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Town of Somers

WESTCHESTER COUNTY, N.Y.

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SOMERS PLANNING BOARD
AGENDA
MARCH 12, 2014
7:30 P.M.

MINUTES Consideration for approval of Draft Minutes for January 8, 2014

TIME-EXTENSION

1. **MERRITT PARK ESTATES FINAL SUBDIVISION APPROVAL [TM: 5.20-1-1]**
   Request for a 90-day time-extension to the period of Final Subdivision Approval from March 31, 2014 up to and including June 30, 2014 in accordance with §150-13.M. of the Code of the Town of Somers. This is the fifteenth request for a time-extension.

PROJECT REVIEW

2. **HIDDEN MEADOW AT SOMERS [15.07-1-6]**
   Application for Preliminary Subdivision Approval, Site Plan Approval Steep Slopes, Wetland, Stormwater Management and Erosion and Sediment Control Permits relative to application of Multifamily Residence Baldwin Place District (MFR-BP) under consideration by the Town Board to a 16.7 acre parcel located along the south side of US Route 6 for the proposed development of 53 units of housing, sixteen of which would be affordable, within 45 townhouse buildings on 45 fee simple lots plus one lot for lands to be owned in common by a Home Owners Association. Discussion on the need for professional services for Traffic Consulting from Michael Galante of Frederick P. Clark Associates, Inc.

Next Planning Board Meeting, April 9, 2014
Agenda information is also available at www.somersny.com

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MEMORANDUM

TO: Town of Somers Planning Board
CC: Marilyn Murphy, Planning Board Secretary
FROM: Joseph C. Barbagallo, P.E., BCEE
DATE: March 7, 2014.
RE: Hidden Meadow at Somers
Subdivision Plat Application, Site Plan Application
16 Route 6 (Birdsall Road)
TM: 15.07-1-6, R-80 District

GENERAL

The purpose of this memorandum is to provide the Planning Board with a summary of our comments related to our review of the Preliminary Subdivision Plat Approval and Site Plan Applications that have been submitted for the parcel located at 16 Route 6. The applications propose the creation of 46 individual lots for the construction of 53 housing units contained on 9 attached "townhouse-style" buildings. The 46 subdivided lots will be composed of 45 fee-simple lots and 1 home-owners association lot for common infrastructure. Proposed work includes the construction of sanitary sewer infrastructure, connection to municipal water supply system, stormwater infrastructure and electrical service utilities. The Application also proposes the construction of additional roadway and drainage infrastructure necessary to provide future connection to the adjacent Town owned parcel, located west of the project site. The following documents were received during the current review period.

DOCUMENTS RECEIVED

- "Full Environmental Assessment Form & Supplemental Reports for Hidden Meadow at Somers", prepared by Insite Engineering, Surveying & Landscape Architecture, P.C., dated February 26, 2014.
- "Hidden Meadow at Somers, Alternative Recreation Plan (Options 1-3)", Figures: "1-3", prepared Insite Engineering, Surveying & Landscape Architecture, P.C, dated February 25, 2014.
- "Hidden Meadow at Somers", Drawing Sheets: "1 – 11", prepared by Insite Engineering, Surveying & Landscape Architecture, P.C., dated September 10, 2013, last revised February 26, 2014.
- Letter, by Philip Bean, Charles Silver, Ph.D, Watershed Inspector General, Office of the New York State Attorney General, dated February 25, 2014.
- Letter, Jeffrey Contelmo, PE, Insite Enginering, Surveying & Landscape Architecture, P.C., dated March 3, 2014.
- Memorandum, by Town of Somers Open Space Committee, dated February 26, 2014.
- Letter, by Michael Nowicki, Ecological Solutions, LLC., dated March 3, 2014.

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PERMITS AND APPROVALS REQUIRED

- Town of Somers Town Board: Application of MFR-BP Zoning District
- Town of Somers Town Board: Water/Sewer District Extension.
- Town of Somers Planning Board: Subdivision Plat Approval
- Town of Somers Planning Board: Site Plan Approval
- Town of Somers Planning Board: Stormwater Management and Erosion and Sediment Control Permit
- Town of Somers Planning Board: Wetlands Activity Permit
- Town of Somers Planning Board: Tree Removal Permit
- Town of Somers Planning Board: Steep Slopes Protection Permit
- Town of Somers Fire Department: Approval of Proposed Hydrant Locations
- NYC DEP: Approval of Stormwater Pollution Prevention Plan
- NYC DEP: Approval of Sanitary Sewer Connections
- NYSDEC: State Environmental Quality Review
- NYSDEC: SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-10-001)
- NYSDOT: Highway Work Permit
- Westchester County Department of Health (WCDOH): Approval of Water and Sanitary Sewer Systems
- Westchester County Board of Legislators: Sewer District Expansion
- Westchester County Planning Board: Approval of Funding
- New York State Affordable Housing Corporation: Approval of Funding

DISCUSSION

The Applicant has provided revised drawings and a draft Full Environmental Assessment Form (EAF) containing supplementary reports related to site water and sewer and a Stormwater Pollution Prevention Plan (SWPPP) It is our understanding that the level of detail provided by the Applicant at this time is intended to gain feedback from the Planning Board on alternatives related to on/off-site recreation options and for determination of SEQR review path. Outstanding engineering comments related detailed design elements and other open concerns, as will be addressed after additional feedback is obtained from the Planning Board, including possible direction on SEQR path.

A joint meeting of Town Officials with representatives of the Town Board, Parks and Recreation Board, Planning Board and Open Space Committee and the Applicant was held on March 6, 2014. At this meeting, concerns related to the availability of off-site/on-site

recreation options were discussed along with implications issues under SEQR review and project funding timelines. Meeting attendees agreed that further discussions would be held at the upcoming meeting of the Planning Board, at which time additional feedback on the construction of required recreation area and additional studies that the Planning Board may require as part of the SEQR process would be provided to the Applicant.

The following is a summary of our comments at this time. Several of our comments, as identified by our previous memorandum, dated February 7, 2014, have been addressed by the provided documents. It should still be noted however that the provided submittal reflects the current progress of design development for the project and that not all detailed design components have been included at this time. The status of all previously identified comments as well as new comments is shown in **Bold Type.** Further comments will be issued upon review of more detailed design submittals.

1. The NYC DEP has issued review comments for the project based upon preliminary project sketch plans that were provided to the DEP prior to receipt of the current Applicant submittal. NYC DEP comments shall be considered in coordination with engineering comments provided by this memorandum. **Partially Addressed, Additional NYC DEP comments have not yet been received in response to the Applicant's January comment response memorandum. Project review by the NYC DEP will continue as design development progresses with final NYC DEP satisfaction confirmed though approval of the project SWPPP.**

2. **Our office has reviewed project review comments that have been offered by the office of the Watershed Inspector General, as referenced in their letter dated February 26, 2014. Several of these comments match the outstanding concerns already raised by our previous reviews of the draft Stormwater Pollution Prevention Plans and phosphorous loading calculations, as referenced within this memorandum. Some of the identified WIG comments related to the project phosphorous loading calculations have already been addressed by the revised project submittal. Other outstanding issues, especially those related to erosion and sediment control and design details must be incorporated as the Applicant continues to develop their design following additional input of the Planning Board. The Applicant indicated at the March 6th meeting that it will be working directly with the WIG to resolve reaming issues. We will continue to assist the Planning Board and the office of the WIG to make sure that all applicable comments are addressed as project design development progresses.**

3. It has come to our attention through recent discussions with the New York State Office of the Attorney General, Watershed Inspector General, that in accordance with the Clean Water Act, additional requirements are applicable for projects located within the TMDL watershed of the Amawalk Reservoir. These requirements are in addition to those regulations already required by the NYSDEC SPDES program and the Enhanced Phosphorous requirements of the Stormwater Management Design Manual. The Applicant shall prepare a site specific phosphorous loading analysis that compares pre development to post development conditions. *Partially Addressed, It is our understanding that compliance under the NYSDEC TMDL program is obligated through the General SPDES*

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Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) (GP-0-10-002). In accordance with of Part IX (A)(5)(b) of the Permit, Somers Town Code requires that "post-construction stormwater management controls are designed in accordance with the most current version of the technical standards of the NYSDEC Stormwater Management Design Manual, including enhanced phosphorous removal standards" to address phosphorous loading concerns.

In response to the ongoing discussion about the applicability of Phosphorous Loading analysis to this project, the Applicant has provided a preliminary pre versus post construction phosphorous loading comparison for the project. We have reviewed the provided phosphorous loading calculations and offer the following comments for consideration at this time.

a. *The Applicant should consider a weighted average of proposed ground surface conditions (impervious, developed open space) in calculation of post construction phosphorous loading.* **Addressed.**

b. *The Applicant has cited 70 percent phosphorous load reduction by the proposed stormwater treatment practices. The currently accepted phosphorous load reduction approach under the East of Hudson Watershed Stormwater Retrofits Program establishes phosphorous load reduction credits based values established in the Croton Kensico Watershed Intermunicipal Coalition (CKWIC) manual, dated December 2009. In addition, it is stated that when two stormwater practices are utilized in series (treatment train approach), that 100% of available load removal credit for the first practice shall be applied, and only 50% load removal credit for the second.* **Partially Addressed. The Applicant has revised load reduction calculations to reflect the acceptable reduction credit for practices in series.**

   The Applicant has cited Chapter 10 of the NYSDEC Stormwater Management Design Manual for obtaining 70% phosphorous removal. This figure is calculated by averaging the removal efficiencies for particulate and soluble forms of phosphorous (80% and 60%, respectively) specified as treatment performance goals under Section 10.1.3 for design compliance with Chapter 10. While this may be acceptable given the heightened design requirements of Chapter 10, our office will need to confirm with the NYSDEC that 70 percent phosphorous removal is appropriate for consideration on this project and for this watershed.

c. *As of July 2012, the NYSDEC has updated surface effluent phosphorous concentrations to include a category for developed open space, (described as large residential lawns, parks, golf courses). The phosphorous load concentration for this surface type is specified as 0.59 mg/L. The Applicant should consider this surface type for load calculations corresponding to large areas of open lawn within the development.* **Addressed, The Applicant has referenced appropriate effluent phosphorous concentration values as specified by the NYSDEC for use in the EOHWC stormwater retrofits program.**

d. **The Applicant's phosphorous loading analysis does not consider the same total development area for pre versus post development conditions. An**

additional 1.0 acre that is included under post-development appears to be associated with the drainage area of the eastern proposed pocket wetland area. The Applicant should consider this area for comparison of phosphorous loading under pre-development conditions.

4. The Applicant has prepared a preliminary Stormwater Pollution Prevention Plan (SWPPP) and drawings to describe proposed project stormwater infrastructure. The following comments are related to our review of the proposed site stormwater plan and systems.

   a. The Applicant has provided water quality volume calculations within the project SWPPP for the sizing of stormwater treatment infrastructure. Chapter 10 of the New York State Stormwater Management Design Manual requires that projects located within the NYC DEP East of Hudson watershed calculate water quality volumes considering the 1 year design storm rainfall based upon total watershed area following upon the SCS (Curve Number) methodology. The provided water quality volumes have been calculated considering the 1 year design storm through the Chapter 4 Water Quality Volume equation, which is not applicable based upon Chapter 10 of the Stormwater Manual. The Applicant shall calculate water quality volumes based upon the SCS method. **Addressed.**

   b. The Applicant shall prepare hydraulic pipe design calculations for all proposed stormwater conveyance pipe. Hydraulic calculations shall demonstrate adequate capacity to convey runoff collected by the 100 year design rainfall without surcharging. **Not Addressed, To be provided with future submittals.**

   c. The Applicant shall update the plans to indicate rim and invert elevations on all stormwater infrastructure. **Not Addressed, To be provided with future submittals.**

   d. The Applicant shall provide a construction detail for the proposed underdrain located to the west of the Townhouses. **Addressed.**

   e. The Application proposed to construction a Pocket Wetlands Area (NYSDEC Type W4). The following comments are based upon our initial review of the proposed wetlands design.

      i. The Applicant shall prepare a Wetlands Planting Plan based upon Appendix H of the NYSDEC Stormwater Management Design manual. **Not Addressed, To be provided with future submittals.**

      ii. The NYSDEC Stormwater Design Manual requires that pretreatment of stormwater flows is required prior to introduction to the stormwater wetland area. While it is noted that a portion of stormwater flows are routed to pretreatment prior to the proposed surface sand filter, stormwater flows are also allowed to flow directly to the wetland area from catch basin referred to as "6P" in the HydroCAD report. The Applicant shall show a pretreatment forebay or identify alternative pretreatment measures at the proposed discharge location into the wetland area. **Partially Addressed, Project drawings and additional details have been provided to demonstrate that an adequate forebay has been**

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sized within proposed Pocket Wetland (1.2). The Applicant must however provide flow dissipation measures at inlet pipe discharge location to the forebay to attenuate the 100 year design flow.

iii. The Applicant shall prepare a profile construction detail for the proposed wetland area that shows all applicable invert elevations for the proposed wetland system. **Addressed, Acceptance of provided construction details will be confirmed through review of the final SWPPP.**

f. The Applicant proposes to construct a surface sand filter as part of the proposed site stormwater infrastructure. The following comments are related to our review of the proposed surface sand filter design.

i. The Applicant shall provide site investigation data to demonstrate minimum 2 foot vertical separation between the invert of the proposed sand filter and groundwater/bedrock. **Partially Addressed, Provided preliminary field investigation data, as depicted on drawing sheet "ST-1" suggests adequate separation in the general vicinity of the proposed sand filter. Adequate vertical separation will be confirmed by future deep hole excavations to be conducted within the proposed sand filter practice.**

ii. The Applicant shall provide sizing design calculations for the proposed surface sand filter based upon the NYSDEC Stormwater Management Design Manual (SWMDM), latest edition. **Addressed.**

iii. The Applicant shall revise the surface sand filter design to include an underdrain as required by the SWMDM. The Applicant shall revise the provided HydroCAD analysis to remove stormwater infiltration from being considered at the proposed sand filter. Stormwater is intended to be collected by the system underdrain after flowing through the filter media and would be discharged to the stormwater wetland area. **Addressed.**

iv. The Applicant shall provide a construction detail and sizing calculations for the proposed hydrodynamic separator unit located prior to the surface sand filter. **Partially Addressed, The requested hydrodynamic separator construction detail shall be provided with future submittal.**

g. The Applicant proposes to utilize porous pavement for a portion of the proposed unit driveways and also on the lower roadway within the development. Porous pavement systems must be designed in accordance with Chapter 5 of the NYSDEC SWMDM. The following comments are based upon our initial review of the proposed porous pavement areas.

