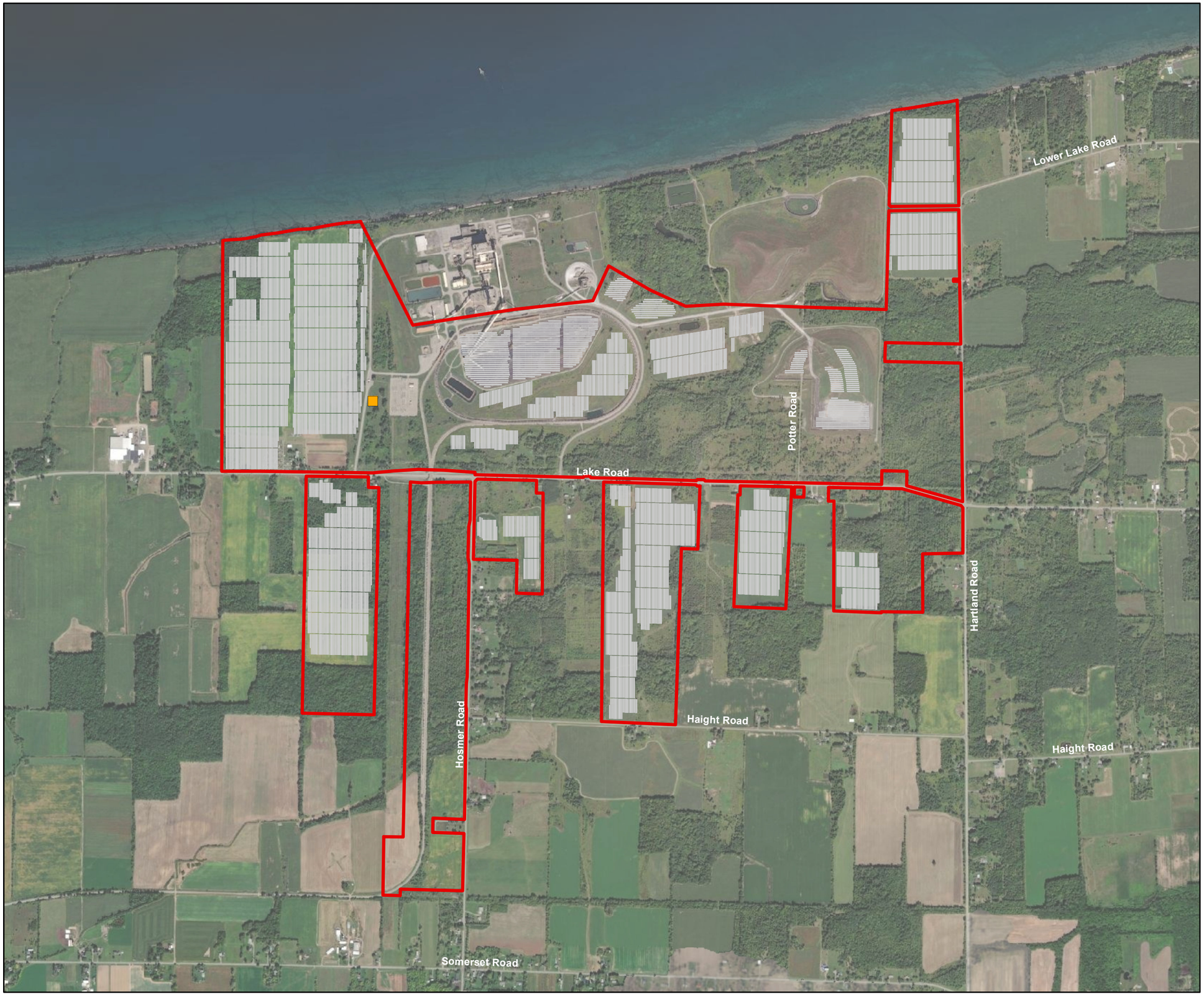
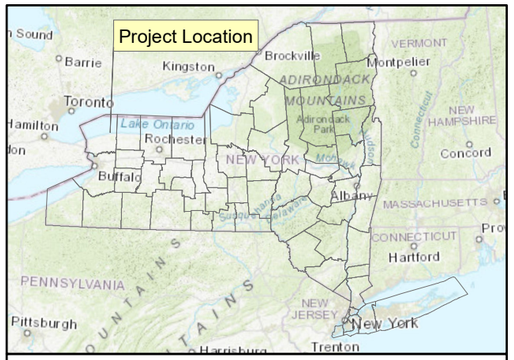
FIGURES





Legend

- Facility Substation
- Project Site
- Solar Array

1:18,000

0 0.25 0.5 Miles

Figure 1

Facility Layout

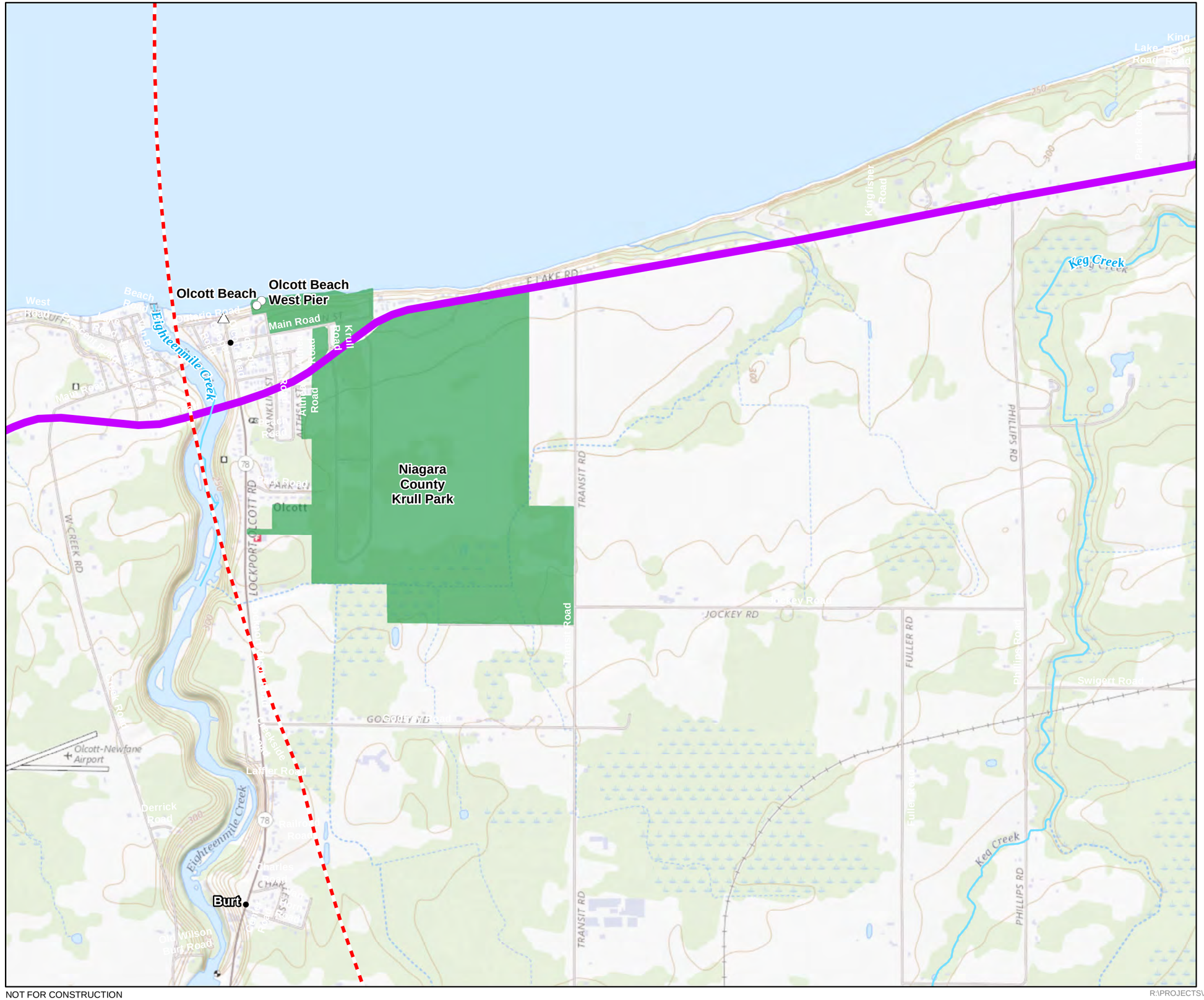
Somerset Solar
Niagara County, NY
March 2023

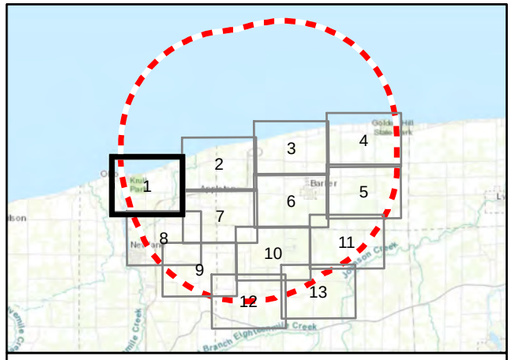
TETRA TECH

Source: Esri, et. al., 2022; Niagara County Real Property Tax Services

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_1_Facility_Layout.mxd





Legend

- Resource Inventory Area (5 miles)
- Recreation/Other Public Site
- Olcott Beach Lighthouse
- Stream/River
- Great Lakes Seaway Trail Scenic Byway
- Niagara County Krull Park

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 1 of 13

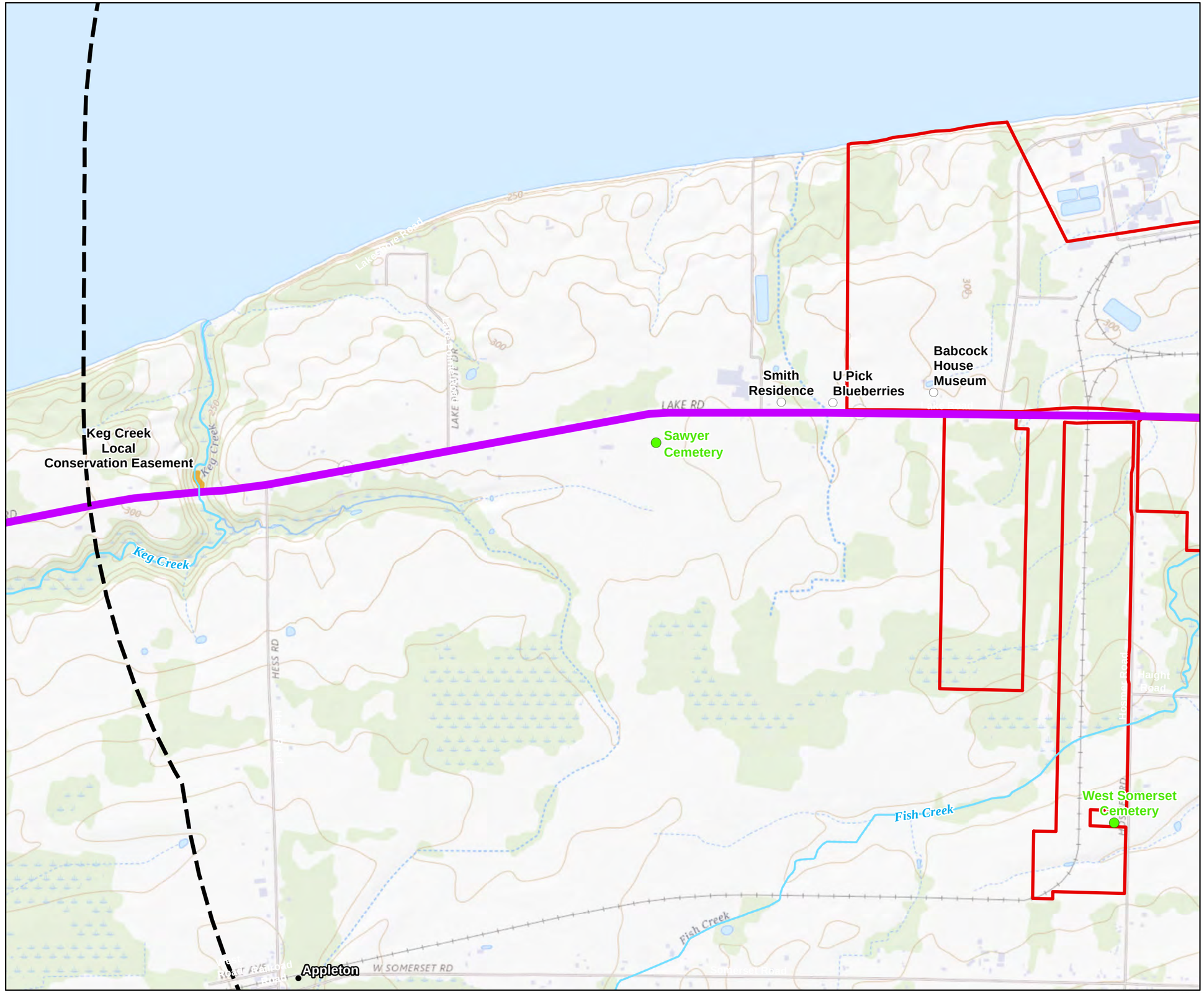
Somerset Solar
Niagara County, NY
March 2023

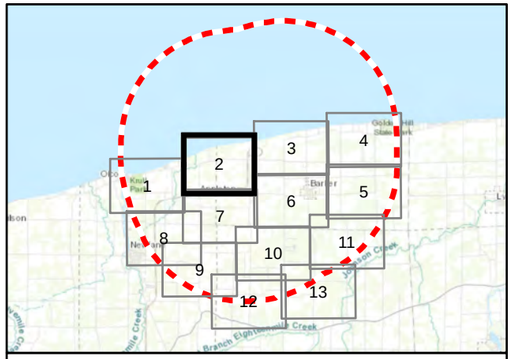
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Project Site
- Visual Study Area (2 miles)
- Cemetery
- Recreation/Other Public Site
- Stream/River
- Great Lakes Seaway Trail Scenic Byway
- Keg Creek Local Conservation Easement

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 2 of 13

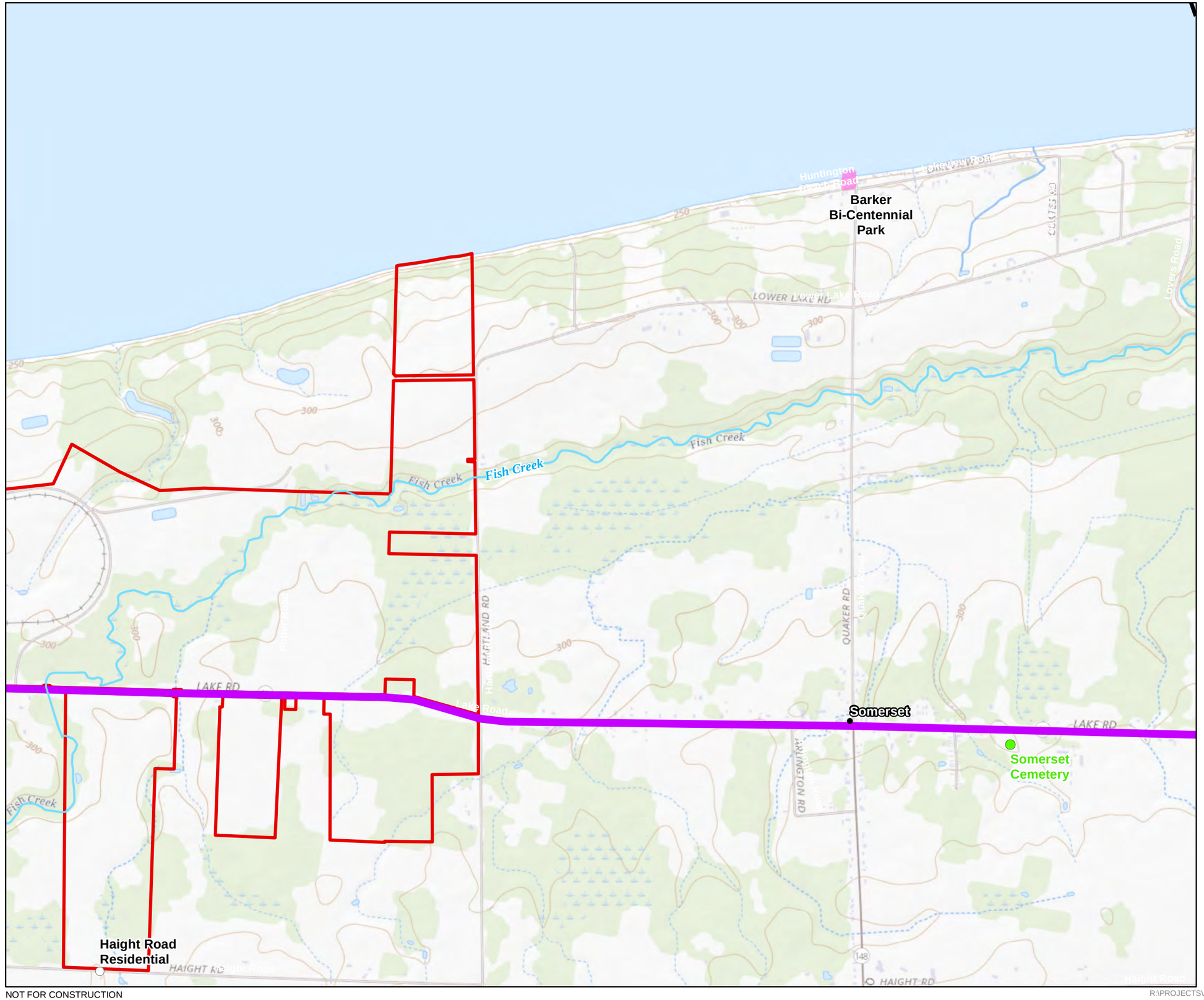
Somerset Solar
Niagara County, NY
March 2023

