#### 1.0 SUMMARY

## 1.5 Summary of the Final Environmental Impact Statement

This document is a Final Environmental Impact Statement ("FEIS") prepared in accordance with the New York State Environmental Quality Review Act ("SEQRA") and its implementing regulations, 6 NYCRR Part 617. The FEIS is prepared as an addendum to the Draft Environmental Impact Statement ("DEIS"), which is hereby incorporated by reference into this FEIS.

The SEQRA documents have been prepared in support of the application of Double Diamond, Inc. (the "Applicant") to construct a residential/recreational resort development called "Lost Lake Resort" on a site of approximately 2079.51 acres located in the Town of Forestburgh, Sullivan County, New York.

#### The SEQRA Process

The SEQRA lead agency for this action is the Town of Forestburgh Town Board. SEQRA prescribes that the lead agency is responsible for the adequacy and accuracy of the FEIS. The DEIS, as amended by the FEIS, will form the basis for the lead agency's Statement of Findings that will conclude the environmental review process for the Town Board. The Town Board will adopt a Statement of Findings relative to the environmental effects of this project prior to taking any action regarding approval of the application.

The Applicant is requesting approval of the Town Board to designate the site as a Planned Development District (PDD) in accordance with the local PDD regulation, and other associated approvals necessary to implement the Applicant's proposed Master Plan, based on the findings of the lead agency that result from the SEQRA process. A fully detailed set of site development drawings meeting the requirements of the permitting agencies will be submitted to the agencies for review and approval after the conclusion of the SEQRA review process. The approvals that are necessary for the implementation of the development plan are identified in the DEIS and include:

Forestburgh Town Board - PDD Approval, Consent to form transportation corporations for sewer and water service

Planning Board, Town of Forestburgh – Subdivision and Site Plan Approvals

New York State Department of Health - Water Supply

Sullivan County Department of Public Works - Highway Work Permit

New York State Department of Environmental Conservation - SPDES Permit for STP Wastewater Discharge, SPDES General Permit for Stormwater, Waiver for >5 acres construction disturbance, Wetlands Disturbance, Stream Disturbance, Sewer Collection, 401 Water Quality Certification, Water Taking.

Delaware River Basin Commission<sup>1</sup> - Potential Permits for wastewater discharge, groundwater withdrawal, surface water withdrawal

US Army Corps of Engineers<sup>2</sup> - Section 404 Wetlands Permit

<sup>&</sup>lt;sup>1</sup>The DRBC is not defined as an involved agency under SEQRA (it is an interstate compact), although it will need to issue permit(s) as noted.

#### SEQRA Background

The Applicant prepared the DEIS for this application based on a written scope accepted by the lead agency on June 11, 2009. (The adopted Scoping Document is included in Appendix A of the DEIS.) The lead agency reviewed the Applicant's preliminary DEIS for adequacy with respect to its scope and content for the purpose of public review, and after requested revisions were made, accepted the document as complete for the purpose of public review on May 19, 2010, and issued a Notice of Completion and Notice of Public Hearing. The notices are included in FEIS Appendix A. The lead agency held a public hearing on the DEIS and the PDD application on June 16, 2010, at which time the hearing was closed, and held the comment period on the DEIS open for written comments through July 2, 2010. The lead agency received written comments from the public during the comment period.

#### The Final Environmental Impact Statement

In accordance with SEQRA, this FEIS provides written responses to substantive comments on the DEIS received by the lead agency during the public review period, including oral comments made at the public hearing. The transcript of the DEIS public hearing is included in FEIS Appendix C. All written comments received by the lead agency during the public comment periods on the DEIS are included in FEIS Appendix D.

Substantive public and agency comments received by the lead agency on the DEIS, together with responses to the comments as required by SEQRA, are provided in this FEIS in comment/response format and organized by subject matter following the sequence in the DEIS. In some cases, an author's comment may be summarized or paraphrased to clarify its context, or combined with other similar comments, and some responses to comments that are previously addressed in this document refer to the prior response. The source of each comment is referenced. In Appendices C and D, a number referencing the FEIS response that addresses the comment is provided in the right hand margin.

Additionally, the Town provided an opportunity for the New York State Department of Environmental Conservation (NYSDEC) to review and comment on a draft version of a FEIS prepared by the Applicant, along with the preliminary FEIS review comments of the Town's consultant, C.T. Male Associates, P.C. dated January 12, 2011. NYSDEC issued technical comments to the Town Board dated February 18, 2011, as amended by correspondence dated February 22, 2011. In response to these NYSDEC comments, the FEIS has been revised as noted herein. Refer to NYSDEC correspondence in Appendix B.