i. The Applicant shall provide a construction detail for the typical porous pavement installation, including all cross section materials and depths. **Not Addressed, To be provided with future submittal.**

ii. The Applicant shall provide site investigation data (soil percolation and deep hole testing) to demonstrate feasibility of the proposed porous

pavement infiltration systems. Site investigation data shall demonstrate adequate separation to bedrock/groundwater and must prove adequate infiltration rates of site soils. **Partially Addressed, Preliminary field investigation data has been provided at this time. The Applicant states that additional field investigations will be completed and utilized as the design basis for proposed porous pavement systems.**

iii. The Applicant shall provide sizing details for porous pavement areas. Consistent with the NYSDEC SWMDM, porous pavement system stone reservoirs must be designed to contain runoff volume from the 10 year design storm without flooding. **Not Addressed, To be provided with future submittal.**

h. The Applicant shall provide sizing calculations for all permanent stormwater swales based upon runoff generated by the 100 year design storm event. **Not Addressed, To be provided with future submittal.**

i. The Applicant shall provide design details for the proposed level spreader at the combined stormwater outfall adjacent to the site entrance. The Applicant shall consider spreading stormwater discharge over a wider level spreader trench adjacent to the existing wetlands or may wish consider a secondary stabilized discharge location adjacent to the proposed surface sand filter. Greater distribution of discharged stormwater flows will better replicate existing hydrologic conditions for the existing wetland areas. **Partially Addressed, The provided construction detail for typical Level Spreader does not depict required sizing dimensions. The Applicant shall revise the construction detail to reflect the requirements of the NYSDEC New York Standards and Specifications for Erosion and Sediment Control, latest edition, based upon the identified 100 year design flow peak discharge for each location. The Applicant shall consider other options for releasing water upgradient from the proposed Pocket Wetland area (1.2). The purpose being to replicate to the greatest extent practicable the existing wetland hydrology and to avoid concentration of flow that could increase erosion and impact receiving trout streams.**

j. The Applicant shall prepare a draft Stormwater Maintenance Agreement for review and acceptance by the Consulting Town Engineer and Town Attorney. **Partially Addressed, Draft easement review comments will be communicated directly to the Applicant's Engineer.**

k. **Improvements to the shoulder of US Route 6 are subject to the design standards, review and approval of the NYSDOT. The Applicant shall provide supporting design documents related to Route 6 improvements for review and record by the Consulting Town Engineer.**

5. The Applicant proposes to construct common access roadway to serve the Townhouse development and future access to the adjacent Town owned parcel. While it is unknown if a portion of the site roadway may be dedicated to the Town of Somers in the future, site roadway must be designed in accordance with the Somers "Town Road A" design

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standards. The following comments relate to our initial review of the proposed site roadway. It should be noted that the provided Traffic Analysis is not included within the review scope of our office. **It is our understanding that the Applicant does not wish to dedicate constructed roadways to the Town of Somers. Public access will instead be provided through an easement on the identified "Road A" and "Road B" from Route 6 to the adjacent Town owned parcel on the west side of the Hidden Meadow project. The Applicant shall prepare draft easement agreement documents for review by the Consulting Town Engineer and Town Attorney.**

a. The Applicant shall prepare a roadway profile for the site that identifies stations, grades and vertical curves throughout the roadway layout. **Addressed.**

b. In accordance with the Somers Town Code, the Applicant must show that proposed roadway slopes will not exceed 3% grade within 60 feet of all proposed intersections. **Partially Addressed, The provided roadway profile indicates that 5 percent grades will be provided within 60 feet of proposed roadway intersections. The Applicant requests this consideration citing that if 3 percent grades are incorporated, large amounts of additional cut will be required for site earthwork. From an engineering perspective, we conceptually feel comfortable that the Planning Board consider this request as similar intersection grades were permitted to be incorporated on proposed extension of Clayton Boulevard associated with the Somers Realty Phase II Subdivision project. However final determination should be made once the site plan is further developed.**

c. Site grading contains a steep elevation change of approximately 24 vertical feet between the proposed lower roadway and pocket wetland area. The Planning Board should consider if protective guardrail should be incorporated along the outer edge of roadway along this steep embankment. **Addressed.**

6. The Applicant shall update the site Erosion and Sediment Control Plan to depict all proposed temporary soil stockpile areas. **Partially Addressed, The project drawings have been updated to identify temporary soil stockpile areas. Final location and limits of all stockpile areas shall be coordinated with the Land Disturbance Phasing Plan and Site Earthwork Plan, to be included with future Applicant submittals.**

7. The Applicant shall revise the provided construction detail for typical drainage catch basin to specify a Campbell Foundry Type 2541 frame and grade, and show top of frame set 1 inch below surrounding pavement, as specified by Town Code. **Addressed.**

8. The Applicant shall revise the provided construction detail for typical drainage manhole to specify a Campbell Foundry Type 1203 Frame and Cover. Proposed covers shall read the word "DRAIN" as specified by Town Code. **Addressed.**

9. The Applicant's SWPPP and Environmental Assessment acknowledge that a phased construction approach is necessary to ensure that no greater than 5 acres of land are disturbed at one time. The Applicant shall develop a land disturbance phasing plan that is coordinated to the proposed description of construction sequence and Erosion and Sediment Control Plan. **Not Addressed, To be provided with future submittal.**

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10. The Applicant has provided preliminary documents to describe the anticipated earthwork and grading for the proposed site development. The following comments are based upon our initial review of the preliminary earthwork documents that have been received.

    a. The provided Environmental Assessment Form (EAF) indicates that approximately 14,000 cubic yard of excess cut will be generated by the proposed site construction. The Applicant shall develop a proposed earthwork plan that will be coordinated with the land disturbance phasing plan. The earthwork plan shall include a proposed earthwork map that indicates the depth and volume of cut and fill placement throughout the entire proposed area of disturbance. The plan shall also describe the limits and approximate height of all temporary stockpile areas and should detail the intended schedule of truck loading and hauling operations. **Not Addressed, The Applicant states that the proposed earthwork plan will be developed and included with future Application submittal.**

    b. Based upon the volume of earthwork that is proposed for the site, there is high potential for encountering bedrock and shallow groundwater. The Applicant shall conduct site investigations (soil borings and deep hole excavations) to explore the existing subsurface conditions within the area of development. The Applicant shall provide a profile view which depicts subsurface soil strata and depth to bedrock and groundwater based upon investigation findings. **Addressed, The Applicant indicates that preliminary field investigation has suggested that bedrock and groundwater will not be encountered during construction. Absence of shallow bedrock and groundwater will be confirmed during completion of additional field investigation activities.**

    c. The provided EAF indicates that the maximum excavation depth will be approximately 15 feet below existing grade. The Applicant should note that description of temporary excavation bracing and dewatering operations must be included in the proposed earthwork plan. **Addressed.**

    d. The Applicant shall prepare a rock removal plan to describe rock excavation activities during construction. The rock removal plan shall estimate rock removal quantities and shall describe the limits of and methodology intended to be used for rock excavation. **Addressed. The Applicant states that rock removal is not anticipated as necessary by the scope of proposed construction at this time.**

11. The provided EAF indicates that outdoor lighting will be constructed as part of the proposed development. The Applicant shall show all intended outdoor light fixtures on the proposed site plan. The Applicant shall prepare a site photometric plan to depict illumination levels based upon the layout and intensity of light fixtures. *Not Addressed, The site layout plan depicts conceptual lighting locations, but provides no details on lighting fixtures or proposed photometric levels. Further lighting design details shall be provided with future submittals.* **A preliminary photometric plan has been included with the current submittal. The plan identifies that there will be no additional illumination at or in the vicinity of the western, southern and eastern property lines. Average photometric levels along site roadways are generally depicted as less than 0.5 foot-candles. Based upon our review of the provided photometric plan, we feel**

comfortable that the depicted site illumination does not appear to be above what would be appropriate for such a development. We look forward to providing the Planning Board with further input on this issue as project review progresses.

12. Review of NYS Environmental Resource Map data for project site indicates that no records of endangered or threatened animal species exist in the vicinity of the development. Federal Wildlife Service records, however indicate that the Northern Long Eared Bat, as recently registered on December 2, 2013 has been proposed for the Endangered Species List and may inhabit the project area. The Applicant shall contact the NYSDEC to confirm that Environmental Resource Map data is current and address whether the species is of concern within the project area. *Partially Addressed, Our office has reviewed the provided "Endangered Species Habitat Sustainability Assessment and Wetland Report", prepared by Ecological Associates, LLC, dated January 22, 2014 and offers the following comments related to endangered species habitat at this time:* **Our office is in receipt of the Town of Somers Open Space Committee (OSC) memorandum, dated February 26, 2014. While we note that the Applicant has completed acceptable ecological survey(s) of the existing site for presence of protected species and associated habitat area, based upon NYSDEC and United States Fish and Wildlife program requirements, the Westchester County Parks Department also maintains an Endangered Species List that was adopted in Somers by the Town Board at its August 11, 2011 meeting.**

    While no clear regulatory framework exists for the evaluation or enforcement of this local Endangered Species List, such species are of special interest to the Town of Somers. We recommend that the Planning Board consider if additional study of the project site should be undertaken for the presence of locally protected species, not captured by State of Federal endangered species lists. Based upon such study findings, additional mitigation to address potential habitat concerns may be necessary. We look forward to working further with the OSC to ensure that all vegetative and wildlife species that are of special interest to the Town of Somers are adequately protected and that necessary mitigation can be provided.

13. Town of Somers regulated wetlands are located on the project site downgradient of the proposed area of disturbance. These wetland limits were delineated by the Applicant and confirmed by a Woodard & Curran Wetlands Scientist on August 21, 2013. The Applicant shall provide a Wetlands Impact Analysis prepared by a certified wetlands scientist to analyze any potential impacts to the existing wetlands based upon the proposed site hydrologic conditions. *Partially Addressed, Our office has reviewed the provided "Endangered Species Habitat Sustainability Assessment and Wetland Report", prepared by Ecological Associates, LLC, dated January 22, 2014 and offers the following comments related to wetlands impact and proposed mitigation at this time:*

    a. *Town of Somers regulated wetlands are located on the project site down gradient of the proposed area of disturbance and off site in the area of proposed road improvements. These wetland limits were delineated by the applicants consultant and confirmed by a Woodard & Curran Wetlands Scientist on August 21, 2013. The Applicant has provided a Wetlands Impact Analysis prepared by a qualified environmental professiona.l*

Based upon the concerns raised by the OSC memorandum, dated February 26, 2014, our office has suggested that the Planning Board consider if additional site evaluation is necessary to determine the presence of locally protected species of vegetation and wildlife. Possible impacts to regulated wetland areas will be re-evaluated after additional information is provided related to species on the Westchester County Endangered Species List.

14. The Applicant has provided preliminary design calculations and details for the proposed water service and sanitary sewer connections to the proposed development. Our office has completed initial review of these design calculations and has issued comments as cited below. It should be noted that these comments reflect our review of the conceptual level of detail that has been provided and that additional comments will be issued upon future submittal of detailed design documents: **Woodard & Curran review comments related to the design of water supply and wastewater systems have been acknowledged by the Applicant and will be addressed by future Application submittals. Review of proposed site water and wastewater engineering will continue upon the receipt of additional design information.**

Wastewater Engineering Report

a. Section 2 - The estimate of maximum day flows shall use the Westchester County Health Department guidelines for flows per bedroom. **Not Addressed.**

b. Section 2 - The design of the sanitary sewer conveyance and pumping system shall be based around the peak hourly flow, not the maximum daily flow, with consideration for pump station fill time at more typical flows. **Addressed.**

c. Section 4 - It is noted that design calculations for the pump station and force main discharge will be included in future submittals. **Partially Addressed. Preliminary calculations were provided and additional detail will be provided in future submittals, as noted.**

d. Section 4 - Future discussion of pump station design should include system controls and emergency power. **Not Addressed.**

Water Engineering Report

e. Section 2 - The estimate of maximum day flows shall use the Westchester County Health Department guidelines for flows per bedroom. **Not Addressed.**

f. Section 2 - The design of the potable water distribution system shall be based around the greater of the peak hourly flow or fire flow demands, not the maximum daily flow. **Addressed.**

g. Section 3 - Please provide additional information on water distribution system demands in the Windsor Farms district to justify the availability of adequate flow and pressure, as well as additional information on the fire flow test, including the location of the hydrant that was opened and the time of day of the test. We note that there was a significant drop in residual system pressure during the fire flow test, which was run at a relatively low flow for a 10-inch diameter pipe. Please comment on whether the observed residual pressure drop is due to friction losses

in the pipe or if the meter pit is restricting the available flow. **Partially Addressed. A discussion of fire flow requirements and availability along with calculations was provided, and is noted to be expanded in future revisions of the report. The significant residual pressure drop was not discussed; The Applicant should evaluate whether the existing 6" meter is appropriately sized given the added demand.**

h. Section 3 - It is noted that additional review of flow availability will be required when the project's fire flow requirements are known. **Not Addressed. It is noted in the report that more detail on fire demands will be provided in future revisions of the report.**

Utility Plan and Details

i. SP-3 - Some portions of the water and sewer main alignments do not appear to meet the required 10-foot horizontal separation. Please confirm that adequate separation exists in future submittals. **Addressed.**

j. SP-3 - While we note the preliminary nature of these plans, an initial review of the proposed pump station location does not show much space or provisions for access, controls, and emergency power. **Not Addressed.**

k. D-2 - We note that the details and notes are inconsistent with each other and with the Engineering reports with regards to water main material (i.e. PVC water main in detail on sheet D-2, class 54 ductile iron pipe in notes on sheet D-2, class 52 ductile iron pipe in Engineer's report). Please review and correct for subsequent submittals. **Partially Addressed. Notes on Sheet D-2 match the Engineer's report (both specify class 52 ductile iron), however the PVC detail remains.**

l. D-2 – Please provide clarification about the method of pipe restraint. There is a detail for thrust blocks on D-2, the notes specify Field Lok mechanical joints, and the Engineer's report calls for Mega-lug fittings for restrained joints. **Not Addressed.**

m. The Applicant shall prepare a utilities profile to illustrate all layout of sanitary sewer and water service infrastructure in profile view. **Not Addressed.**

15. The proposed site layout will create a steep slope embankment along the western property line adjacent to Town-owned parcel. The Planning Board may wish to consider if a temporary chain link fence should be incorporated in the plan along the top of embankment on the property line. **Comment satisfaction is subject to acceptance by the Planning Board**

16. The grading and utilities plan does not include proposed electrical service utilities for the development. Future plan submittals shall include the proposed layout of site electrical service and must include documentation that proposed electrical demand may be met by existing electrical infrastructure available on the Route 6 corridor. **Addressed.**

17. The proposed site layout includes construction of access roadway terminating at the eastern property boundary of the adjacent Town of Somers owned parcel (the Windsor Farms parcel). It is our understanding that the Town of Somers may wish to pursue

development of a conceptual park layout for adjacent Town owned parcel so that it can be coordinated with the current applications. Coordination of conceptual plan development should be contemplated by the Planning Board during review of the subject application. **Comment progress to be further discussed at the upcoming meeting of the Planning Board.**

18. The Applicant shall prepare a Tree Removal Plan that identifies all trees to be removed on the site. The Tree Removal Plan shall include a schedule that lists all trees to be removed by species and caliper and also shows all trees to be protected during construction. **Not Addressed, To be provided by future Application submittal.**
19. The provided site layout depicts the conceptual location of recreational playground facilities within two areas the proposed development. At the February 6, 2014 meeting between Town officials and the Applicant, alternatives to this playground layout were discussed. Please refer to the Town Planner memorandum, dated February 7, 2014, for a summary of meeting discussion.

