BLUEPOINT WIND

Application for:

New Jersey Department of Environmental Protection Coastal General Permit No. 23 Geotechnical Borings

Bluepoint Wind, LLC

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1. Introduction

Bluepoint Wind, LLC (Bluepoint Wind) is submitting this permit application to the New Jersey Department of Environmental Protection (NJDEP), Division of Land Resource Protection (DLRP) for the authorization of a Coastal General Permit No. 23 – Geotechnical Borings (CGP No. 23). Bluepoint Wind is a partnership between Ocean Winds (OW), an international offshore wind energy company created by EDP Renewables and ENGIE (50:50), and New York-based Global Infrastructure Partners. Bluepoint Wind executed its lease agreement with the U.S. Bureau of Ocean Energy Management (BOEM) on May 1, 2022 for the offshore lease area OCS-A 0537 (Lease Area) in the New York Bight pursuant to 30 CFR Part 585. The Lease Area is located 53 nautical miles (nm) (107 kilometers [km]) off the coast of New Jersey. Bluepoint Wind intends to build a future state-of-the-art offshore wind power project within the Lease Area, including an offshore export cable and onshore facilities for conveying power to onshore points of interconnection. Bluepoint Wind is evaluating potential locations for offshore export cable route options in a Survey Area within the New Jersey waters of the Atlantic Ocean near Belmar, Spring Lake, Sea Girt, and Manasquan Boroughs in Monmouth County (see Figure 1 and 2 and Geotechnical Survey Plan [Appendix A]).

Thirty-five (35) geotechnical locations will be sampled within a 9,471 acre Survey Area to determine the near-seafloor sediment conditions for export cable design, hazards avoidance, and to evaluate the potential for geo-archaeological resources. The collection of this data will support the safe design and installation of the export cable. Geotechnical Survey activities will be conducted in accordance with the BOEM Geotechnical Survey Plan (December 15, 2022) approved for the project. Additional federal regulatory requirements pertaining to the Bluepoint Wind project also apply as follows:

- BOEM Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information Pursuant to 30 Code of Federal Regulations (CFR) Part 585 (BOEM 2020a) and the Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585 (BOEM 2020b).

- BOEM Environmental Assessment - BOEM issued the Finding of No Significant Impact (FONSI) of the Commercial and Research Wind Lease and Grant Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf of the New York/ New Jersey (December 2021) (Appendix B). BOEM concluded that site characterization and site assessment activities occurring between the shore of New Jersey and New York to Wind Energy Areas (WEA) in the New York Bight would result in negligible to minor impacts. Under Section 307 of the Federal Coastal Zone Management Act, the NJDEP DLRP determined this is consistent with the New Jersey's Coastal Zone Management Rules, N.J.A.C. 7:7-1.1 et seq.

- National Marine Fisheries Service (NMFS) Programmatic Consultation - NMFS issued a Letter of Concurrence (LOC) for programmatic consultation pursuant to Section 7 of the Endangered Species Act (ESA) site characterization (geophysical, geotechnical, and biological surveys) and site assessment/data collection activities associated with Atlantic OCS leases. (June 29, 2021). NMFS concluded that the activities assessed in the consultation will have no effect, or are not likely to adversely affect, any ESA-listed species, as project design criteria (PDCs) and best management practices (BMPs) effectively implement the requirements for the specified offshore wind activities. The project will also follow the PDCs and BMPs issued by BOEM on November 22, 2021 (NMFS and BOEM PDC/BMP documents are included in Appendix B).

As the geotechnical activities will be in waterfront development area below mean high water (MHW) within the jurisdictional waters of the State of New Jersey, these activities qualify for a CGP No. 23 under the Coastal Zone Management (CZM) Rules at N.J.A.C. 7:7. The project was discussed in a meeting with NJDEP staff (Janet Stewart, Elizabeth Lange, and Lindsey Davis) and BPW (Esther Siskind, Sharon Farris, and Lauren Fletcher) on February 2, 2023. This application has been prepared in accordance with the NJDEP staff recommendations discussed during the meeting.

