

Chapter 18: Construction

A. PROPOSED ZONING ACTION (GENERIC ANALYSIS)

INTRODUCTION

As described previously, the Proposed Action includes the adoption of MOD Zoning as well as the implementation of the MOD Development Plan. Although the adoption of MOD zoning would not directly result in new construction it would potentially allow for new uses and increased density within the proposed MOD Zoning Area. Any project proposed a part of the MOD would be required to comply with site-specific SEQR.

It is anticipated that the full build-out of the MOD Zoning Area would be a multi-year project and would include several parcels within the MOD. This GDEIS provides a generic analysis of the anticipated construction process for projects proposed as part of the MOD and a more detailed site-specific analysis for the Evergreen and Gyrodyne projects which are proposed as part of the MOD Development Plan. Given the magnitude of the infrastructure improvements that would likely be required for the MOD Development Plan and MOD full build-out, it is expected construction would be implemented in multiple phases. It is anticipated that the build year of the MOD Development Plan would be 2021. Section A of this chapter will generically analyze the construction process for any project proposed under MOD Zoning. Section B of this chapter titled, “MOD Development Plan” will describe the construction process and the potential for environmental impacts related to the construction of the MOD Development Plan which includes the proposed Evergreen Manor and Gyrodyne project sites.

CONSTRUCTION PHASING

PRE-CONSTRUCTION/SITE PREPARATION

Prior to the start of any construction activity or site disturbance in the MOD, a pre-construction meeting would be held with the contractor, project engineer, and representatives from the appropriate regulatory agencies (such as the Town of Cortlandt, NYSDEC, etc.) to discuss construction details and erosion and sediment control plans. For each project phase, a construction site entrance would be established and properly graded and stabilized. Security fencing would be installed at construction entrances, as needed. The contractor and workers would be informed of construction truck routes established to minimize impacts on surrounding areas.

DEMOLITION/GRADING

All MOD projects would be required to consider the natural topography and environmental features on the site during design. As such, construction activities would avoid adverse impacts

related to erosion and degradation of important resources such as wetlands to the maximum extent practicable.

The first step during each construction phase would be to install stormwater management and erosion control measures in areas where vegetation will be cleared and any existing structures will be demolished. Prior to site clearing and demolition, all necessary permits and approvals would be obtained.

Following demolition of existing structures (if required), stormwater management and erosion control measures would be implemented. This would occur during grading and prior to construction (discussed further below). If existing roadways traverse the site they would be improved in accordance with current Town design standards. Roadway improvements would occur as necessitated by progression of the construction phases. Areas for interior circulation routes would also be cleared, graded, and stabilized as needed for each phase.

BLASTING

In the event that blasting is required, a blasting plan would be prepared in conformance with all applicable local, State, and Federal regulations. Any blasting activities would be conducted by an authorized and qualified engineer. All proper and required notifications would be distributed and appropriate mitigation measures would be implemented to ensure safety of construction workers and people in the surrounding area.

BUILDING CONSTRUCTION

The major components of the building construction stage would involve installation of utilities and infrastructure, pouring the foundation, and erecting the structure of the building, interior finishing work, and landscaping. This would be the most intensive stage of construction where the number of construction employees on site would be greatest and where delivery of materials would be most frequent. In order to minimize disturbance to local residents, construction activities would be scheduled to comply with all applicable local regulations. Truck routes would be carefully established to minimize impacts on residents to the extent practicable. Construction activities under the proposed MOD are expected to occur over several years. Hours for construction activities and truck routes would be established and reviewed with the Town and NYSDOT prior to the initiation of any construction. These issues will be thoroughly reviewed and vetted by the Town Board and Planning Board during the SEQR and site plan/subdivision review process conducted by the boards for each project submitted as part of the MOD.

Normal operations during the construction phases of a project typically consist of on-site personnel (laborers, foremen, vehicle operators, drivers, engineers, surveyors, etc.), entering and departing of vehicles from designated entrances (including personal, large construction vehicles, and material transport trucks), and establishment of trailers for base of operations. Contractors will be required to follow an approved site plan to ensure that infrastructure is installed in accordance with design standards, code and permits.

A detailed description of construction activities together with a phasing plan and a schedule for the installation of the infrastructure will be developed for each project developed as part of the MOD. All MOD projects will require a NYSDEC General Permit for Stormwater Discharges from Construction Activity be obtained prior to initiation of construction. Due to the limitations of site

soils in utilization of some common stormwater management techniques, an Individual SPDES permit may be required, depending upon the final development proposal and buildout design.

As part of the requirements of either permit, the Owner/Operator must supply comprehensive construction drawings and a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will incorporate comprehensive erosion and sediment control as per the standards and practices listed in “New York State Standards and Specifications for Erosion and Sediment Control (Blue Book)”, November, 2016 and post-construction stormwater controls.

For any project constructed in the MOD, it is anticipated that a number of permits and approvals will be necessary prior to the commencement of construction activities.

FUTURE WITHOUT THE PROPOSED PROJECT (NO-BUILD CONDITION)

In the Future Without the Proposed Project, there are currently no planned projects in the MOD Zoning Area.

