Appendix C

Visual Assessment and Photo-Simulations

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VISUAL ASSESSMENT & PHOTO-SIMULATIONS

The United Illuminating Company

City of Milford,
Town of Orange,
City of West Haven,
City of New Haven

MILVON-WEST RIVER RAILROAD TRANSMISSION LINE 115-KV REBUILD PROJECT

January 2022

VISUAL ASSESSMENT & PHOTO SIMULATIONS

The United Illuminating Company ("UI" or the "Company") is proposing to rebuild its two existing single-circuit 115-kilovolt (kV) overhead lines that extend approximately 9.5 miles through portions of Milford, Orange, West Haven, and New Haven (the "Project"). The existing circuits extend in a southwest-northeast direction within the Connecticut DOT ("CT DOT") railroad corridor, primarily on railroad catenary structures, between UI's Milvon Substation (located in Milford) and the West River Substation (located in New Haven). At the request of UI, All-Points Technology Corporation, P.C. ("APT") completed this assessment to evaluate the potential visual effects of the Project from surrounding locations.

Project Setting

The Milvon-West River Project corridor is located within a densely developed portion of southern New Haven County. The general area contains multiple transportation corridors, including Interstate 95, U.S. Route 1, and the CT DOT railroad corridor. The existing UI transmission lines and supporting infrastructure occupy areas along both the north and south sides of the railroad corridor. CT DOT owns the railroad corridor, which varies in total width from 90 to 260 feet and, in the Project area, includes three or four railroad tracks. The shared railroad and electrical corridor is visually distinctive as a result of the catenary structures, the UI transmission line support columns, referred to as "bonnets", located on top of the catenary structures, and the 115-kV lines themselves. In several areas, the transmission lines are attached to free-standing structures.[1] Existing structures supporting UI's infrastructure range in height from approximately 55 feet above ground level ("AGL") to approximately 140 feet AGL.[2] The existing catenary structures and UI bonnets typically rise to a height of 60 feet AGL throughout the Project area.

The visual environment adjacent to the railroad corridor varies but is generally characterized by a mix of industrial and commercial areas, with residential areas interspersed, primarily in Milford and West Haven. Because it traverses a near-coastal region, the railroad corridor also extends near and (in some areas) crosses inland/tidal wetlands, marsh and waterways, including the Wepawaug, Indian, and West rivers.

The topography within the corridor and surrounding areas consists of relatively level terrain, and lacks high vantage points. Ground elevations range from approximately 5 feet above mean sea level ("AMSL") to approximately 100 feet AMSL. The edges of the railroad corridor are interspersed with mature mixed deciduous hardwood trees among narrow strips of primarily non-native, shrub/scrub invasive vegetation, escaped ornamentals associated with residential landscaping, and species common to freshwater and tidal wetlands.

Project Description

UI proposes to rebuild the 115-kV lines, primarily on double-circuit monopoles, mostly along the north side of the railroad corridor. With few exceptions, the proposed replacement structures will range from 70 feet to 170 feet AGL. Once the transmission lines are rebuilt, most of the existing support bonnets and all of the existing 115-kV wires/infrastructure will be removed from the top of the catenaries. In addition, other electrical infrastructure that is no longer needed (e.g., certain legacy wood poles, steel poles, and lattice towers) will be removed during the construction of this Project.

Methodology

APT used the combination of a predictive computer model, in-field analysis, and a review of various data sources to evaluate the visibility associated with the Project on both a quantitative and qualitative basis. The predictive model provides a measurable assessment of visibility throughout a pre-defined "Study Area" (in this case, one mile on either side of the railroad corridor) including private properties and other areas inaccessible for direct observations. The in-field analysis consisted of a field reconnaissance throughout the Study Area to record existing conditions, evaluate results of the model, and provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

Computer Modeling

To conduct this assessment, a predictive computer model was developed specifically for this project using ESRI's ArcMap GIS[3] software and available GIS data. The predictive model incorporates Project and Study Area-specific data, including: proposed transmission structure locations, heights and ground elevations; the surrounding topography; and existing vegetation and structures (the primary features that can block direct lines of sight).

A digital surface model ("DSM"), capturing both the natural and built features on the Earth's surface, was generated for the extent of the Study Area utilizing State of Connecticut 2016 LiDAR[4] LAS[5] data points. LiDAR is a remote-sensing technology that develops elevation data by measuring the time it takes for laser light to return from the surface to the instrument's sensors. The varying reflectivity of objects also means

[1] As one example, where the 115-kV lines diverge from the railroad catenary structures to span I-95.

[2] The tallest poles and infrastructure are currently and will continue to be located at the West Haven Train Station.

[3] ArcMap is a Geographic Information System desktop application developed by the Environmental Systems Research Institute for creating maps, performing spatial analysis, and managing geographic data.

[4] Light Detection and Ranging

that the "returns" can be classified based on the characteristics of the reflected light, normally into categories such as "bare earth," "vegetation," "road," "surface water" or "building". Derived from the 2016 LiDAR data, the LAS datasets contain the corresponding elevation point data and return classification values. The Study Area DSM incorporates the first return LAS dataset values that are associated with the highest feature in the landscape, typically a treetop, top of a building, and/or the highest point of other tall structures.

Once the DSM was generated, ESRI's Viewshed Tool was utilized to identify locations within the Study Area where the proposed transmission structures may be visible. ESRI's Viewshed Tool predicts visibility by identifying those cells[6] within the DSM that can be seen from an observer location. Cells where visibility was indicated were extracted and converted from a raster dataset to a polygon feature which was then overlaid onto aerial photograph and topographic base maps. Since the DSM includes the highest relative feature in the landscape, isolated "visible" cells are often indicated within heavily forested areas (e.g., from the top of the highest tree) or on building rooftops during the initial processing. It is recognized that these areas do not represent typical viewer locations and overstate the potential visibility of the Project transmission structures. As such, the resulting polygon feature is further refined by extracting those areas. The viewshed results are also cross-checked against the most current aerial photographs to assess whether significant changes (a new housing development, for example) have occurred since the time the LiDAR-based LAS datasets were captured.

The results of the viewshed analysis are intended to provide a representation of those areas where at least a portion of the proposed replacement structures may potentially be visible to the human eye without the aid of magnification, based on a viewer eye-height of five (5) feet above the ground and the combination of intervening topography, trees and other vegetation, and structures. However, the Project infrastructure may not necessarily be visible from all locations within those areas identified by the predictive model, which has limitations. For instance, the computer model cannot account for mass density, tree diameters and branching variability of trees, or the fact that visibility decreases as distance increases. As a result, some areas depicted on the viewshed map as theoretically offering potential visibility of the Project may be over-predictive because the quality of those views is not sufficient for the human eye to recognize the infrastructure or discriminate it from other surrounding or intervening objects.

Seasonal Visibility

Visibility also varies seasonally with increased, albeit obstructed, views occurring during "leaf-off" conditions. Beyond the variabilities associated with density of tree stands found within any given Study Area, each individual tree also has its own unique trunk, pole timber and branching patterns that provide varying degrees of screening in leafless conditions which cannot be precisely modeled. Seasonal visibility is therefore estimated based on a combination of factors including, but not necessarily limited to, the types, sizes, and density of trees within the Study area. Taking into account these considerations, areas depicting seasonal visibility on the Viewshed Analysis maps are intended to represent locations from where there is a potential for views through intervening trees, as opposed to indicating that leaf-off views will exist from within an entire seasonally-shaded area.

Field Reconnaissance

To supplement the results of the computer modeling efforts, APT completed in-field verification activities consisting of vehicular and pedestrian reconnaissance and photo-documentation. The field reconnaissance activities were completed on multiple occasions from March through November 2021 to obtain an understanding of existing views of the Project area during both leaf-on and leaf-off conditions.

Photographic Documentation and Simulations

During the Study Area reconnaissance, APT obtained photo-documentation of representative locations of existing conditions. At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") technology. Photographs were taken with a Canon EOS 6D digital camera body[7] and Canon EF 24 to 105 millimeter ("mm") zoom lens.

Photographic simulations were generated to portray scaled renderings of proposed replacement facilities from 22 representative locations along the Project corridor. Using field data, site plan information and 3-dimensional (3D) modeling software, spatially referenced models of the proposed infrastructure were generated and merged. The geographic coordinates obtained in the field for the photograph locations were incorporated into the model to produce virtual camera positions within the spatial 3D model. Photo-simulations were then created using a combination of renderings generated in the 3D model and photo-rendering software programs, which were ultimately composited and merged with the existing conditions photographs (using Adobe Photoshop image editing software). The scale of the subjects in the photograph (e.g., existing catenary structures with UI bonnets, free-standing poles and 115-kV lines) and the corresponding simulation (e.g., 115-kV double-circuit monopoles and modified catenaries) is proportional to the surroundings.

[5] An LAS (LASer) file is an industry-standard binary format for storing airborne LiDAR data.

[6] Each DSM cell size is 1 square meter.

[7] The Canon EOS 6D is a full-framed camera which includes a lens receptor of the same size as the film used in 35mm cameras. As such, the images produced are comparable to those taken with a conventional 35mm camera.

Photo-documentation of existing conditions and photo-simulations are presented in the Attachment 1. The photo-simulations are intended to provide the reader with a general understanding of the proposed changes in view characteristics associated with development of the Project.

The photographs presented in this report provide views of existing conditions along the Project corridor. The associated photo-simulations depict visual representations of the rebuilt 115-kV lines from vantage points near the railroad corridor, primarily in Milford and West Haven. The simulations portray the proposed replacement monopoles and rebuilt 115-kV facilities, and the removal of existing UI 115-kV facilities and bonnets from the CT DOT railroad catenary structures.

Conclusions

As presented in Attachment 2 on the viewshed mapping, the zone of visibility associated with the Project generally extends to distances of 0.5 mile; in some areas over undeveloped, open water and marsh, it extends to and beyond 0.75 mile. The railroad corridor has historically been, and continues to be, an unmistakable landmark throughout the Project area. As is the case today, at these distances (and beyond), the tops of the new transmission line structures and transmission circuits will not be prominent features, particularly with the amount of intervening existing infrastructure common within the Project area.

Although some locations will experience changes from existing conditions due to the relocation and modified heights of new structures, visual effects resulting from the Project are balanced by the removal of bonnets and other supporting infrastructure, particularly along the southern side of the railroad corridor.

In terms of changes in character to the railroad corridor and its viewshed, it is important to consider that 330 existing catenary bonnets and 25 free-standing steel poles/lattice towers/unique structures comprised of w-flanges will be removed (or, in some cases significantly lowered[8]) as part of the Project and replaced with 158 new transmission line poles and 2 OPGW[9] poles. Typically, the existing catenary structures rise to 60 feet and UI will be removing approximately 15 feet off the top (bonnets), including 12 feet of horizontal arms on multiple levels. In most locations, several dual catenary bonnets will be replaced with one double-circuit steel pole. Although the heights of the new poles will be substantially taller than the existing bonnets, the increased heights allow for longer spans between poles, ultimately minimizing UI's total infrastructure along the Project corridor.

Multiple historic resources listed on the National Register of Historic Places are located in the City of Milford, including The Academy of Our Lady of Mercy – Lauralton Hall, River Park Historic District, U.S. Post Office – Milford Main, St. Peter's Episcopal Church, and Taylor Memorial Library. These resources will have views of some of the proposed new structures, each to varying degrees. For instance, at The Academy of Our Lady of Mercy – Lauralton Hall property, most of the visibility of the rebuilt lines and associated structures would be limited to the open athletic fields through intervening vegetation. Views from the River Park Historic District will be limited similarly in nature and extent, and restricted to the southern portion of this historic district that encompasses the municipal center of Milford.

The three remaining historic resources will likely experience year-round visibility of new structures, as they have more direct views to the railroad corridor.

Commercial development, transportation and electrical infrastructure, and open water/marshes are the dominant characteristics of the Project Area. In several locations, there are also residences in close proximity to the railroad corridor, most of which have at least partial views of existing railroad and electrical infrastructure. Where direct lines of sight exist at close distances, the new poles may become more prominent features of the landscape in some locations. There will be some tradeoffs, given the significant reduction in catenary bonnets and longer distances between UI support structures.

The most substantial change from existing to proposed structure heights will occur at the West River crossing, where four (4) 120-foot-tall monopoles are required to replace the 89-foot-tall catenary bonnets, which will then be removed. This area contains extensive open marshland on either side of the West River and, where developed, is characterized by commercial and industrial land uses.

Limitations

The photo-simulations in Attachment 1 provide a representation of potential views after the Project is developed, under similar settings as those encountered during the field reconnaissance. Views can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location.

The viewshed maps presented in Attachment 2 depict areas where portions of the Project may potentially be visible to the human eye without the aid of magnification based on a viewer eye-height of five (5) feet above the ground and taking into consideration intervening topography, tree canopy, and existing development.

[8] UI intends to modify 11 existing structures by lowering them to varying degrees

[9] OPGW means Optical Ground Wire

ATTACHMENT 1

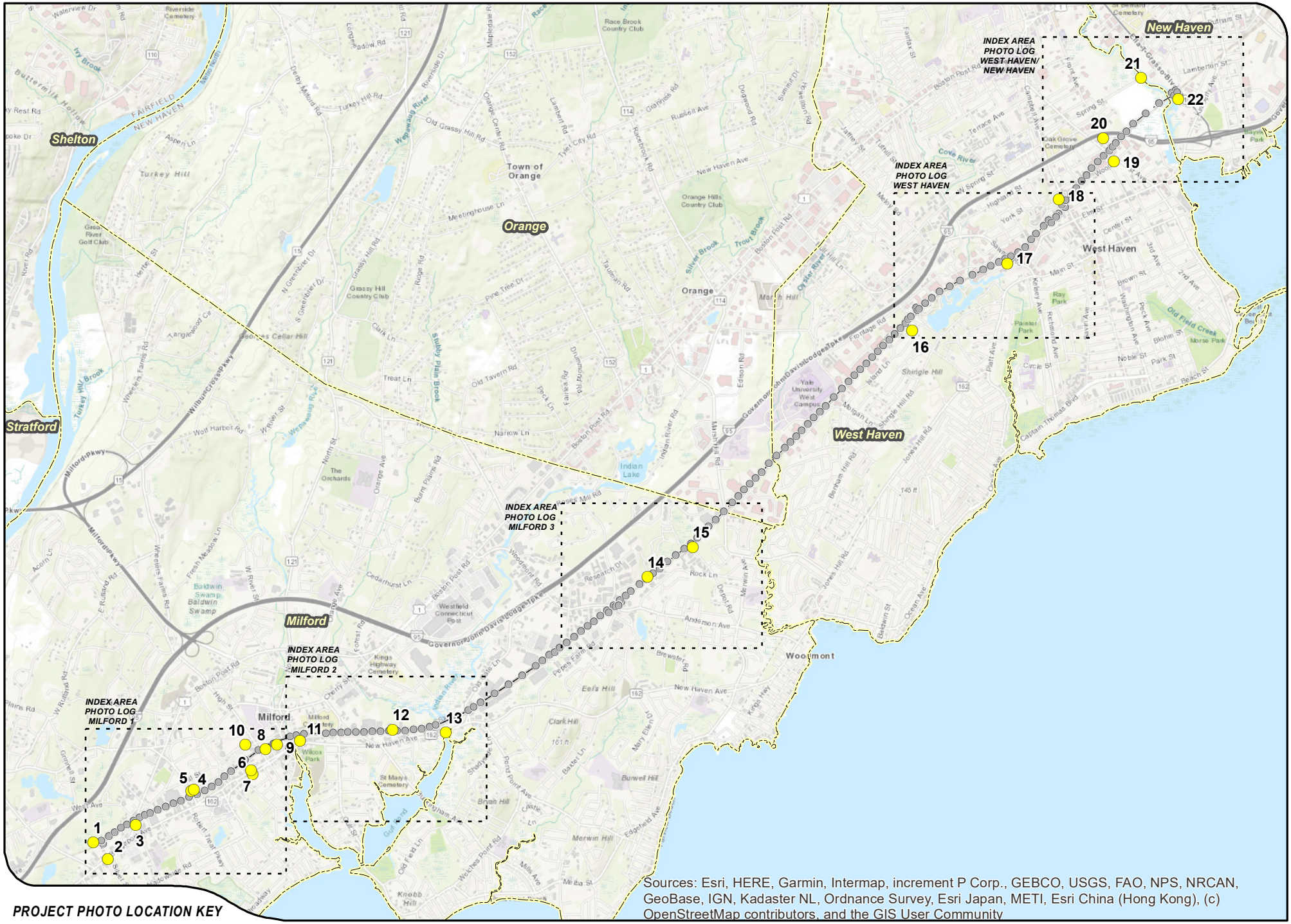
PHOTO KEY, LOGS &
SIMULATIONS

PHOTO KEY

Photo No.	Location	Existing Transmission Line Infrastructure Depicted in Photograph	Project Modifications Depicted in Simulation
1	Beaver Brook Nature Trails - Milford; north of railroad corridor and Milvon Substation. Beaver Brook marsh walking trail loops along the edge of fresh water marsh habitat and the Beaver Brook canal, bordered by Metro North Railroad and nearby I-95.	Center of Photo: Three existing monopoles coming into Milvon Substation from the Milvon to Devon lines and three existing monopoles coming out of Milvon Substation. Left of Photo: Catenary structure with bonnets on the north and south sides of railroad tracks and a couple wood poles behind vegetation.	Left of Photo: Catenary structure with bonnets and wood poles removed; Two new steel poles (one located on south side of tracks and one located on north side of tracks); Vegetation removal will take place on the north side of the tracks.
2	Bridgeport Road - Milford; south of Milvon Substation in a commercially developed area.	Substation and existing monopoles associated with lines coming out and coming into the station. Two bonnets to the east of the grouping of existing steel monopoles.	Bonnets and existing 115-kV facilities will be removed. Two new steel poles to be installed (one located on south side of tracks and one located on north side of tracks).
3	Boston Post Road at Railroad Overpass - Milford; south of West Avenue intersection. Commercial development south of the railroad corridor; mixed residential/commercial development north of railroad corridor.	Catenary structures with bonnets on the north and south sides of the railroad tracks.	Bonnets will be removed. One new steel pole to be installed on the south side of tracks.
4	West End of Pearl Hill Street at Clark Street Intersection - Milford; north of railroad corridor. Commercial development west of Clark Street overpass; residential development to the east.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. One new steel pole to be installed on the north side of tracks. Vegetation removal will take place on the north side of the tracks.
5	Pearl Hill Street - Milford; north of railroad corridor in a residential neighborhood.	Catenary structures with bonnets on the north and south sides of the railroad tracks.	Bonnets and existing 115-kV facilities will be removed. One new steel pole to be installed on the north side of tracks
6	South Broad Street – Milford; south of railroad corridor in a mixed commercial/residential area. Overlooking Milford Green.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. New steel poles will be installed on the north side of tracks.
7	Broad Street - Milford; south of railroad corridor.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. One new steel pole to be installed on the north side of tracks
8	Railroad Avenue South (looking northeast); West of Milford Center for the Arts & Train Station – Milford; south of railroad corridor in a commercially developed area. Residential development farther north of railroad corridor.	One existing steel pole on south side of tracks supporting UI's existing 115-kV facilities and two Metro North signal wires. One bonnet on top of catenary bridge structure located on north side of tracks and one bonnet on top of catenary structure in photo background.	Top Section of the existing steel pole will be removed- bottom sections will remain to continue to support the two Metro North signal wires (not seen due to building in photo view). Bonnets will be removed and four additional double circuit steel poles will be installed on north side of tracks (one in foreground; three in background).
9	Railroad Avenue South (looking west); East of Milford Center for the Arts & Train Station – Milford; south of railroad corridor in a commercially developed area. Residential development farther north of railroad corridor.	Two existing steel poles on south side of tracks supporting UI's existing 115-kV facilities and two Metro North signal wires. Three Bonnets on top of catenary structures are located on the north side of the tracks.	Top Sections of the existing steel poles will be removed- bottom sections will remain to continue to support the two Metro North signal wires. Bonnets will be removed. Two new double circuit steel poles will be installed on north side of tracks.
10	Jepson Drive; South of Academy of Our Lady of Mercy, Lauralton Hall – Milford; north of railroad corridor in mixed residential/commercial area.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and exisitng 115-kV facilities will be removed. One new steel pole to be installed on the north side of tracks.
11	Prospect Street North of Buckingham Avenue - Milford; south of railroad corridor in a mixed commercial/residential area.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. Two new steel pole to be installed on the north side of tracks.
12	Wampus Lane Near its Terminus – Milford; south of railroad corridor.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. New steel poles to be installed between Wampus Lane and north side of tracks. Vegetation removalwill take place on the north side of tracks.
13	491 New Haven Avenue; West of Indian River Crossing – Milford; south of railroad corridor and west of Indian River. Mixed commercial and residential development on both sides of river, south of tracks. Open marsh north of the tracks.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. New steel poles will be installed on the south side of tracks.

PHOTO KEY (Continued)

Photo No.	Location	Existing Transmission Line Infrastructure Depicted in Photograph	Project Modifications Depicted in Simulation
14	Heenan Drive at McQuillan Drive – Milford; north of railroad corridor in a mixed residential/commercial area.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. New steel poles will be installed on the north side of tracks. Vegetation removal will take place on the north side of tracks.
15	Depot Road at its Terminus – Milford; south of railroad corridor in an industrial/commercial area south of tracks. Mixed residential/commercial development north of the tracks.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. The existing steel pole on the north side of tracks will be removed while only the top portion of the existing steel pole on the south side of the tracks will be removed; bottom section will remain to continue to support the two Metro North signal wires. New steel poles will be installed on the north side of tracks. Vegetation Removal will take place on the north side of the tracks.
16	Island Lane - West Haven. South of the Allings Crossing Road overpass in a predominantly residential area.	Four existing lattice towers (two on north side of tracks and two on south side of tracks); existing catenary structure with bonnets on the north and south sides.	Bonnets and existing 115-kV facilities will be removed. The top portions of the existing lattice towers will be removed (the bottom section will remain to continue supporting the MNR electrical facilities). Three new double circuit steel poles will be installed on the north side of tracks. Vegetation Removal will take place on the north side of tracks.
17	Railroad Avenue at West Haven Station – West Haven	Six existing steel poles (three on north side of tracks and three on south side of tracks- one of these three is in the far background); Multiple bonnets on top of catenary structure northern and southern sides in photo background.	All bonnets will be removed. Two steel poles on south side of tracks in foreground will remain with 115-kV arms and insulators removed; steel pole on south side of tracks in background will be removed in full. Two single circuit steel poles (two in foreground) on north side of tracks will be replaced with new double circuit steel poles; the top section of the existing steel pole (in background) on north side of tracks will be removed- bottom section will remain to continue to support the Metro North electrical facilities. Multiple new double circuit steel poles on the north side of the tracks visible in background.
18	York Street; West of Campbell Avenue Intersection – West Haven; north of railroad corridor in a mixed commercial/residential area.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed. New steel poles will be installed on the north and south sides of tracks in order to bring the 115-kV facilities into UI's Elmwest Substation.
19	Wood Street - West Haven; south of railroad corridor, west of 1st Avenue within a mixed commercial (north of Wood Street) and residential (south) area.	Multiple bonnets supporting UI's existing 115-kV facilities (three on north side of tracks and three on south side of tracks)	Bonnets and existing 115-kV facilities removed; new double circuit steel pole and conductors installed on north side of tracks.
20	Mix Avenue – West Haven; north of railroad corridor, east of 1st Avenue in a mixed commercial/residential area.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Majority of bonnets and all existing 115-kV facilities removed; existing bonnets will remain on the south side of tracks between 1st Avenue and West River to support UI's Shield Wire to provide shielding for MNR facilities; Four existing bonnets (adjacent to 1st Avenue) will be replaced with shorter bonnets in order to support a new shield wire for Metro North; new double circuit steel pole and conductors installed on north side of tracks.
21	Spring Street - West Haven. West River Crossing. Existing railroad and electrical corridor extends through undeveloped marsh on west side of river and commercial/industrial development on east side.	Four bonnets supporting UI's existing 115-kV facilities on top of catenary structure northern and southern sides (two bonnets on north side of tracks and two bonnets on south side of tracks); Existing abandoned steel structures on the north side of tracks.	Abandoned structures will be removed and three of four bonnets will be removed. Four new steel poles installed toward the left of this photo (eastern portion).
22	New Haven Fire Training Facility – New Haven; south of railroad corridor in a commercially developed area.	Catenary structures with bonnets on the north and south sides of railroad tracks.	Bonnets and existing 115-kV facilities will be removed on the north side of the tracks. Existing 115-kV facilities will be removed on the south side of the tracks with the bonnets remaining to continue to support UI's Shield Wire to provide shielding for the MNR facilities. New steel poles will be installed on the north side of tracks.



PROJECT PHOTO LOCATION KEY

Legend

Photographic Location | Proposed Structure | Project Transmission Line | Municipal Boundary

N W E S

1 0.5 0 1 Miles

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTO LOG, MILFORD 1
(PHOTOS 1-10)

Legend

Photographic Location | Proposed Structure | Project Transmission Line | Municipal Boundary

N W E S

700 350 0 700 Feet

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
1	**VIEW FROM BEAVER BROOK NATURE TRAILS NEAR MILVON SUBSTATION - MILFORD**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
1	**VIEW FROM BEAVER BROOK NATURE TRAILS NEAR MILVON SUBSTATION - MILFORD**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
2	**VIEW FROM BRIDGEPORT AVENUE NEAR MILVON SUBSTATION - MILFORD**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
2	**VIEW FROM BRIDGEPORT AVENUE NEAR MILVON SUBSTATION - MILFORD**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
3	**VIEW FROM BOSTON POST ROAD AT RAILROAD OVERPASS - MILFORD**	**NORTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
3	**VIEW FROM BOSTON POST ROAD AT RAILROAD OVERPASS - MILFORD**	**NORTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
4	**VIEW FROM WEST END OF PEARL HILL STREET AT CLARK STREET INTERSECTION - MILFORD**	**SOUTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
4	**VIEW FROM WEST END OF PEARL HILL STREET AT CLARK STREET INTERSECTION - MILFORD**	**SOUTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 11/24/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
5	**VIEW FROM PEARL HILL STREET - MILFORD**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
5	**VIEW FROM PEARL HILL STREET - MILFORD**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
6	**VIEW FROM SOUTH BROAD STREET – MILFORD**	**NORTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
6	**VIEW FROM SOUTH BROAD STREET – MILFORD**	**NORTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 11/24/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
7	**VIEW FROM BROAD STREET – MILFORD**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
7	**VIEW FROM BROAD STREET – MILFORD**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
8	**VIEW FROM RAILROAD AVENUE SOUTH; WEST OF MILFORD CENTER FOR THE ARTS – MILFORD**	**NORTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
8	**VIEW FROM RAILROAD AVENUE SOUTH; WEST OF MILFORD CENTER FOR THE ARTS – MILFORD**	**NORTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

EXISTING

PHOTO	LOCATION	ORIENTATION
9	**VIEW FROM RAILROAD AVENUE SOUTH; EAST OF MILFORD CENTER FOR THE ARTS – MILFORD**	**WEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
9	**VIEW FROM RAILROAD AVENUE SOUTH; EAST OF MILFORD CENTER FOR THE ARTS – MILFORD**	**WEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 11/24/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
10	**VIEW FROM JEPSON DRIVE; SOUTH OF ACADEMY OF OUR LADY OF MERCY, LAURALTON HALL – MILFORD**	**SOUTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
10	**VIEW FROM JEPSON DRIVE; SOUTH OF ACADEMY OF OUR LADY OF MERCY, LAURALTON HALL – MILFORD**	**SOUTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTO LOG, MILFORD 2
(PHOTOS 11-13)

Legend

Photographic Location · Proposed Structure — Project Transmission Line · Municipal Boundary

N W E S

700 350 0 700 Feet

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
11	**VIEW FROM PROSPECT STREET NORTH OF BUCKINGHAM AVENUE - MILFORD**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
11	**VIEW FROM PROSPECT STREET NORTH OF BUCKINGHAM AVENUE - MILFORD**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
12	**VIEW FROM WAMPUS LANE NEAR ITS TERMINUS – MILFORD**	**EAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
12	**VIEW FROM WAMPUS LANE NEAR ITS TERMINUS – MILFORD**	**EAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
13	**VIEW FROM 491 NEW HAVEN AVENUE; WEST OF INDIAN RIVER CROSSING – MILFORD**	**NORTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
13	**VIEW FROM 491 NEW HAVEN AVENUE; WEST OF INDIAN RIVER CROSSING – MILFORD**	**NORTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTO LOG, MILFORD 3
(PHOTOS 14-15)

Legend

Photographic Location | Proposed Structure | Project Transmission Line | Municipal Boundary