This FEIS has been prepared with the assistance of Brinkash & Associates, Inc., Alfred Benesch & Company, and Advantage Engineers LLC, the project engineers; Dominic Cordisco, Esq. of Drake, Loeb, Heller, Kennedy, Gogerty, Gaba and Rodd PLLC, project attorney; City/Scape Cultural Resource Consultants; and Tim Miller Associates, Inc., planning consultant to the Applicant; based on input and guidance provided by the Town of Forestburgh Town Board, Town staff, Town advisors, and New York State Department of Environmental Conservation.

<sup>&</sup>lt;sup>2</sup>The USACOE is not defined as an involved agency under SEQRA (it is a federal agency), although it will need to issue permit(s) as noted.

## The Project Description

In response to comments received on the DEIS plan, the project Master Plan underwent changes subsequent to the DEIS hearing as identified below and further explained in various response to comments. The revised Master Plan is shown in FEIS Figure 2-1 (revised February 17, 2011). Plan modifications were made to adjust the locations of roads and building lots for environmental conservation in the following particular areas: land around vernal pools and steep sloped areas were further considered for preservation in the permanent open space; and potential wildlife connections with adjacent, undeveloped land off the site were further considered. These considerations resulted in revised road alignments and lot locations, and associated adjustments in the project Open Space Plan (FEIS Figure 2-2) and Phasing Plan (FEIS Figure 2-3).

Revisions on the Master Plan include, for example, greater contiguous open space in the vicinity of the Bush Kill; elimination of lots and relocation of golf holes 13 and 14 to avoid steep slopes; elimination of roads and lots close to vernal pool wetlands in the central western corner of the site; relocation of the cottages and lots close to wetlands on the west side of Lost Lake; and elimination of narrow or disconnected green spaces between rear lot lines in a number of areas throughout the project. All eliminated lots were relocated to gentler topography near the main entrance and at the south end of the property, retaining lot sizes and total lot count in the current Plan the same as was shown in the DEIS Master Plan.

The preliminary design drawings have been updated for the FEIS. The set of revised drawings address the plan-related comments received during this environmental review. Application requirements of the permitting agencies will require further design development and detailing prior to plan submission to the agencies for review and approval after the conclusion of the SEQRA review. The preliminary design drawings presented in this FEIS are developed to a level of detail that establishes the full extent of impact attributable to the project, thereby providing a thorough basis for defining the extent of impact mitigation that is appropriate for the project.

In response to various project-related environmental concerns heard during this review, the following information outlines modifications to the proposed project description, clarifies its concept, or identifies further mitigation to potential impacts.

- Relative to comments raised about the proposed density of the Master Plan, the Applicant has provided additional information in support of its application and explaining how a considerable number of single-family house lots are necessary to support its multi-million dollar investment to construct and manage the resort facilities. Accommodating sustainability measures into a project such as this, including green building concepts and landscape management procedures, comes at a cost to the developer for which, in keeping with the concept of the PDD, a sizable density bonus is warranted to support those measures. On February 3, 2011, the Forestburgh Town Board unanimously passed a resolution accepting the proposed project density, particularly in light of its discussion with the Applicant about project phasing as a mitigation measure and the ability of the Town and other permitting agencies to monitor how the project fulfills its specific mitigation commitments while it is under development and affording agency control over future phases of development.
- Permit applications for the project will be submitted to permitting agencies by phase, subject
  to the concurrence of such agencies, thereby allowing the permitting agencies to review
  relevant information and effectiveness of mitigation from the prior constructed phases

associated with their particular areas of jurisdiction, including PDD open space requirements, wetlands, stormwater management, access, effects of construction, water supply, Fire Prevention and Building Code compliance, emergency service needs, and green building designs. Amenities, roads and utility infrastructure for the current phase will be substantially complete before commencing applications on the next phase, subject to the review and approval of the Town Building Inspector.