PROBABLE IMPACTS OF THE PROPOSED ZONING (BUILD CONDITION)

TRAFFIC AND TRANSPORTATION

Construction within the Proposed MOD Zoning Area would create daily construction-related traffic to and from a project site(s) including vehicle trips related to workers and delivery of materials and equipment. In addition, there would be some truck traffic associated with removal of construction debris, demolished structures, and potentially from excavated materials from the Project Site.

Route 202/35/Crompond Road is a major state roadway that travels through the MOD Zoning Area. The primary access road for construction vehicles will be Route 202/35/Crompond Road. Therefore, construction vehicles will be subject to the same roadway use limitations as the general public, such as lane closures. It is possible that construction workers would come from local areas and access the site from local roads.

The number and type of vehicles would vary depending on the exact work being done at the project site(s). During land clearing, grading, and excavation, the primary activity would be limited to that specific equipment (which would remain on-site during the land preparation phase) and the workers operating the equipment and generally working on the initial effort. Building construction typically requires the greatest number of workers and generates more vehicle trips than other phases of development. However, construction-related peak traffic hours for the morning and afternoon/evening are typically from 6:00 AM to 7:00 AM and 3:00 PM to 4:00 PM, respectively. As such, construction traffic would avoid significant conflicts with commuter peak hours, which are typically between 8:00 AM to 9:00 AM and 5:00 PM to 6:00 PM as well as local peak traffic hours, which were determined, based on the collected traffic data, to take place from 5:00 PM to 6:00 PM on Friday and 3:30 PM to 4:30 PM on Sunday.

A traffic management plan would be in place to minimize impacts on local traffic. Measures would include clear signage, detours, and flagmen, as necessary. All construction vehicles and staging are expected to be accommodated on site, thereby limiting any queuing on public streets. In addition, Work Zone Traffic Control Plans (WZTCP) would be developed as necessary and approved by the Town for any construction performed on its roads. Finally, local roads that carry

construction vehicles and other local traffic will be swept or washed down as needed as determined by the Town.

AIR QUALITY

Air quality impacts associated with construction activities are typically from the generation of fugitive dust and emissions from vehicles and equipment. Fugitive dust can result from grading, excavation, filling, or movement of vehicles over dry dirt. Erosion and dust control measures to minimize impacts during construction would include:

- Installing truck mats or anti-tracking pads at egress points to clean the trucks' tires prior to leaving the Project Site;
- Watering of exposed areas during dry periods;
- Using drainage diversion methods (silt fences) to minimize soil erosion during site grading;
- Covering stored materials with a tarp to reduce windborne dust;
- Proper maintenance of equipment; and
- Using truck covers/tarp rollers that cover fully loaded trucks and keep debris and dust from being expelled/emitted from the truck along its haul route.

Fugitive dust would be expected to remain on-site and have minimal effect on surrounding properties. Due to the distance of construction activities from sensitive land uses, fugitive dust would not result in any significant adverse impacts.

Vehicle emissions from construction vehicles and equipment can result in elevated levels of nitrogen oxides (NO_x), particulate matter (PM), and carbon monoxide (CO). Greatest impacts are typically associated with heavy duty equipment that is used for short durations. To minimize emissions, vehicle operators would be required to comply with any applicable idling restrictions; use clean fuels as feasible; conform to any applicable local, State, or Federal emission standards; and use vehicles and equipment with Tier 2-rated engines or better. Because emissions would be temporary in nature and construction activities would not be in close proximity to sensitive land uses, construction activities would not be expected to result in any significant air quality impacts.

NOISE

Construction of the MOD projects would typically generate noise and vibration from construction equipment, construction vehicles, worker traffic, and delivery vehicles traveling to and from project sites. Noise levels caused by construction activities would vary widely, depending on the phase of construction—demolition, excavation, foundation, construction of the structures, etc.—and the specific task being undertaken. All construction activities would be conducted in full compliance with existing regulations, including local day and hour construction limitations. Construction activities would be conducted in full compliance with the Town's noise ordinance which restricts use of any pile driver, steam shovel, pneumatic hammer, derrick, steam or electrical hoist or other excessively loud apparatus between the hours and 8:00 PM and 7:00 AM, unless where authorized by the Town. The Town also has a general provision in its noise ordinance that prohibits unreasonable and disruptive noise between 8:00 PM and 7:00 AM on weekdays, and 8:00 PM and 9:00 AM on Sundays or holidays, with which construction activities would also comply.

Local, State, and Federal requirements mandate that certain classifications of construction equipment and motor vehicles be used to minimize adverse impacts. Thus, construction equipment would meet

specific noise emission standards. Usually, noise levels associated with construction and equipment are identified for a reference distance of 50 feet.

Significant noise levels typically occur nearest the construction activities and may reach as high as 90 A-weighted decibels (dBA) under worst-case conditions. **Table 18-1** provides an overview of potential noise emissions from typical construction vehicles and equipment. The exact sequence and duration of construction activities would vary, but the equipment producing the highest noise levels would typically be used intermittently or for short durations. Because high noise levels would be temporary, proposed construction activities would be a substantial distance from sensitive land uses (e.g., residences), and all construction activities would be conducted in compliance with all applicable noise ordinances, no significant adverse noise impacts during construction would be expected.

