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June 23, 2016

Pinelands Preservation Alliance (PPA)
Mr. Carlton Montgomery (*Executive Director*)
17 Pemberton Road
Southampton, NJ 08088

**Re: Preliminary Comments
Letter of Interpretation (LOI) File No: 1500-04-0001.3**

Dear Mr. Montgomery:

Per your request GZA GeoEnvironmental, Inc. (GZA) has reviewed a pending application for a CAFRA Individual Permit and Wetland Line Verification pertaining to development of a Walmart Superstore, located in Toms River and Manchester Township, Ocean County, NJ (site proper). Due to the time constraints the Department of Environmental Protection has imposed on submitting comments, GZA would like to put into the record six preliminary points until such time that a thorough follow-up review of currently available documents, NJ GeoWeb information, documents not yet available for public review, and in-field analysis can be performed.

The following six points of concern represent a summary of our initial findings:

1. The failure of the Division of Land Use Regulation (Division) to explain the reasoning behind the determination for the establishment of exceptional resource value onsite wetlands, which at a minimum must identify those species that trigger the designation. Under N.J.A.C. 7:7A-1, threatened and endangered (T&E) species habitat is defined as that which must, *"show evidence of past use by species and that remains suitable for use by T&E species during normal periods the species would use the habitat"*. However, the LOI letter dated 4/13/16 (referenced above) doesn't provide the species responsible for the designation, nor does the Division identify those species whose life history requirements are in concert with onsite habitat and thus may require screening in order to determine their presence. It should be noted that all past LOI applications that GZA has reviewed specifically identify the species which triggered exceptional resource value classification (RVC). The public, and any natural resource specialist working on behalf of the public, without confirmation of the target species, is at a loss to evaluate the habitat-species association with land directly on and off-site of the site proper. Under this deficient circumstance the public is left with only conjecture based on available information, i.e. NJ GeoWeb and Landscape Maps, V3.1, regarding the Division's reasoning. It should be noted, however, that these sources are by their nature incomplete, and so cannot be used to demonstrate the absence of a given species. Desk top analysis may be a proper starting point to assess a parcel of lands natural attributes, and the Landscape Map is a sound basis for *affirmatively* identifying the presence of T&E habitats, but it is no substitute for in-situ field investigation to identify *all* relevant species habitats on site. In point of fact no indication is provided in the LOI letter as to whether or not the RVC is based on Federal or State listed flora or fauna. NJ GeoWeb and Landscape Version



3.0 review indicate pine snake (*Pituophis melanoleucus*) and pine barren tree frog (*Hyla andersonii*) as occurring on site. These two species indicate to the endangered species ecologist that if their presence is confirmed within the landscape, then it is expected that the complete assemblage of obligate pine barren fauna and flora would be found onsite. Onsite habitat and the habitat that surrounds the site is contiguous for many miles into the core of the pinelands ecosystem. This feature makes it all the more likely that any or all of the T&E and special concern species, both wetland and upland dependent, which have a species occurrence area that is tethered to, and dependent upon, the same site characteristics that make it proper for pine snakes and pine barrens tree frogs, also use the site. In the LOI letter to the applicant it specifies that if any relevant “new information” comes to the Divisions attention the RVC can be reevaluated. However, without the Division providing the public with the site-specific species and the supporting documentation responsible for the RVC, the public is constrained by assumptions. The public is also often unable to access privately held lands, which of course makes the process of wetland and T&E evaluation limited to the applicant’s submitted documentation and desktop review of available information (see 2 below).

