

Proposed/annotated amendments

Note: This is an entirely new subsection and proposed new text is identified as blue underline

650-RICR-20-00-1.3.1(S)

S. Submerged renewable energy cables within state waters

1. Policies

- a. The Council shall identify and designate a renewable energy cable corridor or corridors within Rhode Island state waters for the purpose of facilitating the installation of submerged renewable energy cables from offshore wind farms and to minimize potential adverse impacts to Rhode Island coastal resources and uses.
- b. The Council shall collaborate with and consider the advice and recommendations of the CRMC's Cable Working Group as part of the Narragansett Bay SAMP, which includes members of the CRMC Fishermen's Advisory Board (FAB), as defined in § 05-11.3(E) of this Chapter, representation of the RI Shellfisherman's Association, RI Department of Environmental Management Division of Marine Fisheries (DEM DMF), and other interested stakeholders, to minimize, and when feasible eliminate, potential adverse impacts to Rhode Island coastal resources and uses.
- c. For purposes of this Part in designating a renewable energy cable corridor or corridors, representation of commercial fishing interests in state waters, including, but not limited to, the RI Shellfisherman's Association, the RI Lobstermen's Association, etc., shall be included on the CRMC's Cable Working Group to aid the CRMC in identifying areas of active fish, crustacean and shellfish harvesting within state waters and to advise and make recommendations to the CRMC for the purpose of minimizing, and when feasible eliminating, potential adverse impacts to sensitive and important fish habitats and to the commercial fishing industry as a result of submerged renewable energy cable installation and operation within state waters.
- d. It is the Council's policy to identify and designate Areas of Particular Concern (APCs) within state waters with the advice and recommendations of the CRMC's Cable Working Group for the purposes of this Part. APCs shall include those areas as specified

in § 05-11.10.2 of this Chapter. In addition, APCs shall include areas of paleolandscapes that contain or have a high probability of containing significant cultural artifacts as may be identified and confirmed through appropriate sources including, but not limited to, the RI Historic Preservation and Heritage Commission.

- e. It is the Council's policy to preserve submerged paleolandscapes, which are areas along the seafloor with a higher potential to contain cultural and historical resources, within state waters. In addition, if shipwrecks or possible shipwrecks have been identified within the corridor, these should either be avoided or should be assessed to determine if they are significant cultural resources eligible for listing in the National Register of Historic Places. When paleolandscapes are identified as likely containing significant cultural and historical resources, the Council shall designate them as APCs.
- f. Given the current state of uncertainty in the magnitude of potential impacts to marine organisms from electromagnetic fields (EMF) associated with submerged electrical cables from offshore wind farms in southern New England offshore waters, the Council will establish standards to require applicants to use appropriate cable burial methods and technology for the anticipated or discovered conditions to achieve appropriate cable burial depths in an effort to avoid and minimize adverse EMF effects.
- g. Any submerged renewable energy cable approved by the CRMC, regardless of its location within state waters, shall be subject to an annual submerged lands fees specified by the CRMC and consistent with R.I. Gen. Laws § 46-23-1(f) within any permit issued by the CRMC or as may be required by any applicable legislative action.

2. Standards

- a. All submerged renewable energy cables in state waters shall be installed and maintained within a CRMC designated renewable energy cable corridor(s) as shown in § 1.3.1(S)(5) of this Part, regardless of whether the cable makes landfall in Rhode Island or another state.
- a. Renewable energy cables shall not be installed within the U.S. Department of Defense (DoD) restricted areas of Narragansett Bay, as specified in 33 CFR §§ 334.80, 334.81 and 334.82, without the explicit authorization of the DoD and CRMC approval.

- c. Submerged renewable energy cables shall be presumptively excluded from being installed within a CRMC designated APC. This exclusion is rebuttable if the applicant can demonstrate by clear and convincing evidence that there are no practicable alternatives that are less damaging in areas outside of the APC, or that the proposed project will not result in a significant alteration to the values and resources of the APC. When evaluating a project proposal, the Council shall not consider cost as a factor when determining whether practicable alternatives exist. Applicants which successfully demonstrate that the presumptive exclusion does not apply to a proposed project because there are no practicable alternatives that are less damaging in areas outside of the APC must also demonstrate that all feasible efforts have been made to avoid damage to APC resources and values. This exclusion is rebuttable if the applicant can demonstrate by clear and convincing evidence that there are no practicable alternatives that are less damaging in areas outside of the APC, or that the proposed project will not result in a significant alteration to the values and resources of the APC. When evaluating a project proposal, the Council shall not consider cost as a factor when determining whether practicable alternatives exist. Applicants which successfully demonstrate that the presumptive exclusion does not apply to a proposed project because there are no practicable alternatives that are less damaging in areas outside of the APC must also demonstrate that all feasible efforts have been made to avoid damage to APC resources and values. The Council may require a successful applicant to provide a mitigation plan that protects the ecosystem.
- d. Applications for submerged cables submitted to the CRMC shall include site plans showing the location of the proposed cable(s) within state tidal waters, the landfall location and proposed electric grid connection point. In addition, design details and cable installation methods shall be provided for all proposed renewable energy cables within state waters including the cable landfall and the upland cable routes to the electric grid connection point. The site plans and detail sheets shall be certified and stamped by a professional engineer licensed by the state of Rhode Island.
- e. In the event that an applicant proposes an alternative location within state waters for a renewable energy cable that is located partially or wholly outside of a CRMC designated renewable energy cable corridor, then the applicant must meet the variance criteria of § 1.1.7 of this Part and provide scientifically valid assessments and evidence to the CRMC concerning the following conditions:

- (1) It is not feasible for the proposed renewable energy cable to be located within a CRMC designated renewable energy cable corridor due to existing conditions;
- (2) Maintaining the renewable energy cable entirely within a CRMC designated cable corridor is not feasible due to the proposed cable landfall location;
- (3) The proposed alternative cable route will not have significant adverse impacts to Rhode Island coastal resources and uses; and
- (4) The proposed alternative if located within a CRMC designated APC meets the requirements of 1.3.1(S)(2)(c) of this Part.

f. Applications for submerged cables within state waters shall meet all applicable programmatic standards including, but not limited to, §§ 1.1.6(F), 1.3.1(A), 1.3.1(C), 1.3.1(H) and 1.3.1(I) of this Part.

g. Submerged cable installation

- (1) The target burial depth for submerged cables proposed for installation on a seafloor bottom shall be 4 to 6 feet (1.2 to 1.8 m) below the seafloor (BSF). The target cable burial depths shall be determined through a cable burial risk (or feasibility) assessment (CBRA) based on an assessment of seabed conditions, seabed mobility, and the risk of interaction with external hazards such as commercial fishing gear and vessel anchors. Where sufficient burial depth cannot be achieved based on the CBRA, or protection is required due to cables crossing other cables or pipelines, additional cable protection methods may be used in accordance with § 1.3.1(S)(2)(g)(4) of this Part.
- (2) In areas where submerged cable installation may be challenging due to bedrock or other geologic obstruction, the applicant must use appropriate cable burying technology and accepted engineering techniques to achieve target cable burial depth as specified in § 1.3.1(S)(3)(g)(1) of this Part. Jet plow cable installation methods may not be suitable in areas of hard bottom (those containing rocks, cobble, excess clay and silt and other known geologic obstructions).

- (3) During cable burial, the target cable burial depth shall be achieved as soon as practical following cable laying within the trench to minimize the possibility of cable damage from ship anchors. Mariners shall be advised daily by the applicant of cable laying operations through mariner bulletins on the appropriate VHF radio channel(s) in addition to twice weekly email notifications to an established email notification list and following the U.S.C.G. regulations for notice to mariners.
- (4) Secondary cable protection methods (e.g., concrete mattresses, rock berms or rock bags) may have adverse impacts on commercial fishing gear by creating obstructions that may snag and cause damage to mobile fishing gear (e.g., trawl nets) or fixed gear (e.g., lobster pots, fish pots and gill nets). Therefore, the applicant shall limit secondary cable protection to areas where the cable is insufficiently protected (presenting a risk to marine users and/or the cable), at crossings with other submerged cables or utilities, or other areas in which cable burial is not possible (e.g., cable joints). In addition, any necessary secondary cable protection shall be constructed of biologically-friendly materials (i.e., that allow epifaunal colonization) that mimic as closely as possible the existing surrounding habitat.
- (5) In the event that alternative cable routing is not possible and disturbance will be unavoidable within preserved paleolandscapes that are likely to contain cultural and historical resources the applicant will propose cable installation techniques that will minimize disturbance and impact on the paleolandscapes after seeking input and advice from the State Historic Preservation Office (SHPO) and the local Tribal Historic Preservation Office (THPO). The CRMC may stipulate specific conditions as recommended by the SHPO or THPO as part of the CRMC assent.
- (6) All submerged cables making landfall (onshore of the MLLW line) shall target a burial depth greater than or equal to three (3.0) meters BSF. This standard is best achieved by using horizontal directional drilling (HDD) techniques and may be required by the CRMC. A variance to this standard may be granted where the applicant demonstrates through the CBRA that the cable landing area is composed of a stable

seafloor and a shoreline (e.g., man-made) unlikely to suffer significant beach loss and erosion from coastal storms.

