



**Nathan L. Jacobson & Associates, Inc.**  
 Nathan L. Jacobson & Associates, P.C. (NY)  
 86 Main Street P.O. Box 337 Chester, Connecticut 06412-0337  
 Tel: (860) 526-9591 Fax: (860) 526-5416  
 www.nlja.com  
 Consulting Civil and Environmental Engineers Since 1972

## MEMORANDUM

TO: Christine Nelson, AICP

DATE: June 8, 2005

FROM: Geoffrey L. Jacobson P.E., Wendy Goodfriend, PhD, Richard Snarski, CPSS, PWS, CPESC

PROJECT No.: 0719-0011

SUBJECT: The Preserve – Revisions to the Preliminary Open Space Subdivision

COPIES: R. Snarski, W. Goodfriend, L. Bonin, S. Luckett, S. Martinson, C. Costa, M. Branse,  
 Alan Plattus, B. Hillson, P.E.

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As requested, we have reviewed the following information with respect to the “conditions and modifications” included in the Planning Commissions March 23, 2005 decision to grant approval of the Preliminary Open Space Subdivision Plan for the subject project:

- Item 1: Letter to Ms. Christine Nelson from Dennis G. Goderre of BL Companies regarding “Site Plan Modifications”, dated June 2, 2005.
- Item 2: Drawing entitled “Revised Open Space Master Plan (River Sound)”, dated May 25, 2005, prepared by BL Companies.
- Item 3: Drawing entitled “Maintenance Area”, dated May 25, 2005, prepared by BL Companies.
- Item 4: E-mail transmission to Geoffrey L. Jacobson, P.E. from Wayne Violette of BL Companies regarding the revised cart path location in the vicinity of golf hole #16, dated June 6, 2005.

The responses provided in this memorandum, which are keyed directly to the same lettered and numbered “conditions and modifications” outlined in the aforementioned Planning Commission decision, are the result of a collaborative review effort by Geoffrey L. Jacobson P.E., Wendy Goodfriend, PhD and Richard Snarski, CPSS, PWS, CPESC. Where no specific reference is made to a “Condition and Modification”, it was considered to be an issue that would be reviewed by one of the other consultants retained by the Town of Old Saybrook for the review of this project.

Our comments are as follows:

### C. Golf Course Design

1. The routing of the Golf Course has been revised so that none of the holes cross any portion of Pequot Swamp and, with two exceptions, the required “100-foot horizontal natural, undisturbed buffer” area has been maintained around the perimeter of Pequot Swamp. The first exception is the cart path located at the southern end of Pequot Swamp. It should however be noted that the portion of the cart path that is located within the 100-foot buffer area has been located directly adjacent to the existing property line, and it would not be possible to maintain the 100-foot buffer without either obtaining an easement or acquiring additional property from the adjacent owner. Given this

constraint, we do not believe that it would be unreasonable to allow this path within the 100-foot buffer at this one location provided that the path is constructed without cutting any trees with a diameter greater than 12-inches. The second exception occurs on the east side of the 16<sup>th</sup> fairway, where a small portion of the proposed clearing occurs within 80-feet of Pequot Swamp. This area should be revised to provide the minimum required 100-foot buffer.

2. The required undisturbed area, connecting vernal pool #18 with the red maple swamp to the west, has been provided. The proposed elevated crossing of the red maple swamp, which provides access from the 6<sup>th</sup> green to the 7<sup>th</sup> tee, is preferred to the alternative that would involve constructing a cart path around the perimeter of the red maple swamp and between the red maple swamp and vernal pool #18.
3. The scale of the Revised Open Space Master Plan is such that it is not practical to show the location of the required signs “between the golf course and all sensitive adjacent natural areas alerting golfers that they are prohibited from entering these areas to retrieve errant golf balls”. However, a statement has been made in item 1 above that “Signs as requested will be posted and their installation will be noted on all future plans to be submitted to the town”. We find this response to be acceptable.
4. The routing of the Golf Course has been revised so that, with one exception, there is “no clearing in, over or within fifty feet of identified vernal pools”. The one exception is a small area of proposed clearing along the 17<sup>th</sup> fairway that is approximately 40-feet from vernal pool #3. This area should be revised to provide the minimum required 50-foot buffer.

#### D. Clustering of Estate Lots

Building envelopes for proposed estate lots have been revised so that they are limited to one acre, with the remainder of the lot protected with a conservation easement. It should however be noted that the revised plans show a southerly extension of the cul-de-sac, and the location of four estate lots, into an area that was previously shown as open space. The new location of these lots, roadway, and any associated storm drainage, were not reviewed in regards to potential natural resource impacts. With the proximity to vernal pool #18, which is highly productive, and the large red maple swamp identified as wetlands 18, these lots and roadway extension will need to be carefully considered during the review of the wetlands application.

#### F. Location of Maintenance Facility

While the maintenance facility is in the same general location, the maintenance and chemical storage buildings have been shifted to the east side of a small local drainage divide so that based on the existing topography, surface runoff will no longer drain towards vernal pool #24. Even though a portion of the paved area associated with the maintenance facility is located on the west side of this drainage divide, it is proposed to be graded to the east, away from the vernal pool #24. Surface runoff from this paved area, which has the potential to generate polluted runoff, is proposed to be discharged to a surface impoundment located on the east side of the Chemical Building. Based on a recent discussion with the applicant’s technical representative, a decision has not yet been made whether this impoundment will be designed for irrigation purposes or as a conventional detention pond. In that any surface discharge from this impoundment would result in overland flow to Pequot Swamp, we remained concerned with the detailed design aspects of this impoundment with respect to the protection of natural resources, and in particular the potential for this facility to adversely impact the quality of groundwater. These issues will need to be fully evaluated and addressed during the final design process.

As a related issue, we note that grading now shown for the firehouse, which is included as a part of this general service area, suggests that some of the surface drainage from this facility will be directed towards vernal pool #24. Due to the potential use of chemicals, oils, greases and soaps at this facility, surface drainage should not be discharged toward vernal pool #24.

#### H. Off-Site Improvements

While detailed plans for proposed improvements to Ingham Hill Road and Bokum Road have not yet been submitted, based on recent discussions and the description of proposed improvements included in item 1 above, there appears to be a general consensus regarding many of the off-site improvements to be undertaken by the applicant to address the increased traffic burdens created by this project. As you are aware, in a memorandum to you dated May 11, 2005, I outlined the specific improvements that the Town of Old Saybrook considers necessary to accommodate this project. On Bokum Road, the applicant has agreed to make improvements at the proposed site intersection to address existing sight distance restrictions, and to reconstruct the Bokum Road/Route 154 intersection. Similarly, the applicant has also agreed to realign the connection and create a new intersection near the end of Ingham Hill Road, and to reconstruct the first existing horizontal curve located to the south of this new intersection to increase the centerline radius. The applicant has indicated that they are still reviewing the remaining improvements to Ingham Hill Road that have been identified by the Town including some minor pavement widening of specific sections; creation of a 6-foot wide pedestrian path/bikeway to the extent that is possible within the existing right-of-way and open space areas; spot guide rail improvements; spot grading improvements to improve sight distance; and some minor drainage improvements.

END OF MEMORANDUM