- The project is designed to conform to the Town's PDD requirement for open space, as defined in the regulation. The revised Master Plan includes approximately 1082 acres of land to be preserved in perpetuity as open space (52 percent of the subject property). Figure 2-2 shows in color three open space categories: managed open space including the golf course tees, greens, fairways, roughs and stormwater management areas; unmanaged open space including wetlands, buffers and other undeveloped land; and open water open space consisting of Lost Lake and the Bush Kill. Table 1-1 in section 1.6 below outlines the PDD open space calculation.
- The Lost Lake Resort aims to incorporate the Town's goals of preserving the existing rural and natural character of the Town, as expressed in the Town of Forestburgh Master Plan and the PDD regulation, to conserve the quality and quantity of natural, scenic resources of the region. Vegetated buffers are proposed that will preserve the visual quality of the Town as viewed from its highways. The project plans incorporate environmentally protective measures (such as wetland and wetland buffer preservation within open space lands, water quality protections including erosion and sedimentation measures during construction, and modern water and sewer facilities that will meet current State standards to protect water resources) within a mix of recreation and leisure facilities that is expected to complement the Town's rural character and its economy.
- In the revised Master Plan, wetland areas are preserved as in the original plan and upland protected areas are expanded. The project plan permanently preserves sizable, contiguous, natural open space areas on the property where indigenous wildlife will continue to thrive: some 280 acres in the center of the property including wetland HA-40; some 144 acres around, including and north of Lost Lake; some 106 acres in areas bordering the Bush Kill and its associated floodplain; and some 73 and 38 acres in two areas adjoining the St. Joseph's Lake development properties. This acreage does not include adjacent lands on the rear of private lots that will also remain undisturbed in accordance with the Lost Lake Design Guidelines.
- In the revised Master Plan, portions of the ecological communities identified on-site will remain available for habitat at a smaller scale after the development is complete and connected to adjacent off-site natural areas, while it is concluded that the project site does not act as a substantial wildlife corridor between significant off-site habitats.
- The revised Master Plan has been laid out to avoid disturbance to all but 0.5 acres of regulated wetlands for two road crossings and all but 2.6 acres of regulated wetland buffers for the road crossings and the beach area.
- The revised Master Plan reduces disturbances to steep slopes over 25%. The road layout
  has been adjusted in numerous places to avoid extensive disturbance of such slopes and
  lots are adjusted to avoid slopes at the front of the lot where the house would be located.
- In the revised Plan, the Inn will be a two story structure. While actual floor plans of the buildings are yet to be determined, the revised Master Plan has the following reduced building sizes (gross square feet): Clubhouse 10,500 sf; Inn 28,000 sf; and Conference Center 5,000 sf.

- The revised Master Plan has identified the tunnel crossing of St. Joseph's Road proposed in the DEIS to be constructed in Phase 7 and proposes an at-grade vehicle and golf cart crossing between the northern and southern portions of the project to be constructed in Phase 1 and used until Phase 7. The at-grade access will be a gated crossing with coordinated key-card gates to prevent use as an access point from St. Joseph's Road. Both the at-grade crossing and future tunnel will require review and approval of a Highway Work Permit from Sullivan County Division of Public Works (DPW). Appropriate signage and pavement markings on St. Joseph's Road and the internal roads are proposed for review by the DPW to provide a safe at-grade crossing.
- The Applicant will work with the Town of Forestburgh, Town of Thompson and Sullivan County Highway Superintendents to identify desired construction truck routing for each phase. A traffic routing plan will be designed in detail before construction commences. In addition, the Applicant will conduct a road inspection with the Town and County Highway Superintendents during the site plan review of each phase to ascertain the existing condition of proposed truck routes. The Applicant will be responsible, at the direction of the highway superintendents, to rectify any road damage caused by construction, and the Town will be able to monitor the status of such repairs with its reviews before each subsequent phase is approved.
- To supplement the water supply investigation conducted for the DEIS, additional wells were drilled and tested. A supplemental water supply report was prepared based on testing of the additional wells demonstrating that sufficient water supply is available to permit the first phases of the project to be approved and built, and asserts that there is an adequate supply of groundwater for the whole and complete project. Based on the supplemental hydrogeological data, the Applicant has exercised a high level of due diligence at considerable cost towards demonstrating that there is an adequate supply of groundwater for the whole and complete project, despite the fact that the Lost Lake Resort is not expected to be built out in a manner that would result in a house being built on every lot. Based on available data it appears that there is a sufficient water source from the bedrock formation to provide a community public water supply for the proposed Lost Lake development, subject to the specific permitting requirements of the NYSDEC, NYSDOH and DRBC on a phase by phase basis. It is possible that additional wells may be required to make this demonstration. Permits from the NYSDEC, NYSDOH, and DRBC will be required for each phase of development before the Planning Board can issue final site plan approval. Utilizing actual water use data for subsequent phase approvals, the project will mitigate and avoid any potential significant adverse impact resulting from the water supply.
- In response to concern about altering the water level of Lost Lake and its associated wetland for golf course irrigation, the Applicant proposes using surface water for irrigation, providing that the Lost Lake surface is at least 0.05 foot above the spillway surface and there would still be a discharge from the lake. For periods when the lake surface is less than 0.05 foot above the spillway, the irrigation system will use groundwater from the on-site wells until such time in the future when there is sufficient treated wastewater to use as an alternate source. The EIS establishes that no significant impact to the lake or its associated wetland is expected from the proposed drawdown. The Applicant proposes utilization of treated wastewater from the WWTP for irrigation when it becomes an economically viable consideration after Phase 3 of the project is developed and approximately 150 houses are occupied.

