

1.0 INTRODUCTION

This Document is a Final Environmental Impact Statement (FEIS) prepared in conformance with the requirements of the New York State Environmental Quality Review Act (SEQR). The Town of Blooming Grove is lead agency for this action, and as such is responsible for the adequacy and accuracy of the FEIS. This FEIS incorporates by reference the accepted DEIS prepared for this application, and it provides responses to substantive and relevant comments received by the Planning Board during the DEIS public review period, including those received at the Public Hearing. Full copies of the comments are included herein in Appendices A and B.

1.1 Description of Application History

The 2004 DEIS was prepared in response to a Positive Declaration adopted by the Town of Blooming Grove Planning Board on May 28, 2003. In the DEIS the Applicant, Lake Blooming Grove LLC, proposed development of 38 single family homes on 79.3 acres of vacant, partially wooded land within the R-45 zoning district. The project site is located on the west side of Lake Road in the Town of Blooming Grove, Orange County, New York. The property and project proposal, referred to as the Lake Blooming Grove Subdivision, are located on tax map designation Section 3, Block 1, Lot 59.21.

The DEIS, dated April 1, 2004, was reviewed by the Lead Agency for adequacy with respect to its scope and content for the purpose of public review, and was accepted for circulation by the Lead Agency on April 28, 2004. A public hearing on the DEIS was held on June 23, 2004, and was closed on the same date. In accordance with SEQR, the public comment period was extended until July 15, 2004.

The Applicant reviewed the public comments and prepared a draft FEIS, dated October 1, 2004 and revised based on Town Planning Board comments on March 1, 2005. A public hearing on the subdivision plan and FEIS was continued and remained open due to a moratorium on residential development approvals and anticipated amendments to the Zoning Code. As a result of the amendments to the Zoning Code in 2005, the property was rezoned to Rural Residential and comprehensive five-step Site Analysis and Land Conservation Analysis was required for major subdivisions in order to determine a "base lot count".

Additionally, this FEIS explains modifications made to the original DEIS Plan and includes analyses on the FEIS Conservation Plan that is the preferred site plan based upon new zoning requirements and comments by the Planning Board. Responses to substantive and relevant comments received during the Site Plan Analysis process are also included.

1.2 Town Moratorium and Zoning Code Amendments

In March 2003 the Town of Blooming Grove issued a moratorium on residential development approvals while considering changes to the Town Comprehensive Plan and land use regulations. Review of the Lake Blooming Grove Subdivision DEIS for SEQR purposes continued during the moratorium. The Town of Blooming Grove Planning Board provided comments on the DEIS on January 19, 2005 at a regular meeting of the Board. Additional comments on the DEIS were submitted on April 26, 2005 and responses to these comments were provided to the Planning Board in a submission dated May 17, 2005.

The Town adopted amendments to its Zoning Law on December 27, 2005 after which the moratorium was lifted. Specifically, the portion of the Code that applies to the Lake Blooming Grove Subdivision is Zoning Code §235-14.1 Rural Residential District regulations. The amendments to the Zoning Code were broad and substantial overall, with an objective in the new Rural Residential District to create “conservation subdivisions,” whereby development is concentrated in areas outside of primary or secondary conservation areas. The accepted 2004 DEIS included a Cluster Subdivision Alternative that evaluated a site plan with dwellings located on smaller individual lots in order to preserve open space, consistent with the then Article IX of the Zoning Code. The 2004 DEIS also included an Alternative that was consistent with the Town’s contemplated amendments to the Zoning Code. This alternative has been further refined to comply with the zoning amendments as adopted on December 27, 2005 and July 9, 2007.

The Applicant has provided additional analyses required by the Town to comply with the Zoning Code regulations (§235-14.1 Rural Residential District) and has revised the DEIS Plan accordingly. Specifically, a Land Conservation Analysis and Revised Subdivision Layout were submitted to the Planning Board on April 12, 2006 and, based upon Planning Board comments, a revised Conservation Subdivision Plan and Land Conservation Analysis were submitted on August 1, 2006. Sewage Disposal System Design Drawings, prepared by Lanc and Tully Engineers, and a Drinking Water Supply Analysis, prepared by Leggette, Brashears & Graham, were submitted on April 10, 2007. Revised Wastewater Treatment Analysis and Water Supply Analysis reports were submitted on August 3, 2007. The land use analysis for the Lake Blooming Grove Conservation Subdivision Plan is discussed in Section 7.0 Land Use and Zoning Comments and Responses.

At their meeting on June 27, 2007 the Planning Board provided comments on the applicant’s preliminary Conservation Plan. These comments are included in Appendix A, and this FEIS also provides responses to those comments. The accepted findings of the analyses of conservation areas, wastewater treatment, and drinking water supply were used to establish a Base Lot Count for the project according the process required in the revised 2005 Town of Blooming Grove Code § 235-14.1A(2) Major Subdivision Review for Rural Residential Districts. A Lot Count Determination of 37 lots was approved by the Planning Board on January 23, 2008. The revised site plan proposed in this FEIS (FEIS Conservation Plan) is based on the site plan approval process in the amended zoning law and the approved lot count.

1.3 Summary of FEIS Conservation Plan

The subdivision action proposed and analyzed in the DEIS has been modified to conform to the Town’s newly adopted Zoning Code, and comments made by the Planning Board and the public during the review process. The resulting FEIS Conservation Plan is improved, reducing the majority of potential environmental impacts and reflecting the goals of the Town’s Comprehensive Plan and zoning amendments.

