DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (DSEIS) FOR

CORNWALL COMMONS PLANNED ADULT COMMUNITY

TOWN OF CORNWALL, ORANGE COUNTY, NEW YORK

June 2008

Prepared for Submission to Lead Agency:
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Deadline for Comments on DEIS: Written comments may be submitted to the Lead Agency on or before the date of the hearing, and up to ten days after the hearing is closed.

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II. SUMMARY

This is a Draft Supplemental Environmental Impact Statement (DSEIS) prepared for the Town of Cornwall Planning Board, Cornwall, Orange County, New York, the lead agency, under the New York State Environmental Quality Review Act (SEQRA) (Environmental Conservation Law, Article 8) and implementing regulations (8 NYCRR Part 617). The DSEIS examines potential environmental impacts and measures to mitigate any potentially adverse environmental impacts associated with the development of a 197.7 acre parcel located in the Town of Cornwall, Orange County, New York.

The applicant, Cornwall Commons, LLC, ("the applicant" or "project sponsor") has submitted an application to the Town of Cornwall Planning Board for the development of a Planned Adult Community. The subject property is located on the northwest side of NYS Route 9W, identified as Tax Map No. 9-1-25.22.

This DSEIS has been prepared by the applicant to address the overall development of the Planned Adult Community, including specifically the submission of the site plan application for Lot No. 10 and the cumulative effects of developing the entire site, to determine whether any of the necessary approvals and development would have impacts exceeding the conditions and thresholds of the GEIS and the Findings Statement adopted by the Town of Cornwall Planning Board in April 2002.

The final Scoping Outline for the preparation of this Draft Supplemental Environmental Impact Statement (DSEIS) was adopted by the Town of Cornwall Planning Board on January 9, 2007 (Exhibit "1").

Brief Description of the Action

The applicant has submitted an application to the Town of Cornwall Planning Board to subdivide the property into ten (10) lots, one of which would contain the residential component of the Planned Adult Community, and the other nine (9) lots of which would contain commercial development. The Planning Board has granted preliminary subdivision approval of the ten (10) lot subdivision. The Town Board has granted a special use permit for the Planning Adult Community. The current action that is before the Planning Board is site plan approval for the residential component of the Planned Adult Community on Lot No. 10.

Involved and Interested Agencies and Required Approvals, Permits and Notices

The proposed action involves the following permits and approvals from the involved agencies listed below:

Town of Cornwall Planning Board

The Town Planning Board will review the application for site plan approval for Lot Nos. 1-10 and will act as the lead agency for purposes of conducting State Environmental Quality Review (SEQR) for the project. Each lot within the Planned Adult Community will be subject to site plan review and approval by the Planning Board, utilizing the GEIS, Findings Statement and SEIS to make a SEQR consistency determination.

Town of Cornwall Town Board

The Town Board has granted the special use permit approval for the development of a Planned Adult Community on the applicant's property and approved the extension of the water, sewer, refuse and garbage and ambulance special districts to serve the entire property and project.

Village of Cornwall-on-Hudson

The Village Board of Trustees has approved an agreement with the applicant to use the Village's municipal water supply and system via an existing inter-municipal agreement with the Town of Cornwall. The Village has affirmed its intent to provide water service to the entire project area by letter dated January 1, 2006 (Exhibit "S"). The Village must review and approve the design and engineering plans.

Orange County Department of Health

The applicant will require realty subdivision approval from the Department of Health. The Department of Health will need to review and approve the proposed extension of the existing municipal water system to the project site.

New York State Department of Transportation

The NYS DOT will need to review and approve the proposed site access to US Route 9W and NYS Route 218 and issue a highway work permit. Any work in a State-owned roadway right-of-way necessary to extend municipal water and sewer services to the project site will also be subject to review and approval of the NYS DOT.

New York State Department of Environmental Conservation

The NYS DEC will need to review and approve a State Pollutant Discharge Elimination System (SPDES) permit for the Stormwater Management and Erosion Control Plan and the proposed extension of the existing municipal sewer system to the site.

Other Agencies

Although not involved agencies for SEQR purposes, the proposed action involves the following reviews or approvals from the agencies listed below:

New York State Office of Parks, Recreation and Historic Preservation

The NYS OPRHP has reviewed and approved the Phase I Cultural Resources Survey for the entire project site.

US Army Corps of Engineers

The wetlands on the property have been delineated and received a written jurisdictional delineation approval on December 19, 2007 (Exhibit "Q"). ACOE approval will be obtained if any future filling of federally designated and protected wetlands is proposed, and as required by law during review of specific projects.

Adjoining Municipality

Town of New Windsor

Pursuant to General Municipal Law Section 239-nn, the Town of Cornwall Planning Board is required to provide a copy of the notice of hearing for the site plan application to the Town of New Windsor Town Clerk at least ten days prior to any such hearing.

Existing Conditions, Anticipated Impacts and Proposed Mitigation

Soil, Geology and Topography

The project site lies on a hillside with existing topography ranging from relatively flat to moderately steep slopes. These slopes overlie a mixture of moderately drained to poorly drained soils. The majority of the site drains to the Moodna Creek, which lies off-site, to the west and north. In the eastern portion of the site, minor swales flow eastward to a stream that is tributary to Moodna Creek. There has been no change since the Findings Statement issued for the GEIS.

Grading and earthwork operations are required to prepare the site for the proposed site improvements. Finished grading will be acceptable slopes to minimize erosion and allow for ease of maintenance on the roadways. Grading of the site shall be conducted in a manner to limit the amount of material leaving the site, and displaced soils will be used, to the extent practical, on site in areas where fills may be required.

The proposed development will increase the impervious area of the site through the construction of buildings, roads, parking areas, and sidewalks. In the absence of mitigation, the increase in impervious area would increase the volume rate of runoff draining to the Moodna Creek. This increase will be less severe due to the fact that the existing soils have a fairly low rate of infiltration and a high existing rate of runoff.

The intent of stormwater management mitigation measures is to maintain and/or reduce the rate of runoff from the site compared to predevelopment rates. Stormwater management will also provide water quality treatment of the runoff, in accordance with current state regulations. Implementation of an erosion control and stormwater management plan for this project will include the use of stormwater ponds, developed in accordance with NYSDEC requirements. These facilities will provide stormwater quality per state regulations, and detain the peak of each storm, releasing the runoff at a rate no greater than in the predevelopment condition. A series of ponds, which outlet to the existing swales and tributaries which currently leave the site, will treat the runoff sooner and minimize the impact more effectively than one large central basin. Also, by distributing the runoff to several areas, the flows will be distributed more closely to the existing condition.

Surface Water

In fall of 2006, an additional wetland investigation was conducted by Robert G. Torgersen, LA, CPESC, and subsequent wetland boundary survey information submitted to the ACOE for verification. During this site investigation, an additional wetland area was found in the southerly portion of the site. This additional wetland area is determined to be an isolated wetland and not under

the jurisdiction of the ACOE. The ACOE issued a written jurisdictional delineation approval on December 19, 2007 (Exhibit "Q").

The ACOE conducted a site investigation in summer of 2007 to verify the revised wetland boundary, during which the wetland boundaries as surveyed were verified as accurate. This new verification concludes that the two isolated wetland areas are not under the jurisdiction of the ACOE.

Wastewater Management

The property will be served by the Town of Cornwall sewer system. Sewage will be conveyed to the Town of Cornwall Sewer Treatment Plant (STP) located on Shore Road, adjacent to the Moodna Creek. Sewage will be collected via an on site gravity sewage collection system. The gravity system will convey the sewage to a pump station to be located along the loop road within the project site, from which the sewage will be pumped to sanitary sewer manhole No. 102 of the Town's gravity sewer collection system, which is located along Academy Avenue. This discharge location was previously discussed with appropriate Town officials, and found to be acceptable, as there are no known problems with overflow or restrictions in the pipes leading from this point to the sewage treatment plant. The applicant is reviewing two alternative routings of the forcemain from the pump station to sanitary sewer manhole No. 102 in Academy Avenue.

Water Supply

The site is located in the Town of Cornwall Water District. The Town of Cornwall has contracted with the Village of Cornwall-on-Hudson to provide water to the site. The supply of water to the project site will require improvements and extensions of the existing water system. The Village has completed a water study and evaluation of the water distribution system for the proposed development, including alternative distribution system improvements. All three alternatives provide sufficient pressures and flows for the development of the project and allow for proper fire fighting operations based upon the flows available at hydrants located around the site. The applicant is reviewing two alternatives for connection to the existing water system.

Ecology

The site has not changed from the earlier site evaluation. No evidence of the presence of threatened or endangered species were found on this property, based on the lists provided by the Fish and Wildlife Service and of the NYS DEC Bureau of Habitat. A supplemental report, which findings are contained in Section F of this DSEIS based on the most recent site inspection, negate evidence of habitat for either bog turtle or Indiana bats.

A landscape plan will be prepared showing the location, approximate number and type of landscaping proposed for three schematic locations throughout the site (Exhibit "M"). It is expected that the proposed landscape treatments within the developed areas, including installation of shade trees throughout the project to create a new canopy of tree cover, will minimize any potential adverse impacts of the visual change. On Lot No. 10, approximately 1,046 trees and 4,828 shrubs will be planted on the project site based upon the landscaping plan contained in Exhibit "M".

While the project will remove portions of the existing tree cover, the developed portion of the project as proposed will remain obscured from view by the buffer of existing trees that are proposed to

remain on the northern portions of the site and, therefore, will not significantly affect the viewshed from scenic trails and homes adjacent to the site.

The cabbage oaks were specifically identified on the site. The six oaks that were found on this site were branched nearly to the ground, and all were approximately 48 inches in caliper. There was one hickory of 36 inch caliper found that had a similar canopy development. Many of these trees, as with other larger trees on this site, have dead branches and evidence of broken branches from previous impacts. Two significant trees, a 48" and a 35" white oak, will be saved in an area of undisturbed woodland along the project entry road. All these trees located on this site will require some attention for the removal of dead and broken branches. Many larger trees throughout the site also are heavily infested with invasive vines that should be removed to insure the future health of the affected trees.

Traffic and Transportation

The traffic study that was performed as part of the GEIS considered maximum traffic flows for the property utilizing uses that were higher traffic generators and higher peak time traffic generators. The development of a PAC will have less traffic in contrast to the project studied in the GEIS.

Not only is there less traffic under the proposed use than as studied in the GEIS, the nature of the traffic is considerably different and has less impact. The contribution to peak hour traffic is reduced. The number of trucks and commercial vehicles is substantially reduced. The comparison is set forth on the schedule that is made part of the traffic engineer's report which is annexed as Exhibit "E".

The updated report addresses the recent improvements to US Route 9W, proposed improvements and the current timetable for the completion of those improvements. As a result of the improvements to Route 9W and the change in the nature and volume of vehicle traffic under the proposed plan, the updated traffic report discusses the change and reduction in traffic impact and mitigation, as discussed in further detail in Section G.

Air Quality and Noise Impacts

The short term use of heavy equipment on the site during construction will result in a temporary minor increase in pollutant emissions, including dust from site clearing excavation, demolition and grading operations. Best construction management practices will be employed to reduce sources and extent of such emissions.

During construction, there will be a temporary increase in noise levels due to construction activities including the use of heavy equipment for excavation, grading, paving and removal of vegetation. It is not anticipated that there will be any noticeable increase in the amount of noise generated on the site following the completion of the proposed action. Internal traffic circulation or other noise generating activities and the impact on outside residences will be considered by the Planning Board during site plan review of each lot.

Visual Resources and Cultural Resources

The visual resources identified in the site area and considered in the GEIS included Knox Headquarters. However, based on public comments during the review of the subdivision application, the project sponsor was requested to also consider the potential impacts on the PIPC gorge trail and future pending public land acquisitions. This included the review of existing tree screening, suitable

and adequate buffers and other visual impact mitigation measures. The visual assessment includes a photographic survey of the areas, in conjunction with a series of line-of-sight cross-sections (Exhibit "B") from the following locations:

- Palisades Interstate Park Commission (PIPC) gorge trail/pending Moodna Greenway-Recreational Corridor, located to the west of the site across the Moodna Creek;
- Knox's Headquarters State Historic Site, located on Old Forge Road, just south of Route 94;
- Spaulding Farm, a residential property and cluster of associated out-buildings located northeast of the site at 67 Forge Hill Road;
- Two proposed site accesses from US Route 9W. The entrances are designated in the figures as the "North" and "South" entrances.

The assessment concludes that intervening landscape will substantially eliminate visibility of the project site from the locations listed above. It is expected that the proposed landscape treatments within the developed areas, including installation of shade trees throughout the project to create a new canopy of tree cover, as well as careful selection of architectural treatment of the buildings (for example, building colors and varied rooflines), will minimize any potential adverse effect of visual change. It is also noted that the views from Route 9W would be experienced by people in moving vehicles on a major New York State highway rather than from stationary view points.

While the project will remove portions of the existing tree cover, the developed portion of the project as proposed will remain obscured from view by the buffer of existing trees that are proposed to remain on the northern portions of the site and, therefore, will not significantly affect the viewshed from scenic trails and homes adjacent to the site.

A Phase I Cultural Resources Survey Site Assessment and Site Identification was completed for the site to determine whether any buried historic and prehistoric cultural remains were located in the portion of the site to be developed. The report concluded that there is no evidence of potentially significant cultural resources on the site (Exhibit "F"). By letter dated December 11, 2006, the New York State Office of Parks, Recreation and Historic Preservation determined that there are no archaeological concerns regarding this project (Exhibit "F").

Community Services

Ambulance Services

The subject property is located within the Town of Cornwall Ambulance District. The property will be contributing to the tax levy that is imposed annually by the Town which provides a revenue stream to the Cornwall Volunteer Ambulance Corps (COVAC). The tax payment from this project to COVAC will be substantial since the enhanced value of the real estate as well as the increased assessed value from improvements will be an entirely new source of revenue for the ambulance district. It is not anticipated that the proposed action will have a significant impact on the capacity of hospital services. During site plan review, the Cornwall Ambulance Corps will have the opportunity to comment on site-specific items that may aid in more effective emergency services to the site. A copy of the proposed site plan was forwarded on May 20, 2008, to COVAC for review and comment (Exhibit "X").

Mobile Life Support Services, Inc. is a privately owned commercial Paramedic service which also provides patient care to residents in the Town of Cornwall. The company operates a fleet of over 32

paramedic ambulances and emergency response vehicles managed by a staff of over 260. It is licensed by New York State in the Hudson Valley counties of Orange, Rockland, Ulster and Dutchess. With a collective population of over 1,000,000 residents in those counties, the company handles approximately 50,000 calls per year.

Solid Waste Generation

The property is located in the Town of Cornwall Refuse and Garbage District, which provides garbage service to properties and residents within the district. (The Refuse and Garbage District has been extended to include the Cornwall Commons property formerly located in the Town of New Windsor). The project site will receive the same garbage services as provided to other properties in the district. No improvements or additional services are proposed. The details of on-site collection will be reviewed as part of the site plan review.

Police Protection

During the review of the subdivision application, the Planning Board determined that there would be no unique security needs for the mix of uses proposed within a PAC, in contrast to the original industrial subdivision that might potentially have involved public security issues. While an increase in residential population could increase the total demand for police, this would be covered by the taxes generated by the use, and no additional consideration is needed.

Recreation

The project will contain a club house that will be centrally located near the entrance to the community and other recreational amenities, including tennis court and walking trails.

As per the developer's agreement, if the Planning Board determines that recreation fees in lieu of dedication of parkland should be paid by the project sponsor, the recreation fees shall be set at no more than 33% of the recreation fee for comparable dwelling units not in a PAC prevailing at the time of Planning Board approval. Based on the anticipated impacts of the proposed residential development on the Town's recreational resources, and in light of the PAC providing its own recreational facilities, the Town Board has stipulated that the recreation fees shall not exceed $1,000.00 per unit nor be less than $666.66 per unit.

Fire Protection

The project site is located in the Vails Gate Fire District and the Canterbury Fire District. The property in the Vails Gate Fire District contains 53.8 acres of land. The adjacent property in the Canterbury Fire District contains 143.68 acres of land. The portion of this property in the Vails Gate Fire District was originally located in the Town of New Windsor. The boundary line between the two Fire Districts coincides with the former Town boundary line between New Windsor and Cornwall. The project sponsor's counsel contacted the Fire Districts on July 14, 2005, September 10, 2005, and October 4, 2007, to request the Districts consider alteration of the boundaries of the two Fire Districts to coincide with the new town boundary line (letters annexed as Exhibit "J"). As set forth in a letter from James R. Loeb to the Planning Board dated October 18, 2007 (Exhibit "J"), the action to modify the boundary must be taken by the fire districts and both districts must agree to the proposed change to alter the boundaries. After the fire districts enter into a written memorandum and hold a public hearing, the proposed change must be approved by the Town Board.

The Canterbury Fire District submitted a letter to the Town of Cornwall Planning Board, dated August 2, 2007, providing comments on the proposed project (annexed in Exhibit "J"). The main issue identified is that some of the structures proposed on the site are located within both fire districts. A letter dated May 19, 2008, from Lanc & Tully Engineering, was submitted to Canterbury Fire Department in response to the August 2, 2007 comment letter. Also by letter dated May 2, 2008, revised plans were submitted to the Fire District depicting the overall project and boundaries between districts, the width of each roadway and location of proposed hydrants, and a plan depicting the movement of a fire truck throughout the project site (Exhibit "J").

Since the Fire Districts are not interested in altering the boundary line between the Fire Districts, the Districts can provide service within each respective district and/or, an agreement between the two fire districts can provide for service to this property for dispatching of emergency services. It is the intention of the project sponsor to receive confirmation from both Fire Districts that they will undertake to service the property via procedures and cooperation with each other with reference to predetermined service areas and division of responsibilities which would be the subject of an agreement.

School Children

The project site is within the Cornwall Central School District. As planned, and as discussed in the GEIS and Findings Statement, the school district has built the new high school to expand and improve the educational capacity and quality of the district's school facilities.

Because the applicant's residential development is an age-restricted community, there will be few, if any, school age children. Therefore, there will be significantly less, if any, impacts than previously addressed in the GEIS, which evaluated a project that included a residential component of 69 single family homes on the property formerly located in the Town of New Windsor. Transportation of any qualifying school children who may reside in the community will be addressed with the Cornwall Central School District.

Project Alternatives

Numerous alternatives were evaluated in prior SEQR documents and review. In early 2000, the project sponsor requested the approval of the Town of Cornwall Planning Board for a two-lot subdivision of an approximately 143.68 acre tract in the PIO (Planned Industry and Office) District, and to construct a shared driveway into the site for ingress and egress to this land as well as the project sponsor's adjoining 52.8 acre tract in the Town of New Windsor, which lands were located in the R-3 (Residential) District. The Town of Cornwall PIO zone allowed a variety of uses, including, planned industrial parks, offices, laboratories, warehousing, auto sales, light manufacturing, commercial recreation (including, among other uses, golf courses) and agricultural uses. The Town of New Windsor R-3 Residential zoning permitted single family residential, senior citizen housing developments and Planned Unit Developments (PUDs).

At the time of the initial application, the project sponsor sought zoning amendments to create a mixed use planned development zoning. This request was not approved by the Town of Cornwall Town Board and thereafter the project sponsor modified the application to provide for a 5-lot subdivision. The Generic Environmental Impact Statement (GEIS) prepared by the project sponsor evaluated the effects of a commercial/industrial development of the proposed 5-lot subdivision plus the residential

use of the New Windsor lands in accordance with the existing zoning laws for each municipality. The R-3 zoning in New Windsor would have allowed 69 single family detached residential lots. A potential development of 1,000,000 square feet of mixed use industrial development was evaluated for the Town of Cornwall property under the PIO zoning. The GEIS also examined an alternative plan for a "planned unit development" and senior citizen housing. (The New Windsor lands were later annexed into the Town of Cornwall).