- In response to concern about preservation of vernal pool areas on the site, all Tier I pools on the property will have 100% of the VPE³ undisturbed and in the existing condition and at least 50% of the CTH undisturbed and preserved within the dedicated open space. All Tier II pools will have 100% undisturbed VPE and at least 33% of the CTH undisturbed. These numbers do not include additional undisturbed CTH land that will exist in the rear yards of house lots on account of the Applicant's limitations on lot development.
- In response to a concern about a pair of nesting bald eagles in the site vicinity, the Applicant's proposal includes the following mitigation measures: 1) Where rock removal is necessary within ½ mile of an active nest, no blasting or rock hammering will be conducted during the breeding and nesting period, which is generally between February and July. 2) Potentially disruptive (noisy) activities associated with construction in the northwestern portion of the site will be limited to short periods of time (21 day duration or less) during February through July. 3) No blasting or preparatory rock work for blasting will be conducted in the northwestern portion of the site in the months of February through July. 4) No blasting will be allowed on any lot for individual house construction in the northwestern portion of the site.
- In response to a concern about bog turtle presence on the property, further evaluation indicates the site wetlands do not exhibit the criteria typically associated with bog turtle habitat.
- The Applicant will update the project plans to conform to any new stormwater design requirements applicable to this project. Materials to be submitted for approval will conform with the most current State standards and specifications. Adjustments to the preliminary plans provided with this FEIS will be needed to accommodate the most current State requirements. Consistent with the Town's PDD legislation, expansion of stormwater management basins would become part of the managed open space for the project.
- Phase 1B archaeological testing was conducted over the entire project site in accordance with a project-specific methodology in the summer of 2010. In addition a small area was further evaluated in Phase 2 testing and found to not be National Register Eligible (NRE). Based on the lack of significant cultural material recovery from the project site, it is the professional opinion of the Applicant's archaeologist that no further investigation of historical and archaeological resources at the Lost Lake site is warranted. The archaeological investigation Phase 1A/B and Phase 2 reports have been submitted to NYS OPRHP for review. The Applicant acknowledges that State permits cannot be granted, no final site plan approval can be granted by the Planning Board, nor can any project site construction commence until OPRHP has issued its determination of No Impact on cultural resources for the project (or no adverse impact after mitigation through the successful implementation of an OPRHP approved recovery plan), thereby ensuring that there are no adverse impacts to any historic or archaeological resources.
- An additional traffic study was conducted and concluded, like the DEIS traffic study, that no significant change in traffic conditions will occur, in large part due to the lengthy project build-out anticipated.
- All public, common buildings and residential buildings in the resort will be equipped with automatic sprinklers.

<sup>&</sup>lt;sup>3</sup>100-foot vernal pool envelope ("VPE") and the 750-foot critical terrestrial habitat ("CTH") suggested by Klemens for protection of vernal pool species.