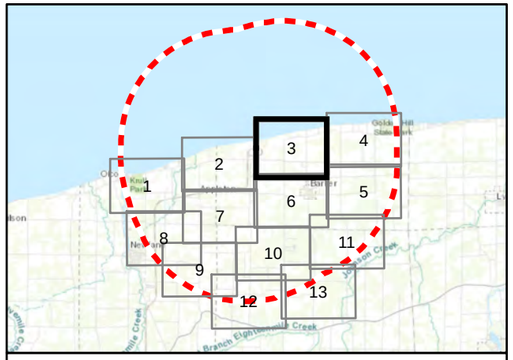
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Project Site
- Visual Study Area (2 miles)
- Cemetery
- Recreation/Other Public Site
- Stream/River
- Great Lakes Seaway Trail Scenic Byway
- Barker Bi-Centennial Park

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 3 of 13

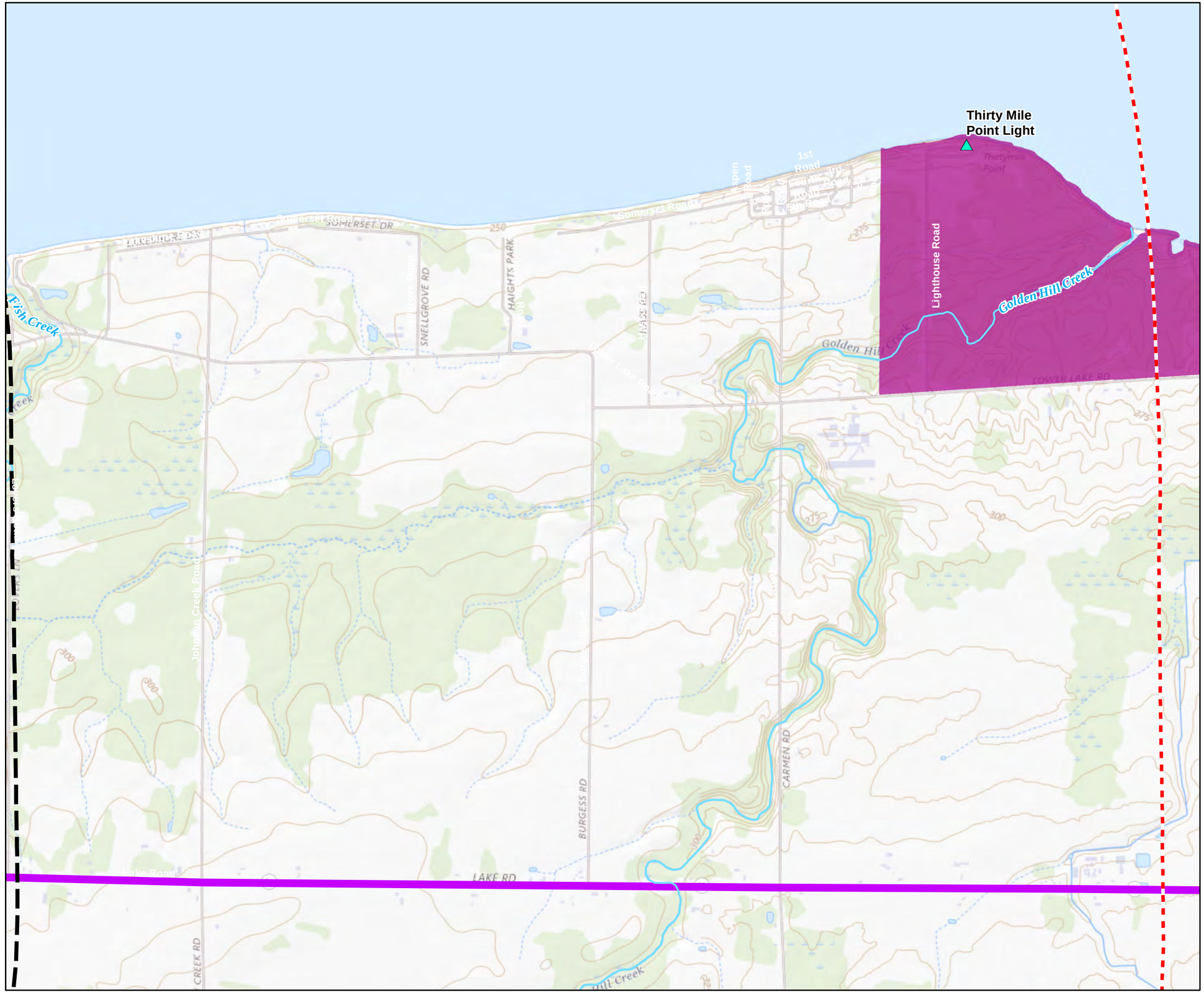
Somerset Solar
Niagara County, NY
March 2023

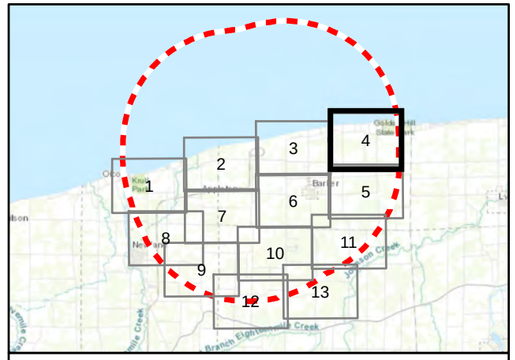
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Visual Study Area (2 miles)
- Resource Inventory Area (5 miles)
- Thirty Mile Point Lighthouse
- Stream/River
- Great Lakes Seaway Trail Scenic Byway
- Golden Hill State Park

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 4 of 13

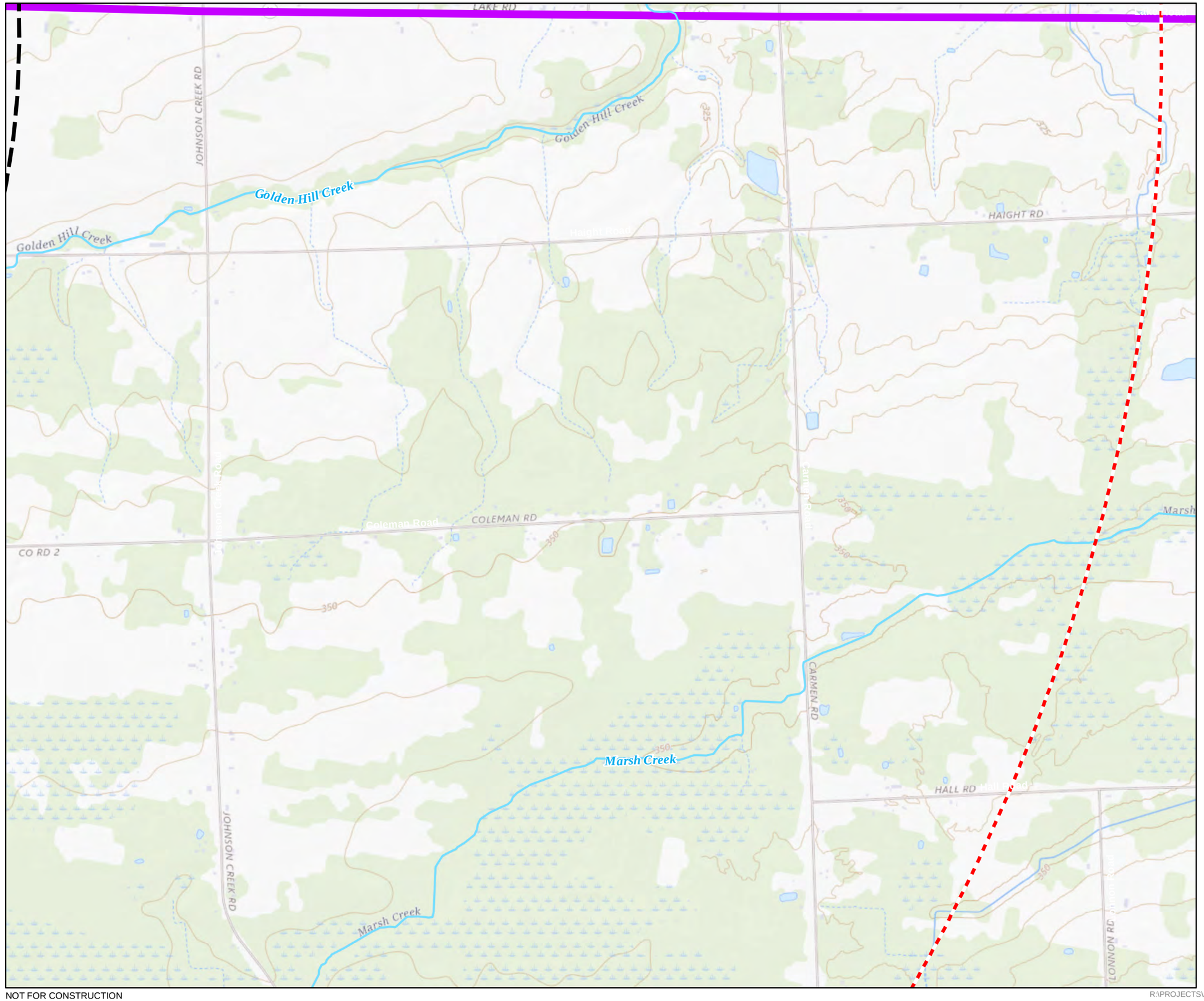
Somerset Solar
Niagara County, NY
March 2023

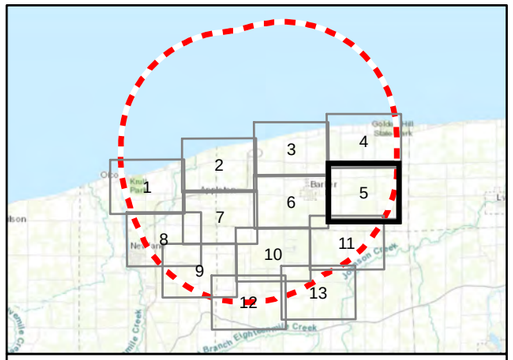
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Visual Study Area (2 miles)
- Resource Inventory Area (5 miles)
- Stream/River
- Great Lakes Seaway Trail Scenic Byway

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 5 of 13

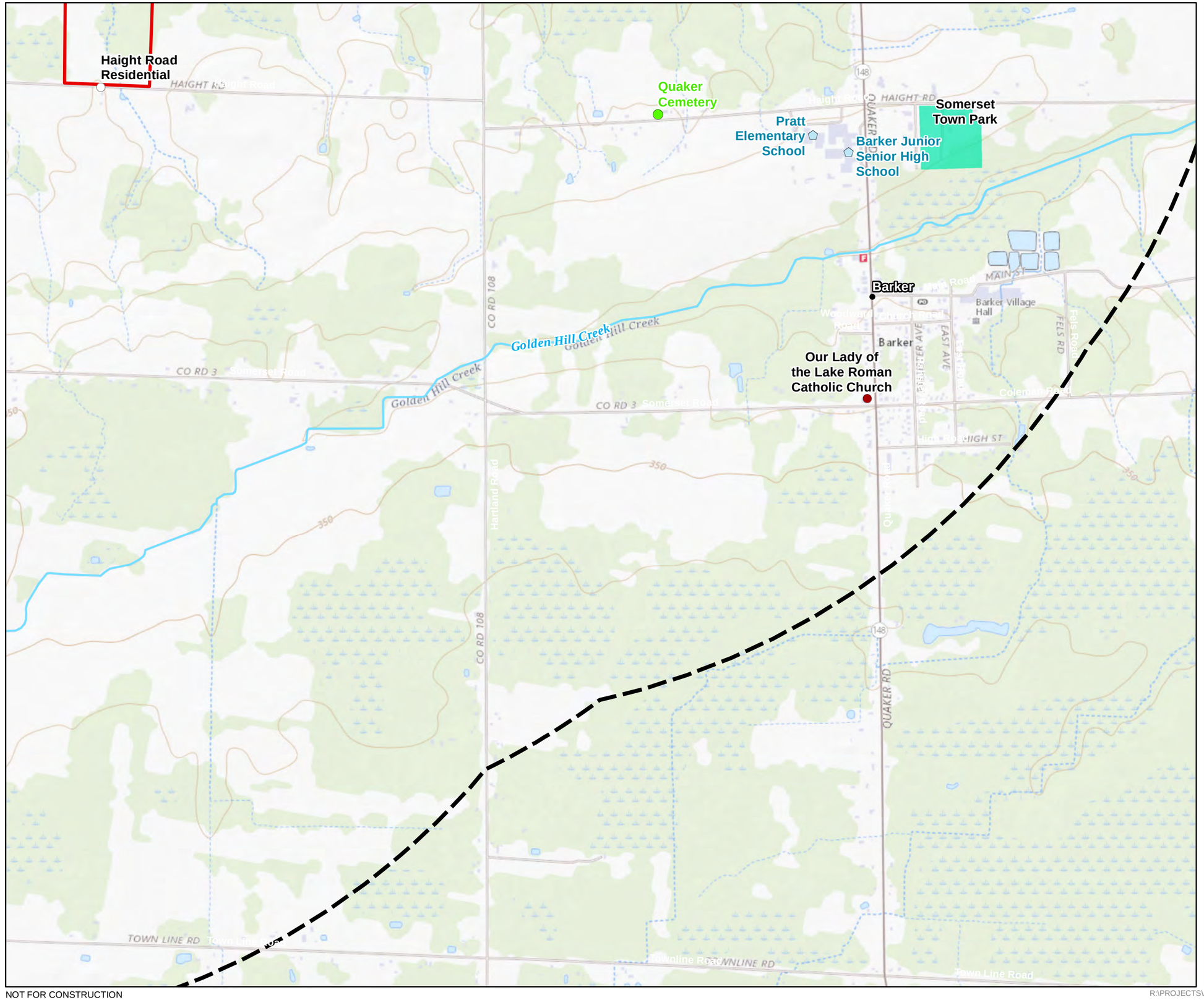
Somerset Solar
Niagara County, NY
March 2023

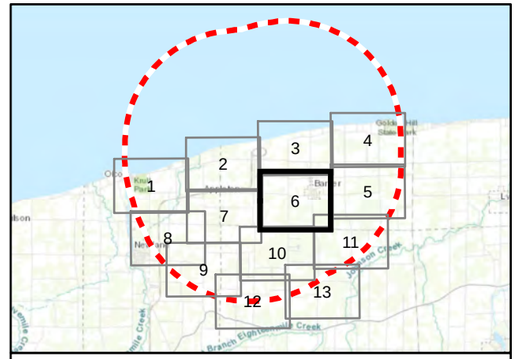
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Project Site
- Visual Study Area (2 miles)
- Cemetery
- School
- Recreation/Other Public Site
- Place of Worship
- Stream/River
- Somerset Town Park

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 6 of 13

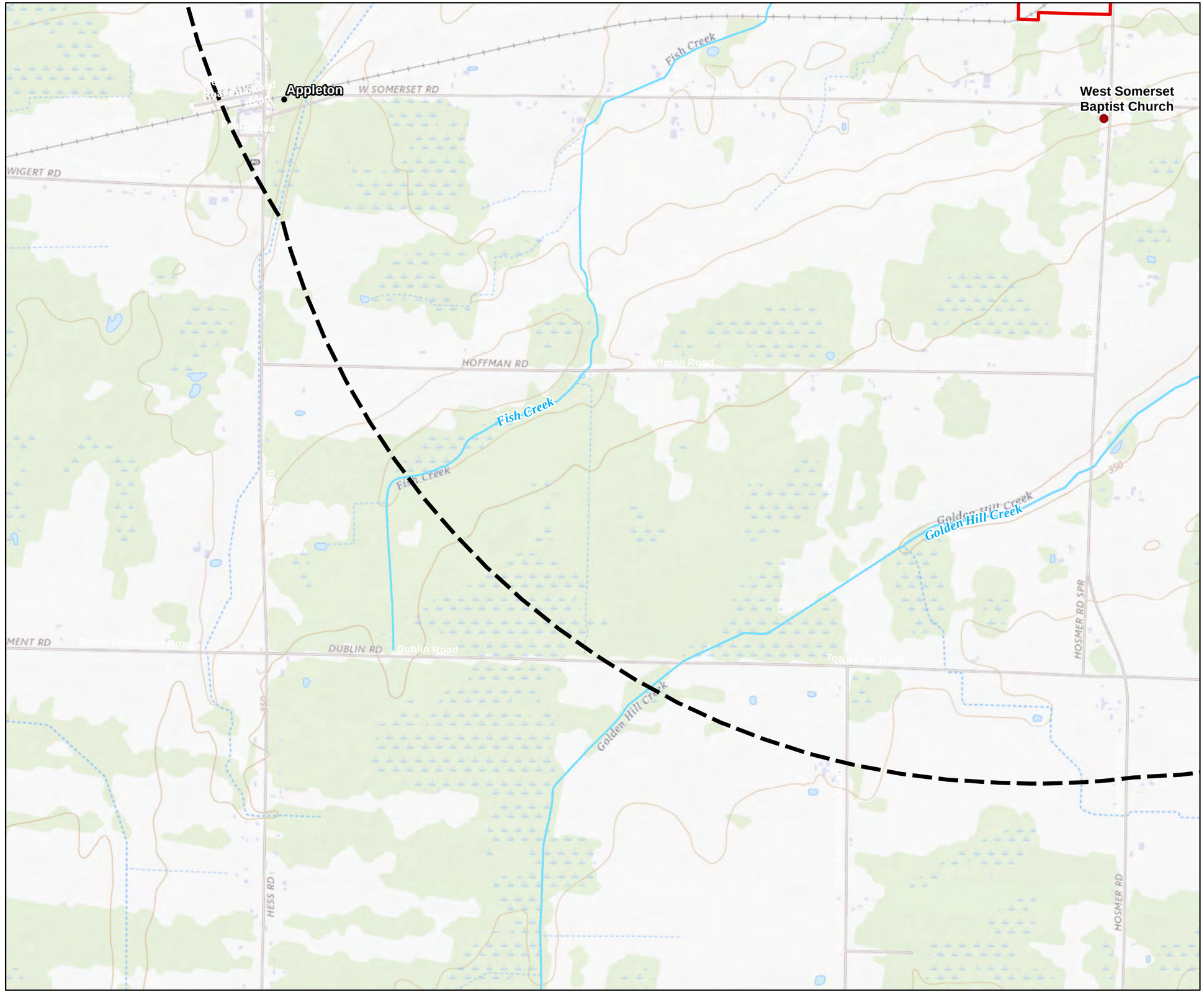
Somerset Solar
Niagara County, NY
March 2023

