N. Construction

1. Introduction

The redevelopment of the site and implementation of the Project would require building demolition, infrastructure removal, installation, and upgrades, and new construction. Although involving several different facets, development of the Project would require the use of conventional construction equipment. The equipment utilized would differ depending on the point in the construction process, but in general heavy equipment (bulldozers, dump trucks) would be used during ground clearing and excavation activities.

The projected construction sequencing for the two project phases is included in Table III.N-3, at the end of this Section.

Typical construction activities potentially occurring in each phase would include:

- **Building Demolition** – The buildings would require the remediation of any controlled materials (i.e. asbestos, lead paint). Asbestos abatement and removal projects are regulated by the New York State Department of Labor under Industrial Code Rule 56. Code Rule 56 covers installation, removal, encapsulation, application or enclosure of asbestos material. Construction and demolition debris would be disposed offsite at a regulated solid waste facility. To the extent practical, concrete and brick would be recycled for use as fill and base material. Demolition procedures would also include creation of a stabilized construction entrance and exit area comprised of a clean gravel roadway. The public roadways surrounding the demolition sites would be cleaned periodically with a street sweeper and water truck. Fixed air monitoring stations would be established at locations along the perimeter to monitor for particulates and volatile organics using direct-reading in accordance with regulatory requirements.

- **Remediation** – Prior to beginning any demolition of the existing buildings, the asbestos contained in fire proofing, acoustical and finish plasters, equipment insulation, piping and fitting insulation, roofing felts, boards, shingles, and flashings, dust and debris, vinyl asbestos tile, ceiling tile, gaskets/seals/sealants, and fire doors will be abated by removing the material and disposing of it in a certified landfill. The New York State Department of Labor’s Asbestos Control Bureau oversees the abatement of toxic hazards associated with asbestos fiber during the rehabilitation, reconstruction or demolition of buildings and other structures originally constructed with asbestos containing materials. The requirements address the licensing of contractors, certification of all persons working on asbestos projects, the filing of notifications of large asbestos projects, and a predemolition survey of buildings to identify any asbestos which may be present to ensure proper abatement of asbestos materials. New York Code Rule 56 requires that a building survey be conducted prior to advertising for bids, or commencing work, on any demolition project by a certified inspector. The survey includes the identification of all asbestos materials throughout the building to be demolished. The survey identifies and assesses the condition of asbestos material contained in fireproofing, acoustical and finish plasters,
equipment insulation, piping and fitting insulation, roofing felts, boards, shingles, and flashings, dust and debris, vinyl asbestos tile, ceiling tile, gaskets/seals/sealants, and fire doors.

If soils immediately adjacent to any building indicate visible evidence of peeling paint, lead and a variety of other metals, prior to demolition, these areas would be tested. Where problems are found, it is anticipated that it would be necessary to remove the immediately surrounding soils to a depth of 6 to 12 inches, and dispose of or reuse onsite in accordance with applicable regulations.

To the extent practical, concrete and brick would be recycled for use as fill and base material. The large pieces of concrete debris could be placed into an on-site crusher to create an aggregate suitable for use at this site or sold locally. The crushed concrete could serve as a sub-base for parking lots and structures.

In addition:

- All fluorescent lamps and ballasts shall be removed and properly disposed of.
- All utilities (water, sanitary, storm, gas, electrical, telephone/data, etc.) serving the building would be located, disconnected, and plugged or capped.
- Solid wastes which are not considered construction and demolition (C&D) debris, such as garbage, corrugated container board, carpeting, furniture, appliances, tires, drums, and containers, clothing, etc., would be removed and properly disposed of.

Most of the buildings on the facility were previously heated via steam generated at the Power Plant, and transmitted via a system of tunnels that extends throughout the facility’s main campus. The tunnels also contained electric and water lines and served as connecting corridors between buildings. The tunnels would be removed or abandoned as follows:

- Remove/remediate all asbestos in accordance with regulatory requirements before abandoning or removing the tunnels;
- Remove existing utility pipes;
- Where tunnels do not conflict with proposed buildings, roads or utilities, the tunnels can remain after removing the top slab, breaking up the bottom slab and backfilling. The tunnels would be filled solid with grout; and
- Where tunnels conflict with proposed construction, they would need to be removed.