(7) A Certification Verification Agent (CVA) may be required by the CRMC in accordance with § 1.3.1(H)(3) of this Part.

(8) Following the completion of a submerged cable, including the landfall, the applicant shall develop a cable inspection program and submit it to the CRMC and the CVA. The cable inspection program shall confirm the cable burial depth along the route and identify the need for any further remedial burial activities and/or secondary cable protection. The CVA shall provide the review report to the CRMC within 90 days of completion.

(9) The CVA shall provide a post-installation report following project completion verifying that the submerged cable and landfall installations were completed in accordance with the CRMC approved plans and specifications and any remedial actions pursuant to the CVA cable inspection program as may be required in § 1.3.1(S)(2)(g)(8) of this Part.

h. Submerged cable monitoring

(1) The entire cable route within state waters shall be surveyed using multi-beam bathymetry promptly following submerged cable installation and the placement of any secondary cable protection (if necessary). The entire cable route within state waters will again be surveyed following the first and second years of operation. The results of the post-lay, year 1 and year 2 multi-beam cable surveys shall be provided to the CRMC review within forty-five (45) days of survey completion and include any remedial actions taken or scheduled to occur. The entire cable route within state waters will continue to be surveyed for the lifecycle of the project using multi-beam bathymetry every two (2) years following completion of the year 2 survey and shall be provided to the CRMC within forty-five (45) days of survey completion.

(2) In the event that cable monitoring shows an installed cable has been exposed or the cable presents a risk to other marine users, or is at risk of being damaged, then the applicant or successive permit holder shall promptly submit a

corrective action report and receive approval from the CRMC before implementing corrective measures in compliance with the CRMC permit and any order of the Council.

i. Electromagnetic field (EMF) monitoring requirements

(1) Applicants shall provide to the CRMC background EMF measurements along the area of the intended cable route within state waters prior to the installation of any submerged renewable energy cable. Both alternating current (AC) and direct current (DC) EMF measurements shall be conducted.

(2) At the completion of installation and activation of any submerged renewable energy cable within state waters, the applicant or successive permit holder shall monitor EMF levels along the cable route at least once annually for the service life of the cable and provide measurements to the CRMC with a location map of all measurement stations. Measurement stations shall include cable portions that achieved the target cable burial depth and cable portions that include secondary protection that did not meet target cable burial depths.

j. Submerged cable applications shall include a fisheries monitoring plan for state waters. The applicant shall consult with the RIDEM Division of Marine Fisheries for the appropriate inclusion of species, gear methods and sampling protocols and obtain CRMC approval of the fisheries monitoring plan. The applicant shall implement the fisheries monitoring plan to obtain the specified fisheries monitoring data for a minimum of one full year prior to cable installation, through the entirety of the construction period, and for two (2) years following commencement of cable activation and operation. The applicant's fisheries monitoring plan may include data the state has obtained as part of ongoing state monitoring activities as a supplement to the applicant required monitoring data.

3. Standards for Areas of Particular Concern (APCs)

a. APCs shall include those areas as specified in § 1.3.1(S)(1)(d) of this Part and may include areas of important fisheries harvesting within state waters as identified and recommended by the RIDEM Division of Marine Fisheries if so designated by the CRMC.

