

JAY FAIN & ASSOCIATES^{LLC}

Environmental Consulting Services

Jay Fain
Principal

Victoria Landau
Principal, ASLA

134 Round Hill Road
Fairfield, CT 06824
203-254-3156
1-800-JAYFAIN
FAX: 203-254-3167
jfassociates@optonline.net

September 18, 2018

Mr. Ching Wan Chin, Chair
Town of Ossining
Route 9A – Po Box 1166
Ossining, NY 10562

Re: The Learning Center, 530 North State Road

Dear Chairman Ching and Members of the Board,

We are in receipt of the memorandum from the Board's Environmental Consultant, Steve Coleman, and dated August 31, 2018. First, the Applicant would like to thank Mr. Coleman for his prompt, thorough and insightful review of the environmental aspects of the Project. Second, the Applicant would like to inform the Board that is in general agreement with the substance of the comments made by Mr. Coleman but differs in some respects due to practical and aesthetic considerations. However, the Applicant is committed to working with the Board and Mr. Coleman to reach a mutually agreeable solution to all the items raised by Mr. Coleman.

Responses to the comments contained in Mr. Coleman's August 31, 2018 memorandum are listed below. For convenience Mr. Coleman's comments are copied below in standard type face followed by the Applicant's responses in italics.

1. As per Chapter 105, the intent is to avoid wetland impacts. The applicant should be directed to provide a realistic site plan that shows avoidance of impacts within the wetland buffer. This should include shifting the building out of the buffer, reductions in the size or number of parking spaces, or changes to the parking layout, and relocation of a portion of the playground area and dumpster locations. This alternative should provide the basis for why impacts are necessary and unavoidable within the wetland buffer.

Response: The Applicant is cognizant of the requirements of Chapter 105 (the Town of Ossining Freshwater Wetland, Watercourses and Water Body Protection Law) and specifically Section 105-8, Standards and findings for Permit Decisions and has incorporated these criteria into the planning process for the TLE Center. As presented to the Planning Board, the programmatic

needs and economic considerations of the TLE Center require a building floor plate of at least 10,000 sq. ft. Reducing the building footprint so that the facility can be located entirely outside the 50 foot watercourse buffer would reduce the proposed floor plate by 1,875 square feet which would render the project economically and programmatically not viable.

Similarly, relocating the proposed playground outside the 50 foot watercourse buffer would require the elimination of at least 11 of the 35 parking spaces. The Applicant has developed numerous TLE centers and from experience is familiar with the parking required for efficient center operation. Such experience confirms that and a reduction of 11 spaces would be insufficient to meet the needs of the facility.

That being said, the Applicant has made a conscientious and concerted effort to avoid watercourse impacts as demonstrated in the project Biological Evaluation and Impact Assessment and, those impacts that cannot be avoided through project change, have been fully mitigated to minimize or avoid adverse environmental impacts to the maximum extent practicable. Mitigation includes establishment of a riparian buffer where one currently does not exist, restoration and enhancement of the proposed buffer area, incorporation of a pervious pavement for the playground surfacing, underground storage of stormwater to reduce peak site runoff and the installation of a Vortechnic (or equivalent proprietary device) to filter parking lot runoff.

Based on these factors, an alternative site plan conforming to the 50 foot regulatory buffer would depict a development that is not compatible with the Applicant's program. The plan would not provide a feasible and prudent or actionable alternative. Therefore, preparation of such a plan would serve no useful purpose as it would not help to inform the Planning Board's decision.

2. Due to prior land use impacts on biodiversity, and the fact that disturbance is restricted to the watercourse buffer area, no additional biological studies are warranted at this time.

Response: Comment noted. However, at the request of Planning Board member Dr. Gareth Hougham, the Applicant's Environmental Consultant has agreed to meet on-site to document any fish species that may be found associated with the on-site watercourse and to further document the physical attributes of the watercourse.

3. Due to the prior land use history for the past 10-15 years, it is recommended that the soils be tested for known contaminants. Prior nursery operations often result in contamination of existing soils. Testing should follow accepted NYSDEC protocols for soil sample methodology and testing for the full range of contaminants.

