

**Statement of Findings
Northern Halfmoon GEIS
Town of Halfmoon
Saratoga County, New York**

**Adopted by the
Town of Halfmoon Town Board
March 5, 2002**

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GENERAL

The Study area comprises approximately 8,800 acres of land in the northern third of the Town of Halfmoon. The boundaries of the Study Area include the municipal boundary with Clifton Park to the west, Malta and Stillwater to the north, and the City of Mechanicville to the east. The southern boundary is formed by Farm to Market Road, Vosburgh Road, and Route 146, including the properties or subdivisions with frontage on these roads.

Pursuant to the State Environmental Quality Review Act (SEQR), the Town of Halfmoon Town Board prepared a Generic Environmental Impact Statement (GEIS) to evaluate the cumulative impacts of future development in the Study Area and to identify appropriate mitigation to ensure orderly and equitable growth. A GEIS is a tool provided by the State Environmental Quality Review Act (SEQR) to address broad land areas or programs that impact land use and the environment. The level of detail for a GEIS is usually at a planning or concept level, meaning that site details are not necessary. This allows the preparer of the GEIS to focus on broader issues and cumulative impacts.

The primary purpose of preparing the GEIS was to end reactionary review of projects in the Study Area and to take a proactive stance by identifying the broad implications of future development on the community's resources and establishing the mitigation measures necessary to ensure that future development does not significantly impact the community. The GEIS and this Statement of Findings apply only to new development/actions within the Study Area that are subject to SEQR. Future development projects/actions in the Study Area that can be classified as Type II actions pursuant to 6 NYCRR 617.5 or pursuant to the Town's own list of Type II actions are not subject to the mitigation requirements of the GEIS.

Pursuant to the requirements of SEQR, the Town Board deemed the Draft GEIS complete on February 27, 2001. A public hearing was held on March 20, 2001. The public comment period was initially scheduled to end on April 2, 2001 but was extended to April 16, 2001 based upon the considerable interest by the public and the public's expressed desire for additional time to review the Draft GEIS. A Final GEIS was prepared and deemed complete on July 3, 2001.

Considerable thought was put into naming the study area in an attempt to avoid the perception of segmenting the Town (north vs. south, east vs. west, rural vs. developed, etc.). The Town is very much a whole. However, comment was received during the GEIS process that the name should be changed to “Northern” Halfmoon GEIS. The Town Board concurs and has revised the title of these findings accordingly. Furthermore, all future reference to the draft and final GEIS should be “Northern” Halfmoon rather than “North” Halfmoon.

CERTIFICATION

The Town of Halfmoon Town Board, as Lead Agency, is issuing this Statement of Findings pursuant to 6NYCRR Part 617.11 of SEQR. Specifically, the Town Board hereby finds:

- a. The requirements of 6 NYCRR 617 have been met.
- b. Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable,
- c. Adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable.
- d. The GEIS is comprehensive and contains the facts and conclusions relied upon to support the Town Board's Statement of Findings and indicates the social, economic and other factors, which formed the basis of its findings.

Pursuant to the regulatory requirements of SEQR for Generic Environmental Impact Statements (6NYCRR Part 617.10), the Northern Halfmoon GEIS assessed the environmental impacts that may occur as a result of future development in the Study Area. This Statement of Findings lists the specific conditions or criteria under which future projects may be undertaken or approved, including requirements for any subsequent SEQR compliance. To the extent that certain impacts may require further analysis, it is recognized that the Final GEIS may be supplemented pursuant to 6 NYCRR Part 617.10(d). No further SEQR compliance is required if a subsequent proposed action will be carried out in conformance with the conditions and thresholds established for such actions in the GEIS and its Findings Statement.

The recommendations of the GEIS and these Findings will not apply to minor residential subdivisions. The Town will identify the minor residential subdivision as a Type II Action pursuant to 6 NYCRR 617.5(b). This provision of the SEQR regulations allows an agency to adopt its own list of Type II Actions.

FACTS & CONCLUSIONS

Development Projections

Existing land use in the Study Area consists primarily of agricultural land, undeveloped/fallow fields, streams and wetlands, and forested areas. Both residential and commercial development have occurred in the Study Area and much more has been proposed prior to initiating this action. Known development projects could result in an additional 613 single-family homes, 168 multi-family units, as well as additional large commercial/light industrial facilities.

A buildout analysis was conducted to determine the amount of development that the Study Area could accommodate under current zoning and subtracting mappable development constraints (primarily wetlands and steep slopes). This information provides a check on the development projections over the 20-year planning period. The evaluation of building permits resulted in a yearly Town-wide growth rate. This rate was adjusted by 50 percent to suggest that at least half of the projected new development would occur in the Study Area while the remainder would occur elsewhere in the Town. This information was then used to arrive at a 20-year total for each land use type. To this was added known development projects that are either before the Town or have been proposed at least verbally. The following 20-year projections were then used to evaluate potential cumulative impacts:

- 1,633 units of single family housing
- 1,268 units of multi-family housing
- 910,000 gross square feet of commercial and office
- 1,340,000 gross square feet of industrial

These development projections account for approximately half of the buildout potential in the Study Area and could result in an additional population of 7,078.

Minor Residential Subdivision

Minor subdivisions in the Town (not limited to the Study Area) have never resulted in significant environmental impact and therefore none have been required to undergo the preparation of an

environmental impact statement. It can be argued that cumulative development of minor subdivisions may result in some significant impacts; however, minor subdivisions typically occur where there is no sewer service resulting in a slow rate of growth and relatively sparse development. Such development often consumes road frontage, then ceases. Further development of interior lots is typically by major subdivision.

The development of road frontage by minor subdivisions has been identified in the Draft and Final GEIS as a potential land use issue. As future major subdivisions are developed, traffic will increase and turn the rural residential roads into collectors. The impact will be on the existing residents of the minor subdivisions. To protect the health, safety and welfare of these future residents and to maintain the roads as future collectors, the Town strongly recommends that minor subdivisions be developed with a common drive and right-of-way for a future Town road. This is described in Finding D.12.

Based on the above and the authority granted to communities and other local and State agencies via 6 NYCRR 617.5(b) the Town finds that minor subdivisions (4 or less lots):

- (1) *in no case, have a significant adverse impact on the environment based on the criteria contained in subdivision 617.7(c) of 6 NYCRR 617; and*
- (2) *is not a Type I action as defined in section 617.4 of 6 NYCRR 617; and therefore*
- (3) *can be established as a local Type II action in accordance with the attached amendment to the Zoning Ordinance.*

Additional findings for specific issues and support for these findings are provided as follows:

A. Demographics

- A.1 As of the date of the Draft GEIS, 2000 Census data was not available. However, comparison of development projections provided in the Draft GEIS with estimates of growth by other sources reveals that growth in the Study Area could significantly exceed other projected growth rates. This is probably due to the

assumption made in the draft GEIS that the Study Area would be provided with water and sewer service. This is a reasonable assumption based on the current locations of utilities.

- A.2 The increase in population in the Study Area as a result of new development will impact both natural and community resources. The implications of this impact are discussed for each topic area, as applicable.

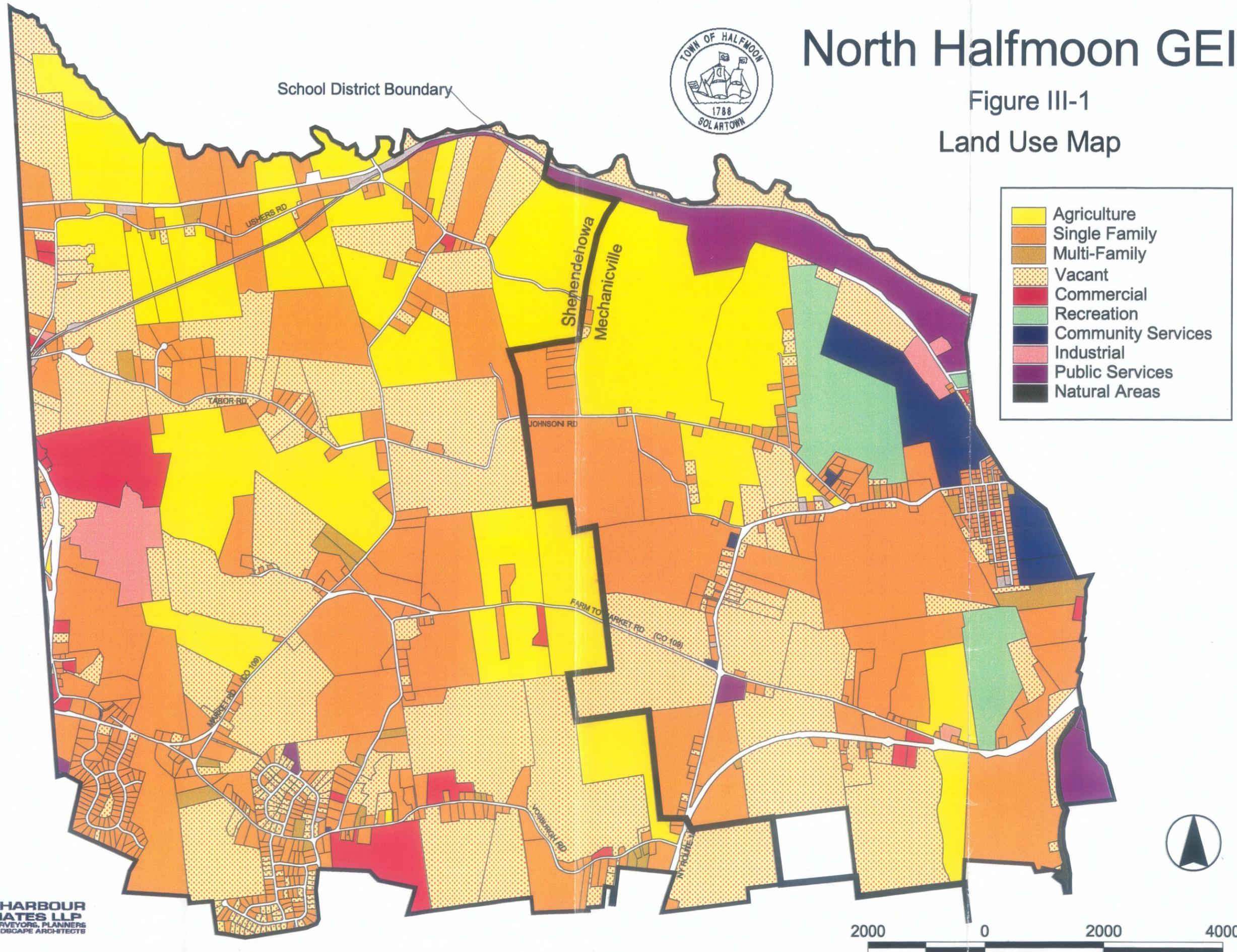
B. Land Use & Zoning

- B.1 Land use within the Study Area was determined by using parcel-based tax map data and State land use codes. Some land use designations were corrected based on more recent conditions. Agriculture is the dominant land use (4,011 acres) based on the tax map data. This is tempered by local data that revealed only 9 active farms exist today, totaling 1,047 acres. Single-family residential is the next largest land use (2,192 acres) followed by vacant land (1,770 acres). Other land uses include multi-family residential, commercial, industrial, community facilities, public services, recreation, and natural resources.
- B.2 The Town's Master Plan was adopted in 1992 and is undergoing an update as of the date of these Findings. The number and size of proposed projects within the Study Area dictated the need to progress with the GEIS prior to completing the Master Plan update. The GEIS does not propose major land use changes in the Study Area but does provide guidance and recommendations for growth management as well as opportunities for recreation. Other land use recommendations are suggested as mitigation for anticipated impacts to community character, increased traffic, and encroachment into sensitive environmental areas/resources.
- B.3 Consistent with the predominance of agricultural and vacant lands, the primary zoning district within the Study Area (74% of the total area) is Agricultural-Residential (A-R). Light Industrial/Commercial (LI-C) and Industrial (M-1) comprise most of the remaining zoning (approximately 21%). Although a much smaller percentage of the total land area than the A-R zoning, the amount of