2. GZA’s appraisal to date took place from the vantage point of the publicly accessed railroad track south of the development site proper, Route 37, and public roads. This situation, although not ideal, was sufficient to get a solid understanding of the landscape quality, general habitat conditions, and degree of anthropogenic disturbance. However, access to the site proper must be available to fully assess the current land use condition as it pertains to specific T&E habitat applicability and to verify the accuracy of the wetland line itself. It is to this point that we find the application in violation of its own spirit and intentions.
3. As it relates to T&E and wetland line verification, GZA found that supporting documentation on the current wetland line designations A, B, C, D, E, and F were not publicly available as required by the Division under N.J.A.C. 7:7A, et.seq. Supporting reports and exhibits were not available for review at the Township(s) clerk offices as of, and including the week of June 6th, 2016. Without these, a complete analysis cannot be conducted by the public and consultant reviewers. It is imperative that supporting documentation be made publicly available that provides the justification for the apparent arbitrary RVC along the delineated wetland lines associated with Block 44, Lots 1, 2, and 9. In GZA’s experience with the Division it is highly irregular that a RVC designation changes along a contiguous wetland line (A, B, D lines) within a land type whose bio-ecologic makeup is invariant in consideration of both horizontal and vertical structure. The Division’s wetland line designations indicate the hydrology within the demarcated wetland is invariant. It is therefore hard to conclude, regardless of the species that has triggered the exceptional RVC designation, what life history “habitat” parameter associated with the target species has changed between the differing RVC classification points. To simplify this point, a pine barren tree frog that is known to exist at wetland point A-16 is not precluded from meeting its life history demands within this adjacent forest patch (see 4 below to further the discussion). No life history parameter that would limit species presence out and inside wetland line segment A-1 through A-15 has suddenly changed between A-15 and A-16. If the Division has determined that this is the case at A-15, and other RVC change points, than the method and reasoning behind such an important determination should be clearly documented, defined, and made publicly available.

In addition, we find no basis in the Protocols for this jurisdictional decision in the Establishment of Exceptional Resource Value Wetlands Pursuant to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) - based on Documentation of State or Federal Endangered or Threatened Species, January 2015 (the Protocols) for the variability of the Division’s RVC designations. In fact, the Protocols do not contemplate or authorize such an approach. The Protocols were specifically amended in 2015 to make clear that exceptional RVC is to be given to wetlands identified in the Landscape Map as T&E habitat, which applies to all the wetlands included in the



CAFRA application in this matter, not on the basis of episodic site inspections that capture only a snapshot of changing wetlands conditions and habitat use over time (to further emphasize this point see 6 below).