Features of the Conservation Plan

Compared with the plan proposed in the DEIS, the Conservation Plan would:

- Reduce the number houses from 38 to 37
- Arrange the housing sites on smaller lots

- Avoid impacts to primary and secondary conservation areas such as wetlands and scenic views, reducing wetlands impacts from 0.47 acres to 0.03 acres
- Provide a continuous set back of approximately 250 feet from Lake Road frontage
- Preserve hedgerow and trees on the perimeter of the property
- Add stone wall features and street trees along Lake Road
- Provide central water supply with two community wells instead of individual wells
- Include an additional level of treatment for stormwater
- Increase sight distance at the northern access road
- Provide for a future roadway connection to adjoining property
- Preserve visual assets on site consistent with code requirements for the Scenic Overlay District
- Adhere to the New York State Energy Star guidelines and US Green Building Council Leadership in Energy and Environmental Design (LEED)

Table 1-1 Alternative Impact Comparisons		
Areas and Potential Impacts	Former DEIS Proposed Action (38 single family residential units)	Current FEIS Proposed Action (37 single family residential units)
Natural Resource Impacts (acres)		
Total Construction Disturbance	30.6	33.7
ACOE Wetland Disturbance	0.47	0.03
Steep Slope Disturbance $\geq 15\%$	2.6	2.15
$\geq 25\%$	0.19	0.057
Developed Area (acres)		
Impervious Surfaces buildings and paved surfaces	5.98	6.75
Lawn/ Landscaping	24.61	23.25
Wetlands	16.65 - 0.47 = 16.18	16.65 - 0.03 = 16.62
Woods (uplands)	38.65 - 16.0 = 24.55	38.65 - 12.24 = 26.41
Road Length	$\pm 4,020$	$\pm 4,990$
Community Resources		
Population	138	132
Water Demand (gpd)	14,250	14,240
Sewage Flow (gpd)	19,760	18,330
Revenues to School District	\$346,368	\$281,088
Revenues to Orange County	\$64,175	\$52,001
Revenues to Town of Blooming Grove	\$97,282	\$78,256
Traffic		
Traffic Generation *	Total AM Peak Hour Trips/ 36 Total PM Peak Hour Trips/ 46	Total AM Peak Hour Trips/ 36 Total PM Peak Hour Trips/ 44
Source: Tim Miller Associates, Inc. and Lanc and Tully Engineering and Surveying, P.C., 2008		

The Lake Blooming Grove Subdivision is located on the west side of Lake Road in the northeast portion of the Town of Lake Blooming Grove. The project's location is shown in Figure 1-1 Location Map. The proposed project layout is shown in Figure 1-2 FEIS Conservation Plan. The DEIS Plan proposed 38 single-family homes with four bedrooms. The revised proposal, the FEIS Conservation Plan, reduces the number of lots to 37, with 30 four-bedroom houses and seven three-bedroom houses. The revised conservation layout concentrates the housing sites on smaller lots, avoiding impacts to primary and secondary conservation areas, most notably to wetlands and the hillside located on the northern portion of the site. The FEIS Conservation Plan divides the area within the loop roadway into two sections separated by a swath of open space that connects the open space and wetland area in the southern portion of the property with the open space in the northern portion of the property. Houses to the east of the grove are arranged along a short cross street. In the DEIS Plan five house lots were located along Lake Road, whereas the FEIS Conservation Plan provides a continuous setback of approximately 250 feet and allows the preservation of a hedgerow and the addition of trees to supplement existing natural vegetative buffers. Stone wall features are proposed to be built at each of the site's two entry drives.

The DEIS Plan proposed individual water supply wells and individual Subsurface Sewage Disposal Systems (SSDS's) for each lot. In the revised FEIS Conservation Plan, water for the development will be supplied by two community wells located in the southern portion of the property. By providing two community wells, the layout of the residential lots has been arranged on the most developable land, as the required separation distance between individual wells and SSDS's would no longer necessitate larger lots. The community wells are proposed in locations remote from private wells on adjoining properties. Individual SSDS's will be provided on each of the proposed lots.

In response to concerns raised about potential impacts on water quality due to potential stormwater runoff in the DEIS Plan, the project engineer has revised the design of the stormwater treatment facilities in the FEIS Conservation Plan. The proposed stormwater management plan would mimic the existing drainage patterns within the site to manage the volume and quality of stormwater. Instead of two stormwater management facilities, the project now includes three stormwater management areas. Flow rates of stormwater on site are anticipated to decrease after the proposed development with the implementation of the stormwater management facilities, and the project is not expected to have an adverse impact to Beaverdam Lake and other downstream receiving waters. For certain parameters, as discussed in detail in Section 5.1, water quality is not expected to be adversely impacted as a result of the project.

An analysis of the project site was conducted to evaluate areas identified in the Scenic Viewshed Overlay District adopted by the Town on February 27, 2006. A Visual Analysis was prepared, and the DEIS site plan was modified accordingly. The current plan preserves the scenic viewshed resource located along the Lake Road frontage and retains the hillside knoll that is part of the scenic viewshed located in the center of the site. The scale, style, colors and materials used in the architecture and landscape design will employ the traditional styles of the neighborhood and integrate the development and the natural assets of the site and locale.

The FEIS Conservation Plan shown in Figure 1-2 shows all land lying outside of individual house lots as open space, to be preserved as such. Planned open space areas include wetland and wetland buffers, surface water areas, rural roadway buffers, connections for continuous

open space, and scenic viewshed buffers. This area, totaling 41.4 acres, exceeds the Town zoning requirement to preserve a minimum of 50% of the total site area as open space.

