

3.8 Infiltration		Sheet #	Yes/No	Comments
General				
1	What type of infiltration practice is used? <input type="checkbox"/> Infiltration trench <input type="checkbox"/> Infiltration basin <input type="checkbox"/> Other infiltration facility type _____ [3.8 Infiltration, page 161]			
Siting				
2	To avoid classification as a Class V well, is the infiltration practice wider than it is deep? [3.8.1 Infiltration Feasibility Criteria- Underground Injection Control, page 164]			
3	Is infiltration slope less than 6% or are check dams or other devices employed to reduce the effective slope of the practice? [3.8.1 Infiltration Feasibility Criteria- Site Topography, page 164]			
4	Is the seasonal high water table and bedrock at least 2 feet from the bottom of the filtering system? [3.8.1 Infiltration Feasibility Criteria- Minimum Depth to Water Table or Bedrock, page 164]			
5	Is there a minimum setback of 10 feet from a structure and waterproofing protection for foundation and basement? If setback not achieved, is an impermeable liner used along the sides of the practice? [3.8.1 Infiltration Feasibility Criteria- Setbacks, page 164]			
Soils				
6	Has the designer verified the soil permeability by completing the geotechnical requirements outlined in Appendix P? [3.8.1 Infiltration Feasibility Criteria- Soils, page 164]			
Design				
7	If runoff is delivered by a storm drain pipe or along the main conveyance system, is the infiltration practice designed as an off-line practice? Does the on-line system include an overflow structure to safely convey larger storms to through the infiltration area? [3.8.2 Infiltration Conveyance Criteria, page 166]			
8	Does the infiltration device pretreat 100 percent of the inflow into the facility using one of the following?			

	<ul style="list-style-type: none"> <input type="checkbox"/> Grass channel <input type="checkbox"/> Grass filter strip (minimum 20 feet and only if sheet flow is established and maintained) <input type="checkbox"/> Forebay or sump pit (accommodate minimum 25 percent of the design storm volume) <input type="checkbox"/> Gravel diaphragm (minimum 1 foot deep and 2 feet wide and only if sheet flow is established and maintained) <input type="checkbox"/> Filter system <input type="checkbox"/> Proprietary structure with demonstrated capability of reducing sediment and hydrocarbons (see Appendix T Proprietary Practices for approved proprietary structures) <p>[3.8.3 Infiltration Pretreatment Criteria, page 166]</p>			
9	<p>If the infiltration facility serves a CDA greater than 20,000 square feet, is a forebay, sump pit, filter system, or proprietary practice used for pretreatment?</p> <p>[3.8.3 Infiltration Pretreatment Criteria, page 166]</p>			
10	<p>Are exit velocities from the pretreatment mechanism non-erosive (less than or equal to 6 feet/second) during a 15-year storm and is flow evenly distributed across the width of the infiltration practice?</p> <p>[3.8.3 Infiltration Pretreatment Criteria, page 166]</p>			
11	<p>If the infiltration practice contains a stone layer, does the layer consist of clean, washed aggregate with a diameter between 1.5 and 3.5 inches?</p> <p>[3.8.4 Infiltration Design Criteria- Stone Layer, page 167]</p>			
12	<p>Is there at least one observation well, consisting of a well-anchored, perforated 4- to 6-inch diameter PVC pipe?</p> <p>[3.8.4 Infiltration Design Criteria- Observation Wells, page 167]</p>			
13	<p>Is there a 6 to 8-inch coarse sand layer at the bottom of the infiltration trench to protect against intrusion from underlying soils?</p> <p>[3.8.4 Infiltration Design Criteria- Trench Bottom, page 168]</p>			
14	<p>If used on the sides of the infiltration practice, does the geotextile fabric meet the following requirements?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Comply with AASHTO M-288 Class 2 <input type="checkbox"/> Permeability at least 10 times higher than the soil subgrade permeability <p>[3.8.4 Infiltration Design Criteria- Geotextile Fabric, page 168]</p>			
15	<p>Does the stone layer meet the specifications outlined in Table 3-30 for washed clean stone free of fines (no more than 2% passing the No.200 sieve)?</p>			