- The project is designed to accommodate fire apparatus, including adequate road width with a load bearing surface, adequate turning radii throughout the project, and gated access points with easy access for the Fire Department. The circulation plan is subject to approval by the local Fire Chief and will meet NFPA requirements. Project representatives met with the Forestburgh Fire Commissioners and Chief Bastone on January 27, 2011, to discuss various aspects of fire service impacts, fire response, manpower and plan-related items. The Commissioners indicated that compliance with applicable requirements in the NYS Uniform Fire Prevention and Building Code is sufficient and by meeting these requirements, the project would be in compliance with applicable NFPA and ISO standards. Certifying compliance with the Uniform Code is under the purview of the Town Building Inspector, who would review the project design during Town review of the construction plans prior to approval of each phase. No significant adverse impact on fire department services has been identified that requires mitigation. The Applicant will seek approval of all security gates from the local Fire Chief.
- The Fire Commissioners support the Applicant's plan to provide a parcel of land for the purpose of a future emergency response facility. At this time the District would not seek to put a firehouse at the site. The Commissioners foresee possible future use of the emergency response facility site to accommodate an unmanned fire station for a truck and an ambulance that would provide first response to a situation in the project. Need for such a facility will be evaluated by the District in the future as Lost Lake Resort expands. The 2-acre emergency services parcel was included in all surveys done for the DEIS, including NYSDEC and ACOE wetlands jurisdictional determinations (June 8, 2010 and April 27, 2010, respectively), and archaeology (December 2010). The parcel is buildable, with no land in wetlands or wetland buffers. There is room in that area of the site for the actual lot configuration to be adjusted for a particular building footprint if needed in the future.
- The Fire Commissioners advised that their primary concern relative to the project is recruitment of a sufficient number of future volunteers to meet the service needs in the future. Lost Lake Resort proposes to provide an incentive program for its employees and homeowners who become active volunteer fire fighters in the Forestburgh Fire Department. The Applicant also proposes to designate a liaison from the Resort who will make periodic reports to the Commissioners at District meetings to provide input into the District's ongoing services planning.
- As described in the DEIS, Lost Lake Resort, Inc. will require strict adherence to its Design Guidelines for construction of the single-family house lots that are binding to all lot owners through a declaration of exceptions, reservations, covenants, restrictions and conditions for Lost Lake Resort. The owner of each lot in the resort will be subject to the architectural guidelines, site planning guidelines, landscape guidelines, and construction regulations in the Design Guidelines. Lot development plans showing limits of disturbance will be subject to the Lost Lake design review board review and approval in conjunction with review by the Town for a building permit.
- The Applicant will require, in the Covenants and Restrictions, that every home be designed and built to meet green building design certification requirements. Irrespective of obtaining the actual certification by LEED or another organization, conformance with the certification requirements will be ascertained through a letter issued by a third party professional (paid for by the Applicant) certifying such conformance prior to issuance of a certificate of occupancy. The Town will have opportunities to review compliance of green building design and sustainable development practices on an on-going basis with every building permit and site plan phase.

• Subsequent to the DEIS, the Applicant received validation of the wetlands delineation and mapping from NYSDEC. The revised Master Plan reflects the wetlands lines approved by both ACOE and NYSDEC.

# 1.6 PDD Open Space Tabulation

Below is a tabulation of the open space areas, which are shown in color in Figure 2-2.

Table 1-1 PDD Open Space Areas (Acres)		
Total Tract Area	2,079.51	Area includes:
Managed Open Space	220.73	Golf course pervious areas, stormwater basins, pervious recreational trail, Bush Kill Park West pervious areas, front entrance landscaped areas, beach area
Unmanaged Open Space	807.43	Wetlands and regulated wetland buffers except crossings, 50' perimeter buffer, 100' St. Joseph's Road buffer, streams, all other undeveloped land
Open Water Open Space	53.88	Lost Lake and Bush Kill
Total Proposed Open Space	1,082.04	52.03%
Not counted as PDD Open Space:	WWTP area and access road, water tank area and access road, wellhead areas within fence and access roads, emergency service facility parcel, house lots, amenity and maintenance buildings and building areas, pavements, roads and road rights-of-way, golf cart paths, Bush Kill Park East	

## 1.7 Responses to Review Comments of NYSDEC, February 2011

Subsequent to the Town Board's receipt of the first draft of the FEIS prepared by the Applicant, the Town provided an opportunity for the New York State Department of Environmental Conservation (NYSDEC) to review and comment on the draft, along with the preliminary FEIS review comments of the Town's consultant, C.T. Male Associates, P.C. dated January 12, 2011. NYSDEC issued technical comments to the Town Board dated February 18, 2011 (as amended by correspondence dated February 22, 2011). The NYSDEC letters are included herein in Appendix B.

The Applicant and the Town are appreciative of the Department's comments on the Lost Lake Resort initial FEIS draft prior to acceptance of the document. As stated in the NYSDEC letter, this participation between the Town and the Department is consistent with the commitments made by Regional Director Janeway and the Town Supervisor to work together in the review of this project subsequent to the NYSDEC Commissioner's decision for the Town to be SEQR Lead Agency, and the Commissioner's encouragement for the Town of Forestburgh Town Board to "actively seek out NYSDEC staff expertise" to ensure that NYSDEC input is reflected in the EIS documents.

In response to these NYSDEC review comments, the FEIS has been revised to include information that was requested. The following comment/responses reiterate the items raised in the NYSDEC letters and addressed in the respective responses.