Please feel free to contact our office anytime with any questions or concerns.

Sincerely,

Joseph C. Barbagallo, P.E., BCEE
Consulting Town Engineer

PLANNING AND ENGINEERING DEPARTMENTS

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Town of Somers

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Director of Planning
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MEMORANDUM

TO: Town of Somers Planning Board

FROM: Syrette Dym, Director of Planning

DATE: March 6, 2014

RE:

Project:	Hidden Meadow – Town Board Referral
Applicant:	The Kearney Realty & Development Group
Location:	16 Route 6 (Section 15.07 Block 1 Lot 6)
Zoning:	R80 Residence District
Actions:	Request for Designation of the MF-BP Multifamily Residence Baldwin Place Floating Overlay Zone – Preliminary Subdivision and Site Plan Approval Application

Application Request:

By original application dated September 27, 2013 and received by the Town Board on September 27, 2013 and by the Planning Board office on September 30, 2013, The Kearney Realty & Development Group seeks to develop a 16.7 acre parcel located on Route 6 that is currently zoned Residence District R-80 with 53 townhouse type dwelling units through application of the Multifamily Residence Baldwin Place MFR-BP Floating Overlay district (Section 170-13.A Town Code) that would permit development at the requested density and unit type. Specifically, there will be 45 townhouses on individual fee simple lots, of which 8 will be affordable. In each of those 8 affordable townhomes, there will be a first floor affordable one-bedroom rental unit to be rented out by the owner of the three-bedroom affordable townhouse building above, for an additional 8 affordable units, or total of 16 affordable housing units.

In furtherance of that original application, the Applicant submitted an application for preliminary subdivision approval and site plan approval with accompanying applications for environmental permits that include those for steep slopes, wetland and watercourse protection, and stormwater management and erosion and sediment control, all dated December 18, 2013. An Application for a tree removal permit with tree removal plan will follow after completion of a tree survey, currently being undertaken.

Background

Preliminary Application for MFR-BP Overlay District and Town Board Actions

At the Town Board meeting of October 10, 2013, the Town Board reviewed the Applicant's preliminary development concept plan and submission letter. After review and discussion regarding the proposal, the Town Board indicated its opinion that the MFR-BP Floating Zone could be applied to this site, but that this opinion was not binding and was subject to all future analyses and studies.

The Town Board decided that the Planning Board was best suited to carry out the SEQR environmental review process. Therefore, the Town Board referred the application to the Planning Board for its review under the procedures of Section 170-13C and, asked the Planning Board to act as lead agency as part of a coordinated review under SEQR (6 NYCRR Part 617).

The additional actions undertaken by the Town Board under Section 170-13C. (1)(a)[5][f] at its meeting of October 10, 2013 included the establishment of an application fee and escrow fee.

Preliminary Actions by Planning Board

Planning Board Meeting of November 13, 2013

- Planning Board declared its intent to establish itself as Lead Agency
- Planning Board determined the Proposed Action to be a Type I Action
- Notice of intent was sent to all involved agencies; responses required by December 19, 2013
- Planning Board in receipt of correspondence indicating no objection to Planning Board as lead agency from:
    - NYC DEP(12-18-13), NYS DEC Ret.3 Division of Environmental Permits (11-25-13),
    - NYS Affordable Housing Corporation (12-3-13),
    - NYS Office of Parks, Recreation & Historic Preservation (12-6-13;11-25-13)
    - Westchester County (11-25-13)

Planning Board Meeting of January 8, 2014

- Planning Board accepts lead agency status

- Receipt of correspondence from Open Space Committee dated November 27, 2013

Basis of Comments

Preliminary Subdivision, Site Plan and Environmental Permit Applications to Planning Board- Considered at Planning Board Meeting of March 12, 2014

- Cover Letter – February 26, 2014
- Site Plan Set (11 sheets), last revised February 26, 2014.
- Recreation Figures 1 through 3, dated February 25, 2014.
- Full Environmental Assessment Form & Supplemental Reports, dated February 26, 2014, including but not limited to the following revised / additional items:
- Appendix A: Full Environmental Assessment Form – Part 1 Attachments.
- Appendix C: Stormwater Pollution Prevention Plan.
- Appendix D: Pollutant Loading Analysis.
- Appendix E: Water Engineering Report.
- Appendix F: Wastewater Engineering Report.
- Appendix J: Fiscal Analysis.

Nineteen (19) hardcopies of the above referenced items are being delivered to the Town for distribution to the Planning Board (7 copies), Town Board (6 copies), Town Attorney (1 copy). Town Planner (2 copies) and Town Engineer (1 copy), the Armey Corps of Engineers (1 copy) and the Westchester County Department of Planning (1 copy). In addition to the hardcopies, twenty-five (25) CD's, with a corresponding letter of transmittal, containing the above referenced items are also enclosed. The CD's are provided for distribution to the interested and involved agencies under SEQRA.

Plans

- Site Plan Set (10 sheets), **dated February 26. 2014 – Insite Engineering**
  - EX-1 - Existing Conditions Plan,
  - SP-1 – Layout and Landscape Plan,
  - SP-2 – Grading Plan
  - SP-3 – Utilities Plan
  - SP-4 – Erosion & Sediment Control Plan
  - PR-1 – Road Profiles
  - LP-1 - Lighting Plan
  - D-1 – Details
  - D-2 – Details
  - D-3 – Details
  - D-4 – Details

Prior Submitted Plans

- Preliminary Subdivision Plat – 1-29-14 – Insite Engineering
- Typical Unit Plans – Sheet A1 - Drawing, dated January 16, 2014 – Coppola Associates

Other

- Watershed Inspector General Office Letter – February 25, 2014
- Open Space Committee Memorandum – February 26, 2014
- Town Attorney e-mail- February 26, 2014
- Frederick P. Clark Associates, Inc. – Traffic Review Proposal – February 24, 2014

Main Issues for Planning Board Meeting of March 12, 2014

Town Position of Development of Future Park Property and Implications for Hidden Development Site Plan

In order to best guide the Planning Board in assessing the alternative locational provisions of the required onsite recreation, it is important for the Board to understand the long term intentions of the Town regarding the adjacent park property.

The land is designated as park on the town assessment rolls and as part of approval of Windsor Farms was deeded to be used for park, recreation and open space purposes by the Town. The Parks and Recreation Board and Superintendent of Parks and Recreation have identified the need for additional playing fields in the Town. At a meeting with the Town Supervisor and the applicant on February 6, 2014, the applicant agreed to provide an easement for the access road to the park, providing water and sewer lines to the park associated with the roadway, provide a comfort station relative to the recreation area and have his traffic consultant approach NYSDOT to get further input regarding potential future park access along Route 6. The applicant's traffic consultant had preliminary feedback from DOT indicating that the project driveway on Route 6 could only handle traffic from one playing field in the park in addition to project generated traffic and. therefore, additional input regarding potential additional park development is needed from DOT. A mechanism for securing future development of this access road on the applicant's property was not determined.

The Town Consulting engineer requested the Town Board to fund the preparation of a concept plan for the park to determine what the property could generate given environmental constraints prior to input on any traffic access constraint input. Such plan is also needed to help identify location and specifics of project related recreation that might be placed here. Authorization for undertaking preparation of this concept plan is pending.

At a minimum, the Town should provide direction as to whether it wants to keep its options for future development of this adjacent property as an active recreation park open and, therefore, whether it would like to see a future access road on the applicant's property as part of its consideration of application of the requested MFR-BP overlay district.

Provision of Required On-Site Recreation

The issue of amount type and location of the 8,700 square feet of open space required by seciton170-13.A(14)(a) is still an item of discussion and decision by the Planning Board.

Based on discussion at the Planning Board meeting of February 12, 2014, I directed the applicant to prepare alternative layouts for review and comment by the Board. The submission package of February 26, 2014 presents the following possible alternatives:

1. **Applicant's Preferred Alternative – as identified on SP-1 Layout & Landscape Plan (2-26-114).** In this plan, a 1,400 square foot recreation area containing a gazebo and playground is located in the traffic circulation island at the southern end of the proposed project loop road. An additional 7,300 square feet of recreation area, as yet undefined, is proposed to be provided on the adjacent Town owned park parcel to the west of the subject property.

In answer to questions regarding provision of this recreation area, the Town attorney has determined that the recreation is required and is required on site. Therefore, as expressed in his e-mail of February 26, 2014, location of the recreation area off-site on the Town park parcel would require a text change (preferable to a zoning variance) by the Town Board to allow such action.

Even if the Town Board should agree that this were an appropriate location for the required amenities and agree to enact an appropriate text change, the following issues would still remain to be addressed.

a. The Planning Board must approve the recreation area with regard to its "location, design and adequacy" as per 170-13A(14). What is the optimum location on the adjacent site and what should the facilities consist of? Can these facilities be planned without placing them within the context of an overall future park plan? Access to these facilities from project site without benefit of completed park access road would have to be identified and incorporated into site plan and environmental process. Who would be allowed to use these facilities? Just project residents or all town residents? If all town residents, who would bear liability and maintenance costs – Town or homeowner's association? Or would text change be written to make these Town responsibilities and should they be?
b. Environmental impacts of building on designated adjacent land has not yet been explored. Impacts on this land would have to be incorporated into environmental assessment. What additional SEQRA actions would this require? This would have to be carefully crafted to avoid issue of segmentation for any future coordinated assessment of development of facilities on park site.

2. **Alternative 1 – Proposed Site Plan, No Access Road to Town Park; 1,400 sf Gazebo/Playground Area and Multipurpose Recreation Field and Multi-Sport Court on northern edge of site adjacent to Route 6**

a. This alternative does not raise issues related to use of adjacent Town park property with regard to text changes and environmental review but does not provide potential future roadway access to a future developed park

3. **Alternative 2A – Proposed Site Plan, Access Road to Town Park, 1,400 sf Gazebo/Playground Area and Multipurpose Recreation Field and Multi-Sport Court between proposed access road and Route 6**
   a. The active recreation fields are located within the front yard setback and will require crossing of park access road when constructed by project residents.

4. **Alternative 2B – Proposed Site Plan, Access Road to Town Park, 1,400 sf Gazebo/Playground Area and 3,650 sf Multipurpose Recreation Field and 3,650 sf Picnic Barbecue area and 30'X50'Multi-Sport Court at southern edge of property within Rear Yard Setbacks**
   a. There is a nonintegrated, separated recreation area in close proximity to residential units with a reduced size recreation field.
   b. Is there a reconfiguration of units that would permit a larger integrated recreational area in this southern end of the property?

It should be noted that The Willows, the other MFR-H development in town with about double the units at 120 dwelling units, has a recreation area that consists of a children's playground area, swimming pool, two tennis courts and what appears to be a platform tennis court converted to a basketball court. The suitability of facilities and design of this area is yet to be determined by the Planning Board.

Addressing Issues of Watershed Attorney General

The issues raised by the Watershed Attorney General in his letter of February 26, 2014 is that the proposed Hidden Meadow project as proposed would likely cause significant adverse environmental impacts by "exacerbating existing pollution problems in the Amawalk Reservoir and its drainage basin - a key component of the New York City Croton Drinking Water Supply System. As such, he is recommending the issuance of a positive declaration and preparation of a draft environmental impact statement.

Woodard & Curran is reviewing the detailed technical objections in this letter, in the applicant's most recent submission and will provide input to the Planning Board on this issue.

Addressing Issues of Open Space Committee

The Open Space Committee, in its memorandum of February 26, 2014, has expressed its concerns that there are unresolved issues relative to wild and endangered species, Westchester County and Somers species of concerns, and impacts to biodiversity on the site and adjacent park site should it be developed. A natural features expert from Woodard a & Curran is researching these issues as discussed in a conversation with the Town Director of Planning and Rob Wasp on March 4, 2014. An e-mail explaining a preliminary direction on these issues was made available at a meeting of Thursday,

March 6, held to discuss many outstanding issues on the project prior to the Planning Board meeting.

EIS vs. Negative Declaration

Both the Watershed Attorney General and the Open Space Committee have questioned whether the SEQRA process should be heading toward a Negative Declaration or a Positive Declaration and the provision of a Draft Environmental Impact Statement.

Up to this point, the applicant has indicated its preference for a negative declaration and has provided the analysis materials requested by involved and interested agencies in an effort to answer questions and incorporate any required mitigation as part of the project. By so doing, the applicant hopes to have the board consider all potential impacts and made a finding that there are no significant adverse impacts that would require further analysis.

On the other hand, the two issues of stormwater and watershed impacts and impacts on species of conservation concern as well as wild or endangered species are still being raised as inadequately addressed.

The Board could continue to pursue analyses leading towards satisfying the concerns of these agencies and committees and leading towards a negative declaration or determine that a focused EIS within specified time frames should be pursued. As indicated at the meeting of March 6, 2014 (see attached agenda and attendance list), the Planning Board needs to develop a so-called "scope" of remaining potentially significant impacts that need to be fully studied. The "scope" will be prepared by the Town Planning Director and Town Consulting Engineer for discussion at the Planning Board meeting of March 13. 2014.

