



INLAND DESIGN

Civil Engineers, Surveyors & Land Development Consultants

February 4, 2020

Chester County Conservation District
Molly Deger, PE
688 Unionville Road, Suite 200
Kennett Square, PA 19348

Re: Technical Deficiency Letter
Project Name: 2969 Horseshoe Trail – Review I
NPDES File Number: PAD150150
Municipality: West Vincent Twp., Chester County, PA
Most Recent Plan Revision Date: 11/18/19
Total Acres: 10.00
Disturbed Acres: 3.18
Receiving Watershed: Birch Run
Designation: EV

Dear Molly:

We are in receipt of the above referenced letter. We have revised the plans and offer the following responses:

General

1. Add this note to the plan: The operator shall remove from the site, recycle, or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes at the site. §102.4(5)(xi).

This note is located on E&S Sheet 9.

2. It appears that symbols for silt fence were used on the E&S plan drawing instead of the compost filter sock symbol. Please address.

The Legend symbol on Sheet 8 has been addressed.

Topographic Features §102.4(b)(5)(i)

3. Please provide a separate drawing to include existing conditions. §102.11(a)(1).

A separate Existing Conditions Plan (Sheet 3) has been added to the plan set.

Characteristics of the earth disturbance activity §102.4(b)(5)(iii)

4. Label the proposed NPDES boundary on the plan map(s) (page 398 in the E&SPC Manual). §102.11(a)(1).

A call-out has been added to E&S Sheet 8.

5. Provide station numbers for the proposed driveway. §102.11(a)(1).

Station numbers have been added and are visible on Sheets 2, 5, and 8.

Surface waters of this Commonwealth §102.4(b)(5)(v)

6. The following note should appear on all E & S plans for projects in specially protected watersheds:
 - a. This project is in a specially protected High Quality or Exceptional Value watershed; extreme care should be exercised in all disturbance activities to prevent degradation to the Waters of the Commonwealth.
 - b. Because this project is in a specially protected High Quality or Exceptional Value watershed, upon completion or temporary cessation of earth disturbance activities, the project site must be immediately stabilized with the appropriate temporary or permanent stabilization. §102.4(5).

The above referenced note is included on all the E&S Plans. See Receiving Waters Notes 2 and 3 on E&S Sheets 8, 9, and 10.

Sequence of BMP installation and removal §102.4(b)(5)(vii)

7. Please provide a separate Sequence of Construction for both lots 2A and 2B. It may be beneficial to construct lot 2B first so that construction traffic will not affect the homeowner of lot 2A.
8. Please address the stormwater sewer installation in the sequence. §102.11(a)(1).
9. Please address the installation of inlet protection in the sequence. §102.11(a)(1).
10. Please address the timing of the installation of the 2' deep stone trench in the sequence.

A separate Sequence of Construction has been provided for each lot and the installation of storm sewer, inlet protection (step 9) and the stone trench (step 17) have been addressed.

Plan drawings §102.4 (b)(5)(ix)**Compost Socks**

11. All perimeter compost filter sock located adjacent streams or wetlands should be 24" compost filter sock. Eg. A1, B1-B4. Please address. §102.11(a)(1).

There are no filter socks adjacent to streams or wetlands. A wetland hatching has been added to the plan and the stream lines have been darkened for better clarity.

Outlet Protection

12. Provide a construction detail for the proposed structural level spreader on the E&S detail sheet. 102.11(a)(1).

The construction detail for the level spreader has also been provided on the E&S detail sheet (new E&S Detail Sheet 10).

Other BMPs

Waterbars

13. Waterbars are not recommended for active access roads. §102.11(a)(1). Please consider the use of broad-based dips instead of the water bars. Provide the appropriate construction details for broad based dips.

A construction detail for Broad Based Dips has been added to E&S Detail Sheet 10.

Concrete Washouts

14. A suitable washout facility should be provided for trucks delivering concrete to the site. See pages 57 through 60 of the E&SPC Manual for guidance on concrete washouts. §102.11(a)(1).

A construction detail with additional maintenance notes from the manual has been added to the detail on E&S Sheet 9.

15. Show the location(s) of the proposed concrete washout facility on the plan map(s) (Item 9, page 5 of the E&SPC Manual). §102.11(a)(1).

The location of the concrete washout is shown for Lot 2A and for Lot 2B.

Comments as per the PA DEP NPDES Post Construction Stormwater Requirements

1. Level spreaders should be constructed level with the existing downstream grade, please address. §102.11(a)(2).

The Level Spreader alignments have been adjusted.

