



October 31, 2022

Matt Morris, L.L.A., P.P., LEED G.A.

Harold E. Pellow & Associates, Inc.

17 Plains Road

Augusta, N.J. 07822

Dear Mr. Morris,

As requested by Andover Township Land Use Board, Equity Environmental has completed a review of the Ecological Resources Inventory and Impact Report (Report) prepared by EcolSciences, Inc. for the Subject Property proposed for development by BHT Properties at 248 Stickles Pond Road; Block 151, Lot 21 in Andover Township, Sussex County, New Jersey.

As a preliminary to this review, we note a statement by EcolSciences, in this Report, “According to a report (Equity Environmental Engineering, 2022) and testimony by the Township’s consultants, i.e., Equity Environmental Engineering (“Equity”), the Site is located within the Skylands Landscape Region, which is “an area of exceptional significance for endangered species.” To obtain site-specific information to balance the claims made by Equity, EcolSciences was retained to review background information, perform field studies, and prepare a report to document ecological resources present within the Site and to assess impacts to these resources from the proposed BHT Project. We note that these “claims” as they are characterized are primarily statements of deficiency in the materials provided by BHT consultants to date, namely;

- The wetlands delineation was performed seasonally late and potentially out of season (October 23rd, 2019) for such investigations to properly characterize wetlands present and the potential associated presence of threatened or endangered species.
- That a Letter of Interpretation application to verify boundaries and transition areas submitted on February 25th, 2021 is still outstanding. This LOI has great bearing on the Site Plan for BHT and the review period seems exceptionally long.
- A review of the Natural Heritage Database associated with BHT Wetlands Report and NJ DEP Landscape Project database indicated the potential presence of multiple rare/endangered wildlife or habitat within ¼ of a mile. Statements made in Freshwater Wetlands Report of BHT made unsupported statements disclaiming the presence of or impact on any rare or endangered plant or animal species – no basis, was provided for these statements. No-infield verification of the presence of potential rare plant or animal species was provided in any materials associated with the BHT Site Plan Approval at the time of our review or during the course of our involvement in public review.
- The Project had not been screened with US Fish & Wildlife Services (USFWS) Information for Planning and Consultation utility (IPaC), a web-based resource that provides detailed information on the location of federally listed species and USFWS trust resources. Nor had a USFWS reviewed the Freshwater Wetlands permit application at the time of our review.

Notwithstanding the above, our review of Ecological Resources Inventory and Impact Report prepared by EcolSciences concludes that this work is well documented with proper backup materials and prepared with seasonably appropriate field investigation - ranging from April 22 to June 17th. The report addresses many of the requests for additional findings as warranted by the ecological setting and environmental databases available.

Summary of Ecological Setting:

- A. Vegetative Communities - surveyed in April, May and June 2022 and determined out of 105 plant species that none are listed as rare by the State.
- B. Wildlife Communities – 79 animal species were observed, 9 amphibians, 1 turtle, 64 bird and five mammal species were observed on Site. Seven species of concern were identified Jefferson salamander, broad winged hawk, brown thrasher, Cooper’s hawk, great blue heron, northern parula, and wood thrush.
- C. Landscape Project – the report reviewed the Landscape Project database findings for potential presence of endangered and threatened species on and in the vicinity of the Site. The narrative of the report determined that
 - 1. Indian Bat – has a suitable habitat on Site but that past siting on Indiana bat was not on the Subject Property. It concludes that a vast amount of suitable habitat is present in the area for this species
 - 2. Bald Eagle – indicates that the area is defined as a foraging habitat for this species and concludes that it would not be unexpected to observe bald eagles foraging in Stickle Pond
 - 3. Bobcat – indicates that the Landscape Project maps this species habitat throughout the Project Area but unlikely that sighting records are located on the Site but it would not be unexpected to observe this species on Site.
 - 4. Barred Owl – indicates the Site is mapped as habitat for this species and concludes that Barred Owls are likely not on the Site as they are often found in remote wilderness areas and past siting in area are most likely north of the Site at St Paul’s Abbey to the west and north of the Site.
 - 5. Kennedy’s emerald – the report simply indicates if this species does exist that it would be restricted to the waters of Stickle Pond or Pequest River and does not discuss the potential for impact.
 - 6. The report indicates that Jefferson Salamander, Brown Thrasher, Wood Thrush were observed on site but no specific regulatory protections are extended to these species. In addition, Coopers Hawk and Great Blue Heron were observed flying over the Site but no specific discussion of these species was provided relating to the impact of the project on these observed species.
- D. USFWS IPaC – the Report provides an appropriate review of the findings of the IPCA database and cited the database finding that “there are no critical habitats at this

location". However, the findings noted the potential presence of federally listed endangered Indiana bat, dwarf wedgemussel, and bog turtle as well as candidate species monarch butterfly as being potentially affected by activities at this location. The analysis determined;