It should be noted that the DEIS calculated Open Space according to the definition in the Town Code § 235-4: "That percentage of the land area not covered by the combined area of all buildings, structures and paved areas on all or that portion of the lot within the same zoning district as the main building." The proposal in this FEIS uses the definition of Open Space as a permanently preserved area provided in the code § 235-14.1C, "Conservation areas." This section defines the regulations for major subdivisions, which require the permanent preservation of 50% of open space. Accordingly, in contrast to the DEIS, the FEIS does not include areas within individual house lots in the open space calculation.

Based upon additional environmental analyses prepared during the Site Plan Analysis process (and included in this FEIS), the majority of potential significant environmental impacts are less for the preferred FEIS Conservation Plan than for the original DEIS Plan. The impervious area has increased by approximately 3/4 acre due to the 970 feet increase in road length and a Town request that the road be 26 foot in width in lieu of the originally proposed 24 foot width (due to expected changes to the Town's Subdivision requirements), as well as the incorporation of larger 2,400 sq. ft. footprints for the dwellings. The area of disturbance has increased from 30.6 acres to 33.7 acres due to the modified roadway layout, an additional stormwater management facility, and grading necessary to balance the site's excavated material. These small increased impacts allow for a plan that provides additional mitigation of potential impacts to surface water and traffic, and responds to Town requirements and concerns raised by the public regarding the DEIS plan.

1.4 Project Description

1.4.1 Site Characteristics and Location

The site comprises 79.3 acres of vacant woods and former pasture lands located in the northeast corner of the Town of Blooming Grove, Orange County, New York, just north of the Hamlet of Salisbury Mills. The shared municipal boundary between the Town of Blooming Grove and the Town of New Windsor forms the northern property line. The Town of Cornwall town line lies approximately one quarter mile east in Beaverdam Lake. A prominent natural feature, Beaverdam Lake lies approximately 500 feet east of the project site, across Lake Road, and is surrounded by single-family residential development.

The property has primary frontage measuring approximately 1,650 feet on the north side of Lake Road. It is located approximately 2,000 feet north of NYS Route 94. There is currently no improved vehicular access to the site.

1.4.2 Purpose, Need, and Benefits

Blooming Grove is located in the New York metropolitan region's outer ring, an area of high density growth and development in the past two decades. Population throughout Blooming Grove is expected to continue to grow in this decade and thereafter, based upon census data. The Applicant proposes to subdivide and develop the project site for 37 single-family residences to address the continued need and public demand for high quality housing in Blooming Grove and greater Orange County. The proposed project is designed to contribute to

the housing resources in the Town of Blooming Grove, while preserving its visual character and protecting the natural and cultural resources of the community.

The Applicant will market the proposed residences over a multi-year period in response to market conditions. While specific architectural styles have not yet been determined, for planning purposes a typical building footprint of 35 by 50 feet has been used. The residences are anticipated to have approximately 3,000 square feet with the majority four bedrooms in size, with a projected sale price of approximately \$475,000. The projected addition to the population of the Town of Blooming Grove is 132 persons, based on current standard demographic multiplier of 3.163 persons per three bedroom household and 3.6248 persons per four bedroom household.

Based on an analysis of projected future assessed valuation, the new project generated tax revenues to all districts would be \$ 411,345 for the modified FEIS Conservation Plan. This represents over 25 times the revenues currently generated by the property. The net increase between the total current tax revenues generated by the site and the total future project-generated revenues for the subdivision is projected to be approximately \$394,958. Further, because the site offers limited areas suitable for active recreation, the Applicant anticipates paying a recreation fee in lieu of providing active recreation land on the property. These fees, established by the Town Board, can be expected to contribute to the development of parkland and recreation in other locations in the Town.

The Applicant proposes energy efficient, low impact design for the Lake Blooming Grove development. The architecture and site design will comply with standards for low impact development as defined in the New York State Energy Star guidelines and US Green Building Council Leadership in Energy and Environmental Design (LEED).

1.4.3 Project Layout

The project will have two entrances located approximately 750 feet apart along Lake Road. An internal looped road system would provide access to each of the proposed residences. In addition to the loop road extending from the two entrances, the plan provides a north-south cross street for internal circulation and a short (340 foot) cul-de-sac in the northwest portion of the site. This cul-de-sac would provide future access to currently undeveloped lands north of the site and a possible future connection with Station Road, as requested by the Planning Board.

Proposed residences would be located along the north-south portion of Road B, in the eastern portion of the site and along the curved loop road in the western portion of the site. These two groups of homes would be separated by a minimum 100 foot wide buffer of some existing trees and vegetation supplemented with additional specimen trees (see Figure 1-2). This 100-foot wide buffer provides a physical connection between the open space on the southern and northern portions of the site. A 250-foot wide buffer of existing vegetation will be maintained along the entire Lake Road frontage. As shown in Figure 1-2, 41.4 acres of Open Space would be preserved with the proposed Site Plan, including much of the southern one-third of the site.

Two community water supply wells are proposed in the southern portion of the property. Access to the two wells would be provided by gravel access drives from the main loop Road B. Access to Community Well #1 would involve a limited amount of wetland disturbance (1,367 square feet or 0.03 acres).