N W E S

700 350 0 700 Feet

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
14	**VIEW FROM HEENAN DRIVE AT MCQUILLAN DRIVE – MILFORD**	**NORTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
14	**VIEW FROM HEENAN DRIVE AT MCQUILLAN DRIVE – MILFORD**	**EAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
15	**VIEW FROM DEPOT ROAD AT ITS TERMINUS – MILFORD**	**WEST**

ALL-POINTS TECHNOLOGY CORPORATION

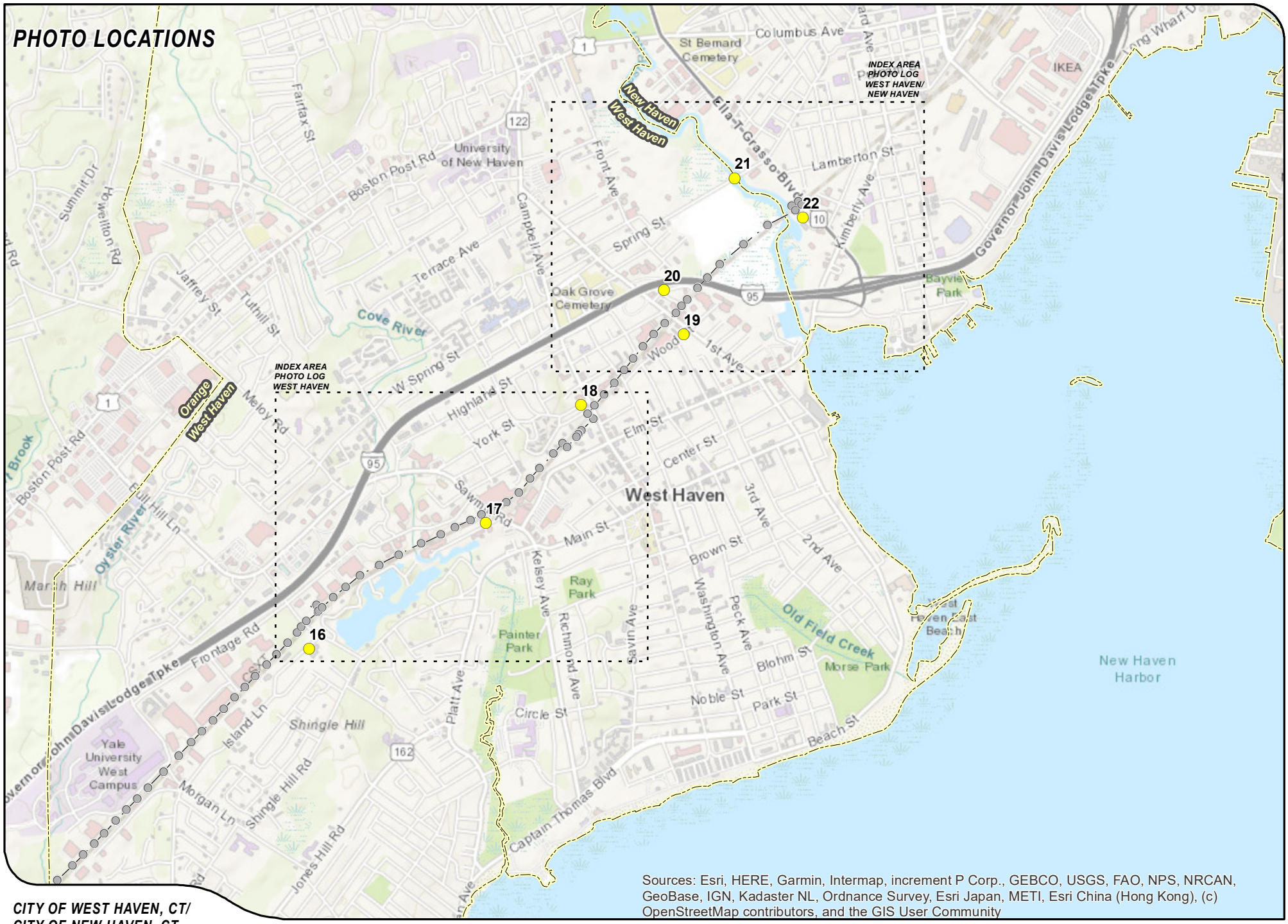
UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
15	**VIEW FROM DEPOT ROAD AT ITS TERMINUS – MILFORD**	**WEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI



CITY OF WEST HAVEN, CT/
CITY OF NEW HAVEN, CT

Legend

Photographic Location | Proposed Structure | Project Transmission Line | Municipal Boundary

**Note: Index Areas refer to subsequent Photolog Maps*

2,250 1,125 0 2,250 Feet

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTO LOG, WEST HAVEN
(PHOTOS 16-18)

Legend

Photographic Location · Proposed Structure — Project Transmission Line · Municipal Boundary

N W E S

700 350 0 700 Feet

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
16	**VIEW FROM ISLAND LANE; SOUTH OF ALLINGS CROSSING ROAD – WEST HAVEN**	**NORTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
16	**VIEW FROM ISLAND LANE; SOUTH OF ALLINGS CROSSING ROAD – WEST HAVEN**	**NORTH**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
17	**VIEW FROM RAILROAD AVENUE AT WEST HAVEN STATION – WEST HAVEN**	**WEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
17	**VIEW FROM RAILROAD AVENUE AT WEST HAVEN STATION – WEST HAVEN**	**WEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

EXISTING

PHOTO	LOCATION	ORIENTATION
18	**VIEW FROM YORK STREET; WEST OF CAMPBELL AVENUE INTERSECTION – WEST HAVEN**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
18	**VIEW FROM YORK STREET; WEST OF CAMPBELL AVENUE INTERSECTION – WEST HAVEN**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTO LOG, WEST HAVEN/ NEW HAVEN (PHOTOS 19-22)

Legend

Photographic Location · Proposed Structure · Project Transmission Line · Municipal Boundary

700 350 0 700 Feet

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
19	**VIEW FROM WOOD STREET; WEST OF 1ST AVENUE INTERSECTION - WEST HAVEN**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
19	**VIEW FROM WOOD STREET; WEST OF 1ST AVENUE INTERSECTION - WEST HAVEN**	**NORTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
20	**VIEW FROM MIX AVENUE; EAST OF 1ST AVENUE – WEST HAVEN**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
20	**VIEW FROM MIX AVENUE; EAST OF 1ST AVENUE – WEST HAVEN**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
21	**VIEW FROM SPRING STREET CROSSING OF WEST RIVER – WEST HAVEN**	**EAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
21	**VIEW FROM SPRING STREET CROSSING OF WEST RIVER – WEST HAVEN**	**EAST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PHOTOGRAPHED ON 4/5/2021

EXISTING

PHOTO	LOCATION	ORIENTATION
22	**VIEW FROM NEW HAVEN FIRE TRAINING FACILITY – NEW HAVEN**	**SOUTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

PROPOSED

PHOTO	LOCATION	ORIENTATION
22	**VIEW FROM NEW HAVEN FIRE TRAINING FACILITY – NEW HAVEN**	**SOUTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

UI

ATTACHMENT 2

VIEWSHED ANALYSIS MAPPING

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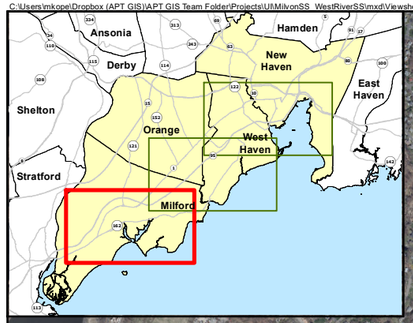

Map Sheet 2
Map Sheet 1

Woodmont Substation

Milford

Milvon Substation

City Pond

Mondo Pond

Beaver Brook Reservoir

Beaver Pond

Beaver Brook

SILVER SANDS STATE PARK

Milford Harbor

Calf Pen Meadow Creek

Eels Hill 134.48' AMSL

Clark Hill 157.44' AMSL

Bryan Hill 134.18' AMSL

Burwell Hill 138.08' AMSL

Merwin Hill 95.12' AMSL

Krabb Hill 49.2' AMSL

CONNECTICUT TURNPIKE

GOVERNOR JOHN DAVIS LODGE TURNPIKE

BOSTON POST ROAD

WEST RIVER STREET

OLD GATE LANE

WOODMONT ROAD

EASTERN STEEL ROAD

PEPES FARM ROAD

HIGGINS DRIVE

HUNTERS RUN

ANDERSON AVENUE

BREWSTER ROAD

QUARRY ROAD

MCCOUN LANE

DEPOT ROAD

ESSEX DRIVE

ROCK LANE

QUIRK ROAD

LONDONDERRY LANE

LINE ROW

LINNTZ

LINDY STREET

MORRIS LANE

WAMPUS LANE

BUCKINGHAM AVENUE

NEW HAVEN AVENUE

EVERGREEN AVENUE

CINDY CIRCLE

DAVIS DRIVE

SYLVAN COURT

PARK PLACE

BUCKINGHAM PLACE

HARBORSIDE DRIVE

SHIPYARD LANE

FACTORY LANE

DARINA PLACE

PROSPECT STREET

RIVER STREET

CONSTITUTION DRIVE

RAILROAD AVENUE

DEPOT STREET

WEST TOWN STREET

JEPSON DRIVE

SPRING LANE

VICTORY CRES

HILL STREET

BERGEN AVENUE

CLARK STREET

SOUTH BROAD STREET

BROAD STREET

CENTER STREET

HIGH STREET

HELMS STREET

LAFAYETTE STREET

NOBLE AVENUE

PEARL HILL STREET

GOLDEN HILL STREET

FENWAY STREET

NORTH

ROBERT TREAT DRIVE

ROBERT TREAT PARKWAY

SEABURY AVENUE

SEAMANS LANE

SOUTH WASHINGTON STREET

MARION AVENUE

SILVER SANDS PARKWAY

WASHINGTON STREET

SHARON COURT

DORSEY LANE

WEST AVENUE

STRAM ROAD

ERNA AVENUE

GULF STREET

POND POINT AVENUE

BRIDGEPORT AVENUE

1

95

121

162

736

Legend

- Proposed Structure
- Project Transmission Line
- Year-Round Visibility
- Areas of Potential Seasonal Visibility
- Study Area (1 Mile Radius)
- Half Mile Radius
- Municipal Boundary
- Scenic Highway*
- Trail*
- DEEP Boat Launches*
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal*
- Land Trust*
- Municipal*
- Private*
- State*

N

1,000 500 0 1,000 Feet

Limitations

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Forest canopy height derived from LiDAR data.

Map Sources

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CTDEEP's data library (http://www.ct.gov/deep)
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Scenic Roads: CTDOT State Scenic Highways (2015)
Connecticut Forest and Parks Association, Connecticut Walk Books East and West

Map Date: December 14, 2021

Viewshed Analysis Map
Milvon-West River Railroad Transmission Line 115-kV Rebuild Project

Milford, CT
Map Sheet 1 of 3

UI

ALL-POINTS TECHNOLOGY CORPORATION

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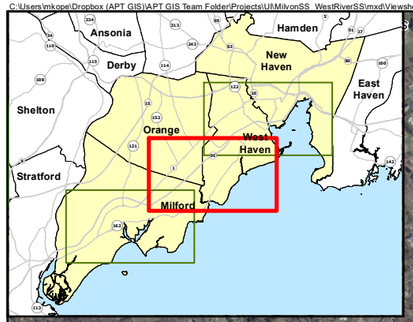

Orange
West Haven
Milford
Allings Crossing Substation
Woodmont Substation
Marsh Hill 236.16' AMSL
Shingle Hill 170.56' AMSL
Jones Hill 144.32' AMSL
Map Sheet 3
Map Sheet 1
Map Sheet 2
Lower Phipps Lake
Indian Lake
Rose Mill Pond
Clark Pond
Cove River
Oyster River
New Haven Harbor
Smith Rock
Twin Rocks
OLD TAVERN ROAD RECREATION AREA
RAY PARK
PAINTER PARK
MORSE PARK
WEST HAVEN HIGH SCHOOL
114
1
152
162
705
95
SAW MILL ROAD
RAILROAD AVENUE
HOOD TERRACE
WAGNER PLACE
ELM STREET
ORCHARD STREET
SAVIN AVENUE
CAMPBELL AVENUE
UNION AVENUE
WASHINGTON AVENUE
3RD AVENUE
MAIN STREET
LAKE AVENUE
FOREST TERRACE
WOODY LANE
SHADY LANE
CEDAR LANE
PHIPPS DRIVE
ALLINGS CROSSING ROAD
CARRIAGE DRIVE
MARYDALE ROAD
MARTIN LANE
ANDREA DRIVE
SHERRY CIRCLE
MARKS DRIVE
ALEXANDER DRIVE
ISLAND LANE
DONNA LANE
CONNECTICUT TURNPIKE
FRONTAGE ROAD
EDER ROAD
HEFFERNAN DRIVE
CALEGARI DRIVE
FRANKLIN ROAD
MILLS DRIVE
MOUNT PLEASANT ROAD
BAILEY DRIVE
MORGAN LANE
RIDGE HOLLOW ROAD
PERRY MERRILL DRIVE
DOWN DRAFT CIRCLE
MARSH HILL ROAD
ROBINSON BOULEVARD
CONNAR ROAD
CASCADE BOULEVARD
MARBLE LANE
BARN LANE
TURTLE LANE
ELLA CIRCLE
MCQUILLAN DRIVE
QUARRY ROAD
CORA PLACE
WAYNE ROAD
SALEY ROAD
OXFORD ROAD
ESSEX DRIVE
DEPOT ROAD
ROCK LANE
QUIRK ROAD
LONDONDERRY LANE
HUNTERS RUN
ANDERSON AVENUE
NEW HAVEN AVENUE
BREWSTER ROAD
PERES FARM ROAD
EASTERN STEEL ROAD
HIGGINS DRIVE
WOODMONT ROAD
OLD GATE LANE
GOVERNOR JOHN DAVIS LODGE TURNPIKE
BOSTON POST ROAD

Legend

- Proposed Structure
- Project Transmission Line
- Year-Round Visibility
- Areas of Potential Seasonal Visibility
- Study Area (1 Mile Radius)
- Half Mile Radius
- Municipal Boundary
- Scenic Highway*
- Trail*
- DEEP Boat Launches*
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal*
- Land Trust*
- Municipal*
- Private*
- State*

N

1,000 500 0 1,000 Feet

Limitations

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Map Date: December 14, 2021

Viewshed Analysis Map
Milvon-West River Railroad Transmission Line 115-kV Rebuild Project