Adverse and Beneficial Environmental Impacts of Proposed Action

The benefits of the proposed action, as discussed in the 2005 Town Comprehensive Plan, include provision of existing and future senior residents with a range of housing and recreational opportunities, a range of commercial opportunities for Town residents and others, positive impacts on the school budget, limited traffic generation, volunteers for community programs, revenues for the recreation system, revenues for improvements to the sewer and water systems, and to assist in the economic support of downtown Cornwall (Exhibit "G").

Any potentially significant adverse impacts can be adequately mitigated as specifically addressed in Section III below.

III. DESCRIPTION OF THE PROPOSED ACTION

A. Introduction

The Cornwall Commons project involves the subdivision and development of a 197.7 acre parcel located in the Town of Cornwall. The project consists of the subdivision of the 197.7 acres in the Town of Cornwall into 9 commercial lots and 1 residential lot. The residential lot shall be developed in accordance with the Planned Adult Community "PAC" zoning established by the Town Board. This DSEIS examines the potential environmental impacts and measures to mitigate any potentially significant adverse environmental impacts associated with the subdivision and development of the 197.7 acre parcel.

The project will utilize existing municipal water and sewer services that have capacity to serve the project. Existing municipal water service will be extended to serve the project. The main loop road proposed as part of the project will be constructed by the developer and dedicated to the Town. The roads to be constructed on the interior of Lot No. 10 will be constructed by the developer. The access to the site will be from NYS Route 9W. Stormwater runoff generated from the project will be collected on site through a series of catch basins and storm drainage piping. The runoff will then be conveyed to stormwater ponds located on site, where it will be treated for quality, and then released at a rate equal to or lower than predevelopment runoff rates.

The ten (10) lots are shown on the plan entitled "Preliminary Subdivision" (Map B-I), approved by the Planning Board on September 5, 2006. The lot sizes are as follows:

Lot 1	1.641± acres
Lot 2	7.867± acres
Lot 3	7.253± acres
Lot 4	2.626± acres
Lot 5	3.146± acres
Lot 6	2.025± acres

Lot 7	2.627± acres
Lot 8	1.213± acres
Lot 9	3.714± acres
Lot 10	159.196± acres

Each lot may remain at its size shown on the Preliminary Subdivision plan when a specific development is proposed for site plan approval or the lot may be combined or modified, depending on market demand. Lot No. 10, the Planned Adult Community, will consist of single family dwellings, attached single family dwellings, and multiple family dwellings, a club house and recreational amenities.

The site is zoned to permit the development of a Planned Adult Community (PAC), which allows detached single family dwellings, attached single family dwellings, multiple family units, club houses, recreational amenities, congregate care and/or assisted living dwelling units, commercial retail, office, hotel/motel, medical/dental clinics, personal service and food service, restaurant buildings, day care facilities, and other ancillary facilities intended to provide convenient services to the residents of the PAC. The Town Board has granted special permit use approval for PAC development of the site.

This DSEIS has been prepared by the applicant to address the overall development of the Planned Adult Community, including specifically the submission of the site plan application for Lot No. 10 and the cumulative effects of developing the entire site, to determine whether any of the necessary approvals and construction would have impacts exceeding the conditions and thresholds of the GEIS and the Findings Statement adopted by the Town of Cornwall Planning Board in April 2002. As set forth in the final Scoping Outline adopted by the Planning Board (Exhibit "1"), the specific areas to be addressed for the overall site are the following: (1) views, (2) traffic, (3) stormwater and (4) rough grading.

Each lot within the proposed 10-lot subdivision will require site plan approval from the Planning Board prior to the development of each lot. Each of those approvals will require the submission of detailed plans showing compliance with all applicable laws and each approval will be subject to a SEQR consistency determination. If any of the necessary approvals would have impacts exceeding the conditions and thresholds of the GEIS and Findings Statement or other impacts not identified during the previous environmental review, then further environmental analysis would be appropriate at that time.

B. Project Background

Site Description and Location

The subject site consists of approximately 197.7 acres identified on the Town of Cornwall Tax Map as Section 9, Block 1, Lot 25.22, and is located in the Planned Residential Development (PRD) Zoning District. The site is vacant wooded land located on the northwest side of US Route 9W and adjoining the former O&W Railway line.

The parcel lies in the northeast portion of the Town of Cornwall abutting the Town of New Windsor. The Moodna Creek, a major local drainage tributary of the Hudson River, flows below the western limits of the property, and the creek is bounded on the southwest by single family homes along

Schofield Lane and Frost Lane. The Funny Child Brook, although not located adjacent to the project, is located to the southeast of the project site. The property is bounded on the south and southeast by vacant land, the southeastern portion of which is owned by the New York Military Academy, and by Route 9W. This segment of Route 9W is a four-lane divided highway featuring scattered commercial structures. Knox's Headquarters and PIPC gorge trails are located to the northwest of the site. The Spaulding Farm is located on the south side of Forge Hill Road, approximately 2,200 feet from the intersection with Route 9W and Forge Hill Road. The area surrounding the farm is improved with very large industrial building.

Prior State Environmental Quality Review

The Cornwall Commons generic SEQR review was undertaken beginning in 2000 for what was then a proposed 5-lot subdivision of vacant industrial lands in the then - PIO district in the Town of Cornwall and a proposed 69-lot residential subdivision of what were R-3 zoned lands in the Town of New Windsor. The Town of Cornwall Planning Board was the SEQR lead agency. The generic SEQR analysis considered a potential development of up to 1,000,000 square feet of mixed use industrial under the then-current PIO zoning, in addition to the 69 single family detached dwelling units in the Town of New Windsor. In addition, the alternatives of a senior development and a Planned Unit Development were considered. After completion and acceptance of the GEIS and FEIS, the Planning Board adopted generic SEQR lead agency Findings in April 2003 (Exhibit "1").

The Town Board adopted a new Town Comprehensive Plan recommended by the Comprehensive Plan Committee and Planning Board and adopted zoning amendments recommended by the Planning Board which allow for the development of a Planned Adult Community on the property. The Town Board prepared and accepted a Generic Environmental Impact Statement for the adoption of the Town Comprehensive Plan and a negative declaration for the adoption of the zoning amendments in accordance with the Comprehensive Plan.

The portion of the site that was located in the Town of New Windsor has been annexed to the Town of Cornwall. The Town of Cornwall Town Board adopted a negative declaration declaring that upon the annexation of the property, the Town Board intended to zone the property to allow the construction of a Planned Adult Community, and that the annexation of the New Windsor property and zoning of the New Windsor property to allow for the construction of a Planned Adult Community, as intended, will not cause a significant adverse impact on the environment.

The Town entered into a developer's agreement (Exhibit "A") with the applicant, which agreement sets forth the zoning for the entire property and its projected development after annexation. The Town Board determined that the agreement and development pursuant to the agreement will not have a significant adverse effect on the environment and adopted a negative declaration.

On June 5, 2006, the Town Board adopted a Resolution of Consistency as to the proposed project conformity with the thresholds of the Planning Board's GEIS and Findings Statement and, on the recommendation of Planning Board, granted a Special Permit for the proposed development of the property as a PAC (Exhibit "1").

The applicant amended the application to subdivide the property into 10 lots, one of which will contain the residential component of the PAC and 9 of which will contain commercial development. The Planning Board adopted a Resolution of Consistency with respect to the amended subdivision plan and granted preliminary subdivision approval on September 5, 2006 (Exhibit "1").

The following areas addressed in the Findings Statement and Planning Board consistency determination are to be reviewed during site plan review: preparation of a stormwater management plan, visual impact on Moodna Creek and PIPC gorge trail, compliance with applicable federal regulations relating to any proposed disturbance of federally protected wetland areas, identification of cabbage oaks and attempt to preserve them in a natural landscape design, site grading and earth operations in an attempt to protect existing vegetation and wildlife habitat, adequate and safe traffic access to the site and necessary improvements, location of sewer and water utilities, transportation for school children, landscaping and buffers, and noise impacts.

Past Physical Changes and Activities

All of the land within the project site shows evidence of long term intensive disturbance from agricultural and industrial practices. This is revealed by the many abandoned railroad structures, railroad beds, woven wire fencing, stonewalls, farm lanes, and old roads.

The site has not changed from the 2000 site evaluation, with the exception of four-wheeler tracks throughout the site and an additional isolated wetland area identified on the site. The wetland boundary has been surveyed and verified as accurate and the written jurisdictional delineation approval was issued on December 19, 2007 (Exhibit "Q").. Refer to Section C for additional information.

C. Involved and Interested Agencies and Required Approvals and Notices

Involved or Interested Agency/ Adjoining Municipality	Approval or Permitting Required
Town of Cornwall Town Board 183 Main Street Cornwall, New York 12518	Special use permit for PAC and approval of extension of water, sewer, refuse and garbage and ambulance districts.
Town of Cornwall Town Planning Board 183 Main Street Cornwall, New York 12518	Lead agency for SEQR review, subdivision and site plan approval.
Village of Cornwall-on-Hudson 325 Hudson Street Cornwall-on-Hudson, NY 12520	Review and approval of water system improvement plans.
NYSDOT SEQR Unit *(electronic transmission preferred)* Traffic Engineering and Safety Division 4 Burnett Blvd. Poughkeepsie, NY 12603	Approval of proposed site access to Route 9W and NYS Route 218 and issuance of highway work permit.
NYSDEC – Region 3 21 South Putt Corners Road New Paltz, New York 12561	Approval of Stormwater Management and Erosion Control Plan and extension of existing municipal sewer system.
NYS Office of Parks, Recreation, and Historic Preservation Field Services Bureau – Peebles Island P.O. Box 189 Waterford, New York 12188-0189	Review of Phase I Cultural Resources Survey.

Orange County Department of Planning 124 Main Street Goshen, New York 10924	Review of proposed project pursuant to General Municipal Law Section 239.
Orange County Department of Health 124 Main Street Goshen, New York 10924	Approval of proposed extension of existing municipal water system and realty subdivision approval.
US Army Corps of Engineers Regulatory Branch – New York District Room 1937, 26 Federal Plaza New York, New York 102778	Jurisdictional determination of wetland delineation.
Town of New Windsor 555 Union Avenue New Windsor, New York 12553	Pursuant to General Municipal Law Section 239-nn, the Town of Cornwall Planning Board is required to provide a copy of the notice of hearing for the site plan application to the Town of New Windsor Town Clerk at least ten days prior to any such hearing.

D. Interested Parties

The following parties have no permit authority, but have expressed an interest or concern regarding the potential environmental impacts of the proposed action:

Palisades Interstate Park Commission
Administration Building
Bear Mountain, New York 10911-0427

E. Project Description

The Planning Board has granted preliminary subdivision approval of the ten (10) lot subdivision. The Town Board has issued the special use permit for the Planned Adult Community (Exhibit "1"). The current action before the Planning Board is site plan approval of the residential component of the Planned Adult Community on Lot No. 10.

The project site was initially located in the Town of Cornwall and the Town of New Windsor. The initial application was for commercial/industrial development of the Town of Cornwall lands and residential development of the New Windsor lands. The GEIS evaluated the potential development of 69 single family detached residential lots in the Town of New Windsor and the potential development of 1,000,000 square feet of mixed use industrial development in the Town of Cornwall. The GEIS also considered an alternative plan for a "planned unit development" and senior citizen housing. The SEQR review process resulted in the adoption of a Findings Statement by each of the Town Planning Boards which concluded that the proposed project will not have a significant adverse effect on the environment.

Thereafter, in 2005, the project sponsor petitioned the Town Board of the Town of Cornwall and the Town Board of the Town of New Windsor to annex to the Town of Cornwall the 53.8 ± acres of land located in the Town of New Windsor and contiguous to the Town of Cornwall.

An agreement was entered into between the Town of Cornwall and the project sponsor setting forth the proposed zoning for the entire property and projected development after annexation (Exhibit

"A"). The Town Board found that the agreement and development pursuant to the agreement will not have a significant adverse effect on the environment.

The Town Board determined that the annexation allowed and facilitated construction of a PAC in this portion of the Town of Cornwall, which furthers the objectives of the Town's Comprehensive Plan; that annexation will allow the unified development of the entire property, which promotes good planning and use of land and efficient governmental services and administration; the property will not generate additional school children, but will produce significant tax revenue for the School District; the Town of Cornwall water district, sewer district and ambulance district will provide service to the entire development, reducing the administrative burden and providing for unified services; and user charges and any special assessments paid by the property will benefit the districts.

F. Site Plan

Purpose and Need

The development of a Planned Adult Community is a permitted use under the Town Zoning Code for the purpose of establishing a range of housing opportunities for persons 55 years of age or older in a residential development which contemplates the desires and needs of such persons for privacy, participation in social and community activities, and convenient access to local community facilities.

Design and Layout

The 197.7 acre parcel is being subdivided in to ten (10) lots. Lot Nos. 1 through 9 will consist of offices, hotels, restaurants, congregate care facilities, and other uses permitted under the PAC zoning, and will be located along the loop road passing through the Cornwall Commons site. Lot No. 10 will be developed as a residential community in accordance with the current zoning, and will consist of a club house, recreational amenities, single-family detached dwellings, single-family attached dwellings, and multiple family dwellings. The largest single family home will be constructed within the 60' x 45' building envelope depicted on the plan. A smaller home may be constructed within this envelope which would provide for additional room to construct a patio or deck within the envelope. The schematic planting design provides for landscaping in the rear of the home to provide privacy from adjoining homes.

The club house, with its recreational amenities, will be centrally located near the entrance to the community. The multiple family and attached single family units will be located to the southern portion of the site, and single family units will located on the remainder of the project site.

Sidewalks will be provided along the interior of the project site, along one side of most of the roads, to allow the residents to walk around the neighborhood and to the club house. Sidewalks will also be provided on the interior of landscaped park areas. The site will also consist of trails in several of the open areas to allow for the residents to walk through the natural undisturbed areas, providing them access to other areas of the community without walking along the roads. The sidewalks will be extended along the entrances to the project, allowing for the residents to cross over to the sidewalk located along the easterly side of the loop road. This will allow for local residents to walk to the commercial areas located along the loop road, and in turn reduce traffic on the loop road and interior road system. A walking route has been designated via Frost Lane to Willow Avenue to Main Street to encourage pedestrian travel between the Business District and Cornwall Commons. The traffic signal

located on Route 9W at the entrance to Cornwall Commons will also afford controlled pedestrian crossing opportunities.

Parking lots have been provided along the front of the club house for those residents driving to use the club house or the amenities located at the club house. For the single family dwelling units, the plan provides for driveways for two-car garage units with a driveway at 17' wide and tapered to a width of 15' at the road, which will allow for vehicles to enter and exit the driveways. This will provide four parking spaces per unit. The zoning code requires two parking spaces are provided for each of the residential units. The plan proposes a total of 1,751 parking spaces, which is 706 more than the required 1,045 parking spaces. The multiple family units will have garages located at ground level, and have been provided with additional parking areas around the buildings for residents and visitors. Each of the multi-family buildings will have five entrances from the exterior of the building. Entrances are also provided from the garages into the interior of the building.

On-site garbage collection will require dumpsters at various locations throughout the multi-family area and near the club house. The proposed locations are depicted on the site plan for Lot No. 10. The detached and attached single family units will each have regular garbage cans for refuse pick up.

Areas for snow storage have been provided throughout the site as depicted on the site plan for Lot 10.

Water supply to the site will require the extension of water mains into the site from existing municipal facilities. The Village of Cornwall on Hudson's water consultant, Stantec, has performed an analysis on three alternatives for supplying water to the project site. Currently the project sponsor is looking at two of the alternatives discussed within the Stantec report. The preferred alternative for supplying water to the project site (Stantec Alternative No. 3) would be the installation of a new 12" water main along Mill Street and Howard Street into the back of the project site. The second alternative (Stantec Alternative No. 1) would be the installation of a new 12" water main along Mailler Avenue and Halverson Street, and then under Route 9W and into the southerly entrance of the project site. All three alternatives studied by Stantec will provide acceptable fire flows and pressures within the site to service the proposed project. The project sponsor is looking to have all installed water mains to be publicly owned and operated by the Village of Cornwall on Hudson. The water system interior to the residential site, will be looped through the project to minimize any dead ends. Hydrants will be located throughout the project site for fire fighting purposes and for flushing of the lines.

Wastewater will be collected by gravity sewer mains located within the project site. The sewage from these mains will be conveyed to the sewer main to be installed within the loop road, and then conveyed to a sewage pump station located along the loop road. The sewage from the pump station will be pumped to the existing gravity sewage collection system in Academy Street, from which it will be conveyed to the Cornwall Sewage Treatment Plant through the existing gravity sewer collection system. There are two alternatives under consideration for the routing of the forcemain. The preferred alternative would be to install the forcemain through the project site, then under Route 9W through an existing concrete tunnel that leads to NYMA's athletic fields, then south-easterly through the athletic field to Faculty Drive, then along Faculty Drive to Academy Avenue, then south-east along Academy Avenue to existing sanitary sewer manhole 102. The second alternative would be the routing of the forcemain around the site behind the commercial lots, under Route 9W to Halverson Street, then along Halverson Street to Mailler Avenue, then along Mailler Avenue and Academy Avenue to sewer manhole 102 located across from NYMA.

Stormwater runoff generated from the project will be collected on site through a series of catch basins and storm drainage piping. The runoff will then be conveyed to stormwater ponds located on site, where it will be treated for quality, and then released at a rate equal to or lower than predevelopment runoff rates.

The vehicular access to the site will be from two entrances located along Route 9W. A loop road through the site will connect the two entrances, and will have two traffic circles located along it at the proposed entrances to the residential community. The loop road will be constructed as a boulevard, with fifteen (15) foot lanes in either direction and a ten (10) foot landscaped median located between the lanes. The median will have several openings located at areas to allow for vehicles to turn in and out of the commercial sites. The two entrances from the loop road to the residential community will be gated, with the main entrance having a guard house. A gated emergency access to the residential site will be located at the south-western corner of the site and will connect to Frost Lane. A bus pick up area has been located along the loop road, near the main entrance, to allow for public transportation to be used by the residents.

Alternative road width plans have been prepared depicting the internal roadway in the residential community at road widths varying from 24 feet to 28 feet (annexed as Exhibit "W"). Below are the four alternatives identified by the Town Planning Board for consideration, with the project sponsor's preferred alternative listed first and the least desirable alternative last for the reasons set forth below. In all of the alternatives, the road width in the multiple family and attached single family dwellings section will be 26 feet in accordance with the requirements of the New York State Fire Code (Exhibit "O").

(1) Alternative 1: A paved roadway of 24 feet in a 40 foot right of way with parking on one side.

The project sponsor is proposing that the road internal to the single-family detached residential community will be 24 feet in width with parking on one side and a 40 foot right of way. The internal roadways will be private streets which will provide significant benefits to the Town since highway taxes would be paid but there would be no demand on Town services for snow and ice control, street maintenance, street repairs, street reconstruction, curb maintenance, repairs or construction.

This plan presents the preferred alternative because it is fully consistent with the goals cited in the Town Comprehensive Plan and the provisions contained in the PAC zoning law, the Generic Environmental Impact Statement and Findings Statement adopted by the Town Planning Board.

The applicant submitted a plan for site plan, subdivision and special use permit approval for the PAC that depicts private internal roadways. An addendum to the special use permit application states:

> The majority of interior roads serving the PAC development will be private and, therefore, not generate cost to the Town to maintain said roads.
>
> The applicant proposed a gated community with roads other than the loop Town road shown on the plan will be private roads.
>
> The applicant proposed a Town loop road depicted on the conceptual site plan and preliminary subdivision approval. All other interior roads servicing the PAC are proposed to be private roads.

The PAC local law Section 158-21X expressly provides:

> The applicant shall determine, prior to final approval, which roads are to be private or public roads. All roads shall be constructed to town specifications for the road bed and pavement depths and pavement width shall be eighteen (18) feet for a one-way street, twenty-four (24) feet for a two-way street with parking on one side, and thirty-two (32) feet for a two-way street with parking on two sides.

