



STATE OF RHODE ISLAND
COASTAL RESOURCES MANAGEMENT COUNCIL
STAFF REPORT TO THE COUNCIL

DATE: May 16, 2024
TO: Jeffrey M. Willis, Executive Director
FROM: Justin Wolf Skenyon

Applicant's Name:	Revolution Wind, LLC
CRMC File Number:	B2021-07-005
Project:	Cable Burial Work Plan, Revolution Wind's cable route
Location:	574 & 594 Camp Ave, 135 Circuit Dr, 244 Burlingham; North Kingstown: Plat(s): 179 185; Lot(s): 1,11,30 1,4,8
Water Type/Name:	,
Coastal Feature:	
Plans Reviewed:	Cable Burial Work Plan

INTRODUCTION: The Council previously approved the Revolution Wind Category B assent on February 8, 2023, with stipulations requiring Revolution Wind submit additional information for Council approval including a Cable Burial Work Plan.

Background: This report was requested as part of the Category B assent already issued by the Council. At the time of Council approval there were still outstanding changes. In this report Revolution Wind refers to the Stipulations as Conditions and rennumbers them. The language and legal standing remain unchanged.

STAFF STIPULATIONS:

Cable Burial Work Plan: The Applicant shall submit a Cable Burial Work Plan for review and approval by the CRMC Council at least 90 days prior to the start of construction of the offshore activities. The Work Plan shall include all elements of the trenching and dredging work in areas within CRMC's regulatory authority. The work plan shall include, at a minimum, a detailed schedule, weather and equipment contingency plans, a detailed list of all equipment and vessels to be utilized, and a detailed anchoring and spud plan.

Signed: _____ Staff Biologist

Signed: Justin Wolf Skenyon Staff Engineer

Staff Response: As required, Revolution Wind has submitted a Cable Burial Work Plan for approval. Staff has reviewed the document and has determined that the report contains a detailed schedule showing all phases of work within the Time-of-Year restrictions. Cable Burial Work Plan Section 4 (Equipment and Weather Contingency Plans) includes detailed contingency plans for reasonable unforeseen circumstances. A detailed list of all equipment and vessels is included. The anchoring and spud plan was submitted to United States Army Corps of Engineers and approved on October 4, 2023.

Construction Schedule and Time of Year Restrictions: At the request of the RIDEM, the Cable Burial Work Plan shall require a more detailed construction schedule via-a-vis fishery time of year restrictions. In the event that the Project construction schedule changes, the Applicant will be required to provide both CRMC and RIDEM with an updated such schedule, for approval, prior to any changes being made.

Staff Response: The applicant has provided a detailed schedule that staff consider sufficient.

Dredge Window: The proposed dredging activities described in the permit application, which includes cable installation using either jet plowing or mechanical plowing approaches, must adhere to the following time of year restrictions and conditions. All in-water construction activities north of the ColRegs Demarcation line shall occur between August 31 and January 31. No further modification to this extended dredge window shall be granted *except, and consistent with RIDEM's July 7, 2023 revisions to Condition 9 of its Water Quality Certificate (21-135) and Dredge Permit (DP-21-187), offshore HDD works would begin July/August 2024 (prior to the approved August 31 start of the approved dredge window) and continue through the approved window.

Staff Response: The provided schedule shows a reasonable estimation of the duration of construction activities. All construction activities within state water beholden to this stipulation are expected to be completed within the Dredge Window.

Cable Burial Plan: Prior to the submittal of the Cable Burial Work Plan, the cable installation contractor shall complete and provide to the CRMC and RIDEM the "Cable Burial Plan." This study shall include a detailed assessment of the anticipated sediment conditions, unforeseen conditions, and the proposed cable installation method. This study shall be included and incorporated into the work plan.

Staff Response: The Cable Burial Plan report is included as Appendix B in the Cable Burial Work Plan document. The Cable Burial Plan report covers in detail the entire expected corridor. Staff consider this sufficient.

Cable Burial Depth: Target cable burial depth is a minimum cable burial depth of four (4) feet and six (6) feet, or deeper along the entire length of the export cable in state waters. Burial depth shall be determined from the top of the cable below existing seabed. In cases where the minimum burial depth cannot be achieved due to cable and pipeline crossings, machine failures, or unforeseen adverse bottom conditions, Revolution Wind will be required to attain minimum burial depth where Revolution Wind confirms depth can be achieved through reburial using the Capjet plow or similar method. Where Revolution Wind confirms reburial using the Capjet plow or similar method will not achieve minimum burial depth, Revolution Wind will confirm the acceptable burial depth from the cable burial risk assessment approach (which assesses seabed conditions, seabed mobility, and the risk of interaction with external hazards such as commercial fishing gear and vessel anchors engineered zonally along the route). In cases where this Capjet plow or similar method is unsuccessful in achieving burial depth or in the cases of cable or pipeline crossing, secondary cable protection shall be used to minimize risk to the cables and risk to other water users,

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Signed: _____ Staff Engineer

including hazards such as commercial fishing gear and vessel anchors.

Staff Response: The Revolution Wind report states the cable is expected to attain minimum burial depth of 4 feet for the length of the cable corridor in state waters. Staff consider this sufficient.

Cable Burial Tools: The applicant is required to use the best tool from their list of available tools (as described in the application and supplemental information provided) to achieve a proper cable burial depth of 4-6 feet or deeper, in accordance with their cable burial work plan. Revolution Wind expects to use jet assisted mechanical plow as the principle proposed method of burial on all segments of the RWECC-RI route except for at and north of the Jamestown Bridge where lower water depths and bridge height restrictions will require burial by jetting or other appropriate and feasible methods. Revolution Wind shall simultaneously lay and bury cables in state waters unless ground conditions are inappropriate or technically unfeasible.

Staff Response: The applicant has provided a list of equipment and vessels along with detailed descriptions. Staff consider this sufficient.

Cable Burial During Construction: Revolution Wind shall mitigate against the risk of not achieving target burial depth by using one or more of the following options, depending on tool choice:

- a) using the geometry of the plow relative to the seabed and where necessary adjusting the tool settings;
- b) tuning the plow jetting system to the soil types encountered along the route as necessary
- c) remotely adjusting the depth of burial on the plow during operations as necessary
- d) monitoring and managing tow forces, share depth and plow speeds in the event hard clays are encountered;
- e) performing continuous, real time trenching performance validation to ensure the tool is operating as per the contractor specification, ensuring the tooling performs optimally for the given burial requirements and the as-encountered ground conditions; and
- f) performing continuous, real time burial performance validation, understanding cable burial versus the given burial requirements and the as-encountered ground conditions.

Staff Response: Staff consider the equipment and methodologies described in the Cable Burial Work Plan and its appendices sufficient.

Signed: _____

Staff Biologist

Signed: Justin Melf Skuzen

Staff Engineer

Name: «fname» «mname» «lname»«organization»

CRMC File No.: «idapp»

Staff Report

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Staff Engineer