CHEMUNG COUNTY STORMWATER COALITION

851 Chemung Street
Horseheads, New York 14845

November 17, 2016

Mr. Tom Skebey, Code Enforcement Officer
Town of Horseheads Code Enforcement Department
150 Wygant Road
Horseheads, New York 14845

Re: Hunter's Run - Phase IIA
Horseheads, New York
Review of Stormwater Management Plan

Mr. Skebey:

I have completed a review of the following submitted information for the above-referenced project regarding the Stormwater Pollution Prevention Plan and stormwater management system design for that project.

- Submittal letter from LaBella Associates, Dated September 6, 2016, Received September 12, 2016
- Site Plan Drawings for Hunter's Run - Phase IIA, Stamped by a NYS Licensed Professional Engineer, Prepared by LaBella Associates, Revision Dated September 2016, Received on September 12, 2016
- Stormwater Conveyance and Infiltration Basin Calculations, Prepared by LaBella Associates, Received on September 12, 2016

My review comments and questions regarding the SWPPP and stormwater management system for the above-referenced project, based upon the submitted information, are as follows.

SPDES PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY

1. It is recommended that a SPDES Permit for Stormwater Discharges from Construction Activity be obtained for this project and the SWPPP conform to the requirements outlined in Permit No. GP-0-15-002. The proposed Phase IIA of Hunter's Run would result in land disturbance of over 1 acre. The Phase IIA project would result in a considerable amount of earthwork/grading. The maximum amount of cut would be around 11 feet and the maximum amount of fill shall be 5 feet. Accordingly, proper Erosion & Sediment Controls, including routine inspections by a qualified professional and maintenance of practices, would be important to prevent/minimize impacts to adjacent properties.

HYDROLOGIC & HYDRAULIC MODELING

1. Background information, supporting the assumed infiltration rate of 12 inches per hour, is requested to be included in the engineer's design report.

2. In regards to the modeling of the existing infiltration basin, how was the Stage vs. Storage characteristics of this infiltration basin determined?

3. As per the submitted hydrologic modeling, a maximum water surface elevation of 979.98 is estimated for a 100-year storm return period. As per the Chemung County LIDAR topography for the area of the existing infiltration basin, it appears that a low spot along the north side of the existing infiltration basin (near the property line) is roughly 978 feet. Will the estimated maximum water surface elevation be able to be contained within the existing basin?

STORMWATER CONVEYANCE

1. As per the submitted calculations regarding the performance of the existing infiltration basin, the peak 100-year stormwater flow is indicated as reaching this basin. On the other hand, as per the submitted storm sewer sizing calculations, the proposed storm sewer is sized to accommodate a 10-year design storm event. Documentation that the peak 100-year design storm would be able to be conveyed to the existing basin should be provided.

2. Does the existing storm sewer have sufficient capacity to convey flows from the existing Phase 1 of the project, as well as from the proposed Phase IIA?

3. A roughness coefficient of 0.01 was utilized. ADS, the manufacturer of smooth-bore HDPE storm sewer, recommends the use of a roughness coefficient of 0.012.

4. The depth of the proposed swale (as shown on the Typical Road Section on Sheet C3.1) shall be 2.5 feet, although the Grading Plan indicates a swale depth of only 1 foot (approx.).

5. A number of proposed stormwater inlets and drywells (including ST-13A, ST-12A, ST-12, and ST-13) are shown positioned directly adjacent to the roadway pavement. It is unclear how the depth of the proposed roadside swale would be maintained with this layout. The inlets should be located such to best collect stormwater.

6. As per the "Typical Roadway Section" on Sheet C3.1, it is indicated that roadside drainage may consist of either concrete gutter/storm sewer system or roadside ditches. The plans should clearly indicate which is proposed to be utilized. A "Typical Roadway Section" should be provided that outlines the proposed roadway section and roadside drainage system. It is requested that the applicant's engineer gain input from the Town of Horseheads Highway Superintendent regarding the proposed roadside drainage system.

7. The proposed stormwater inlets should be of sufficient number and spaced such that ponding of stormwater along the proposed roadways does not occur.

8. In accordance with the NYS Stormwater Management Design Manual, dry wells can only be utilized for rooftop runoff.

SEQUENCE OF CONSTRUCTION & SOIL RESTORATION

1. A detailed Sequence of Construction should be developed that includes the installation and maintenance of temporary erosion and sediment controls, the installation of the proposed infrastructure, and soil restoration.

2. The specifics of soil restoration (including deep-ripping and decompaction) should be detailed on the plans.

   - Which pervious areas to receive soil restoration should be clearly specified.

   - Are any disturbed areas that shall remain pervious not receive soil restoration? If so, the HSG should be increased by one group accordingly for the post-developed hydrologic calculations. Also, the WQv calculations may need to be adjusted accordingly.

   - It is recommended that NYSDEC's document entitled "Deep Ripping and De-compaction, 2008" be referenced and included in the SWPPP.

EROSION & SEDIMENT CONTROL

1. A significant amount of excavation is proposed for the Phase IIA project, including a maximum cut of over 10 feet and a maximum fill depth of over 5 feet. Furthermore, existing developed residential properties and public thoroughfares border the project site. Accordingly, proper erosion and sediment control during construction would be critical.

   a. Temporary erosion control measures along the eastern boundary of the project site appear to be necessary.

   b. Is storm drain inlet protection proposed to be utilized. If so, the plans should clearly note this, including an associated detail.

   c. On Sheet C1.1, it is noted that temporary siltation facilities shall be utilized. The proposed locations of these should be noted on the plan and appropriate details included.

   d. Why is a construction entrance provided onto Steeple Chase? Is it the intent to have construction traffic utilize that roadway?

2. A note should be added to the plans that states that an individual erosion & sediment control plan shall be required to be prepared for each home site. Each of these individual erosion & sediment control plans shall be submitted to the Town of Horseheads for their review and acceptance, as part of the building permit application for an individual home site.

MISCELLANEOUS

1. The Applicant is responsible to obtaining all necessary approvals, including those from the Town of Horseheads (including their Highway Superintendent), the Chemung County Department of Public Works, the Chemung County Health Department, the Chemung County Sewer District, and the NYSDEC.

2. In regards to the proposed roads, the following items are noted.

   - A turn-around should be provided at the end of the proposed Old Sable Road that is consistent with the Town's street/roadway standards.

   - In regards to the proposed extension of the Hunter's Run roadway, the profile should clearly demonstrate how this proposed roadway extension shall blend into the profile of the existing portion of Hunter's Run.

   - The proposed elevations of the proposed Old Sable Road should be noted on the profile for that roadway.

3. Easements for the proposed stormwater collection system ((including back-lot and side-lot swales) should be shown on the plans. In addition, easements for the other buried utilities and the proposed turn-around should also be noted on the plans. Easements should be of sufficient width to allow for access for maintenance and repairs of these utilities.

If you have any questions or comments regarding this letter, please do not hesitate to contact me.

Sincerely,

Jimmie Joe Carl, P.E.

Cc: LaBella Associates