2. Project Description

Geotechnical survey activities will include the following activities:

- Mobilization of equipment and personnel on geotechnical vessel(s), or vessels of opportunity outfitted with geotechnical sampling and testing equipment
- Field operations from vessels suitable for shallow water operation (jack-up barges excluded)
    - Vibracoring of the seabed in a maximum of 35 locations within the Survey Area to acquire representative soil samples and deployment of seabed equipment to acquire in situ testing data
    - Field laboratory testing
    - Field processing of in-situ data
- Preservation and transportation of soil samples to onshore soils testing laboratories and to BPW's Qualified Marine Archaeologist (QMA)
- Interpretation and reporting of all field and laboratory data
- Demobilization

Vessels

Vessels to conduct shallow geotechnical work will be vessels of variable sizes with up to five meters draft capable of shallow water operation. Jack up barges will not be used for work in state waters. Vessels will be equipped with primary Differential Global Navigation Satellite System (DGNSS) for positioning with a second independent DGNSS as back-up. Equipment deployed to the seabed shall be positioned using a subsea USBL system.

Methods and Equipment

Geotechnical samples will be collected within the Survey Area via a combination of vibracores (VCs), in-situ Piezocone Penetration Tests (PCPTs) with possible Thermal Resistivity Test (TRT)/VCs. The intervals for sampling will be approximately 3,281 ft (1,000 m) with the closest location being beyond the Geotechnical Survey Area boundary which is approximately 1,400 feet (0.43 km) from the shoreline at its closest point. Geotechnical samples of a range from 3 inch (in) (75 [cm] centimeter) to 4 in (100 cm) diameter will be collected, at water depths greater than 6 m within state waters. Seabed penetration is specified at 20 ft (6 m), but this might be limited by soil type at some locations. Ultra-shallow water depths below six meters will not be investigated due to the complexity of operations. Geotechnical sample locations and numbers may be altered slightly within the Survey Area based on the variability of environmental conditions identified during the survey. A maximum of three coring attempts shall be made at each specified location to achieve either the minimum core recovery and / or acceptable core quality. BPW will ensure that vibracore operations are undertaken to efficiently perform the sampling at a location and avoid excessive vibratory coring times. Some samples will be vibracores while the others will be PCPT's. The determination will be made in-field based on the interpretation of geophysical data and assessment results from the QMA.

Timing

Geotechnical survey activities in state waters will start on or after July 1, 2023 and may take place at various times in 2023 and 2024; within the five-year authorization period of the CGP No. 23. The schedule is planned around time-of-year restrictions (TOYs) as follows:

- NJDEP TOY for anadromous fish from April 1st to June 30th
- United States Army Corps of Engineers TOY for diadromous fish migration, spawning activities and Essential Fish Habitat (EFH) from March 1st to June 30th.

Work will be completed in 12 hours shifts daily and some variance is expected in schedule for weather or equipment-related delays.

3. Compliance Statement

This section provides the compliance statement demonstrating that the proposed geotechnical survey activities will be conducted in accordance with the conditions of the CGP No. 23 (N.J.A.C. 7:7-6.23) and the Subchapter 9 Special Areas requirements (N.J.A.C. 7:7-9.0). Only Subchapter 9 Special Areas that are applicable are addressed.

3.1 Geotechnical Survey Borings (N.J.A.C. 7:7-6.23)

a) Borings and related site disturbance shall not be located in shellfish habitat (N.J.A.C. 7:7- 9.2), submerged vegetation habitat (N.J.A.C. 7:7-9.6) or endangered or threatened wildlife or plant species habitats (N.J.A.C. 7:7-9.36)

1. Shellfish habitat – Based on review of NJDEP shellfish distribution maps and shellfish lease locations (NJDEP Shellfish Map 002), the Geotechnical Survey Area is not within waters containing shellfish habitat or leases (NJDEP 1963).

2. Submerged Aquatic Vegetation (SAV) habitat – Geotechnical samples will be located within the Atlantic Ocean well within the Geotechnical Survey Area boundary which is located approximately 1,400 ft. (0.43 m) from the shoreline at its closest point. Based on review of NJDEP SAV maps (NJDEP SAV Maps 029 and 045), these locations are not within the shallow or inland waters containing SAV habitats mapped by NJDEP (NJDEP 1979).