North Halfmoon GEIS

Figure III-1
Land Use Map



commercially and industrially zoned land is significant, which contributes to a more favorable fiscal impact.

- B.4 Future residential development will have the largest impact on land use, particularly the character of the Study Area. Under current zoning and the anticipated development projections, the character of the Study Area would change from rural to suburban residential as undeveloped lands are developed with half-acre lots, perpetuating sprawl. This is inconsistent with the land use goals of the 1992 Master Plan and current efforts on a State and national level to curb sprawl. It will likely be a major issue of the future Master Plan Update.
- B.5 Anticipated future land uses along municipal boundaries will be generally consistent with adjacent land uses.
- B.6 Mitigation for conflicting land uses should consist of buffers between such uses. A minimum 100 foot buffer is recommended, especially between residential uses and commercial/industrial uses. The Town should also consider limiting the establishment of non-residential PDDs in residentially zoned areas. This will significantly reduce the potential for land use conflicts within the Study Area. There is currently a sufficient amount of land zoned for commercial and industrial uses along the major highways. An exception to this is the land along Route 146 in the Study Area. This area should be considered for commercial PDDs. This area is currently zoned residential for the most part but traffic along this corridor, both now and in the future, warrants the consideration of other land uses. A PDD is recommended over commercial rezoning since the latter could result in a number of small developments, each with a curb cut on Route 146. This type of strip development would be counterproductive to management of the Route 146 corridor.
- B.7 The Town's PDD legislation should be revised to reflect the recommendations of the GEIS. When and where PDDs are permitted should continue to be at the discretion of the Town Board. However, it is recommended that PDDs be located where there is good access, the potential for public transportation, and where the present surrounding density of development is consistent with the PDD. At present, the only portion of the Study Area that meets all or some of these parameters is the area adjacent to the City of Mechanicville.

B.8 The Town could consider implementing some additional growth management tools to supplement the existing zoning and subdivision regulations. Recommended tools include clustering/conservation subdivision, incentive zoning, purchase of development rights, and residential development design guidelines. Each could be useful in implementing the mitigation provided in the GEIS. It is the Town's intent to provide this recommendation to the Master Plan Committee and allow the comprehensive planning process to determine which growth management tools are suitable and desirable for the Town to implement.

C. Agricultural Resources

C.1 Land use mapping based on state land use codes and tax map data suggests that there are over 4,000 acres of agricultural land within the Study Area. However, information collected from the Farm Service Agency in Saratoga County revealed that 2,589 acres are actually designated as active farmland. Of that total, only 1,047 acres are known to be currently productive. Agricultural activity in surrounding communities is limited. There are no Agricultural Districts in the Town of Halfmoon, yet the Town has more farmland and potential farmland than most communities in the County, based on the County's Farmland Protection Plan.

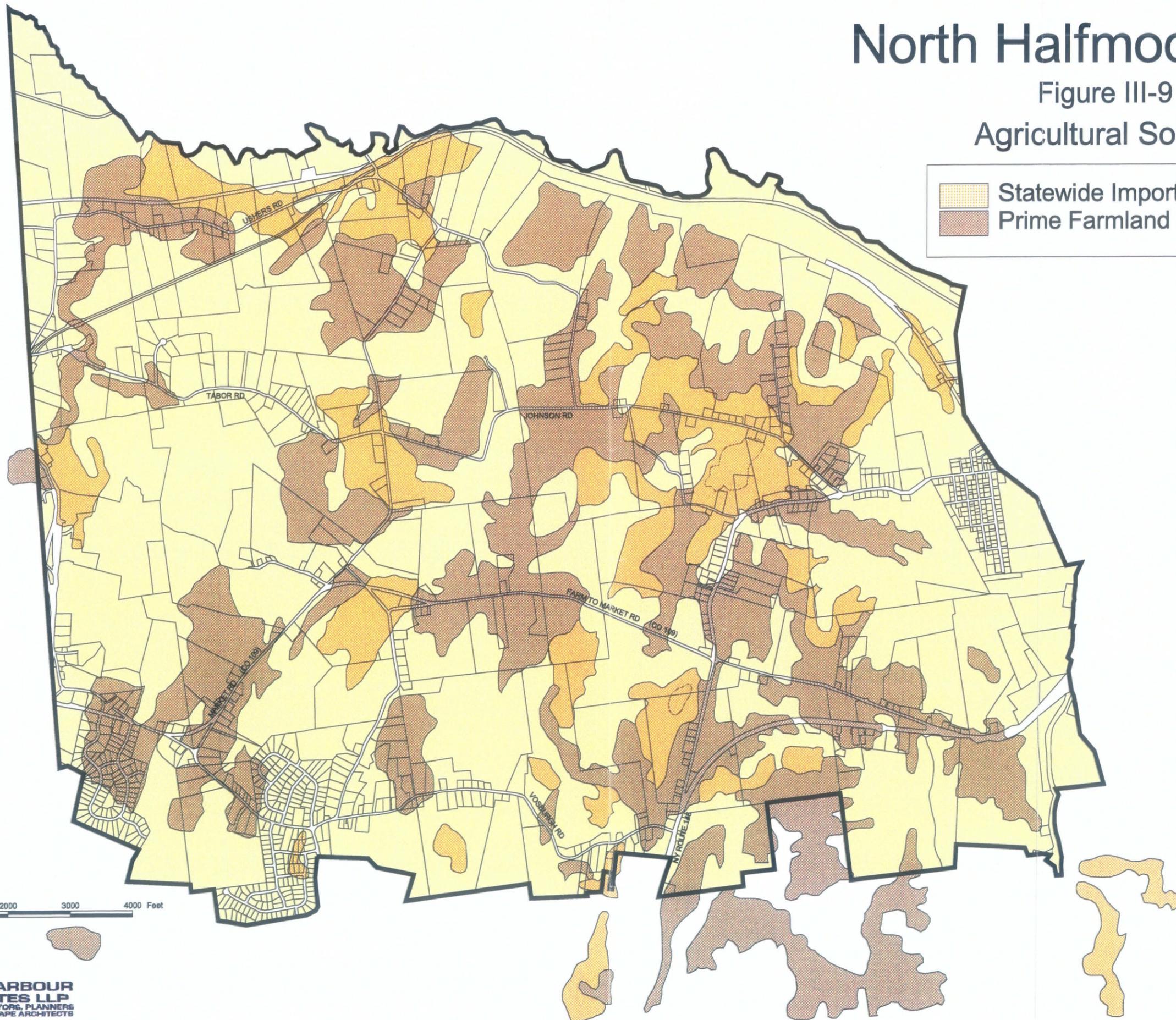
C.2 The loss of agriculture as a viable land use in North Halfmoon appears to be inevitable based on current development patterns, the availability of water and sewer, and perhaps most significantly, poor economic return on farm products. The 20-year development projections emphasize this trend.

C.3 Permanent solutions to prevent further loss of agricultural land appear to be unreasonable. Such measures would impose agricultural zoning and other regulatory measures that would not likely be supported by residents.

C.4 To mitigate the potential loss of farmland, the Town could consider establishing an incentive-based growth management program that would place a permanent easement on large parcels, restricting the use to agriculture and open space and in return paying the farmer for the lost development potential. This can be accomplished through incentive zoning and purchase of development rights.

North Halfmoon GEIS

Figure III-9
Agricultural Soils



1000 0 1000 2000 3000 4000 Feet



Incentive zoning allows an increase in development density or some other related incentive in exchange for a benefit to the community. The Town should establish incentive zoning legislation wherein they would establish the benefits and incentives. For the purposes of farmland protection, developers could purchase the development rights from a landowner and transfer those rights (typically a portion thereof, not one for one) to a developable parcel while placing a permanent conservation easement on the other parcel. This would involve negotiations between developer, landowner and Town and each would need to be a willing party. The purchase of development rights (PDR) is more straight forward. The Town could purchase the development rights of a desirable or critical parcel from a willing landowner. The land would then have a permanent easement placed on it to prevent future development. In conjunction with a PDR program, the Town could consider the preparation of a fiscal model. This would be useful in determining the fiscal impacts of a PDR program as well as providing opportunities to evaluate the fiscal impacts of other land use alternatives.

D. Recreation & Open Space Resources

Open Space Conservation Plan

- D.1 Approximately 304 acres in the Town of Halfmoon are designated as public open space. Within the Study Area, public open space is limited to approximately 16.4 acres of State-owned lands. An extension of the Zim Smith trail is proposed along the existing Saratoga County Sewer District right-of-way. The Erie Canal trail extends into the southeastern portion of the Study Area, along Route 4.
- D.2 Development over the next 20 years as projected will result in an increase in population within the Study Area of approximately 7,078 people. There are no recreational facilities in the Study Area to support this growth in population.
- D.3 Current zoning and subdivision regulations have no provisions for the preservation of significant open space, especially within residential developments. Additionally, these regulations promote land consumption and sprawl that is becoming a less desirable development pattern. These types of communities are vehicle dependent and lack amenities that enhance the quality of life. The result

is typically increased impacts from traffic, noise, air pollutants, and water pollutants; as well as a lack of neighborhood cohesion and community identity.