1) Section 1.5 The SEQR Process. Within this section, the following is stated: "The DEIS, as amended by the FEIS, will form the basis for the lead agency's Findings that will conclude the environmental review process." The project sponsor should be aware that all involved agencies must issue a Findings statement prior to the issuance of any permits or approvals; not just the lead agency. In order for the Department to make a positive findings statement, the Department must determine that the action selected is the one that avoids impacts to the maximum extent practicable and balances social, economic and environmental needs. If the Department cannot find that the proposed project accomplishes this requirement, a negative findings statement must be issued by NYSDEC.

**Response:** Comments noted. The sentence in Section 1.5 has been revised to correctly state that the lead agency's Findings will conclude the environmental review process for the lead agency. The Town Board and project sponsor understand that all involved agencies, including but not limited to the Department, must make their own findings.

2) Open Space, Response 2-6. The project sponsor continues to evaluate impacts to open space in a context related to the Town of Forestburgh PDD definition of open space. The project sponsor reached the conclusion that if the amount of open space as defined by the Town regulation is met, there will be no impact to open space. As previously indicated, the majority of land preserved as open space is currently State regulated freshwater wetland and adjacent area (280 acres), Lost Lake (144 acres), golf course (270 acres) and steep slopes (84 acres) for a total of 778 acres. So while the DEIS claims that 1,082 acres (52%) are being preserved, in essence, only 15% of the 2,079 acre site are being preserved. When evaluated in this context, it is clear that very little land is actually preserved. As previously indicated, the Department recommends that a site plan be included in the FEIS that clearly indicates preserved open space that does not include the golf course. Figure 2-2 (as referenced in response 2.6) does not accomplish this.

**Response:** FEIS Table 1-1 outlines the acreages of the managed versus unmanaged open space areas in the revised Master Plan, consistent with the Town's PDD legislation. Of the 807 acres proposed as unmanaged (natural) open space, 343 acres is already preserved by regulation as freshwater wetland and adjacent area, 71 acres is preserved in steep slopes, and an additional 393 acres of land (19 percent of the property) is being set aside in permanent open space preservation. The 221 acres of managed open space includes land to be maintained as golf course, and 54 acres will remain open water. Figure 2-4 illustrates these open space areas in three different colors.

**3)** Water Resources – Wastewater, Response 2-15. This response is not accurate. It is not a case of the Town having an option of assuming responsibility for a Sewage Treatment Plant (STP) run by a failed Sewage Works Corporation (SWC), but a legal obligation. A town board resolution is required to allow a STP formation, and the town has the option of requiring bonds. It is because of this obligation that the Department recommends that developers skip the SWC process, and go directly to formation of a municipal district, while it is still only one owner (the developer), with town oversight during design/construction, and ownership upon start-up. It can be extremely difficult to form a district later, once the project is occupied, due to the process of obtaining approvals through referendums, etc.

**Response:** It is the Applicant's intention to maintain responsibility for the operation of the resort infrastructure. Response 2-15 has been revised to stipulate that prior to a site plan approval the Applicant will petition the Town to form water and sewer special improvement districts and the Lost Lake water and sewer transportation corporations will enter into an agreement with the Town to provide a mechanism by which the Town could assume ownership and operation of the water and sewer works should the transportation corporations fail to operate and maintain those systems. This mitigation measure required by the Town Board will serve to make it the Applicant's responsibility to form both water and sewer special improvement districts as a precedent condition to receiving any site plan approvals.

4) Response 3.5-5. The project sponsor should be aware that the NYSDEC State Pollutant Discharge Elimination System (SPDES) permits are based upon a drought flow using MA7CD/10 (mean average 7 consecutive day/10 year recurring cycle). The USGS Streamstats program is designed (for data in NYS) to look at high flow and average conditions, not low flows. It is therefore inappropriate to apply it in the manner it was, in the project sponsor's response. The project sponsor's own calculations, as shown in the footnotes to the table, are based upon a year-round average flow, not a typical summer low-flow, or a drought flow. Regardless, even using this data, the projected wastewater discharge flow is approaching the 10:1 dilution, at full built out. The table should be revised to reflect critical flow periods.

**Response:** The tabulation presented in Response 3.5-5 addresses the original comment that asked for evaluation based on average stream flow. The project engineer, Alfred Benesch & Company, has further evaluated the proposed WWTP discharge based on critical low stream flow periods, which is provided in FEIS Appendix K.

