Appendix B: Supplemental Information and Additional Figures and Tables

B.1 Wetlands

Table B-1 summarizes National Wetland Inventory (NWI) wetland communities in the Massachusetts part of the wetlands geographic analysis area. Table B-2 quantifies the potential wetland impacts based on NWI data for the Falmouth onshore components for the Mayflower Wind Project (Project). These tables are similar to Table 3.5.8-1 and Table 3.5.8-3 in Section 3.5.8, *Wetlands*, respectively, but show NWI data instead of Massachusetts Department of Environmental Protection (MassDEP) wetland data. Note that the NWI GIS data were used for the analysis in Rhode Island in Section 3.5.8, *Wetlands*, including the impacts disclosed for Alternatives C-1 and C-2, so that information is not repeated here.

Table B-1. NWI wetland communities in the Massachusetts part of the geographic analysis area

Wetland Community	Falmouth Onshore Project Area	Percent of Total
Estuarine and Marine Wetland	4,901	34%
Freshwater Emergent Wetland	992	7%
Freshwater Forested/Shrub Wetland	8,600	59%
Total	**14,493**	**100%**

Source: USFWS 2021

Table B-2. NWI wetland impacts in the Falmouth Onshore Project area—Proposed Action

Onshore Project Component	Wetland Community	Impact (acres)	% Relative to Wetlands in GAA	Duration
Falmouth Onshore				
Onshore Export Cable Routes				
Worcester Avenue Route	N/A	0	0	N/A
Shore Street Route Eastern Option	N/A	0	0	N/A
Shore Street Route Western Option	N/A	0	0	N/A
Central Park Route	N/A	0	0	N/A
Lawrence Lynch to Cape Cod Aggregates Route	N/A	0	0	N/A
Paper Road – Thomas B Landers Road Deviation	N/A	0	0	N/A
Onshore Substation Locations				
Lawrence Lynch	N/A	0	0	N/A
Cape Cod Aggregates	N/A	0	0	N/A

Onshore Project Component	Wetland Community	Impact (acres)	% Relative to Wetlands in GAA	Duration
Underground Transmission Route and Point of Interconnection				
Underground Transmission Route from Cape Cod Aggregates to POI	Freshwater Forested/ Shrub Wetland	0.06	<0.1	Long term (> 5 years)
Point of Interconnection (Falmouth Switching Station)	N/A	0	0	N/A

Source: USFWS 2021
Note: The disturbance area used to calculate the potential wetland impact areas from export cables is based on a 40-foot-wide corridor along the cable route, except for the cable route from Cape Cod Aggregates to POI, which is a 100-foot-wide corridor.
GAA = geographic analysis area; N/A = not applicable; POI = point of interconnection

B.1.1 Characteristic Wetland Communities in the Falmouth Onshore Project Area

B.1.1.1 Red Maple Swamp

Red maple (*Acer rubrum*) swamps are the most common forested wetlands in Massachusetts (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022). Within these wetlands, red maple is the dominant species in the tree stratum. The shrub layer within red maple swamps in Eastern Massachusetts typically includes sweet pepper-bush, highbush blueberry, northern arrow-wood (*Viburnum dentatum*), spicebush, and greenbrier (*Smilax rotundifolia*). Ferns are typically abundant with cinnamon fern (*Osmundastrum cinnamomeum*) being the most common. Other ferns include sensitive fern (*Onoclea sensibilis*), royal fern (*Osmunda regalis*), marsh fern (*Thelypteris palustris*), and spinulose wood fern (*Dryopteris carthusiana*). Skunk cabbage (*Symplocarpus foetidus*) is one of the most common herbaceous species (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022).

B.1.1.2 Atlantic White Cedar Bog

Atlantic white cedar bogs are semi-forested, acidic, dwarf-shrub wetlands (Natural Heritage and Endangered Species Program [COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022]). Short (6–30 feet [2-10 meters]) Atlantic white cedar (*Chamaecyparis thyoides*) trees dominate the open canopy. An open to nearly continuous, low (3 feet [1 meter]) shrub layer often includes small Atlantic white cedars. Scattered red maple may be present with occasional associates including white and pitch pine, grey birch (*Betula populifolia*), and black spruce (*Picea mariana*). Scattered tall shrubs may be present and include highbush blueberry and swamp azalea. A dense low shrub layer is frequently comprised of leatherleaf, sheep laurel (*Kalmia angustifolia*), black huckleberry, rhodora (*Rhododendron canadense*), and bog rosemary (*Andromeda polifolia var. glaucophylla*). There is typically a well-formed sphagnum moss (*Sphagnum spp*.) layer below the shrubs, and large and small cranberry (*Vaccinium macrocarpon and V. oxycoccos*), sundews (*Drosera* spp.), and pitcher plants (*Sarracenia purpurea*) may be present (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022).

B.1.1.3 Kettlehole Level Bog

Kettlehole level bogs are unique peatland ecosystems that develop in valley bottoms without inlets or outlets. Species composition in this ecosystem includes sphagnum moss blueberries, leatherleaf (*Chamaedaphne calyculata*), and species of laurel (*Kalmia spp*.). The Natural Heritage and Endangered Species Program identifies this ecosystem as Imperiled (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022).

B.1.1.4 Shrub Swamp

Shrub swamps are shrub-dominated wetlands and often occur within overhead electric utility rights-of-way as a result of previous tree clearing for installation of the utility and subsequent integrated vegetation management activities that targets removal of tree species while allowing for continued growth and establishment of low-growing species, such as shrubs. The species composition of shrub swamps is highly variable and can include meadowsweet (*Spiraea alba var. latifolia*), steeplebush (*Spirea tomentosa*), swamp azalea, silky dogwood (*Swida amomum*), winterberry (*Ilex verticillata*), sweet gale (*Myrica gale*), and arrowwood. Low-growing, weak-stemmed shrubs include dewberry (*Rubus hispidus*), water-willow (*Decodon verticillatus*), and Canadian burnet (Sanguisorba canadensis). The herbaceous layer often includes common arrowhead (*Sagittaria latifolia*), skunk cabbage, ferns, sedges (*Carex* spp.), bluejoint grass (Calamagrostis canadensis), bur reed (*Sparganium* spp.), virgin's-bower (*Clematis virginiana*), swamp candles (*Lysimachia terrestris*), clearweed (*Pilea pumila*), and turtlehead (*Chelone glabra*). Sphagnum moss is often abundant. Invasive species include reed canary-grass (*Phalaris arundinacea*), glossy buckthorn (Frangula alnus), common buckthorn (*Rhamnus alnifolia*), and purple loosestrife (*Lythrum salicaria*) (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022).

B.1.1.5 Emergent Marsh

The deep emergent marsh wetland type occurs along rivers, streams, lakes, ponds, and other waterbodies. Water depths are less than 3 feet (1 meter), though some depth of water is usually always present in most years and influences the vegetation present. Often this wetland type is part of a wetland mosaic with shrub swamp and forested wetland bordering the emergent portions of the wetland. Vegetation consists primarily of herbaceous species and graminoids. These often include broad-leaved cattail (*Typha latifolia*), sphagnum moss, wool-grass (*Scirpus cyperinus*), common threesquare (*Schoenoplectus pungens*), bluejoint grass, reed canary-grass, rice cut-grass (*Leersia oryzoides*), tussock-sedge (*Carex stricta*), arrow-leaf tearthumb (*Persicaria sagittata*), beggar-ticks (*Bidens* spp.), bedstraw (*Galium* spp.), common arrowhead, slender-leaved goldenrod (*Euthamia caroliniana*), marsh-fern, marsh St. John's-wort (*Triadenum virginicum*), Joe-Pye-weeds (*Eutrochium* spp.), bonesets (*Eupatorium* spp.), and water-horehound (*Lycopus* spp.). Areas with more permanent open water often support floating-leaved plants like water-lilies (*Nymphaea odorata and Nuphar* spp.). Shrubs can include red osier dogwood (*Swida sericea*), leatherleaf (*Chamaedaphne calyculata*), sweet-gale, meadowsweet, steeplebush, and highbush blueberry; however, shrub cover is sparse (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022).

B.1.1.6 Highbush Blueberry Thicket

Highbush blueberry thickets are peatlands that host tall shrubs and sometimes small red maple trees. Common species within this ecosystem include the namesake highbush blueberry along with other common blueberry species including swamp azalea (*Rhododendron viscosum*), winterberry (*Ilex verticillata*), and sweet pepperbush (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022).

B.1.1.7 Vernal pools

Vernal pools are temporary pools or ponds, typically occurring within wetlands, that fill with water in the fall or winter due to rainfall and seasonal high groundwater levels and remain ponded through the spring and into summer. Often vernal pools dry up completely by the middle or end of the summer, or at least every few years, which prevents fish populations from becoming established within the pool. The absence of fish is critical to the reproductive success of many amphibian and invertebrate species that rely exclusively on vernal pools to provide breeding habitat, including wood frog (*Lithobates sylvaticus*), mole salamanders (*Ambystoma* spp.), and fairy shrimp (*Eubranchipus* spp.). For this reason, vernal pools are a unique and sensitive aquatic habitat, and have specific protections under both the Massachusetts Wetlands Protection Act regulations (310 Code of Massachusetts Regulations [CMR] 10.00) and the U.S. Army Corps of Engineers New England District's General Permits for the Commonwealth of Massachusetts for activities subject to Corps jurisdiction in waters of the U.S., including wetlands (COP Appendix J, Section 4.1.4.1; Mayflower Wind 2022).

B.2 Climate and Meteorology

The Atlantic seaboard is classified as a mid-latitude climate zone based upon the Köppen Climate Classification System. The region is characterized by mostly moist subtropical conditions, generally warm and humid in the summer with mild winters. The Massachusetts climate is characterized by frequent and rapid changes in weather, large daily and annual temperature ranges, large variations from year to year, and geographic diversity. During the winter, the main weather feature in the northeastern United States is the northeaster (cold-core extratropical cyclone). During the summer, convective thunderstorms occur frequently. The Atlantic hurricane season runs from June 1 to November 30.

The National Climatic Data Center (NCDC) defines distinct climatological divisions to represent geographic areas that are nearly climatically homogeneous. Locations within the same climatic division are considered to share the same overall climatic features and influences. The site of the Proposed Action is located within the Massachusetts coastal division (NOAA 2021).

B.2.1 Ambient Temperature

According to NCDC data for the Massachusetts coastal division, the average annual temperature is 50.5 degrees Fahrenheit (°F) (10.3 degrees Celsius [°C]), the average winter (December–February) temperature is 31.7°F (-0.2°C) and the average summer (June–August) temperature is 69.6°F (20.9°C), based on data collected from 1987 through 2019. Table B-3 summarizes average temperatures at the individual recording stations within the general area of the proposed Project area. Data for some stations as seen in the table are reflective of different years of weather observations; however, the general pattern shows little difference across the listed locations.

Table B-3. Representative temperature data

Station	Annual Average °F/°C	Annual Maximum °F/°C	Annual Minimum °F/°C
Coastal Division	50.5/10.3	59.2/15.1	41.8/5.4
Nantucket	50.7/10.4	57.6/14.2	43.9/6.6
Martha's Vineyard	51.2/10.7	59.1/15.1	43.2/6.2
Hyannis	51.1/10.6	58.8/14.9	43.4/6.3
Buzzards Bay Buoy	50.4/10.2	N/A	N/A
Nantucket Sound Buoy	52.4/11.3	N/A	N/A

Sources: NOAA 2019a (Coastal Division 2019 data; Nantucket 2019 data; Martha's Vineyard 2019 data; Hyannis 2019 data), NOAA 2019b (Buzzards Bay Buoy 2009-2019 data; Nantucket Sound Buoy 2009-2019 data).
°C = degrees Celsius; °F = degrees Fahrenheit; N/A = not available.

B.2.2 Wind Conditions

Prevailing winds in the middle latitudes over North America flow mostly west to east ("westerlies"). Westerlies within the Lease Area vary in strength, pattern, and directionality. Extreme wind conditions on the U.S. East Coast are influenced by both winter storms and tropical systems. Several northeasters occur each winter season, while hurricanes are rarer but potentially more extreme. The tropical systems, therefore, define the wind farm design, based on extreme wind speeds (those with recurrence periods of 50 years or more).

Table B-4 summarizes wind conditions in the Massachusetts coastal division. This table shows the monthly average wind speeds, monthly average peak wind gusts, and the hourly peak wind gusts for each individual month. Data from 2009 through 2019 show that monthly wind speeds range from a low of 11.97 miles per hour (mph) (19.27 kilometers per hour [km/hr]) in July to a high of 17.02 mph (27.38 km/hr) in January. The monthly wind peak gusts reach a maximum during November at 21.23 mph (34.17 km/hr). The one-hour average wind gusts reach a maximum during October at 64.65 mph (104.04 km/hr).

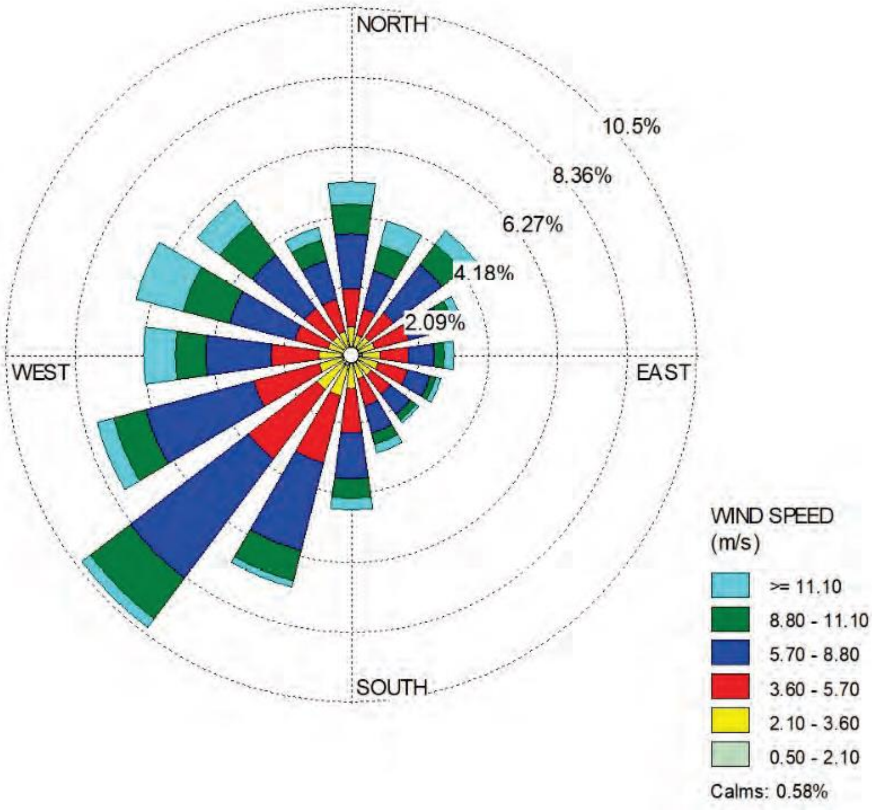
Table B-4. Representative wind speed data for the Massachusetts coastal division

Month	Monthly Average Wind Speed		Monthly Average Peak Gust		Peak One-Hour Average Gust	
	mph	km/hr	mph	km/hr	mph	km/hr
January	17.02	27.38	20.97	33.75	61.29	98.64
February	15.77	25.38	19.35	31.15	63.53	102.24
March	15.91	25.61	19.44	31.29	64.42	103.68
April	14.90	23.97	18.12	29.16	49.21	79.20
May	13.14	21.14	15.89	25.58	58.16	93.60

Month	Monthly Average Wind Speed		Monthly Average Peak Gust		Peak One-Hour Average Gust	
	mph	km/hr	mph	km/hr	mph	km/hr
June	12.31	19.81	14.93	24.03	44.52	71.64
July	11.97	19.27	14.49	23.32	57.04	91.80
August	12.48	20.08	15.14	24.37	59.95	96.48
September	13.92	22.40	17.08	27.48	51.90	83.52
October	16.45	26.48	20.40	32.82	64.65	104.04
November	17.01	27.38	21.23	34.17	57.71	92.88
December	15.99	25.73	19.84	31.93	59.50	95.76

Source: NOAA 2019b (National Data Buoy Center, Nantucket Sound Station 44020, 2009–2019).
km/hr = kilometer per hour; mph = miles per hour.

Throughout the year, wind direction is variable. However, seasonal wind directions are primarily focused from the west/northwest during the winter months (December–February) and from the south/southwest during the summer months (June–August). Figure B-1 shows a 5-year wind rose for Buoy Station 44020 (Nantucket Sound). Wind speeds are in meters per second. Percentages indicate how frequently the wind blows from that direction.



Source: NOAA 2019b.

Figure B-1. 5-year (2015–2019) wind rose for Nantucket Sound

B.2.3 Precipitation and Fog

Data from NCDC show that the annual average precipitation is 49.75 inches (126.37 centimeters) in the Massachusetts coastal division. Table B-5 shows monthly variations in average precipitation, which ranges from a high of 5.59 inches (14.20 centimeters) for October to a low of 3.30 inches (8.38 centimeters) in May.