Two stormwater management facilities are to be located on the southern portion of the property and a third area is to be located near the northern project entrance on Lake Road. These stormwater management facilities have been designed in accordance with New York State Department of Environmental Conservation (NYSDEC) requirements and will be landscaped with wetland plantings, as further described in Section 3.2 Water Resources.

1.5 Compliance with Zoning Code and Comprehensive Plan

The proposed FEIS Conservation Plan conforms with the Town Zoning Code and Comprehensive Plan. As described previously, the zoning code was amended substantially on December 27, 2005 in response to the Town's updated Comprehensive Plan. The Applicant has submitted additional environmental analyses to comply with the amended Zoning Code.

As recommended in the Comprehensive Plan, the Zoning Code was amended to avoid overburdening the water supply and protect open space and visual resources. The modified FEIS Conservation Plan, for a single-family residential development with 37 dwelling units supplied by two community wells, represents an appropriate density for the site that will not overburden the water supply, as described in Section 3.2 of this FEIS. The Comprehensive Plan also recommended amending the code to require that wastewater disposal avoids harm to the natural environment. The soil analysis described in Section 3.1 of this FEIS indicates that the proposed individual septic system locations are adequate and appropriate for the development.

The modified FEIS Conservation Plan conforms with the goals of the Comprehensive Plan of protecting and preserving open space, scenic vistas, and the character of the existing roadways. It employs a conservation layout that avoids impacts to wetlands and wetland buffers, maximizes open space, and preserves the visual qualities of the site from significant vantage points including Lake Road. The development density for the project was calculated according to the five-step Site Analysis process in the amended Zoning Code. A full discussion of the project's compliance with the zoning code and a description of the site analysis process appears in Section 7.0 of this FEIS.

1.6 Comparison of Impacts of Former Plan and Revised Plan

This FEIS incorporates responses to comments received on the 2004 DEIS, draft 2005 FEIS, and the subsequent zoning analyses required by the new Zoning Code amendments. The potential impacts of the project related to soils, water resources, traffic, and visual resources have been more fully analyzed based upon water supply and wastewater treatment analyses prepared as part of the Site Analysis process. The impacts of the current FEIS Conservation Plan on these resources are briefly compared to the previous DEIS Plan below and in Table 1-1. They are discussed comprehensively in Sections 2.0 through 9.0 of this FEIS. Certain sections of the DEIS received no comments during the review period and remain accurate for the current proposal or required only minor revisions based on the reduction in the number of proposed houses from 38 to 37.

1.6.1 Geology, Soils and Topography

Grading

Approximately 34 acres or 43 percent of the site would be graded to accommodate the proposed FEIS Conservation Plan compared with 30.6 acres, or 39 percent for the previous DEIS Plan. Based upon engineering estimates, a total of approximately 41,934 cubic yards of material will be cut and 41,790 cubic yards will be filled for the FEIS Conservation Plan as opposed to the 24,729 cubic yards of material to be cut and 19,225 cubic yards to be filled for the DEIS Plan. The balance of 143 cubic yards can be used in various portions of the site to eliminate the need to transport material off-site. The bulk of the earth cuts would be located in the area of the access road, in the west-central portion and south-eastern portion of the property. Grading is also required for the two stormwater detention ponds located in the southern portion of the property and by the north access road.

Steep Slopes

Construction on slopes has been considered carefully for the proposed residential construction since grading such slopes increases the potential for soil erosion and may impact slope stability. Under the current Blooming Grove Code steep slopes are defined in § 235-4 as “Areas with an average slope equal to or greater than 25% with a minimum area of 2,000 square feet and a minimum width perpendicular to the contour of 10 feet.” Since the project site consists of rolling topography and hillsides, disturbance of slopes for the construction of roadways and residences is required. The project would result in the disturbance of 0.057 acres with slopes over 25 percent compared with 0.19 acres in the previous plan. Impacts to slopes greater than 15 percent has been reduced from 2.6 acres to 2.15 acres under the current proposal.

A Soil Erosion and Sediment Control plan is provided in the set of submitted site plans. The primary aim of this plan is to reduce soil erosion from areas exposed during construction and prevent silt from reaching the on-site wetlands and areas downstream. All soil erosion and sedimentation control practices would be installed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, and the Town of Blooming Grove municipal code.

Sanitary Septic Systems

For the DEIS Plan the project engineer completed extensive deep hole and percolation testing for the future installation of sanitary septic systems for the proposed residential lots. This testing was done in June, July, August and October, 2002. Deep hole testing was completed on 36 of the 38 proposed lots. In 2007, two percolation tests were completed on each of the lots for the FEIS Conservation Plan. The testing indicated that there was suitable soil cover on all of the lots tested. Testing for sanitary systems is further described in Section 3.1 Geology Soils and Topography. Septic systems have been carefully located on each lot in areas that have appropriate slopes, soil conditions and setbacks.

1.6.2 Water Resources

Water Supply and Wells

The FEIS Conservation Plan proposes a community water supply with two wells, while the DEIS plan included individual wells on each of the residential lots. Providing the community water

system allowed the clustered layout with smaller lots, since the separation distances between individual wells and septic systems was no longer necessary.

At the time the DEIS was submitted in 2004, wells had not been drilled on the property, and the analysis of impacts on groundwater was based on existing local wells. Subsequently four test wells were drilled in February 2005 for the purpose of analyzing impacts of the DEIS Plan, which proposed individual wells for the subdivision. A report was issued by Tim Miller Associates, Inc. with SSEC on March 1, 2005 and a revised report was submitted on May 17, 2005. The previous groundwater studies involved the pump testing of four wells selected to represent the proposed 38 individual wells.

