MEMORANDUM

TO: Sparta Township Planning Board
CC: Diana Katzenstein, Planning Board Secretary
FROM: Sparta Township Environmental Commission
DATE: February 25, 2022
SUBJECT: ENVIRONMENTAL COMMISSION REVIEW OF PLANNING BOARD APPLICATION #689

The Sparta Township Environmental Commission has reviewed the application submitted by Diamond Chip Realty, LLC for a proposed Diamond Chip Logistics Park.

The Commission’s comments and questions are organized as follows:
1. Rare/Protected Species on-site and in immediate area
2. Air Quality / Pollution / Impact of Traffic
3. Impervious Surface
4. Stormwater Management
5. Environmental Impact Statement
6. Water Resources / Conservation Easement
7. Hazardous Materials
8. Miscellaneous (Lighting, Permeable Pavement, Landscape Plan, Solar, EV Charging, Noise)
9. Quality of Life
10. Conclusion

Key size and scope attributes:
- 880,000 square feet of warehouse space
- 191 truck door bays
- Two (2) warehouses, each with length of 1,152 feet (over 1/5 mile) and height of approximately 45 feet
- Total lot size: 68 acres
- Straight-line distance from property edge to Route 15: approximately 1/5 mile

1. Rare/Protected Species on-site and in immediate area:

Rare species and habitats will likely be subjected to significant short- and long-term risk from this proposed development. The Environmental Impact Statement (EIS) provided by the applicant contains a report from the New Jersey Department of Environmental Protection, Office of Natural Lands Management, dated August 5, 2020. The DEP report is based on the Natural Heritage Database, Landscape Project habitat mapping, and the Biotics Database Report (see digital application packet pages 362-381). This data-based report shows the presence of the following at-risk species and habitats which have Federal and/or State of NJ protection status.

ON the actual project site:
- 4 species of rare Birds with State of NJ Protection Status of “Special Concern”. Two of these species use the property for breeding.
Within ¼ mile of project site:
(As a reference point, the two warehouses would each stretch over 1/5 mile long.)

- Turtles (2 rare species): One with Federal Protection Status of “Threatened” and NJ Protection Status of “Endangered”, and the other with NJ Protection Status of “Threatened”
- Birds (8 rare species): Two of which have a NJ Protection Status of “Threatened”, and six with NJ Status of “Special Concern”. Six of these eight species use the immediate area for breeding.
- Bobcat: NJ Protection Status of “Endangered”
- 2 Vernal Pool Habitats

Within 1 mile of project site:
(The impact of intense daily truck volume reasonably expected in the area surrounding the complex extends the potential scope and scale of protected species at risk.)

- Federal or NJ protected species:
  - Endangered: 8
  - Threatened: 8
  - Species of Concern: 13
- Vernal Pools: 10 (4 confirmed, 6 suspected)

Additionally:
- Approximately 1/4 mile east exists a “Natural Heritage Priority Site” identified as a critically important area to conserve New Jersey's biological diversity,
- Approximately 1/3 mile south exists a Category One (C1) stream recognized by the New Jersey Department of Environmental Protection as a pristine waterway,
- Property is approximately 25 feet away from species-specific habitat containing one or more occurrences of wildlife listed as endangered and threatened pursuant to the Federal Endangered Species Act of 1973. (Applicant packet page 351, EIS figure 12)

Despite this extensive list of recognized rare and protected species on and surrounding the project site, the conclusion presented in the applicant’s Environmental Impact Statement is “No impacts to regulated wildlife are anticipated.” This ignores the risks to the protected species identified above, and the damage caused by habitat fragmentation to wildlife and plants.

The EIS also hypothesizes that “The active concrete manufacturing operations onsite and the developed use of adjacent properties also likely present enough disturbance to prevent the frequent use by any regulated wildlife.”

This speculative statement is in direct contradiction to the official, data-based report provided by the New Jersey Department of Environmental Protection for this property and immediate vicinity.

2. Air Quality / Pollution / Impact of Traffic:

- Air quality degradation caused by a large increase in truck emissions (particularly diesel exhaust) is of concern. There will be negative impacts from truck emissions on the local airshed, as well as the impact of additional truck traffic on Route 15 creating congestion and the increased emissions that commonly accompany that congestion. Consideration must be given to:
  - Pollution from idling cars and trucks due to increased congestion
  - Odor from increased volume of trucks, particularly diesel-fueled
  - Increased rail traffic will also result in vehicles waiting in traffic at crossings

- According to the Environmental Protection Agency (EPA), approximately 1/3 of the carbon dioxide placed into the atmosphere comes from the transportation industry.
• Sussex County is part of the EPA’s Ozone “non-attainment” area (i.e., we do not meet the federal standard for ozone). Additional trucks and related vehicle trips from this proposed development will only serve to exacerbate our non-attainment status.

