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May 31, 2024

Richard Lucia
Environmental Engineer IV
Rhode Island Coastal Resources Management Council
4808 Tower Hill Rd. #116
Wakefield, RI 02879

Re: Port of Davisville Blue Economy Support Docks & Vessel Launch Ramp
Quonset Development Corporation, North Kingstown, RI

Dear Mr. Lucia:

On behalf of the Quonset Development Corporation (QDC), Foth Infrastructure and Environment (Foth) has prepared the following responses to the Rhode Island Coastal Resource Management Council's (RICRMC) request for additional information, provided on April 11, 2024.

1. Category B and Climate Change Requirements

CRMC Request: Please address in writing detailed CRMC program requirements individually (i.e. 1.3.1 Cat B requirements, 1.2 Climate Change etc...).

1.1 RI CRMC Management Program Section 1.3.1.A Category B Requirements

1. Demonstrate the need for the proposed activity or alteration;
 - Please refer to Section 1.3, Purpose and Need, of permit application.
 - Currently, the Port has no facilities to support vessel launch or the berthing of vessels under 50-feet in length. The POD is proposing to develop an underutilized portion of the Port of Davisville Terminal 5 in support of the Rhode Island initiative of Blue Economy. As a result of the project, the Port can continue to grow and support the booming Blue Economy in Rhode Island. The proposed improvements will allow greater access for support vessels of the aquaculture, seafood, maritime shipping, and offshore wind industries, and the Port.
2. Demonstrate that all applicable local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met;
 - The QDC developed a Master Land Use and Development Plan, which was reviewed and approved by the CRMC. This plan identifies the POD as "Waterfront Space and Marine Trades" for future development. Proposed land use includes the continuation of existing uses at the piers through auto importing, exporting, and temporary parking; and seafood transporting and processing; and new industrial

and office uses including those that are water dependent. The proposed project is consistent with the above referenced Master Plan.

- The QBP was established through unique state legislation for the primary purpose of managing the land transferred to the State by the Navy upon closure of the former Quonset Naval Air Station and the Davisville Navy Construction Battalion Center. The purpose of the QBP is to activate the transferred land for large-scale economic development. As QBP is owned by the State and operated by QDC, a quasi-state agency, land use control rests with QDC. According to the Town of North Kingstown Code of Ordinance (Sec. 21-100, dated January 15, 2021) the proposed site location is classified under the QBP district. According to the Town Ordinance, "Development proposals in the QBP shall be reviewed under the procedures and standards located in the Quonset Business Park Development Package [...]" [Sec. 21-100(c)]. The Quonset Business Park Development Package is adopted by the QDC Board of Directors and considered a State regulation. The QDC, as steward of the QBP, is an integral part of the Town's and the State's overall fiscal and economic viability as a provider of tax revenue and jobs.

Due to the presence of significant infrastructure including access highways, a general aviation and military airport, a wastewater treatment facility, freight rail, a working waterfront, and public water supply, the QBP district is uniquely suited to accommodate commercial and industrial uses. The proposed Blue Economy Pier is proposed to maintain the same local zoning ordinances, building codes, flood hazard standards, and fire/safety codes as all other POD infrastructure.

- No negative long-term impacts to land use at the project site are anticipated. Land use and zoning will remain the same, appropriate for port and industrial uses. Surrounding land use will not be negatively impacted by the project. In the long-term, the development of the Blue Economy facility will positively impact land use, allowing for the use of an underutilized section of the POD. Additional beneficial cumulative socioeconomic impacts will be realized long-term by the increased operations at the Port and the associated increased job generation and tax revenue directly related to the Rhode Island Blue Economy.
- In the short-term, during construction, soil disturbing activities will affect the use of the site as well as the temporary impacts due to shoring. Due to the short duration of construction, this will not pose notable impacts to any local ordinances.

3. Describe the boundaries of the coastal water and land area that is anticipated to be affected;

- Please see Section 3.3, Regulated Resources, of the permit application.
- The proposed site is located within CRMC designated Type 6 waters. The proposed project will not negatively affect the objectives of CRMC, and in fact, conform to CRMC's stated purpose of Type 6 designated waters. The project is in direct support of the CRMC policy to support modernization and increased commercial activity related to shipping. The highest priority uses of Type 6 waters and adjacent lands include the construction and maintenance of dock space and facilities required for the support of the ports existing Blue Economy industries. The proposed

improvements support the current day-to-day and future operations of the facility and are consistent with the CRMC goals for Type 6 Waters.