The Comprehensive Plan states in part:

> The basic benefits to the Town are the provision of a mix of housing units for middle aged and older residents, condominium living, *maintenance of the road system by a local homeowners association*, no impact on the school budget (which is the largest of all property taxes), limited traffic generation since there are no school children and many area retirees, volunteers for many community programs and people with spendable income who will benefit the local shop owners (emphasis added) (Exhibit "G").

The Town PAC Zoning Law states in part:

> A PAC may utilize cluster design or Traditional Neighborhood Development (TND) features. The Town wishes to encourage the use of TND or Cluster site design as alternatives to conventional subdivisions. Cluster site design and TND results in the preservation of contiguous open space and important environmental resources, while allowing more design flexibility than is allowed for conventional subdivisions. Such concept plan must be approved by the Town Board in accordance with Section 158-41. (Said approval was granted by the Town Board on June 5, 2006).

The Negative Declaration and Consistency Determination adopted by the Planning Board prior to granting subdivision approval to this project states:

> This project uses gated private roads (Exhibit "1" (F12).

The Generic Environmental Impact Statement and Findings Statement made specific reference to stormwater issues and expressly provided:

> Covering of the development area with buildings and pavement will decrease the amount of precipitation that infiltrates the soil, thereby reducing the volume of groundwater flowing beneath the site (Page 3-3 of GEIS).
>
> Adding pavement and imperious surfaces to the project area has the potential to increase pollutant contributions to local water resources (Exhibit "1", page 9 of Findings Statement).

This alternative is sensitive to the environmental concerns raised during the review of this project, and will provide for less disturbance, more open space, more attractive street design, and more areas of trees and natural conditions. The total length of the proposed 24' wide roads is 17, 830 linear feet, which equates to 427,900 square feet of surface area; whereas, 28' wide roads equates to 499,240 square feet. The difference in pavement area is 71,320 square feet. The wider roads thus cause a

16.7% increase in paved areas for roads (Exhibit "T"). Based on the increase in pavement, there will be an increase of stormwater runoff from the project roads by 16.6%.

(2) Alternative 2: A paved roadway of 24 feet in a 40 foot right of way with no parking on either side.

This alternative provides an unobstructed traveled way of 24 feet. A 40 foot road right of way with a 24 foot paved roadway, without parking on either side, provides wider unobstructed roadway than a 28 foot road with parking on one side and will have fewer environmental impacts than a 28 foot roadway.

Traffic engineer Philip Grealy, Ph.D., P.E., states in his memo, dated April 24, 2008 (Exhibit "V"), that the allowance for a parallel parking space is between 7' and 8' and with the 28' roadway, this would leave an effective travel width of between 20' and 21'. The 24' curb to curb roadway width with no parking would provide a 24' wide travel way.

The site plan approval issued by the Planning Board can impose a requirement of no parking on the interior roadways. The Town, with the consent of the owner under Vehicle and Traffic Law Section 1660-a, can adopt a local law prohibiting parking on private streets and provide for the enforcement of such regulations. The main enforcement of the no parking restriction would be by the Homeowner's Association Rules and Regulations, which can prohibit parking with penalty of fines to be imposed which, if not paid, will become liens against real property.

This alternative provides all of the environmental impact benefits as Alternative 1.

The single family homes will have two car garages and parking for two vehicles in the driveway. Parking lots have been provided at the club house for those residents driving to use the club house or the amenities.

(3) Alternative 3: A paved roadway of 28 feet in a 40 foot right of way with parking on one side.

This alternative will increase the area of impervious surface, will increase the volume of stormwater runoff, will increase the on site rate of run off, will increase the extent of quality treatment maintenance, will increase the area that will be disturbed in the course of construction, and will significantly increase the development costs.

The sole benefit of this alternative compared to Alternative 1 is a 4 foot wider effective travel way. There is no benefit compared to Alternative 2- in fact, this alternative is a detriment- since the effective travel way in Alternative 2 is 3'-4' wider than in this alternative.

There will be a 16.6% increase in road pavement area from a 24 foot wide road system to a 28 foot wide road system. This will increase the amount of impervious area and in turn decrease the pervious coverage on the site. Based upon the pavement increase, there will be an increase of stormwater runoff from the project roads by 16.6%. This will also increase the pollutant loading of the stormwater runoff from the roads by 16.6%. By increasing the road width, an extension of the proposed amphibian crossing will be necessary requiring an additional cost of $2,100.00 and will increase the cost of road construction by $359,284.00. The additional stormwater runoff from the roads will require the upsizing of the storm drainage collection pipes within the road system (Exhibit "U").

(4) Alternative 4: A paved roadway of 28 feet in a 50 foot right of way (Town ownership) with parking on one side.

This alternative is the least desirable based on its inconsistency with the law and prior Town approvals, disregard of environmental concerns, and burden on the Town for repair and maintenance. This alternative provides a 19% increase in the amount of impervious area, thereby decreasing pervious coverage on the site. There will be an increase of stormwater runoff from the project roads by 19% and increase in pollutant loading of the stormwater runoff from the roads by 19%. The additional stormwater runoff from the roads may also require the upsizing of the storm drain collection pipes within the road system at an additional cost to the project sponsor. The increase in the roadway and right of way width will require the extension of the proposed amphibian crossings, which will generate an additional cost of $2,100.00. Based on the increase in the road width and length in order to meet the public road standards, the additional cost of road construction will be $409,586. This alternative will also reduce the amount of area to remain undisturbed by 3.88 acre and will reduce the proposed naturalistic planting areas by 0.30 acres. This alternative will also decrease the buffer of existing trees that are proposed to remain on the northern portions of the site in order to screen the project from the trails and homes adjacent to the site. Also, the changing of road ownership from private to public will require the Town to provide public service such as road maintenance, plowing, repair, reconstruction, etc., all at the expense of the Town taxpayers (Exhibit "U").

The sole benefit of this alternative compared to Alternative 1 is a 4 foot wider effective travel way. There is no benefit compared to Alternative 2- in fact, this alternative is a detriment- since the effective travel way in Alternative 2 is 3'-4' wider than in this alternative.

Unit Count and Type

The residential portion of the project will have 490 residential units, consisting of 314 single family detached dwellings, (14) single family attached dwellings, and 162 multiple dwelling units.

The total project area is 197.716 acres. After deducting 9.530 acres for regulated wetlands and 2.730 for easements, there is a total of 185.456 acres of usable lot area. Based on the permitted density calculation of three units per usable acre, the project site could be developed with up to 556 units. Accordingly, the mix of units is as follows: 56.48% single family units, 2.52% attached single family units and 29.14% multi-family units.

The housing mix complies with Town of Cornwall Zoning Code Section 158-21X(2), which requires the following housing mix in order to create a variety of housing types within the Planning Adult Community:

Detached single family dwellings (30 to 90% of the units)
Attached single family dwelling units (0 to 30% of the units)
Multiple dwelling units (0 to 30% of the units)

By memorandum dated March 28, 2008 (Exhibit "P"), the Planning Board attorney confirmed that the proposed mix of unit types complies with the Town of Cornwall Code Section 158-21(X)(2) and that the unit mix limitation is calculated against the allowable density of the project site.

The developer's agreement entered into between the project sponsor and the Town of Cornwall Town Board limits the total number of residential dwelling units to a total of 490 residential units. A copy is attached as Exhibit "A".

Ownership

A homeowners association will be formed to own and/or operate and maintain all of the private lands and facilities that will benefit and/or be used by all 10 lots. Several separate condominiums will be formed for the residential development on Lot No. 10, including a master HOA that would operate and maintain the trails, recreation center, lawns and storm water management areas and depending on the alternatives approved, the interior roadway and sewer and water lines.

Pursuant to Town Zoning Code Section 158-21X(5)(i)(iii), the site plan may, at the discretion of the Planning Board, be approved in sections. Annexed as Map "AA" is a proposed section plan, which sections have been identified for purposes of development and construction, financing and marketing. Each section delineated on the map would be under the control of a separate condominium. The clubhouse, common area and facilities will be conveyed to the Homeowners Association, and owners in all sections will be members.

Construction Scheduling and Phasing Plan

The expected year of project completion is 2015.

It is anticipated that the project will consist of several phases, which will be broken down further into smaller phases to comply with NYS DEC requirements on maximum disturbance (Map P). It is anticipated that the first phase of the project will consist of constructing approximately 75% of the loop road through the project site, starting from the southerly entrance from Route 9W. The second phase will consist of extending off site utilities to service the project site. The third phase will consist of constructing a portion of the infrastructure within the residential community, and the development of the club house. The fourth phase will be to continue the construction of the infrastructure within the residential site, along with the construction of residential dwelling units. As phase four progresses, the construction of the loop road will be completed. The construction of the commercial areas is unknown at this time, and will be dependent upon demand for these sites. Each of the commercial sites will require site plan approval from the Town of Cornwall Planning Board.

Portions of the site must be cleared and graded to accommodate the proposed uses. Grading limits have been established on the Erosion and Sediment Control Plans. These grading limits will minimize the extent of soil exposure at any one time to the greatest extent practical. Current regulations as outlined within the NYS DEC SPDES General Permit for Stormwater Discharge Permit No. GP-02-01 allows for a maximum of five acres to be disturbed at any one time during construction of the project. However, a waiver may be granted by the NYS DEC to let individual projects exceed the five-acre disturbance threshold. To make application for the waiver, a project sponsor must prepare the following items: Stormwater Pollution Prevention Plan, Erosion and Sediment Control Plan and a Phasing Plan that incorporates specific construction sequencing for each proposed phase. These items are in addition to an Engineer's Report that describes each phase and the reason(s) why the phase must exceed the five acre threshold is submitted to the NYS DEC for their review and approval.

A waiver of the five-acre limit is often granted to large projects such as the Cornwall Commons project. In the past, these types of residential and commercial projects have been granted the waiver by the NYS DEC. Typically, on larger scale projects, it is necessary to disturb more than five acres at one time in order to correctly install the necessary utility infrastructure for the project and limit the time in which soil is exposed to weathering conditions due to stockpiling and placement on site.

The proposed Erosion and Sediment Control Plan in conjunction with the Construction Phasing Plan will control erosion and sedimentation through the use of rapid stabilization measures, construction of temporary sediment control practices and the provision of lawn and landscaping measures in disturbed areas. All temporary erosion control and sediment control measures utilized on site are designed to capture sediment prior to discharge off-site. The temporary measures have been designated for each phase of construction and sediment discharge to off-site downstream areas during construction will be avoided to the greatest extent possible through the use of these practices.

Description of Construction Process

Each of the phases will typically consist of clearing of the existing vegetation, installation of erosion control measures, grubbing of stumps, construction of stormwater pond(s), rough grading of site, temporary stabilization of graded areas as needed to protect against erosion, installation of utilities, grading of roadway and road right-of-way, installation of curbs, installation of road base, installation of pavement, installation of sidewalks, final stabilization of all disturbed areas, and landscaping designated areas. It is anticipated that working hours will be between 7:00 am and 4:30 pm, Monday through Friday, and 8:00 am to 3:00 pm on Saturdays.

Internal Project Layout

The proposed site plan for Lot 10 shows the proposed layout of the project, the proposed clearing and grading of the site, along with wetlands and other features.

Connection to NYMA Property

There were letters received by the Planning Board dated July 5, 2006 and September 5, 2006, written on behalf of New York Military Academy (NYMA), which requested the imposition by the Planning Board of conditions and requirements for the applicant to make available a portion(s) of its property for purpose of access by NYMA to its property. In the Determination of Consistency and Negative Declaration adopted by the Planning Board in connection with preliminary subdivision approval (Exhibit "A"), the Board noted that the preliminary subdivision plan provides for at least one access way to the NYMA property and that "the preliminary plan approval does not prevent any alterations to the plan that might arise from future coordination between NYMA and the Cornwall Commons site as to access, utilities, and other matters."

The final site plans have not been completed for Lot Nos. 1 through 9 and therefore a final subdivision plan has not been completed. The uses for Lot Nos. 1 through 9 have not been established and since it is well recognized that commercial uses are site specific and most, if not all, site specific uses require unique footprints with likewise unique site features, the applicant must reserve layout and design flexibility which may affect the precise location of lot lines, buildings, signage and other improvements.

ENVIRONMENTAL SETTING: EXISTING CONDITIONS, ANTICIPATED IMPACTS, AND PROPOSED MITIGATION MEASURES (IF NEEDED)

A. Land Use, Planning and Zoning

Existing Conditions and Compatibility of Proposed Project

The project site is zoned Planned Residential Development (PRD) which allows the development of a Planned Adult Community. The surrounding properties are zoned Highway Commercial, SR-1Suburban Residential, SR-2 Suburban Residence and Planned Commercial Development (PCD) Zoning District.

The proposed project is compatible with existing land uses, the Town Comprehensive Plan, Town Zoning Code and Orange County Comprehensive Plan. The Town Board adopted a new Town Comprehensive Plan recommended by the Comprehensive Plan Committee and Planning Board and thereafter adopted zoning amendments recommended by the Planning Board which allow for the development of a Planned Adult Community on the Cornwall Commons property. The Town Board prepared and accepted a Generic Environmental Impact Statement for the adoption of the Town Comprehensive Plan and a negative declaration for the adoption of the zoning amendments in furtherance of the Comprehensive Plan. The Orange County Department of Planning report issued with respect to the Town Comprehensive Plan found that the plan was in compliance with the Orange County Comprehensive Plan and the report issued with respect to the zoning amendments specifically found that the cluster development of a PAC would be a useful method to further preserve open space. Further, the Orange County Department of Planning report on the Cornwall Commons special use permit stated that this type of development is encouraged in this priority growth area as set forth in the Orange County Comprehensive Plan.

The parcel lies in the northeast portion of the Town of Cornwall abutting the Town of New Windsor. The Moodna Creek, a major local drainage tributary of the Hudson River, flows below the western limits of the property, and the creek is bounded on the southwest by single family homes along Schofield Lane and Frost Lane. There will be a secondary gated emergency access to the site from Frost Lane. Computer simulation has been conducted, in order to show that an emergency access vehicle can turn into this access way. The proposed surface will be grasscrete and a detail has been provided on the site plan. .

The property is bounded on the south and southeast by vacant land, the southeastern portion of which is owned by the New York Military Academy, and by Route 9W. This segment of Route 9W is a four-lane divided highway featuring scattered commercial structures.

On the easterly side of Willow Avenue and northerly side of Route 9W is a proposed development called Willow Woods, consisting of 32 building lots with access to said lots by a new cul-de-sac road entering from Willow Avenue.

On the east side of Mill Street, a residential development is proposed consisting of 11 single family residential lots. The property on the west side of Mill Street, was previously owned by Firthcliff Carpet Company, subsequently called Majestic Weaving, and was used for many years as a fabric production and dye manufacturer. The site had been a location for disposal of hazardous waste. However, a letter dated May 10, 2000, from the New York State Department of Environmental Conservation, confirms that the 2a inactive hazardous waste disposal site designation for the property

was changed to classification 3 and that the site "does not present a significant threat to the public health or environment" (Exhibit "K").

Mitigation Measures

The proposed project is compatible with existing land uses, the Town Comprehensive Plan, Town Zoning Code and Orange County Comprehensive Plan. No mitigation for the proposed use is necessary.

B. Soils, Geology, and Topography

1. Existing Conditions

According to the Orange County soil survey, there are soils of six series on the project site. The Mardin gravelly silt loam (3 to 8 percent slopes), which underlies the major part of the site, is a moderately well drained soil formed in glacial till deposits derived from sandstone, shale and slate. The next largest is an area of Erie gravelly silt loam (0 to 3) percent slopes) in the northeastern corner of the site, which is a somewhat poorly drained soil, also formed in glacial till deposits of sandstone, shale and slate.

In the southeastern corner of the site is a somewhat smaller area of Bath-Nassau shaly silt loam, which is a complex of deep, well-drained Bath soil and shallow, somewhat excessively drained Nassau soil. These soils formed in glacial till deposits derived from shale and slate. In the south-central part of the site there is also an area of Swartswood and Mardin soils, on slopes ranging from 3 to 15 percent. The Swartswood soil is well to moderately drained, and is formed in glacial deposits derived from gray and brown conglomerate and sandstone. The large stones and boulders greater than 10 inches in diameter occur in the surface of the Swartswood and Mardin soils in this area, Mardin soils also occur on steep (25-35%) slopes along the northern and western edges of the site. The Bath, Erie, Mardin, and Swartswood soils have a fragipan in the lower part of the soil profile. A perched water table frequently occurs above he fragipan early in the spring.

The descriptions of soil test pit data for pits excavated on the site in October of 2006 are provided in Exhibit "C", in a report prepared by Melick-Tully Associates. These pits were excavated to explore the subsurface soil, rock and groundwater conditions throughout the site. The location of the test pits can be found on a plan included within the report.

Based upon inspection of site soil conditions and the testing of site soils, building foundations can be supported by conventional shallow foundations which derive their support from the natural soils, shale bedrock, or granular controlled compacted fill. It was further noted that groundwater seepage was encountered at depths ranging between 4 feet and 12 feet in several of the test pits, but given the presence of wetlands, this suggests that shallow perched water seepage could be encountered. Therefore, dewatering operations will be employed where necessary to allow for the proper construction of utilities and structure foundations. Structures developed with basements will have foundation drains installed in accordance with the current NYS Building Code.

During soil exploration of the site, shale bedrock was encountered in several of the excavations at varying depths. Removal of rock will be conducted by mechanical means where possible, but blasting may be required when sound rock is encountered. If it is determined during construction that blasting is required, blasting permits will be filed with the Town Building Department.

A past slope failure along the abandoned railroad was investigated. This slope is not located on the project site and construction is not proposed within 110' of this slope.

2. Potential Impacts

a. Grading Impacts

The grading plans, Road Profiles, and Cut & Fill Analysis plans have been completed for the project . The Cut & Fill Analysis was conducted for Lot No. 10 in its entirety and for the construction of the loop road. Based upon the Cut & Fill analysis, there will be a surplus of approximately 36,800 cubic yards from the construction of the loop road and road right-of-way, and a need for the import of 13,300 cubic yards of fill on Lot No.10. In total, it is estimated that approximately 23,500 cubic yards of material will need to be removed from the total site during the construction of the loop road and Lot No. 10. The commercial lots (Lot Nos. 1 through 9) have not been graded at this time, and these lots will need to return the Planning Board for site plan approval.

The grading has been conducted in such a manner to minimize the need for retaining walls, although several walls will be needed during the construction of Lot No. 10. The first wall is located along the back of the single family units located in the most northwesterly corner. This wall ranges in height from 3 to 5 feet. A second wall will be used along the road servicing this area to minimize impacts to wetlands located along the back portion of the property, and has a maximum height of 8 feet. A third wall is used for the construction of the stormwater pond located in the northwest corner of the project, and has a maximum height of 4 feet. The forth and fifth wall are located along the southeasterly side of the multiple family units and range in height from 5 to 8 feet in height. Several other walls are located behind single family units located in the front northeasterly corner of the project, and range from 2 to 4 feet in height. At this time, the walls are proposed to be constructed of modular block systems.

Erosion control methods will be employed during construction to mitigate any impacts to isolated wetlands, wetlands, or other areas of concern, from sediment runoff as per NYS DEC requirements.

No other potential for erosion is foreseen at this time. If issues arise during construction, additional erosion control methods will be employed by the contractor to mitigate sediment runoff.

3. Mitigation Measures

A Stormwater Pollution Prevention Plan (SWPPP) has been developed in accordance with the manuals entitled "New York State Stormwater Management Design Manual", and "New York Standards and Specifications for Erosion and Sediment Control". A copy of the SWPPP, dated August 9, 2007, can be found in Volume 2 . The stormwater ponds located throughout the entire project site have been sized to handle the runoff from the loop road, the maximum build out of the commercial sites, and the entire development of Lot No. 10. These ponds have also been designed in accordance with NYS DEC requirements to treat the runoff for water quality.