- D.4 The essentially undeveloped condition of north Halfmoon provides an opportunity to change the typical pattern of development by planning for open space, recreational opportunities, and trails to link neighborhoods to desirable destinations, such as a park. To accomplish this, the GEIS proposes the Open Space Conservation Plan and the Recreation and Pathways Plan.
- D.5 The Open Space Conservation Plan calls for the provision of quality open space within each development. Quality open space is defined as undeveloped land and includes natural areas that are interconnected, not fragmented; accessible, not tied up in back lots; and that contribute to the aesthetic quality of the area. Accessible means that the open space is partially located adjacent to the main road (not the internal subdivision road) and/or adjacent to the trail corridor identified in the Recreation and Pathways Plan. The Development Guidelines for Open Space Conservation provided in Appendix C of the draft GEIS should be used for guidance.
- D.6 Projects within the Study Area must undergo a conservation subdivision/development review process. This will involve early consultation with the Planning Board to identify important environmental resources and other open space that contribute to the character of the area. Procedures for this process are outlined in the Development Guidelines for Open Space Conservation provided in Appendix C of the Draft GEIS. These guidelines provide the flexibility to create a hamlet style development or larger lot development. The difference will be in the land area necessary to accommodate the project and the land designated to conserve open space.
- D.7 As part of the conservation subdivision/development review process, the Planning Board will work with the developer to identify both developable and constrained lands. Constrained lands are defined as federal and State wetlands, stream corridors, floodplain, steep slopes (greater than 15 percent), and unique or critical habitat such as that which supports threatened or endangered species. Other lands may also be defined as constrained in order to provide the required 20 percent quality open space or to protect other important community resources.

- D.8 The Town should create an overlay district within the Study Area that mandates conservation subdivisions and the accompanying Development Guidelines for Open Space Conservation (Appendix C).
- D.9 At a minimum, each development must provide 20% quality open space as defined and discussed in the draft GEIS. This open space must be contiguous and must provide aesthetic quality that will help to preserve the character of the area. Quality open space should incorporate a portion of the frontage along existing roads in an attempt to preserve the visual quality of the road corridor. If not proposed as some other aspect of the project, quality open space should also incorporate designated trails. The Planning Board and Town Board will provide direction to the applicant regarding important site features/community benefits that should be contained within the open space. The initial 20% quality open space may contain all or a portion of undevelopable land. Ownership of the open space is flexible and dependent upon the quality of the open space and its proximity to planned trails, parks and greenways. If the contiguous open space is 20 acres or larger, two homestead lots of not less than 10 acres each with deed restrictions to protect the open space from further development could be subdivided. The open space may also be farmed but not clear cut or mined. Therefore, the open space would not be suitable for farming if it is forested.
- D.10 The Town should adopt incentive zoning to encourage the provision of additional quality open space and other public benefit related to the Open Space Conservation Plan and the Recreation and Pathways Plan. Until this occurs, the Town can achieve similar results by utilizing the existing PDD process. Incentive zoning will more clearly identify the Town's values (acceptable benefits). A density bonus will be provided equal to the percentage of quality open space preserved on the site over and above the 20% minimum, not to exceed a maximum density of 2 units per gross acre for single-family developments and 8 units per gross acre for predominantly multi-family developments. This provision specifically excludes fragmented pieces and narrow corridors of constrained lands that are incorporated in the back lots of the subdivision. The base number of lots permitted on the property will be determined using a standard 20,000 square foot lot subdivision, excluding the required 20% open space and development constraints, as identified with the Planning Board. To be considered for

additional development density, the additional quality open space cannot include constrained lands. The following scenario is provided as guidance:

Parcel size:	100 acres
Constrained Land (wetlands, slopes, etc.):	30 acres
Developable Land:	70 acres
Developable Land minus roads & utilities (20%):	56 acres
Base Density ¹ (20,000 sq.ft. lots):	122 lots
<i>Applicant wishes to increase density by 20%</i>	<i>146 lots</i>
Is density compatible with max. 2 lots per gross acre (<=200)?	Yes
Requires add. 20% quality open space	70 ac. X 20% = 14 acres
Developable land reduced to:	56 acres
Developable land minus roads & utilities (20%):	45 acres
Proposed density per developable acre:	146 lots/45 acres = 3.24 lots/acre
Typical lot size:	13,400 sq.ft. (approx. 1/3 acre)

- D.11 PDDs or cluster subdivisions are not excluded from the conservation subdivision provisions, the Development Guidelines, or any other provisions of this GEIS.

- D.12 Lots that front on existing roads should not be permitted in future major subdivisions with an internal street system. All lots in the subdivision should front on the internal subdivision road system. If, as a result of the layout, side or back yards are adjacent to existing roads the home should be set back a minimum of 100 feet from the existing road right-of-way (ROW), if determined by the Planning Board to be reasonable. This will provide ample land area to account for potential future road improvements (eg, upgrade from a rural road to a collector) and future trail development.

- D.13 Minor subdivisions along existing roads should be limited. These roads are likely to become collector roads in the future, handling large volumes of traffic that is inconsistent with its function as a residential road. The recommended approach will be to incorporate a single access drive that can be accessed by each lot. An easement would be incorporated so that the access road could one day become a

¹ The actual base density must be determined by actual site layout to account for proper access, set backs, stormwater management, and other site plan related issues.

site access road as development of the larger interior parcel occurs. The recommended layout is illustrated on Final GEIS Figure II-2.

- D.14 Based on the recommendations for the future widening of Farm to Market Road (Section III.J) the building setback for this road must increase to a minimum of 60 feet.
- D.15 Subdivisions on parcels of 5 gross acres or less shall generally be required to meet the requirements of a conservation subdivision process; However, the 20 percent quality open space requirements may not be imposed, at the discretion of the Planning Board.
- D.16 Commercial and industrial development must undergo the same type of review as outlined for residential development (i.e., conservation subdivision).
- D.17 The open space requirements for commercial and industrial development shall increase from the current 20 percent provision to 30 percent. Of this 30 percent, 10 percent must be quality open space, as defined in the Open Space Conservation Plan. This will help to achieve some of the goals of this GEIS which are to provide quality open space, create contiguous natural corridors, and protect water quality through the provision of stream buffers.
- D.18 The Town should consider possible incentive zoning that would benefit commercial and industrial development in exchange for public benefit.

Recreation & Pathways Plan

- D.19 It is recommended that the Recreation and Pathways Plan become part of the Town's Master Plan Update and broadened to identify pathway linkages for the entire Town. New development within the Study Area should incorporate the Recreation and Pathways Plan concepts in site design.
- D.20 The Town should pursue the acquisition of lands for an active and passive park within the Study Area. This should include site investigations and discussions with appropriate regulatory entities regarding the proposed use.

- D.21 The Town could consider providing oversized box culverts at existing road crossings along the greenways to facilitate wildlife passage. This should be considered at the points of crossing on Farm to Market Road and Johnson Road. New development roads that must cross greenways and other important wildlife corridors, as established through the conservation subdivision/development process, should be required to facilitate wildlife passage.
- D.22 Each neighborhood or cluster within a development should have ample trail access.

E. Visual Resources

- E.1 The Study Area has many characteristics that create some significant viewpoints. The rural or pastoral landscape is highly valued by many communities. Early feedback from the community outreach program of the Town's Master Plan Update suggests that Halfmoon is no different in its valuation of open space. It is the rural landscape that comprises the foreground view within the Study Area. The aesthetic quality of the Study Area is, in and of itself, pleasing to those who live there and those who pass through.
- E.2 Draft GEIS Figure III-6 Identifies 4 areas of particular visual significance.
- E.3 Development under current zoning and within the areas identified on Draft GEIS Figure III-6 could result in the loss of significant views for the public. Views such as these are not common place and should be respected for both their current and potential future value as designated viewsheds.
- E.4 The conservation subdivision procedures should result in visually compatible projects. Other options, such as permanent conservation easements to protect open space and farmland are even more effective in preserving visual resources and should be encouraged as voluntary programs.

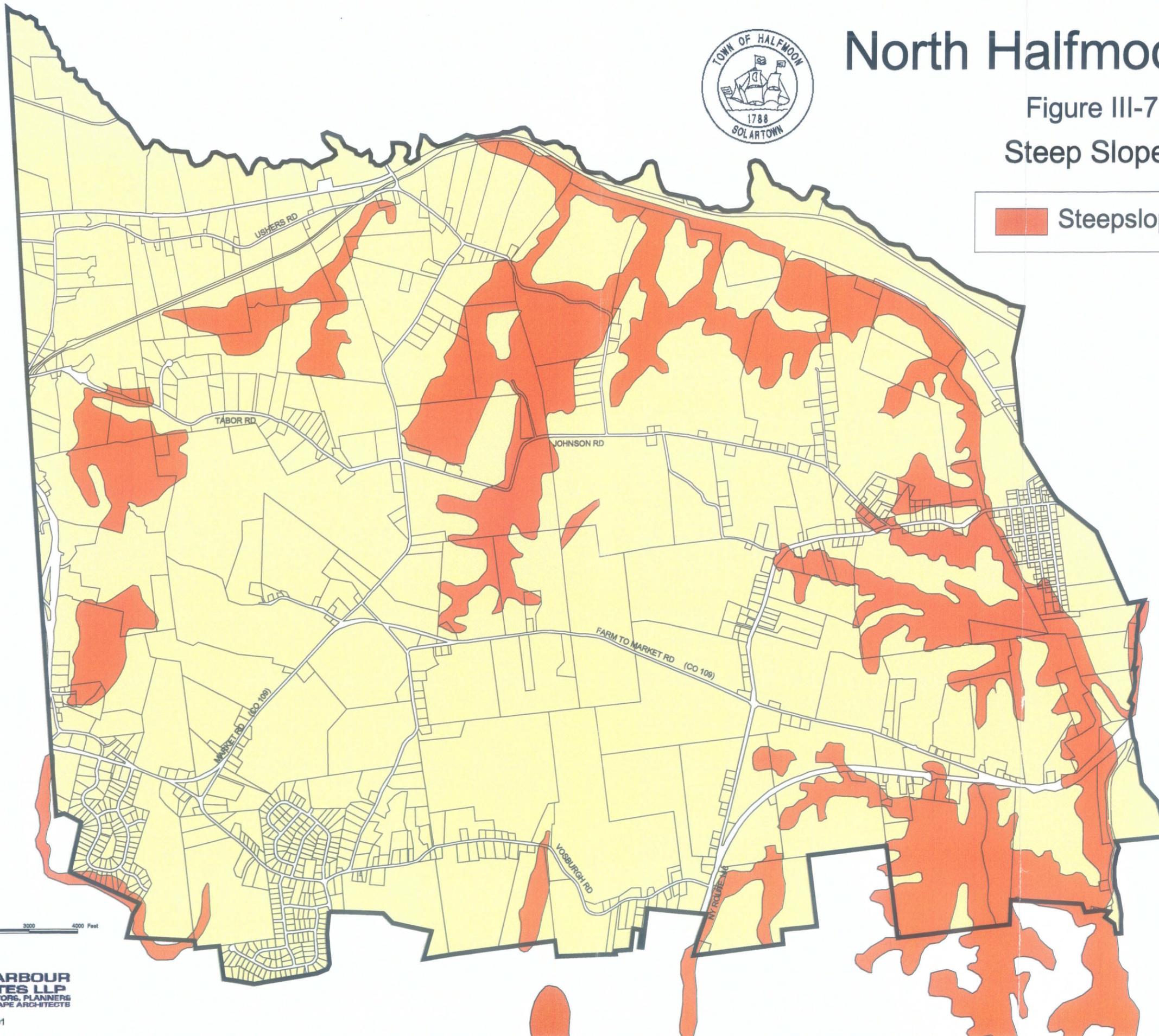
F. Topography, Geology & Soils

- F.1 The landscape of the Study Area is rolling with steep slopes primarily associated with stream corridors. Bedrock is generally very deep and is not a significant