STORMWATER AND EROSION AND SEDIMENT CONTROL

Ground disturbance can expose soils to erosive forces such as rain and wind, which can lead to sedimentation of nearby waterbodies. To prevent potential impacts to water quality, any projects that disturb more than 1 acre of land are required to obtain a SPDES General Permit (GP-0-10-001) from the New York State Department of Environmental Conservation (NYSDEC). As part of this permit process, a Stormwater Pollution Prevention Plan (SWPPP) must be developed, which includes an Erosion and Sediment Control Plan (ESCP). Appropriate erosion and sediment control measures for each phase would be developed as a project progresses. These measures would require review and approval from NYSDEC before any earth work activities can take place. Upon completion of construction activities, a landscape plan would be implemented to revegetate disturbed areas.

With NYSDEC-approved erosion and sediment control measures in place, no significant adverse impacts related to erosion and sedimentation would be expected to occur.

**Table 18-1
Typical Noise Emission Levels For Construction Equipment**

Equipment Item	Noise Level at 50 Feet (dBA)
Air Compressor	81
Asphalt Spreader (paver)	89
Asphalt Truck	88
Backhoe	85
Bulldozer	87
Compactor	80
Concrete Plant	83 ⁽¹⁾
Concrete Spreader	89
Concrete Mixer	85
Concrete Vibrator	76
Crane (derrick)	76
Delivery Truck	88
Diamond Saw	90 ⁽²⁾
Dredge	88
Dump Truck	88
Front End Loader	84
Gas-driven Vibro-compactor	76
Hoist	76
Jack Hammer (Paving Breaker)	88
Line Drill	98
Motor Crane	93
Pile Driver/Extractor	101
Pump	76
Roller	80
Shovel	82

Truck	88
Vibratory Pile Driver/Extractor	89 ⁽³⁾
<p>Notes:</p> <p>¹ Wood, E.W., and A.R. Thompson, Sound Level Survey, Concrete Batch Plant; Limerick Generating Station, Bolt Beranek and Newman Inc., Report 2825, Cambridge, MA, May 1974.</p> <p>² New York State Department of Environmental Conservation, <i>Construction Noise Survey, Report No. NC-P2</i>, Albany, NY, April 1974.</p> <p>³ F.B. Foster Company, Foster <i>Vibro Driver/Extractors, Electric Series Brochure</i>, W-925-10-75-5M.</p> <p>Sources: Patterson, W.N., R.A. Ely, And S.M. Swanson, <i>Regulation of Construction Activity Noise</i>, Bolt Beranek and Newman, Inc., Report 2887, for the Environmental Protection Agency, Washington, D.C., November 1974, except for notated items.</p>	

MITIGATION

As described above, a number of measures would be implemented to reduce impacts from construction. These measures would be developed in full compliance with all applicable local, State, and Federal regulations. Therefore, construction resulting from the adoption of the MOD Zoning would not be expected to result in any significant adverse impacts on the MOD Zoning Area or in the surrounding area.

B. MOD DEVELOPMENT PLAN

EVERGREEN

OVERVIEW

The development of the Evergreen Manor Project is expected to be completed in several phases. It is anticipated that the Phase 1 Evergreen Manor development program will involve the construction of the assisted and independent living facility and residential apartments on proposed Parcels 3 and 4, utility infrastructure and the main entrance road on Parcel 8, placement of excess fill material on Parcels 2 and 5, and related stormwater management measures and wetland mitigation activity on Parcels 6 and 7. Development of Parcels 1, 2 and 5 which is expected to include the construction of hotel, retail/medical/dental labs, and restaurant uses and is expected to be constructed upon completion of the Phase 1 development. The work described in the Phase 1 Evergreen Manor development program includes the largest potential for soil disturbance and soil erosion if not properly mitigated. Subsequent phases will be smaller in size and may be developed over several years. Future development phases will follow similar construction sequencing procedures to those described below. Refer to Site Plan Drawing SP-4.2 for location of work areas and development sites referenced herein.

Before construction activities begin on any parcel the following requirements will be met:

- Construction fencing and/or silt fencing shall be installed to delineate the approved limit of disturbance.
- Silt fences and hay bales as shown on the erosion control plans in the SWPPP shall be installed throughout the entire area where work is anticipated. These erosion and sediment control measures shall be maintained throughout the Project’s construction phase.
- Suitable quantities of erosion and sedimentation stabilization and control measures, including, but not limited to, mulch/woodchips, erosion control blankets,

hydroseed/tackifier and granular sub-base material will be readily available on site for implementation as needed throughout the construction of the Project.