The applicant has prepared a draft Part 2 and 3 for review by the Board so the Board can identify which, if any significant impacts will result from the project and whether mitigation for these impacts has been incorporated as part of the proposed project. This discussion could happen at the Planning Board meeting of March 12, 2014.

Need for Town Traffic Consultant

As a result of the meeting of February 6, 2014 with the Supervisor, Applicant and Parks and Recreation Superintendent and Board Chairman, the issue of traffic access and intensity of development of the adjacent park property was an issue of discussion. Although NYS DOT has issued its opinion that the project itself will have no significant impact on traffic on Rote 6 with the incorporation of the proposed left turning lane and the fact that the Long Form EAF indicates that the project traffic generated does not reach the threshold of a significant impact, issues of future park related traffic flow and treatment of the adjacent sites in a coordinated manner raised the issue as to whether the Planning Board should have its own traffic consultant reviewing these issues.

As such Mike Galante of Frederick P. Clark Associates was asked to prepare a scope of services. The Planning Board should discuss whether it believes such services are needed.

Timing of Application of MFR-BP District by Town Board
The applicant has indicated that he is working to obtain application of the overlay zoning district by the Town Board as soon as possible. Based on the zoning, it is clear the Town Board needs to be able to make findings regarding the 16 criteria of Section 170-13-A 1-16 in order to proceed with such a determination. On review, several of those items are yet to be determined, specifically item (9) Drainage and item (14) Recreation area and open space. Additionally, the question is, can the Town Board, even if the above issues are resolved, take action prior to completion of SEQRA, i.e., before either issuance of a negative declaration or, if a positive declaration and DEIS, until issuance of findings? Based on input from the Town Attor4ney at the March 6, 2014 meeting (see attached), since the Town Board must undertake the actions of applying the MFR-BP overlay district, extend the sewer district and petition the County for extension of the water district as well as additional actions, the Town Board cannot act until SEQRA is complete.

Site Plan Issues –Review of the Site Plan submission package has raised the following questions.

SP-1 Layout & Landscape Plan

Parking – The minimum required visitor parking is 23 spaces. Although the plans identify the 23 spaces, the parking calculation list only identifies that 15 are for visitors. This needs to be corrected. .

Building Setback – As previously mentioned to the Planning Board by the applicant, the applicant will be seeking a reduction of two setback requirements. Setback from adjoining lot lines in single family residence districts are required to be 100 feet in the MFR-BP district. At the southern and western property liens where the provided setbacks are 52 feet (adjacent to the Stonewall Farm property) and 58 feet to the west (adjacent to the Town park property) respectively, the provided buffers do not meet the 100 foot requirement. The Planning Board , as per Section 170-13A(6) (a) may permit a reduction in these setback requirements if it determines that the objectives of such setbacks can be met with lesser distances considering the neighboring uses, topographic conditions, existing vegetation or other factors.

Section 170-13A(6)(b) requires buffers of 30 feet along property lines across a local street from any property in a residence district. Although Route 6 is not a "local" street, this 30 foot buffer has been maintained along the frontage. The buffer is intended to remain in its natural vegetative state. However, a portion of this area will be removed for construction of the left turn lane into the project. The current Layout & Landscape Plan (SP-1) does not show any additional evergreen planting as provided for in Section 170-13A(6)((b)[3]. Once the tree survey is provided, the Planning Board can determine

whether additional evergreen screening should be provided along the Route 6 roadway frontage.

Trees – It appears that a tree is shown to be located within the driveway of building 42 B. This should be corrected.

Retaining walls – There appear to be retaining walls shown rear of a number of the units. A detail of this retaining wall should be provided with information indicating the range of heights from lowest to highest materials, and length from shortest to longest. .

Road B – The grade of 5% at the intersection with the main project roadway will need consideration by the Planning Board.

-

Refuse Collection Storage and Treatment – Section 170-13A (10) indicates that refuse collection, storage and disposal is subject to Planning Board approval. It further states that: "The outside storage of refuse, if permitted, shall be in rodentproof containers conveniently located and enclosed or otherwise screened from view. Such facilities shall comply with all setback requirements applicable to principal buildings. Submissions by the applicant indicate that garbage cans for all three bedroom units will be stored inside garages and that for the eight affordable one bedroom units; they will be stored on the porches. It should be noted that, based on the typical unit plan provided by Coppola Associates large scale plan of (1/27/12), interior garage dimensions are 12'1" by 21'1". The porch identified for location of the garbage can for the one bedroom affordable units is in fact the front entryway to the unit with a dimension of three feet by eight and a half feet. In answer to my previous comment that these front porch container locations did not appear to meet the conditions of being screened or enclosed, a revised small scale plan by the architect dated February 26, 2014, submitted as part of the submission book, shows what appears to be some type of fence along the front of the porch. No details of this fence are given. While it might provide some coverage for the garbage can, it also appears to be blocking the main entrance window of the unit. Details of the height, length and materials of this screening need to be provided. .

APPLICANT'S SUBMISSION PACKAGE. COMMENTS

Appendices C-F – To be Addressed by Woodard & Curran

EAF Parts 2 and 3 – The Planning Board can utilize the materials provided to help make a determination regarding whether the project will result in any significant environmental impacts that have not been mitigated, and help to make a determination leading toward a negative declaration or a positive declaration and preparation of an EIS, narrowly scoped though it might be in terms of issues required to be addressed.

Appendices G&H - Traffic Report and Letter

Reviewed by Town Director of Planning.

Appendix I – Housing Action Council Letter – January 29, 2014
The letter indicates that purchasers would have incomes that do not exceed 80% of the median income of Westchester County residents. However, since the letter also indicates that the affordable units will be marketed in accordance with the Affirmative Fair Housing Market Plan Requirements, the units will more likely be priced to target families whose incomes do not exceed 70 % of the Westchester median income.

Appendix J – Fiscal Analysis – February 24, 2014

My comments of memorandum of January 6, 2014 have been addressed and the analysis provides guidance for the potential fiscal impacts that could be anticipated from the project. With regard to school children generation, standard multipliers indicate there would be no significant impact on the school system in terms of costs or availability of seats. At the very high end of child generation, a local example of the Willows, if experienced here, could have a more significant impact on costs and seat availability. Those impacts have been disclosed. An additional closet added to bedroom 1 in the two bedroom market rate unit as shown in the small scale typical unit plans of February 26, 2014, while taking away some space in the second floor study, does not preclude the use of this room as a bedroom that might increase the child generation rate.

Concerns expressed by the Somers Assistant Superintendent for Business for the Somers Central Schools District in a letter of January 29, 2014, written in response to questions regarding the Somers Crossing project, regarding traffic issues, are relevant for this project. Those concerns relate to the impact of construction on the flow of school buses in the vicinity as well as the impact of stopped buses on future traffic flow on Route 6. Please address these issues for this project.

Appendix K – Threatened and Endangered Species Assessment and Wetland Report - January 22, 2014 To be Commented on by Woodard & Curran

Applicant's Responses to Comments – Insite Engineering Cover Letter for Submission for Planning Board Meeting of February 12, 2014

Town Director of Planning Memorandum dated January 2, 2014
Full EAF – Part 1
D.2.j. **As indicated by the Applicant's traffic engineer in their letter of January 24, 2014, the proposed access road to the adjacent Town property necessary for its development with active recreation is likely only able to handle traffic generated by one new ball field. Continued discussions regarding optimum future development of the park and participation by the application are ongoing with the Town.**

1. Information regarding lot size and size of units. There needs to be detailed information about the range of sizes of the fee simple lots. There also needs to be information regarding unit sizes for market rate and owner and rental affordable units. Interior amenity treatment of affordable units versus those of market rate units needs to be provided. Floor plans of market rate and owner and rental

affordable units should be provided. **Partially addressed – Interior amenity treatment still needs to be addressed.**

2. Tree Survey and Landscape Plan –Once the tree survey and tree removal plan is complete, the applicant should prepare several sections showing the visual impact of the proposed plan on views from Route 6. A Visual Impact Addendum sheet should be prepared and submitted. – **Not Addressed – Needs to be submitted with future submissions.**
3. School Children Generation– In addition to identification of the number of school children generated as identified by the Rutgers study, the applicant should identify the number of school age children generated by the Willows development, identifying total number of units and bedroom type, as a local comparison of school generation rates for townhouses. – **Addressed.**
4.

Compliance with Zoning

Conformance with Section 170-13.A.

1. **Addressed. There still needs to be approval by the Planning Board for this disturbance as part of the project approval.**
2. (7) Traffic – Adequacy to be determined after review of Traffic Impact Study. **Relationship to accessway to adjacent park and facilities still to be determined.**
3. (10) Refuse Collection –**Please provide a concept plan for location of garbage cans and screening for affordable units. Further details regarding proposed fence on small scale plan as described above, needs to be provided.**

Cc: Town Board
Town Clerk
Roland Baroni
Open Space Committee
Joe Barbagallo
Ken Kearney
Rich Williams

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C-
PB
TP
CTE ?
applicant

Ecological Solutions, LLC

Connecticut
1248 Southford Road
Southbury, CT 06488
Phone (203) 910-4716
ecolsol@aol.com

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PLANNING ENGINEERING
TOWN OF SOMERS

March 3, 2014

Ken Kearney
c/o Kearney Realty & Development Group
PO Box 925
Baldwin Place, NY 10505

641

Re: Responses to Comments from Town of Somers Open Space Committee
dated February 26, 2014
Hidden Meadow Property
Town of Somers, Westchester County, New York

Dear Ken:

The following information is provided in response to the written comments from the Town of Somers Open Space Committee dated February 26, 2014. Attached is my 2013 and current Endangered/Threatened Species: Scientific License.

Response to Bullet Point 1:

This comment pertains to the possible future development of the adjacent Town property. Any development of this property would be undertaken directly by the Town, and any associated lighting would be studied separately by the Town.

Ecological Solutions, LLC is unaware of documented impacts to birds and amphibians from exterior lighting sources such as used for ballfields. However, it is known that this type of lighting may impact bat species that potentially could forage for insects attracted by exterior lighting. To potentially minimize lighting impacts the US Fish and Wildlife Service in the attached document (Indiana Bat Project Review Fact Sheet – May 2012) recommends the following: (e.g., limit number of lights, direct lights downward, fully shield lights, use motion sensors or timers).

Response to Bullet Point 2:

The focus of the "Threatened and Endangered Species Habitat Suitability Assessment and Wetland Report" was to determine if potential habitat exists for State or Federally regulated species on the property. As per the report's introduction actual field surveys were conducted on the property "Field assessments were conducted on July 25 and August 21, 2013 and January 14, 2014 and habitat on the property was observed..." This study was completed in addition to obtaining information from the New York State Department of Environmental Conservation (NYSDEC) Natural Heritage Program correspondence and the USFWS list of threatened and endangered species for Westchester County.

Biodiversity of the property was noted during the analysis of the property for potential habitat for these species and the data is included in this reports. A formally titled biodiversity assessment report was not prepared since the data was already included in the two submitted reports.

Response to Bullet Point 3:

The "Threatened and Endangered Species Habitat Suitability Assessment and Wetland Report" addressed known occurrences and potential habitat for State and federally listed species. The Westchester County Endangered Species List contains species that are endangered, threatened, and special concern in the County. This list was consulted during the field surveys and only wood thrush a special concern species in the County was noted in the vicinity of the property. The wood thrush is a migratory bird species that is highly mobile and could be expected to utilize this property as well as any other wooded area in Westchester County. Wood thrush though still numerous in New York State are declining in number due in part to cowbird nest parasitism at the edges of fragmenting habitat and to acid rain's depletion of its invertebrate prey.

Response to Bullet Point 4:

The mitigation measures proposed in the "Threatened and Endangered Species Habitat Suitability Assessment and Wetland Report" including the tree clearing timeframe (October 1 to March 31) are typically recommended by both the USFWS and NYSDEC. (Indiana Bat Project Review Fact Sheet – May 2012). The fencing referenced in the "Threatened and Endangered Species Habitat Suitability Assessment and Wetland Report" is not silt fencing but rather orange fencing that is to be placed in the field to clearly demarcate areas to be cleared so that the tree removal contractor has a guide to use in the field.

Response to Bullet Point 5:

The "Threatened and Endangered Species Habitat Suitability Assessment and Wetland Report" provided a thorough analysis of wetland functions and impacts. It appears that the comment is directed toward the Town's consultant for agreeing with the analysis provided. To reiterate there is no impact proposed to the wetland on the property and only minor impacts adjacent to and associated with the Route 6 improvements. The "Threatened and Endangered Species Habitat Suitability Assessment and Wetland Report" is accompanied by the Full Environmental Assessment Form (Part 1, 2, and 3). This form (which is filled out by the NYSDEC Mapper application with respect to threatened and endangered species) is provided to provide the necessary documentation that no significant adverse environmental impact will occur.

Response to Comment 6:

The information contained within the "Threatened and Endangered Species Habitat Suitability Assessment and Wetland Report" will be reviewed by the Town's environmental consultant, NYSDEC, USFWS, and US Army Corps of Engineers during the SEQRA and

wetland permitting process for the project. These Agencies are responsible for regulating threatened and endangered species and potential habitat in New York State and not a third party consultant. Besides the Town's environmental consultant, to date none of these agencies have offered any comments through the SEQRA progress regarding potential impacts to threatened and endangered species. The applicant has hired a professional biologist licensed by NYSDEC and paid for the Town of Somers to higher a consultant to perform a non-biased review of the project. Can you say that the project will not negatively impact the wood thrush due to its migratory nature, and significant amount of forest to be preserved.

If you need additional information please call me at 203-910-4716.

Sincerely,

Michael Nowicki
Biologist

C
PB
TP

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HENRY M. HOCHERMAN
RETIRED

February 28, 2014

RECEIVED
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TOWN OF SOMERS

Via Electronic and First Class Mail

Hon. John Currie, Chairman
and Members of the Planning Board
Town of Somers
Somers Town Hall
335 Route 202
Somers, New York 10589

635

Re: Merritt Park Estates Subdivision
Town File No. 767
Fifteenth Request for Ninety-Day Extension of Final Subdivision Approval

Dear Chairman Currie and Members of the Planning Board:

At its meeting on December 11, 2013, the Board granted a fourteenth 90-day extension of Mancini Building Corp.'s ("Mancini") Conditional Final Subdivision Approval (the "Final Approval") for the above-referenced subdivision to March 31, 2014. We are writing to request a fifteenth 90-day extension pursuant to Town Law Section 276(7)(c), to and including June 30, 2014 (the first business day after the ninetieth day, which is a Sunday).

