

**3.4 Terrestrial and Aquatic Ecology**

**3.4.1 Existing Conditions**

During June of 2006, Tim Miller Associates, Inc. (TMA) visited the project site to identify and categorize the existing plant communities of the Tripi Subdivision project site and make wildlife habitat assessments for the property.

The project site is located in a section of the Town characterized by upland, hilly topography where the land grade generally slopes towards the south and east. Half of the site is flat or has slopes of less than 15 percent. Steeper slopes of greater than 15 percent exist elsewhere, principally within the eastern and southern portions where sections of the site slope steeply towards adjoining properties (Figure 3.4-1).

The project site is approximately 25.59 acres in area and primarily consists of successional woodlands and fields, with open lawns and existing homes on two portions of the property (Figure 3.4-2). The existing land coverage types identified on the property are presented in Table 3.4-1. There are no wetlands, watercourses or water bodies on the project site. During field investigations, no surface seeps were observed on the property, along the Harris Road frontage, or at the Sunrise Avenue cul-de-sac in the vicinity of the project site. Since Harris Road and Sunrise Avenue are located at the base of a hillside, surface water run-off and shallow groundwater seeps from bedrock outcrops can be expected seasonally or during wet periods.

Table 3.4-1 Existing Approximate Land Coverage	
	Existing Acreage
Woods/Fields	23.40
Unvegetated (Rocks, earth or fill)	0.90
Roads, buildings, pavement, existing landscaping	1.29
Wetlands/Streams	0.00
TOTAL =	25.59
Source: Petruccelli Engineering, P.E, P.C	

**3.4.1.1 Existing Conditions - Vegetation**

Vegetative cover types vary across the site from maintained lawns and landscaping, to abandoned lawns and landscaping to successional woods. Those areas around the occupied home on the property have been maintained as lawn, and are dominated by warm season grasses and ornamental plantings. Several large trees are present in this area and also to the north of the existing residence, bordering the length of the abandoned residential road through the property. Many of these trees are evergreens, including several large Norway spruce and yews. Areas around the abandoned and collapsed household buildings on the central and northern areas of the site are converting to shrubby fields with evidence of prior landscape plantings including forsythia, rhododendron, butterflybush and spirea.

The woodlands make up the largest undeveloped portions of the site. The remaining undeveloped areas of the site are open-canopied and are dominated by field herbaceous species such as goldenrods and mugwort, which often invade previously disturbed open field areas. The vegetation in each of these areas is impacted by an overgrowth of vining species, particularly wisteria, poison ivy, grapes and Oriental bittersweet.

The eastern edge of the site has a high proportion of steep, often rocky and less vegetated slopes. Areas at the base of these eastern slopes appear less disturbed than most of the site and support an understory of winged euonymous, spicebush, ferns and occasional clumps of skunk cabbage.

The three general vegetative community types that occur on the project site: upland deciduous woodlands, small areas of meadow vegetation and disturbed or landscaped areas maintain a vegetative ground cover throughout the entire year, with the exception of many herbaceous species that die back during winter.

#### *Upland Deciduous Woodlands*

This vegetative community type consists of second growth habitat of native and common non-native invasive species. This community type supports a three strata system dominated by small to medium size trees <20" in diameter at 4.5 feet (diameter at breast height, or DBH), understory shrubs and vines, and a lowermost herb layer. This community type occurs across the project site. The level of habitat complexity in this community type can be considered typical for a second growth upland wooded area.

A mix of predominantly deciduous native tree species occurs in this community that includes: red oak, black oak, white oak, sugar maple, tulip poplar, hickories, sweet birch and black cherry. In portions of the site, strands of introduced invasive vegetation or planted species predominates, including tree of heaven, Norway maple, Norway spruce and yew.

The shrub layer includes younger saplings of many of the tree species identified in the preceding paragraph as well as a dominant presence of winged euonymous. Native shrubs observed, such as smooth sumac, spicebush and flowering dogwood, are represented by one or few specimens. Included with this layer are native vining and cane species such as poison ivy, Virginia creeper, black raspberry, wineberry, grapes and exotic invasive species such as bush honeysuckles, multiflora rose, Japanese barberry and Oriental bittersweet.

The ground layer is composed of various herbaceous plants including fern species such as Christmas fern, hayscented fern, sensitive fern and marginal woodfern as well as garlic mustard, Virginia jumpseed, spotted wintergreen and wild garlic. Ground covering vining species such as bittersweet, Virginia creeper, wisteria and poison ivy are also present in this layer.

#### *Meadows and Disturbed/Landscaped Areas*

Early successional old-field meadow vegetation occurs on portions of the site previously developed as homesites. The areas of meadow vegetation are located adjacent to collapsed or abandoned buildings and the abandoned internal roads. As the meadow areas are in an early stage of succession, they have low to moderate levels of productivity and abundance.

The vegetation in these areas consists of naturalized yard grasses and pioneering herbaceous species including various goldenrods, ragweed, mugwort, milkweed, common mullein, Queen Anne's lace, prickly dewberry and common dandelion.

A table of plant species that were identified on the site is provided below.