Drinking water in the FEIS Conservation Plan would be supplied by two community wells and consequently new well test data and analysis were required. Pumping tests were conducted on the two successful test wells (pumping test Wells 2 and 3) between January 22, 2007 and February 12, 2007, and a report was issued by Leggette, Brashears & Graham April 2007 (revised June and August 2007). Calculations in the report are based on the preliminary lot count of 41 units proposed at that time. The report concluded that the respective yields meet the water-supply requirements of the New York State Department of Health (NYSDOH). Estimated water demand for the proposed Lake Blooming Grove Subdivision is 15,760 gallons per day (gpd) or 10.9 gallons per minute (gpm). The NYSDOH requires that the water supply for the proposed development equal or exceed twice the average water demand of 31,520 gpd, or about 21.9 gpm, with the most productive well out of service. The 72-hour pumping tests completed on Wells 2 and 3 indicate a safe yield of 22 gpm from each well. The results of the well tests and potential effect of the proposed action was reviewed by the town Engineer and the Town's independent hydrologist, each of whom found the proposed action likely not to adversely affect adjoining neighbors' wells.

Recharge of the bedrock aquifer on the 79.39-acre parcel has been estimated to be 49,620 gpd under normal precipitation conditions and 34,235 gpd under drought conditions. The recharge estimates significantly exceed the estimated water demands (15,760 gpd) under both normal and drought conditions. The water-level drawdown response in off-site monitoring from the test events on Wells 2 and 3 was reported at pumping rates (22 gpm) at more than twice the average water demand (10.9 gpm) of the project. The data from the recent pumping test events on Wells 2 and 3 indicate normal operation of these wells to meet the project water demand (10.9 gpm) will not likely result in meaningful impact to off-site wells (see Section 3.3).

It should be noted that any groundwater supply development for the proposed Lake Blooming Grove project will ultimately be reviewed and approved, prior to being placed into operation, by the NYSDEC, NYSDOH and Orange County Department of Health (OCDOH).

Water-level measurements collected from on-site piezometers indicate no hydraulic connection between the bedrock aquifer and the on-site wetland feature under pumping conditions.

The water quality for both wells (Wells 2 and 3) meets all New York State drinking water standards and guidelines, with the exception of odor. Water-quality results indicate the presence of hydrogen sulfide odor above the Maximum Concentration Level (MCL) in both Wells 2 and 3, which will likely be reduced to acceptable levels following chlorination, Well 3 was also positive for the presence of total coliform. LBG recommends disinfection of Well 3 before it is placed in service.

Stormwater Management

Numerous comments on the DEIS were related either directly or indirectly to the project's potential impact to Beaverdam Lake. The Planning Board and the public expressed concern regarding stormwater treatment and the projected increase in levels of biological oxygen demand (BOD) that would result in the stormwater runoff from the development proposed in the DEIS (BOD indicates how much oxygen is being used by aerobic organisms in water to decompose organic matter and is a general indicator of the organic material in water, including nitrates and phosphates, which are a source for aerobic bacteria). While the DEIS provided a discussion regarding Beaverdam Lake and the project's potential impacts on it, additional information is provided in Section 5.1 of this FEIS, including the Lake's history, current environmental condition and future condition with the proposed project.

As described in the DEIS, the Lake Blooming Grove subdivision would include approximately 15 acres that drain to Beaverdam Lake, or approximately 0.3 percent of the entire drainage basin. Approximately 20 percent of the 79 acre site drains to Beaverdam Lake, while the balance of the site flows towards the west and Moodna Creek.

The quality and quantity of stormwater draining into Beaverdam Lake and Moodna Creek has been addressed in the FEIS Conservation Plan and a revised Stormwater Pollution Prevention plan (SWPPP). Instead of the two stormwater management facilities proposed in the DEIS Plan, the FEIS Conservation Plan includes three stormwater management areas. A proposed pocket pond (Stormwater Basin B) would be located adjacent to the existing wetland north of the proposed northern entrance drive, and two other stormwater management areas would be located in the southern portion of the site (see Figure 1-2).

The SWPPP includes wet retention basins, bioretention areas, and dry swales. Stormwater collected on developed portions of the property would be treated using these stormwater management practices to reduce off-site discharge of stormwater runoff, sediment and pollutants.

A comparison of the flow rates that would occur before and after the development of the FEIS Conservation Plan indicates rates after development would decrease in all of the drainage areas. In the drainage area that discharges to Beaverdam Lake (Area B), a decrease of approximately 8 to 17 percent has been estimated for the various storm events analyzed.

The revised stormwater pollution prevention plan (SWPPP) in this FEIS was prepared according to the New York State Stormwater Management Design Manual (August, 2003) standards using the required Water Quality Volume (WQv) provisions to protect surface water from the impacts of stormwater runoff. In addition to designing the stormwater management plan to meet the WQv criteria, the project engineer prepared a Pollutant Loading Estimate indicating overall pollutant loading rates would decrease in the post-development condition (with treatment) compared to the existing condition. In contrast to the plan proposed in the DEIS, the revised stormwater management plan in the FEIS Conservation Plan would result in an expected overall decrease not only phosphorous and nitrate, but concentrations of Biological Oxygen Demand as well.

