

## Appendix H: Seascape, Landscape, and Visual Impact Assessment

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### H.1 Introduction

This appendix describes the seascape, landscape, and visual impact assessment (SLVIA) methodology and key findings that the Bureau of Ocean Energy Management (BOEM) used to identify the potential impacts of offshore wind structures (wind turbine generators [WTGs] and offshore substations [OSSs]) on scenic and visual resources in the geographic analysis area. The SLVIA methodology applies to any offshore wind energy development proposed for the Outer Continental Shelf (OCS) and incorporates by reference the detailed description of the methodology described in the *Assessment of Seascape, Landscape, and Visual Impacts of Offshore Wind Energy Developments on the Outer Continental Shelf of the United States* (BOEM 2021). The analysis in this appendix relies on and incorporates by reference the assessment of the six New York Bight (NY Bight) lease areas conducted by Argonne National Laboratory (Argonne) and BOEM in accordance with the SLVIA methodology, *Ocean, Seascape, Landscape, and Visual Impact Assessment of the New York Bight Offshore Wind Lease Areas* (Argonne 2024). These documents are available on the BOEM website.

Section H.2, *Method of Analysis*, of this appendix describes the specific methodology used to apply the SLVIA methodology to the NY Bight projects, and Section H.3, *SLVIA Results*, summarizes the wind farm distances, fields of view (FOVs), noticeable elements, visual contrasts, scale of change, and prominence that contributed to the determination of impact levels for ocean, seascape, and landscape and each key observation point (KOP) for the NY Bight projects. Section H.4, *Cumulative Impacts of NY Bight Projects*, describes the cumulative impacts from the NY Bight projects in combination with other ongoing and planned offshore wind projects. Detailed maps of character areas, KOPs, and other scenic resources within view of each lease area and of the six NY Bight lease areas collectively are contained in Argonne (2024). Visual simulations of the NY Bight projects alone, other ongoing and planned offshore wind projects without the NY Bight projects, and other offshore wind projects in combination with the NY Bight projects are provided on BOEM's NY Bight website: <https://www.boem.gov/renewable-energy/state-activities/new-york-bight>.

The demarcation line between seascape and open ocean is the U.S. states jurisdictional boundary, 3 nautical miles (nm) (3.45 statute miles [5.5 kilometers]) seaward from the coastline (U.S. Congress Submerged Lands Act, 1953). This line coincides with the area of sea visible from the shoreline. The line defining the separation of seascape and landscape is based on the juxtaposition of apparent seacoast and landward landscape elements, including topography, water (bays and estuaries), vegetation, and structures.

### H.2 Method of Analysis

The SLVIA has two separate but linked parts: the open ocean, seascape, and landscape impact assessment (SLIA) and the visual impact analysis (VIA). The SLIA analyzes and evaluates the *sensitivity* of

the receptor and the *magnitude of change* in consideration of impacts on both the physical elements and features that make up a landscape, seascape, or open ocean. The VIA analyzes and evaluates the impacts on people from adding the proposed development to views from selected viewpoints.

The inclusion of both the SLIA and VIA in the BOEM SLVIA methodology is consistent with the National Environmental Policy Act's (NEPA) objective of providing Americans with aesthetically and culturally pleasing surroundings and its requirement to consider all potentially significant impacts of development.

### **H.2.1 SLIA Methodology**

The SLIA inventories and describes the visual character of the ocean and the coastal landscape and seascape. It analyzes and evaluates the magnitude of change and the sensitivity of the receptor in consideration of impacts on both the physical elements and features that make up the open ocean, seascape, or landscape. The magnitude of change depends on a project's scale or degree of change, geographic extent, and duration and reversibility.

Sensitivity is measured by the impact receptor's susceptibility to change, its ability to accommodate the impacts of a proposed project without changing its basic character, and its perceived value to society. These impacts affect the "feel," "character," or "sense of place" of an area of open ocean, seascape, or landscape, rather than the composition of a view from a particular place. Social value is based on the aesthetic, perceptual, and experiential aspects of the landscape, seascape, or open ocean that make it distinctive. In the SLIA, the impact receptors (the entities that are potentially affected by the proposed project) are the open ocean/seascape/landscape itself and its components, both its physical features and its distinctive character.

### **H.2.2 VIA Methodology**

The VIA analyzes and evaluates the impacts on people of adding the proposed development to views from selected viewpoints. It also evaluates the change to the composition of the view itself and assesses how the people who are likely to be at that viewpoint may be affected by the change to the view. Enjoyment of a particular view is dependent on the viewer, and, in the VIA, the impact receptors are people.

The VIA for an offshore wind project assesses the impacts of adding the proposed development to views from selected viewpoints (referred to as key observation points or KOPs). The VIA assesses how the change to the view itself caused by the addition of the wind energy project components, such as seeing wind turbines instead of an open ocean horizon, affects people who are likely to be at the viewpoint. The change to the view as a result of adding the proposed project may affect viewers' experience of that particular view. How the addition of the project to the view affects the viewers' experiences and their responses depends in part on who they are, what they are doing when viewing the facility, and how much they value the view. The experience of a particular view is dependent on the viewers, and, as noted, in the VIA, the impact receptors are people, rather than the seascape or landscape itself.

### H.2.3 Project Visibility Factors

WTG visibility would be variable throughout the day depending on many factors. View angle, sun angle, and atmospheric conditions would affect the WTG visibility. Visual contrast of WTGs would vary throughout the day depending on the visual character of the horizon's backdrop and whether the WTGs are backlit, side-lit, or front-lit. If less visual contrast is apparent in the morning hours, then it is likely that the visual contrast may be more pronounced in the afternoon. The inverse is possible as well. These effects are also influenced by varying atmospheric conditions, direction of view, distance between the viewer and the WTGs, and elevation of the viewer.

At closer distances, approximately 16 miles (26 kilometers) or closer, the form of the 1,312-foot (400-meter) WTG may be the dominant visual element creating the visual contrast regardless of color. At approximately 12 miles (19 kilometers) or closer the form of the 853-foot (260-meter) WTG may be the dominant visual element creating contrast regardless of color. At greater distances, color may become the dominant visual element creating visual contrast under certain visual conditions that gives visual definition to the WTG's form and line. As the elevation of the viewer increases, earth curvature (EC) has a decreasing effect on the visible height of individual WTGs, allowing a greater proportion of the turbine infrastructure to be seen.

The noticeable daytime and nighttime elements of the project's WTGs and OSSs and their viewshed distances are listed in Table H-1 for 1,312-foot (400-meter) WTGs and in for 853-foot (260-meter) WTGs. Each WTG would have two L-864 flashing red obstruction lights at the top of the nacelle, one of which is required to be lit (BOEM 2021). WTGs would have additional intermediate lighting on the tower utilizing low-intensity red flashing (L-810) obstruction lighting. Line-of-sight calculations for onshore viewers (5.9-foot [1.8-meter] eye level) are based on intervening EC screening (7.98-inch [20.3-centimeter] height per mile). Heights of WTG and OSS components are stated relative to mean lower low water and highest astronomical tide.

Table H-2 and Table H-3 for 1,312-foot (400-meter) WTGs and Table H-5 and Table H-6 for 853-foot (260-meter) WTGs indicate the NY Bight projects' effects based on horizontal and vertical FOV, respectively, defined as the extent of the observable landscape seen at any given moment, usually measured in degrees (BOEM 2021). The horizontal FOV for each KOP is listed in Argonne (2024). FOVs are valid and reliable indicators of the magnitude of view occupation by NY Bight project facilities.

**Table H-1. Heights of noticeable<sup>1</sup> 1,312-foot WTG elements and OSS, and visible distances<sup>2</sup>**

Noticeable Element <sup>1</sup>	Height in Feet (Meters)	Visible Distance <sup>2</sup> in Miles (Kilometers)
Rotor Blade Tip	1,312 (400) MLLW	0–47.4 (76.3)
Upper Aviation Light	728 (221.9) MLLW	0–36.1 (58.1)
Nacelle	718 (218.8) MLLW	0–35.8 (57.6)
Hub	706 (215.2) MLLW	0–35.6 (57.3)
Mid-tower Navigation Light	353 (107.6) MLLW	0–26.0 (41.8)
OSS	295.3 (90.0) HAT	0–24.1 (38.9)
Yellow Tower Base Color	50 (15.2) HAT	0–11.5 (18.5)

<sup>1</sup> Perception of project elements, from 5.9 feet (1.8 meters) human eye-level while standing at mean sea level, involves static distance-related sizes, forms, lines, colors, and textures; variable daytime lighting conditions; variable nighttime light conditions; and variable meteorological conditions.

<sup>2</sup> Based on intervening EC and clear-day conditions.

HAT = highest astronomical tide; MLLW = mean lower low water

**Table H-2. Horizontal FOV occupied by the 1,312-foot WTGs**

State	Noticeable Element	Width <sup>1</sup> Miles (Kilometers)	Distance <sup>2</sup> Miles (Kilometers)	Horizontal FOV	Human FOV	Percent of FOV
New York	Wind turbine array	28.9 (46.5)	23.6 (38.0)	50°	124°	40%
New Jersey	Wind turbine array	46.7 (75.1)	30.7 (49.4)	57°	124°	46%

<sup>1</sup> Maximum extent of the visible wind turbine array.

<sup>2</sup> Nearest onshore distance to the wind turbine array: Atlantique Beach, New York, and Long Island Beach, New Jersey.

**Table H-3. Vertical FOV occupied by the 1,312-foot WTGs**

State	Noticeable Element	Height Feet (meters)	Distance Miles (Kilometers)	Height Above Horizon <sup>1</sup> Feet (Meters)	Vertical FOV	Human FOV	Percent of FOV
New York	Rotor Blade Tip	1,312 (400.0) MLLW	23.6 (38.0)	1,036.5 (311.5)	0.48°	55°	0.8 %
New Jersey	Rotor Blade Tip	1,312 (400.0) MLLW	30.7 (49.4)	799.4 (311.5)	0.28°	55°	0.5 %

<sup>1</sup> Based on intervening EC, clear-day, and clear-night conditions.

MLLW = mean lower low water

**Table H-4. Heights of noticeable<sup>1</sup> 853-foot WTG elements and OSS, and visible distances<sup>2</sup>**

Noticeable Element <sup>1</sup>	Height in Feet (Meters)	Visible Distance <sup>2</sup> in Miles (Kilometers)
Rotor Blade Tip	853 (260.0) MLLW	0–38.7 (62.3)
Aviation Light	513 (156.4) MLLW	0–30.8 (49.6)
Nacelle	503 (153.3) MLLW	0–30.5 (49.1)
Hub	492 (150.0) MLLW	0–30.2 (48.6)
OSS	295.3 (90.0) HAT	0–24.1 (38.7)
Mid-tower Navigation Light	246 (75.0) MLLW	0–22.2 (35.7)
Yellow Tower Base Color	50 (15.2) HAT	0–11.5 (18.5)

<sup>1</sup> Perception of project elements, from 5.9 feet (1.8 meters) human eye-level while standing at mean sea level, involves static distance-related sizes, forms, lines, colors, and textures; variable daytime lighting conditions; variable nighttime light conditions; and variable meteorological conditions.

<sup>2</sup> Based on intervening EC and clear-day conditions.

HAT = highest astronomical tide; MLLW = mean lower low water

**Table H-5. Horizontal FOV occupied by the 853-foot WTGs**

State	Noticeable Element	Width <sup>1</sup> Miles (Kilometers)	Distance <sup>2</sup> Miles (Kilometers)	Horizontal FOV	Human FOV	Percent of FOV
New York	Wind turbine array	19.0 (30.6)	23.6 (38.0)	39°	124°	31%
New Jersey	Wind turbine array	23.9 (38.5)	30.7 (49.4)	38°	124°	31%

<sup>1</sup> Maximum extent of the visible wind turbine array.

<sup>2</sup> Nearest onshore distance to the wind turbine array: Atlantique Beach, New York, and Long Island Beach, New Jersey.

**Table H-6. Vertical FOV occupied by the 853-foot WTGs**

State	Noticeable Element	Height Feet (meters)	Distance Miles (Kilometers)	Height Above Horizon <sup>1</sup> Feet (Meters)	Vertical FOV	Human FOV	Percent of FOV
New York	Rotor Blade Tip	853 (260.0) MLLW	23.6 (38.0)	577.5 (176.0)	0.27°	55°	0.4%
New Jersey	Rotor Blade Tip	853 (260.0) MLLW	30.7 (49.4)	340.4 (103.7)	0.12°	55°	0.2%

<sup>1</sup> Based on intervening EC, clear-day, and clear-night conditions.

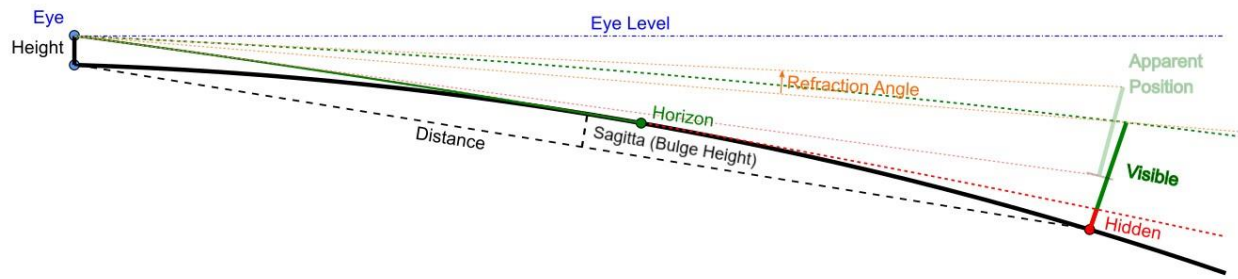
MLLW = mean lower low water

While the coastal shoreline has a prevailing eastward viewing direction, localized views may vary from southeast to northeast. All cardinal directions are conceivable when viewing from a lighthouse or a water vessel at sea. When viewing from onshore toward a southerly direction and scanning to the east and west, the color of the horizon backdrop often will vary. Variation will continue as the sun arcs across the sky from sunrise to sunset. Depending on sun angle, the backdrop sky color may have various intensities of white to gray and sky blue to pale blue to dark blue-gray. Partly cloudy to overcast conditions will also influence the color make-up of the horizon’s backdrop. The sunrise and sunset have varying degrees of light blue to dark blue, light and dark purples intermixed with oranges, yellows, and reds. Partly cloudy skies may increase the remarkable color effects during the sunset and sunrise periods of the day.

When placing WTGs offshore, the visual interplay and contrasting elements in form, line, color, and texture may vary with the ever-changing character of the backdrop. Front-lit WTGs may have strong color contrast against a darker gray sky, giving definition to the WTG's vertical form and line contrast to the ocean's horizontal character and the line where the sea meets sky, or visually dissipates against a whiter backdrop created by high levels of evaporative atmospheric moisture during clear sunny days. Partly cloudy skies may create varying degrees of sunlight reflecting off the white wind turbines, placing some WTGs in the shadow and making them appear a darker gray and less conspicuous while highlighting others with a bright white color contrast. The level of noticeability would be directly proportional to the degree of visual contrast and scale of change between the WTGs and the corresponding backdrop. Visual simulations prepared of the NY Bight projects depict both maximum visibility, illustrating no atmospheric haze, and predicted visibility, depicting visibility with the atmospheric conditions on the day the photograph was taken. These variations through the course of the day may result in periods of moderate to major visual effects while at other times of day would have minor or negligible effects.

WTG blade motion also affects visibility. Empirical studies of offshore wind turbine visibility have shown that WTG blade movement is routinely visible at distances of 21 miles (34 kilometers) or less and as far as 26 miles (42 kilometers) (Sullivan et al. 2013). In a visually empty seascape, the rotational movement of the turbines can dominate the scene during the day. Contrary to static turbine noticeability, blade motion is visible regardless of lighting conditions, sun angle, and sky contrast levels. Blade motion contributes substantially to visual contrast and may contribute relatively more at shorter viewing distances (Sullivan 2013). Blade movement noticeability would be dependent on meteorological conditions. It is critical to note that the studies cited above were conducted on smaller WTGs than those considered for the NY Bight projects in the NY Bight Programmatic Environmental Impact Statement [PEIS] or other offshore wind projects along the U.S. eastern seaboard; therefore, noticeability distances would increase with larger wind turbines.

Atmospheric refraction of light rays causes fluctuations in the extents and appearances of offshore and onshore facilities. It results from the bending of light rays between viewers and objects due to current air temperature, water vapor, and barometric pressure (Bislins 2022). Atmospheric refraction can increase the visibility of objects, making them look larger or taller, depending on conditions, as depicted in Figure H-1. Table H-7 provides a summary of increased visibility ranges for the nearest beach viewers for each lease area and both turbine sizes based on the average sea level refraction calculation coefficient of 0.17 (Bislins 2022) applied to the turbine blade tip viewshed distances. Daytime and nighttime atmospheric refraction-based visibility varies with sea level's continuous increases and decreases in temperature, water vapor, and barometric pressure.



Source: Bislins 2022

**Figure H-1. Effects of atmospheric refraction and earth curvature on WTG visibility**

**Table H-7. Atmospheric refraction summary for all lease areas for 1,312-foot and 853-foot WTGs**

Lease Area	1,312-Foot WTG		853-Foot WTG	
	Rotor Blade Tip Increased Visibility Feet (Meters)	Nearest Beach Increased Visibility Feet (Meters)	Rotor Blade Tip Increased Visibility Feet (Meters)	Nearest Beach Increased Visibility Feet (Meters)
OCS-A 0537	From 0.0 to 233.8 (71.3) = 233.8 (71.3)	From 167 (50.9) to 375 (114.3) = 208 (63.4)	From 0.0 to 158 (48.2) = 158 (48.2)	Not visible
OCS-A 0538	From 0.0 to 233.8 (71.3) = 233.8 (71.3)	From 296 (90.2) to 482 (146.9) = 186 (56.7)	From 0.0 to 158 (48.2) = 158 (48.2)	From 0 to 26.8 (43.1) = 26.8 (43.1)
OCS-A 0539	From 0.0 to 233.8 (71.3) = 233.8 (71.3)	From 535 (163.1) to 678 (206.7) = 143 (43.6)	From 0.0 to 158 (48.2) = 158 (48.2)	From 94.5 (152.1) to 234.3 (377.1) = 139.8 (225)
OCS-A 0541	From 0.0 to 233.8 (71.3) = 233.8 (71.3)	From 799 (243.5) to 895 (272.8) = 96 (29.3)	From 0.0 to 158 (48.2) = 158 (48.2)	From 340 (103.6) to 436 (132.9) = 96 (29.3)
OCS-A 0542	From 0.0 to 233.8 (71.3) = 233.8 (71.3)	From 615 (187.5) to 744 (226.8) = 129 (42.3)	From 0.0 to 158 (48.2) = 158 (48.2)	From 0.0 to 69.1 (111.0) = 69.1 (111.0)
OCS-A 0544	From 0.0 to 233.8 (71.3) = 233.8 (71.3)	From 1,028 (313.3) to 1,083 (330.1) = 55 (16.8)	From 0.0 to 158 (48.2) = 158 (48.2)	From 569 (173.4) to 624 (190.2) = 55 (16.8)

Visibility thresholds have been described and rated through research by Robert Sullivan at Argonne based on WTGs in England. Table H-8 describes visibility threshold levels and ratings based on this work. This research, along with distance and observer elevation considerations, informed by the visual simulations, EC calculations, horizontal FOV, and vertical FOV in undeveloped open ocean provide the basis for evaluating visibility.



**Table H-8. Visibility threshold levels**

Visibility Rating	Description
<b>Visibility level 1.</b> Visible only after extended, close viewing; otherwise, invisible.	An object/phenomenon that is near the extreme limit of visibility. It could not be seen by a person who was unaware of it in advance and looking for it. Even under those circumstances, the object can be seen only after looking at it closely for an extended period.
<b>Visibility level 2.</b> Visible when scanning in the general direction of the subject; otherwise, likely to be missed by casual observers.	An object/phenomenon that is very small and/or faint, but when the observer is scanning the horizon or looking more closely at an area, can be detected without extended viewing. It could sometimes be noticed by casual observers; however, most people would not notice it without some active looking.
<b>Visibility level 3.</b> Visible after a brief glance in the general direction of the study subject and unlikely to be missed by casual observers.	An object/phenomenon that can be easily detected after a brief look and would be visible to most casual observers, but without sufficient size or contrast to compete with major landscape/seascape elements.
<b>Visibility level 4.</b> Plainly visible, so could not be missed by casual observers, but does not strongly attract visual attention or dominate the view because of its apparent size, for views in the general direction of the study subject.	An object/phenomenon that is obvious and with sufficient size or contrast to compete with other landscape/seascape elements, but with insufficient visual contrast to strongly attract visual attention and insufficient size to occupy most of an observer’s visual field.
<b>Visibility level 5.</b> Strongly attracts the visual attention of views in the general direction of the study subject. Attention may be drawn to the strong contrast in form, line, color, or texture, luminance, or motion.	An object/phenomenon that is not large but contrasts with the surrounding landscape elements so strongly that it is a major focus of visual attention, drawing viewer attention immediately and tending to hold attention. Has strong contrasts in form, line, color, and texture. In addition, bright light sources and moving objects contribute substantially to drawing viewer attention. The study subject’s visual prominence noticeably interferes with views of nearby landscape/seascape elements.
<b>Visibility level 6.</b> Dominates the view because the study subject fills most of the visual field of views in its general direction. Strong contrasts in form, line, color, texture, luminance, or motions may contribute to view dominance.	An object/phenomenon with strong visual contrasts that is so large it occupies most of the visual field, and views cannot be avoided except by turning one’s head more than 45 degrees from a direct view of the object. The phenomenon is the major focus of visual attention, and its large apparent size is a major factor in its view dominance. The study subject’s visual prominence noticeably detracts from views of other landscape/seascape elements.

Source: Sullivan et. al 2013.

## H.2.4 Geographic Scope

As described in Section 3.6.9, *Scenic and Visual Resources*, of the PEIS, the scenic and visual resources geographic analysis area extends approximately 47.4 miles (76.3 kilometers) offshore and 50 miles (80.5 kilometers) onshore to capture potential views of the NY Bight projects, and includes the coastlines from Atlantic City, New Jersey, to the Shinnecock Indian Nation in Long Island, New York, as well as elevated viewpoints of national significance (e.g., Empire State Building) (Argonne 2024).



## H.2.5 Defining Potential Impacts

Project activities for all stages of the project life cycle (construction and installation, operations and maintenance [O&M], and decommissioning) are assessed against the environmental baseline to identify the potential interactions between a project and the seascape, landscape, and viewers. Analysis of visual impacts for the onshore geographic analysis area should include an assessment of landfalls, buried onshore export cables, onshore substation/converter station, and transmission connections to the electric grid. Because the locations of onshore infrastructure for the NY Bight projects are currently unknown, this assessment only analyzes impacts from offshore structures. Visual impacts from onshore infrastructure will be analyzed during the project-specific NEPA review for each Construction and Operations Plan (COP). Potential impacts from offshore infrastructure are assessed to determine an impact level consistent with the definitions in Table H-9.

**Table H-9. Definitions of potential adverse impact levels for SLIA and VIA**

Impact Level	Impact Type	Definition
<b>Negligible</b>	Adverse	<p><b>SLIA:</b> Very little or no effect on seascape/landscape unit character, features, elements, or key qualities either because unit lacks distinctive character, features, elements, or key qualities; values for these are low; or project visibility would be minimal.</p> <p><b>VIA:</b> Very little or no effect on viewers' visual experience because view value is low, viewers are relatively insensitive to view changes, or project visibility would be minimal.</p>
<b>Minor</b>	Adverse	<p><b>SLIA:</b> The project would introduce features that may have low to medium levels of visual prominence within the geographic area of an ocean/seascape/landscape character unit. The project features may introduce a visual character that is slightly inconsistent with the character of the unit, which may have minor to medium negative effects on the unit's features, elements, or key qualities, but the unit's features, elements, or key qualities have low susceptibility or value.</p> <p><b>VIA:</b> The visibility of the project would introduce a small but noticeable to medium level of change to the view's character; have a low to medium level of visual prominence that attracts but may or may not hold the viewer's attention; and have a small to medium effect on the viewer's experience. The viewer receptor sensitivity/susceptibility/value is low. If the value, susceptibility, and viewer concern for change is medium or high, then evaluate the nature of the sensitivity to determine if elevating the impact to the next level is justified. For instance, a KOP with a low magnitude of change, but that has a high level of viewer concern (combination of susceptibility/value), may justify adjusting to a moderate level of impact.</p>
<b>Moderate</b>	Adverse	<p><b>SLIA:</b> The project would introduce features that would have medium to large levels of visual prominence within the geographic area of an ocean/seascape/landscape character unit. The project would introduce a visual character that is inconsistent with the character of the unit, which may have a moderate negative effect on the unit's features, elements, or the key qualities. In areas affected by large magnitudes of change, the unit's features, elements or key qualities have low susceptibility and/or value.</p> <p><b>VIA:</b> The visibility of the project would introduce a moderate to large level of change to the view's character, may have a moderate to large level of visual prominence that attracts and holds but may or may not dominate the viewer's attention, and has a moderate effect on the viewer's visual experience. The viewer receptor sensitivity/susceptibility/value is medium to low. Moderate impacts are typically</p>

Impact Level	Impact Type	Definition
		associated with medium viewer receptor sensitivity (combination of susceptibility/value) in areas where the view's character has medium levels of change, or low viewer receptor sensitivity (combination of susceptibility/value) in areas where the view's character has large changes to the character. If the value, susceptibility, and viewer concern for change is high, then evaluate the nature of the sensitivity to determine if elevating the impact to the next level is justified.
<b>Major</b>	Adverse	<p><b>SLIA:</b> The project would introduce features that would have dominant levels of visual prominence within the geographic area of an ocean/seascape/landscape character unit. The project would introduce a visual character that is inconsistent with the character of the unit, which may have a major negative effect on the unit's features, elements, or key qualities. The concern for change (combination of susceptibility/value) to the character unit is high.</p> <p><b>VIA:</b> The visibility of the project would introduce a major level of character change to the view; will attract, hold, and dominate the viewer's attention; and have a moderate to major effect on the viewer's visual experience. The viewer receptor sensitivity/susceptibility/value is medium to high. If the magnitude of change to the view's character is medium, but the susceptibility or value at the KOP is high, then evaluate the nature of the sensitivity to determine if elevating the impact to major is justified. If the sensitivity (combination of susceptibility/value) at the KOP is low in an area where the magnitude of change is large, then evaluate the nature of the sensitivity to determine if lowering the impact to moderate is justified.</p>

## H.2.6 Laws, Ordinances, and Regulations

Open ocean, seascape, landscape, and visual resource protection and management laws, ordinances, and regulations are identified in Table H-10.

**Table H-10. Laws, Ordinances, and Regulations**

Jurisdiction	Authority	Objectives
<b>Federal</b>		
BOEM	Code of Federal Regulations (CFR) Title 30 of the CFR Part 585, Subpart F, Plans and Information Requirements	This title provides guidance on survey requirements, project-specific information, and information to meet the requirements of the Outer Continental Shelf Lands Act, NEPA, and other applicable laws and regulations. It also specifies that to comply with NEPA and other relevant laws, the COP must include a detailed description of visual resources and various social and economic resources that could be affected by the proposed project, that would be addressed in an SLVIA.
BOEM	Outer Continental Shelf Lands Act (OCSLA), Title 43, Chapter 29, Subchapter I, Section 1301 (1953)	The primary purpose of the OCSLA is to facilitate the federal government's leasing of its offshore mineral resources and energy resources. As set forth in the Energy Policy Act of 2005, OCSLA was amended to authorize the Department of the Interior (DOI) to issue submerged land leases for alternate uses and alternative energy development on the OCS. Through this amendment and subsequent delegation by the Secretary of the Interior, BOEM has the authority to issue these leases and regulate activities that occur within them, including the authorization of a COP.

Jurisdiction	Authority	Objectives
BOEM	Submerged Lands Act (SLA) of 1953	The SLA grants coastal states title to natural resources located within their coastal submerged lands out to 3 miles (4.8 kilometers) from their coastline.
BOEM	National Environmental Policy Act (NEPA)	NEPA was signed into law in 1970 and set forth a national environmental policy in the United States meant to ensure federal agencies consider the significant environmental consequences of their proposed actions and inform the public about their decision making. NEPA established the Council on Environmental Quality (CEQ) to advise agencies on the NEPA process and to oversee and coordinate the development of federal environmental policy. The CEQ issued revised NEPA regulations (40 CFR 1500-1508) in 2021. The regulations include procedures to be used by federal agencies for the NEPA review process.
BOEM	Clean Air Act (CAA) of 1970	The CAA authorized the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The states were directed to develop State Implementation Plans (SIPs), which consist of emission reduction strategies, with the goal of achieving the NAAQS by the legislated date. BOEM has jurisdiction over OCS air emissions in the Gulf of Mexico west of 87.5 degrees west longitude (off the coasts of Texas, Louisiana, Mississippi, and Alabama). BOEM also has jurisdiction over OCS air emissions within the Chukchi and Beaufort Seas in Alaska according to the Consolidated Appropriations Act of 2012. In all other OCS areas, the USEPA has jurisdiction, as mandated by Section 328 of the CAA.
BOEM	Coastal Zone Management Act (CZMA) (1972)	The U.S. Congress recognized the growth in the coastal zone by passing the CZMA, which is administered by the National Oceanic and Atmospheric Administration (NOAA). The goal is to “preserve, protect, develop, and where possible, to restore or enhance the resources of the nation’s coastal zone.” Authorized by the CZMA in 1972, the Coastal Zone Management Program (CZMP) was established as a voluntary partnership between the federal government and U.S. coastal and Great Lakes states and territories (BOEM 2009).
BOEM	National Historic Preservation Act 1966	This act establishes a preservation program and a system of protections, which encourages both the identification and protection of historic resources. As part of this program, historic districts and individual properties are either listed or eligible for listing on the National Register of Historic Places (NRHP) or National Historic Landmarks (NHL).
BOEM	Inflation Reduction Act of 2022	This act offers funding, programs, and incentives to accelerate the transition to a clean energy economy and will likely drive significant deployment of new clean electricity resources. The act’s incentives reduce renewable energy costs for organizations, businesses, nonprofits, educational institutions, and state, local, and tribal organizations. Taking advantage of Inflation Reduction Act incentives, such as tax credits, is key to lowering greenhouse gas emission footprints and accelerating the clean energy transition.

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BOEM	Information Guidelines for a Renewable Energy Construction and Operations Plan (COP). Version 4.0. (BOEM 2020)	BOEM’s guidelines indicate that the visual resource assessment should apply appropriate viewshed mapping, photo simulations, and field inventory techniques to determine the visibility of the proposed project at scenic viewpoints.
BOEM	Assessment of Seascape, Landscape, and Visual Impacts of Offshore Wind Energy Developments on the Outer Continental Shelf of the United States (2021)	This OCS Study provides the methodology for assessing the seascape, landscape, and visual impacts of offshore wind within a particular study area. Developers are to use this guidance in preparation as part of a COP for their lease development. This assessment is to be reviewed by BOEM.
<b>State of New York</b>		
New York State Department of State (NYSDOS)	New York State Coastal Management Program and Final Environmental Impact Statement (NYSDOC 2017)	Policy 24: Prevent impairment of scenic resources of statewide significance. Policy 25: Protect, restore, or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.
New York State Department of Environmental Conservation (NYSDEC)	NYSDEC Policy DEP-00-2: Assessing and Mitigating Visual and Aesthetic Impacts	The purpose of this policy is to guide the evaluation of visual impacts for proposed projects as they relate to scenic and aesthetic resources of statewide significance.
New York State Department of State (NYSDOS)	Long Island Sound Coastal Management Program (LIS CMP) (1999) (NYSDOS 1999)	Policy 3: Enhance visual quality and protect scenic resources throughout Long Island Sound. The LIS CMP provides a recommendation to protect scenic resources within the Long Island Sound coastal region by having the NYSDOS and local government undertake a comprehensive scenic resources evaluation of the Long Island Sound Coastal Area and prepare appropriate area designations. This would include scenic areas of statewide significance (SASS). Another recommendation is to identify, preserve, and provide access to regionally important vistas. The NYSDOS proposed to evaluate scenic land and water vistas as part of the SASS Program (Executive Law, Article 42 and 19 NYCRR Part 602.5c). The NYSDOS will also work with Local Waterfront Revitalization Programs to identify locations for protection and enhancement of visual access.
South Shore Estuary Reserve	Long Island South Shore Estuary Reserve Comprehensive Management Plan (CMP) 2022	Originally implemented in 2001, The Long Island South Shore Estuary Reserve CMP is the result of The Long Island South Shore Estuary Reserve Act passed in 1993 creating the Long Island South Shore Estuary Reserve (Reserve). The act also implemented the Long Island South Shore Estuary Reserve Act Council (Council) whose task was to design a CMP to protect the reserve and its inhabitants. This CMP emphasizes the importance of the Long

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		<p>Island South Shore Estuary Ecosystem and outlines actions necessary to preserve, protect, and enhance the natural, recreational, economic, aesthetic, and educational resources that the reserve provides. The CMP discusses various components, such as:</p> <ul style="list-style-type: none"> <li>• Action 2.3.8: Reduce negative environmental consequences of duck sludge and other legacy pollutants through removal and/or restoration. The restoration of former duck farms represents an important opportunity to improve aesthetic and environmental conditions for nearby neighborhoods and provide County residents with the opportunity to access these waterways for recreational and educational purposes.</li> <li>• Action 4.3.4: Increase end-of-street parks and parking access to the shoreline. Implement projects that create parks at the end of streets and in vacant lots, provide public parking access, and provide benefits such as improved aesthetics and public access. Parks that utilize green infrastructure best management practices can also contribute to water quality improvement.</li> </ul>
<b>New York City, New York</b>		
New York City Planning (NYCP)	New York City Waterfront Revitalization Program (WRP) (2016)	<p>The WRP establishes New York City’s policies for waterfront planning, preservation, and development projects to ensure consistency over the long term. The goal of the WRP is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront, while minimizing any potential conflicts among these objectives (NYCP 2016). The WRP includes policies that are intended to protect and enhance scenic resources:</p> <ul style="list-style-type: none"> <li>• Policy 9: Protect scenic resources that contribute to the visual quality of the New York City coastal area.</li> <li>• Policy 9.1: Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.</li> <li>• Policy 9.2: Protect and enhance scenic values associated with natural resources.</li> </ul>
New York City Department of City Planning	New York City Comprehensive Waterfront Plan (2021)	<p>This plan, updated every 10 years, puts forth new strategies for an equitable, resilient and healthy waterfront in the face of climate change.</p> <p>Goal 1: Expand public access to the waterfront with an emphasis on equity by bridging access gaps in historically underserved areas and supporting growing waterfront communities. An important part of this goal is visual access. Clear, unobstructed sightlines down to the waterfront expand connectivity. Visual corridors typically overlap with streets and other upland connections to guide people safely to the water. Where physical access to the water cannot be achieved immediately, visual connectivity can provide communities with an opportunity to see and engage with their waterfronts and form a meaningful connection.</p>

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<b>Suffolk County, New York</b>		
Suffolk County	Suffolk County Comprehensive Master Plan 2035 (Suffolk County Department of Economic Development and Planning 2023)	The vision of the 2035 Plan is captured by three themes: Revitalize, Rebuild, and Reclaim, i.e., revitalize the economy; rebuild the downtowns and infrastructure; and reclaim the quality of the groundwater, surface water and terrestrial resources. The Master Plan discusses the importance of the rural water setting of Suffolk County that attracts visitors who enjoy bathing beaches, fishing, boating, and other water sports as well as hiking, bicycling, adventure tourism, and other outdoor recreation or simply viewing the scenery and historic hamlets.
Babylon, Town of	2020-2024 Consolidated Plan & 2020 Annual Action Plan (2020)	No specific objectives are included within the plan for protecting or improving scenic views, nor beach/waterfront views.
Brookhaven, Town of	Local Waterfront Revitalization Program (Anticipated Completion Date of August 2023) (Town of Brookhaven 2023)	The Local Waterfront Revitalization Program will provide strategies and identify projects that improve public access, establish connections between downtown and the waterfront, modify local codes and ordinances to remove barriers to sustainable development, and incorporate sea level rise projections and resiliency measures into community planning.
Islip, Town of	None identified	The Town of Islip is in the process of creating a Comprehensive Plan.
Southampton, Town of	Town of Southampton Coastal Resources & Water Protection Plan (2016)	The plan describes the community’s scenic resources as follows: “Southampton’s unique scenic quality and sense of place is derived from the interplay of rural farmland, areas of undeveloped open space, water frontage (bay, ocean) and the hamlet centers. This rural character graces the Town with significant natural and historic resources. It is this quality that maintains the Town’s vitality as a resort, second home and visitor attraction, as well as an attractive place to live and work.” The Plan presents the different visual resources found within the town, including natural environments, built environments, historic vistas, and recognized areas of high scenic quality.
<b>Nassau County, New York</b>		
Nassau County	Nassau County Master Plan (2010)	The Nassau County Master Plan’s goals are centered around a framework that helps shape the county’s jobs, places, and infrastructure. Economic development is to be enhanced by strengthening downtowns, revitalizing underutilized commercial properties, and redeveloping brownfields to preserve the quality of life for residents by protecting environmental, scenic, and historic resources.  Within the Master Plan, sections are dedicated to the importance of historic and cultural assets, along with the sustainable land use development and waterfront and coastal zones. The plan addresses the county’s variety of historic, cultural, and scenic resources in addition to the environmental resources Nassau County has to offer.