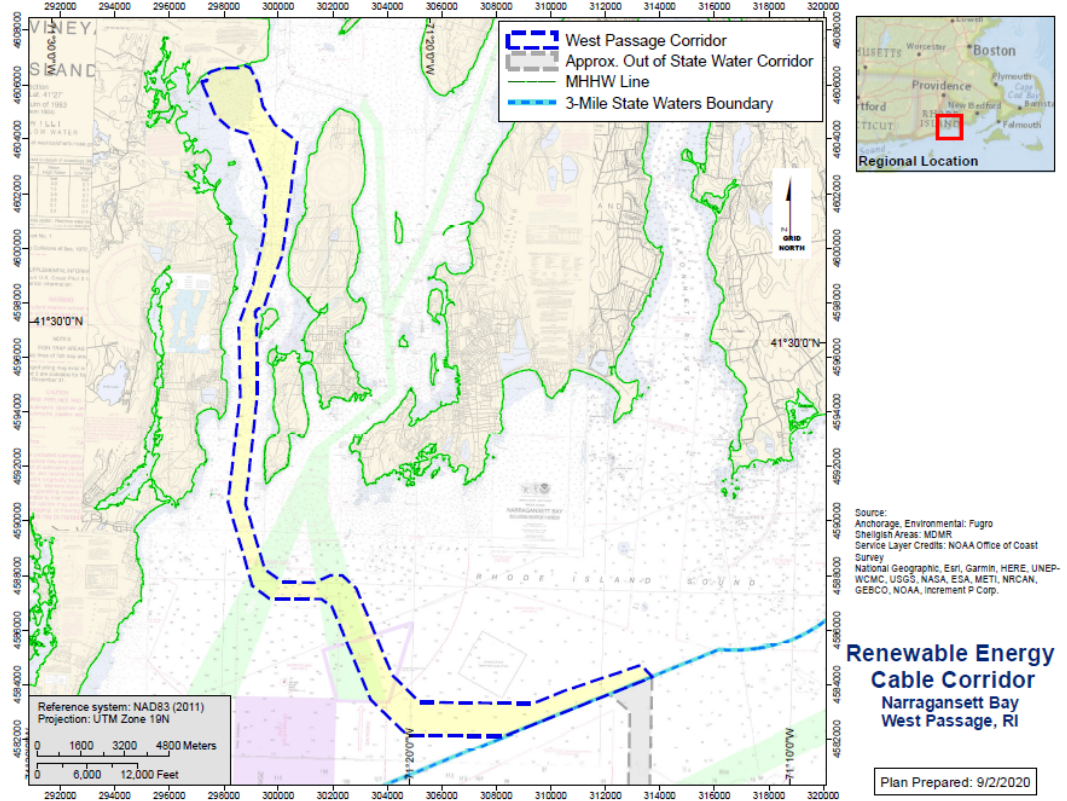
- b. APCs shall include areas of paleolandscapes that contain or have a high probability of containing significant cultural artifacts. The Council shall consult with paleoarchaeologists in designating such APCs. Whenever possible, excavation to project depth should avoid paleosol and peat horizons. Furthermore, the “ravinement” surface, a widely recognized regional seismic reflector that indicates erosional processes at the time of marine transgression over the site, should not be disturbed. In the event these features cannot be avoided, the applicant shall demonstrate compliance with § 1.3.1(S)(2)(c) of this Part
- c. Shipwrecks potentially eligible or eligible for listing in the National Register of Historic Places, as may be recommended by the RI Historic Preservation and Heritage Commission, shall be considered APCs.
- d. APCs within state waters will be described and shown within this Part as they become identified, designated and adopted by the CRMC. Additional APCs may be identified and adopted by the CRMC as new information becomes available.

4. Narragansett Bay West Passage renewable energy cable corridor

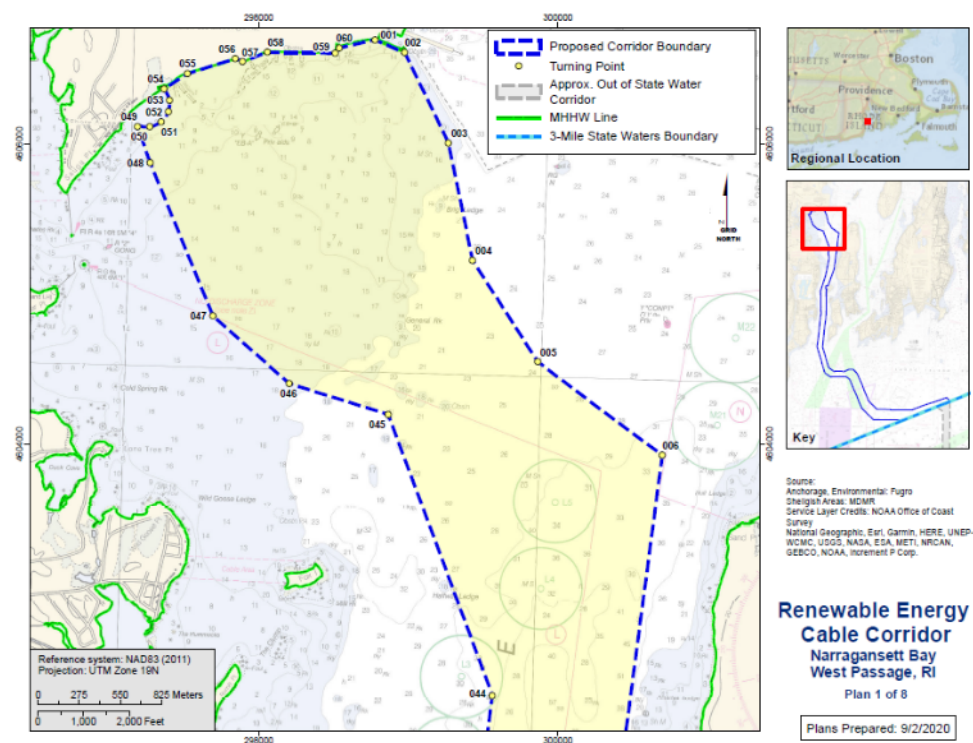
- a. The Narragansett Bay West Passage renewable energy cable corridor is an approximate 600-meter-wide corridor as depicted in the figures in §§ 1.3.1(S)(5)(b) through (j) of this Part. The West Passage cable corridor begins at a point south of Sachuest Point in Middletown at the 3-nautical mile limit of state waters and heads west towards the “Narragansett Bay Traffic Lane Inbound” as marked on NOAA nautical chart 13218. The corridor then heads northwest across the “Pilot Boarding Area” and around the “restricted area” identified on the same chart. From that point on the north side of the restricted area, the corridor heads north into the West Passage of Narragansett Bay between Bonnet Point and Beavertail Point. The corridor continues north within the West Passage, passing on the west side of Dutch Island, and continues north towards the Jamestown-Verrazano Bridge. The corridor crosses beneath the bridge and proceeds north following deeper water depths west of Conanicut Island. North of Hull Point on the Conanicut Island shore, the corridor turns west-northwest to a landfall along the southern shoreline of Quonset Point in North Kingstown. The cable corridor boundary extends along the shoreline between Blue Beach on the west and the Martha’s Vineyard Fast Ferry on the east, following the mean higher high

