III.M Construction

I. Introduction and Principal Conclusions

All construction activities will be conducted in accordance with all municipal and state regulations and would not result in significant adverse impacts.

All construction activities will be conducted in accordance with Section 96-6.D of the Town Code, with construction only taking place between the hours of 7:00 am and 8:00 pm Monday through Friday, and occasionally between 9:00 am and 5:00 pm on Saturdays.

The intent of the grading design of the site is to balance the earthwork, such that no excess material will need to be exported off of the site, and no material will need to be brought into the site as fill, avoiding the need for dump trucks for this purpose, which lessens potential off-site truck traffic trips.

Most construction-related trucking will utilize I-84 and exit at Exit 19 (NY 312), and proceed along NY 312 to Pugsley Road and the construction site.

Construction workers will generally arrive before the 7:30-8:30 AM peak weekday morning traffic hour, and depart before the 5:00-6:00 PM peak weekday afternoon hour, and generally utilize the same route as the construction truck traffic.

An Erosion and Sediment Control Management Program will be implemented for the proposed development, beginning at the start of construction and continuing throughout its course, in accordance with the requirements of the "New York State Standards and Specifications for Erosion and Sediment Control," dated November 2016.

2. Existing Conditions

The existing site was formerly in agricultural use (pasture and livestock), which use has been abandoned, and no buildings remain on the property. As such, no demolition is required.

3. Future Without the Proposed Project

Without the proposed project, the site would remain in its currently undeveloped condition. There would be no temporary construction impacts, and none of the benefits resulting from the construction of the proposed project.

4. Anticipated Impacts

All construction activities will be conducted in compliance with existing regulations, including local day and hour construction limitations. Consistent with Section 96-6.D of the Town Code, construction will only take place between the hours of 7:00 am and 8:00 pm Monday through Friday, and occasionally between 9:00 am and 5:00 pm on Saturdays. Construction access will be via the proposed site driveway serving Buildings #1 and #2 off of Pugsley Road, and off of Barrett Road for Buildings #3 and #4. Construction will be sequenced in such a manner so that, as areas are disturbed, they will immediately be protected with erosion and sediment controls. Figure III.M-1 depicts the construction staging.

The proposed project is anticipated to be constructed with two infrastructure phases: Buildings I and 2 would be constructed under one general infrastructure development phase; and, Buildings 3 and 4 would be constructed in a separate general infrastructure development phase. The construction of each individual building will be dictated by the market demand, and the first building of each phase will trigger the completion of infrastructure in common to the two buildings of the phase. Each building is anticipated to take 12-15 months to complete, and would follow the generalized construction sequence discussed below. With the exception of the water production, storage, and distribution infrastructure, which would be completed during the first phase of building development, each building phase would be independent. Should disturbance to a lot that is not the site of active building construction be required, erosion and sediment control measures, discussed below, would be implemented to avoid potential impacts.

- a) Pre-construction meeting with Town officials. At this meeting, the Applicant will provide the name and number of a 24/7 contact person that the Town may call should any issues arise during the course of construction that warrant immediate attention;
- b) Installation of erosion and sediment control measures;
- c) Clear vegetation on portions of site to be developed;
- d) Strip and stockpile topsoil;
- e) Begin rough grading and construction of buildings and parking areas;
- f) Install storm drain and septic sewer system (immediately install erosion & sediment control protection on all inlets);
- g) Install utilities (electric and telephone);
- h) Install concrete and asphalt concrete pavement;
- i) Finish grading, redistribute topsoil and establish vegetation and/or landscaping;
- j) Clean pavements and storm drain system of all accumulated sediment in conjunction with the removal of all temporary sediment and erosion control devices;
- k) Complete site and building construction.

The following are anticipated construction milestones for the initial building of Phase I of the project:

- Building Permits: May 15, 2019
- Site Work/infrastructure commences: June 1, 2019.

- Building construction commences: September 1, 2019
- Initial building complete: September 1, 2020.
- Additional phases can be completed simultaneously or sequentially based on market demand. Each building would take approximately fifteen months to complete.

Construction Jobs

As discussed in the Tax Analysis Section III.H.4.b, it is estimated that approximately 600 full and part-time jobs will be added to the local workforce during the construction phase. This includes workers both on-site as well as those that would not be, such as truck drivers making deliveries. Not all of these jobs will be involved in all of the phases of construction, and some may only apply to one phase, but in total, the proposed project will generate a total of 600 construction jobs. Manpower for typical construction fluctuates over the duration of the project in a bell-shaped curve. Beginning and ending months have relative low manpower and the middle of the schedule manpower peaks.