Snowfall amounts can vary quite drastically within small distances. Data from the Martha's Vineyard Station (KMVY) shows that the annual snowfall average is approximately 23 inches (58.4 centimeters), and the month with the highest snowfall is February, averaging around 8 inches (20.3 centimeters).

Fog is a common occurrence along coastal Massachusetts. Fog is especially dense across the water south of Cape Cod toward the islands of Martha's Vineyard and Nantucket. Fog data were collected from 1997 to 2009 at the BUZM3 meteorological station located in Buzzard's Bay, approximately 25 miles (40 kilometers) from the Project area; and from 2007 to 2009 at the Martha's Vineyard Coastal Observatory (MVCO) meteorological station located 2 miles (3 kilometers) south of Martha's Vineyard (Merrill 2010). The data show that fog is most common in the Project area during the months of June, July, and August, with a typical range of 6 to 11 days per month with at least 1 hour of fog. In the winter, fog is much less frequent, with 3 or fewer days with at least 1 hour of fog.

Table B-5. Representative monthly precipitation data for the Massachusetts coastal division (2009–2019) [a]

Month	Average Precipitation	
	Inches	Centimeters
January	4.04	10.26
February	3.86	9.80
March	4.67	11.85
April	4.14	10.51
May	3.30	8.38
June	4.20	10.67
July	3.72	9.44
August	3.67	9.33
September	3.56	9.03
October	5.59	14.20
November	4.15	10.53
December	4.87	12.36
Annual Average	49.75	126.37

Source: NOAA 2019a.

[a] Precipitation is recorded in melted inches (snow and ice are melted to determine monthly equivalent). Data are representative of the Massachusetts coastal division.

The potential for icing conditions, i.e., atmospheric conditions that can lead to the deposition of ice from the atmosphere onto a structure, was also predicted based on data collected at the BUZM3 tower

(Merrill 2010). Icing is rare when the water temperature is greater than 43°F (6°C), so in most months of the year, and for many days during the winter months, there is no potential for icing to occur. The data show that moderate icing (defined by the Federal Aviation Administration as a rate of accumulation such that short encounters become potentially hazardous) is unlikely to occur more than 1 day per month, while the potential for light icing is above 5 days per month in December, January, and February. Icing would be unlikely to occur at any time from April through October.

B.2.4 Hurricanes and Tropical Storms

During the 160 years for which weather records have been kept, ten hurricanes have made landfall in Massachusetts and five others have passed through the Wind Farm Area without making landfall. The latest hurricane that made a direct landfall was Hurricane Bob in 1991. Out of those ten hurricanes, five ranked as Category 1 on the Saffir-Sampson Scale, two were Category 2 hurricanes, and three were Category 3 hurricanes. Since records have been kept, no Category 4 or 5 hurricanes have made landfall in Massachusetts. Of the hurricanes that passed through the Wind Farm Area without making landfall in Massachusetts, one was Category 2, one was Category 1, and three were tropical storms when they passed through the Wind Farm Area (NOAA 2018). The most recent of these storms was Beryl in 2006. The National Oceanic Atmospheric Administration (NOAA) 2019c defines the winds speeds and typical damage associated with each category of hurricane.

In addition to hurricanes, northeasters may occur several times per year in the fall and winter months. Wind gusts during the strongest northeasters can cause similar damage to a Category 1 hurricane, although northeasters typically are larger and last longer than hurricanes.

B.2.5 Mixing Height

The mixing height is the altitude above ground level to which air pollutants vertically disperse. The mixing height affects air quality because it acts as a lid on the height pollutants can reach. Lower mixing heights can allow less air volume for pollutant dispersion and lead to higher ground-level pollutant concentrations than do higher mixing heights. Table B-6 presents atmospheric mixing height data from the nearest measurement locations to the Project area (Nantucket and Chatham, Massachusetts). As shown in the table, the minimum average mixing height is 389 meters (1,276 feet), while the maximum average mixing height is 1,421 meters (4,662 feet).

Table B-6 Representative seasonal mixing height data

Season	Data Hours Included [a]	Average Mixing Height (meters/feet)	
		Nantucket	Chatham
Winter (December, January, February)	Morning: no-precipitation hours	780/2,559	668/2,192
	Morning: all hours	905/2,969	655/2,149
	Afternoon: no-precipitation hours	791/2,595	774/2,539
	Afternoon: all hours	890/2,920	747/2,451

Season	Data Hours Included [a]	Average Mixing Height (meters/feet)	
		Nantucket	Chatham
Spring (March, April, May)	Morning: no-precipitation hours	588/1,929	681/2,234
	Morning: all hours	734/2,408	664/2,178
	Afternoon: no-precipitation hours	746/2,447	1,218/3,996
	Afternoon: all hours	827/2,713	1,110/3,642
Summer (June, July, August)	Morning: no-precipitation hours	389/1,276	569/1,867
	Morning: all hours	448/1,470	568/1,863
	Afternoon: no-precipitation hours	609/1,998	1,421/4,662
	Afternoon: all hours	667/2,188	1,295/4,249
Fall (September, October, November)	Morning: no-precipitation hours	625/2,051	586/1,923
	Morning: all hours	739/2,425	583/1,913
	Afternoon: no-precipitation hours	765/2,510	1,036/3,399
	Afternoon: all hours	831/2,726	945/3,100
Annual Average	Morning: no-precipitation hours	595/1,952	620/2,034
	Morning: all hours	707/2,320	618/2,028
	Afternoon: no-precipitation hours	727/2,385	1,121/3,678
	Afternoon: all hours	804/2,638	1,028/3,373

Source: USEPA 2021.
[a] Missing values are not included.

B.2.6 Potential General Impacts of Offshore Wind Facilities on Meteorological Conditions

A known impact of offshore wind facilities on meteorological conditions is the wake effect. A wind turbine generator (WTG) extracts energy from the free flow of wind, creating turbulence downstream of the WTG. The resulting "wake effect" is the aggregated influence of the WTGs for the entire wind farm on the available wind resource and the energy production potential of any facility located downstream. Christiansen and Hasager (2005) observed offshore wake effects from existing facilities via satellite with synthetic aperture radar to last anywhere from 1.2 to 12.4 miles (2 to 20 kilometers) depending on ambient wind speed, direction, degree of atmospheric stability and the number of turbines within a facility. During stable atmospheric conditions, these offshore wakes can be longer than 43.5 miles (70 kilometers).

Under certain conditions, offshore wind farms also can affect temperature and moisture downwind of the facilities. For example, from September 2016 to October 2017, a study using aircraft observations accompanied by mesoscale simulations examined the spatial dimensions of micrometeorological impacts from a wind energy facility in the North Sea (Siedersleben et al. 2018). Measurements and associated modeling indicated that measurable redistribution of moisture and heat were possible up to 62 miles (100 kilometers) downwind of the wind farm. However, this occurred only when (a) there was a strong, sustained temperature inversion at or below hub height and (b) wind speeds were greater than approximately 13.4 mph (6 meters/second) (Siedersleben et al. 2018). Typically, air temperature will decrease with height above the sea surface in the lower atmosphere (i.e., the troposphere), and air will freely rise and disperse up to the mixing height (Holzworth 1972; Ramaswamy et al. 2006). A temperature inversion occurs when a warmer overlying air mass causes temperatures to increase with height; a strong inversion inhibits the further rise of cooler surface air masses, thus limiting the mixing height (Ramaswamy et al. 2006). Therefore, the North Sea study suggests that rapidly spinning turbines with hub heights at or above a strong inversion may induce mixing between air masses that would otherwise remain separated, which can significantly affect temperature and humidity downwind of a wind farm.

As shown in Table B-6, the minimum average mixing height in the region is much higher than the height of the top of the proposed WTG rotors (780–1,066 feet [238–325 meters]) or the WTG hubs (419–605 feet [128–184 meters]). Therefore, WTG hub heights are expected to remain well below the typical mixing height and associated temperature inversions over the open ocean in the Project region. Accordingly, the redistribution of moisture and heat due to rotor-induced vertical mixing, and any associated shifts to the microclimate, would be limited to the immediate vicinity of the Project.

B.3 Marine Mammals

There are 38 species of marine mammals within the Northwest Atlantic Outer Continental Shelf (OCS) region and 31 that have been documented or are considered likely to occur in the Project area (Table B-7). Species' federal protection status, occurrence in the geographic analysis area and Project area, critical habitat, population size trends, and mortality data must be considered to understand the potential impacts and their magnitude from the Proposed Action, action alternatives, and the No Action Alternative. The West Indian manatee (*Trichechus manatus*) is considered extralimital and rare and is not expected to occur in the Project area; thus, this species is not considered further. In addition, six species within the toothed whales and dolphins group were considered to have "hypothetical" occurrence and were excluded from the assessment of the Proposed Action (BOEM 2014). For an in-depth discussion of marine mammals in the vicinity of the Project area and the analysis of impacts, refer to Chapter 3, Section 3.5.6, *Marine Mammals*.

Table B-7. Marine mammal species documented or likely to occur in the Project area and their stock information

Species	Scientific Name	Stock	Best Population Estimate [a]	Status under MMPA [b]	Status under ESA	Relative Occurrence in Project Region [c]	Population trend [d]	Reference for Population Data
Baleen Whales (Mysticetes)								
Blue whale	*Balaenoptera musculus*	W. North Atlantic	402 [e]	Strategic	Endangered	Rare	Unavailable	Hays et al. (2020)
Fin whale	*Balaenoptera physalus*	W. North Atlantic	6,802	Strategic	Endangered	Common	Unavailable	Hays et al. (2021)
Humpback whale	*Megaptera novaeangliae*	Gulf of Maine	1,396	Non-Strategic	Not Listed	Common	+2.8%/year	Hays et al. (2021)
Minke whale	*Balaenoptera acutorostrata*	Canadian East Coast	21,968	Non-Strategic	–	Common	Unavailable	(Hays et al. 2021)
North Atlantic right whale	*Eubalaena glacialis*	W. North Atlantic	368	Strategic	Endangered	Common	Decreasing	Hays et al. (2021)
Sei whale	*Balaenoptera borealis*	Nova Scotia	6,292	Strategic	Endangered	Common	Unavailable	Hays et al. (2021)
Toothed Whales (Odontocetes)								
Atlantic spotted dolphin	*Stenella frontalis*	W. North Atlantic	39,921	Non-Strategic	–	Rare	Decreasing	Hays et al. (2020)
Atlantic white-sided dolphin	*Lagenorhynchus acutus*	W. North Atlantic	93,233	Non-Strategic	–	Common	Unavailable	Hays et al. (2020)
Common bottlenose dolphin	*Tursiops truncatus*	W. North Atlantic, Northern Migratory Coastal	6,639	Strategic	–	Common	Decreasing	Hays et al. (2021)
Pantropical spotted dolphin	*Stenella attenuata*	W. North Atlantic	6,593	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Risso's dolphin	*Grampus griseus*	W. North Atlantic	35,215	Non-Strategic	–	Uncommon	Unavailable	Hays et al. (2020)
Short beaked common dolphin	*Delphinus delphis*	W. North Atlantic	172,825	Non-Strategic	–	Common	Unavailable	Hays et al. (2020)

Species	Scientific Name	Stock	Best Population Estimate [a]	Status under MMPA [b]	Status under ESA	Relative Occurrence in Project Region [c]	Population trend [d]	Reference for Population Data
Striped dolphin	*Stenella coeruleoalba*	W. North Atlantic	67,036	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
White-beaked dolphin	*Lagenorhynchus albirostris*	W. North Atlantic	536,016	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Harbor porpoise	*Phocoena phocoena*	Gulf of Maine/Bay of Fundy	95,543	Non-Strategic	–	Common	Unavailable	Hays et al. (2021)
Blainville's beaked whale	*Mesoplodon densirostris*	W. North Atlantic	10,107 [f]	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Cuvier's beaked whale	*Ziphius cavirostris*	W. North Atlantic	5,744 [f]	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Dwarf sperm whale	*Kogia sima*	W. North Atlantic	7,750[g]	Non-Strategic	–	Rare	Increasing [h]	Hays et al. (2020)
Gervais' beaked whale	*Mesoplodon europaeus*	W. North Atlantic	10,107 [f]	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Killer whale	*Orcinus orca*	W. North Atlantic	Unknown	Non-Strategic	–	Rare	Unavailable	Waring et al. (2015)
Long-finned pilot whale	*Globicephala melas*	W. North Atlantic	39,215	Non-Strategic	–	Uncommon	Unavailable	Hays et al. (2020)
Pygmy sperm whale	*Kogia breviceps*	W. North Atlantic	7,750 [g]	Non-Strategic	–	Rare	Increasing [h]	Hays et al. (2020)
Short-finned pilot whale	*Globicephala macrorhynchus*	W. North Atlantic	28,924	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Sowerby's beaked whale	*Mesoplodon bidens*	W. North Atlantic	10,107 [f]	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Sperm whale	*Physeter macrocephalus*	North Atlantic	4,349	Strategic	Endangered	Uncommon	Unavailable	Hays et al. (2020)
True's beaked whale	*Mesoplodon mirus*	W. North Atlantic	10,107 [f]	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)

Species	Scientific Name	Stock	Best Population Estimate [a]	Status under MMPA [b]	Status under ESA	Relative Occurrence in Project Region [c]	Population trend [d]	Reference for Population Data
Earless Seals (Pinnipeds)								
Harbor seals	*Phoca vitulina*	W. North Atlantic	61,336	Non-Strategic	–	Common	Unavailable	Hays et al. (2021)
Gray seals	*Halichoerus grypus*	W. North Atlantic	27,300	Non-Strategic	–	Common	Increasing	Hays et al. (2021)
Hooded seals	*Cystophora cristata*	W. North Atlantic	Unknown	Non-Strategic	–	Rare	Unavailable	Hays et al. (2020)
Harp seal	*Phoca groenlandica*	W. North Atlantic	7.6 million	Non-Strategic	–	Uncommon	Unavailable	Hays et al. (2020)

[a] Best stock population estimates reported in the Draft 2021 U.S Atlantic and Gulf of Mexico Marine Mammal Stock Assessments (Hays et al. 2021).
[b] The MMPA defines a "strategic" stock as a marine mammal stock (a) for which the level of direct human-caused mortality exceeds the potential biological removal level; (b) which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA within the foreseeable future; (c) which is listed as a threatened or endangered species under the ESA; or (d) is designated as depleted.
[c] Data from Mayflower Wind COP Volume 2.
[d] Increasing = beneficial trend, not quantified; Decreasing = adverse trend, not quantified; Unavailable = population trend analysis not conducted on this species.
[e] The minimum population estimate is reported as the best population estimate in the most recently updated 2021 draft stock assessment report (Mayflower Wind 2022).
[f] This estimate includes Gervais' beaked whales and Blainville's beaked whales for the Gulf of Mexico stocks, and all species of *Mesoplodon* undifferentiated beaked whales in the Atlantic.
[g] This estimate includes both dwarf and pygmy sperm whales.
[h] Increasing trend should be interpreted with caution (Hays et al. 2020)
ESA = Endangered Species Act; MMPA = Marine Mammal Protection Act

B.4 Finfish

There are a variety taxa of state- and federally managed fishes managed finfish within the Northeast Continental Shelf Large Marine Ecosystem that have essential fish habitat (EFH) designated in the Project area (COP Volume 2, Section 6.7.2.2.1, Table 6-49 through Table 6-51; Mayflower Wind 2022) or recorded catch in (COP Appendix V, Section 2.2, Table 2-5; Mayflower Wind 2022) or in and around (COP Appendix V, Section 2.1, Table 2-1; Mayflower Wind 2022) the Project area. These species are listed in Table B-8.

Table B-8. Relevant managed fish taxa in the Northeast Continental Shelf Large Marine Ecosystem

Taxa		
Acadian redfish (*Sebastes fasciatus*)	Albacore tuna (*Thunnus alalunga*)	Coastal and non-coastal sharks (for full list of shark species see COP Volume 2, Section 6.7.2.2.1, Table 6-51; Mayflower Wind 2022)
American eel (*Anguilla rostrata*)	American plaice (*Hippoglossoides platessoides*)	Goosefish (*Lophius americanus*)
American shad (*Alosa sapidissima*)	Atlantic cod (*Gadus morhua*)	Hickory shad (*Alosa mediocris*)
Atlantic croaker (*Micropogonias undulatus*)	Atlantic halibut (*Hippoglossus hippoglossus*)	Ocean pout (*Macrozoarces americanus*)
Atlantic herring (*Clupea harengus*)	Atlantic mackerel (*Scomber scombrus)*	Pollock (*Pollachius pollachius)*
Atlantic menhaden (*Brevoortia tyrannus)*	Atlantic striped bass (*Morone saxatilis)*	River herring (*Alosa* spp.*)*
Atlantic sturgeon (*Acipenser oxyrinchus)*	Atlantic wolffish (*Anarhichas lupus)*	Scup (*Stenotomus chrysops)*
Barndoor skate (*Dipturus laevis*)	Black sea bass (*Centropristis striata*)	Cobia (*Rachycentron canadum*)
Bluefin tuna (*Thunnus thynnus*)	Bluefish (*Pomatomus saltatrix*)	Haddock (*Melanogrammus aeglefinus*)
Butterfish (*Peprilus triacanthus*)	Clearnose skate (*Raja eglanteria*)	Little skate (*Leucoraja erinacea*)
Skipjack tuna (*Katsuwonus pelamis)*	Smooth skate (*Mustelus canis)*	Offshore hake *(Merluccius albidus)*
Spanish mackerel (*Scomberomorus maculatus)*	Spiny dogfish (*Squalus acanthias)*	Red hake *(Urophycis chuss)*
Spot (*Leiostomus xanthurus)*	Summer flounder (*Paralichthys dentatus*)	Rosette skate (*Leucoraja garmani*)
Swordfish (*Xiphias gladius)*	Tautog (*Tautoga onitis*)	Silver hake (*Merluccius bilinearis)*
Thorny skate	Tilefish	Witch flounder

Taxa		
(Amblyraja radiata)	(*Caulolatilus microps and Lopholatilus chamaelonticeps)*	*(Glyptocephalus cynoglossus)*
Weakfish (*Cynoscion regalis*)	White hake (*Urophycis tenuis*)	Winter flounder (*Pseudopleuronectes americanus*)
White marlin (*Tetrapturus albidus)*	Windowpane (*Scopthalmus aquosus)*	Winter skate (*Leucoraja ocellata*)

Source: Mayflower Wind 2022.