North Halfmoon GEIS

Figure III-7
Steep Slopes



1000 0 1000 2000 3000 4000 Feet

Map Prepared by:
CHA
CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS

Map Created January 2001

construction constraint. Soils are deep and consist primarily of silt loam and loamy sand.

- F.2 Potential development constraints include poorly drained and excessively drained soils that encompass much of the Study Area, hydric soils that suggest the presence of wetland, and eroded soils that have resulted in steep slopes.
- F.3 Some prime and statewide important farmland soils have been identified and mapped in the Study Area. These soils typically denote the most productive farmland.
- F.4 Projects involving septic systems should be carefully reviewed to ensure the soils are capable of accommodating these systems.
- F.5 All projects must provide a soil erosion and sedimentation control plan during site plan review.
- F.6 Steep slopes are a development constraint due to the potential for erosion, water quality impacts, and general impact to the natural characteristics of the landscape. Steep slopes are defined as any slope of 15 percent or greater.

G. Water Resources

- G.1 The primary drainage courses in the North Halfmoon Study Area are the Anthony Kill and its tributaries, the Dwass Kill and its tributaries and tributaries to the Hudson River. These streams are identified on Draft GEIS Figure III-10. The 100-year floodplain is associated with the Dwass Kill, Anthony Kill, and the Hudson River.
- G.2 Groundwater resources within the Study Area appear to be ample for the current population. The western portion of the Town of Halfmoon is within the Clifton Park-Halfmoon Aquifer, which is highly productive. Most residents in the Study Area rely on private wells.

- G.3 Future development within the Study Area will increase the potential for surface water and groundwater contamination. Both residential and non-residential development results in the introduction of vehicle fluids, household chemicals, fertilizers and pesticides to runoff. Contaminated runoff is then collected as part of the stormwater collection system and often discharged directly to a water course without opportunity for treatment. Furthermore, development often results in clearing of vegetation up to stream edges, thus reducing the ability of lands adjacent to the streams to filter runoff. Removal of vegetation also destabilizes the slopes, resulting in increased erosion and sedimentation and slope failure. Encroachment into the floodplain places structures in jeopardy of flood damage.
- G.4 Measures to prevent water quality impacts include the provision of an erosion and sedimentation control plan, a stormwater management plan that incorporates retention of the first half-inch of run-off from the site (first flush); and special measures as necessary to protect sensitive environmental resources.
- G.5 Erosion control features such as staked hay bales and silt fence must be installed correctly and maintained on a regular basis. The Planning Board must be provided with a maintenance schedule and inspection/maintenance reports must be provided to the Town in accordance with that schedule. At a minimum, inspection and maintenance (if necessary) must occur after each storm event.
- G.6 A 30 foot buffer must be maintained between the top of bank and any permanent structures, impervious surfaces or leach systems. Where the top of bank cannot be readily identified due to gradual slopes, the ordinary high water mark can be used to define the top of bank. The first 10 feet of the buffer must be natural buffer. The remaining 20 feet can include lawns and inground or above ground pools. This will apply to all mapped streams as identified on the USGS topographic quadrangles (7.5 min; see also Figure 3-11 “water features map” in draft GEIS). For all new development projects subject to these Findings, stream buffers that have been previously disturbed by other site activities must be reestablished by stabilizing soils and providing natural plantings.

- G.7 Encroachment into the 100-year floodplain should be avoided.
- G.8 Due to the highly sensitive nature of water supplies, projects occurring within the well head protection areas are inconsistent with the GEIS and must be reviewed with a supplemental site specific EIS.
- G.9 Measures to protect other groundwater resources include proper drainage control and consideration of the elimination of pollutants, such as salts and pesticides. Waterproofing techniques for building slabs and foundations may be needed to prevent water damage to new construction.

H. Drainage

- H.1 Development in the Study Area will result in increased runoff that can lead to flooding downstream, particularly at areas of natural and human-made drainage channel constraints.
- H.2 Seven culverts have been identified by the Town in the Study Area as being undersized and have resulted in frequent flooding. The culverts are identified on Draft GEIS Figure III-11. Future development will exacerbate the problem.
- H.3 To mitigate the anticipated increase in runoff from new development, all projects must provide a stormwater management plan based on the NYSDEC State Pollutant Discharge Elimination System (SPDES) permit guidelines. Specifically, post developed peak discharge rates shall not exceed pre-developed peak discharge rates for the 2-year, 10-year, 25-year, and 100-year storm events. Other provisions as described in Draft GEIS Section III.H also apply.

I. Ecology

- I.1 Much of the Study Area has been cleared due to past and present agricultural activity. Abandoned agricultural lands are undergoing secondary succession and other vegetative community types and habitat are present and evolving. Constrained areas such as wetlands and stream corridor with steep slopes contain

forested areas. Numerous wetlands have been mapped using existing mapping provided by federal and State agencies.

- I.2 Contact with the NYSDEC Natural Heritage Program revealed the potential for two State-listed endangered species, one State-listed threatened species, and two rare but unprotected species. The endangered species include the Karner blue butterfly (*Lycaeides melissa samuelis*) and swamp smartweed (*Polygonum setaceum var interjectum*), a vascular plant. Based on the descriptions provided by NYSDEC, the general locations of Karner blue butterfly habitat are found in the northern portion of the Study Area. Other butterflies associated with the Karner blue butterfly habitat include the State-threatened frosted elfin (*Callophrys irus*) and the unprotected (rare) dusted skipper (*Atrytonopsis hianna*). The Myers Brook was also identified as a cold water fish spawning area but is not identified as a protected habitat.
- I.3 Development within the Study Area based on the 20-year development projections will have a significant impact on the amount and quality of habitat within the Study Area. This could include significant loss of wetland, potential impact to the habitat of threatened and endangered species, and the loss of habitat for common wildlife species. Land area impact will be the result of the land area required for development of residential and commercial/industrial projects as projected for the next 20 years. The total potential land area impact over the next 20 years is 1,475 acres.
- I.4 The most substantial mitigation efforts for the loss of natural habitat are the plans and recommendations for the conservation of open space and the Recreation & Pathways Plan. They call for the provision of contiguous open space and recommend greenways linking large areas of open space and major drainage courses to allow wildlife passage. This will promote diversity and result in a healthier natural community. Other provisions to protect/mitigate natural habitat, as described in Draft GEIS Section III.I, also apply.
- I.5 Preserve stream corridors and associated wetland to maintain and improve water quality and habitat and to preserve natural buffers between incompatible land uses. A minimum setback of 30 feet from the top of bank is required. The first

10 feet of the buffer from the top of bank or ordinary high water mark must be natural buffer. The remaining 20 feet may be lawn or landscaped area but cannot contain permanent structures (with the possible exception of a residential pool), impervious area (such as parking areas, roads, etc.), or septic systems including leach fields. In situations where the top of bank is not well defined (where slopes are gradual) the mean high water mark can be used.

