

Suggestions for Sheet Layouts

Note: The intent of this document is to provide clarity on the sheet layout and content expectations of the Sussex Conservation District. This does not replace the Preliminary Sediment & Stormwater Management Plan Review (Step 2) checklist or the Sediment & Stormwater Management Plan Review (Step 3). In addition, other municipalities and delegated agencies may require different information in their submittals.

Cover Sheet

See respective checklists for specifics but generally items should include:

- Professional Statements
- Owner Statements
- Site Data table
- Legend
- Location Map and/or Vicinity Map
- Project Header
- Contact Info for Designer, Owner and Delegated Agency
- Sheet Index
- 3" x 5" clear area for SCD approval stamp
- Standard Construction Notes

*Additional information can be included on the Cover Sheet as space allows

Pre-Construction Site Stormwater Management Plan

This sheet is mainly used to show E & S Controls required for your project if you will have pre-construction demolition or bulk grading. If not, you can choose to omit this sheet and move on to the Construction Site Stormwater Management Plan. For large sites that can't fit on one sheet at 1":100', you will need an Overall Pre-Construction Site Stormwater Management Plan sheet showing the page breaks. At this point, proposed buildings, parking and final BMP's should not be shown. This sheet is, again, to illustrate E & S Controls needed for demolition of existing structures and bulk grading.

The following items should be included in Plan View:

- Limit of Disturbance for this phase of work
- Stabilized Construction Entrance for this phase of work
- Perimeter Controls for this phase of work
- Sediment trapping facilities for this phase of work
- Diversion channels for this phase of work
- Soil Stockpile for this phase of work
- Sensitive Area Protection for trees, existing infiltration areas, and existing or proposed wastewater disposal areas
- Any Additional E & S controls needed for this phase of work
- Inlet protection for existing inlets in this phase of work

- Contours (1' for on-site and LiDAR 2' for off-site). Make sure to show them at least 100' past the LOD.
- Show any streams, ditches, tax ditches or bodies of water (if applicable)
- Show existing tree line
- Identify any areas of demolition
- State and/or Federal Wetland delineation and buffer (if applicable)
- 100-Year Flood Zone line (if applicable)
- Project Benchmark with vertical datum and elevation listed
- Adjacent Property owner information (name & tax map #)

*Also include a Line-type Legend and list the total area of disturbance for this phase of work on this sheet.

Construction Site Stormwater Management Plan

The purpose of this sheet is to show all the E & S that will be required during the Construction Phase of your project. For large sites that can't fit on one sheet at 1":100', you will need an Overall Construction Site Stormwater Management Plan sheet showing the page breaks. Note: the location of the LOD, Perimeter Controls, Stabilized Construction Entrance, Sediment Trapping Facilities, Soil Stock Piles, etc. may not be the same as in the Pre-Construction Site Stormwater Management Plan for demo and bulk grading. Show them again on this sheet even if they did not change. It may seem a bit redundant to have this sheet as well as the Pre-Construction Plan Site Stormwater Management Plan but there is a difference; this sheet should show the proposed project in plan view with the E & S Controls.

The following items should be included in Plan View:

- Limit of Disturbance for this phase of work
- Stabilized Construction Entrance for this phase of work
- Perimeter Controls for this phase of work
- Sediment trapping facilities for this phase of work
- Diversion channels for this phase of work
- Soil Stockpile for this phase of work
- Sensitive Area Protection for trees, existing infiltration areas, and existing or proposed wastewater disposal areas
- Outlet Protection for this phase of work
- Any Additional E & S controls needed for this phase of work
- Inlet protection for existing inlets in this phase of work
- Contours (1' for on-site and LiDAR 2' for off-site). Make sure to show them at least 100' past the LOD.
- Show any streams, ditches, tax ditches or bodies of water (if applicable)
- Show existing tree line
- State and/or Federal Wetland delineation and buffer (if applicable)
- 100-Year Flood Zone line (if applicable)
- Project Benchmark with vertical datum and elevation listed
- Adjacent Property owner information (name & tax map #)

* Also include a Line-type Legend and list the total area of disturbance for this phase of work on this sheet.