3. Endangered or threatened wildlife or plant species – A New Jersey Natural Heritage Program (NHP) data request was completed to obtain a list of federal and state-listed threatened and endangered species potentially present in the vicinity of the Geotechnical Survey Area (February 28, 2023) (Appendix C). Review of NJ Landscape Project (Version 3.3) layers (New Jersey Division of Fish and Wildlife 2017) was also completed to supplement data in areas outside of the study area requested for review by NHP. No additional threatened and endangered species were identified during review.

As per the findings of the NMFS LOC, geotechnical activities as assessed in the consultation will have no effect, or are not likely to adversely affect, any ESA-listed species, if PDCs and BMPs are implemented. BPW's geotechnical survey activities will be conducted in accordance with the PDCs and BMPs which include protections for North Atlantic right whale (*Eubalaena glacialis*), humpback whale (*Megaptera novaeangliae*), fin whale (*Balaenoptera physalus*), and Atlantic leatherback sea turtle (*Dermochelys coriacea*). Avian species documented by NHP and Landscape Project data within the Geotechnical Survey Area are foraging occurrences only. Potential impacts to foraging avian species are not anticipated due to the temporary nature of activities which does not restrict avian species foraging movements.

A Threatened and Endangered Species Assessment Table is provided in Appendix C to summarize information concerning the potential for impacts to species identified in the NHP data and Landscape Project layers.

b) Borings and related site disturbance shall comply with wild and scenic river corridors, (N.J.A.C. 7:7-9.44), wetlands (N.J.A.C. 7:7-9.27), and wetlands buffers (N.J.A.C. 7:7-9.28).

Not applicable. Geotechnical samples will be collected in the Atlantic Ocean in locations that do not intersect with wild and scenic river corridors, wetlands, and wetlands buffers.

c) Borings for remedial investigation shall be permitted, constructed, and completed in accordance with the Well Construction and Maintenance; Sealing of Abandoned Well rules, N.J.A.C. 7:9D, and N.J.A.C. 7:26E-1.5(b) and 4 of the Technical Requirements for Site Remediation;

Not applicable. Geotechnical samples are being collected for site characterization purposes and are not related to any remedial investigation requiring compliance with the Technical Requirements for Site Remediation.

d) Disturbance shall be limited to that which is necessary to access and conduct the geotechnical borings.

i. Disturbance to vegetation shall be limited to a maximum width of five feet for access.

Not applicable. No disturbance to vegetation is anticipated from the proposed geotechnical activities.

e) Borings and related site disturbance shall not be conducted during the following time periods:

i. During the migration of anadromous fish from April 1 thru June 30 (inclusive);

Geotechnical survey activities will not begin until July 2023 outside of the time-of-year (TOY) restriction for anadromous fish.

ii. During the period from March 1 thru June 30 and from October 1 thru November 30 (inclusive), within and adjacent to waters on the Delaware River System from the mouth of bay to Delaware Memorial Bridge and tidal Maurice River, identified as American shad migratory pathways;

iii. During the period from April 1 thru June 30 and from September 1 thru November 30 (inclusive), within and adjacent to waters on the Delaware River System from the Delaware Memorial Bridge to the New York State line and tidal portions of Rancocas and Raccoon Creeks, identified as American shad migratory pathways.

Not applicable. Geotechnical boring activities will not be located in the Delaware River system.

f) Bore holes shall be backfilled to the original surface level with appropriate, non-contaminated, soil material.

i. Sand may not be used for backfilling in either freshwater or coastal wetlands. Restoration of all bore holes must maintain the hydrologic integrity of the wetlands. To avoid the potential for draining a wetland by puncturing a hard-pan or confining layer, all borings must be sealed with grout or bentonite in accordance with the Department's Water Monitoring Management Program rules, N.J.A.C. 7:9-6.