Wetlands

The FEIS Conservation Plan is expected to disturb approximately 0.031 acres of wetlands in one distinct area associated with the installation of one community well access road. In addition, there would be a temporary disturbance of 0.061 acres related to the placement of a drainage pipe along the west side of Lake Road. The on-site wetlands are regulated by the Town and the US Army Corps of Engineers (USACOE), and the proposed impacts to the wetlands will require approval by the USACOE. Although alternatives were reviewed by the project engineer, the location of the well and impact to wetlands were unavoidable. Wetland impacts were minimized to the extent possible by shifting the location and orientation of the well access drive and the placement of a retaining wall in an area where the roadway grading approaches the wetland. To mitigate the loss of wetland associated with the project, the applicant is proposing several measures. As described below, the three stormwater basins would be planted with wetland vegetation, and therefore, similar wetland functions would be retained in those portions of the site. These basins would provide additional filtering of storm flows and biological uptake of nutrients.

1.6.3 Traffic and Transportation

Site Distance

There are two proposed road entrances onto Lake Road for the project, the northernmost road entrance (Road A) and the southern entrance (Road B). Intersection sight distance is defined as the distance necessary for a vehicle to safely enter the traffic stream requiring only minor speed adjustments by vehicles in the traffic stream. In the FEIS Conservation Plan, the northern entrance road has been relocated approximately 100 feet to the south from its previously proposed location and the sight distance onto Lake Road has been increased as a result. The DEIS plan provided 545 feet of sight distance for a left turn out and 320 feet for a right turn for the original Road A entrance, while the FEIS Conservation Plan now provides a 440 foot left turn sight distance and a 490 foot right turn sight distance for Road A. For Road B, the left turn sight distance provided is 475 feet and the right turn sight distance provided is 407 feet. This is sufficient for a vehicle traveling in excess of 35 miles per hour. The posted speed limit on Lake Road in this area is 30 miles per hour. Other than these changes in the access road the current plan presents no substantive change in the traffic and transportation impacts.

1.6.4 Land Use and Zoning

As described above, the FEIS Conservation Plan has been developed to conform with the Comprehensive Plan and current zoning of the Town of Blooming Grove. A detailed discussion of the project conformance with the Code and the required Site Analysis Process is provided in Section 3.5.

1.6.5 Visual and Cultural Resources

Visual Resources Impacts

Pursuant to the zoning revisions adopted in December 2005 a visual assessment analyzing the potential visual impacts of the new subdivision plan was conducted, in 2007. The assessment specifically considered two areas identified as "Scenic Viewshed Overlay Districts," according to the new Town of Blooming Grove Zoning Map. A visual analysis of the project site was

completed for the Lake Blooming Grove DEIS (April 1, 2004). This analysis remains applicable to the project site since existing conditions in the vicinity of the site have not substantially changed. The 2007 analysis utilizes the information and findings of the 2004 analysis, as it relates to the Scenic Viewshed Overlay areas and the new subdivision plan (see Section 3.9).

Minor revisions to the illustrative Visual Resources Plan (Figure 9-6) prepared for analysis were made for this FEIS based on the reduction of the number of units and the reconfiguration of the north stormwater basin and access road. The revised FEIS Conservation Plan was developed with full consideration of the potential visual effects of the project, and designed to conserve the scenic viewsheds to the extent possible. The design addresses visual impacts by: 1) preserving areas of existing trees and wooded buffers, 2) locating the roadway network and residences to conform to the existing topography, and 3) providing landscaping and planting to supplement existing vegetation and provide enhanced visual buffers.

1.7 Ownership and Maintenance of Site Features and Open Space

The Conservation Plan proposed in this FEIS requires the long-term ownership and maintenance of the following site features: (1) public community water supply, (2) stormwater treatment and drainage facilities, and (3) open space. There are numerous methods available in order to ensure the proper maintenance of each of these features. While the several possible methods of ownership have somewhat differing operational characteristics, each method would provide effective maintenance, and there is no environmental impact associated with one ownership over another.

Public Community Water Supply

The FEIS Conservation Plan proposes a community water supply with two wells. The public community water supply system will be designed and installed in accordance with the requirements of the NYSDEC, NYSDOH and the OCDOH.

The proposed community water supply must be owned and operated by one of the following:

- (1) a Town special district established under Article 12 or 12-A of Town Law.
- (2) a private waterworks corporation established under Article 4 of the Transportation Corporation Law.

Before a private waterworks corporation is established the Town Board must consent to the formation. Any engineering plans for the proposed public community water supply system will be reviewed by the Town and Orange County Water Authority, in addition to the agencies named above.

A Town water district must be approved by the Town Board. No such costs are borne by taxpayers not benefited by, or outside, the special improvement district. All costs, including capital costs and operation and maintenance, are paid solely by the property owners within the special district.

Storm Water Retention and Drainage

The storm water retention and drainage facilities will be designed and installed consistent with NYSDEC requirements. The proposed drainage facilities can be owned and maintained by a homeowners' association (HOA), but the preferred method may be the establishment of a special drainage district under Town Law. No such costs are borne by taxpayers not benefited by, or outside, this district. All costs, including capital costs and operation and maintenance and any other costs associated with labor or billing, are paid solely by the property owners within the special district.

Another possible alternative, subject to confirmation by the approving authority, is placing the ownership and maintenance of the drainage facilities within the Water Works corporation described above.