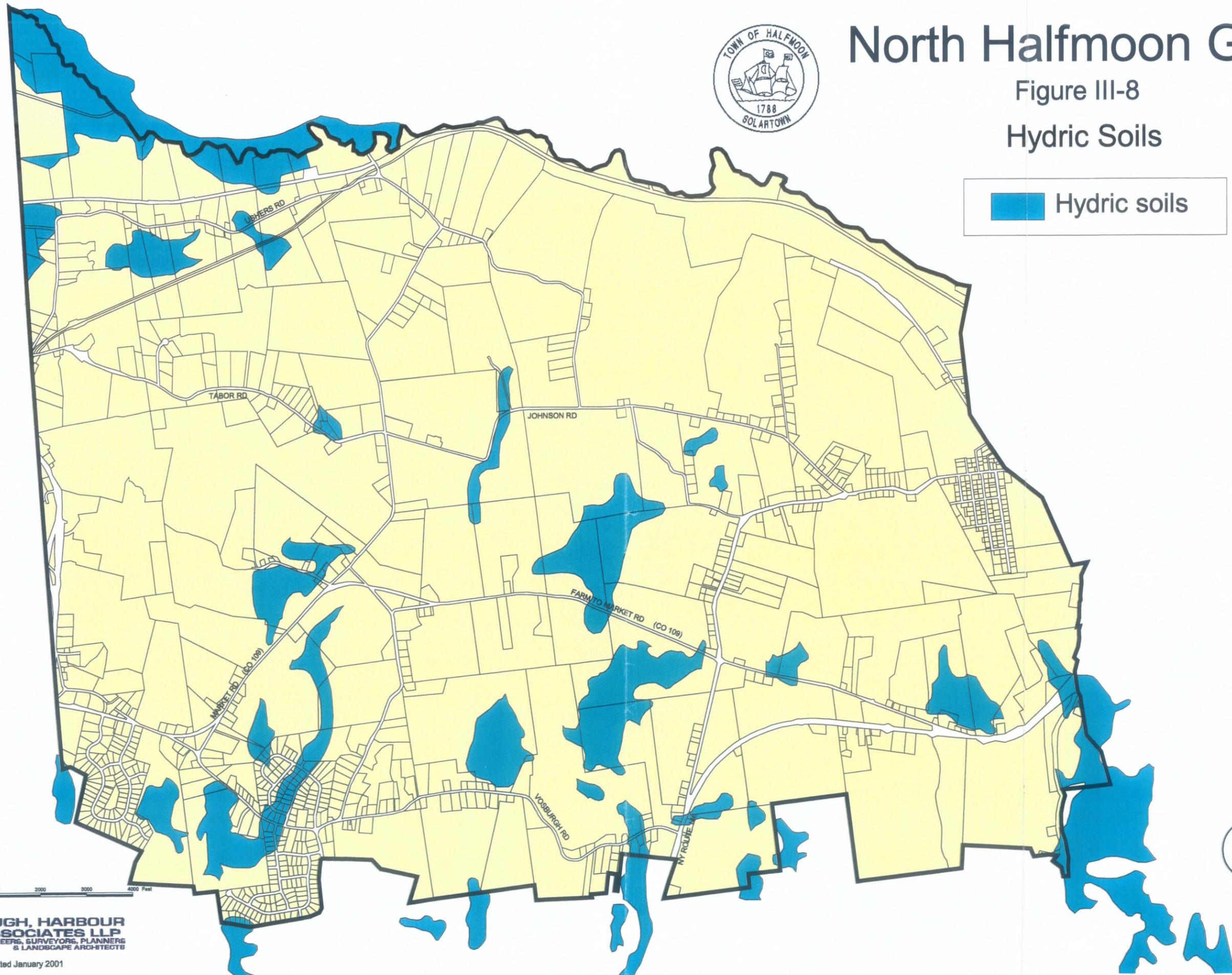
- I.6 The impact to federal and State wetlands is contrary to the intent of this GEIS. It is recognized, however, that some impacts may be unavoidable even with the most environmentally sensitive projects due to wetland corridors and other protrusions that constrain access. Therefore, for the purpose of establishing an impact threshold, wetland (federal and State) impacts that will require an individual permit from the U.S. Army Corps of Engineers (ACOE) and/or an Article 24 permit from the NYS Department of Environmental Conservation (NYSDEC) are considered potentially significant and will require further SEQR documentation. This does not suggest that a supplemental EIS will be necessary, since it may be possible for the applicant to appropriately mitigate the impact. Projects that only require Pre-Construction Notification from ACOE will result in limited impacts and are generally consistent with the GEIS and these Findings.
- I.7 Encourage preservation of wetland areas and stream corridors by considering conservation easements and other methods of protection.
- I.8 If wetland and stream impacts are permitted, project sponsors must attempt to limit impacts to less significant portions of the wetland and avoid fragmentation (splitting wetland into parts, isolating the parts through impervious areas and other barriers). This is consistent with the requirements of federal and State regulations to avoid and minimize impacts.
- I.9 Require wetland delineations pursuant to State and federal regulations, as appropriate. The project sponsor will be responsible for confirming the wetland boundaries with ACOE and NYSDEC prior to site plan approval. Other specific wetland mitigation measures, as identified in Draft GEIS Section III.I, also apply.



North Halfmoon GEIS

Figure III-8

Hydric Soils



1000 0 1000 2000 3000 4000 Feet

Map Prepared by:

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

Map Created January 2001

- I.10 The Karner blue butterfly and frosted elfin habitats and their buffers should be avoided completely. Although NYSDEC has worked with developers in the past and will continue to do so, the potential impact is very significant at both a State and national level. There is significant developable land within the Study Area to accommodate future development. Therefore, projects that contain these species or known habitat must demonstrate to the Town how the habitat will be completely protected and must have concurrence from NYSDEC in order for the project to comply with this SEQR threshold.
- I.11 Projects located in the northwest portion of the Study Area, adjacent to the State wetland, must undertake an investigation for the presence of swamp smartweed. If found, this species must be protected.
- I.12 The proposed extension of the Zim Smith trail, the potential for further trail linkages and the construction of a sewer trunk in the northern portion of the Study Area may impact Karner blue butterfly and frosted elfin habitat, as well as swamp smartweed. Regional trails and trail systems to serve a municipality are generally viewed as public benefits and mitigation for increases in population due to development, as are sewers. For the purposes of this GEIS, trail and sewer development must avoid the habitat of threatened and endangered species to comply with this document.
- I.13 To recognize the significance of the Meyers Brook, natural buffers from the top of bank of the stream and its tributaries should be a minimum of 100 feet. The natural buffer should be forested. If it is not forested, the Town should require that native trees be planted to reforest the buffer.

J. Traffic

- J.1 Existing traffic within the Study Area generally flows freely with good levels of service at all intersections and along all roadway linkages.
- J.2 Potential future trip generation was based on the 20-year development projections. This will result in significant increases in traffic volume over most if not all the roadways in the Study Area. Analysis of intersection level of service reveals that most intersections will decrease in level of service but would not fail. The exception are certain turning movements at Pruyn Hill Road and NYS Route 146, Pruyn Hill Road and Farm to Market Road, Ushers Road and Tabor Road, Farm to Market Road/Smith Road/Cary Road, and Farm to Market Road and Anthony Road. Roadway linkages analysis also resulted in deficiencies on Farm to Market Road from U.S. Route 9 to NYS Route 146, Ushers Road from U.S. Route 9 to Tabor Road, and NYS Route 146 from Pruyn Hill Road to Farm to Market Road.
- J.3 Improvements are recommended for each of the impacted intersections and road segments. The total cost for these improvements was estimated at \$3 million (see also Q.2).

K. Utilities

- K.1 Electric and gas service are provided in the Study Area by Niagara Mohawk Power Corporation. Telephone service is provided by Verizon Communications. Based on contact with these utilities, future development within the Study Area will have no adverse impact on service.
- K.2 The development projections provided in Draft GEIS Section II were arrived at based on the assumption that municipal water and sewer service will be available, improvements to which would be paid for by future development. Without municipal water and sewer service, the carrying capacity of the land (groundwater supply, soil filtration capacity) would not support the projected development without potential significant impact to groundwater supply and quality as well as the potential for groundwater and surface water contamination from failed septic systems.



North Halfmoon GEIS

Figure III -20

Proposed CIP Water Supply Improvements

- EXISTING WATER MAINS (8" UNLESS OTHERWISE NOTED)
- CURRENTLY PROPOSED WATER MAINS (8" UNLESS OTHERWISE NOTED)
- PROPOSED CIP WATER SUPPLY IMPROVEMENTS (12" UNLESS OTHERWISE NOTED)
- SYSTEM WIDE IMPROVEMENTS

HALFMOON WATER DISTRICT #1
SERVED BY MECHANICVILLE
WATER SYSTEM

CURRENTLY PROPOSED
WATER TANK
400,000 GAL.

PROPOSED CIP
WATER TANK
600,000 GAL.

PROPOSED METERED
INTERCONNECTION
WITH MECHANICVILLE
WATER SYSTEM

POTENTIAL BOOSTER
PUMP STATION
(SYSTEM WIDE
IMPROVEMENT)

HOFFMAN
WELL
FIELD



GRAPHIC SCALE



1 inch = 2000ft.

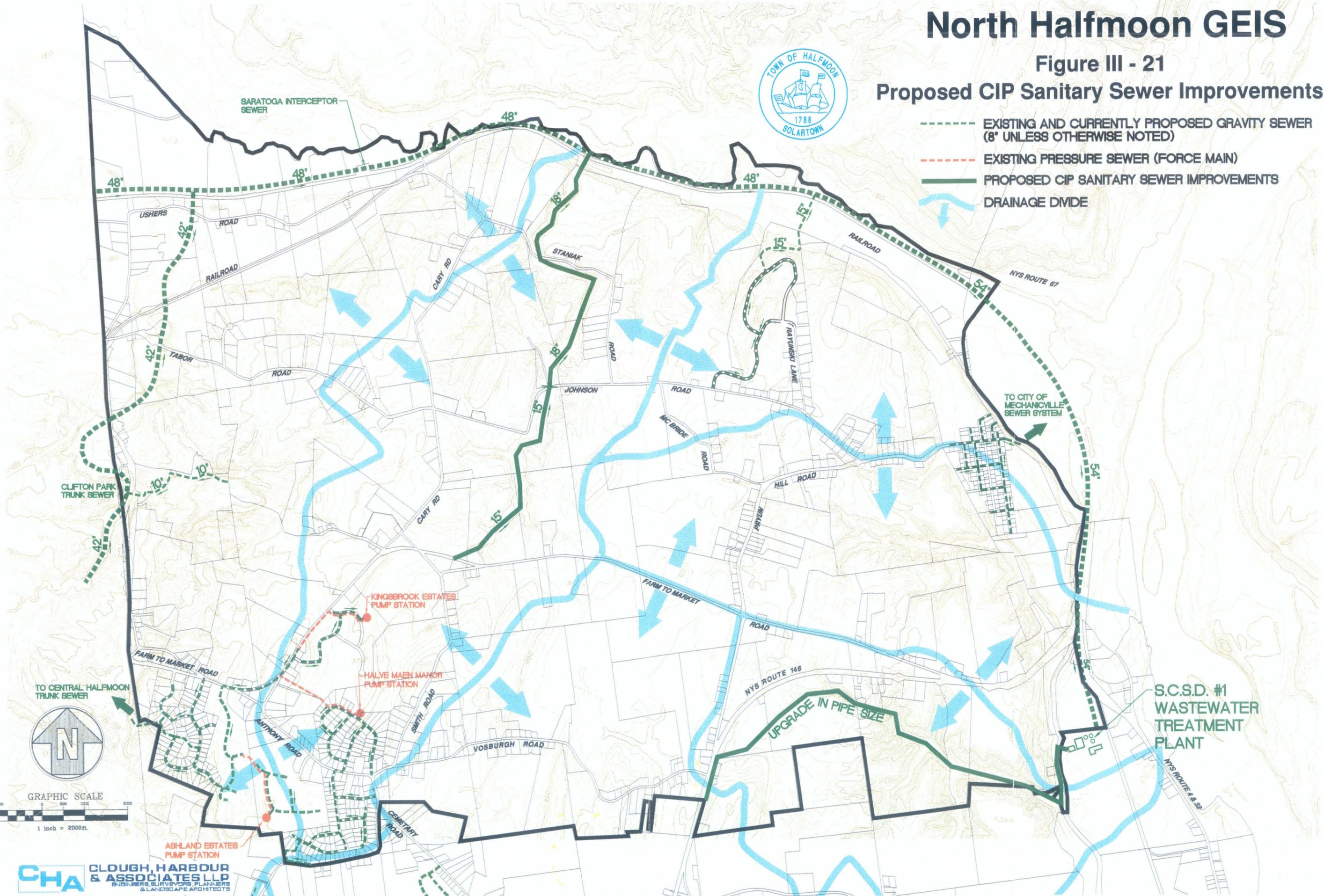
North Halfmoon GEIS

Figure III - 21

Proposed CIP Sanitary Sewer Improvements



- EXISTING AND CURRENTLY PROPOSED GRAVITY SEWER (8" UNLESS OTHERWISE NOTED)
- - - EXISTING PRESSURE SEWER (FORCE MAIN)
- PROPOSED CIP SANITARY SEWER IMPROVEMENTS
- ↗ DRAINAGE DIVIDE