As you may recall, in our last request we reported that the off-site drainage improvements and sewer and water main extensions on the Heritage Hills property have been completed, that the roads in Heritage Hills have been patched, and that the other areas of disturbance on that property have been seeded, mulched and stabilized. Since the last extension was granted, Mancini moved forward with road drainage work on its property. Mancini has performed a majority of the blasting required for the road, drainage and utility installations but has not been able to make much more progress on its site infrastructure because of the harsh winter conditions we have been experiencing. As soon as the weather breaks, Mancini expects to continue with the on-site infrastructure work after which it plans to install the off-site drainage improvements on the Lake Lincolndale Property Owners' Association ("LLPOA") property. We understand from our client that it has been in regular contact with Mr. Steve Woelfle and that there have been no issues with the work.

Because the infrastructure improvements will not be completed by the March 31st expiration date, we respectfully request that the Board grant an additional 90-day extension of Final Approval, to and including June 30, 2014, at which time we will report on the status of the work.

Kindly schedule this matter for the next available Planning Board meeting and let us know if an appearance is required. Thank you for your courtesy.

Respectfully yours,

Hocherman Tortorella & Wekstein, LLP

By: Geraldine N. Tortorella

GNT:mc
cc: *(via electronic mail)*
Syrette Dim, AICP
Roland Baroni, Esq.
Joseph P. Eriole, Esq.
Mr. Steve Woelfle
Mr. Richard Mancini
Mr. John Mancini
Joseph Riina, P.E.

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PLANNING AND ENGINEERING DEPARTMENTS

Telephone
(914) 277-5366
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Town of Somers

WESTCHESTER COUNTY, N.Y.

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Steven Woelfle
Principal Engineering Technician
swoelfle@somersny.com

Syrette Dym, AICP
Town Planner
sdym@somersny.com

DATE: **March 5, 2013**

TO: **Planning Board**

FROM: **Syrette Dym, AICP**
Town Planner

RE: **Merritt Park Estate Subdivision 15th Time-Extension**

On February 28, 2014, a request for a fifteenth 90-day time extension of Conditional Final Subdivision Approval was received in relation to the above referenced project. On December 11, 2013, the Planning Board granted a time extension for the final subdivision approval to March 31, 2014. The current requested time extension would extend approval through June 30, 2014 (the first business day after the ninetieth day, which is a Sunday). The request for extension was received within the 90 day period.

Off-site drainage improvements and sewer and water main extensions on the Heritage Hills property have been completed. The roads in Heritage Hills have been patched and other disturbed areas have been seeded, mulched and stabilized. Road drainage work has commenced, including a majority of blasting required for the road, drainage and utility installations. Additional progress has been impeded by severe winter conditions. Once weather improves, onsite work will continue and off-site drainage improvements on Lake Lincolndale Property Owners' Association property will take place.

There has been regular contact with Steve Woelfle and there are no issues of concern. I have no objections to extension of the subdivision approval.

cc: Geraldine Tortorella, Esq.
RichardMancini
John Mancini

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C-
PB
TP
CTE
applicant

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

RECEIVED
MAR 3 - 2014
PLANNING ENGINEERING
TOWN OF SOMERS

March 3, 2014

Town of Somers Planning Board
335 Route 202
Somers, N.Y. 10589

RE: Hidden Meadow at Somers
16 U. S. Route 6
Tax Map # 15.07-1-6

Dear Chairman Currie and Members of the Board:

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Our office is in receipt of the February 25, 2014 comments from the Watershed Inspector General (WIG). We are keenly aware of project's obligations relative to SEQRA and the TMDL program. Hidden Meadows at Somers has been designed to meet the requirements of all the regulatory agencies with jurisdiction over the project and provide the lead agency with ample data to fulfill its hard look under SEQRA. Additional information, including a draft Part 2 and 3 of the Full Environmental Assessment Form has been provided to the Town of Somers as Lead Agency under SEQRA to assist them in evaluating the potential impacts. Supplemental information will continue to be provided as the process commences.

With respect to the technical comments offered in the letter we offer the following responses:

Water Quality:

1. This comment relates to the Pollutant Loading Analysis provided for the project. The comment can be broken into three parts, the loading concentrations used, the removal rates of the proposed stormwater management practices, and the existing TMDL loads in the Amawalk Reservoir. We note the following with respect to each of the items:
   a. The pollutant loading coefficients in the Pollutant Loading Analysis utilized the latest NYSDEC issued and approved loading coefficients being used in the Stormwater Retrofit Program. These are the accepted coefficients being used by the East of Hudson Watershed Corporation (EOHWC) (of which the Town of Somers is a member) for the evaluation and approval of phosphorus accounting from stormwater retrofits. We believe the region deserves a uniform approach to phosphorus accounting by endorsing the NYSDEC approach used in the Stormwater Retrofit Program currently being implemented by the EOHWC and its member Towns. The Stormwater Retrofit Program, being overseen by the EOHWC, is a subset of the SPDES General Permit for MS4's, and is one of the programs required by the NYSDEC to comply with the TMDL Implementation Plan. Since the comment is relative to the project's potential impact on the TMDL, it is appropriate to calculate the project's phosphorus impacts using the same methodology the NYSDEC requires the local municipalities (as part of the EOHWC) to use for the Stormwater Retrofit Program.

      The coefficients recommended for use by the WIG are taken from the Terrene Institute's *Fundamentals of Urban Runoff Management*, published in August of 1994. This document is almost 20 years old, and does reflect the recent advances and recommendations/guidance issued by the NYSDEC. The Hidden Meadow at Somers Pollutant Loading Analysis utilities the coefficients from the January 20, 2012 letter from Mr. Robert Capowski, P.E. of the NYSDEC. This letter contains the coefficients required to be used in the Stormwater Retrofit Program. Again this is one of the programs that is being used to meet the TMDL Implementation Plan for the New York City East of Hudson

Watershed (NYCEOH).

The Hidden Meadow at Somers has utilized the coefficients cited in the NYSDEC's January 20, 2012 letter as this is the most recent data approved by NYSDEC and accepted for use. These are also the coefficients municipalities are required by the NYSDEC to use to demonstrate compliance with the obligations under the TMDL Implementation Plan.

b. The second part of the comment recommends utilizing the removal efficiencies from the outdated 2003 *New York State Stormwater Management Design Manual* (Design Manual). Developed approximately 11 years ago this manual has undergone two subsequent revisions in 2008 and 2010. One of the substantial revisions, present in the 2008 and 2010 versions is the addition of Chapter 10, the Enhanced Phosphorus Removal Standards (Chapter 10) for the NYCEOH watershed. Based on Town of Somers, NYSDEC, and NYCDEP regulations, Hidden Meadow at Somers is required to meet the Chapter 10 requirements. Chapter 10 requires additional design standards to be met, such that practices designed in accordance with Chapter 10 provide additional phosphorus removal. As stated in Chapter 10, "The goal of this chapter is to address design standards for 'enhanced phosphorus removal' for projects in phosphorus-limited watersheds. It has been determined that enhanced phosphorus removal is required to meet water quality objectives established for these watersheds."

Hidden Meadow at Somers utilized the removal efficiencies discussed in Chapter 10 because all proposed stormwater management practices (SMP's) meet the Chapter 10 design requirements.

This comment also recommends using the outdated 2003 *New York State Stormwater Management Design Manual* formula for calculating removal efficiencies for practices placed in series. Again, this formula is outdated with respect to the current standards the NYSDEC is applying with respect to the Stormwater Retrofit Program. The calculations for removal efficiencies presented in the project's Phosphorus Loading Analysis use the same methodology currently being approved for stormwater retrofits being implemented by MS4's as required by the TMDL Implementation Plan.

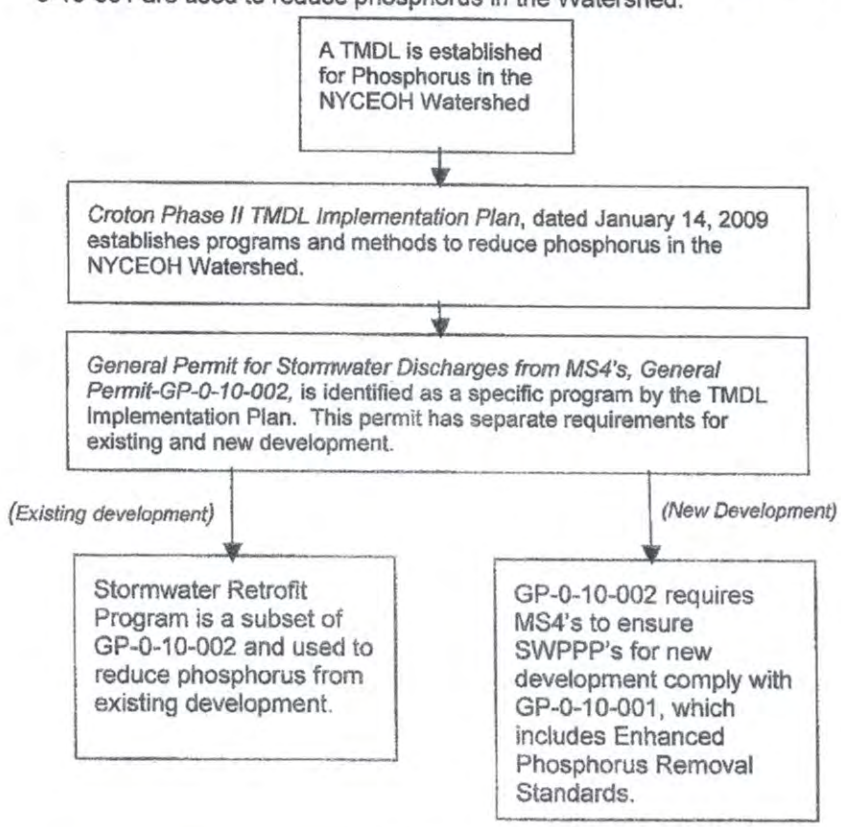
The third part of the comment indicates the proposed project should be overdesigned to accommodate for the existing TMDL. This comment is again inconsistent with the TMDL framework established by the NYSDEC. The TMDL Implementation Plan clearly states, that for simplicity and ease of local government administration, the plan is largely structured to use existing programs to achieve reductions. These programs include:

- Potential additional point source reductions.
- NYSDEC SPDES General Permit for Stormwater Discharges for Municipal Separate Stormwater Sewer Systems (MS4s) Permit No. GP-0-10-002.
- State and regional source control and agricultural programs.
- US EPA Filtration Avoidance Determination Program.
- Westchester County "Croton Plan".
- NYCDEP "Croton Strategy".
- NYCDEP EOH Water Quality Investment Funds.
- New York State non point source programs.
- NYSDEC – NYCDEP Coordinated Stormwater Enforcement Protocol.

The TMDL Implementation Plan in large part utilizes the *SPDES General Permit for MS4s, General Permit GP-0-10-002* (GP-0-10-002) to achieve phosphorus reductions. The stormwater retrofit program is one of the key parts of GP-0-10-002 being used by the TMDL Implementation Plan to reduce phosphorus loads from existing development.

For new development, the NYSDEC utilizes the *SPDES General Permit for Stormwater Discharges from Construction Activities, General Permit GP-0-10-001* (GP-0-10-001) to address phosphorus within the NYCEOH watershed. GP-0-10-001 specifically identifies the NYCEOH watershed as a watershed where Enhanced Phosphorus Removal Standards (Chapter 10) must be applied. This chapter limits SMP types and requires more robust practices requiring larger water quality volumes in most instances. As stated in Chapter 10, "The goal of this chapter is to address design standards for 'enhanced phosphorus removal' for projects in phosphorus-limited watersheds. It has been determined that enhanced phosphorus removal is required to meet water quality objectives established for these watersheds." In other words, new development projects designed in accordance with Chapter 10 will meet the water quality objectives required in the NYCEOH watershed. Beyond the additional requirements of GP-0-10-001 and the TMDL implementation plan, the NYCDEP has enacted regulations that require further stormwater treatment.

The following simplified flow chart has been provided for informational purposes and illustrates how the TMDL Implementation Plan, the Stormwater Retrofit Program and GP-0-10-001 are used to reduce phosphorus in the Watershed:



In addition to the programs utilized by the *Croton Phase II TMDL Implementation Plan,* the *NYCDEP Rules and Regulations from the Protection from Contamination, Degradation, and Pollution of the New York City Water Supply and its Sources*, require further stormwater treatment to be provided in new development projects. These requirements are for new development and are in addition to the requirements stemming from the TMDL Implementation Plan.

The Hidden Meadow at Somers project has been designed to meet the stormwater regulatory requirements of the Town of Somers, NYSDEC, and NYCDEP and mitigates potentially significant stormwater impacts. For existing development, many of the minimum control measures of GP-0-10-002 have heightened requirements for MS4's within the NYCEOH watershed. One of these heightened requirements is to comply with the Stormwater Retrofit Program. For new development, such as the subject project, GP-0-10-001 requires compliance with Chapter 10. As stated in the Design Manual compliance with Chapter 10 meets the water quality objectives of the phosphorus limited watersheds. By meeting these objectives, as well as additional NYCDEP requirements (providing two standard SMP's in series) the project has not only considered and addressed the Phosphorus TMDL, but exceeded the requirements of NYSDEC's Enhanced Phosphorus Removal Standards (Chapter 10).

2. Details, cross-sections and additional testing for the porous pavement sections will be provided as required by the local MS4 approving the SWPPP, as the project progresses.

Hydrologic Evaluation:

1. This comment indicates the SWPPP should be revised utilizing the new rainfall data issued by the Northeast Regional Climate Center (NRCC), as an alternative to the values published in the Design Manual (TP-40 values). A letter from NYSDEC was attached to the Watershed Inspector General's letter. This letter indicates designers may use either rainfall data, and as the designers we have selected the TP-40 values. It should first be noted that the Hidden Meadow at Somers SWPPP, will meet all regulatory requirements using either rainfall data. The effect of utilizing the suggested NRCC data versus the TP-40 values, is the suggested NRCC values cause the water quality volume to decrease, the peak flow from the 10-year storm event to decrease, and the peak flow from the 100-year storm to increase approximately 3 c.f.s. (100-year peak flows are in the order of 40 c.f.s.). As SWPPP designers we do not endorse these changes.