Open Space

Approximately 52 percent of the subject property will be preserved as open space. No trails or other recreational activities are proposed within the open space. The open space will be used as passive recreation with minimal requirement for maintenance. The permanent preservation of such open space or conservation areas shall be legally ensured to the satisfaction of the Planning Board and Town Attorney by the filing of appropriate covenants, deed restrictions, easements, or other agreements. According to Section 235-14.1(C) of the Town's Zoning Code, ownership, or operation, and maintenance of the open space can reside with the Town, a conservation organization, or a HOA. Pursuant to Section 235-14.1(C)(3), the Town Board shall retain the right to review and approve the bylaws and charter of any HOA and require whatever conditions it deems necessary to ensure proper operation and maintenance.

In the alternative, the open space may be owned and maintained together with either a special drainage improvement district approved by the Town Board, or a special water supply improvement district approved by the Town Board, since the drainage and community water supply facilities lie within the open space. As discussed above, only the users, within these special drainage and water supply improvement districts, who benefit from the services of the special improvement district will share any operation and maintenance costs. No such costs are borne by taxpayers not benefited by the special improvement districts.

Finally, another possible alternative is having the private Waterworks Corporation, established in connection with the community water supply, own and maintain the open space since the community wells lie within the open space. The cost for the operation and maintenance of the open space would be limited to the customers serviced by the private Waterworks Corporation (i.e. the 37 homes proposed) and therefore paid via their water bill.

These alternatives are approaches that will provide the Town with a means to accomplish the objectives of protecting Open Space and assuring the project's infrastructure is properly maintained at no cost to the town-wide residents.

1.8 FEIS Format

The FEIS is arranged in sections, with comment summaries and responses arranged by subject area similar to the DEIS. This FEIS provides additional and updated studies, analysis, and data

as necessary for the Planning Board, involved and interested agencies, and the public to evaluate the specific impacts of the modified Conservation Plan. The transcript of the DEIS public hearing is included as Appendix B.

The following letters on the DEIS and FEIS were received (see Appendix A):

Table 1-2 Comment Letter, Author and Date		
Letter #	Author	Date
1	Fine and Associates, Beaverdam Lake Civic Association	June, 23,2004
2	Town of Blooming Grove Planning Board	June 29, 2004
3	Jerome and Christine Taylor	July 10, 2004
4	Thomas and Kathleen Corl	July 10, 2004
5	James and Donna Sheer	July 11, 2004
6	William F. Auerbach	July 12, 2004
7	Ralph and Evelyn Juarbe	July 11, 2004
8	Rick and Chris Basso	July 11, 2004
9	Wayne and Pamela Day	July 11. 2004
10	Town of Blooming Grove Planning Board Review, Patrick Brady, P.E.	July 26, 2004
11	Town of Blooming Grove Planning Board Review, Patrick Brady, P.E.	June 25, 2007
12	HydroQual Environmental Engineers & Scientists, P.C.	Nov. 21, 2007
13	Christopher Murney	Feb. 26, 2008
14	Steven Lerner	March 7, 2008

A comment summary, in some cases, may incorporate more than one individual comment on the same subject, followed by a response to that comment. The sources of each comment are referenced. The format of the comments and responses is as follows:

Comment # (Source): Comment summary text.

Response #: Response text.

1.9 Required Approvals and Involved and Interested Agencies

As the Lead Agency, the Town of Blooming Grove Planning Board has primary responsibility for review of this application and for determining its conformance with the Town's requirements for the subdivision of land. The proposed action will require the following approvals or referrals by the following listed agencies (involved agencies):

- **Town of Blooming Grove Town Board of Trustees**
Consent to create Transportation Corporation (community water system) and related contractual agreements
Acceptance of public roads of other public improvements offered for dedication
Establishment of special districts
 6 Horton Road
 Blooming Grove, New York 10914

- **Town of Blooming Grove Planning Board**
Subdivision approval
P.O. Box 358
Horton Road and Route 94
Blooming Grove, New York 10914
- **Town of Blooming Grove Highway Department**
Entrance permit
2741 Route 94
Blooming Grove, New York 10914
- **Orange County Health Department**
Realty subdivision
Community wells
Community water supply and distribution system approval (Note: The Community Water Supply Approval is based upon the review and approval from the NYSDOH and that by nature of the application the OCHD will most likely review the System for the State.)
Individual sanitary disposal systems
1887 County Building
124 Main Street
Goshen, NY 10924
- **New York State Department of Environmental Conservation (NYSDEC)**
Stormwater Discharge SPDES General Permit
Water Supply Permit
Region 3
21 South Putt Corners Road
New Paltz, New York 12561
- **New York Department of State**
Transportation Corporation (community water system)
Albany, New York
- **New York State Department of Health**
Review of Community Water Supply and Distribution System
Albany, New York
- **U.S. Army Corps of Engineers**
Nationwide Wetlands Permit #29
U.S. Army Corps of Engineers (ACOE)
Civil Works Office
U.S Army Engineer District, New York
26 Federal Plaza
New York, New York 10278

Interested Parties

- **Orange County Planning Department**
Referral for review per §239 of General Municipal Law (No approval)

