

4.0 ADVERSE IMPACTS THAT CANNOT BE AVOIDED

Construction of the proposed village will involve building materials and fossil fuels. Operation of the projects will require energy - electricity and gas and human capital.

No adverse impacts that cannot be avoided or adequately mitigated as a result of the proposed action have been identified.

All adverse impacts resulting from the proposed development will be mitigated to the maximum extent practicable. The proposed development will have certain short-term and long-term adverse impacts, as would any development on the site.

4.1 Short-Term Construction

It is anticipated that the project will be constructed in sub phases in order to minimize the impacts. The phases will depend greatly on the economic factors such as product demand but will also be dependent on the physical characteristics of the site and final proposed design. It is proposed that, to the greatest extent practical, the cut and fill volumes per phase (200,000 cu/yd) be balanced, accordingly, each phase will be closely evaluated prior to construction to determine if minor modifications to the proposed grading are required to balance the earthwork volumes. It is anticipated that these excess volumes will be trucked off site. Each phase will be designed in accordance with the general guidelines, as follows:

- a. Identify an access point for the phase and construct appropriate fencing, gates or other required devices to secure the site.
- b. Define the disturbance limits, construct stabilized construction entrance and install the required erosion control measures.
- c. Strip and stockpile topsoil and complete the required earthwork operations, including the construction of temporary roadways and temporary stabilization.
- d. Install utilities and other infrastructure, as required.
- e. Construct buildings, roadways, and other structures as required.
- f. Install permanent stabilization including topsoil, seed, sod, or other landscaping, as required.

- g. Once site is stabilized, remove erosion control measures that are no longer required.
- h. Commence next construction phase.

Unavoidable adverse impacts may include minor local increase in noise, dust and pollution with the presence of construction vehicles on-site during the construction period.

1. Potential Impacts

Proposed Cut and Fill

The site grading will be adjusted to balance the cut and fill volumes within each phase of construction to the greatest extent practical. This can be achieved by making minor modifications to the proposed grading. Additionally, the anticipated volumes do not account for stone base material required beneath roads and buildings, concrete pads and bituminous pavement, which can collectively account for several thousand additional cubic yards of available fill over the entire site. It is anticipated that this excess fill will be taken off site and disposed of in an approved location.

Blasting

Mechanical rock excavation procedures will be implemented to the greatest extent practical to minimize blasting. Although no blasting is anticipated to occur on the site, if it is required, it will be specified as controlled blasting with the necessary safety procedures implemented, in order to minimize offsite impacts.

Noise

Noise impacts due to construction are temporary in nature and are not considered to be significant. Construction hours will be established in accordance with Town of Guilderland requirements. See Section 5.13 for additional information.

Dust

Water will be applied by sprinkler or water truck as necessary during grading operations to minimize sediment transport and maintain acceptable air quality conditions. Repetitive treatments will be done as needed until grades are paved or stabilized with vegetation.

Construction Traffic

The project will be phased such that temporary roadways into the site are established, allowing controlled access to the project site from Route 20 and Winding Brook Drive, minimizing impacts to the residential dwellings at Fairwood Apartment complex farther down Winding Brook Drive. Work within the Route 20 right of way will require a permit from NYSDOT. Work within Winding Brook Drive will require approval from Guilderland DPW.

Erosion During Construction

Soil erosion and sediment control during construction will be accomplished using the temporary devices outlined in prior sections of this report. The measures will include a stabilized construction entrance to minimize tracking of mud offsite. The erosion control measures will be designed in accordance with NYSDEC regulations.

2. Mitigation

Erosion Control Plan

A Stormwater Pollution Prevention Plan (SWPPP) will be submitted to the NYSDEC in accordance with GP-02-01, for the issuance of a general permit for discharges associated with construction activities. Since more than five (5) acres of exposed soils is anticipated in many of the construction phases, the submitted SWPPP will be subject to a 60 day review. Additionally, the general permit will require that a Notice of Intent (NOI) be filed prior to commencement of construction, that erosion and sediment control inspections be performed routinely and within 24 hours of a significant rainfall event of 0.5 inches of rainfall within 24 hours, or greater and that a Notice of Termination (NOT) be filed once the site has been substantially stabilized.

Blasting Control and Monitoring Plan

Mechanical rock excavation procedures will be implemented to the greatest extent practical to minimize blasting. Although not anticipated, if blasting is required, it will be specified as controlled blasting, in order to minimize offsite impacts. Blasting will be conducted in accordance with all Federal, State and Local regulations. A pre-blast survey and blast monitoring will be required.

Construction Plan, Traffic Control and Safety Plan

The final design for the project will include a Maintenance and Protection of Traffic (MPT) plan for work within any public roadway. Permits will be issued by NYSDOT for work within Route 20, and Town of Guilderland for work within Winding Brook Drive. The MPT plans will specify the type and placement of warning signs, traffic control devices such as barrels, cones, barriers and flag trees and locations for flagmen for lane and shoulder closings. The traffic control plan will be developed in accordance to State and Local standards and will specify that closures occur only during non-peak traffic periods, typically from 9AM to 3 PM. The Fire Department, Police and Emergency Medical Services will be notified, in advance, of any lane or shoulder crossing.

Construction access to the site will be from controlled access points and will include appropriate signage. The minimum number of access points will be utilized during each phase of construction.

4.2 Long-Term Impacts

The long-term impacts will include a change of the Project Site's current natural environment and the addition of new town population, school children, traffic, water consumption and sewage flow to the community and its infrastructure systems. Although all adverse impacts have been mitigated to the extent practicable, there will be some effects from this development, as outlined below.

4.2.1. Natural Environment

On the portion of the 57 acre site where development will occur, trees and shrubs will be removed and much of this portion of the Project Site will be regraded.

The proposed project incorporates the preservation of approximately 21.7 acres of open space. In addition, the site design will include a walking and bicycle trail system, and a number of passive park areas in the Village Center. The Kaikout Kill corridor will be preserved as an important natural resource.

4.2.2. Built Environment

Town Population

The total population in the Town of Guilderland in 2000 was 32,688 people. The projected 2010 population for the Town of Guilderland is 36,093 (Source-CDRPC Capital District Population Projection Data). It has been estimated that the residential uses in the Proposed Action will generate a population of approximately 796 people. This figure represents approximately 2% of the total 2000 population*. The estimated 116 school-age children will increase the public school enrollment by about 2% as well. Projections, however, call for a leveling off in enrollments with future declines in enrollment similar to other school districts. The significant tax surplus from the proposed development will be available to help address school district needs. (See Section 3.12.2, 3.13.2)

(* -Utilizing the following ULI multipliers: 4-bedroom, Single-Family (3.6248); Blended, Townhouse (2.4373))

No other adverse impacts that cannot be avoided or adequately mitigated as a result of the proposed action(s) have been identified.