water limit. The turning point coordinates identified in each detail map panel are listed in the table in § 1.3.1(S)(5)(K) of this Part.

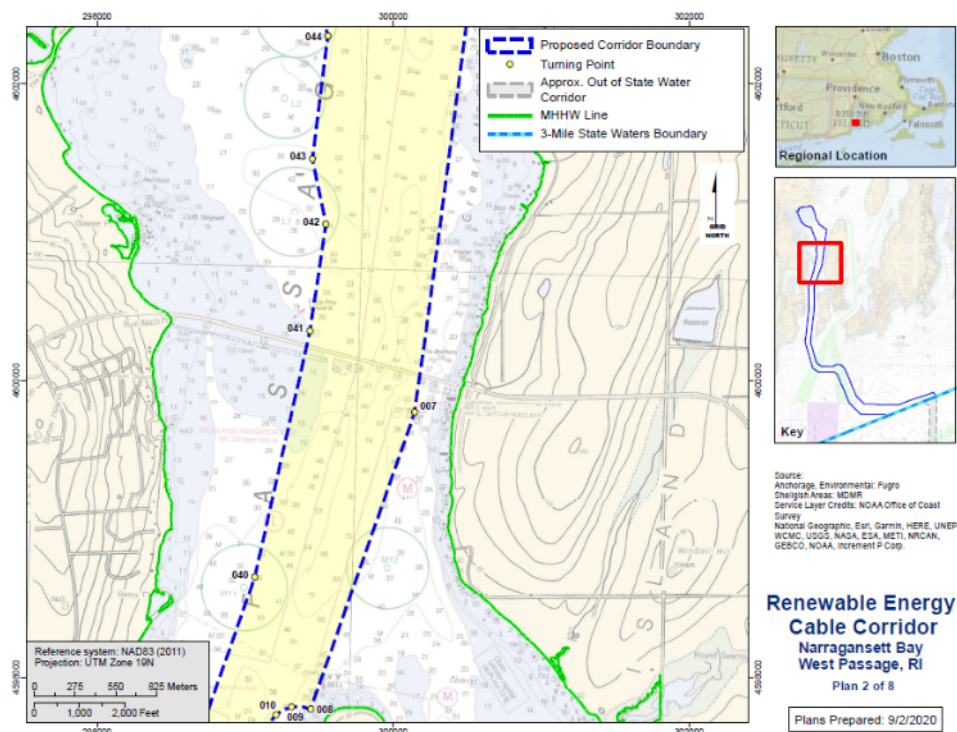
b. Overall locus map

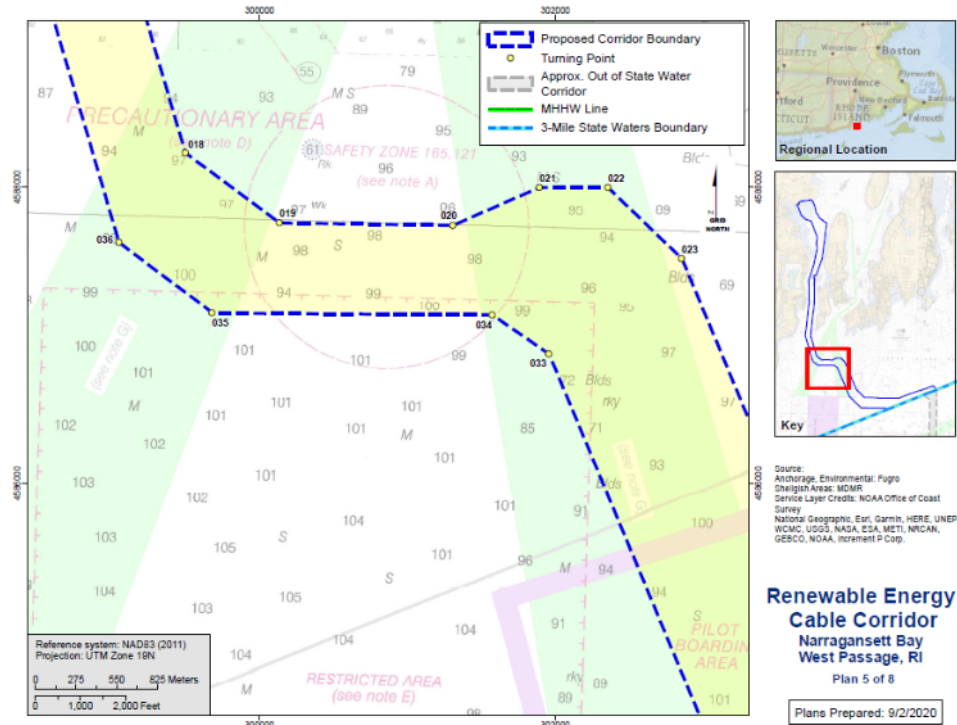


c. Detailed map panel 1

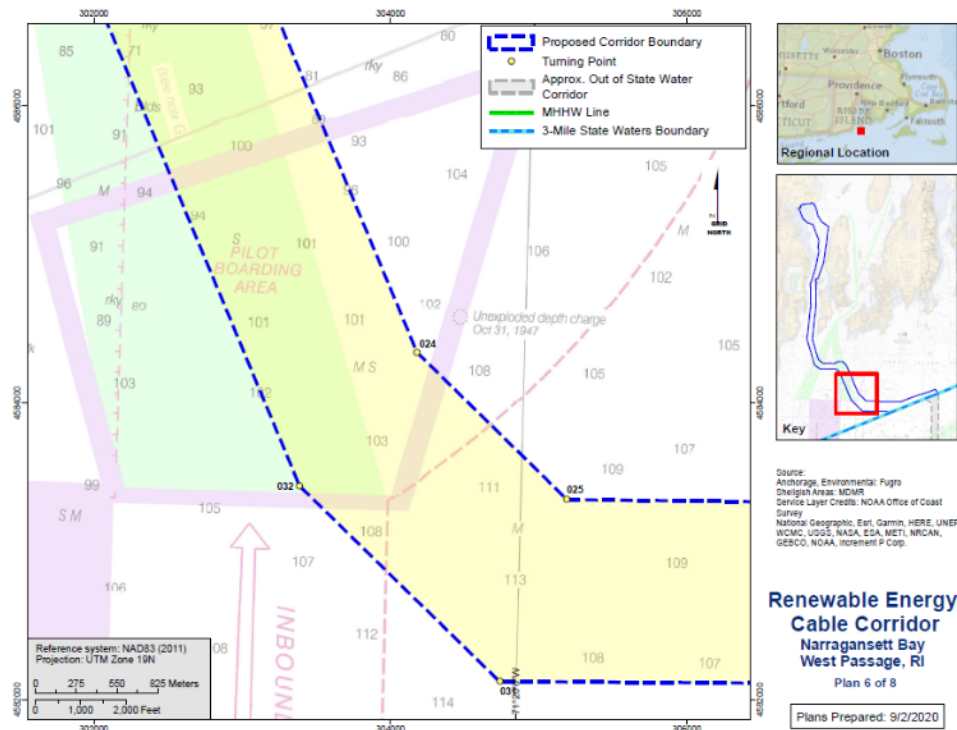


d. Detailed map panel 2

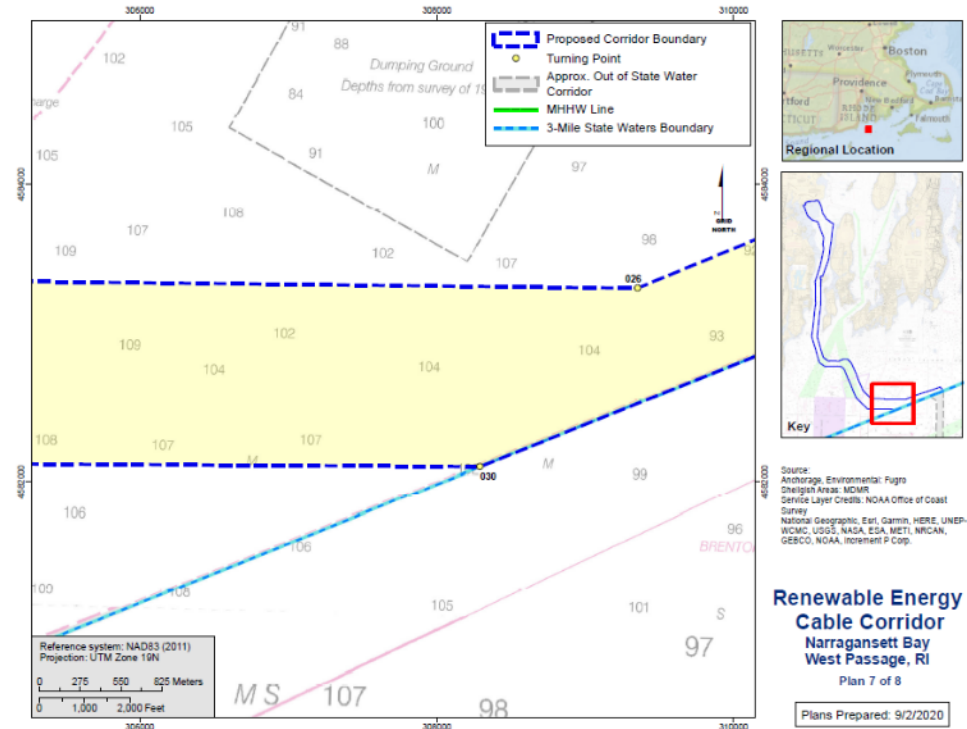




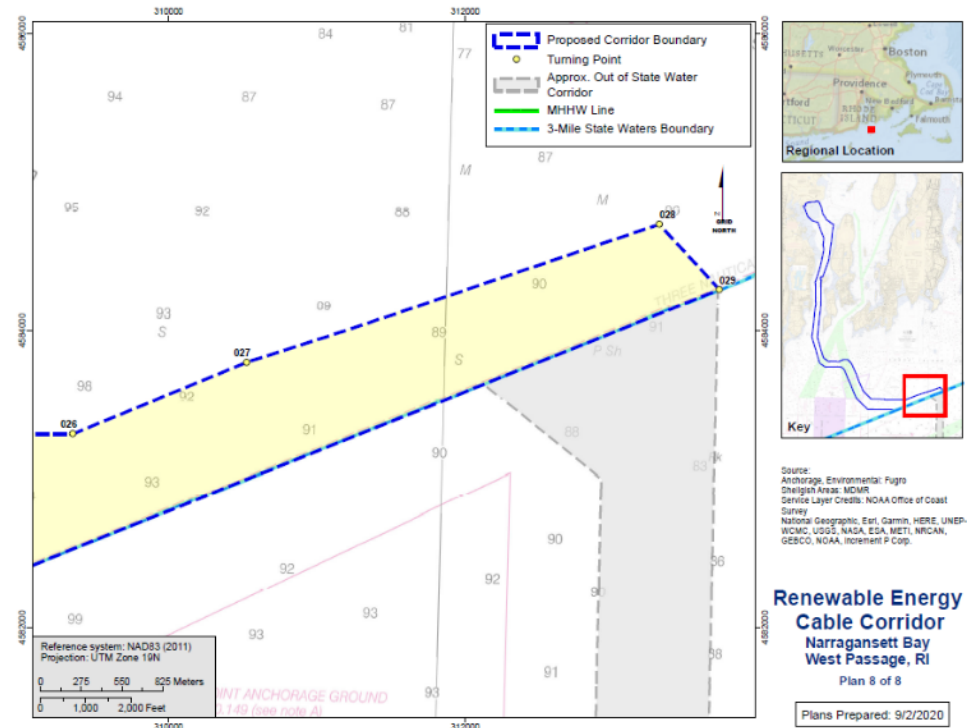
h. Detailed map panel 6



i. Detailed map panel 7



j. Detailed map panel 8



k. Turning point coordinates table

	<u>Turning point number</u>	<u>Latitude</u>	<u>Longitude</u>
<u>001</u>	<u>41.58662151</u>	<u>-71.41406973</u>	
<u>002</u>	<u>41.5859217</u>	<u>-71.41164894</u>	
<u>003</u>	<u>41.58056602</u>	<u>-71.40794571</u>	
<u>004</u>	<u>41.57356066</u>	<u>-71.40575547</u>	
<u>005</u>	<u>41.56757724</u>	<u>-71.40031586</u>	
<u>006</u>	<u>41.56218289</u>	<u>-71.39013042</u>	