Milford, Orange, and West Haven, CT
Map Sheet 2 of 3

UI

All-Points Technology Corporation

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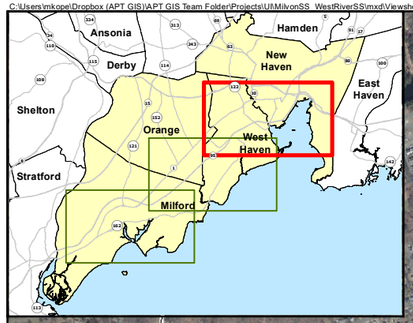

Orange
West Haven
New Haven
East Haven
Allingtn Hill 301.76' AMSL
West River Memorial Park Pond
WEST RIVER MEMORIAL PARK
CENTER GREEN
RICHARD C. LEE SCHOOL
HILL K-5 SCHOOL
West River Substation
Elmwest Substation
Allings Crossing Substation
Sawmill Pond
Lower Phipps Lake
RAY PARK
PAINTER PARK
BAYVIEW PARK
QUINNIPIAC PARK
Quinnipiac River
Reservoir Hill 119.08' AMSL
FORT WOOSTER PARK
Beacon Hill 190.24' AMSL
EAST SHORE PARK
New Haven Harbor
Chidsey Hill 104.96' AMSL
Raynham Hill 154.16' AMSL
FORT HALE PARK
Black Rock
MORSE PARK
Map Sheet 3
Map Sheet 2
MORRIS STREET
HURLBUT STREET
WILSON STREET
LAMBERTON STREET
TIMBERLAKE STREET
PLYMOUTH STREET
ELM GRASSO BOULEVARD
ROAD A
FRONTAGE ROAD
THILL STREET
CLINTON PLACE
GOVERNOR JOHN DAVIS LODGE TURNPIKE
MIX AVENUE
CONNECTICUT TURNPIKE
PENT ROAD
OLIVER LANE
RICHARDS STREET
WOOD STREET
THOMPSON STREET
MAPLE STREET
1ST AVENUE
4TH AVENUE
BASSETT COURT
WHARTON STREET
WHARTON PLACE
MYRTLE AVENUE
FERN STREET
COLLIS STREET
STEVENS AVENUE
FORK STREET
CLARK STREET
GEORGES STREET
ELM STREET
WASHINGTON AVENUE
UNION AVENUE
CAMPBELL AVENUE
SAVIN COURT
SAVIN AVENUE
3RD AVENUE
WEST CLARK STREET
GOODHUE STREET
ORCHARD STREET
PHILLIPS TERRACE
SAW MILL ROAD
RAILROAD AVENUE
HOOD TERRACE
WAGNER PLACE
CANDEE AVENUE
MAIN STREET
LEETE ROAD
EDMA ROAD
FRONTAGE ROAD
WOODY LANE
SWAN LANE
LAKE AVENUE
CEDAR LANE
PHIPPS DRIVE
ALLINGS CROSSING ROAD
ISLAND LANE
EDER ROAD
HODGKIN LANE
Ball Island
1
5
10
34
91
95
122
162
337

Legend

- Proposed Structure
- Project Transmission Line
- Year-Round Visibility
- Areas of Potential Seasonal Visibility
- Study Area (1 Mile Radius)
- Half Mile Radius
- Municipal Boundary
- Scenic Highway*
- Trail*
- DEEP Boat Launches*
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal*
- Land Trust*
- Municipal*
- Private*
- State*

N

1,000 500 0 1,000 Feet

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Connecticut Forest and Parks Association, Connecticut Walk Books East and West

Map Date: December 14, 2021

Viewshed Analysis Map
Milvon-West River Railroad Transmission Line 115-kV Rebuild Project

Orange, New Haven, and West Haven, CT
Map Sheet 3 of 3

UI

ALL-POINTS TECHNOLOGY CORPORATION

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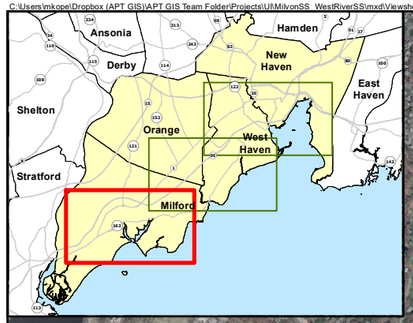

Map Sheet 2
Map Sheet 1

Woodmont Substation

Milford

Milvon Substation

City Pond

Mondo Pond

Beaver Brook Reservoir

Beaver Pond

Beaver Brook

SILVER SANDS STATE PARK

Milford Harbor

Calf Pen Meadow Creek

Eels Hill 134.48' AMSL

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CONNECTICUT TURNPIKE

GOVERNOR JOHN DAVIS LODGE TURNPIKE

BOSTON POST ROAD

WEST RIVER STREET

OLD GATE LANE

WOODMONT ROAD

EASTERN STEEL ROAD

PEPES FARM ROAD

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DEPOT ROAD

ESSEX DRIVE

ROCK LANE

QUIRK ROAD

LONDONDERRY LANE

LINE ROW

LINNTZ

LINDY STREET

MORRIS LANE

WAMPUS LANE

BUCKINGHAM AVENUE

NEW HAVEN AVENUE

EVERGREEN AVENUE

CINDY CIRCLE

DAVIS DRIVE

SYLVAN COURT

PARK PLACE

BUCKINGHAM PLACE

HARBORSIDE DRIVE

SHIPYARD LANE

FACTORY LANE

DARINA PLACE

PROSPECT STREET

RIVER STREET

CONSTITUTION DRIVE

RAILROAD AVENUE

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WEST TOWN STREET

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HILL STREET

BERGEN AVENUE

CLARK STREET

SOUTH BROAD STREET

BROAD STREET

CENTER STREET

HIGH STREET

HELMS STREET

LAFAYETTE STREET

NOBLE AVENUE

PEARL HILL STREET

GOLDEN HILL STREET

FENWAY STREET

NORTH

ROBERT TREAT DRIVE

ROBERT TREAT PARKWAY

SEABURY AVENUE

SEAMANS LANE

SOUTH WASHINGTON STREET

MARION AVENUE

SILVER SANDS PARKWAY

WASHINGTON STREET

SHARON COURT

DORSEY LANE

WEST AVENUE

STRAM ROAD

ERNA AVENUE

GULF STREET

POND POINT AVENUE

BRIDGEPORT AVENUE

1

95

121

162

736

Legend

- Proposed Structure
- Project Transmission Line
- Year-Round Visibility
- Areas of Potential Seasonal Visibility
- Study Area (1 Mile Radius)
- Half Mile Radius
- Municipal Boundary
- Scenic Highway*
- Trail*
- DEEP Boat Launches*
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal*
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- Municipal*
- Private*
- State*

N

1,000 500 0 1,000 Feet

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Map Date: December 14, 2021

Viewshed Analysis Map
Milvon-West River Railroad Transmission Line 115-kV Rebuild Project

Milford, CT
Map Sheet 1 of 3

UI

ALL-POINTS TECHNOLOGY CORPORATION

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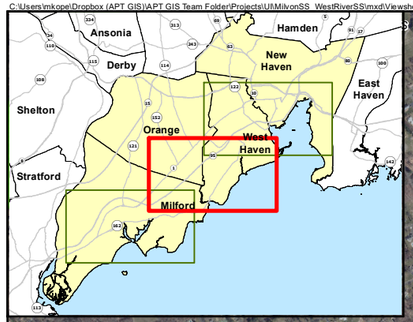