4. Demonstrate that the alteration or activity will not result in significant impacts on erosion and/or deposition processes along the shore and in tidal waters;

- Please see Section 3.2, Erosion Control, of the permit application.

5. Demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life.

- Please see Section 3.1, Threatened and Endangered Species, for assessed impacts to animal life.

- Plant Life:

- i. Eelgrass – Based on the results of a desktop study of the Rhode Island Submerged Aquatic Vegetation from 2006, 2012, 2016, and 2021, it was indicated that eelgrass exists within the vicinity of the proposed project in one location. The closest known location of eelgrass is greater than 1.5 miles south of the proposed Blue Economy facility located on the South face of the Quonset Airport.

- ii. Wetlands – In accordance with the Rhode Island Geographic Information System (GIS) mapping tools and the Wetlands Inventory Mapper, Marine/Estuarine Unconsolidated shore and Estuarine Emergent wetlands are located approximately 500' south of the proposed project site along the southern side of Terminal 5.

- iii. Saltmarsh – In accordance with the Rhode Island GIS mapping tools, saltmarsh habitat, specifically mudflats, exists approximately 200-feet to 400-feet south of the proposed Blue Economy footprint.

- Animal Life:

- i. Shellfish – Waters adjacent to and outside of the POD are classified as Rhode Island DEM SA waters, which are designated for shellfish harvesting for direct human consumption, primary and secondary contact recreational activities, and fish and wildlife habitat. A shellfish survey, conducted by QDC, between August 8, 2019 and September 12, 2019, concluded that shellfish were present and some were transplanted; however, operations suspended due to low densities.

- ii. Tautog (*Tuatoga onitus*) – This species of fish lives in close association with structures such as rocks, wrecks, pilings, jetties, natural and artificial reefs, and other bottom discontinuities. They are active in the daytime and become quiescent at night often retiring to shelter. Adult tautog migrate into Narragansett Bay in late April and remain through September and are essentially absent in the Bay from late November to March. Spawning takes place within Narragansett Bay from May through August, and peak

spawning occurs in June and July. Juvenile tautog are present from July through October in Narragansett Bay but likely begin settling in June. Construction activities are best conducted between mid-fall and mid-spring when adult fish are in deeper waters and no spawning is happening.

- iii. Winter flounder – These fish are bottom dwelling fish. They are active during the day. Winter flounder make short seasonal migrations into shallower bays and estuaries in the fall and winter to spawn in the late winter-early spring. They may move offshore in response to warmer waters in the late summer-early fall or to severe cold in shallow bays in the winter, returning in spring to spawn. Winter flounder spawn from January through May in Narragansett Bay, with peak spawning occurring in February and March.
 - iv. Scup – These are a pelagic schooling fish and appear to school more closely at night. Narragansett Bay serves as a spawning ground and nursery area for the species with the latter being the more important function, as the Bay is a host to both young and juveniles. In addition, scup serves as a food source for weakfish, bluefish, and striped bass. The migration patterns for scup into and out of Narragansett Bay suggest that work should occur between November and April (Normandeau Associates, 1999).
 - v. Other Fish – The populations in Narragansett Bay include summer flounder, bluefish, and weakfish. The peak of bivalve larval occurs as water temperatures are around 68°F, as summer progresses.
- In summary, the proposed project will not significantly impact the presently low abundance of plant life, nor will it impact its diversity. Since the work proposed within this application is located outside of plant life listed above, it is not anticipated that any adverse impacts will occur. The use of mitigation measures such as silt fencing and turbidity barriers will further emphasize this prevention. Temporary impacts to animal life are anticipated due to the construction activities, however, these impacts will be localized to the duration of construction. It is likely the any affected areas will be re-colonized by the benthic organisms found in the adjacent undisturbed sediments and the finfish will return to their habitat once construction reaches completion. Any impacts to the benthic habitat experienced by the proposed work are expected to recover and thereby restore the finfish food source.

6. Demonstrate that the alteration will not unreasonably interfere with, impair, or significantly impact existing public access to, or use of, tidal waters and/or the shore.

- The proposed improvements are located within the Port of Davisville, an active port facility with minimal to no public access or use. The entirety of the proposed site location is owned and operated by the QDC. It is not anticipated that the proposed work will unreasonably interfere with, impair, or significantly impact existing public access to, or use. In addition, construction activities are anticipated to be minimal and occurring for a duration of four (4) months.