<u>007</u>	<u>41.52477724</u>	<u>-71.39535597</u>	
<u>008</u>	<u>41.50657942</u>	<u>-71.40310059</u>	
<u>009</u>	<u>41.50667816</u>	<u>-71.40463589</u>	
<u>010</u>	<u>41.50617107</u>	<u>-71.40588975</u>	
<u>011</u>	<u>41.50521891</u>	<u>-71.40660887</u>	
<u>012</u>	<u>41.50423419</u>	<u>-71.40655027</u>	
<u>013</u>	<u>41.50353369</u>	<u>-71.40602139</u>	
<u>014</u>	<u>41.50304865</u>	<u>-71.40512745</u>	
<u>015</u>	<u>41.4996664</u>	<u>-71.40579501</u>	
<u>016</u>	<u>41.47857756</u>	<u>-71.40457722</u>	
<u>017</u>	<u>41.44200235</u>	<u>-71.40845563</u>	
<u>018</u>	<u>41.42062467</u>	<u>-71.39927124</u>	

<u>019</u>	<u>41.41652859</u>	<u>-71.39149622</u>
<u>020</u>	<u>41.41666517</u>	<u>-71.37747357</u>
<u>021</u>	<u>41.41912336</u>	<u>-71.37058361</u>
<u>022</u>	<u>41.41923749</u>	<u>-71.36504103</u>
<u>023</u>	<u>41.41503699</u>	<u>-71.35891293</u>
<u>024</u>	<u>41.38676821</u>	<u>-71.34204042</u>