Jurisdiction	Authority	Objectives
Long Beach City	Comprehensive Plan 2022–2023 (draft)	The 2023 Comprehensive Plan outlines the city’s values, visions, and goals for the next 15 years. One of the city’s goals is to enhance the physical attributes of all commercial districts and areas. This includes improving aesthetics in streetscapes and commercial areas. Increasing public access to the waterfront is an important aspect to the Comprehensive Plan, along with the ability for beaches and dunes for the southern waterfront to provide resiliency, environmental, social, and economic benefits. However, no specific objectives are included in the plan for protecting or improving scenic views, or beach/waterfront views.
Hempstead, Town of	Energy and Sustainability Master Plan (Town of Hempstead 2012)	The implementation of a “green grounds” policy would promote greener and more cost-effective maintenance and operations strategies. This is important as the demand for high quality public-use landscapes has increased. The “green grounds” policy would not compromise the visual landscape quality. There is no town master plan or specifics discussed in the plan referenced about the preservation of scenic views.
Oyster Bay, Town of	Town of Oyster Bay: Open Space Preservation Plan (South Shore Estuary Reserve Workplan Implementation) (2010)	Scenic value is identified in the Open Space Preservation Plan as an important factor in identifying open space and resource protection.
<b>State of New Jersey</b>		
New Jersey Coastal Management Program	Section 309 Assessment and Strategy (2021-2025)	Section 309 Enhancement Objective: Attain increased opportunities for public access, considering current and future public access needs, to coastal areas of recreational, historical, aesthetic, ecological, or cultural value.
New Jersey Department of Environmental Protection	Green Acres Program (2023)	The mission of this program is “to achieve, in partnership with others, a system of interconnected open spaces, the protection of which will preserve and enhance New Jersey’s natural environment and its historic, scenic, and recreational resources for public use and enjoyment.”
State Historic Preservation Office	New Jersey State Register of Historic Places	The geographic analysis area contains additional historic resources that the state has determined are worthy of preservation, but which have either not been determined eligible for inclusion or have not been evaluated for listing in the NRHP.
<b>Atlantic County, New Jersey</b>		
Atlantic County	Atlantic County, New Jersey Master Plan (2018); Atlantic County, New Jersey Open Space and Recreation Plan (2018)	The Master Plan includes a goal to preserve and protect resources, environmentally sensitive areas, particularly watersheds, recharge areas, threatened and endangered species habitat, scenic view sheds, and other valuable features. The Pine Barrens Byway is located partially within the county and includes a variety of historic and scenic sites. There are no specific objectives to preserve and protect scenic views from within the community or the ocean/beach areas. The Open Space and Recreation Plan defines open space as consisting of “diverse environments such as forests, fields, meadows, lakes, ponds, beaches, rivers, streams, historic sites and structures, scenic views and corridors, athletic



Jurisdiction	Authority	Objectives
		fields, gardens, orchards, farmland, and vacant lots.” No specific objectives are included within the plan for protecting or improving scenic views, or beach/waterfront views.
Absecon, City of	2016 Reexamination Report (2017)	The need to develop and implement programs and regulatory controls to protect scenic resources is identified in the reexamination report, specifically pertaining to residential structures along the Shore Road Corridor and adjacent streets. The report introduces recommendations for historic preservation. No specific objectives are included within the report for protecting or improving scenic views, or beach/waterfront views.
Atlantic City	Atlantic City Master Plan (2008); Master Plan Reexamination Report (2016)	An objective under the Open Space and Recreation section of the Master Plan is to preserve and protect open space areas that have scenic views and/or important historical, cultural significance and exceptional ecological value. Gardner’s Basin Maritime Park is identified as being the most scenic park in the city as it sits by the water’s edge. The Conservation Element section describes tidal marshes to provide grand scenic views of the city’s urban skyline due to the flat landscape character. Although areas are identified as being scenic, no specific objectives are included within the Master Plan for protecting or improving scenic views, or beach/waterfront views. The reexamination report does provide specifications.
Brigantine, City of	2016 Master Plan Re-examination Report (2016)	An objective identified from the previous planning documents includes an intent to “implement programs and regulatory controls designed to protect the scenic resources of the community.” Zoning controls such as building height restrictions and setbacks have previously been implemented. There is public concern for access to scenic resources due to the development of the waterfront. There is a need to promote and preserve access to the Bay and Atlantic Ocean. A general goal to promote a desirable visual environment through creative development techniques and good civic design and arrangements is in the 2016 General Goals and Objectives Statement section. Provisions are made in subsequent sections to respond to this objective and improve the visual environment through changes to building setbacks, height restrictions, and similar measures. However, no additional measures are proposed to protect or enhance visual access and protect scenic corridors.
Egg Harbor Township	Egg Harbor Township Master Plan (2002); Master Plan Reexamination Report (2017)	The Master Plan wants to provide resource protection by enhancing the natural, cultural and scenic resources of the Great Egg Harbor River (GEHR) and its watershed. The GEHR and its tributaries are described as a scenic resource with many scenic landscapes including lakes, streams, pristine forest areas, and cedar/hardwood swamps. The Pinelands Comprehensive Management Plan designates the lower and middle portions of the river and its tributaries as scenic corridors of “special significance” within the Pinelands. It identifies the need to incorporate resource protection measures and proposes the creation of a River Conservation (RC) overlay zoning district and the establishment of a land use plan that protects river resources. Recommendations for this zoning district include minimizing the

Jurisdiction	Authority	Objectives
		visual impacts of development as seen from the river. The 2017 Reexamination Report has shown no progress in implementing the proposed RC zone overlay and is still a recommendation.
Galloway Township	Master Plan Reexamination Report (2020)	An objective identified from the previous planning documents is to preserve and protect open space areas having scenic views or important historical, cultural, or agricultural significance. Another identified objective is to maintain continuous networks of open spaces along streams, scenic areas, and critical environmental areas. However, no specific objectives are included within the Master Plan for protecting or improving scenic views, or beach/waterfront views.
Linwood City	City of Linwood Master Plan (2002); Master Plan Reexamination Report (2018)	The City of Linwood's goals include preserving the city's historic, scenic, and recreational assets. However, there is no specific mention of the preservation of outward views from within the community, or ocean/beach views. No specific objectives are included within the Master Plan for protecting or improving scenic views, or beach/waterfront views.
Longport, Borough	Municipal Public Access Plan (2020) (Borough of Longport 2020)	This plan lays out the visions for providing access to tidal waters and shorelines. There is no mention of visual or scenic resources; however, the importance for public water access is important in this Borough.
Margate City	2016 Comprehensive Master Plan Update (2017)	This Master Plan is in place to address the city's increased seasonal population by developing plans and strategies for the city to adapt and thrive in the future. One goal is to promote a desirable visual environment through creative development techniques and good civic design and arrangement. A second objective is to establish within the Land Use Plan and Land Development Ordinance, as appropriate, specific architectural design standards to promote a desirable visual environment and ensure the continued visual integrity of both the commercial and residential sections of the city. A goal set forth around waters includes minimizing pollutants in stormwater runoff from new and existing development to restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the state; protect public health; safeguard fish and aquatic life and scenic and ecological values; and enhance the domestic, municipal, recreational, industrial, and other uses of water.
Pleasantville City	Pleasantville Master Plan Reexamination (2015)	An objective of this plan is to create a conservation zone along the city's eastern boundary where the bay and marine tidal marsh exist so that development is not permissible. However, no specific objectives are included within the plan for protecting or improving scenic views, or beach/waterfront views.
Port Republic City	None identified	
Ventnor City	2016 Master Plan Reexamination (2016) (Ventnor City 2016)	No specific objectives are included within the plan for protecting or improving scenic views, or beach/waterfront views.

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<b>Burlington County, New Jersey</b>		
Burlington County	Parks and Open Space Master Plan (2002)	An objective of this plan is to identify and preserve areas of significant scenic beauty. This includes roads that provide visual or physical access to extraordinary scenic, cultural, recreational, or natural features. These areas will be submitted to the New Jersey Department of Transportation for designation in accordance with the New Jersey Scenic Byways Program. The plan recommends that the county should work with appropriate staff and outside agencies to identify, map, and develop viewsheds and areas of significant beauty. As a part of the county's goal to advance the county's culture, character, and heritage through development of the county park system, the county plans to erect interpretative signs to promote historic viewsheds. No specific objectives are included for protecting or improving beach/waterfront views.
Bass River Township	None identified	
<b>Cape May County, New Jersey</b>		
Cape May County	Cape May County Open Space and Recreation Plan (2007); Comprehensive Plan (2022)	One goal of the Cape May County Open Space and Recreation Plan is to protect and preserve natural and scenic resources. However, there are no specific objectives for protecting or improving scenic views, or beach/waterfront views. The Comprehensive Plan also does not include objectives for protecting or improving scenic views, or beach/waterfront views.
Ocean City	City of Ocean City Master Plan (1988); Ocean City Open Space & Recreation Plan (2014); Master Plan Reexamination Report (2019); Conservation Plan Element, Environmental Resources and Recreation Inventory (2009)	An objective of the Ocean City Master Plan is to promote a desirable visual environment through creative development techniques with respect to environmental assets and constraints of the overall city and of individual development sites. Another objective is to encourage the preservation and restoration of historically significant buildings and sites within the city. There are development provisions for structures in the waterfront neighborhoods of the city to preserve waterfront views. The Ocean City Open Space and Recreation Plan includes a conservation goal to preserve and maintain the ecological, historical, visual, recreational, and scenic resources of the city. The plan includes guidelines to acquire sites of special scenic value that should be protected to preserve or enhance the character of the community. The goal of the Conservation Plan Element, Environmental Resources and Recreation Inventory is to preserve and maintain the ecological, historic, visual, recreational, and scenic resources of the city. However, there are no objectives for protecting or improving scenic views, or beach/waterfront views. There are also no additional objectives in terms of scenic resources in the Master Plan Reexamination Report.
<b>Monmouth County, New Jersey</b>		
Monmouth County	The Monmouth County Master Plan (2016); 2018 Master Plan Reexamination (2018)	This plan's objectives are to help guide efforts and actions that contribute to a strong, stable, and sustainable prosperity through redevelopment, revitalization, and rediscovery. Relevant objectives of the plan include:

Jurisdiction	Authority	Objectives
		<ul style="list-style-type: none"> <li>• Protect, conserve, and enhance the county’s significant, diverse, natural, and scenic resources utilizing sound ecological protection and restoration measures.</li> <li>• Support investment in the preservation of cultural, historic, and scenic resources located in priority growth areas and locations.</li> <li>• Support retention, preservation, restoration, and improvement of our cultural, historic, and scenic resources that define a community’s distinct character.</li> </ul> <p>The Reexamination Plan does not mention any changes to the goals pertaining to scenic resources.</p>
Allenhurst Borough	Master Plan Reexamination Report (2018)	The Master Plan references the Coastal Metropolitan Planning Area, within which the Borough falls. One of the objectives of this reference is to encourage the reclamation of environmentally damaged sites and mitigate future negative impacts, particularly for waterfronts, beaches, scenic vistas, and habitats. It also references the State Development and Redevelopment Plan (SDRP) goals, one of which is to preserve and enhance areas with historic, cultural, scenic, open space, and recreation value.
Asbury Park City	Master Plan & Master Plan Reexamination Report (2017)	The Master Plan provides improvement to the lakes in the city that would enhance the public’s enjoyment through aesthetic and environmentally healthy improvements of the water and surrounding areas. However, no specific provisions are included for protecting or enhancing the outward views from within the community, or beach/ocean views.
Avon-by-the-Sea Borough	Municipal Public Access Plan (2017)	This plan identifies the boardwalk as an important public access point that provides visual and physical access to the oceanfront. There are five locations along Shark River that are limited to visual access only due to safety concerns.
Belmar Borough	Master Plan Reexamination Report & Update (2016)	One of the four goals of this Master Plan is Preservation and Enhancement of Critical State Resources – Ensure that strategies for growth include preservation of the State’s critical natural, agricultural, scenic, recreation, and historic resources, recognizing the roles they play in sustaining and improving the quality of life for New Jersey residents and attracting economic growth.
Bradley Beach Borough	Master Plan Reexamination Report (2018); Recreation, Open Space, and Conservation Element of the Bradley Beach Borough Master Plan; Municipal Public Access Plan (2019)	The Master Plan Reexamination Report addresses land development issues and provides recommendations where necessary. The Recreation, Open Space, and Conservation Plan objective is to provide an inventory of the Borough’s existing recreation, open space, and observation facilities and establish goals and objectives to guide enhancement, preservation, and development of these facilities. The Municipal Public Access Plan includes the enhancement of public access to tidal waters and shorelines for recreation, navigation, commerce, and fishing. Recreation activities in this Borough include swimming, sunbathing, fishing, surfing, sport diving, bird watching, walking, and boating along the tidal shores. No specific objectives are included within the three plans for protecting or improving scenic views, or beach/waterfront views.

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Deal Borough	Municipal Public Access Plan (2017)	This plan not only identifies physical beach access areas in the Borough, but visual access of the beach and ocean for those who choose not to physically access the beaches. Three points of visual access are identified.
Highlands Borough	2016 Master Plan Reexamination Report and Master Plan Amendments (2016)	This plan recognizes the importance of aesthetics in terms of new buildings, and landscape design, streetscapes, and neighborhoods. The land use plan elements include open space preservation and living shorelines. No specific objectives are included within the plan for protecting or improving scenic views, or beach/waterfront views.
Loch Arbour Village	Municipal Public Access Plan (2017)	The Village is responsible for providing public access to the tidal waters. No specific objectives are included within the Access Plan for protecting or improving scenic views, or beach/waterfront views.
Long Branch City	2020 Master Plan Reexamination (2020) Municipal Public Access Plan (2017)	Some goals in the Master Plan include promoting aesthetically pleasing development that recognizes the character of the traditional New Jersey shore towns, preserving the city's natural resources and historically and architecturally significant districts and structures.  In the Municipal Public Access Plan, the city supports the reconstruction of the historic Long Branch Pier as a multi-purpose facility. This pier will be open for public use and includes a fishing area, a garden, a children's play area, visual access, and proximity to beach and boardwalk access points. There are 27 public access locations identified as having visual access.  Between these two plans, no specific objectives are included for protecting or improving scenic views, or beach/waterfront views.
Manasquan Borough	Master Plan Re-examination (2017)	This plan encourages the development of both active and passive recreation for residents and visitors while maintaining the sensitivity to environmental and cultural resources. No specific objectives are included within the plan for protecting or improving scenic views, or beach/waterfront views.
Middletown Township	Master Plan Reexamination Report & Amended Housing Master Plan Element and Open Space, Recreation and Conservation Master Plan Element	This report discusses the approach to site design that promotes preservation of significant resources, including scenic corridors, historic roadways, architecturally and historically significant structures, and open space. No specific objectives are included within the plan for protecting or improving scenic views, or beach/waterfront views.
Monmouth Beach Borough	Municipal Public Access Plan (2017); Master Plan Reexamination Report and Plan Amendment (2017)	The plan identifies 13 publicly accessible areas that are for visual purposes only of the water. The plan is consistent with Goal #2 of the Monmouth County Comprehensive Master Plan, including to protect, conserve, and enhance the county's significant, diverse, natural, and scenic resources utilizing sound ecological protection and restoration measures. One of the report's goals is to promote aesthetically pleasing human scale development that recognizes the character of traditional New Jersey shore towns. No specific objectives are included within the plan or the report for protecting or improving scenic views, or beach/waterfront views.

Jurisdiction	Authority	Objectives
Neptune Township	The Township of Neptune Comprehensive Master Plan (2011)	The Master Plan provides a framework for development and preservation of the township throughout its scenic, historic, and natural areas. The plan provides goals and recommendations for future development while preserving natural and historic resources. This includes promoting aesthetics in terms of commercial and industrial areas, future utility installations, and the visual quality of scenic corridors. The Fletcher Lake and Wesley Lake corridors will be evaluated for potential designation as scenic corridors and to consider adopting appropriate design standards and guidelines for development along designated corridors. However, no specific objectives are included for protecting or improving beach/waterfront views.
Sea Bright Borough	2017 Sea Bright Borough Master Plan (2017)	This plan notes the importance of conserving the beach and river waterfronts for the value of providing both scenic vistas and recreational opportunities. A policy of the Borough includes promoting visual environment through creative development techniques and good civic design and arrangement.
Sea Girt Borough	Master Plan Reexamination Report (2018)	The Master Plan states the Coastal Area Facilities Review Act policies, including the reclamation of environmentally damaged sites and mitigation of future negative impacts, particularly for waterfronts, beaches, scenic vistas, and habitats. The plan discusses the need for a historic preservation plan. No specific objectives are included for protecting or improving scenic views, or beach/waterfront views.
Spring Lake Borough	Master Plan (2010)	Some of the goals presented in the Master Plan include maintaining historic resources and the natural beauty of the Borough, enhancing conservation, recreational, and open spaces. No specific objectives are included for protecting or improving scenic views, or beach/waterfront views.
<b>Ocean County, New Jersey</b>		
Ocean County	Conservation Plan Element, Environmental Resources and Recreation Inventory (2009); 2011 Comprehensive Master Plan (2011); Open Space, Parks & Recreation Plan (2020)	The Conservation Plan Element's overall goal is to preserve and maintain the ecological, historic, visual, recreational, and scenic resources of the city. However, there are no objectives for protecting or improving scenic views, or beach/waterfront views. The Comprehensive Master Plan and the Open Space, Parks, and Recreation Plan include no objectives for protecting or improving scenic views, or beach/waterfront views.
Barnegat Light Borough	Barnegat Light Borough Master Plan Reexamination (2018)	One goal of the Municipal Public Access Plan (attached to the Master Plan) is to maintain and continue to promote a visually pleasing aesthetic along the waterfront areas. The plan identifies four public access points that are used for visual access only.
Barnegat Township	2011 Barnegat Township Master Plan (2011)	Historic preservation is a valuable asset to the community. By protecting aesthetically attractive architectural elements and utilizing existing infrastructure, historic preservation is essential. Significant sites are often those that already provide the town with open space, recreation, and scenic vistas. Referencing the



Jurisdiction	Authority	Objectives
		State Development and Redevelopment Plan, the Borough will preserve and enhance historic, cultural, scenic, open space, and recreational value. However, no specific objectives are included within the plan for protecting or improving scenic views, or beach/waterfront views.
Bay Head Borough	Municipal Public Access Plan (2020); Master Plan Reexamination Report and Update (2021)	There are 22 public access points identified as having visual access to the water in the Municipal Public Access Plan. There are no specific objectives in the plan for protecting or improving scenic views, or beach/waterfront views.
Beach Haven Borough	Beach Haven Borough Comprehensive Master Plan (2018)	A goal of the Comprehensive Master Plan is to maintain and continue to promote a visually pleasing aesthetic along the waterfront areas. However, there are no specific objectives included for protecting or improving scenic views, or beach/waterfront views.
Berkeley Township	Berkeley Township Comprehensive Master Plan (1997) General Reexamination of the Master Plan (2019) Environmental Resources Inventory (2012)	The Township Master Plan, the Reexamination Report, and the Township Environmental Resources Inventory include no specific objectives for protecting or improving scenic views, or beach/waterfront views.
Brick Township	Master Plan Reexamination Report (2018) Master Plan: Part 2 – Land Use Element	In the Land Use Element of the Master Plan, there is recognition of the special attraction and scenic value placed on the residential uses of a barrier island location and the over-water views it provides. However, no specific provisions for protecting or enhancing the outward views from within the community, or beach/ocean views are included. The Master Plan Reexamination Report includes no specific objectives for protecting or improving scenic views, or beach/waterfront views.
Eagleswood Township	None Identified	
Harvey Cedars Borough	Municipal Public Access Plan (2017)	A goal of the Municipal Public Access Plan is to maintain and continue to promote a visually pleasing aesthetic along waterfront areas. There are 21 publicly accessible areas listed as having visual access to the waterfront.
Lacey Township	Master Plan (1991) Lacey Township Master Plan Update – Revised Land Use Element (2016); Master Plan Reexamination Report (2018)	The Township Master Plan includes a townscape objective that states that all elements that could be obtrusive to the boating public should be reviewed and specifically addressed through view studies or simulations prior to receiving approvals. The Township Reexamination Report and Revised Land Use Element include no specific objectives for protecting or improving scenic views, or beach/waterfront views.
Lavallette Borough	Master Plan Reexamination (2006);	The Reexamination of the Master Plan encourages the preservation and maintenance of Lavallette’s historic sites. The original Master Plan encourages the importance of aesthetic



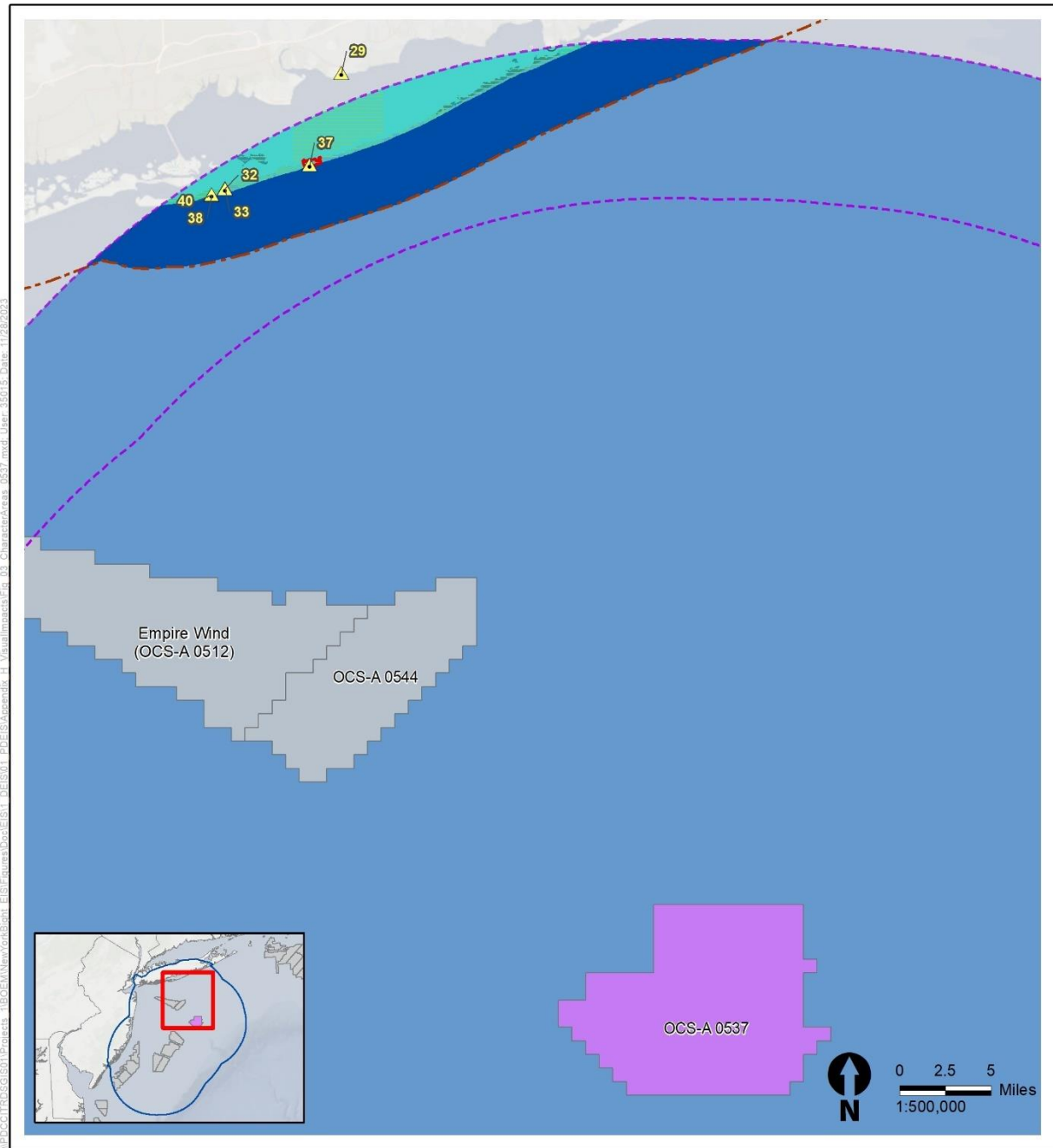
Jurisdiction	Authority	Objectives
	Master Plan for the New Millennium (1999)	streetscapes, commercial land uses, and historical and cultural qualities. However, neither plan includes specific objectives for protecting or improving scenic views, or beach/waterfront views.
Little Egg Harbor Township	Reexamination Report and Master Plan Amendment (2015)	The Township Master Plan includes a goal to promote a desirable visual environment through conservation and preservation of valuable natural features. However, the plan does not include specific objectives for protecting or improving scenic views, or beach/waterfront views.
Long Beach Township	Comprehensive Master Plan Update (2017)	The Comprehensive Master Plan does not include specific objectives for protecting or improving scenic views, or beach/waterfront views.
Mantoloking Borough	2017 Master Plan Re-Examination Report (2017)	The Master Plan does not include specific objectives for protecting or improving scenic views, or beach/waterfront views.
Ocean Township	Ocean Township Master Plan (1990); 2019 Master Plan Reexamination Report (2019)	The Ocean Township Master Plan includes a conservation goal to identify scenic areas within the Township and provide for their preservation. The Reexamination Report includes no specific objectives for protecting or improving scenic views, or beach/waterfront views.
Point Pleasant Beach Borough	2021 Reexamination & Master Plan Amendment	One plan objective is to strive to foster an aesthetically pleasing downtown commercial district for the ease and safety of pedestrians. This includes protecting and enhancing the historic maritime character of the Borough by maintaining appropriate scales of development, intensity of use, and architectural style. However, it does not include specific objectives for protecting or improving scenic views, or beach/waterfront views.
Seaside Heights Borough	Master Plan Reexamination Report (2022); Vision Plan (2009)	The Vision Plan recognized the need for increased access to the bay front. However, neither plan includes objectives for protecting or improving scenic views, or beach/waterfront views.
Seaside Park Borough	2008 Seaside Park Master Plan (2008)	Although a goal of the Master Plan is to encourage desirable visual design of new and upgraded businesses, it does not include specific provisions for protecting or enhancing the outward views from within the community, or beach/ocean views. Standards for preservation of historic structures are included.
Ship Bottom Borough	2021 Master Plan Reexamination Report (2021)	This report prioritizes the value of public access to the waterfront and the importance of a sustainable shoreline void of erosion. However, it does not include specific objectives for protecting or improving scenic views, or beach/waterfront views.
Stafford Township	2017 Master Plan: Land Use Element (2017)	The Land Use Element of the Master Plan does not include specific objectives for protecting or improving scenic views, or beach/waterfront views.
Surf City Borough	Comprehensive Master Plan Re-examination (2019)	This Master Plan Re-examination highlights the need to prioritize the value of public access to the waterfront and the importance of a sustainable shoreline void of erosion, especially being a barrier island community. The municipal Public Access Plan, attached to the Re-examination, works to maintain and promote visually pleasing aesthetic waterfront areas. However, neither plan includes specific objectives for protecting or improving scenic views, or beach/waterfront views.

Jurisdiction	Authority	Objectives
Toms River Township	Natural Resources Inventory (2016) Township of Toms River Master Plan (2017)	No specific objectives are included within the Natural Resources Inventory or the Master Plan for protecting or improving scenic views, or beach/waterfront views.
Tuckerton Borough	Master Plan (2002)	An objective in the Master Plan is to preserve and protect the distinctive physical and historic character of the Borough and preserve maritime heritage by recognizing the ties to Tuckerton Creek, Little Egg Harbor, and the Atlantic Ocean. The Conservation Plan Element states that the protection of scenic visual corridors is valued as an important contribution to the quality of life for residents and should be protected from inappropriate development. These visual corridors are the view of Lake Pohatcong from Route 9, the view of Long Beach Island and Little Egg Harbor from the Tuckerton Cover area, and views of Tuckerton Creek.

### H.3 SLVIA Results

This section presents the results of the SLVIA analysis, organized by SLIA (Section H.3.1) and VIA (Section H.3.2) results. The results are applicable to both action alternatives analyzed in the Final PEIS, Alternative B and Alternative C, unless otherwise specified.

Visual simulations from representative viewpoints (available on BOEM’s NY Bight website: <https://www.boem.gov/renewable-energy/state-activities/new-york-bight>) indicate that daytime and nighttime visibility of wind turbines and offshore substations would be noticeable to the casual observer from the open ocean character area, seascape character areas, landscape character areas, and viewer viewpoints. Figure H-2 through Figure H-7 show character areas with KOPs, sensitive resource areas (e.g., overburdened communities, protected natural landscapes, and historic areas), and visibility buffers for the 1,312-foot (400-meter) and 853-foot (260-meter) wind turbines. The visibility buffers for the two turbine heights are based on the rotor blade tip height and the parameters for the digital elevation model (DEM) and the digital surface model (DSM) using best practices recommended by ESRI (refer to Argonne 2024 for more information regarding viewshed modeling). Figure H-8 through Figure H-13 show the extent of onshore visibility for each lease area and both turbine heights based on viewshed modeling along with KOPs and sensitive resources. Sensitive resources are defined as overburdened communities, protected lands, and publicly accessible cultural and historic sites (refer to Argonne 2024 for more information on these resources).

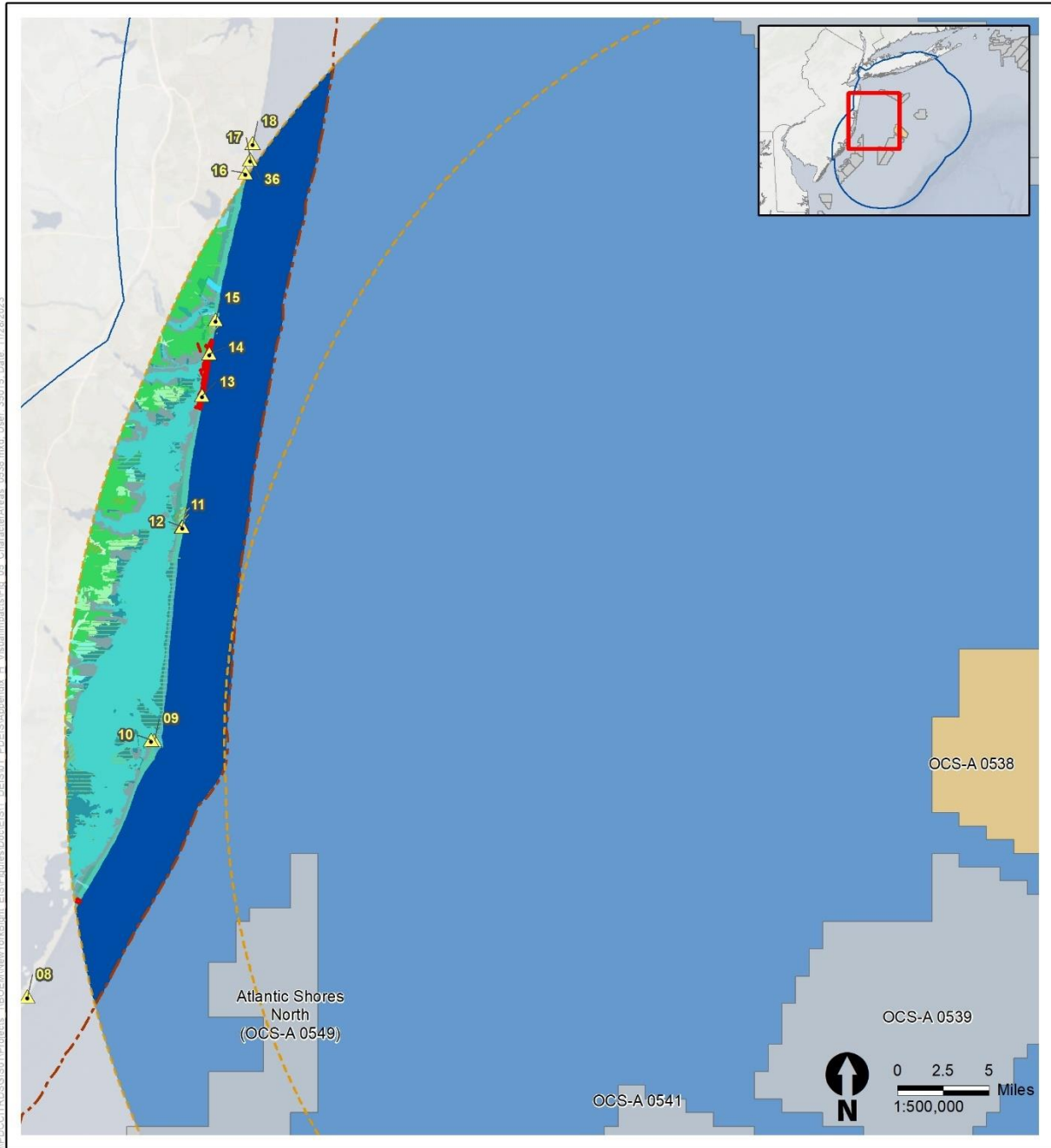


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Source: BOEM 2022, ANL 2023.

**Figure H-2. Scenic resources and character areas for OCS-A 0537**

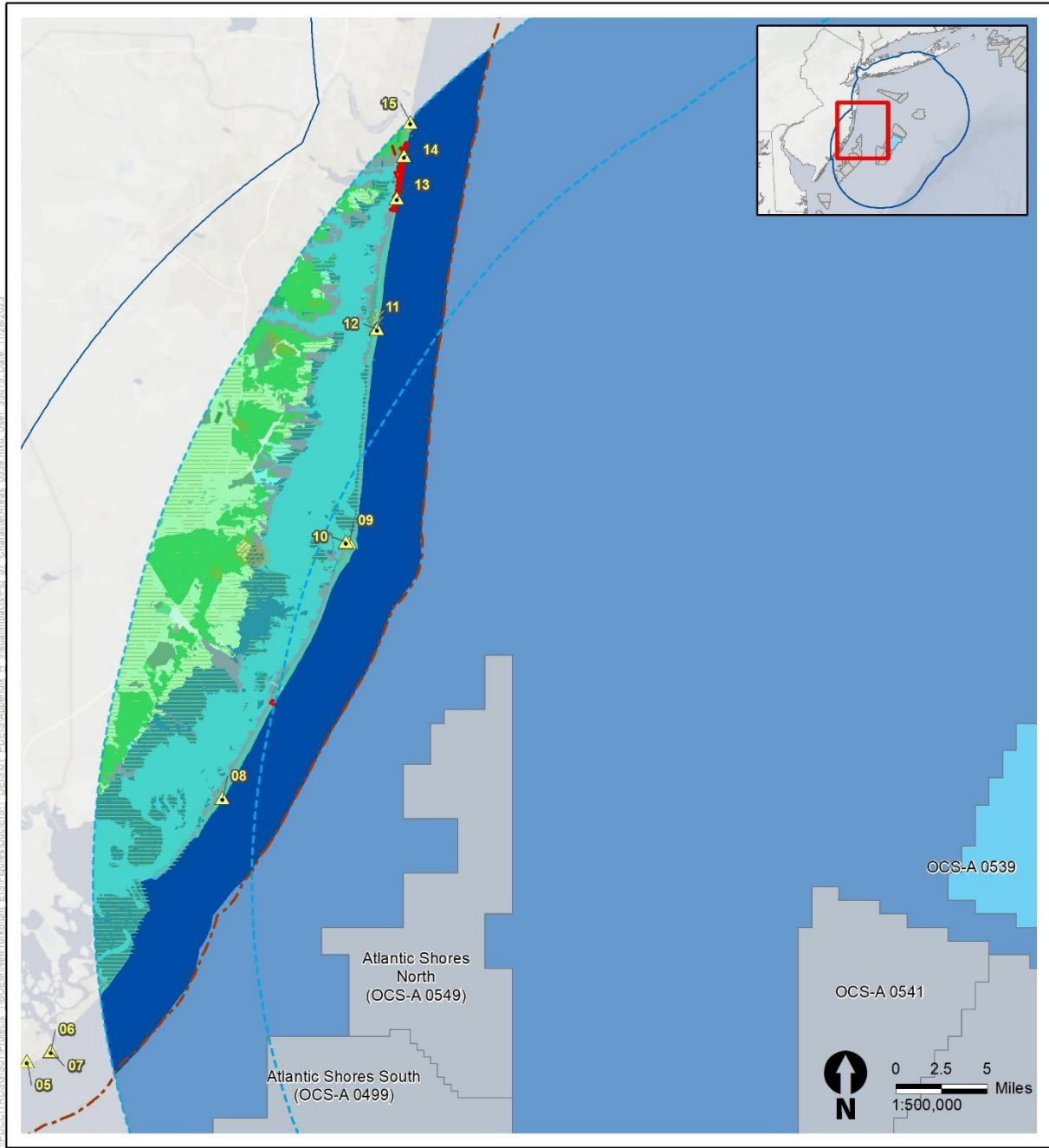


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Source: BOEM 2022, ANL 2023.

**Figure H-3. Scenic resources and character areas for OCS-A 0538**



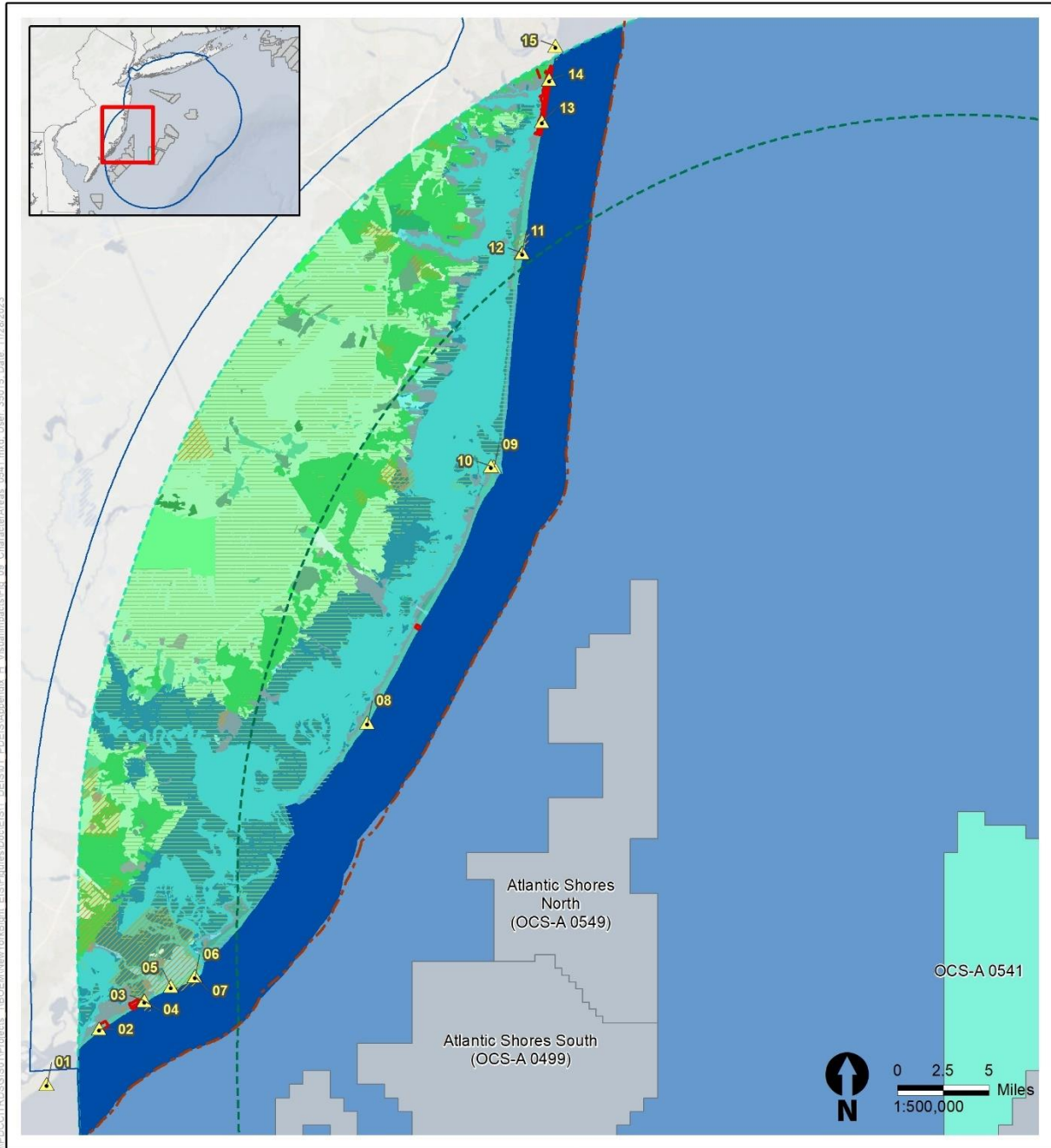
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Source: BOEM 2022, ANL 2023.

**Figure H-4. Scenic resources and character areas for OCS-A 0539**



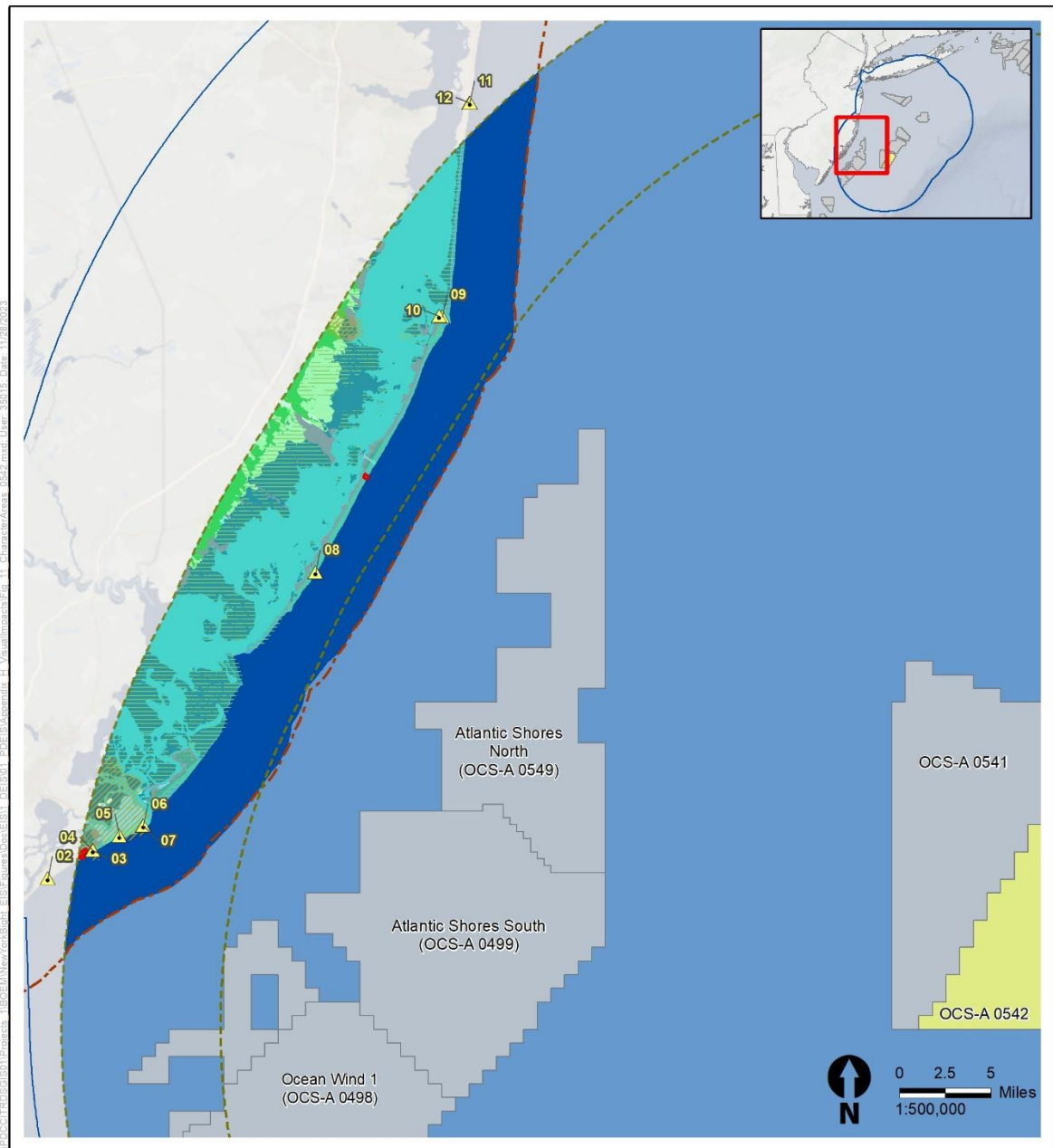


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Source: BOEM 2022, ANL 2023.

