

PROPOSED RR STRAWMAN (Jan. 16, 2014)

Step 1: Project Layout and Site Design

- GOALS
 - Avoid disturbance of vegetation and soil on steep slopes and near surface waters and other sensitive environmental areas
 - *Accomplished by establishing simple, selective siting criteria for disturbance, similar to the horizontal isolation distances for septic systems in Chapter 1 of the Environmental Protection Rules (e.g., steep slopes are > 15% slope over a horizontal distance of 100 feet).*
 - Avoid mass clearing and grading; limit clearing and grading to the minimum needed to construct the development and associated infrastructure; minimize impacts to historically undisturbed vegetation and native trees
 - *Accomplished by offering better (lower) CN for undisturbed soils and mature forest*
 - *Woods or meadow in “good condition” applies to the following portions of the site:*
 - *Existing forest/meadow areas that are undisturbed*
 - *Reforested areas where the soils have been restored/amended*
 - Build on the least porous soils; limit construction activities to previously disturbed soils; minimize soil compaction
 - *Accomplished by offering better (lower) CN for areas with restored soils*
 - *Open space in “good condition” applies to areas that are disturbed during construction but the soils are actively restored/amended*
 - *Open space in “fair condition” applies to areas that are disturbed during construction and the soils are not amended, restored, or built on*

Step 2: Apply Non-Structural Stormwater Practices

- GOALS
 - Maximize the use of non-structural practices to capture the WQv and CPv
 - *Accomplished by:*
 - *Requiring the WQv be managed using non-structural and structural GSI practices*
 - *Encouraging the CPv to be managed wholly through the application of non-structural practices, and applying a reduced RCN reflecting the reduction achieved by non-structural GSI practice implementation to the calculations for CPv (and Q10 and Q100) in cases where CPv is partially reduced using non-structural GSI practices*
 - Enhance ability of background land cover to reduce runoff through practices such as soil amendment and planned reforestation
 - *Accomplished by offering better (lower) CN for amended soils and reforested areas, as compared to “open space in fair condition”*

- Manage stormwater close to the source and redirect it back into the ground using practices like disconnection of rooftop and non-rooftop runoff, sheet flow to undisturbed natural/conservation areas and vegetated filter strips, and grassed channels
 - *Accomplished by:*
 - *Making residential, commercial, and industrial properties all eligible to use rooftop disconnection practice*
 - *Defining rooftop disconnection to include disconnecting to a bioswale or bioretention*
 - *Requiring that disconnection to HSG C/D be coupled with soil amendment to boost the runoff reduction rate and receive “full credit” for the disconnection*
 - *If the inflow is to a conservation area or vegetated filter strip is from a pipe or channel, an engineered level spreader must be incorporated into the design to ensure well-distributed flow, especially on sloping sites*

Step 3: Apply Structural GSI Practices

- GOALS
 - Maintain predevelopment runoff characteristics
 - *Accomplished by using structural GSI practices to capture the WQv if non-structural practices are insufficient to reach targets*
 - Maximize the use of GSI practices for the treatment and control for WQv and CPv; if the reduced RCN for a drainage area with structural GSI practices reflects “woods in good condition” or “meadow in good condition”, then CPv is assumed to have been met.
 - *Maximization of GSI includes:*
 - *Maximization of disconnection or redirection of rooftop and non-rooftop runoff into infiltration areas or vegetated stormwater control measures.*
 - *Substitution of vegetated stormwater control measures for curb-and-drain systems.*
 - *Substitution of vegetated stormwater control measures for existing turfgrass or other landscaped areas that do not function as stormwater treatment areas.*
 - *Routing flows through bioretention swales whenever possible.*
 - *If woods/meadow in “good condition” target is not met following maximization of GSI practices, a reduced RCN reflecting the (non-structural and) structural GSI practices that will be implemented is applied to the calculations for CPv, Q10 and Q100*

Step 4: Apply Other Structural Practices

- GOAL
 - Use “other” structural practices to meet peak flow control requirements only after use of GSI practices has been maximized.