<u>025</u>	<u>41.37810325</u>	<u>-71.32964434</u>
<u>026</u>	<u>41.37868779</u>	<u>-71.27988525</u>
<u>027</u>	<u>41.38329333</u>	<u>-71.26603703</u>
<u>028</u>	<u>41.39231781</u>	<u>-71.23303224</u>
<u>029</u>	<u>41.38845162</u>	<u>-71.22806483</u>
<u>030</u>	<u>41.3676079</u>	<u>-71.29219311</u>
<u>031</u>	<u>41.36694851</u>	<u>-71.33464318</u>
<u>032</u>	<u>41.37848198</u>	<u>-71.35121954</u>
<u>033</u>	<u>41.40900535</u>	<u>-71.36943279</u>
<u>034</u>	<u>41.41128746</u>	<u>-71.37409591</u>
<u>035</u>	<u>41.41095101</u>	<u>-71.39674734</u>
<u>036</u>	<u>41.41507645</u>	<u>-71.40443003</u>

<u>037</u>	<u>41.44231434</u>	<u>-71.41618114</u>
<u>038</u>	<u>41.47773022</u>	<u>-71.41211099</u>
<u>039</u>	<u>41.50120511</u>	<u>-71.4135789</u>
<u>040</u>	<u>41.51449207</u>	<u>-71.40791888</u>
<u>041</u>	<u>41.52952734</u>	<u>-71.4040011</u>
<u>042</u>	<u>41.53604761</u>	<u>-71.4029587</u>
<u>043</u>	<u>41.5399575</u>	<u>-71.40419231</u>