**Figure H-5. Scenic resources and character areas for OCS-A 0541**



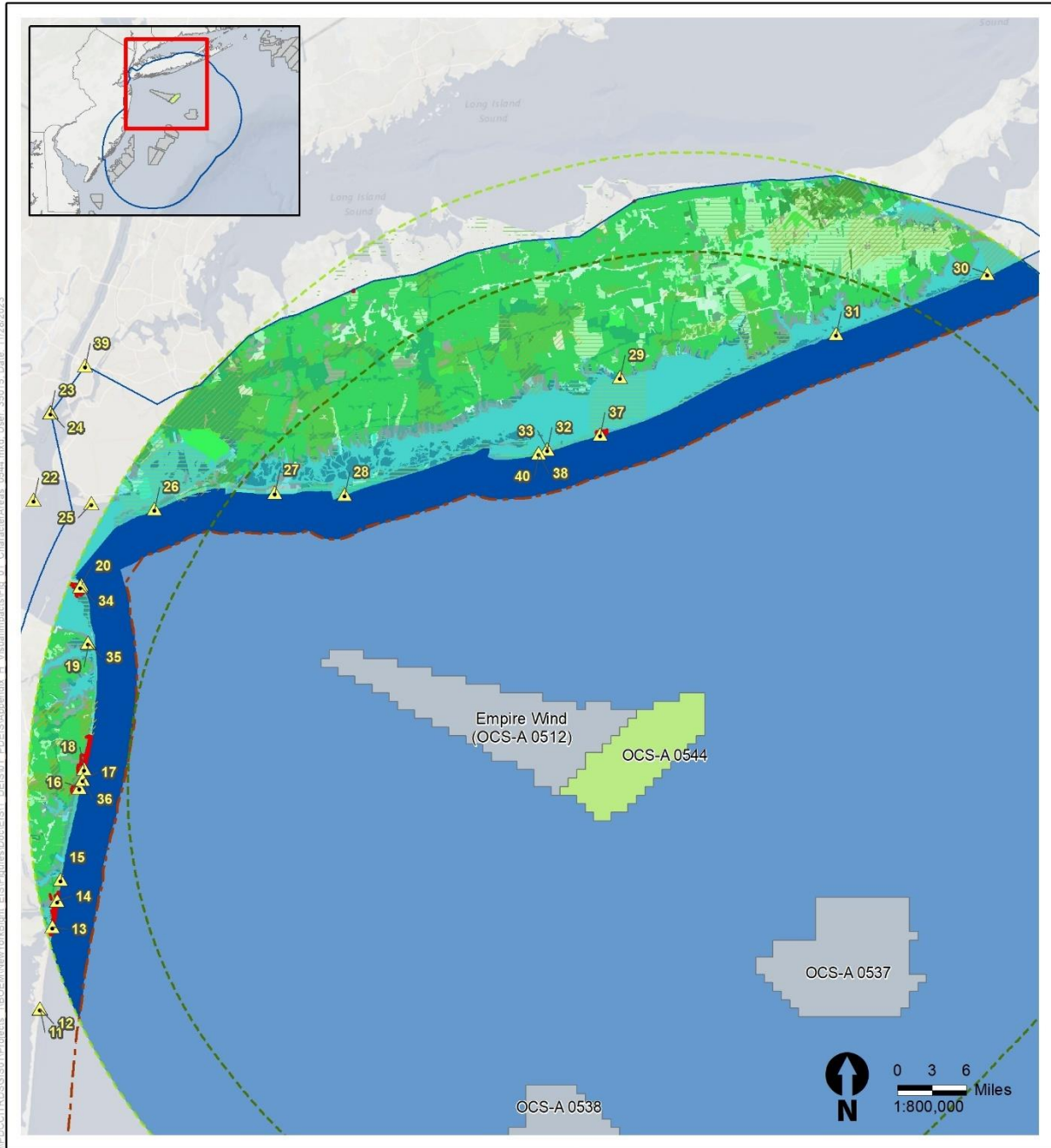
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- |   |   |  |  |
|---|---|--|--|
| <p><b>Visibility Buffer</b></p> <p>Lease Area 1,312'</p> <p>Buffer 853'</p> <p>Project Name (OCS-A 0542)</p> <p>Scenic and Visual Resources Geographic Analysis Area</p> <p>Key Observation Point</p> <p>Historic District</p> <p>Overburdened Community</p> <p>Protected Lands</p> <p>State Seaward Boundary</p> | <p><b>Landscape Character Areas</b></p> <ul style="list-style-type: none"> <li>Inland Commercial Park</li> <li>Inland Industrial</li> <li>Inland Industrial Resource</li> <li>Inland Natural Area</li> <li>Inland Rural</li> <li>Inland Suburban/Exurban Residential</li> </ul> | <p><b>Seascape Character Areas</b></p> <ul style="list-style-type: none"> <li>Bayside Industrial Resource</li> <li>Bayside Natural Upland</li> <li>Bayside Natural Wetland</li> <li>Bayside Recreation</li> <li>Bayside Residential</li> <li>Bayside Urban</li> <li>Bayside Waterbodies</li> <li>Seascape Residential</li> </ul> | <p><b>Ocean Character Area</b></p> <ul style="list-style-type: none"> <li>Seascape Urban</li> <li>Nearshore Ocean</li> <li>Oceanside Beach</li> <li>Oceanside Recreation</li> <li>Oceanside Residential/Commercial</li> <li>Oceanside Urban</li> <li>Open Ocean</li> </ul> |
|---|---|--|--|

Source: BOEM 2022, ANL 2023.

**Figure H-6. Scenic resources and character areas for OCS-A 0542**



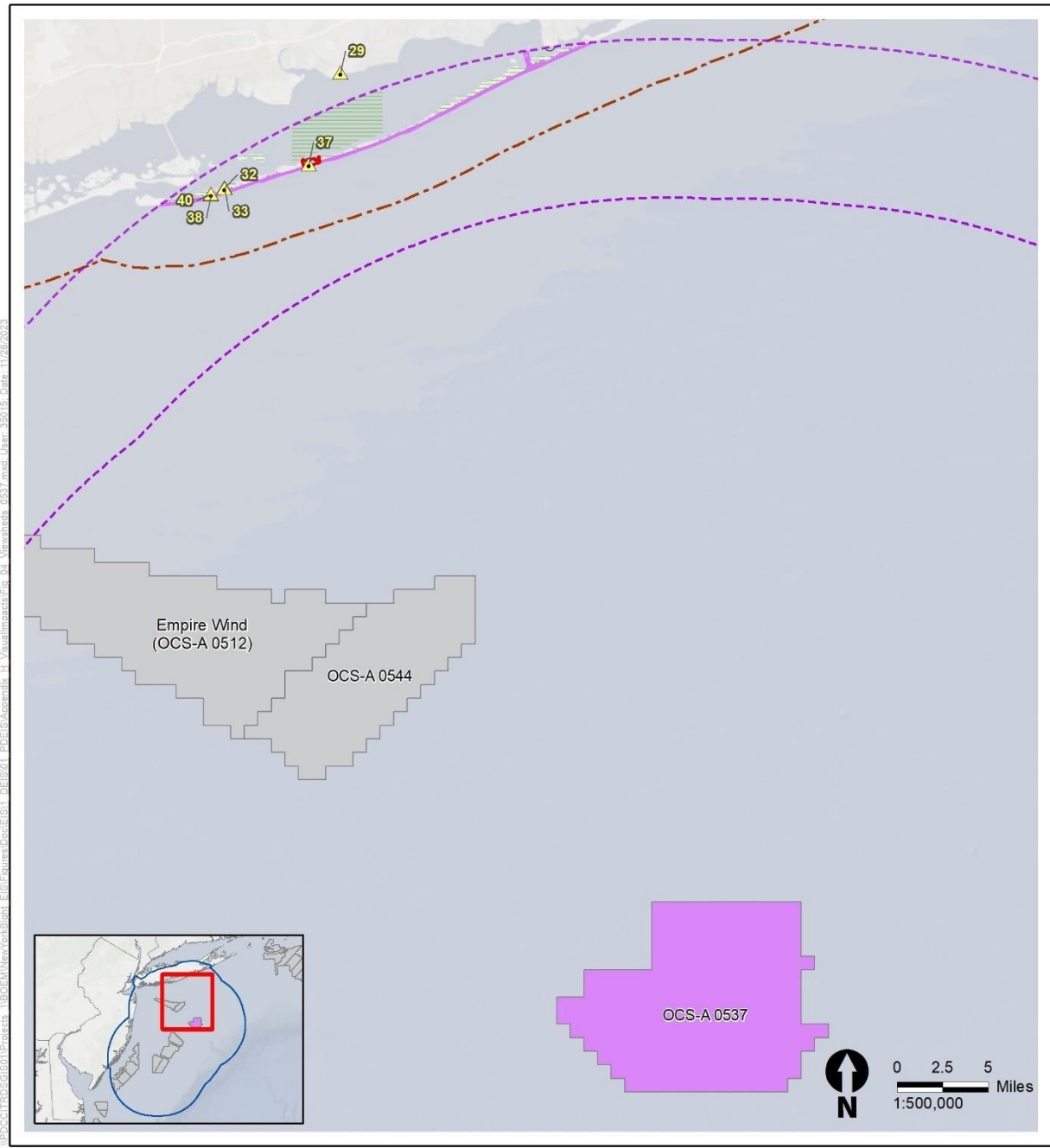


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- |  |   |   |  |
|--|---|---|--|
| <p><b>Visibility Buffer</b></p> <p>Lease Area: 1,312'</p> <p>Buffer: 853'</p> <p>Project Name: (OCS-A 0544)</p> <p>Scenic and Visual Resources Geographic Analysis Area</p> <p>Key Observation Point</p> <p>Historic District</p> <p>Overburdened Community</p> <p>Protected Lands</p> <p>State Seaward Boundary</p> | <p><b>Landscape Character Areas</b></p> <ul style="list-style-type: none"> <li>Inland</li> <li>Inland Commercial Park</li> <li>Inland Industrial</li> <li>Inland Industrial Resource</li> <li>Inland Military Site</li> <li>Inland Natural</li> <li>Inland Recreation</li> <li>Inland Rural</li> <li>Inland Suburban/Exurban Residential</li> </ul> | <p><b>Seascape Character Areas</b></p> <ul style="list-style-type: none"> <li>Inland Urban</li> <li>Bayside Commercial Park</li> <li>Bayside Industrial</li> <li>Bayside Industrial Resource</li> <li>Bayside Military Site</li> <li>Bayside Natural Upland</li> <li>Bayside Natural Wetland</li> <li>Bayside Recreation</li> <li>Bayside Residential</li> <li>Bayside Urban</li> </ul> | <ul style="list-style-type: none"> <li>Bayside Waterbodies</li> <li>Seascape Residential</li> <li>Seascape Urban</li> <li>Nearshore Ocean</li> <li>Oceanside Beach</li> <li>Oceanside Recreation</li> <li>Oceanside Residential/Commercial</li> <li>Oceanside Urban</li> </ul> <p><b>Ocean Character Area</b></p> <ul style="list-style-type: none"> <li>Open Ocean</li> </ul> |
|--|---|---|--|

Source: BOEM 2022, ANL 2023.

**Figure H-7. Scenic resources and character areas for OCS-A 0544**

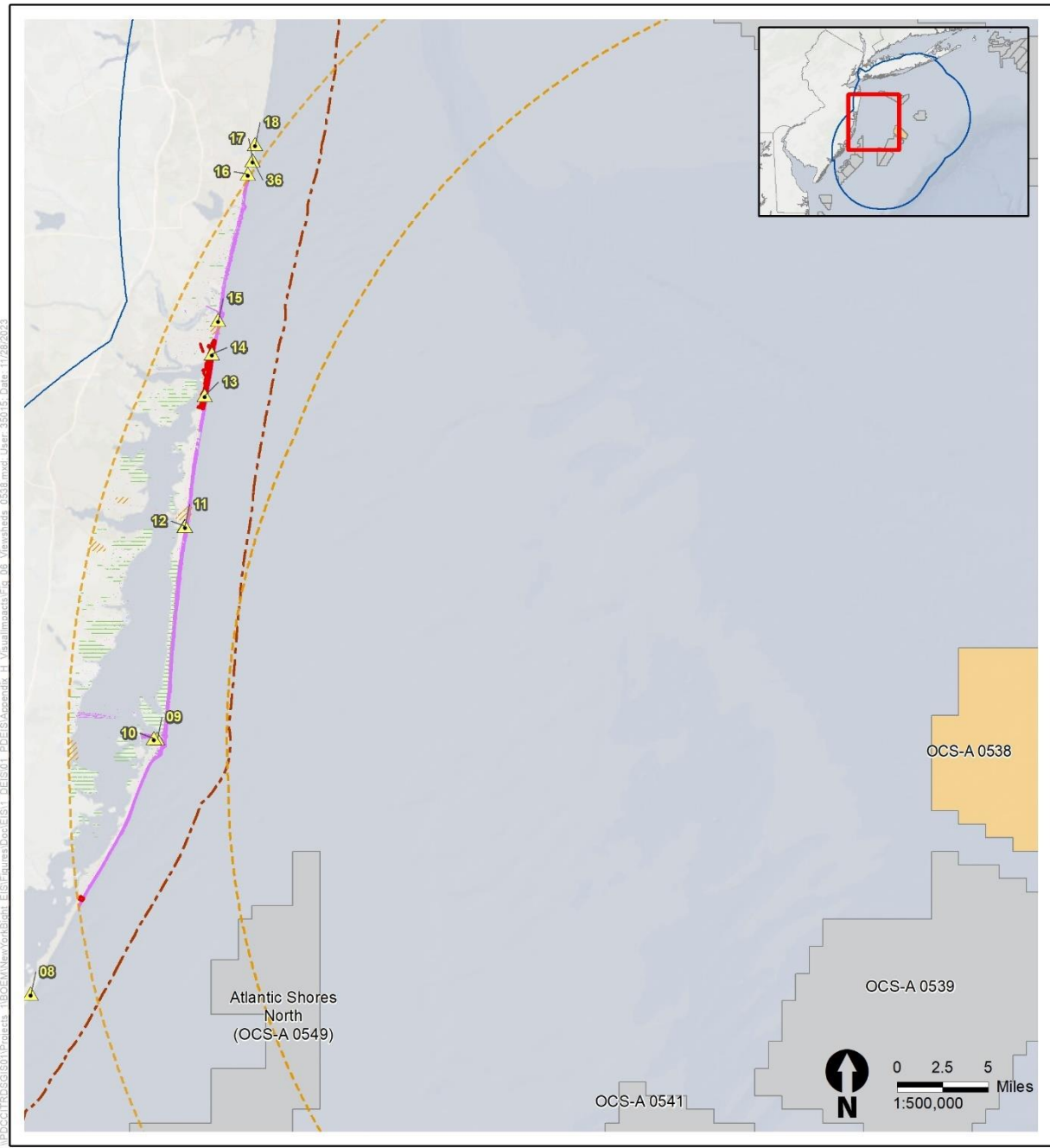


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- Scenic and Visual Resources Geographic Analysis Area
  - ▲ Key Observation Point
  - Historic District
  - Overburdened Community
  - Protected Lands
  - State Seaward Boundary
  - Turbine Visibility (1,312' Turbine Tip)
- |  | Lease Area   | Visibility Buffer   | Visibility Buffer   | Project Name |
|--|--|---|---|--------------|
|  | <span style="background-color: purple; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | <span style="border: 1px dashed purple; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | <span style="border: 1px dashed purple; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | (OCS-A 0537) |

Source: BOEM 2022, ANL 2023.

**Figure H-8. Turbine visibility viewshed and KOPs for OCS-A 0537**

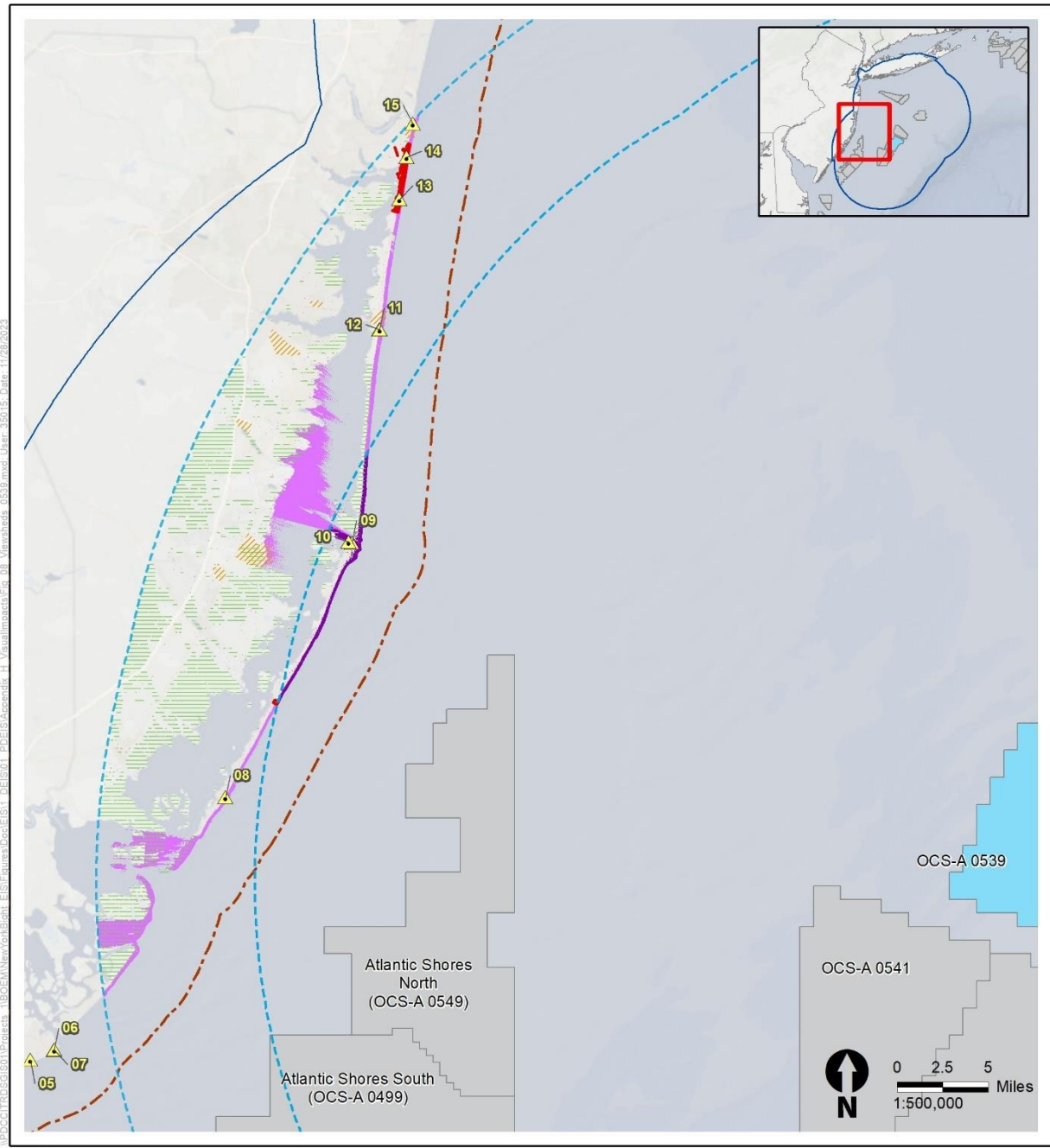


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- Scenic and Visual Resources Geographic Analysis Area
  - ▲ Key Observation Point
  - Historic District
  - Overburdened Community
  - Protected Lands
  - State Seaward Boundary
  - Turbine Visibility (1,312' Turbine Tip)
- |            | Visibility Buffer   | Visibility Buffer   |              |
|------------|---|---|--------------|
| Lease Area | 1,312'  | 853'  | Project Name |
|            | <span style="border: 1px dashed purple; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | <span style="border: 1px dashed orange; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | (OCS-A 0538) |

Source: BOEM 2022, ANL 2023.

**Figure H-9. Turbine visibility viewshed and KOPs for OCS-A 0538**

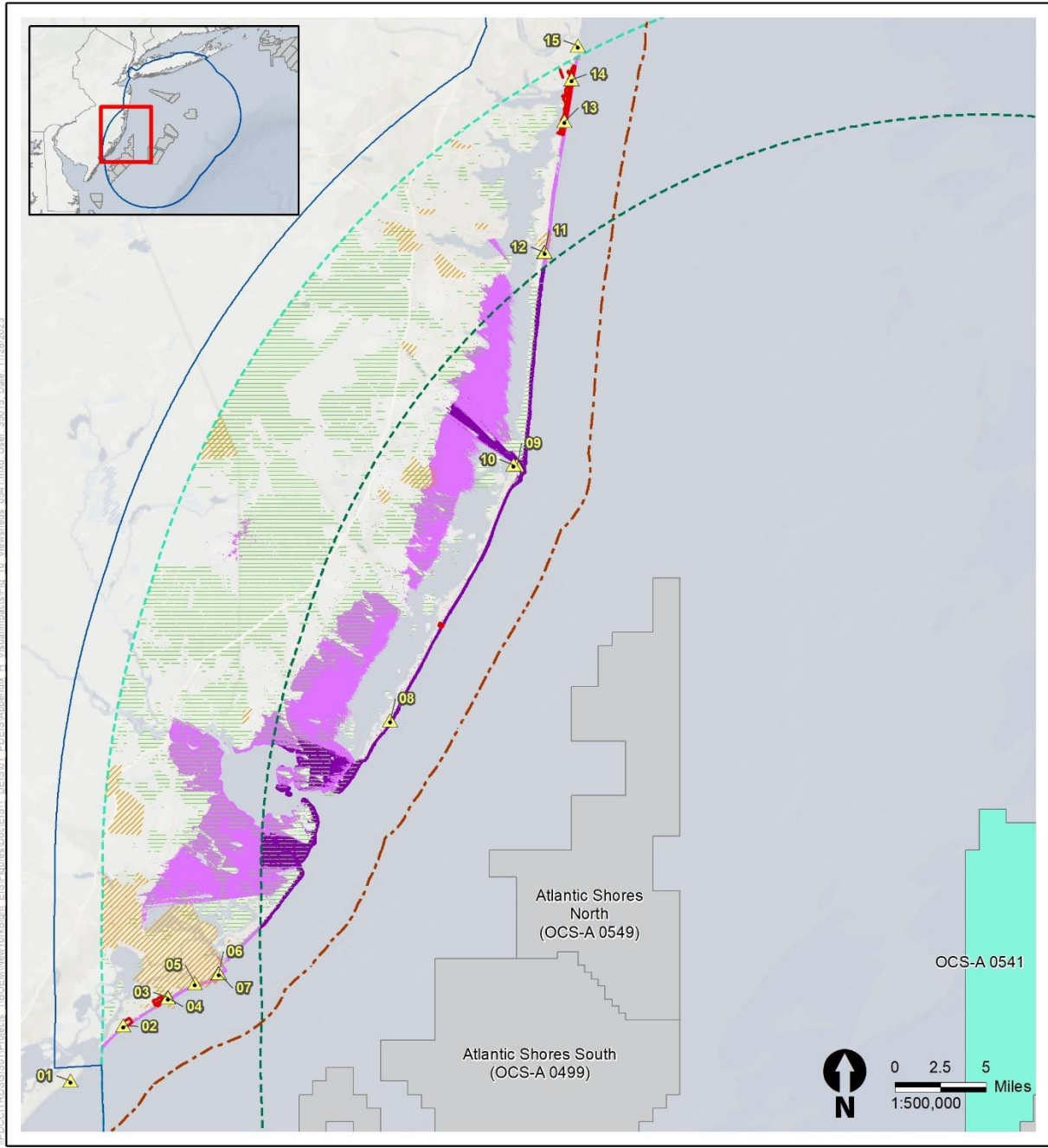


- Scenic and Visual Resources Geographic Analysis Area
  - ▲ Key Observation Point
  - Historic District
  - Overburdened Community
  - Protected Lands
  - State Seaward Boundary
  - Turbine Visibility (853' Turbine Tip)
  - Turbine Visibility (1,312' Turbine Tip)
- |  | Visibility Buffer   | Visibility Buffer   | Project Name |
|--|---|---|--------------|
| Lease Area   | 1,312'  | 853'  | (OCS-A 0539) |
| <span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | <span style="border: 2px dashed blue; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | <span style="border: 2px dashed blue; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> |              |

Source: BOEM 2022, ANL 2023.

**Figure H-10. Turbine visibility viewshed and KOPs for OCS-A 0539**



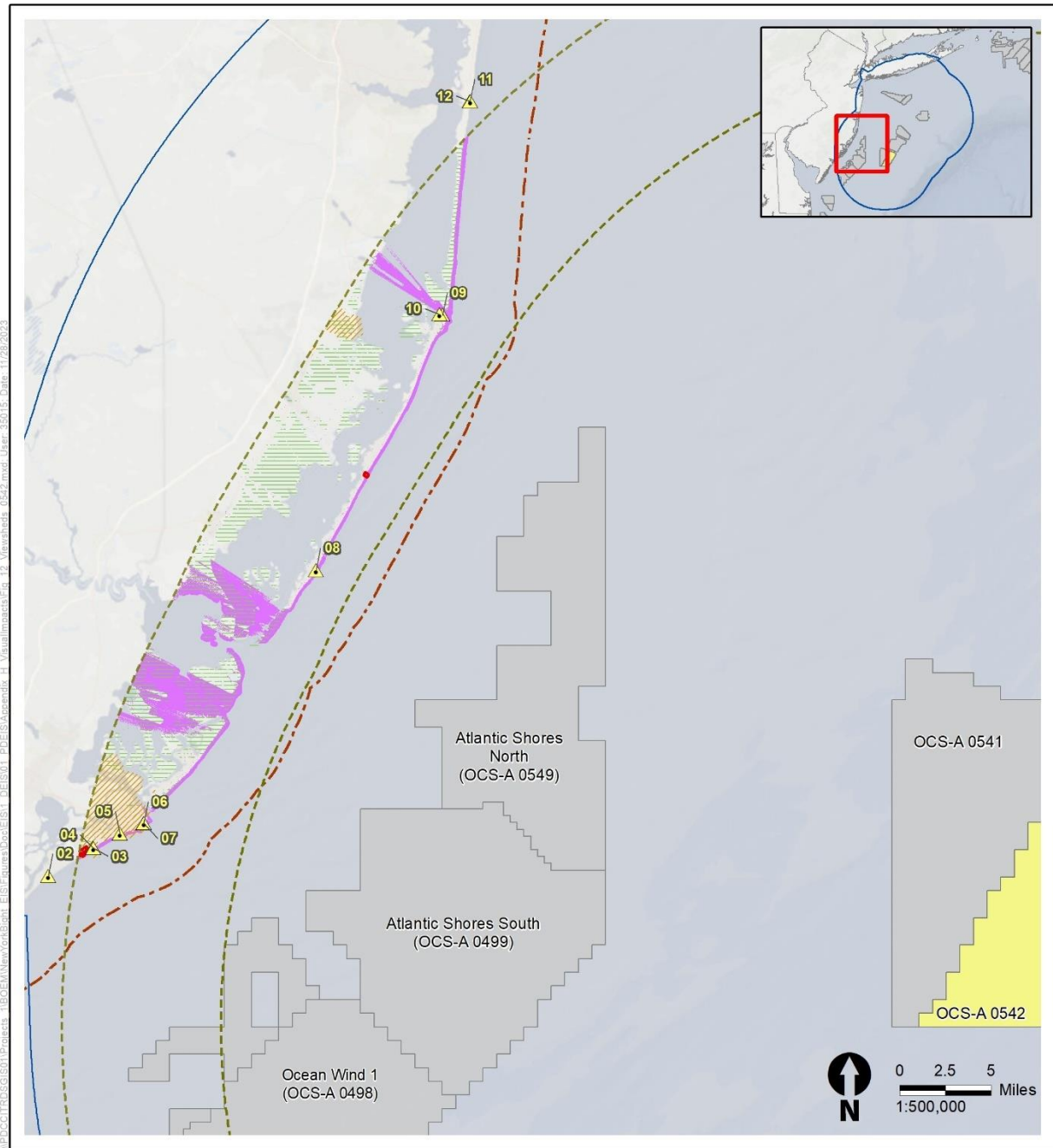


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- Scenic and Visual Resources Geographic Analysis Area
  - Key Observation Point
  - Historic District
  - Overburdened Community
  - Protected Lands
  - State Seaward Boundary
  - Turbine Visibility (853' Turbine Tip)
  - Turbine Visibility (1,312' Turbine Tip)
- |            | Visibility Buffer  | Visibility Buffer   | Project Name |
|------------|--|---|--------------|
| Lease Area | <span style="border: 1px dashed magenta; display: inline-block; width: 15px; height: 10px;"></span> 1,312' | <span style="border: 1px dashed purple; display: inline-block; width: 15px; height: 10px;"></span> 853' | OCS-A 0541   |

Source: BOEM 2022, ANL 2023.

**Figure H-11. Turbine visibility viewshed and KOPs for OCS-A 0541**

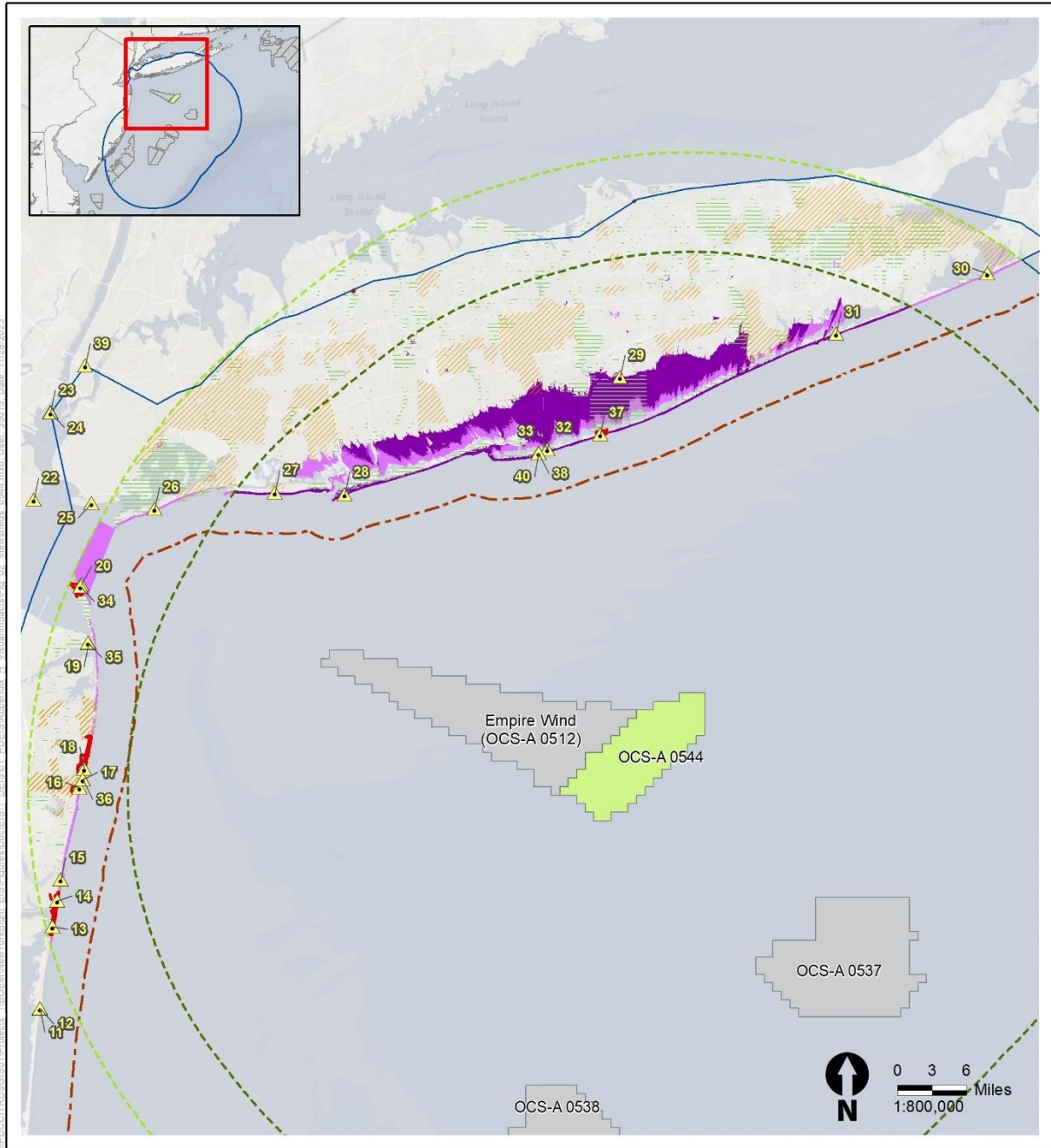


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- Scenic and Visual Resources Geographic Analysis Area
  - Key Observation Point
  - Historic District
  - Overburdened Community
  - Protected Lands
  - State Seaward Boundary
  - Turbine Visibility (1,312' Turbine Tip)
- |            | Visibility Buffer   | Visibility Buffer   | Project Name |
|------------|---|---|--------------|
| Lease Area | <span style="border: 1px dashed purple; display: inline-block; width: 15px; height: 10px;"></span> 1,312' | <span style="border: 1px dashed purple; display: inline-block; width: 15px; height: 10px;"></span> 853' | OCS-A 0542   |

Source: BOEM 2022, ANL 2023.

**Figure H-12. Turbine visibility viewshed and KOPs for OCS-A 0542**



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- Scenic and Visual Resources Geographic Analysis Area
  - ▲ Key Observation Point
  - Historic District
  - Overburdened Community
  - Protected Lands
  - State Seaward Boundary
  - Turbine Visibility (853' Turbine Tip)
  - Turbine Visibility (1,312' Turbine Tip)
- |  | Visibility Buffer  | Visibility Buffer   |              |
|--|--|---|--------------|
| Lease Area   | 1,312'   | 853'  | Project Name |
| <span style="background-color: lightgreen; border: 1px dashed green; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | <span style="border: 1px dashed green; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | <span style="border: 1px dashed purple; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> | (OCS-A 0544) |

Source: BOEM 2022, ANL 2023.

**Figure H-13. Turbine visibility viewshed and KOPs for OCS-A 0544**



### H.3.1 Open Ocean, Seascape, and Landscape Impact Assessment (SLIA)

#### H.3.1.1 Offshore Open Ocean, Seascape, and Landscape Character

Open ocean, seascape, and landscape character in the geographic analysis area is organized in a three-level hierarchy (Argonne 2024):

- **Level 1:** Defines the broad character of ocean, seascape, and landscape.
- **Level 2:** Character types are relatively homogeneous in character. They are generic in nature and share similar combinations of geology, topography, drainage patterns, vegetation, historical land use and settlement patterns, and perceptual and aesthetic attributes. Level 2 is specific to the seascape character, which is split into two discrete character types: those that maintain visibility to the ocean (oceanside seascape) and those that maintain visibility to the bay (bayside seascape). If both elements are visible, the discrete area is considered part of the oceanside seascape character area. Level 2 is not represented in ocean or landscape character, only in seascape.
- **Level 3:** Level 3 focuses on the aesthetic, perceptual, and experiential aspects of a character area (or type) with unique qualities that contribute to a sense of place. Within Level 3, character areas (or types) are further broken down into specific areas with common character and perceptual attributes. For example, these areas may have similar architectural styles, scale, development patterns, or other similarities that are identified and described for their unique qualities.

Table H-11 identifies the characters, character types, and character areas delineated in the geographic analysis area.

**Table H-11. Summary of character (level 1), character types (level 2), and character areas (level 3)**

Level 1: Characters	Level 2: Character Types	Level 3: Character Areas
Ocean Character	N/A	Open Ocean
Seascape Character	Bayside	Bayside Commercial Park
		Bayside Industrial
		Bayside Industrial Resource
		Bayside Military Site
		Bayside Natural Area Upland
		Bayside Natural Area Wetland
		Bayside Recreation
		Bayside Residential
		Bayside Urban
		Bayside Waterbodies
		Seascape Residential
		Seascape Urban
		Oceanside
		Oceanside Beach

Level 1: Characters	Level 2: Character Types	Level 3: Character Areas
		Oceanside Recreation
		Oceanside Residential/Commercial
		Oceanside Urban
Landscape Character	N/A	Inland Agriculture
		Inland Commercial Park
		Inland Industrial
		Inland Industrial Resource
		Inland Military Site
		Inland Natural Area
		Inland Recreation
		Inland Rural
		Inland Suburban/Exurban Residential
		Inland Urban

Source: Argonne 2024.

The following subsections include a description of each character, character type, and character area. Detailed descriptions and photographs of the character areas can be found in Argonne (2024).

#### *H.3.1.1.1 Open Ocean Character*

The Open Ocean zone includes the open water of the Atlantic Ocean off the coast of New Jersey and New York and portions of Delaware Bay. This character area’s defining characteristic is the presence of open water as a dominant element and unobstructed views in all directions. This primarily includes open waters of the Atlantic Ocean that are 3 nm (5.5 kilometers) beyond the Atlantic shoreline and unbounded by landforms. Human elements, such as ships of various sizes, lighthouses, buoys, and other infrastructure, can be seen at various distances throughout the study area, but the emphasis of the view is consistently on the overall flatness and variable colors of the water.

#### *H.3.1.1.2 Seascape Character Descriptions*

The regions that comprise the seascape character type are unified by a view of and relationship to the ocean and other saltwater bodies such as bays, inlets, and sounds, extending 3 nm (5.5 kilometers) from the edge of the ocean’s coastline into the ocean. These unified areas include bayside and oceanside features, as they are deeply connected visually, ecologically, and recreationally to each other. The land uses in seascape areas may vary significantly, but the emphasis on the connectivity between the land and ocean remains an important visual and experiential element across all areas with seascape character.

***Bayside Seascape Types*** maintain a view and direct connection to bays and other related saltwater bodies and associated features such as marinas and other developments along the bay and related waterbodies. These areas, however, do not maintain a direct connection to the coastline or ocean itself.

### *Bayside Commercial Park*

These areas reflect business districts and commercial areas composed of office complexes, big box stores, strip malls, and parking lots. Relatively few residential spaces exist within these landscapes. Buildings are nondescript, often single-story, but may also contain office complexes several stories tall. Major roads and highways may have such office parks and strip malls running alongside them, but these character areas are specifically delineated when the density of such development is significant. While non-ocean waterbodies may be visible from the premises, little to no infrastructure or general design of the space and the buildings themselves emphasize the view of the waterbodies.