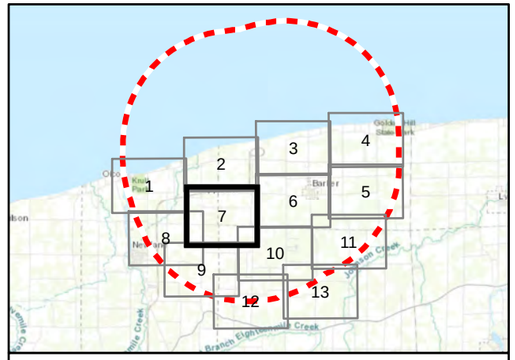
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Project Site
- Visual Study Area (2 miles)
- Place of Worship
- Stream/River

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 7 of 13

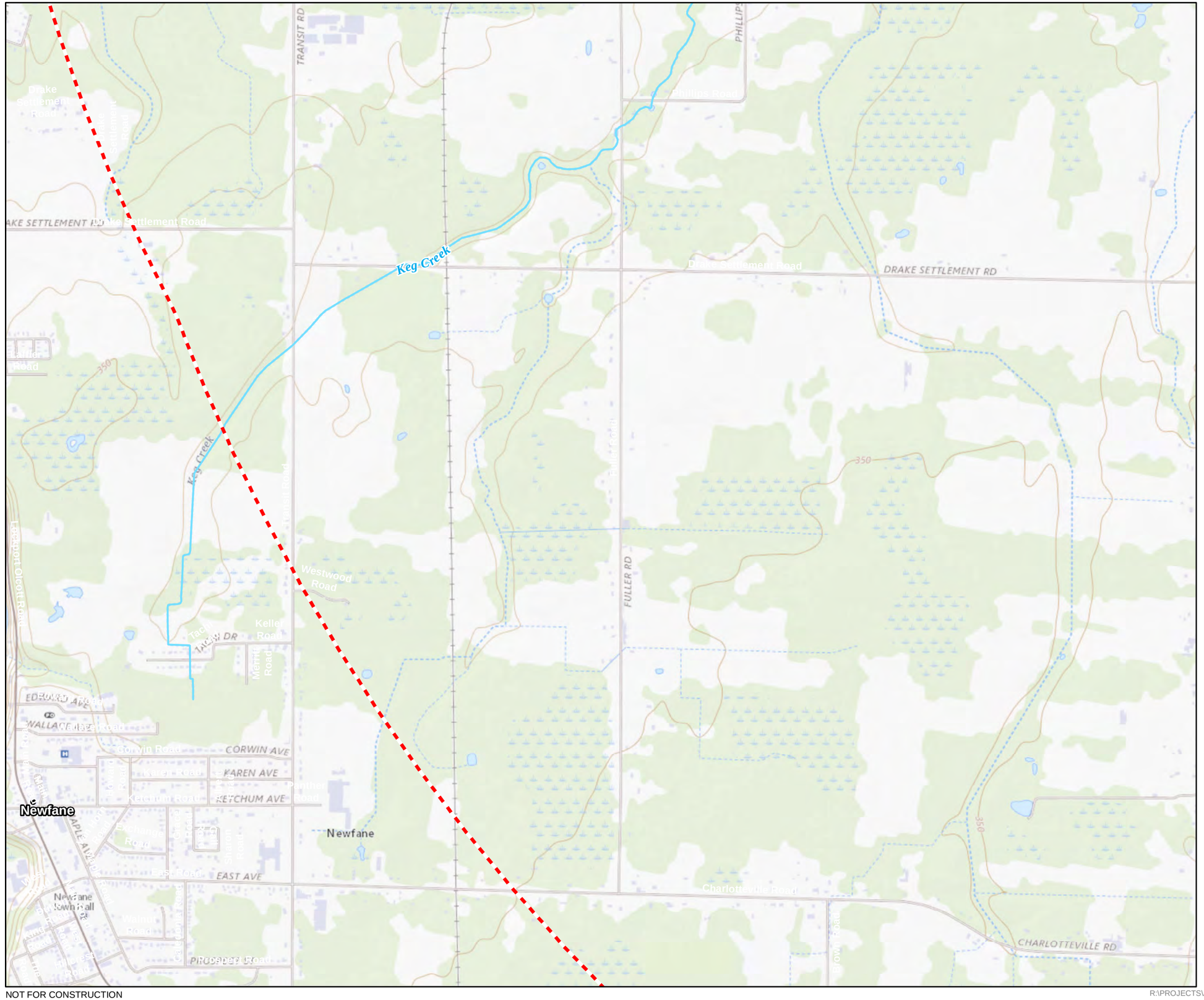
Somerset Solar
Niagara County, NY
March 2023

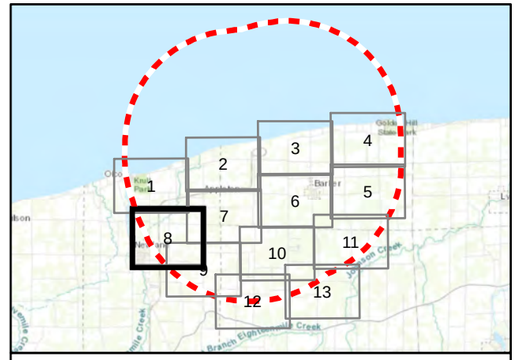
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Resource Inventory Area (5 miles)
- Stream/River

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 8 of 13

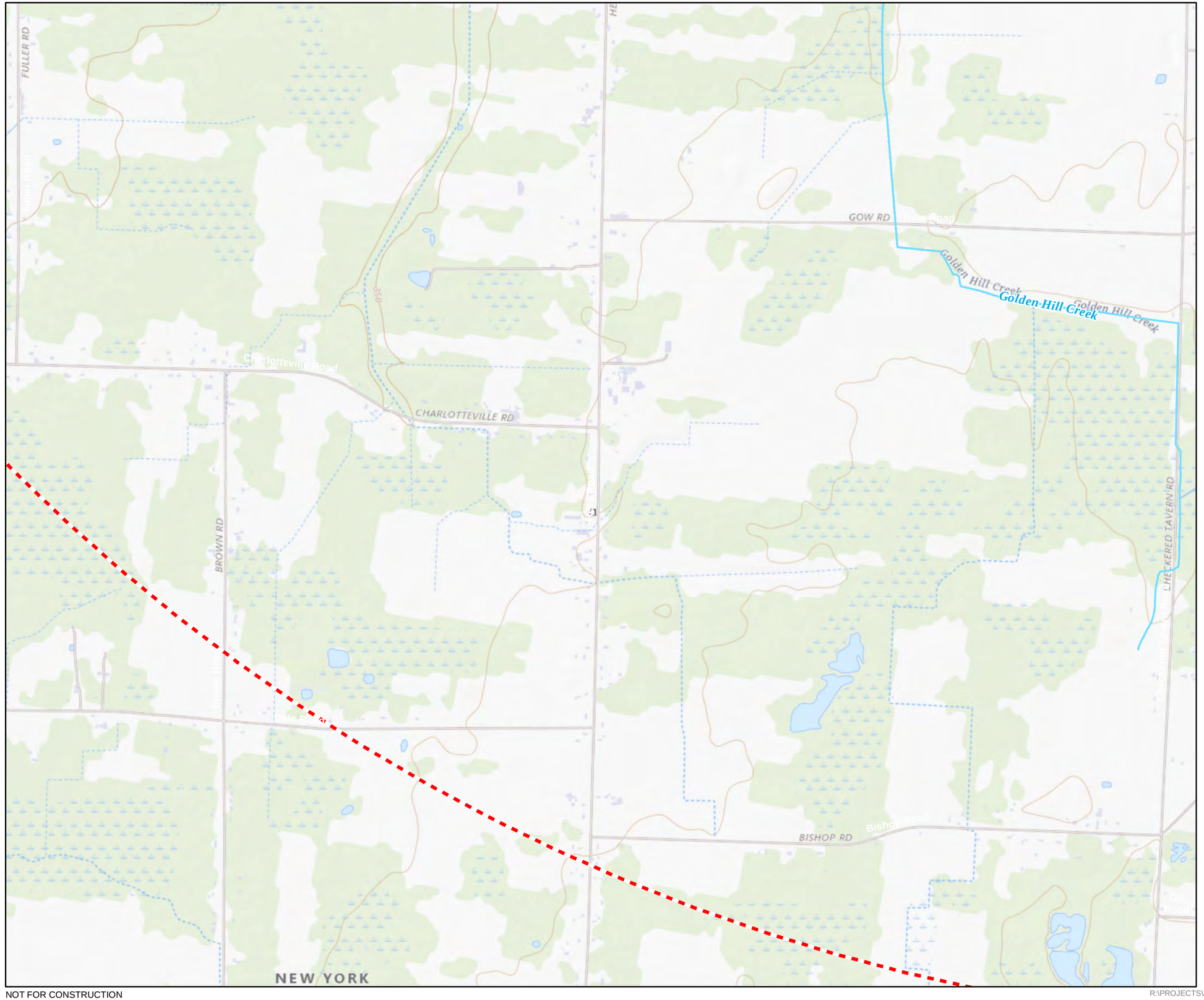
Somerset Solar
Niagara County, NY
March 2023

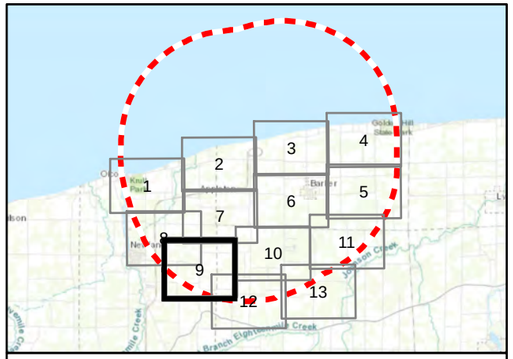
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Resource Inventory Area (5 miles)
- Stream/River

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 9 of 13

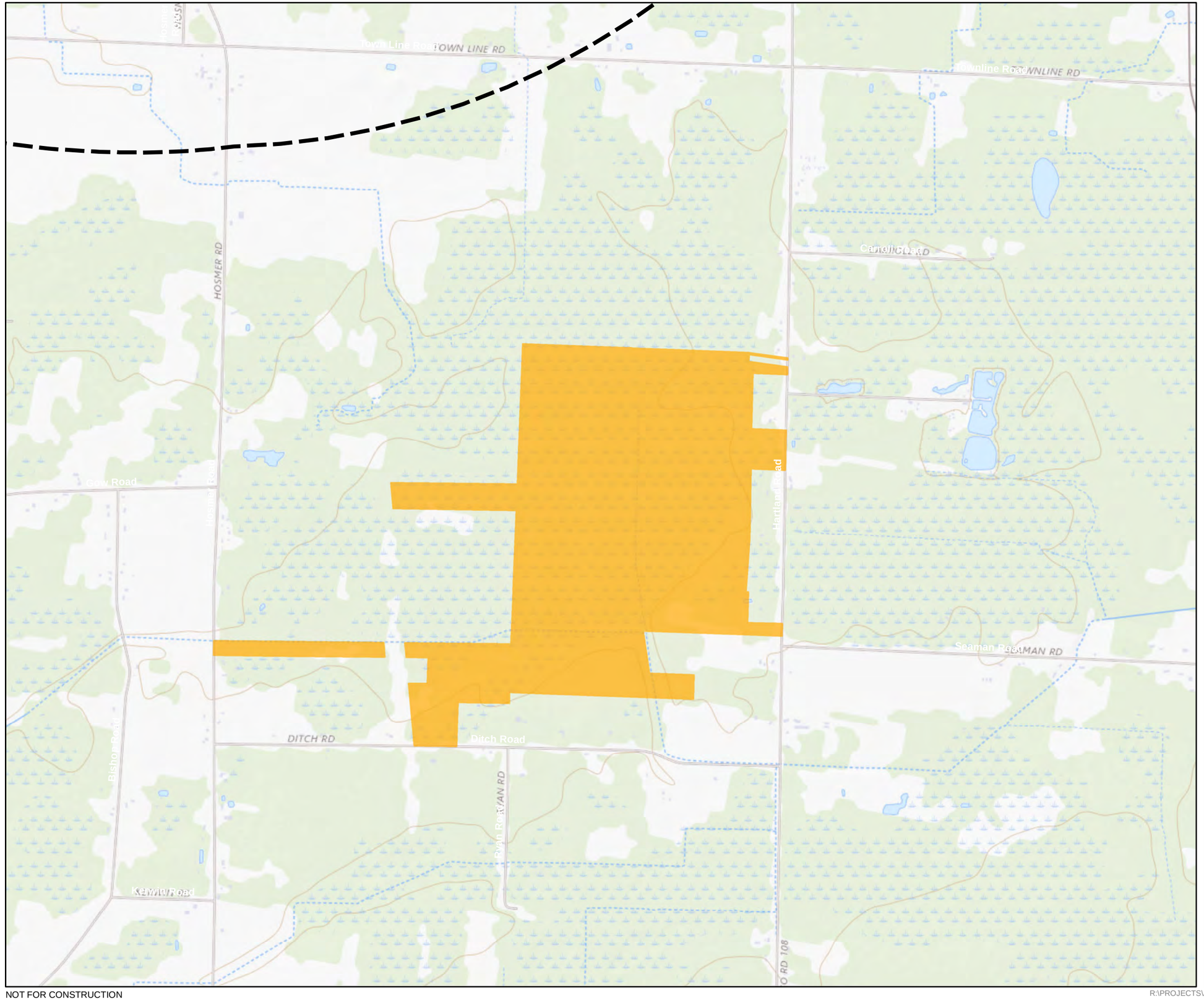
Somerset Solar
Niagara County, NY
March 2023

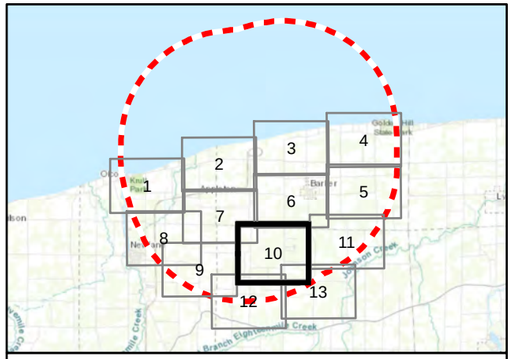
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Visual Study Area (2 miles)
- Hartland Swamp WMA