<u>044</u>	<u>41.54745585</u>	<u>-71.40321635</u>
<u>045</u>	<u>41.56416335</u>	<u>-71.41217906</u>
<u>046</u>	<u>41.56584835</u>	<u>-71.4201474</u>
<u>047</u>	<u>41.56978164</u>	<u>-71.4264238</u>
<u>048</u>	<u>41.57886237</u>	<u>-71.43178091</u>
<u>049</u>	<u>41.58102813</u>	<u>-71.43289211</u>
<u>050</u>	<u>41.58104946</u>	<u>-71.43188824</u>
<u>051</u>	<u>41.58135439</u>	<u>-71.43099121</u>
<u>052</u>	<u>41.58197688</u>	<u>-71.43044734</u>
<u>053</u>	<u>41.58266486</u>	<u>-71.43036826</u>
<u>054</u>	<u>41.58332869</u>	<u>-71.43083827</u>
<u>055</u>	<u>41.58429575</u>	<u>-71.42901043</u>

<u>056</u>	<u>41.585267</u>	<u>-71.42520728</u>
<u>057</u>	<u>41.58510047</u>	<u>-71.42462974</u>
<u>058</u>	<u>41.58571649</u>	<u>-71.42266507</u>
<u>059</u>	<u>41.58576808</u>	<u>-71.41720127</u>
<u>060</u>	<u>41.58608429</u>	<u>-71.41689568</u>

6. [Reserved] Sakonnet River renewable energy cable corridor