2. There are several dimensions for a 170+/- foot riparian buffer, please clarify if this is per the township requirements and if so, revise the dimensions to state such. Also, the stream and wetland lines and different buffer lines/hatches are currently difficult to follow on the PCSM Plan, please address. §102.14 §102.8(f)(5)

The riparian buffers have been clarified and labeled Township for those that reflect the Township's standard. The streams have been bolded and the wetland areas have been hatched for better clarification of the makeup of the Greenway Area.

3. Please verify that Infiltration Bed 2B will be directed to POI B given the proposed orientation of the level spreader and existing downslope grades. Either adjust the proposed discharge location to ensure it will reach POI B or revise the calculations to show both beds discharging to POI A. §102.11(a)(2).

The Level Spreader has been adjusted slightly. A compost diversion sock has been added to the property boundary and is called to be left in place. This will act as an extension of the berm that exists further downstream of the level spreader.

4. Per Sections D.4 and E Part 1 of the Permit Application and DEP Worksheets 2 and 10, the existing forested riparian buffer is being protected. This is consistent with the 4th paragraph of the Greenway Area Management Plan on the PCSM Plan (Sheet 4). However, this riparian area is also hatched as an “Existing/Proposed Greenway”, and there are several additional “allowed uses on greenway land” identified on Section II of the Greenway Area Management Plan on Sheet 4. Please more clearly delineate/identify the protected forested riparian buffer (per 102.14) title as NS BMP 5.4.2 and clearly define what is allowed (and restricted) in this area per 102.14. Also, please include the PA SW BMP Manual Chapter 8 checklist for BMP 5.4.2 with the DEP Worksheets and on the PCSM O&M.

The Greenway Area Management Plan specifies what is allowed, but also explains how it is going to be used, managed, and maintained. While the uses are permitted, the Greenway Area will be restricted to the passive uses proposed in the plan. No earth disturbance is permitted.

A note has been added to the plan to require approval from the Conservation District should a new permitted use of the Greenway be proposed.

The Worksheet from Chapter 8 has been added to the Worksheets.

5. The Volume of Runoff Tributary to the BMP in the 2-yr/24hr design storm is inconsistent between Chart 5.b and the 2A and 2B Post Captured Hydrographs, please address. §102.11(a)(2).

The hydrograph applies a time of concentration; therefore it will not match the straight Worksheet 4 captured volume calculation.

6. All seepage/infiltration bed details should be revised to include the following information: §102.11(a)(2).
 - a. Note on all detention/seepage bed detail(s) should state that “the stone be uniformly graded, clean washed aggregate.” (The stone should be checked and approved by the design or site engineer before installation into seepage beds to ensure that it is clean washed stone. This should also be addressed in construction sequence.)
 - b. All seepage bed detail(s) should show and state that “undisturbed or uncompacted subgrade” for the bottom of any bed(s). This should be indicated on plans/details and addressed in the construction sequence.

The seepage bed has been revised on PCSWM Detail Sheet 6.

7. Identify the person(s) responsible for long-term operation and maintenance of the PCSM BMPs. §102.8(f)(10).

The PCSM Long Term Operation and Maintenance Responsible Party is identified as the Lot Owners.

8. The long-term operation and maintenance program must provide for completion of a written report documenting each inspection and all BMP repair and maintenance activities. §102.8(f)(10). Revise as necessary.

The written Report requirement is included under the Record Keeping heading.

9. Add a note to the plan drawing(s) requiring the PCSM Plan, inspection reports, and monitoring records be available for review and inspection by the Department or conservation district. §102.8(j).

This note is included on the PCSWM Plan under the Record Keeping heading.

10. Vehicles should not be parked or driven over infiltration BMPs (Stormwater BMP manual, Chapter 6). §102.11(a)(2). Please add this requirement to the long-term operation and maintenance instructions.

The requirement has been added to the Long-Term Operation and Maintenance Instructions, note 7.

11. Define “failure” for (specify PCSM BMP) and provide guidance for corrective measure(s) to be taken should failure occur (Protocol 2 the Stormwater BMP manual). §102.11(a)(2).

Protocol 2 from the BMP Manual has been added to the PCSWM Plan.

We trust that the plans now adequately address the comments and approval can be granted. Please feel free to contact me with any questions or comments regarding this matter.

Very Truly Yours,



Linda R. Layer, P.E.
Project Manager

c: Patricia Morgera
Erica L. Batdorf, Township Manager
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