Table 3.4-2 Vegetation - List of Observed Species Tripi Subdivision	
Common name (Scientific name)	
Trees and Shrubs	
Arborvitae ( <i>Thuja occidentalis</i> )	Pignut hickory ( <i>Carya glabra</i> )
Autumn olive ( <i>Elaeagnus umbellata</i> )	Prickly dewberry ( <i>Rubus flagellaris</i> )
Black cherry ( <i>Prunus serotina</i> )	Red oak ( <i>Quercus rubra</i> )
Black oak ( <i>Quercus velutina</i> )	Rhododendron ( <i>Rhododendron</i> spp.)
Black raspberry ( <i>Rubus occidentalis</i> )	Sassafras ( <i>Sassafras albidum</i> )
Butterflybush ( <i>Buddleja davidii</i> )	Smooth sumac ( <i>Rhus glabra</i> )
Flowering dogwood ( <i>Cornus florida</i> )	Spicebush ( <i>Lindera benzoin</i> )
Forsythia ( <i>Forsythia</i> spp.)	Spirea ( <i>Spirea</i> spp.)
Japanese barberry ( <i>Berberis thunbergii</i> )	Sugar maple ( <i>Acer saccharum</i> )
Japanese maple ( <i>Acer palmatum</i> )	Sweet birch ( <i>Betula lenta</i> )
Maple-leaved viburnum ( <i>Viburnum acerifolium</i> )	Tree of heaven ( <i>Ailanthus altissima</i> )
Mockernut hickory ( <i>Carya tomentosa</i> )	Tulip poplar ( <i>Liriodendron tulipifera</i> )
Morrow's honeysuckle ( <i>Lonicera morrowii</i> )	White oak ( <i>Quercus alba</i> )
Multiflora rose ( <i>Rosa multiflora</i> )	Wineberry ( <i>Rubus phoenicolasius</i> )
Norway maple ( <i>Acer platanoides</i> )	Winged euonymus ( <i>Euonymus alata</i> )
Norway spruce ( <i>Picea abies</i> )	Yew ( <i>Taxus</i> spp.)
Oriental bittersweet ( <i>Celastrus orbiculatus</i> )	
Forbs and Ferns	
Avens ( <i>Geum</i> spp.)	Longbract frog orchid ( <i>Dactylorhiza viridis</i> )
Black-eyed Susan ( <i>Rudbeckia hirta</i> )	Marginal woodfern ( <i>Dryopteris marginalis</i> )
Broad dock ( <i>Rumex obtusifolius</i> )	Mugwort ( <i>Artemisia vulgaris</i> )
Clearweed ( <i>Pilea pumila</i> )	Path rush ( <i>Juncus tenuis</i> )
Cleavers ( <i>Galium aparine</i> )	Pointedleaf ticktrefoil ( <i>Desmodium glutinosum</i> )
Common burdock ( <i>Arctium minus</i> )	Queen Anne's lace ( <i>Daucus carota</i> )
Common dandelion ( <i>Taraxacum officinale</i> )	Red clover ( <i>Trifolium pratense</i> )
Common milkweed ( <i>Asclepias syriaca</i> )	Selfheal ( <i>Prunella vulgaris</i> )
Common ragweed ( <i>Ambrosia artemisiifolia</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
Common speedwell ( <i>Veronica officinalis</i> )	Skunk cabbage ( <i>Symplocarpus foetidus</i> )
Common St-John's wort ( <i>Hypericum perforatum</i> )	Spinulose wood fern ( <i>Dryopteris carthusiana</i> )
Christmas fern ( <i>Polystichum acrostichoides</i> )	Spotted touch-me-not ( <i>Impatiens capensis</i> )
Cypress spurge ( <i>Euphorbia cyparissias</i> )	Spotted wintergreen ( <i>Chimaphila maculata</i> )
Deptford pink ( <i>Dianthus armeria</i> )	Sulfur cinquefoil ( <i>Potentilla recta</i> )
Enchanter's nightshade ( <i>Circaea lutetiana</i> )	Virginia creeper ( <i>Parthenocissus quinquefolia</i> )
Everlasting pea ( <i>Lathyrus latifolius</i> )	Virginia jumpseed ( <i>Polygonum virginianum</i> )
Garlic mustard ( <i>Alliaria petiolata</i> )	White avens ( <i>Geum canadense</i> )
Grape ( <i>Vitis</i> spp.)	White vervain ( <i>Verbena urticifolia</i> )
Hayscented fern ( <i>Dennstaedtia punctilobula</i> )	Wild garlic ( <i>Allium vineale</i> )
Indian pipe ( <i>Monotropa uniflora</i> )	Wild peppergrass ( <i>Lepidium virginicum</i> )
Indian strawberry ( <i>Duchesnea indica</i> )	Wild sensitive plant ( <i>Chamaecrista nictitans</i> )
Jack in the pulpit ( <i>Arisaema atrorubens</i> )	Wisteria ( <i>Wisteria</i> spp.)
Japanese pachysandra ( <i>Pachysandra terminalis</i> )	Yellow wood sorrel ( <i>Oxalis europaea</i> )
Notes: This list represents the species observed during project surveys of this site. The list is not, however, represented to be an exhaustive list of all plant species on the site.	
Prepared by: Tim Miller Associates, Inc., 2007.	

By letter of 26 June, 2006, the New York State Department of Environmental Conservation (NYSDEC) Natural Heritage Program (NHP) has indicated that their natural resources database does not identify any rare or State-listed plants, significant natural communities, or other significant habitats on or in the immediate vicinity of the project site (Appendix B - Correspondence).