1. Bog Turtle is not present on site based on Phase 1 survey.
 2. Birds of Conservation Concern (BCC) – identified black-capped chickadee, prairie warbler and wood thrush on Site
 3. This section of the report does not specifically discuss any potential project related impacts to Indiana bat, dwarf wedgemussel or identified BCC species observed on Site.
- E. Natural Heritage Priority Sites – the Report documents that the Site has three Natural Heritage Priority Sites within ¼ mile of the Project Site, Andover Ridge, Site 564, and Springdale and the Muckshaw Ponds just outside of ¼ mile from the Site. This section of the Report notes that the Site is not a Natural Heritage Priority Site as it is geographically separate from local priority sites by agricultural land, residential and commercial development. While this characterization is generally true, Site 564 as shown in Figure 10 of the report is directly accessible and connected without obstruction to the Project Site via upland forested areas adjacent to Stickles Pond and as noted in the narrative of the Report, Site 564 "Contains significant natural community with numerous globally and state-imperiled plant/animal species." The Report further notes that the dominance of invasive plant species on Site inhibits the re-establishment of native plant communities which prevents eligibility as a Natural Heritage Priority Site.
- F. Freshwater Wetlands – summarizes the delineation of wetlands, and the characterization of these wetlands and the presence of a vernal pool on Wetland Area E. It also notes the distinction of Wetland Area A as ordinary with no transition area. It further notes that NJDEP's review of the Application is pending.
- G. Waters – The Report documents that the presence of adjacent Pequest River and past impacts to this natural resource and that the River and Stickles Pond in the vicinity of the Site are classified at Category 1 waters.
- H. Vernal Pools – The Report documents the presence of a vernal pool associated with Wetland E nearly about ¾ of an acre in size with a depth of 1-3 feet. The in-field assessment of this vernal pool by EcolSciences indicates the presence of nine species in this vernal pond area, three obligate (restricted to vernal pond area) and six facultative (species that occur in wetlands but may occur in non-wetland areas).
1. Bog Turtle – a Phase 1 natural resources assessment was performed by a NJ Recognized Bog Turtle Surveyor that found no Bog Turtles were presence on Site and that none of the A-E mapped wetland areas on Site did not afford a suitable habitat for the Bog Turtle.

Statement of Findings of Impact of the Ecological Resources on Site

While we do not find fault with the factual basis of the report and ecological survey of the Report summarized above– which we find to be expertly performed, we do await confirmation by USFWS and NJ DEP of its characterization of impacts, or lack thereof as summarized below. Equity continues to believe this site is uniquely situated and ecologically significant in its relation to the regional ecology and as evidence by the findings of this Report, the diversity of wildlife present on Site or otherwise tied to the area ecology. We particularly note that the general characterization of impacts related to development of the Site refers to this notion that suitable habitat for rare, threatened or endangered species exists in the region and that although the development will displace if not eliminate habitat and the wildlife associated with the Site, that this wildlife is not unique and therefore the loss of on-site habitat would not impact these species adversely. Further it notes that sufficient and standard mitigation for identified endangered species such as Indiana Bat and migratory birds, is to limit tree clearing from April 1st to November 15th.

In terms of whether these answers as they relate to potential impact and mitigation are sufficient to address what we see as a dramatic alteration of the intensity of use, displacement of known habitat, and permanent alteration of this Site within the context of the broader ecology of the area – we await communications from NJ DEP and USFWS that these mitigations measures and considerations are sufficient to address concerns regarding wildlife and vegetative community impact related to the Proposed Project. We do note that the Report does not consider in any significant way the potential impact to on-Site displaced habitat related to intended business operations by BHT – specifically noise, air quality/dust emissions or erosion related to truck movements on wetlands/ vernal ponds sited adjacent to construction material and vehicle storage operations.

The Report documents the following impacts or non-impacts;

- A. Vegetative Communities – The report documents development footprint impact (elimination of 28.85 acres of maintained field, 12.62 acres of mixed hardwood upland forest, and 6.8 acres of successional woodland. The finding of this section of the Report is that the loss of vegetative communities is not significant as they are not unique and are dominated by invasive and non-native plants.

Equity Response: While we concur with the general finding that the vegetative communities present on-site are not unique, the proposed development, as documented in the Report, would result in significant elimination of habitat for the variety of species documented as present on Site. Despite past impact to the Site from previous use and presence of invasive species (approximately 23% of species documented) – approximately 12.62 acres of mixed hardwood upland forest and 6.9 acres of successional woodland area would be eliminated due to the Project Development. The previous use of the Site left these forested areas intact, while the

Proposed Development of the Site would permanently eliminate these vegetative communities and supported wildlife currently documented on Site.