4. Wetland buffer dimensions and the inherent protection they provide are ecologically significant. GZA wetland scientists question the logic behind what appears to be an arbitrary reduction in buffer size to the northern and western wetlands (C, D, E lines and A1-A-15). In addition, wetlands to the south of the site proper, located on Block 44, Lots 1 & 2, although isolated, are in close proximity (<1,000') with exceptional RVC wetlands and within a mosaic of sub-habitats with varying level of obligate pine barren complexity; all of which are in concert with the "foraging, breeding, and nesting" metrics associated with known T&E species and those yet to be vetted (see barred owl reference below). However, the Division has designated this wetland as intermediate value. Why? The CAFRA application and LOI provide no justification. This approach does not comport with NJDEP stated wetland protection goals that demand that their basic inherent functions perpetuate unencumbered. Not least of these functions is to support in perpetuity rare species community structure. Numerous points can be associated with the primary impacts that will occur linked with the construction of a sizeable commercial facility that will inevitably degrade the quality and functionality of sensitive wetlands. The Block 44, Lot 1 wetlands will abut the proposed building footprint. With this close proximity, impacts not yet considered are sure to evolve over time. Excessive sound and light signatures, off-site dumping, easy forested access by ORV's et cetera, are just a few anticipated harms to this wetland complex. It would seem to defy logic that buffer size for Division-confirmed T&E species would be truncated in areas where the protection a maximum size designation would provide extended benefit; i.e. areas where anthropogenic input is greatest. Larger sized buffers adjacent to T&E habitat play a major role in nutrient capture and non-point pollution control in these areas; areas where their attributes are needed most. This is especially true for species like the pine barren tree frog that require non-degraded water sources during the breeding portion of their life-cycle. It therefore is worth repeating the question - why are these buffers not maximized to the greatest extent allowable under the definition and context of exceptional resource wetlands? N.J.A.C. – 7:7A-2.4.2 clearly defines them as being "present habitat for T&E species" (see 5 below).
5. During GZA in-field site investigation(s) of June 9th, 2016 (3pm-1am June 10th) the wetlands and land use associated with the site proper and surrounding landscapes were found to be in concert with state listed T&E species and state listed special concern species. Without definitive designation of the Divisions T&E species GZA evaluated the site proper and adjacent blocks and lots for habitat applicability with state and federally listed species. In a single night of survey a positive occurrence for the state threatened barred owl (*Strix varia*) was documented (T&E rare species report forthcoming). This species is not listed within the current land use mapping "BIOTICS" database. This species vocalized its demarcation call from a block and lot adjacent and south of Block 44, Lot 2 from Block 3,000, Lot 1 – 11:35 pm. The habitat description for this species as specified in the Divisions protocols for establishing Exceptional RVC is in concert with the onsite site habitat and therefore should be considered in a reevaluation of the site proper wetlands. This is an important observation for two significant reasons, (1) even though the habitat on, and surrounding the site proper is in obvious alignment with the owls life history no one from the Divisions Endangered and Nongame Species Program was required to provide input on the potential for its presence within the complex, and (2) now that it's presence is confirmed a species occurrence area (SOA) must be established that interfaces with site proper. The later point should trigger the Division to reassess the RVC of Block 9, Lots 1 & 2 wetlands as the information provided herein should be considered "**new information**" that may lead to a more accurate and appropriate RVC. The LOI Line Verification Letter demands this, "Should new information be disclosed or discovered, the Division reserves the right to void the original letter of interpretation and issue a revised letter of interpretation". Given the finding, a Phase-I habitat assessment for barred owl should be initiated in the winter/spring of 2017 to confirm presence or absence of nesting owls. The fact barred owl habitat is now found begs the question of how many other potential rare species have not been properly assessed



that may be ecologically tied to the complex and surrounding landscapes. It is important to recognize that the Division puts the onus on the applicant to report rare species findings outside of reviewing the dearth of bio-ecologic desktop information that can be derived from Natural Heritage Program information. The point here is an obvious one, asking an applicant's agent to assess T&E habitat where a positive sighting of a rare species would likely result in a hardship creates an atmosphere of skepticism as it relates to protocol and due diligence. To further emphasize this point there are many other T&E species whose life history requirements align with the habitat mosaics found on the site proper; life histories that have a wetland component to them and correlate with the "breeding, nesting, and foraging" standards set forth in the regulatory guidelines. Obvious species where no evidence could be found that a T&E applicability study was ever required by the Division or commissioned as a proactive due-diligence initiative to determine presence/ absence. These species include the following:

- a. Barred owl (*Strix varia*) State Threatened;
- b. Red-shouldered Hawk (*Buteo lineatus*), NJ Endangered;
- c. Red-headed Woodpecker (*Melanerpes erthrocephalus*) NJ Threatened;
- d. Corn Snake (*Elaphe g. guttata*) NJ Endangered;
- e. Southern Gray Tree frog (*Hyla chrysocelis*) NJ Endangered (not likely to occur in Ocean County);
- f. Northern Long Eared Bat (*Myotis septentrionalis*) NJ State Endangered;
- g. Little Brown bat (*Myotis lucifugus*) NJ State Endangered.