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 10 of 13

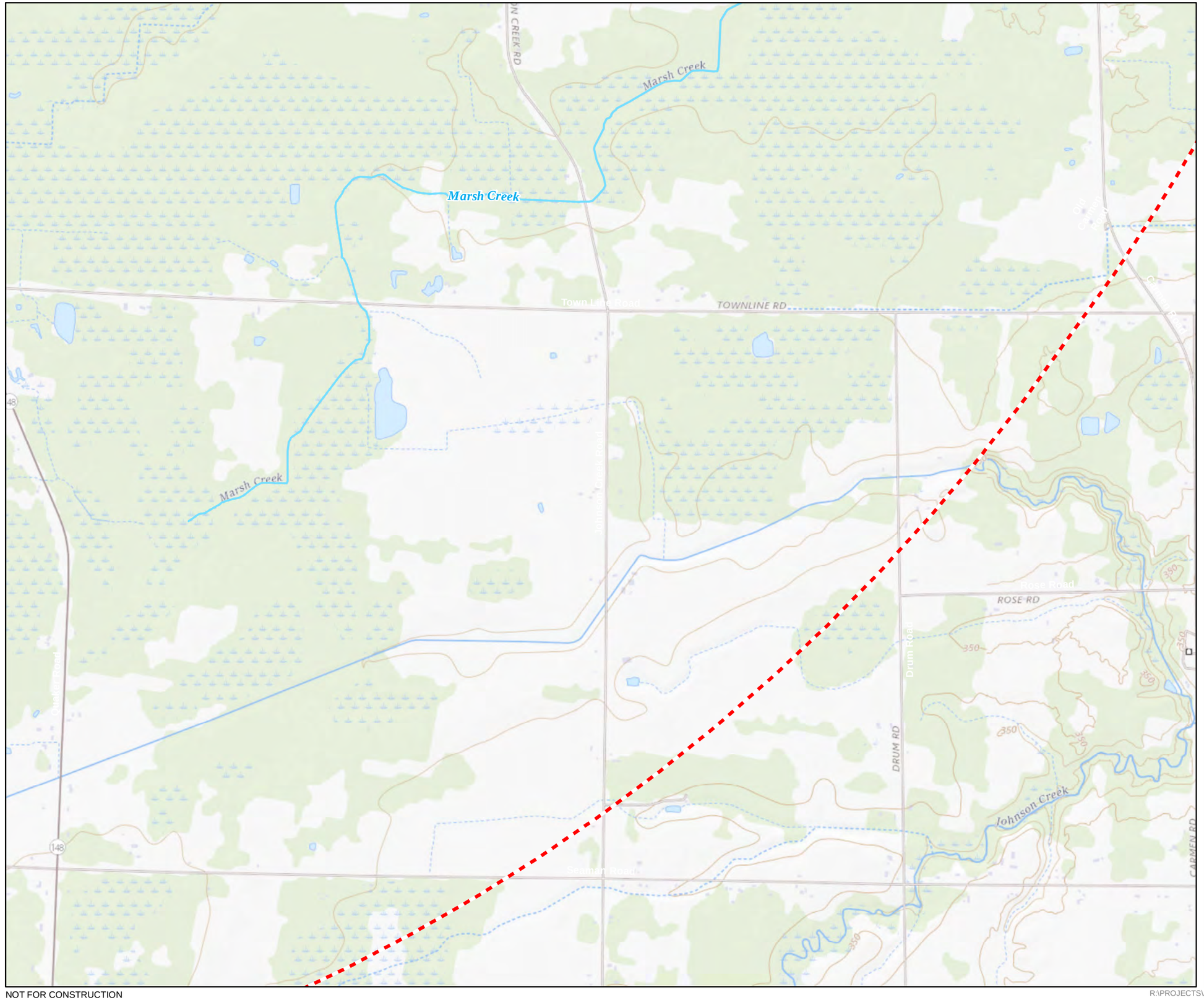
Somerset Solar
Niagara County, NY
March 2023

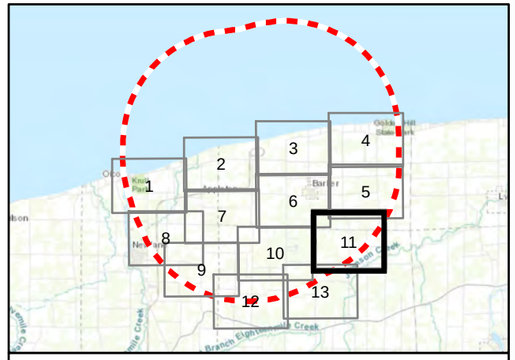
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Resource Inventory Area (5 miles)
- Stream/River

1:15,600

0 1,000 2,000 Feet

Figure 2

Visual Resource Inventory

Map 11 of 13

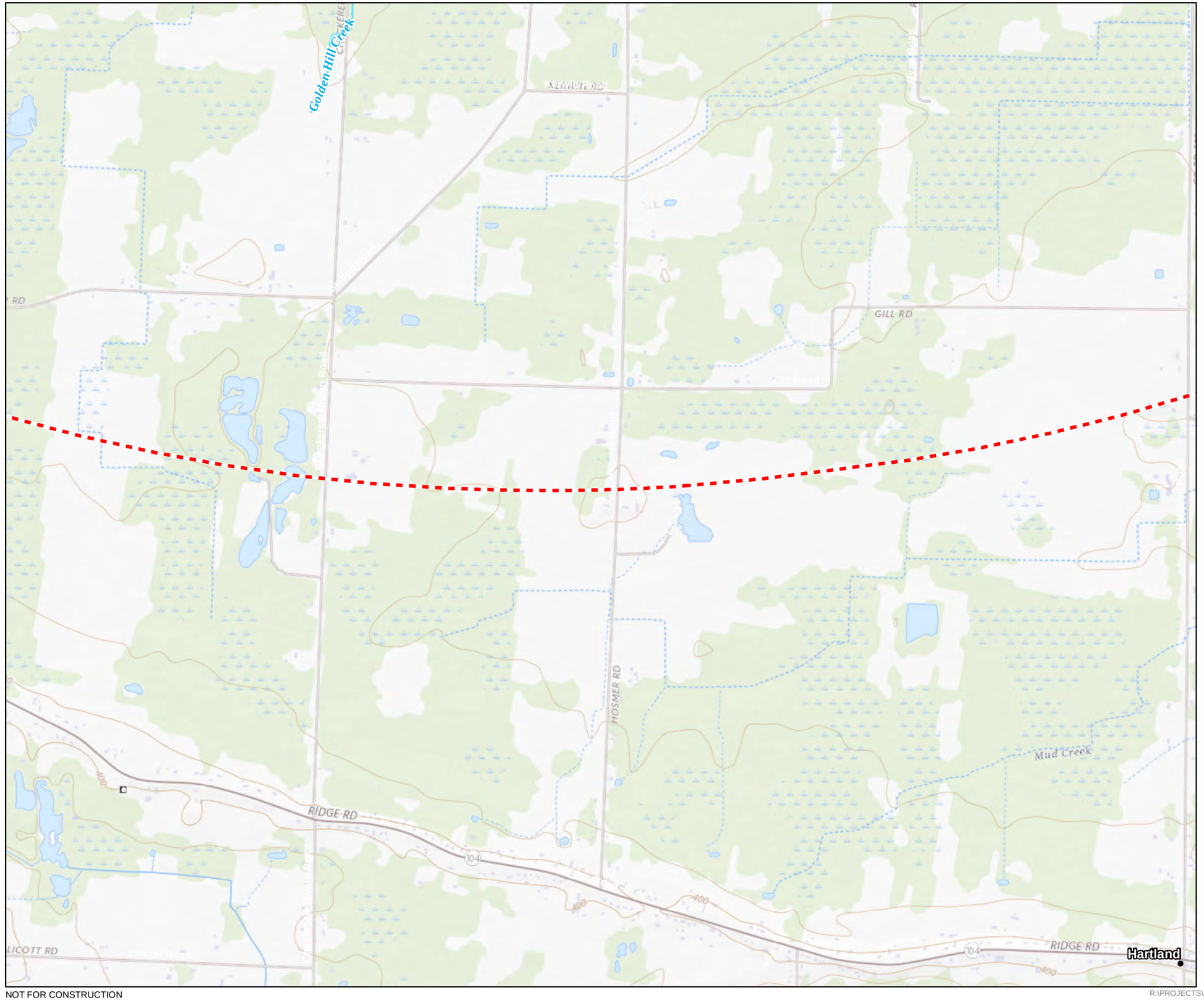
Somerset Solar
Niagara County, NY
March 2023

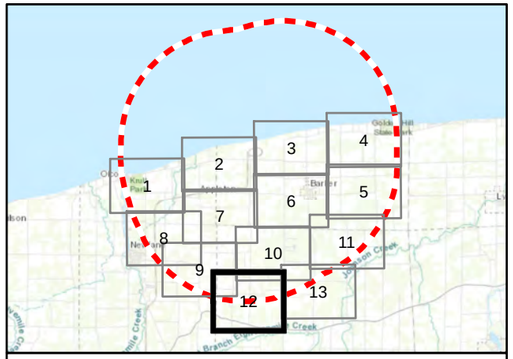
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Resource Inventory Area (5 miles)
- Stream/River

1:15,600

Feet

0 1,000 2,000

Figure 2

Visual Resource Inventory

Map 12 of 13

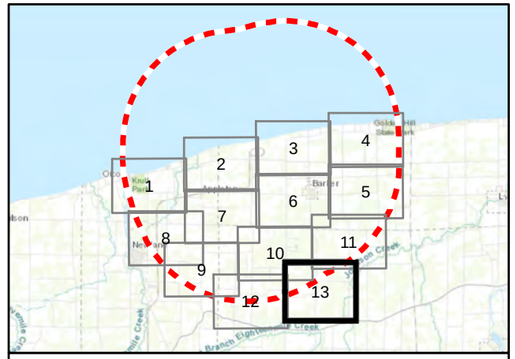
Somerset Solar
Niagara County, NY
March 2023

TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd



Legend

Resource Inventory Area (5 miles)

1:15,600

Feet

0 1,000 2,000

Figure 2

Visual Resource Inventory

Map 13 of 13

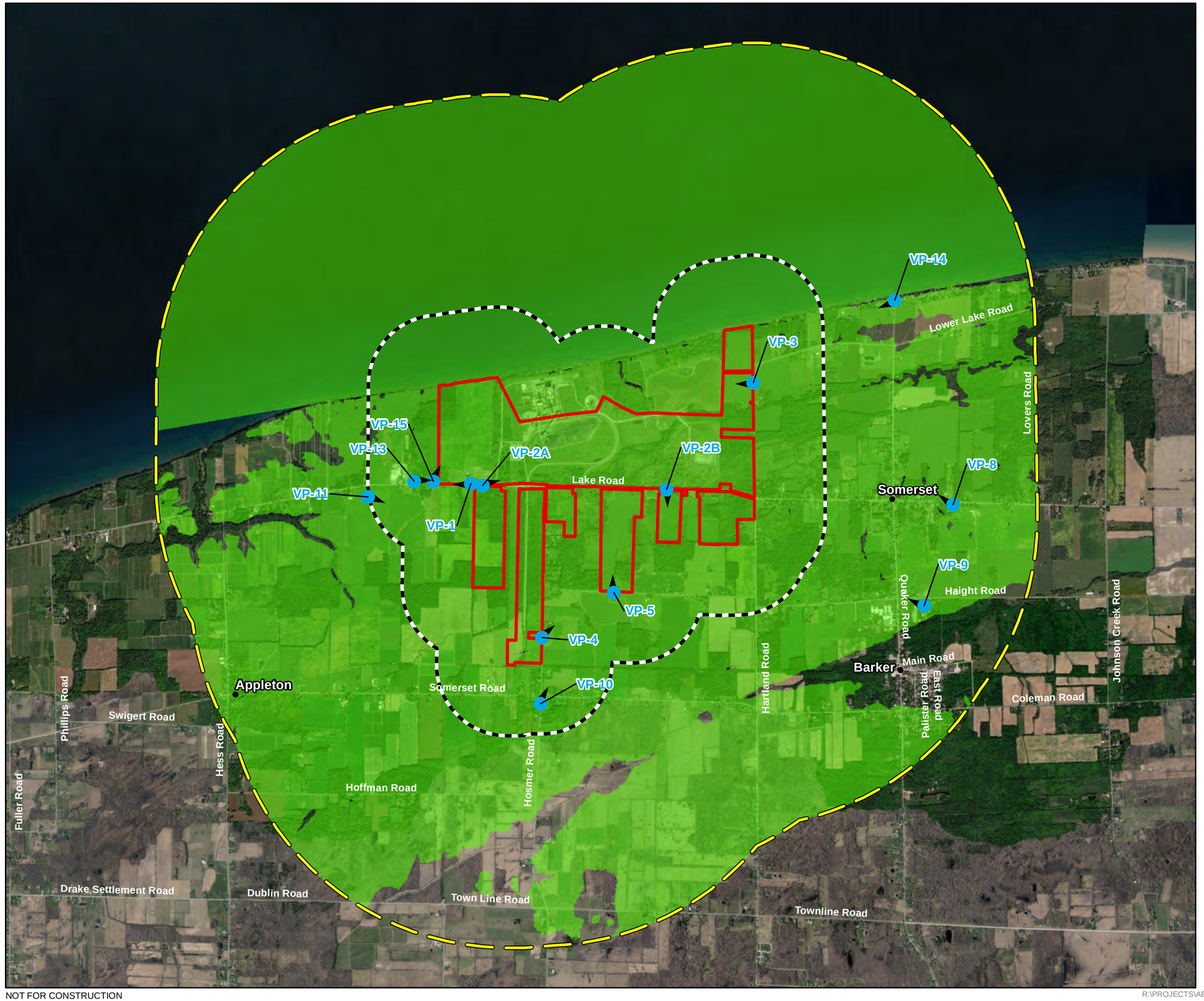
Somerset Solar
Niagara County, NY
March 2023

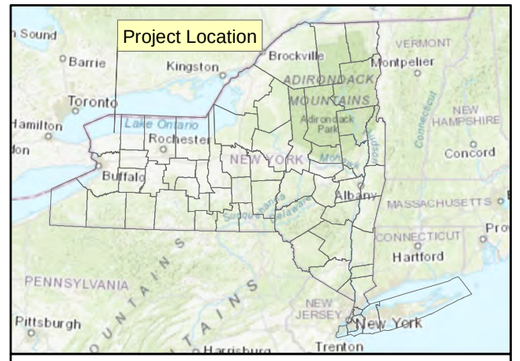
TETRA TECH

Source: Esri, et. al., 2022; USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_2_Visual_Resource_Inventory.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:42,000

0 0.25 0.5 0.75 1 Miles

Figure 3a

Viewshed Analysis for Solar Arrays
Topographic View

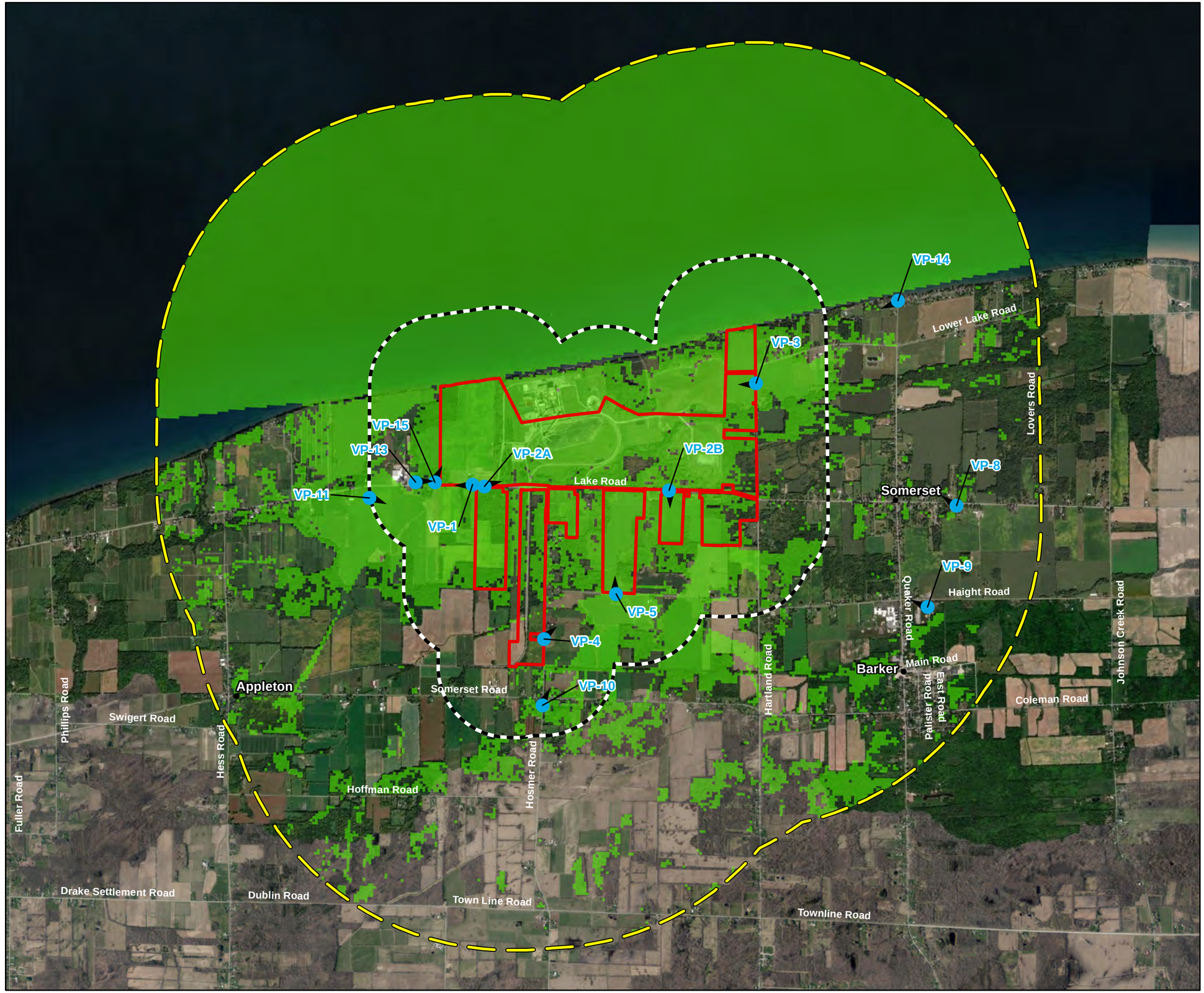
Somerset Solar
Niagara County, NY
March 2023

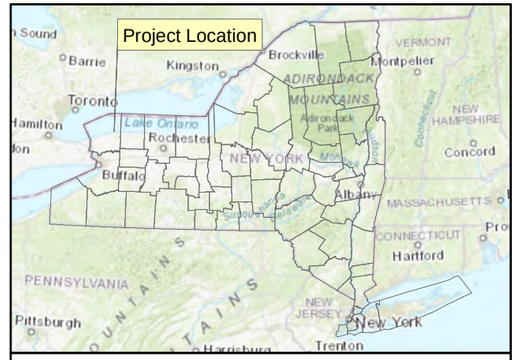
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3a_BareEarth_Viewshed_Aerial.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