The United States Fish and Wildlife Service (USFWS) has similarly been requested to provide information regarding occurrences of Federally-listed threatened or endangered species within the vicinity of the project. Their response dated 12 January, 2007, provides their current best available information regarding Federally-listed species "known or likely" to occur in Westchester County, in the form of a Westchester County-wide species list and a Request Response Cover Sheet available through the USFWS Cortlandt office web site (Appendix B - Correspondence). The Westchester County list includes five species: bald eagle (*Haliaeetus leucocephalus* - Threatened, but considered for delisting), bog turtle (*Clemmys mohlengi* - Threatened), Indiana bat (*Myotis sodalis* - Endangered), shortnose sturgeon (*Acipenser brevirostrum* - Endangered, but considered for reclassifying) and New England cottontail (*Sylvilagus transitionalis*, a Candidate species for possible future listing). One of these species, the sturgeon, is only present in the Hudson River; and another, the bat, is noted to only be present during summer months in the county. The other three species, the eagle, the turtle and the rabbit have habitat requirements that are not generally met by the characteristics of this site.

#### 3.4.1.2 Existing Conditions - Wildlife

The site as it exists has limited potential for use by most larger or development-sensitive species of wildlife. The suburban surroundings, with relatively high density housing and proximity to highly trafficked roads isolates the area and does not present ideal habitat conditions for any but those species that are adapted to an urban/suburban landscape. Human subsidized species, i.e. those species associated with residential developments or other human generated disturbances of the environment, are expected to dominate the wildlife on this site in all four seasons of the year.

A list of common, human-subsidized species which could reasonably be expected to utilize the site or the surrounding residential environment is provided in Table 3.4-3. This list identifies common species that are likely to utilize the given habitat types. It is noted that this list is not entirely based on actual observations at the site, but is a compilation of observations that have been made by TMA ecologists in similar habitat conditions throughout the County. However, the value of this property as wildlife habitat is compromised by its proximity to surrounding residential areas and roads and the habitat fragmentation resulting from these developments.

The tree canopy on the project site does not appear to be as fully developed as that of older forested areas in other more extensive offsite forested areas. Sunlight invading through breaks in the tree canopy has promoted a dense shrub and herb layer and the development of understory thickets over much of the site. Such understory vegetation can provide valuable habitat to smaller mammal species and many species of birds. These thickets are typically made up of brambles and multiflora rose that provide cover and food sources for a variety of smaller woodland species. No field indicators of higher predatory species (e.g., coyote or fox) such as scat, carrion or footprints were observed on the project site during the site survey, although habitat does exist that would encourage use by red fox, and food sources for this animal would be readily available on this property.

Table 3.4-3 Observed and Expected Wildlife List Tripi Subdivision	
Common name ( <i>Scientific name</i> )	
<b>Mammals</b>	
Eastern chipmunk ( <i>Tamias striatus</i> )*	Raccoon ( <i>Procyon lotor</i> )
Eastern cottontail ( <i>Sylvilagus floridanus</i> )	Star-nosed mole ( <i>Codylura cristata</i> )
Gray squirrel ( <i>Sciurus carolinensis</i> )*	Striped skunk ( <i>Mephitis mephitis</i> )
House mouse ( <i>Mus musculus</i> )	White-footed mouse ( <i>Peromyscus leucopus</i> )
Meadow vole ( <i>Microtus pennsylvanicus</i> )	White-tailed deer ( <i>Odocoileus virginianus</i> )
Opossum ( <i>Didelphis virginiana</i> )	Woodchuck ( <i>Marmota monax</i> )
<b>Reptiles and Amphibians</b>	
American toad ( <i>Bufo americanus</i> )	Garter snake ( <i>Thamnophis sirtalis</i> )
Brown snake ( <i>Storeria dekayi</i> )	Redback salamander ( <i>Plethodon cinereus</i> )
<b>Birds</b>	
American crow ( <i>Corvus brachyrhynchos</i> )*	Junco ( <i>Junco hyemalis</i> )
American goldfinch ( <i>Carduelis tristis</i> )	Mourning dove ( <i>Zenaida macroura</i> )*
American kestrel ( <i>Falco sparverius</i> )	Northern cardinal ( <i>Cardinalis cardinalis</i> )
American robin ( <i>Turdus migratorius</i> )	Northern mockingbird ( <i>Mimus polyglottos</i> )
Black-capped chickadee ( <i>Parus atricapillus</i> )	Purple finch ( <i>Carpodacus purpureus</i> )
Blue jay ( <i>Cyanocitta cristata</i> )	Red-tailed hawk ( <i>Buteo jamaicensis</i> )
Bluebird ( <i>Sialia sialis</i> )	Hummingbird ( <i>Archilochus colubris</i> )
Brown thrasher ( <i>Toxostoma rufum</i> )	Tufted titmouse ( <i>Parus bicolor</i> )
Downy woodpecker ( <i>Picoides pubescens</i> )	Warblers ( <i>Dendroica</i> spp.)
Gray catbird ( <i>Dumetella carolinensis</i> )*	Wrens ( <i>Troglodytes</i> spp.)*
House sparrow ( <i>Passer domesticus</i> )	
Notes: * indicates wildlife observed at the site, either directly or indirectly (e.g. by signs such as tracks or scat). This list also includes species that may be expected to utilize the site. The list is not, however, represented to be an exhaustive list of all wildlife species on the site.	
Prepared by: Tim Miller Associates, Inc., 2007.	

The larger trees on the site could be used for nesting by several bird species, including robins, Baltimore oriole, mockingbird, catbird and others. Gray squirrels and Eastern chipmunk were observed among these trees. Evidence of deer usage of the property was observed in the wooded and the open areas of the site. Some tree trunk cavities were observed, which would provide additional nesting habitat for some bird species.