Pre-Construction/Site Preparation

Prior to the start of construction or site disturbance, a pre-construction meeting will be held with the contractor, the Town, and project engineer to discuss construction details and erosion and sediment control plans. The Erosion & Sediment Control Plan (see full size drawings C-401, C-402, C-403, C-404, and C-405 "Erosion & Sediment Control Plans"), described in further detail in Section III.D, "Surface Water and Wetlands," details how the project site will be protected from erosion and sedimentation during construction when soils are being disturbed.

Site preparation will include installing security fencing at the driveways to the site and construction fencing at the limits of disturbance to prevent unauthorized entry to construction areas, to restrict access to areas that could be hazardous to the public,

and to protect areas not proposed to be disturbed from construction operations. Stabilized construction entrances/exits will be established to prevent tracking of sediment outside of the project site. The construction entrances/exits will be constructed with one- to four-inch stone layered over a filter fabric and be at least six inches thick. The stabilized areas will be maintained regularly prevent sediment from being tracked onto public rights-of-way. The areas for the proposed temporary sediment traps will be cleared and grubbed and topsoil will be stockpiled on-site.

Any fill that is required to be used will be clean fill.

It is estimated that approximately 50-80 construction workers will be utilized at this point for each building phase of the project, and the number of daily truck trips would be approximately 40-50, or less than 10 per hour spread throughout the day. Because the site will be balanced, such that no excess material will need to be exported off of the site, and no material will need to be brought into the site as fill, there would be no need to use dump trucks, which lessens potential off-site truck traffic trips.

Building Construction

The major components of the building construction stage will involve installing utilities and infrastructure, pouring the foundations, and erecting the structures of the buildings, interior-finishing work, and landscaping. This will be the most intensive stage of the construction process where material deliveries will take place regularly and the greatest number of workers will be on-site. It is estimated that approximately 150-200 workers would be on-site. Trucks would arrive at the site with pre-mix concrete and other building materials. It is estimated that 80-100 trucks would on average visit the site daily, or approximately 10-13 trucks per hour, especially when concrete is being delivered. Once each of the foundations is poured, the building slabs will be poured. Once construction work is completed, disturbed areas will be restored and the site will be landscaped according to the approved landscaping plan (see full size drawings C-501, C-502, C-503, C-504, and C-505 "Landscaping Plan"). The clearing and grubbing of the portion of the property to be disturbed will include tree-clearing equipment, chippers, and bucket trucks. This will be followed by creating staging areas for construction, including gravel parking surfaces for parking for construction workers at the location of the proposed parking areas of each of the buildings.

Next, excavation will begin with excavators, front end loaders, dozers, compaction equipment, and 10-wheel dump trucks. A contractor will utilize low bed trailers to transport the equipment to and from the site as needed.

The majority of the equipment will remain on-site for the duration of construction, thus minimizing movement of equipment to and from the site.

Specialty equipment may be required during certain phases of construction, including concrete work, asphalt paving, etc. During the foundation/floor construction, concrete trucks and possibly dump trucks would be required on-site. During construction of the driveways and parking areas, 10-wheel dump trucks and/or trailers will deliver stone subbase to the site to be spread by dozers and/or graders.

The paving operation will require asphalt spreaders, asphalt rollers, water trucks, and 10-wheel dump trucks along with trailers. The paving operation, being weather dependent, will be limited to the April-November timeframe, but could change depending on weather conditions.

All construction debris that cannot be recycled will be disposed of in accordance with the regulations of all local, state, and federal authorities having jurisdiction.

Truck Routes

The intent of the grading design of the site is to balance the earthwork, such that no excess material will need to be exported off of the site, and no material will need to be brought into the site as fill. The site is large, and any minor amounts of material that may be needed as fill will be sourced from within the limit of disturbance, or if any excavated material is in excess, it will be utilized as berm material within the limit of disturbance.

Most construction-related trucking will utilize I-84 and exit at Exit 19 (NY 312), and proceed along NY 312 to Pugsley Road and the construction site.

Construction workers will generally arrive before the 7:30-8:30 AM peak weekday morning traffic hour, and depart before the 5:00-6:00 PM peak weekday afternoon hour, and generally utilize the same route as the construction truck traffic.