The demolition of the buildings and utilities and the site remediation is anticipated to occur during both Phase I and Phase II of construction.
Site Preparation and Grading – Prior to construction, the disturbance limit for each phase would be staked in the field and reviewed to determine if changes to grading can conserve additional trees. This would be done by the installation of tree wells and minor adjustment to grading. The trees to remain would be protected with construction fencing to avoid damage during construction. In addition, wetlands, wetland buffers and habitat protection areas would be fenced to avoid damage by construction vehicles or workers.

Earthwork operations would establish the rough grading of the site. After the approximate subgrade elevation is established, the storm drainage and utilities would be installed. Sediment control measures during this phase would include installation of sediment barriers adjacent to all areas to be disturbed. A stabilized construction entrance would be installed at all points of access to adjacent roadways. Stabilization of all slope areas would proceed immediately upon completion. Dust control measures would be implemented as required.

The reconstruction of the golf holes would be phased to minimize the period in which the golf course would be shutdown.

Building Construction – The building construction is expected after the site access roads and utilities are completed. The duration would depend to some extent on the sale of units. The first buildings would not be occupied until the utility infrastructure system serving the units is completed.

2. Potential Impacts

Construction activities usually result in a number of temporary environmental impacts. The duration of these potential impacts are related to construction phasing and can include such impacts as increased on-site vandalism of building materials and construction equipment; construction related noise from the operation of heavy equipment; fugitive dust and emissions from operating power equipment; construction traffic relating to employee arrival/departure and material delivery routes on the adjoining roadway network; and increased soil erosion from on-going earthwork operations. The Applicant anticipates that these impacts would be mitigated through the management of the construction process. Each of these potential impacts is described in greater detail below.

Construction Phasing

The construction of the project is anticipated to be completed in two phases, extending over a period of approximately 10 years. Exhibit III.N-1, DEIS Phasing Plan identifies the two phases of planned construction. In general, the Applicant intends to commence with construction of the residential units on the west side of the project, along with a majority of the project’s commercial development (on both the east and the west side) during the first Phase of construction. Demolition of the former HVPC buildings and existing infrastructure would also commence during this initial phase of construction. Phase 2 would focus on completing the site’s utility infrastructure, and constructing the residential units on the east parcel along with the balance of the proposed commercial development. However, the timeline and sequence may vary to accommodate market conditions.
The planned phasing of construction is expected to reduce peak construction related project impacts. Further, the planned phasing of construction is expected to minimize project impacts by avoiding random spread of development across the site, thereby allowing for an efficient placement of construction staging and material stockpile areas. Construction staging and material stockpile areas would also be centrally located within the site to the maximum extent practical, minimizing any potential impacts to the surrounding residences. A detailed description of Project phasing is included in Chapter IV of the DEIS.

**Air Quality**

The primary anticipated air quality impacts from demolition and construction activities are related to fugitive dust and mobile source emissions. Fugitive dust can result from land clearing, construction materials or debris handling, excavation, demolition, compaction, short term storage and vehicle motion over unpaved areas. Mobile sources, such as construction equipment and construction worker vehicles, would produce emissions including CO, VOCs, and NO₂. Exhaust emission of particulate matter may also result from the use of diesel-powered vehicles. Given the scale of the project site and that most construction activity would occur in the interior of the site and relatively distant from neighboring uses, significant air quality impacts on surrounding uses are not anticipated.

**Noise**

Temporary, localized noise increases may also be expected from demolition and construction activities and vehicles during the construction period. The level of noise impact would depend on the equipment and activity involved and would decrease with distance from the construction site. Noise levels of “heavy” construction equipment ranges from 79 to 92 dBA at 50 feet. The U.S. EPA reports noise levels at housing projects range from a high of 88 to a low of 75 dBA from grading through finishing operations (U.S. EPA, Construction Noise Control Technology Initiatives, Table 2.2).¹ (See Section III.L for typical noise levels from construction activities.) As a point of reference, some common sound levels are listed below:

- Pile Driver at 100 feet – 90 to 100 dBA
- Chainsaw at 30 feet – 90 dBA
- Truck at 100 feet – 85 dBA
- Noisy Urban Environment – 75 dBA
- Lawn Mower at 100 feet – 65 dBA
- Average Speech – 60 dBA
- Typical Suburban Daytime – 50 dBA
- Quiet Office – 40 dBA
- Soft Whisper at 15 feet – 30 dBA

Noise levels from major construction operations at varying distances are identified below.