7. **Demonstrate that the alteration will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation.**
 - The proposed improvements will have no long-term impact to the water circulation, flushing, turbidity, and sedimentation at the site. Design considerations implanted to archive this include:
 - i. All pile spacing has been designed to provide reasonably unimpeded water flow. Pile bent spacing parallel with ebb and flow patterns has been designed at approximately 15 to 23 times the pile diameter in areas of open water flow.
 - ii. The lowest horizontal structural support element proposed for the pier and floats are located no less than 18-inches above the Mean Lower Low Water Line (MLLW).
 - iii. In order to maintain proper circulation within the Narragansett Bay, floating docks have been designed to maintain floating conditions based on the Lowest Astronomical Tide (LAT) elevation of -1.04 feet NAVD88 within the project area.
 - Short-term impacts to circulation, flushing, turbidity, and sedimentation may occur due to construction activities. However, construction activities are anticipated to be localized to four (4) months and are expected to return to pre-construction conditions. Any short-term or temporary impacts to turbidity or sedimentation will be mitigated through the use of use of as silt fencing and turbidity barriers.
 - Please see attached plans for additional Wave Attenuation structure details.
8. **Demonstrate that there will be no significant deterioration in the quality of the water in the immediate vicinity as defined by DEM.**
 - RI DEM classifies the waters around the proposed improvements as Class SB waters which are designated for primary and secondary contact recreational activities, shellfish harvesting for controlled relay and depuration, and fish and wildlife habitat. No permanent impacts are anticipated due to the proposed work. The proposed Blue Economy vessel launch ramp, fixed pile supported pier, floating docks, crane pad, and wave screen are proposed to be constructed immediately south of the Terminal 5 Pier, consisting of similar pile supported structure. In addition, the proposed work is consistent with other structures found within the Port of Davisville, as well as other structures found within Class SB waters.
 - Temporary impacts to water quality due to the installation of the Blue Economy Support Docks and Vessel Launch Ramp will not result in the discharge of pollutants that will violate Water Quality Standards. It is anticipated that Water Quality will be visually monitored throughout the course of work. Mitigation measures, such as silt fencing and turbidity barriers, will be placed as necessary to avoid impacts of suspended sediments into adjacent waterways.
9. **Demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance.**

- Rhode Island’s Historical Society’s Historic Preservation Database was reviewed to determine potential historical, architectural, and archaeological sites on or adjacent to the area of potential effect for this project. No historical, architectural, or archaeological sites were identified on or adjacent to the POD. The nearest historic listing identified was Camp Endicott Historic District located greater than 1.5 miles to the southwest, Allen-Madison House, located approximately 1.0 miles away on Post Road in North Kingstown, RI, and e next the Davisville Historic District located over 3.0 miles west of the site.
- No short-term or long-term impacts to historic, archaeological, or cultural resources are anticipated within the project site. Due to the location and existing site use of the POD, it is not anticipated that local historic properties will be impacted by the proposed work. No ground disturbances, visible or audible disturbances, or changes in public access, traffic patterns, or land use will occur within the vicinity of historic properties. The State Historic Preservation Office (SHPO) and Tribal Historic Preservation Office (THPO) were contacted on March 29, 2024, to initiate a 30-day comment period as part of USACE consultation. SHPO and THPO comment period closes April 26, 2024. To date, no comments have been received.

10. Demonstrate that the alteration or activity will not result in significant conflicts with water dependent uses and activities such as recreational boating, fishing, swimming, navigation, and commerce.

- The proposed improvements are within the active Port of Davisville and located within Type 6 Industrial Waterfronts and Industrial Waterfronts and
- Commercial Navigation Channels Commercial Navigation Channels. Due to the current use as an active port as well as the intended use of waters as industrial/commercial, it is anticipated that the proposed improvements will not hinder the public’s use of the water resources in the area.

11. Demonstrate that measures have been taken to minimize any adverse scenic impact (see § 1.3.5 of this Part).

- The proposed improvements are not anticipated to have any adverse scenic impact. The proposed project is located within an industrialized business park. The proposed vessel launch ramp, fixed pier, floating dock, crane platform and wave attenuation structures are consistent with the surrounding port infrastructure. Other than the temporary visual impact of the construction within Narragansett Bay, the impacts to the site will be consistent with that of the POD and will not have an adverse scenic impact.

1.2 Section 1.1.10 Climate Change and Sea Level Rise Policies

1. The Council will review its policies, plans and regulations to proactively plan for and adapt to climate change and sea level rise. The Council will integrate climate change and sea level rise scenarios into its programs to prepare Rhode Island for these new, evolving conditions and make our coastal areas more resilient.