N

1:42,000

0 0.25 0.5 0.75 1 Miles

Figure 3b

Viewshed Analysis for Solar Arrays
Vegetated View

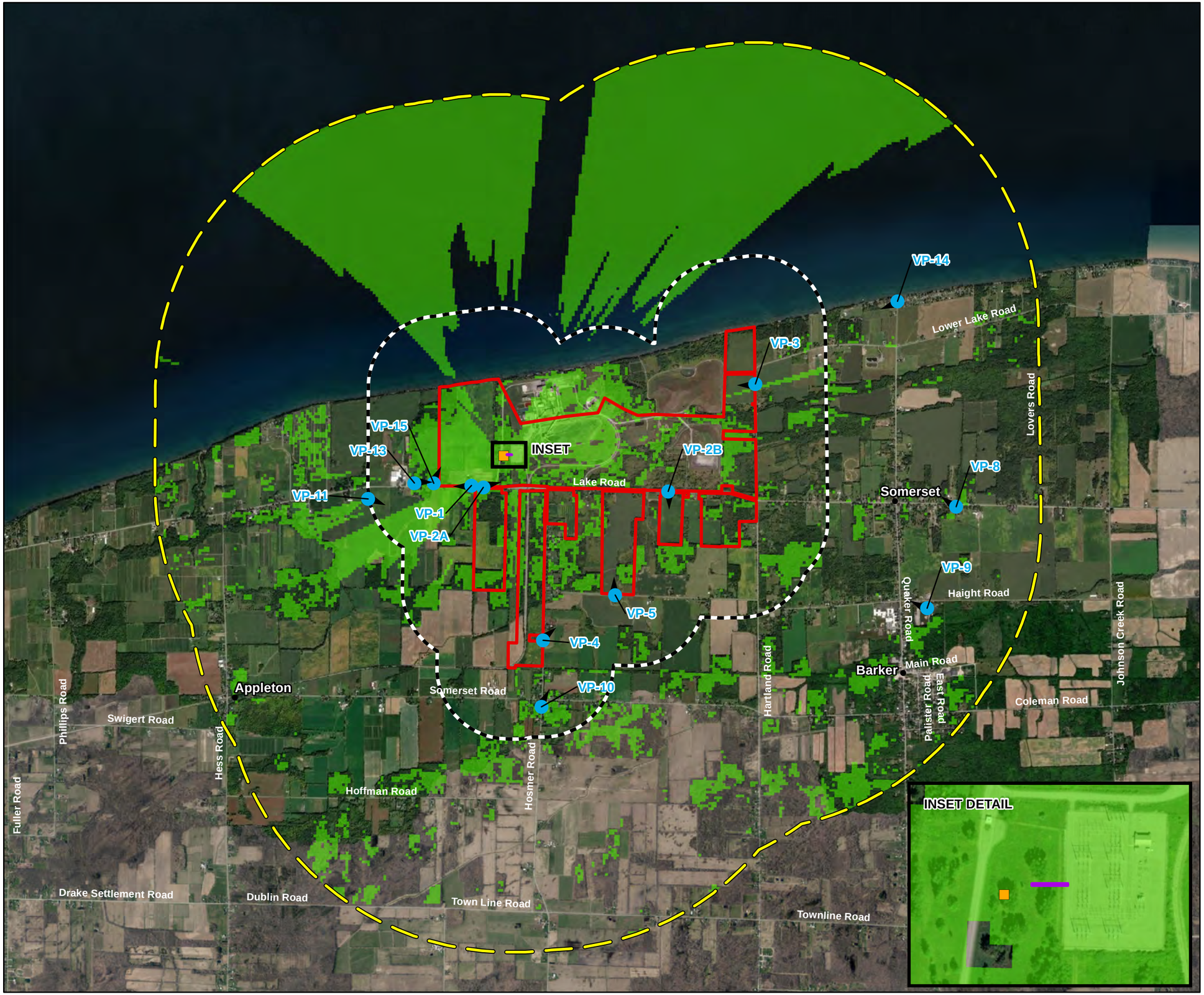
Somerset Solar
Niagara County, NY
March 2023

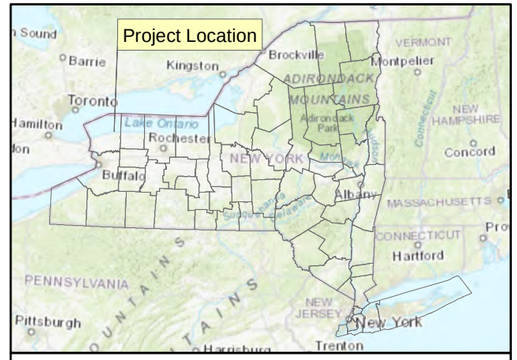
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3b_Vegetated_Viewshed_Aerial.mxd





Legend

- Identified Representative Viewpoint
- Facility Substation
- Proposed 345kV
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Substation take-off location and height obtained from Tetra Tech Engineering on 07/22/2022. A take-off structure height of 52 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:42,000

0 0.25 0.5 0.75 1 Miles

Figure 3c

Viewshed Analysis for Substation Feature
Vegetated View

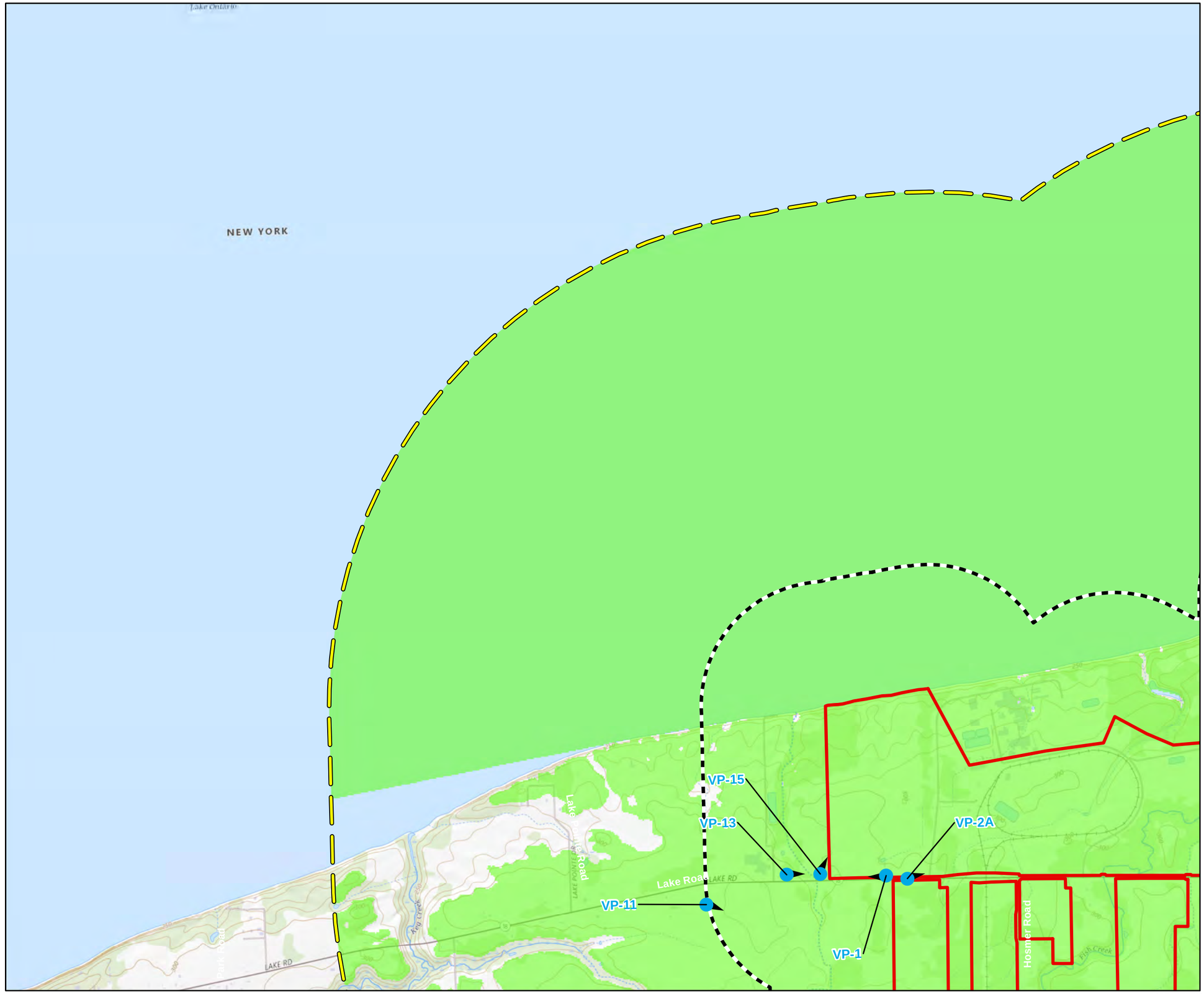
Somerset Solar
Niagara County, NY
March 2023

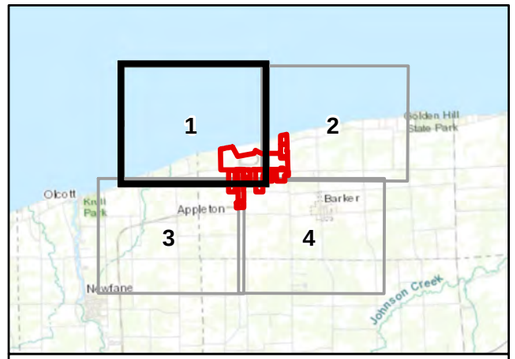
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3c_Vegetated_Viewshed_Aerial_Substation.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3d

Viewshed Analysis for Solar Arrays
Topographic View

Map 1 of 4

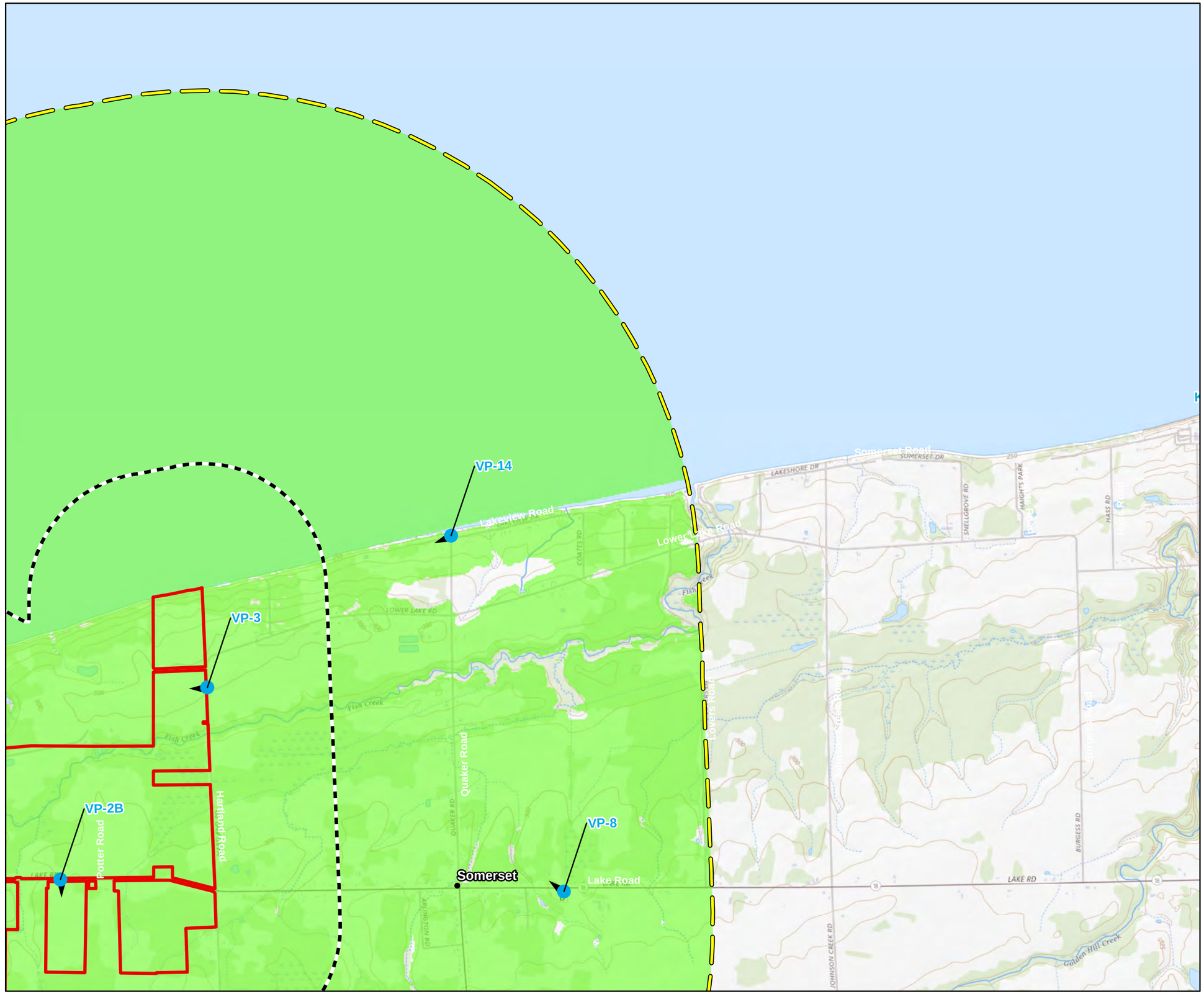
Somerset Solar
Niagara County, NY
March 2023

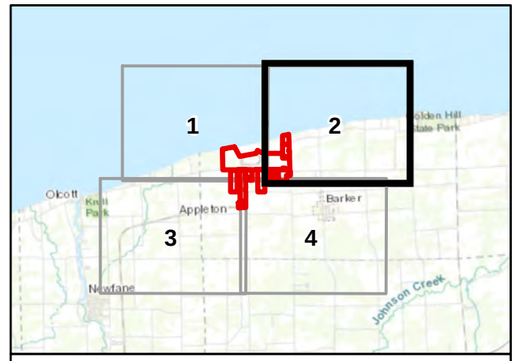
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3d_BareEarth_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3d

Viewshed Analysis for Solar Arrays
Topographic View

Map 2 of 4

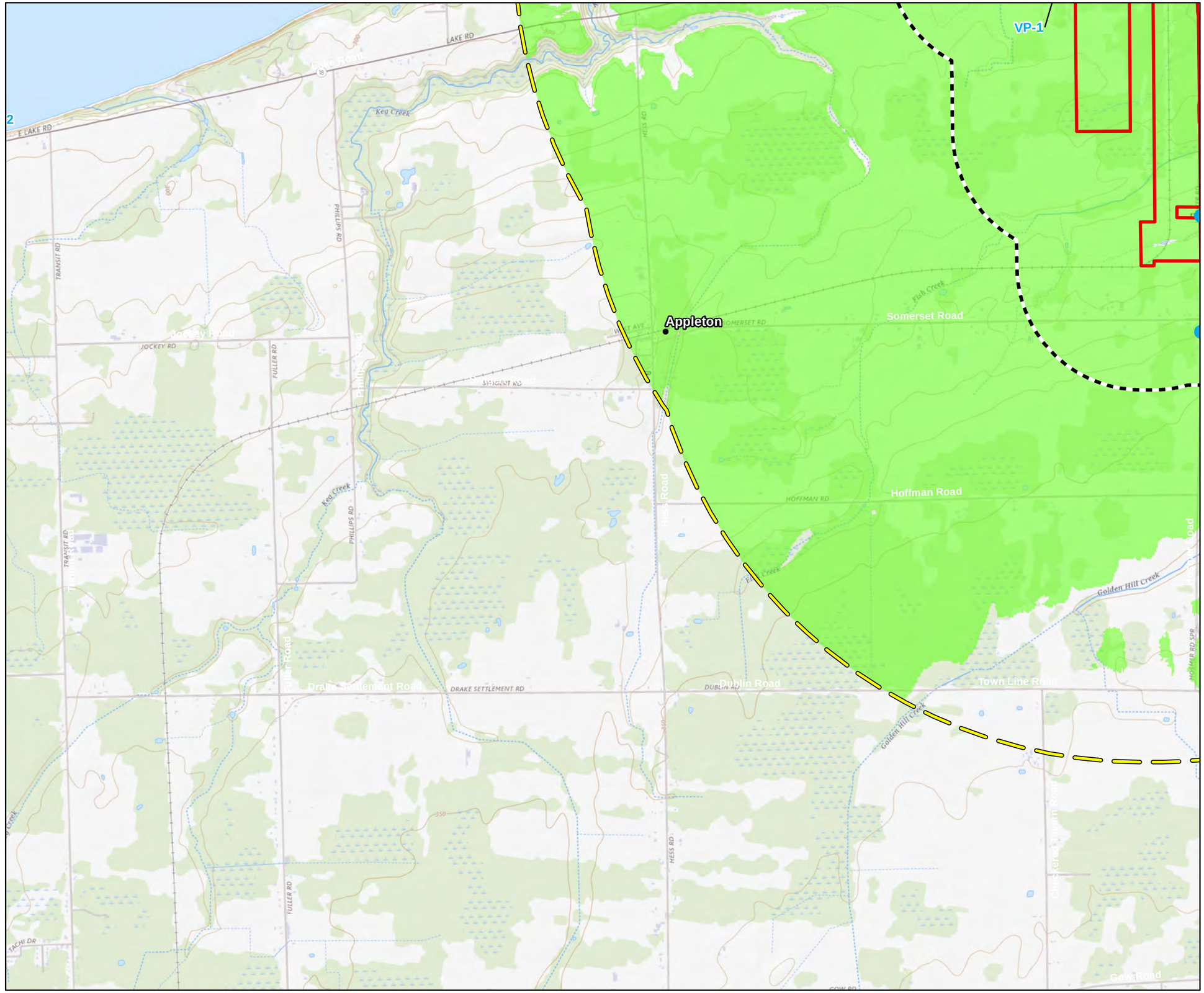
Somerset Solar
Niagara County, NY
March 2023