Response: The Applicant has performed a Phase 1 environmental study of the subject property. No sources of contamination were identified. A copy of the Phase 1 study is provided for the Board's information.

4. The existing drainage conveyance system requires improvements, including design of culvert openings and discharge points to minimize potential impacts to aquatic organisms. This should include the drainage from the other side of North State Road and improvements to the culvert outlet and flows into the existing 2 – 48 inch culverts.

Response: The Applicant has studiously endeavored to avoid any impacts to the on and off-site "drainage conveyance system" and is currently proposing no work immediately adjacent to or within the stream channel. No aspects of the proposed mitigation and drainage improvements will impact aquatic organisms. The Applicant notes that the majority of the stream channel bordering the eastern portion of the subject parcel is on land not owned or controlled by the Applicant or current owner (the Applicant is currently contract vendee). Therefore, the Applicant does not have the legal right to perform off-site improvements. The Applicant will consent to reasonable improvements on the portion of the stream to be acquired by the Applicant including removal of accumulated litter and debris and possible bank stabilization if that can be achieved by bio-engineering means and not require physical disturbance of the stream or its banks. The applicant is has been made aware that the Planning Board would like to avoid physical disturbance of the stream so as to maintain its biological integrity.

5. The outlet of the 2-48 inch culverts in the northern side shows significant signs of erosion and should be properly stabilized as it enters the offsite channel and eventually into the existing watercourse, including suitable wing walls, etc. Some of the required stabilization should include the channel immediately off site. The bottom of the channel should be carefully designed to provide suitable substrate for aquatic organisms.

Response: To address the unstable condition at the outlet to the northern end of the pipe, the Applicant is proposing to install gabion baskets perpendicular to the pipe outlet. Gabion baskets are ideal for this application as they are easily installed with a minimum of disturbance (if necessary they can be installed without machinery) and will become naturalized with vegetation.

As the voiced preference of the Planning Board, the Applicant has avoided any direct disturbance of the stream and its banks but may consider performing reasonable additional work on the Property, if the Planning Board requests that it do so.

6. The outlet where the watercourse channel empties into the existing 2- 48 inch culverts in the southern section should also be properly stabilized, including removal of accumulated debris, stabilization of the banks, and retrofits to minimize scouring within the channel and proper substrate within the culvert pad area.

Response: See Responses to Comments 4 and 5 above.

7. The use of a flexi-pave surface is a good green practice. Due to compacted soils, soil tests should be taken to determine if the proper separation distance (3 feet) is present to allow for infiltration. I would defer to the Town Engineer for further comment.

Response: The soils on the entire Property and in the area of the proposed pervious playground surface area are fill (Human Transported Material, HTM) transported to the site for past uses. As deposited and compacted fill material it will not readily infiltrate storm water. To compensate for the lack of infiltration, the material below the proposed playground will be excavated to a depth of approximately 2 feet and replaced with a free draining material. A subsurface drainage system will be installed that will collect the water that has infiltrated through the substrate and direct it to the site drainage system. This is an accepted water quality practice and will provide both water quality improvement as well as some peak water quantity attenuation.

8. A detailed Invasive Species Removal and Management protocol should be provided that outlines the steps for removal, ongoing maintenance, and specific strategies in place to monitor success of removals.

Response: Comment noted. The Applicant has provided an overview of the Species Removal and Management Protocol within the Landscape and Wetland Mitigation Plan. A site specific Species Removal and Management Protocol can and will be prepared by the Applicant, however, the Applicant requests that the preparation of this plan be made a condition of Planning Board approval and be subject to approval of the Town Environmental Consultant.

9. A Five-Year Wetland Monitoring and Maintenance Plan is required and should be prepared for the proposed Watercourse Buffer Mitigation Plan. Based upon the small size of the property the landscaping out of the buffer area should also be included. The 5-Year Plan should follow Town protocols (sample can be provided). In addition, a 25% Maintenance Bond will be required that is based upon the total cost estimate for implementation of the mitigation plan, including plants, materials, labor to install plantings.