<u>Noise</u>

A discussed in Chapter III.N "Noise" of the DEIS, construction impacts, although temporary, can include noticeable effects from actions that are associated with construction. Construction activities could affect noise due to additional traffic and equipment noise. Determination of the significance of construction impacts and the need for mitigation is generally based on the duration and magnitude of the impacts.

Noise levels at a given location are dependent on the type and quantity of construction equipment being operated, the acoustical utilization factor of the equipment (i.e., the percentage of time a piece of equipment is operating), the distance from the construction site, and any shielding effects (from structures such as buildings, walls, or barriers). Noise levels caused by construction activities will vary widely, depending on the phase of construction (i.e., superstructure, interior fit-outs, etc.) and the location of the construction activities relative to noise-sensitive receptor locations.

Section III.N concludes that noises from construction will comply with the Town's Noise Ordinance (because construction will be confined to the hours and days as limited by the Noise Ordinance), will be of relatively short duration, and will not constitute a significant impact.

Based on the findings of geotechnical investigations conducted during September 1987, and a subsequent subsurface investigation of the site by SESI Consulting Engineers during early 2018 (see Appendix E-1), blasting may not be required. The borings taken in 1987 on the site indicate that no bedrock is encountered to depths ranging from 20 to 27 feet below the existing grade, and from the 2018 investigation no bedrock was encountered from 12 to 22.5± feet below existing grade. Since bedrock is very far below the surface, blasting is not expected to be needed to remove bedrock. Conventional earth excavation equipment will be used to handle all grading activities. However, if it is determined to be necessary, blasting will be conducted in accordance with applicable local, state, and federal regulations including Town Code Chapter 71, "Explosives and Blasting."

The licensed blasting specialist will use care and caution to prevent excessive shock waves or stones and other material from flying and endangering life and property. The blasting of material will be conducted so as not to cause any damage to off-site buildings or structures. All blasting will be under the direct supervision of persons approved and licensed by New York State.

Air Quality

As discussed below under the Erosion and Sediment Control measures, and in Chapter N.III "Air Quality", during the construction process, any disturbed earth will be wet down with water, if necessary, to control dust. After construction activities, all disturbed areas will be covered and/or vegetated to provide for dust control on the site.

All trucks carrying fill or other unconsolidated materials shall be covered with tarps. This shall help ensure that debris and dust will be fully contained during transport.

All soil or dirt stock piles shall be enclosed with silt fencing when not in use, and during weekends.

A stabilized construction entrance shall be established at the entrance to the site at Pugsley Road and at the entry to Barrett Road from Pugsley Road. Tires and truck bodies, as necessary, will be washed to minimize tracked mud and dust.

Erosion And Sediment Control, And Best Management Practices

To prevent the potential adverse impacts of soil erosion, the proposed project will conform to the following requirements:

- Requirements of the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-15-002, effective January 29, 2015, last modified November 23, 2016;
- NYS Stormwater Management Design Manual, last revised January 2015;
- New York City Environmental Protection (NYCEP, formerly NYCDEP) Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources, amended April 4, 2010;
- Chapter 119 "Stormwater Management and Erosion and Sediment Control" of the Town of Southeast Zoning Code.;

 "New York State Standards and Specifications for Erosion and Sediment Control," dated November 2016.

Because more than one acre of land is to be disturbed, the project will provide a Stormwater Pollution Prevention Plan (SWPPP), containing both temporary erosion control measures during construction and long-term post-construction stormwater management practices to avoid flooding and water quality impacts in the long-term (see Appendix D-I).

The following practices will be used throughout construction to minimize the potential erosion and sedimentation impacts associated with the disturbance, and will be coordinated with the final SWPPP:

- Stabilized Construction Entrance/Exit (SCE) The construction entrances/exits
 will have a stabilized aggregate pad underlain with filter cloth to prevent
 construction vehicles from tracking sediment off-site. Stabilized construction
 entrances will be located at specific transition areas between concrete/asphalt to
 exposed earth.
- Silt Fence Silt fencing will be installed on the down-gradient edge of disturbed areas parallel to existing or proposed contours or along the property line as perimeter control. Silt fencing will be used where stakes can be driven into the ground as per the Silt Fence detail in the New York State Standards and Specifications for Erosion and Sediment Control (ECS) and as shown on the Drawings attached to the DEIS. Silt fencing controls sediment runoff where the soil has been disturbed by slowing the flow of water and encouraging the deposition of sediment before the water passes through the silt fence. Built-up sediment will be removed from silt fencing when it has reached one-third the height of the bale/fence and properly disposed.