- The Project Site shall be inspected by the Contractor daily to assure that all erosion and sedimentation control measures are functioning properly, and the Contractor shall act to remedy deficiencies in the erosion and sediment control measures immediately. Daily reports shall be provided by the Contractor in the SWPPP notebook maintained on site during all construction activities.
- The Project Site shall be inspected on a weekly basis, and after every storm of ½ inch or more, by the Owner's Representative. The Owner's Representative shall be a New York State Professional Engineer, personnel working directly under the supervision of a New York State Professional Engineer, or a New York State Certified Phase II Erosion Control Specialist. The Contractor shall commence addressing all matters identified in the bi-weekly reports as requiring action to stabilize erosion and sediment control within 2 days of notification from the Owner's Representative and shall complete work as soon as possible. The Owner's Representative's reports will also be included in the SWPPP notebook maintained on site during all construction activities.
- All areas of disturbed soil that will not be worked on for 10 days or more shall be temporarily stabilized when work activities are ceased.
- All areas of disturbed soil shall be equipped with truck tracking pads where the exits abut existing asphalt roads used for construction activities. Access to and from areas of disturbed soil shall be limited to the areas of the truck tracking pads.
- All existing asphalt roads utilized for construction activities, hauling, or trucking shall be swept clean as required, with a minimum of two times per day.
- All haul roads shall be watered as required to prevent fugitive dust from truck traffic activities.
- Crushing activities shall be monitored to prevent the generation of fugitive dust. Materials shall be watered as required to prevent fugitive dust.
- All stockpiles for soil shall be surrounded with silt fence and hay bales. Soil stockpiles that will be in place for over ten days will be stabilized with seed when constructed. Silt fences and hay bales shall be observed daily and immediately repaired as required.
- As construction allows, building excavations for lower floors, floor slabs and foundations shall be excavated to store storm water for conveyance to sediment control basins via de-watering pump points.
- Where rock is encountered in the areas of mass excavation, rock shall be cleared of soil overburden, or soil overburden shall be temporarily stabilized until removed.
- All slopes of 3:1 or greater disturbed during construction activities, shall be immediately stabilized after final grading of the areas. These areas shall be completed with placement of top soil followed immediately with placement of jute mesh erosion control blankets and grass seed to stabilize the slopes. Jute mesh erosion control blankets, where employed, shall be pinned to the slopes in accordance with the Manufacturer's installation requirements. Temporary erosion and sediment stabilization methods shall be applied as required during the construction activities on slopes, prior to final grading activities occurring.

CONSTRUCTION PHASING

Construction Phase 1: Install Erosion and Sediment Control Measures/Tree clearing/Road and Utility Construction

Phase 1 of construction will last approximately 5 months. The area of work will be approximately 15 acres and located in areas 1, 1a, 2a, 2b, 3, disturbing approximately 4.5 acres of soil in areas 1 and 1a only. Under this phase, the main site access road and supporting utilities will be installed. The road will be stabilized with granular base to allow for construction vehicle access to parcels 3 and 4. Sediment traps and diversion swales will be installed to collect runoff from the road and will require ongoing maintenance during the development of parcels 3 and 4. The following activities will occur during this phase.

- Install construction fencing and/or silt fencing along the approved limit of disturbance area and all Erosion and Sediment control fencing in areas 1, 1a, 2a, 2b, 3
- Demolish existing buildings and structures. Mulch and seed all disturbed areas
- Clear cut trees within areas 1, 1a, 2a, 2b, 3 – No Soil Removal
- Grub vegetation, removal topsoil for Sediment Traps in 1 and 1a
- Excavation and grading of Sediment Traps
- Excavation and grading of swales where needed to direct stormwater to sediment traps
- Strip topsoil from main road and area 1a. Stockpile topsoil on area 1a
- Excavate and grade main road removing excess material for fill placement on area 1a
- Bring road to subgrade elevations
- Cut in driveways to individual parcels
- Install water, sanitary, drainage pipes and structures in main road
- Install electric and communication conduits and manholes. Install gas mains
- Place 100 feet of granular and asphalt base course on main road at Rt 202 entrance
- Place granular base on remaining main road up to cul-de-sac
- Stabilize all areas of work

Construction Phase 2: Construction of Development sites in areas 2a and 2b, Site Retaining Walls, Site Utilities

Phase 2 of construction will last approximately six months. The work area will be approximately 9 acres and located in areas 2a and 2b, disturbing approximately 7 acres of soil. Under this phase, area 1 (main road) and area 1a will be temporarily stabilized to reduce soil erosion. No work is anticipated in areas 1 and 1a during this phase. Development sites for Parcels 3 and 4 will commence with site clearing and excavation for buildings and site improvements as shown for areas 2a and 2b. Excess soil material is anticipated from each site and will require removal by trucking off site. The goal of this phase will be to install the sediment traps, diversion swales and begin foundation excavation and foundation construction. Once foundations areas have been excavated, create sediment sumps next to the building areas to contain runoff for sediment removal and for dewatering as needed. Since the maximum soil disturbance will be over 5-acres exposed at one time, additional soil erosion and sediment control measures will be required to minimize soil erosion impacts. The following activities will occur during this phase in areas 2a and 2b only.