It is possible that some raptor species, such as hawks and owls could use the larger trees as perches or for stopovers, considering the elevation of the site and the proximity to nearby woods and waterbodies. Several common species of owls, including great horned owl and barred owl, may nest in cavities within the larger trees on site. Common hawk species, including red-tailed hawk and kestrel are also possible transients in the area. It is noted, however, that no nests of these species were observed.

The maintained areas associated with the existing residence would be used by a number of common species. House sparrows would use the eaves of the houses for nesting. Blue jays,

robins and cardinals would also use the open land for foraging throughout the year. The evergreen trees north of the existing occupied house would provide protective cover for some bird species that might nest in this area.

The brushy area of the site could provide cover for a number of songbird species, all of which are also relatively common in suburban landscapes, including mourning doves, sparrows and cardinals. It is likely that common species such as Eastern cottontail rabbit, American goldfinch, garter snake, American toad and several small rodents, including the house mouse, meadow vole and star-nosed mole utilize this area. Robins, sparrows, purple finch, black capped chickadee and other bird species that prefer thickets are also likely to use the site. Seeds, forbs and invertebrates would be available as food sources.

#### *NYS Reptile and Amphibian Atlas*

The NYSDEC atlas of reptiles and amphibians<sup>1</sup> presents countywide information on species that are known to have populations in Westchester County. The atlas information for the Mount Kisco USGS quadrant map, which includes the area of the project site, identifies the species known from the region, although only four species would be considered to be adaptable to the relatively small, disturbed and upland habitats presented by the project site. As noted previously, there are no wetlands or water bodies on the property to provide critical habitat for most other amphibian and many of the reptile species that are present in Westchester County.

#### *NYS Breeding Bird Atlas*

Table 3.4-3 provides a list of bird species common to the area that were observed on, or could reasonably be expected to utilize, the site. A more comprehensive, multi-year list of birds known to have nested in the region has been compiled by the New York State Breeding Bird Atlas<sup>2</sup> (BBA). The BBA is a comprehensive, statewide bird survey that documents the breeding birds identified by trained volunteers in three-mile square blocks throughout two survey periods: 1980-1985 and 2000-2005. The most recent surveys (2000 through 2005) have been completed and data is being compiled for inclusion in a comprehensive final report. The listings include data on species and breeding behavior observed, the year the bird(s) was observed and the state protection status for each species.

The project site falls within Breeding Bird Atlas Block numbers 6056A and 6056B in eastern Westchester county. The breeding bird lists for these blocks are available from both the 1980-1985 and the recent 2000-2005 surveys and may be considered to provide the most inclusive list of bird species possibly expected to be observed in areas on or near the site. A total of 111 species were observed within the two blocks during the two BBA survey periods. Appendix D provides maps for these two blocks and the individual species lists for each survey period. The listing of a particular bird in a breeding block does not mean that the species would breed everywhere in that block, as the list for each block includes a greater variety of breeding birds (e.g. waterfowl) than could utilize the habitats on any given site within that block. Due to existing habitat limitations, many of the species listed for these two Blocks would not be expected to breed on this site.

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<sup>1</sup> NYSDEC. 2006. New York State Amphibian and Reptile Atlas Project 1990-1998.  
[www.dec.state.ny.us/website/dfwmr/wildlife/herp/](http://www.dec.state.ny.us/website/dfwmr/wildlife/herp/)

<sup>2</sup> New York State Department of Environmental Conservation (NYSDEC). 2005. NYS Breeding Bird Atlas  
website. [www.dec.state.ny.us/apps/bba/results/](http://www.dec.state.ny.us/apps/bba/results/).

### 3.4.2 Potential Significant Adverse Impacts and Related Mitigation

Areas of disturbance are defined as the limits of construction disturbance and grading necessary to construct the internal road system, utilities, residences and driveways. Residential building construction would result in open areas around each residence which would be landscaped. Areas of disturbance for the Conventional Plan are shown in Figure 3.1-4 Grading for Conventional Plan Areas of Disturbance for the Conservation Plan are shown in Figure 3.1-5 Grading for Conservation Plan.

#### Conventional Plan Impacts

The Conventional Plan described in this DEIS would involve the temporary disturbance of 17.15 acres (approximately 67 percent) of the 25.59 acre Tripi Subdivision site for the construction of the residences, driveway, internal roadways, Subsurface Treatment Areas (SSTA) and stormwater management facilities as shown on Figure 3.1-4 Grading for Conventional Plan Areas of deteriorating asphalt from the former Bailey Hall development remain on the site. The remainder of the site is wooded with some areas of overgrown lawn near former site buildings. A total of nineteen new residences would be created across this portion of the site resulting in the loss of 15.86 acres of existing vegetation and its conversion to new landscaping (13.71 acres) and buildings, roads and driveways (3.44 acres) (see Table 3.4-4). The home sites would be integrated into surrounding areas on the site that are to be undisturbed, principally the steep slope areas of the property.

The proposed project would result in the loss of approximately 15.86 acres of trees and overgrown field on the project site that currently provides wildlife habitat. As shown on Table 3.4-4, most of this loss would occur within upland woodland areas. The project would also result in the reclamation of areas currently disturbed by abandoned driveways and pavement. The impacts associated with the proposed changes in land cover are described in the following paragraphs.

