is considered to be a DIA if it meets the requirements listed below:

- The soil, in proximity of the discharge area, is not designated as hydrologic soil group "D" or equivalent (see Appendix F.2. Hydrologic Soil Group Map);
- The overland flow path (pervious area serving as BMP) from discharge area has a positive slope of 10% or less;
- The length of overland flow path (pervious area serving as BMP) is greater than or equal to the contributing rooftop or pavement length;
- The length of overland flow path (pervious area serving as BMP) is greater than 25 feet.

If the discharge is concentrated at one or more discrete points, no more than 1,000 square feet of impervious area 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 edge of the pavement, this requirement is waived; however, there must be a provision for the establishment of vegetation along the pavement edge and temporary stabilization of the area until vegetation becomes stabilized.

If rainspouts are discharged underground to provide infiltration, the portion of the impervious area draining to those rainspouts is waived from the DIA discharge requirements. Rainspouts discharged underground which are directly connected to a storm sewer system are not waived from the DIA requirements.

Computations for DIA as a BMP must be submitted to Penn Lake Park Borough. This worksheet is provided as an example, or may be used for the computations.

Applicant Address:	Brief Description of Project:				
Nearest waterbody:	No more than 1,000 sq. ft. can discharge to one point on the surface. Number of discharge points required:				
Total Proposed Impervious Area (A): Total Earth Disturbance:	Discharge Point 1 Area:	Discharge Point 2 Area:	Discharge Point 3 Area:	Discharge Point 4 Area:	Discharge Point 5 Area:
Are rainspouts discharged underground? (Y/N) If yes, contributing impervious area (B):	Impervious Path Length: Pervious Path Length:	Impervious Path Length: Pervious Path Length:	Impervious Path Length: Pervious Path Length:	Impervious Path Length: Pervious Path Length:	Impervious Path Length: Pervious Path Length:
Total Impervious Area Discharged on Surface (A) – (B):	Pervious Path Slope <10%? (Y/N)	Pervious Path Slope <10%? (Y/N)	Pervious Path Slope <10%? (Y/N)	Pervious Path Slope <10%? (Y/N)	Pervious Path Slope <10%? (Y/N)
HSG Soil Group from Appendix F.2 Hydrologic Soils Group Map (Cannot be "D" Soils):					
Project sketch:					

EXAMPLE:

Example: Joe Homeowner would like to build a single-family home, with a driveway and backyard stone patio. The home is 2,000 sq. ft., the stone patio is 800 sq. ft., and the asphalt driveway is 500 square feet.

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: