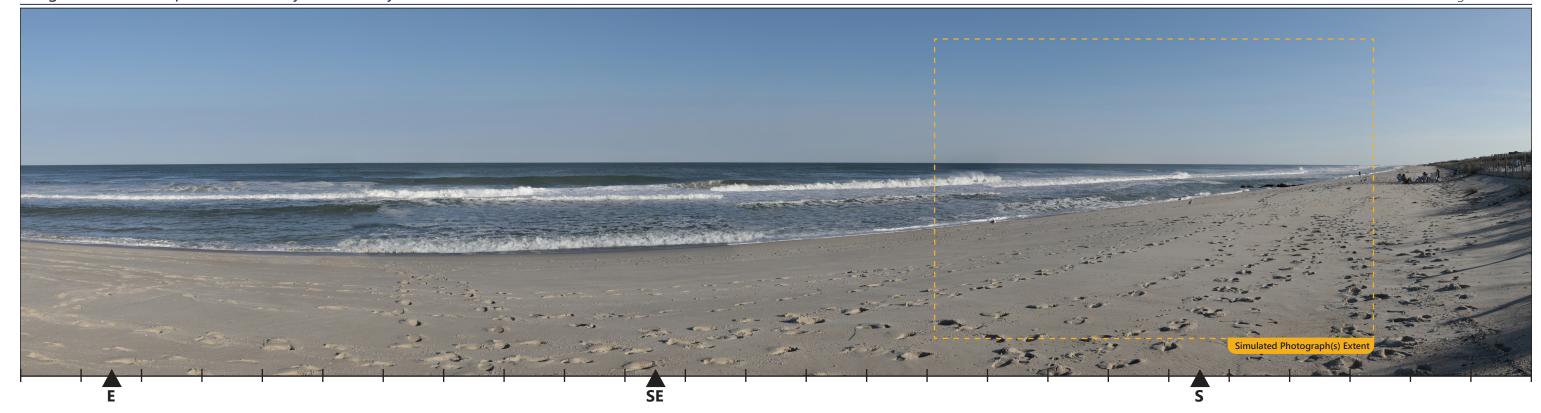
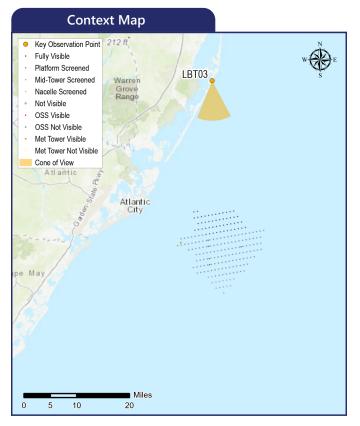
# LBT03 Beach at Long Beach Island Foundation for the Arts and Sciences

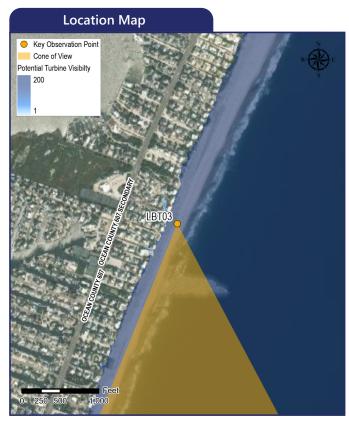
Long Beach Township, Ocean County, New Jersey

Attachment E: Photosimulations
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The image above is a +/- 124° panorama photograph from the Beach at Long Beach Island Foundation for the Arts and Sciences NRL, panning clockwise from east (left) to south-southwest (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).





#### **Simulation Information**

Coordinates: Character Area: User Group: Direction of View:

Distance to Nearest Visible Turbine: Visually Sensitive Resource:

#### **Environmental Information**

Date Taken:09/22/2020Time:5:17 PMTemperature:69°FHumidity:38%Visibility:10 milesWind Direction:WestWind Speed:10 mphConditions Observed:Fair

39.72895°N, 74.12058°W

Residential Beachfront, Seascape (SCA)

Residents/Tourists, Fishermen

South 24.87 miles

N/A

#### **Photograph Information**

Camera: Canon EOS 5D Mark IV
Resolution: 30.4 Megapixels
Focal Length: 50mm

Camera Height: 16.64 feet AMSL

#### Notes

Printed at 100%, the photosimulations are 15 inches wide by 10 inches high. At this size, the photosimulation(s) should be viewed from a distance of 21 inches.

### Simulated Photograph(s)



# LBT03 Beach at Long Beach Island Foundation for the Arts and Sciences

Atlantic Shores Offshore Wind

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#### Proposed Conditions

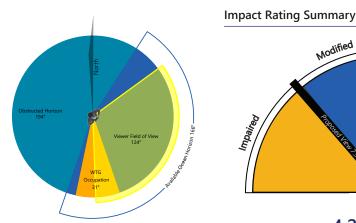
Scenic Quality:ModifiedRating Panel Score Average:7.9Rating Panel Score Range:5.8 - 10.2Impact Magnitude:4.2 (Significant)

Viewshed analysis suggests that Project visibility from this general area will be largely limited to the open beach, with potential visibility decreasing rapidly as one proceeds west into the developed residential areas that line the beach. Views from the adjacent roads and neighborhoods are completely screened.

With the proposed Project in place, the view is dominated by a large, highly organized, and visible array of WTGs that extend across a large portion of the ocean view to the southeast-south from this location. Of the 170-degrees of relatively unobstructed ocean horizon, the Project occupies approximately 31-degrees or 18.2 percent of the view (see Field of View Image, left). Project visibility is partly mitigated by the relative proximity of the WTGs (24.87 miles), yet also enhanced by back-lighting from the late-day sun that makes the WTGs appear dark against the sky. Rating panel members had a somewhat variable range of reactions to the impact resulting from the Project WTGs, with the VIA scores ranging from 5.8 to 10.2 (average score = 7.9). These scores indicate an average reduction of 4.2 points in comparison to the existing view, indicating the view becomes modified and significant impacts could occur under the clear conditions presented. Individual rating panel members indicated reductions that ranged from 0.3 to 9.0. Panel members noted that while the WTGs are not tall on the horizon, their expansive layout and dense appearance on the horizon dominates and clutters the view. From this position, the WTGs are generally well organized and symmetrical in their layout. However, the center of the array results in a view down the row, causing the WTGs to stack and creating a darker, denser form on the horizon. The movement of the stacked rotor blades will also attract viewer attention and make the WTGs the focus of this view. The sense of a pristine ocean horizon is no longer a component of the view with the Project in place under these exceptional viewing conditions. With the Project in place, the scenic quality of this view is low to moderate. It should be noted that the visibility and visual dominance of the WTGs is likely to be reduced under more hazy or foggy sky conditions, or lighting conditions when the WTGs are front lit and lighter in color. An example of more typical viewing conditions is provided from the KOP at BHB01.

The panel members assigned the Project visibility an average VTL of 5 from this KOP. The rating panel indicated that the WTGs are not compatible and would result in partially retained scale contrast with the ocean (water resources). The rating panel scores also indicated that the WTGs would present partially retained scale contrast, some degree of compatibility, and co-dominance with land use and viewer activity.

Visual Impact Rating



Paritally Retained Preserved Preserved

-4.2. Significant

#### Visual Threshold Level (VTL)

Field of View

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 that attention. In addition to strong contrasts in form, line, color, and texture, bright light sources such as lighting and reflections and moving objects associated with the study subject may contribute substantially to drawing viewer attention. The visual prominence of the study subject interferes noticeably with views of nearby landscape/seascape elements (Sullivan et al., 2013).

#### Principles of Composition and Factors Affecting Visual Impact Summary

Design Elements	Description		
Focal Point	The horizon line against the ocean provides a focus, but no strong single focal point is present.		
Order	Layers created by the sandy beach, rolling surf, waves, ocean and horizon.		
Visual Clutter	Potential for clutter from beach crowds, umbrellas, chairs, boats, etc.		
Movement	Human activity on the beach, boats on the water, and the movement of waves and wildlife.		
Duration & Frequency of View	Moderate to long duration and high frequency view experienced by residents and beach-goers.		
Atmospheric Conditions	The sky appears as clear as could be. Moisture in the air could impact visibility.		
Lighting Direction	Backlit		
Scenic or Recreational Value	There are residences lining the oceanfront with direct beach access. The ocean gives the viewers a sense of a pristine, untouched seascape. This is a popular beach for residents and vacationers.		

#### Compatibility and Contrast Rating Average

		9	3.9	
Beach at Long Beach Island Arts Foundation				
Resource	Compatibility	Scale	Spatial Dominance	
Water Resources	2.6	2.4	2.4	
Landform	2.0	1.8	1.5	
Vegetation	0.5	0.5	0.8	
Land Use	2.4	2.1	2.1	
User Activity	2.4	2.1	2.4	
	Compatible 2	1 – Minima 2 – Modera 3 – Severe	ate 2 – Co-Dominant	

## **Existing Conditions**

Scenic Quality: Partially Retained

Rating Panel Score Average: 12.0
Rating Panel Score Range: 9.8 - 14.8

This view is from the beach near the Long Beach Island Foundation (LBIF) for the Arts and Sciences facility in Long Beach Township, New Jersey. Built in 1948, the Main Gallery was the first structure completed on the LBIF site. The Gallery is approximately 3,500 square feet and hosts free exhibitions year-round from internationally known artists working in a wide range of media to community-based shows highlighting the work of the local community and its artists. The LBIF offers classes, workshops, exhibitions, and educational programs to the community, and is also a popular wedding venue. Beach access for wedding ceremonies is located across the street from the LBIF property.

The selected viewpoint is located on the beach near the LBIF property. Although outside the field of view in the selected photograph, the area immediately inland from the beach is developed and representative of the Residential Beachfront Character Area. The existing view to the south from this location looks down a long sandy beach. Beyond the lines of breaking waves, the dark blue-gray ocean extends to the horizon where it meets the bluish white sky. The smooth sand on the beach includes multiple sets of footprints and seagulls, with a single person visible along the shoreline as it angles out of the view. A small group of beach goers and adjacent build structures are visible to the right, again outside the frame of the selected photo. These observations, along with the tracks in the sand, suggest that the beach is well used. However, the view toward the ocean appears largely natural and unspoiled.

Rating panel members indicated that while the visual qualities of the wide-open beach are common along the eastern seaboard, this view has an especially tranquil quality that is minimally interrupted by built amenities and visual clutter. The numerous sets of footprints in the sand provide texture and shadow in the foreground view, which breaks up the smooth, light-colored plane of sand. The movement of the frothy waves occupies the viewer's attention until the rich, blue-green color of the ocean leads the viewer's eye to the clear, powder blue color of the sky. The balance of the warm tones of the sand and the clear blues of the sky and water enhances the expansive feel of the view and draws the viewer's eye to the strong horizon line. Rating panel scores for the existing conditions photographs ranged from 9.8 to 14.8 (average score = 12.0). The score for this KOP indicates that this view is partially retained.

# LBT03 Beach at Long Beach Island Foundation for the Arts and Sciences

Project Occupation

Primary Field of View

Available Ocean Horizon

Attachment E: Photosimulations

Atlantic Shores Offshore Wind

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Long Beach Township, Ocean County, New Jersey

## KOP Information

Primary Field of View: East

Distance to Closest WTG: 24.87 miles

Camera Height: 16.64 ft

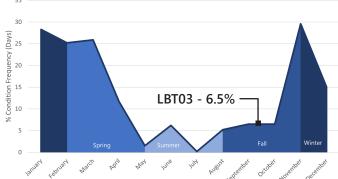
User Groups: Residents, Tourists,

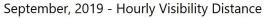
Fishermen

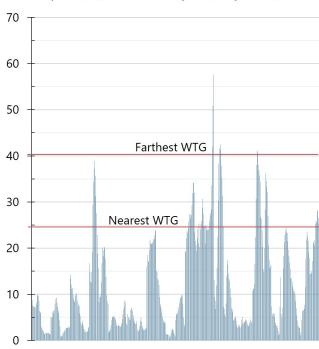
## Atmospheric Perspective

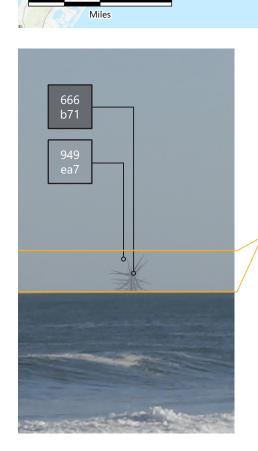
The effect the atmosphere has on the appearance of an object as viewed from a distance.

Condition Represented: 32+ Miles Visibility











Fully Visible

Platform

Screened

Mid-Tower

Screened

Fully Screened

Nacelle

Screened

### WTG Color Contrast

Color Contrast Rating:

**Horizon Occupation** 

Percentage of Project Occupation on Ocean Horizon: 18.6% (Project Occupation / Available Ocean Horizon)

Horizon

Ocean

124°

**FOV** 

166.0° Avail 80



Lighting Condition: Side lit

Season: Fall

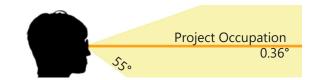
Sky Condition: Fair

Atmospheric Condition: >10 Miles

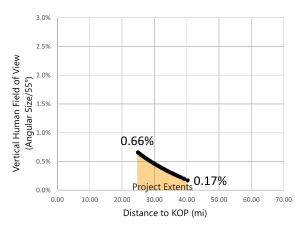
# SIMILAR VIEWING PARAMETERS:

KOP BLB02 Illustrates the project from 27.32 miles in the back lit condition. This provides an indication of how the turbines may appear from this KOP during midday conditions.

## Vertical Occupation



Percentage of Human FOV: 0.66% (0.36° / 55°) (Considering the nearest visible turbine)







fshore Wind Project - New Jersey

bservation Point: LBT03 - Beach at Long Beach Island Foundation for the Arts and Scinnent E: Photosimulations: Page 28 of 159

size is 15 inches wide by 10 inches high. At this size and focal length, the photosimulation should be viewed from a distance of 21 inches.

T in
This scale is designed to insure the photosimulation images are printed at the