

## N. Construction

### 1. Summary of Additional Technical Studies

No further technical studies related to construction impacts were necessary for the FEIS. An additional map outlining potential locations for construction staging and rock crusher locations has been prepared to help clarify and respond to comments regarding the management of construction activities.

### 2. Plan Changes and Impact Summary

The modified FEIS plan would not result in construction related impacts any further than the original conceptual plan presented in the DEIS.

### 3. Comments and Responses

#### *Comment N.1*

We are concerned about the possible health effects associated with the asbestos currently contained within the existing structures. Specifically, we would like to know what enforceable steps are being taken to ensure the protection of the health of the citizens of these communities, as well as the workers at the facility during the demolition and asbestos removal.

We strongly believe that whatever steps and precautionary measures are under review should be shared with the community so that citizens can be involved in the planning. If the demolition is indeed to occur, ongoing monitoring must be enacted to ensure that these steps are working. These monitoring plans should also be shared with the community. Steps should be enacted to ensure that any contaminated debris is safely removed to an off-site location.

(Michael Seilback, Vice President of Public Policy and Communications, American Lung Association in New York, Letter, 6/29/09, Pg. 1; Judy Baker, Letter, 6/30/09, Pg. 1)

#### *Response N.1*

*As stated in Chapter III.N of the DEIS, 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 in accordance with all applicable legal requirements 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. During the abatement work, air monitoring devices will be required and installed to assure permit compliance for air quality. The Town as an involved agency during any asbestos removal project including all building demolition work can provide community notification of all abatement and related demolition activities.*

*Comment N.2*

The American Lung Association in New York is committed to reducing pollution from diesel engines, including any that would service this facility. The state should require the use of clean diesel equipment in any removal, building or transportation work, including clean bulldozers, tractors, electric generating equipment, and clean diesel trucks going to and from the site. Moreover, all transportation routes must minimize exposure to the community. The plan for this should also be fully shared with the people of the community.

(Michael Seilback, Vice President of Public Policy and Communications, American Lung Association in New York, Letter, 6/29/09, Pg. 1)

*Response N.2*

*As stated in Chapter III.N of the DEIS, mobile sources, such as construction equipment and construction worker vehicles, would produce emissions including CO, VOCs, and NO<sub>2</sub>. 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.*

*Nevertheless, specific measures will be taken to further eliminate the potential for significant adverse air impacts from mobile sources, including:*

- *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;*
- *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 PM<sub>2.5</sub> 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; and*
- *“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.***

*Comment N.3*

Approximately 55 percent of the site overlies a Zone I aquifer and 13 percent of the site overlies a Zone II aquifer, both critical in supplying drinking water to the Harlem Valley. The concerns about burying construction and demolition debris on site, either in the ground or in the many tunnels that run under the site should under no circumstances be allowed as this could lead to serious pollution of this critical aquifer and a threat to the health, safety and welfare of residents.

(Rebecca E. C. Thornton, President, Dutchess Land Conservancy, Letter, 6/3/09, Pg. 5, Evelyn Chiarito, Public Hearing Transcript, Pg. 140)

*Response N.3*

***It is not anticipated that construction activities will in any way impact groundwater resources. Construction and demolition debris would be disposed off site at a regulated solid waste facility, with the exception of certain clean fill. To the extent practical, concrete and brick would be recycled for use as fill and base material. This would occur after asbestos remediation described in response to Comment N.1.***

***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; and***
- ***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 or abandon 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 suitable backfilling. The tunnels would be filled solid with grout; and***
- ***Where tunnels conflict with proposed construction, they would need to be removed.***

*Comment N.4*

The bullet list on Page III.N-2 of the DEIS should be updated to specify that no demolition debris will be stored in the tunnels.