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West Haven
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Marsh Hill 236.16' AMSL
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Map Sheet 3
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Rose Mill Pond
Clark Pond
Cove River
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OLD TAVERN ROAD RECREATION AREA
RAY PARK
PAINTER PARK
MORSE PARK
WEST HAVEN HIGH SCHOOL
114
1
152
162
705
95
SAW MILL ROAD
RAILROAD AVENUE
HOOD TERRACE
WAGNER PLACE
ELM STREET
ORCHARD STREET
SAVIN AVENUE
CAMPBELL AVENUE
UNION AVENUE
WASHINGTON AVENUE
3RD AVENUE
MAIN STREET
LAKE AVENUE
FOREST TERRACE
WOODY LANE
SHADY LANE
CEDAR LANE
PHIPPS DRIVE
ALLINGS CROSSING ROAD
CARRIAGE DRIVE
MARYDALE ROAD
MARTIN LANE
ANDREA DRIVE
SHERRY CIRCLE
MARKS DRIVE
ALEXANDER DRIVE
ISLAND LANE
DONNA LANE
CONNECTICUT TURNPIKE
FRONTAGE ROAD
EDER ROAD
HEFFERNAN DRIVE
CALEGARI DRIVE
FRANKLIN ROAD
MILLS DRIVE
MOUNT PLEASANT ROAD
BAILEY DRIVE
MORGAN LANE
RIDGE HOLLOW ROAD
PERRY MERRILL DRIVE
DOWN DRAFT CIRCLE
MARSH HILL ROAD
ROBINSON BOULEVARD
CONNAR ROAD
CASCADE BOULEVARD
MARBLE LANE
BARN LANE
TURTLE LANE
ELLA CIRCLE
MCQUILLAN DRIVE
QUARRY ROAD
CORA PLACE
WAYNE ROAD
SALEY ROAD
OXFORD ROAD
ESSEX DRIVE
DEPOT ROAD
ROCK LANE
QUIRK ROAD
LONDONDERRY LANE
HUNTERS RUN
ANDERSON AVENUE
NEW HAVEN AVENUE
BREWSTER ROAD
PERES FARM ROAD
EASTERN STEEL ROAD
HIGGINS DRIVE
WOODMONT ROAD
OLD GATE LANE
GOVERNOR JOHN DAVIS LODGE TURNPIKE
BOSTON POST ROAD

Legend

- Proposed Structure
- Project Transmission Line
- Year-Round Visibility
- Areas of Potential Seasonal Visibility
- Study Area (1 Mile Radius)
- Half Mile Radius
- Municipal Boundary
- Scenic Highway*
- Trail*
- DEEP Boat Launches*
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal*
- Land Trust*
- Municipal*
- Private*
- State*

N

1,000 500 0 1,000 Feet

Limitations

This map depicts areas where proposed infrastructure may potentially be visible to the human eye without the aid of magnification based on a viewer eye-height of 5 feet above the ground and intervening topography, tree canopy, and existing structures. This analysis is based on a combination of computer modeling, incorporating the DSM, and 2019 digital aerial photographs.
This analysis does not necessarily depict all locations where views may occur. It is intended to provide a representation of those areas where at least a portion of the new facilities may be seen, but may actually over-predict visibility in some locations.

Physical Geography / Background Data

Study area encompasses a 1-mile radius surrounding the proposed structures and includes 14,015 acres.
A digital surface model (DSM) was created from the State of Connecticut 2016 LiDAR LAS data points.
The DSM captures the natural and built features on the Earth's surface.
Forest canopy height derived from LiDAR data.

Map Sources

*Not all data layers appear on map sheet.
Ortho Base Map: State of Connecticut 2019 aerial imagery (CTECO Map Service)
CTDEEP's data library (http://www.ct.gov/deep)
Data layers are maintained and updated by CTDEEP and represent the most recent publications.
Scenic Roads: CTDOT State Scenic Highways (2015)
Connecticut Forest and Parks Association, Connecticut Walk Books East and West

Map Date: December 14, 2021

Viewshed Analysis Map
Milvon-West River Railroad Transmission Line 115-kV Rebuild Project

Milford, Orange, and West Haven, CT
Map Sheet 2 of 3

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All-Points Technology Corporation

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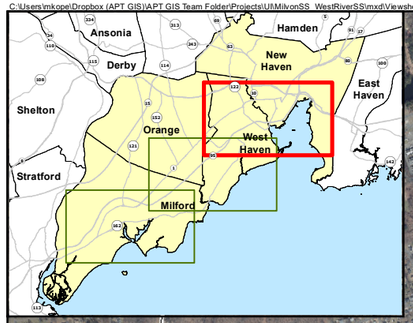

Orange
West Haven
New Haven
East Haven
Allingtn Hill 301.76' AMSL
West River Memorial Park Pond
WEST RIVER MEMORIAL PARK
CENTER GREEN
RICHARD C. LEE SCHOOL
HILL K-5 SCHOOL
West River Substation
Elmwest Substation
Allings Crossing Substation
Sawmill Pond
Lower Phipps Lake
RAY PARK
PAINTER PARK
BAYVIEW PARK
QUINNIPIAC PARK
Quinnipiac River
Reservoir Hill 119.08' AMSL
FORT WOOSTER PARK
Beacon Hill 190.24' AMSL
EAST SHORE PARK
New Haven Harbor
Chidsey Hill 104.96' AMSL
Raynham Hill 154.16' AMSL
FORT HALE PARK
Black Rock
MORSE PARK
Map Sheet 3
Map Sheet 2
MORRIS STREET
HURLBUT STREET
WILSON STREET
LAMBERTON STREET
TIMBERLAKE STREET
PLYMOUTH STREET
ELM GRASSO BOULEVARD
ROAD A
FRONTAGE ROAD
THILL STREET
CLINTON PLACE
GOVERNOR JOHN DAVIS LODGE TURNPIKE
MIX AVENUE
CONNECTICUT TURNPIKE
PENT ROAD
OLIVER LANE
RICHARDS STREET
WOOD STREET
THOMPSON STREET
MAPLE STREET
1ST AVENUE
4TH AVENUE
BASSETT COURT
WHARTON STREET
WHARTON PLACE
MYRTLE AVENUE
FERN STREET
COLLIS STREET
STEVENS AVENUE
FORK STREET
CLARK STREET
GEORGES STREET
ELM STREET
WASHINGTON AVENUE
UNION AVENUE
CAMPBELL AVENUE
SAVIN COURT
SAVIN AVENUE
3RD AVENUE
WEST CLARK STREET
GOODHUE STREET
ORCHARD STREET
PHILLIPS TERRACE
SAW MILL ROAD
RAILROAD AVENUE
HOOD TERRACE
WAGNER PLACE
CANDEE AVENUE
MAIN STREET
LEETE ROAD
EDMA ROAD
FRONTAGE ROAD
WOODY LANE
SWAN LANE
LAKE AVENUE
CEDAR LANE
PHIPPS DRIVE
ALLINGS CROSSING ROAD
ISLAND LANE
EDER ROAD
HODGKIN LANE
Ball Island
1
5
10
34
91
95
122
162
337

Legend

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Map Date: December 14, 2021

Viewshed Analysis Map
Milvon-West River Railroad Transmission Line 115-kV Rebuild Project

Orange, New Haven, and West Haven, CT
Map Sheet 3 of 3

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ALL-POINTS TECHNOLOGY CORPORATION