- Construct onsite sediment traps and stone lined diversion swales
- Divert clean water from undisturbed areas to downstream collection areas
- Clear and grub areas
- Strip topsoil and stockpile with work areas and Install silt fencing around stockpiles
- Limit soil exposure in each parcel to no more than 3.5 acres each for a total of 7 acres
- Excavation of building foundations

- Excavation and grading of parking areas for areas
- Construct building foundations
- Begin retaining walls and stabilize steep slope areas
- Begin installation of site drainage systems, piping and structures
- Temporarily stabilize completed slopes and exposed soil not subject to earthwork activities

Construction Phase 3: Continued Building Construction in areas 2a and 2b, Create Wetland in area 3, Installation of Utilities to Buildings, Establish Rough Grading to subgrade elevations

Phase 3 of construction will last approximately four months and will have a work area of approximately 10.5 acres. Construction activities will occur in areas 2a, 2b, and 3, disturbing approximately 7 acres of soil. Under this phase mass earth work will be generally completed to rough grade elevations and steep slope areas will receive permanent vegetative or structural stabilization. Building foundations will be backfilled and grades around buildings will be brought close to finished subgrade elevations. Site retaining walls will be completed. Building construction continues. Subject to seasonal planting limitations, wetland creation work will commence in area 3. It is anticipated that this wetland work shall be completed in a continuous phase so that soil stabilization can occur as soon as possible. At the end of this phase it is anticipated that soil exposure will be limited to areas around the building and active utility installations. Construction access roads will be stabilized with granular stone or road base material and maintained throughout the construction phase. The following activities will occur during this phase.

- Building Construction continues in areas 2a and 2b,
- Grade elevations established on drives and parking areas
- Install building utilities from main drive
- Complete retaining walls
- Install sediment and erosion control in area 3
- Soil preparation for new wetland in area 3 of 1.2 acres
- Install wetland planting and soil restoration in area 3

Construction Phase 4: Building Construction Continues, Completion of Route 202/35/Crompond Road intersection work, install main road curbs, street lights and sidewalks

Phase 4 of construction will last approximately 4 months and will have a work area of approximately 10.5 acres. Construction activities will occur in areas 1, 2a, 2b, and 4, disturbing approximately 4.5 acres of soil. Under this phase the majority of major grading has been completed and stabilized with temporary or permanent vegetation or structural measures. Work will include paving the base course on the main road and completing intersection work at the main road and Route 202/35/Crompond Road. The following activities will occur during this phase.

- Maintain sediment traps and manage swales as needed
- Building construction continues
- Final grading of site and drainage connections
- Complete building utility connections in 2a and 2b
- Activate water systems for partial fire suppression systems to buildings
- Install curbs and granular base course in areas 2a and 2b
- Install curbs and asphalt base courses in area 1
- Install curbs and intersection work in Route 202/35/Crompond Road

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- Install sidewalks and street lights in area 1 along main road
- Install traffic signals at intersection – maintain existing signals operational

Construction Phase 5: Building Construction Continues, Completion of Route 202/35/Crompond Road intersection work, final paving and landscaping

Phase 5 of construction will last approximately 4 months and will have a work area of approximately 14.5 acres. Under this phase, site development work in area 2a and 2b will be completed and will disturb approximately 4.5 acres of soil. Construction work on the building interior may continue beyond exterior work. Final landscaping and asphalt finished course pavements will be completed. Traffic signal testing and acceptance will be completed, and the old signals removed.

- Complete Building construction
- Install final plantings and site restoration
- Road striping and signage
- Maintain sediment traps and manage swales as needed
- Building construction continues
- Final road and driveway paving

Construction work activities may persist after these five phases but will be limited to the interiors of buildings.

GYRODYNE

CONSTRUCTION PHASING

The preferred construction plan for the Gyrodyne Project site involves the simultaneous construction of the medical office building and the multi-family residential building, as well as all of the on-site improvements. The existing buildings will be demolished and the entire site will be cleared and graded prior to construction beginning for the two buildings. Construction is projected to begin in 2020 and is expected to last for approximately 24 months.

Constructing the project in a single phase will result in the shortest construction period, and will have a direct positive impact on reducing the number of construction vehicle trips generated. The reduction of truck trips will reduce the amount of time that local traffic volume will be affected, as well as a reduction in noise and air pollution generated by the trucks. The shorter duration of time also reduces the time the site will be disturbed with noise and dust, as well as a shorter time period that adjacent residents will be affected by any direct impacts resulting from the ongoing construction. Dividing the proposed project into multiple phases for construction purposes will extend the duration of impacts from the construction on the adjacent residents. A single phase will reduce the time period from beginning grading to when the site becomes operational.

See construction schedule below for an estimated construction sequence plan/timeline.

Construction Period 1 (months 1 to 2): Site Preparation and Installation of Erosion and Sediment Control Measures/Tree clearing/Road Construction

Site preparation for the site would occur during the first two (2) months, with a majority of it being completed in the first month. The area of work for the residential building will be approximately 4.3 acres and the area of work for the medical building would be 4.8 acres.

Under Phase 1, the site access roads and supporting utilities will be installed. The road will be stabilized with granular base to allow for construction vehicle access. Sediment traps and diversion swales will be installed to collect runoff from the road and will require ongoing maintenance during the development of parcels 1 and 2.

