Phase 1 requires 24 foot width on McDonald Road. We should discuss whether this should be done at 1A.

Note 9 says that there are no changes to this sheet. There are no changes to the footprint but there are changes to the notes on the map.

RESPONSE

The Phase 1 Pilot Plant has 6 loading berths, the Main Plant building has 5.

Based on the size and scope of the Phase 1A Plans and the anticipated traffic related to it, no improvements to McDonald Road are required, and the costs associated with the preparation of the plans and construction of these improvements would be onerous for such a limited endeavor. The Applicant will prepare plans for the proposed improvements to the southern shoulder of McDonald Road prior to the submittal of the Building Permit Application for the construction of Phase 1B for approval by the Town. Plans for the upgrade of McDonald Road will be prepared and submitted to the Town for approval prior to the submittal of the Building Permit Application for the construction of Phase 2. Prior to the preparation of either Plans, the Applicant will meet with the Town Highway Superintendent and the Planning Board regarding the requirements for both upgrade projects.

There were no revisions to the notes on Sheet 4, however they will be modified to indicate works in either Phase 1A or 1B.

16. Is there any truck loading in the rear of the main building?

RESPONSE

There is no truck loading at the rear of the main building.

Response to comments from Erik Kiviat dated January 20, 2017

Recommendations

1&2. Conduct a comprehensive survey of the vascular flora of the entire 48 acre site. Conduct surveys of birds, bats, herpetofauna, dragonflies, and butterflies of the site. Survey work should be performed by qualified independent field biologists during appropriate seasons for at least one full year prior to construction.

Study the golden-winged warblers and determine individual home ranges during breeding and nonbreeding seasons. This is important to understand and minimize development impacts on this Special Concern species.

RESPONSE

The flora and fauna were studied as part of the DEIS and no endangered were identified on the Site. That being said, less than 23% of the total 47.8 acre lot will be covered by buildings or other impervious surfaces, the wetland and upland areas in the western portion of the property will remain undisturbed, the wooded areas along the D&H Canal and the Basha Kill Creek will remain undisturbed, the wooded area at the eastern end of the property will remain undisturbed, and the tree line along McDonald Road east of the Phase 1 entrance will remain. As such significant habitat opportunities will remain on the property, including that for the Golden-winged Warbler which occur in wetland habitats more and move into nature forests immediately after fledging.
3. Mark and map shagbark hickories of all sizes from saplings to large trees and protect them from cutting or damage. Protect the hazel shrubs along MacDonald Road.

RESPONSE

As stated above, the majority of the trees on the property will remain even after full build out. Two small stands of trees in the footprint of the Phase 1 Pilot Plant building and the Phase 1 parking lot will be removed during construction, as will some of the trees in the western portion of a stand of trees that extend out from the eastern end of the property into the area around the infiltration basins. As such, the trees identified for removal are limited and unavoidable for construction. Removal of these trees will take place during the winter months in compliance with the applicable NYSDEC requirements for protection of potential bat summer habitat. As such there is no need to perform a survey of the trees on the property.

4. Test soils for potential contaminants (e.g., heavy metals, pesticides) around the dump and remove the dumped refuse for proper disposal. Test soils across the development area for lead.

RESPONSE

There has been some “convenience dumping” of some refuse, appliances, metal, etc. There has been extensive soil borings and test pits excavated around the property over the years with no evidence of large-scale dumping or contamination. Water tests have shown no evidence of any impacts to groundwater on the property. No additional testing is warranted.

5. Arrange for an independent verification of the entire onsite wetland boundary. This will be helpful to the project as well as to biodiversity. Also take auger borings outside the current wetland boundary on the field side, to determine if filling took place during episode(s) of earthmoving that occurred subsequent to the enactment of federal and state wetland protection.

RESPONSE

The wetlands on the property have been verified to the satisfaction of the NYSDEC by a NYSDEC Biologist and the Map validated in 2016. No filling has taken place on the property anywhere near the wetlands or the 100 foot buffer.

6. Have a fulltime independent construction monitor onsite during all site preparation and construction activities to help ensure that proper measures are maintained to minimize soil erosion, siltation, equipment impingement on wetlands, damage to shagbark hickories and hazels, spills and leaks of potential pollutants, and other preventable environmental damage. An appropriately trained and licensed monitor can also safely remove any snakes and turtles that may wander onto the construction area, as well as coaching construction workers to see and avoid those reptiles.

RESPONSE

A competent contractor will be retained for all phases of construction. As required by NYSDEC, the contractor will have a Trained Contractor onsite at all times and weekly inspections (twice a week if more than 5 acres are being disturbed) will be performed by a New York State Professional Engineer or Qualified Inspector working under the direct supervision of the Professional Engineer to ensure that all erosion control requirements and measures are being followed and the wetlands are not impacted.