• A recent study determined that large, diesel trucks were the greatest contributor of harmful black carbon emissions close to roadways, finding that vehicle “type” mattered more than traffic volume. (University of Toronto Applied Science & Engineering, September 2018)

• Magnifying this concern are the following issues with the validity of the traffic study forecast, one that led to a conclusion that no mitigation measures are necessary:

• The traffic study, as presented, appears to be based on optimistic and unreasonable assumptions. The statement that “The results of the build-out analysis are similar to that of the no-build analysis” defies logic. To assume that the quantity of daily vehicle trips associated with the addition of an 880,000 square foot warehouse complex with almost 200 truck bays would have no meaningful impact to traffic flows calls into question both the analysis. The current constraints on north and south bound traffic flows on Route 15 are clear to anyone who travels that portion of the highway. The statement that the applicant is proposing no mitigation measures cannot be reasonably accepted.

• Without defining the nature of the businesses and the associated types of cargo/inventory and related transfer requirements, what is the validity underlying the conclusion that no mitigation measures are necessary?

• The applicant’s study area appears to be too narrowly focused. The applicant must consider and mitigate the impacts on our residents and business owners located on Pinkneyville Rd., Sussex Mills Rd, Newton-Sparta Rd and the interconnected roadways. There can be no reasonable doubt that trucks will seek alternate routes to avoid congestion at the identified Route 15 ingress/egress points by traveling on these alternate routes. Use of these alternates will negatively impact the health and welfare of those along these routes due to increased noise, diesel exhaust emissions and traffic/pedestrian safety risks (not to mention the increased infrastructure costs for these local roads).

• Finally, the traffic study appears to forecast only a Year 2023 scenario. Applicant should provide evidence that a 2023 projection fairly represent 2024, 2025 and beyond. Do the 2023 projections assume full, steady-state operations and capacity? Applicant should provide justification for the assumption that future years (3, 5, 10 years out) will be equivalent to the first year of hypothetical operation, 2023.

3. Impervious Surface:

Impervious coverage is proposed to reach over 54%. This represents almost 37 acres of impervious surface of the total 68 acres. (For reference, this is equivalent to approximately 28 full football fields).

Current state impervious surface is 4.8% for this property (NJ MAP, NJ Conservation Blueprint; Rowan University Geospatial Research Lab, 2015), which equates to 3-4 acres. Additionally, the Boundary and Topographical Survey provided by the applicant (pages 11-17 in electronic packet) shows that the vast majority of land cover is dirt, sand, gravel, grass, woods, and wetlands, which aren’t impervious. The current low degree of impervious cover is also supported by the numerous aerial photos contained throughout the application (Kimley Horn report (p. 182), Envirotactics report (p. 184), and others).

Therefore, the addition of approximately 33 acres of impervious surface to the existing 3-4 is extremely significant. While it may remain true that a formal variance is not required, this increase is materially impactful and should be acknowledged and considered in the larger context.
4. **Stormwater Management:**

- The applicant is claiming **exemption from stormwater runoff quality requirements** based on a claimed reduction in “motor vehicle surface area”. Applicant states the proposed development would result in **a reduction in motor vehicle surface area**, based on the perspective that “the portions of the existing concrete mixing plant (Sparta Ready Mix) for which heavy machinery is operated are considered “motor vehicle surface area”.”

Applicant reports Existing motor vehicle service area of 31.45 acres, and a Proposed motor vehicle service area of 15.87 acres. This implies that the motor vehicle service area for a brand new 880,000 square foot warehouse complex with almost 200 truck door bays, designed to be a transportation hub, will utilize only 50% of the vehicle service area of the operations of the current business.

The following exhibits support our questions regarding the evidence, assumptions, and calculations used by applicant to claim a reduction in motor vehicle surface area and hence an exemption from stormwater runoff quality requirements:

- EIS Soils Map (figure 4, page 342)
- EIS Existing Development Features Map (figure 10, page 349)
- Stormwater Study Existing Motor Vehicle Surface Area map with overlaid grid (Appendix F, EX-1, page 317)

Applicant should provide detailed evidence and calculations supporting the assumption that existing use by machinery for the size/scale of current operations meets the full definition and intent of “motor vehicle service area”, and same for calculations supporting proposed motor vehicle service area.

- Annual on-site **Groundwater Recharge Deficit** post-development will be 715,205 cubic feet. This represents 55% of the current recharge of 1.3M cubic feet for the property. (Application packet page 320, Kimley-Horn Stormwater Study, Appendix H)

- Regarding stormwater flows, although the applicant reports standardized rainfall amounts for the 2, 10 and 100-year storms, it is well understood that we are experiencing **100-year storm events with greater frequency**. As such, the stormwater flow rates and volumes associated with the unprecedented impervious cover being proposed are at best optimistic, and at worse, **understate the hazards associated with flooding this and adjacent properties**. The proposal to resolve water quality concerns through the use of drywells is a solution from prior decades. The **applicant should provide current, real-world case studies** that demonstrate that impaired stormwater flows can be adequately managed for water quality on this scale.

5. **Environmental Impact Statement:**

The Commission is compelled to call into question the validity and completeness of the Environmental Impact Statement (EIS) as presented. In addition to EIS topics addressed elsewhere in this document, concern exists regarding the overall level of analysis and considerations of environmental impact risks.

The EIS conclusion that the proposed development will be an overall improvement appears indefensible based on the facts presented.