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¹ Construction equipment noise levels are provided in the Federal Highway Administrative Highway Construction Noise: Measurement Prediction and Mitigation, Appendix A.
Table III.N-1
Noise Levels of Major Construction Operations

<table>
<thead>
<tr>
<th>Construction Phase</th>
<th>100 Feet</th>
<th>400 Feet</th>
<th>600 Feet</th>
<th>1000 Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Clearing</td>
<td>78</td>
<td>72</td>
<td>63</td>
<td>59</td>
</tr>
<tr>
<td>Excavation</td>
<td>83</td>
<td>77</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>Foundations</td>
<td>71</td>
<td>65</td>
<td>56</td>
<td>52</td>
</tr>
<tr>
<td>Building Erection</td>
<td>78</td>
<td>72</td>
<td>63</td>
<td>58</td>
</tr>
<tr>
<td>Finishing and Cleanup</td>
<td>83</td>
<td>77</td>
<td>68</td>
<td>64</td>
</tr>
</tbody>
</table>

Source (U.S. EPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, 1971)

When evaluated against typical sound levels, the sound levels presented above are relatively low. The noise levels would be attenuated by a variety of mechanisms. The most significant of these is the diversion of the sound waves with distance. In general, this mechanism would result in a 6 dBA decrease in the sound level with every doubling of distance from the source. Additional reductions in noise are achieved through absorption by the atmosphere.

The Project site covers a large area. Projected sound levels at offsite locations would vary with the type and location of the construction activity on the Site. Because construction activities would be carried out at various locations and because these activities change as work progresses, the construction site would have both spatial and temporal noise dimensions. Noise levels at the various receptors would depend on the work activity, the proximity of the work activity (relative location on site/distance to receptor), and extraneous sources (i.e., sirens, and other background sources).

All activities would be subject to §107 of the Town’s municipal code, which prohibits construction, demolition or excavation between after 9:00pm and before 7:00am. As previously mentioned with air quality impacts, the size of the project site and the concentration of construction activity towards the interior would be expected to minimize the potential for significant noise impacts on surrounding uses. In addition, equipment is not generally operated continuously or simultaneously. There would be times when no equipment is operating and noise would be at ambient levels.

**Blasting**

It is expected that rock removal would be required to complete construction of the project. While it is anticipated that some bedrock may be removed with excavators or other power equipment, rock blasting is anticipated. Blasting noise is of very short duration (less than one second) and is typically heard as a dull rather than sharp type of sound. Potential areas of concern with blasting activities include flyrock, damage to existing structures from the associated airblast, as well as damage to on and off-site structures from ground vibrations attributable to the blasting activity. The use of explosives for blasting is regulated by §69 of the municipal code. Blasting requires permitting from the Town and is prohibited on weekends and holidays.
Traffic
Project implementation would generate construction-related traffic, including construction worker commuting and the delivery of materials and equipment. The numbers and types of vehicles would vary depending on the construction phase. Deliveries would generally be made on flat-bed or box trucks, with delivery routing having trucks entering the site from Route 22 at Wheeler Road. Typically, construction workers arrive on-site prior to the AM peak hour and depart before the PM peak hour, limiting the potential impact of employee traffic.

Phase 1A construction would provide a reasonable indication of anticipated construction traffic over the ten year project build-out, given its combination of residential and commercial new construction and adaptive reuse. On a typical workday, there would be approximately 150 construction workers on site. This would generate approximately 45 to 50 vehicles entering and exiting the site, assuming some car pooling and a few workers arriving by train. Depending on the stage of activity in that phase, there might be 10 small delivery trucks and 5 larger trucks during the course of the day. Most of the heavy equipment, such as excavators, bulldozers, backhoes and bulldozers, would have already arrived and would be stored on site in a staging area.

During the morning peak hour (i.e., 7:30 to 8:30 AM), approximately 45 to 50 vehicles could be expected, most of which would arrive and depart from the Route 22/Wheeler Road intersection. The AM traffic is considerably heavier southbound than northbound. In contrast, it is anticipated the much of the construction traffic would be reversed, with heavier traffic coming in a northbound direction in the AM peak. During the evening peak (i.e., 4:30 to 5:30 PM), construction traffic would be minimal given typical afternoon quitting times for construction workers. However, during the mid-afternoon periods, construction workers leaving the site could be delayed on Route 22 in response to school bus traffic. The improvements to the Route 22 intersections, including upgrading of the Wheeler/Route 22 intersection as part of Phase 1B of the development, would be sufficient to accommodate the construction worker traffic from each phase of development, since the improvements are based residential and commercial traffic from full development of the site, plus a growth factor plus potential traffic from other developments in the Harlem Valley.