7. Examine the current site plan and determine if stormwater basins and the main building can be pulled back from the wetland buffer zone. Also, determine if the whole project can be laid out more compactly to reduce habitat loss.
RESPONSE

The construction impacts to the 100-foot wetland buffer related to the construction of the stormwater basins is limited to a small area of Basin #1 and the outfall from Basin #2. These disturbances have been permitted and will be restored upon completion. The project is laid out as small a portion of the property as is possible.

8. The stormwater basins should be built prior to site preparation and construction and should be designed to act as settling ponds for soil materials (suspended sediment). Silt and clay particles commonly are not fully blocked by siltation barriers from entering wetlands and streams.

RESPONSE

Stormwater Basins #1 and #2 will be constructed as the initial tasks of Phase 1A and Phase 2, respectively.

9. Remaining (undeveloped) field habitat should be managed as shrubland. This might be as simple as a targeted mowing regime. Shrubland with native plants can possibly be developed over the SSDS and infiltration array without interfering with the operation and future maintenance of these facilities.

RESPONSE

Undeveloped portions of the property are planned to be left undisturbed. These areas could be managed as shrubland with targeted mowing to keep them from being re-forested. The Landscaping Plan was specified by a Landscape Architect retained by the Planning Board. The Applicant would be open to using different seed mixes and managing areas as shrubland as long as it is acceptable to the Planning Board and the plants and/or their root systems do not impact the functioning of the installations.

10. BE should consider mitigating for the loss and fragmentation of the field habitat for birds and other wildlife. This could take the form of funding the preservation and management for grassland or shrubland of a large parcel adjoining one of the existing managed natural areas in Mamakating.

RESPONSE

Comment noted.

11. BE should also consider mitigating for the loss of prime farmland soils by protecting prime farmland soils for agriculture elsewhere in the region, perhaps in association with one of several organizations that have established training centers or "incubators" for new farmers.

RESPONSE

Comment noted.

12. Update the NYNHP and FWS inquiries, because there may be new data and new policies. Update the Sullivan County Audubon Society inquiry.

RESPONSE

The Ironcolor Shiner, a species of special concern, is the only animal species identified within the area of the project using the NYSDEC New York Nature Explorer online mapping tool. The Eastern Rattlesnake
is no longer identified as being a Threatened Species in the Town of Manakating. No plant species were listed as being endangered, threatened or of special concern on the subject property.

13. Investigate options for types of wind turbines and solar panels that would minimize mortality and morbidity of flying animals, and monitor mortality for several years following installation.

RESPONSE
Comment noted.

Response to comments from Andrew Willingham dated January 24, 2017

Stormwater & Grading

In 2006 and 2008, on behalf of the BKAA, I furnished extensive comments (under my former employer David Clouser & Associates) to the Planning Board documenting the substantial deficiencies of the YM’s stormwater management design. For instance, the proposed stormwater system provides almost no stormwater detention for the 12+/- acres of proposed impervious surface, which will likely result in extensive downstream flooding and property damage. This design uses an earthen berm located on neighboring property to detain the site’s stormwater. This berm has already breached, a condition that will be greatly worsened by the site’s proposed mismanagement of stormwater. The downstream flooding and property damage could be eliminated if the project simply met applicable stormwater requirements.

The D&H Canal Berm is not a component of the stormwater design. The stormwater management system has been approved by NYSDEC and remains valid per correspondence from NYSDEC dated 12/19/2016.

1. Phase 1 of the YM project originally included the pilot plant which utilized Stormwater Management Basin #1 for stormwater treatment/attenuation. The revised BE Phases 1A/1B now encompass the greenhouses and access road to the greenhouses along with the pilot plant. It must be verified that Stormwater Management Basin #1 can provide attenuation and water quality treatment for the additional impervious surfaces.

RESPONSE
Stormwater Basin #1 handles stormwater from the south side of Phase 2 following its construction which includes 24,000 sq. ft. of impervious surface. Runoff from this area flows directly into Basin #1. The Phase 1A gravel drive and greenhouses result in approximately 50,660 sq. ft. of impervious surface. Runoff from these areas is directed to Basin #1 via a grassed channel and via vegetated overland flow over 320 feet from elevation 529 to elevation 528.

2. The grading plan for Phase 1A (Sheet 10A) indicates a high point along the center of the greenhouse access road. This results in the western greenhouses draining westward toward the wetland and therefore bypassing Stormwater Management Basin #1. All runoff from impervious surfaces must be captured and treated in the Basin in accordance with NYSDEC regulations. The stormwater management plan must be revised.