Construction Site Details and Notes

This portion of the plan set (usually 2-5 sheets) should include all the E & S Details required for your project and the overall Sequence of Construction for your project.

The E & S Details can be found in the Delaware Erosion & Sediment Control Handbook (use the most recent version). In addition to these details, any proprietary E & S Control details should also be located in this sheet section.

Writing the Sequence of Construction for your project may be challenging. With that in mind, DNREC created a “Typical Sequence of Construction” which can be found in Section 3.05 General Plan Requirements of the Technical Document. See the link below to Section 3.05.1:

<http://www.dnrec.delaware.gov/swc/Drainage/Documents/Sediment%20and%20Stormwater%20Program/Technical%20Document/Tech%20Doc%20March%202013/3.05%20General%20Plan%20Requirements.pdf>

If you include a more specific sequence of construction in the Post Construction Plans for individual BMP's, make sure to reference the sheet location in the overall Sequence of Construction.

Post-Construction Site Stormwater Management Plan

The purpose of this section of the plan set is to show the location of all of your BMP's and then provide details for each type.

First, provide an overall plan view of your project at a reasonable scale. For BMP's such as wet ponds, bioretention and infiltration facilities, provide a label for each. For BMP's that may cover large areas such as compost amended soils, filter strips and disconnected rooftops, a hatch or shading may be used to show the location.

Second, create a Post Construction Management Plan per facility. Basically, if you identified the BMP in the overall plan view with a specific label it will probably need its own sheet (ex- “Pond 3” or “Bioretention A”). For each of these BMP's, provide a Post-Construction plan of the facility at a maximum of 1”:30' scale and a cross section to a reasonable defined scale. Make sure to label all of the elements of the BMP. Refer to the Step 3 checklist item 42 a-j for the list of requirements. You will also need to provide a facility-specific Sequence of Construction on the sheet as well as the O & M notes and a legend (if needed).

For all other BMP's that you used a hatch or shading to represent, you can create a “Typical” Post-Construction plan per facility type. For example: A project has 4 areas of permeable pavement; three with an underdrain connected to a bioretention facility and one with an infiltration sump. This would require two “typical” cross sections and possibly two different sequences of construction but only one set of O & M notes. If all of the information can fit on one sheet that is acceptable. If not, you could choose to move the O & M notes and sequence(s) of construction to a second sheet.

For quicker reviewer verification, a schedule or table can be provided to accompany “typical cross sections”. For example, if you have five filter strips in “C” soils and six in “B” soils. One cross section can represent them all for construction purposes but the areas, cross slope, presence of a gravel diaphragm and soil type can be listed in a schedule or table on the same sheet as the cross section.

Pre/Post Limit of Disturbance Drainage Area Plan

The purpose of these sheets is to display the data entered in the DURMM LOD sheet only. It is important to understand that you only have to show the area within the project LOD in plan view. The types of cover shown are: pre-developed woods, pre-developed meadow, pre-developed impervious and post developed impervious. Often these areas can be shown as hatched or shaded. If a project is small enough in size, you can show both the pre and post LOD Drainage Area plans on the same sheet in two separate views. Make sure to label the individual drainage areas and include the drainage area lines, soil type line, tree line and any existing or proposed impervious areas within the LOD.

BMP Contributing Drainage Area Plan

This sheet directly corresponds to the C.A. RCN sheet in DURMM and is most similar to the old “Post-Development” plan. Plan view should include the final project layout as well as Tc lines, individual drainage areas, soil type line, tree line, property lines, points of analysis and the project limit of disturbance line. This sheet will also be used to verify areas entered in programs like HydroCAD for TR-55/TR-20 hydrologic modeling.

Optional: An Existing Contributing Drainage Area can be created to represent the pre-developed conditions of the project. This would correspond to the pre-development TR-55/TR-20 hydrologic calculations performed in programs such as HydroCAD, WinTR-55 or Pond Pack. Plan view should include the Tc lines, individual drainage areas, soil type line, tree line and points of analysis.