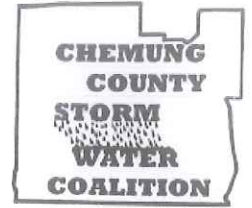


CHEMUNG COUNTY STORMWATER COALITION

851 Chemung Street, Horseheads, New York 14845



December 20, 2011

Mr. Tim Gilbert, Code Enforcement Officer
Town of Big Flats
476 Maple Street
Big Flats, New York 14814

**Re: Stormwater Management Plan Acceptance
Williams Honda
County Route 64, Big Flats, New York**

Tim:

We have completed a review of the above-referenced project regarding the proposed stormwater management system for that project. The following information was reviewed.

- Stormwater Pollution Prevention Plan for the New Williams Honda, Prepared by Hawk Engineers, Dated June 2011, Stamped by a licensed engineer, Received December 16, 2011
- Site Plan Drawings for New Williams Honda, Prepared by Hawk Engineers, Dated June 2011, Stamped by a licensed engineer, Modified in Response to the Chemung County Stormwater Coalition's comments, Received December 16, 2011

Background

As you are aware, the proposed project is classified as a "hotspot" land use, as per Table 4.3 of the NYS Stormwater Design Manual (i.e., fleet storage areas) and could be expected to generate higher concentrations of pollutants in runoff than that of typical runoff. Furthermore, the proposed stormwater management system involves the infiltration of developed runoff. As discussed with Town officials, the infiltration of hotspot runoff represents an increased risk of contaminating the aquifer, which happens to supply the Town of Big Flats groundwater supply well to the south.

Given the lack of storm sewers, the flat topography of the area, and the highly permeable soils, the applicant's engineer was unable to identify other options for the management of stormwater besides infiltration. Typically, to protect groundwater from possible contamination, runoff from designated hotspot land uses or activities must not be directed to a formal infiltration facility. In cases where this goal can't be achieved, redundant pretreatment must be provided prior to infiltration, in accordance with the NYSDEC Stormwater Design Manual.

The proposed stormwater management approach is innovative in our area and involves the use of CrystalStream water quality units (prior to infiltration) to remove certain pollutants (such as hydrocarbon). The applicant's engineer arranged a technical presentation by the manufacturer's representative of the CrystalStream units for the Town and Stormwater Team members. Questions were asked, information was exchanged, and a better understanding of the CrystalStream unit's performance capabilities and maintenance requirements was obtained. Diligent operation and maintenance, including routine inspection efforts, would be required to maintain system functionality.

The infiltration of hotspot runoff (in the context of protecting the aquifer and Town's well) was discussed in detail with the applicant's engineer, the Town, and me during the planning of the Williams Honda project and the following points were noted in specific to the Williams Honda project.

1. The existing site is currently developed and the land use is consistent with the Town's zoning.
2. The proposed land use is generally comparable to the adjacent land uses (Lowe's and Kent Brown's dealership) and is expected to have similar pollutant runoff potential as that of the adjacent land uses (which currently infiltrate "untreated" stormwater into the aquifer). When compared to the Lowe's site, it was discussed that the Williams Honda project may have less pollutant runoff potential, as the majority of the automobiles would be of a newer vintage.
3. The proposed Williams Honda project will not be allowed to use salt de-icing agents (unlike the surrounding developments).
4. The proposed Williams Honda project will provide pretreatment of its stormwater prior to infiltration, unlike to the adjacent developments. Runoff from the Williams Honda site will be pretreated via a series of two CrystalStream water quality units, which include X-TEX filters that will remove oils and other hydrocarbons.
5. Viable options, other than infiltration, could not be found by the applicant's engineer for the management of developed stormwater.

SWPPP Acceptance

Upon review of the above information, I believe that the proposed stormwater management system design and SWPPP are acceptable. This approval is conditioned upon the following items.

1. One set of final approved Stormwater Pollution Prevention Plan and one set of the approved Site Plan Drawings, with the executed approval stamp of the Chemung County Stormwater Coalition, must be on-site at all times during construction and site stabilization.
2. A formal, signed enforceable maintenance agreement for the stormwater collection and management system shall be provided by the Applicant. This agreement shall be binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property. That agreement must be fully consistent with Section 17.37.100 of the Town's Stormwater Management and Erosion and Sediment Control Ordinance.

A draft Operation and Maintenance Plan for the proposed stormwater management basin is included in the Stormwater Pollution Prevention Plan. This O & M Plan should be reviewed by the Town and changes made as needed. The final O & M Plan should be included as part of the enforceable maintenance agreement. The approved SWPPP should be noted in the O & M Plan, as being part of the O & M agreement.

Also, the Applicant shall convey to the Town easements and/or rights-of-way to assure access for periodic inspections by the Town or their representatives (and for maintenance if required). These agreements shall be subject to the review and approval of the Town and their attorney. Also, it is requested that the Stormwater Coalition be allowed to review the final Operation and Maintenance Plan and agreement.

3. Diligent operation and maintenance by the applicant/owner will be necessary to ensure the optimum and long-term performance of the proposed stormwater management system, including the proposed CrystalStream water quality vaults/filters. Diligent operation and maintenance efforts will help protect the aquifer that supplies the Town's adjacent supply well. Lack of operation and maintenance would translate to an increased risk of aquifer contamination. The filters within the CrystalStream units will need to be routinely monitored and replaced, to maintain optimum performance.
4. This acceptance pertains only to stormwater drainage and management facilities. It is incumbent upon the Applicant to obtain all necessary approvals, including those from the Town of Big Flats.
5. As a point of understanding (as per discussion with the design engineer), the proposed HDPE storm sewers shall have smooth-bore interiors.
6. In regards to the proposed infiltration system, the design engineer assumed an infiltration rate of 1 inch/minute. Because the proposed infiltration areas are situated in existing paved parking areas, infiltration testing of the on-site soils was not completed during the design phase. Prior to the start of construction, the design engineer shall complete infiltration testing in the areas of the proposed infiltration basins, to verify the field infiltration rate. Upon completion of this testing, the results shall be directed to the Chemung County Stormwater Coalition. If the field-confirmed infiltration rates are lower than the assumed design infiltration rates, the size of the infiltration system shall be increased accordingly.
7. Upon completion of the proposed site construction (including the stormwater collection and management systems), a licensed professional engineer shall provide a certification letter to the Town of Big Flats Code Enforcement Officer (copied to the Chemung County Stormwater Coalition), stating that the site work (including the stormwater system) for the project was constructed in conformance with the approved plans and specifications.
8. It is imperative that appropriate field construction observation and controls be provided, to ensure that the proposed improvements are constructed in accordance with the approved plans.

If you have any questions or comments, please do not hesitate to contact us. Furthermore, we would be happy to discuss this project in greater detail.

Sincerely,



Jimmie Joe Carl, P.E.

Cc: Lance Muir, Town of Big Flats Planning Board
Hawk Engineers
Jessica Verrigni, Chemung County