Bayside Commercial Parks have low sensitivity. Their blocky, nondescript built features cause low susceptibility to changes in their character, and the low scenic quality of commercial parks contributes to the low value associated with the character of these areas. This character area occurs along the coast of Brooklyn, within Gravesend Bay.

### *Bayside Industrial*

Bayside Industrial areas are adjacent to the bay or other bayside waterbody and are industrial in nature, with features such as smokestacks, large blocky buildings, docks, large freight ships, bare earth, concrete, waste pilings, metal silos, warehouses, cranes, vehicles, and industrial materials. The scale of the industrial infrastructure is typically large, with angular, geometric cranes lining the waterfront. Freighters and other large coastal ships move within this environment, adding an additional visual weight and blocky pattern. While they are sometimes connected to residential and urban areas, they typically lack public access and do not provide views of the ocean and horizon.

Bayside Industrial areas have low sensitivity because they are not susceptible to changes to their character from the NY Bight projects due to having similar industrial characteristics, including tall, vertical elements and blocky infrastructure, and the low scenic quality of industrial areas and oftentimes poor condition contribute to the low value associated with the character of these areas. Bayside Industrial areas occur sporadically, mostly along the mainland coastal edge of both New York and New Jersey. There is a higher density of industrial areas within the mainland edge of Brooklyn and western Long Island.

### *Bayside Industrial Resource*

The Bayside Industrial Resource areas consist of industrial zones such as wastewater treatment plants, landfills, and quarries. These industrial resource areas are generally smaller in scale than other industrial facilities, less dependent on large facilities for manufacturing, and are frequently visually obscured by vegetation. These facilities are often more secluded and obscured behind forested areas. The industrial elements within this category generally have low-lying, horizontal flat features, such as retention ponds and mining pits, that may not be visible from public rights-of-way.

Bayside Industrial Resource areas have low sensitivity because they are not susceptible to changes to their character from the NY Bight projects due to having similar industrial characteristics, including tall, vertical elements and blocky infrastructure. Also, the low scenic quality of industrial resource areas and

their oftentimes poor condition contribute to the low value associated with the character of these areas. Industrial resource areas occur sporadically, mostly along the mainland coastal edge of both New York and New Jersey. There is a higher density of Bayside Industrial Resource areas within the mainland edge of Brooklyn and western Long Island.

#### *Bayside Military Site*

These sites may have docks, piers, or other waterfront resources. When not obscured by vegetation, such as dense trees, military sites generally consist of light industrial and office buildings, gravel roads, chain-link fence, and railways. Buildings are generally small, square, and nondescript in the traditional industrial style of the early 20<sup>th</sup> century.

Bayside Military Sites are low in sensitivity. They are not susceptible to changes to their character from the NY Bight projects due to their existing light industrial character, including their blocky infrastructure, and they are moderately valued for having some forested areas that contribute to the areas' scenic qualities and having bayside elements like docks and piers. The only Bayside Military Site is near Leonardo, New Jersey, within Sandy Hook Bay.

#### *Bayside Natural Area Upland*

Upland forests, shrubland, and grasses within natural or natural-appearing spaces occur within islands of the non-ocean waterbodies, as well as on adjacent bayside upland areas on the mainland and barrier islands. These upland natural areas maintain visual connection to the bay, estuaries, inlets, etc., and often have trails or other forms of access from the natural areas to the non-ocean waterbodies.

Bayside Natural Area Uplands are highly sensitive due to their natural sense of place, and lack of human development or industrial features, making these areas highly susceptible to change from the NY Bight projects. They are also highly valued due to their high scenic quality, wildness, and tranquility. This character area is common along the coastal edges of the mainland in both New York and New Jersey, typically occurring directly behind, and slightly elevated from, tidal wetlands. They are more common in the mainland of southern New Jersey. They can also occur on sufficiently elevated islands and within the non-ocean waterbodies and the barrier islands themselves, which is more common within Long Island.

#### *Bayside Natural Area Wetland*

Large swaths of wetlands, marshes, estuaries, mudflats, and islands exist within the interior inlets or sounds, and on the mainland side of coastal islands. Due to the changing nature of the boundaries of marshes, borders of these areas are less defined compared to more stable habitats such as forests. These areas are dominated by emergent grasses, reeds, and rushes.

Bayside Natural Area Wetlands are highly sensitive due to their natural sense of place, and lack of human development or industrial features, making these areas highly susceptible to change from the NY Bight projects. They are also highly valued due to their high scenic quality, wildness, and tranquility. From Ocean City north to Barnegat Lighthouse, a significant portion of the area between the mainland

and the barrier islands is Bayside Natural Area Wetland. The character area also extends from Jamaica Bay to Fire Island.

### *Bayside Recreation*

Bayside Recreation consists of developed green space along the edge of a bay, which has amenities adjacent to a beach. These recreational areas are differentiated from other greenspaces, such as natural areas, by their scale of human development and recreational focus. These non-natural appearing areas often have seascape-related amenities such as marinas, fishing piers, boat launches, and water parks, as well as parks with significant sports and recreational resources such as tennis courts, baseball diamonds, walking trails in non-natural landscapes, and public and private golf courses.

Bayside Recreation areas are highly sensitive. The infrastructure is often limited in these areas, making their character highly susceptible to change. They are highly valued due to their high scenic qualities and locally held values and are often historic designated parks.

### *Bayside Residential*

Bayside Residential consists of developed land that contains mostly residential units of low to high density; with views of bayside saltwater waterbodies from any vantage point, including marinas, docks, and piers; or that are located directly on the shoreline itself. These homes often have direct access to the waterfront and are generally designed in a way to provide significant views of the inlets, marshes, rivers, or other areas on the landward side of the barrier islands. The shoreline can be hardened and highly developed with houses built directly on piers or adjacent to hard-edged shorelines, or soft, naturalized, gradual slopes. The scale of development can be variable.

The Bayside Residential character area is highly sensitive. The composition of low to high density structures—some of which may have architectural historic interest—and lack of industrial elements makes for a character that is highly susceptible to change from the NY Bight projects. Bayside Residential areas are highly valued due to their scenic quality, houses' architectural and/or historic interest, and locally held values based on the bayside orientation.

### *Bayside Urban*

Bayside Urban includes highly developed land with a view of bayside waterbodies from any vantage point—including marinas, docks, and piers—or that are located directly on the bayside shoreline. These areas are multiuse, with a mix of commercial, residential, and public lands. There can be restaurants, commercial districts, or public/private parks with significant infrastructure for waterfront access, such as large marinas or piers.

The sensitivity for Bayside Urban areas is medium. They are typically characterized by dense built structures with significant waterfront access infrastructure. This highly developed area has low susceptibility to character change from the NY Bight projects. Bayside Urban areas are highly valued for their tourism value and connection to the bayside waterbodies, and sometimes for having historically significant features. In Atlantic City, much of the Bayside Urban area consists of large hotels and

entertainment complexes situated along the water's edge. In addition, houses, condominiums, and apartment buildings are densely situated along the canals and marinas.

### *Bayside Waterbodies*

Bayside Waterbodies are partially enclosed marine waterbodies with direct access to the ocean and the associated docks, marinas, and other infrastructure. Although not essential to the viewing experience, these areas may have full, partial, or no views of the ocean and extend to the edge of river deltas and other waterbodies.

Bayside Waterbodies are highly sensitive and highly valued for their scenic qualities. These calm waterbodies are highly susceptible to change. The inlets between Ocean City and Seaside Park, with their extensive natural areas, are an example of Bayside Waterbodies.

### *Seascape Residential*

Seascape Residential areas are neighborhoods directly tied to the seascape character but that do not maintain direct views of the ocean, non-ocean waterbodies, beaches, or other marine infrastructure. They are intrinsically connected to the seaside character due to proximity, character of the built environment, or overall experience, but they do not directly connect to the ocean features. For example, a barrier island may be large enough that the interior residential streets maintain cohesive cultural and/or architectural cues to seaside elements but are too far from beach access points or are disconnected due to distance and large roads that act as a visual and physical barrier to the ocean and non-ocean waterbodies.

These areas are highly sensitive, highly susceptible to change from industrial infrastructure, and highly valued for their aesthetic and perceptual elements. Ocean City, Mantoloking, and Navesink are all examples of Seascape Residential areas.

### *Seascape Urban*

Seascape Urban areas include developed urban land that is directly tied to seascape character but does not maintain direct views of the ocean, dunes, beaches, or other marine infrastructure. They have medium sensitivity and are typically characterized by densely built structures and are highly locally valued for their integration into the seascape character elements and tourism. Atlantic City, New Jersey, and Island Park, New York, are examples of Seascape Urban areas.

**Oceanside Seascape Types** maintain clear visibility and connectivity to the ocean. The shared inter-visibility between natural lands and developed areas and the sea is such that the land, coastline, and sea maintain visibility of the ocean.

### *Nearshore Ocean*

The nearshore ocean stretches 3 nm (5.5 kilometers) from the coastline in which the ocean relates to the seascape. Here, long horizontal waves typically roll towards the coast, with regular whitecaps and

breaking waves occurring, except in calm weather. Colors and textures vary consistently, and change constantly, throughout this stretch of water.

Nearshore Ocean is highly sensitive due to its pristine, flat, vast, and minimal character and lack of infrastructure and industrial elements. It is highly valued for scenic qualities, wildness, and tranquility. Nearshore ocean extends all along the New York and New Jersey.

#### *Oceanside Beach*

Oceanside Beach areas maintain features, such as dunes and vegetation, in a way that makes the beach appear to be natural or have a minimal human impact. Here, human development is either not present, mostly obscured, or is built in a way that enhances rustic and/or natural features. Activities are passive and active, from swimming, surfing, and beachcombing, to relaxation and viewing nature. The emphasis of the view is the uninterrupted, wide horizon of the beach and ocean. Examples include Brigantine Beach, Island Beach State Park, and Highland Beach of Sandy Hook National Park in New Jersey. New York examples include Breezy Point and the majority of Fire Island's coastline.

Oceanside Beach is highly susceptible to changes due to its flat nature and natural appearance, is highly valued due to scenic quality and locally held values, and is therefore a highly sensitive environment.

#### *Oceanside Recreation*

Oceanside Recreation areas are characterized by developed recreational park land with a view of the beach and/or ocean from any vantage point. These include walking trails and seaside promenades, seaside recreational resources, public marinas, and piers. The infrastructure is often limited within Oceanside Recreation areas, but when it is present, it is human-scale and not industrial. Jones Beach and Robert Moses State Park are examples of Oceanside Recreation areas.

The Oceanside Recreation character is highly susceptible to change. These areas are highly valued due to their high scenic qualities with oceanside characteristics and their locally held values, and they are often natural or historic designated parks.

#### *Oceanside Residential/Commercial*

This zone consists of developed residential land, with a view of the beach and/or ocean from any vantage point. Architectural styles vary, but seaside residential units may reflect cottage, Victorian, and modern styles with an emphasis on decks, balconies, and windows that encourage views of the surrounding seascape. Access to the beach and ocean is often delineated through fenced walkways or boardwalks, often at the end of streets that abut dunes, guiding individuals up the dunes to the beach and ocean. In other instances, commercial areas such as cafes, gift shops, hotels, and other small-scale businesses are intermixed with residential units and maintain architectural vernacular that connects them to the seascape. Vegetation can include dune grasses and shrubs along the more natural beach and dune edge, and conventional landscaping elements within the properties themselves.

These areas are highly sensitive. The medium density structures with historic buildings and architectural significance are highly susceptible to change. The scenic quality, historic interest, and local value



towards oceanside orientation make this character area highly sensitive. Oceanside Residential/Commercial areas occur between Ocean City and Ventnor City.

#### *Oceanside Urban*

Oceanside Urban areas consist of dense residential, commercial, and public lands, while still emphasizing the view of the beach and/or ocean. Certain elements that regularly occur, such as boardwalks or other paths along the beach edge, provide additional means for recreation, including food, drink, and other entertainment. Although the oceanside urban structures are often dense they have scenic quality and historic interest. Brighton Beach and Long Beach are examples of Oceanside Urban areas, with a variety of dense multi-use buildings, hotels, and beach recreation.

The scenic quality, historic interest, and local value towards oceanside and historically significant features make these areas highly valued environments.

#### *H.3.1.1.3 Landscape Character*

Land uses and landcover types vary significantly across the Landscape Character type. The common thread amongst the landscape character areas is that they have minimal visibility and opportunities for interaction with the ocean and/or seascape in general. Typologies in the study range from the highly urban, dense built environment of Manhattan, suburban New Jersey, and the agricultural landscapes of eastern Long Island, to the extensive natural areas of central New Jersey. While changes in elevation may allow for rare instances of ocean views from certain vantage points, such as skyscrapers in Midtown Manhattan, the landscape and seascape boundary is on the mainland wherever direct, ground-level connectivity to the seascape has ended.

#### *Inland Agriculture*

This character area consists of managed fields for agricultural purposes, and the adjacent housing and related agricultural structures such as barns, silos, and other elements of the farmstead. Fields are typically large, rectangular, and consist of pasture, row crops, or large raised beds and/or greenhouse structures for a variety of crops and agricultural products.

Inland Agriculture areas are highly sensitive. Agricultural areas consist of open fields with flat to rolling hills containing farm-related light industrial infrastructure such as silos that lend significant vertical elements to the character, making Inland Agriculture areas moderately susceptible to change due to the NY Bight projects. Agricultural fields provide tranquil scenic quality and open landscape views, making for high locally held values associated with them and overall high value in their character. This character area is found inland and to the far south in New Jersey, and inland to the far east of Long Island.

#### *Inland Commercial Park*

Inland Commercial Park areas are composed of office complexes, big box stores, strip malls, and parking lots. Relatively few residential units exist within these landscapes. Buildings are nondescript, often single-story buildings, but may contain office complexes several stories tall. Major roads and highways

may have such office parks and strip malls along them, but these character areas are specifically delineated when the density of such development is significant. These typically occur near highway ramps and have no proximity to or view of the ocean.

Inland Commercial Park areas have low sensitivity. Their blocky, nondescript built features and varying human development create low susceptibility to changes in character from the NY Bight projects, and the low scenic quality of commercial parks contributes to the low value associated with their character. Inland Commercial Park occurs frequently adjacent to urban and residential areas along stretches of highway.

#### *Inland Industrial*

These are significant areas of developed land that are industrial in nature, with features such as smokestacks, large blocky buildings, and limited access to the shoreline for the public. While they are connected to residential and urban areas, these large areas typically lack public access and do not particularly provide views of the ocean and horizon. Bare earth, concrete, waste pilings, metal silos, warehouses, vehicles, and industrial materials are typical in this environment.

Inland Industrial areas have low sensitivity because they have a low susceptibility to changes to their character from the NY Bight projects due to their similar industrial characteristics, including tall, vertical elements and blocky infrastructure; the low scenic quality of industrial areas and their oftentimes poor condition contribute to the low value associated with the character of these areas. Inland Industrial areas are sporadic throughout the geographic analysis area, with increasing frequency in areas surrounding New York City and Jersey City.

#### *Inland Industrial Resource*

Inland Industrial Resource areas consist of industrial zones related to natural resources, such as wastewater treatment plants, landfills, and quarries. They are generally smaller in scale than other industrial facilities, less dependent on large facilities for manufacturing, and are frequently visually obscured by vegetation. These facilities are often more secluded and obscured behind forested areas. The industrial elements within this category are smaller in scale and generally consist of low-lying, horizontal flat features, such as retention ponds and mining pits, that may not be visible from public rights-of-way.

Inland Industrial Resource areas have low sensitivity. They are moderately susceptible to changes to their character from the NY Bight projects. Although there is an industrial character, infrastructure is at a smaller scale with often low-lying horizontal flat features. However, the low scenic quality of Inland Industrial Resource areas contributes to the low value associated with their character. Inland Industrial Resource areas are infrequent but dispersed evenly throughout the geographic analysis area. They often exist along the edge of large population centers, adjacent to forests and/or wetlands.

### *Inland Military Site*

When not obscured by vegetation such as dense trees, Inland Military Sites generally consist of light industrial infrastructure, office buildings, gravel roads, chain-link fence, and railways making them moderately valued. Buildings are generally small, square, and nondescript in the traditional industrial style of the early 20<sup>th</sup> century.

Inland Military Sites consist of extensive forested areas of moderate to high scenic quality, along with varying industrial elements, making them moderately susceptible to changes to their character from the NY Bight projects and moderately valued due to their scenic qualities. Sections of central and southern New Jersey have large military complexes, mostly set far from developed areas.

### *Inland Natural Area*

Inland Natural Areas predominantly include greenspace that is natural or natural appearing. Inland, this typically comprises forests, savannahs, and grasslands. Pine barrens are a representative habitat of such natural area. These spaces lack significant development, or at least appear to lack development, using smaller trails and paths enclosed in these natural spaces, rather than wide trails with high visibility.

Inland Natural areas are highly sensitive due to their sense of place and lack of human development/built environment, making these areas highly susceptible to change from the NY Bight projects. They are also highly valued due to their high scenic quality, wildness, and tranquility. Much of inland central and southern New Jersey is composed of natural areas. In contrast, far eastern Long Island has significant natural areas; western and central Long Island has natural areas along inland waterbodies.

### *Inland Recreation*

These areas include developed recreational park lands with no view of the beach and/or ocean and that are clearly part of the inland landscape. These include parks with significant sports and recreational resources such as tennis courts, baseball diamonds, walking trails in non-natural landscapes, as well as public and private golf courses.

Inland Recreation areas are highly sensitive. They are mainly composed of developed parks and sports infrastructure, which is not similar in character to WTG infrastructure, making the character of the area highly susceptible to change. Recreation areas have high locally held value, often have significant or historic designation, and have high scenic qualities, making them highly valued in character. In Long Island, many of these areas are highly developed parks with baseball fields, tracks, open fields for recreation, and clearly designed walking paths, all identifying areas for specific active recreation.

### *Inland Rural*

Inland Rural areas have a low population density. Architecturally there may be similar vernacular elements related to agricultural areas, but significant architectural and structural elements persist between Inland Rural and the Inland Suburban/Exurban Residential character areas.

Sensitivity is high for Inland Rural character areas. These areas are typically open with flat to rolling hills with sparse residential structures, making the character of the area highly susceptible to change due to the NY Bight projects. They may have valued conservation and open space areas around the sparse residential homes, but the homes themselves typically lack architectural interest, making them moderately valued. Southern inland New Jersey and far eastern Long Island have instances of low-density housing often set within natural areas such as forest land, or adjacent to agricultural fields. These do not include farmsteads, but rather the low-density development far from the urban/suburban core.

#### *Inland Suburban/Exurban Residential*

Inland Suburban/Exurban Residential character areas reflect developed land, mostly residential units, that do not have a view of the beach and/or ocean from any vantage point. These neighborhoods are clearly part of the inland landscape, and lack connection or reference to the seascape. They vary in architectural styles and densities, but most importantly do not bear architectural or cultural elements associated with seaside communities. There is significant variation in architectural and structural styles of Inland Suburban/Exurban Residential areas, ranging from conventional suburban design at various densities, to exurban and rural styles.

The Inland Suburban/Exurban Residential character areas are highly sensitive. They lack industrial elements similar to that of a WTG and are composed of mostly residential structures, which are minimal when compared to the project infrastructure, making the area highly susceptible to change to its character due to the NY Bight projects. These areas may have valued conservation and open space areas around the residential neighborhoods, but the homes themselves lack significant architectural elements and there are no particular locally held values tied to this character, making it moderately valued. In Long Island, the Inland Suburban/Exurban Residential area is defined by a dense, gridded network of streets and homes, of varying styles typical of suburban conventions of the 20<sup>th</sup> century. In New Jersey, there is a similar density closer to the coast. Further inland, the housing density and size of homes increases, and the structure of neighborhoods is less gridded.

#### *Inland Urban*

Inland Urban areas consist of developed land without a view of the beach or ocean from any vantage point. Dense commercial areas, dense residential areas with apartment buildings, and other areas with significant development are considered in this landscape.

Inland Urban character areas are overall low in sensitivity. They typically have lower scenic qualities, but have locally held value, tourism value, and sometimes historically significant features, making their character moderately valued. Long Island, New York, includes several examples of Inland Urban.

### H.3.1.2 Sensitivity

The sensitivity of an open ocean, seascape, or landscape impact receptor is dependent on its susceptibility to change and its perceived value to society. Sensitivity is based on the value placed on a

character area by residents and visitors and the susceptibility of the character area, which is the ability to accept or not accept additions of elements or features that affect the scenic character of that area. Receptor sensitivity is recorded on an ordinal scale of high, medium, or low based on information from the baseline data collected; therefore, sensitivity of each character area is determined and described in the character area classification part of the methodology. Section 3.6.9, Table 3.6.9-5, Table 3.6.9-6, and Table 3.6.9-7 contain detailed definitions of the criteria ratings (high, medium, low) for susceptibility, value, and sensitivity. *Ocean, Seascape, Landscape, and Visual Impact Assessment of the New York Bight Offshore Wind Lease Areas* (Argonne 2024) has detailed baseline data and descriptive rationale for the rating determinations.

Table H-12 summarizes the susceptibility, value, and sensitivity ratings for the open ocean, seascape, and landscape character as described in the preceding character area descriptions.

**Table H-12. Open ocean, seascape, and landscape sensitivity**

Open Ocean, Seascape, and Landscape Character Area	Susceptibility	Value	Sensitivity
<b>Open Ocean</b>	High	High	<b>High</b>
<b>Seascape – Bayside Seascape</b>			
Bayside Commercial Park	Low	Low	<b>Low</b>
Bayside Industrial	Low	Low	<b>Low</b>
Bayside Industrial Resource	Low	Low	<b>Low</b>
Bayside Military Site	Low	Medium	<b>Low</b>
Bayside Natural Area Upland	High	High	<b>High</b>
Bayside Natural Area Wetland	High	High	<b>High</b>
Bayside Recreation	High	High	<b>High</b>
Bayside Residential	High	High	<b>High</b>
Bayside Urban	Low	High	<b>Medium</b>
Bayside Waterbodies	High	High	<b>High</b>
Seascape Residential	High	High	<b>High</b>
Seascape Urban	Low	High	<b>Medium</b>
<b>Seascape – Oceanside Seascape</b>			
Nearshore Ocean	High	High	<b>High</b>
Oceanside Beach	High	High	<b>High</b>
Oceanside Recreation	High	High	<b>High</b>
Oceanside Residential/Commercial	High	High	<b>High</b>
Oceanside Urban	Medium	High	<b>High</b>
<b>Landscape</b>			
Inland Agriculture	Medium	High	<b>High</b>
Inland Commercial Park	Low	Low	<b>Low</b>
Inland Industrial	Low	Low	<b>Low</b>
Inland Industrial Resource	Medium	Low	<b>Low</b>
Inland Military Site	Medium	Medium	<b>Medium</b>
Inland Natural Area	High	High	<b>High</b>
Inland Recreation	High	High	<b>High</b>
Inland Rural	High	Medium	<b>High</b>
Inland Suburban/Exurban Residential	High	Medium	<b>High</b>
Inland Urban	Low	Medium	<b>Low</b>

### H.3.1.3 Magnitude

The magnitude of effect in an open ocean, seascape, or landscape depends on the size or scale of the change associated with the proposed project, the geographic extent of the change based on the viewshed, and the duration and reversibility of a NY Bight project. Acreages of character areas in the offshore geographic analysis area overall and within the viewshed (i.e., the amount of character area from which the WTG array would be visible) are listed in Table H-13 for the 1,312-foot (400-meter) wind turbines and Table H-14 for the 853-foot (260-meter) wind turbines. Each lease area is measured/calculated as a fraction of the entire six lease area. The acreages for each individual lease are greater than the total area for the combined six-project geographic analysis area because the individual lease viewsheds overlap.

Note that character areas that are not a part of the geographic extent that is visually exposed to the offshore projects but that are adjacent to it may not be physically affected but may be perceptually affected. For instance, the Oceanside Residential character areas on Long Beach Island that have views to the offshore project may be the only character areas on the island that are directly affected. However, the other character areas of Long Beach Island adjacent to or one removed from the Oceanside Residential character areas (e.g., Seascape Residential, Bayside Recreation, Bayside Commercial Park, Bayside Urban) may be perceptually affected because they are all a cohesive part of the Long Beach Island community, and the offshore wind energy development becomes a part of the identity of the whole community.

*Size and scale of change* considers changes to the physical elements of the open ocean, seascape, and landscape, and their aesthetic, experiential, and perceptual aspects. Although size and scale does not refer to the size and scale of the project per se, understanding the degree of visibility provides measurable context for analyzing the perceptual aspects of scale, prominence, and impacts on open ocean, seascape, and landscape. Table H-15 and Table H-16 list specific locations in New York and New Jersey where the NY Bight projects' noticeable features, based on their heights, distances, and EC for the 1,312-foot (400-meter) WTGs and 853-foot (260-meter) WTGs, respectively, have a perceptual effect on the open ocean, seascape, or landscape. Higher impact levels would stem from unique, extensive, and long-term appearance of strongly contrasting, large, and prominent vertical structures in the otherwise horizontal open ocean and seascape environments where wind turbine structures are an unexpected element. Table H-17 and Table H-18 break out the geographic extent of each character area based on project noticeability and provide additional detail to describe the degree of change from existing conditions for each lease area. Within Table H-17 and Table H-18, the project analysis area corresponds to the area within a 50-mile (80.5-kilometer) buffer of each individual lease area and is equivalent to the geographic analysis area for all six NY Bight lease areas. The impact area is the portion of the project analysis area that is visible and is associated with each individual lease area, not all six lease areas combined.

Operational effects would be similar to those of end-stage construction and installation and would be long term and fully reversible. The duration and reversibility of each character area is documented in the summary tables, Table H-19 through Table H-32.

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**Table H-13. Area of open ocean, seascape, and landscape character areas within the project area viewsheds for 1,312-foot WTGs**

Character Area	Total Area in the Geographic Analysis Area		Area Within the 1,312-Foot WTG GAA Viewshed <sup>1</sup>													
			New York Bight All Lease Areas		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544	
	Square Miles	Square Kilometers	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected
<b>Open Ocean</b>	15,569.90	40,325.86	15,569.90 (40,325.86)	100.00%	8,948.43 (23,176.33)	57.47%	8,987.57 (23,277.71)	57.7%	9,268.76 (24,005.98)	59.5%	8,568.93 (22,193.44)	55.0%	9,011.49 (23,339.64)	57.9%	6,844.82 (17,728.00)	44.0%
<b>Bayside Seascape</b>																
Bayside Commercial Park	0.44	1.15	0.001 (0.004)	0.3%	--	--	0.000 (0.001)	0.1%	0.000 (0.001)	0.1%	0.000 (0.001)	0.1%	0.000 (0.000)	0.02%	0.000 (0.001)	0.1%
Bayside Industrial	5.74	14.87	0.047 (0.121)	0.8%	0.000 (0.000)	0.0%	--	--	--	--	0.000 (0.001)	0.8%	0.000 (0.000)	0.02%	0.046 (0.120)	0.8%
Bayside Industrial Resource	0.42	1.09	0.115 (0.299)	27.3%	--	--	--	--	--	--	0.000 (0.003)	0.9%	0.001 (0.002)	0.5%	0.114 (0.295)	27%
Bayside Military Site	0.58	1.49	0.040 (0.103)	6.9%	--	--	0.037 (0.095)	6.4%	0.033 (0.085)	5.7%	0.027 (0.070)	4.7%	--	--	0.031 (0.081)	5.5%
Bayside Natural Upland	13.81	35.76	0.441 (1.141)	3.2%	0.009 (0.024)	0.1%	0.003 (0.008)	0.1%	0.004 (0.010)	0.1%	0.006 (0.015)	0.2%	0.003 (0.008)	0.1%	0.424 (1.099)	3.1%
Bayside Natural Wetland	154.00	398.85	65.994 (170.923)	42.9%	0.297 (0.769)	0.2%	0.071 (0.184)	0.1%	7.439 (19.267)	6.6%	51.343 (132.979)	45.4%	18.109 (46.903)	16.0%	14.158 (36.669)	9.2%
Bayside Recreation	13.98	36.22	0.924 (2.394)	6.6%	0.015 (0.038)	0.1%	0.017 (0.045)	0.5%	0.018 (0.048)	0.5%	0.038 (0.099)	1.0%	0.013 (0.033)	0.3%	0.863 (2.236)	6.2%
Bayside Residential	71.73	185.78	1.848 (4.788)	2.6%	0.102 (0.265)	0.1%	0.119 (0.308)	0.3%	0.286 (0.742)	0.8%	0.564 (1.460)	1.5%	0.185 (0.479)	0.5%	1.113 (2.883)	1.6%
Bayside Urban	12.06	31.22	0.122 (0.316)	1.0%	0.003 (0.009)	0.03%	0.004 (0.011)	0.1%	0.002 (0.005)	0.1%	0.064 (0.164)	1.5%	0.048 (0.124)	1.2%	0.053 (0.136)	0.4%
Bayside Waterbodies	419.31	1,086.01	184.216 (477.116)	43.9%	0.994 (2.574)	0.2%	0.610 (1.579)	0.3%	16.438 (42.574)	8.3%	58.779 (152.236)	29.8%	13.398 (34.701)	6.8%	124.47 (322.38)	29.7%
Seascape Residential	9.04	23.42	0.046 (0.119)	0.5%	--	--	0.019 (0.049)	0.4%	0.011 (0.027)	0.2%	0.016 (0.041)	0.3%	0.010 (0.025)	0.2%	0.013 (0.034)	0.1%
Seascape Urban	1.39	3.61	0.001 (0.002)	0.1%	--	--	0.001 (0.002)	3.3%	0.001 (0.002)	3.3%	0.001 (0.002)	4.7%	0.001 (0.002)	4.1%	--	--
<b>Oceanside Seascape</b>																
Nearshore Ocean	636.12	1,647.54	635.906 (1646.990)	99.9%	114.791 (297.306)	18.1%	167.83 (434.67)	26.4%	199.94 (517.84)	31.43%	235.88 (610.91)	37.1%	183.79 (476.01)	28.9%	433.90 (1,123.79)	68.2%
Oceanside Beach	12.87	33.32	7.807 (20.219)	60.7%	2.354 (6.098)	18.3%	1.073 (2.780)	22.2%	2.076 (5.378)	42.9%	2.279 (5.902)	47.0%	2.094 (5.424)	43.2%	5.366 (13.899)	41.7%
Oceanside Recreation	6.97	18.05	3.265 (8.457)	46.9%	0.623 (1.614)	9.0%	0.000 (0.001)	0.1%	0.000 (0.001)	0.1%	0.000 (0.000)	0.1%	0.000 (0.000)	0.1%	3.229 (8.364)	46.3%
Oceanside Residential/Commercial	20.12	52.10	6.193 (16.041)	30.8%	0.698 (1.808)	3.5%	2.982 (7.723)	22.2%	2.763 (7.156)	20.6%	3.093 (8.010)	23.0%	2.309 (5.980)	17.2%	3.616 (9.367)	18.0%
Oceanside Urban	4.94	12.80	1.482 (3.839)	30.0%	--	--	0.243 (0.630)	10.2%	0.128 (0.332)	5.3%	0.384 (0.995)	16.0%	0.350 (0.907)	14.6%	1.109 (2.871)	22.4%

Character Area	Total Area in the Geographic Analysis Area		Area Within the 1,312-Foot WTG GAA Viewshed <sup>1</sup>													
			New York Bight All Lease Areas		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544	
	Square Miles	Square Kilometers	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected
<b>Landscape</b>																
Inland Agriculture	21.27	55.09	0.014 (0.037)	0.1%	--	--	0.001 (0.001)	0.03%	0.004 (0.010)	0.2%	0.012 (0.030)	0.6%	--	--	0.002 (0.004)	0.0%
Inland Commercial Park	38.16	98.84	0.042 (0.108)	0.1%	0.000 (0.000)	0.00%	0.007 (0.018)	0.1%	0.009 (0.023)	0.1%	0.024 (0.063)	0.2%	0.007 (0.019)	0.1%	0.011 (0.028)	0.00%
Inland Industrial	30.08	77.92	0.243 (0.629)	0.8%	0.000 (0.000)	0.00%	0.000 (0.001)	0.00%	0.001 (0.002)	0.01%	0.001 (0.004)	0.02%	0.001 (0.001)	0.01%	0.241 (0.625)	0.08%
Inland Industrial Resource	18.55	48.04	0.276 (0.715)	1.5%	--	--	0.003 (0.007)	0.02%	0.007 (0.019)	0.1%	0.073 (0.189)	0.5%	0.001 (0.004)	0.01%	0.201 (0.522)	1.1%
Inland Military Site	20.39	52.82	0.244 (0.632)	1.2%	--	--	--	--	--	--	0.244 (0.632)	1.2%	--	--	--	--
Inland Natural Area	455.94	1180.89	0.469 (1.216)	0.1%	0.001 (0.003)	0.00%	0.013 (0.032)	0.00%	0.045 (0.116)	0.01%	0.429 (1.112)	0.1%	0.062 (0.162)	0.02%	0.029 (0.075)	0.00%
Inland Recreation	29.30	75.88	0.082 (0.212)	0.3%	--	--	0.004 (0.010)	0.1%	0.001 (0.004)	0.02%	0.059 (0.152)	0.8%	0.019 (0.049)	0.3%	0.020 (0.052)	0.01%
Inland Rural	25.60	66.30	0.114 (0.295)	0.4%	--	--	0.001 (0.003)	0.00%	0.002 (0.005)	0.01%	0.007 (0.018)	0.03%	0.000 (0.001)	0.00%	0.106 (0.273)	0.4%
Inland Suburban/Exurban Residential	691.95	1792.14	0.596 (1.543)	0.1%	0.110 (0.285)	0.02%	0.152 (0.394)	0.1%	0.159 (0.411)	0.1%	0.247 (0.640)	0.1%	0.088 (0.229)	0.04%	0.115 (0.298)	0.00%
Inland Urban	157.39	407.65	0.203 (0.525)	0.1%	--	--	0.007 (0.018)	0.1%	0.005 (0.014)	0.1%	0.006 (0.016)	0.1%	--	--	0.190 (0.492)	0.01%

Note: areas <0.00 square mile (0.00 square kilometer) = 0.64 acre or less.

Source: Argonne 2024

<sup>1</sup> Areas are not additive across leases due to overlap in lease area viewsheds. The area affected is a percentage of the total area GAA, not the individual lease area.

km<sup>2</sup> = square kilometers

**Table H-14. Area of open ocean, seascape, and landscape character areas within the project area viewsheds for 853-foot WTGs**

Character Area	Total Area in the Geographic Analysis Area		Area Within the 853-Foot WTG GAA Viewshed <sup>1</sup>													
			New York Bight All Lease Areas		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544	
	Square Miles	Square Kilometers	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected
<b>Open Ocean</b>	15,569.90	40,325.86	12,962.88 (33,573.71)	83.26%	8,948.43 (23,176.34)	57.5%	6,555.41 (16,978.44)	42.1%	6,868.38 (17,789.03)	44.11%	6,331.05 (16,397.35)	40.66%	6,625.01 (17,158.69)	42.55%	5,226.68 (13,537.03)	33.57%
<b>Seascape</b>																
Bayside Commercial Park	0.44	1.15	0.001 (0.002)	0.15%	--	--	<0.000 (0.001)	0.01%	<0.000 (0.000)	0.03%	<0.000 (0.000)	0.01%	<0.000 (0.000)	0.01%	<0.000 (0.001)	0.06%
Bayside Industrial	5.74	14.87	0.043 (0.011)	0.74%	--	--	--	--	--	--	<0.000 (0.000)	0.00%	--	--	0.043 (0.110)	0.74%
Bayside Industrial Resource	0.42	1.09	0.106 (0.275)	25.12%	--	--	--	--	--	--	0.001 (0.001)	0.13%	0.000 (0.001)	0.06%	0.106 (0.273)	24.99%
Bayside Military Site	0.58	1.49	0.004 (0.011)	0.74%	--	--	0.003 (0.008)	0.52%	<0.000 (0.001)	0.05%	<0.000 (0.000)	0.03%	--	--	--	0.38%

Character Area	Total Area in the Geographic Analysis Area		Area Within the 853-Foot WTG GAA Viewshed <sup>1</sup>													
			New York Bight All Lease Areas		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544	
	Square Miles	Square Kilometers	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected
Bayside Natural Upland	13.81	35.76	0.187 (0.485)	1.36%	0.001 (0.002)	0.01%	<0.000 (0.001)	0.00%	0.001 (0.003)	0.01%	0.003 (0.007)	0.02%	0.001 (0.002)	0.01%	0.183 (0.474)	1.33%
Bayside Natural Wetland	154.00	398.85	12.953 (33.547)	8.41%	0.005 (0.014)	0.00%	0.007 (0.018)	0.00%	0.029 (0.076)	0.02%	7.264 (18.814)	4.72%	0.268 (0.694)	0.17%	5.670 (14.685)	3.68%
Bayside Recreation	13.98	36.22	0.659 (1.708)	4.72%	0.001 (0.002)	0.01%	0.011 (0.027)	0.08%	0.006 (0.014)	0.04%	0.009 (0.023)	0.06%	0.003 (0.007)	0.02%	0.642 (1.664)	4.59%
Bayside Residential	71.73	185.78	0.995 (2.576)	1.39%	0.007 (0.019)	0.01%	0.020 (0.051)	0.03%	0.041 (0.106)	0.06%	0.134 (0.347)	0.19%	0.019 (0.049)	0.03%	0.836 (2.166)	1.17%
Bayside Urban	12.06	31.22	0.059 (0.153)	0.49%	<0.000 (0.000)	0.00%	0.002 (0.005)	0.02%	0.001 (0.002)	0.01%	0.028 (0.073)	0.24%	0.009 (0.024)	0.08%	0.029 (0.076)	0.24%
Bayside Waterbodies	419.31	1,086.01	87.471 (226.548)	20.86%	0.003 (0.008)	0.00%	0.009 (0.025)	0.00%	0.817 (2.115)	0.19%	5.698 (14.757)	1.36%	0.013 (0.035)	0.00%	81.360 (210.723)	19.40%
Seascape Residential	9.04	23.42	0.025 (0.066)	0.28%	--	--	--	--	0.004 (0.011)	0.05%	0.010 (0.026)	0.11%	0.005 (0.013)	0.05%	0.004 (0.011)	0.05%
Seascape Urban	1.39	3.61	0.001 (0.002)	0.05%	--	--	--	--	0.001 (0.002)	0.04%	0.001 (0.002)	0.05%	0.001 (0.002)	0.05%	--	--
<b>Oceanside Seascape</b>																
Nearshore Ocean	636.12	1,647.54	388.342 (1005.801)	61.05%	<0.000 (0.001)	0.00%	1.418 (3.672)	0.22%	85.274 (220.860)	13.41%	158.569 (410.691)	24.93%	20.966 (54.302)	3.30%	229.776 (595.118)	36.12%
Oceanside Beach	12.87	33.32	6.061 (15.699)	47.11%	0.062 (0.160)	0.48%	--	--	1.219 (3.157)	9.47%	2.079 (5.385)	16.16%	0.856 (2.216)	6.65%	3.910 (10.128)	30.40%
Oceanside Recreation	6.97	18.05	2.656 (6.897)	38.12%	0.002 (0.006)	0.04%	--	--	<0.000 (0.001)	<0.00%	0.000 (0.000)	0.00%	0.000 (0.000)	0.00%	2.655 (6.876)	38.10%
Oceanside Residential/Commercial	20.12	52.10	3.895 (10.088)	19.36%	0.051 (0.133)	0.26%	--	--	1.914 (4.958)	9.52%	2.186 (5.661)	10.86%	1.509 (3.907)	7.50%	1.555 (4.027)	7.73%
Oceanside Urban	4.94	12.80	0.979 (2.535)	19.81%	--	--	--	--	0.086 (0.222)	1.74%	0.209 (0.542)	4.24%	0.044 (0.115)	0.90%	0.761 (1.971)	15.40%
<b>Landscape</b>																
Inland Agriculture	21.27	55.09	0.002 (0.004)	0.01%	--	--	<0.000 (0.001)	0.00%	0.001 (0.003)	0.00%	0.000 (0.000)	0.00%	--	--	0.000 (0.000)	0.00%
Inland Commercial Park	38.16	98.84	0.020 (0.053)	0.05%	<0.00 (0.00)	0.0%	0.01 (0.01)	0.0%	0.005 (0.012)	0.01%	0.014 (0.036)	0.04%	0.004 (0.010)	0.01%	0.002 (0.004)	0.00%
Inland Industrial	30.08	77.92	0.048 (0.125)	0.16%	<0.00 (0.00)	0.0%	<0.00 (0.00)	0.0%	<0.000 (0.001)	0.00%	0.001 (0.002)	0.00%	<0.000 (0.001)	0.00%	0.047 (0.123)	0.16%
Inland Industrial Resource	18.55	48.04	0.213 (0.553)	1.15%	--	--	0.002 (0.005)	0.0%	0.003 (0.009)	0.02%	0.049 (0.127)	0.26%	0.000 (0.001)	0.00%	0.163 (0.423)	0.88%
Inland Military Site	20.39	52.82	0.003 (0.008)	0.02%	--	--	--	--	--	--	0.003 (0.008)	0.02%	--	--	--	--
Inland Natural Area	455.94	1,180.89	0.089 (0.231)	0.02%	<0.00 (0.00)	0.0%	0.006 (0.015)	0.0%	0.015 (0.038)	0.00%	0.066 (0.172)	0.01%	0.004 (0.010)	0.00%	0.019 (0.050)	0.00%
Inland Recreation	29.30	75.88	0.022 (0.058)	0.08%	--	--	0.002 (0.005)	0.01%	<0.000 (0.001)	0.00%	0.007 (0.019)	0.02%	0.001 (0.004)	0.00%	0.013 (0.034)	0.05%

Character Area	Total Area in the Geographic Analysis Area		Area Within the 853-Foot WTG GAA Viewshed <sup>1</sup>													
			New York Bight All Lease Areas		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544	
	Square Miles	Square Kilometers	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected	Square Miles (km <sup>2</sup> )	Percent Affected
Inland Rural	25.60	66.30	0.035 (0.091)	0.14%	--	--	0.001 (0.002)	0.00%	<0.000 (0.001)	0.00%	0.002 (0.004)	0.01%	<0.000 (0.000)	0.00%	0.033 (0.086)	0.13%
Inland Suburban/Exurban Residential	691.95	1,792.14	0.309 (0.799)	0.04%	0.04 (0.11)	0.0%	0.083 (0.214)	0.01%	0.078 (0.201)	0.01%	0.115 (0.279)	0.02%	0.031 (0.079)	0.00%	0.082 (0.211)	0.01%
Inland Urban	157.39	407.65	0.138 (0.358)	0.09%	--	--	0.004 (0.010)	0.00%	0.001 (0.004)	0.00%	0.002 (0.006)	0.00%	--	--	0.132 (0.343)	0.08%

Note: areas <0.00 square miles (0.00 square kilometers) = 0.64 acres or less.