M:9836/ACAD/02/prop-SEWER

ASHLAND ESTATES PUMP STATION

KINGSBROOK ESTATES PUMP STATION

HALVE MAEN MANOR PUMP STATION

SC.S.D. #1 WASTEWATER TREATMENT PLANT

TO CITY OF MECHANICVILLE SEWER SYSTEM

TO CENTRAL HALFMOON TRUNK SEWER

CLIFTON PARK TRUNK SEWER

SARATOGA INTERCEPTOR SEWER

- K.3 The Town's plans to develop a water treatment plant with an intake in the Hudson River will result in an ample supply of water with the ultimate ability to serve the entire Town. Planned improvements within the Study Area ("Jobs Now", Water District 12, and Water District 15 extensions) will provide water to a large portion of the Study Area. Additional improvements will be necessary to accommodate the future projected development.
- K.4 A capital improvements plan was developed in the Draft GEIS, calling for new transmission lines and a water tank. Based on the improvements that are directly related to the projected future development, mitigation costs were determined. The total cost of water improvements is \$4,635,000 (See also Q.2).
- K.5 Most of the Study Area is not serviced by sanitary sewer. However, discussions with the Saratoga County Sewer District revealed that there is sufficient capacity in the existing sewer transmission line along Route 9 and the main trunk line that follows the Anthony Kill. Development projects currently before the Town are proposing pump stations and force mains to provide sewer service to their projects, which cannot be served by gravity sewer.
- K.6 Development with sewer service can and will occur within the Study Area without future Town planning. This, however, would result in numerous pump stations and force mains that require energy and maintenance, all of which requires funding. If sewer service is to be provided to north Halfmoon then it should be planned as gravity sewer wherever possible to reduce costs and provide a more trouble free system.
- K.7 A capital improvement program was developed to provide sewer to most areas of north Halfmoon. These improvements and their approximate routes have been identified on Draft GEIS Figure III-21. Based on the improvements that are directly related to the projected future development, mitigation costs were determined. The total cost of sewer improvements is \$2,390,000 (see also Q.2).
- K.8 Construction of the proposed trunk lines may temporarily impact streams and wetlands. However, it is anticipated that the sewer can be constructed without any significant permanent impacts to sensitive environmental features. As of the date of these Findings, federal regulations for the protection of wetland, streams

and other waters of the U.S. would require the proposed sewer installations to be reviewed by the U.S. Army Corps of Engineers. This process will provide thorough review of sensitive environmental features that would supplement the GEIS and help to ensure no significant environmental impacts occur.

L. Air Quality

- L.1 The major source of pollution (primarily carbon monoxide and ozone) in the Capital District and Saratoga Region is vehicular traffic. Ozone is the most serious air pollutant impacting this area. Based the U.S. Environmental Protection Agency 8-hour standard for ozone, the Albany Area (Albany, Saratoga, Greene, Montgomery, Rensselaer, & Schenectady counties) is classified as in attainment for ozone. It is anticipated that the 8-hour standard will be replaced with a 1-hour standard. When this occurs, the Albany Area will be designated “marginal non-attainment” for ozone.
- L.2 The Study Area is relatively undeveloped and probably has good local air quality, although it is possible that traffic from Route 9, I-87, Route 4&32, and Mechanicville could result in some air quality impacts during thermal inversions.
- L.3 Future development in the Study Area will significantly increase traffic and the potential for localized air quality impacts. To mitigate these potential impacts, intersection improvements have been identified to maintain traffic flow and reduce idling time, which should reduce emissions. In general, however, broader measures at State and federal levels that include stricter vehicle emission controls are anticipated and necessary to address the air pollution issue.
- L.4 Manufacturing operations that produce significant emissions and odors are inconsistent with the parameters of the GEIS and these Findings. Such projects would require further SEQR analysis.

- L.5 Construction within the Study Area could be significant, with several projects occurring simultaneously. Minimum standards/measures have been identified in the Draft GEIS to address dust impacts. These and potentially other more strict measures, as identified by the Town Board or Planning Board, may be necessary to address construction impacts.

M. Community Services

- M.1 Police protection is provided to the Town of Halfmoon by the Saratoga County Sheriff's department and the New York State Police Department. There are two fire departments that service the Study Area on a full time basis. They are: The Hillcrest Volunteer Fire Department, which is located on Pruyn Hill Road and the Clifton Park/Halfmoon Fire District, which is located on Firehouse Road near the intersection of Routes 9 and 146 in Clifton Park. The Clifton Park/Halfmoon Emergency Corps, located at 15 Crossings Boulevard in Clifton Park, provides emergency medical services (EMS) in the Study Area. There are two public school districts that provide education to the students who reside within the Study Area: Shenendehowa Central School District and Mechanicville Public School District.
- M.2 Neither the Troop "G" Commander for the New York State Police nor the County Sheriff feel that the additional projected development will have any significant impact on staff and capital expenditures.
- M.3 Both fire districts expressed concern with future development in terms of the availability of staff, equipment, and water supply. All must increase as development occurs to provide adequate service. The costs for additional equipment was not calculated since the Town cannot collect mitigation costs for special districts. This issue will have to be addressed as the need arises. The GEIS provides a capital improvement program to provide water to the Study Area. This should provide sufficient water for fire fighting and should solve current deficiencies. Staffing is an issue of local, State and national concern. Volunteer fire companies were established to serve rural areas, which typically had few fires and significant local support from volunteers. Suburbanization has resulted in significant development that has significantly increased calls and the

need for more highly trained volunteers. Most volunteer fire companies cannot find enough volunteers to serve their area. Eventually, it may be necessary for communities to provide for some level of paid professional firefighting.

- M.4 Contact with the Clifton Park/Halfmoon Emergency Corps revealed the need to increase staff and provide an additional ambulance to meet the projected growth in the Study Area. However, they believe that they can meet the increased demand.
- M.5 In the Mechanicville School District, the elementary school, middle school and high school are all at or near capacity. Plans are in place to provide additional capacity such that capacity will be available for future growth. Similar capacity issues were expressed by the Shenendehowa School District.
- M.6 The cost of providing education to children often exceeds the tax income generated from residential development. This is a potential concern for the Study Area since the overwhelming majority of development will be residential. The fiscal impact analysis conducted for the development projections in the Study Area suggest a potential for a beneficial fiscal impact for the school districts. This is primarily a factor of the amount of potential industrial and commercial development and the relatively high value of homes that have been constructed over the past few years. If this trend continues and additional industrial and commercial development occurs within the Study Area as projected, the impact on the school districts may be mitigated. It is recognized, however, that the trend in high value homes may end as developers seek different markets and provide different types of housing. Since school taxes are typically the highest tax paid by a resident, the Town might consider constructing a fiscal model that would help to evaluate fiscal impact by comparing various land use scenarios. Such forward fiscal planning would provide the Town with the opportunity to address land use in a given area in order to mitigate potential fiscal impacts, rather than reacting to increased taxes.

Noise

- N.1 The Study Area is rural, generally undeveloped and impacted by few noise sources. Portions of the Study Area adjacent to Mechanicville and adjacent to any of the major roads (Route 9, 4&32, 67, 146) experience higher ambient noise levels than the interior of the Study Area.
- N.2 Development as projected in the Draft GEIS will change the character of the Study Area from rural to suburban. It will also result in more non-residential development that will introduce truck traffic. In general, ambient noise levels will likely increase by 15 or more decibels, as indicated in Draft GEIS Table III-23.
- N.3 Construction noise will be unavoidable. Since there is a potential for considerable construction that would include many phases over a period of several years, construction noise could become a major nuisance. The Town should work with developers for each project to establish a noise reduction program. Examples of noise reduction methods are provided in Draft GEIS Section III.N. Key to the program is the identification of sensitive receptors (typically residential areas) and limiting hours of operation so as not to significantly disturb residents.
- N.4 The increase in ambient noise levels will be unavoidable and would have little impact on residents in suburban developments. It will have a greater impact on rural residents. A noise ordinance could be considered to prevent excessive noise such as loud broadcasts of music or voices and other sources.
- N.5 Noise is most effectively attenuated by distance from a source. This fact provides further support for limiting the consideration of non-residential PDDs in residentially zoned areas and providing significant buffers (distance) between incompatible uses.

O. Cultural Resources

- O.1 A Phase 1A Cultural Resource Survey was conducted to investigate the potential occurrence of historic and prehistoric cultural resources within the Study Area. The only site listed on the State and National Registers of Historic Places is the Champlain Canal. No remnants of the canal are visibly present within the Study Area. Given the proximity of the Study area to the Hudson River and major tributaries and the known use of the area by native Americans as hunting grounds, travel corridors, and a war path, the entire Study Area is considered sensitive for the potential presence of historic and prehistoric cultural resources.
- O.2 Correspondence from the NYS Office of Parks, Recreation and Historic Preservation (NYSOPRHP) provided in Final GEIS Appendix A indicated no concerns regarding historic buildings/structures/districts within the Study Area. They do, however, agree with the conclusions of the Phase 1A report that further site specific analysis consisting of supplemental Phase 1A analysis and a Phase 1B field survey would be necessary for all new development projects unless it can be proven that the site has been significantly disturbed. It is generally accepted that farming (plowing of the soil) does not constitute disturbance since this activity seldom reaches depths necessary to destroy archaeological sites.
- O.3 All future projects will be required to receive sign-off from NYSOPRHP prior to site plan approval.

P. Fiscal Analysis

- P.1 A fiscal impact analysis was forecasted for the Town of Halfmoon for the projected development, estimated at the Year 2020. The development types consist of residential (*single family and multi*), commercial/office, light industrial and warehousing. The Town does not have a tax to support the general fund. The majority of income for the Town is from sales tax (approximately 60% of the general fund).