B.5 Environmental Justice

The U.S. Census tracts with environmental justice communities in the geographic analysis area, as described in Section 3.6.4, *Environmental Justice*, are presented in the following tables. Table B-9 presents the tracts for Massachusetts based on Massachusetts Executive Office of Energy and Environmental Affairs data. Table B-10 presents the tracts for Rhode Island, Connecticut, and Virginia based on U.S. Environmental Protect Agency's Environmental Justice Screening and Mapping Tool's data.

Table B-9. U.S. census tracts with environmental justice populations in Massachusetts

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
Barnstable County						
010100	2					
010304	1		1			
010306	1					
010400					1	
010700	1					
010800	2					
011200	1					
011500			1			
011600	1				1	
011700	1					
012002	1					
012101	1		2			
012102	2					
012502			2			
012601			1			
012602			2		2	
013800			1			
013900	1					

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
014002	1					
014100	2					
014402			1			
014500	1					
014600					1	
014800	2					
014900	1					
015002	1		1			
015300					2	
Bristol County						
600203			1			
613100			1			
613300	1					
613400			1			
613600	1				1	
613700					1	
613800	1		1		2	
613901					1	
613902	1					
614000					2	
614101			2		1	
614102			1			
630101			1		1	
630102	3					
630200			1			
630300	1					
630400			1			
631100	4		1			
631200					1	
631300	1					
631400	1				1	
631600			2		1	
631700	2					
640100					2	
640200	3				2	
640300	1				2	
640400	1	1			1	

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
640500	4			1		
640600	3		1			
640700	2					
640800		1			1	
640901	2			1	2	
641000	1				1	1
641101					2	
641200	1				1	
641300	1		2			1
641400					2	1
641500	1				1	
641600	2					
641700	2					
641800	1					
641900					2	
642000			1		1	
642100	1				1	
642200	3				1	
642400	1					
645101	1					
646101	1					
650101			1			
650102			1		1	
650201			1			
650300	1				1	
650400	3					
650500					2	
650600					3	
650700						2
650800			2		1	1
650900					2	1
651001	1					
651002					1	
651100	1				1	1
651200					1	1
651300					2	
651400	1		2		1	

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
651500			1		3	
651600			3		1	
651700					2	
651800					2	
651900					1	1
652000					2	1
652100					1	
652200	1					
652300					2	
652400					1	1
652500					1	1
652600					1	1
652700					3	1
652800			2			
653101	1					
653301	1					
654100			1			
654200	1					
655200	1		2		1	
655300	1					
985500			1			
Dukes County						
200100	2					
200200	1		1			
200300			1			
200400			1			
Essex County						
202102			1			
203200	1		1			
203301	1					
204101			1		1	
204102			1			
204200	1		2		1	
204300					1	1
204400					1	
204500			1			
204600			2			

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
204701						1
204702					1	
205100	1		3	1		
205200			2	1	1	1
205300			3			
205500			1		1	
205600			1	1	1	
205700			5			
205800			1		1	1
205900			3			
206000					2	
206100					1	1
206200			2		1	
206300			2		2	
206400			2		1	1
206500					1	2
206600			1		3	
206700			2		2	
206800						2
206900					1	2
207000					1	1
207100					1	2
207200			1			1
208102			3			
208200	1		1			
208300			1			
210300	2					
210400	1		1			
210500			1			
210600					2	
210700					3	
210800	1				1	
211100	1					
211300			1			
215101			1			
215102	1					
217100	1					

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
217300	1		2		1	
217400	1				1	
217500	1					
217600	1					
220101	1					
221400	2				1	
221500	2					
221600	1				1	
221700	2					
223100	1					
223200	1					
250100						1
250200					4	
250300						1
250400				1	1	1
250500					1	2
250600				2		2
250700				1		2
250800			1		3	1
250900						2
251000						1
251100				1	1	1
251200						1
251300					2	1
251400			1		2	1
251500			2		3	
251600			2			2
251700			1	2		1
251800			4			
252101			3			
252102			1			
252300			3			1
252400			1		1	1
252501			2		1	
252502			2		1	
252601			2			
252602			2			

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
252603			1			
253100			1			
253202			3			
253204			1			
254402			1			
260100			1		2	
260200			1		1	
260401			1			
260402			1			
260500			1			
260600			2		1	
260700					1	
260800					2	
260900					3	
261000			1			
261102					1	
265101	1					
266300	1					
266400	1					
268300	2					
Nantucket County						
950200			1			
Plymouth County						
502200	1					
503102	1					
510100			3		1	
510200			4			
510300					1	2
510400			1		3	
510501			1		1	
510502			1	1	2	1
510503					2	
510600			3			
510700			3		2	1
510800			4	2		
510900				1	2	
511000			1		1	

Tract	Low Income	Low Income and English Isolation	Minority	Minority and English Isolation	Minority and Low Income	Minority, Low Income, and English Isolation
511100			5			
511200			3		1	1
511301			4		1	
511302			3		1	
511400					4	
511500			2		2	
511600			3	1	2	
511701			4		1	
511702			2			
520201			1			
521102	1					
523202			1			
525203			1			
525300			1			
530100	1					
530200	1					
530500	2					
530600			1			
542300	1					
544200	2					
545100	1					
545200	2		2			
545300	1				1	
545400	1				1	
561100			1			
561200					1	
502200	1					
Total Number of Tracts	**133**	**2**	**196**	**17**	**174**	**58**

Source: MAEEA 2021.

Table B-10. U.S. census tracts with environmental justice populations in Rhode Island, Connecticut, and Virginia

Tract	Low Income	Low Income and Minority	Minority
Rhode Island – Newport County			
040200	1		
Rhode Island – Providence County			
000101		1	
000102		1	
000200		1	
000300		1	
000400		1	
000500		1	
000600		1	
000700		1	
000800	1		
000900	1		
001000		1	
001100	1		
001200		1	
001300		1	
001400		1	
001500			1
001600			1
001700		1	
001800		1	
001900		1	
002000		1	
002101			1
002102			1
002200		1	
002500			1
002600		1	
002700		1	
002800		1	
002900			1
003700	1		

Tract	Low Income	Low Income and Minority	Minority
010800		1	
010900		1	
011000		1	
011100		1	
014100			1
014700			1
015000			1
015100		1	
015200		1	
015300		1	
015400			1
015500			1
016000			1
016100		1	
016300			1
016400		1	
016600			1
016700			1
017100			1
017400		1	
017600		1	
017900	1		
018000	1		
018100	1		
018300	1		
Total Number of Tracts – Rhode Island	**9**	**31**	**16**
Connecticut – New London County			
690300		1	
690400		1	
690500		1	
690700		1	
690800		1	
696100	1		
696400	1		

Tract	Low Income	Low Income and Minority	Minority
696700		1	
696800		1	
697000		1	
702500	1		
702800	1		
709200	1		
870200	1		
870300	1		
Total Number of Tracts – Connecticut	**7**	**8**	**0**
Virginia – Newport news			
030100		1	
030300		1	
030400		1	
030500		1	
030600		1	
030800		1	
030900		1	
031100		1	
031200		1	
031300		1	
031400		1	
031601			1
031701	1		
031902			1
032006		1	
032007			1
032113		1	
032114		1	
032117		1	
032123			1
032124		1	
032126		1	
032127		1	
032128		1	
032129		1	

Tract	Low Income	Low Income and Minority	Minority
032130			1
032131			1
032132			1
032211			1
032212		1	
032223			1
032224		1	
032225		1	
032226		1	
032300		1	
032400		1	
Virginia – Portsmouth			
210200	1		
210300	1		
210500		1	
210600			1
210900		1	
211100		1	
211400		1	
211500		1	
211600	1		
211700		1	
211800		1	
211900		1	
212000		1	
212100		1	
212300		1	
212400		1	
212500		1	
212600		1	
212701			1
212702			1
212801		1	
213001			1
213101		1	

Tract	Low Income	Low Income and Minority	Minority
213103			1
213104			1
213200		1	
980100			1
Total Number of Tracts – Virginia	**4**	**43**	**16**

Source: USEPA 2022.

B.6 Water Quality

The following figures (Figures B-2 through B-6) show the potential HVDC convertor station location and the plan views of the excess temperatures from Scenarios 1 through 4 for that station location from Mayflower Wind's National Pollutant Discharge Elimination System permit application (TetraTech and Normandeau Associates, Inc. 2022).

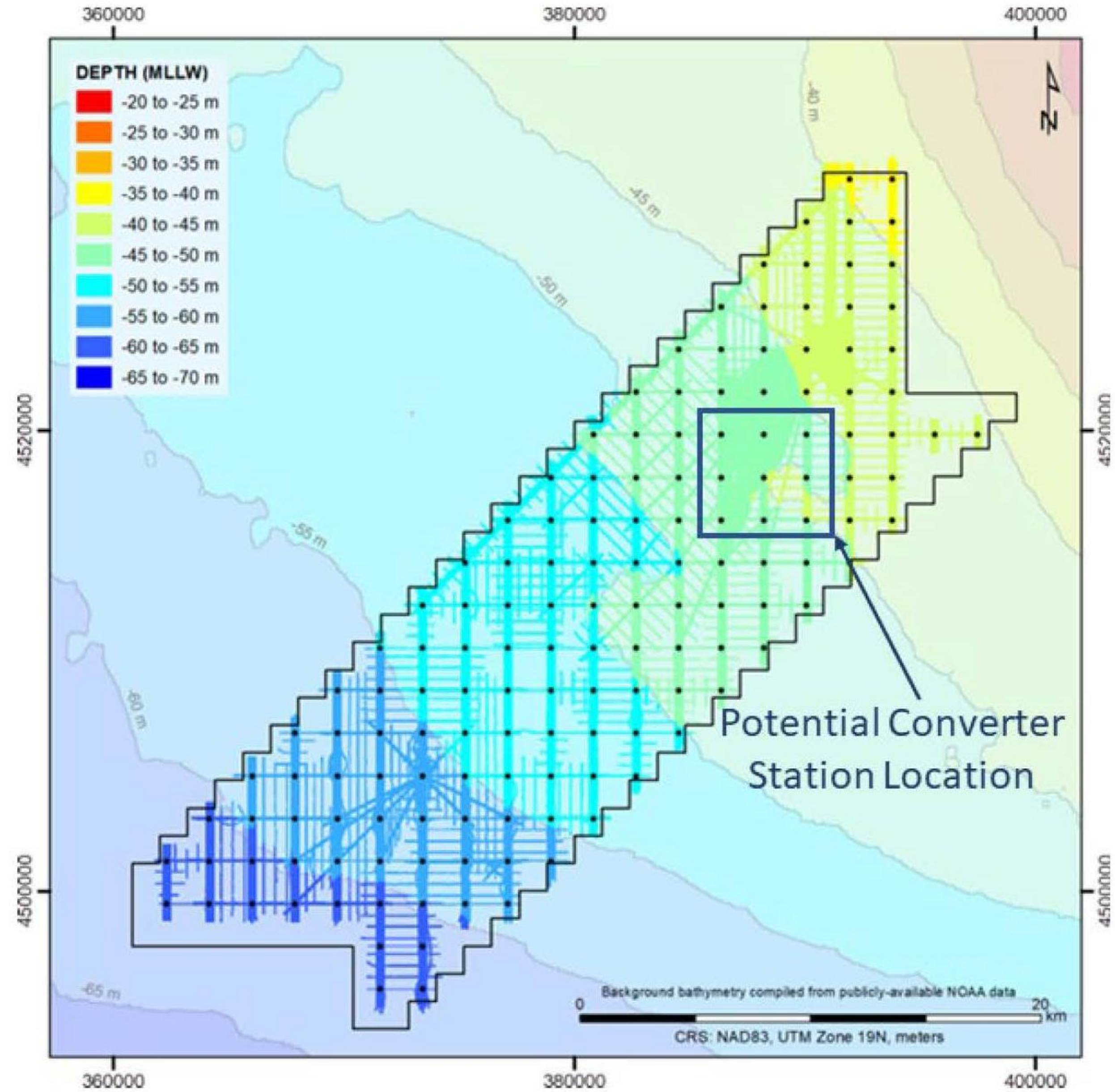


Figure B-2. Approximate Location of the Offshore Substation Platform with Converter Station, within the Lease Area (at one of the existing positions, shown as black dots)

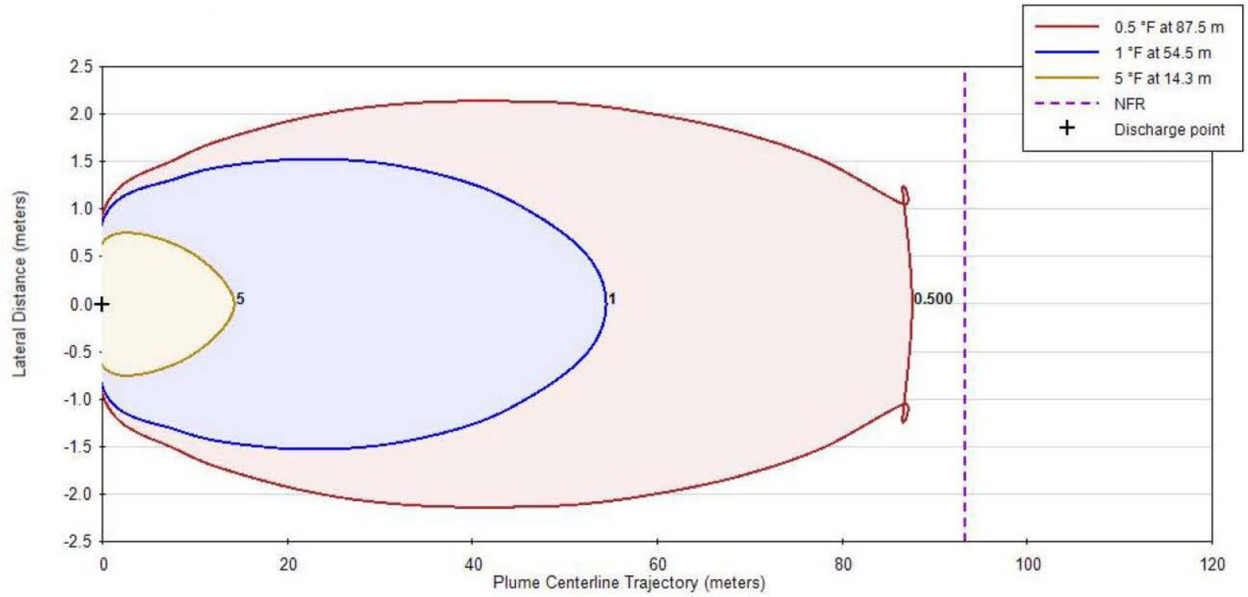


Figure B-3. Zone of Dilution for Scenario I, Winter Max. Current Speed (temperatures shown as ΔT)