   For comparison purposes utilizing the TP-40 values, the required water quality volume is approximately 20% to 30% more than if the newer NRCC data is used. Therefore it is more conservative to utilize the existing TP-40 data, particularly considering the sensitivity of water quality and the TMDL in the NYCEOH watershed. If the new NRCC data was used as suggested, then the amount and size of the proposed stormwater management practices could be reduced. This seems to conflict with the previous Comment 1, in which the comment generally indicated additional stormwater treatment should be provided, beyond regulatory requirements, to overcompensate for existing phosphorus loads.

   With respect to water quantity, the TP-40 data produces peak flows that are greater than the NRCC data for the 10-year design storm. It is only the 100-year storm event that results in an increase in peak flows. To compare the magnitude of the increase, the 100-year pre-development peak flow generated by the NRCC data is approximately 44 c.f.s. The 100-year pre-development peak flow generated by the TP-40 data is 41 c.f.s. Utilizing the NRCC data results in a minor increase in peak flow in the 100-year storm event and a decrease in the 10-year storm event. Coupled with the probability that a 100-year storm event has a 1% chance of occurring in any given year (compared to the 10-year storm with a 10% chance of occurrence) the TP-40 rainfall data was selected for use in the project SWPPP as it provided a more conservative design for the more common rainfall events.

   The Design Manual allows a designer to select the rainfall data to use in a project SWPPP. Since the TP-40 data results in a higher water quality volume, and higher peak flows for the more frequent storm events, it was utilized in the project SWPPP.

2. This comment indicates a higher peak flow is obtained when the new NRCC 24-hour rainfall value is applied to the previous TP-40 distribution curves. As the author of the comment noted in his previous comment, NRCC has developed new distribution curves that are to be used when the NRCC 24-hour rainfall values are used. Morphing / combining the NRCC and the TP-40 values, as the author stated in this comment, provides a misleading comparison. It is more appropriate to compare the NRCC rainfall values and distribution curve to the TP-40 rainfall values and distribution curves, in order to provide a proper comparison. This comparison was discussed in the previous comment and results in a 3 c.f.s. difference for the 100-year storm event (44 c.f.s. using NRCC data and 41 c.f.s. using TP-40 data). Inventing ways to apply rainfall data, by mixing the NRCC and TP-40 data, for the purpose of anticipating a climate change event is not part of any published regulation, or guidance document issued by the NYSDEC, EPA, or NYCDEP.

   The Hidden Meadow at Somers SWPPP follows the current accepted industry standards and regulatory requirements. As noted in the previous comment, this office compared the new rainfall data issued by the NRCC with the TP-40 data. Based upon the comparison, it was determined the TP-40 data, which was utilized in the project SWPPP, produced a more conservative design for both water quality, and the more frequent storm events. For the low probability events there was an insignificant change in the data (3 c.f.s. +/- for a 100-year peak flow in the order of 40 c.f.s.). Therefore until such time as new data is published, reviewed and accepted by the NYSDEC, this office will not mix and misapply data, and will continue to follow the regulatory requirements, and industry accepted data.

Technical, Comment 3 through Comment 6, request modifications to the pre-development Tc path and post-development drainage areas. Currently the Hidden Meadow at Somers SWPPP uses a single subcatchment to model the pre-development condition. Based upon the following comments there was no objection to using a single subcatchment to model the pre-development condition. However, the following comments request the post-development drainage areas, in particularly subcatchment 1.4S (the remaining undeveloped area) be broken into several smaller subcatchments. The Hidden Meadow at Somers SWPPP model can be modified to accommodate this request. If the post-development subcatchments are re-divided into smaller areas as requested, it necessitates modifying the pre-development area as well. The subject comments do not mention modifying the pre-development boundary. If the pre-development area is not modeled in a similar manor as the undeveloped post-development areas, a proper comparison of the pre- versus post-development condition will not be attained. Not modeling the pre and post-development conditions similarly causes the post-development Tc paths to being artificially shortened, while the pre-development Tc path would remain longer because it is modeled as a single watershed to Design Point 1. Further explanation will be provided for each response below, but either way the pre or post-development models, particularly with respect to the undeveloped areas, should be modeled consistently if a real pre- versus post-development comparison is to be performed.

3. The pre-development Tc path is representative of the topography at the top of the watershed. The existing stonewall that causes a change in the flow path can be more clearly labeled on the drawings as requested.

4. The requested modification to Drainage Area 1.4S can be accommodated in future revisions of the SWPPP if determined to be appropriate by the lead agency / local MS4. This comment requests an additional subcatchment be added where it is proposed to re-direct stormwater through the existing stone wall. The re-direction of this runoff does not significantly alter the pre-development flow path. Therefore, if the post-development boundary is split to separately account for the flow from each area, the pre-development model should also be modified.

5. The requested modification can be accommodated in future revisions of the SWPPP if determine to be appropriate by the lead agency /local MS4. However, since this comment relates to an undeveloped area, as indicated above, the pre-development model should also be modified for a true comparison of pre versus post-development conditions.

6. The requested modification to Drainage Area 1.3S can be accommodated in future revisions of the SWPPP if determined to be appropriate by the lead agency / local MS4.
7. The soil restoration requirements required by the Design Manual will be added to the SWPPP as requested.

Erosion & Sediment Control

1. Phasing and sequencing will be provided in future submissions.
2. Typical with construction performed in the project locale woody material including stumps will be removed from the site. Future submissions can include a note on the Erosion Control Plan to indicate this.
3. A concrete truck washout facility detail can be provided on the project drawings in future submissions.
4. The requested bullets can be included in the SWPPP.
5. If determined to be appropriate by the lead agency / local MS4 the time to apply temporary stabilization can be adjusted beyond the regulatory requirements.
6. The percentage of annual rye in the temporary seeding can be increased if determined to be appropriate by the lead agency / local MS4.
7. Final access routes to the post-construction stormwater management practices will be illustrated on the layout and landscape plan as requested.

Summary

The opening remarks in the February 25, 2014 "Technical Appendix: Hidden Meadow at Somers" prepared by Mr. Don Lake, P.E., CPESC states the "preliminary stormwater pollution prevention plan for this project is of low quality and needs substantial improvement." This comment is inappropriate and misleading considering the above cited responses to the comments. The SWPPP for Hidden Meadow at Somers will provide additional details as the project advances through the SEQRA process to the permit review and approval process. In addition, further detail has already been included in the recently submitted SWPPP, beyond what was reviewed by Mr. Lake. Developing a SWPPP within the NYCEOH watershed is atypical when compared to other parts of the State because of the TMDL and overlapping regulatory oversight of municipalities, the NYSDEC, and the NYCDEP. The above comments demonstrate a lack of understanding of stormwater advances being made in this part of the State, particularly with respect to NYSDEC's review and approval of calculations being submitted to demonstrate TMDL compliance. A closer look at Mr. Lake's comments reveal his recommendations suggest the following:

- Utilize outdated methods for pollutant loading,
- Utilize new rainfall data that generates lower water quality volumes and lower flows for more common rainfall events.
- Inappropriately mix methodologies to generate rainfall events "to address anticipated future changes in precipitation patterns due to climate change,"
- Modify the post-development drainage areas to create an inconsistency between the pre and post-development models.

All of the comments offered, with the exception of recommending a smaller water quality volume be used, result in inappropriately skewing the modeling to generate higher post-development values. Good engineering practice would be to develop consistent pre and post-development models so that a true comparison can be made to ensure impacts are appropriately mitigated, without resulting in unnecessary efforts and land disturbance.

We look forward to discussing these comments in more detail with the Planning Board at the March 12, 2014 Planning Board meeting, we are confident that we can address open issues relating to SEQRA prior to the Board's determination of significance

If you have any questions or comments regarding this information, please do not hesitate to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
Jeffrey J. Contelmo., PE
Senior Principal Engineer

By: _____
Richard D. Williams Jr., P.E.
Senior Project Engineer

JJC/RDW/kf

cc: P. Bein, Watershed Inspector General (via email)
C. Silver, Watershed Inspector General Scientist (via email)
T. Snow, NYSDEC (via email)
C. Garcia, NYCDEP (via email)
M. Giannetta, NYCDEP (via email)
J. Barbagallo, Woodard & Curran (via email)
R. Wasp, Woodard & Curran (via email)
S. Dym, Town of Somers (via email)
C. Martabano, Esq.

Insite File No. 13155.100

STATE OF NEW YORK
OFFICE OF THE ATTORNEY GENERAL

ERIC T. SCHNEIDERMAN
ATTORNEY GENERAL

DIVISION OF SOCIAL JUSTICE
ENVIRONMENTAL PROTECTION BUREAU

February 25, 2014

By Overnight Mail

Planning Board
Town of Somers
335 Route 202
Somers, NY 10589

Re: Hidden Meadow at Somers, 16 U.S. Route 6, Tax Map #15.07-1-6

Dear Planning Board Members:

Enclosed are our comments on the proposed Hidden Meadow project. The Office of the Watershed Inspector General looks forward to working with the Town of Somers Planning Board and involved agencies as environmental review of the Hidden Meadow project proceeds.

Respectfully submitted,

Philip Bein
Watershed Inspector General
Assistant Attorney General
Environmental Protection Bureau
Office of the Attorney General
The Capitol
Albany, New York 12224
(518) 474-4843

Charles Silver, Ph.D.
Watershed Inspector General Scientist
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cc: Jeff Contelmo, Insite Engineering, Surveying & Landscape Architecture, P.C.
Cynthia Garcia, DEP
Matt Gianetta, DEP
Tom Snow, DEC
Richard Williams, Insite Engrg., Surveying & Landscape Architecture, P.C.

Comments of the Office of the Watershed Inspector General February 25, 2014

Hidden Meadow Town of Somers Westchester County, New York

The Office of the Watershed Inspector General ("WIG" or "WIG Office")[1] respectfully submits these comments recommending issuance of a positive declaration and preparation of a draft environmental impact statement for the proposed Hidden Meadow development, located in the Town of Somers, Westchester County ("Hidden Meadow" or "the Project"). Hidden Meadow is a multi-family town house/apartment development to be constructed on a 16.8-acre parcel proposed within the drainage basin of New York City's Croton Drinking Water Supply System. The Croton System, operated by the City of New York ("the City"), has historically provided drinking water to almost one million New Yorkers each day.

WIG submits these comments because Hidden Meadow, in its current form, would likely cause significant adverse environmental impacts by exacerbating existing pollution problems in the Amawalk Reservoir and its drainage basin – a key component of the Croton System. WIG's objective is not to oppose development of Hidden Meadow. Rather, WIG seeks to secure appropriate modifications to the Project to eliminate adverse water pollution impacts and to ensure that the Project complies fully with the federal Clean Water Act, New York's water pollution control law, and the State Environmental Quality Review Act ("SEQRA").

I. Summary

The existing site is forested with a centrally located, town-regulated, acre and a half wetland. The wetland drains offsite into the Muscoot River, which feeds the Amawalk Reservoir. The proposed Hidden Meadow development includes 45 townhouses and 8 affordable rental apartments. Approximately 8 acres of the site would be disturbed and 3 acres of impervious surfaces constructed.

As demonstrated in greater detail in the attached Technical Appendix, the draft Full Environmental Assessment Form Part 1 and related project application materials prepared by the project Sponsor do not support a finding that there would be no adverse environmental impacts from the Project in its present form and do not

[1] The position of WIG was established by Governor Pataki in Executive Order No. 86 on August 19, 1998, and continued in executive orders issued by successive governors. *See* 9 NYCRR § 5.86. WIG's role is "to enhance current efforts to protect the New York City drinking water supply from activities that have the potential to adversely affect the New York City Watershed reservoirs and tributaries." See id, § 5.86.

justify issuance of a negative declaration for Hidden Meadows.[2] The Sponsor's evaluation of the Project's pollution impacts and plans for mitigating them are flawed. Further environmental review under SEQRA and modifications to the Project are needed to correct these deficiencies and ensure compliance with applicable water pollution laws and regulations.

II. The Amawalk Reservoir and Phosphorus Pollution from Construction and Development

The proposed Project is located within the Amawalk Reservoir's watershed; accordingly stormwater runoff from the Project site will drain to that Reservoir. The Amawalk Reservoir is part of the Croton system of the New York City Watershed, which can supply as much as thirty percent of the water relied on by New York City and other communities each day. *Friends of Van Cortlandt Park v. City of N.Y.*, 95 N.Y. 623, 626 (2001). Water from the Amawalk feeds the City's New Croton Reservoir, is disinfected with chlorine, and then is distributed to consumers through a system of pipes.[3]

Pursuant to ECL § 17-0301, the New York State Department of Environmental Conservation ("DEC") has promulgated water quality standards for the Amawalk Reservoir, designating it a Class A water body. 6 N.Y.C.R.R. § 864.6. Class A waters are intended to be used as "a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing." 6 N.Y.C.R.R. § 701.6(a). DEC water quality standards prohibit discharges of pollutants into the Amawalk Reservoir "in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages." 6 N.Y.C.R.R. § 703.2. These standards also prohibit discharges into the reservoir of "[t]aste-, color-, and odor-producing, toxic and other deleterious substances . . . in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages." *Id.*

The Amawalk, like other reservoirs within the New York City Watershed, is "eutrophic," suffering from excessive algae in the growing seasons because of discharges of the pollutant phosphorus into these reservoirs.[4] Excessive algae

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[2] Materials reviewd by WIG include the draft Full Environmental Assessment Form Part 1 – Project and Setting dated 1/29/14; Pollutant Loading Analysis, dated 1/29/14; and Preliminary Stormwater Pollution Prevention Plan, dated 1/29/14; and construction drawings dated 1/29/14.

[3] New York State Attorney General's Office, "Reducing Harmful Phosphorus Pollution in the New York City Reservoirs Through the Clean Water Act's 'Total Maximum Daily Load' Program," July 5, 2000, at 6.

[4] New York City Department of Environmental Protection, "Proposed Phase II Phosphorus TMDL Calculations for Amawalk Reservoir," March 1999 ("DEP Amawalk Report"), at 2-3, 14.

growth impairs the taste and odor of reservoir water and depletes levels of dissolved oxygen in the reservoir's bottom waters, impairing aquatic life and releasing metals into the water.[5] Eutrophic conditions also result in increased levels of organic carbon in the water.[6]

As a result of the phosphorus pollution in the Amawalk, the reservoir fails to comply with water quality guidelines and standards established by DEC pursuant to State law and the federal Clean Water Act, 33 U.S.C. § 1251 *et seq*. The Amawalk's watershed is a "phosphorus restricted basin" because phosphorus concentrations exceed DEC guidelines, and are subject to additional federally mandated pollution controls called Total Maximum Daily Loads ("TMDLs"). *See* 10 NYCRR §§ 128-1.6(a)(80), 4.1(c); 33 U.S.C. § 1313(d).