C. Surface and Groundwater – Existing Conditions, Impacts, Mitigation Measures

a. Drainage Study of Existing On-Site Conditions

1. Existing Drainage Patterns

A major part of the site drains to Moodna Creek, which lies just offsite, to the west and north of the project. The surface drainage to Moodna Creek flows across the site via sheet flow, and eventually collects in less defined drainage channels. In the eastern part of the site, similar channels flow eastward to a small stream which lies about 500 feet east of NYS Route 9W, and which is tributary of Moodna Creek. There are no permanent streams on the project site. There is a seasonal high water table in the on-site soils due to the presence of fragipan.

2. Stream Classifications

The Moodna Creek is located to the west and north of the project, and is classified as a "C" class water body. The Funny Brook Child, although not located adjacent to the project, is located to the southeast of the project and eventually will receive stormwater runoff from the site. The Funny Brook is classified as a Class "C" water body.

3. Wetland Areas

The wetlands on this site are all a Red Maple/Hardwood Swamp, which occur in several locations within the site. The following wetlands are contained on the project site:

Wetland A: The origin of this wetland occurs in a shallow depression within the site, which is a red maple hardwood swamp classification. This wetland drains generally southward in a narrow stream course that empties into a culvert under Route 9W.

Wetland B: This wetland exists in the westerly portion of the site, behind an existing residential development. This area is fed from the runoff from municipal road systems to the south behind the existing homes, and the flow runs northerly to a discharge offsite through the property.

Isolated Wetland C: This wetland is a seasonally flooded wetland, predominantly a red maple swamp habitat with a seasonal depth of approximately 8 to 12 inches in the spring which evaporates to a reasonably dry condition by August of the year. There is no outlet to this wetland, which classification as an isolated wetland results in it being a non jurisdictional federal wetland.

Wetland D: A larger wetland, also located behind adjoining residential housing on the westerly side of the property. This wetland lies in a shallow depressional forest with a drain southward toward Route 9W.

Wetland E: This wetland is contained in a shallow depression that collects water from the rear of a forested portion of the site in the northwest portion of the property, and which is really a shallow watercourse that runs down the slope to a discharge along the former railroad line that borders the site.

Isolated Wetland F: This wetland is also an isolated, non jurisdictional wetland with no evident outlet. It occurs in a shallow depression with the forested site just off the adjoining residential housing in the west central portion of the site.

4. Floodplain Areas

Based upon FIRM (Flood Insurance Rate Mapping) maps prepared for the Town of Cornwall, and dated September 30, 1982, and FIRM maps for the Town of New Windsor, dated December 15, 1978, the project site does not lie within any flood plains.

5. Discharge Points of Existing Drainage

The pre-development plan found within the SWPPP shows the current location as to where the existing drainage from the site discharges to points off site. Currently there are seven discharge points along the back of the project where the existing runoff discharges, and then runs down to the abandoned railroad, where it is collected in a swale line, and then discharged through existing culvert pipes. Once discharged from these culvert pipes, the water runs overland down to the Moodna Creek. At the front of the project, there are two discharge points, which run to drainage channels that discharge into the existing wetlands. The water leaving the wetlands runs through an existing culvert located under Route 9W, and is conveyed to a wetland on the easterly side of Route 9W, and is then conveyed by overland flow and through drainage channels to the Funny Child Brook, which is tributary to the Moodna Creek.

6. Downstream Drainage Infrastructure

The existing drainage leaving the site runs through several culverts along the back portion of the site that run under the abandoned railroad bed. These culverts range from 12" to 36", and are either cast iron or corrugated metal pipe. These culverts were found to be in good structural condition. The water draining from the front portion of the project drain through a 48" reinforced concrete pipe that runs under Route 9W, which is in good structural condition.

b. Classification Information On All Watercourses and Waters

There are two water courses that receive the stormwater runoff from the site. The first water course located along the westerly and northerly portions of the project is Moodna Creek. The Moodna Creek is classified as a Class "C" water body. The second water course is located to the southeast of the project on the easterly side of Route 9W, and is known as the Funny Child Brook, which is classified as a Class "C" water body.

c. Wetlands

The project consultant, Robert G. Torgersen, LA, CPESC, conducted a site biological and a site freshwater wetlands investigation on this site. As a part of the freshwater wetlands investigation, all areas meeting the required environmental parameters to determine the presence of freshwater wetlands on the site were identified and the boundaries of each identified on the site for location by the project surveyor. There were no instances of a prior determination as to jurisdictional or non-jurisdictional wetlands made by the project consultant.

There were several freshwater wetlands so identified, surveyed, and submitted to the Eastern Permits Section, U.S. Army Corps of Engineers (ACOE) for boundary verification. During the site investigation for boundary verification, Mr. Brian Orzel of the ACOE made the determination that one of the identified freshwater wetlands, identified on the site plans as Wetland E, did not meet the requirements of the required hydrological connection to navigable waters and was identified as not being a jurisdictional federal wetlands.

There are several requirements necessary to prove a natural hydrological connection of a wetland to a navigable waterway. These include, throughout the entire discharge area, the presence of a scoured waterway, the presence of hydric soils in the waterway, the presence of hydrophytic vegetation in the waterway, and the actual connection to the navigable waterway or tributary thereof.

In light of the discussion by some of the objectors, Mr. Orzel conducted a second, two hour site investigation on June 24, 2003, with Peter Torgersen, our principal wetland specialist, to look for a verifiable hydrological connection from Wetland E. A thorough investigation along the entire downslope route from Wetland E was carried out, and none of the required environmental conditions necessary to classify the outfall as a permanent (as opposed to seasonally intermittent) connection were found. The original determination of this wetland by the ACOE was therefore verified and does not change.

In fall of 2006, due to the original wetland Jurisdictional Determination having been expired, a new wetland investigation was conducted, and subsequent wetland boundary survey information submitted to the ACOE for verification. During this site investigation, an additional wetland area found in the southerly portion of the site. This additional wetland area is determined to be an isolated wetland and no longer under the jurisdiction of the ACOE.

The ACOE conducted a site investigation in summer of 2007 to verify the revised wetland boundary, at which time the wetland boundaries as surveyed were verified as accurate. This new verification included the conclusion that the two isolated wetland areas which are not under the jurisdiction of the ACOE. The written jurisdictional delineation approval was issued by letter dated December 19, 2007 (Exhibit "Q").

Changes to Hydraulic Regime of Wetlands

Pre & post drainage plans have been prepared to show the drainage areas to each of the wetlands (Maps S & T). The following table shows the current drainage to each of the wetlands, and the drainage to each of the wetlands after construction is completed.

Pre-Development Wetland Drainage Conditions

Wetland Area		Rainfall Peak Flow (CFS)			Rainfall Volume (ac.ft)		
		1-Year	10-Year	100-Year	1-Year	10-Year	100-Year
Wetlands A		12.96	54.69	98.15	1.504	5.507	9.791
Wetlands B		22.28	66.16	107.48	2.211	6.414	10.546
Wetlands C	Non-Jurisdictional	5.96	25.11	45.12	0.722	2.644	4.701
Wetlands D		7.46	29.85	52.87	0.799	2.841	5.004
Wetlands E		5.74	23.01	40.87	0.773	2.747	4.839
Wetlands F	Non-Jurisdictional	4.16	14.22	24.16	0.500	1.597	2.714

Post-Development Wetland Drainage Conditions

Wetland Area		Rainfall Peak Flow (CFS)			Rainfall Volume (ac.ft)		
		1-Year	10-Year	100-Year	1-Year	10-Year	100-Year
Wetlands A		5.73	25.44	71.20	1.446	7.089	13.190
Wetlands B		22.28	66.16	107.48	2.211	6.414	10.546
Wetlands C	Non-Jurisdictional	8.31	26.46	43.89	0.642	2.050	3.484
Wetlands D		8.98	31.63	54.08	0.914	2.995	5.135
Wetlands E		0.79	25.83	58.69	0.605	4.460	8.140
Wetlands F	Non-Jurisdictional	0.00	0.00	0.00	0.000	0.000	0.000

Pre- and Post-Development Differences to Wetlands

Wetland Area		Rainfall Peak Flow (CFS)			Rainfall Volume (ac.ft)		
		1-Year	10-Year	100-Year	1-Year	10-Year	100-Year
Wetlands A		-7.23	-29.25	-26.95	-0.058	1.582	3.399
Wetlands B		0.00	0.00	0.00	0.000	0.000	0.000
Wetlands C	Non-Jurisdictional	2.35	1.35	-1.23	-0.080	-0.594	-1.217
Wetlands D		1.52	1.78	1.21	0.115	0.154	0.131
Wetlands E		-4.95	2.82	17.82	-0.168	1.713	3.301
Wetlands F	Non-Jurisdictional	-4.16	-14.22	-24.16	-0.500	-1.597	-2.714

Pre- and Post-Development Differences to Wetlands (Percent)

Wetland Area		Rainfall Peak Flow (Percent)			Rainfall Volume (Percent)		
		1-Year	10-Year	100-Year	1-Year	10-Year	100-Year
Wetlands A		-55.8%	-53.5%	-27.5%	-3.9%	28.7%	34.7%
Wetlands B		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wetlands C	Non-Jurisdictional	39.4%	5.4%	-2.7%	-11.1%	-22.5%	-25.9%
Wetlands D		20.4%	6.0%	2.3%	14.4%	5.4%	2.6%
Wetlands E		-86.2%	12.3%	43.6%	-21.7%	62.4%	68.2%
Wetlands F	Non-Jurisdictional	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%

The following is a summary of the changes referenced above:

Wetland Area A: The drainage area discharging to this area will increase by 9.8 acres, causing the stormwater quantity to increase. However peak flow rates will decrease. Stormwater Ponds C and E discharge into Area A. The detention provided by the ponds causes the flow rate decrease.

Wetland Area B: The drainage area for Area B is located off-site and outside the limits of disturbance. There will be no change in drainage entering this wetland area.

Wetland Area C: This area is a non-regulated, non-jurisdictional wetland area. The drainage area discharging to Area C will decrease by 4.65 acres, causing the stormwater quantity to decrease as well. Flow rates will increase slightly due to conversion of permeable surfaces to impermeable surfaces.

Wetland Area D: The drainage area discharging to Area D will decrease by 0.25 acres. The flow rates and stormwater quantities will also decrease.

Wetland Area E: The drainage area discharging to Area E will increase by 7.47 acres. The flow rate will decrease in the 1-year storm and increase in the 10-year and 100-year storms. Pond D discharges into this area.

The site development plans have been modified to include an additional 6 acres of undisturbed woodland – 46.87 acres previously, and 53.06 acres currently (see Grading Comparison Plan annexed as Map "U"). Much of this additional woodland is in the immediate vicinity of the several wetland areas which will remain. The additional woodland areas that border the wetlands will aid in the provision of shade for wetland plants, and for upland habitat for any amphibians that may exist in the wetlands.

The storm drainage from developed sites will now be collected in storm drainage treatment basins for both quality and quantity treatment prior to being discharged into the drainage courses or wetland areas. The rate of runoff will be controlled so as not to exceed preconstruction conditions, and as a result, the total volume of runoff is also controlled.

Although the peak discharge rates are lower than preconstruction rates, the volume of post construction discharge runoff will be substantially the same as the volume of pre construction discharge. (See hydrographs for illustration of design amounts contained in Exhibit "L"). In addition, the plans have been modified to provide at each of the stormwater discharge points, level spreaders or similar design features to reduce the impact of stormwater discharge into the native habitats. There will not be any significant impact to the native wetland areas due to the modifications in the amounts of stormwater that will continue to enter the wetland habitats.

The protection of the vernal pool habitat in Wetland C will help to preserve the breeding environment for the mole salamander and other species that reside in the adjoining woodland. Given the site development in the area near the wetland, some stormwater will enter this wetland during all rain events during the entire year. At present, during summer months and most fall months, much of the precipitation that falls in the wooded areas surrounding the wetland seeps into the ground and does not enter the wetland/vernal pool habitat. The modified design, including the site grading and redesign of rear yards and areas in the vicinity of the recreation facility, will allow the preservation of more native woodland which buffers the wetland, providing for additional habitat for wetland species.

In consideration for providing suitable passageways for amphibians, two 6' PVC pipes will be installed under Road "B", along with mountable curbing along both sides of Road "B", to allow for the movements of amphibians from one area to another. These crossing are depicted on the site plan for Lot No. 10.

The site grading throughout the site has been modified to enable the preservation of additional native woodland habitat in many areas, some of which is adjacent to existing wetland areas (Map "U" and "Y"). Other native woodland will remain in areas between housing groups, scattered throughout the site. Areas of open grading, necessary for the construction of roads and housing, will be planted in a native woodland type of plant material to, in time, replicate a native woodland habitat in those areas. Existing woodland areas that will remain will be maintained by removal of dead and downed trees (by hand with no machinery entering those areas) and young woodland growth encouraged to grow. Some downed trees, if appropriate, may be left to provide habitat for smaller mammals, reptiles and insects. Stone walls in those areas will also be left intact for the same purpose. An undisturbed stream

corridor buffer of 25 feet on either side of surface streams on the site have been provided in furtherance of habitat preservation.

Mitigation Measures for Construction Related Impacts to Wetlands

Specific construction mitigation measures will be followed in the case of construction near or adjacent to each of the wetland areas that will remain undisturbed. Initially, prior to construction machinery becoming active on the site, a silt fence and a four-foot construction fence will be installed at the limits of site grading around each of the wetlands or along the edges of the adjoining woodland areas which are to remain undisturbed. A similar method of protection will be installed along each of the areas of undisturbed woodland which are shown to remain throughout the site.

Where storm drainage is shown to discharge into or near an area of wetlands or woodlands, a variety of stormwater dissipation measures, including grassed swales, level spreader discharge features and reinforced outfall structures, will be installed to disperse the flow of runoff to minimize disturbance to the wetland habitat and the soil in the woodlands.

Native grasses, shrubs and trees will be planted in areas bordering the wetlands in areas that are to be graded that are beyond the immediate residential rear or side yard areas. This planting will restore some of the native upland habitat adjacent to the wetlands. The native plantings will restore some wooded habitat throughout the site, some shade habitat along the edges of the wetlands, and provide habitat for insects, birds and amphibians as they mature.

All the wetland areas provide habitat for a variety of plants, insects and birds through the many shrubs and trees in the area. Wetland C is the large vernal pool wetland that is a non jurisdictional wetland, but is being significantly retained. This wetland contains a significant amount of moisture for the spring through early summer months for a variety of amphibians, birds, insects, plants and other various wildlife. Some of the wooded border along the edges of this wetland will be removed, and the native planting to be added in other areas bordering the wetland habitat mentioned previously, will assist in restoring adjacent woodland and shrub habitat for this wetland. Wetland D is wooded and will remain undisturbed with several areas of adjacent woodland remaining in the southerly, southeasterly and southwesterly areas. Wetland E is a wooded wetland caused by groundwater seepage that runs down slope to the west and does not contain any significant habitat, and will remain largely undisturbed. Wetland F is a non-jurisdictional isolated wetland caused by a natural depression in the woodland, and is dry during most of the year and also does not contain any significant levels of wetland habitat.

The overall site development will be designed in a manner that will maintain to a significant amount, the existing wetland habitats, some adjoining woodland habitat, and, in cleared areas in residential backyard areas, be planted in a native woodland variety of shrubs and trees. The site storm drainage design has been modified in order to maintain much of the previous rainfall discharges into the several wetland areas to minimize impacts from changes in stormwater to those areas.

d. Quantify All Disturbances to Watercourses and Water

Two wetlands and two non-regulated non-jurisdictional isolated wetlands will be disturbed during the construction of the project. Wetland A located along the front of the project in the southeasterly corner, will be temporarily disturbed to allow for the installation of a storm drainage line from the loop road to the stormwater pond. A permanent access-way to this stormwater pond for maintenance

will be provided via easement and is depicted on the site plan for Lot No. 10. Wetland E, which is 0.518± acres in size, will have 0.006± acres of permanent disturbance, as a portion of a proposed road passes over the upper tail end of the wetlands. Non-regulated non-jurisdictional isolated Wetland C located to the left of the club house, and 3.591± acres in overall size, will have 0.225± acres of permanent disturbance for the construction of the loop road around the club house area. Non-regulated non-jurisdictional isolated Wetland F located in the south westerly portion of the project, and being 1.021± acres in size, will have 0.844± acres of permanent disturbance for the construction of a road and single-family homes.

e. Moodna Creek – Relationship of Site & Site Drainage

In 1972, the Clean Water Act was established to regulate "Point Source" discharges of pollutants to the "Waters of the U.S." Amendments were made to the act in 1987 in which a phased approach to regulating stormwater discharges would be required. In 1990, the U.S. Environmental Protection Agency (EPA) established Phase I of the National Pollutant Discharge Elimination System (NPDES) stormwater program. This regulation established requirements for a stormwater permit application process. In New York State, Phase I became effective in 1992, in which regulated stormwater activities are covered by a State Pollutant Discharge Elimination System (SPDES) permit. Phase I regulated 11 types of industrial activities, and medium to large municipalities with populations greater than 100,000 and 250,000 respectively. In December of 1999, the second half of the program was put into place to control stormwater. Phase II expanded the scope of activities to be regulated and increased the number of municipalities and businesses that required permits. Under Phase II regulations, construction activities disturbing one acre or more are required to file for permit coverage. To comply with Phase II, New York State, in January 2003, issued non-industrial Stormwater Management General Permits under the SPDES. The state regulation requires operators of regulated construction sites to obtain coverage under General Permit GP-02-01. Under this permit, construction site operators must notify the state of any project disturbing one acre or more, prepare a formal written Stormwater Pollution Prevention Plan (SWPPP) and adhere to the provisions of the plan during and after construction.

The applicant has conducted a drainage study and prepared a Stormwater Pollution Prevention Plan (SWPPP) for the entire project site. The Stormwater Pollution Prevention Plan was prepared including the design of proposed drainage system, erosion & sediment control, and construction phasing plans using "Best Management Practices" as recommended by the New York State Department of Environmental Conservation, as indicated in their Stormwater Management Design Manual. Based upon the drainage study, a total of five stormwater basins will be located on site, with three of the stormwater basins being located within Lot No.10. Three of the drainage basins located within the overall 10 lot subdivision will be discharging stormwater from the site, that will ultimately drain into the Moodna Creek. The drainage basins have been designed to treat the runoff from the site for quality, and to provide for a "no net increase" in the rate of flow leaving the site, and will actually reduce the rate of flow to below the predevelopment runoff rates.

2. Other

a. Management

Management and maintenance of the proposed stormwater facilities on site will be controlled by the homeowners association. Three (3) of the stormwater ponds that accept runoff from the proposed Town road (loop road) will also be placed in a stormwater district in the event that the Town of Cornwall must intervene to ensure proper maintenance of these facilities. The access to the ponds will be afforded from the proposed roads through easements. The maintenance of the facilities will be conducted by the homeowners association, and will require that the association to periodically inspect the stormwater facilities to insure proper operation, and that all structures and piping within these facilities are in good operating condition. In addition, periodic removal of deposited sediment in the catch basins, pipes, and stormwater ponds will be necessary. A check list for inspection of the stormwater facilities has been included in Appendix "H" of the submitted SWPPP (Volume 2).

3. Mitigation Measures.

Other methods of mitigating the stormwater runoff from the site that were looked at were the use of permeable pavement, and stormwater infiltration units. These forms of stormwater management, although considered, were not used due to the seasonal high ground water level and the soils consisting of fragipan. Additional forms of water quality treatment may be considered by the applicant for the commercial lots as they are developed.