Construction Period 2 (months 3 to 5): Preparation of development site for the buildings including site retaining walls and utilities

Phase 2 would include the installation of retaining walls and infrastructure for the site during months 3-5. Construction of the residential buildings would begin during month 4 and continue through month 12.

Construction Period 3 (months 5 to 12): Continued residential building construction, begin medical building construction, installation of utilities to buildings, electrical, plumbing and mechanical work in residential building, establish rough grading to subgrade elevations.

Construction of the buildings would begin during month 4 and continue through month 12. The electrical, plumbing and mechanical work for the residential building would begin first and take place during months 8 to 10.

Construction Period 4 (months 12 to 18): Building construction continues,

Construction Site work for the residential building only would occur during months 11 to 14. The electrical, plumbing and mechanical work for the medical building would take place during months 13 to 18. Interior finishes for the residential building would be done during months 11 to 14. Building completion and site work for the residential building is expected to occur during month 15.

Construction Period 5 (months 18 to 24): Medical building construction continues, site work for medical building and off-site improvements.

The electrical, plumbing and mechanical work for the medical building would take place during months 18 to 21. Interior finishes for the medical building would also be done during months 18 to 21. Building completion and site work for the medical building would be completed during month 24. Construction of Orchard Lake trails, Route 202/35/Crompond Road intersection work, installation of main road curbs, street lights and sidewalks would occur during Phase 5.

ALTERNATIVE CONSTRUCTION PHASING PLAN

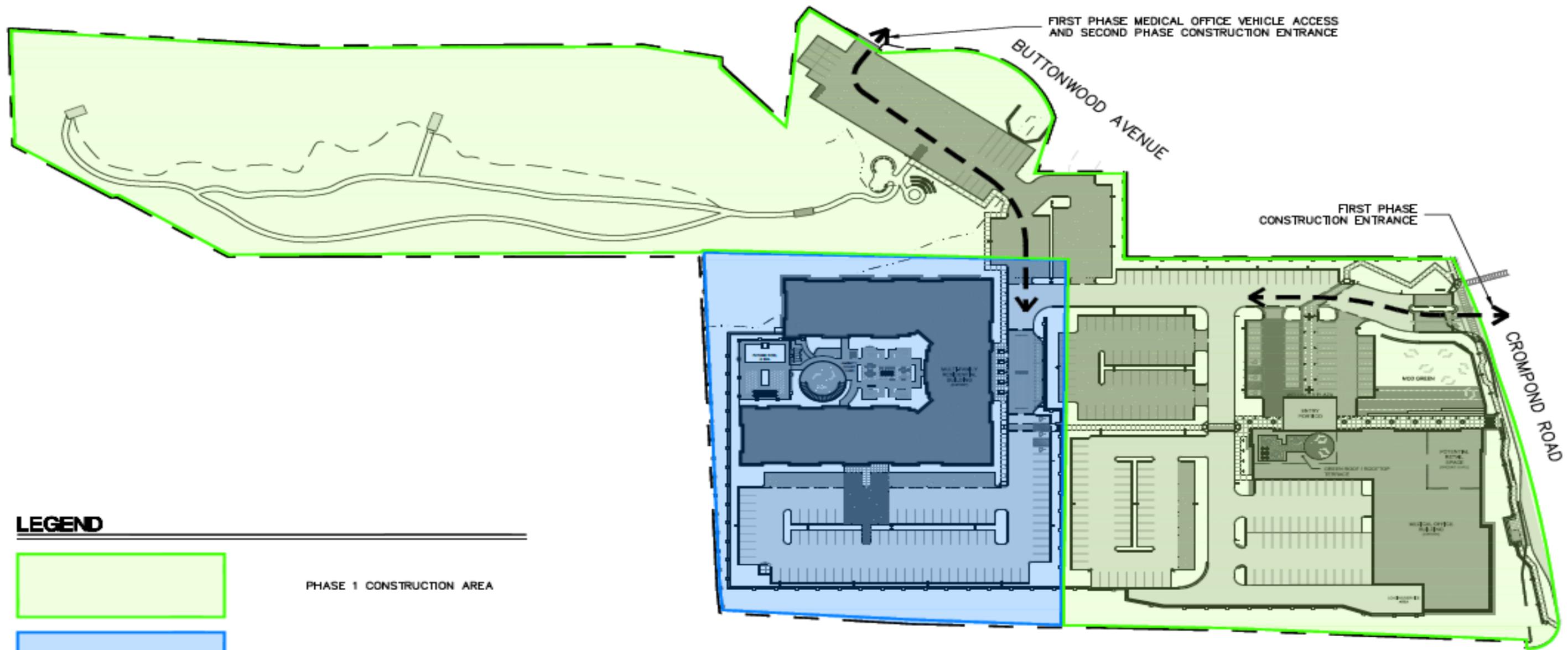
An alternative plan to completing construction of the site in a single phase would be to follow a two-phase sequencing plan for the Gyrodyne Project site. This would involve the medical office building and associated on-site improvements being constructed first, while keeping the existing medical office buildings located in the southern (interior) portion of the site open and operational during the initial construction period. To avoid the co-mingling of construction traffic with users of the existing medical office buildings, access for users of the existing medical office buildings will be moved to a new driveway off of Buttonwood Avenue, requiring vehicles traveling on Route 202/35/Crompond Road to turn onto Buttonwood Avenue and utilize the residential street to get access to the existing medical offices. Construction traffic associated with construction of the new medical office building will be from the existing driveway that is currently being used from Route 202/35/Crompond Road and directly adjacent to the proposed medical offices. This proposed access plan results in an increase in traffic on Buttonwood Avenue, with the vehicles that had previously used Route 202/35/Crompond Road to access the existing medical office buildings. The added traffic on Buttonwood Avenue would be eliminated during a single phase construction plan, since the existing medical office buildings would not be in operation during the construction period (see **Figure 18-1, Multi-Phase Construction Sequence Plan**).

