STATE OF NEW YORK
OFFICE OF THE ATTORNEY GENERAL

LETITIA JAMES
ATTORNEY GENERAL

DIVISION OF SOCIAL JUSTICE
ENVIRONMENTAL PROTECTION BUREAU

April 29, 2019

By Email and Mail

Mr. Tom LaPerch
Planning Board Chairman
Town of Southeast Planning Board
1 Main Street
Brewster, NY 10509

Re: Northeast Interstate Logistics Center
Watershed Inspector General Comments

Dear Mr. LaPerch:

As requested by Ashley Ley, the Office of Watershed Inspector General (WIG or WIG Office) respectfully submits the following comments on the Draft Final Environmental Impact Statement (March 2019) for the proposed Northeast Interstate Logistics Center development (the Project). The WIG Office appreciates this opportunity to comment on the Project and looks forward to working with the Town, Watershed regulators, the Project sponsor, and other stakeholders as environmental review of the Project proceeds.

Respectfully Submitted,

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Cc: Ashley Ley (AKRF). Town Planning Consultant

Northeast Interstate Logistics Center

NY Route 312 & Pugsley Road

Town of Southeast, Putnam County, NY

Review of the Draft Final Environmental Impact Statement

March 2019

Prepared by JMC, Inc.

By: Donald W. Lake, Jr. PE

on behalf of the Watershed Inspector General

April 29, 2019

These technical comments are based on my review of the following revised documents:

a. Draft Final Environmental Impact Statement (FEIS), March 2019, Volume I, containing 3 sections.
b. Draft FEIS Appendices, Volume 5A, Appendix Stormwater Pollution Prevention Plan (SWPPP), Volume 1, prepared by JMC, Inc., dated March 2019 (1,196 pages) and Volumes 5B & 5C, Volumes 2 & 3, Proposed Hydrologic Calculations, dated March 2019 (2,746 pages).
c. FEIS Site Plan Approval Drawings C-000 through C-908, 60 sheets, dated March 18, 2019.

These technical comments are being submitted to facilitate a timely review of the SWPPP.

Background

The proposed Northeast Interstate Logistics Center project is a distribution center that will receive, consolidate, repackage, assemble, refrigerate, store, label, and ship nonhazardous goods and materials. The project would discharge into the watershed of New York City's Middle Branch Reservoir, part of the City's Croton system, which has historically provided drinking water to almost one million New Yorkers each day.

The Watershed Inspector General (WIG) Office reviewed the draft environmental impact statement for the proposed project in August 2018. At that time, the project included the construction of 4 "High Cube Warehouses" (HCW) and associated infrastructure on 328 acres of wooded land. The revised, current project configuration reduces the HCW complex from 4 buildings to 2, the area of disturbance from 132 acres to 113.7 acres, and impervious area from 57.2 acres to 48.4 acres. The revised layout continues to disturb 0.05 acres of wetland and reduces DEC and Town wetland buffer areas from 11.7 acres to 8.45 acres (DEC 2.66 acres and Town 5.79 acres).

Resolution of July 2018 Comments

A review of the above documents and FEIS Volume 2, Correspondence, Comments and Responses indicate that JMC, Inc. did a thorough job of addressing most of our previous comments (WIG Document 108). However, the following previously identified issues require further revisions:

a. WIG Comment in 6-24, SWPPP, Preliminary Site Plan Approval Drawings: the soil boundaries from the web soil survey data must be placed on all site plan views, including the existing condition plan, proposed grading plan, and erosion control plan.

   FEIS Response: The soil boundaries are shown on the existing condition drawing.

   WIG Reply: General Permit GP-0-015-002, Part III.B.1.b requires that site maps and construction drawings show "locations of soil types and boundaries". These soil boundaries need to be included on all developed plan views to identify sensitive or easily erodible soils and for developing the erosion and sediment control plan. These boundaries need to be added as required to the Grading Plan Drawings C-201 to C-205.

b. WIG Comment in 6-56: Detail 2 shows a riser and anti-vortex device for a sediment basin. This detail needs to be deleted and replaced with a full design for a sediment basin that complies with the Sediment Basin standard on page 5.19 of the 2016 Blue Book. This will also require the hydrologic analysis for the 10-year storm, since all drainage areas will exceed 5 acres. In addition, all basins will require a skimmer dewatering device designed in accordance with that standard on page 5.10 of the 2016 Blue Book.

FEIS Response: states that a temporary sediment basin detail and dewatering detail have been added to the drawings.