- Storm Drain Inlet Protection Inlet protection will be installed at all inlets where the surrounding area has been disturbed. The inlet protection will be constructed in accordance with NYSDEC Standards and Specifications for Erosion and Sediment Control. Typically, they will be constructed to pass stormwater through, but prevent silt and sediment from entering the drainage system.
- Stockpile Detail Stockpiled soil will be protected, stabilized, and sited in accordance with the Soil Stockpile Detail, as shown on the detail sheets. Soil stockpiles and exposed soil will be stabilized by seed, mulch, or other appropriate measures, when activities temporarily cease during construction for seven days or more in accordance with NYSDEC requirements.
- Dust Control During the construction process, any disturbed earth will be wet down with water, if necessary, to control dust. After construction activities, all disturbed areas will be covered and/or vegetated to provide for dust control on the site.
- Temporary Seeding and Stabilization In areas where construction activities, clearing, and grubbing have ceased, temporary seeding will be performed to control sediment-laden runoff and provide stabilization to control erosion during storm events. This temporary seeding/stabilization will be in place no later than 14 days after construction activity have ceased.
- Erosion Control Matting The matting will be utilized on slopes and within swales, where applicable, to provide stabilization in advance of vegetation being established. Such matting will be biodegradable to facilitate long term growth of vegetation in swales, on slopes and within stormwater management facilities.
- Sump Pit If necessary, a temporary pit may be necessary to trap and filter water for pumping to a suitable discharge area. The purpose will be to remove excessive

water from excavations. Sump pits will be constructed when water collects during the excavation phase of construction.

- Dewatering Site-specific practices and appropriate filtering devices will be employed as necessary by the contractor so as to avoid discharging turbid water to the surface waters of the State of New York.
- Temporary Sediment Trap The purpose of a sediment trap is to intercept sediment-laden runoff and filter the sediment laden stormwater runoff leaving the disturbed area to protect drainage ways, properties, and rights-of-way below the sediment trap. The trap will be installed down gradient of construction operations which expose critical areas to soil erosion. The trap will be maintained until the disturbed area is protected against erosion by permanent stabilization.
- Temporary Sediment Basins The basins will be constructed to intercept sediment laden runoff and trap and retain the sediment. The sediment basins are sized to provide a sediment storage volume of 3,600 cubic feet per acre draining to the basin. The Sediment Basins will be used with the permanent stormwater management practices until their contributing drainage areas are stabilized.
- Temporary Riser and Anti-Vortex Devices These devices will be placed at the bottom of the temporary sediment basins where they intercept and collect debris and litter from the pond before they can enter the off-site storm drainage system.
- Materials Handling The contractor will store construction and waste materials away from any environmentally sensitive areas. The contractor will incorporate storage practices to minimize exposure of the materials to stormwater, and spill prevention and response where practicable. Prior to commencing any construction activities, the contractor will obtain necessary permits or verify that all permits have been obtained.

A continuing maintenance program will be implemented for the control of sediment transport and erosion control after construction and throughout the useful life of the project.

The practices discussed above, including implementation of the Erosion & Sediment Control Plan, Best Practices, and construction management techniques will avoid and/or mitigate potential temporary impacts related to erosion and sedimentation. A landscape plan will be implemented to restore and landscape all temporary site disturbances.

The proposed developer/contractor will have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify that the appropriate erosion and sediment controls, as shown on the Erosion & Sediment Control Plans, have been adequately installed to ensure overall preparedness of the site to begin construction. In addition, the developer/contractor will have a qualified professional conduct one site inspection at least every seven calendar days and at least two site inspections every seven calendar days when greater than five acres of soil disturbance at any one time which, as a condition of the waiver, site inspections would be increased from weekly to twice weekly. In addition, the contractor will perform an inspection of erosion and sediment control measures at the end of each construction day and immediately following each rainfall event. All required repairs are to be immediately executed by the contractor

The Town of Southeast has the authority to enforce compliance with the approved SWPPP. Should compliance not be maintained, the Town can place a stop work order on the project, and fine the parties found responsible for violations.

5. Mitigation Measures

No additional mitigation measures are proposed.