D. Wastewater Management

a. Project Sewer Generation from Site

The Town of Cornwall's sewage treatment plant located along Shore Road, and discharging into the Moodna Creek, will be receiving the sewage generated by the proposed project. This sewage treatment plant has a SPDES permit to treat up to 1.2 million gallons per day. The proposed development of Lot No. 10 is estimated to generate 117,600 gallons of sewage per day. The remaining 9 commercial lots are estimated to generate 39,650 gallons of sewage per day. The developer's agreement (Exhibit "A") provides the terms for reservation of capacity for this project.

b. Related Concerns

Sewage will be collected via an on site gravity sewage collection system. The gravity system will convey the sewage to a pump station to be located along the loop road within the project site, from which the sewage will be pumped to manhole 102 of the Town's gravity sewer collection system, which is located along Academy Avenue. This discharge location was previously discussed with Town Engineer and Chief Wastewater Plant Operator and found to be acceptable, as the lines leading from this point to the sewage treatment plant have not been know to have any problems with regards to overflows or restrictions. The option of connecting the projects sanitary sewer flow into the existing sanitary sewer manhole No. 23 in Mailler Avenue, at the intersection of Halverson Road, was also investigated. Since manhole No. 23 is closer to the project it would seem to be a more likely connection. However, as a result of the sewer study conducted along the existing sewer lines within Mailler Avenue and Faculty Drive, it was determined that due to existing operational problems and hydraulic conditions, that this connection would not be viable and that connecting the project to manhole No. 102 was the better alternative. The project sponsor is looking at two alternatives with

regards to the routing of the forcemain from the pump station to sanitary sewer manhole 102 in Academy Avenue (see Map "Z"). The preferred alternative is to run the force main from the pump station in an easterly direction along the loop road, then through the existing tunnel south-east under Route 9W, then south-easterly across NYMA's athletic fields to Faculty Drive. The forcemain would then be run south along Faculty Drive to Academy Avenue, then south-east along Academy Avenue to existing sanitary sewer manhole 102. The second alternative is to route the forcemain along the back of the commercial properties, to the southern entrance of the project, from which the forcemain would then cross under Route 9W to Halverson Street, then south-easterly along Halverson Street to Mailler Avenue. The forcemain would then run north-east along Mailler Avenue to Academy Avenue, and then south-east up Academy Avenue to existing sanitary sewer manhole No. 102.

In the preferred alternative, the forcemain would run for approximately 3,900 feet through the NYMA's athletic field and up Faculty Drive to Academy Avenue. The forcemain would require approval from the New York State Department of Transportation for crossing under Route 9W, and require the project sponsor to obtain an easement from NYMA to cross private property.

In the second alternative, the forcemain would run for approximately 6,100 feet and would require approval from the New York State Department of Transportation for crossing under Route 9W. This alternative, running from Halverson Street to Mailler Avenue to Academy Avenue, would require acquisition of an easement to cross private property on the opposite side of Route 9W from the southerly project entrance.

E. Water Supply

a. Existing Village of Cornwall Water Supply & Distribution Analysis

The Town of Cornwall receives there current water supply from the Village of Cornwall-on-Hudson. The Village acts as a service provider to the Town under an arrangement by which the Village sells water outside of the Village to properties in the Town. The Village currently has two existing water main locations in the vicinity of the project. There is a 6" water main in Mailler Avenue to the east of the property. In addition, there are 6" water mains located in Howard Street and Forest Lane to the south of the project. These 6" lines are connected to an 8" line located in Willow Avenue, further south. Water for the project will be supplied from the Village of Cornwall-on-Hudson. The Village has affirmed its intent to provide water service to the entire project area by letter dated January 1, 2006 (Exhibit "S").

Supply of water to the project will require improvements and extensions to the existing water system (see Map "Z"). Three alternatives for primary water supply to the project site have been studied by Stantec Consulting Service, Inc, water consulting engineers for the Village of Cornwall. The first alternative would be the installation of a new 12" water main along Mailler Avenue, with the possibility of improvements of the existing water main along Maple Avenue. The second alternative would be connecting to the existing line in Hudson Street, then installing a new 12" line along Second Street to Academy Avenue, then north-west along Academy Avenue to Mailler Avenue, then south-west along Mailler Avenue to Halverson Street, then west along Halverson Street and under Route 9W into the project site. The third alternative would be the installation of a new 12" water main along Mill Street, then north down Howard Street into the project site. During the spring and summer of 2007, Stantec modeled the Village's existing water system, and also performed an

analysis on the system based upon the three alternatives noted above, and as found in Exhibit "D". Based upon the analysis of the first alternative, the study shows that pressures within the proposed project site would range from 66 psi to 104 psi, with fire flows ranging from1,625 gallons per minute to 1,850 gallons per minute. Based upon the analysis of the second alternative, the study shows that pressures within the proposed project site would range from 89 psi to 128 psi, with fire flows ranging from 2,300 gallons per minute to 2,500 gallons per minute. The third alternative would provide the project with pressures ranging between 60psi and 104 psi, with fire flows ranging from 1,800 gallons per minute to 2,000 gallons per minute. All three alternatives provide sufficient pressures and flows for the development of the project for proper fire fighting operations based upon the flows available at hydrants located around the site.

b. Project Water Supply Needs & Distribution Alternatives

The proposed 490 residential project for Lot No. 10 is estimated to consume approximately 117,600 gallons of water per day. The estimated total daily demand for the 9 commercial lots and Lot No. 10 is 157,250 gallons per day.

The project sponsor is currently looking at two alternatives for supplying water to the project site. The preferred alternative for supplying of water to the project site (Stantec's Alternative No. 3) is the installation of approximately 3,200 feet of water main along Mill Street, and then north along Howard Street into the project site. Upon entrance to the site, the water distribution system would branch out to convey water throughout Lot No. 10, and also to convey water to the loop road. The project sponsor is proposing that the water lines installed throughout Lot No. 10, and the loop road, would be publicly owned. In the event that the Village of Cornwall on Hudson determines not to accept any portion of the water lines, then the water distribution system within Lot No. 10 and the loop road would remain private, and would be maintained by a transportation corporation or homeowners association. Whether the system is to be public or private, an emergency (secondary) water connection will be made to the existing 6" water main within Frost Lane, as the water line is constructed into the project site from Howard Street. At 85% of project completion, the water main within the loop road at the southerly entrance would be extended under Route 9W to allow for a future connection to the water system on the easterly side of Route 9W. This preferred alternative may require the installation of a pressure reducing valve, will require additional disturbance and grading along the back of the property, and permits from the Orange County Department of Public Works for work within Mill Street.

The second alternative for supplying water to the project site (Stantec's Alternative No. 1) is the installation of approximately 3,900 feet of water main north-east along Maple Avenue and Mailler Avenue, then west along Halverson Street and under Route 9W into the southerly entrance of the projects loop road. The water distribution line would then continue along the loop road and branch out into the Lot No. 10 to convey water to the residential portion of the project. The project sponsor is proposing that the entirety of the second alternate would be publicly owned. A secondary (emergency) connection to the existing 6" water main within Frost Lane would be made when the south-easterly portion of the project is developed. This alternative will require approval from the New York State Department of Transportation for crossing under Route 9W; approval from the Orange County Department of Public Works for work within Willow Avenue; and have a greater disturbance to the local street and residents located along Mailler Avenue and Maple Avenue.

F. Ecology (Plant and Animal Life)

1. Update

All of the Cornwall Commons property shows evidence of long term intensive disturbance from agricultural & industrial practices in the past. This is revealed by the many abandoned railroad structures, railroad beds, woven wire fencing, stonewalls, farm lanes, old roads, etc.

The northern one third of this site, beyond the Lot No. 10 area, is vegetated primarily by a nearly impenetrable tangle of non-native, invasive species such as multiflora rose, Asiatic bittersweet, black locust, buckthorn, greenbriar, winged euonymus, etc. Here, the former industrial land near the old railroad property is very highly disturbed by cuts and fills for drains and structures. In addition, many years of nearly annual fires from coal burning, steam locomotives has eradicated many of the fire sensitive species from this highly degraded property.

The Southern two thirds of the Cornwall Commons site contrasts dramatically. Although this parcel was agricultural pastureland perhaps 75 years ago, it now contains some well developed red and white oak forest on the uplands and red maple swamps in the low spots with a surprising abundance of hemlocks on the more mesic sites. Nevertheless, the land here is composed of overlapping rocks and is everywhere traversed by old farm lanes and woven wire fencing indicating that this land has been heavily grazed for many years. Indeed the species composition here depicts a forest that is comprised of the light loving species that characteristically seed into abandoned pastureland. Several of the older white oaks here exhibit the cabbage growth form (branching near the ground as opposed to branching in the upper reaches as is typical of woodland trees) of open grown trees left in pastures to provide shade for livestock. A site investigation undertaken on May 30, 2007, by Robert Torgersen, Landscape Architect, and biologists from his office have identified the approximate locations of a total of 6 "cabbage form" large white and red oaks on the site that show the characteristic shape of having originally been in an open meadow. This tree form resulted when the tree was originally in an open meadow as alluded to previously, and which retains much of its full headed shape after the maturity of the second growth hardwood forest that has grown up around these large trees.

The six oaks and several other large trees that were specifically found on this site were branched nearly to the ground, and all were approximately 48 inches in caliper. There was one hickory of 36 inch caliper found that had a similar canopy development. Many of these trees, as with other larger trees on this site, have dead branches and evidence of broken branches from previous impacts. Two significant trees, a 48" and a 35" white oak, will be preserved in an area of undisturbed woodland along the project entry road.

On February 12, 2008, a site investigation was conducted by Robert Torgersen, LA, CPESC, to evaluate the health and overall condition of the cabbage oaks (see report Exhibit "W"). Of these seven trees, there is only one that is of sufficient health and shape to warrant efforts to preserve without disturbance. This tree is a 36" caliper White Oak to the east of station 30+50 on the project entrance road. This tree appears to be structurally healthy and of a shape to warrant saving. There are a significant number of vines on the entire tree that are threatening to overwhelm the tree that must be removed to avoid further impacts to the health of the crown.

The other trees of concern are all in poor shape due to decay or structural damage, and do not warrant saving. They all have a significant amount of trunk decay, which is evident from the ground up to the mid level branches, and many dead branches which all provide entry points for further decay. The

surrounding woodland in the areas of non-disturbance on this site, particularly in the vicinity of these trees, contains many mature red and white oaks, red and sugar maples, and other trees from 8 inches to 30 inches in caliper that will continue to grow to be significant trees. Additionally, woodland areas to be established as shown on the site plan shall be planted with an assortment of native plant varieties, arranged in various sizes to replicate a developing forest. Typically one tree will be planted per 750 feet, and understory shrubs beneath the trees at one per 500 square feet of overall area. Arrangements of trees and shrubs will be random to reflect naturally evolving woodland- shrubs arranged in more open areas, and trees spread throughout. The understory in these areas will be seeded in a native meadow grass mixture for initial soil stabilization purposes.

The following is a brief summary of Torgersen's findings (Exhibit "W"). The trees are identified on the site plan. (1) 38" White Oak- This tree is healthy with no visible rot or decay. The tree is heavily infested with vines which must be removed to assure continued healthy growth. (2) 48" White Oak. Many of the lower limbs are dead with visible decay in the base of the tree. (3) 48" White Oak. There is visible decay which will progress over time. (4) 36" Red Oak. There is visible decay in the upper branches. (5) 50" White Oak. This tree is 90% dead and is in very poor condition. (6) Twin 48" Red Oak. 40% of this tree has decay which is evident in the upper branches. (7) 48" Red Oak. This tree is in poor condition with a split in the trunk ten feet up. The hollow trunk indicates significant internal decay. (8) 48" Red Oak. This tree is in very poor condition with a split in the trunk eight feet up, and with decay in the branches.

Our field observations on this tract and the history of nearby tracts suggest that this land has been under cultivation for over 100 years. Many sensitive species can be expected to vanish after prolonged cultivation, grazing and repeated fires from the nearby railroad when steam engines caused nearly annual burns. Indeed, our count during field investigation on the site revealed the presence of approximately 25 species of trees, 12 shrubs and 20 ground layer plants commonly occurring on this site.

The current site plan provides for retaining a total of 52.80 acres of undisturbed woodland, an area that includes freshwater wetlands. The total site area of Lot No. 10 is 158.994 acres. In addition to the existing wooded area to remain, a total of 5.41 acres of rear yard and other significant areas shown on the Naturalistic Planting plan will be planted in a native woodland type of planting (Map "Y"). This woodland planting will provide additional shade and wildlife habitat in rear yards and areas bordering the native woodland to remain.

The woodland areas that are to remain in an undisturbed condition were evaluated on May 14, 2008, for each location on the site as depicted on the Naturalistic Planting plan (Map "Y"). Each of the forest locations were surveyed in the field and stakes identifying each area were placed for identification in the field. A photograph of each area was taken in the vicinity of each staked location, and is attached in Exhibit "W" for illustration purposes. The forest type and characteristics were evaluated with respect to the condition of the woodland that will remain following site development in each area .

The following woodland areas are listed in the sequence of travel through the site during the site investigation. These wooded areas and identified trees will remain undisturbed.

II This woodland consists of red oaks to 28" caliper, white oaks to 32", American beech, 4 to 8", and shagbark hickory to 12 " tree species. The understory consists of Virginia creeper, Christmas fern, spicebush and greenbriar. This area also contains a 48" white oak.

IX This woodland area contains red maple to 18", white oak to 24", and sugar maple to 18". The understory contains spicebush, Virginia creeper, poison ivy, witch hazel, greenbriar and Christmas fern.

IX (Two locations along the entry road between two cul-de-sacs.) Red maple to 16", American elm to 12". Understory is winged euonymus, multiflora rose, and spicebush.

XIV Trees include red maple to 16", hickory to 12" (many dead), white oak to 20", and red oak to 24". Understory contains Christmas fern, New York fern, spicebush, greenbriar and fox grape.

XIII Trees include black cherry to 16", red maple to 10", with an understory of spicebush, garlic mustard and Japanese barberry.

XII Trees include black cherry to 12", and red maple to 12", with understory of spicebush and Japanese barberry.

IX Trees include red maples 12-16", and white oaks to 16". Understory is spicebush, Japanese barberry and multiflora rose.

VII (Woodland borders and extends along edge of isolated wetland.) A wide variety of trees which includes Shagbark hickory to 10", green ash to 24", tuliptree to 24", red oak to 16", American elm to 14" and black cherry to 12". The understory includes spicebush, fox grape and arrowood viburnum. Note that the wetland area is a part of this woodland and contains many red maples, elms and ash, as well as the wetland understory.

VI Trees include American beech to 24", red oak to 24" and red maple to 18" with an understory dominated by witch hazel.

V Trees include red maple to 16" and white oak to 20", with a dominant understory of witch hazel.

IV Trees include white oak to 16" and red maple to 12", with many vines of all types on the trees.

III Trees include red oaks to 20", American beech to 6", chestnut oak to 12" and red maple to 15" with understory shrubs including arrowood viburnum.

VIII Trees include white oak to 30", red oak to 30" green ash to 12" and American elm to 10", with much Virginia creeper and poison ivy on the ground.

In general the entire woodland in the proposed residential portion of the site is wooded in a similar habitat – red and sugar maple, red and white oak, American beech in the southwesterly portion of the site, and American elm and black cherry throughout. The mature forest contains the mentioned species from sapling size to 24 to 36 inches in caliper, which suggests an approximate timeframe from the end of agricultural operations from 75 to 100 years ago. These second growth trees are in close proximity of the several larger trees mentioned above, which suggests the approximate timeframe from the cessation of active agricultural operations.

All areas within the proposed residential portion of the site which are to remain are wooded in a generally even cover with little understory as is expected from the heavy overstory provided by the trees which limits the amount of sunlight reaching the forest floor. In areas in which some of the larger trees have fallen through age or storm impact, thus opening up the understory, American elms and black cherry as well as American beech start to become established in addition to the oak and maple seedlings. A very few Canada hemlock are scattered throughout the site, generally in isolated locations, and are very sparse in habitat due to the heavy competition from the larger trees in their proximity.

In retaining these woodland areas between areas of development, some pruning of the trees will be required to remove dangerous dead branches, and the presence of the invasive vines on many of the mature trees is a significant deterrent to viable future grown of these trees. Removal of the invasive vines from all trees in the areas of woodland to remain should be done to enhance the viability of the trees which are to remain.

A set of photographs of typical habitat in each of these areas is attached as Exhibit "W".

Wetland Habitat

Several site investigations have been carried out by the office of Robert G. Torgersen in June and July of 2006 in order to up-date the previously reported findings. The freshwater wetland areas have been re-investigated and the boundaries of them re-established. There have been some additional areas along the pre-existing wetland areas added, and two additional areas of freshwater wetlands have been identified and determined. These additional wetland areas are in the southern portion of the site, near the existing single family housing off Schofield Lane.

Mole salamanders were found in the vernal pool portion of the isolated Wetland C during the initial site ecological investigation. These species are listed as of Special Concern by the NYSDEC, and are, in fact, quite common in native woodlands associated with vernal pools in the northeastern part of the country.

The mole salamanders belong to the family Ambystomatidae, and are represented in the northeast region by four main species: the spotted salamander (*Ambystoma maculatum*), the blue-spotted salamander (*A. laterale*), the Jefferson salamander (*A. jeffersonianum*), and the marbled salamander (*A. opacum*).

Mole salamanders get their name from their subterranean habits (they are commonly found in underground tunnels and burrows produced by small mammals), and their ability to burrow under rocks, logs, moss, and other vegetative debris. It is here they spend their days foraging for a variety of invertebrates, ranging from earthworms to snails to both larval and adult insects. Most of the year, these stout-bodied animals are quite secretive and are unlikely to be seen unless you are actively searching for them. They were found during site investigations in the vernal pool portion of the isolated Wetland C.

In early spring, when the snow is melting, the ground is thawing out, and nighttime temperatures edge above freezing, mole salamanders make their migrations on rainy nights to ephemeral and permanent woodland pools where they congregate to breed (note: marbled salamanders are the only species of mole salamander in our area which migrate to breeding pools in autumn). These migrations occur primarily on rainy nights, and individuals may migrate to woodland pools from as far as 120 meters away, and tend to return to the ponds where they were born. These pools are usually dry for a

portion of the year, thus insuring the absence of fish which prey upon salamander eggs and larvae, and fill up with spring rains, snow melt, and rises in the water table (hence the term "vernal" pool). Once in the ponds, the males will leave their spermatophores on the pond floor, where they will be picked up by the female and used to fertilize her eggs. Eggs are laid in masses which range from the size of golf balls to that of tennis balls, depending upon the species.

Salamander eggs are surrounded by a matrix of jelly, which distinguishes them from frog egg masses in which single eggs are merely clustered together. These eggs will hatch in four to seven weeks, and larvae will feed on small invertebrates in the pond until they metamorphose and move onto land in the autumn. The maintenance of this vernal pool habitat on this site, with some adjoining native woodland, continues to assist in providing some levels of habitat for these salamanders.

In consideration for providing suitable passageways for amphibians, two 6' PVC pipes will be installed under Road "B", along with mountable curbing along both sides of Road "B", to allow for the movements of amphibians from one area to another. These crossing are depicted on the site plan for Lot No. 10.

Carex seorsa, weak stellate sedge, is listed in New York State as a threatened native plant species. This plant species inhabits wetlands in the eastern portion of the United States, from Florida to New York, New Hampshire and Michigan to the north, and extending to Ontario in Canada. Examples of this sedge were found mainly in Wetland D, and in the other wetlands to a more limited extent. It is listed as threatened in this portion of New York State, due to climatic impacts as well as from development impacts that are reducing vernal pool and freshwater wetland habitats. It is found on hummocks in hardwood or hardwood-conifer swamps, red maple woods, and buttonbush depressions, and is often found at edges of woodland pools or at the swamp-upland border.