WIG Reply: Sheet C-906 does present some generic information but does not include site specific details for sizing, dimensions, elevations, or volumes for the sediment storage zones and the dewatering zones as required. A table for these sediment basins or traps containing this information must be included. Also, the elevations shown in details 81 and 82 on C-906 do not match the elevations for this project.

c. WIG Comment in 6-60: SWPPP, Appendix A. Pond Pack 3.01: For the time of concentration (T_c) calculations, the manning coefficient for sheet flow (SF) was 0.24 for all watersheds but one. Based on the existing wooded areas on site, 0.40 (woods, light, from TR-55) is more appropriate. In addition, the shallow concentrated flow (SCF) used in these routings was taken as Unpaved as noted in TR-55, where the only choices are Paved and Unpaved. U.S. Department of Agriculture (USDA) NRCS National Engineering Handbook (NEH) Section 4 "Hydrology" offers 6 additional land descriptions for shallow concentrated flow. To compare, the velocity vector for Unpaved is 16.1 feet per second, whereas the velocity vector for SCF in Woodland is 5.0 feet per second. The slower rate leads to a longer T_c, which reduces the existing peak discharges for all frequency events. The current T_c for all events needs to be re-calculated, and the routings redone.

FEIS Response: "The time of concentration for all watersheds has been recalculated utilizing the appropriate manning coefficient for the cover types determined by the Project's environment consultant. Shallow concentrated flow is taken as unpaved in accordance with TR-20, which is all that is required as stated in the Stormwater Management Design Manual."

WIG Reply: This response does not satisfy the comment. TR-20, referenced for use on page 4-7 of the New York State Stormwater Management Design Manual, January 2015, incorporates a total of eight (8) different coefficients to use for shallow concentrated flow depending on land cover. As noted in the original comment, the appropriate coefficient for shallow concentrated flow should be applied to the T_c for the drainage areas and the model needs to be re-run.

Comments on March 2019 Revised Project

1. SWPPP Appendix H, "Sediment Basin Calculations" does not contain the necessary calculations to support the proposed sediment basin systems. At a minimum, the design calculations need to be presented to establish the volumes for the sediment storage zone and the dewatering storage zone. In addition, the sizing of the skimmer orifice and appurtenances need to be provided. (See the requirements in the NYS Standards and Specifications for Erosion and Sediment Control, November 2016, page 5-24 for the Design Details Data Sheet.) The table shown in Appendix H also displays dewatering zone elevations for Basins 3B-1 and 5 that do not agree with the surface water elevations shown on their respective drawings (C- 402 for Basin 3B-1, and C-404 for Basin 5). These discrepancies need to be resolved.

2. In addition to responding to our previous WIG comment (9-21) in Volume 2 of the FEIS, concerning cleared and grubbed vegetated waste material on site being chipped and composted offsite, this note also needs to be presented on the Erosion and Sediment Control Plan drawings, C401 – C405. The estimated acres of woodland to be cleared also need to be included on these drawings.

3. SWPPP, page 60, the earthwork quantities for each construction phase need to be included here and on Drawing C-421, Disturbance Authorization, Phasing of the Project and Sequence of Construction. Also delete General Note #12 on drawing C-421 since it is not relevant.

4. Drawing C-302, Building A, Cistern 3B-1 is labeled at 205 feet, but appears to scale out at 150 feet. This discrepancy needs to be reconciled. Also, several structures need rock outlet protection aprons: (a) Drawing C-302, conduit outlet structure ES B-2-1 needs a rock outlet protection apron; (b) all erosion and sediment control plan view drawings need a rock outlet protection apron added at the end of culverts where they are not currently shown; and (c) a construction detail for these rock outlet protection aprons also needs to be added on drawing C-905, next to Detail 80, for conduits outletting from a concrete headwall.

5. Drawing C-304, Building B, Cistern 1B-1 is labeled for 275 feet, but scales out at only approximately 200 feet. This discrepancy needs to be resolved.

6. The legend from "Stabilized Construction Entrance" on Drawing Series C-401 through C-405, Erosion and Sediment Control Plans needs to be changed to "Stabilized Construction Access" as shown in the New York State Standards for Erosion and Sediment Control, November 2016.

7. Drawing C-402, add the drainage area boundaries and required storage volumes for all sediment traps and basins.

8. Drawing C-205, Grading Plan "E", shows a small area of the infiltration basin IB 4A-1 at contour elevation 606. This is 2 feet lower than the rest of the basin floor, which should be level. Please reconcile this discrepancy.

9. There are two separate detail drawings (Drawing C-905, Detail 75 and Drawing C-906, Detail 84) showing the emergency spillways at the detention ponds. Based on the FEIS response to WIG comment (logged as 6-66), the emergency spillways in these drawings are no longer relevant. To correct this discrepancy, only one detail needs to be provided which coordinates the correct elevations and top widths of the respective basins.