<b>Table 3.4-4 Conventional Plan Existing and Proposed Land Coverage</b>			
	<b>Existing Acreage</b>	<b>Proposed Acreage</b>	<b>Change (Acres)</b>
Woods/ overgrown Fields	24.30	8.44	-15.86
Roads, pavement, existing landscaping	1.29	3.44	2.15
New landscaping	0.00	13.57	13.57
Wetlands/Streams	0.00	0.00	0.00
TOTAL =	25.59	25.59	
Source: Petruccelli Engineering, P.E, P.C, 2008			

#### Conservation Plan Impacts

The proposed Conservation subdivision plan would also result in the loss of existing vegetation and wildlife habitat on the property, although to a lesser degree than the Conventional Plan. Under the Conservation Plan a total of 11.77 acres of existing vegetation would be removed

and converted to either homes, roads and driveways or to landscaped lawn and plantings. A summary of existing and proposed coverage is provided in Table 3.4-5, below.

<b>Table 3.4-5 Conservation Plan Existing and Proposed Land Coverage</b>			
	<b>Existing Acreage</b>	<b>Proposed Acreage</b>	<b>Change (Acres)</b>
Woods/ overgrown Fields	24.30	12.53	-11.77
Roads, buildings, pavement, existing landscaping	1.29	3.89	2.60
New landscaping	0.00	9.17	9.17
Wetlands/Streams	0.00	0.00	0.00
TOTAL =	25.59	25.59	
Source: Petruccelli Engineering, P.E, P.C, 2010			

As shown in the grading plan for the Conservation Plan (see Figure 3.1-5 Conservation Plan Grading Map), 21 proposed residences, the looped access road and the community septic system are clustered in the northwest portion of the site. Approximately 12.53 acres of existing vegetation in the eastern and southern portions of the site will be retained and preserved with a conservation easement.

*Impacts to Vegetation*

In all areas of the site, the removal of trees would be subject to the Tree Preservation provisions of Chapter 112 of the Town Code that provide guidelines for the protection of trees on private properties of the hamlets. Tree removal provisions within the Town code regulate the removal of any tree 18 inches and greater in diameter at breast height (dbh), and the removal of more than 50 trees on properties greater than 10 acres, and if trees are to be removed from steep slopes as defined in Chapter 102 of the Town Code (slopes of 25 percent and on plots of land greater than 100 square feet and with a minimum horizontal distance of 10 feet.), and if the land is within an area designated as of significant vegetation on the Natural Resource Inventory Maps of the Town of Bedford. Section 112-5 of the code exempts applications to the Planning Board from the need to file a tree removal permit application. Approvals granted by the Planning Board are deemed to incorporate a tree removal permit as the Planning Board is required to apply the criteria, procedures and standards of the Tree Preservation Chapter of the Town Code. The agency will record in their determinations all specific tree removals which they approve.

While the existing vegetative community of the proposed development is widely dominated by invasive and generally non-native plant species that offer only moderate wildlife habitat and food sources, some of the existing trees are large and do provide both habitat and food sources for some wildlife. These trees, where healthy, will be preserved to the extent practicable. Invasive vines (multiflora rose, oriental bittersweet, etc.) encountered while clearing will be removed by physical means.

It is presently anticipated that the construction of homes on the proposed subdivision (both Conventional and Conservation plans) would result in some of the larger trees throughout the

site being removed incidental to grading work associated with providing new road and driveway access to the lots.

The Landscape Plan for the future homes would provide for revegetation throughout the site. The new plantings would provide street trees along the new roads, foundation plantings around the homes, side and rear yard plantings to buffer between new homes and existing homes, visual buffer planting, infill planting in stormwater control areas and areas of lawn upon open spaces around the homes. Following the construction of residences, individual property owners may choose to landscape, grade, and/or remove existing vegetation on portions of their lots, within the permit regulations for these activities as controlled by the Town.

The proposed Conventional development would result in disturbance to 15.86 acres of upland woodland vegetation and overgrown fields on the project site. Under post-development conditions, approximately 8.44 acres of existing vegetation would remain on the site. This represents a disturbance to approximately 65 percent of the existing vegetation. The majority of areas which will remain undisturbed by construction are located on individual lots. While no formal preservation of trees or vegetation will be maintained on the site for the Conventional Plan, any future tree removal, construction or grading by individual homeowners will be subject to the Town Code and requirements.

The proposed Conservation Plan would result in the disturbance to 11.77 acres of existing woods and overgrown fields on the site. Following development, approximately 12.53 acres, or approximately 50 percent of existing woodlands and overgrown fields on the site would remain. The majority of this vegetation would be retained on common land, owned and maintained by the future homeowners association, outside of the individual residential lots (see Figure 3.1-5 Grading for Conservation Plan). A conservation easement will be placed on this land to ensure the long term preservation of this open space.

The Conservation Plan will include street tree planting at the outer perimeter of the entire looped road. Street trees will be planted at intervals of approximately 80 feet or one tree per residential lot. Given the community septic system interior to the looped road, street trees will not be planted in this area. Ornamental bushes and shrubs will be planted within the right-of-way, along the interior of the looped street. Small ornamental trees may be planted in the septic reserve areas, as long as they do not interfere with the operation and maintenance of the septic system. The septic fields inside the looped road will be planted with areas of turf-grass and wildflower mix. As indicated above, a strip of land 20 feet in width will be preserved at the rear yards of Lots 10, 11, and 12, at the western property border near West View Drive. This area will be preserved as common land, owned and maintained by the homeowners associates. Existing vegetation in this area (mature and mid-sized trees) will be maintained to the extent possible. Evergreen trees will be planted to supplement the existing vegetation and to buffer the views into the site from West View Drive.