(Town of Dover Planning Board, Letter, 7/20/09, Pg. 8)

*Response N.4*

***Comment noted. As described in Response N.3, the tunnels would be either removed or abandoned. No demolition debris would be stored in the tunnels.***

*Comment N.5*

It is unclear how construction and demolition debris from the existing buildings will be handled. Certain of this material may be considered hazardous due to the presence of asbestos and lead paint. Quantities of hazardous material that would have to be transported off-site should be provided in terms of number of truck trips. Any non-hazardous construction and demolition debris should also be quantified and the location of its ultimate use or disposal identified.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12; Evelyn Chiarito, Public Hearing Transcript, Pg. 139)

*Response N.5*

***See Response N.3 above. The Applicant estimates that demolition of the existing on-site structures will generate between 60,000 CY to 70,000 CY of construction and demolition debris (C&D). It is further estimated that 75% of this C&D material, or approximately 50,000 CY will require off-site disposal. Based on an average transport container size of 30 CY, approximately 1,650 truck trips (defined as a round-trip to and from the site) might be required to remove the C&D material from the site. The remaining 25% of the material is expected to be found suitable for on-site reuse. All material to be removed from the site will first be sorted on-site for the purpose of off-site recycling and proper waste disposal to a NYS approved landfill. In either instance the controlled handling of the material is expected to allow for the management of off-site truck traffic. Further, it is the goal of the Applicant to minimize the off-site transport of material by reusing as much material on-site as practical, including the on-site processing of select material. The locations of off-site disposal facilities have not been identified and will be subject to availability at the time of demolition activities.***

*Comment N.6*

No C&D should be buried onsite and the Town Board should require this to be stated in the EIS. There is asbestos and lead paint in the buildings slated for renovation or demolition. It is better to err on the safe side and cart it all off-site than risk polluting our groundwater, a protected resource, by burying or reusing the C&D debris. If the Town Board does not require this, as a backup and a minimum, a cost-benefit analysis of the alternative, safely containing and C&D must be presented and reviewed by the Town Board, the DEC, the NYSDOH and the DCDOH before beginning any on-site burial.

(Constance I. DuHamel, Deuel Hollow Conservation Association, Letter, 6/30/09, Pg. 3)

*Response N.6*

***See responses N.3 and N.5 above.***

*Comment N.7*

Monitoring the removal or burial of C&D cannot be left to the Town Code Enforcer or the developer, or any related party to the developer. It is too big a job for the town and the liability is enormous; it is too serious and costly a threat to leave the monitoring to an interested party.

(Constance I. DuHamel, Deuel Hollow Conservation Association, Letter, 6/30/09, Pg. 3)

*Response N.7*

***Comment noted. Neither the Applicant nor any qualified demolition contractor would bury C&D materials on the construction site, with the exception of concrete, block and brick. C&D materials are transported off site to a licensed landfill for disposal, as well as manifested by the demolition contractor assuring proper handling.***

***Interpreting the question, the concerned party seems to be referring to non-regulated, crushed masonry material that will be left on site to fill basements, voids, and create roadways.***

***With respect to lead based paint, the Army Corp's engineer research & development center construction engineering research laboratory (CERL) has conducted numerous studies on demolition sites to assure lead levels stay below the EPA limit of lead in soil of 400mg/kg (total lead concentration). It is the contractor's responsibility to monitor LBP (lead-based paint) in crushed material as they are liable under the Resource Conservation & Recovery Act (RCRA). To assure lead levels are below EPA mandate (5 ppm), Toxicity Characteristic Leachate Potential (TCLP) samples can be taken.***

*Comment N.8*

The problems inherent in taking over old structures must be addressed clearly. Environmental hazards and the high expense of demolition were evident even in the 1981 study that the hospital undertook of possible alternative uses for the campus. It is unclear at this point how the Benjamin Company will deal with these issues in both the buildings and in the utility tunnels and passageways connecting the many buildings, all of which carry wiring and piping with various hazards, especially asbestos and lead.

The buildings scheduled for demolition and remediation should be completed prior to creating a business and housing cluster near Route 22 and the train station. The development plan and the DEIS should be required to address these in detail and within a time frame that is acceptable to the Town.