Threats to the plant species habitat comes from wetland loss and the removal of wooded overstory that provides shade for the wetland ground layer, which permits sensitive plant species to survive in a moist atmosphere. The site development plan has been modified to include preservation of a significant amount of adjoining woodland to remain in the vicinity of all the wetland areas on this site, thus enhancing the survival of this and other wetland habitat plants.

As mentioned previously, design modifications to provide additional areas of undisturbed woodland throughout the site, as well as along portions of existing wetland habitats, will ensure that habitat exists on many parts of this site for a wide range of plant and animal species. Additional planting in areas adjoining these native woodland areas will be installed in a native plant environment – trees, shrubs, grasses and forbs (Map "Y").

To describe the dominant plant communities, the criteria followed were those established in *"Ecological Communities of New York State"* by Carol Reschke produced by the New York Natural Heritage Program and the New York State Department of Environmental Conservation, March 1990.

This property contains two ecologically distinct communities identified in *"Ecological Communities of New York State"* by Reschke. The following is a description of these communities with the specific compositional variations that occur on this property.

Community Type: Red Maple/Hardwood Swamp Heritage Ranking: G5 S4S5

Location

These protected wetland areas occur generally along a stream off Route 9W, and in the middle portion of the property in shallow depressions that are fed with shallow watercourses and will remain undisturbed.

Description

These ecological communities are a type of hardwood swamp that occurs in poorly drained depressions usually on inorganic soils. It is widespread in New York State and is broadly defined with many regional and edaphic variants. Red maple (*Acer rubrum)* is clearly dominant here with only occasional American elms *(Ulmus Americana)* scattered about. The shrub layer here is dense in places and consists mainly of spicebush (*Lindera benzoin),* highbush blueberry *(Viburnum cassinoides*), Shadbush (*Amelanchier sp.), A*rrowood *(Viburnum recognitum),* Sweet pepper bush *(Clethra alnifolia)* and winterberry (*Ilex verticillata)*. The herbaceous layer here contains skunk cabbage (*Symplocarpus foetitius),* tussock sedge (*Carex stricta)*, sensitive fern (*Onoclea sensibilis),* and sphagnum moss (*Sphagnum sp).*

One of the wetland areas, "C" is an isolated freshwater wetland that has no permanent wetland hydrological connection to downslope streams or wetland areas. After two site investigations performed the Army Corps of Engineers on this site, no hydrophytic wetland connection was found that would classify this wetland as jurisdictional.

Community Type: Oak-tulip tree forest Heritage Ranking: G4 S2 S3

Location

This ecological community occurs throughout the site with the minor exception of some open successional meadow areas in the northeastern portion of the site, and the aforementioned freshwater wetlands.

Description

This site is forested with a mature Oak-Tulip tree Forest on the entire site, other than the several smaller red maple wetland areas. This ecological community is all common and reflects hundreds of years of human impacts. All the land on this property shows signs of being residential, logged or grazed as recently as 50 years ago. No parcels of land were found that seem to have been continuously forested. No evidence of any endangered or threatened plant or animal species was found here and the potential for rare species occurring here is quite low. The site to be developed is an upland site that is now mid successional to mature forest. This forest here is composed mostly of early successional, light-loving species (oak, elm, black cherry, etc) and contains old stonewalls, remains of foundations, etc. The largest, oldest trees on this site are red oaks and sugar maples that apparently seeded into open, sunny, pastures or fields about seventy-five years ago.

The Oak-Tulip Tree Forest is a mesophytic hardwood forest that occurs on moist, well drained sites in southeastern New York. The dominant trees include a mixture of five or more of the following: red oak *(Quercus rubra*), tulip tree *(Liriodendron tulipifera),* beech, *(Fagus americana),* black birch, *(Betula nigra),* red maple, *(Acer rubrum),* scarlet oak, *(Quercus coccinea),* and white oak, *(Quercus alba).*

The subcanopy stratum of small trees and tall shrubs are dominated by flowering dogwood *(Cornus florida),* common associates which include witchhazel, *(Hamamalis virginiana),* sassafras, *(Sassafras albidum),* red maple, *(Acer rubrum)* and black cherry, *(Prunus velutina)*. Common low shrubs include maple leaf viburnum, *(Viburnum acerifolia),* northern blackberry *(Rhus allegheniensis),* and blueberries, *(Vaccinium angustifolium, V. palladium).* The shrub layer and groundlayer are very diverse.

Some groundlayer herbs include white wood aster *(Aster divaricatus),* New York Fern *(Thelipteris novaboracensis),* Virginia creeper *(Parthenocissus quinquifolia),* jack in the pulpit *(Arisaema triphyllum),* wild geranium *(Geranium maculatum),* Solomon's seal *(Polygonatum biflorum)* and false Solomons seal *(Smilacinia racemosa).*

The site is located on a higher elevation than the adjoining former railroad bed which borders the site on the west and the north boundaries. A significant elevation change lies between the subject property and the railroad bed, and a similar significant elevation change lies between the railroad bed and the Moodna Creek.

Rare and State Listed Animals, Plants and Ecological Habitats

The site has not changed from the earlier site evaluation, with the exception of many four wheeler tracks throughout the site. No further evidence of the presence of threatened or endangered species were found on this property, based on the lists provided by the Fish and Wildlife Service and of the NYSDEC, Bureau of Habitat.

A request was made on March 5, 2007, to the New York State Dept of Environmental Conservation (DEC), Division of Fish, Wildlife & Marine Resources, New York Natural Heritage Program for information regarding the possible presence of rare or state listed animals and plants, significant natural communities, and other significant habitats on this site, or in the immediate vicinity of this site.

The NYS DEC responded by letter dated March 19, 2007 (Exhibit "I"), with a list of several plant and animals within a quarter mile of the subject site. The Hudson River, and the Moodna Basin estuary marsh are within the area of concern. The elevations on this site vary from approximately 150 to 200, which is considerably above any Hudson River and related estuary habitat. The species of concern listed by the DEC are:

Estuary Beggar Tick, located in the Moodna Creek tidal mud flats.
Bald Eagle – normally inhabits rocky outcrops along the Hudson River.
Least bittern – tidal estuary and mud flat habitats
Marsh intertidal mudflat habitat – adjacent to Hudson River
Brackish tidal marsh – adjacent to Hudson River
Shortnose Sturgeon – Hudson River
Atlantic Sturgeon – Hudson River
Waterfowl Winter Concentration Area – Moodna Creek mouth and Hudson River
Anadromous Fish Concentration Area – Hudson River
Spongy Arrowhead – mudflats north of the Moodna Creek mouth and vicinity

As evidenced by the species and their habitat, there are no listed species that could occur on the Cornwall Commons site. The Federal Fish and Wildlife Service has listed the Indiana Bat and the Bog turtle as possible inhabitants in Orange County.

Specific site investigation was undertaken for the possible presence of the Indiana Bat and the Bog Turtle, both of which are endangered species in Orange County. A site investigation was conducted on July 19, 2006 for the purpose of investigating the possible presence of Indiana Bat habitat, (*Myotis sodalist)* and of possible Bog Turtle, (*Clemmys muhlenberghii)* habitat within or near the subject site. The USF&W has identified these species as endangered in New York State.

Indiana Bat

The Indiana bat is one of nine bat species found in New York. With the coming of spring, Indiana bats disperse from their winter homes, known as hibernacula, some going hundreds of miles. Indiana bat hibernacula and hibernacula characteristics have been well documented by numerous observational studies reported in the literature. Indiana bats spend the winter months in secluded caves or mines. There are eight hibernacula currently known in Albany, Essex, Warren, Jefferson, Onondaga and Ulster Counties. To date there are three known hibernacula located in the immediate vicinity of Kingston, New York. The hibernacula are critical to the survival of this species because so few are known to exist. The USFWS and NYSDEC are continually documenting habitat utilization by this species once emergence occurs. In August or early September, Indiana bats swarm at the entrance of selected caves or mines. This is when mating takes place. Indiana bats spend the winter months in these secluded caves or mines which average 37 to 43 degrees F. Criteria for selecting hibernacula are not clearly understood; many apparently suitable sites are not occupied. Where this species is found, however, it can be extremely abundant, congregating in densities of more than 300/square foot. Year after year, bats often return to exactly the same spots within individual caves or mines. Hibernation can begin as early as September and extend nearly to June.

Outside the hibernation period, Indiana bats are very mobile and use both live trees greater than 5 inches dbh especially containing dead wood and snags or dead trees in a variety of habitats for roosts during the summer months. They feed solely on flying insects during the summer months, and presumably males spend the summer preparing for the breeding season and winter that follows. Females congregate in nursery colonies, only a handful of which have ever been discovered. These nursery colonies found in the lower Hudson Valley vicinity were located near sources of open water, along the banks of streams or lakes in forested habitat, or adjacent to freshwater wetland areas, under the loose bark of mature shagbark hickory trees, and in some cases, in dead trees, mainly black locusts, that have open or hanging bark to provide shelter for the bats, and which can contain from 50-100 females. Although roosts have been documented in a wide array of hardwood and pine species, trees and snags that have exfoliating bark or crevices, such as Shagbark Hickory and Black Locust, appear to be most important to this species because females and their young rest under the bark. Trees, equal to or greater than 9 inches dbh with exfoliating bark and/or crevices, southern or western exposure, and solar exposure (tree structure above canopy) appear to be the most important habitat for maternal colonies during the summer months. Each of the sites so far identified, have been in mature Shagbark Hickories that are located near existing wetland that contains some open water or near streams or pond areas.

According to the literature, roost-tree density necessary to support Indiana bats is not understood and negative or positive biological thresholds linked to roost abundance are unknown. Similarly, there are no quantitative studies that adequately describe species composition of forest stands or stand

structure surrounding occupied roosts. There is evidence however that Indiana bats return to the same summer foraging and roosting areas and sometimes to an individual tree each year.

Habitat Assessment/Conclusion

The property was also surveyed for the presence of Indiana Bat summer roost and maternal colony habitat. This assessment included field observation of the existing habitat covers types on the property. Field evaluation was conducted by walking through all of the habitats on the site that meet the criteria for summer habitat for the Indiana Bats. The following methodology was performed:

1. Sampling routes throughout the property in areas that provide the necessary environmental conditions for summer habitat, to cover all of the identified vegetation cover types were established from plan inspection and on site evaluation.

2. These sampling routes were walked and trees greater than 9 inches dbh were investigated. Trees meeting the above criteria were examined to determine their suitability to support Indiana Bats such as exfoliating bark, holes, cavities, and crevices.

3. General conditions of surrounding habitat were also reviewed to determine tree location, size, and position in habitat.

The property is considered not to contain potential habitat for the Indiana Bat. It is understood that to avoid any possible direct impacts to individual Indiana Bats, removal of trees for construction activities or within building envelopes will occur during the time period from October 1 to March 30. No further mitigation is proposed concerning Indiana Bat habitat.

Bog Turtle

The bog turtle is New York's smallest turtle, reaching a maximum length of 4.5 inches. It is one of seventeen species of turtles found in New York State, including marine turtles. The secretive bog turtles are the smallest species in the Genus *Clemmys*, with the maximum length not exceeding 4.5 inches. The carapace is domed and from light brown to ebony, with scutes often having lighter-colored centers in a starburst pattern. The distinguishing feature is a large, conspicuous, bright orange, yellow, or red blotch on each side of the head. This blotch is present from birth in both sexes.

The Bog Turtle normal habitat extends from New York and Massachusetts south to southern Tennessee and Georgia. This is a semi-aquatic species, preferring habitat with cool, shallow, slow-moving water, deep soft muck soils, and tussock-forming herbaceous vegetation.

In New York, the bog turtle is generally found in open, early successional types of habitats such as wet meadows or open calcareous boggy areas generally dominated by sedges (*Carex spp.*) or sphagnum moss. Like other cold-blooded or ectothermic species, it requires habitats with a good deal of solar penetration for basking and nesting. According to a variety of sources, Bog Turtles' preferred habitat includes shallow, spring-fed fens, sphagnum bogs, swamps, marshy wet meadows with soft, muddy, organic bottoms, slow moving water, and open canopies bordered by shrub and red maple swamps. Plant species found in association with bog turtles include shrubby cinquefoil (*Potentilla fruticosa*), sedges (*Carex* spp., especially *Carex stricta)*, sphagnum moss (*Sphagnum*

spp.), and skunk cabbage (*Symplocarpus foetidus)*. The turtles frequently lay eggs atop tussock sedges in areas with open canopies and sparse shrub vegetation that would not shade the nests.

According to NYSDEC and the Natural Heritage Program (2003) optimal habitat (in New York) has the following attributes:

- <25% canopy cover;
- Headwater or spring head water sources;
- Muddy substrate;
- Shallow, uneroded rivulets;
- Cinquefoil, sedges, rushes, sphagnum moss;
- No obvious threats or evidence of negative impacts to wetland in the past.

Habitat suitability declines as canopy cover increases and threats and impacts to the wetland increase in severity or proximity. Degraded water quality, due to siltation and eutrophication, is a primary threat to the turtles, as well as successional processes that lead to closed canopies, human influenced habitat changes, and collecting.

Habitat Assessment/Conclusion

The Phase 1 Bog Turtle habitat suitability assessment followed the protocols outlined by the Fish and Wildlife Service (2001).

The project area and immediately adjacent observable areas were reviewed to determine if suitable hydrology, soils, and vegetative structure that constitute bog turtle habitat occurs on the site. Each of the wetlands on this site was evaluated for the habitat requirements that could support a bog turtle population. There were no open wetland areas or low growing areas that contained cattail and generic tussock sedge sometimes linked to bog turtle reproduction. These areas were extensively evaluated and determined not to be potential bog turtle habitat as no fen indicator species were observed and the hydrology and substrate material were too variable or unstable to support bog turtle specimens.

2. **Mitigation Measures**

a. Landscape Plan

A landscape plan will be prepared showing the location, approximate number and type of landscaping proposed. It is expected that the proposed landscape treatments within the developed areas, including installation of shade trees throughout the project to create a new canopy of tree cover, will minimize any potential adverse impacts of the visual change. While the project will remove portions of the existing tree cover, the developed portion of the project as proposed will remain obscured from view by the buffer of existing trees that are proposed to remain on the northern portions of the site and, therefore, will not significantly affect the viewshed from scenic trails and homes adjacent to the site

(See Section I for additional information). The applicant has increased the wooded surrounding buffer on the northern portion of the project site to mitigate any potential impacts.

During site plan review, site specific landscaping plans for a typical lot and street will be provided depicting the specific types of plantings and locations, which will include foundation plantings and street trees. All landscaping shall be properly maintained and shall be approved by the Planning Board. A schematic planting design has been prepared for the recreation area, single family, townhouse, and condominium housing areas (Exhibit "M").

On Lot No. 10, approximately 1,036 trees and 4,828 shrubs will be planted on the project site based upon the landscaping plans contained in Exhibit "M". The breakdown is as follows:

Naturalistic Planting Areas – 373 trees and 559 shrubs;
Single family units – 314 trees and 3,768 shrubs (1 tree and 12 shrubs per yard);
Attached single family units – 36 trees and 86 shrubs;
Multifamily area – 177 trees and 357 shrubs;
Club house – 90 trees and 58 shrubs; and
Park area between multi-family Road "S" – 46 trees.

Removal of trees for construction activities or within building envelopes will occur during the time period from October 1 to March 30 in order to avoid possible direct impacts to individual Indiana Bats.

G. Traffic and Transportation

1. Existing Conditions

Cornwall Commons is proposed as a mixed used development which will be developed on properties located on the west side of U.S. Route 9W in the vicinity of the NYS Route 218 (Academy Avenue) Interchange (See Figure No. 1 in the Traffic Report Exhibit "E"). Access to the site will include the construction of a new roadway connecting with U.S. Route 9W north and south of the NYS Route 218 Interchange to provide two access points to U.S. Route 9W. A design year of 2010 has been used for analysis purposes.

The Traffic Impact Study had evaluated a future design year of 2010 which was chosen to account for other development traffic and background growth as well as the anticipated completion of the project. Based on current traffic growth rates and the inclusion in the study of the traffic from other proposed projects which have not yet been built, the volumes contained in the Traffic Impact Study are representative of a longer design period which is more consistent with a 2014 to 2015 timeframe. For example, the Traffic Impact Study included the full traffic generation from the Chestnut Woods Development which has not yet commenced construction and full occupancy of that project is more consistent with the 2015 timeframe.

a) **Description of Existing Traffic Network**

Roadway Description

The site is located along the west side of U.S. Route 9W. A description of U.S. Route 9W and other area roadways is provided below.

U.S. Route 9W

U.S. Route 9W is a major north/south roadway which traverses throughout Orange County. In the vicinity of the site, the roadway consists of two lanes per direction and has a grade separated interchange with NYS Route 218. North of the site, there is an intersection with Forge Hill Road and south of the site, U.S. Route 9W has an Interchange connection with Willow Avenue (C.R. 32). The posted speed limit on this section of roadway currently varies between 45 and 55mph.

The New York State Department of Transportation (NYSDOT) has plans for long term improvements to the U.S. Route 9W Corridor and will generally involve safety related improvements for this section of the Corridor. The NYSDOT in the interim has installed a traffic signal at the U.S. Route 9W/Forge Hill Road intersection and has incorporated striping changes on the northbound approach to provide a separate left turn lane.

Forge Hill Road (County Route 74)

Forge Hill Road intersects with US Route 9W at a signalized intersection. The U.S. Route 9W approaches consist of two lanes while Forge Hill Road consists of one lane in each direction.

NYS Route 218

New York State Route 218 (Academy Avenue) originates at a grade separated interchange with U.S. Route 9W adjacent to the site. This section of roadway consists of one travel lane per direction and has a posted speed limit of 35 mph. The roadway continues in a southeasterly direction providing access to Cornwall. The roadway continues further to the south eventually connecting again with Route 9W.

Willow Avenue (County Route 32)

Willow Avenue (C.R. 32) intersects with U.S. Route 9W at a grade separated Interchange. In the vicinity of the interchange, Willow Avenue consists of one lane in each direction. The ramp connections are channelized and controlled by a series of “stop” and “yield” signs.

Mailler Avenue

Mailler Avenue is a two lane local roadway which originates at an intersection with Willow Avenue, continues in a northeasterly direction intersecting with several other local roadways and terminates at a “T” intersection with NYS Route 218 (Academy Avenue).

Existing Conditions Manual Traffic Surveys

In order to establish the existing traffic volumes on the area roadways, all available traffic count data was collected from the NYSDOT. In addition, manual traffic counts were conducted by representatives of John Collins Engineers, P.C. at the various intersections which were identified as part of the Scoping Document. These intersections included the following:

- U.S. Route 9W and NYS 218 (Academy Avenue) Interchange
- Academy Avenue (NYS Route 218) and Main Street
- U.S. Route 9W and Caesar’s Lane
- U.S. Route 9W and Forge Hill Road
- Willow Avenue (C.R. 32) and U.S. Route 9W Interchange
- Academy Avenue (NYS Route 218) and Mailler Avenue

Existing Peak Hour Traffic Conditions for AM and PM Peak Hours

The traffic counts at these intersections were conducted during various periods during 2005 and 2006. The counts were conducted on typical Weekdays and covered the morning and afternoon peak hours. Based on the results of the existing traffic volumes the following peak hours were determined to be critical with respect to analysis.

- Weekday Peak AM Highway Hour -- 7:30 AM - 8:30 AM
- Weekday Peak PM Highway Hour -- 4:30 PM - 5:30 PM

The resulting Year 2006 Existing Traffic Volumes for each of these intersections are shown on Figures No. 2 and 3.

Analysis During Peak Periods

A capacity analysis was conducted at each of the intersections using the procedures described below.

Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the 2000 Highway Capacity Manual, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service "A" represents the best condition and a Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

Unsignalized Intersection Capacity Analysis

The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the 2000 Highway Capacity Manual. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the Level of Service, the average amount of vehicle delay is computed for each critical movement to the intersection.