While the existing buildings remain open, the northern portion of the property will be cleared and graded in preparation for construction of the new medical office building located at the northeast corner of the property, along Route 202/35/Crompond Road. Construction will involve the building as well as on-site improvements for the northern portion (area adjacent to Route 202/35/Crompond Road) of the property. Once the medical office building is completed and operational, clearing and grading will begin for the remainder portion of the property, which includes the demolition of the original medical office buildings. Construction will then begin on the multi-family residential building as well as the remaining on-site improvements.

Construction for a two-phase plan would also be projected to begin in 2020. The medical office building would be expected to take approximately 20 months, and the multi-family residential building would be expected to take approximately 16 months, with a 3-month break in between. The total duration of construction for the entire project would be estimated to be approximately 38 to 40 months, which is approximately 14 to 16 months longer than having construction occur in a single phase.

Staging for construction activity for both proposals will completely occur on-site and will be shifted to different locations as construction on the property progresses. The staging area will be protected at all times with restricted access. Construction activities will be confined to weekday hours between 7:00 a.m. and 7:00 p.m. in order to abide by Town Code requirements for construction activities. Idling of heavy equipment will be restricted to five minutes per hour during the weekday hours of 8:00 a.m. and 6:00 p.m. in order to limit the amount of noise. Anticipated truck routes for vehicles traveling to and from the Gyrodyne Project Site have not yet been determined, but they will follow routes that have been accepted and approved by the Town. On the preliminary site plan, the amount of “cut” material to remove from the property is approximately 70,466 cubic yards, and the amount of “fill” material is approximately 20,368 cubic yards. At this preliminary stage, both 30-yard and 40-yard trucks are being considered for these tasks.

PLAT SCALE - 1/8" = 1'-0" - 2015 WORKSHEET: Medical Oriented District Construction Phasing Exhibit Date: March 27, 2018/Version: 1.0 - Plotted by: ERM



LEGEND



PHASE 1 CONSTRUCTION AREA



PHASE 2 CONSTRUCTION AREA



MULTI-PHASE CONSTRUCTION SEQUENCE PLAN



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MARCH 29, 2019

Figure 18-1

Gyrodyne
Multi-Phase
Construction
Plan

Medical Oriented District
Draft Generic Environmental
Impact Statement



Not to scale



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C. PROBABLE IMPACTS OF MOD DEVELOPMENT PLAN

EVERGREEN

Construction activities associated with the Evergreen Manor Project will be temporary in nature. Construction of the Evergreen Manor Project will involve the construction of a main entrance road, individual development parcel access driveways, parking areas, underground utility systems, building foundation systems, building structures, stormwater management measures, site lighting, landscaping and other physical improvements that will physically alter the existing Evergreen Manor Site.

Construction activities could potentially result in a number of temporary environmental impacts. These include construction-related noise from the operation of heavy equipment; construction traffic relating to material deliveries and material export operations; employee arrival/departure routes on the adjoining roadway network; increased soil erosion from on-going earthwork operations; and the degradation of air quality from fugitive dust and emissions from operating power equipment. VS Construction anticipates that all of these impacts would be mitigated through management of the timing and methodologies of the construction process.

GYRODYNE

SINGLE PHASE CONSTRUCTION PLAN

Like any large construction project, the future construction associated with the Gyrodyne Project will have short-term temporary environmental impacts which can include soil erosion, noise, traffic disruption, and dust associated with the construction of the proposed buildings, driveways, parking, utilities, plazas, lighting, landscaping, and sidewalks. The preferred construction timing for the site is to construct both the medical office building and the multi-family residential building at the same time in a single phase. A proposed alternate is to have construction follow a two-phase plan with the medical office building constructed first followed by the multi-family residential building. A reasonable construction timeframe estimate is approximately 24 months for the preferred single phase approach, which is approximately 14 to 16 months shorter than the 38 to 40 month projection for the alternate two-phase construction plan. Noise and vibration will be generated from construction and worker traffic, heavy equipment operation, and delivery vehicles. While there will be far fewer site-generated trips associated with construction than there will be with the full build-out of the Proposed Action, the number of site-generated trips associated with construction is less with a single phase plan as compared to a two-phase plan.