The statement that the “proposed development will not result in any significant or adverse impact on the environment or cultural resources of Sparta Township” **raises concerns in how potential adverse impacts were measured and evaluated**, and what specific **thresholds** were used to formulate that statement, particularly with respect to:

- Rare/Protected Species
- Air Quality
- Impervious Coverage
- Stormwater Management
- Water Resources / Proximity to Aquifer, Streams
Additionally, with regard to Air Quality impacts, the EIS states that the “proposed development will not impact the onsite/surrounding air quality long term and is relatively consistent with other developments in the area.” Applicant should provide detailed evidence that supports this statement.

Lastly, the EIS states that there will be no degradation of surface water quality because of the proposed development and an increase in quality can be expected. An increase in water quality from this or any industrial development has not been supported by any data. Applicant should provide detailed evidence that supports this statement.

6. Water Resources / Conservation Easement:

Proximity to invaluable water resources such as the Germany Flats aquifer, Paulins Kill river headwaters, and Sparta Junction tributaries creates risk of long-term adverse impacts.

With regard to the Conservation Easement and extent of encroachment into regulated areas, past use of these areas does not imply that additional/modified uses are permitted. The applicant needs to clarify what areas are conserved and verify that these conservation easements are not being directly or indirectly impacted.

Risk to on-site Wetlands and Transition Areas:

- Three permits applicant has requested from NJDEP fall under “Freshwater Wetlands Special Activity Transition Area for Redevelopment”. “These permits will allow for the redevelopment of the transition area, filling of isolated wetlands, and permit the proposed rail spur through transition area.” Application packet page 350 (EIS figure 11 map)
- Property contains wetlands rated as “Exceptional Resource Value Wetlands”, that extends from NW corner, across to E corner, and down to S corner. Application packet page 357 (EIS page 28)

7. Hazardous Materials:

Diamond Chip Realty’s website states that the current property is a “blank canvas … for any industry or sector”. It also promotes “space for … processing industrial and commercial goods”.

This raises a concern that hazardous substances may be delivered to/from the warehouse complex, and/or stored short-term or long-term on premises (including third party inventory). If hazardous materials will be prohibited, how will this restriction be guaranteed over time, 5, 10, 25 years out? What is the mechanism?

If spills or leaks of hazardous material (including diesel fuel) occurs, what is the clean-up plan to prevent environmental damage? Is the expectation that the Township provides hazardous material clean up? If so, do we currently have this capability, or does it need to be developed? What will be the cost to develop and/or maintain, and would this cost be covered by residents’ taxes or the property owner?

Fire prevention/Fire services: Does Sparta Fire Department have the capacity, ability and equipment to handle a fire in this facility if hazardous materials are present?

8. Miscellaneous (Lighting, Permeable Pavement, Landscape Plan, Solar, EV Charging, Noise):

- Lighting design: Applicant should clarify the degree of light spillage expected for a complex of this magnitude. Will the complex be operational and lighted 24/7? From what distance will the complex be visible to neighbors and from Route 15? Will downward-facing lights by employed to reduce impact on migratory birds and other species?
- Permeable pavement is recommended for appropriate sections of road, parking areas, and sidewalks in order to reduce stormwater runoff, filter out pollutants, and potentially reduce the need for salt.
- The landscape planting plan should be comprised of only native, non-invasive species.
- Is on-site solar generation being incorporated (roof, other)? Are there considerations for a “community solar” framework?
• Are Electric Vehicle (EV) charging stations for current/future trucks, cars, and forklifts being incorporated?

• Noise pollution from addition of trucks is a concern, and in particular from engine breaking while trucks are traveling up and down Route 15. Likewise, noise from operating the facility 24/7 is a concern. Applicant should clarify hours of operation.

9. **Quality of Life:**

Intertwined with the clear environmental concerns is a real impact from this proposal is on our quality of life. Past, current and future residents did not/will not move to Sparta because we allowed the largest warehouse/industrial operation in the region. To the contrary, we live in Sparta because we value the attributes of clean air and water, open spaces, and safety. Once these attributes are taken from us, they will not come back. There is also the risk of a negative impact to Sparta’s town character and image, as well as reduced property values, resulting from damage to Sparta’s natural setting and environment.

10. **Conclusion:**

There exists insufficient evidence that the applicant has adequately acknowledged and addressed the environmental concerns and adverse impacts associated with this development on this environmentally-sensitive area.

The Sparta Township Environmental Commission recommends that this application be rejected due to the significant deficiencies identified above. The risks associated with the proposed development do not align with the reasonable preservation and protection of the natural resources of Sparta and its residents.

Additionally, **22 members of the public** attended the February 24, 2022 meeting of the Sparta Township Environmental Commission:

- 14 Sparta residents spoke during the Public Comment segment to express their intense opposition to this proposed development
- Areas of concern and questions ranged from environmental, to quality of life, to safety, and others
- There was overwhelming consensus that Sparta residents need and deserve more time to better understand and provide input regarding this proposed development.

Given the complexity of this project, the volume of information provided, the environmental/quality of life impacts associated with the development, and acknowledging the input from the public, the Environmental Commission would be in support of an extension of the public review period in the interest of full community engagement.