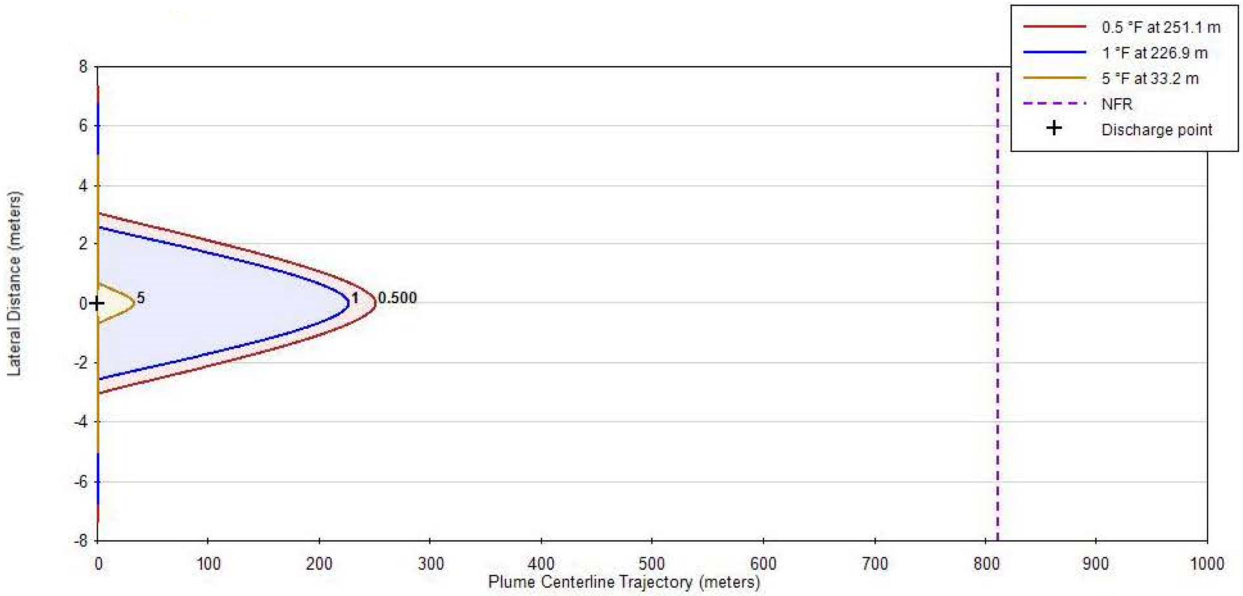


Figure B-4. Zone of Dilution for Scenario 2, Winter Min. Current Speed (temperatures shown as ΔT)

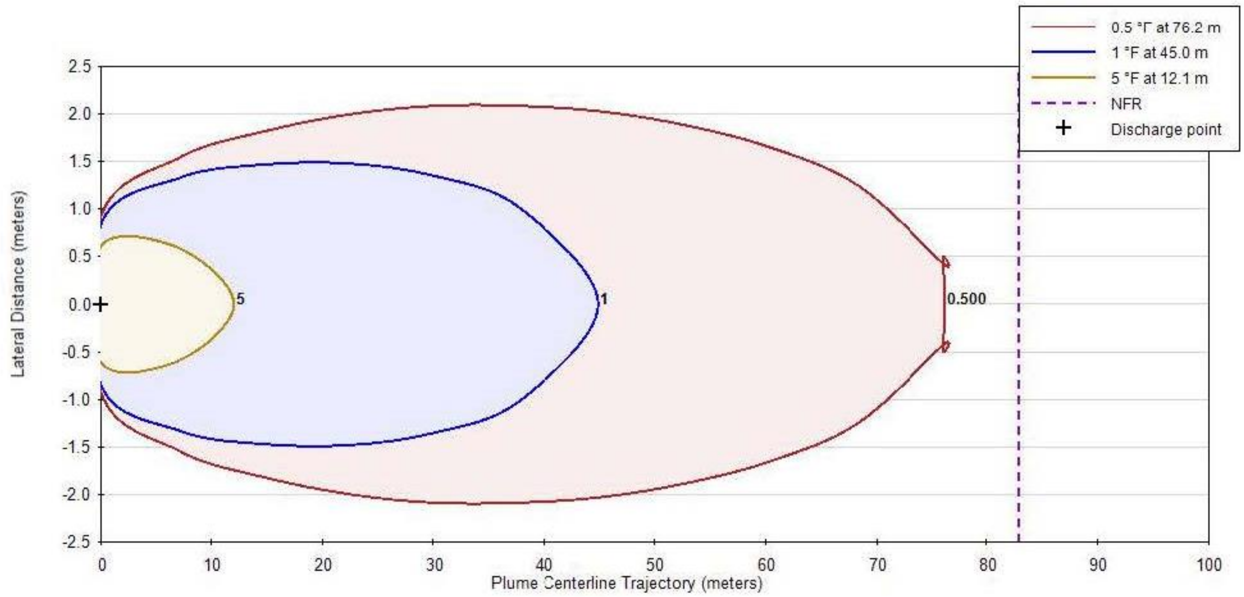


Figure B-5. Zone of Dilution for Scenario 3, Summer Max. Current Speed (temperatures shown as ΔT)

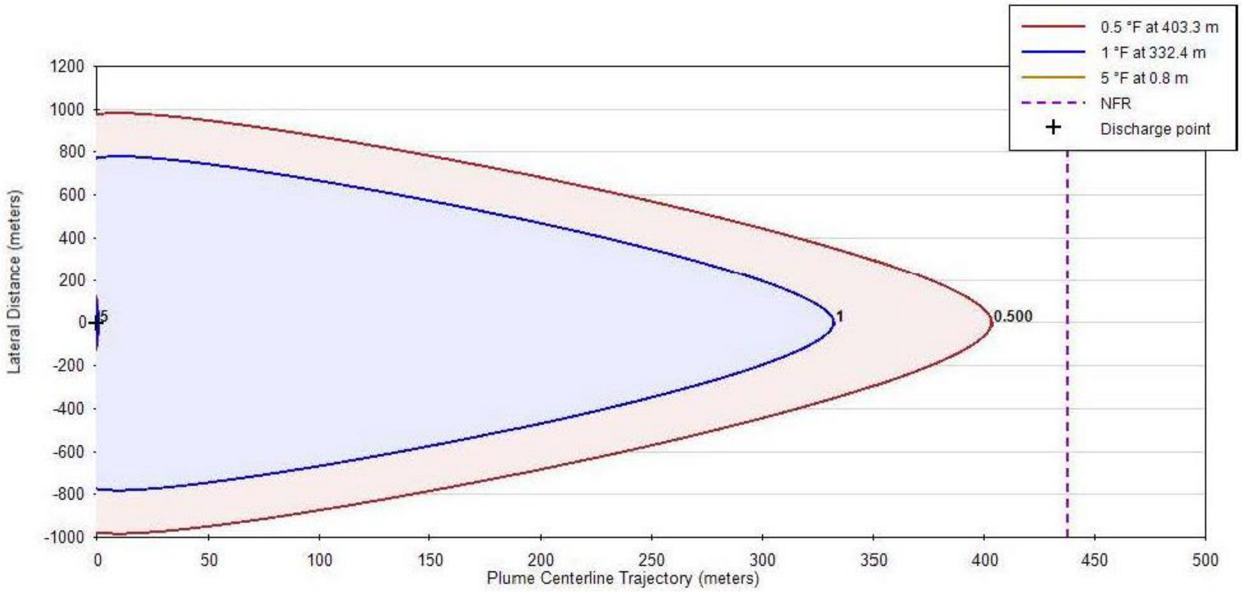
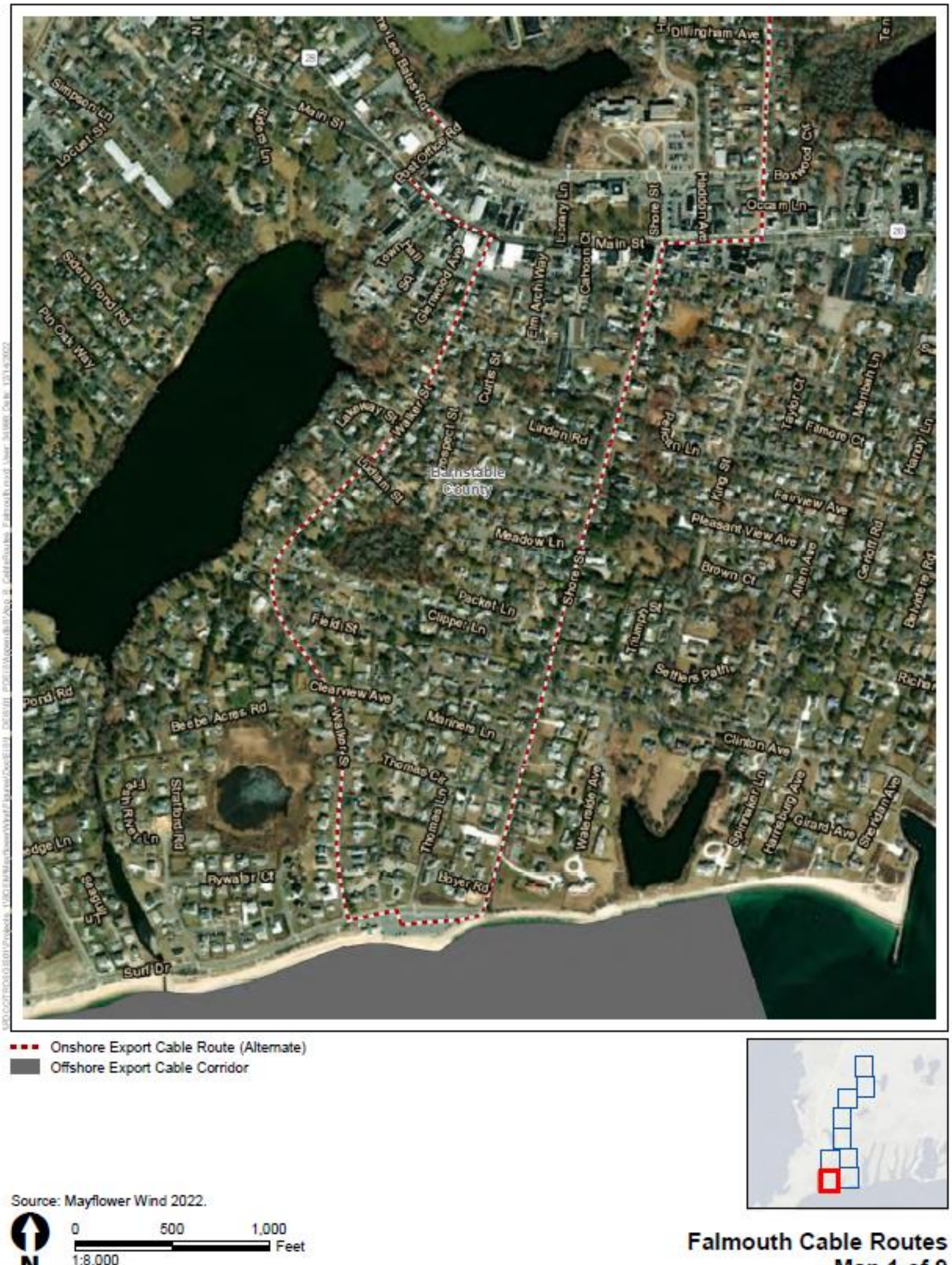


Figure B-6. Zone of Dilution for Scenario 4, Summer Min. Current Speed (temperatures shown as ΔT)

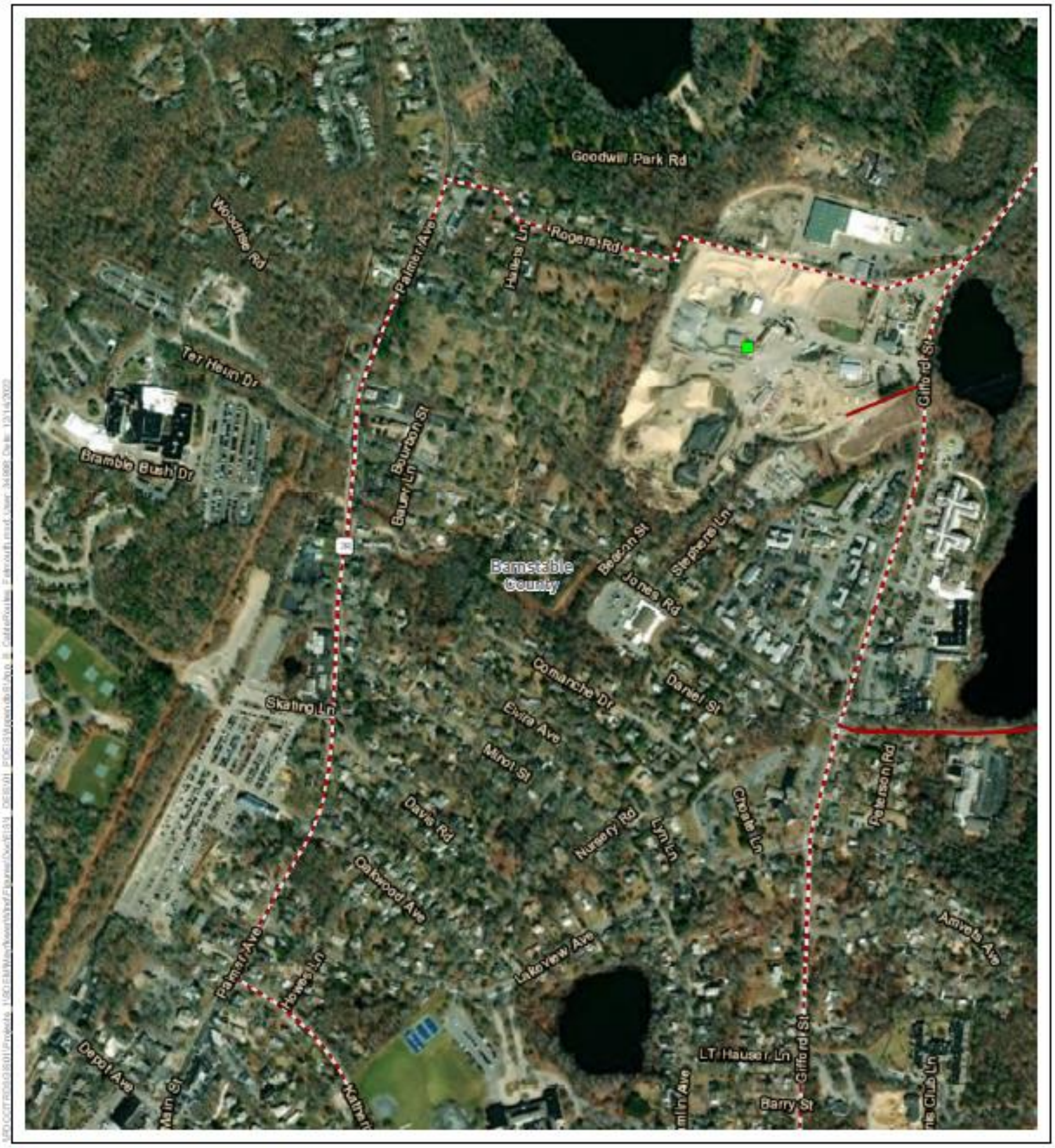
B.7 Onshore Cable Route Maps

This section contains detailed maps of the onshore cable routes analyzed in this EIS, as described in Chapter 2, *Alternatives*.

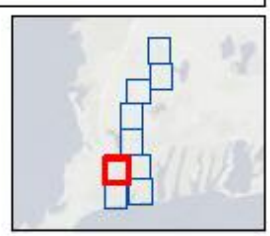
B.7.1 Proposed Action - Falmouth Onshore Cable Routes



Falmouth Cable Routes
Map 1 of 9



Falmouth Preferred Onshore Substation
Onshore Export Cable Route (Preferred)
Onshore Export Cable Route (Alternate)
Offshore Export Cable Corridor



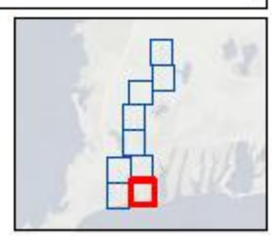
Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Falmouth Cable Routes
Map 2 of 9



Onshore Export Cable Route (Preferred)

Onshore Export Cable Route (Alternate)

Offshore Export Cable Corridor

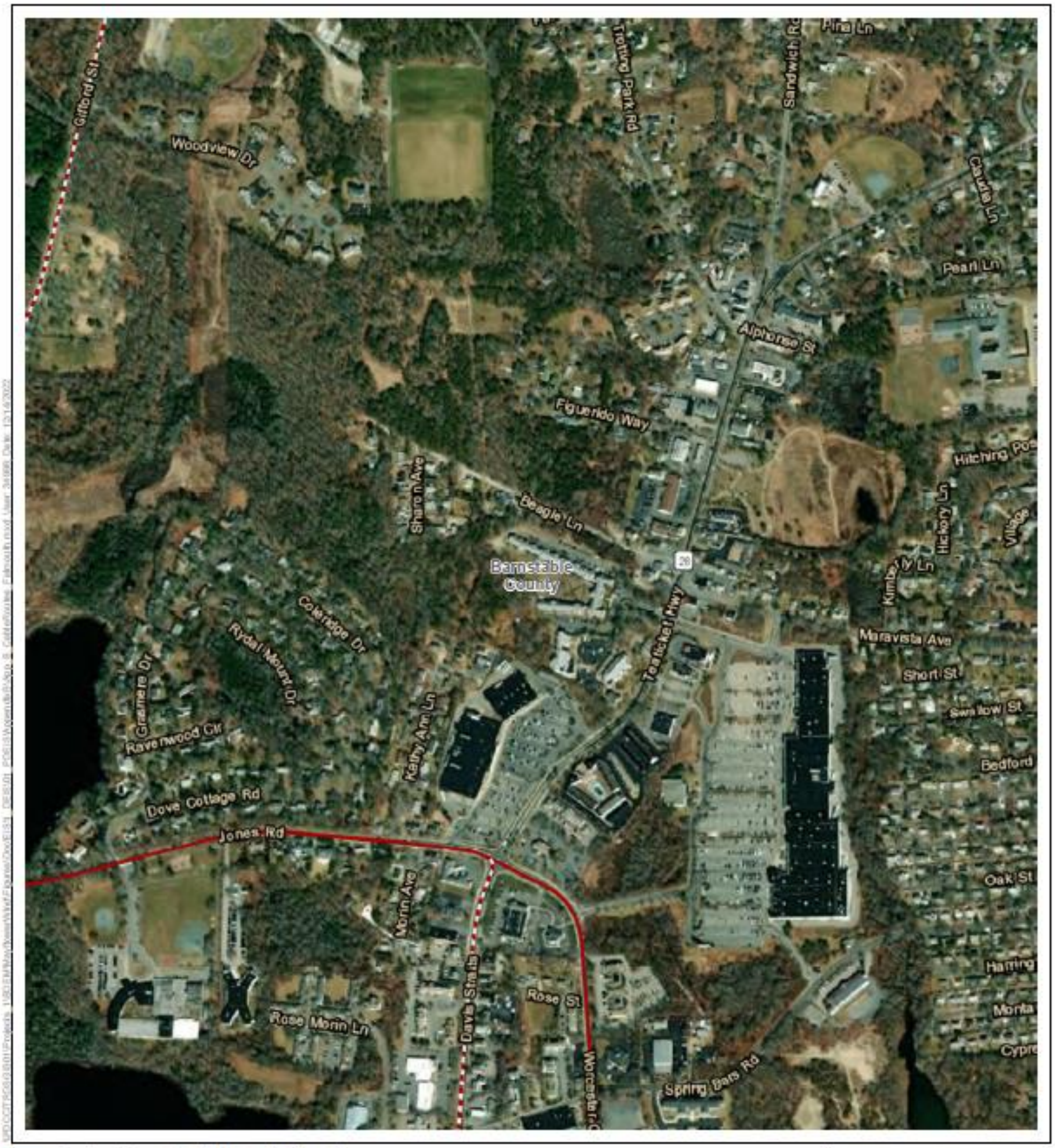
Source: Mayflower Wind 2022.