TWO-PHASE CONSTRUCTION PLAN

If a two-phase construction sequence is followed, there will be the possibility that once the construction of medical office building is complete in the first phase, real estate market conditions may change prior to the start of the second phase. Between the time that construction of the first phase begins and ends, the real estate demand for multi-family residential can dramatically shift and no longer be profitable for a developer to construct and it can become difficult to lease residential units in the building. The potential consequence can either be that the second phase never begins, and the existing medical office buildings would remain, or the second phase can be partially completed and left unfinished. Either way, there is a risk of having existing buildings

that may become vacant, or a partially completed new building that is completely vacant on an unfinished site. Having the entire project completed in a single phase would eliminate the risk of real estate market conditions changing between two phases of construction.

D. MITIGATION

EVERGREEN

Construction of the Evergreen Manor Project has been designed to minimize and mitigate potential impacts to the extent practicable. Best management practices will be incorporated into the construction management plans to minimize potential impacts in accordance with all applicable laws and regulations.

CONSTRUCTION TRAFFIC

The routes of trucks being used for construction activities will vary depending on the truck's point of origin and/or destination, but the roads that will be utilized by trucks will be US Route 202/35/Crompond Road, US Route 6, and US Route 9.

AIR QUALITY

During construction of the Evergreen Manor Project, appropriate air quality measures, such as erosion and sediment controls, stabilized construction entrances, site watering during excavation (including truck wash stations) to avoid the re-suspension of dust, covering stockpiles of soil and gravel, will be implemented where necessary.

NOISE

Although noise will be generated from construction equipment, all equipment will be properly maintained and muffled in compliance with the EPA's noise emission standards, and such noise impacts will be temporary and short-term. In compliance with Section 197-16 of the Town of Cortlandt Code, Town of Cortlandt Noise Control Law construction on of the Evergreen Manor Project will limit "the use and operation of construction machinery and equipment in connection with the excavation and filling of land and the demolition, rehabilitation and construction of buildings between the hours of 7:00 p.m. and 7:00 a.m., Monday through Friday, from Friday 7:00 p.m. to Saturday 8:00 a.m. and all day Sunday and national holidays". If bedrock is encountered as the Project area is excavated and blasting is required all necessary permits for blasting will be obtained. Prior to any blasting a pre-blast survey of all structures that could potentially be impacted will be performed by experienced and licensed professionals and submitted to the Town for approval.

STORMWATER & EROSION AND SEDIMENT CONTROL

Several temporary stormwater management and erosion and sedimentation control practices to be utilized during construction to mitigate any potential impacts including, but not limited to, surrounding material stockpiles with silt fencing and hay bale dams, excavated and embankment areas will be graded to permit drainage and the runoff will be intercepted in temporary diversion ditches with silt barriers or settling basins to collect sedimentation. Sediment traps, inlet protection, swales, berms and energy dissipaters will be installed, as necessary, to minimize soil and sediment from leaving the Project Site. Temporary mulching and seeding will be conducted

to limit and control the exposure of soil. Stabilized construction entrances including wheel wash down areas and anti-tracking pads will also be constructed and maintained throughout construction to minimize the off-site migration of sediment. Soil erosion and sedimentation control measures will meet the New York State Department of Environmental Conservation (NYSDEC) New York State Standards and Specifications for Erosion and Sediment Control requirements and the Town of Cortlandt requirements. An erosion and sediment control plan for the Evergreen Manor Project is included in the full-size site plan set for the project and discussed in additional detail in the SWPPP (see **Appendix 18**). Permanent structures and measures implemented to manage the project's quantity and/or the quality of the stormwater will require regular inspections and maintenance. These include permanent erosion control practices (soil stabilization), water quality control practices (i.e. bioretention areas), and related stormwater flow controlling structures (culverts, catch basins, etc.). The project sponsor will be responsible for inspecting and maintaining permanent stormwater management structures and practices as outlined in the project SWPPP. See Chapter 7, "*Stormwater Management*," for additional discussion regarding the Erosion and Sediment Control Plan.

GYRODYNE

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Maintenance and Protection of Traffic (MPT)/Work Zone Traffic Control (WZTC) plans will be implemented to ensure continued two-way vehicle and pedestrian access around the property. Typical MPT elements include wayfinding and advance lane/shoulder closure signage (e.g. "Shoulder Closed Ahead"), construction fencing, barricades (possibly with flashing beacons/temporary lighting), flaggers to help direct traffic, etc.

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STORMWATER & EROSION AND SEDIMENT CONTROL

Soil erosion and sedimentation control measures will meet the New York State Department of Environmental Conservation (NYSDEC) New York State Standards and Specifications for Erosion and Sediment Control requirements and the Town of Cortlandt requirements. A Stormwater Pollution Prevention Plan (SWPPP) will be utilized to control erosion and minimize the transfer of site debris onto local roads. Erosion and Sediment Control elements may include silt fences, hay bales, a gravel or crushed-stone construction entrance/exit with a wash-down area, and/or sandbags to protect inlets. An erosion and sediment control plan for the Gyrodyne Project is included in the full-size site plan set for the project and discussed in additional detail in Chapter 7, “*Stormwater*” and in the SWPPP (see **Appendix 18**).