- B, C, D. Wildlife Communities/landscape project/ USFWS IPaC – as noted in this section of the Report, “a total of 50.76 acres or 50.3 percent of the Site would be developed by the Project impacting 44.2 percent of the existing upland woods, 65.5 percent of the field, and 0.3 percent of wet woods habitats. These areas would be lost as suitable habitats for the identified wildlife species”. The report does then note that woodland edge habitat would continue to exist along the boundary of the developed area. The Report notes as it does in the above section, that while the project would eliminate current onsite habitats for identified wildlife in these eliminated vegetative communities, that the “loss of on-Site habitats would not impose a significant adverse impact on the populations of these species”.

This section specifically addresses the potential presence of Federally Listed Indiana bat habitats and indicates the USFWS typically imposes tree clearing prohibitions on new projects. The Report notes that USFWS has indicated that “any tree removal shall be conducted outside of the April 1-November 15th active season window for Indiana bat.” This section further notes that this tree clearing prohibition coincides with the resident and migratory bird species that inhabit the Site and therefore the requirements of the Migratory Bird Treat Act (MBTA) would be avoided by the project.

Equity Response: *As noted in the response above under vegetative communities, due to the project, “these areas would be lost as suitable habitats for the identified endangered, threatened, and special concern wildlife species.” In response to this impact, the Report notes that despite the loss of habitat or use of the site for foraging that, “due to the widespread presence of suitable habitats for endangered and threatened wildlife species in the Project region as illustrated on Figures 5 through 9, the loss of on-Site habitats would not impose a significant adverse impact on the populations of these species.” Further, the Report notes that standard measures from USFWS are a prohibition on tree clearing from April 1st to November 15th and that this will prevent the potential taking of migratory bird species species and that migratory birds such as wood thrush and brown thrasher would continue to breed on site or adjacent suitable woodland and woodland edge habitats on-Site.*

While the above statements may in fact represent a possible future reality – ie that identified species will simply migrate off Site or find some suitable area where on-Site habitat has not been eliminated by construction of the Proposed Development, there is no discussion of the impact of the future operations at the Site. The Project will bring many trucks onto the Site and involve the movement of construction material on and off-site resulting in potential exposure to noise and air pollution, isolation of wetlands on-site that would be exposed to potential erosion, oil and fuel runoff and dust generation. We would ask that EcoSciences consider such potential impact of on-site,

post construction operation on those species that would potentially remain on-site and are characterized as not impacted during or after construction by the proposed development.

Further, in addition to a probation of tree clearing from April 1st to November 15th, USFWS also may recommend additional measures such as preserving high-suitability roost trees or replanting of appropriate roost tree species to address the potential loss of habitat for Indiana bat. We would ask that any communication to date on mitigation requirements be provided to the Andover Township Planning and Zoning Board and final mitigation approved by USFWS for Indiana bat, northern long-eared bat, and the taking of migratory birds of particular concern.

- E. Priority Sites: As noted above the Site is not a Natural Heritage Priority Site and the Site has been disturbed by past use and has a considerable presence of invasive species that make it ineligible for classification as a Natural Heritage Priority Site.

Equity Response: *While we agree with the facts of this characterization – i.e., that it is disturbed by past use, contains significant invasive species, and that it is not a Natural Heritage Priority Site; the Site is in fact surrounded to the north, south, east and west by such designated Sites within a ¼ of a mile, is directly adjacent to a category 1 stream, contains multiple wetlands and a large vernal pool and contains a significant amount of uplands woods as well as an array of animal and plant species that attest to the existing and enduring biodiversity that the Site supports. Further, while the Site is bound to the South by physical infrastructure to the South with Route 206 and Stickles Pond Road, the Site shares an unmistakable connection to the broader ecological system and to Site 564 specifically which together form the lowland section of the valley with Spingdale Natural Heritage Priority Site bound by upland Andover Ridge and Muckshaw Ponds Natural Heritage Priority Site to the northwest and southeast.*

- F. Freshwater Wetlands: Equity has no further comment on this Section as is awaiting the LOI and determination that Wetland Area A is not an exceptional resource and Transition Areas Plan Waiver and Special Activities Transition Area Waiver for Redevelopment.
- G. Waters: Equity has no further comment on this Section of the Report and awaits NJDEP determination on the LOI on the 300-foot riparian zone
- H. Vernal Pools: This section restates portions of the design controls as conceived on latest Site Plans in order to minimize impacts on Wetland Area E and associated vernal pool.

BHT Application Review
Ecological Resources Inventory and Impact Report Review

Equity Response: *To assure Wetland E and B are maintained and hydrology and drainage systems perform as summarized, and the Spill Prevention Plan is followed as required and that during construction appropriate measures are deployed to mitigate impacts to this large wetland complex supporting some 9 species including Jefferson Salamander, a species of Special Concern, we would recommend that post construction monitoring of this vernal pool be performed to evaluate impact of operations approximately 6 months after operations begin to assure that its function as an ecological resource for wildlife habitat is maintained.*

- I. Bog Turtle: As noted above a Phase 1 Field Survey was performed indicating none of the wetlands are suitable habitat for this species. Given the expertise of EcolSciencess we have no reason to dispute this finding.

Respectfully Submitted,

equity environmental engineering



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