- P.2 The Town's current operating budget is primarily supported by sales tax. Since the housing values of new development are higher than existing development on average it can be assumed that their disposable income for goods and services will be higher. Therefore new development will generate more sales tax per capita than existing development. The development of commercial property to meet their needs will also generate new sales tax revenues. The next largest source of revenues is the mortgage tax at 11.5% of total revenues. New development will generate more sales than resales from existing properties and therefore more revenues per capita or assessed value than existing development. The result is a beneficial impact on this revenue stream.
- P.3 As with the General Fund, ad valorem tax does not generate revenues to support the highway fund. The largest source of revenue is the sales tax at 88.7% of the highway fund. Since the housing values of new development on average is greater than the existing average, it can be concluded that new households incomes will be higher. Therefore, new development will generate more sales tax revenues per dwelling unit. A neutral or slightly beneficial impact is anticipated.
- P.4 The fiscal impact of new development on capital improvements for infrastructure typically results in inequities. This occurs when current development pays for improvements to establish a preferred level of service. As future development occurs, all pay for the necessary improvements. Therefore, those who have been in the community the longest pay the most. This inequity will be mitigated by the establishment of mitigation costs for some capital improvements.
- P.5 The analysis of costs vs. revenue for the school districts revealed that the Shenendehowa School District could be beneficially impacted by almost \$5 million as a result of the projected development. The Mechanicville School District could have a beneficial fiscal impact of \$2 million.

Q. Mitigation Costs

Q.1 One of the benefits of preparing an area-wide GEIS is the ability to identify capital improvements necessary to serve anticipated future growth and to distribute the cost of those improvements equitably among all future development within the study area. This was accomplished for each of the capital improvements and open space/recreation improvements for which the Town would be financially responsible.

Q.2 The following table provides a summary of the mitigation costs based on equivalent dwelling units (EDUs). The EDU is often used in water and wastewater planning and design. Mitigation costs were calculated for water and sewer improvements based on EDUs. This was carried forward for the other costs to facilitate implementation. There are 4,026 EDU’s based on the 20-year projections for residential, commercial and industrial development.

Mitigation Cost Summary

Mitigation Costs Per EDU							
Land Use	Water	Sewer	Culverts	Traffic	GEIS Prep.	Open Space	Total
	\$4.635 mil.	\$2.39 mil.	\$200,000	\$3.00 mil.	\$125,000	1.30 mil.	11.65 mil.
EDU	\$1,151	\$594	\$50	\$745	\$31	\$323	\$2,894

Q.3 The Town’s current Equivalent Domestic Unit Assessment Schedule will be used to distribute costs for residential, commercial and industrial development. A copy is attached.

Q.4 The mitigation costs derived from this GEIS will be collected at the time of each certificate of occupancy (CO). This is somewhat different than the procedures of other communities engaged in capital improvement programs derived through SEQR, where most of the funds are collected up front, usually divided into one

third at stamping of final plans, one third at first building permit and one third at first CO. The reason for spreading the cost over time is to account for the need of the development community to make most of the capital improvements themselves, for which they will be reimbursed once the funds are available or credited against their required fees. For residential development, these funds are generated as homes are sold.

- Q.5 Mitigation costs presented in the table above are in 2001 dollars. To account for inflation, the Town may review the mitigation costs every 2 years and adjust them as necessary so that sufficient funds are available to pay for the improvements.

Unavoidable Adverse Environmental Impacts

- A. Demographics - Based on the anticipated development potential within the Study Area provided in Section II, the population of the Study Area could increase by 7,078 people. This increase in population will have unavoidable impacts on community services and the physical environment. Draft GEIS Section III documents these impacts and provides recommendations to maintain and upgrade services to meet the needs of the growing population. However, despite these mitigation measures, the additional people will consume services and compete with natural communities for land.
- B. Land Use & Zoning – There will be an unavoidable change in the character of the Study Area from primarily rural to suburban. The Open Space Conservation Plan and the Recreation and Pathways Plan are proposed to change the typical land use patterns of sprawl to a more desirable suburban community with significant open space and recreational opportunity.
- C. Agriculture - The impact of the conversion of the Study Area to a predominantly suburban community is questionable given the fact that many farms do not exist as a result of economic conditions within the farming industry and the fact that there are few agricultural operations surrounding the Study Area. However, as viewed from a county level and even a regional level, the loss of agricultural land (both active and inactive or abandoned) will have an unavoidable impact on agricultural activity and potential future activity in the region. This is contrary to the Saratoga County Agricultural and Farmland Protection Plan. Programs that will pay the farmer up-front for the permanent loss of the development potential

of their land may be sufficient to encourage some folks to remain in farming or to simply hold their land as open space. This is not expected to preserve all the agricultural land and, as exemplified by the current proposals before the Town, agricultural land will be lost in the near future, regardless of the adoption of the GEIS and this Statement of Findings.

- D. Recreation & Open Space - The impacts of the recommendations of the Open Space Conservation Plan and the Recreation and Pathways Plan are primarily beneficial. Each plan will result in greater open space than would remain under current zoning requirements.
- E. Visual Resources - Some visual resources will be lost from the simple fact that land use within the Study Area will change as development occurs.
- F. Topography, Geology & Soils - Soil erosion is likely to increase as a result of development activity in the Study Area. Numerous erosion control methods and products are available to the development community. However, very often the erosion control systems are not maintained or properly installed. When this occurs, sediment-laden water is released from the site, impacting areas downstream.
- G. Water Resources - Development will bring both an increase in runoff and a decrease in water quality. Buffering provisions for both streams and wetlands will help to address this issue. However, much like the issues identified in F, enforcement can be difficult.
- H. Drainage - Anticipated increased runoff will impact existing natural drainage courses and existing road culverts. Several mitigation measures have been proposed that will address runoff to the greatest extent practicable. These include increased stormwater detention standards, retention of the first flush (first half inch of runoff from a site), culvert replacements, protection of wetlands, and the provision of stream buffers.
- I. Ecology - As much as 1,475 acres could be impacted under current zoning and subdivision regulations. Some of this impact will be to sensitive ecological systems such as wetlands and streams. The mitigation measures will help to minimize this impact and will significantly improve the ecology of the area as compared to how it could develop under current regulations. Therefore, there are both adverse and beneficial unavoidable impacts to the ecology of the Study Area. Certainly, the current conditions, a mosaic of farmed land, fallow land, and other natural communities, are more beneficial to the ecology of the area than the anticipated developed condition.

- J. Traffic - More vehicles will use the local roads. This will change the character of these rural roads and the character of the adjacent lands. Conflicts between cars, farm implements, and pedestrians will increase and safety will become an issue of increasing concern. Efforts to accommodate pedestrians through an area-wide trail system will have a significant benefit to the community and the new residents in the Study Area. Such measures, if employed, will create a safer and more desirable atmosphere than in other parts of the Town and in other communities where development has occurred without addressing the pedestrian environment.
- K. Utilities - Utilities, primarily water and sewer, have a profound impact on land use. Utilities also provide an opportunity to cluster development and create projects that do not sprawl across the landscape. Programs designed to help farmers to continue farming and flexible regulations, such as the conservation subdivision process, provide the means to control growth within the framework of municipal water and sewer service.
- L. Air Quality - Probably the largest source of air pollution will be emissions from motor vehicles, including construction vehicles. Vehicle use/traffic will increase significantly within the Study Area over the next 20 years. Mitigation for this increase includes intersection improvements that will help to maintain traffic flow as well as State and national efforts to reduce vehicle emissions.
- M. Community Services - There will be an unavoidable impact to fire fighting and emergency services as a result of future growth. The impact will include increased capital expenditures and the need for staff. Fire fighting and emergency services are volunteer organizations that have difficulty recruiting volunteers. This issue is common to most suburban communities with volunteer fire fighting. The significant increase in residential development will increase the number of school age children that must be accommodated within the Shenendehowa and Mechanicville school districts. The impact to the school districts will depend on the actual assessed value of development and the resulting school tax revenue.
- N. Noise - Noise will increase in the Study Area as development occurs. Initially, the most significant noise sources will be construction equipment and will be temporary. Eventually, however, the ambient noise levels will increase due to increased residential, commercial and industrial development. The significance of this impact will depend on the perception of the resident. A resident moving into a subdivision might be less impacted than a resident building on a single parcel in a rural area, due to personal preferences.

- O. Cultural Resources – If Phase 1A/1B cultural resources surveys are prepared for each project and reviewed by NYSOPRHP, then no significant impact to cultural resources is anticipated.
- P. Fiscal Analysis - The revenues from future sales tax should balance with the operating budget. However, without a mitigation cost system, the capital budget would be adversely impacted by future development. Analysis of the fiscal impact on the school districts revealed a beneficial impact to the school budgets. This is due partly to a significant potential for commercial and industrial development and a relatively high value for new construction of residential units over the past two years.

Alternatives

- A. Alternative Development Scenarios - Full buildout of the Study Area was estimated in Section II and amounts to 5,847 residential units and 14.5 million gross square feet of industrial and commercial building. Buildout within the Study Area probably would not occur for 50 or more years. This is an unreasonable time frame for planning purposes and was therefore rejected as a suitable development projection.

A growth management scenario consisting of the Open Space Conservation Plan and the Recreation and Pathways Plan is the preferred alternative for future development of north Halfmoon. Although some aspects of these plans have been incorporated into the mitigation requirements for this GEIS, the implementation and success of these plans will require Town-wide support, legislation, and adoption within the Town's Master Plan Update.

Preservation of the rural character of the Study Area was considered extensively. To achieve rural character under an atmosphere of development, the density would have to be reduced significantly in order to achieve an open space provision of at least 50 percent. Under this scenario, it is possible that up to half of the current residential buildout projections would be eliminated and the 20-year projections would approach residential buildout. It was determined that the level of land use change associated with a rural character development scenario and its implications on the community (both beneficial and adverse) is best left to the

consideration of the entire Town as it relates to the overall vision and desired future land use to be developed through the presently proceeding Master Plan process and extensive community outreach.

- B. Alternative Land Use – Analysis of alternative residential uses involved consideration of duplexes (permitted by current zoning) and multi-family uses as permitted by PDD. At a maximum development density of 10 units per acre under the present PDD legislation, the development projection for the next 20 years would be grossly underestimated. Significant multi-family development would convert the rural character to that of a densely populated suburban or urban environment. The residents would undoubtedly demand goods and services in close proximity, thus infusing commercial development to meet the growing demand. This alternative was rejected based the unmanageable level of adverse impact on almost every resource.

