Dear Dan,

Thank you for taking to meet with Susan Ealer and myself on June 16th to review conditions of the existing and proposed culverts along the north side of Prickly Pear Hill Road.

Our concerns are three-fold:

- 1. Is the proposed storm water collection system for the HNGC storage area sized correctly and will it work?
- 2. Will the haphazard nature of the existing storm water conveyance system, the road and the damaged swales, meet current and future demands?
- 3. How can continuous and prompt maintenance be assured for the privately-owned road and culvert system?

1. Is the proposed storm water collection system sized correctly?

We should be provided with the design calculations that support the sizing and gradients for the new piping. What is the volume proposed for the settling basin and is it large enough to contain the design flows? What flows are anticipated from the "upper reaches" of the drainage divide in order to assure that the full amount of runoff has been considered?

The quantitative information is the only sure way to know, basically, will it work as planned. It was unclear as presented during the planning board meeting whether or not such information was ascertained and was it given to Chazen to assess. We and Chazen would need to see the numbers to be sure.

2. Will the haphazard nature of the existing storm water conveyance system, the road and the damaged swales, meet current and future demands?

The application for the HNGC special exemption for a "lower storage area" relies on a 1000-foot length pre-existing asphalt swale. It redirects water that used to flow down the south side of the road to the north side swale. The current state of this swale shows years of neglect, and although recently patched, the entire length is now a discontinuous patch work of recent asphalt repairs and older failing asphalt resulting in an inconsistent sized and depth swale lacking a continuous drainage ability. The plan as it stands now is incomplete, lacks quantitative calculation certainty and relies too much on unimproved existing uneven parts of the swale.



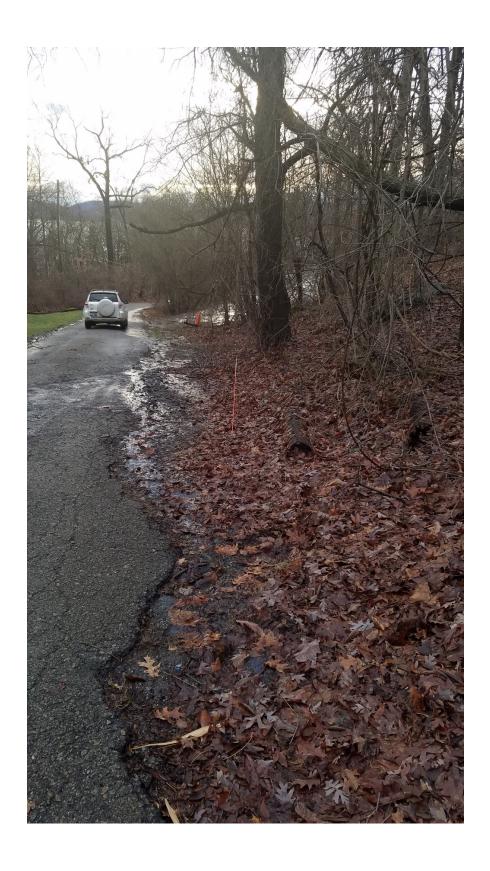
We observed several particular trouble spots with the plan and existing decerped pieces of swale.

A. There is no connection planned for the proposed new run of swale at the at the foot of the "storage Area" and the existing run of historical swale. The new swale ends abruptly at the uphill start of #3 future driveway, creating a condition where water discharged from the storage area would flow on to the shoulder thereby spilling on to the road itself.



B. We discussed for some sort of temporary solution to this obvious flaw in the current plan.





C. Further west we saw several existing parallel grooves in the land adjoining the asphalt swale indicating that the existing swale was not adequately deep or wide to accommodate existing runoff let alone accommodate additional run off. This was especially pronounced along the entire footage adjoining the Ealer property. The culvert depth and width should be adjusted to meet the water flow conditions.



D. We saw two culverts at the end of Prickly Pear Hill. One conducted water from the north swale of Prickly Pear Hill Road to the South and on to the 9A western swale. The other culvert transverses Prickly Pear Hill Road connecting the swales along the 9A hiway. Both culverts will overflow onto both roads during a significant rain. Much can be improved if the culverts were properly maintained and cleared of debris on a regular basis.



3. How can continuous and prompt maintenance be assured for the privately-owned road and culvert system?

Our consulting engineer thought that these provisions of the village code would be applicable in this situation to address our concerns about future maintenance:

Per Article 196-9. Maintenance, inspection and repair of stormwater facilities:

E. Prior to the issuance of any final plan approval, the owner, applicant or developer must execute a formal maintenance agreement for permanent stormwater management facilities, other than those serving an individual single-family residence, binding on all subsequent landowners. The maintenance agreement shall be in a form acceptable to the Village Attorney and shall be recorded in the office of the County Clerk as a deed restriction on the property. The Village of Croton-on-Hudson, in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future permanent stormwater management facility, provided such facility meets all the requirements of this article and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

and

230-64 Performance guaranty. The Board of Trustees may, as a condition to the grant of a special permit, require a bond on terms satisfactory to the Board of Trustees, guaranteeing performance of the final site development plan approved by the Planning Board.

On a non-water related issue that I pointed out to you Dan, is that the HNGC property adjoining Prickly Pear Hill Road is not maintained as if were part of a residential neighborhood. Dead wood and fallen trees are left to accumulate on the land. They should be cleared away. Poison Ivy and other tree strangling vines are not cut further adding to the increasing amount of dead and dying trees on the property.



Dan, once again, we appreciate you taking the time to walk the road with us and remain hopeful that with proper instructions from your office, the situations can be made better for the neighborhood and neighbors who depend on the road and the storm water conveyance system for an improved and safe environment.

Sincerely,

Mitchell Bring