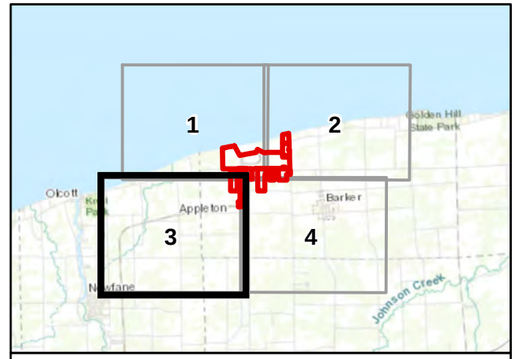
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3d_BareEarth_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3d

Viewshed Analysis for Solar Arrays
Topographic View

Map 3 of 4

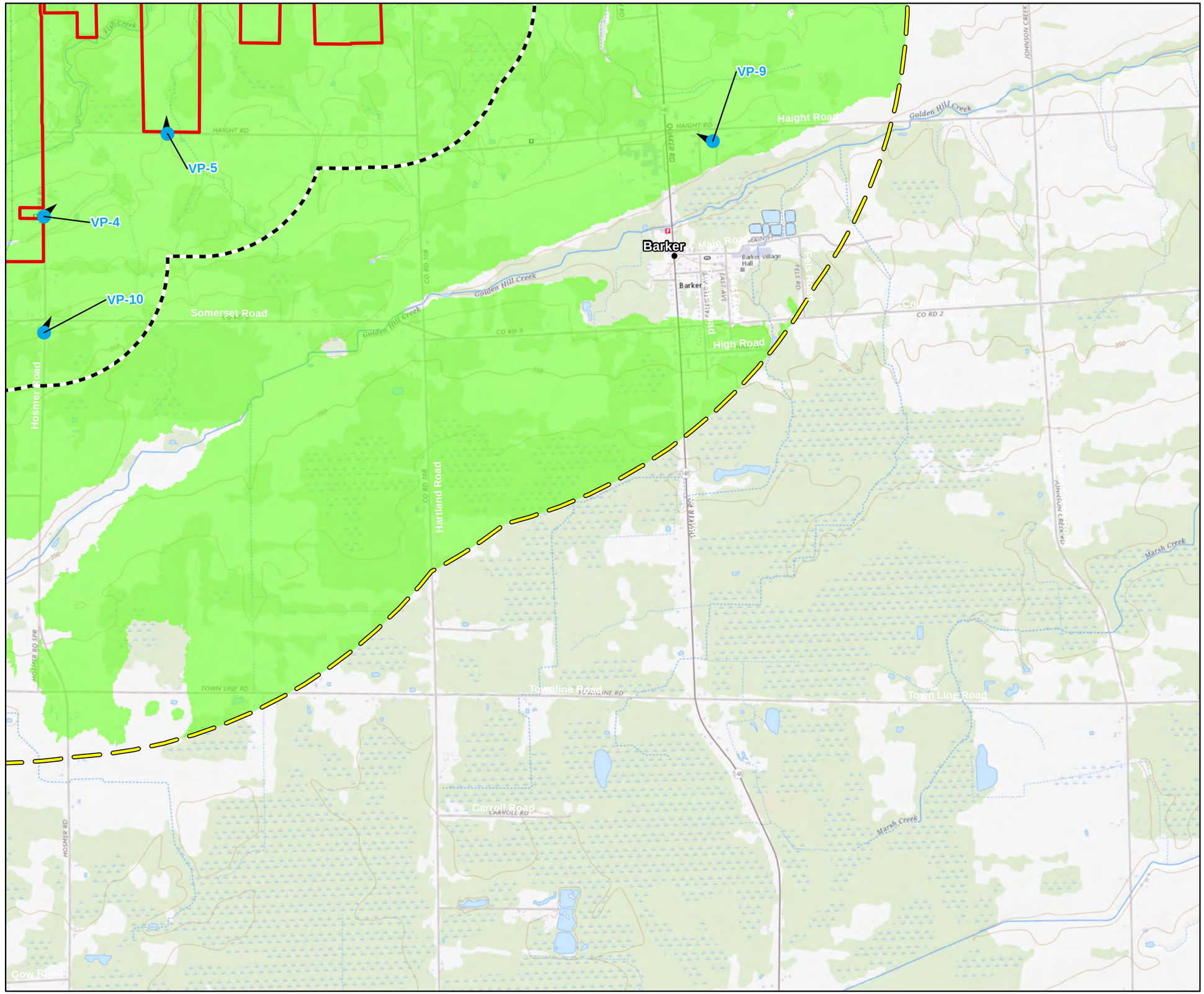
Somerset Solar
Niagara County, NY
March 2023

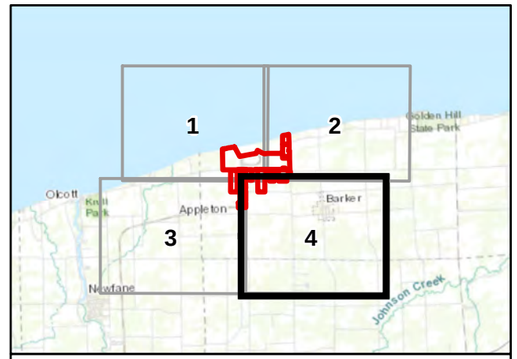
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3d_BareEarth_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3d

Viewshed Analysis for Solar Arrays
Topographic View

Map 4 of 4

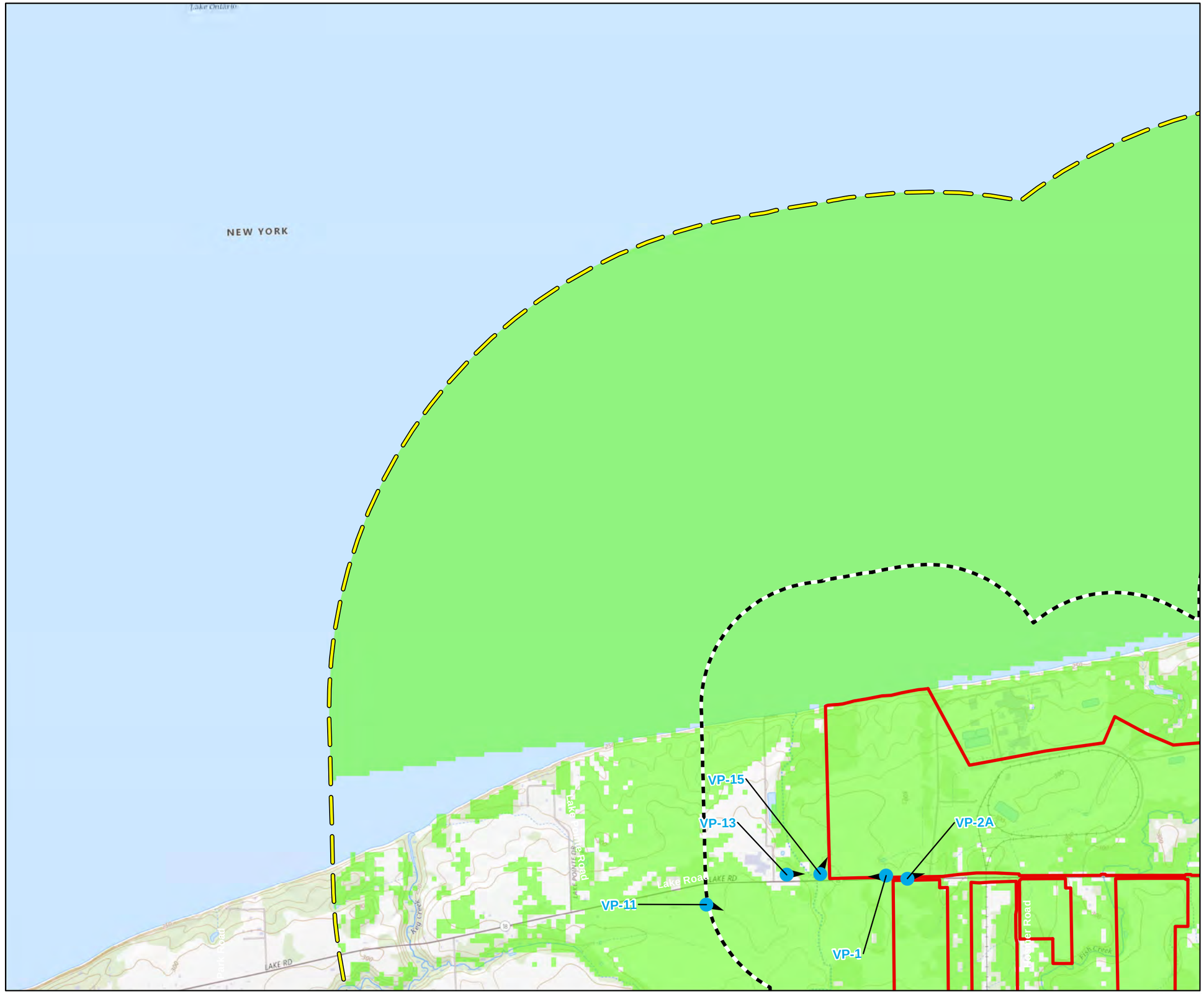
Somerset Solar
Niagara County, NY
March 2023

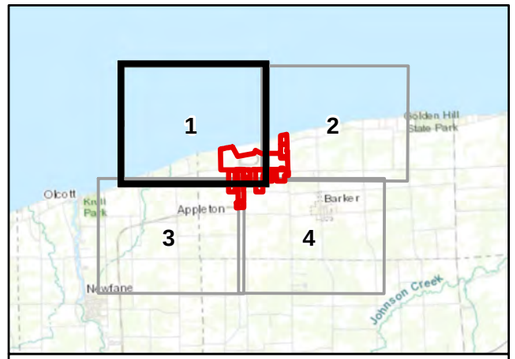
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3d_BareEarth_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3e

Viewshed Analysis for Solar Arrays
Vegetated View

Map 1 of 4

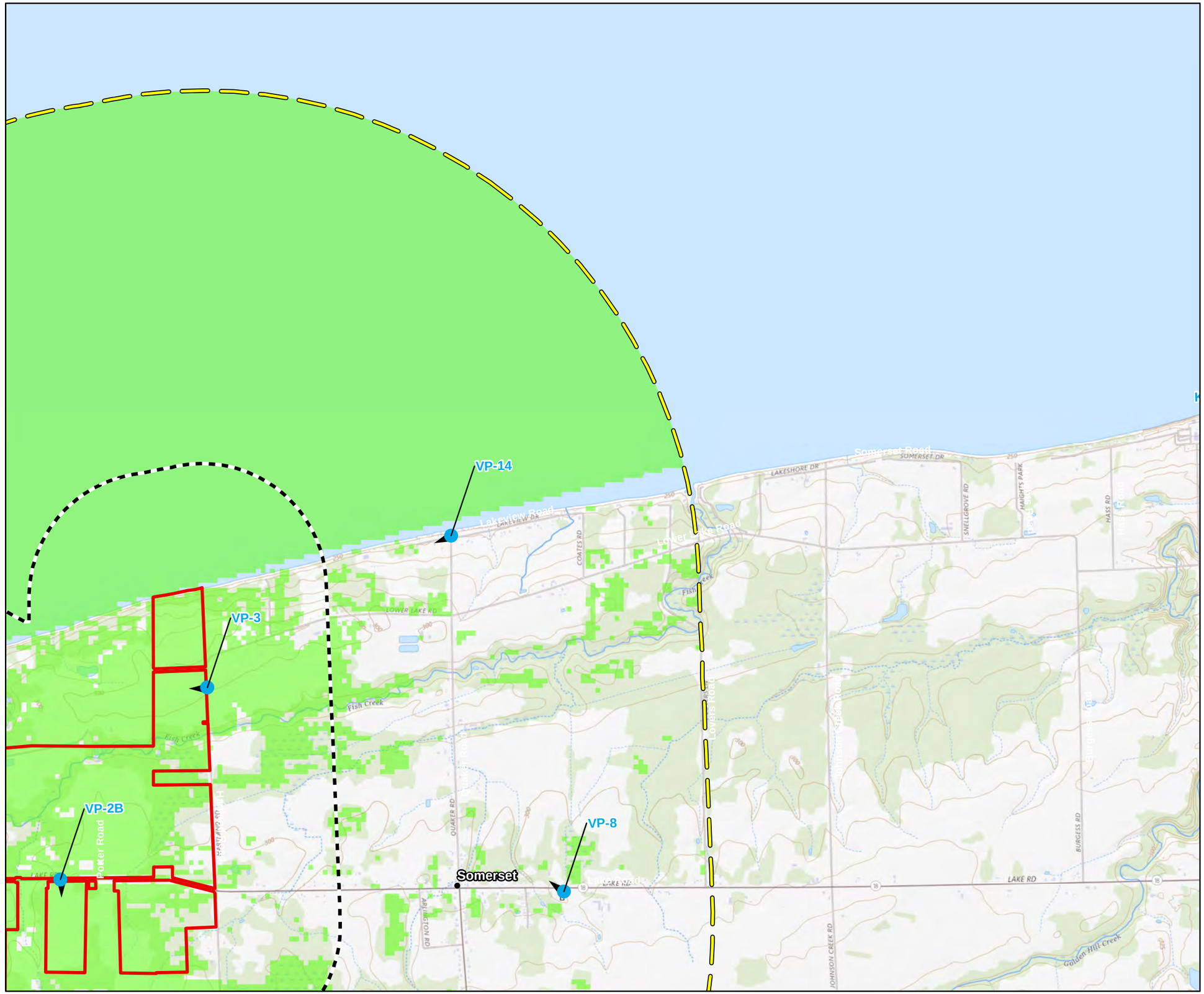
Somerset Solar
Niagara County, NY
March 2023

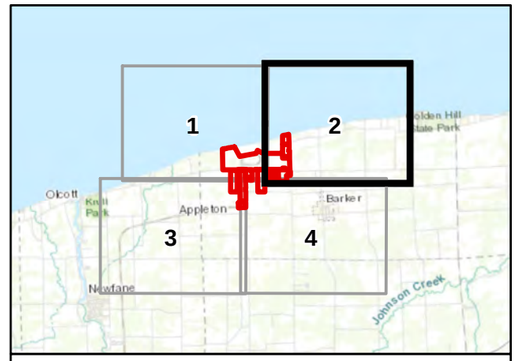
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3e_Vegetated_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3e

Viewshed Analysis for Solar Arrays
Vegetated View

Map 2 of 4

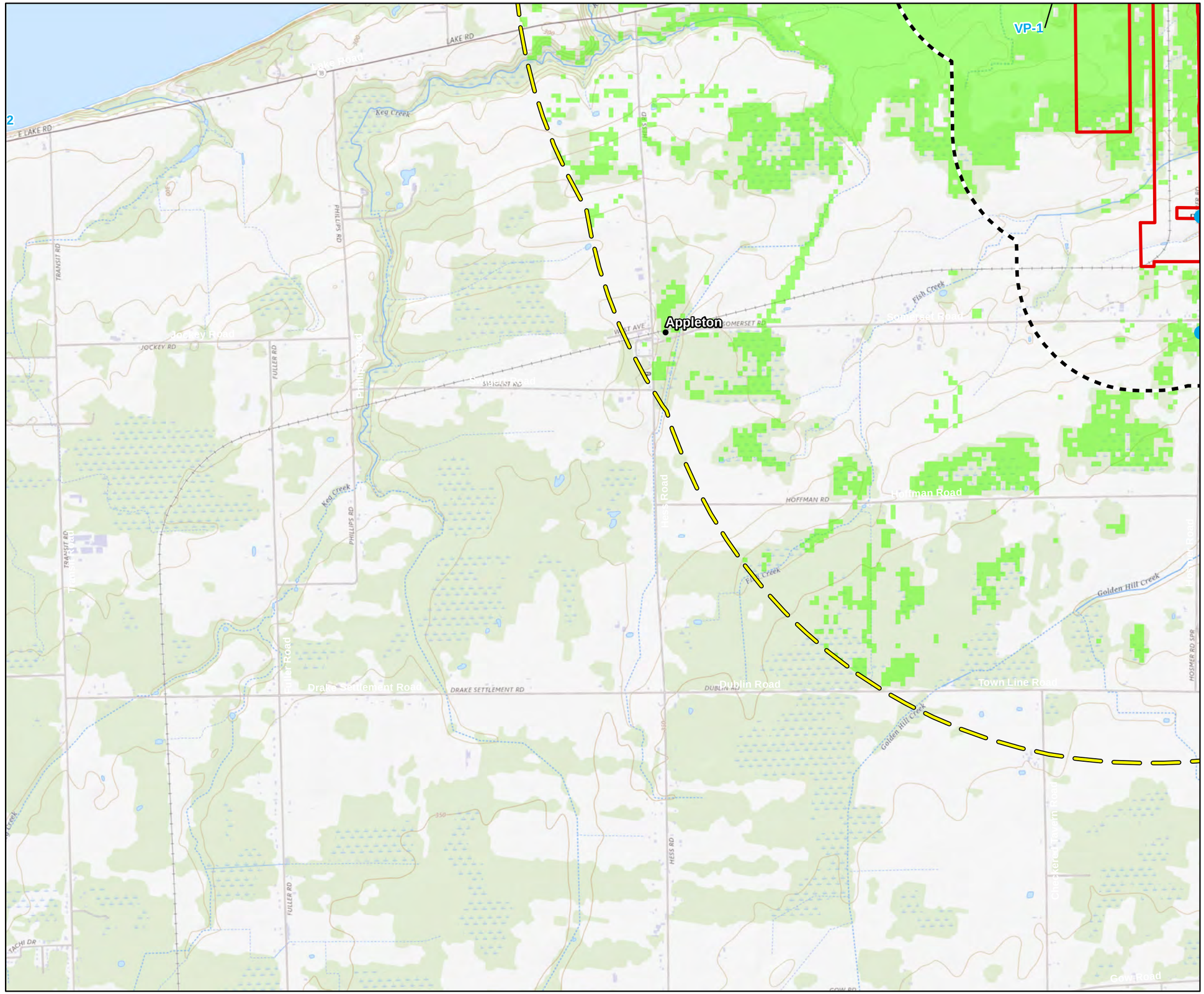
Somerset Solar
Niagara County, NY
March 2023