Response: The Applicant is in agreement with the concept of a Five-Year Wetland Monitoring and Maintenance Plan. However, the Applicant requests that the preparation of this plan be made a condition of Planning Board approval and be subject to approval of the Town Environmental Consultant. The requested bond estimate would also be prepared at that time

10. The entire buffer mitigation area should be over-seeded with a native grass seed mix. Suggested seed mixes should be provided from either Ernst Seed or Prairie Nursery. The seed mix should be specified and listed on the mitigation plan.

Response: The Applicant is not opposed to this concept but notes that the area to be planted is currently dominated by non-native invasive species. While these plants will be removed, propagules including seed and plant remnants will remain in the overlying soil and thus

regrowth from these plants will need to be removed for a period of time. An initial over seeding will make identification and removal of these undesirable plants more difficult, if not impossible.

The Applicant's Environmental Consultant proposes that the initial seeding be postponed for at least two years from time of initial buffer installation to allow invasive species seeds to germinate and be removed. At that time, it can be determined by the Town Environmental Consultant if additional over seeding is still desirable. This contingency would be addressed in the 5 year maintenance and monitoring plan.

11. The side yard plantings of Green Giant Arborvitae and Amelanchier should be modified to include a greater diversity. It is recommended to do 3 of each and add two other suitable species to minimize potential issues with disease and maintenance problems that could arise and to increase overall diversity of the site. Suggested species include native hollies, spruces and cedars, and other flowering native understory tree species.

Response: Comment noted. While diversity is a consideration, the Applicant is striving for some uniformity in the appearance of the building and notes the plantings in question are landscape plantings, not wetland mitigation. As additional consideration is that these plantings are relatively few in number and are guaranteed under General Note 3 – All Vegetation shown on this plan shall be maintained in a healthy and vigorous growing condition throughout the duration of the proposed use of this site.

12. The row of green giants located within the buffer should be modified to include additional species and preferably be staggered with a combination of native shrubs and understory herbaceous plants to create a more natural layout of proposed buffer plantings and to create vertical and horizontal stratification of plant layers.

Response: The proposed row of Green Giant Arborvitaes was added in response to the Planning Board request that a visual buffer be provided between the Applicant's Property and the neighboring residential property. The arborvitaes are shown as being planted in close proximity and in line to provide the most effective visual screen. However, the Applicant is proposing the screen planting at the Planning Board's request and will provide the Planning Board with a mixed planting if preferred.

13. The 5-white flowering dogwood should be reduced in number and other fruit and nut bearing understory trees added, such as crab apple, hawthorn, elderberry, etc.

Response: comment noted. The planting selection has been changed to three dogwoods and two native species crabapples.

14. The proposed mitigation plan should include the addition of 2-3 overstory trees to provide long-term replacements of the declining species of white pine and red maple.

Response: As requested, three over story trees have been added to the planting plan - a red maple, a black gum and a river birch.

15. The site plan should incorporate an irrigation system for the maintenance of the landscaping and mitigation plantings.

Response: The Applicant is striving for a long term, self-sustaining system. Due to the proximity of the parking lot, an irrigation system is appropriate for the site landscape plantings. However, the mitigation plantings have been designed to be self-sustaining with a minimum of exogenous inputs including fertilizer, pesticide and/or irrigation. Therefore, the Applicant proposes to install temporary irrigation measures until the mitigation measure are well established and can be weaned off the artificial watering input.

16. Temporary deer fencing or a commitment to a regular deer spray program should be provided for the mitigation plantings and included on the site plan. In addition, for the trees, it may be advisable to add some type of trunk guard protectors to minimize damage from rabbits and deer.

Response: All plantings for the Property were carefully chosen for to be native, non-invasive with high pollinator value and high deer resistance. That being said, it is our experience that, due to high nutrient content, almost all nursery stock will experience some deer predation. The Applicant also recognized that all plants are guaranteed under the Five-Year Wetland Monitoring and Maintenance Plan. To insure survival, a combination of a deer spray and deer enclosure will be implemented on the site.

Please do not hesitate to contact me if you have further questions or require additional clarification.

Respectfully Submitted,



Jay Fain, MS, CPESC, PSS, CERP
Jay Fain and Associates, LLC

cc: Mr. Adam Wekstein, Esq.
Jarmal Kizel Architects and Engineers, Inc.
Mr. Alan Brandeis