Using the above procedures, a capacity analysis was conducted at each of the key intersections. The results for the existing conditions results are summarized in Table No. 2 in the Traffic Report, Exhibit "E".

2. **Future Traffic Conditions**

a) 2010 No-Build (Without the Project) Conditions

AM and PM Peak Hour Volumes

In order to develop the design year No-Build Traffic Volumes, the existing traffic volumes were projected to the future design year utilizing a background growth factor of 2% per year. This growth factor was developed based on a review of historical data compiled by NYSDOT. The resulting Year 2010 Projected Traffic Volumes are shown on Figures No. 4 and 5. In addition, as specified in the scoping document, the traffic for other planned developments in the area including Chestnut Woods, Winding Creek and Willow Woods were estimated and then added to the Projected Traffic Volumes to obtain the 2010 No-Build Traffic Volumes. The other development volumes are shown on Figures No. 6 and 7 and the resulting Year 2010 No-Build Traffic Volumes are shown on Figures No. 8 and 9 for each of the Peak Hours, respectively.

Analysis of Peak Hour Conditions for 2010 No-Build

Using the same analysis procedures described in Section A.1.a (4), each of the intersections were analyzed for the 2010 No-Build conditions. The results are summarized in Table No. 2 and Section A.4.b) provides a description of each intersection.

b) **Area Traffic Improvements**

The New York State Department of Transportation has installed a traffic signal at the intersection of U.S. Route 9W and Forge Hill Road and has restriped the northbound approach to provide a separate left turn lane. Other long term corridor improvements have been identified for this area and are included on the Transportation Improvement Plan (TIP). At this time, the primary focus of the NYSDOT improvements are intersection, maintenance and upgrades of existing structures. There is not specific timetable for the long term corridor improvements. In addition to the recent resurfacing of this area of Route 9W, a traffic signal is planned to be installed which is at the intersection of Route 9W and Laurel Avenue south of the project area. The Traffic Impact Study did include consideration of the recent signal and striping improvements at the intersection of Route 9W/Laurel Avenue. This improvement will accommodate the additional traffic from the Cornwall Commons Development.

3. **Capacity Analyses** (Table No. 2)

A capacity analysis was performed at each of the intersections utilizing the procedures described above in order to evaluate current and future operating conditions for the area roadways. The results are summarized in Table No. 2. A description of each of the intersections is presented in Sections 4b and 4c.

4. **Potential Impacts (2010 Build – With Project)**

a) Site Generated Traffic Volumes (Table No. 1)

The proposed development includes both residential and commercial development component. Information published by the Institute of Transportation Engineers (ITE) as contained in their report entitled Trip Generation, 7th Edition, 2003, was utilized to develop the Peak Hour traffic volumes. The Peak Hour trip generation rates and corresponding site generated traffic volumes for the development are shown in Table No. 1. It should be noted that the peak traffic generation for the currently proposed project is significantly lower than that analyzed in the original GEIS.

b) Arrival and Departure Distributions (Figures No. 10, 10A, 11 and 11A)

Based on a review of existing traffic volumes and a review of population and employment centers in the area, the arrival and departure distributions were developed. Figures No. 10 and 11 show the distributions for the development. Note that these distributions reflect the utilization of the Route 9W/Route 218 (Academy Avenue) Interchange in order to accomplish left turn movements to and from the site and are herein referred to as Access Scenario No. 1. The second access scenario (Access Scenario No. 2), considers the creation of a full movement signalized intersection connection with US Route 9W at the southerly location. The expected traffic distributions for this access scenario are shown on Figures No. 10A and 11A.

c) 2010 Build Traffic Volumes (Figures No. 12 through 15)

The site generated traffic volumes were assigned to the roadway network utilizing the above referenced arrival and departure distributions. The resulting site generated traffic volumes for Scenario No. 1 are shown on Figures No. 12 and 13. These volumes were added to the Year 2010 No-Build Traffic Volumes to obtain the Year 2010 Build Traffic Volumes. The resulting Year 2010 Build Traffic Volumes are shown Figures No. 14 and 15 for each of the peak Hours.

Similarly, the site generated traffic volumes for the Access Scenario No. 2 are shown on Figures No. 12A and 13A. These site generated traffic volumes were added to the Year 20010 No-Build Traffic Volumes to obtain the Year 2010 Build Traffic Volumes for Access Scenario No. 2. The resulting Year 2010 Build Traffic volumes for Access Scenario No. 2 are shown on Figures No. 14A and 15A.

d) **Capacity Analysis of Future Build Conditions**

Copies of the capacity analysis are contained in Appendix "C" of the Traffic Report, Exhibit "E". Table No. 2 provides a summary of the Levels of Service for the Year 2006 Existing, 2010 No-Build and 2010 Build Conditions.

1. U.S. Route 9W and Caesar's Lane

Caesar's Lane intersects at a "T" intersection with U.S. Route 9W southbound. Capacity analysis conducted at the intersection utilizing the existing traffic volumes indicates Levels of Service "C" for traffic entering and exiting Route 9W. The capacity analyses were re-computed for the future conditions. A review of future analysis indicates that Levels of Service "C" or better will be maintained in the future 2010 No-Build and Build conditions.

2. US Route 9W and Forge Hill Road

Forge Hill Road intersects with U.S. Route 9W at a signalized intersection. The U.S. Route 9W northbound approach consists of two lanes including a left and a through/right lane. The Route 9W southbound approach consists of a separate left, a through and a through/right turn lane. The Forge Hill Road eastbound approach is one lane and the westbound approach also has a short right turn lane. Capacity analysis conducted at the intersection indicates that under current conditions. Levels of services "D" are experienced during the PM Peak Hour.

Capacity analysis conducted at the intersection utilizing future traffic volumes indicates that under the future No-Build conditions, overall Levels of Services "D" or better are expected for the intersection. However, during the PM Peak Hour, the northbound approach will experience a Level of Service "E" and "F".

To improve operations, modifications to the existing traffic signal timings could be implemented. Capacity analysis conducted at the intersection utilizing the future No-Build and Build traffic volumes with these changes indicates that overall Levels of Service "D" will be experienced.

The New York State Department of Transportation as part of their long term improvement project, is planning to provide additional lanes to improve the operation and safety of the intersection.

3. U.S. Route 9W and North Site Access Road

In the vicinity of the north site access road, U.S. Route 9W consists of two lanes in each direction. When constructed, this roadway should consist of a right turn entry and right turn exit connection to Route 9W southbound.

Capacity analysis conducted at the intersection indicates that acceptable levels of service will be experienced at the intersection under future conditions. The final design of this intersection will be detailed with NYSDOT as part of the Highway Work Permit process.

4. U.S. Route 9W and NYS 218 Interchange

NYS Route 218 (Academy Avenue) intersects with US Route 9W at a full movement interchange. The analysis conducted for existing conditions indicates that Levels of Service "B" or better are currently experienced during the weekday AM and PM peak hours.

The future conditions were evaluated for No-Build and Build conditions. A review of these analyses indicates that Levels of Service "D" or better will be obtained at the intersection under the future conditions. It is also recommended that additional signing be installed in advance of the interchange areas to direct traffic to and from the local area roadways including the new access road which will serve the site.

5. U.S. Route 9W and Southerly Site Access Road

The new southerly site access road will intersect with Route 9W south of the 218 Interchange. This intersection has been analyzed for two conditions including a full movement signalized intersection (Scenario No. 2). When constructed this intersection should consist of one entering and two exiting lanes and require the construction of separate left and right turn lanes on Route 9W. Capacity

analysis conducted at this intersection utilizing future traffic volumes indicates that overall Levels of Service "B" will be experienced.

6. Academy Avenue and Mailler Avenue

Academy Avenue intersects with Mailler Avenue at a "stop" sign controlled intersection. Capacity analysis conducted at the intersection utilizing existing traffic volumes indicates a Level of Service "C" or better during peak periods. A review of the analysis indicates that for the future No-Build condition Levels of Service "C" or better will be maintained at the intersection.

The future Build conditions were re-analyzed utilizing the Build traffic volumes. A review of these analyses indicates these Levels of Service "C" or better will be maintained at the intersection under future conditions.

7. Academy Avenue and Main Street/Faculty Road

Academy Avenue and Main Street/Faculty Road intersect at a stop sign controlled intersection. All approaches to the intersection consist of one lane. Capacity analysis conducted at the intersection utilizing the existing traffic volumes indicates that the northbound left turn movement currently operates at a Level of Service "F" during peak hours.

In order to improve operating conditions for this left turn movement, the installation of a traffic signal would be required. Therefore, it is recommended that this intersection be monitored in the future to determine if traffic signal warrants will be satisfied. If satisfied, a fair-share contribution towards the signalization should be made by the Applicant. Monitoring of the Academy Avenue/ Faculty Road intersection is suggested regardless of the proposed project.

The intersection was re-evaluated assuming signalization utilizing the 2010 No-Build and 2010 No-Build traffic volumes. A review of these analyses indicates overall Levels of Service "B" will be obtained.

8. U.S. Route 9W and Willow Avenue

Willow Avenue intersects with US Route 9W at a grade separated interchange. The ramps are located in the northwest and southeast quadrants of the interchange. The ramp connections to Willow Avenue are both stop sign controlled and channelized. Capacity analysis, conducted at the intersections indicate that during peak periods traffic exiting the ramps is currently operating at Level Service "C" or better. A review of the 2010 No-Build and Build analysis indicates that similar levels of service will be maintained at the interchange signing and striping improvements should be considered at these intersections.

5. **Mitigation Measures**

Based on a review of the field conditions in the vicinity of the site, as well as a review of the results of the capacity analysis, the following is a summary of the findings and recommendations relative to the proposed development.

a) The construction of the new access road connection to Route 9W will have to be coordinated with the New York State Department of Transportation. Under the current development plan,

the site can be served via a right turn entry and right turn exit at the northerly portion of the property. The access related improvements at the connection to Route 9W will be the sole expense of the applicant. The southerly access (Scenario No. 2) includes the provision of a full-movement signalized intersection. This improvement will include construction of separate turn lanes on Route 9W as well as the installation of a new traffic signal. The access improvements, including separate left and right turn lanes will be constructed within the existing Route 9W right-of-way or on lands under the control of the applicant.

b) The New York State DOT has evaluated improvements to the Route 9W corridor, which includes the intersection of Route 9W and Forge Hill Road, for safety and capacity type improvements including additional land widening. It is expected that the improvements will include extension of acceleration and deceleration lanes at the 218 interchange. No specific design plans are yet available from NYS DOT. In the interim, the applicant will contact NYSDOT to implement traffic signal timing improvements to improve the efficiency of the signal operation.

c) As a result of the capacity analysis, certain intersection improvements were identified as described in the previous section. These should be implemented with or without the development of the project. For example, at Willow Avenue and Route 9W, additional pavement markings including striped crosswalks and stop bars are recommended. Based on the amount of traffic generated by the project at these locations, a fair-share contribution could be made for the improvements. The contribution will be computed based on the percentage of the total intersection volume that the site generated traffic represents during the PM Peak Design Hour. For example, at Willow Avenue and Route 9W, additional pavement markings including striped crosswalks and stop bars are recommended. If the project traffic is 20 vehicles of the 200 total vehicles through the location, the applicant would be responsible for 10% of the cost of the improvements.

d) At the existing intersection of the Route 9W northbound on/off ramp connection to Route 218, this intersection should be modified to allow exiting movements along Route 218 in both directions. Under existing conditions there is an unpaved area which is occasionally utilized by vehicles; however this should be modified to provide a standard intersection.

e) In addition to the above items, several of the intersections in the vicinity of the site should be improved by the addition of the new pavement markings including stop bars, painted stop bars, etc. Furthermore, the sight distance at some of the locations could be improved by the pruning of the existing vegetation located within the right-of-way. These improvements should be implemented regardless of the proposed development.

f. The intersection of Academy Avenue and Faculty Road was identified as an unsignalized intersection which experiences long peak hour delays. It is not unusual at unsignalized intersections for the side road approach to experience such delays. In order to improve this condition, a traffic signal would have to be installed. However, based on current traffic volumes the intersection does not satisfy NYSDOT traffic signal warrants. For the signal warrants to be satisfied, increases in traffic volumes would have to occur. If warranted, increases in traffic volumes would be the result of background traffic volume increases including any additional traffic from the Cornwall Commons project. Thus, it is recommended that the traffic volumes for the intersection should be collected and submitted

to NYSDOT at a later date. The applicant will monitor the traffic volumes at the intersection after the completion of the Lot 10 development and submit them to NYSDOT.

6. **Public Transportation**

Public transportation services in the vicinity of Cornwall Commons are currently limited. Coach USA/Shortline does operate limited service along the Route 9W corridor. The Cornwall Commons Site Plan has been designed to accommodate buses along the main boulevard access. Any buses coming from Route 9W both northbound and southbound can use the "loop road A" to circulate on-site for the commercial portion of the project. A bus pick up area has been located along the loop road, near the main entrance, to allow for public transportation to be used by residents.

7. **Pedestrian Traffic**

The site plan has been designed to provide sidewalks in the main commercial areas as well as in the areas surrounding the congregate care portion of the site. Sidewalks will be provided along the interior of the project site, along one-side of most of the roads, to allow for the residents to walk the neighborhoods, and to the club house. Sidewalks have also been located on the interior of landscaped park areas. The site will also consist of trails in several of the open areas to allow for the residents to walk through the natural undisturbed areas, providing them access to other areas of the community without walking along the roads. Sidewalks will be extended along the entrances to the project, allowing for the residents to cross over to the sidewalk located along the easterly side of the loop road. This will allow for the local residents to walk to the commercial areas located along the loop road, and in turn reduce traffic on the loop road and interior road system.

The residents can also use the interior site sidewalks and trails to connect to existing access routes. For example, there will be a traffic light installed on the main entrance of the project to allow pedestrians and bicyclists to cross Route 9W, residents could then travel along Mailler to Willow Avenue to Main Street, to shop in the downtown area. Downtown Cornwall includes the north and south sides of Main Street (County Road 9) between Chadeayne Traffic Circle on the west (Hasbrouck Avenue) and Cornwall Baptist Church on the east (Tamara Lane). This area includes a mix of residential, retail, office and local commercial uses, as well as the post office, library, Town Hall, various restaurants and the Cornwall Hospital.

A walking route will also be designated via Frost Lane to Willow Avenue to Main Street to encourage pedestrian travel between the business district and Cornwall Commons. Pedestrian access to the Cornwall Campus of St. Luke's Cornwall Hospital and both its proposed cancer center and medical office building will be along the same traveled routes that are now used by members of the community who avail themselves of those services.

Cornwall Commons is not designed to be an entirely self-contained residential living area. The facilities and services of the Cornwall Public Library, the Cornwall campus of St. Luke's Cornwall Hospital facility and other community services, the Town of Cornwall, Town Hall services and facilities, and Donahue Hudson Riverside Park, will continue to provide those services and facilities on a community wide basis. Since the access to all those community facilities and services is via private passenger vehicle for present residents, the Cornwall Commons residents are likely the follow the same precedents. The on-site clubhouse will maintain a display area in a prominent location accessible to the residents to provide information concerning the greater Cornwall community

activities. A community bulletin board will be maintained for posting of notices and communications received concerning community services and activities which should include all community organizations, public announcements and notices.

8. **Emergency Access**

The project is designed with two (2) roadway connections to Route 9W. This allows for emergency vehicle access to the overall site. The residential portion of the project is also served via two (2) connecting points to the main boulevard (Road A) servicing the property. The internal roadways have been designed to accommodate fire vehicles and other emergency service vehicles. In the residential portion of the site, a series of loop roads are provided to limit the potential for blockage along any particular roadway. This provides alternate routing for emergency vehicles throughout the project.

H. Air Quality

The short term use of heavy equipment on the site during construction will result in a temporary minor increase in pollutant emissions, including dust from site clearing excavation, demolition and grading operations. Best construction management practices will be employed to reduce sources and extent of such emissions.

Regarding traffic, the project will not result in a reduction in the levels of service and, therefore, there will be no increase in vehicle delay. The proposed access improvements will provide a level of service "C" or better after the completion of the project. The project will not have a significant adverse impact on air quality.

I. Visual Resources/Cultural Resources: Existing Conditions, Impacts, Mitigation

1. Existing Conditions

The visual assessment that is presented below has been conducted in accordance with the NYSDEC guidelines relating to visual impact assessments. "View shed" is defined as the geographic area from which a "facility" or project may be seen. A significant aesthetic resource is a designated place visited by the public for the purpose of enjoying its beauty. A resource may be designated by a locality, a state agency, or a federal agency.

A visual assessment is an analytical technique that determines the view shed of a particular project, identifies aesthetic resources within the view shed, determines the potential impact of the project on the aesthetic resources, and identifies strategies to avoid, eliminate or reduce adverse impacts. The visual assessment may incorporate line-of-sight profiles or photographs to demonstrate potential visibility of a facility from a sensitive viewpoint.

Variables associated with the actual visual experience include but are not limited: atmospheric perspective (diminishing clarity and contrast of view due to atmospheric interference), and size perspective (reduction of apparent size of objects as distance increases). It is noted that mere visibility of a facility/development, even startling visibility, does not automatically mean it has an adverse visual or aesthetic impact. Aesthetic impact occurs when there is a demonstrated detrimental effect on the public enjoyment of an aesthetic resource. Visual impact occurs when mitigation

measures, or the mitigating effects of perspective, do not adequately reduce the visibility of a facility from an aesthetic resource to an insignificant level.

Visual Assessment Receptors

The visual assessment includes a photographic survey of the sensitive areas, in conjunction with a series of line-of-sight profile cross-sections (Exhibit "B") of the following key locations specified by the Scoping Document adopted on January 9, 2007:

- Palisades Interstate Park Commission (PIPC) gorge trail/pending Moodna Greenway-Recreational Corridor, located to the west of the site across the Moodna Creek;
- Knox's Headquarters State Historic Site, located on Old Forge Road, just south of Route 94;
- Spaulding Farm, a residential property and cluster of associated out-buildings located northeast of the site at 67 Forge Hill Road;
- Two proposed site accesses from US Route 9W. The entrances are designated in the figures as the "North" and "South" entrances.

Photographic Survey

The photographic survey was conducted by Tim Miller Associates, Inc. on April 11, 2007 under off-leaf conditions. The objective of the photographic survey was to determine what, if any, portions of the site are likely to be visible from the key receptor locations listed above.

Gorge Trail Photos

A series of photos were taken from the west bank of the Moodna Creek, along the slope at elevations of approximately 120 to 130 feet. The photo locations were specifically chosen to correspond to the points marked as 'Assumed Trail Positions "A" and "B"' on the *Sight Distance Analysis* map, prepared by Lanc & Tully Engineering & Surveying, dated April 6, 2006 and revised October 23, 2006. An additional photo was obtained, at an elevation of approximately 140 feet, from along the tributary trail descending down from Knox's Headquarters to the Moodna Creek.

At Position "A", the foreground depicts a line of fairly densely packed deciduous hardwoods that continue down the slope to the Moodna flood plain, at which they thin out considerably. The opposite slope across the Moodna Creek appears to contain a densely packed cover of deciduous hardwood trees with a canopy height estimated to be approximately 40 to 60 feet. The former rail bed of the New York Ontario & Western Railroad barely can be seen at this location. The proposed project will benefit from the additional 200 feet of screening the intervening natural vegetation provides prior to the limit of disturbance line.

The conditions at Position "B" are similar to Position "A", however the hardwood trees in the foreground are mixed in with several evergreens, screening the view of the opposite bank to an even greater extent. Here, as in Position "A", it is very difficult to view the opposite bank of the Moodna Creek gorge. The proposed development would be well screened by the natural vegetation on both sides of the Creek.