N

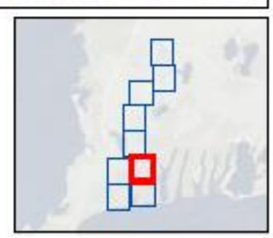
0 500 1,000 Feet

1:8,000

Falmouth Cable Routes
Map 3 of 9



Onshore Export Cable Route (Preferred)
Onshore Export Cable Route (Alternate)
Offshore Export Cable Corridor



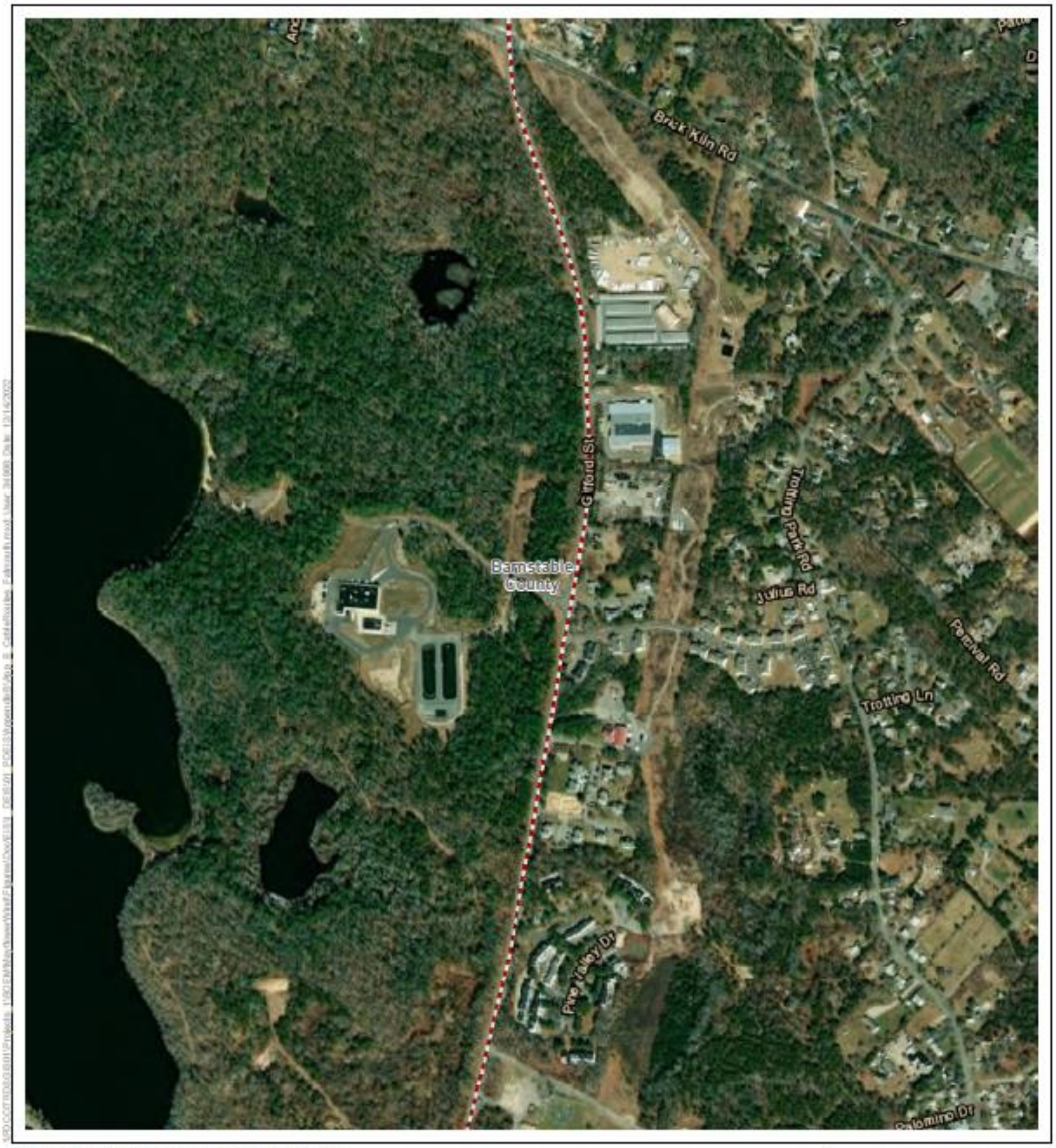
Source: Mayflower Wind 2022.

N

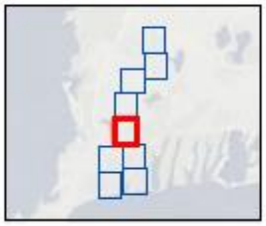
0 500 1,000 Feet

1:8,000

Falmouth Cable Routes
Map 4 of 9



Onshore Export Cable Route (Alternate)
Offshore Export Cable Corridor



Source: Mayflower Wind 2022.

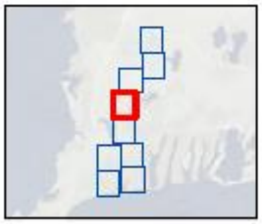
N
0 500 1,000 Feet
1:8,000

Falmouth Cable Routes
Map 5 of 9

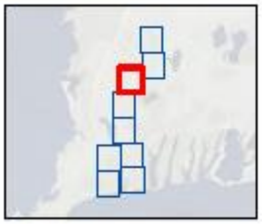
Onshore Export Cable Route (Alternate)
Offshore Export Cable Corridor

Source: Mayflower Wind 2022.

0 500 1,000 Feet
1:8,000



Falmouth Cable Routes
Map 6 of 9

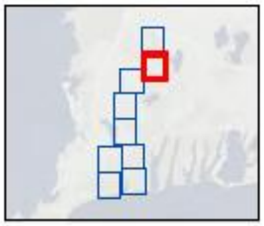


Onshore Export Cable Route (Alternate)
Offshore Export Cable Corridor

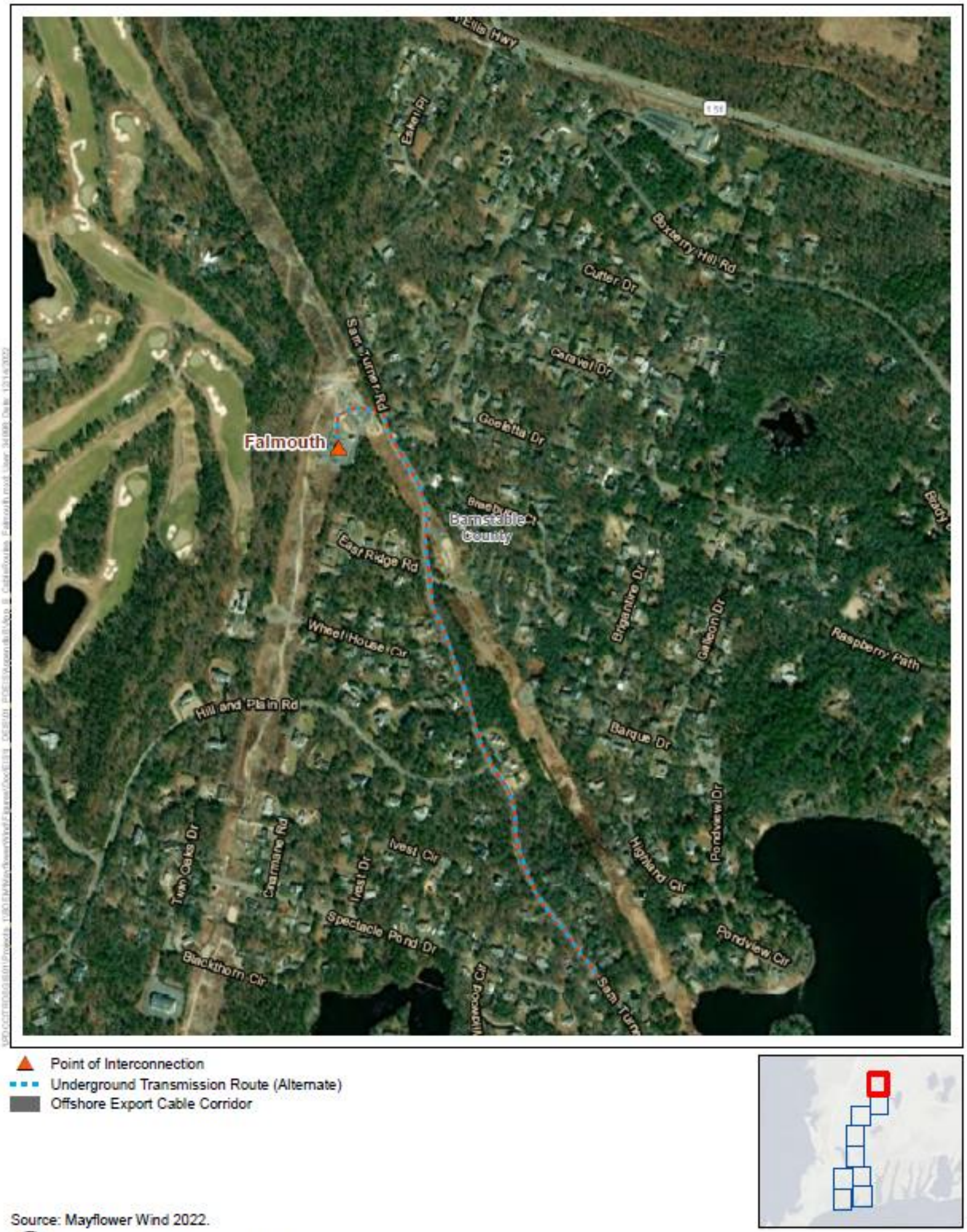
Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

Falmouth Cable Routes
Map 7 of 9



Falmouth Cable Routes
Map 8 of 9



Source: Mayflower Wind 2022.

N

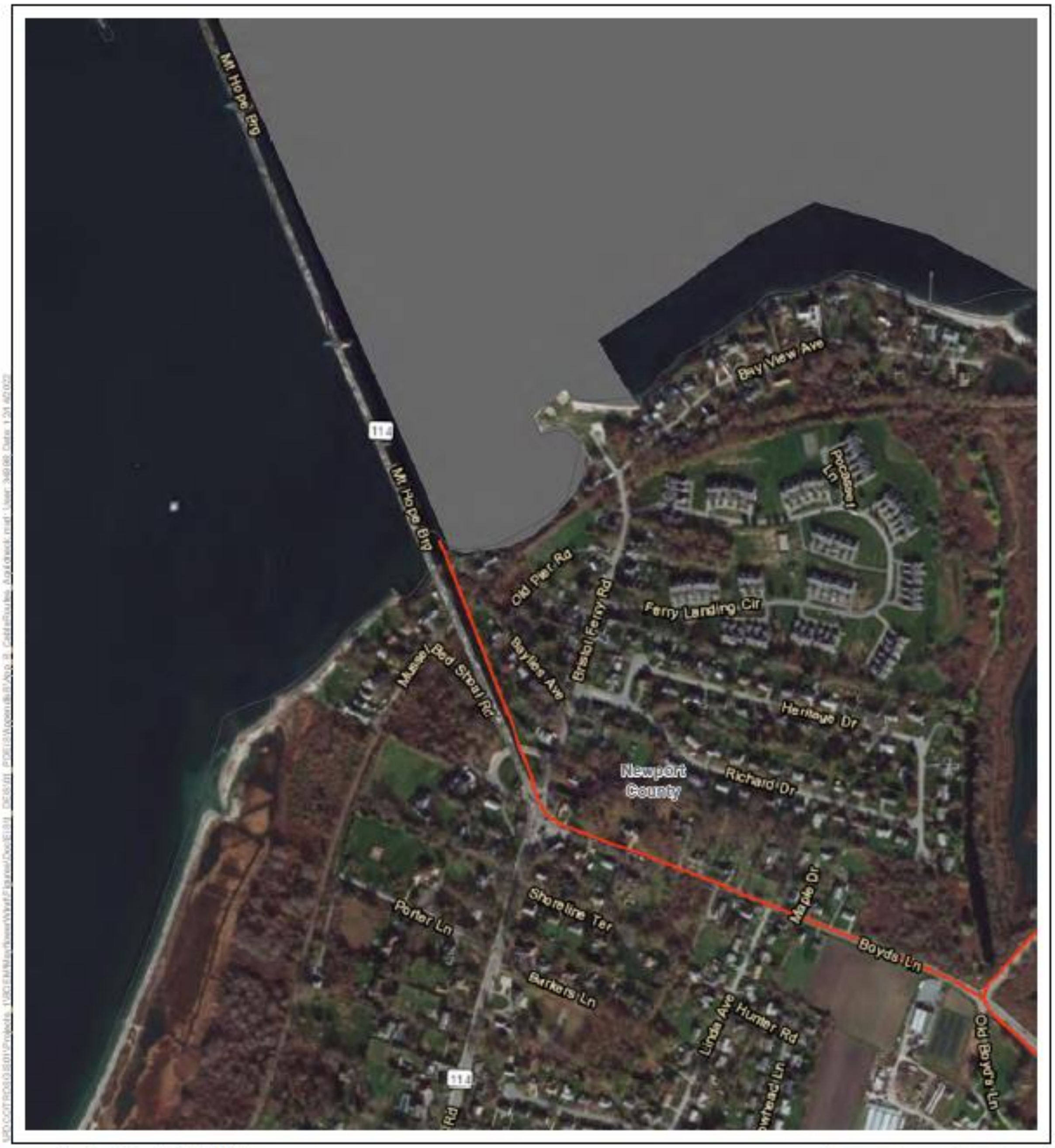
0 500 1,000 Feet

1:8,000

Falmouth Cable Routes
Map 9 of 9

B.7.2 Proposed Action - Brayton Point Onshore Cable Routes

B.7.3 Proposed Action - Aquidneck Island Cable Routes



Onshore Export Cable Route

Offshore Export Cable Corridor

Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Aquidneck Island Cable Routes
Map 2 of 3