Currently this list of species has not been factored into the site proper's calculus for wetland RV classification. The fact that none of these species are found in Natural Heritage Program records should not preclude their onsite investigation when the site is so clearly in agreement with their jurisdictional life history parameters and ecologic metrics for tenancy. To be blunt, no one has bothered to look. This point is further emphasized by the fact that in a single evening of survey, GZA's ecologist documented the presence of the state threatened barred owl. A species whose presence in the system is a good indication that the onsite habitat mosaic consists of high quality wetlands within the greater pineland eco-region – as referenced in the (*Barakowski et al., 1987. Distribution, Density, and habitat relationships of barred owls in northern New Jersey*). To further reinforce our assertion that the site proper and surrounding landscape is of exceptional land use and ecologic quality; in addition to barred owl, five supplemental species of special concern were documented during the June 9th diurnal/nocturnal site evaluation:

1. Brown Thrasher (*Toxostoma rufum*);
2. Least Flycatcher (*Empidonax minimus*);
3. Great Blue Heron (*Ardea Herodias*);
4. Veery (*Catharus fuscescens*);
5. Whip-poor-will (*Caprimulgus vociferous*).

With the understanding that none of these species carry regulatory authority they certainly should not be so easily dismissed when evaluating wetland habitat quality. Within the framework of their life histories, all of these special concern species are documented to be indicators of high quality wetlands. It is worth pointing out that it's a self-fulfilling prophecy that to allow the site proper wetlands to be impacted by the secondary and tertiary effects commercial development will ultimately impose, that the guild suite of currently documented T&E/special concern species will continue to decline. This is in direct opposition to the spirit of the land use regulation initially generated for their long term protection.

The Department should also be made aware that the Federal Fish and Wildlife 4(d) rule pertaining to critical habitat determination for northern long eared bat (NLEB) is in effect as of April 2016. This rule recommends that



presence/absence surveys for NLEB take place on projects where tree removal of an acre or more is proposed. Because the onsite conditions are in concert with the foraging behavior of the species, and deadwood southern facing trees can be found within the complex, a potential exists for NLEB onsite maternity roosting habitat. A Phase-II acoustic survey is recommended to determine the presence/absence of state and federally listed bat species as a proactive due-diligence method to avoid incidental take clause of the 4d rule.

6. It should be cautioned that the site proper and surrounding natural greenway connected lands are in flux. Forest and buffer habitat change over time in association with natural landscape succession. In addition climate change and weather events are acting on the landscape in various ways that also drive site specific land change. The recognition that T&E habitat is not fixed is why the division emphasizes Landscape Maps to improve upon both the predictability and quality of habitat protection provided under the act. In the case of this application this provision is especially important because the two known T&E species, pine snake and pine barren tree frog, will adjust their behaviors to compensate for landscape change. Valuing the habitat complex in its totality and subjecting known and potential T&E species to a rigorous species-based methodology to determine Land Use/Land Cover habitat is a prudent approach. In point of fact, the fore mentioned barred owl sighting should not be looked at in a site specific vacuum. This species requires a highly complex, multivariate wetland/upland/ riverine habitat(s) to complete its phenological cycle at a level that will assure the continuance of the species. Consideration of this point through analysis of the species appropriate Land Use/Land Cover is a more protective method to ensuring that jurisdictional compliance is maximize.

Without a complete copy of the application, including the vital supporting documentation and justification of the applicant's agents delineated wetland line, the application must be deemed administratively incomplete until such time that the public has Township access to an entire application (refer to NJ Freshwater Wetlands LOI Application Checklist and Fee Table 2016 #3-A, "*Proof that the municipal clerk has been sent a copy of the **entire** application that was submitted to NJDEP*". Based on the information submitted herein many questions pertaining to RVC persist. GZA, on behalf of PPA, respectfully request that the proposed CAFRA permit application for development be denied until such time that a more complete bio-ecologic appraisal of T&E potentiality of the site proper be commissioned in order to ensure the public that pineland rare species communities and associated EPA Priority Wetlands onsite remain protected to the maximum extent possible.

Respectfully submitted,

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Blaine Rothauser
(GZA GeoEnvironmental, Inc.)
(Senior Project Manager)

Carol McKnight

A handwritten signature in blue ink, appearing to read 'Carol J.M. McKnight', written over a light blue horizontal line.

(GZA GeoEnvironmental, Inc.)
(Consultant Reviewer)