#### *Impacts to Wildlife*

As described above, the proposed Conventional development would retain approximately 8.44 acres of the existing mixed vegetation that presently serve as wildlife habitat on the project site. Approximately 12.53 acres of habitat would be retained under the Conservation Plan. The proposed construction would not result in any grading or disturbance to these naturally vegetated areas. This retained vegetation would continue to provide habitat for most wildlife

species that occur on the site, as none of the species occurring on the property are solely dependent on large tracts of undisturbed habitat.

A long term impact associated with the loss of vegetation at any development project is the reduction is the reduction of wildlife habitat by the removal of food sources, cover and breeding sites necessary to sustain wildlife. Most wildlife is expected to emigrate from disturbed areas of this site to forested habitats which exist near the site, such as large forested tracts surrounding Muscoot Reservoir to the east or to smaller wooded sites such as Katonah Park to the north. Smaller mammals currently using the property, such as squirrels, mice, opossum, and raccoons may move to other residential properties with vegetation similar to what is found on-site. Therefore, no significant adverse regional impact on wildlife would occur as a result of this project.

Wildlife typically would emigrate from disturbed areas when construction takes place slowly and in phases. If, as planned, the streets and utilities are developed during the first phase of this project, then the noise and attendant disturbance across the site would alarm most wildlife and give them time to leave most areas prior to most grading activities. As a significant portion of this property would remain undisturbed and as the surrounding lands are relatively similar in development, it is expected that most wildlife would temporarily move to these locations. Further, it is anticipated that the open and revegetated spaces to be created between residential units in this type of development would become attractive to many local species of songbirds and small mammals after each construction stage is completed.

All impervious areas where houses, roads, and driveways are proposed would unavoidably no longer function as wildlife habitat or be available for wildlife use. The proposed roads would have curbing consistent with the road requirements stipulated in the Town Code. The provision of standard curbing is not anticipated to result in significant adverse wildlife impacts. The low rates of traffic generated by the residences would not impede wildlife movement (see Section 3.5 Transportation for trip generation information), and the proposed roads would not serve as a physical barrier to wildlife movements across the site for wildlife.

The composition of the wildlife population on the project site may be slightly altered following development as those species already adapted to the local suburban environment (such as raccoons, opossum, woodchucks, mice, songbirds, etc.) would continue to have a greater ecological advantage, while species less tolerant of human activity may utilize the project site less. Some of the wildlife species expected or observed at the project site, such as cottontail rabbit, striped skunk, eastern chipmunk and red fox, prefer the habitats of successional woodlands with dense understory and bramble thickets that presently exist within the project site. However, because similar contiguous areas of successional woodlands would remain on and adjacent to the project site, actual population levels may not noticeably change in the community. It is likely that this transition has been underway for a number of years on this site, as a result of the development of adjacent residential communities.

While not as valuable as the existing forested habitat, the new lawn and landscaped areas created by the proposed development (both Conventional and Conservation) would still be used as forage by deer and other browsing or foraging species of wildlife. Many species of trees and shrubs commonly chosen for home landscaping would be expected to provide both food and nesting sites for songbirds and other avian species. The proposed disturbance to approximately 15.86 acres (or 11.77 acres for Conservation Plan) of mixed woodland community represents a

potential reduction of local habitat for those species identified in Table 3.4-3 that occur exclusively in upland woods.

Prior site developments, regular maintenance of landscaped areas, proximity to roads and existing dwellings has created an urban/suburban environment which is most suitable only for those species that are adaptable to human presence. The presence of "subsidized" species and the absence of specialized taxa may be used to identify the property as one more suitable for development as they indicate the site development would present only limited potential for impacts to native wildlife communities. Accordingly, no significant adverse impacts on terrestrial or aquatic wildlife are anticipated as a result of the proposed action nor are any specific impact mitigation measures proposed.

As described in the project SWPPP, the proposed project would decrease the rate of stormwater runoff from the site and provide controls to reduce the levels of sediment, phosphorous, nitrogen, and Biochemical Oxygen Demand (BOD) within stormwater released from the site. With the implementation of the proposed stormwater and erosion control measures (see descriptions in Sections 3.1 and 3.2 - Geology/Water Resources), the proposed project would not adversely impact the quantity or quality of on-site or off-site surface water resources.

#### *Wildlife Corridors*

No wildlife corridors have been identified to occur on the project site that connect to offsite wildlife habitats.

#### *Cumulative Impacts*

The proposed disturbance to vegetation and wildlife habitat on the project site would contribute to an overall cumulative decrease of natural areas within the Town of Bedford. These decreases are the result of increasing development and human activity within the town and surrounding areas.

The project is expected to result in temporary and/or permanent displacement of some of the existing wildlife to other areas of the Town. It is possible that some of the displaced individuals would not find suitable habitat in the vicinity due to the cumulative effect of decreases in habitat and increased competition for resources by other wildlife. Impacts to these displaced wildlife individuals would be permanent.

#### *Impacts on Adjacent Property*

As discussed previously, the proposed construction activity would contribute to a cumulative decrease of natural areas within the Town and is expected to result in the relocation of some wildlife species from the project site to neighboring properties. Wildlife habitat on the surrounding properties is limited to that associated with established residential developments. The majority of the surrounding Town lands supports moderate density suburban residential uses that provide minimal, if any, extensive high quality wildlife habitat.