A significant increase in the mix of commercial over industrial development would result in increased traffic impacts and may impact other resources such as water and sewer service and community services. A more likely alternative would be the conversion of lands along Route 146 to commercial PDD. This is a reasonable development scenario that can be supported by the analysis provided in this GEIS. The traffic would focus on Route 146 and, therefore, would have little impact on residential areas. Furthermore, it is anticipated that rezoning and development of lands along Route 146 would redistribute the development from the Route 9 corridor to the Route 146 corridor. The impact on water and sewer would not be significant since this corridor has been identified as suitable for the installation of a sewer trunk. Given these factors, a future recommendation to convert the lands along Route 146 to commercial PDD would be a viable alternative under this GEIS.

The alternative to light industrial uses are manufacturing. This use is currently allowed in the Town's Industrial (M-1) zoning district and could result in almost 6.5 million gross square feet of manufacturing uses. The impact of this use on the community would depend on the type of use. The Town's zoning ordinance specifies that the manufacturing uses do not produce toxic or harmful products and by-products nor pose significant hazards to the community. From this

perspective, manufacturing uses would appear to be acceptable and consistent with the thresholds of this GEIS. However, many of these uses place a significant demand on water and sewer service. They may also result in significant traffic. Therefore, an alternative that would allow primarily manufacturing uses would not be consistent with this GEIS and should be rejected. Individual applications for manufacturing uses should be carefully reviewed to determine their potential impact on the community.

C. Other Permitted Uses - Permitted and special permit uses identified for the A-R, R-2, C-1, NB-1, and LI-C zoning districts in the Town's zoning ordinance are generally consistent with the recommendations and thresholds provided in the GEIS. Farming is a desirable use and one of the best ways to maintain the rural character of the Study Area. This use is encouraged in the GEIS and is an acceptable alternative to the development projections. However, regulatory measures that would require this use would not solve the farming issues and would likely result in hardships on existing landowners. Soil/mineral resource extraction is also permitted in the Study Area under the Town's Mineral Resource Protection provisions (Section 903 of the Zoning Law). Mineral resources (primarily gravel) are somewhat limited in their extent, the Town should consider identifying areas suitable for extraction operations and establishing appropriate land use regulations. Soil/mineral extraction within the Study Area would be outside the level of environmental analysis contained within this GEIS. Furthermore, broad scale extraction operations would be inconsistent with the anticipated future residential character of the area. Such uses could result in significant vegetation/habitat loss, roadway impacts, and general aesthetic impacts.

D. No Growth - The no growth alternative is not possible under current zoning. To achieve this scenario, the Town would have to develop a policy of land preservation that would involve the imposition of significant regulatory constraints. It is highly unlikely that the Town could impose such regulations and survive legal challenge. Furthermore, the Town would have to deny all the projects currently before the Planning Board, which would also be challenged on the grounds of grandfathering. A possible/equitable solution to a no growth policy would be to use permanent easements through the transfer or purchase of

development rights. This has been proposed in the GEIS but will be completely voluntary. It is hoped that some landowners will participate and that funds can be generated to make purchases.

Another potential solution is continued farming. This scenario is encouraged in the GEIS and, from that perspective, supports a no growth policy, but only at a voluntary level. If farming were a viable industry in north Halfmoon and the majority of landowners supported efforts to protect farming as the primary land use, then both voluntary and regulatory measures could be imposed to protect farmers. Available information suggests that this is not the current status of farming and that landowners would strongly oppose any type of agricultural zoning that excludes other uses. Recommendations of the Draft GEIS include voluntary land preservation measures. However, the reality of future development requires appropriate planning and impact evaluation, as provided under the 20-year development projections.

- E. No Action - Under the no-action alternative, the analysis and recommendations provided in this GEIS are rejected in favor of the Town's current system of land use management that includes zoning, subdivision regulations and other local laws and procedures. The benefit of the GEIS is that it takes a much closer look at the carrying capacity of the land than can be achieved under the current process. Should the no-action alternative be adopted, land use patterns will continue in the same manner as in the past. Standard subdivisions at half to one-acre lots will continue suburban sprawl within the Study Area. It will also result in greater impact to the environment and community resources due to larger land consumption (less natural open space). This pattern of development will result in reactionary planning for water, sewer and road infrastructure. Since the purpose of conducting this study is to stay abreast of future development and plan for its impact, as well as provide recommendations for the conservation of land resources, the no-action alternative is not consistent with the Town's goals.

Cumulative & Growth Inducing Impacts

A. Cumulative Impacts

The Draft GEIS provides a detailed analysis of these impacts and provide the mitigation measures to ensure orderly growth in conjunction with a vision for future land use in the Study Area. However, the scope of the GEIS and the boundaries of the Study Area impose limitations on how broad the cumulative impacts can be carried out. Undoubtedly, there are impacts beyond the established boundaries. Section VI of the Draft GEIS identifies some of the potential cumulative impacts as they have become evident through the GEIS process.

- A.1 Water Resources - Increased runoff and improvements to culverts could result in an increase in runoff to the Anthony Kill that may have implications in the City of Mechanicville. The impact may be minor and strong efforts to control the runoff from larger projects may be sufficient to prevent any significant downstream impacts; however, definitive statements in this regard cannot be made with the current level of analysis. Since at least three other communities contribute to the Anthony Kill watershed, the City of Mechanicville should consider undertaking a watershed study to determine the characteristics of peak flow.
- A.2 Land Use and Zoning - The potential impact of land use and zoning on adjacent land uses, both within and outside the Town were evaluated using current zoning regulations and available land use mapping and land use plans. To this extent, the evaluation of potential land use conflicts addresses cumulative impacts with adjacent communities. However, it does not benefit from a coordinated planning effort between the two communities. Halfmoon should consider consultation with the Town of Clifton Park, the Town of Stillwater, and the City of Mechanicville as future planning occurs within the Study Area and the remainder of the Town. This might be particularly beneficial for open space and trail planning.
- A.3 Utilities - Project development within the Study Area will impact the Saratoga County Sewer District's conveyance and treatment systems as some of the available capacity will be utilized by the projected development in the Study Area and thus unavailable for projects elsewhere in the County once capacity is reached.

A.4 Traffic - The evaluation of the impact of future traffic on the State roadways (Route 146 and Route 9) within/adjacent to the Study Area is much more difficult to project since future pass-through traffic could have a much more significant impact on these roads than the impacts anticipated by growth within the Study Area. Future corridor planning initiated by the State may prove useful in managing growth and maintaining traffic flow.

B. Growth-Inducing Impacts

Both residential and non-residential growth often induces other types of growth. These are typically referred to as secondary impacts because they do not occur during construction nor do they typically happen immediately after construction. These impacts are often very difficult to predict.

Significant residential development results in a need or demand for nearby goods and services. Commercial enterprises are generally eager to locate within or near population centers. The impact of the infusion of commercial development will depend on the extent of prior planning and an understanding of the concerns of the neighborhoods. From a planning perspective, properly located convenience stores combined with trail systems can be very successful in reducing vehicle trips. The potential for including well-planned neighborhood commercial development should be considered during the comprehensive planning process to help reduce vehicle trips.

Employment-generating development can induce residential growth which in turn impacts open space, natural habitat, water quality and quantity, community services, and other environmental issues.

A significant benefit of preparing a GEIS is the ability to account for induced development. Zoning within the Study Area provides significant opportunity for commercial, industrial and residential development. Development projections have been prepared for each of these land uses, impacts have been evaluated, and mitigation measures identified to prevent significant impact to the community. Some of the mitigation measures are provided as land use recommendations for the Master Plan Committee and the public to consider.

Irreversible and Irretrievable Commitment of Resources

The construction of 2,900 residential units and 2.25 million gross square feet of commercial and industrial space would result in the irreversible and irretrievable commitment of undeveloped or farmed land to a developed state (approximately 50 percent of the developable land in the Study Area). Construction and operation of new buildings and related site improvements would require building materials, equipment, energy, and human resources.

In general, the results of the Draft GEIS suggest that resources are readily available to both construct and support future development. It is difficult, however, to predict the future availability of these resources and what impact development will have on them. The availability of petroleum products and natural gas are extremely important in today's methods of construction and operation. History suggests that these resources are limited (naturally or artificially). A sudden lack or perceived lack of petroleum products and natural gas would have significant impacts on the rate of construction.

Development would also have an impact on financial resources. Money, in the form of public or private financing, would be expended to construct these new projects and would be unavailable for other uses. However, the expenditure of money to build and/or operate these new ventures should generate revenue for owners, employees, and the municipalities (e.g., property tax). In addition, developers would be required to pay their fair share for infrastructure and municipal service improvements to support the new development.

Future SEQR Actions

According to 6 NYCRR 617.10 of SEQR,

Generic EISs and their findings should set forth specific conditions of criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQR compliance. This may include thresholds and criteria for supplemental EISs to reflect specific significant impacts, such as site specific impacts, that were not adequately addressed or analyzed in the generic EIS.

In response to the above, the following outlines the general criteria under which future SEQR actions will take place within the Study Area. As stated in 6NYCRR 617.15(c)(1):

No further SEQR compliance is required if a subsequent site specific action will be carried out in conformance with the conditions and thresholds established for such actions in generic EIS or its findings statement.

Therefore, to satisfy these requirements, future development proposals should be consistent with the criteria specified in the Draft and Final GEIS and as finalized in this Statement of Findings. These criteria include the mitigation measures discussed for each environmental issue. Some of the mitigation will require payments made by the project sponsor in accordance with the identified mitigation costs. This fee structure includes water and sewer improvements, traffic improvements, provisions for open space, and the pay-back for the preparation of this GEIS. Failure to provide mitigation for potential adverse impacts will require further SEQR action to justify the lack of mitigation.

In the event subsequent proposed actions were adequately addressed in the GEIS but not adequately addressed in the findings statement, an amended findings statement must be prepared. If subsequent proposed actions were not addressed or not adequately addressed in the GEIS and the subsequent actions will not result in any significant environmental impacts, then SEQR requires only that a negative declaration be prepared. However, SEQR requires a supplement to the final generic EIS if:

...the subsequent proposed action was not addressed or was not adequately addressed in the generic EIS and the subsequent action may have one or more significant adverse environmental impacts.

As future development is proposed within the Study Area, the lead agency for each proposed action will be responsible for carrying out the requirements of 6 NYCRR 617. This will require the Lead Agency to interpret the Statement of Findings prepared for the Study Area, as it specifically relates to the development project being proposed. To provide the Lead Agency with sufficient documentation to compare the parameters and impacts of a site specific project with the Findings Statement, each project that is subject to SEQR (Type 1 or Unlisted Action) must prepare a Full Environmental Assessment Form.