	[3.8.4 Infiltration Design Criteria- Material Specifications, page 168]			
16	Does the design use Equation 3.11 Maximum Surface Basin Depth for Infiltration Basins or Equation 3.12 Maximum Underground Reservoir Depth for Infiltration Trenches to establish the maximum depth of the infiltration practice? [3.8.4 Infiltration Design Criteria- Practice Sizing, page 168]			
17	To calculate the infiltration practice’s storage volume, does the design use Equation 3.15 Storage Volume Calculation for Surface Basin Area for Infiltration Basins or Equation 3.16 Storage Volume Calculation for Underground Reservoir Surface Area for Infiltration Trenches? [3.8.4 Infiltration Design Criteria- Practice Sizing, page 169]			
Construction				
18	Does the plan contain the following construction notes? <input type="checkbox"/> Infiltration practices should not be installed until all up-gradient construction is completed and pervious areas are stabilized with dense and healthy vegetation, unless the practice can be kept off-line so it receives no runoff until construction and stabilization are complete. <input type="checkbox"/> Keep the infiltration practice off-line until the construction is complete. [3.8.6 Infiltration Construction Sequence, pages 171-172]			
19	Does the erosion and sediment control plan provide the following? <input type="checkbox"/> Prevent sediment from entering the infiltration site by using super silt fence, diversion berms, or other means <input type="checkbox"/> Indicate the earliest time at which stormwater runoff may be directed to the infiltration practice <input type="checkbox"/> Indicate specific methods to be used to temporarily keep runoff from the infiltration site [3.8.6 Infiltration Construction Sequence, page 171]			
20	Are all infiltration areas located outside of the Limits of Disturbance during construction to prevent soil compaction? If not, does the design meet one of the following criteria? <input type="checkbox"/> The in-situ soils are not disturbed any deeper than 2 feet above final design excavation of the bottom of the storage course. The impacted area is excavated and tilled to a depth of 12-inches below the bottom of the reservoir layer. <input type="checkbox"/> The excavation cannot be restricted above 2 feet. Infiltration tests are			

	<p>performed prior to the installation of the practice to ensure the infiltration rate is still present. If there is a loss in the infiltration rate, deep tilling practices will be utilized to restore the rate.</p> <p>[3.8.6 Infiltration Construction Sequence, page 170]</p>			
21	<p>If an infiltration application is used as a sediment trap or basin during construction, are the following shown as notes or graphics on the plan?</p> <ul style="list-style-type: none"> <input type="checkbox"/> The maximum excavation depth of trap or basin at the construction stage must be at least 2 feet higher than the final site elevation of the bottom of the proposed infiltration practice. Final remediation can be achieved by removing trapped sediment and performing deep tilling <ul style="list-style-type: none"> <input type="checkbox"/> An alternative to deep tilling is an impermeable liner to protect in-situ soils from sedimentation. Remove sediment deposits prior to installing the infiltration practice. <p>[3.8.6 Infiltration Construction Sequence, page 171]</p>			
22	<p>Does the plan contain the Infiltration Practice Construction and Maintenance Inspection Checklists (Appendix L Construction Inspection Checklists and Appendix M Maintenance Inspection Checklists) or incorporate the checklists by reference?</p> <p>[Appendix L and Appendix M]</p>			
Maintenance				
23	<p>Does the SWMP include a maintenance schedule similar to Table 3-31 Typical Maintenance Activities for Infiltration Practices in the Stormwater Management Guidebook?</p> <p>[3.8.7 Infiltration Maintenance Criteria- Maintenance Inspections, page 173]</p>			
24	<p>Is the infiltration practice included in the Declaration of Covenant?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Is the location and extent of the infiltration practice a part of Exhibit B Site Plan? <input type="checkbox"/> Is the maintenance of the infiltration practice a part of Exhibit C Maintenance Plan? <p>[3.8.7 Infiltration Maintenance Criteria- Declaration of Covenants, page 174]</p>			