There is no potential for draining wetlands or puncturing wetland layers as the proposed sampling will not be located within freshwater or coastal wetlands. It is expected that sediment movement in the Atlantic Ocean will naturally fill boring locations back to pre-existing grades.

ii. Water used to flush a boring may be discharged to the ground provided the boring is not conducted in proximity to a stream or in an area of hazardous waste or acid-producing soils. When the boring is performed in proximity to a stream, and water or drilling fluid is used to remove soil from the hole, the sediment-laden water shall not be allowed to flow overland such that it would enter the stream. Soil erosion and sediment control measures shall be used as necessary to contain/filter excess water. Drilling fluid shall be contained when working adjacent to a fish-populated watercourse during the relevant restricted period, and in any other situation where containment represents the only method of ensuring that there is no impact to adjacent streams.

Completed sampling locations will naturally backfill with sediment. No sampling will be conducted in freshwater or coastal wetlands, between April 1st to June 30th (anadromous fish TOY), nor will water be discharged to the ground.

3.2 Special Areas (N.J.A.C. 7:7-9)

7:7-9.4 Prime Fishing Areas
Prime fishing areas are present within the Geotechnical Survey Area (Appendix A, Geotechnical Survey Plan). However, the planned geotechnical activities occur in small areas and are temporary in nature. Bathymetric contours will not be changed.

7:7-9.4 Submerged Infrastructure Routes
Existing submarine cables are present within the Geotechnical Survey Area (Appendix A, Geotechnical Survey Permit Plan). The locations of existing and decommissioned submarine cables are mapped and geotechnical samples will not be collected in these locations. Therefore, hazards to submerged infrastructure are not anticipated.

7:7-9.4 Shipwreck and Artificial Reef Habitats
Artificial reef habitats are not located within the Geotechnical Survey Area. Shipwrecks are documented to occur within the Geotechnical Survey Area (Appendix A, Geotechnical Survey Permit Plan) and will be avoided if known from existing mapping or if identified based on geophysical survey campaign data collected prior to the start of the geotechnical survey.

7:7-9.34 Historic and Archaeological Resources
Geophysical survey campaign data will be reviewed, and additional information acquired, if necessary, for site clearance pertaining to cultural/archaeological sites of interest before any bottom disturbing activities commence.

4. References

BOEM (2020a), "Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information Pursuant to 30 CFR Part 585", 32p. Available at: https://www.boem.gov/G_G_Guidelines_Providing_Geophysical_Geotechnical_Geohazard_Information_Pursuant_to_30_CFR_Part_585/

BOEM (2020b), "*Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585*", 23p. Available at: https://www.boem.gov/Guidelines_for_Providing_Archaeological_and_Historic_Property_Information_Pursuant_to_30CFR585/.

New Jersey Department of Environmental Protection (NJDEP) (1963). Shellfish Maps. Manasquan Inlet to Little Egg Harbor Map 002 available at: https://www.nj.gov/dep/landuse/shellfish.html

NJDEP (1979). Submerged Aquatic Vegetation Maps. Asbury Park Map 029 and Point Pleasant Map 045 available at: https://www.nj.gov/dep/landuse/sav.html

New Jersey Division of Fish and Wildlife (2017). New Jersey Landscape Project, Version 3.3. New Jersey Department of Environmental Protection, Division of Fish and Wildlife, Endangered and Nongame Species Program. GIS layers available at: https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d