1887 County Building
124 Main Street
Goshen, New York 10924

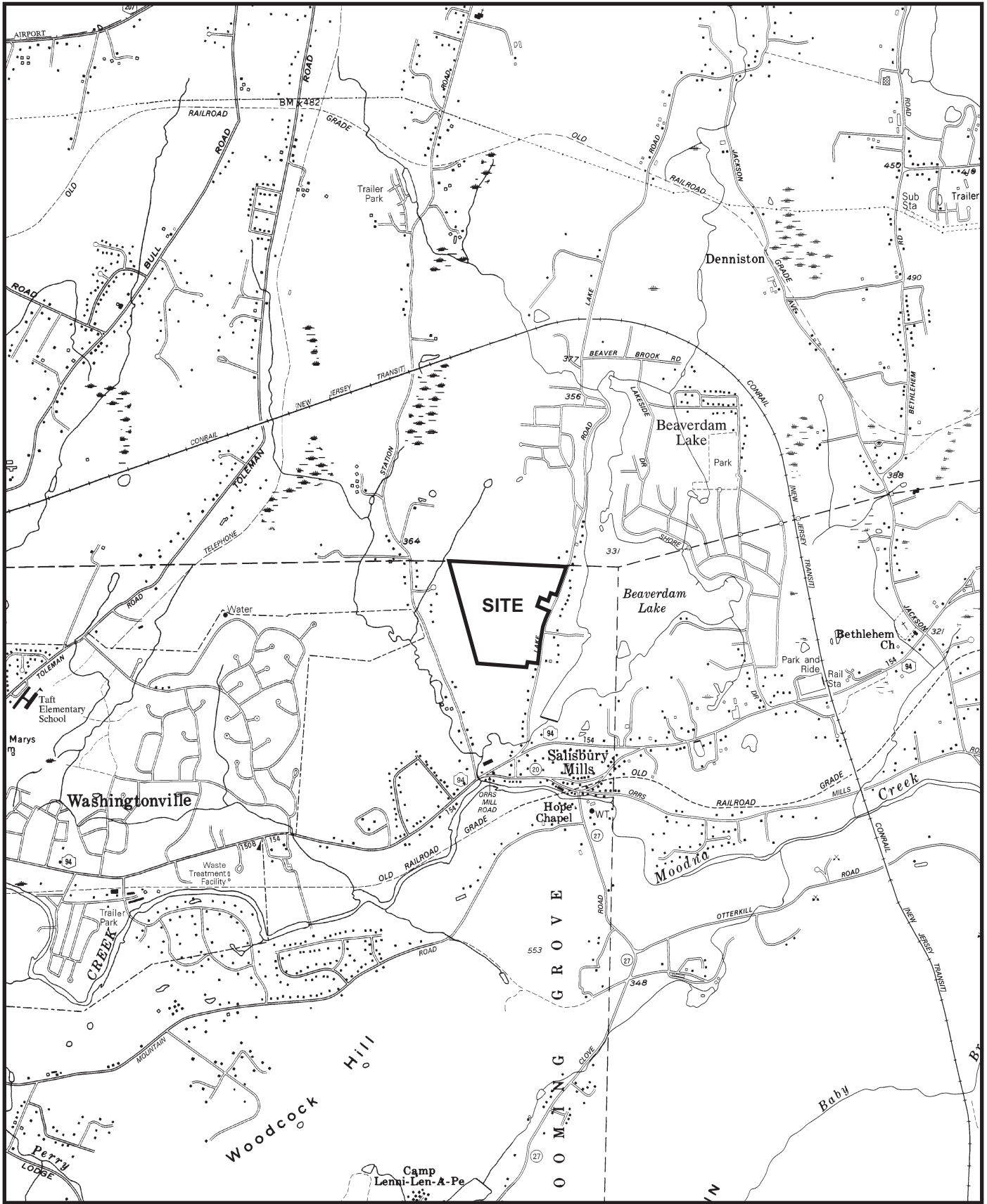
- **NYS Office of Parks Recreation and Historic Preservation**
Coordinated review associated with NYSDEC Water Supply Permit
Waterford, New York 12188
- **Washingtonville Central School District**
52 West Main Street
Washingtonville, New York 10922
- **Salisbury Mills Fire Department**
Route 94
Salisbury Mills, New York 12577
- **Town of Blooming Grove**
Volunteer Ambulance Corp.
7 North Street
Washingtonville, New York 10992
- **Town of Blooming Grove Police Department**
2 Horton Road
Blooming Grove, New York 10914
- **Town of Blooming Grove**
Department of Parks & Recreation
4 West Main Street
Washingtonville, New York 10992
- **Town of New Windsor**
555 Union Avenue
New Windsor, New York 12553
(239-nn referral)
- **Orange County Water Authority**
- **Moodna Creek Watershed Management Plan**
99 Main Street, Suite 1
PO Box 118
Goshen, NY 10924
- **Beaverdam Lake Civic Association**

Additional Required Filings

- **Office of the Planning Board as Lead Agency**
P.O. Box 358
Horton Road and Route 94
Blooming Grove, New York 10914

- **Charles J. Bohan, Supervisor**
Town of Blooming Grove
6 Horton Road
Blooming Grove, NY 10914
- **Alexander B. Grannis, Commissioner**
New York State Department of Environmental Conservation
Division of Environmental Permits
625 Broadway
Albany, NY 12233-1750
- **Lake Blooming Grove LLC, Applicant**
18200 Seville Clubhouse Drive
Brooksville, FL 34614
Attn: Judi Saker

Persons requesting a copy



LEGEND

 Site Property Boundary



Figure 1-1: Site Location
 Lake Blooming Grove
 Town of Blooming Grove, Orange County, New York
 Base Map: NYS DOT Planimetric Map
 Scale: 1" = 1,500'



Figure 1-2: FEIS Conservation Plan

Lake Blooming Grove

Town of Blooming Grove, Orange County, New York

Source: Lanc & Tully Engineering and Surveying, P.C., 4-29-08

Scale: 1" = 250'