In 2000, DEC submitted, and EPA accepted, Phase II TMDLs for the Amawalk and other City reservoirs.[7] Recent sampling data from 2003 through 2008 show that phosphorus concentrations in the Amawalk Reservoir have continued to increase.[8] The sources of the phosphorus pollution include upstream wastewater treatment plants and other point sources (including stormwater runoff discharged from municipal storm sewer pipes) and non-channelized stormwater runoff. Stormwater pollution from construction and development is of great concern for the Amawalk Reservoir. Because of the focal role of stormwater pollution in impairing that drinking water source, DEC determined in its Phase II TMDLs that phosphorus discharges to the Amawalk Reservoir must be reduced by 122 kilograms per year.[9]

The construction and development of land is a major source of phosphorus and other pollutants which discharge into the Amawalk Reservoir in stormwater runoff. "Stormwater pollution is one of the most significant sources of water pollution in the nation." *Environmental Def. Ctr., Inc. v. EPA*, 344 F.3d 832, 840 (9th Cir. 2003). According to EPA, "[u]ncontrolled storm water discharges from areas of urban development and construction activity negatively impact receiving waters by changing the physical, biological, and chemical composition of the

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[5] DEP Amawalk Report, at 2; *see* Nat'l Research Council, Watershed Management for Potable Water Supply: Assessing the New York City Strategy, at 106-07 (2000) (hereinafter "NRC Study").

[6] *See* NRC Study, *supra*, at 2.

[7] *See* "Phase II Phosphorus Total Maximum Daily Loads for Reservoirs in the New York City Water Supply Watershed," dated June 2000 (hereinafter, Phase II TMDLs). The Phase II TMDLs can be found at: http://www.dec.ny.gov/docs/water_pdf/nycjune2000.pdf

[8] *See* 2008 Watershed Water Quality Annual Report , DEP, (July 2009), at 37-38.

[9] *Id.*

water, resulting in an unhealthy environment for aquatic organisms, wildlife and humans," and can "severely compromise" water quality.[10]

Discharges of stormwater from construction sites include sediment, a pollutant which also serves as a carrier of other pollutants, such as nutrients (including phosphorus), metals, organic compounds, and pathogens. "It is generally acknowledged that erosion rates from construction sites are much greater than from almost any other land use."[11] Sediment loads in stormwater discharges from construction sites are typically 1,000 to 2,000 times the sediment loads in discharges from undeveloped forested land.[12]

Post-construction stormwater discharges from developed areas are also a major source of pollution to the waters of the United States. "Urbanization alters the natural infiltration capability of the land and generates a host of pollutants . . . thus causing an increase in stormwater runoff volumes and pollutant loadings."[13] Land development "can result in both short- and long-term adverse impacts to water quality in lakes, rivers and streams within the affected watershed by increasing the load of various pollutants in receiving water bodies, including sediments, metals, organic compounds, pathogens, and nutrients."[14] EPA has determined that urban runoff and storm sewer discharges were the second leading source of water quality impairment in estuaries and the third leading source of such impairment in lakes, ponds and reservoirs.[15]

Stormwater pollution to the Amawalk is of great concern because it carries pathogens. The Reservoir watershed lies within the "60 day travel time" to consumers of New York City water. Discharges within this geographic area raise heightened concerns because 60 days is generally viewed as the life span for many disease-causing microbes in fresh water. The pathogens of central concern in the

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[10] "National Pollutant Discharge Elimination System – Regulations for Revision of the Water Pollution Control Program Addressing Stormwater Discharges; Final Rule," 64 Fed. Reg. 68722, 68724, 68728. (Dec. 8, 1999) (hereinafter, 1999 Preamble & Rule).

[11] *Id.*

[12] EPA, "Storm Water Phase II Final Rule: Small Construction Program Overview (Fact Sheet 3.0)," EPA 833-F-00-013 (Jan. 2000), available at http://www.epa.gov/npdes/pubs/fact3-0.pdf.

[13] 1999 Preamble & Rule, 64 Fed. Reg. at 68725.

[14] EPA, Draft Proposed Rule for Effluent Limitations Guidelines and New Source Performance Standards for the Construction and Development Category, Docket No. 01644, at 49-50. February 12, 2002.

[15] EPA, "National Water Quality Inventory: 2000 Report at 22 & 30," EPA-841-R-02-001 (Aug. 2002),available at http://www.epa.gov/305b/2000report/chp3.pdf & http://www.epa.gov/305b/2000report/chp4.pdf.1

Watershed are *Cryptosporidium* oocysts and *Giardia* cysts. These microbes can cause severe intestinal distress and can be deadly for persons with compromised immune systems. These pathogens are highly resistant to destruction by chlorination.

While a filtration plant is being completed to treat Croton system water, even when it is fully constructed and operational, the risks posed by pathogens to public health will not be eliminated. For example, in 1993 the filtered water supply for the City of Milwaukee became contaminated with cryptosporidia when the filtration plant failed, causing over 400,000 people to suffer stomach cramps, fever, diarrhea and dehydration, and killing over 100 people.

III. Applicable Law

WIG's review of stormwater from the proposed Project implicates the State Environmental Quality Review Act ("SEQRA"), the Clean Water Act, and New York's water pollution control law, codified as Article 17 of the New York Environmental Conservation Law ("ECL").

A. SEQRA

Under SEQRA, the lead agency "having principal responsibility for carrying out or approving" an action regulated by SEQRA must determine if the action "may have a significant effect on the environment." ECL § 8-0111(6). If the lead agency determines that the action may have such effect, the agency issues a "positive declaration" and must prepare a draft environmental impact statement, which is subject to public comment and review before being finalized as a final environmental impact statement. ECL § 8-0109(5); 6 N.Y.C.R.R. § 617.7(a)(1).

Environmental review under SEQRA must be comprehensive; it must cover all "relevant areas of environmental concern." *Har Enterprises v. Town of Brookhaven*, 74 N.Y.2d 524, 529 (1989). An environmental impact statement must evaluate alternatives to a proposed project; any project approval must avoid or minimize adverse environmental impacts "to the maximum extent possible." ECL §§ 8-0109(2), (8); 6 N.Y.C.R.R. § 617.11.[16] Because SEQRA requires consideration of alternatives and mitigation of environmental impacts, it "is not merely a disclosure statute; it imposes far more action-forcing or substantive requirements on state and local decision makers than [the National Environmental Policy Act] imposes on

[16] Alternatively, the agency can disapprove the action based on adverse environmental effects disclosed during SEQRA review or on other grounds. *See, e.g., Matter of Fawn Builders, Inc. v. Planning Bd.*, 223 A.D.2d 996 (3d Dep't 1996); *Town of Henrietta*, 76 A.D.2d 215, 226 (4th Dep't 1980) ("SEQRA is not intended to take away the jurisdiction or authority already granted" to government agencies).

their federal counterparts." *Matter of Jackson v. N.Y. State Urban Dev. Corp.*, 67 N.Y.2d. 400, 415 (1986) (internal quotations omitted).

B. The Clean Water Act and ECL Article 17

Under the Clean Water Act, the "primary means" for achieving water-quality standards is the National Pollutant Discharge Eliminations System ("NPDES") permitting program for discharges of pollutants by "point sources" — discrete conveyances, such as pipes carrying effluent from wastewater treatment plants and storm sewer pipes carrying polluted stormwater runoff. *See Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992); 33 U.S.C. §§ 1311(a), 1342. These permits contain "effluent limitations" that "restrict the quantities, rates, and concentrations of specified substances which are discharged from point sources." *Arkansas v. Oklahoma*, 503 U.S. at 101; *see* 33 U.S.C. § 1311.

When the effluent limitations on point sources alone are not sufficient to restore the quality of a waterway, the Clean Water Act requires further action. The States must identify water bodies for which technology-based effluent limitations are insufficient to achieve standards and develop TMDLs to remedy the problem. 33 U.S.C. §§ 1313(d)(1)(A), 1313(d)(1)(C), (2); 40 C.F.R. § 130.2(e)-(i).

However, until water quality standards have been achieved, a "new discharger" or "new source" such as a new development project proposing to discharge pollutants from a point source "which will cause or contribute to the violation of water quality standards," may not receive a NPDES permit authorizing such discharges.[17] 40 C.F.R. §§ 122.2, 122.4(i); *Friends of Pinto Creek v. EPA*, 504 F.3d 1007, 1011-12 (9th Cir. 2007); *see* 40 C.F.R. §§ 122.4(a), (d).

Similarly, DEC, which administers the NPDES program in New York (called the State Pollutant Discharge Elimination System or "SPDES") and its own water pollution laws under Article 17 of the Environmental Conservation Law, prohibits discharges of pollutants that would "cause or contribute to" the violation of water quality standards. ECL § 17-0811(5). DEC requires all SPDES permits it issues to include provisions "necessary to insure compliance with water quality standards," and cannot issue permits without such provisions. 6 NYCRR §§ 750-1.3(e), (f). DEC's *SPDES General Permit for Stormwater Discharges from Construction Acitivity* (Permit No. GP-0-10-001), Part I.D.5, provides that discharges which cause or contribute to contravention of water quality standards are ineligible for coverage under that general permit. As a result, under both federal and state law, if

[17] An exception occurs where all existing dischargers are subject to compliance schedules to achieve water quality standards and the new discharger's or new source's pollution would not impede achievement of compliance under those schedules. 40 C.F.R. § 122.4(i). The exception does not apply to Hidden Meadow because existing dischargers in the Amawalk drainage basin are not bound to compliance schedules.

phosphorus discharges from the Hidden Meadow site increase as a result of the Project, it may not receive a NPDES permit authorizing the stormwater discharges unless it offsets them by securing reduced phosphorus discharges elsewhere in the watershed.

IV. The Need for Further Environmental Review and Project Modifications

The environmental review performed so far does not demonstrate that a negative declaration for this project is warranted. To the contrary, Hidden Meadow as currently proposed would likely result in significant adverse water quality impacts within the Amawalk Reservoir watershed. As explained in the attached Technical Appendix: the preliminary stormwater pollution prevention plan for this project is of poor quality and needs substantial improvement; key information, such as soil restoration, and stormwater management practice and erosion and sediment control practice details, are not provided; the pollutant loading analysis is flawed due to inappropriate loading concentrations and efficiency allocations; and the stormwater hydrology is inaccurate since it uses outdated data.

It is likely that the project, in its present form, would cause significant increases in phosphorus pollution within the Amawalk Reservoir drainage basin, and offsite reductions in the discharge of this pollutant will therefore be needed, but are not included within the Project's plans. Because of the increased phosphorus loading, the Project as currently configured could not obtain a SPDES permit under federal or state law. Based on the inadequacies detailed in the Technical Appendix, further environmental review, project modifications, and revisions to the stormwater pollution prevention plans are necessary.

V. Conclusion

The WIG Office appreciates this opportunity to submit these comments on the documentation submitted so far for the proposed Hidden Meadow project.

WIG requests that the Planning Board issue a positive declaration and require completion of a draft environmental impact statement to address deficiencies in the Project and to ensure compliance with the federal Clean Water Act, New York's water pollution control law, and SEQRA.

Respectfully submitted,

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Technical Appendix: Hidden Meadows at Somers

Prepared by Donald W. Lake Jr., PE, CPESC

February 25, 2014

My technical review is based on the following documents: Insite Engineering Drawings dated 1/29/14; Full Environmental Assessment Form Part 1 – Project and Setting dated 1/29/14; Pollutant Loading Analysis dated 1/29/14; and the Preliminary Stormwater Pollution Prevention Plan (SWPPP) dated 1/29/14.

The preliminary stormwater pollution prevention plan for this project (SWPPP) is of low quality and needs substantial improvement. Key information, such as soil restoration and stormwater management practice and erosion and sediment control practice details are not provided; the pollutant load analysis is flawed due to inappropriate loading concentrations and efficiency allocations; and the stormwater hydrology is inaccurate since it uses outdated data. It is likely that the project, in its present form, would cause significant increases in phosphorus pollution within the Amawalk Reservoir drainage basin, and offsite reductions in the discharge of this pollutant will need to be obtained. Because of these and other inadequacies detailed below, a revised SWPPP should be developed and made available for further public comment.

Water Quality

1. The pollutant load analysis for annual total phosphorus (TP) after stormwater treatment showed a 2.62 pound net reduction. My analysis, using the applicant's land use areas and treatment systems, contradicts this reduction and shows a net annual TP increase of 1.99 pounds after stormwater treatment. This 4.61 pound difference is due to the following changes: reducing the percentage of impervious surface for the existing pasture (non-grazed meadow) from 5% to 2% (usually 1%, 1993 NYS Department of Environmental Conservation "Reducing the Impacts of Stormwater Runoff from New Development" Table 4, but no more than 2% without field documentation); reducing the event mean concentration (EMC) values for TP from .4 mg/l to 0.11 mg/l for pasture; and from 0.15 mg/l to 0.11 mg/l for forest areas (Terrene Institute Table 3.2- Water Quality Characteristics of Runoff).

For the existing condition, the applicant calculates that 6.69 pounds of TP will leave the site, whereas I computed 4.35 pounds. They calculated a developed condition, without treatment, value of 13.01 pounds and I calculated 17.78

pounds. This is due to the changes noted above for the EMC values and percent of impervious area.

The applicant's final TP post treatment numbers were reduced to 4.07 pounds, representing a 39% decrease, while my calculations show an increase of 6.34 pounds remaining or an increase of 46%. This difference is due to the fact that the applicant used high efficiencies for their practices (70%), while I used the average efficiency from the national best management practice (BMP) performance database; that is 46% TP removal for wetlands and 53% removal for sand filters (National Pollutant Removal Database at www.bmpdatabase.org). Also, the applicant used a combined SMP (stormwater management plan) system efficiency of 91%, while I calculated a combined efficiency of 75% by using the appropriate methodology listed in Appendix 1 of the 2003 New York State Stormwater Management Design Manual, for stormwater management practices used in series.

In addition, no effort was made to compensate for the phosphorus TMDL overrun in the Amawalk Reservoir, which can be addressed by reducing the existing TP load by 11.3%, which I calculate to be 0.5 lbs. (NYSDEC Phase II Phosphorus Total Maximum Daily Loads For Reservoirs in the New York City Water Supply Watershed June 2000)

2. No details or cross-sections were provided to validate or support the use of porous pavement as shown in the stormwater pollution prevention plan (SWPPP). These must be provided.