Source: Argonne 2024.

<sup>1</sup> Areas are not additive across leases due to overlap in lease area viewsheds. The area affected is a percentage of the total area GAA, not the individual lease area.

km<sup>2</sup> = square kilometers

**Table H-15. Noticeable elements and impacts by open ocean, seascape, and landscape character area for the 1,312-foot WTGs**

Noticeable Elements Impacts	Open Ocean, Seascape, and Landscape Character Areas
R, AL, N, H, O, M, Y Prominence 6	<b>Open Ocean Character Area:</b> Ocean
R, AL, N, H, O, M Prominence 5	<b>Open Ocean Character Area:</b> Ocean <b>Seascape Character Areas:</b> Bayside Natural Wetland, Bayside Residential, Bayside Waterbodies, Nearshore Ocean, Oceanside Beach, Oceanside Recreation, Oceanside Residential (NY: Ocean Beach, Fire Island, Saltaire)
R, AL, N, H Prominence 3–4	<b>Open Ocean Character Area:</b> Ocean <b>Seascape Character Areas:</b> Bayside Commercial Park, Bayside Industrial, Bayside Industrial Resource, Bayside Natural Upland, Bayside Natural Wetland, Bayside Recreation, Bayside Residential, Bayside Urban, Bayside Waterbodies, Seascape Residential, Seascape Urban, Nearshore Ocean, Oceanside Beach, Oceanside Recreation, Oceanside Residential/Commercial, Oceanside Urban (NY: Brookhaven, Islip, Massapequa Park, Long Beach, Jones Beach. NJ: Beach Haven, Long Beach, Barnegat) <b>Landscape Character Areas:</b> Inland Commercial Park, Inland Industrial, Inland Industrial Resource, Inland Natural Area, Inland Recreation, Inland Suburban/Exurban Residential, Inland Urban (NY: Islandia, Islip, Brookhaven, Babylon. NJ: Barnegat Township)
R Prominence 1–2	<b>Open Ocean Character Area:</b> Ocean <b>Seascape Character Areas:</b> Bayside Commercial Park, Bayside Industrial, Bayside Industrial Resource, Bayside Natural Upland, Bayside Natural Wetland, Bayside Recreation, Bayside Residential, Bayside Urban, Bayside Waterbodies, Seascape Residential, Seascape Urban, Nearshore Ocean, Oceanside Beach, Oceanside Recreation, Oceanside Residential/Commercial, Oceanside Urban (NY: Lawrence, Westhampton Beach, Atlantic Beach, Rockaway Beach, Quogue. NJ: Brigantine, Atlantic City, Monmouth Beach, Highlands, Belmar, Bay Head, Mantoloking, Point Pleasant Beach Borough) <b>Landscape Character Areas:</b> Inland Agriculture, Inland Commercial Park, Inland Industrial, Inland Industrial Resource, Inland Military Site, Inland Natural Area, Inland Recreation, Inland Rural, Inland Suburban/Exurban Residential, Inland Urban (NY: Huntington, Southampton. NJ: Barnegat Township, Egg Harbor Township, Berkeley Township, Brick Township, Point Pleasant Beach Borough)

R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, Y = yellow tower base color.  
 Prominence: 0 = Not visible. 1 = Visible only after extended study; otherwise not visible. 2 = Visible when viewing in general direction of the wind farm; otherwise likely to be missed by casual observer. 3 = Visible after brief glance in general direction of the wind farm; unlikely to be missed by casual observer. 4 = Plainly visible; could not be missed by casual observer, but does not strongly attract visual attention or dominate view. 5 = Strongly attracts viewers' attention to the wind farm; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 = Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV

**Table H-16. Noticeable elements and impacts by open ocean, seascape, and landscape character area for the 853-foot WTGs**

Noticeable Elements Impacts	Open Ocean, Seascape, and Landscape Character Areas
R, AL, N, H, O, M, Y Prominence 6	<b>Open Ocean Character Area:</b> Ocean
R, AL, N, H, O Prominence 5	<b>Open Ocean Character Area:</b> Ocean <b>Seascape Character Areas:</b> Bayside Natural Wetland, Bayside Residential, Bayside Waterbodies, Nearshore Ocean, Oceanside Beach, Oceanside Recreation, Oceanside Residential/Commercial (NY: Fire Island, Saltaire, Davis Park.)
R, AL, N, H Prominence 3–4	<b>Open Ocean Character Area:</b> Ocean <b>Seascape Character Areas:</b> Bayside Natural Wetland, Bayside Residential, Bayside Waterbodies, Nearshore Ocean, Oceanside Beach, Oceanside Recreation, Oceanside Residential/Commercial (NY: Fire Island, Saltaire, Davis Park.)
R Prominence 1–2	<b>Open Ocean Character Area:</b> Ocean <b>Seascape Character Areas:</b> Bayside Commercial Park, Bayside Industrial, Bayside Industrial Resource, Bayside Natural Wetland, Bayside Natural Upland, Bayside Recreation, Bayside Residential, Bayside Urban, Bayside Waterbodies, Seascape Residential, Seascape Urban, Nearshore Ocean, Oceanside Beach, Oceanside Recreation, Oceanside Residential/Commercial, Oceanside Urban (NY: Long Beach, Jones Beach, Islip, Mastic Beach, Babylon, Brookhaven. NJ: Beach Haven, Long Beach Island, Surf City) <b>Landscape Character Areas:</b> Inland Agriculture, Inland Commercial Park, Inland Industrial, Inland, Industrial Resource, Inland Natural Area, Inland Recreation, Inland Rural Inland Suburban/Exurban Residential, Inland Urban (NY: Massapequa, Patchogue, Islip, Babylon, Brookhaven. NJ: Barnegat Township Tuckerton Borough)

R = rotor, AL = aviation light, N = nacelle, H = hub, O = OSS, M = mid-tower light, Y = yellow tower base color.  
 Prominence: 0 = Not visible. 1 = Visible only after extended study; otherwise not visible. 2 = Visible when viewing in general direction of the wind farm; otherwise likely to be missed by casual observer. 3 = Visible after brief glance in general direction of the wind farm; unlikely to be missed by casual observer. 4 = Plainly visible; could not be missed by casual observer, but does not strongly attract visual attention or dominate view. 5 = Strongly attracts viewers' attention to the wind farm; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 = Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV



**Table H-17. 1,312-foot WTGs scale of change and prominence for open ocean, seascape, and landscape<sup>1</sup>**

Scale of Change and Prominence Effects	Open Ocean, Seascape, and Landscape	One Project												Six Projects	
		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544		New York Bight	
		Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Geographic Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )
<b>Large Scale of Change and Prominence of 5 or 6</b>	<b>Open Ocean Character Area:</b>														
	Open Ocean	9,416.28 (24,388.1)	3,299.03 (8,544.4)	9,681.22 (25,074.3)	3,406.70 (8,823.3)	9,957.53 (25,789.9)	3,704.96 (9,595.8)	9,062.22 (23,471.1)	3,490.03 (9,039.1)	9,447.28 (24,468.4)	3,464.63 (8,973.4)	7,289.92 (18,880.8)	2,932.73 (7,595.7)	15,569.90 (40,325.9)	8,828.66 (22,866.1)
	<b>Seascape Character Areas:</b>														
	Bayside Natural Wetland	-	-	-	-	-	-	-	-	-	-	46.78 (121.2)	0.59 (1.5)	154.00 (398.8)	0.59 (1.5)
	Bayside Residential	-	-	-	-	-	-	-	-	-	-	48.63 (126.0)	0.03 (0.1)	71.73 (185.8)	0.04 (0.1)
	Bayside Waterbodies	-	-	-	-	-	-	-	-	-	-	257.62 (667.2)	14.80 (38.3)	419.31 (1,086.0)	14.80 (38.3)
	Nearshore Ocean	-	-	-	-	-	-	-	-	-	-	450.73 (1,167.4)	86.72 (224.6)	636.12 (1,647.5)	86.72 (224.6)
	Oceanside Beach	-	-	-	-	-	-	-	-	-	-	8.86 (22.9)	0.87 (2.2)	12.87 (33.3)	0.91 (2.4)
	Oceanside Recreation	-	-	-	-	-	-	-	-	-	-	6.95 (18.0)	0.46 (1.2)	6.97 (18.0)	0.48 (1.2)
Oceanside Residential/Commercial	-	-	-	-	-	-	-	-	-	-	13.13 (34.0)	0.67 (1.7)	20.12 (52.1)	0.72 (1.9)	
<b>Medium Scale of Change and Prominence of 3 or 4</b>	<b>Open Ocean Character Area:</b>														
	Open Ocean	9,416.28 (24,388.1)	2,382.34 (6,170.2)	9,681.22 (25,074.3)	2,422.73 (6,274.8)	9,957.53 (25,789.9)	2,480.77 (6,425.2)	9,062.22 (23,471.1)	2,226.57 (5,766.8)	9,447.28 (24,468.4)	2,446.93 (6,337.5)	7,289.92 (18,880.8)	1,782.05 (4,615.5)	15,569.90 (40,325.9)	3,297.72 (8,541.1)
	<b>Bayside Seascape Character Areas:</b>														
	Bayside Commercial Park	-	-	-	-	-	-	-	-	-	-	0.29 (0.7)	0.00 (0.0)	0.44 (1.1)	0.00 (0.0)
	Bayside Industrial	-	-	-	-	-	-	-	-	-	-	3.74 (9.7)	0.05 (0.1)	5.74 (14.9)	0.05 (0.1)
	Bayside Industrial Resource	-	-	-	-	-	-	-	-	-	-	0.28 (0.7)	0.08 (0.2)	0.42 (1.1)	0.08 (0.2)
	Bayside Natural Upland	-	-	-	-	-	-	2.90 (7.5)	0.00 (0.0)	2.06 (5.3)	-	11.10 (28.8)	0.19 (0.5)	13.81 (35.8)	0.20 (0.5)
	Bayside Natural Wetland	-	-	-	-	-	-	109.21 (282.9)	13.82 (35.8)	84.68 (219.3)	-	46.78 (121.2)	13.54 (35.1)	154.00 (398.8)	27.49 (71.2)
	Bayside Recreation	-	-	-	-	-	-	2.44 (6.3)	0.01 (0.0)	0.66 (1.7)	-	11.18 (29.0)	0.82 (2.1)	13.98 (36.2)	0.84 (2.2)
	Bayside Residential	-	-	-	-	-	-	28.93 (74.9)	0.16 (0.4)	17.25 (44.7)	-	48.63 (126.0)	1.01 (2.6)	71.73 (185.8)	1.25 (3.2)
	Bayside Urban	-	-	-	-	-	-	3.56 (9.2)	0.00 (0.0)	3.30 (8.5)	-	5.63 (14.6)	0.05 (0.1)	12.06 (31.2)	0.05 (0.1)
	Bayside Waterbodies	-	-	-	-	-	-	162.81 (421.7)	25.04 (64.8)	129.83 (336.3)	-	257.62 (667.2)	94.45 (244.6)	419.31 (1,086.0)	120.19 (311.3)
	Seascape Residential	-	-	-	-	-	-	2.05 (5.3)	0.00 (0.0)	1.70 (4.4)	-	7.46 (19.3)	0.01 (0.0)	9.04 (23.4)	0.01 (0.0)
	Seascape Urban	-	-	-	-	-	-	0.02 (0.0)	0.00 (0.0)	0.02 (0.0)	-	1.37 (3.6)	-	1.39 (3.6)	0.00 (0.0)
	<b>Oceanside Seascape Character Areas:</b>														
	Nearshore Ocean	-	-	-	-	225.62 (584.4)	31.82 (82.4)	247.02 (639.8)	130.46 (337.9)	208.33 (539.6)	-	450.73 (1,167.4)	119.93 (310.6)	636.12 (1,647.5)	250.39 (648.5)
	Oceanside Beach	-	-	-	-	-	-	4.01 (10.4)	1.28 (3.3)	3.81 (9.9)	-	8.86 (22.9)	2.56 (6.6)	12.87 (33.3)	3.93 (10.2)
	Oceanside Recreation	-	-	-	-	-	-	0.01 (0.0)	0.00 (0.0)	0.01 (0.0)	-	6.95 (18.0)	2.35 (6.1)	6.97 (18.0)	2.37 (6.1)
	Oceanside Residential/Commercial	-	-	-	-	-	-	9.86 (25.5)	1.55 (4.0)	7.15 (18.5)	-	13.13 (34.0)	0.27 (0.7)	20.12 (52.1)	1.85 (4.8)
	Oceanside Urban	-	-	-	-	-	-	1.40 (3.6)	0.03 (0.1)	1.32 (3.4)	-	3.82 (9.9)	0.25 (0.7)	4.94 (12.8)	0.28 (0.7)
	<b>Landscape Character Areas:</b>														
	Inland Agriculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Inland Commercial Park	-	-	-	-	-	-	10.08 (26.1)	0.00 (0.0)	1.76 (4.6)	-	28.29 (73.3)	0.01 (0.0)	38.16 (98.8)	0.01 (0.0)
Inland Industrial	-	-	-	-	-	-	-	-	-	-	23.87 (61.8)	0.24 (0.6)	30.08 (77.9)	0.24 (0.6)	
Inland Industrial Resource	-	-	-	-	-	-	-	-	-	-	5.94 (15.4)	0.15 (0.4)	18.55 (48.0)	0.15 (0.4)	
Inland Natural Area	-	-	-	-	-	-	296.52 (768.0)	0.03 (0.1)	44.47 (115.2)	-	161.28 (417.7)	0.01 (0.0)	455.94 (1,180.9)	0.04 (0.1)	

Scale of Change and Prominence Effects	Open Ocean, Seascape, and Landscape	One Project												Six Projects		
		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544		New York Bight		
		Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Geographic Analysis Area Square Miles (km <sup>2</sup> )
	Inland Recreation	-	-	-	-	-	-	-	-	-	-	24.79 (64.2)	0.00 (0.0)	29.30 (75.9)	0.00 (0.0)	
	Inland Suburban/Exurban Residential	-	-	-	-	-	-	131.92 (341.7)	0.00 (0.0)	39.31 (101.8)	-	569.25 (1,474.3)	0.03 (0.1)	691.83 (1,791.8)	0.14 (0.4)	
	Inland Urban	-	-	-	-	-	-	-	-	-	-	122.51 (317.3)	0.07 (0.2)	157.39 (407.6)	0.07 (0.2)	
Small Scale of Change and Prominence of 1 or 2	<b>Open Ocean Character Area:</b>															
	Open Ocean	9,416.28 (24,388.1)	3,267.06 (8,461.7)	9,681.22 (25,074.3)	3,158.14 (8,179.6)	9,957.53 (25,789.9)	3,083.03 (7,985.0)	9,062.22 (23,471.1)	2,852.34 (7,387.5)	9,447.28 (24,468.4)	3,099.92 (8,028.8)	7,289.92 (18,880.8)	2,130.04 (5,516.8)	15,569.90 (40,325.9)	3,443.52 (8,918.7)	
	<b>Seascape Character Areas:</b>															
		Bayside Commercial Park	-	-	0.32 (0.8)	0.00 (0.0)	0.17 (0.4)	0.00 (0.0)	0.18 (0.5)	0.00 (0.0)	0.15 (0.4)	0.00 (0.0)	0.29 (0.7)	-	0.44 (1.1)	0.00 (0.0)
		Bayside Industrial	-	-	-	-	-	-	0.02 (0.1)	0.00 (0.0)	0.02 (0.1)	0.00 (0.0)	3.74 (9.7)	0.00 (0.0)	5.74 (14.9)	0.00 (0.0)
		Bayside Industrial Resource	-	-	-	-	-	-	0.14 (0.4)	0.00 (0.0)	0.14 (0.4)	0.00 (0.0)	0.28 (0.7)	0.03 (0.1)	0.42 (1.1)	0.03 (0.1)
		Bayside Military Site	-	-	0.29 (0.7)	0.04 (0.1)	0.29 (0.7)	0.03 (0.1)	0.27 (0.7)	0.03 (0.1)	-	-	0.58 (1.5)	0.03 (0.1)	0.58 (1.5)	0.04 (0.1)
		Bayside Natural Upland	1.49 (3.9)	0.01 (0.0)	2.53 (6.5)	0.00 (0.0)	2.72 (7.0)	0.00 (0.0)	2.90 (7.5)	0.01 (0.0)	2.06 (5.3)	0.00 (0.0)	11.10 (28.8)	0.23 (0.6)	13.81 (35.8)	0.24 (0.6)
		Bayside Natural Wetland	10.59 (27.4)	0.29 (0.8)	22.26 (57.7)	0.07 (0.2)	64.09 (166.0)	7.37 (19.1)	109.21 (282.9)	37.55 (97.3)	84.68 (219.3)	18.08 (46.8)	46.78 (121.2)	0.04 (0.1)	154.00 (398.8)	37.90 (98.1)
		Bayside Recreation	1.67 (4.3)	0.01 (0.0)	1.89 (4.9)	0.02 (0.0)	1.54 (4.0)	0.02 (0.0)	2.44 (6.3)	0.03 (0.1)	0.66 (1.7)	0.01 (0.0)	11.18 (29.0)	0.05 (0.1)	13.98 (36.2)	0.09 (0.2)
		Bayside Residential	3.72 (9.6)	0.10 (0.3)	21.24 (55.0)	0.12 (0.3)	24.86 (64.4)	0.29 (0.8)	28.93 (74.9)	0.42 (1.1)	17.25 (44.7)	0.19 (0.5)	48.63 (126.0)	0.08 (0.2)	71.73 (185.8)	0.59 (1.5)
		Bayside Urban	0.21 (0.5)	0.00 (0.0)	0.68 (1.8)	0.00 (0.0)	0.39 (1.0)	0.00 (0.0)	3.56 (9.2)	0.06 (0.2)	3.30 (8.5)	0.05 (0.1)	5.63 (14.6)	0.01 (0.0)	12.06 (31.2)	0.07 (0.2)
		Bayside Waterbodies	87.07 (225.5)	0.99 (2.6)	82.74 (214.3)	0.61 (1.6)	132.74 (343.8)	16.38 (42.4)	162.81 (421.7)	33.71 (87.3)	129.83 (336.3)	13.27 (34.4)	257.62 (667.2)	15.20 (39.4)	419.31 (1,086.0)	49.08 (127.1)
		Seascape Residential	-	-	3.50 (9.1)	0.02 (0.0)	2.33 (6.0)	0.01 (0.0)	2.05 (5.3)	0.02 (0.0)	1.70 (4.4)	0.01 (0.0)	7.46 (19.3)	0.00 (0.0)	9.04 (23.4)	0.03 (0.1)
		Seascape Urban	-	-	0.02 (0.0)	0.00 (0.0)	0.02 (0.0)	0.00 (0.0)	0.02 (0.0)	-	0.02 (0.0)	0.00 (0.0)	1.37 (3.6)	-	1.39 (3.6)	-
	<b>Oceanside Seascape Character Areas:</b>															
		Nearshore Ocean	155.90 (403.8)	114.77 (297.3)	196.83 (509.8)	167.80 (434.6)	225.62 (584.4)	168.08 (435.3)	247.02 (639.8)	105.41 (273.0)	208.33 (539.6)	183.76 (475.9)	450.73 (1,167.4)	227.24 (588.6)	636.12 (1,647.5)	298.52 (773.2)
		Oceanside Beach	4.34 (11.2)	2.32 (6.0)	2.02 (5.2)	1.09 (2.8)	3.77 (9.8)	2.09 (5.4)	4.01 (10.4)	1.02 (2.6)	3.81 (9.9)	2.11 (5.5)	8.86 (22.9)	1.95 (5.1)	12.87 (33.3)	2.99 (7.7)
		Oceanside Recreation	1.75 (4.5)	0.63 (1.6)	0.01 (0.0)	0.00 (0.0)	0.01 (0.0)	0.00 (0.0)	0.01 (0.0)	0.00 (0.0)	0.01 (0.0)	0.00 (0.0)	6.95 (18.0)	0.43 (1.1)	6.97 (18.0)	0.43 (1.1)
		Oceanside Residential/Commercial	2.18 (5.7)	0.70 (1.8)	9.36 (24.3)	3.01 (7.8)	9.13 (23.6)	2.80 (7.3)	9.86 (25.5)	1.57 (4.1)	7.15 (18.5)	2.34 (6.1)	13.13 (34.0)	2.72 (7.0)	20.12 (52.1)	3.70 (9.6)
		Oceanside Urban	-	-	1.02 (2.6)	0.25 (0.6)	0.38 (1.0)	0.12 (0.3)	1.40 (3.6)	0.36 (0.9)	1.32 (3.4)	0.35 (0.9)	3.82 (9.9)	0.86 (2.2)	4.94 (12.8)	1.21 (3.1)
	<b>Landscape Character Areas:</b>															
		Inland Agriculture	-	-	0.37 (1.0)	0.00 (0.0)	0.35 (0.9)	0.00 (0.0)	1.63 (4.2)	0.01 (0.0)	-	-	19.64 (50.9)	0.00 (0.0)	21.27 (55.1)	0.01 (0.0)
		Inland Commercial Park	0.09 (0.2)	0.00 (0.0)	4.70 (12.2)	0.01 (0.0)	4.05 (10.5)	0.01 (0.0)	10.08 (26.1)	0.02 (0.1)	1.76 (4.6)	0.01 (0.0)	28.29 (73.3)	0.00 (0.0)	38.16 (98.8)	0.03 (0.1)
		Inland Industrial	0.02 (0.1)	0.00 (0.0)	0.28 (0.7)	0.00 (0.0)	0.67 (1.7)	0.00 (0.0)	5.09 (13.2)	0.00 (0.0)	0.27 (0.7)	0.00 (0.0)	23.87 (61.8)	0.00 (0.0)	30.08 (77.9)	0.01 (0.0)
	Inland Industrial Resource	-	-	2.66 (6.9)	0.00 (0.0)	6.04 (15.6)	0.01 (0.0)	12.67 (32.8)	0.07 (0.2)	2.85 (7.4)	0.00 (0.0)	5.94 (15.4)	0.05 (0.1)	18.55 (48.0)	0.12 (0.3)	
	Inland Military Site	-	-	-	-	-	-	14.73 (38.1)	0.24 (0.6)	-	-	-	-	20.39 (52.8)	0.24 (0.6)	
	Inland Natural Area	0.24 (0.6)	0.00 (0.0)	33.84 (87.6)	0.01 (0.0)	125.28 (324.5)	0.05 (0.1)	296.52 (768.0)	0.41 (1.0)	44.47 (115.2)	0.06 (0.2)	161.28 (417.7)	0.02 (0.0)	455.94 (1,180.9)	0.43 (1.1)	
	Inland Recreation	-	-	1.64 (4.3)	0.00 (0.0)	0.52 (1.3)	0.00 (0.0)	2.66 (6.9)	0.06 (0.2)	0.84 (2.2)	0.02 (0.0)	24.79 (64.2)	0.02 (0.0)	29.30 (75.9)	0.08 (0.2)	
	Inland Rural	-	-	0.68 (1.8)	0.00 (0.0)	2.66 (6.9)	0.00 (0.0)	20.29 (52.5)	0.01 (0.0)	0.54 (1.4)	0.00 (0.0)	5.31 (13.7)	0.11 (0.3)	25.60 (66.3)	0.11 (0.3)	
	Inland Suburban/Exurban Residential	11.88 (30.8)	0.11 (0.3)	73.38 (190.1)	0.15 (0.4)	82.67 (214.1)	0.16 (0.4)	131.92 (341.7)	0.25 (0.6)	39.31 (101.8)	0.09 (0.2)	569.25 (1,474.3)	0.08 (0.2)	691.83 (1,791.8)	0.45 (1.2)	
	Inland Urban	-	-	3.81 (9.9)	0.01 (0.0)	2.67 (6.9)	0.01 (0.0)	4.20 (10.9)	0.01 (0.0)	-	-	122.51 (317.3)	0.12 (0.3)	157.39 (407.6)	0.13 (0.3)	

<sup>1</sup> Area measures represent totals by noticeable elements in the viewshed. Areas that are <0.00 sq miles (0.00 sq KM) are 0.64 acres or less.  
km<sup>2</sup> = square kilometers

**Table H-18. 853-foot WTGs scale of change and prominence for open ocean, seascape, and landscape<sup>1</sup>**

Scale of Change and Prominence Effects	Open Ocean, Seascape, and Landscape	One Project												Six Projects		
		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544		New York Bight		
		Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Geographic Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	
<b>Large Scale of Change and Prominence of 5 or 6</b>	<b>Open Ocean Character Area:</b>															
	Open Ocean	9,416.28 (24,388.1)	2,978.23 (7,713.6)	9,681.22 (25,074.3)	3,134.97 (8,119.5)	9,957.53 (25,789.9)	3,454.33 (8,946.7)	9,062.22 (23,471.1)	3,203.01 (8,295.8)	18,894.57 (48,936.7)	6,438.71 (16,676.2)	7,289.92 (18,880.8)	2,713.65 (7,028.3)	15,569.90 (40,325.9)	8,356.44 (21,643.1)	
	<b>Seascape Character Areas:</b>															
	Bayside Waterbodies	-	-	-	-	-	-	-	-	-	-	-	257.62 (667.2)	0.00 (0.0)	419.31 (1,086.0)	0.00 (0.0)
	Nearshore Ocean	-	-	-	-	-	-	-	-	-	-	-	450.73 (1,167.4)	66.04 (171.1)	636.12 (1,647.5)	66.04 (171.1)
	Oceanside Beach	-	-	-	-	-	-	-	-	-	-	-	8.86 (22.9)	0.41 (1.1)	12.87 (33.3)	0.41 (1.1)
	Oceanside Recreation	-	-	-	-	-	-	-	-	-	-	-	6.95 (18.0)	0.18 (0.5)	6.97 (18.0)	0.18 (0.5)
Oceanside Residential/Commercial	-	-	-	-	-	-	-	-	-	-	-	13.13 (34.0)	0.46 (1.2)	20.12 (52.1)	0.48 (1.2)	
<b>Medium Scale of Change and Prominence of 3 or 4</b>	<b>Open Ocean Character Area:</b>															
	Open Ocean	9,416.28 (24,388.1)	507.07 (1,313.3)	9,681.22 (25,074.3)	461.62 (1,195.6)	9,957.53 (25,789.9)	448.55 (1,161.7)	9,062.22 (23,471.1)	480.04 (1,243.3)	18,894.57 (48,936.7)	874.63 (2,265.3)	7,289.92 (18,880.8)	367.05 (950.6)	15,569.90 (40,325.9)	776.94 (2,012.3)	
	<b>Seascape Character Areas:</b>															
	Bayside Natural Wetland	-	-	-	-	-	-	-	-	-	-	-	46.78 (121.2)	0.75 (1.9)	154.00 (398.8)	0.75 (1.9)
	Bayside Residential	-	-	-	-	-	-	-	-	-	-	-	48.63 (126.0)	0.07 (0.2)	71.73 (185.8)	0.07 (0.2)
	Bayside Waterbodies	-	-	-	-	-	-	-	-	-	-	-	257.62 (667.2)	19.39 (50.2)	419.31 (1,086.0)	19.39 (50.2)
	Nearshore Ocean	-	-	-	-	-	-	-	-	-	-	-	450.73 (1,167.4)	34.41 (89.1)	636.12 (1,647.5)	34.41 (89.1)
	Oceanside Beach	-	-	-	-	-	-	-	-	-	-	-	8.86 (22.9)	0.70 (1.8)	12.87 (33.3)	0.70 (1.8)
Oceanside Recreation	-	-	-	-	-	-	-	-	-	-	-	6.95 (18.0)	0.25 (0.6)	6.97 (18.0)	0.25 (0.6)	
Oceanside Residential/Commercial	-	-	-	-	-	-	-	-	-	-	-	13.13 (34.0)	0.20 (0.5)	20.12 (52.1)	0.21 (0.5)	
<b>Small Scale of Change and Prominence of 1 or 2</b>	<b>Open Ocean Character Area:</b>															
	Open Ocean	9,416.28 (24,388.1)	2,913.06 (7,544.8)	9,681.22 (25,074.3)	2,958.82 (7,663.3)	9,957.53 (25,789.9)	2,965.50 (7,680.6)	9,062.22 (23,471.1)	2,648.01 (6,858.3)	18,894.57 (48,936.7)	5,936.68 (15,375.9)	7,289.92 (18,880.8)	2,145.98 (5,558.1)	15,569.90 (40,325.9)	3,829.50 (9,918.4)	
	<b>Bayside Seascape Character Areas:</b>															
	Bayside Commercial Park	-	-	0.32 (0.8)	0.00 (0.0)	0.17 (0.4)	0.00 (0.0)	0.18 (0.5)	0.00 (0.0)	0.30 (0.8)	0.00 (0.0)	0.29 (0.7)	0.00 (0.0)	0.44 (1.1)	0.00 (0.0)	
	Bayside Industrial	-	-	-	-	-	-	0.02 (0.1)	0.00 (0.0)	0.05 (0.1)	-	3.74 (9.7)	0.04 (0.1)	5.74 (14.9)	0.04 (0.1)	
	Bayside Industrial Resource	-	-	-	-	-	-	0.14 (0.4)	0.00 (0.0)	0.28 (0.7)	0.00 (0.0)	0.28 (0.7)	0.11 (0.3)	0.42 (1.1)	0.11 (0.3)	
	Bayside Military Site	-	-	0.29 (0.7)	0.00 (0.0)	0.29 (0.7)	0.00 (0.0)	0.27 (0.7)	0.00 (0.0)	-	-	0.58 (1.5)	0.00 (0.0)	0.58 (1.5)	0.00 (0.0)	
	Bayside Natural Upland	1.49 (3.9)	0.00 (0.0)	2.53 (6.5)	0.00 (0.0)	2.72 (7.0)	0.00 (0.0)	2.90 (7.5)	0.00 (0.0)	4.13 (10.7)	0.00 (0.0)	11.10 (28.8)	0.19 (0.5)	13.81 (35.8)	0.19 (0.5)	
	Bayside Natural Wetland	10.59 (27.4)	0.01 (0.0)	22.26 (57.7)	0.01 (0.0)	64.09 (166.0)	0.03 (0.1)	109.21 (282.9)	7.27 (18.8)	169.36 (438.6)	0.55 (1.4)	46.78 (121.2)	4.93 (12.8)	154.00 (398.8)	12.21 (31.6)	
	Bayside Recreation	1.67 (4.3)	0.00 (0.0)	1.89 (4.9)	0.01 (0.0)	1.54 (4.0)	0.01 (0.0)	2.44 (6.3)	0.01 (0.0)	1.33 (3.4)	0.01 (0.0)	11.18 (29.0)	0.64 (1.7)	13.98 (36.2)	0.66 (1.7)	
	Bayside Residential	3.72 (9.6)	0.01 (0.0)	21.24 (55.0)	0.02 (0.1)	24.86 (64.4)	0.04 (0.1)	28.93 (74.9)	0.13 (0.3)	34.49 (89.3)	0.04 (0.1)	48.63 (126.0)	0.77 (2.0)	71.73 (185.8)	0.93 (2.4)	
	Bayside Urban	0.21 (0.5)	0.00 (0.0)	0.68 (1.8)	0.00 (0.0)	0.39 (1.0)	0.00 (0.0)	3.56 (9.2)	0.03 (0.1)	6.60 (17.1)	0.02 (0.0)	5.63 (14.6)	0.03 (0.1)	12.06 (31.2)	0.06 (0.2)	
	Bayside Waterbodies	87.07 (225.5)	0.00 (0.0)	82.74 (214.3)	0.01 (0.0)	132.74 (343.8)	0.82 (2.1)	162.81 (421.7)	5.70 (14.8)	259.66 (672.5)	0.03 (0.1)	257.62 (667.2)	61.96 (160.5)	419.31 (1,086.0)	68.07 (176.3)	
	Seascape Residential	-	-	3.50 (9.1)	0.01 (0.0)	2.33 (6.0)	0.00 (0.0)	2.05 (5.3)	0.01 (0.0)	3.40 (8.8)	0.01 (0.0)	7.46 (19.3)	0.00 (0.0)	9.04 (23.4)	0.03 (0.1)	
	Seascape Urban	-	-	0.02 (0.0)	0.00 (0.0)	0.02 (0.0)	0.00 (0.0)	0.02 (0.0)	0.00 (0.0)	0.04 (0.1)	0.00 (0.0)	1.37 (3.6)	-	1.39 (3.6)	0.00 (0.0)	
	<b>Oceanside Seascape Character Areas:</b>															
	Nearshore Ocean	155.90 (403.8)	0.00 (0.0)	196.83 (509.8)	1.42 (3.7)	225.62 (584.4)	85.26 (220.8)	247.02 (639.8)	158.56 (410.7)	416.65 (1,079.1)	41.90 (108.5)	450.73 (1,167.4)	129.32 (334.9)	636.12 (1,647.5)	287.88 (745.6)	
Oceanside Beach	4.34 (11.2)	0.06 (0.2)	2.02 (5.2)	0.80 (2.1)	3.77 (9.8)	1.23 (3.2)	4.01 (10.4)	2.10 (5.4)	7.62 (19.7)	1.71 (4.4)	8.86 (22.9)	2.81 (7.3)	12.87 (33.3)	4.98 (12.9)		
Oceanside Recreation	1.75 (4.5)	0.00 (0.0)	0.01 (0.0)	0.00 (0.0)	0.01 (0.0)	0.00 (0.0)	0.01 (0.0)	0.00 (0.0)	0.03 (0.1)	0.00 (0.0)	6.95 (18.0)	2.23 (5.8)	6.97 (18.0)	2.23 (5.8)		

Scale of Change and Prominence Effects	Open Ocean, Seascape, and Landscape	One Project												Six Projects	
		OCS-A 0537		OCS-A 0538		OCS-A 0539		OCS-A 0541		OCS-A 0542		OCS-A 0544		New York Bight	
		Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Project Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )	Geographic Analysis Area Square Miles (km <sup>2</sup> )	Impact Area Square Miles (km <sup>2</sup> )
	Oceanside Residential/Commercial	2.18 (5.7)	0.05 (0.1)	9.36 (24.3)	0.82 (2.1)	9.13 (23.6)	1.94 (5.0)	9.86 (25.5)	2.21 (5.7)	14.30 (37.0)	3.04 (7.9)	13.13 (34.0)	0.90 (2.3)	20.12 (52.1)	3.25 (8.4)
	Oceanside Urban	-	-	1.02 (2.6)	0.06 (0.2)	0.38 (1.0)	0.09 (0.2)	1.40 (3.6)	0.21 (0.5)	2.63 (6.8)	0.09 (0.2)	3.82 (9.9)	0.76 (2.0)	4.94 (12.8)	0.98 (2.5)
	<b>Landscape Character Areas:</b>														
	Inland Agriculture	-	-	0.37 (1.0)	0.00 (0.0)	0.35 (0.9)	0.00 (0.0)	1.63 (4.2)	0.00 (0.0)	-	-	19.64 (50.9)	0.00 (0.0)	21.27 (55.1)	0.00 (0.0)
	Inland Commercial Park	0.09 (0.2)	0.00 (0.0)	4.70 (12.2)	0.00 (0.0)	4.05 (10.5)	0.00 (0.0)	10.08 (26.1)	0.01 (0.0)	3.52 (9.1)	0.01 (0.0)	28.29 (73.3)	0.00 (0.0)	38.16 (98.8)	0.02 (0.1)
	Inland Industrial	0.02 (0.1)	0.00 (0.0)	0.28 (0.7)	0.00 (0.0)	0.67 (1.7)	0.00 (0.0)	5.09 (13.2)	0.00 (0.0)	0.54 (1.4)	0.00 (0.0)	23.87 (61.8)	0.05 (0.1)	30.08 (77.9)	0.05 (0.1)
	Inland Industrial Resource	-	-	2.66 (6.9)	0.00 (0.0)	6.04 (15.6)	0.00 (0.0)	12.67 (32.8)	0.05 (0.1)	5.71 (14.8)	0.00 (0.0)	5.94 (15.4)	0.16 (0.4)	18.55 (48.0)	0.21 (0.6)
	Inland Military Site	-	-	-	-	-	-	14.73 (38.1)	0.00 (0.0)	-	-	5.67 (14.7)	-	20.39 (52.8)	0.00 (0.0)
	Inland Natural Area	0.24 (0.6)	0.00 (0.0)	33.84 (87.6)	0.01 (0.0)	125.28 (324.5)	0.01 (0.0)	296.52 (768.0)	0.07 (0.2)	88.95 (230.4)	0.01 (0.0)	161.28 (417.7)	0.02 (0.0)	455.94 (1,180.9)	0.09 (0.2)
	Inland Recreation	-	-	1.64 (4.3)	0.00 (0.0)	0.52 (1.3)	0.00 (0.0)	2.66 (6.9)	0.01 (0.0)	1.68 (4.3)	0.00 (0.0)	24.79 (64.2)	0.01 (0.0)	29.30 (75.9)	0.02 (0.1)
	Inland Rural	-	-	0.68 (1.8)	0.00 (0.0)	2.66 (6.9)	0.00 (0.0)	20.29 (52.5)	0.00 (0.0)	1.08 (2.8)	0.00 (0.0)	5.31 (13.7)	0.03 (0.1)	25.60 (66.3)	0.04 (0.1)
	Inland Suburban/Exurban Residential	11.88 (30.8)	0.04 (0.1)	73.38 (190.1)	0.08 (0.2)	82.67 (214.1)	0.08 (0.2)	131.92 (341.7)	0.11 (0.3)	78.62 (203.6)	0.06 (0.2)	569.25 (1,474.3)	0.08 (0.2)	691.83 (1,791.8)	0.31 (0.8)
	Inland Urban	-	-	3.81 (9.9)	0.00 (0.0)	2.67 (6.9)	0.00 (0.0)	4.20 (10.9)	0.00 (0.0)	-	-	122.51 (317.3)	0.13 (0.3)	157.39 (407.6)	0.14 (0.4)

<sup>1</sup> Area measures represent totals by noticeable elements in the viewshed. Areas that are <0.00 sq miles (0.00 sq KM) are 0.64 acres or less.  
km<sup>2</sup> = square kilometers

#### H.3.1.4 Open Ocean, Seascape, and Landscape Impact Assessment Summary and Impact Levels

Table H-19 through Table H-32 summarize the effects from the offshore components of each lease area and all six NY Bight lease areas on sensitivity, magnitude, and visibility thresholds (Table H-8). The tables also present the impact levels for each character area based on the impact level definitions in Table H-8.