(Margery Josephson, President, Naromi Land Trust, Letter, 6/29/09, Pg. 2-3)

*Response N.8*

***Comment noted. Building demolition will occur in various phases of the redevelopment, including Phase 1B. Additional demolition will occur prior to or as part of Phase 1A, given the approval of a RESTORE New York grant that the Town and Applicant had sought from New York State.***

*Comment N.9*

More detail should be provided on the construction sequencing and details of construction processes to allow for a more complete impact assessment of the construction period. Given the extensive amount of demolition required for this project, a more specific analysis of potential noise and vibration, erosion and sediment control, and fugitive dust control should be provided.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12)

*Response N.9*

*The project construction and demolition activities will require authorization under SPDES General Permit GP-0-08-001 for compliance with the New York State Department of Environmental Conservation (NYSDEC) Stormwater regulations during construction. A detailed Stormwater Pollution Prevention Plan (SWPPP) will be prepared and filed with the NYSDEC to demonstrate adequate protection during construction activities and upon completion of the project. The SWPPP will outline the erosion control activities that will be required so as to minimize the transport of pollutants and sediment into wetlands and waterways during construction.*

*Once the sequence of building demolition is determined, a detailed sequence of construction and site work will be prepared and in general conformance with New York State Standards and Specifications for Erosion and Sediment Control manual. For each building demolition site, the following is expected:*

- 1. Once the building has been cleared for demolition, sediment barriers will be installed around the work site and sediment trap(s) appropriately sized to accommodate the land area will be constructed to capture the surface runoff.*
- 2. Once the building has been knocked down, the masonry (brick, mortar and concrete) will be moved to a crusher where the material will be reduced to a uniform gradation for reuse under roads and pavements.*
- 3. Material not suitable for reuse will be removed from the site to an approved disposal site.*
- 4. During actual demolition, water will be applied over the work to minimize dust and sediment transport. The contractor will be required to monitor the conditions and the amount of water required to control dust migration offsite. Similar dust control measures will also be required for the crushing operations.*

*The actual building demolition time period will depend on the size and amount of concrete masonry in the building. Once abatement and removal of debris within the building is complete, the actual demolition of each building is anticipated to take approximately 3 to 4 weeks to complete with another 2 or 3 weeks of crushing and removal of debris offsite. As discussed in Response N.11 below, noise from an equivalent piece of equipment to the crusher was estimated in the DEIS Section L. In that analysis, construction noise sites were included on the southern and western ends of the site. Since the crusher will be located central to the site, noise levels at existing offsite homes and businesses due to its operation will be less than those predicted in the DEIS.. Ground vibration levels from the crusher will be similarly low at offsite properties due to the rock crusher's proposed, centralized location.*

*Comment N.10*

We recommend that in the construction and phasing plans the applicant describe how the wetlands will be protected during construction if a severe storm event such as the recent nor'easter occurs. The plans should include where machinery and materials would be stored and fueling take place. The plans should show the location of fuel tanks or a containment berm, which should be capable of containing 110 percent of the capacity of any fuel tank, the location where concrete trucks will rinse their shoots and how the rinsed concrete will be contained or where construction equipment will be maintained and how any pollutants will be contained. The narrative should describe measures to prevent lubricants, oil and fuel leaking from construction equipment from contaminating the brook and wetlands.

(Elaine E. LaBella, Director of Land Protection, Housatonic Valley Association, Letter, 6/3/09, Pg. 3; Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Public Hearing Transcript, Pg. 93-94)

*Response N.10*

***No onsite storage of fuel for equipment is planned for use in construction of the project. The applicant's contractor will utilize a local fuel supplier for the delivery of fuel for construction equipment. Temporary construction trailers and buildings will utilize electric power or where needed above ground propane tanks. Several locations for possible construction staging areas have been identified for the storage of construction equipment, material storage and contractor offices. These locations are diagrammatically shown on Exhibit II.N-1 and may be moved to coincide with the progress of the development. The project construction activities and post construction improvements will require authorization under SPDES General Permit GP-0-08-001 for compliance with the New York State Department of Environmental Conservation (NYSDEC) Stormwater regulations during construction. A detailed Stormwater Pollution Prevention Plan (SWPPP) will be prepared and filed with the NYSDEC to demonstrate adequate protection during construction activities and upon completion of the project. The SWPPP will outline the erosion control activities that will be required so as to minimize the transport of pollutants and sediment into wetlands and waterways during construction. The plan will require permit coverage by NYSDEC prior to any work being initiated.***