Hydrologic Evaluation

1. The Preliminary Stormwater Pollution Prevention Plan was completed January 29, 2014. However, the hydrologic analysis provided in the SWPPP uses antiquated (1961 "Rainfall Frequency Atlas of the United States for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years" or "Technical Paper No. 40" [TP-40]) rainfall values and rainfall distribution values. New rainfall and rainfall distribution values were published on the Northeast Regional Climate Center (NRCC) website three years ago, in January 2011. DEC recognizes the recent NRCC data set as an acceptable alternative to use of the TP-40 data (*see* attached letter from Carol Lamb-LaFay, P.E., dated September 30, 2013). A comparison of the rainfall amounts is shown below, where P1, for example, stands for the 1 year, 24 duration rainfall event:

	TP-40	NRCC
P1	3.1	2.76
P2	3.5	3.35
P10	5.0	5.04
P100	7.5	9.10

In addition to the rainfall data, there will be different rainfall distribution values for each event.

2. The time of concentration (T_c) is defined as the time required for a drop of water to travel from the most hydrologically distant point in a watershed to the outlet. Still using the Type III rainfall distribution, my calculation for the 100-year storm with a P = 9.10 inches and an adjusted time of concentration (T_c) flow path, shows a peak existing condition discharge of 69.4 cubic feet per second (cfs) compared to 41.4 cfs with the TP-40 rainfall value of 7.5 inches. This results in an almost 70% increase in the developed condition 100 year discharge. Additional modifications for the hydrology evaluation of the site may be needed to address anticipated future changes in precipitation patterns due to climate change. NRCC is studying this matter and is expected to report results in the near future.

3. The T_c flow path for the existing condition needs to be adjusted to the topography at the very top of the watershed. In addition, the stone wall that spans the west property line should be highlighted at the locations where the flow path changes.

4. The developed condition analysis should sub-divide Drainage Area (DA) 1.4S at the top of the watershed to account for a split of flow to the north and south, through a break to be created in the stone wall.

5. Due to the linear nature of the upper portion of DA 1.4S, the addition of another sub-area should be considered to the southeast of the existing area.

6. The developed condition for DA 1.3S should also be divided into two areas due to the extreme separation from runoff producing areas to the design point at 1.3 P.

7. No soil restoration details have been provided in the SWPPP as required by the New York State Stormwater Management Design Manual (August 2010). Failure to address this issue means that all disturbed soils are required to be classified as hydrologic soil group (HSG) D and all disturbed pervious areas must be classified and quantified as impervious for water quality volume (WQv) calculations.

Erosion & Sediment Control

1. Based on the documents reviewed, no phasing or sequencing of operations plan was presented, although references are made in the SWPPP and on engineering drawing D3.

2. Approximately 8.5 acres of forest will be cleared and grubbed for this project. However, there is no mention of how this woody material, including stumps, is to be handled. This deficiency needs to be addressed.

3. With a significant amount of concrete construction occurring on this site, a concrete truck washout facility should be provided and the corresponding details added to the drawings.

4. SWPPP section 4.1 should add the following details as bullets: concrete truck washout, dust control, and stone check dams. In addition, SWPPP section 4.2 should add the following details as bullets: level spreader, lined waterway, and rock outlet protection structures. Practices listed here and not listed on drawing SP-4 should be added to that sheet.

5. Due to the project location in a TMDL watershed, it is recommended that the 14 day stabilization threshold for seeding and mulching be reduced to 7 days.

6. Temporary seeding should be done with a much higher percent of annual ryegrass than what is shown on sheet SP-1. See the NY Standards for Erosion and Sediment Control, 2005, for mix rates.

7. Final access routes to the post-construction pocket wetland and sand filter must be shown on the plan view of the site layout.

8. Sheet D-3, Details, note 11, all slopes steeper than 3:1 must be stabilized with a rolled erosion control product (RECP). Remove statement #21 as non-specific, and define "owner" in #23. Is that homeowner?

9. The temporary swale detail (Sheet D-3) needs to be site specific at this site.

10. The check dam detail (Sheet D-3) should add the spacing formula shown in the NY Standards for Erosion and Sediment Control, August 2005.

11. Create a table for all rock outlet protection structures (ROPs) on Sheet D-4 so that the dimensions of all of the different ROPS can be obtained.

New York State Department of Environmental Conservation
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Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233-3505
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Website: www.dec.ny.gov

Joe Martens
Commissioner

September 30, 2013

Mr. Charles Silver
NYS Office of the Attorney General
Environmental Protection Bureau
The Capitol
Albany, NY 12224-0341

Dear Mr. Silver:

I am writing to you in response to your inquiry as to the Department's position with regard to the use of updated precipitation data in the design of stormwater management practices. The New York State Stormwater Management Design Manual, August 2010 (Design Manual), includes a provision that allows designers to use the most recent rainfall frequency values developed by acceptable sources. Hydrologic data and rainfall distributions published by the Northeast Regional Climate Center (NRCC) in January 2011 on their website www.precip.net is considered to be an acceptable alternative to using the isohyets maps for required design storms presented in the Design Manual.

If you have any questions or need further clarification, please contact me at 518-402-8123 or calambla@gw.dec.state.ny.us.

Sincerely,

Carol Lamb-LaFay, P.E.
Chief, Stormwater Permits Section
Bureau of Water Permits

ecc: P. Bein, OAG

Donald W. Lake Jr. P.E.
Curriculum Vitae

EMPLOYMENT

Adjunct Assistant Professor, SUNY-College of Environmental Science & Forestry 2011 - 2014

Visiting Instructor, SUNY-College of Environmental Science and Forestry, 2003 – 2010

Adjunct Professor, Department of Civil & Environmental Engineering, Syracuse University, 1991 – 2012

Engineering Specialist, New York State Soil & Water Conservation Committee, 1997 – 2006

President, DuLac Engineering, 1995 – current

State Conservation Engineer, USDA-Natural Resources Conservation Service, 1983 – 1995

State Design Engineer, USDA-Natural Resources Conservation Service, 1978 – 1983

Project Engineer, USDA-Natural Resources Conservation Service, 1973 – 1978

Staff Engineer, USDA-Natural Resources Conservation Service, 1970 – 1973

Engineering Student Trainee, USDA- NRCS, 1966 - 1970

EDUCATION

B.S. Civil Engineering, State University of New York at Buffalo, 1970

LICENSES/CERTIFICATIONS

Professional Engineer, New York State (#53844), 1976
Certified Professional Erosion & Sediment Control Specialist (CPESC #738)
Certified Stormwater Quality Specialist (CPSWQ #2)

MEMBERSHIPS/ACTIVITIES

Erosion & Sediment Control Expert Panel, Chesapeake Bay Program (2013)
Chair, International CPESC Council (2010-2012)
Past Chair, International CPESC Council (1996-1998)
Past Technical Vice-Chair, International CPESC Council
New York State Department of Conservation Stormwater Workgroup

MEMBERSHIPS/ACTIVITIES cont'd

National Society of Professional Engineers
Soil and Water Conservation Society
Association of State Dam Safety Officials
American Society of Testing & Materials (Committee D 18.25)
International Erosion Control Association
USDA-Natural Resources Conservation Service, Standards Committee
New York Non Point Source Committee
New York State Department of Transportation Erosion & Sediment Control Task Force

HONORS & AWARDS

Commendation Award, NY Land Improvement Contractor's Association, 2009
Commendation Award, New York Association of Conservation Districts, 2006
CPESC Distinguished Service Award, 2004
Presidents Citation, Soil and Water Conservation Society, 1998
International Erosion Control association, Sustained Contributor Award, 1996
NY Land Improvement Contractors of America Outstanding Service Award 1995
Commendation Award, Empire Chapter, Soil and Water Conservation Society 1995
Conservation Education Award, Empire Chapter, Soil And Water Conservation Society, 1992
Special Award, NY Conservation District Employees Association, 1991
Certificates of Merit (13), USDA-Soil Conservation Service

BACKGROUND & EXPERTISE

Civil Engineering – hydrology, urban hydrology, soil erosion evaluation, soil mechanics, development construction techniques and procedures, sedimentation processes and capture design, applied channel and structure hydraulics, site planning and resource assessments, pollutant wash off methods, stormwater management practices design including extended detention ponds, wetlands, filtering systems and infiltration, stormwater pollution prevention plan review, effect of vegetation in abating negative water quality impacts.

TECHNICAL SERVICE RECIPIENTS

New York State Dormitory Authority
New York State Office of General Services
New York State Office of the Attorney General
New York State Department of Environmental Conservation
New York State Department of Transportation
Loess Hills Alliance, Iowa
Nebraska Cooperative Extension Service

SERVICE RECIPIENTS cont'd

International Erosion Control association
Hansen Aggregates, Inc.
Groton Housing Authority
C&S Engineers, Inc.
O'Brien & Gere Engineers, Inc.
Lamont Engineers, Inc.
Barton & Loguidice, P.C.
North Carolina State University, Water Resources Institute
Energize Vermont, Inc.

PUBLICATIONS

1. Books/Manuals

    a. R. Pitt, S. Clark, D. Lake, Construction Site Erosion and Sediment Controls, Planning, Design and Performance, August 2007, ISBN: 1-932078-38-X. (College textbook)

    b. New York Standards and Specifications for Erosion and Sediment Control, August 2005.

    c. New York Guidelines for Urban Erosion and Sediment Control, 1988, Rev. 1991, 1994, 1997.

    d. New York Contractors Erosion and Sediment Control Field Notebook, 1994; Revised January 2013.

2. Papers

    a. D. Lake, "Struggle for Compliance (New York Perspective)", 15 pgs. Delaware Urban Erosion, Sediment and Stormwater Conference 2000, October 25, 2000.

    b. D. Lake, "Common Threads of Disaster", 1998, Newark, Delaware

    c. D. Lake, "Best Management Practices for Urban Erosion and Sediment Control in New York Counties and Towns", 1990

    d. J. Dickerson, D. Lake, "Biotechnical Slope Protection", ASAE Conference, New Orleans, 1989

    e. D. Lake, Transition Structure Performance for Flood Control", ASAE Conference, Chicago, 1987

2. Papers, cont'd

f. A. Feher, D. Lake, "Alternative Methods for Unloading Manure Storage Structures", 1994

g. D. Lake, "Rehabilitation of Embankment Conduits", ASAE Conference, New Orleans, 1984

h. S.K. Bhatia, J.L. Smith, D. Lake, D. Walowsky, "A Technical and Economical Evaluation of Geosynthetic Rolled Erosion Control Products in Highway Drainage Channels", May 2002.

i. J.L. Smith, S.K. Bhatia, D. Lake, D. Walowsky, "Evaluation of Vegetative and Root System Growth Through Different Geosynthetic Rolled Erosion Control Products in a Highway Drainage Channel", September 2003.

j. Donald W. Lake Jr., "National Urban Erosion Control Standards and Specifications, Do We Need Them? A Perspective From New York", November, 1993.

k. Donald W. Lake Jr., "Training For Use of New York's Guidelines For Urban Erosion And Sediment Control", March, 1993.

l. J. Dickerson, T. Kelsey, C. Jones, D. Lake, R. Godfrey, "Obtaining Plant Materials For Biotechnical Work", February, 1990.

m. T. West, J. Southerland, J. Bloomfield, D. Lake, " Final Report, A Study Of The Effectiveness Of A Vortechs Stormwater Treatment System For Removal Of Total Suspended Solids And Other Pollutants In The Marine Village Watershed, Village Of Lake George, New York", January, 2001.

INSTRUCTIONAL/TRAINING ACTIVITIES

Mr. Lake has an extensive training history presenting 1,540 courses, seminars, lectures and workshops for over 37,250 individuals. Some highlights of this career appear below:

A. Instructor for SUNY-CESF ERE – 596-02, Stormwater Management Design from 2003 to 2010. 205 students completed the course.

B. Organized the SUNY-CESF Stormwater Management Outreach Program in 2005. Through spring 2009, 104 courses have trained 3,027 participants. The venues included Syracuse, Buffalo, Rochester, Albany, Middletown and Fishkill.

C. Designed, prepared and presented 34, one day workshops for construction contractors and highway department employees. Sessions began 1987 and continue through 2000. 1,095 people attended.

D. Designed, prepared and presented 80, two day stormwater management and erosion control workshops for design professional. Sessions included field problems and dealt with water quality. Since these began in 1989, 2007 individuals have attended these courses.

E. Since 1988, prepared and conducted 155, one day seminars in erosion and sediment control and stormwater management. 5,701 people have attended these seminars.

F. Created, organized and coordinated the Syracuse University Stormwater Management Program Workshop Series through SUCE for the years 1997 through 2004. Since this 7 short course curriculum began the recorded attendance was as follows: 1997-84; 1998-104; 1999-93; 2000-217; 2001 – 180; 2002 – 164; 2003 – 270; 2004 – 439.

H. Instructed as Adjunct Professor, CIE 600/500 Urban Erosion and Stormwater Design at Syracuse University, fall 1992 – thru 2002. A total of 128 students completed the full semester course.

I. Developed the Regional Stormwater Training system creating four locations in New York State to host stormwater management and other courses. These locations, Henrietta, Syracuse, Ballston Spa, and Middletown, offered 63 courses from spring 2010 through the spring of 2011. Attendees for these courses numbered 1,306.

RESEARCH ACTIVITIES

a. "Controls on Water Quality in the New Croton Reservoir/Turkey Mountain Watershed" Final Report for NYS-DOT, March 2006.

b. "A Study of the Effectiveness of a Vortec Stormwater Treatment system in Total Suspended Solids and Contaminant Removal in the Marine Village Watershed, Village of Lake George, New York", New York Department of Conservation, $20,000, New York State Department of Transportation, $50,000, with J. Sutherland, NYS-DEC, and T. West, Darren Fred Water Institute.

c. "Economical Gains and Performance of Geocomposits in Preventing Erosion in Highway Ditches", Unfunded, with S. Bhatia, J. Hoy, and D. Walowsky.

PUBLIC SERVICE

a. Scientific Community

Reviewed papers for the following professional journals:
Civil Engineering News
Erosion Control Magazine

Reviewed proposals for:
New York State Environmental Trust Fund
New York State Environmental Bond Act
New York State Transportation Infrastructure Research Consortium

b. General Community

Served as member of the Town of Manlius Planning Board since 1995 to 2001
Served as member of the Fayetteville Manlius School Board, 1992