5) As previously indicated in our comments on the DEIS, the Bush Kill is a head water trout stream that flows through a portion of the Neversink River Unique Area, a highly regarded fishing location and ecologically rich and unique natural area. The Department remains concerned that the preferred alternative at full build out has the potential to create an adverse impact to this trout stream at the expected flow rates. This impact can be minimized through

implementation of one of the several alternatives that the project sponsor has proposed that could accomplish the objective of a resort development component and a substantial residential lot component (PDD Base Density with bonus alternative allows for 1,235 lots).

**Response:** Refer to FEIS Appendix K for demonstration of the wastewater treatment proposal related to the slow build out scenario for this project. The Applicant continues to maintain that the proposed action, as modified by this FEIS, is the only practicable alternative that meets its objectives.

**6)** The concept of constructing sewage lagoons, at an unspecified future date, is questionable. It is not clear where such storage structures would be located, or how close they might be to residences. Nor is it clear what mitigative measures might be taken to prevent the risk of odor complaints, in the event sewage lagoons are built. Although this is treated wastewater, it is not without risk for odors, if allowed to stagnate. The outlined use of such water for irrigation of the golf course is acceptable, but needs to follow a management plan that is consistent with the Department's existing guidance and policies on the use of land applications of wastewater.

**Response:** The proposal to use lagoons has been omitted. The Applicant acknowledges that reuse of wastewater for irrigation of the golf course must be consistent with the NYSDEC guidance and policies on the use of land applications of wastewater. The SPDES application for the project phase that includes construction of the proposed effluent tank will include a wastewater reuse management plan for review by NYSDEC.

**7)** Additional comments will likely be generated on waste water during the SPDES application process.

**Response:** It is understood that additional comments from NYSDEC and other agencies specific to permit applications can be expected.

**8)** Section 1.5, The Project Description regarding Water Resources - Water Supply. In a bullet point within this section, the following is stated:

"To supplement the water supply investigation conducted for the DEIS, additional wells were drilled and tested. Expected well yields for wells currently in place are presented that demonstrate there is an adequate supply of groundwater for the whole and complete project. The updated Water Supply Report shows that the estimated well field production from seven production wells exceeds three water demand scenarios for the fully built project. The Applicant's report will be submitted to NYSDEC, NYSDOH and DRBC for review."

This statement is not supported by the information provided to date. The adequacy of the groundwater supply remains questionable. Further, this analysis does not take into account the NYS Department or Health (NYSDOH) redundancy requirement. While the project sponsor has submitted a request to the NYSDOH for consideration of a waiver from this requirement, the Department has no record of NYSDOH having approved this request. If the NYSDOH has approved of this request, this correspondence should be included in the FEIS.

- **9)** Response 3.5-3. Well field production remains questionable.
- **10)** Response 3.5-7. Within this section it is stated that "there is an adequate supply of groundwater for the whole and complete project." This has not been so demonstrated to date.

**Response to 8, 9 and 10:** The bullet point in Section 1.5 has been revised based on the supplemental water supply report demonstrating that sufficient water supply is available to permit the first phases of the project, and asserts that utilizing actual water use data for subsequent phase permit applications will demonstrate an adequate supply of groundwater for the whole and complete project, subject to the specific permitting requirements of the NYSDEC, NYSDOH and DRBC on a phase by phase basis. It is possible that additional wells may be required to make this demonstration.

In its letter dated January 21, 2011 (included in FEIS Appendix B), NYSDOH outlined its response to four questions raised by the Applicant regarding the water supply:

- a 330 gallon per day per unit (3 bedroom house) is reasonable for determining residential water demand
- a Max Day peaking factor of 1.8 may be used
- the "largest well out of service" redundancy stated in the "Ten States Standards" will be required
- applications to and plan approvals by the NYSDOH, and actual construction, may be conducted by phase as project build-out progresses. This approach will likely involve periodic agency reviews of the built portions of the project to ensure that adequate water supply will be available as per NYS codes and standards.

Further discussion is presented in Response 3.5-3, including proposed mitigation to avoid any potential significant adverse impact resulting from the water supply.

11) Response 3.5-10. The project sponsor was asked about pumping level stabilization during a pump test. The response quoted only a section of the NYSDEC Recommended Pump Test Procedures. The part of the stabilization definition that was quoted was: "water level that has not fluctuated by more than plus or minus 0.5 feet for each 100 feet of water in the well (i.e., static water level (SWL) to bottom of well) over at least a six hour period of constant pumping flow rate." However, the preceding sentence was omitted: "The plotted measurements shall not show a trend of decreasing water level." The project sponsor must re-evaluate stabilization of pumping based on the full definition of stabilization.