*Comment N.11*

The Applicant has made references in the past to an on-site rock crusher to be used as part of the demolition process. No analysis of potential noise impacts from this piece of equipment, together with other reasonably anticipated pieces of construction equipment, has been provided.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12)

*Response N.11*

***As shown on Exhibit II.N-1, locations have been identified as possible locations for a rock crusher. The rock crusher would be used to reduce the size of both excavated rock and clean concrete and brick demolished from the onsite buildings for reuse on the site in areas of fill and under pavements. The benefits of the rock crusher include reduced trucking of material and reduced offsite disposal. Typically, rock crushers have noise levels in the range 94 db(A)***

*at 50 feet from the source (the proposed rock crushers are over 1,000 feet from neighboring residential uses; Haven House is over 800 feet from the closest staging location). Such noise levels were already accounted for in the construction impacts discussion contained in Section L. For more detail, see Response L.3. These levels are not expected to create significant adverse impacts on neighboring land uses. The rock crusher would only be operated during the weekdays from 8:00 am to 4:00 pm.*

*Comment N.12*

What specific measures will be used to protect historic resources to remain against physical damages (such as vibration, damage from falling objects, subsidence, collapse, or damage from construction machinery) when demolition or construction of other buildings would occur within 90 feet of the buildings being retained?

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12-13)

*Response N.12*

*As described in Chapter III.N of the DEIS, depending upon the nature of the adjacent structure, protective measures could include 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 protected prior to construction activity. A well protected structure with tight mortar joints, strong connections between interior and exterior walls, solid foundations and sound plaster is at less risk than one which has a neglected structure.*

*Providing adequate protection involves the following:*

- The structural integrity of historic buildings to remain shall be documented prior to excavation work within the zone of influence of the foundation.*
- Any shoring or bracing of building walls or foundations shall be undertaken prior to excavation work.*
- If blasting is required near by, a pre-blast survey of the buildings will be conducted to determine if any additional requirements may be required to minimize vibrations into the structures.*
- If required, temporarily remove or secure loose objects and glass from the building facades to protect worker safety and to preserve significant architectural features.*
- Additional protection measures may be required once the historic building have been restored and/or occupied.*

*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.*

*Comment N.13*

The best management practices for control of soil erosion and sedimentation should be updated to reflect current NYSDEC standards. Haybales are not included in the list of approved practices for inlet protection the New York State Standards and Specifications for Erosion and Sediment

Control. Approved practices are excavated drop inlet protection, filter fabric drop inlet protection, stone and block inlet protection, and curb drop inlet protection.

(Town of Dover Planning Board, Letter, 7/20/09, Pg. 5)

*Response N.13*

***All erosion and sediment control practices will be designed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control manual. As part of the detailed site and subdivision review, detailed site and subdivision plans will be prepared in conformance with the manual and standards.***

*Comment N.14*

The FEIS should clearly state that all provisions of Town Code will be followed during the construction period including all requirements for notification of surrounding property owners.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 13)

*Response N.14*

***The Applicant has agreed and the Environmental Findings will indicate that all provisions of the Town Code will be followed, including, when required by the Town Code, notification of surrounding property owners.***

*Comment N.15*

The developer and the contractors hired for construction should guarantee that they will employ legal citizens. Homeland Security should be on site to ensure that this happens.

(Judy Baker, Letter, 6/30/09, Pg. 1; Carl Guaglino, Public Hearing Transcript, 6/3/09, Pg. 213-214)

*Response N.15*

***The Applicant is committed to complying with all applicable legal requirements pertaining to construction, including its contractors' hiring practices. The Applicant is certainly willing to cooperate with the Department of Homeland Security.***