Knox's Headquarters

The view from the Knox's Headquarters structure is approximately level with the roof line of the proposed buildings on the Project Site. As shown on the photo, the lawn in the foreground extends approximately 300 feet to the edge of a hardwood forest. The forest covers the Knox HQ grounds for another 300 feet, after which the topography abruptly descends to the Moodna Creek gorge. The project site screening is provided primarily by the tree trunks and low-lying shrub vegetation on the Knox side of the Creek. From the vantage point at the Knox's Headquarters structure, the buildings shall be adequately screened by the existing vegetation.

Spaulding Farm

Spaulding Farm is located on the south side Forge Hill Road, approximately 2,200 feet from the intersection with U.S. Route 9W and Forge Hill Road. The farm consists of a main residence with several outbuildings and surrounding lawn/field areas which are relatively flat. Approximately 800 feet from Forge Hill Road, behind the Farm, ground elevation rises sharply up a forested slope to the edge of a plateau. Both photographs taken from Forge Hill Road at #67 Spaulding Farm show the dense vegetation covering the slope and lining the perimeter overlooking the Farm. As the project site is beyond the tree line, the existing vegetation will screen views from this area.

The areas surrounding this farm consist of a very large, basic industrial building. It had little if any aesthetic appeal when it was built and used over many years (purportedly up to 50 years old). The building is now in disrepair and if the hazardous waste site designation is removed, the improvements are to be demolished. Similarly, four single-family wood frame homes in extreme disrepair adjoin the farm to the west. Across the street a large area along the highway has become the repository of various kinds of fill materials in mounds and piles that are from time to time spread and then replaced.

North and South Entrances on NYS Route 9W

Four photos are provided representing views from the north and south at both proposed accesses to the site from Route 9W. The project buildings will be visible from Route 9W, a major high traffic roadway. Landscaping will add aesthetic benefits, however total screening is not appropriate since the view of the project site from Route 9W is not an aesthetic resource.

Line of Sight Profiles

Line of sight profiles were developed to demonstrate changes in views from seven locations: one from the Knox's Headquarters building, two from the proposed trail on the north side of the Moodna Creek, and four from the vicinity of 67 Forge Hill Road. The profiles reveal the topographic changes that will occur on the project site and identify the natural vegetation that would remain. Circa 2004 aerial photos obtained from the NYS GIS Clearinghouse were used in conjunction with the Site Plan provided by Lanc & Tully Engineering, dated November 2007. The aerials assisted in defining the boundaries of the existing forested areas as represented in the profiles.

The building heights shown in the Line of Sight cross-sections represent the proposed structures from the ground floor to the top (peak) of the roofs – approximately 35 feet. The heights were confirmed by the project architect. By showing the structures as "boxes", the profiles therefore represent the

worst-case scenario (or greatest potential impact to the lines of sight), as the heights are depicted across the entire building footprint, and not at a single peak.

Knox's Headquarters

The line of sight profile from Knox's Headquarters demonstrates that approximately 400 feet of intervening forested area exists at the southern end of the lawn fronting the Headquarters, prior to the topography sloping downward to the Moodna Creek gorge. The buffer of vegetation on the opposite slope will also serve to screen the site structures.

PIPC Moodna Gorge Trail

Two line of sight profiles were prepared from the locations marked as Assumed Trail Position "A" and "B", at elevations of approximately 120 to 130 feet along the slope above the northeast bank of the Moodna Creek. The profiles demonstrate that 150 to 200 feet of hardwood forest exists directly within the line of sight along the slope to the north of the site. This intervening vegetation provides an adequate screen of the project site under off-leaf conditions.

Forge Hill Road/ Spaulding Farm

Four line of sight profiles were prepared for the key views located at 67 Forge Hill Road (a.k.a. Spaulding Farm). Three of the profiles originate at the edge of the roadway fronting the property and were positioned to intersect the buildings closest to the receptor locations. Profiles E-E', C-C' and D-D' follow the roadway as it bends to the north towards the intersection with Route 9W. The profiles fronting Spaulding Farm were designed to intersect the site structures which may afford the greatest impact on the receptor points. These are (from west to east) a congregate care facility, two unmarked buildings on Road "A", and a 4-story building. The profiles demonstrate that 150 to 200 feet of existing hardwood forest provides a screen to the buildings beyond the top of the slope, to the buildings along Road "A".

Line of Sight Profile F-F' was prepared to determine whether the Site congregate care building might be visible from the property across Forge Hill Road, now occupied by a commercial building. This profile, prepared in the event the building is removed at a later date, demonstrates that at least 150 feet of hardwood forest covering the northeast slope adjacent to the site property will be sufficient to screen the building from this vantage point.

Mitigation Measures

Landscaping

The intervening landscape will substantially eliminate visibility of the project site from the locations listed above. It is expected that the proposed landscape treatments within the developed areas, including installation of shade trees throughout the project to create a new canopy of tree cover, as well as careful selection of architectural treatment of the buildings (for example, building colors and varied rooflines), will minimize any potential adverse effect of visual change. It is also noted that the views from Route 9W would be experienced by people in moving vehicles on a major NYS highway rather than from stationary view points.

Existing Vegetation

While the project will remove portions of the existing tree cover, the developed portion of the project as proposed will remain obscured from view by the buffer of existing trees that are proposed to remain on the northern portions of the site and, therefore, will not effect the viewshed from scenic trails and homes adjacent to the site.

Buffer

The applicant has further mitigated potential impacts to the surrounding viewshed by increasing the wooded buffer surrounding the northern portion of the project site. The result of the increased buffer will serve to further screen the project from identified areas, particularly along the proposed Moodna Creek nature trails. The non-disturbance area along the north and westerly slopes of the property will also be supplemented with additional plantings where necessary.

2. **Site Lighting**

A lighting plan has been developed for the project to provide a typical lighting scheme using shielded luminaries, to be provided and maintained by Central Hudson Gas & Electric. The lighting plan shows estimated lighting calculation values, which incorporate street lighting and typical residential exterior lights. Street and sidewalk lighting will utilize photoelectric controls for automatic dusk till dawn illumination of the project. The layout was developed to prevent glare to traffic and light trespass to adjoining off-site properties. Details of the typical proposed luminaries, along with details of the associated isolux curves drawn to scale, are provided on the plan (Map V). Bollard lights will be provided along the walkways in front of the clubhouse and the entranceways to the multi-family units. The project sponsor is also considering the installation of solar street lights throughout the project site.

3. Cultural Resources

A Phase I Cultural Resources Survey Site Assessment and Site Identification was completed for the project subsequent to acceptance of the GEIS. A copy of the report and the approval letter from the NYS Office of Parks, Recreation, and Historic Preservation (OPRHP) is annexed as Exhibit "F". The report concluded that there is no evidence of potentially significant cultural resources on the site. By letter dated December 11, 2006, the OPRHP determined that there are no further archaeological concerns regarding this project.

J. Community Services

1. Public Services

School District

The project site is within the Cornwall Central School District. As planned, and as discussed in the GEIS and Findings Statement, the school district has built the new high school to expand and improve the educational capacity and quality of the district's school facilities.

Because the applicant's residential development is an age-restricted community, there will be few, if any, school age children. Therefore, there will be significantly less, if any, impacts than previously

addressed in the GEIS, which evaluated a project that included a residential component of 69 single family homes on the property formerly located in the Town of New Windsor. Transportation of any qualifying school children who may reside in the community will be addressed with the Cornwall Central School District.

The project is expected to generate very few, if any, school age children, due to the zoning and deed restrictions regarding age. There is only a slight potential for an indirect effect on schools, due to seniors selling their existing homes within the school district to families with school children. The project will not draw its market only from lands within the Cornwall School District. Although the project will certainly be openly available to eligible senior citizens within the Town, there is nothing to prevent other seniors from any municipality from buying the proposed housing. Therefore, the exact proportion of the future owners from within the Cornwall School District cannot be determined with any degree of precision.

Further, the senior citizens currently living in the Cornwall School District may sell their homes for many reasons unrelated to this project. If a senior citizen no longer desires to or is unable to maintain a single family home for health or other reasons, that person could sell their home at any time without the need for any approvals from the Town of Cornwall. If a person sells their house to either move to another state, move in with extended family or to move into the proposed project, the effect would be the same on the school district. Accordingly, the project would not be expected to create either a direct or indirect significant adverse impact on the school district.

Paragraph 14 of the developer's agreement (Exhibit "A"), provides that in the event that the Town does not change the senior housing age limit from the current 55 years of age to 62 years of age, then the development of the annexed property may consist of either 65 detached dwelling units with out any age restriction or a senior citizen housing project at the current Town of Cornwall permitted maximum density of ten units per acre. The Town has not amended the age limit in the senior housing regulations, thus permitting construction of the 65 detached residences, which would certainly include school-age children. There will be a decline in the tax benefit represented in the fiscal analysis, annexed as Exhibit "H", if such units are constructed.

Ambulance Services

The property is located within the Town of Cornwall Ambulance District. The property will be contributing to the special assessment levy that is imposed annually by the Town, which provides a revenue stream to the Cornwall Volunteer Ambulance Corp. (COVAC). The payment generated by this project to COVAC will be substantial since the enhanced value of the real estate as well as the increased assessed value from improvements will be an entirely new source of revenue for the ambulance district. It is not anticipated that the proposed action will have a significant impact on the capacity of hospital services. During site plan review, Cornwall Ambulance Corps will have the opportunity to comment on site-specific items that may aid in more effective emergency services to the site. A copy of the proposed site plan was forwarded on May 20, 2008, to COVAC for review and comment (Exhibit "X").

Mobile Life Support Services, Inc. is a privately owned commercial Paramedic service which also provides patient care to residents in the Town of Cornwall. The company operates a fleet of over 32 paramedic ambulances and emergency response vehicles managed by a staff of over 260. It is licensed by New York State in the Hudson Valley counties of Orange, Rockland, Ulster and

Dutchess. With a collective population of over 1,000,000 residents in those counties, the company handles approximately 50,000 calls per year.

Recreation

The project will contain a club house that will be centrally located near the entrance to the community and other recreational amenities, including tennis court and walking trails.

As per the developer's agreement, if the Planning Board determines that recreation fees in lieu of dedication of parkland should be paid by the project sponsor, the recreation fees shall be set at no more than 33% of the recreation fee for comparable dwelling units not in a PAC prevailing at the time of Planning Board approval. Based on the anticipated impacts of the proposed residential development on the Town's recreational resources, and in light of the PAC providing its own recreational facilities, the Town Board has stipulated that the recreation fees shall not exceed $1,000.00 per unit nor be less than $666.66 per unit.

Garbage District

The property is located in the Town of Cornwall Refuse and Garbage District, which provides garbage service to properties and residents within the district. (The Refuse and Garbage District has been extended to include the Cornwall Commons property formerly located in the Town of New Windsor). The project site will receive the same garbage services as provided to other properties in the district. No improvements or additional services are proposed. The details of on-site collection will be reviewed as part of the site plan review. On-site garbage collection will require dumpsters at various locations throughout the multi-family area and near the club house. The proposed locations are depicted on the site plan for Lot No. 10. The detached and attached single family units will each have regular garbage cans for refuse pick up.

Fire District

The project site is located in the Vails Gate Fire District and the Canterbury Fire District. The property in the Vails Gate Fire District contains 53.8 acres of land. The adjacent property in the Canterbury Fire District contains 143.68 acres of land. The portion of this property in the Vails Gate Fire District was originally located in the Town of New Windsor. The boundary line between the two Fire Districts coincides with the former Town boundary line between New Windsor and Cornwall. The project sponsor's counsel contacted the Fire Districts on July 14, 2005, September 10, 2005, and October 4, 2007, to request the Districts consider alteration of the boundaries of the two Fire Districts to coincide with the new town boundary line (letters annexed as Exhibit "J"). As set forth in a letter from James R. Loeb to the Planning Board dated October 18, 2007 (Exhibit "J"), the action to modify the boundary must be taken by the fire districts and both districts must agree to the proposed change to alter the boundaries. After the fire districts enter into a written memorandum and hold a public hearing, the proposed change must be approved by the Town Board.

The Canterbury Fire District submitted a letter to the Town of Cornwall Planning Board dated August 2, 2007, providing comments on the proposed project. The main issue identified is that some of the structures proposed on the site are located within both fire districts.
A letter dated May 19, 2008, from Lanc & Tully Engineering, was submitted to Canterbury Fire Department in response to the August 2, 2007 comment letter. Also by letter dated May 2, 2008, revised plans were submitted to the Fire District depicting the overall project and boundaries between

districts, the width of each roadway and location of proposed hydrants, and a plan depicting the movement of a fire truck throughout the project site (Exhibit "M").

Since the Fire Districts are not interested in altering the boundary line between the Fire Districts, the Districts can provide service within each respective district and/or, an agreement between the two fire districts can provide for service to this property for dispatching of emergency services. It is the intention of the project sponsor to receive confirmation from both Fire Districts that they will undertake to service the property via procedures and cooperation with each other with reference to predetermined service areas and division of responsibilities which would be the subject of an agreement.

Police Protection

During the review of the subdivision application, the Planning Board determined that there would be no unique security needs for the mix of uses proposed within a PAC, in contrast to the original industrial subdivision that might potentially have involved public security issues. While an increase residential population could increase the total demand for police, this would be covered by the taxes generated by the use, and no additional consideration is needed.

2. Other Services

A. Management Plan for Common Areas

A homeowners association will be formed to own and/or operate and maintain all of the private lands and facilities that will benefit and/or be used by all 10 lots. Several separate condominiums will be formed for the residential development on Lot No. 10, including a master HOA that would operate and maintain the trails, recreation center, lawns and storm water management areas and depending on alternatives approved, the interior roadway and sewer and water lines.

The stormwater management plan will be embodied in a stormwater management agreement that will be recorded and will run with the title to the land so as to bind all property within the Cornwall Commons project. Rights of enforcement will be mutually granted so that benefited properties will have the method and a contractual basis to enforce their rights. That management plan will be subject to approval by the Town Attorney. This agreement will also provide for maintenance of median landscaping and signage. The agreement will provide for a cost allocation in order to establish a method of assessing and collecting the maintenance costs. The project sponsor will also petition the Town Board to form a drainage district to encompass the entire project to deal with the issue of maintenance.

The Town of Cornwall Town Board has adopted a procedure for the establishment of drainage districts in the Town (Exhibit "W"). As part of the subdivision approval of this project, the Town Planning Board can require the applicant to request Town Board approval for the establishment of a drainage district for repair and maintenance of the proposed drainage facilities.

K. Energy Consumption

All construction will comply with State Building Code and Energy Code requirements. In addition, the project sponsor is incorporating native plants in the landscaping plan that need very little water to thrive to conserve water and will install low-flow showers and toilets in the dwelling units. the future building occupants can be provided with suggestions to reduce energy impacts, including but not limited to the following: use compact fluorescent light bulbs, program thermostat to reduce output when not needed, plug air leaks, check HVAC system every two years to make sure it is running efficiently, and reduce water usage through use of aerators. Where feasible, the project sponsor will attempt to use the following: mold resistant drywall, programmable thermostats, on demand water heaters versus heating with traditional tank full of water, compact fluorescent bulbs, structural engineered lumber, insulated concrete forms and precast concrete panels, e-coatings on windows, skylights and glass doors, engineer and composite wood components that employ recycled contents, ovens that offer increasing control of cooking cycles and clothes washers and dishwashers that use less water.

V. APPENDICES

1. All SEQR Documentation
    * Scope for Preparation of DSEIS
    * Town Planning Board Resolution Adopting Negative Declaration and Consistency Determination for 10-Lot Subdivision
    * Town Board Resolution Adopting Negative Declaration for Special Use Permit for Planned Adult Community and Resolution Granting Special Use Permit
    * Town of Cornwall Planning Board Lead Agency Written SEQR Findings Statement
    * Town of New Windsor Notice of Adoption of Lead Agency Written SEQR Findings Statement
2. Copies of all studies (e.g., traffic, drainage, cultural resources, visual, etc.) and correspondence
    A. Developer's Agreement
    B. Visual Assessment
    C. Preliminary Subsurface Investigation Report
    D. Water Distribution System Computer Model & Hydraulic Analysis
    E. Traffic Impact Study
    F. Cultural Phase I Resources Survey Site Assessment and Site Identification
    G. Town Comprehensive Plan
    H. Fiscal Analysis
    I. NYS Department of Environmental Conservation dated March 19, 2007
    J. Fire District Correspondence
    K. NYS Department of Environmental Conservation dated May 10, 2000
    L. Pre- / Post- Development Hydrographs
    M. Schematic Planting Designs
    N. Town Procedure for Establishment of Drainage District 2008
    O. New York State Fire Code 2007
    P. Memo re: Cornwall Commons Unit Mix dated March 28, 2008
    Q. Letter from ACOE dated December 19, 2007
    R. Town Board minutes re: Approval of PAC 2006
    S. Letters from and to Village of Cornwall-on-Hudson re water service
    T. Letter to Planning Board re: SEIS submission dated April 23, 2008
    U. Correspondence from Lanc & Tully re: Impacts of 28' road
    V. Memo from P. Grealy dated April 28, 2008, re: Roadway Width
    W. Tree Evaluation and Photographs
    X. Letter to COVAC dated May 20, 2008

Volume 2 . Stormwater Pollution Prevention Plan

Volume 3: Maps

A- Removed from binder and provided separately.

B
Preliminary Subdivision Plan
Sheets 1 & 2 of 16
Last Revised September 20, 2007

C
Preliminary Subdivision Plan
Utility Plan
Sheets 3, 4 & 5 of 16
Last Revised September 20, 2007

D
Preliminary Subdivision Plan
Sight Distance Plan
Sheet 6 of 16
Last Revised September 20, 2007

E
Preliminary Subdivision Plan
Road Profile
Sheet 7 of 16
Last Revised September 20, 2007

F
Preliminary Subdivision Plan
Off Road Sanitary Profiles
Sheet 8 of 16
Last Revised September 20, 2007

G
Preliminary Subdivision Plan
Detail Sheet
Sheet 9 of 16
Last Revised September 20, 2007

H
Preliminary Subdivision Plan
Pumpstation Details
Sheet 10 of 16
Last Revised September 20, 2007

I
Preliminary Subdivision Plan
Erosion Control Plan
Erosion Control Details
Stormwater Ponds and Cross-Sections
Drainage Details
Sheets 10, 11, 12, 13, 14, 15 & 16 of 16
Last Revised September 20, 2007

J- Removed from binder and provided separately.

K- Removed from binder and provided separately.

L- Removed from binder and provided separately.

M- Removed from binder and provided separately.

N- Removed from binder and provided separately.

O- Removed from binder and provided separately.

P
Site Plan for Lot No. 10
Alternative Construction Phasing Plan
October 11, 2007
Last Revised March 13, 2008

Q- Removed from binder and provided separately.

R
Cut and Fill Analysis Plan For Road A and Stormwater Ponds
Last Revised August 29, 2007
Cut and Fill Analysis Plan for Lot No. 10
Last Revised September 7, 2007

S
Pre-Development Wetland Drainage Areas
Sheet 1 of 2
November 19, 2007
Last Revised January 28, 2008

T
Post-Development Wetland Drainage Areas
Sheet 2 of 2
November 19, 2007
Last Revised January 28, 2008

U
Grading Comparison Plan
Sheet 1 of 1
January 23, 2008

V- Removed from binder and provided separately.

W
Road Width Alternative Plans
Sheets 1-4 of 4
May 12, 2008

X

Fire District Plans
Sheets 1-3 of 3
October 23, 2007
Last Revised April 28, 2008

Y

Naturalistic Planting and Undisturbed Areas Plan
March 24, 2008
Last Revised April 21, 2008

Z

Preferred Alternative For Proposed Forcemain
Alternative 1 for Forcemain Routing
Preferred Alternative for Proposed Watermain
Alternative 1 Watermain Routing
May 12, 2008

AA

Section Development Plan
May 14, 2008

SITE PLAN