Lease areas farther from shore (i.e., OCS-A 0537 and OCS-A 0538) have less effect on seascape and landscape character areas because of their smaller perceptive scale, whereas lease areas nearer to shore (i.e., OCS-A 0544) have a greater perceptive scale and therefore a greater effect on oceanside seascape character type sense of place in limited areas of New York.

High to moderate magnitudes of visual impact would occur in the ocean-facing and bay-facing seascape character areas and diminish to moderate and minor as distance increases and screening effects increase from topography, structures, and vegetation. Nearshore Ocean is the largest and most vulnerable character area to change, outside of the Open Ocean. Medium to minor size or scale changes to character type sense of place would occur in all other seascape and landscape character areas. Impacts of the NY Bight projects on open ocean character, seascape character, and landscape character range from **negligible** to **major**.



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**Table H-19. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0537 for 1,312-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0537	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X			Major	Same as Alternative B	
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			--		X				X	Negligible	Same as Alternative B	
Bayside Industrial			X			X			X			--		X				X	Negligible	Same as Alternative B	
Bayside Industrial Resource			X			X			X			--		X				X	Negligible	Same as Alternative B	
Bayside Military Site			X		X				X			--		X				X	Negligible	Same as Alternative B	
Bayside Natural Upland	X			X					X			--		X				X	Negligible	Same as Alternative B	
Bayside Natural Wetland	X			X					X			X		X			X		Minor	Same as Alternative B	
Bayside Recreation	X			X					X			--		X				X	Negligible	Same as Alternative B	
Bayside Residential	X			X					X			•		X			X		Negligible	Same as Alternative B	
Bayside Urban			X	X					X			--		X				X	Negligible	Same as Alternative B	
Bayside Waterbodies	X			X				X				X		X			X		Minor	Same as Alternative B	
Seascape Residential	X			X					X			--		X				X	Negligible	Same as Alternative B	
Seascape Urban			X	X					X			--		X				X	Negligible	Same as Alternative B	
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					X		X				X	Minor	Same as Alternative B	
Oceanside Beach	X			X				X				X		X				X	Minor	Same as Alternative B	
Oceanside Recreation	X			X					X			X		X				X	Minor	Same as Alternative B	
Oceanside Residential/ Commercial	X			X				X				X		X				X	Minor	Same as Alternative B	
Oceanside Urban		X		X				X				--		X				X	Negligible	Same as Alternative B	
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X				X	Negligible	Same as Alternative B	
Inland Commercial Park			X			X			X			--		X				X	Negligible	Same as Alternative B	
Inland Industrial			X			X			X			--		X				X	Negligible	Same as Alternative B	
Inland Industrial Resource		X				X			X			--		X				X	Negligible	Same as Alternative B	
Inland Military Site		X			X				X			--		X				X	Negligible	Same as Alternative B	
Inland Natural Area	X			X					X			--		X				X	Negligible	Same as Alternative B	
Inland Recreation	X			X					X			--		X				X	Negligible	Same as Alternative B	
Inland Rural	X				X				X			--		X				X	Negligible	Same as Alternative B	
Inland Suburban/ Exurban Residential	X				X				X			--		X				X	Negligible	Same as Alternative B	
Inland Urban			X		X				X			--		X				X	Negligible	Same as Alternative B	

<sup>1</sup> • = <0.64 acre, -- = not visible

**Table H-20. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0538 for 1,312-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0538	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X			Major	Same as Alternative B	
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			X		X				X	Minor	Same as Alternative B	
Bayside Industrial			X			X			X			--		X				X	Negligible	Same as Alternative B	
Bayside Industrial Resource			X			X			X			--		X				X	Negligible	Same as Alternative B	
Bayside Military Site			X		X				X			X		X				X	Minor	Same as Alternative B	
Bayside Natural Upland	X			X					X			X		X				X	Minor	Same as Alternative B	
Bayside Natural Wetland	X			X					X			X		X				X	Minor	Same as Alternative B	
Bayside Recreation	X			X					X			X		X				X	Minor	Same as Alternative B	
Bayside Residential	X			X					X			X		X				X	Minor	Same as Alternative B	
Bayside Urban			X	X					X			X		X				X	Minor	Same as Alternative B	
Bayside Waterbodies	X			X				X				X		X				X	Minor	Same as Alternative B	
Seascape Residential	X			X					X			X		X				X	Minor	Same as Alternative B	
Seascape Urban			X	X					X			X		X				X	Minor	Same as Alternative B	
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					X		X				X	Minor	Same as Alternative B	
Oceanside Beach	X			X				X				X		X				X	Minor	Same as Alternative B	
Oceanside Recreation	X			X					X			X		X				X	Minor	Same as Alternative B	
Oceanside Residential/Commercial	X			X					X			X		X				X	Minor	Same as Alternative B	
Oceanside Urban		X		X				X				X		X				X	Minor	Same as Alternative B	
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X				X	Negligible	Same as Alternative B	
Inland Commercial Park			X			X			X			•		X				X	Negligible	Same as Alternative B	
Inland Industrial			X			X			X			•		X				X	Negligible	Same as Alternative B	
Inland Industrial Resource		X				X			X			•		X				X	Negligible	Same as Alternative B	
Inland Military Site		X			X				X			--		X				X	Negligible	Same as Alternative B	
Inland Natural Area	X			X					X			•		X				X	Negligible	Same as Alternative B	
Inland Recreation	X			X					X			•		X				X	Negligible	Same as Alternative B	
Inland Rural	X				X				X			--		X				X	Negligible	Same as Alternative B	
Inland Suburban/Exurban Residential	X				X				X			X		X				X	Minor	Same as Alternative B	
Inland Urban			X		X				X			•		X					Negligible	Same as Alternative B	

<sup>1</sup> • = <0.64 acre, -- = not visible

**Table H-21. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0539 for 1,312-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0539	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X				Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			•		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial Resource			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Military Site			X		X				X			X		X				X		Minor	Same as Alternative B
Bayside Natural Upland	X			X					X			•		X					X	Negligible	Same as Alternative B
Bayside Natural Wetland	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Recreation	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Residential	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Urban			X	X					X			•		X					X	Negligible	Same as Alternative B
Bayside Waterbodies	X			X				X				X		X				X		Minor	Same as Alternative B
Seascape Residential	X			X					X			X		X				X		Minor	Same as Alternative B
Seascape Urban			X	X					X			X		X				X		Minor	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					X		X				X		Minor	Same as Alternative B
Oceanside Beach	X			X				X				X		X				X		Minor	Same as Alternative B
Oceanside Recreation	X			X				X				X		X				X		Minor	Same as Alternative B
Oceanside Residential/Commercial	X			X				X				X		X				X		Minor	Same as Alternative B
Oceanside Urban		X		X				X				X		X				X		Minor	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X				X		Negligible	Same as Alternative B
Inland Commercial Park			X			X			X			•		X				X		Negligible	Same as Alternative B
Inland Industrial			X			X			X			•		X				X		Negligible	Same as Alternative B
Inland Industrial Resource		X				X			X			•		X				X		Negligible	Same as Alternative B
Inland Military Site		X			X				X			--		X				X		Negligible	Same as Alternative B
Inland Natural Area	X			X					X			•		X				X		Negligible	Same as Alternative B
Inland Recreation	X			X					X			•		X				X		Negligible	Same as Alternative B
Inland Rural	X				X				X			--		X				X		Negligible	Same as Alternative B
Inland Suburban/Exurban Residential	X				X	X			X			X		X				X		Minor	Same as Alternative B
Inland Urban			X		X				X			•		X				X		Negligible	Same as Alternative B

<sup>1</sup> • = <0.64 acre, -- = not visible

**Table H-22. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0541 for 1,312-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4) <sup>1</sup>	Low (1-2)	Unseen	OCS-A 0541	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X			X			Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			•		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			•		X					X	Negligible	Same as Alternative B
Bayside Industrial Resource			X			X			X			•		X					X	Negligible	Same as Alternative B
Bayside Military Site			X		X				X			X		X					X	Minor	Same as Alternative B
Bayside Natural Upland	X			X					X			X		X					X	Minor	Same as Alternative B
Bayside Natural Wetland	X			X					X	X				X				X		Moderate	Same as Alternative B
Bayside Recreation	X			X					X			X		X					X	Minor	Same as Alternative B
Bayside Residential	X			X					X			X		X					X	Minor	Same as Alternative B
Bayside Urban			X	X					X			X		X					X	Minor	Same as Alternative B
Bayside Waterbodies	X			X				X				X		X				X		Moderate	Same as Alternative B
Seascape Residential	X			X					X			X		X					X	Minor	Same as Alternative B
Seascape Urban			X	X					X			•		X					X	Negligible	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X			X				X					X	Moderate	Same as Alternative B
Oceanside Beach	X			X				X		X				X					X	Moderate	Same as Alternative B
Oceanside Recreation	X			X				X				X		X					X	Minor	Same as Alternative B
Oceanside Residential/Commercial	X			X				X				X		X					X	Moderate	Same as Alternative B
Oceanside Urban		X		X				X				X		X					X	Moderate	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			X		X					X	Minor	Same as Alternative B
Inland Commercial Park			X			X			X			X		X					X	Minor	Same as Alternative B
Inland Industrial			X			X			X			•		X					X	Negligible	Same as Alternative B
Inland Industrial Resource		X				X			X			X		X					X	Minor	Same as Alternative B
Inland Military Site		X			X				X			X		X					X	Minor	Same as Alternative B
Inland Natural Area	X			X					X			X		X					X	Minor	Same as Alternative B
Inland Recreation	X			X					X			X		X					X	Minor	Same as Alternative B
Inland Rural	X				X				X			X		X					X	Minor	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X			X		X					X	Minor	Same as Alternative B
Inland Urban			X		X				X			X		X					X	Minor	Same as Alternative B

<sup>1</sup> • = <0.64 acre, -- = not visible

**Table H-23. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0542 for 1,312-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0542	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X				Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial Resource			X			X			X			•		X				X		Minor	Same as Alternative B
Bayside Military Site			X		X				X					X					X	Negligible	Same as Alternative B
Bayside Natural Upland	X			X					X			•		X				X		Minor	Same as Alternative B
Bayside Natural Wetland	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Recreation	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Residential	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Urban			X	X					X			X		X				X		Minor	Same as Alternative B
Bayside Waterbodies	X			X				X				X		X				X		Minor	Same as Alternative B
Seascape Residential	X			X					X			X		X				X		Minor	Same as Alternative B
Seascape Urban			X	X					X			•		X				X		Minor	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					X		X				X		Minor	Same as Alternative B
Oceanside Beach	X			X				X				X		X				X		Minor	Same as Alternative B
Oceanside Recreation	X			X					X			•		X				X		Minor	Same as Alternative B
Oceanside Residential/Commercial	X			X				X				X		X				X		Minor	Same as Alternative B
Oceanside Urban		X		X				X				X		X				X		Minor	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X				X		Negligible	Same as Alternative B
Inland Commercial Park			X			X			X			•		X				X		Minor	Same as Alternative B
Inland Industrial			X			X			X			•		X				X		Minor	Same as Alternative B
Inland Industrial Resource		X				X			X			•		X				X		Minor	Same as Alternative B
Inland Military Site		X			X				X			--		X				X		Negligible	Same as Alternative B
Inland Natural Area	X			X					X			X		X				X		Minor	Same as Alternative B
Inland Recreation	X			X					X			--		X				X		Negligible	Same as Alternative B
Inland Rural	X				X				X			--		X				X		Negligible	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X			X		X				X		Minor	Same as Alternative B
Inland Urban			X		X				X			--		X				X		Negligible	Same as Alternative B

<sup>1</sup> • = <0.64 acre, -- = not visible



**Table H-24. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0544 for 1,312-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6) <sup>1</sup>	Moderate (3-4) <sup>1</sup>	Low (1-2)	Unseen	OCS-A 0544	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X			X			Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			•		X				X		Minor	Same as Alternative B
Bayside Industrial			X			X			X			X		X			X			Minor	Same as Alternative B
Bayside Industrial Resource			X			X			X			X		X			X			Minor	Same as Alternative B
Bayside Military Site			X		X				X			X		X				X		Minor	Same as Alternative B
Bayside Natural Upland	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Natural Wetland	X			X					X			X		X			X			Moderate	Same as Alternative B
Bayside Recreation	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Residential	X			X					X			X		X			X			Moderate	Same as Alternative B
Bayside Urban			X	X					X			X		X				X		Minor	Same as Alternative B
Bayside Waterbodies	X			X				X			X			X		X				Moderate	Same as Alternative B
Seascape Residential	X			X					X			X		X					X	Minor	Same as Alternative B
Seascape Urban			X	X					X			--		X				X		Negligible	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X			X				X			X			Major	Same as Alternative B
Oceanside Beach	X			X				X		X				X			X			Major	Same as Alternative B
Oceanside Recreation	X			X				X	X					X			X			Moderate	Same as Alternative B
Oceanside Residential/Commercial	X			X				X			X			X			X			Moderate	Same as Alternative B
Oceanside Urban		X		X				X			X			X			X			Moderate	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X				X				•		X				X		Minor	Same as Alternative B
Inland Commercial Park			X			X		X				•		X			X			Minor	Same as Alternative B
Inland Industrial			X			X		X				•		X			X			Minor	Same as Alternative B
Inland Industrial Resource		X				X		X				•		X			X			Minor	Same as Alternative B
Inland Military Site		X			X			X				--		X				X		Negligible	Same as Alternative B
Inland Natural Area	X			X				X				•		X				X		Minor	Same as Alternative B
Inland Recreation	X			X				X				X		X				X		Minor	Same as Alternative B
Inland Rural	X				X			X				•		X				X		Minor	Same as Alternative B
Inland Suburban/Exurban Residential	X				X			X				•		X				X		Minor	Same as Alternative B
Inland Urban			X		X			X				•		X				X		Minor	Same as Alternative B

<sup>1</sup> • = <0.64 acre; -- = not visible

**Table H-25. Open ocean, seascape, and landscape character SLIA summary for six NY Bight Projects for 1,312-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	Six Projects	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X				Major	Same as Alternative B
<b>Bayside Seascape</b>																					
Bayside Commercial Park			X			X			X		•			X				X		Minor	Same as Alternative B
Bayside Industrial			X			X			X		X			X				X		Minor	Same as Alternative B
Bayside Industrial Resource			X			X			X		X			X				X		Minor	Same as Alternative B
Bayside Military Site			X		X				X		X			X				X		Minor	Same as Alternative B
Bayside Natural Upland	X			X					X		X			X				X		Minor	Same as Alternative B
Bayside Natural Wetland	X			X					X	X				X		X	X			Moderate	Same as Alternative B
Bayside Recreation	X			X					X		X			X				X		Minor	Same as Alternative B
Bayside Residential	X			X					X		X			X				X		Moderate	Same as Alternative B
Bayside Urban			X	X					X		X			X				X		Minor	Same as Alternative B
Bayside Waterbodies	X			X				X		X				X			X			Moderate	Same as Alternative B
Seascape Residential	X			X					X		X			X				X		Minor	Same as Alternative B
Seascape Urban			X	X					X		•			X				X		Minor	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X			X				X		X				Major	Same as Alternative B
Oceanside Beach	X			X				X		X				X		X				Major	Same as Alternative B
Oceanside Recreation	X			X				X		X				X			X			Moderate	Same as Alternative B
Oceanside Residential/Commercial	X			X				X		X				X			X			Moderate	Same as Alternative B
Oceanside Urban		X		X				X		X				X			X			Moderate	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X		X			X				X		Minor	Same as Alternative B
Inland Commercial Park			X			X			X		X			X				X		Minor	Same as Alternative B
Inland Industrial			X			X			X		X			X				X		Minor	Same as Alternative B
Inland Industrial Resource		X				X			X		X			X				X		Minor	Same as Alternative B
Inland Military Site		X			X				X		X			X				X		Minor	Same as Alternative B
Inland Natural Area	X			X					X		X			X				X		Minor	Same as Alternative B
Inland Recreation	X			X					X		X			X				X		Minor	Same as Alternative B
Inland Rural	X				X				X		X			X				X		Minor	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X		X			X				X		Minor	Same as Alternative B
Inland Urban			X		X				X		X			X				X		Minor	Same as Alternative B

<sup>1</sup> • = <0.64 acre;

**Table H-26. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0537 for 853-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0537	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X				Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial Resource			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Military Site			X		X				X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Upland	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Wetland	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Residential	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
Bayside Waterbodies	X			X					X			--		X					X	Negligible	Same as Alternative B
Seascape Residential	X			X					X			--		X					X	Negligible	Same as Alternative B
Seascape Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					--		X					X	Negligible	Same as Alternative B
Oceanside Beach	X			X					X			--		X					X	Negligible	Same as Alternative B
Oceanside Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Oceanside Residential/Commercial	X			X					X			--		X					X	Negligible	Same as Alternative B
Oceanside Urban		X		X					X			--		X					X	Negligible	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X					X	Negligible	Same as Alternative B
Inland Commercial Park			X						X			--		X					X	Negligible	Same as Alternative B
Inland Industrial			X						X			--		X					X	Negligible	Same as Alternative B
Inland Industrial Resource		X							X			--		X					X	Negligible	Same as Alternative B
Inland Military Site		X			X				X			--		X					X	Negligible	Same as Alternative B
Inland Natural Area	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Rural	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Urban			X		X				X			--		X					X	Negligible	Same as Alternative B

<sup>1</sup> -- = not visible

**Table H-27. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0538 for 853-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0538	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X				Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial Resource			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Military Site			X		X				X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Upland	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Wetland	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Residential	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
Bayside Waterbodies	X			X					X			--		X					X	Negligible	Same as Alternative B
Seascape Residential	X			X					X			--		X					X	Negligible	Same as Alternative B
Seascape Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					--		X					X	Negligible	Same as Alternative B
Oceanside Beach	X			X					X			--		X					X	Negligible	Same as Alternative B
Oceanside Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Oceanside Residential/Commercial	X			X					X			--		X					X	Negligible	Same as Alternative B
Oceanside Urban		X		X					X			--		X					X	Negligible	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X					X	Negligible	Same as Alternative B
Inland Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Inland Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Inland Industrial Resource		X				X			X			--		X					X	Negligible	Same as Alternative B
Inland Military Site		X			X				X			--		X					X	Negligible	Same as Alternative B
Inland Natural Area	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Rural	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Urban			X		X				X			--		X					X	Negligible	Same as Alternative B

<sup>1</sup> -- = not visible

**Table H-28. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0539 for 853-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0539	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X				Major	Same as Alternative B
<b>Bayside Seascape</b>																					
Bayside Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial Resource			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Military Site			X		X				X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Upland	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Wetland	X			X					X			X		X				X		Minor	Same as Alternative B
Bayside Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Residential	X			X					X			•		X					X	Negligible	Same as Alternative B
Bayside Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
Bayside Waterbodies	X			X				X				X		X				X		Minor	Same as Alternative B
Seascape Residential	X			X					X			•		X					X	Negligible	Same as Alternative B
Seascape Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					X		X				X		Minor	Same as Alternative B
Oceanside Beach	X			X				X				X		X				X		Minor	Same as Alternative B
Oceanside Recreation	X			X				X				•		X				X		Negligible	Same as Alternative B
Oceanside Residential/Commercial	X			X				X				X		X				X		Minor	Same as Alternative B
Oceanside Urban		X		X				X				X		X				X		Minor	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X					X	Negligible	Same as Alternative B
Inland Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Inland Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Inland Industrial Resource		X				X			X			--		X					X	Negligible	Same as Alternative B
Inland Military Site		X			X				X			--		X					X	Negligible	Same as Alternative B
Inland Natural Area	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Rural	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Urban			X		X				X			--		X					X	Negligible	Same as Alternative B

<sup>1</sup> • = <0.64 acre; -- = not visible

**Table H-29. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0541 for 853-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0541	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X		X				Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X		X			•		X					X	Negligible	Same as Alternative B	
Bayside Industrial			X			X		X			--		X					X	Negligible	Same as Alternative B	
Bayside Industrial Resource			X			X		X			--		X					X	Negligible	Same as Alternative B	
Bayside Military Site			X		X			X			--		X					X	Negligible	Same as Alternative B	
Bayside Natural Upland	X			X				X			•		X					X	Negligible	Same as Alternative B	
Bayside Natural Wetland	X			X				X			X		X				X		Minor	Same as Alternative B	
Bayside Recreation	X			X				X			X		X				X		Minor	Same as Alternative B	
Bayside Residential	X			X				X			X		X				X		Minor	Same as Alternative B	
Bayside Urban			X	X				X			•		X				X		Minor	Same as Alternative B	
Bayside Waterbodies	X			X				X			X		X				X		Minor	Same as Alternative B	
Seascape Residential	X			X				X			•		X				X	X	Minor	Same as Alternative B	
Seascape Urban			X	X				X			•		X				X		Negligible	Same as Alternative B	
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X			X			X				X		Moderate	Same as Alternative B	
Oceanside Beach	X			X				X		X			X				X		Moderate	Same as Alternative B	
Oceanside Recreation	X			X				X			•		X				X		Negligible	Same as Alternative B	
Oceanside Residential/Commercial	X			X				X		X			X				X		Minor	Same as Alternative B	
Oceanside Urban		X		X				X			X		X				X		Minor	Same as Alternative B	
<b>Landscape</b>																					
Inland Agriculture		X		X				X			X		X				X		Minor	Same as Alternative B	
Inland Commercial Park			X			X		X			•		X				X		Negligible	Same as Alternative B	
Inland Industrial			X			X		X			•		X				X		Negligible	Same as Alternative B	
Inland Industrial Resource		X				X		X			•		X				X		Negligible	Same as Alternative B	
Inland Military Site		X			X			X			--		X				X		Negligible	Same as Alternative B	
Inland Natural Area	X			X				X			X		X				X		Minor	Same as Alternative B	
Inland Recreation	X			X				X			•		X				X		Negligible	Same as Alternative B	
Inland Rural	X				X			X			•		X				X		Negligible	Same as Alternative B	
Inland Suburban/Exurban Residential	X				X			X			X		X				X		Minor	Same as Alternative B	
Inland Urban			X		X			X			--		X				X		Negligible	Same as Alternative B	

<sup>1</sup> • = <0.64 acre; -- = not visible



**Table H-30. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0542 for 853-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0542	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X			X			Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Industrial Resource			X			X			X			--		X					X	Negligible	Same as Alternative B
Bayside Military Site			X		X				X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Upland	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Wetland	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Residential	X			X					X			--		X					X	Negligible	Same as Alternative B
Bayside Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
Bayside Waterbodies	X			X				X				--		X					X	Negligible	Same as Alternative B
Seascape Residential	X			X					X			--		X					X	Negligible	Same as Alternative B
Seascape Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X					--		X					X	Negligible	Same as Alternative B
Oceanside Beach	X			X				X				--		X					X	Negligible	Same as Alternative B
Oceanside Recreation	X			X				X				--		X					X	Negligible	Same as Alternative B
Oceanside Residential/Commercial	X			X				X				--		X					X	Negligible	Same as Alternative B
Oceanside Urban		X		X				X				--		X					X	Negligible	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			--		X					X	Negligible	Same as Alternative B
Inland Commercial Park			X			X			X			--		X					X	Negligible	Same as Alternative B
Inland Industrial			X			X			X			--		X					X	Negligible	Same as Alternative B
Inland Industrial Resource		X				X			X			--		X					X	Negligible	Same as Alternative B
Inland Military Site		X			X				X			--		X					X	Negligible	Same as Alternative B
Inland Natural Area	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Recreation	X			X					X			--		X					X	Negligible	Same as Alternative B
Inland Rural	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X			--		X					X	Negligible	Same as Alternative B
Inland Urban			X		X				X			--		X					X	Negligible	Same as Alternative B

<sup>1</sup> -- = not visible

**Table H-31. Open ocean, seascape, and landscape character SLIA summary for OCS-A 0544 for 853-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	OCS-A 0544	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term						
<b>Open Ocean</b>	X			X			X			X				X			X			Major	Same as Alternative B
<b>Seascape</b>																					
Bayside Commercial Park			X			X			X			•		X					X	Negligible	Same as Alternative B
Bayside Industrial			X			X			X			X		X					X	Minor	Same as Alternative B
Bayside Industrial Resource			X			X			X		X			X					X	Minor	Same as Alternative B
Bayside Military Site			X		X				X			--		X					X	Negligible	Same as Alternative B
Bayside Natural Upland	X			X					X			X		X					X	Minor	Same as Alternative B
Bayside Natural Wetland	X			X					X			X		X			X			Moderate	Same as Alternative B
Bayside Recreation	X			X					X			X		X					X	Minor	Same as Alternative B
Bayside Residential	X			X					X			X		X					X	Minor	Same as Alternative B
Bayside Urban			X	X					X			X		X					X	Minor	Same as Alternative B
Bayside Waterbodies	X			X				X				X		X			X			Moderate	Same as Alternative B
Seascape Residential	X			X					X			•		X					X	Minor	Same as Alternative B
Seascape Urban			X	X					X			--		X					X	Negligible	Same as Alternative B
<b>Oceanside Seascape</b>																					
Nearshore Ocean	X			X			X			X				X			X			Major	Same as Alternative B
Oceanside Beach	X			X				X				X		X			X			Moderate	Same as Alternative B
Oceanside Recreation	X			X				X	X					X			X			Moderate	Same as Alternative B
Oceanside Residential/Commercial	X			X				X				X		X			X			Moderate	Same as Alternative B
Oceanside Urban		X		X				X				X		X				X		Minor	Same as Alternative B
<b>Landscape</b>																					
Inland Agriculture		X		X					X			•		X					X	Negligible	Same as Alternative B
Inland Commercial Park			X			X			X			•		X					X	Negligible	Same as Alternative B
Inland Industrial			X			X			X			X		X				X		Minor	Same as Alternative B
Inland Industrial Resource		X				X			X			X		X				X		Minor	Same as Alternative B
Inland Military Site		X			X				X			--		X					X	Negligible	Same as Alternative B
Inland Natural Area	X			X					X			X		X					X	Minor	Same as Alternative B
Inland Recreation	X			X					X			X		X					X	Minor	Same as Alternative B
Inland Rural	X				X				X			X		X					X	Minor	Same as Alternative B
Inland Suburban/Exurban Residential	X				X				X			X		X					X	Minor	Same as Alternative B
Inland Urban			X		X				X			X		X					X	Minor	Same as Alternative B

<sup>1</sup> • = <0.64 acre; -- = not visible

**Table H-32. Open ocean, seascape, and landscape character SLIA summary for six NY Bight projects for 853-foot WTGs**

Character Area	Sensitivity						Magnitude of Impact							Visibility Threshold Rating				Impact Levels				
	Susceptibility			Value			Size and Scale of Change			Geographic Extent				Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	Six Projects	Sub-alternatives C1 and C2
	High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small <sup>1</sup>	Permanent	Long Term	Short Term							
<b>Open Ocean</b>	X			X			X			X				X			X			Major	Same as Alternative B	
<b>Bayside Seascape</b>																						
Bayside Commercial Park			X			X			X			•		X					X	Negligible	Same as Alternative B	
Bayside Industrial			X			X			X			X		X					X	Negligible	Same as Alternative B	
Bayside Industrial Resource			X			X			X			X		X				X		Minor	Same as Alternative B	
Bayside Military Site			X		X				X			X		X					X	Negligible	Same as Alternative B	
Bayside Natural Upland	X			X					X			X		X					X	Minor	Same as Alternative B	
Bayside Natural Wetland	X			X					X			X		X					X	Minor	Same as Alternative B	
Bayside Recreation	X			X					X			X		X					X	Minor	Same as Alternative B	
Bayside Residential	X			X					X			X		X					X	Minor	Same as Alternative B	
Bayside Urban			X	X					X			X		X					X	Minor	Same as Alternative B	
Bayside Waterbodies	X			X				X				X		X			X			Moderate	Same as Alternative B	
Seascape Residential	X			X					X			X		X					X	Minor	Same as Alternative B	
Seascape Urban			X	X					X			•		X					X	Negligible	Same as Alternative B	
<b>Oceanside Seascape</b>																						
Nearshore Ocean	X			X			X				X			X			X			Major	Same as Alternative B	
Oceanside Beach	X			X				X				X		X			X			Moderate	Same as Alternative B	
Oceanside Recreation	X			X				X				X		X			X			Moderate	Same as Alternative B	
Oceanside Residential/ Commercial	X			X				X				X		X			X			Moderate	Same as Alternative B	
Oceanside Urban		X		X				X				X		X				X		Minor	Same as Alternative B	
<b>Landscape</b>																						
Inland Agriculture		X		X					X			•		X					X	Negligible	Same as Alternative B	
Inland Commercial Park			X			X			X			X		X				X		Minor	Same as Alternative B	
Inland Industrial			X			X			X			X		X				X		Minor	Same as Alternative B	
Inland Industrial Resource		X				X			X			X		X				X		Minor	Same as Alternative B	
Inland Military Site		X			X				X			--		X					X	Negligible	Same as Alternative B	
Inland Natural Area	X			X					X			X		X					X	Minor	Same as Alternative B	
Inland Recreation	X			X					X			X		X					X	Minor	Same as Alternative B	
Inland Rural	X				X				X			•		X					X	Negligible	Same as Alternative B	
Inland Suburban/ Exurban Residential	X				X				X			X		X					X	Minor	Same as Alternative B	
Inland Urban			X		X				X			X		X					X	Minor	Same as Alternative B	

<sup>1</sup> • = <0.64 acre; -- = not visible

## H.3.2 Visual Impact Assessment (VIA)

### H.3.2.1 Sensitivity

Impacts on people are considered in evaluating KOPs. The susceptibility of viewers to changes in views is a function of the activities in which the viewers are engaged and their attention or interest on the view. Visual receptors most susceptible to change generally include residents with views of the proposed project from their homes, people engaged in outdoor recreation whose attention is focused on the views, visitors to historic or culturally important sites where views are an important contributor to the experience, people who regard the visual environment as an asset to their community, and people traveling scenic highways, railroads, or other transport specifically for enjoyment of the views.

KOPs are generally selected to represent high value, highly susceptible viewpoints to evaluate impacts at these special places; therefore, it is not surprising that all the KOPs are highly sensitive. Table H-33 documents the susceptibility, value, and sensitivity of viewers at each KOP. Overall, residents, tourists, and visitors engaging in recreation at these viewpoints are highly susceptible to changes from the NY Bight projects due to their interest in ocean-facing views and the visual environment being an important asset to their community. It is noted that susceptibility may be variable for visitors based on the activities people are engaged in and the nuances of each location. For example, visitors at Lucy the Elephant have a higher susceptibility while in the howdah and viewing the open ocean, and a lower susceptibility while on the ground or inside the structure. Many of the KOPs have special local, state, or national designations that demonstrate their value. For all the KOPs, their expansive ocean-facing views define their experiential character, which contributes to their overall view value.

**Table H-33. View value, susceptibility, and viewer sensitivity for each KOP**

KOP <sup>1</sup>	Viewer Experience								
	View Value			Receptor Susceptibility			Viewer Sensitivity		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
KOP-02 Lucy the Elephant <sup>1,2</sup>	X				X		X		
KOP-03 John Stafford Hall-Boardwalk <sup>2</sup>	X			X			X		
KOP-04 John Stafford Hall-Beach Entrance	X			X			X		
KOP-05 Jim Whelan Hall-Balcony <sup>1,2</sup>	X				X		X		
KOP-06 Atlantic City Boardwalk-Ocean Casino Boardwalk View	X			X			X		
KOP-07 Atlantic City Boardwalk-Top of Ocean Casino <sup>1</sup>	X			X			X		
KOP-08A/B Beach Haven – daytime and nighttime <sup>2</sup>	X			X			X		
KOP-09 Barnegat Jetty	X			X			X		
KOP-10 Barnegat Lighthouse <sup>1,2</sup>	X			X			X		
KOP-11 US Life Saving Station #14 <sup>1</sup>	X			X			X		
KOP-12 Seaside Park Beach	X			X			X		

KOP <sup>1</sup>	Viewer Experience								
	View Value			Receptor Susceptibility			Viewer Sensitivity		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
KOP-13 Mantoloking <sup>2</sup>	X			X			X		
KOP-14 Bayhead	X			X			X		
KOP-15 Point Pleasant	X			X			X		
KOP-16 Ocean Grove	X			X			X		
KOP-17 Asbury Park Beach	X			X			X		
KOP-18 Allenhurst Residential Historic District <sup>2</sup>	X			X			X		
KOP-19 Navesink Twin Lights	X			X			X		
KOP-26 Fort Tilden <sup>2</sup>	X			X			X		
KOP-27 Magnolia Beach	X			X			X		
KOP-28 Jones Beach <sup>2</sup>	X			X			X		
KOP-29 Rudolph Oyster House	X				X		X		
KOP-30 Shinnecock Inlet <sup>2</sup>	X			X			X		
KOP-31 Westhampton Beach <sup>2</sup>	X			X			X		
KOP-32 Fire Island Lighthouse-Upper Deck <sup>1, 2</sup>	X			X			X		
KOP-33 Fire Island Lighthouse-Base	X			X			X		
KOP-35 Navesink Twin Lights Lighthouse <sup>1, 2</sup>	X			X			X		
KOP-36 Asbury Park Hall-Balcony <sup>1, 2</sup>	X			X			X		
KOP-37 Point O' Woods <sup>2</sup>	X			X			X		
KOP-38 Robert Moses Field 5	X			X			X		
KOP-39 Empire State Building Observation Deck <sup>1, 2</sup>	X			X			X		
KOP-40 Robert Moses Field-Nighttime <sup>2</sup>	X			X			X		
KOP-A Representative Recreational Fishing, Pleasure, and Tour Boat Area	X			X			X		
KOP-B Representative Commercial and Cruise Ship Shipping Lanes	X			X			X		

<sup>1</sup> Elevated viewpoint

<sup>2</sup> Simulation

### H.3.2.2 Magnitude

The measure of magnitude of visual impacts is similar to that used for SLIA and is based on the size or scale of change, the geographic extent of its effects, and its duration and reversibility. Large-scale changes that introduce new, non-characteristic, discordant, or intrusive elements are more important than small changes or changes involving similar features already present within the view.

Size and scale of change and geographic extent is measured by a project's distances, horizontal FOVs, noticeable features based on their heights and EC, and visual contrasts. The analysis considers the

introduction of WTGs and OSSs to an open ocean baseline. The scale, size, contrast, and prominence of change focuses on the:

- Arrangement of WTGs and OSSs in the view.
- Horizontal and vertical FOV scale of the wind turbine array, based on WTG and OSS size and number.
- Position of the array in the open ocean.
- Position of the array in the view.
- Wind turbine array's distance from the viewer.

Geographic extent is a measure of visibility, character-changing effects, scale, prominence, and visual contrasts reduce steadily with distance from the observation point and increase with elevated observer positions in comparison with the wind turbine array. Distance and observer elevation considerations are informed by the visual simulations (BOEM's NY Bight website: <https://www.boem.gov/renewable-energy/state-activities/new-york-bight>), EC calculations, horizontal FOV, and vertical FOV in undeveloped open ocean. The wind turbine array and nearest WTGs would be:

- Unavoidably dominant features in the boat and ship ocean view between 0 and 5 miles (0 and 8.0 kilometers) distance.
- Strongly pervasive features in the onshore to offshore view between 5 and 16 miles (8 and 25.75 kilometers) distance.
- Clearly visible features in the onshore to offshore view between 16 and 20 miles (25.75 and 45.1 kilometers) distance.
- Low on the horizon, but persistent features in the onshore to offshore view between 20 and 36.1 miles (45.1 and 58.1 kilometers) distance.
- Intermittently noticed features in the onshore to offshore view between 36.1 and 47.4 miles (58.1 and 76.3 kilometers) distance.
- Below the horizon beyond 47.4 miles (76.3 kilometers) distance.

Like duration and reversibility in the SLIA, this is a measure of the length of time over which the impact is likely to occur and the degree to which the pre-project conditions can be restored after decommissioning. Duration is recorded on an ordinal scale of short term (less than 5 years), long term (5–30 years), or considered permanent (more than 30 years). Reversibility is recorded on a scale of nonreversible, partially reversible, or fully reversible. In the assessment of impact level, duration and reversibility are considered together and recorded on a scale of good, fair, and poor, with good combining short duration with full reversibility, and poor combining permanent with nonreversible. A



combination matrix can be found in Argonne 2024. Impact levels are recorded in the visual summary tables found in Section H.3.2.3.

Construction and installation involving moving and stationary visual feature contrasts to forms, lines, colors, and textures, scale, and prominence in formerly open seascape may have more effect on viewers than operational and decommissioning impacts, where the viewing context is existing WTGs and OSSs. Construction impacts would be temporary and include:

- Daytime and nighttime movement of installation vessels, cranes, and other equipment visible in the seascape in and around the lease area.
- Dawn, dusk, and nighttime construction and installation lighting on WTGs and OSSs.
- Beach, other sensitive land-based, and boat and cruise ship views of WTGs and OSSs under construction and installation.

Foreground influence assessments, involving the presence of intervening or framing elements and their influence on effects of project characteristics, are based on each KOP’s locale photography and visual simulations and summarized in Table H-34.

**Table H-34. Foreground view framing and intervening elements between the KOPs and the lease areas**

Foreground Element(s) Influence <sup>1</sup>	Offshore Key Observation Points
Open Ocean <b>Negligible Influence</b>	KOP-A Recreational Fishing, Pleasure, and Tour Boat Area KOP-B Commercial and Cruise Ship Shipping Lanes
Beach and Ocean <b>Minor Influence</b>	KOP-28 Jones Beach State Park KOP-31 Westhampton Beach KOP-36 Asbury Convention Hall Balcony KOP-11 US Life Saving Station #14 KOP-12 Seaside Beach Park KOP-17 Asbury Park Beach KOP-37 Point O’ Woods
Dunes, Beach, and Ocean <b>Minor Influence</b>	KOP-3 Stafford Hall Boardwalk KOP-4 Stafford Hall Beach Entrance KOP-10 Barnegat Lighthouse KOP-18 Allenhurst KOP-30 Shinnecock Inlet KOP-14 Bayhead KOP-15 Point Pleasant KOP-16 Ocean Grove
Structures, Dunes, and Beach <b>Moderate Influence</b>	KOP-8A Beach Haven (daytime) KOP-8B Beach Haven (night) KOP-6 Atlantic City Boardwalk – Ocean Casino KOP-7 Ocean Casino – Top KOP-9 Barnegat Jetty KOP-27 Magnolia Beach KOP-33 Fire Island Lighthouse – Base

Foreground Element(s) Influence <sup>1</sup>	Offshore Key Observation Points
	KOP-38 Robert Moses Field 5 KOP-40 Robert Moses Field – Nighttime
Bay, Vegetation, Roadway, and Structures <b>Minor Influence</b>	KOP-32 Fire Island Lighthouse – Top
Landscape Structures, Vegetation, and Topography <b>Minor to Moderate Influence</b>	KOP-13 Mantoloking KOP-35 Navesink Twin Lights – Top
Bay, Landscape Structures, and Topography <b>Dominant/Major Influence</b>	KOP-29 Rudolph Oyster House (Long Island Maritime Museum)
Bay, Structures, and Roadways <b>Dominant/Major Influence</b>	KOP-39 Empire State Building
Vegetation, Roadway, and Topography <b>Dominant/Major Influence</b>	KOP-19 Navesink Twin Lights
Structures, Landscape Structures, Vegetation, and Topography <b>Minor to Moderate Influence</b>	KOP-26 Fort Tilden/Jacob Riis (night)
Structures, Dunes, Beach Structures, and Ocean <b>Dominant/Major Influence</b>	KOP-2 Lucy the Margate Elephant KOP-5 Jim Whelan KOP-35 Navesink Twin Lights Lighthouse – Top

<sup>1</sup> Based on conditions portrayed by representative photography contained in Argonne (2024). Nearby view receptor locations may vary from screened to open views of the lease area.