**Response:** The cited preceding sentence has been added to Response 3.5-10. This does not change the conclusion of the response since stabilization for a much longer duration than the 6 hours in the NYSDEC requirement was demonstrated in the well testing. The plotted well data show no trend of decreasing water levels in the tested wells, which can be confirmed by review of the raw data sheets.

**12)** Golf course irrigation, Response 3.5-16. The project sponsor's drought mitigation measures include "Replacing some or all of the surface water from Lost Lake with groundwater." The project sponsor must clarify where this groundwater would come from. Would it be diverted from the wells used for water supply? Would dedicated irrigation wells be installed? If so, could it be proven that such wells would not interfere with already stressed (due to drought) public water supply wells? Perhaps one mitigation measure should be to allow the grass to go dormant in a drought.

In Response 3.5-16 the project sponsor states that one mitigation measure is to reduce the acreage that is irrigated, and perform manual watering. At some point there should be a formal

mitigation measure and it should include when such measures are implemented and what the ensuing steps of decreased irrigation will be as drought continues.

Response: Response 3.5-16 has been revised. The original ambiguous statement "Replacing some or all of the surface water from Lost Lake with groundwater" is replaced by a more specific description of the proposal to utilize groundwater from the supply wells for irrigation for those periods when the lake surface is less than 0.05 foot above the spillway, until such time in the future as there is sufficient treated wastewater to use as an alternate irrigation water source. Water taking permit application will need to demonstrate that such water use would not interfere with the potable water supply. As part of the application, the Applicant will develop a Water Conservation/Drought Management Plan for the golf course that will detail specific actions to be taken during drought conditions. Response 3.5-16 elaborates on the proposal for drought mitigation.

**13)** Additional comments on Water Supply will likely be generated during the Water Supply application review process.

**Response:** It is understood that additional comments from NYSDEC and other agencies specific to permit applications can be expected.

**14)** Wetlands. As previously indicated, all disturbances within the wetlands and their 100-foot adjacent areas (AA) must be avoided to the maximum extent practicable. Additional comments will likely be generated on impacts to wetlands during the Article 24 Freshwater Wetlands application review process.

**Response:** It is understood that application materials for an Article 24 permit will need to demonstrate that disturbances to wetlands and adjacent areas have been avoided to the maximum extent practicable, and that additional comments from NYSDEC and other agencies specific to permit applications can be expected.

**15)** Wildlife Ecology, Response 3.4-1. Maintaining a 100 foot buffer around a wetland does not mean there will be no adverse impact to wetland species. The 100 foot wetland adjacent area was put in place as a measure to assist in maintaining the water quality of state regulated wetlands.

**Response:** Response 3.4-1 has been expanded to further discuss impacts relative to wetland species and the effect of the buffer.

**16)** Response 3.4-2. Within this response it is stated that Forest Interior Bird species would continue to use wetland buffer area and forest left on adjoining house lots. Forest interior bird species should be clearly defined. Further, wetland buffer areas and forest areas of house lots typically act more as edge habitats than forest interiors. This area needs further clarification. A habitat map clearly identifying what habitat areas they are referring to would be beneficial.

**Response:** Response 3.4-2 has been expanded to provide information on particular affected species, identifies the forest areas exclusive of edge habitats and the mapping that illustrates the habitat.

**17)** Response 3.4-7. Department staff is still reviewing this information related to Bog turtle. See comment to Response 3.4-8 below.

Response: Comment noted.

**18)** Response 3.4-8. Within this response, it is discussed what impacts are proposed to areas located in proximity to turtle nesting habitat. This information should be clearly depicted on a map.

**Response:** As stated in Response 3.4-8, predated turtle nests were observed during field surveys but their locations were not recorded. Sheets C-9, C-11 and C-12 of the Preliminary Design Plans show the areas along the old railway embankment at eastern property boundary in the vicinity of encountered turtle nests, and proximity to proposed development areas. Evidence of nests was observed in the embankment at Wetland G (HA-41) south of St. Joseph's Road (Sheets C-9 and C-11) and Wetland ABD (HA-41) near the Bush Kill (Sheets C-11 and C-12).

**19)** A more detailed review of issues related to water supply, wastewater discharge stream and wetland impacts will be completed during the Department's review of the applications required for this project.

**Response:** It is understood that additional comments from NYSDEC and other agencies specific to permit applications can be expected.