Figures

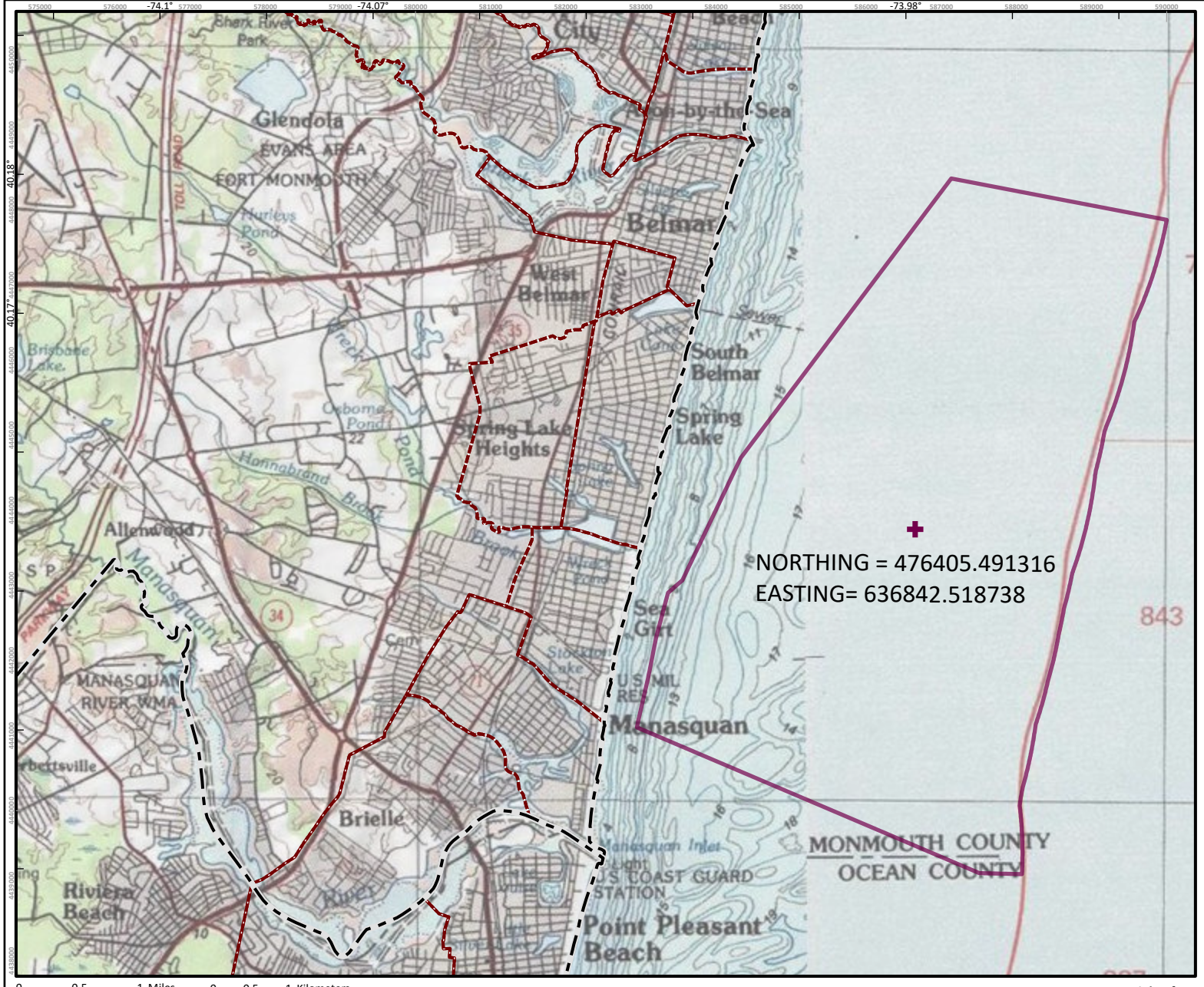

FIGURE 1 USGS SITE LOCATION MAP
GEOTECHNICAL BORING PERMIT
(CGP NO. 23)
BLUEPOINT WIND, LLC

BLUEPOINT WIND

TETRA TECH

- Geotechnical Survey Area
- County Boundaries
- Municipal Boundaries

Data Sources:
USGS; ESRI USGS Topo Basemap
(USGS 24k Topo Quads - Asbury Park;
Asbury Park OE E; Point Pleasant)

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Prepared By: Tetra Tech, Inc.
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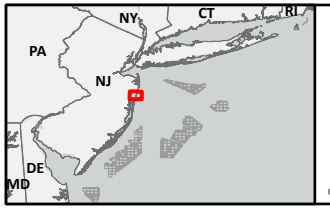