Visual contrast determinations on viewer experience are based on visual simulations for 17 representative KOPs (Argonne 2024). Potential viewpoints’ evaluations range from faint to dominant. Visual contrast determinations involve comparisons of characteristics of the KOPs before and after implementation of the NY Bight projects. The range of potential contrasts includes strong, moderate, weak, and none. The strongest daytime contrasts would result from tranquil and flat seas combined with sunlit WTG towers, nacelles, flickering rotors, and the yellow tower 50-foot (15.2-meter) base color against a dark background sky and an undifferentiated foreground. The weakest daytime contrasts would result from turbulent seas combined with overcast daylight conditions on WTG towers, nacelles, and rotors against an overcast background sky and a foreground modulated by varied landscape elements. The strongest nighttime contrasts would result from dark skies (absent moonlight) combined with aviation lights, lighting on the OSS, mid-tower lights, and project lighting reflections on low clouds and active (non-reflective) surf, and the dark-sky light dome. The weakest nighttime contrasts would result from moonlit, cloudless skies; tranquil (reflective) seas; and aircraft detection lighting system (ADLS) activation (Sub-alternative C1 [Preferred Alternative]).

There would be daily variation in WTG color contrast as sun angles change from backlit to front-lit (sunrise to sunset), and the backdrop would vary under different lighting and atmospheric conditions. Two sets of photo simulations were produced for selected KOPs. One set approximates the predictable visibility based on the atmospheric visual clarity at the time the photograph was taken. The other set approximates the maximum visibility potential with no visual interference from atmospheric conditions.

Table H-35 identifies which KOPs are simulated and additional KOPs that use this simulation as a reference.

Visual contrast, scale of change, and prominence determinations for KOPs with simulations are listed in Table H-36 through Table H-41 for each lease area and the 1,312-foot (400-meter) and 853-foot (260-meter) WTGs, followed by Table H-42 and Table H-43 for the six projects and 1,312-foot (400-meter) and 853-foot (260-meter) WTGs, respectively.

Photo-simulations are instrumental when assessing visual impacts from KOPs. Table H-35 lists the KOPs with photo-simulations, as well as the KOPs without simulations that are similar in distance to the lease area WTGs as the KOPs with simulations and would represent similar level of visual impact. This table also lists KOPs initially identified for impact evaluation, but were found to be outside of the view of WTGs within any of the six NY Bight lease areas.

**Table H-35. KOPs with simulations, KOPs represented by KOPs with simulations, and KOPs outside of view of the lease areas**

KOPs with Simulations		KOPs Represented by the KOPs with Simulations	
KOP # <sup>1</sup>	KOP Name	KOP #	KOP Name
KOP-02	Lucy the Margate Elephant	n/a	n/a
KOP-04	John Stafford Beach Entrance	KOP-03	John Stafford Hall – Boardwalk
		KOP-06	Atlantic City Boardwalk Ocean Casino Boardwalk View
KOP-05	Jim Whelan Hall – Balcony	KOP-07	Atlantic City Boardwalk Top of Ocean Casino
KOP-08	Beach Haven (Day)	n/a	n/a
KOP-08	Beach Haven (Night)	n/a	n/a
KOP-10	Barnegat Lighthouse	n/a	n/a
KOP-13	Mantoloking	KOP-14	Bayhead
		KOP-15	Point Pleasant
KOP-18	Allenhurst Residential Historic District	KOP 16	Ocean Grove
		KOP 17	Asbury Park Beach
		KOP 19	Navesink Twin Lights (ground level)
KOP-26	Fort Tilden (Night)	n/a	n/a
KOP-28	Jones Beach	n/a	n/a
KOP-30	Shinnecock Inlet	n/a	n/a
KOP-31	Westhampton Beach	KOP-27	Magnolia Beach
KOP-32	Fire Island Lighthouse Upper Deck	n/a	n/a
KOP-35	Twin Lights Lighthouse	n/a	n/a
KOP-36	Asbury Park Hall – Top	n/a	n/a
KOP-37	Point O’ Woods	KOP- 33	Fire Island Lighthouse (Base)
		KOP-38	Robert Moses Field #5 (Day)
KOP-39	Empire State Building	n/a	n/a
KOP-40	Robert Moses Field 5 (Night)	KOP-33	Fire Island Lighthouse (Base) <sup>2</sup>
		KOP-37	Point O’Woods <sup>2</sup>

KOPs with Simulations		KOPs Represented by the KOPs with Simulations	
KOP # <sup>1</sup>	KOP Name	KOP #	KOP Name
<b>KOPs without Simulation Representation</b> (analysis based solely on GIS)			
KOP-09	Barnegat Jetty		
KOP-11	US Life Saving Station #14		
KOP-12	Seaside Park Beach		

<sup>1</sup> Eight KOPs were identified but following the analysis appeared outside of the affected viewshed and have been removed from the impact analysis. These are: KOP-01 Ocean City Music Hall, KOP-20 Sandy Hook Beach, KOP-21 Great Kills, KOP-22 Roosevelt Pier, KOP-23 Statue of Liberty – Upper Deck, KOP-24 Statue of Liberty – Base, KOP-25 Coney Island Boardwalk, and KOP-34 Sandy Hook Observatory.

<sup>2</sup> KOP 40 provides a representative example of nighttime effects for KOP-33 and KOP-37.

The following tables list the analytical results for the two different sets of simulations when the results are different at the respective KOPs. KOPs noted with results based on maximum visibility conditions are labeled with **MAXIMUM VISIBILITY** in the tables, and results on the predicted visibility based on the visual clarity at the time of the photo are labeled with **PREDICTED VISIBILITY**.

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**Table H-36. 1,312-foot and 853-foot WTG NY Bight projects magnitude and impacts for OSC-A 0537**

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	New York Bight Visible FOV Degrees (% of 124°)	OCS-A 0537 Contrast, Scale of Change, and Prominence						OSC-A 0537 Impact Level			
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2	
KOP-02 Lucy the Elephant	97.4 (156.8) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-04 John Stafford Hall-Beach Entrance	94.6 (152.3) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall-Balcony	92.9 (149.8) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Day	77.1 (124.1) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Night	77.1 (124.1) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-10 Barnegat Lighthouse (Elevated 170 feet)	66.4 (106.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-13 Mantoloking	61.5 (99.5) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-18 Allenhurst Historic District	61.4 (98.8) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-26 Fort Tilden (Night)	66.6 (107.2) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-28 Jones Beach	54.4 (87.5) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-30 Shinnecock Inlet	55.2 (88.8) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-31-Daytime Westhampton Beach	49.4 (29.4) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-32 Fire Island Lighthouse-Upper Deck (Elevated 167 feet)	45.7 (73.5) R, AL, N R	16.5° (13%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	1 0	Minor -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-32 Fire Island Lighthouse-Upper Deck (Elevated 167 feet)	45.7 (73.5) R, AL, N R	16.5° (13%)	None	None	None	None	None	0	0	Negligible	Negligible	Same as Alternative B
KOP-35 Navesink Twin Lights Lighthouse (Elevated 255 feet)	65.0 (104.6) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-36 Asbury Park Hall-Balcony (Elevated 46.14 feet)	61.3 (98.7) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-37 Point O' Woods	44.8 (72.1) R	17° (14%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	1 0	Minor -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-37 Point O' Woods	44.8 (72.1) R	17° (14%)	Weak	Weak	Weak	Weak	Small	0	0	Negligible	Negligible	Same as Alternative B
KOP-39 Empire State Building Observation Deck (Elevated 1,263.1 feet)	78.2 (125.8) R	9.1° (7%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-40 Robert Moses Field-Nighttime	45.9 (73.9) R	16.4° (13%)	Weak	Weak	Negligible	Negligible	Small	0	0	Negligible	Negligible	Negligible (ADLS)
KOP-A	20–47.4 (0–76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	6	Major	Major	Same as Alternative B
KOP-B	20–47.4 (0–76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	6	Major	Major	Same as Alternative B

<sup>1</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>2</sup> WTGs and OSS visibility: 0-Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise, likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers’ attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).



**Table H-37. 1,312-foot and 853-foot WTG NY Bight projects magnitude and impacts for OSC-A 0538**

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS-A 0538 Contrast, Scale of Change, and Prominence						OCS-A 0538 Impact Level			
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2	
KOP-02 Lucy the Margate Elephant	69.5 (111.8) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-04 John Stafford Beach Entrance	66.7 (107.3) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall – Balcony	65.0 (104.6) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Day	50.5 (81.2) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Night	50.5 (81.2) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	42.7 (68.7) R, AL, N, H R	15.4° (12%)	Moderate Minor	Minor Minor	Moderate Minor	Minor Minor	Small Small	2 1	Minor -----	----- Minor	----- Minor	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	42.7 (68.7) R, AL, N, H R	15.4° (12%)	Minor None	Minor None	Minor None	Minor None	Small Small	1 0	Negligible -----	----- Negligible	----- Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-13 Mantoloking	44.1 (70.9) R	11.2° (9%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Minor -----	----- Negligible	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-13 Mantoloking	44.1 (70.9) R	11.2° (9%)	None	None	None	None	None	0	Negligible	Negligible	Negligible	Same as Alternative B
KOP-18 Allenhurst Historic District	48.1 (77.5) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-26 Fort Tilden (Night)	60.6 (97.5) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-28 Jones Beach	55.0 (87.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-30 Shinnecock Inlet	79.9 (128.5) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-31 Westhampton Beach	69.8 (112.3) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-32 Fire Island Lighthouse Deck (Elevated 167 feet)	55.6 (89.5) R	13.5° (11%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Minor -----	----- Negligible	----- Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-35 Twin Lights Lighthouse (Elevated 255 feet)	55.0 (88.6) R	9° (7%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Negligible -----	----- Negligible	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-35 Twin Lights Lighthouse (Elevated 255 feet)	55.0 (88.6) R	9° (7%)	None	None	None	None	None	0 0	Negligible	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-36 Asbury Park Hall (Elevated 46.14 feet)	47.5 (76.50) R	10.2° (8%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Negligible -----	----- Negligible	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-36 Asbury Park Hall (Elevated 46.14 feet)	47.5 (76.50) R	10.2° (8%)	None	None	None	None	None	0	Negligible	Negligible	Negligible	Same as Alternative B
KOP-37 Point O' Woods	57.1 (91.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	73.8 (118.9) R, AL, N, H R	7.8° (6%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-40 Robert Moses Field 5 – Night	55.5 (89.2) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Negligible (ADLS)
KOP-A	11–47.4 (0–76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Major	Major	Same as Alternative B

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS-A 0538 Contrast, Scale of Change, and Prominence						OCS-A 0538 Impact Level		
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
KOP-B	11-47.4 (0-76.3) R, AL, N, H, M, O, Y	0-360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Major	Same as Alternative B

<sup>1</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>2</sup> WTGs and OSS visibility: 0 – Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise, likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers’ attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

**Table H-38. 1,312-foot and 853-foot WTG NY Bight projects magnitude and impacts for OSC-A 0539**

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS -A 0539 Contrast, Scale of Change, and Prominence						Impact Level			
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2	
KOP-02 Lucy the Margate Elephant	59.4 (95.6) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-04 John Stafford Beach Entrance	53.2 (85.7) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall – Balcony	51.6 (83.1) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Day	40.4 (64.9) R	18.1° (17%)	Weak	Weak	Weak	Weak	Small	1	1	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Night	40.4 (64.9) R	18.1° (17%)	None	None	None	None	None	None	2	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	37.7 (60.7) R, AL, N, H, M R, AL, N, H	20.6° (17%)	Moderate Weak	Moderate Weak	Strong Moderate	Moderate Weak	Medium Small	4 2	4 2	Moderate -----	----- Minor	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	37.7 (60.7) R, AL, N, H, M	20.6° (17%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-13 Mantoloking	41.7 (72.4) R	19.7° (16%)	Weak None	Weak None	Weak None	Weak None	Small None	1	1	Minor -----	----- Negligible	Same as Alternative B
KOP-18 Allenhurst Historic District	53.2 (85.6) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-26 Fort Tilden (Night)	69.1 (111.2) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-28 Jones Beach	64.7 (104.1) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-30 Shinnecock Inlet	91.7 (147.5) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-31 Westhampton Beach	82.0 (131.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-32 Fire Island Lighthouse Deck (Elevated 167 feet)	67.0 (107.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-35 Twin Lights Lighthouse (Elevated 255 feet)	62.2 (100.1) R	16.8° (14%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-36 Asbury Park Hall (Elevated 46.14 feet)	52.1 (83.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-37 Point O' Woods	68.7 (110.6) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	82.9 (133.4) R	13.2° (11%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS -A 0539 Contrast, Scale of Change, and Prominence						Impact Level			
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2	
KOP-40 Robert Moses Field 5 – Night	66.7 (107.3) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Negligible (ADLS)
KOP-A	14–47.4 (0–76.3) R, AL, N, H, M, O, Y R, AL, N, H, M, O, Y	0–360° (300%)	Strong Strong	Strong Strong	Strong Strong	Strong Strong	Strong Strong	Large Large	6 6	Major -----	----- Major	Same as Alternative B
KOP-B	14–47.4 (0–76.3) R, AL, N, H, M, O, Y R, AL, N, H, M, O, Y	0–360° (300%)	Strong Strong	Strong Strong	Strong Strong	Strong Strong	Strong Strong	Large Large	6 6	Major -----	----- Major	Same as Alternative B

<sup>1</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>2</sup> WTGs and OSS visibility: 0 – Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise, likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers’ attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

**Table H-39. 1,312-foot and 853-foot WTG NY Bight projects magnitude and impacts for OSC-A 0541**

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS -A 0541 Contrast, Scale of Change, and Prominence						OCS -A 0541 Impact Level		
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
<b>MAXIMUM VISIBILITY</b> KOP-02 Lucy the Margate Elephant	46.4 (74.7) R	23.1° (19%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Negligible -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-02 Lucy the Margate Elephant	46.4 (74.7) R	23.1° (19%)	None	None	None	None	None	0	Negligible -	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-04 John Stafford Beach Entrance	43.7 (70.5) R	24.4° (20%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Negligible -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-04 John Stafford Beach Entrance	43.7 (70.5) R	24.4° (20%)	None	None	None	None	None	0	Negligible -	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall – Balcony	42.3 (68.0) R	25.2° (20%)	None	None	None	None	None	0 0	Negligible -----	----- Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-08 Beach Haven – Day	32.9 (53.0) R, AL, N, H	28.1° (23%)	Moderate Weak	Moderate Weak	Moderate Weak	Moderate Weak	Small Small	3 1	Minor -----	----- Minor	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-08 Beach Haven – Day	32.9 (53.0) R, AL, N, H	28.1° (23%)	None	None	None	None	None	0	Negligible -	Negligible	Same as Alternative B
KOP-08 Beach Haven – Night	32.9 (53.0) R, AL, N, H	28.1° (23%)	Minor None	Moderate None	Moderate None	Weak None	Small None	3 0	Minor -----	----- Negligible	Negligible (ADLS)
<b>MAXIMUM VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	32.2 (52.0) R, AL, N, H, M, O R, AL, N, H, M, O	23.8° (19%)	Moderate Weak	Moderate Weak	Moderate Moderate	Moderate Moderate	Small Small	3 2	Minor -----	----- Minor	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	32.2 (52.0) R, AL, N, H, M, O R, AL, N, H, M, O	23.8° (19%)	Weak None	Weak None	Weak None	Weak None	Small None	3 0	Minor -----	----- Negligible	Same as Alternative B
KOP-13 Mantoloking	44.6 (71.7) R	16.4° (13%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Negligible -----	----- Negligible	Same as Alternative B
KOP-18 Allenhurst Historic District	55.7 (89.7) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-26 Fort Tilden (Night)	76.0 (122.2) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-28 Jones Beach	75.5 (121.9) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-30 Shinnecock Inlet	110.3 (177.4) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS -A 0541 Contrast, Scale of Change, and Prominence						OCS-A 0541 Impact Level			
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2	
KOP-31 Westhampton Beach	99.6 (160.3) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-32 Fire Island Lighthouse Deck (Elevated 167 feet)	81.9 (131.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-35 Twin Lights Lighthouse (Elevated 255 feet)	66.0 (106.2) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-36 Asbury Park Hall (Elevated 46.14 feet)	54.4 (87.5) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-37 Point O' Woods	84.4 (135.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	89.0 (143.2) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-40 Robert Moses Field 5 – Night	81.5 (131.1) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-A	5–47.4 (0–76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Strong	Large	6	Major	Major	Same as Alternative B
KOP-B	5–47.4 (0–76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Strong	Large	6	Major	Major	Same as Alternative B

<sup>1</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>2</sup> WTGs and OSS visibility: 0 – Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise, likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

**Table H-40. 1,312-foot and 853-foot WTG NY Bight projects magnitude and impacts for OSC-A 0542**

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>		OCS -A 0542 Contrast, Scale of Change, and Prominence						Impact Level			
	OCS-A 0542	Visible FOV Degrees (% of 124°)	Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2	
KOP-02 Lucy the Margate Elephant	48.9 (78.7) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-04 John Stafford Beach Entrance	46.8 (75.4) R	18.2° (15%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall - Balcony	45.5 (73.3) R	18.9° (15%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-08 Beach Haven – Day	42.3 (68.2) R	24.3° (20%)	Moderate Weak	Moderate Weak	Weak Weak	Weak Weak	Small Small	3 1	Minor -----	----- Minor	Same as Alternative B	
<b>PREDICTED VISIBILITY</b> KOP-08 Beach Haven – Day	42.3 (68.2) R	24.3° (20%)	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-08 Beach Haven – Night	42.3 (68.2) R	24.3° (20%)	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
<b>MAXIMUM VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	42.5 (68.4) R, AL, N, H R, AL, N, H	18.2° (15%)	Moderate Weak	Moderate Weak	Moderate Moderate	Moderate Moderate	Small Small	3 2	Minor -----	----- Minor	Same as Alternative B	
<b>PREDICTED VISIBILITY</b> KOP-10 Barnegat Lighthouse (Elevated 170 feet)	42.5 (68.4) R, AL, N, H R, AL, N, H	18.2° (15%)	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-13 Mantoloking	53.2 (85.7) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-18 Allenhurst Historic District	63.3 (101.8) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-26 Fort Tilden (Night)	82.0 (131.9) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-28 Jones Beach	80.9 (130.1) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-30 Shinnecock Inlet	109.7 (176.6) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-31 Westhampton Beach	99.6 (160.3) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-32 Fire Island Lighthouse Deck (Elevated 167 feet)	83.9 (135.0) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-35 Twin Lights Lighthouse (Elevated 255 feet)	73.2 (117.8) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-36 Asbury Park Hall (Elevated 46.14 feet)	62.0 (99.8) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-37 Point O' Woods	85.8 (138.1) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-39 Empire State Building (Elevated 1,263.1 feet)	95.3 (153.4) None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B	
KOP-40 Robert Moses Field 5 – Night	83.5 (134.3) None	None	None	None	None	None	None	0	Negligible	Negligible	Negligible (ADLS)	
KOP-A	14–47.4 (0 – 76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Major	Same as Alternative B	

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS -A 0542 Contrast, Scale of Change, and Prominence						Impact Level		
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
KOP-B	14–47.4 (0 – 76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Major	Same as Alternative B

<sup>1</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>2</sup> WTGs and OSS visibility: 0 – Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise, likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers’ attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).



**Table H-41. 1,312-foot and 853-foot WTG NY Bight projects magnitude and impacts for OSC-A 0544**

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>	Visible FOV Degrees (% of 124°)	OCS -A 0544 Contrast, Scale of Change, and Prominence						OCS-A 0544 Impact Level			
			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2	
KOP-02 Lucy the Margate Elephant	92.7 (149.1) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-04 John Stafford Beach Entrance	89.7 (144.6) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall – Balcony	88.2 (141.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Day	70.8 (113.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-08 Beach Haven – Night	70.8 (113.9) None	None	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-10 Barnegat Lighthouse (Elevated 170 feet)	57.0 (91.8) R	5.8° (5%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-13 Mantoloking	47.3 (61.4) R	8.9° (7%)	None None	None None	Weak None	None None	None None	Small None	1 0	Negligible -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-13 Mantoloking	47.3 (61.4) R	8.9° (7%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-18	42.5 (68.4) R	12.2° (10%)	Weak None	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Minor -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-18 Allenhurst Historic District	42.5 (68.4) R	12.2° (10%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-26 Fort Tilden (Night)	43.9 (70.6) R	16.1° (13%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-28	31.9 (51.4) R, AL, N, H	23.1° (19%)	Weak Weak	Weak Weak	Medium Weak	Weak Weak	Weak Weak	Small Small	3 1	Minor -----	----- Minor	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-28	31.9 (51.4) R, AL, N, H	23.1° (19%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-30 Shinnecock Inlet	44.5 (71.9) R	7.4° (6%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-30 Shinnecock Inlet	44.5 (71.9) R	7.4° (6%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-31	33.9 (54.5) R, AL, N, H	11.5° (9%)	Weak Weak	Weak Weak	Weak Weak	Weak Weak	Weak Weak	Small Small	2 1	Minor -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-31	33.9 (54.5) R, AL, N, H	11.5° (9%)	None	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-32	24.2 (38.9) R, AL, N, H, M, Y	27.9° (22%)	Moderate Moderate	Moderate Moderate	Strong Strong	Moderate Moderate	Moderate Moderate	Medium Medium	4 4	Moderate -----	----- Moderate	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-32	24.2 (38.9) R, AL, N, H, M, Y	27.9° (22%)	Weak Weak	Weak Weak	Weak Weak	Moderate Weak	Moderate Weak	Medium Small	3 2	Minor -----	----- Minor	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-35	44.0 (70.9) R, AL, N, H, M	13.9° (11%)	Weak Weak	Weak Weak	Weak Weak	Weak Weak	Weak Weak	Small Small	1 1	Minor -----	----- Minor	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-35	44.0 (70.9) R, AL, N, H, M	13.9° (11%)	None None	None None	None None	None None	None None	None None	0 0	Negligible -----	----- Negligible	Same as Alternative B

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>		Visible FOV Degrees (% of 124°)	OCS -A 0544 Contrast, Scale of Change, and Prominence						OCS-A 0544 Impact Level		
	OCS-A 0544			Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
<b>MAXIMUM VISIBILITY</b> KOP-36 Asbury Park Hall (Elevated 46.14 feet)	42.9 (69.0)	R	12.0° (10%)	Weak None	Weak None	Weak None	Weak None	Small None	1 0	Negligible -----	----- Negligible	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-36 Asbury Park Hall (Elevated 46.14 feet)	42.9 (69.0)	R	12.0° (10%)	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-37 Point O' Woods (Alternative B Impact Level based on KOP-40 nighttime impact)	24.1 (38.7)	R, AL, N, H, M, O R, AL, N, H, M, O	25.7° (21%)	Moderate Weak	Strong Moderate	Strong Moderate	Moderate Weak	Medium Medium	4 3	Moderate -----	----- Minor	Negligible with ADLS
<b>PREDICTED VISIBILITY</b> KOP-37 Point O' Woods	24.1 (38.7)	R, AL, N, H, M, O R, AL, N, H, M, O	25.7° (21%)	Moderate Weak	Moderate Weak	Moderate Weak	Moderate Weak	Medium Small	3 2	Moderate -----	----- Minor	Same as Alternative B
<b>MAXIMUM VISIBILITY</b> KOP-39 Empire State Building (Elevated 1,263.1 feet)	55.35 (89.0)	R, AL, N, H, M, O, Y R, AL, N, H, M, O	13.4° (11%)	Weak Weak	Weak Weak	Moderate Weak	Moderate Weak	Small Small	2 1	Minor -----	----- Minor	Same as Alternative B
<b>PREDICTED VISIBILITY</b> KOP-39 Empire State Building (Elevated 1,263.1 feet)	55.35 (89.0)	R, AL, N, H, M, O, Y R, AL, N, H, M, O	13.4° (11%)	None	None	None	None	None	0	Negligible	Negligible	Same as Alternative B
KOP-40 Robert Moses Field 5 – Night	24.2 (38.9)	R, AL, N, H, M, O	28.3° (23%)	Weak Weak	Moderate Moderate	Moderate Moderate	Weak Weak	Medium Medium	4 4	Moderate -----	----- Moderate	Negligible with ADLS
KOP-A	0–47.4 (0–76.3)	R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Major	Same as Alternative B
KOP-B	0–47.4 (0–76.3)	R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Major	Same as Alternative B

<sup>1</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>2</sup> WTGs and OSS visibility: 0 – Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise, likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

**Table H-42. 1,312-foot NY Bight projects magnitude and impacts (six projects)**

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>						New York Bight Visible FOV Degrees (% of 124°)	New York Bight Contrast, Scale of Change, and Prominence							
	OCS-A 0537	OCS-A 0538	OCS-A 0539	OCS-A 0541	OCS-A 0542	OCS-A 0544		Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	Impact Level	Sub-alternatives C1 and C2
KOP-02 Lucy the Elephant	97.4 (156.8) None	69.5 (111.8) None	59.4 (95.6) None	46.4 (74.7) R	48.9 (78.7) None	92.7 (149.1) None	24° (19%)	Weak	Weak	Weak	Weak	Small	1	Negligible	Same as Alternative B
KOP-04 John Stafford Hall Beach Entrance	94.6 (152.3) None	66.7 (107.3) None	53.2 (85.7) None	43.7 (70.5) R	46.8 (75.4) R	89.7 (144.6) None	24.4° (20%)	Weak	Weak	Weak	Weak	Small	1	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall Balcony	92.9 (149.8) None	65.0 (104.6) None	51.6 (83.1) None	42.3 (68.0) R	45.5 (73.3) R	88.2 (141.9) None	25.2° (20%)	Weak	Weak	Weak	Weak	Small	1	Negligible	Same as Alternative B
KOP-08A Beach Haven – Daytime	77.1 (124.1) None	50.5 (81.2) None	40.4 (64.9) R	32.9 (53.0) R, AL, N, H	42.3 (68.2) R	70.8 (113.9) None	42.7° (34%)	Moderate	Moderate	Moderate	Weak	Small	3	Minor	Same as Alternative B
KOP-08B Beach Haven – Nighttime	77.1 (124.1) None	50.5 (81.2) None	40.4 (64.9) R	32.9 (53.0) R, AL, N, H	42.3 (68.2) R	70.8 (113.9) None	42.7° (34%)	Moderate	Moderate	Moderate	Moderate	Small	3	Minor	Negligible with ADLS
KOP-10 Barnegat Lighthouse (Elevated 170 feet)	66.4 (106.9) None	42.7 (68.7) R, AL, N, H,	37.7 (60.7) R, AL, N, H, M,	32.2 (52.0) R, AL, N, H, M, O	42.5 (68.4) R, AL, N, H,	57.0 (91.8) R	91° (73%)	Moderate	Moderate	Strong	Moderate	Medium	4	Moderate	Same as Alternative B

KOP	Distance in Miles (Kilometers) and Noticeable Elements <sup>1</sup>						New York Bight Visible FOV Degrees (% of 124°)	New York Bight Contrast, Scale of Change, and Prominence							
	OCS-A 0537	OCS-A 0538	OCS-A 0539	OCS-A 0541	OCS-A 0542	OCS-A 0544		Form	Line	Color	Texture	Scale	Prominence <sup>2</sup>	Impact Level	Sub-alternatives C1 and C2
KOP-13 Mantoloking	61.5 (99.5) None	44.1 (70.9) R	41.7 (72.4) R	44.6 (71.7) R	53.2 (85.7) None	47.3 (61.4) R	80.5° (65%)	Weak	Weak	Weak	Weak	Small	2	Minor	Same as Alternative B
KOP-18 Allenhurst Residential HD	61.4 (98.8) None	48.1 (77.5) None	53.2 (85.6) None	55.7 (89.7) None	63.3 (101.8) None	42.5 (68.4) R	48.4° (39%)	Weak	Weak	Weak	Weak	Small	2	Minor	Same as Alternative B
KOP-26 Fort Tilden - nighttime	66.6 (107.2) None	60.6 (97.5) None	69.1 (111.2) None	76.0 (122.2) None	82.0 (131.9) None	43.9 (70.6) R	15° (12%)	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-28 Jones Beach	54.4 (87.5) None	55.0 (87.9) None	64.7 (104.1) None	75.5 (121.9) None	80.9 (130.1) None	31.9 (51.4) R, AL, N, H	23.1° (19%)	Weak	Weak	Moderate	Moderate	Small	3	Minor	Same as Alternative B
KOP-30 Shinnecock Inlet	55.2 (88.8) None	79.9 (128.5) None	91.7 (147.5) None	110.3 (177.4) None	109.7 (176.6) None	44.5 (71.9) R	5.7° (5%)	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-31 Westhampton Beach – Daytime	49.4 (29.4) None	69.8 (112.3) None	82.0 (131.9) None	99.6 (160.3) None	99.6 (160.3) None	33.9 (54.5) R, AL, N, H	11.5° (9%)	Weak	Weak	Weak	Weak	Small	2	Minor	Same as Alternative B
KOP-32 Fire Island LH Upper Deck (Elevated 167 feet)	45.7 (73.5) R, AL, N	55.6 (89.5) R	67.0 (107.9) None	81.9 (131.9) None	83.9 (135.0) None	24.2 (38.9) R, AL, N, H, M, Y	41.1° (33%)	Moderate	Moderate	Strong	Moderate	Medium	4	Moderate	Same as Alternative B
KOP-35 Twin Lights LH (Elevated 255 feet)	65.0 (104.6) None	55.0 (88.6) R	62.2 (100.1) None	66.0 (106.2) None	73.2 (117.8) None	44.0 (70.9) R, AL, N, H, M	57.8° (47%)	Weak	Weak	Weak	Weak	Small	1	Minor	Same as Alternative B
KOP-36 Ashbury Park Hall – Top (Elevated 46.14 feet)	61.3 (98.7) None	47.5 (76.50) R	52.1 (83.9) R	54.4 (87.5) None	62.0 (99.8) None	42.9 (69.0) R	61.9° (50%)	Weak	Weak	Weak	Weak	Small	1	Negligible	Same as Alternative B
KOP-37 Point O' Woods (Alternative B Impact Level based on KOP-40 nighttime impact)	44.8 (72.1) R	57.1 (91.9) None	68.7 (110.6) None	84.4 (135.9) None	85.8 (138.1) None	24.1 (38.7) R, AL, N, H, M, O	38.2° (31%)	Moderate	Strong	Strong	Moderate	Medium	4	Moderate (Moderate Nighttime)	Negligible with ADLS
KOP-39 Empire State Building (Elevated 1,263.1 feet)	78.2 (125.8) R	73.8 (118.9) R, AL, N, H	82.9 (133.4) R	89.0 (143.2) None	95.3 (153.4) None	55.35 (89.0) R, AL, N, H, M, O, Y	42.4° (34%)	Weak	Weak	Weak	Weak	Small	2	Minor	Same as Alternative B
KOP-40 Robert Moses Field – Nighttime	45.9 (73.9) R	55.5 (89.2) None	66.7 (107.3) None	81.5 (131.1) None	83.5 (134.3) None	24.2 (38.9) R, AL, N, H, M, O	31.5° (25%)	Weak	Strong	Strong	Weak	Medium	4	Moderate	Negligible with ADLS
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–47.4 (76.3) (68.4) R, AL, N, H, M, O, Y	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–47.4 (76.3) (68.4) R, AL, N, H, M, O, Y	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Same as Alternative B
KOP-B Commercial and Cruise Ship Shipping Lanes	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–47.4 (76.3) (68.4) R, AL, N, H, M, O, Y	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–47.4 (76.3) (68.4) R, AL, N, H, M, O, Y	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–47.4 (76.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Same as Alternative B

<sup>1</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>2</sup> WTGs and OSS visibility: 0 – Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise, likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

LH = Lighthouse; HD = Historic District

**Table H-43. 853-foot NY Bight projects magnitude and impacts (six projects)**

KOP <sup>1</sup>	Distance in Miles (Kilometers) and Noticeable Elements <sup>2</sup>						New York Bight Visible FOV Degrees (% of 124°)	New York Bight Contrast, Scale of Change, and Prominence							
	OCS-A 0537	OCS-A 0538	OCS-A 0539	OCS-A 0541	OCS-A 0542	OCS-A 0544		Form	Line	Color	Texture	Scale	Prominence <sup>3</sup>	Impact Level	Sub-alternatives C1 and C2
KOP-02 Lucy the Elephant	97.4 (156.8) None	69.5 (111.8) None	59.4 (95.6) None	46.4 (74.7) None	48.9 (78.7) None	92.7 (149.1) None	None	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-04 John Stafford Hall-Beach Entrance	94.6 (152.3) None	66.7 (107.3) None	53.2 (85.7) None	43.7 (70.5) None	46.8 (75.4) None	89.7 (144.6) None	None	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall-Balcony	92.9 (149.8) None	65.0 (104.6) None	51.6 (83.1) None	42.3 (68.0) None	45.5 (73.3) None	88.2 (141.9) None	21.4° (17%)	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-08A Beach Haven – Daytime	77.1 (124.1) None	50.5 (81.2) None	40.4 (64.9) None	32.9 (53.0) R	42.3 (68.2) None	70.8 (113.9) None	27.2° (22%)	Weak	Weak	Weak	Weak	Small	2	Minor	Same as Alternative B
KOP-08B Beach Haven – Nighttime	77.1 (124.1) None	50.5 (81.2) None	40.4 (64.9) None	32.9 (53.0) R	42.3 (68.2) None	70.8 (113.9) None	27.2° (22%)	None	None	None	None	None	0	Negligible	Negligible (ADLS)
KOP-10 Barnegat LH (Elevated 170 feet)	66.4 (106.9) None	42.7 (68.7) R	37.7 (60.7) R, AL, N, H, M	32.2 (52.0) R, AL, N, H, M, O,	42.5 (68.4) R, AL, N, H	57.0 (91.8) R	63.0° (51%)	Weak	Weak	Moderate	Weak	Small	2	Minor	Same as Alternative B
KOP-13 Mantoloking	61.5 (99.5) None	44.1 (70.9) None	41.7 (72.4) None	44.6 (71.7) None	53.2 (85.7) None	47.3 (61.4) None	None	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-18 Allenhurst Residential HD	61.4 (98.8) None	48.1 (77.5) None	53.2 (85.6) None	55.7 (89.7) None	63.3 (101.8) None	42.5 (68.4) R	None	Weak	Weak	Weak	Weak	Small	1	Negligible	Same as Alternative B
KOP-26 Fort Tilden	66.6 (107.2) None	60.6 (97.5) None	69.1 (111.2) None	76.0 (122.2) None	82.0 (131.9) None	43.9 (70.6) None	None	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-28 Jones Beach	54.4 (87.5) None	55.0 (87.9) None	64.7 (104.1) None	75.5 (121.9) None	80.9 (130.1) None	31.9 (51.4) R	23.1° (19%)	Weak	Weak	Weak	Weak	Small	2	Minor	Same as Alternative B
KOP-30 Shinnecock Inlet	55.2 (88.8) None	79.9 (128.5) None	91.7 (147.5) None	110.3 (177.4) None	109.7 (176.6) None	44.5 (71.9) None	None	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-31- Westhampton Beach Daytime	49.4 (29.4) None	69.8 (112.3) None	82.0 (131.9) None	99.6 (160.3) None	99.6 (160.3) None	33.9 (54.5) R	8.9° (7%)	Weak	Weak	Weak	Weak	Small	1	Negligible	Same as Alternative B
KOP-32 Fire Island LH-Upper Deck (Elevated 167 feet)	45.8 (73.7) R	55.8 (89.7) R	67.0 (107.9) None	81.9 (131.9) None	83.9 (135.0) None	24.2 (38.9) R, AL, N, H, M	34.7° (28%)	Moderate	Moderate	Moderate	Moderate	Medium	5	Moderate	Same as Alternative B
KOP-35 Twin Lights LH (Elevated 255 feet)	65.0 (104.6) None	55.0 (88.6) R	62.2 (100.1) None	66.0 (106.2) None	73.2 (117.8) None	44.0 (70.9) R, AL, N, H, M	41.1° (33%)	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-36 Asbury Park Hall-Top (Elevated 46 feet)	61.3 (98.7) None	47.5 (76.50) None	52.1 (83.9) None	54.4 (87.5) None	62.0 (99.8) None	42.9 (69.0) None	6.1° (5%)	None	None	None	None	None	0	Negligible	Same as Alternative B
KOP-37 Point O' Woods (Alternative B Impact Level based on KOP-40 nighttime impact)	44.8 (72.1) None	57.1 (91.9) None	68.7 (110.6) None	84.4 (135.9) None	85.8 (138.1) None	24.1 (38.7) R, AL, N, H, M, O	25.7° (21%)	Weak	Moderate	Moderate	Weak	Small	3	Minor	Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263 feet)	78.2 (125.8) R	73.8 (118.9) R	82.9 (133.4) None	89.0 (143.2) None	95.3 (153.4) None	55.35 (89.0) R, AL, N, H, M, O	33.5° (27%)	Weak	Weak	Weak	Weak	Small	1	Negligible	Same as Alternative B
KOP-40 Robert Moses Field 5 – nighttime	45.9 (73.9) None	55.5 (89.2) None	66.7 (107.3) None	81.5 (131.1) None	83.5 (134.3) None	24.2 (38.9) R, AL, N, H, M, O	28.3° (23%)	Weak	Moderate	Moderate	Weak	Medium	4	Moderate	Negligible (ADLS)

KOP <sup>1</sup>	Distance in Miles (Kilometers) and Noticeable Elements <sup>2</sup>						New York Bight Visible FOV Degrees (% of 124°)	New York Bight Contrast, Scale of Change, and Prominence							
	OCS-A 0537	OCS-A 0538	OCS-A 0539	OCS-A 0541	OCS-A 0542	OCS-A 0544		Form	Line	Color	Texture	Scale	Prominence <sup>3</sup>	Impact Level	Sub-alternatives C1 and C2
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Same as Alternative B
KOP-B Commercial and Cruise Ship Shipping Lanes	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–38.7 (62.3) R, AL, N, H, M, O, Y	0–360° (300%)	Strong	Strong	Strong	Strong	Large	6	Major	Same as Alternative B

<sup>1</sup> LH – Lighthouse, HD – Historic District

<sup>2</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, M = mid-tower light, O = OSS, and Y = yellow tower base color.

<sup>3</sup> WTGs and OSS visibility: 0 – Not visible. 1 – Visible only after extended study; otherwise not visible. 2 – Visible when viewing in general direction of the lease areas; otherwise likely to be missed by casual observer. 3 – Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 – Plainly visible; could not be missed by casual observer, but does not strongly attract visual attention or dominate view. 5 – Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 – Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

### H.3.2.3 Visual Impact Assessment Summary

The VIA considers the characteristics of the view receptor, characteristics of the view toward the NY Bight project facilities, and the experiential impacts of the NY Bight project. The viewer experiences would be affected by the NY Bight projects' noticeable features; applicable distances and FOV extents; open views versus view framing and intervening foregrounds, and form, line, color, and texture contrasts; scale of change; and prominence in the characteristic seascape and landscape. Higher impact levels would stem from unique, extensive, and long-term appearance of strongly contrasting, large, and prominent vertical structures in the otherwise horizontal seascape environment; where structures are an unexpected element and viewer experience is of formerly open views of high-sensitivity seascape and landscape; and from high sensitivity view receptors. Based on these VIA impact range factors and the geographic analysis area viewer experience analyses, Table H-44 through Table H-50 summarize impacts from the NY Bight projects on the viewer experience (KOP locations) for each lease area and the six NY Bight projects combined. Impacts of the NY Bight projects on viewer experiences range from **negligible** to **major**.