As noted, wildlife that utilizes the 25.59 acre site is typical of upland environments in regional suburban communities. Construction of the proposed access roads, the associated infrastructure and the individual residences on the proposed lots would be completed in stages.

During each phase of construction, wildlife would likely be displaced from any immediate area where construction is occurring and would relocate to other suburban areas in the vicinity.

Some of the displacement of wildlife species would be temporary as a result of disturbance from construction activity. Some of the displacement would be permanent as a result of the residential use of the site and the loss of wildlife habitat on the site. As described in Section 3.2 (Water Resources), the project would not result in any changes to offsite stormwater discharge rates.

Chapter 4 (Open Space and Natural Environment) of the July 2002 Draft Bedford Comprehensive Plan cites the proliferation of white-tailed deer as a community concern due to increasing problems with deer collisions on area roadways and increasing townwide damage to homeowner landscaping. Small enclaves of undeveloped and abandoned residential lands, such as the project site, promote the presence of deer populations within the center portions of the Town, and the restoration of this property to a more open and occupied condition may act to reduce the deer population within the center of the Town.

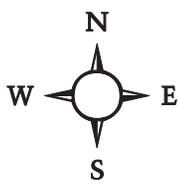
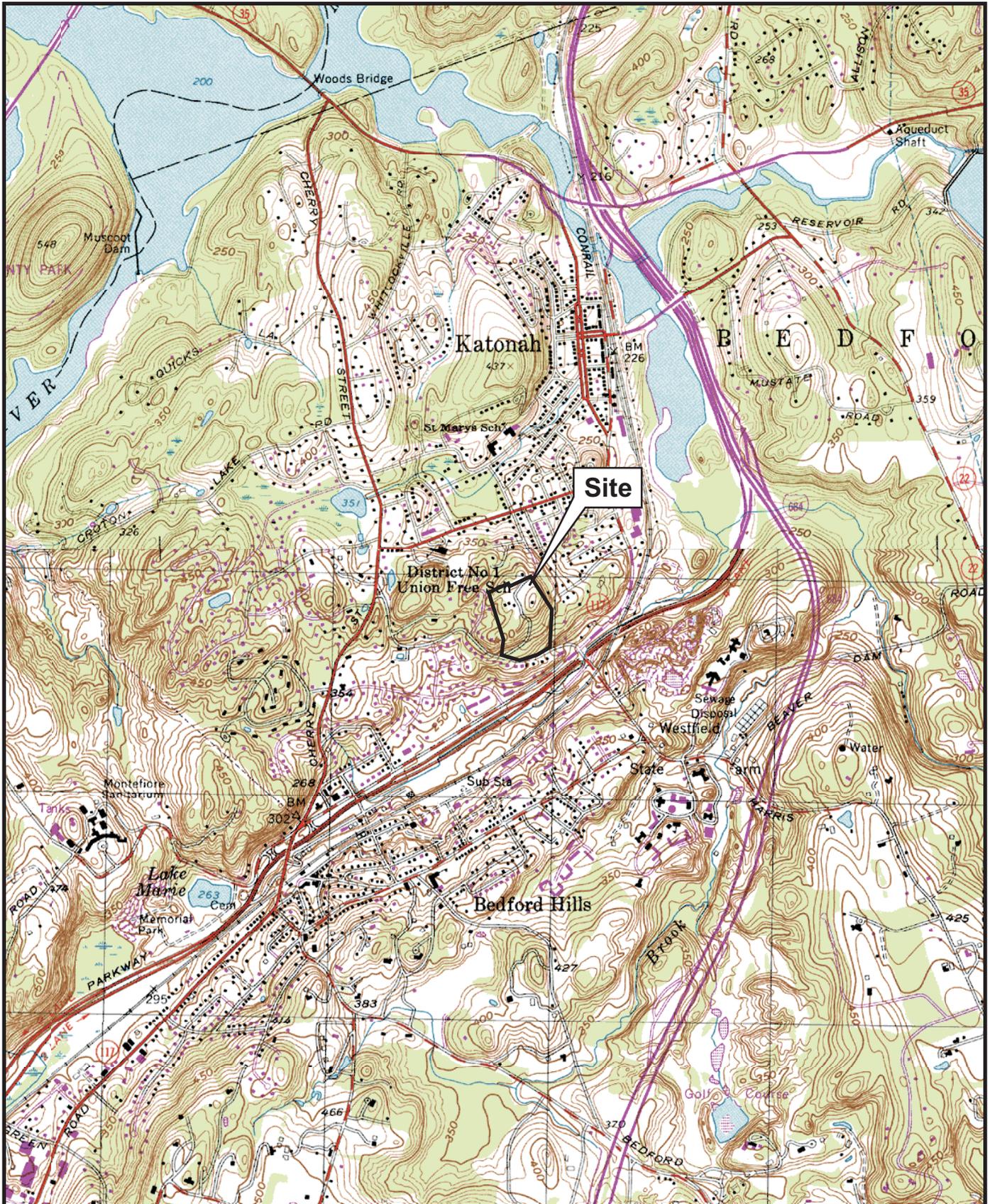
There is a single SEQRA designated Critical Environmental Area (CEA) within Bedford, on lands located approximately one mile or greater to the south and southeast of the project site. This CEA underlies a geographic area that overlays an aquifer within the Town and would not be expected to be impacted by the proposed development, which is downstream of this CEA.

Neither field observations nor the NYSDEC NHP database, identified the presence of any rare, endangered, or unusual plant or animal species on or in the vicinity of the subject property. Further, based upon on-site evaluations, the project site would be limited in the number of uncommon or unusual species that it could support.