10. Drawing C-905, Detail 77, the Outlet Control Structures table shows two anomalies. First, for Detention Basin 1A-1, the orifice is at elevation 611 while the outlet culvert elevation is at 612.75. Second, the Pond/Wetland 1B-1, has the orifice elevation at 628.5 and the culvert outlet elevation at 613.9, or 14.9 feet lower. These discrepancies need to be corrected.

11. Two identical Sediment Trap III details are presented. One on Drawing C-906 as Detail 84 and the other on Drawing C-908 as Detail 100. One of these details needs to be deleted.

12. Drawing C-906, Detail 86, Bio-Retention shows an 18" layer of soil for the system. The January 2015 New York State Stormwater Management Design Manual, page 6-48, requires a minimum of 30" or 2.5 feet as the soil depth for this practice. This design needs to conform to the NYS standards.

Water Quality

Appendix G in Volume 5A of the FEIS displays a pollutant load analysis. This analysis appears to be based on outdated information, and no references or citations were provided to document its source. In response, the WIG Office has prepared a pollutant load analysis based on the revised, current site configuration for the disturbed portion of the site, 113.7 acres, using the Simple Method.

The pollutant load concentrations and the stormwater management practice (SMP) total phosphorus (TP) pollutant removal efficiencies were based on information provided in the March 2015 East of Hudson (EOH) Watershed Corporation Stormwater Retrofit Project Design Manual. These values were modified based on the treatment train provided for the sub-areas and the isolation of the water quality treatment volume from the total storm runoff.

The revised, current stormwater management system is well designed. Using infiltration basins offline and allowing the larger storms to bypass and collect in detention ponds confines the stormwater effluent and eliminates the resuspension of captured phosphorous. The use of hydrodynamic structures upstream of all SMP conveyances act as a pretreatment for the infiltration basins, detention ponds, the pocket wetland, and the two cistern storage units that are used for rain harvesting. Also, two bio-retention cells act as pre-treatment for the pond/wetland system 3B-1 which receives runoff from two separate sub-areas.

The WIG Office calculated the existing TP load for the 113.7 acres of disturbed area at the site to be 14.9 pounds. For the post-developed condition, 32 sub-areas representing the 113.7 disturbed acres were analyzed. The land use data from the Pond Pack computer model used to calculate the runoff curve numbers for the sub-areas was also used to establish the event mean concentration for the pollutant loads. This analysis shows that 67.50 acres of new building construction and associated grading drains to the SMP's.

Of these 67.50 acres, 45.94 are impervious areas that produce a TP load and 4.07 acres are SMP ponds. SMP ponds are impervious, but do not produce any significant TP load. This leaves 46.2 pervious acres that are disturbed but will be reshaped and vegetated in the landscape. The 46.2 acres do not drain to any SMP.

The WIG Office calculated a post-developed TP load without treatment for the 67.5 acres of disturbed area to be 207.3 pounds in comparison to the existing TP load for this area of 8.84 pounds. To calculate the TP load after treatment, each of the 32 sub-areas was reviewed for their flow paths and treatment systems. When the pollutant removal efficiencies of the stormwater treatment systems were applied to the post-developed load for each of the 32 sub-areas, the final post-developed TP load with treatment for the 67.5 acres is 5.65 pounds. Adding the TP load from the 46.2 acres (4.33 pounds) of pervious area to the treated TP load, the total post-developed TP load for the 113.7-acre disturbed area is 9.98 (5.65 + 4.33) pounds, in comparison to the 14.9 pounds calculated in the existing condition. This is 4.92 pounds less than the existing TP condition of 14.9 pounds or a 33% reduction.

As noted previously, the Middle Branch Reservoir is phosphorous impaired. The June 2000, NYSDEC Phase II TMDL Report prepared for USEPA, establishes the Middle Branch Reservoir as impaired as shown in Table 2 on page 17. The allowable available load is 816 kilograms per year (kg/yr). This was developed after a Margin of Safety factor of 14% was applied to the calculated TMDL of 949 kg/yr. The actual current load, also shown in Table 2, is 1,020 kg/yr. Therefore, since the existing TP load exceeds the available load capacity of the receiving reservoir, it must be reduced.

For the Middle Branch Reservoir to meet water quality standards, phosphorous sources would have to reduce their TP load by 20%. This is calculated by taking the current load of 1020 kg/yr, and subtracting the available load of 816 kg/yr, which equals 204 kg/yr. This excess load is then divided by the current load to determine the percentage of reduction to be made to meet the water quality target. That is 204 kg/yr /1020 kg/yr = .20 or 20%. As shown above, this design exceeds the desired TMDL reductions for this watershed.