As indicated above, the maximum number of construction vehicles and construction worker trips in the peak hours would not exceed the projected traffic volumes from Phase I or from full buildout of the Project. However, improvements to the intersection of Route 22 and Wheeler Road would be undertaken in Phase I (prior to the construction of Phase 1B).

Construction Site Security/Public Safety
The storage of large quantities of building materials, construction vehicles and other construction equipment on-site throughout the construction process increases the potential for on-site vandalism. The project site is currently monitored by a private security service. This type of security service would be maintained during (and after) construction of the project.

To ensure the safe passage of the public through the Project site, the Applicant would undertake the following steps:
• Install security fencing around the site before and building demolition or excavation activities commence on site;
• Maintain security fencing around the site until demolition activities are completed or all hazards have been removed from publicly accessible areas of the site;
• Ensure that under no circumstances would pedestrians passing the site need to walk through un-supervised construction vehicle access locations to the site, be compelled to walk onto roadway traffic lanes (without positive separation between pedestrians and vehicles), or walk around parked construction vehicles or stored construction materials in order to safely pass the site;
• Ensure that no materials, equipment or device related to activity on the site blocks the vision of pedestrians to signals or other traffic control devices located on streets adjacent the site;
• Ensure that all construction or demolition materials are secured from falling or being windblown from the site; and
• Conduct daily safety inspections of public areas adjacent the site, at the beginning and end of each site work day, to ensure that no hazards to the public exist in publicly accessible areas around the site.

All necessary efforts would be undertaken by the Applicant to ensure that activities or conditions on the Project site would not be a hazard to or damage adjacent properties, including:

• Ensure that workers associated with the site do not enter onto adjacent private property unless access and conditions of access to adjacent private property is prearranged by the Applicant through written agreement with the adjacent property owner;
• Protect adjacent property and buildings from vibration or contact damage due to construction or demolition activity (i.e. demolition, movement of construction equipment, etc.) and undertake all necessary monitoring of adjacent property and buildings, including pre- and post-activity surveys, to ensure the potential for damage is managed and controlled;
• Protect all trees on adjacent property from damage due to activity associated with the site unless pre-arrangements have been made and written approval given for removal;
• Ensure that no site or equipment lighting is directed towards residential occupancies on-site or off-site;
• Respond quickly to concerns expressed by adjacent property owners of damage or the potential for damage occurring as a result of conditions or activity on the site.

Erosion and Sedimentation
Disturbance and the exposure of soil during construction can create the potential for the transport of sediment in stormwater flows. Consistent with State regulations and construction best management practices, a Stormwater Pollution Prevention Plan would be prepared and implemented for the site to mitigate this impact.
3. Mitigation Measures

Potential impacts from construction equipment and activities would be managed throughout the duration of the construction process through adherence to the State construction code, and implementation of a NYSDEC-approved Stormwater Pollution Prevention Plan, including the use of construction and erosion control best management practices. In addition, a blasting plan and traffic management plan would be devised as part of site plan approval.

Specific Mitigation Measures would include:

**Noise and Air Quality**

Contract specifications would require that all construction equipment be properly maintained with mufflers in accordance with manufacturers’ recommendation to limit noise impacts. To the extent possible, noisy operations would be combined to occur during the same period. Additional measure to minimize impact would include:

- The internal combustion engine-powered construction equipment used in the construction of the project shall be limited to late model (1998 and newer) so as to take advantage of the cleaner burning engines. Exceptions to this shall be subject to the approval of the Town Building Department upon a demonstration that it is not feasible or practicable to obtain the required equipment.
- Engines shall be fitted with "critical" level exhaust silencers.
- All non-road vehicles over 50HP used shall utilize the best technology available for reducing the emission of pollutants, including, but not limited to, retrofitting such non-road vehicles with oxidation catalysts, particulate filters, and/or technology with comparable or better effectiveness. All construction equipment shall include PM2.5 emission controls.
- All diesel powered non-road vehicles in use at this construction site shall be fueled only with ultra low sulfur diesel having a sulfur content of no more than fifteen (15) parts per million. All fuel delivered for use at this construction site shall consist of said fuel.
- “Non-road engines" mean an internal combustion engine (including the fuel system) that is not used in a motor vehicle used solely for competition or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code (USC), except that this term shall apply to internal combustion engines used to power generators, compressors, or similar equipment used in any construction program or project.
- Variable volume back-up alarms shall be used on construction vehicles.
- No noisy activity that can be heard off-site would occur between the hours of 10:00 pm and 7:00 AM on weekdays and 10:00 pm and 9:00 am on Sundays and statutory holidays.

