

# Permeable Pavement System Construction Checklist

*This checklist has been developed for BMPs designed in accordance with the Delaware Sediment and Stormwater Program's Post Construction Stormwater BMP Standards and Specifications. Submit interim versions of this construction checklist to the approval agency weekly with the Certified Construction Reviewer report. Submit the final completed checklist with the PCVD.*

## **PROJECT INFORMATION**

Project Name/BMP Name: \_\_\_\_\_

Project Approval Number: \_\_\_\_\_ NOI number: \_\_\_\_\_

Location: \_\_\_\_\_

Contractor: \_\_\_\_\_

Construction Reviewer: \_\_\_\_\_

Supervising P.E.: \_\_\_\_\_

## **Permeable Pavement Variant**

3-A Porous Asphalt

3-C Permeable Interlocking Concrete Pavers  
or Concrete Grid Pavers

3-B Pervious Concrete

3-D Plastic Grid Pavers

For each checklist item, enter in the blank the date (MM/DD/YY) the item is completed and verified by the construction reviewer. If an item is not applicable, enter "N/A" in the blank for that checklist item.

### **I. Pre-Construction**

A. \_\_\_\_\_ Permeable Pavement field meeting with responsible person and person completing construction checklist.

B. \_\_\_\_\_ Extents of permeable pavement delineated and access by equipment prohibited with Sensitive Area Protection (SAP) to prevent compaction of existing soils.

C. \_\_\_\_\_ Equipment on the site large enough to excavate permeable pavement from the sides of the facility.

D. \_\_\_\_\_ Pervious areas draining to the permeable pavement stabilized in accordance with the approved plans.

E. \_\_\_\_\_ Pipe and appurtenances on-site and dimensions and properties checked and confirmed to be in accordance with the approved plan.

i. \_\_\_\_\_ Discharge pipe

ii. \_\_\_\_\_ Overdrain

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iii. \_\_\_\_\_ Inspection port(s)/Cleanout(s)

iv. \_\_\_\_\_ Underdrain pipe

v. \_\_\_\_\_ Other; list: \_\_\_\_\_

F. \_\_\_\_\_ Materials on-site and dimensions and properties checked and confirmed to be in accordance with the approved plan. **Submit materials invoice or delivery tickets to approval agency as part of PCVD for the following items:**

i. \_\_\_\_\_ Clean, washed reservoir layer stone

ii. \_\_\_\_\_ Clean, washed bedding layer stone

iii. \_\_\_\_\_ Permeable Pavement surface material

iv. \_\_\_\_\_ Joint fill stone, *if applicable*

v. \_\_\_\_\_ Clean, washed filter layer stone, *if applicable*

vi. \_\_\_\_\_ Geotextile fabric, *if applicable*

**II. Excavation and Grading**

A. \_\_\_\_\_ Permeable Pavement excavated to dimensions and at location as per the approved plan.

B. \_\_\_\_\_ Permeable Pavement excavated to design bottom elevation as per the approved plan.

C. \_\_\_\_\_ Permeable Pavement excavated from the sides to not compact the existing soil.

D. \_\_\_\_\_ Groundwater not encountered during excavation. (Note: If groundwater is encountered during the excavation process, construction of the facility must cease, and the designer notified that a plan modification is necessary)

E. \_\_\_\_\_ Bottom of permeable pavement excavation scarified prior to placement of stone.

F. \_\_\_\_\_ Confirmatory testing performed in native soil at design bottom elevation in accordance with Soil Investigation Procedures for Stormwater BMPs. **Submit confirmatory infiltration testing report to approval agency as part of PCVD.**

Confirmatory infiltration testing

Confirmatory rate is at least 150% of the approved design rate

Confirmatory rate is less than 150% of approved design rate; designer notified to provide plan revision

Hand augers to a minimum depth of 3 feet below the bottom of the facility

Limiting layer not present

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Construction Reviewer: \_\_\_\_\_

- Limiting layer present; designer notified to provide plan revision

**III. Structural Components**

- A. \_\_\_\_\_ Discharge pipe installed from overdrain to discharge point.
- B. \_\_\_\_\_ Overdrain installed at elevations as specified on the approved plan.
- C. \_\_\_\_\_ Inspection port(s) installed.
- D. \_\_\_\_\_ Joint fill stone placed in accordance with the approved plans, *if applicable*.
- E. \_\_\_\_\_ Reservoir layer placed with a minimum depth of 6 inches of stone and in accordance with the approved plan.
- F. \_\_\_\_\_ Bedding layer placed with the depth of stone in accordance with the approved plan.
- G. \_\_\_\_\_ Filter layer placed with the depth of stone in accordance with the approved plan, *if applicable*.
- H. \_\_\_\_\_ Permeable pavement surface material placed in accordance with the approved plan.
- I. \_\_\_\_\_ Underdrain piping laid flat or with positive slope toward outlet.
- J. \_\_\_\_\_ Photo documentation of construction of structural components taken. ***Submit photo documentation to approval agency as part of PCVD.*** (Photo #: \_\_\_\_\_ )

**IV. Erosion and Sediment Control**

- A. \_\_\_\_\_ Sediment prevented from entering permeable pavement by keeping it off-line or using perimeter controls as specified on the approved plan.
- B. \_\_\_\_\_ Drainage area stabilized in accordance with the approved plan.
- C. \_\_\_\_\_ Sediment controls removed once drainage area meets final stabilization standard.

**V. Maintenance Access**

- A. \_\_\_\_\_ Maintenance access in accordance with the approved plans.

**VI. Post Construction Verification**

Owner shall submit post construction verification documents to demonstrate that the permeable pavement practice has been constructed within allowable tolerances in accordance with the Approved Sediment and Stormwater Management Plan and accepted by the approving agency.

- A. \_\_\_\_\_ Constructed permeable pavement surface confirmed to be no less than the design.
- B. \_\_\_\_\_ Constructed contributing drainage area confirmed to be no greater than the design contributing drainage area.

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C. \_\_\_\_\_ Constructed volume of the permeable pavement storage confirmed equal to or greater than 90% of the of the design.

D. \_\_\_\_\_ Constructed elevation of all structures confirmed to be within 0.15 foot of the design elevation for:

- i. \_\_\_\_\_ Discharge pipe
- ii. \_\_\_\_\_ Overdrain
- iii. \_\_\_\_\_ Inspection port(s)/cleanout(s)
- iv. \_\_\_\_\_ Underdrain pipe
- v. \_\_\_\_\_ Other; list: \_\_\_\_\_

**VII. BMP Acceptance**

A. \_\_\_\_\_ Final BMP construction review complete.

B. \_\_\_\_\_ All BMP punch list items addressed.

C. \_\_\_\_\_ Permeable Pavement is online (stabilized drainage area is entering permeable pavement).

D. \_\_\_\_\_ As-built survey.

E. \_\_\_\_\_ PCVD submitted to approval agency for review and approval. Submit the following pieces of PCVD documentation to the approval agency:

- Materials invoice or delivery tickets
- Confirmatory infiltration testing report
- Photo documentation
- Soil test report
- Lime, fertilizer, and seed tickets
- As-built survey
- Final, completed BMP Construction Checklist