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**Table H-44. Summary table for OCS-A 0537 viewer experience**

Viewpoint	WTGs (feet)	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				OCS-A 0537 Impact Levels					
		Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
		High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small	Good	Fair	Poor							
KOP-02 Lucy the Elephant	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-04 John Stafford Hall Beach Entrance	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-05 Jim Whelan Hall Balcony	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-08A/B Beach Haven – Daytime and Nighttime	1,312	X			X										X				X	Negligible		Negligible (ADLS)	
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-10 Barnegat LH (Elevated 170 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-13 Mantoloking	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-18 Allenhurst Residential HD	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-26 Fort Tilden – Nighttime	1,312	X			X										X				X	Negligible		Negligible (ADLS)	
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-28 Jones Beach	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-30 Shinnecock Inlet	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-31-Westhampton Beach – Daytime	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-32 Fire Island LH (Elevated 167 feet)	1,312	X			X				X				X		X			X	Minor			Same as Alternative B	
	853	X			X					X			X		X			X		Negligible		Same as Alternative B	
KOP-35 Twin Lights LH (Elevated 255 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-36 Ashbury Park Hall – Top (Elevated 46.14 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-37 Point O’ Woods	1,312	X			X					X			X		X			X	Minor			Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-40 Robert Moses Field – Nighttime	1,312	X			X					X			X		X			X	Minor			Negligible (ADLS)	
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area <sup>1</sup>	1,312	X			X			X			X				X		X		Major			Same as Alternative B	
	853	X			X			X			X				X		X			Major		Same as Alternative B	
KOP-B Commercial and Cruise Shipping Lanes <sup>1</sup>	1,312	X			X			X			X				X		X		Major			Same as Alternative B	
	853	X			X			X			X				X		X			Major		Same as Alternative B	

<sup>1</sup> Representative  
LH = Lighthouse; HD = Historic District

**Table H-45. Summary table for OCS-A 0538 viewer experience**

	WTGs (feet)	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				OCS-A 0538 Impact Levels					
		Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
		High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small	Good	Fair	Poor							
KOP-02 Lucy the Elephant	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-04 John Stafford Hall Beach Entrance	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall Balcony	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-08A/B Beach Haven – Daytime and Nighttime	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-10 Barnegat LH (Elevated 170 feet)	1,312	X			X					X			X		X					X	Minor		Same as Alternative B
	853	X			X					X			X		X					X		Minor	Same as Alternative B
KOP-13 Mantoloking	1,312	X			X					X			X		X					X	Minor		Same as Alternative B
	853	X			X					X			X		X					X		Negligible	Same as Alternative B
KOP-18 Allenhurst Residential HD	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-26 Fort Tilden – Nighttime	1,312	X			X										X					X	Negligible		Negligible (ADLS)
	853	X			X										X					X		Negligible	Negligible (ADLS)
KOP-28 Jones Beach	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-30 Shinnecock Inlet	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-31 Westhampton Beach – Daytime	1,312	X			X										X					X	Negligible		Same as Alternative B
	8WTG53	X			X										X					X		Negligible	Same as Alternative B
KOP-32 Fire Island LH (Elevated 167 feet)	1,312	X			X					X			X		X					X	Minor		Same as Alternative B
	853	X			X					X			X		X					X		Negligible	Same as Alternative B
KOP-35 Twin Lights LH (Elevated 255 feet)	1,312	X			X					X			X		X					X	Negligible		Same as Alternative B
	853	X			X					X			X		X					X		Negligible	Same as Alternative B
KOP-36 Ashbury Park Hall – Top (Elevated 46.14 feet)	1,312	X			X					X			X		X					X	Negligible		Same as Alternative B
	853	X			X					X			X		X					X		Negligible	Same as Alternative B
KOP-37 Point O’ Woods	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	1,312	X			X										X					X	Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-40 Robert Moses Field – Nighttime	1,312	X			X										X					X	Negligible		Negligible (ADLS)
	853	X			X										X					X		Negligible	Negligible (ADLS)
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area <sup>1</sup>	1,312	X			X			X			X				X		X				Major		Same as Alternative B
	853	X			X			X			X				X		X					Major	Same as Alternative B
KOP-B Commercial and Cruise Shipping Lanes <sup>1</sup>	1,312	X			X			X			X				X		X				Major		Same as Alternative B
	853	X			X			X			X				X		X					Major	Same as Alternative B

<sup>1</sup> Representative  
LH = Lighthouse; HD = Historic District

**Table H-46. Summary table for OCS-A 0539 viewer experience**

Character Area	WTGs (feet)	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				OCS-A 0539 Impact Levels					
		Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
		High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small	Good	Fair	Poor							
KOP-02 Lucy the Elephant	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-04 John Stafford Hall Beach Entrance	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-05 Jim Whelan Hall Balcony	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-08A/B Beach Haven – Daytime and Nighttime	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-10 Barnegat LH (Elevated 170 feet)	1,312	X			X				X			X			X			X	Moderate		Same as Alternative B		
	853	X			X					X			X					X	Minor	Minor	Same as Alternative B		
KOP-13 Mantoloking	1,312	X			X					X			X					X	Minor		Same as Alternative B		
	853	X			X								X					X	Negligible	Negligible	Same as Alternative B		
KOP-18 Allenhurst Residential HD	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-26 Fort Tilden – Nighttime	1,312	X			X										X				X	Negligible		Negligible (ADLS)	
	853	X			X										X				X	Negligible	Negligible	Negligible (ADLS)	
KOP-28 Jones Beach	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-30 Shinnecock Inlet	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-31-Westhampton Beach – Daytime	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-32 Fire Island LH (Elevated 167 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-35 Twin Lights LH (Elevated 255 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-36 Ashbury Park Hall – Top (Elevated 46.14 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-37 Point O’ Woods	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-39 Empire State Building (Elevated 1,263.1 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-40 Robert Moses Field – Nighttime	1,312	X			X										X				X	Negligible		Negligible (ADLS)	
	853	X			X										X				X	Negligible	Negligible	Negligible (ADLS)	
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area <sup>1</sup>	1,312	X			X			X			X				X		X			Major		Same as Alternative B	
	853	X			X			X			X				X		X				Major	Same as Alternative B	
KOP-B Commercial and Cruise Shipping Lanes <sup>1</sup>	1,312	X			X			X			X				X		X			Major		Same as Alternative B	
	853	X			X			X			X				X		X				Major	Same as Alternative B	

<sup>1</sup> Representative  
LH = Lighthouse; HD = Historic District

**Table H-47. Summary table for OCS-A 0541 viewer experience**

Character Area	WTGs (feet)	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				OCS-A 0541 Impact Levels					
		Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
		High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small	Good	Fair	Poor							
KOP-02 Lucy the Elephant	1,312	X			X					X			X		X				X		Negligible		Same as Alternative B
	853	X			X									X					X		Negligible		Same as Alternative B
KOP-04 John Stafford Hall Beach Entrance	1,312	X			X					X			X		X				X		Negligible		Same as Alternative B
	853	X			X								X		X				X		Negligible		Same as Alternative B
KOP-05 Jim Whelan Hall Balcony	1,312	X			X					X			X		X				X		Negligible		Same as Alternative B
	853	X			X								X		X				X		Negligible		Same as Alternative B
KOP-08A Beach Haven – Daytime	1,312	X			X				X			X		X				X			Minor		Same as Alternative B
	853	X			X					X			X		X				X		Minor		Same as Alternative B
KOP-08B Beach Haven – Nighttime	1,312	X			X				X				X		X				X		Minor		Negligible (ADLS)
	853	X			X								X		X				X		Negligible		Negligible (ADLS)
KOP-10 Barnegat LH (Elevated 170 feet)	1,312	X			X					X			X		X				X		Minor		Same as Alternative B
	853	X			X					X			X		X				X		Minor		Same as Alternative B
KOP-13 Mantoloking	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-18 Allenhurst Residential HD	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-26 Fort Tilden – Nighttime	1,312	X			X										X				X		Negligible		Negligible (ADLS)
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-28 Jones Beach	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-30 Shinnecock Inlet	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-31 Westhampton Beach – Daytime	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-32 Fire Island LH (Elevated 167 feet)	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-35 Twin Lights LH (Elevated 255 feet)	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-36 Ashbury Park Hall – Top (Elevated 46.14 feet)	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-37 Point O’ Woods	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-40 Robert Moses Field – Nighttime	1,312	X			X										X				X		Negligible		Negligible (ADLS)
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area <sup>1</sup>	1,312	X			X			X			X				X		X				Major		Same as Alternative B
	853	X			X			X			X				X		X				Major		Same as Alternative B
KOP-B Commercial and Cruise Shipping Lanes <sup>1</sup>	1,312	X			X			X			X				X		X				Major		Same as Alternative B
	853	X			X			X			X				X		X				Major		Same as Alternative B

<sup>1</sup> Representative  
LH = Lighthouse; HD = Historic District

**Table H-48. Summary table for OCS-A 0542 viewer experience**

Character Area	WTGs (feet)	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				OCS-A 0542 Impact Levels					
		Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
		High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small	Good	Fair	Poor							
KOP-02 Lucy the Elephant	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-04 John Stafford Hall Beach Entrance	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-05 Jim Whelan Hall Balcony	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-08A/B Beach Haven – Daytime and Nighttime	1,312	X			X					X			X		X				X	Minor		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-10 Barnegat LH (Elevated 170 feet)	1,312	X			X					X			X		X				X	Minor		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-13 Mantoloking	1,312	X			X					X			X		X				X	Minor		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-18 Allenhurst Residential HD	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-26 Fort Tilden – Nighttime	1,312	X			X										X				X	Negligible		Negligible (ADLS)	
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-28 Jones Beach	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-30 Shinnecock Inlet	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-31-Westhampton Beach – Daytime	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-32 Fire Island LH (Elevated 167 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-35 Twin Lights LH (Elevated 255 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-36 Ashbury Park Hall – Top (Elevated 46.14 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-37 Point O’ Woods	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-40 Robert Moses Field – Nighttime	1,312	X			X										X				X	Negligible		Negligible (ADLS)	
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area <sup>1</sup>	1,312	X			X			X			X				X		X			Major		Same as Alternative B	
	853	X			X			X			X				X		X				Major		Same as Alternative B
KOP-B Commercial and Cruise Shipping Lanes <sup>1</sup>	1,312	X			X			X			X				X		X			Major		Same as Alternative B	
	853	X			X			X			X				X		X				Major		Same as Alternative B

<sup>1</sup> Representative  
LH = Lighthouse; HD = Historic District

**Table H-49. Summary table for OCS-A 0544 viewer experience**

Character Area	WTGs (feet)	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				OCS-A 0544 Impact Levels					
		Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
		High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small	Good	Fair	Poor							
KOP-02 Lucy the Elephant	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-04 John Stafford Hall Beach Entrance	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-05 Jim Whelan Hall Balcony	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-08A/B Beach Haven – Daytime and Nighttime	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-10 Barnegat LH (Elevated 170 feet)	1,312	X			X					X			X		X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-13 Mantoloking	1,312	X			X					X			X		X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-18 Allenhurst Residential HD	1,312	X			X					X			X		X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-26 Fort Tilden – Nighttime	1,312	X			X					X			X		X				X	Negligible		Negligible (ADLS)	
	853	X			X										X				X	Negligible	Negligible	Negligible (ADLS)	
KOP-28 Jones Beach	1,312	X			X				X			X		X				X	Minor			Same as Alternative B	
	853	X			X				X			X		X				X	Minor			Same as Alternative B	
KOP-30 Shinnecock Inlet	1,312	X			X										X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-31-Westhampton Beach – Daytime	1,312	X			X					X			X		X			X	Minor			Same as Alternative B	
	853	X			X					X			X		X			X	Negligible	Negligible	Same as Alternative B		
KOP-32 Fire Island LH (Elevated 167 feet)	1,312	X			X				X			X		X			X		Moderate			Same as Alternative B	
	853	X			X				X			X		X			X		Moderate			Same as Alternative B	
KOP-35 Twin Lights LH (Elevated 255 feet)	1,312	X			X					X			X		X			X	Minor			Same as Alternative B	
	853	X			X					X			X		X			X	Negligible	Negligible	Same as Alternative B		
KOP-36 Ashbury Park Hall – Top (Elevated 46.14 feet)	1,312	X			X					X			X		X				X	Negligible		Same as Alternative B	
	853	X			X										X				X	Negligible	Negligible	Same as Alternative B	
KOP-37 Point O’ Woods	1,312	X			X				X			X		X			X		Moderate			Same as Alternative B	
	853	X			X				X			X		X			X		Minor			Same as Alternative B	
KOP-39 Empire State Building (Elevated 1,263.1 feet)	1,312	X			X					X			X		X			X	Minor			Same as Alternative B	
	853	X			X					X			X		X			X	Negligible	Negligible	Same as Alternative B		
KOP-40 Robert Moses Field – Nighttime	1,312	X			X				X			X		X			X		Moderate			Negligible (ADLS)	
	853	X			X				X			X		X			X		Moderate			Negligible (ADLS)	
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area <sup>1</sup>	1,312	X			X			X			X			X			X		Major			Same as Alternative B	
	853	X			X			X			X			X			X		Major			Same as Alternative B	
KOP-B Commercial and Cruise Shipping Lanes <sup>1</sup>	1,312	X			X			X			X			X			X		Major			Same as Alternative B	
	853	X			X			X			X			X			X		Major			Same as Alternative B	

<sup>1</sup> Representative  
LH = Lighthouse; HD = Historic District



**Table H-50. Viewer experience summary table for six NY Bight projects**

KOP	WTGs (feet)	Sensitivity						Magnitude of Impact						Visibility Threshold Rating				Six Projects Impact Levels					
		Susceptibility			Value			Size and Scale of Change			Geographic Extent			Duration & Reversibility			High (5-6)	Moderate (3-4)	Low (1-2)	Unseen	1,312-Foot WTGs	853-Foot WTGs	Sub-alternatives C1 and C2
		High	Moderate	Low	High	Moderate	Low	Large	Medium	Small	Large	Medium	Small	Good	Fair	Poor							
KOP-02 Lucy the Elephant	1,312	X			X							X			X				X		Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-04 John Stafford Hall-Beach Entrance	1,312	X			X					X		X			X				X		Negligible		Same as Alternative B
	853	X			X										X					X		Negligible	Same as Alternative B
KOP-05 Jim Whelan Hall-Balcony	1,312	X			X										X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-08A Beach Haven – Daytime	1,312	X			X					X		X			X			X			Minor		Same as Alternative B
	853	X			X					X		X			X			X			Minor		Same as Alternative B
KOP-08B Beach Haven – Nighttime	1,312	X			X					X		X			X			X			Minor		Negligible (ADLS)
	853	X			X					X		X			X				X		Negligible		Negligible (ADLS)
KOP-10 Barnegat LH (Elevated 170 feet)	1,312	X			X				X		X				X			X			Moderate		Same as Alternative B
	853	X			X					X	X				X				X		Minor		Same as Alternative B
KOP-13 Mantoloking	1,312	X			X					X	X				X				X		Minor		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-18 Allenhurst Residential HD	1,312	X			X					X	X				X				X		Minor		Same as Alternative B
	853	X			X					X		X			X				X		Negligible		Same as Alternative B
KOP-26 Fort Tilden - Nighttime	1,312	X			X							X			X				X		Negligible		Negligible (ADLS)
	853	X			X										X				X		Negligible		Negligible (ADLS)
KOP-28 Jones Beach	1,312	X			X					X		X			X			X			Minor		Same as Alternative B
	853	X			X					X		X			X				X		Minor		Same as Alternative B
KOP-30 Shinnecock Inlet	1,312	X			X							X			X				X		Negligible		Same as Alternative B
	853	X			X										X				X		Negligible		Same as Alternative B
KOP-31 Westhampton Beach Daytime	1,312	X			X					X		X			X				X		Minor		Same as Alternative B
	853	X			X							X			X				X		Negligible		Same as Alternative B
KOP-32 Fire Island LH-Upper Deck (Elevated 167 feet)	1,312	X			X				X		X				X			X			Moderate		Same as Alternative B
	853	X			X				X			X			X			X			Moderate		Same as Alternative B
KOP-35 Twin Lights LH (Elevated 255 feet)	1,312	X			X					X	X				X				X		Minor		Same as Alternative B
	853	X			X					X	X				X				X		Negligible		Same as Alternative B
KOP-36 Asbury Park Hall-Top (Elevated 46.14 feet)	1,312	X			X						X				X				X		Negligible		Same as Alternative B
	853	X			X							X			X				X		Negligible		Same as Alternative B
KOP-37 Point O' Woods	1,312	X			X				X		X				X			X			Moderate		Same as Alternative B
	853	X			X					X		X			X				X		Minor		Same as Alternative B
KOP-39 Empire State Building (Elevated 1,263.1 feet)	1,312	X			X					X	X				X				X		Minor		Same as Alternative B
	853	X			X							X			X				X		Negligible		Same as Alternative B
KOP-40 Robert Moses Field - Nighttime	1,312	X			X				X		X				X		X				Moderate		Negligible (ADLS)
	853	X			X				X		X				X		X				Moderate		Negligible (ADLS)
KOP-A Recreational Fishing, Pleasure, and Tour Boat Area <sup>1</sup>	1,312	X			X			X			X				X		X				Major		Same as Alternative B
	853	X			X			X			X				X		X				Major		Same as Alternative B
KOP-B Commercial and Cruise Shipping Lanes <sup>1</sup>	1,312	X			X			X			X				X		X				Major		Same as Alternative B
	853	X			X						X				X		X				Major		Same as Alternative B

<sup>1</sup> Representative  
LH = Lighthouse; HD = Historic District

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## H.4 Cumulative Impacts of NY Bight Projects

NEPA requires consideration of other reasonably foreseeable activities in the project's viewshed and the project's additive effects on open ocean character, seascape character, landscape character, and viewer experience. These effects include direct physical effects on the open ocean, seascape, and landscape or changes to the distinct character of the open ocean, seascape, and landscape.

Effects on open ocean character, seascape character, and landscape character can occur in the following conditions (SLVIA Chapter 8; BOEM 2021).

- Multi-project WTGs and OSSs visible within or from the open ocean character unit as overlapping or adjacent features and elements.
- Multi-project WTGs and OSSs visible from seascape character units as overlapping or adjacent features and elements.
- Multi-project WTGs and OSSs visible from landscape character units as overlapping or adjacent features and elements.

Effects on viewer experience can occur in the following conditions (SLVIA Chapter 8; BOEM 2021).

- Multi-project WTGs and OSSs visible as overlapping features and elements.
- Multi-project WTGs and OSSs visible as adjacent features and elements.
- Multi-project WTGs and OSSs visible as viewers move through the open ocean, seascape, and landscape.

Simulations of the additive effects of the project in the context of other offshore wind projects are available on the BOEM website (<https://www.boem.gov/renewable-energy/state-activities/new-york-bight>). The KOP-based visual simulations portray 1,312-foot (400-meter) and 853-foot (260-meter) WTG predicted and maximum visibility for three construction and installation scenarios:

- The project construction (six NY Bight lease areas) without other foreseeable planned activities.
- The project construction with other foreseeable planned activities. 2024–2030 Project Construction includes Ocean Wind 1 OCS-A-0498, Empire Wind OCS-A 0512, Empire Wind II OCS-A 0512, Atlantic Shores Offshore Wind South OCS-A 0499, Atlantic Shores Offshore Wind North OCS-A 0539, and Ocean Wind 2 OCS-A532.<sup>1</sup>
- Other foreseeable planned activities without the six NY Bight leases.

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<sup>1</sup> Refer to footnotes 9 and 10 in PEIS Chapter 1 for additional information on the status of Ocean Wind 1, Empire Wind 1, and Empire Wind 2.

The number of offshore wind structures illustrated in the simulations differs from the number of structures assumed in Appendix D, *Planned Activities Scenario*. This is due to the timing of when Appendix D and simulations documents were developed, and the assumptions used in developing the layouts for the simulations. The number of offshore structures identified in both documents are estimates of reasonably foreseeable offshore wind development and are subject to change as lessees submit COPs and refine their development plans. BOEM believes the simulations presented on their website provide a reasonable approximation of the scale, contrast, and prominence of visual impacts that would occur from development of the NY Bight projects in combination with other ongoing and planned offshore wind projects.

The effects of other lease areas on open ocean character, seascape character, and landscape character are described in Table H-51. Increased impacts on the open ocean character area, seascape character areas, and landscape character areas stem from the effects of additional WTGs in view of the character areas. Effects include additive expansions to the perceived geographic extents of lease areas' FOVs, greater magnitudes of character-changing turbines and substations, and increased daytime and nighttime vessel traffic. Simulations show that lease area proximities to character areas increase and decrease the character-changing interactions of key features and key elements. Those simulations showing beach views toward lease areas with visible WTGs' yellow bases and platforms, mid-tower lights, substations, hubs, nacelles, aviation lights, and rotors change seascape character more than views with more distant and fewer visible WTG elements.

The effects on open ocean character, seascape character, and landscape character of other lease areas in combination with the NY Bight projects are described in Table H-52.

The effects on viewer experience from non-NY Bight projects are described in Table H-53.

The effects on viewer experience of other lease areas in combination with the NY Bight projects are described in Table H-54.

**Table H-51. Non-NY Bight projects' open ocean, seascape, and landscape areas cumulative lease area distances, FOVs, noticeable elements, visual contrasts, scale of change, and prominence**

Lease Area and Additive Date	Distance in Miles (Kilometers) <sup>1</sup> and Impacts			FOV Degrees (% of 124°)			Noticeable Elements <sup>2</sup> and Impact Level	Visual Contrast, Scale of Change, and Prominence					
	Seascape <sup>4</sup>	Open Ocean	Landscape <sup>4</sup>	Seascape	Open Ocean	Landscape		Form	Line	Color	Texture	Scale	Prominence <sup>3</sup>
Atlantic Shores Offshore Wind South OCS-A 0499 2026	8.7 (14.0) <b>Major</b>	0 (0)–42.5 (68.4) <b>Major</b>	9.0 (14.5) <b>Major</b>	136° (110%)	82° to 360° (66 to 290%)	136° (110%)	R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Atlantic Shores Offshore Wind North OCS-A 0549 2030	9.0 (14.5) <b>Major</b>	0 (0)–42.5 (68.4) <b>Major</b>	9.2 (14.8) <b>Major</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Empire Wind I and II OCS-A 0512 2030	14.1 (22.7) <b>Moderate</b>	0 (0)–40.7 (65.5) <b>Major</b>	34.9 (56.1) <b>Minor</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Ocean Wind 1 OCS-A-0498 2025	15.3 (24.6) <b>Major</b>	0 (0)–39.6 (63.7) <b>Major</b>	15.5 (24.9) <b>Major</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Ocean Wind 2 OCS-A532 2030	9.2 (14.7) <b>Major</b>	0 (0)–39.6 (63.7) <b>Major</b>	15.5 (24.9) <b>Major</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6

<sup>1</sup> The most conservative onshore case involves the seaward edge of the beach nearest the projects. The seascape unit edge is 3.45 miles (5.6 kilometers) offshore (New Jersey jurisdictional boundary).

<sup>2</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, O = OSS, M = mid-tower light, Y = yellow tower base color.

<sup>3</sup> WTGs and OSS Prominence (visibility): 0 = Not visible. 1 = Visible only after extended study; otherwise not visible. 2 = Visible when viewing in general direction of the lease areas; otherwise likely to be missed by casual observer. 3 = Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 = Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 = Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 = Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

<sup>4</sup> The seaward edge between landscape and seascape varies. The most conservative case is 0.2-mile (0.3-kilometer) landward distance from seaward beach edge.

**Table H-52. NY Bight and other WTGs' cumulative open ocean, seascape, and landscape areas lease area distances, FOVs, noticeable elements, visual contrasts, scale of change, and prominence**

Lease Area and Incremental Date	Distance in Miles (Kilometers) <sup>1</sup> and Impacts			FOV Degrees (% of 124°)			Noticeable Elements <sup>2</sup> and Impact Level	Visual Contrast, Scale of Change, and Prominence					
	Seascape <sup>1</sup>	Open Ocean	Landscape <sup>4</sup>	Seascape	Open Ocean	Landscape		Form	Line	Color	Texture	Scale	Prominence <sup>3</sup>
NY Bight (2030)	20.2 (32.6) <b>Moderate</b>	0 (0)–47.2 (68.4) <b>Major</b>	27.3 (44.0) <b>Minor</b>	136° (110%)	82° to 360° (66 to 290%)	136° (110%)	R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Atlantic Shores Offshore Wind South OCS-A 0499 (2026)	8.7 (14.0) <b>Major</b>	0 (0)–42.5 (68.4) <b>Major</b>	9.0 (14.5) <b>Major</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Atlantic Shores Offshore Wind North OCS-A 0549 (2030)	9.0 (14.5) <b>Major</b>	0 (0)–42.5 (68.4) <b>Major</b>	9.2 (14.8) <b>Major</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Empire Wind I and II OCS-A 0512 (2030)	14.1 (22.7) <b>Moderate</b>	0 (0)–40.7 (65.5) <b>Major</b>	34.9 (56.1) <b>Minor</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Ocean Wind 1 OCS-A-0498 (2025)	15.3 (24.6) <b>Major</b>	0 (0)–39.6 (63.7) <b>Major</b>	15.5 (24.9) <b>Major</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6
Ocean Wind 2 OCS-A532 (2030)	9.2 (14.7) <b>Major</b>	0 (0)–39.6 (63.7) <b>Major</b>	15.5 (24.9) <b>Major</b>				R, AL, N, H, O, M, Y Major	Strong	Strong	Strong	Strong	Large	6

<sup>1</sup> The most conservative onshore case involves the seaward edge of the beach nearest the projects. The seascape unit edge is 3.45 miles (5.6 kilometers) offshore (New Jersey jurisdictional boundary).

<sup>2</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, O = OSS, M = mid-tower light, Y = yellow tower base color.

<sup>3</sup> WTGs and OSS Prominence (visibility): 0 = Not visible. 1 = Visible only after extended study; otherwise not visible. 2 = Visible when viewing in general direction of the lease areas; otherwise likely to be missed by casual observer. 3 = Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 = Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 = Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 = Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

<sup>4</sup> The seaward edge between landscape and seascape varies. The most conservative case is 0.2-mile (0.3-kilometer) landward distance from seaward beach edge.

**Table H-53. Non-NY Bight projects' cumulative viewer experience WTG distances, FOVs, noticeable elements, visual contrasts, scale of change, and prominence**

KOP	Distance in Miles (Kilometers) and Impact					FOV Degrees (% of 124°)	Noticeable Elements <sup>2</sup> and Impact Level	Visual Contrast, Scale of Change, and Prominence					
	ASOW South <sup>1</sup>	ASOW North <sup>1</sup>	EW I and II <sup>1</sup>	OW 1 <sup>1</sup>	OW 2 <sup>1</sup>			Form	Line	Color	Texture	Scale	Prominence <sup>3</sup>
KOP-02 Lucy the Elephant	14.4 (23.2) <b>Major</b>	22.1 (35.6) <b>Moderate</b>	Not Visible	16.0 (25.8) <b>Moderate</b>	10.8 (17.3) <b>Major</b>	127.6° (103%)	R, AL, N, H Major	Strong	Strong	Strong	Strong	Large	6
KOP-04 John Stafford Beach Entrance	14.4 (23.2) <b>Major</b>	19.3 (31.0) <b>Moderate</b>	Not Visible	15.6 (25.1) <b>Moderate</b>	9.6 (15.5) <b>Major</b>	135.6° (109%)	R, AL, N, H Major	Strong	Strong	Strong	Strong	Large	6
KOP-05 Jim Whelan Hall Balcony	11.5 (18.4) <b>Major</b>	17.6 (28.4) <b>Moderate</b>	Not Visible	15.4 (24.8) <b>Moderate</b>	9.2 (14.7) <b>Major</b>	140.2° (113%)	R, AL, N, H Major	Strong	Strong	Strong	Strong	Large	6
KOP-08A/B Beach Haven – Day and Night	13.5 (21.7) <b>Major</b>	9.8 (15.8) <b>Major</b>	Not Visible	24.5 (39.4) <b>Minor</b>	20.2 (32.6) <b>Moderate</b>	139.7° (113%)	R, AL, N, H Major	Strong	Strong	Strong	Strong	Large	6
KOP-10 Barnegat Lighthouse (Elevation 157.2 feet)	27.3 (44.0) <b>Moderate</b>	10.1 (16.2) <b>Major</b>	50.2 (80.8) <b>Negligible</b>	38.6 (62.2) <b>Minor</b>	35.4 (57.0) <b>Minor</b>	169.6° (138%)	R, AL, N, H, O, and M Major	Strong	Strong	Strong	Strong	Large	6
KOP-13 Mantoloking	Not Visible	25.8 (41.5) <b>Moderate</b>	34.1 (54.9) <b>Minor</b>	Not Visible	Not Visible	42° (34%)	R, AL, N, H Moderate	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-18 Allenhurst Residential Historic District	Not Visible	39.0 (62.8) <b>Minor</b>	24.4 (39.3) <b>Moderate</b>	Not Visible	Not Visible	33.7° (27%)	R, AL, N, H Moderate	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-26 Fort Tilden	Not Visible	Not Visible	21.2 (33.9) <b>Moderate</b>	Not Visible	Not Visible	15.7° (13%)	R, AL, N, H Moderate	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-28 Jones Beach	Not Visible	Not Visible	14.2 (22.9) <b>Major</b>	Not Visible	Not Visible	52.4° (42%)	R, AL, N, H Major	Strong	Strong	Strong	Strong	Large	6
KOP-31 Westhampton Beach	Not Visible	Not Visible	37.9 (61.0) <b>Minor</b>	Not Visible	Not Visible	12.9° (10%)	R, AL Minor	Weak	Weak	Weak	Weak	Small	6
KOP-32 Fire Island Lighthouse (Elevation 154.7 feet)	Not Visible	Not Visible	21.7 (35.0) <b>Major</b>	Not Visible	Not Visible	61.7° (50%)	R, AL, N, H, O, and M Major	Strong	Strong	Strong	Strong	Large	6
KOP-35 Twin Lights Lighthouse (Elevation 204 feet)	Not Visible	50.0 (80.5) <b>Minor</b>	22.4 (36.1) <b>Major</b>	Not Visible	Not Visible	20.5° (16%)	R, AL, N, H Major	Strong	Strong	Strong	Strong	Large	6
KOP-36 Ashbury Park Hall (Elevation 46.4 feet)	Not Visible	38.1 (61.4) <b>Minor</b>	24.9 (40.0) <b>Moderate</b>	Not Visible	Not Visible	114.8° (93%)	R, AL, N, H Moderate	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-37 Point O' Woods	Not Visible	Not Visible	23.9 (38.5) <b>Moderate</b>	Not Visible	Not Visible	55.2° (44.5%)	R, AL, N, H, O, and M Major	Strong	Strong	Strong	Strong	Large	6
KOP-39 Empire State Building (Elevation 1,263 feet)	Not Visible	74.2 (119.5) <b>Negligible</b>	34.1 (54.9) <b>Minor</b>	Not Visible	Not Visible	59.5° (48%)	R, AL, N, H, O, and M Moderate	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-40 Robert Moses – Nighttime	Not Visible	Not Visible	21.3 (34.2) <b>Major</b>	Not Visible	Not Visible	62.9° (51%)	R, AL, N, H, O, and M Major	Strong	Strong	Strong	Strong	Large	6

<sup>1</sup> ASOW South = Atlantic Shores Offshore Wind South OCS-A 0499 (1,049-foot [319.7-meter] WTGs), ASOW North = Atlantic Shores Offshore Wind North OCS-A 0549 (1,049-foot [319.7-meter] WTGs), EW I and II = Empire Wind OCS-A 0512 (951-foot [290-meter] WTGs), OW 1 = Ocean Wind 1 OCS-A-0498 (906-foot [276-meter] WTGs), and OW2 = Ocean Wind 2 OCS-A532 (906-foot [276-meter] WTGs). Due to EC, zero atmospheric refraction, and known WTG heights. WTGs beyond 42.6 miles (68.6 kilometers) would not be visible from ground level plus 5.9 feet (1.8 meters) viewing height.

<sup>2</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, O = OSS, M = mid-tower light, Y = yellow tower base color.

<sup>3</sup> WTGs and OSS (onshore) visibility: 0 = Not visible. 1 = Visible only after extended study; otherwise not visible. 2 = Visible when viewing in general direction of the lease areas; otherwise likely to be missed by casual observer. 3 = Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 = Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 = Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 = Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).

**Table H-54. NY Bight and other lease areas' cumulative viewer experience, lease area distances, FOVs, noticeable elements, visual contrasts, scale of change, and prominence**

KOP	Distance in Miles (Kilometers) and Impact							FOV Degrees (% of 124°)	Noticeable Elements <sup>2</sup> and Impact Level <sup>3</sup>	Visual Contrast, Scale of Change, and Prominence					
	NYB 1,312-foot WTGs <sup>1</sup>	NYB 853-foot WTGs <sup>1</sup>	ASOW South <sup>1</sup>	ASOW North <sup>1</sup>	EW I and II <sup>1</sup>	OW 1 <sup>1</sup>	OW 2 <sup>1</sup>			Form	Line	Color	Texture	Scale	Prominence <sup>3</sup>
KOP-02 Lucy the Elephant	46.3 (74.4) <b>Negligible</b>	Not Visible	14.4 (23.2) <b>Major</b>	22.1 (35.6) <b>Moderate</b>	Not Visible	16.0 (25.8) <b>Moderate</b>	10.8 (17.3) <b>Major</b>	127.6° (103%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-04 John Stafford Beach Entrance	43.8 (70.5) <b>Negligible</b>	Not Visible	14.4 (23.2) <b>Major</b>	19.3 (31.0) <b>Moderate</b>	Not Visible	15.6 (25.1) <b>Moderate</b>	9.6 (15.5) <b>Major</b>	135.6° (109%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-05 Jim Whelan Hall Balcony	42.3 (68.1) <b>Negligible</b>	42.3 (68.1) <b>Negligible</b>	11.5 (18.4) <b>Major</b>	17.6 (28.4) <b>Moderate</b>	Not Visible	15.4 (24.8) <b>Moderate</b>	9.2 (14.7) <b>Major</b>	140.2° (113%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-08A/B Beach Haven – Day and Night	32.6 (52.5) <b>Minor</b>	32.6 (52.5) <b>Minor</b>	13.5 (21.7) <b>Major</b>	9.8 (15.8) <b>Major</b>	Not Visible	24.5 (39.4) <b>Minor</b>	20.2 (32.6) <b>Moderate</b>	139.7° (113%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-10 Barnegat Lighthouse (Elevation 157.2 feet)	32.3 (52.0) <b>Moderate</b>	32.3 (52.0) <b>Minor</b>	27.3 (44.0) <b>Moderate</b>	10.1 (16.2) <b>Major</b>	50.2 (80.8) <b>Negligible</b>	38.6 (62.2) <b>Minor</b>	35.4 (57.0) <b>Minor</b>	169.6° (138%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-13 Mantoloking	44.1 (71.0) <b>Minor</b>	Not Visible	Not Visible	25.8 (41.5) <b>Moderate</b>	34.1 (54.9) <b>Minor</b>	Not Visible	Not Visible	138.1° (111%)	R, AL, N, H <b>Moderate</b>	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-18 Allenhurst Residential Historic District	42.5 (68.4) <b>Minor</b>	Not Visible	Not Visible	39.0 (62.8) <b>Minor</b>	24.4 (39.3) <b>Moderate</b>	Not Visible	Not Visible	116.2° (94%)	R, AL, N, H <b>Moderate</b>	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-26 Fort Tilden - nighttime	43.7 (70.3) <b>Negligible</b>	Not Visible	Not Visible	Not Visible	21.2 (33.9) <b>Moderate</b>	Not Visible	Not Visible	20.0° (16%)	R, AL, N, H <b>Moderate</b>	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-28 Jones Beach	31.4 (50.5) <b>Minor</b>	31.4 (50.5) <b>Minor</b>	Not Visible	Not Visible	14.2 (22.9) <b>Major</b>	Not Visible	Not Visible	60.5° (49%)	R, AL, N, H <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-31 Westhampton Beach	33.9 (54.5) <b>Minor</b>	33.9 (54.5) <b>Negligible</b>	Not Visible	Not Visible	37.9 (61.0) <b>Minor</b>	Not Visible	Not Visible	22.3° (18%)	R, AL <b>Minor</b>	Weak	Weak	Weak	Weak	Small	6
KOP-32 Fire Island Lighthouse (Elevation 154.7 feet)	24.2 (39.0) <b>Moderate</b>	24.2 (39.0) <b>Moderate</b>	Not Visible	Not Visible	21.7 (35.0) <b>Major</b>	Not Visible	Not Visible	82.8° (67%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-35 Twin Lights Lighthouse (Elevation 204 feet)	44.1 (70.9) <b>Minor</b>	44.1 (70.9) <b>Minor</b>	Not Visible	50.0 (80.5) <b>Minor</b>	22.4 (36.1) <b>Major</b>	Not Visible	Not Visible	89.5° (72%)	R, AL, N, H <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-36 Ashbury Park Hall (Elevation 46.4 feet)	42.6 (68.6) <b>Negligible</b>	42.6 (68.6) <b>Negligible</b>	Not Visible	38.1 (61.4) <b>Minor</b>	24.9 (40.0) <b>Moderate</b>	Not Visible	Not Visible	117.8° (95%)	R, AL, N, H <b>Moderate</b>	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-37 Point O' Woods	24.1 (38.7) <b>Moderate</b>	24.1 (38.7) <b>Moderate</b>	Not Visible	Not Visible	23.9 (38.5) <b>Moderate</b>	Not Visible	Not Visible	82.3° (66%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6
KOP-39 Empire State Building (Elevation 1,263 feet)	55.8 (89.8) <b>Minor</b>	55.8 (89.8) <b>Negligible</b>	Not Visible	74.2 (119.5) <b>Negligible</b>	34.1 (54.9) <b>Minor</b>	Not Visible	Not Visible	63.4° (51%)	R, AL, N, H, O, and M <b>Moderate</b>	Moderate	Moderate	Moderate	Moderate	Medium	3
KOP-40 Robert Moses – Nighttime	24.2 (39.0) <b>Major</b>	24.2 (39.0) <b>Major</b>	Not Visible	Not Visible	21.3 (34.2) <b>Major</b>	Not Visible	Not Visible	80.4° (65%)	R, AL, N, H, O, and M <b>Major</b>	Strong	Strong	Strong	Strong	Large	6

<sup>1</sup> NYB = six New York Bight leases, ASOW South = Atlantic Shores Offshore Wind South OCS-A 0499 (1,049-foot [319.7-meter] WTGs), ASOW North = Atlantic Shores Offshore Wind North OCS-A 0549 (1,049-foot [319.7-meter] WTGs), EW I and II = Empire Wind OCS-A 0512 (951-foot 9290-meter) WTGs, OW 1 = Ocean Wind 1 OCS-A-0498 (906-foot [276-meter] WTGs), and OW 2 = Ocean Wind 2 OCS-A532 (906-foot [276-meter] WTGs). Due to EC, zero atmospheric refraction, and known WTG heights. WTGs beyond 42.6 miles (68.6 kilometers) would not be visible from ground level plus 5.9 feet (1.8 meters) viewing height.

<sup>2</sup> Noticeable elements: R = rotor, AL = aviation light, N = nacelle, H = hub, O = OSS, M = mid-tower light, Y = yellow tower base color.

<sup>3</sup> WTGs and OSS (onshore) visibility: 0 = Not visible. 1 = Visible only after extended study; otherwise not visible. 2 = Visible when viewing in general direction of the lease areas; otherwise likely to be missed by casual observer. 3 = Visible after brief glance in general direction of the lease areas; unlikely to be missed by casual observer. 4 = Plainly visible; could not be missed by casual observer but does not strongly attract visual attention or dominate view. 5 = Strongly attracts viewers' attention to the lease areas; moderate to strong contrasts in form, line, color, or texture, luminance, or motion. 6 = Dominates view; strong contrasts in form, line, color, texture, luminance, or motion fill most of the horizontal FOV or vertical FOV (Sullivan et al. 2013).



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