**Blasting**

As described earlier, rock removal is anticipated and would be performed either by chipping or blasting. Rock removal would be performed in accordance with all local, state and federal regulations, including §69 of the municipal code, which dictates licensing, permitting, insurance, and notification requirements for blasting activity. Blasting would be carried out by a person who is licensed in the State of New York to handle and detonate explosives, and
all personnel who may handle or use explosives would have appropriate training and safety instructions. Warning signs would be posted at suitable locations.

Prior to the start of blasting, a qualified licensed professional engineer/seismologist experienced in blasting (“PE/S”) would be employed by the Applicant to prepare and certify a detailed Blasting Plan, as well as supervise and be responsible for the monitoring and conducting of all blasting activities, if any. The Blasting Plan would be prepared and certified by the PE/S and submitted to the Town, prior to any blasting activities at the site. The Blasting Plan would include, among other items, a pre-blasting survey of all structures within 300 feet of the blast site, a sub-surface utility analysis, drill patterns, noise/sound and ground and air vibration analyses, instrumentation requirements and setup procedures, measurement protocols and monitoring frequencies, proposed blasting and rock crushing procedures and operations, if any, a warning signal system for blasting occurrences, flyrock control procedures, and protocols for ongoing reporting and complaint procedures. Blasting noise and vibration analyses would be monitored by the PE/S and the PE/S would detail the results of each blasting operation.

The Blasting Plan would also provide that the contractor shall be limited to no more than four pounds of explosive per delay, and a maximum of 100 pounds per detonation. All blasting operations would be monitored by the PE/S using a seismograph placed on the property line to insure that peak particle velocities would not be exceeded.

The United States Bureau of Mines has established that a threshold of four inches per second would likely crack plaster and therefore recommended that a safe vibration criteria is two inches per second. This limitation has been used successfully in the industry, as well as being the basis for any blasting operations in proximity to the NYC Department of Environmental Protection aqueducts. As listed below in Table III.N-2, the maximum peak particle velocity would be restricted to a peak particle velocity of 1.75 inches per second or lower. The peak particle velocity emanating from any blast would be restricted to at least the following limits:

<table>
<thead>
<tr>
<th>Distance</th>
<th>Peak Particle Velocity (inches per second)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 100 feet</td>
<td>1.75</td>
</tr>
<tr>
<td>100 to 200 feet</td>
<td>1.50</td>
</tr>
<tr>
<td>200 to 500 feet</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The PE/S would also notify the Town, the State Police, Dutchess County Sheriff’s Office, and all inhabitants or users of structures located within 300 feet of the blasting site at least 24 hours prior to commencement of any blasting operations.

The limits of the operation would be fenced in. Blasting noise and vibration would be monitored at all times. The Blasting Plan would also include that:
Construction

- No person would use during the blasting operations a quantity of explosives greater than necessary to properly fracture the rock, nor use such amount as may potentially endanger persons of property
- Prior to each detonation, regardless of its location to adjacent properties, the blast area would be covered with appropriate matting to both prevent the escape of broken rock or other materials and to sufficiently muffle the sound associated with the blast
- No person would be authorized to detonate, direct or cause to detonate any explosives unless competent persons are on hand to give proper warning of the impending blast, as required by the NYS Department of Labor and the Federal Occupational Safety and Health Administration
- While on site, all explosives would be kept in a properly constructed magazine painted red and marked “DANGER EXPLOSIVES.” Magazines to be used for the storage of explosives would be as specified in the current standards of the National Fire Protection Code. Magazines would be kept locked, except when being inspected or when explosives are being placed therein or removed therefrom. Explosives would not be permitted to be stored on-site overnight.

As rock is encountered on the site during the excavation process, the contractor would be required to make every effort to remove as much material by means other than blasting. The Blasting Plan would contain measures to minimize noise, dust and debris emanating from the blasting and general construction activities.