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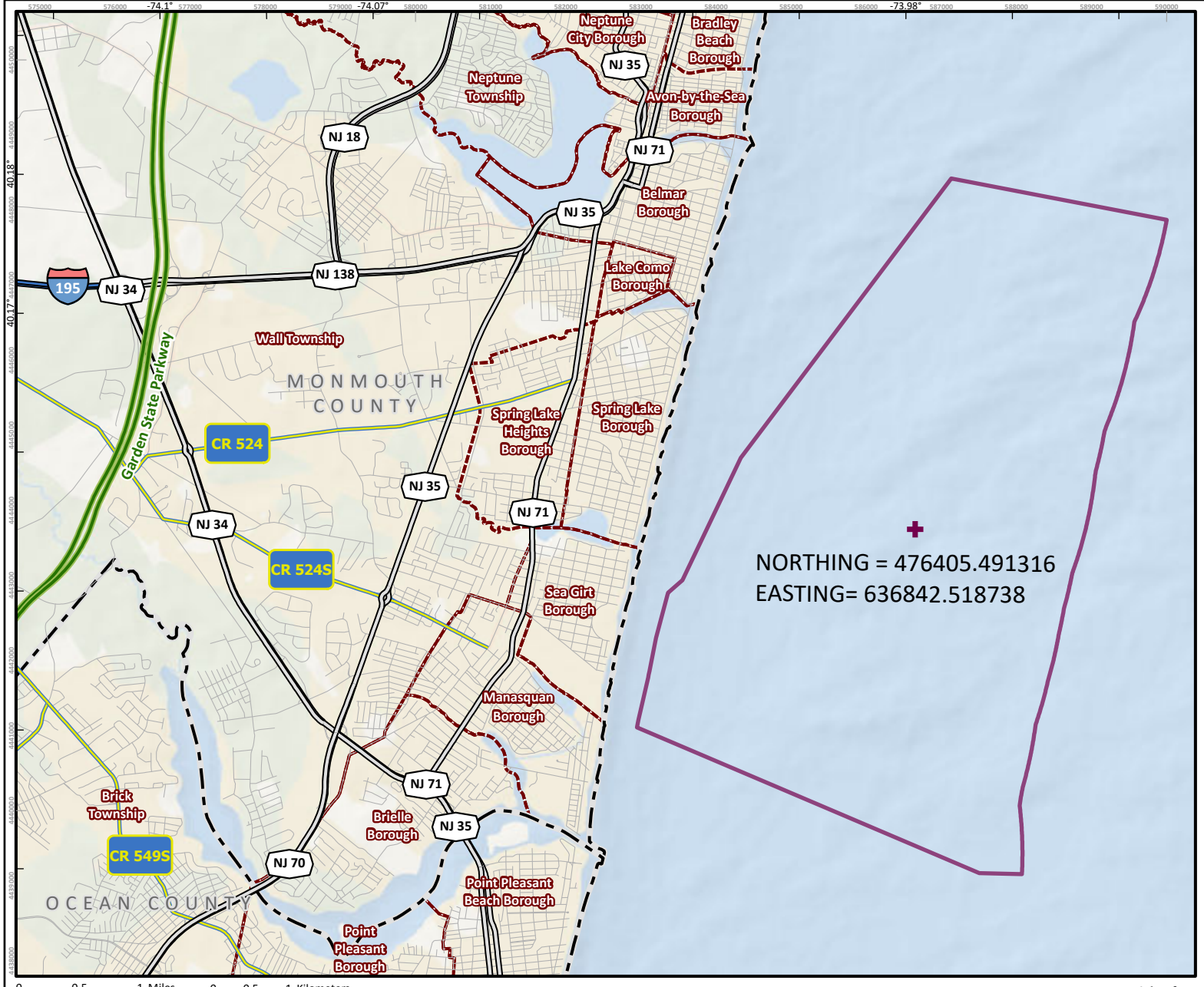

FIGURE 2 COUNTY ROAD MAP
GEOTECHNICAL BORING PERMIT
(CGP NO. 23)
BLUEPOINT WIND, LLC

BLUEPOINT WIND

TETRA TECH

- Interstate
- Parkway
- State Route
- County Road
- Local Road
- County Boundaries
- Geotechnical Survey Area
- Municipal Boundaries

Data Sources:
NJ Geoweb; NJ DOT; USGS; ESRI Basemap

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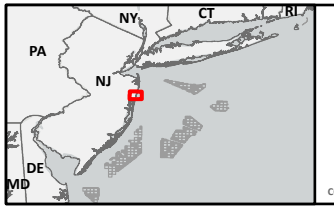

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