— Onshore Export Cable Route
■ Offshore Export Cable Corridor

Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

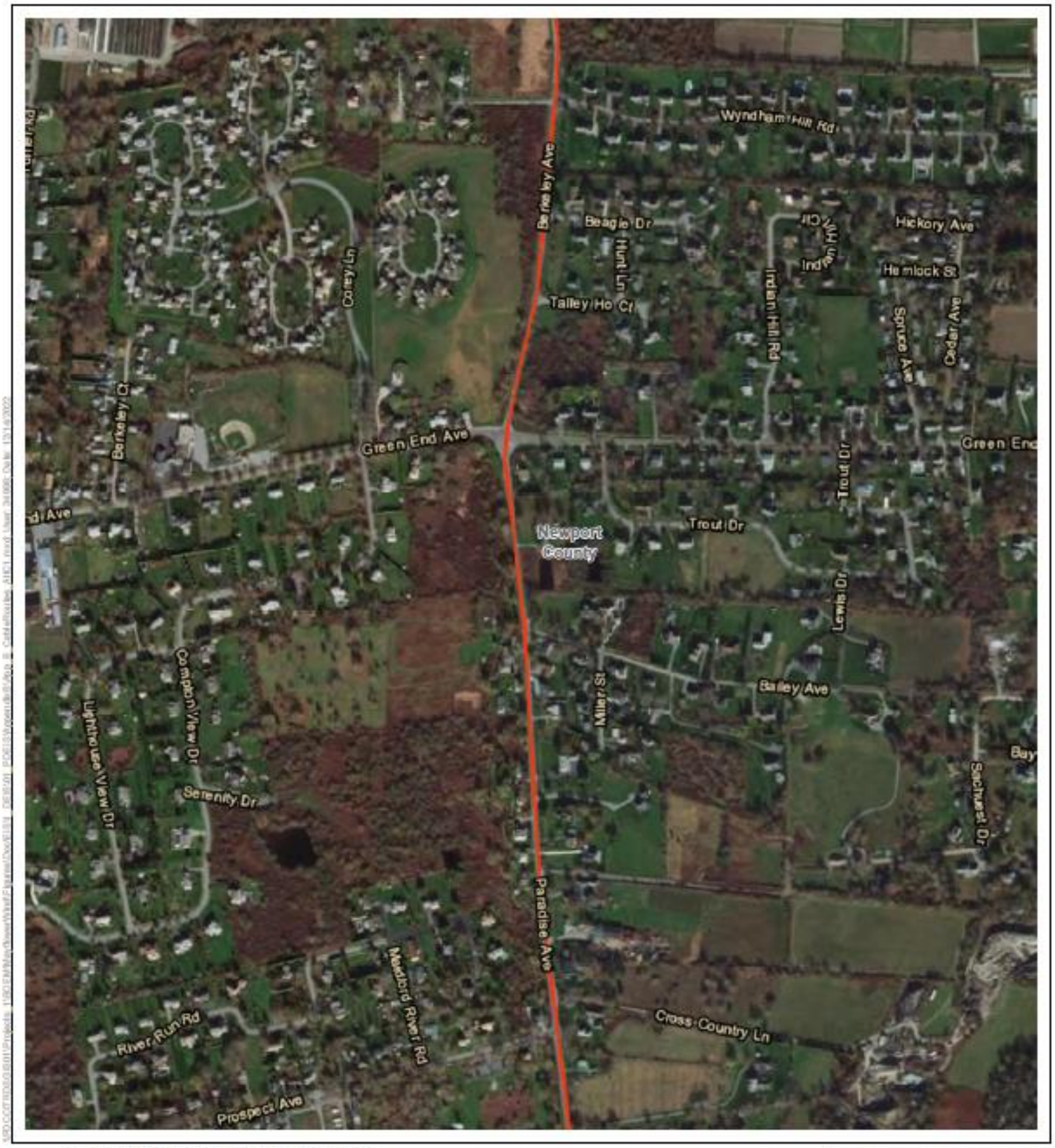
Aquidneck Island Cable Routes
Map 3 of 3

B.7.4 Alternative C-1 Onshore Cable Routes (Aquidneck Island)

Source: Mayflower Wind 2022.

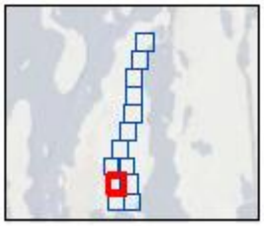
N 0 500 1,000 Feet 1:8,000

Alternative C-1 Onshore Export Cable Route
Map 1 of 13



Alternative C-1 - Onshore Export Cable Route

Offshore Export Cable Corridor



Source: Mayflower Wind 2022.

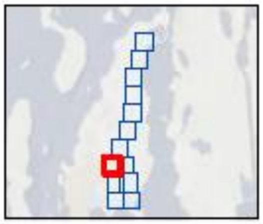
N

0 500 1,000 Feet

1:8,000

Alternative C-1 Onshore Export Cable Route
Map 2 of 13

Alternative C-1 - Onshore Export Cable Route
Offshore Export Cable Corridor

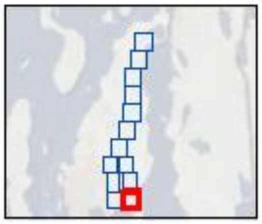


Source: Mayflower Wind 2022.

N
0 500 1,000 Feet
1:8,000

Alternative C-1 Onshore Export Cable Route
Map 3 of 13

Alternative C-1 - Onshore Export Cable Route
Offshore Export Cable Corridor

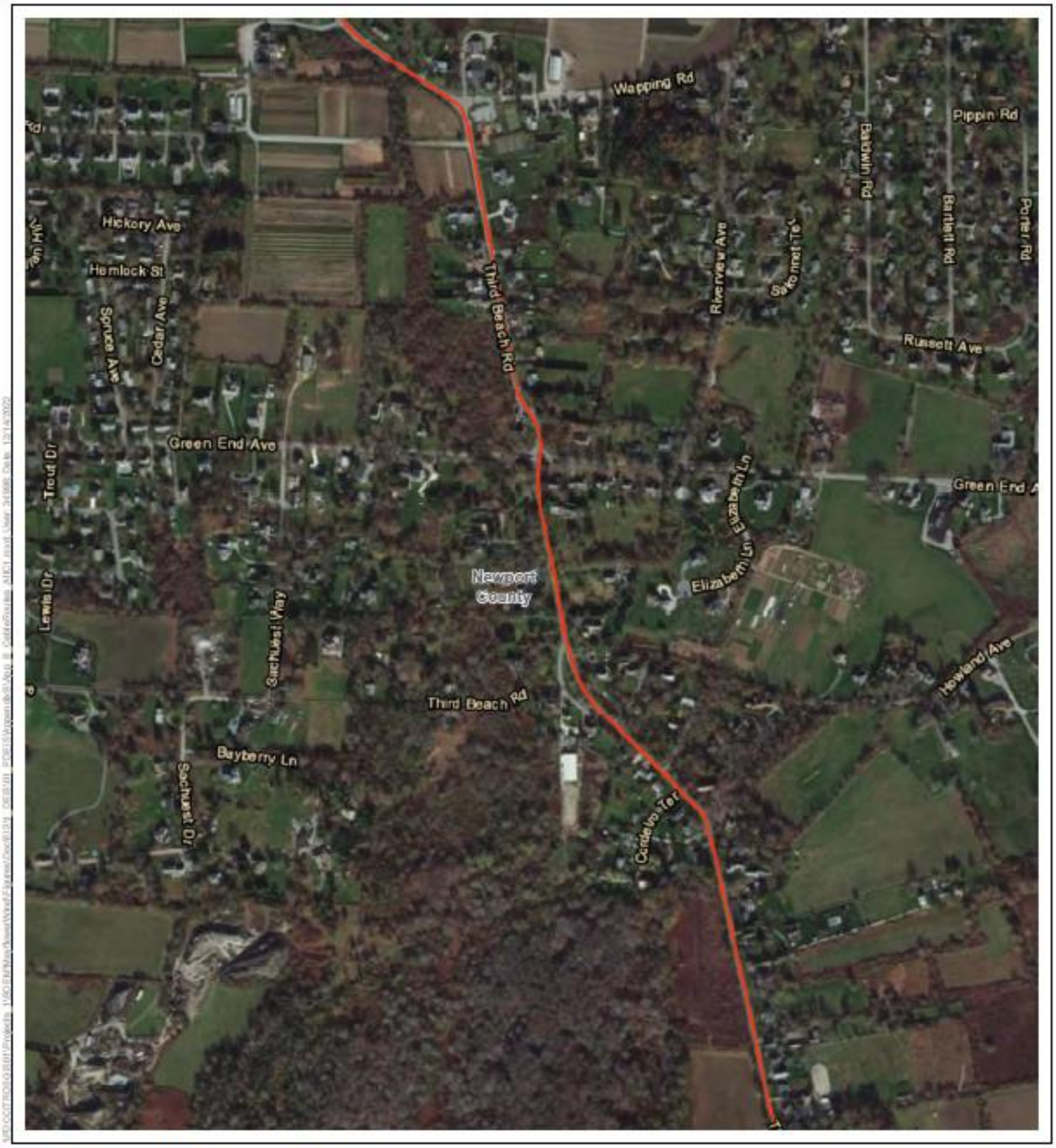


Source: Mayflower Wind 2022.

N

0 500 1,000 Feet
1:8,000

Alternative C-1 Onshore Export Cable Route
Map 4 of 13



Alternative C-1 - Onshore Export Cable Route

Offshore Export Cable Corridor

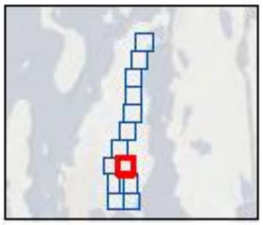
Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Alternative C-1 Onshore Export Cable Route
Map 5 of 13



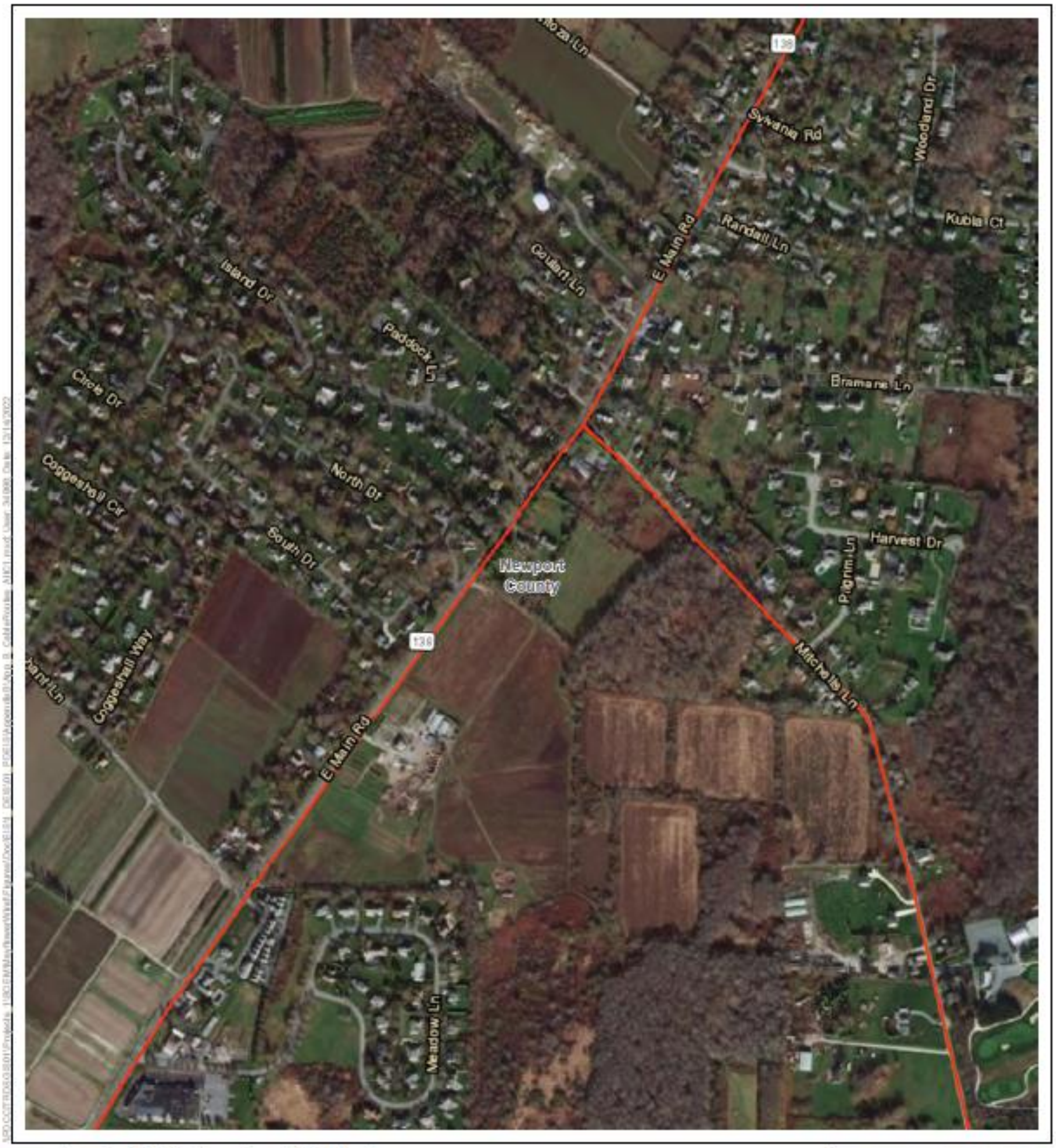
Alternative C-1 - Onshore Export Cable Route
Offshore Export Cable Corridor

Source: Mayflower Wind 2022.

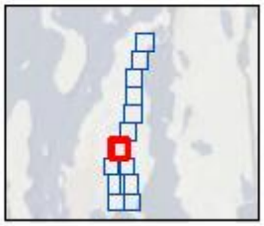
N

0 500 1,000 Feet
1:8,000

Alternative C-1 Onshore Export Cable Route
Map 6 of 13



Alternative C-1 - Onshore Export Cable Route
Offshore Export Cable Corridor



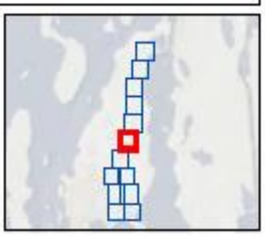
Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

Alternative C-1 Onshore Export Cable Route
Map 7 of 13

Alternative C-1 - Onshore Export Cable Route

Offshore Export Cable Corridor



Source: Mayflower Wind 2022.

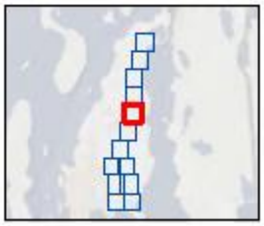
N

0 500 1,000 Feet

1:8,000

Alternative C-1 Onshore Export Cable Route
Map 8 of 13

Alternative C-1 - Onshore Export Cable Route
Offshore Export Cable Corridor



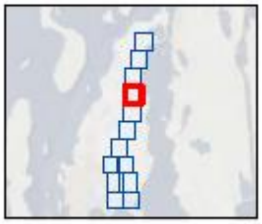
Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

Alternative C-1 Onshore Export Cable Route
Map 9 of 13

— Alternative C-1 - Onshore Export Cable Route

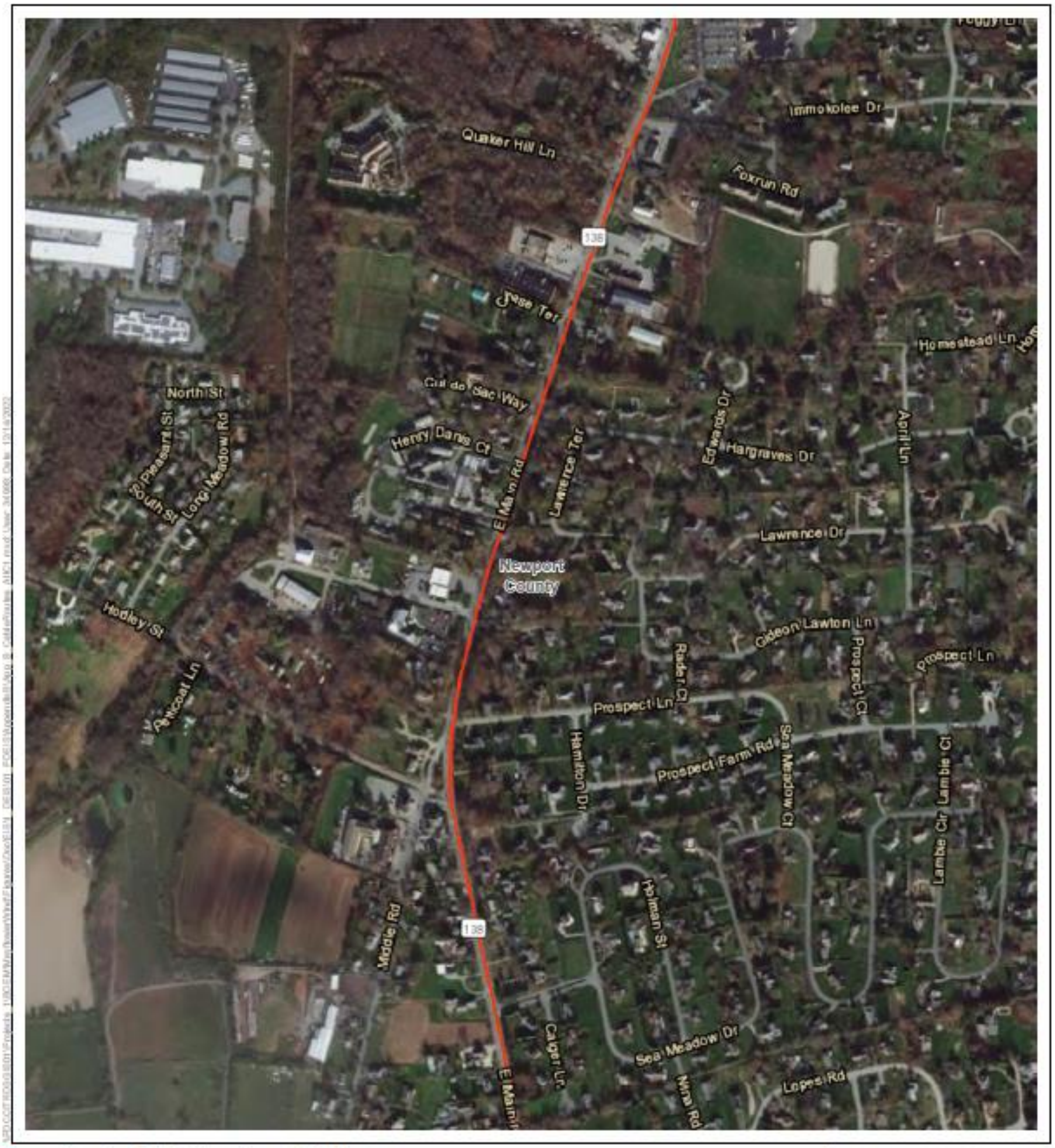
Offshore Export Cable Corridor



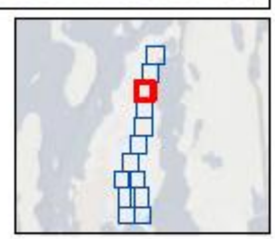
Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

Alternative C-1 Onshore Export Cable Route
Map 10 of 13



Alternative C-1 - Onshore Export Cable Route
Offshore Export Cable Corridor



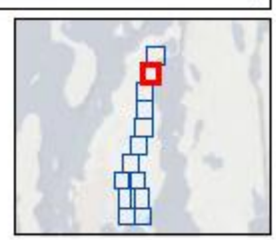
Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

Alternative C-1 Onshore Export Cable Route
Map 11 of 13

Alternative C-1 - Onshore Export Cable Route

Offshore Export Cable Corridor



Source: Mayflower Wind 2022.