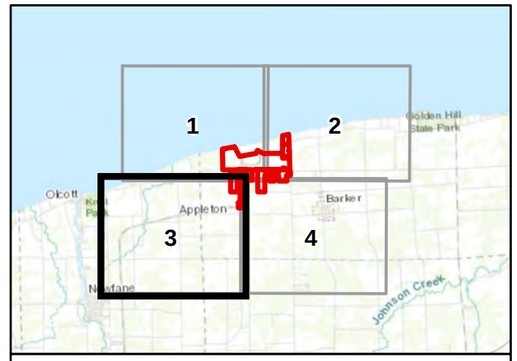
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3e_Vegetated_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

N

1:24,000

0 0.25 0.5 Miles

Figure 3e

Viewshed Analysis for Solar Arrays
Vegetated View

Map 3 of 4

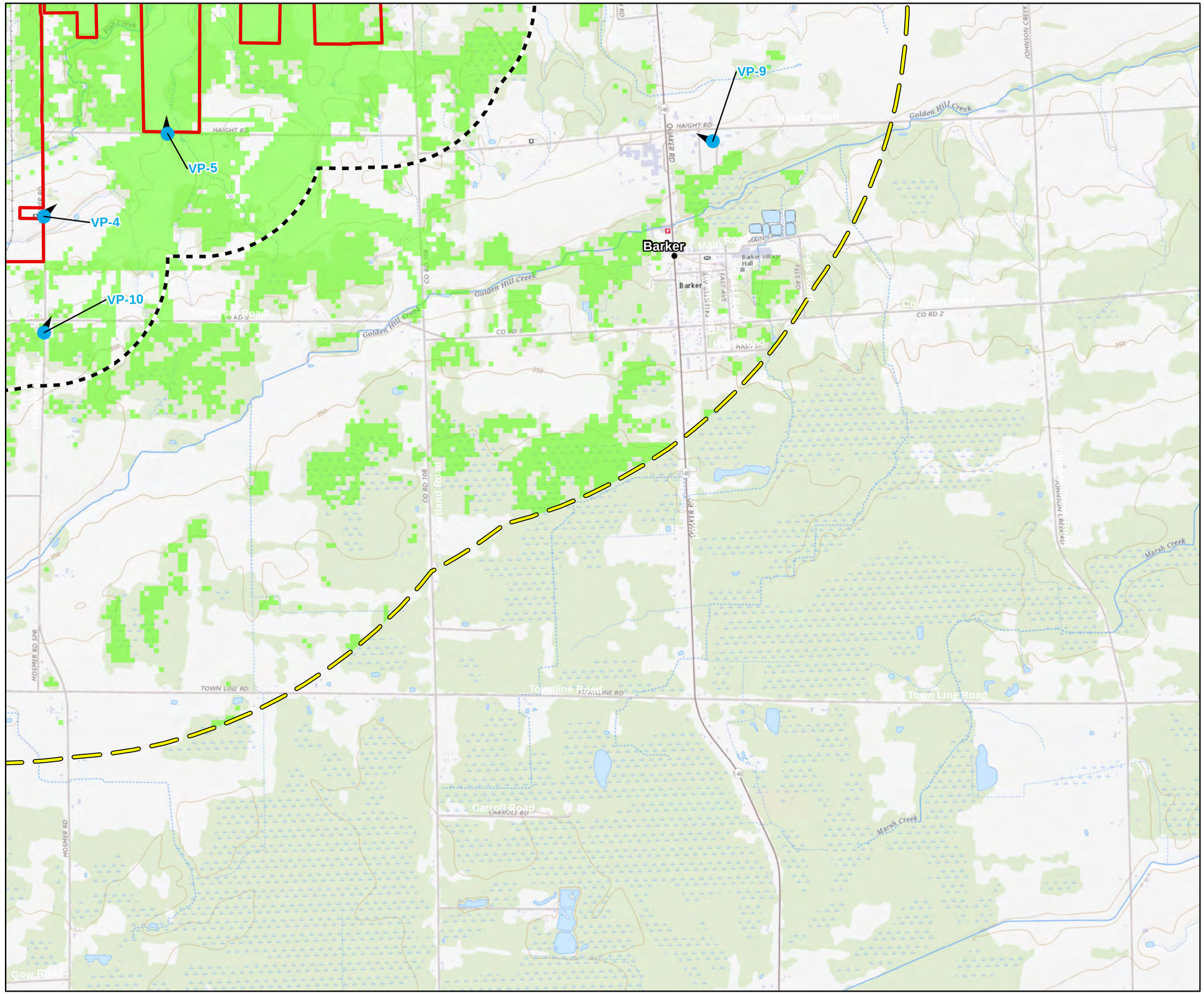
Somerset Solar
Niagara County, NY
March 2023

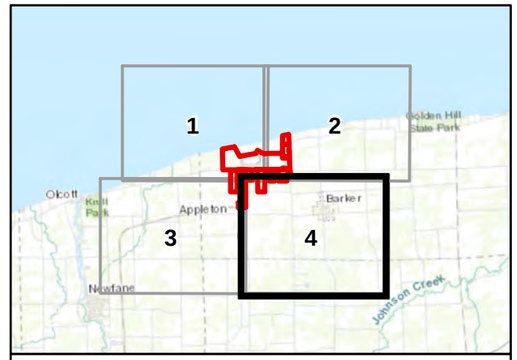
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3e_Vegetated_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Solar array obtained from Tetra Tech Engineering on 07/22/2022. An array height of 9.5 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

N

1:24,000

0 0.25 0.5 Miles

Figure 3e

Viewshed Analysis for Solar Arrays
Vegetated View

Map 4 of 4

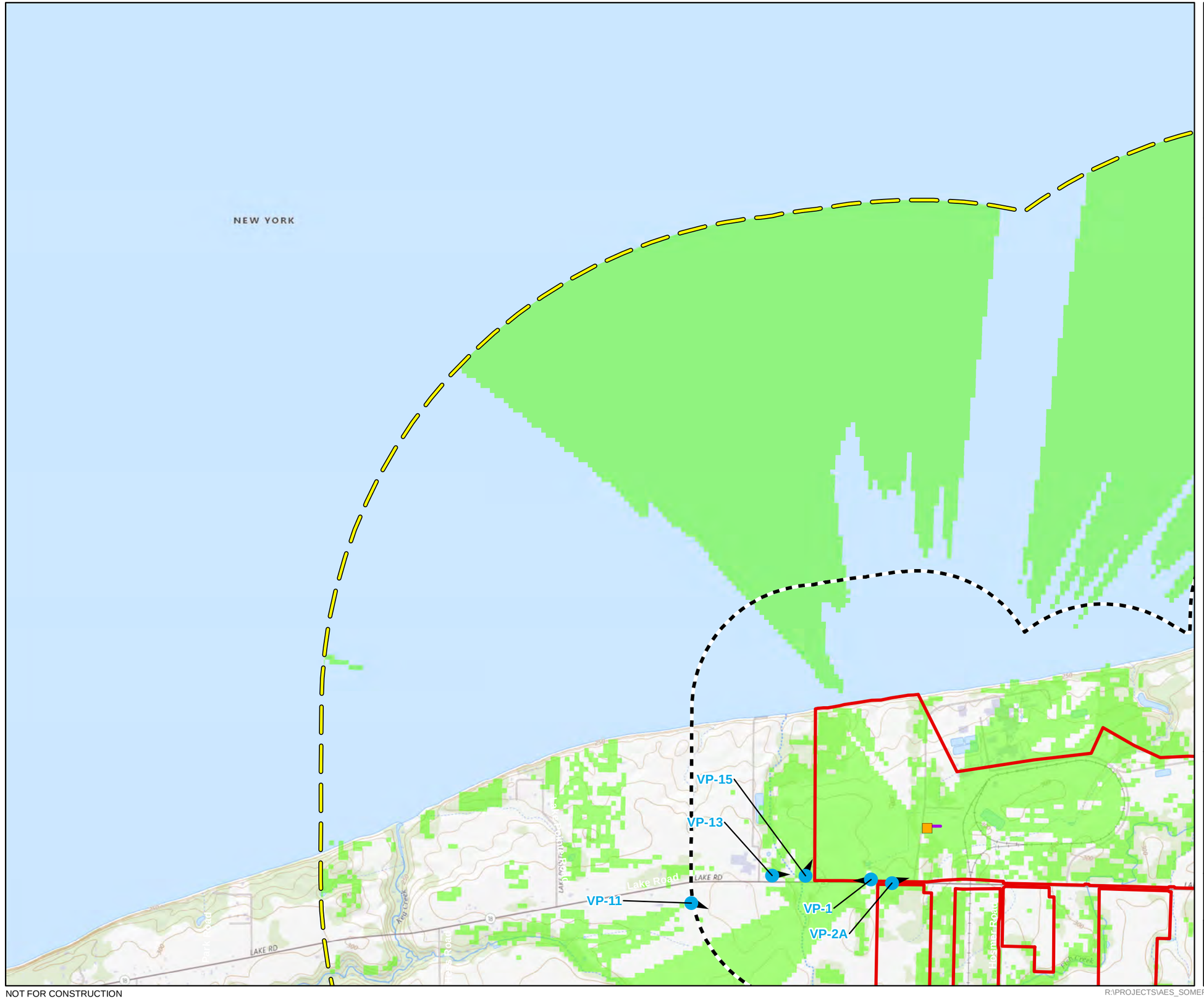
Somerset Solar
Niagara County, NY
March 2023

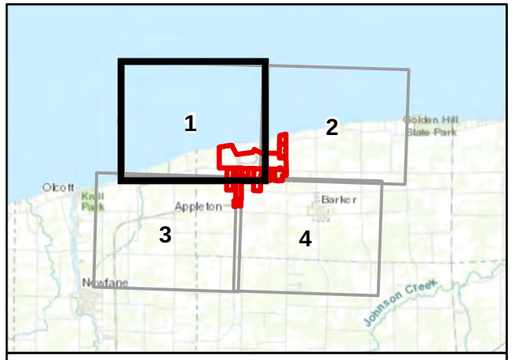
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3e_Vegetated_Viewshed_Topo.mxd





Legend

- Identified Representative Viewpoint
- Facility Substation
- Proposed 345kV
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Substation take-off location and height obtained from Tetra Tech Engineering on 07/22/2022. A take-off structure height of 52 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

Miles

0 0.25 0.5

Figure 3f

Viewshed Analysis for Substation Feature
Vegetated View

Map 1 of 4

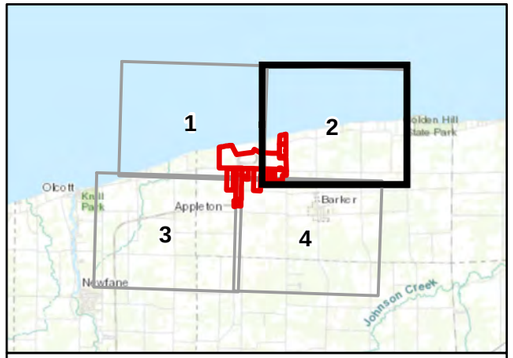
Somerset Solar
Niagara County, NY
March 2023

TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3f_Vegetated_Viewshed_Topo_Substation.mxd



Legend

- Identified Representative Viewpoint
- Facility Substation
- Proposed 345kV
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Substation take-off location and height obtained from Tetra Tech Engineering on 07/22/2022. A take-off structure height of 52 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3f

Viewshed Analysis for Substation Feature
Vegetated View

Map 2 of 4

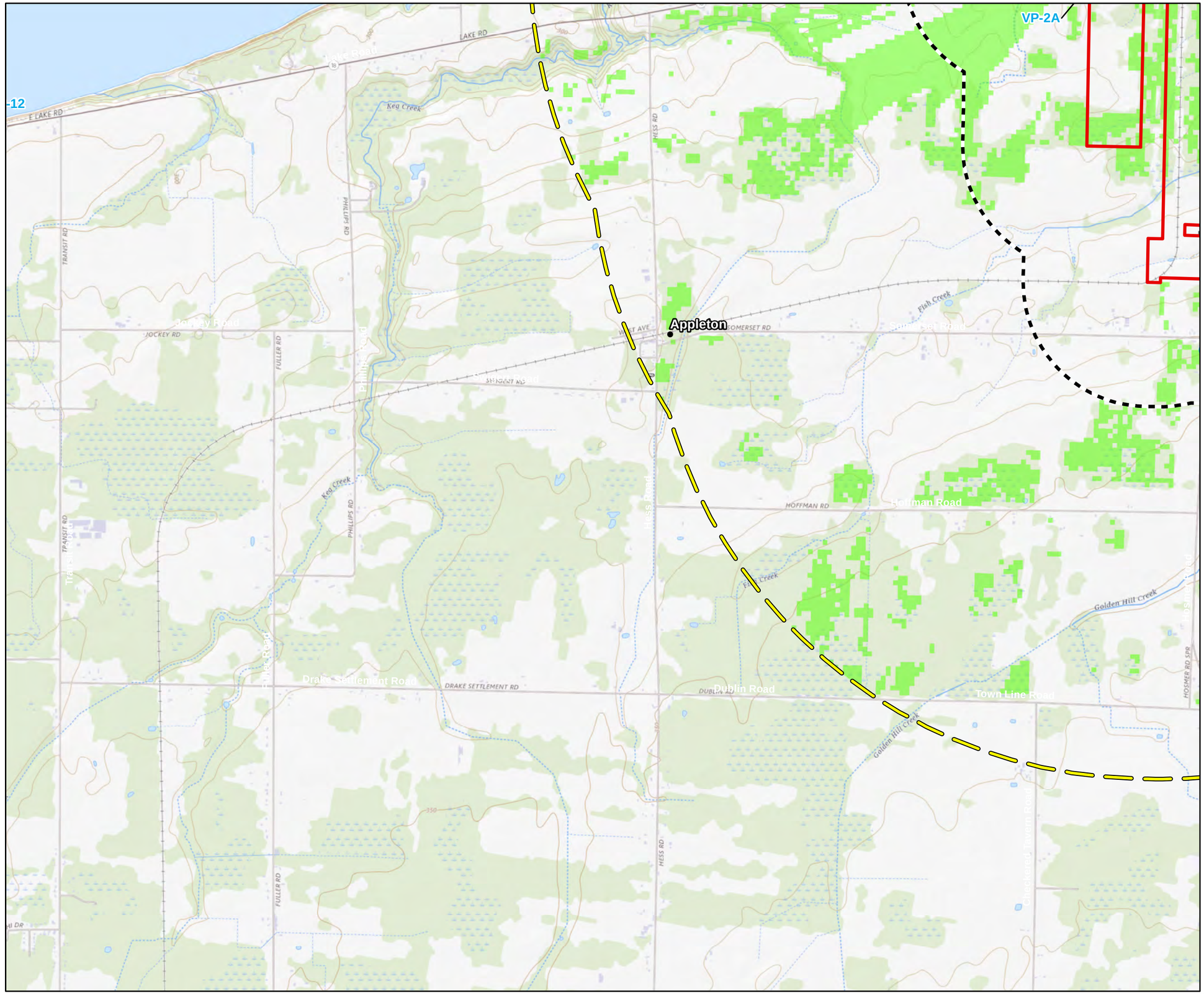
Somerset Solar
Niagara County, NY
March 2023

TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3f_Vegetated_Viewshed_Topo_Substation.mxd



Legend

- Identified Representative Viewpoint
- Facility Substation
- Proposed 345kV
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Substation take-off location and height obtained from Tetra Tech Engineering on 07/22/2022. A take-off structure height of 52 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3f