In preparation for blasting operations, rock-drilling equipment would be employed to establish the hole patterns in which the explosives would be placed. Drill rigs typically generate sound levels between 80 to 100 dBA at a distance of 50 feet. A typical rock crusher generates approximately 94 dBA. If necessary, noise attenuation at the site of the drilling would be determined in consultation with the PE/S based on background noise levels and a range of dBA considered to be acceptable as per industry standards.

The rock that is blasted or excavated on the site would be processed on-site using a rock crusher to create fill or other construction aggregates. Any processing of on-site material would comply with the municipal noise code and the contractor would be prohibited from crushing any rock imported to this site, unless the additional material is required for the construction of the project's roadways and foundations. All structural rock fill must be properly compacted and would be inspected and approved by a soils testing firm. Rock crushing operations would be located centrally to the site to minimize potential impacts to adjacent residential land uses.

**Erosion and Sediment Control Plan**

An erosion and sediment control plan would be prepared in conformance with the Town Code and the NYSDEC New York State Stormwater Management Design Manual (April 2008). In addition, practices would be designed based on the NYSDEC New York State Standards and Specifications for Erosion and Sediment Control (August 2005). During and post construction, efforts would be made to preserve a similar drainage pattern as currently occurs, with undisturbed stormwater runoff and ground water being diverted from temporary swales, sediment traps and permanent stormwater management measures.
Best management practices to be employed for control of soil erosion and sedimentation and fugitive dust include:

- Installation of silt fencing and staked haybales along the limits of disturbance. Additional haybales would be installed as inlet protection.
- Installation of stabilized construction entrances.
- Installation of temporary siltation/sediment traps, as appropriate and necessary.
- Temporary seeding or planting of disturbed areas designated for landscaping.
- Installation of protective covering or water spraying of the ground surface to prevent fugitive dust emissions and debris from leaving the site.
- Covering of open-body trucks with tarps during motion.
- Low speeds for all construction vehicles.
- Vehicle access locations to the site would be monitored and cleaned as necessary to keep sidewalks and roadways free of mud, soil or other construction debris that may be deposited by construction equipment leaving the site.

Construction Traffic Management

A construction traffic management plan would address the timing of deliveries to the site during Phase 1 and Phase 2 construction, staging, and material storage areas and locations for construction worker parking. Improvements to the intersection of Route 22 and Wheeler Road would be undertaken prior to the construction of Phase 1B.

The traffic management plan would specify:

- The locations for on-site construction worker parking and if such parking is temporary or designed to be future parking for commuters, shoppers or residents;
- Staging and material storage areas for each sub phase of the Project;
- Specific arrival and departure times for construction workers and schedules for deliveries, making certain to avoid highway and school bus peak hours; and,
- Best management practices described above with regard to construction vehicle speeds and safety measures.

The sequencing of construction and the provision of adequate construction staging and material stockpile areas over the approximate 10 year construction period would permit the recycling of building materials; coordinated use of construction crews and equipment; and the reduction of material deliveries. Further, materials from the demolition of existing on-site buildings, tunnels, other structures and pavement areas would be recycled to the maximum extant practical and would further reduce the off-site deliveries of materials to the project site. Brick and remains from the concrete foundations of the existing buildings to be demolished on the site would be crushed and reused on-site as fill material where acceptable to both the owner and local building officials. Other construction and demolition debris not suitable for reuse on-site would be stockpiled on-site until a significant quantity of material has been collected for the efficient transporting of the material off-site.

Demolition Waste Management Plan

A Demolition Waste Management Plan would be developed that details:
• Types of waste and estimated quantities, by volume, of Construction, Demolition and Landclearing (CDL) waste expected to be generated during demolition;
• Proposed methods for CDL waste salvage, reuse, recycling and disposal during demolition, including, but not limited to, one or more of the following: contracting with a deconstruction specialist to salvage materials generated, selective salvage as part of demolition contractor’s work, and reuse of materials on-site or off-site sake or donation to a third party;
• Proposed methods for salvage, reuse, recycling and disposal during construction, including, but not limited to, one or more of the following: requiring subcontractors to take their CDL waste to a recycling facility, contracting with a recycling hauler to remove recyclable CDL waste to an approved recycling or material recovery facility, and processing and reusing materials on-site, including crushing on-site and reuse of materials as roadbed, and self-hauling to a recycling or material recovery facility;
• Name of recycling or material recovery facility receiving each of the CDL wastes; and
• Handling and transportation procedures, including method that would be used for separating recyclable waste.