N

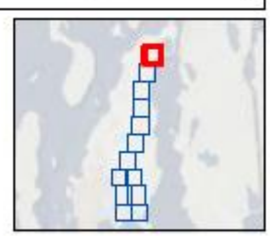
0 500 1,000 Feet

1:8,000

Alternative C-1 Onshore Export Cable Route
Map 12 of 13

Alternative C-1 - Onshore Export Cable Route

Offshore Export Cable Corridor



Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

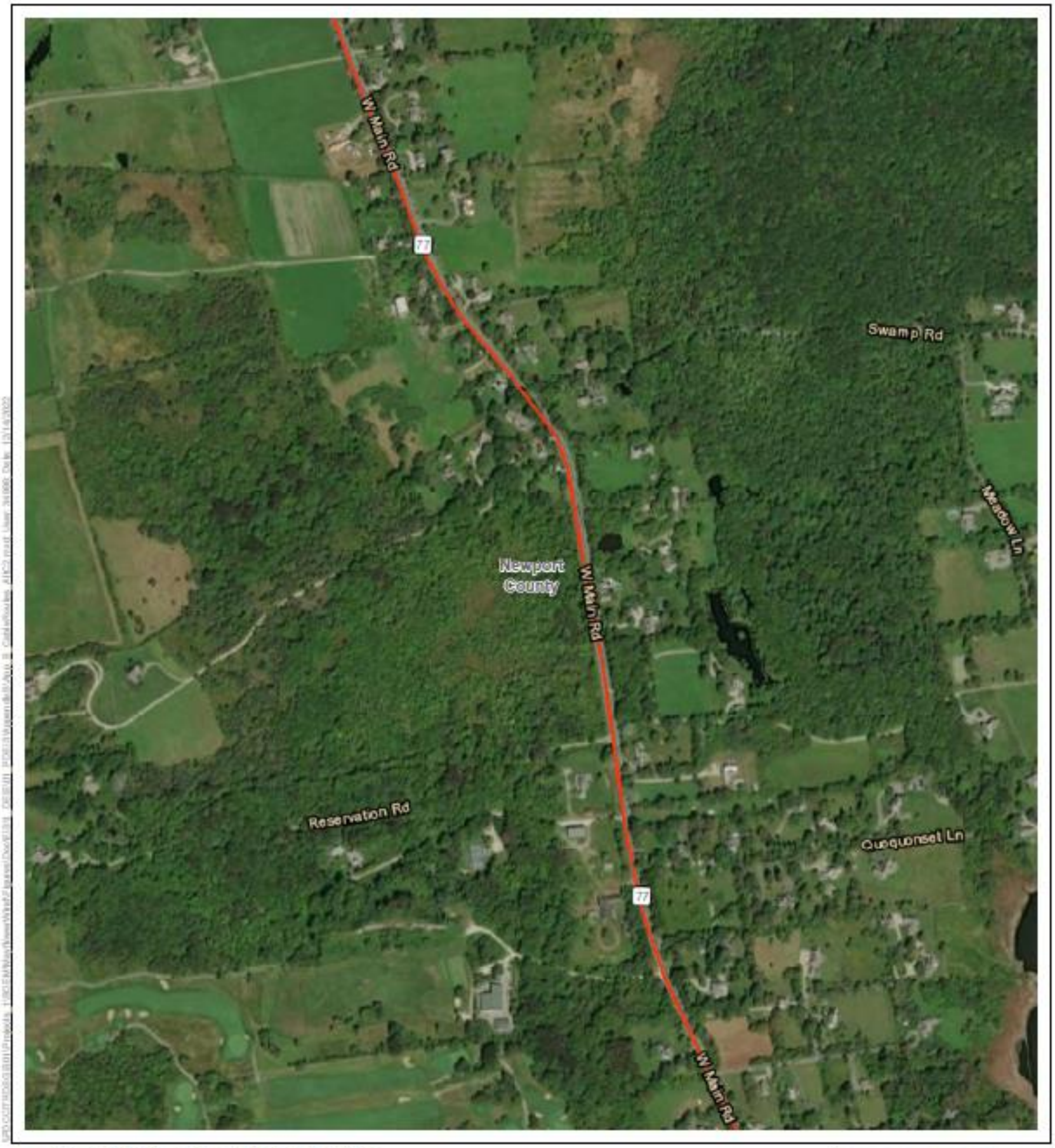
Alternative C-1 Onshore Export Cable Route
Map 13 of 13

B.7.5 Alternative C-2 Onshore Cable Routes (Little Compton and Tiverton, Rhode Island)

Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

Alternative C-2 Cable Route
Map 2 of 15

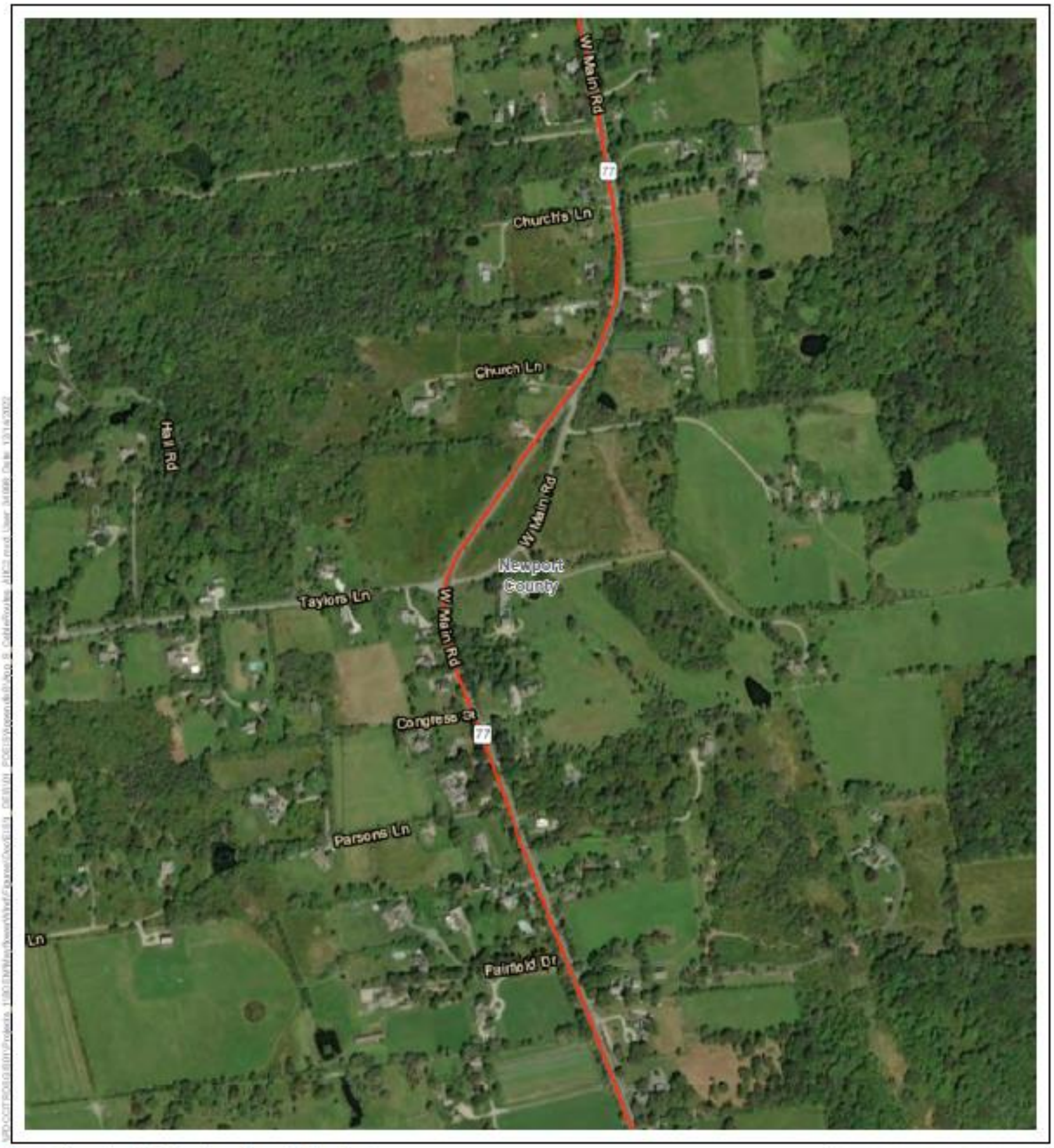


Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

Alternative C-2 Cable Route
Map 3 of 15



Alternative C-2 - Onshore Export Cable Route

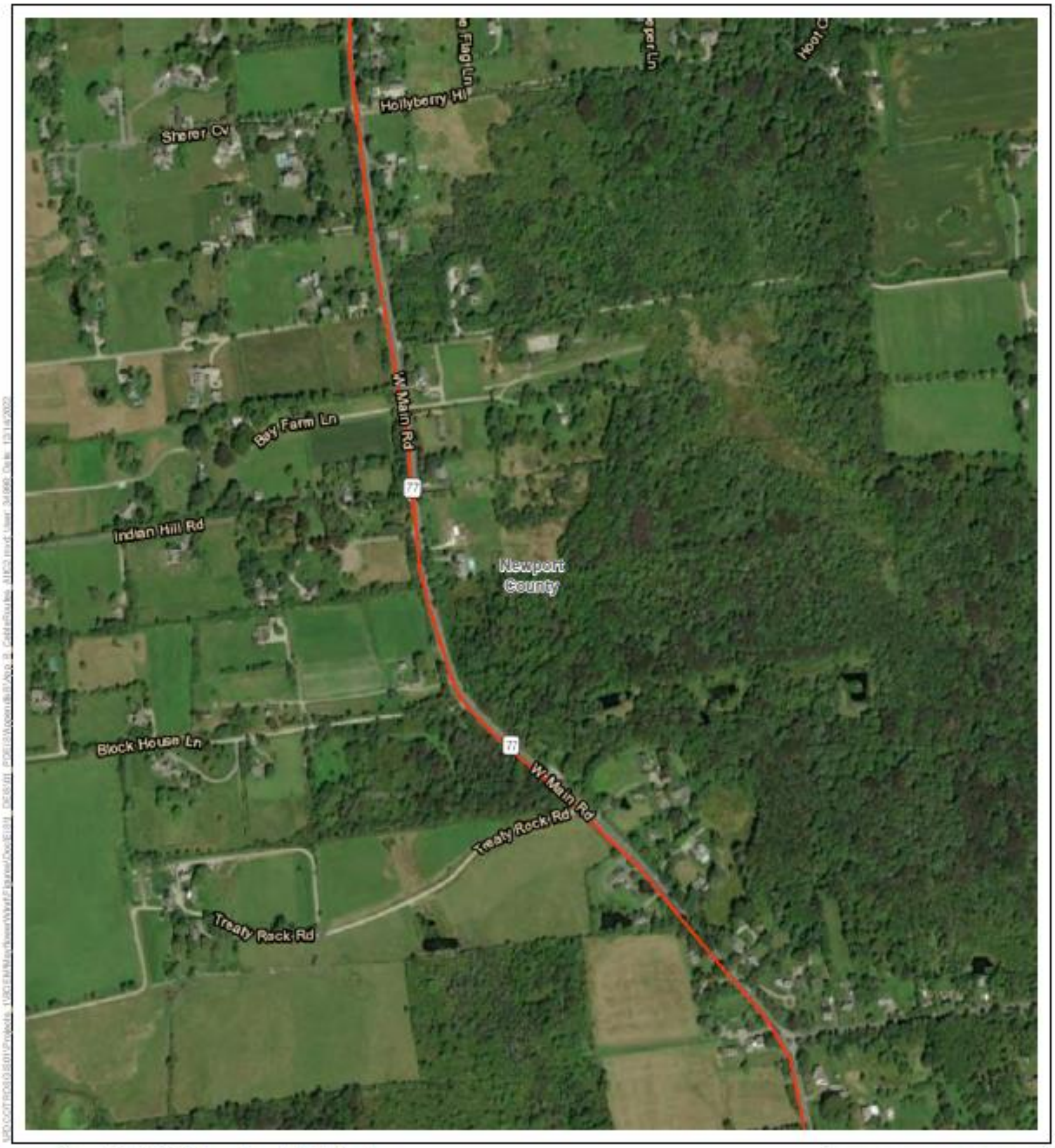
Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Alternative C-2 Cable Route
Map 4 of 15



Alternative C-2 - Onshore Export Cable Route

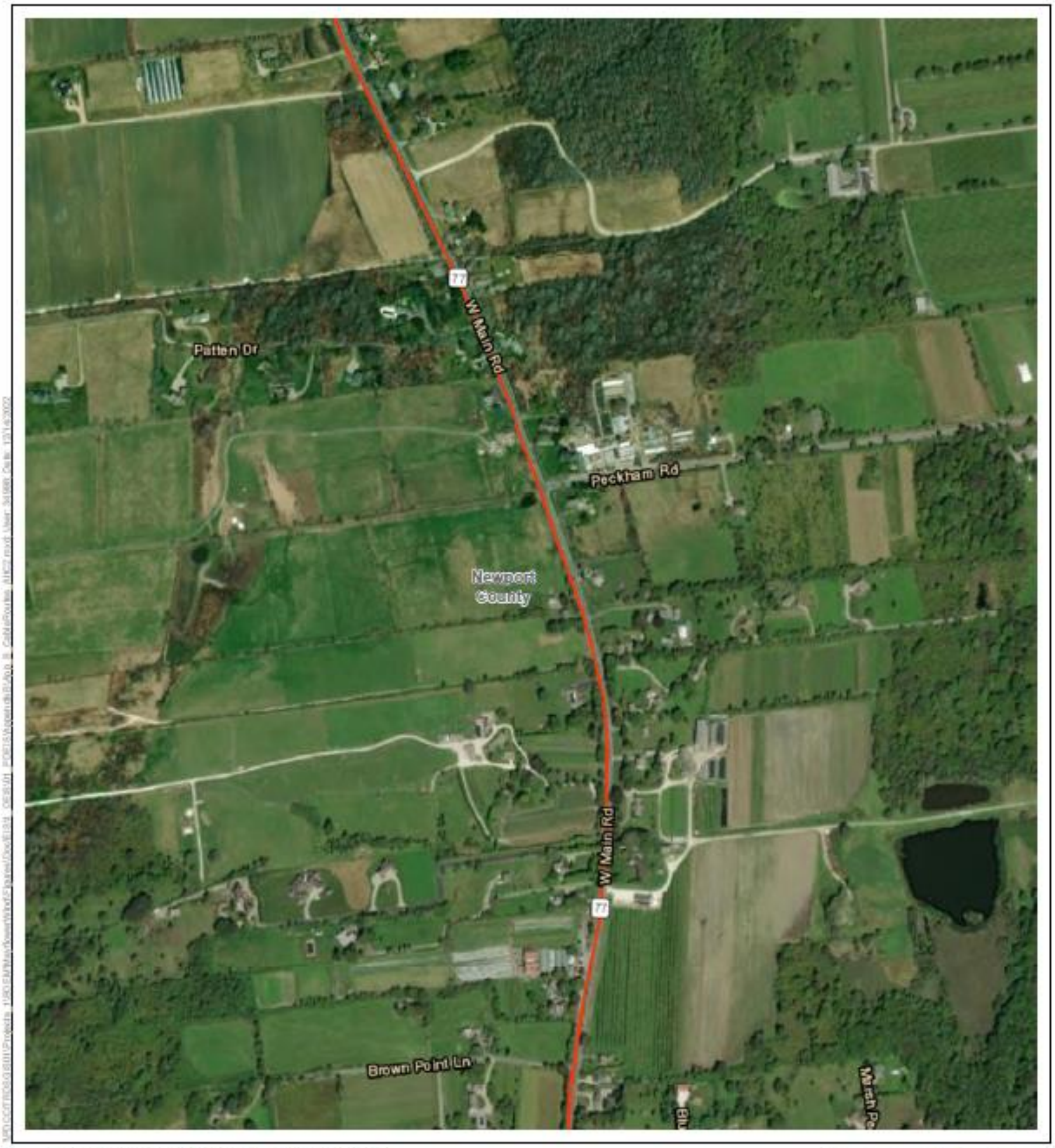
Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Alternative C-2 Cable Route
Map 5 of 15



Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

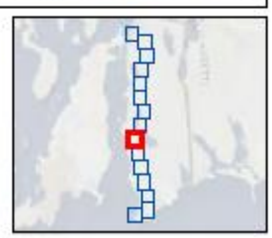
N

0 500 1,000 Feet

1:8,000

Alternative C-2 Cable Route
Map 6 of 15

Alternative C-2 - Onshore Export Cable Route



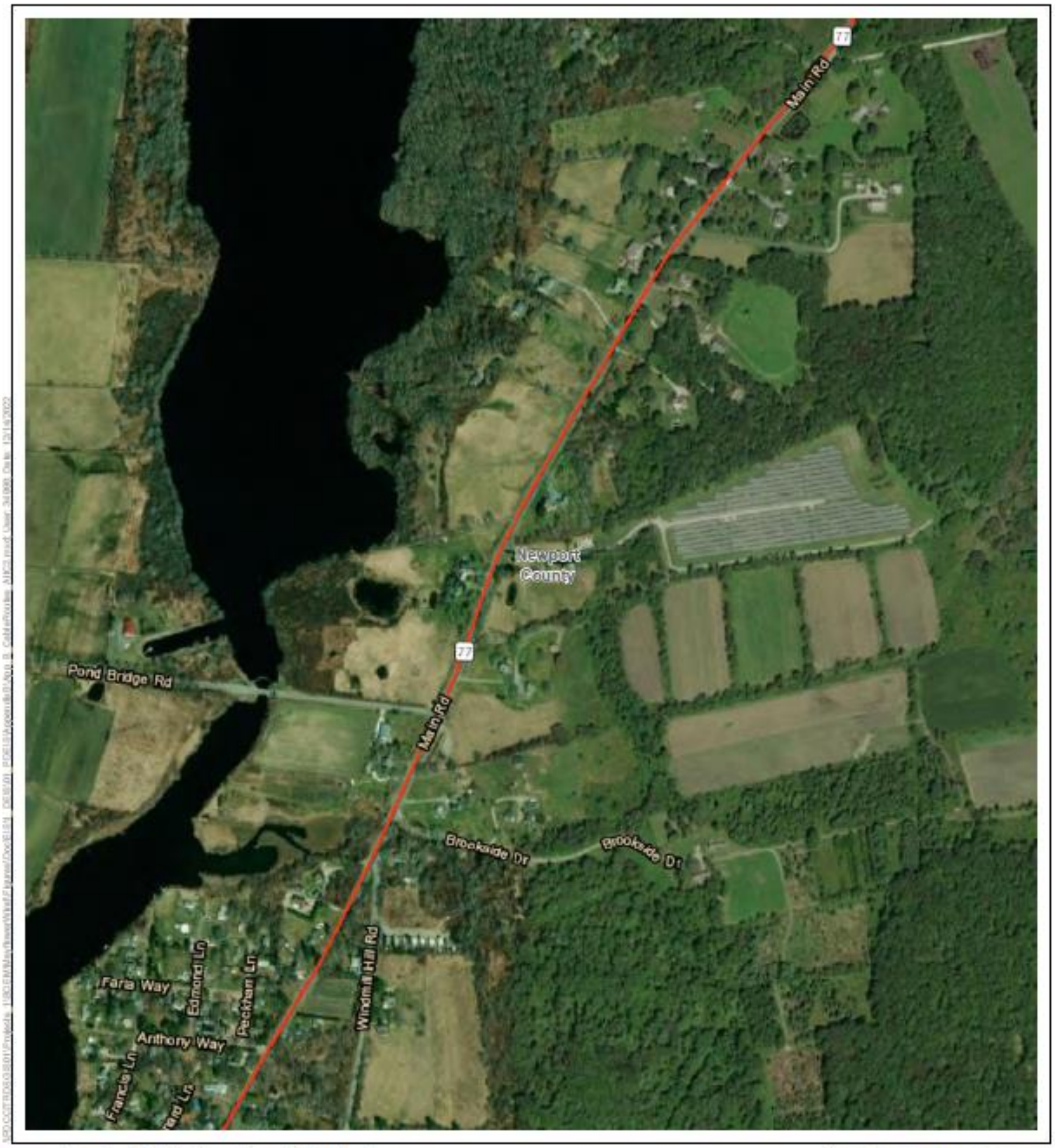
Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Alternative C-2 Cable Route
Map 7 of 15



Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Alternative C-2 Cable Route
Map 8 of 15

Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

0 500 1,000 Feet
1:8,000

Alternative C-2 Cable Route
Map 9 of 15

Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

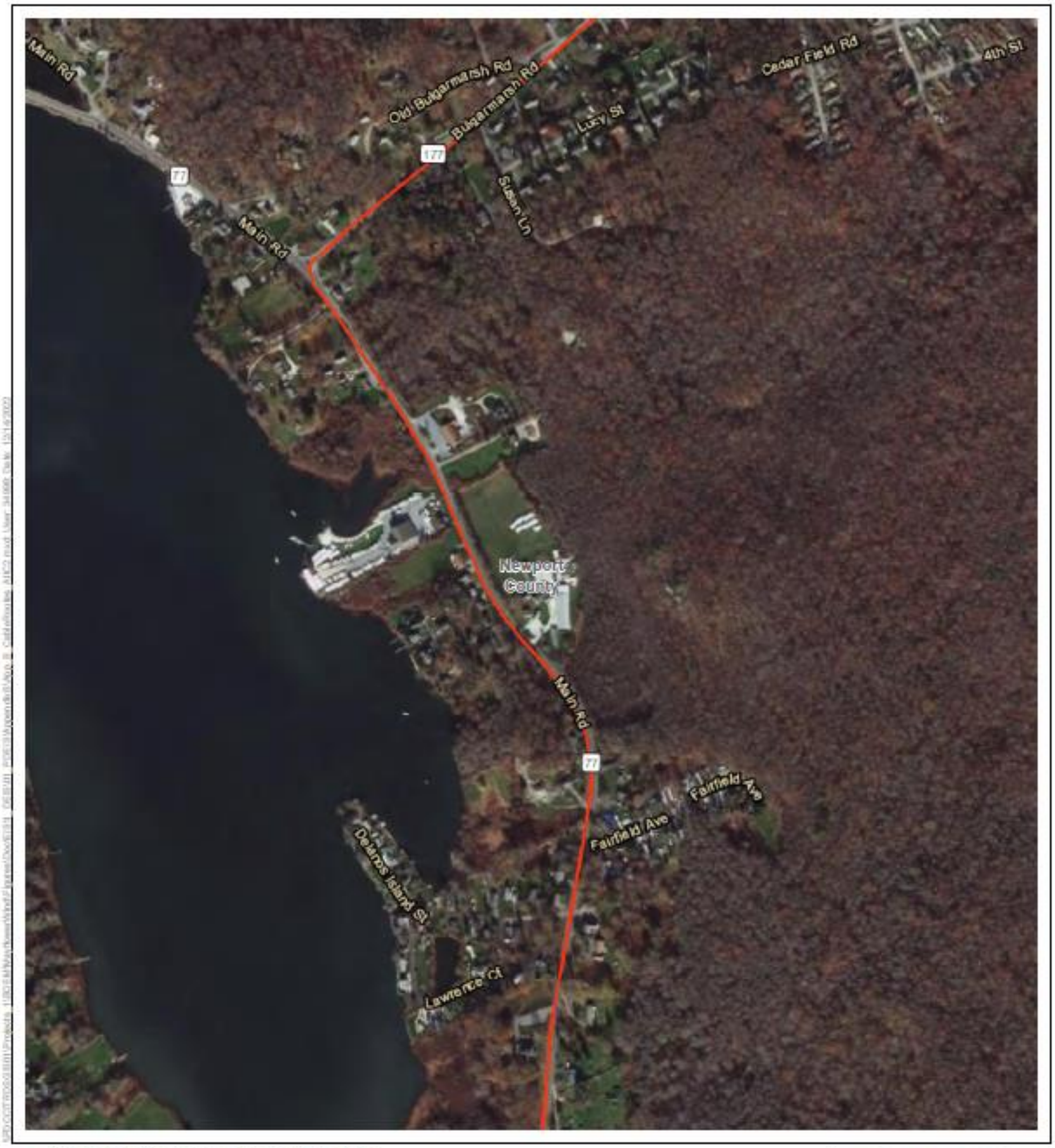
Alternative C-2 Cable Route
Map 10 of 15

Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

N 0 500 1,000 Feet
1:8,000

Alternative C-2 Cable Route
Map 11 of 15



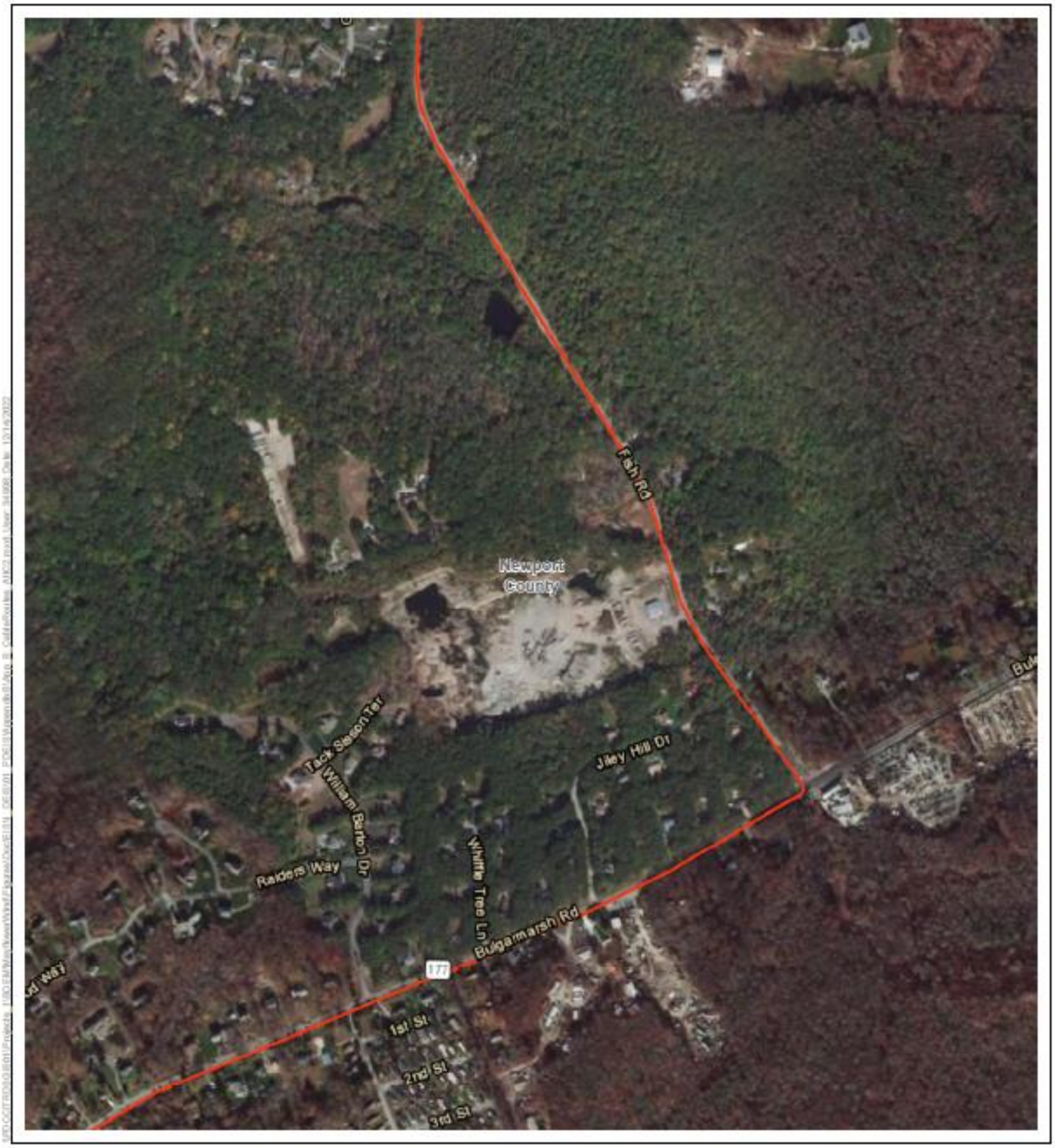
Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

N

0 500 1,000 Feet
1:8,000

Alternative C-2 Cable Route
Map 12 of 15



Alternative C-2 - Onshore Export Cable Route

Source: Mayflower Wind 2022.

N 0 500 1,000 Feet 1:8,000

Alternative C-2 Cable Route
Map 13 of 15

Alternative C-2 - Onshore Export Cable Route

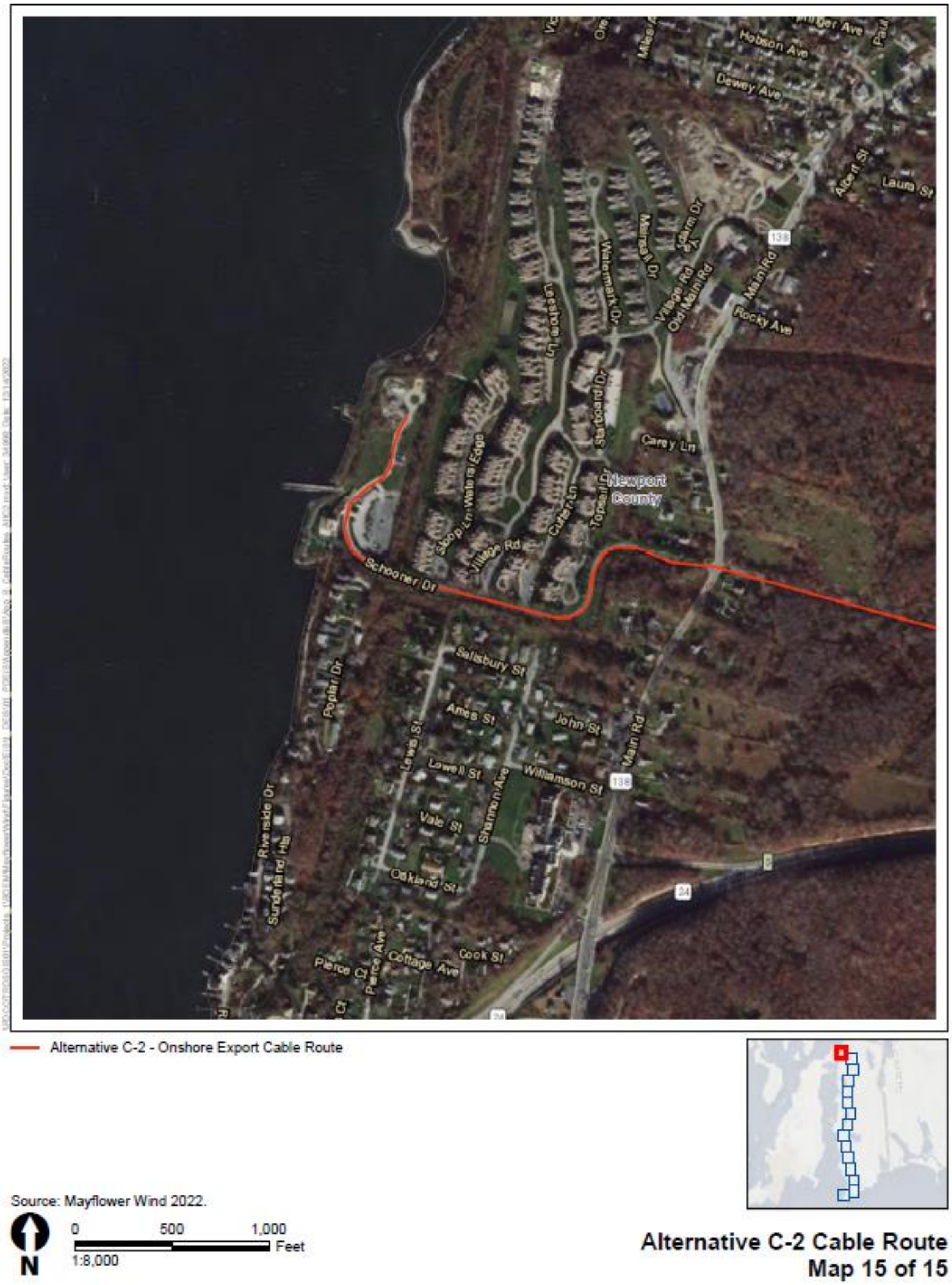
Source: Mayflower Wind 2022.

N

0 500 1,000 Feet

1:8,000

Alternative C-2 Cable Route
Map 14 of 15



Alternative C-2 Cable Route
Map 15 of 15

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