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MEMORANDUM

To : Edward P. Marron, Jr.
Building Inspector

From : George E. Pommer, P.E.
Project Manager

Date : September 20, 2010

Subject : Retention System Requirements
Village of Irvington

As requested, we are providing recommendations for retention system requirements in the Village of Irvington. Based on our knowledge and experience, please accept the following criteria as the minimum criteria required for applicants to submit plans with a proposed retention system.

1. The method used to determine runoff volume must be clearly identified.
2. The site must have zero net increase for the 100 year storm event from existing to proposed conditions.
3. The existing and proposed curve number (CN) should be provided.
4. Pipe sizes and structure dimensions and elevations should be provided.
5. Pretreatment must be provided. As required by New York State Department of Environmental Conservation, pretreatment must be provided to prolong the lifespan of the retention system. It allows larger sediment and debris to be collected and removed prior to entering the retention system. Acceptable pretreatment methods include catch basins (with 24 inch sumps) sedimentation basin or other methods specified in the New York State Stormwater Management Design Manual.
6. The depth to groundwater must be determined and shown. A minimum of 2 feet of separation should be provided between the water table and the bottom of the infiltration units.

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E N V I R O N M E N T A L A N D C I V I L E N G I N E E R I N G
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7. The depth to rock should be identified.
8. The percolation rate must be determined by performing a soil percolation test. The bottom of the percolation hole should be 6 inches below bottom of proposed practice.
9. The location of percolation hole(s) and deep test pit(s) should be shown on plan.
10. The following typical details should be provided:
 - a. A section(s) of the retention system(s) which includes the unit(s) material, $\frac{3}{4}$ inch stone, geotextile fabric, and emergency over flow. The emergency overflow may be an overflow outlet, surge pipe with splash block, etc.
 - b. Access manhole(s) with an opening a minimum of 24 inches.
 - c. Pretreatment system.
 - d. Cleanout port(s).

If you have any questions or concerns, please contact me at your earliest convenience.



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