Protection of Historic Structures
Effective planning and protective measures initiated before construction activities begin can prevent most of the damage that might occur to adjacent historic buildings. Depending upon the nature of the adjacent structure, protective measures might be limited to documenting and monitoring the historic structure, or could encompass a broader plan that includes encasing windows, independent review of excavation procedures and a range of other precautions.

The best defense against affecting historic buildings is to ensure that the structures are well maintained prior to construction activity. A well maintained structure with tight mortar joints, strong connections between interior and exterior walls, solid foundations and sound plaster is at less risk than a neglected structure.

Providing adequate protection involves the following:
• The condition of the historic building should be documented prior to adjacent work;
• Protective measures at both the construction site and the historic site, including, but not limited to shoring and bracing should be implemented;
• All beams in party walls should be cut off close to the walls, stub-ends removed without weakening existing masonry, and beam pockets cleaned of loose mortar;
• Wall anchors should be bent over at the beam ends in the standing wall and all open beam holes should be enclosed with sound brick and cement mortar. The stability and condition of the remaining walls shall be investigated and all necessary steps taken to protect same;
• Where the floor beams of the adjacent building bear on the party wall, it would be ascertained whether such beams are anchored into the wall and, where such anchorage is lacking, anchorage shall be provided or the standing wall would be otherwise braced.
• Roofing material of adjoining buildings shall be bent over and flashed;
• All doors or other opening in party walls shall be sealed and weatherproofed;
Cornices, where cut, shall be properly sealed. Parapets and any walls that have been disturbed shall be pointed up and made weathertight;

All exposed furring, lath, and plaster on party walls shall be removed, and any loose wall material shall be firmly anchored or removed and replaced;

All unnecessary chimney breasts, projections and any other debris exposed shall be removed and all openings shall be bricked up flush on the exterior side of the party wall; and

All masonry which is in poor condition shall be pointed and patched.

All necessary shoring and bracing for adjacent structures would be provided, along with regular monitoring during construction to identify damage, to evaluate the efficacy of protective measures already in place, and to explore and implement additional corrective steps.
Table III.N-3
Projected Construction Sequencing (see Exhibit III.N-2, Construction Sequencing)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Construction Sequence</th>
<th>Residential Units</th>
<th>% of Total Residential</th>
<th>Commercial SF</th>
<th>% of Total Commercial</th>
<th>Amenities</th>
<th>Infrastructure</th>
<th>Required Demolition</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1A</td>
<td>217</td>
<td>15.7%</td>
<td>81,500</td>
<td>33.2%</td>
<td>Golf course, Great lawn, Boat launch, Neighborhood greens/squares</td>
<td>Route 22/Wheeler improvement, bridge reconstruction, utility service lines, well installation, water/wastewater plant upgrades</td>
<td>Clubhouse</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>1B</td>
<td>176</td>
<td>12.8%</td>
<td>119200</td>
<td>48.6%</td>
<td>Neighborhood greens/squares</td>
<td>Utility service lines, roads</td>
<td>4 institutional buildings</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1C</td>
<td>156</td>
<td>11.3%</td>
<td></td>
<td></td>
<td>Playfield, Neighborhood greens/squares</td>
<td>Utility service lines, roads</td>
<td>Agricultural buildings</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2A</td>
<td>493</td>
<td>35.8%</td>
<td>44800</td>
<td>18.2%</td>
<td>Wetland trail to Boyce, Trail linkage to AT, Reservoir recreation access, Smith Hall, Neighborhood greens/squares</td>
<td>Utility service lines, roads</td>
<td>11 institutional buildings plus smaller accessory uses</td>
<td>6-8</td>
</tr>
<tr>
<td></td>
<td>2B</td>
<td>49</td>
<td>3.6%</td>
<td></td>
<td></td>
<td>Neighborhood greens/squares</td>
<td>Utility service lines, roads</td>
<td>NA</td>
<td>8-9</td>
</tr>
<tr>
<td></td>
<td>2C</td>
<td>285</td>
<td>20.7%</td>
<td></td>
<td></td>
<td>Neighborhood greens/squares</td>
<td>Utility service lines, roads</td>
<td>7 institutional buildings and several smaller houses and accessory structures</td>
<td>9-10</td>
</tr>
</tbody>
</table>

*Institutional Buildings (does not account for smaller agricultural structures or single-family homes)