### **3.4.3 Proposed Additional Mitigation Measures**

It is anticipated that the proposed mitigation measures incorporated into Best Management Plan features of the construction plan for this Project would offset to the extent practicable any potential for the limited adverse impacts described above. No additional mitigation measures are proposed for the terrestrial and aquatic resources on the site or within the Town.

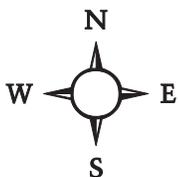
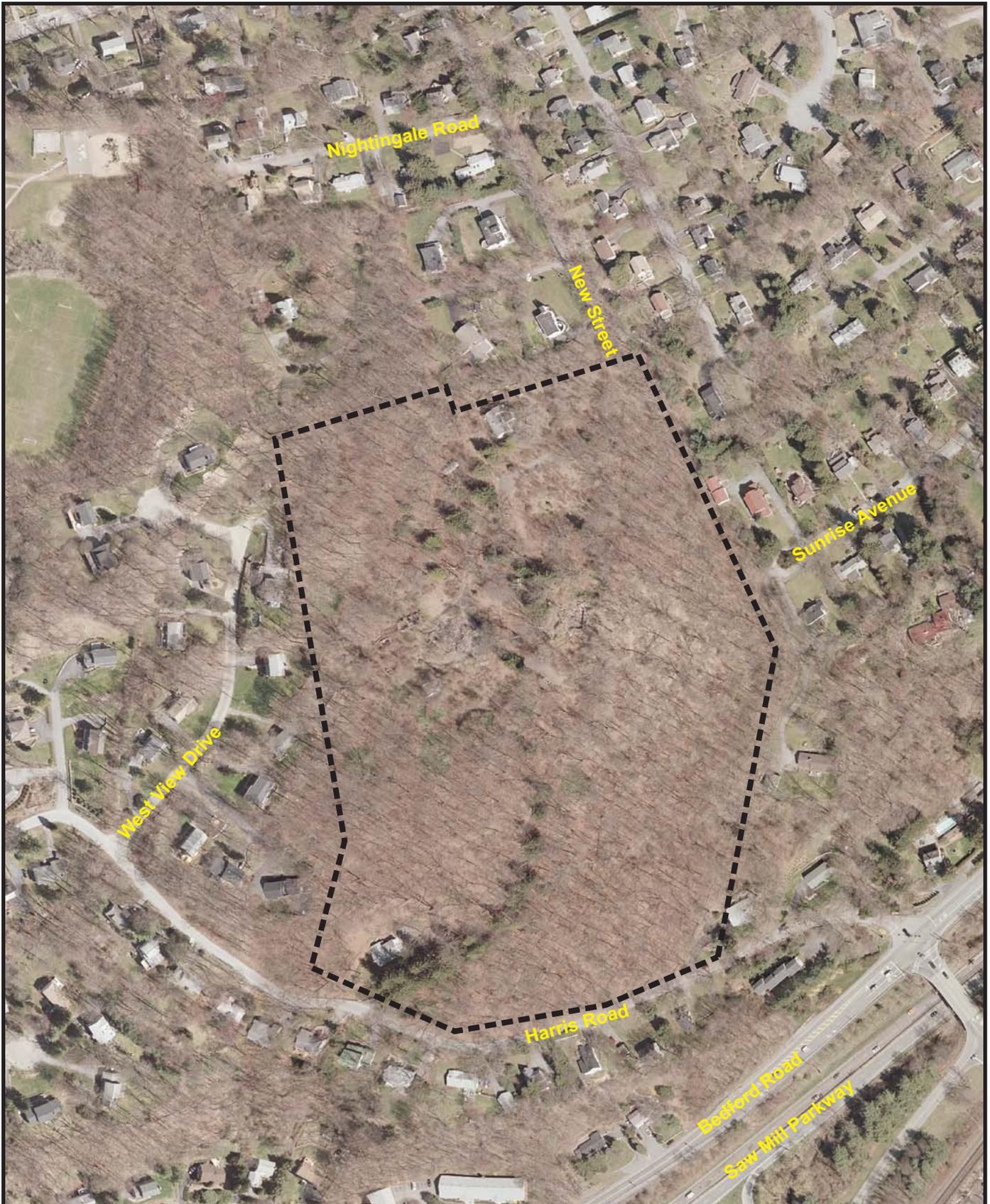
Mitigation for erosion and sedimentation impacts from stormwater runoff during construction is described previously in Section 3.1 (Geology) of this document. Mitigation for post-construction stormwater discharge to offsite areas is described in Section 3.2 (Water Resources). The proposed permanent features for onsite stormwater retention and treatment ponds are designed as NYSDEC Pocket Ponds (P-5) in compliance with design specifications provided in the NYSDEC Stormwater Manual. These basin types include fore bay areas at the inlets and shallow marshes (Micro pools) near the outlets at four stormwater basins that will be created within the boundary of the project property.




**Site Property Boundary**

**Figure 3.4-1: Local Setting  
Tripi Subdivision**

Town of Bedford, Westchester County, New York  
 Source: NYSDEC 7.5-minute Topographic Map, Mount Kisco Quad  
 Scale: 1" = 2,000'



 Site Property Boundary

Figure 3.4-2: Site on Aerial Photograph  
Tripi Subdivision  
Town of Bedford, Westchester County, New York  
Source: NYS GIS Clearinghouse, 2004 Aerial Photo  
Approx. Scale: 1" = 300'