RESPONSE
While it is not likely that water from the western portion of the greenhouse area would reach the wetlands more than 400 feet away, the grading has been changed on Sheet 10A to direct any flow toward Basin #1.
3. The grading plan for Phase 1A calls for an approximate 4 acre area south and west of the greenhouses to be filled with approximately 18-24 inch depth of fill. The purpose of disturbing and filling in this large area is unclear, as no improvements are proposed in that area for either Phase 1A or Phase 1B.

**RESPONSE**

This area was disturbed in 2010 when the initial grading took place prior to the cessation of work by YMMCA. The area will be brought up to elevation 528 or more to facilitate proper drainage and in preparation for the future construction of Phase 2. Additionally, the southern portion of the area will be disturbed during the construction of Basin #1. The area will be seeded following grading.

4. Per our review of the grading plan, it appears that large volumes of soil material will need to be trucked (our rough calculations indicated several hundred truck trips to the site). Cut/fill volume calculations for Phase 1A should be provided to estimate truck trips and impacts to the surrounding road system.

**RESPONSE**

The traffic analysis included in the DEIS found no significant traffic impacts using 50 to 60 trucks to the facility per day. No impacts are anticipated.

**100 Year Floodplain**

The improper delineation of the 100 year floodplain was documented in my 08/27/08 Letter to the Planning Board (pages 7-8). This issue remains unaddressed with the current Site Plans. FEMA mapping was revised in 2011 for the project area (after YM Site Plan approval was granted), further justifying the update/modification.

BE's Engineer has simply traced the floodplain from FEMA mapping to the Site Plan, which is not the correct method to determine floodplain location. The applicant’s engineer should refer to the 2011 Flood Insurance Study for the Town of Mamakating to determine the actual 100-year flood elevations at this site. The floodplain is then translated to the plan using the site’s topography. The floodplain on the Site Plan should match the floodplain elevation according to FEMA mapping and studies. The project design may need to be altered based on the results of an accurate floodplain delineation.

**RESPONSE**

The site was graded in 2010 prior to the FEMA mapping in 2011. The floodplain limit was not traced from the FEMA map. FEMA used the YMMCA survey data following the re-grading to prepare the revised flood map. The Floodplain elevations at the project site are 525 and 526 feet. The area proposed for development are above these elevations.

**Building Elevations**

As the Board knows, the proposed BE main plant — Phase 2 will be large and visible from various viewpoints. As part of the Planning Board and public comment/review process (in hearings related to the 2006 and 2008 approvals), this structure's exterior design was presented, discussed and negotiated, with mitigation provided by the Applicant during both the SEQQR and Site Plan Approval processes. We understand that BE’s main plant has been lowered in height. However, its design has been altered. Therefore, revised building elevation drawings must be
furnished for the Board's review. The exterior design must also conform with the Town's Design Guidelines.

It should be noted that YM submitted Building Plans for the Pilot Plant in 2012 to the Building Department that were not consistent with the approved Elevation drawings nor the Town's Design Guidelines. The building appearance was an issue of great importance during the project's initial review and requires attention during this amended Site Plan approval.

**RESPONSE**

*Building elevations have been provided to the Planning Board.*

**NYSDEC Wetland Boundary**

The Site Plan notes indicate that the NYSDEC wetland boundary was flagged by Michael Clancy of the NYSDEC in July of 2003 and was "validated" by the NYSDEC in October 2016. However, it does not appear that the wetland was relagged and resurveyed in 2016. The original wetland flags almost certainly did not survive the 13 year period between delineations. It is unclear how the NYSDEC could validate flags that were not present on the site. The wetlands should be relagged by the NYSDEC or by an independent consultant and resurveyed by the Applicant to properly verify whether the wetland boundary has changed over the last 13+ years.

**RESPONSE**

*Michael Fratz of the NYSDEC walked the Site on October 13, 2016 with the previous Wetland Map and concluded that conditions had not changed and that a re-flagging was not needed.*

**McDonald Road Improvements**

Required improvements to MacDonald Road were discussed in YM's SEQR Findings Statement, earlier Site Plan Resolutions and my previous letter to the Board dated 08/27/08. MacDonald Road is in poor condition and incapable of managing the additional traffic generated by the BE project. Despite the above, no road improvement plans or schedule have been supplied for MacDonald Road. Sheet 5 of the Site Plan contains a vague description of the required improvements with no phasing schedule, plans or construction details. A note on Sheet 6 indicates "Detailed grading associated with road widening not shown. This information shall be shown on road widening construction plan and shall be reviewed and approved by the Town Engineer and Town Highway Supervisor." To prevent segmentation and allow full review of the proposed improvements by the Board, public and other agencies, the Road Widening Construction Plan should be included in the BE Site Plan Set. The phasing of the improvements is also not clear. The required improvements to MacDonald Road are significant and should not be described with a few notes on the plan.

**RESPONSE**

*Please see the response to Mr. Faggi’s comment No. 1 regarding the planned road improvements.*