- See below Section 2 and attached Costal Hazard Analysis (CHA) Worksheet.
2. The Council's sea level rise policies are based upon the CRMC's legislative mandate to preserve, protect, and where possible, restore the coastal resources of the state through comprehensive and coordinated long-range planning.
 - See below Section 2 and attached CHA Worksheet.
 3. The Council recognizes that sea level rise is ongoing, and its foremost concern is the accelerated rate of rise and the associated risks to Rhode Island coastal areas today and in the future. The Council recognizes that the lower the sea level rise estimate used, the greater the risk that policies and efforts to adapt sea level rise and climate change will prove to be inadequate. Therefore, the policies of the Council may take into account different risk tolerances for differing types of public and private coastal activities. In addition, the Council will regularly review new scientific evidence regarding sea level change.
 - See below Section 2 and attached CHA Worksheet.
 4. The Council relies upon the most recent NOAA sea level rise data to address both short- and long-term planning horizons and the design life considerations for public and private infrastructure. The Council's policy is to adopt and use the most recent sea level change scenarios published by NOAA (currently Technical Report NOS CO-OPS 083 (2017)), and the NOAA sea level rise changes curves for Newport and Providence as provided in the U.S. Army Corps of Engineers online sea level rise calculator tool available at: <http://corpsclimate.us/ccaceslcurves.cfm>. The Council requires the use of the NOAA High scenario curve for projecting sea level rise for future conditions. In addition, the Council adopts and recommends use of the STORMTOOLS online mapping tool developed on behalf of the CRMC by the University of Rhode Island Ocean Engineering program to evaluate the flood extent and inundation from sea level rise and storm surge.
 - See below Section 2 and attached CHA Worksheet.

2. Coastal Hazard Analysis Worksheet

To provide a detailed and concise submission, Foth has summarized any assumptions made as part of the Coastal Hazard Analysis (CHA) Worksheet. Below is a detailed list of these assumptions:

- ◆ The lowest horizontal structural member (LHSM) identified in step 1.A of the Coastal Hazard Analysis (CHA) Worksheet is represented as the elevation at the bottom of the pile caps on the fixed pile supported pier.
- ◆ The design elevation of the pier was selected to reflect the maximum allowable elevation the expected vessels at the pier would be able to safely use (+10.0-foot Quonset Vertical Datum (QVD), +6.95-foot NAVD88). The design elevation of the Blue Economy fixed pier is the same as other docks within Little Allens Harbor which serve smaller vessels with only around 3-4' of freeboard. Based on the required design elevation to account for Sea Level Rise (SLR) in the CRMC's STORMTOOLS, the pile supported fixed pier would need to be built to an elevation of +21.3-foot NAVD88 which would be too tall of a structure for its



intended use to service the smaller vessels with only around 3-4' of freeboard. Such a structure this tall for smaller vessels would pose a safety hazard when making crew and equipment transfers to and from the fixed pier.

- ◆ It is the opinion of Foth that the Shoreline Change Maps (dated 1939 to 2014) utilized by the CRMC as part of the CHA Worksheet are inconsistent within the Port of Davisville due to the infill that occurred between 1940-1950. Starting in 1941, The United States Navy, as part of the Construction Battalion Center, constructed the entire Port of Davisville. This construction reached from Allen Harbor to the Quonset Airport, including Pier 1 and Pier 2. Due to this, the Shoreline Change Map, which details the change in shoreline between 1939 to 2014, notes an infill of 767 feet, 10.2 feet per year, along Terminal 5, station 1706. Since this infill was not naturally occurring, it is the opinion of Foth that this is an inaccurate representation of the shoreline change within the area. Due to this, Foth utilized stations 1700 through 1704 to develop an approximate average shoreline change of -0.02 feet per year.

Foth, on behalf of the QDC appreciates the RICRMC's time and attention to this permit application. Should you have any questions or require any additional information, please do not hesitate to contact me at (401) 626-7208 or at Kaitlyn.Cross@foth.com.

Sincerely,
Foth Infrastructure & Environment, LLC

A handwritten signature in black ink that reads "Kaitlyn Cross".

Kaitlyn Cross
Project Manager

cc: Gregory J. Coren, P.E. (QDC), Mr. Christian Jones (QDC), Wendy Rocha (Foth), Ethan Bowe (Foth)

Attachments: Attachment 1 - Coastal Hazard Analysis Worksheet
Attachment 2 – Revised Blue Economy Support Dock and Ramp Plans, Prepared
by WSP, Dated May 10, 2024