Viewshed Analysis for Substation Feature
Vegetated View

Map 3 of 4

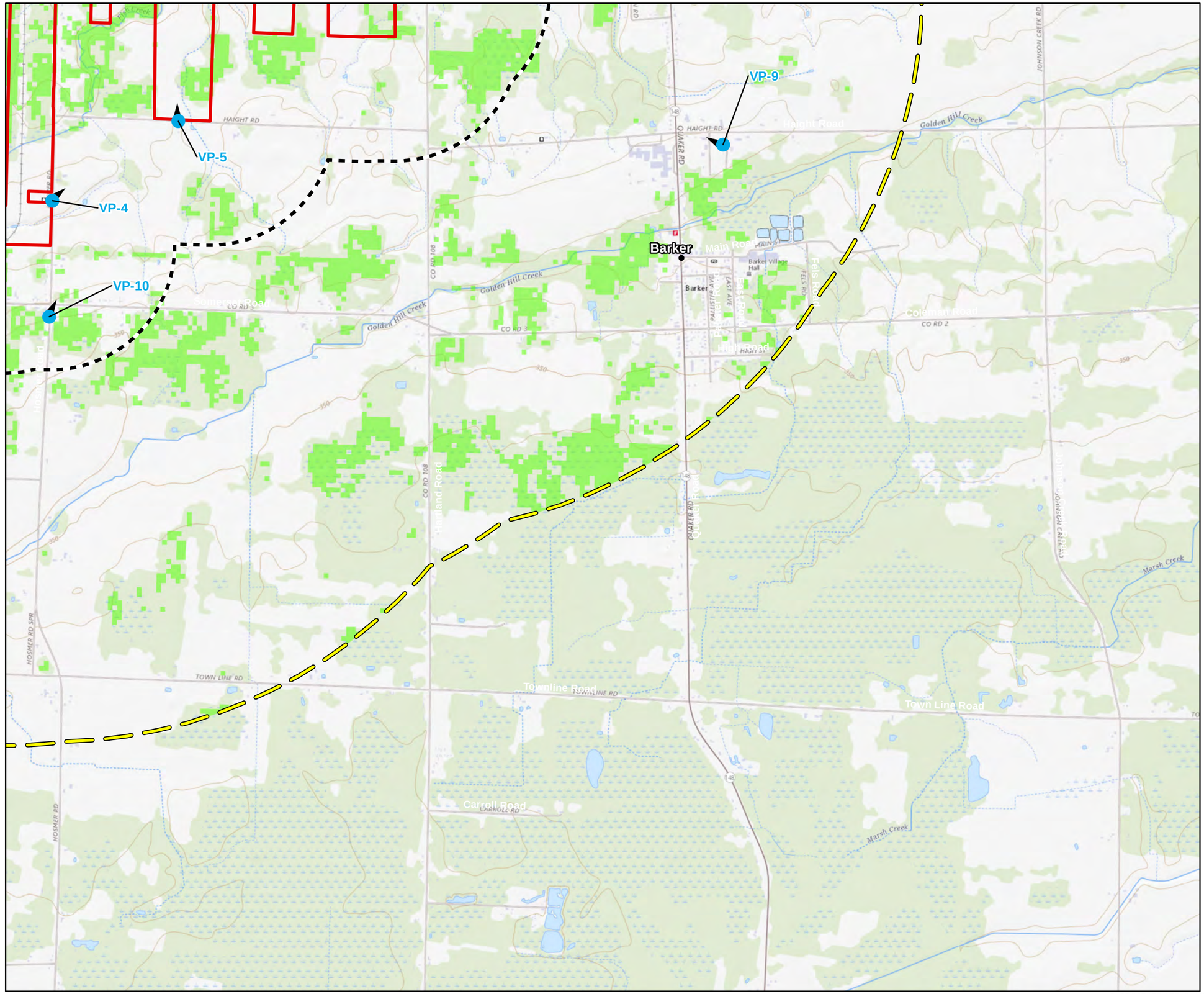
Somerset Solar
Niagara County, NY
March 2023

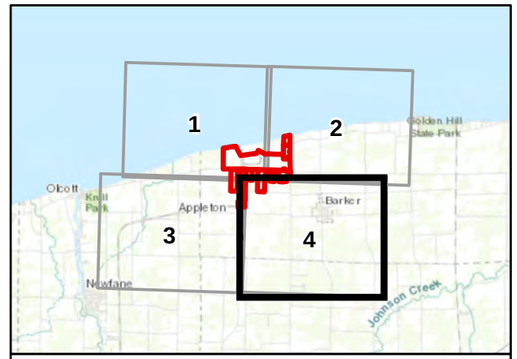
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3f_Vegetated_Viewshed_Topo_Substation.mxd





Legend

- Identified Representative Viewpoint
- Facility Substation
- Proposed 345kV
- Project Site
- Foreground Distance Zone (0.5 miles)
- Visual Study Area (2 miles)
- Potential Visibility of Solar Array*

*Viewshed analysis based on USGS NED10m. USGS 10m was modified to account for forested areas using the USGS LANDFIRE Existing Vegetation Height data. Substation take-off location and height obtained from Tetra Tech Engineering on 07/22/2022. A take-off structure height of 52 ft and an observer height of 6 ft were assumed in the analysis. Areas that are not shaded in green indicate that the proposed solar facility is likely not visible at that location.

1:24,000

0 0.25 0.5 Miles

Figure 3f

Viewshed Analysis for Substation Feature
Vegetated View

Map 4 of 4

Somerset Solar
Niagara County, NY
March 2023

TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH, USGS NED, LANDFIRE EVH

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_3f_Vegetated_Viewshed_Topo_Substation.mxd

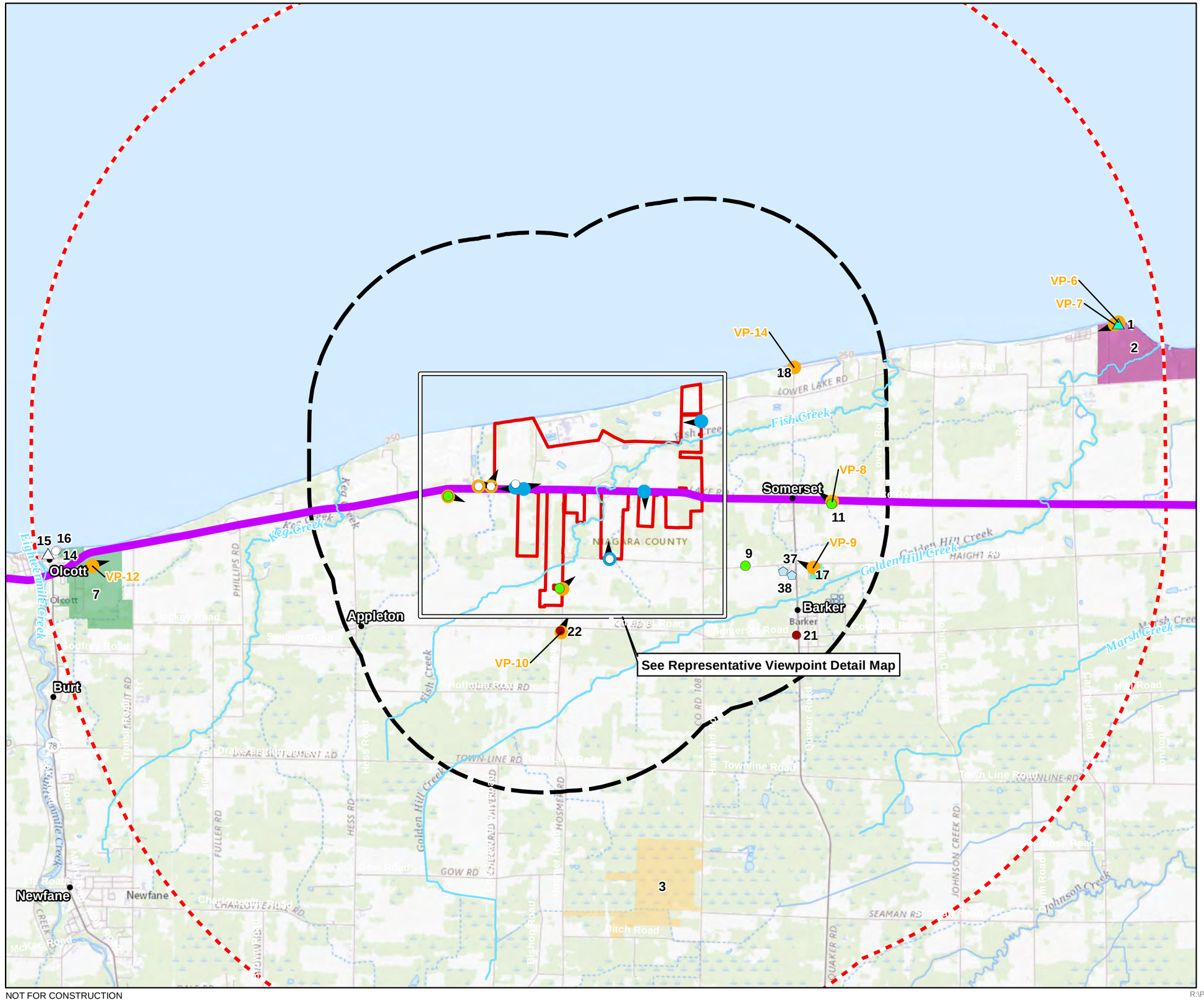


Figure 4a

Identified Representative Viewpoints

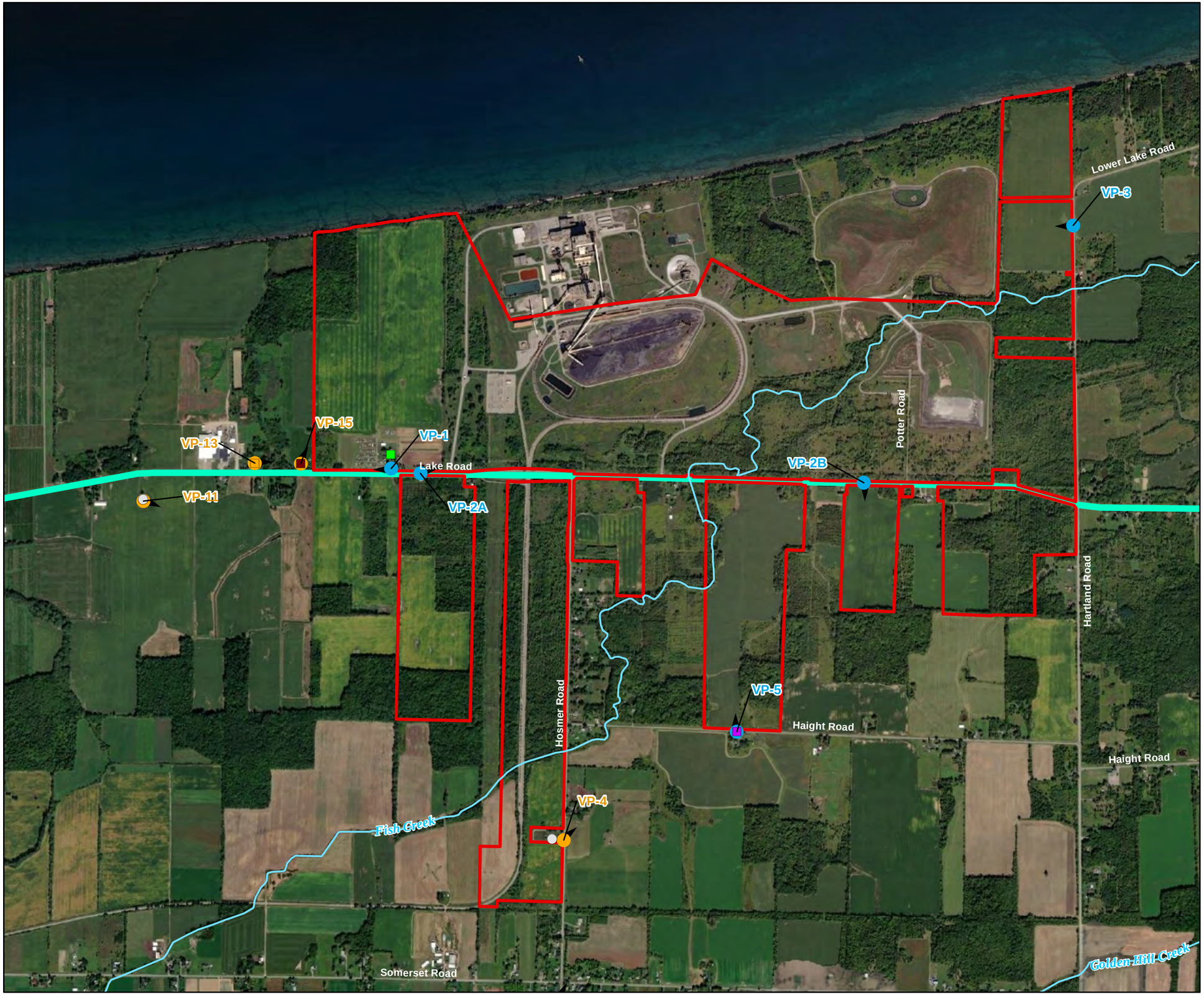
Somerset Solar
Niagara County, NY
March 2023

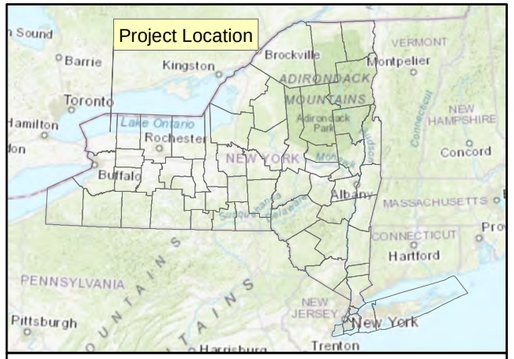
TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_4a_Identified_VPs.mxd





Legend

- Identified Representative Viewpoint
- Identified Representative Viewpoint with Photo Simulation
- Project Site
- Babcock House Museum
- Haight Road Residential
- Smith Residence
- U Pick Blueberries
- Cemetery
- Great Lakes Seaway Trail Scenic Byway
- Stream/River

N

0 1,000 2,000 Feet

Figure 4b

Identified Representative Viewpoint - Detail

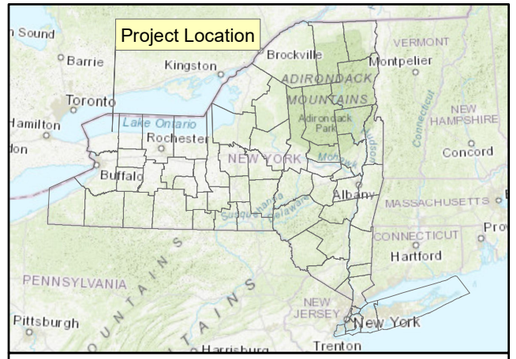
Somerset Solar
Niagara County, NY
March 2023

TETRA TECH

Source: ESRI, USDA NAIP, BTS, US CENSUS, NYSGIS, USGS PAD-US 2.1, NSD, NYSDEC, HIFLD, NHD, GOOGLE EARTH PRO, NRHP, NSBP

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_Fig_4b_Identified_VPs_Detail.mxd



Legend

- Project Site Boundary
- Foreground Distance Zone (0.5 miles)
- Middleground to Backgroud Distance Zone (2 miles)
- Municipal Boundary

Landscape Similarity Zones

- Agriculture
- Developed / Transportation Corridors
- Forest
- Industrial
- Open Water
- Wetland

Approximate Scale

0 0.25 0.5 0.75 1 Miles

Figure 5

Landscape Similarity Zones

Somerset Solar
Niagara County, NY
January 2023

TETRA TECH

Source: Esri, et. al., 2022; NYS GIS Civil Boundaries, Sept 2021, USGS NLCD 2019

NOT FOR CONSTRUCTION

R:\PROJECTS\AES_SOMERSET\SECTION_94C\MAPS\Visuals_LandscapeSimilarityZones.mxd

Attachment 1: Sources of Data

Somerset Solar Facility
Data Sources

Data Source	Description	Link to Source
National Park Service		
National Register of Historic Places (Geospatial Dataset – Code: 2210280)	The National Register geospatial dataset is intended to be a comprehensive inventory of all cultural resources that are listed on the National Register of Historic Places. However, this dataset excludes all features deemed 'restricted' or 'sensitive', such as sensitive archaeological sites. This dataset provides feature geometry representations (point or polygon) and is intended to be supplemented with descriptive attributes maintained by other external database systems such as the National Register Information System which is included in this geodatabase.	https://irma.nps.gov/DataStore/Reference/Profile/2210280
Administrative Boundaries of National Park System Units 9/30/2018 - National Geospatial Data Asset (NGDA) NPS National Parks Dataset	National Park Service unit boundaries.	https://irma.nps.gov/DataStore/Reference/Profile/2224545?Inv=True
Wild and Scenic Rivers Program: Map of NPS Wild and Scenic Rivers	On-line interactive map that provides detailed information about and links for individual wild and scenic rivers.	https://www.nps.gov/orgs/1912/index.htm
New York State Department of State		
Title 19	Identifies categories from which aesthetic resources of statewide significance can be derived and guidance for the evaluation of visual impacts of proposed projects.	https://ores.ny.gov/system/files/documents/2020/09/draft-regulations-chapter-xviii-title-19-subparts-900-1-900-5-900-7-900-14.pdf
New York State Department of Environmental Conservation		
Policy DEP-00-2	This policy provides guidance for the evaluation of visual impacts of proposed projects and outlines where scenic and aesthetic resources of statewide significance may be derived.	https://www.dec.ny.gov/docs/permits_ej_operations_pdf/visualpolicydep002.pdf
New York State Coastal Management Program		
Scenic Areas of Statewide Significance	Outlines NYS coastal areas, inland waterways, local waterfront revitalization program areas, groundwater management zones, designated agricultural districts, flood-prone areas, critical environmental areas designated pursuant to Article 8 of the ECL, and coastal erosion hazard areas that are considered scenic areas of statewide significance (SASS).	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=321
New York State Department of Transportation		
Great Lakes Seaway Trail National Scenic Byway Corridor Management Plan Series (2005)	This plan details opportunities for economic development to promote tourism while preserving the byway's intrinsic resources and character.	https://www.dot.ny.gov/content/engineering/Scenic-Byways/Byways-repository/Great%20Lakes%20Seaway%20Trail_001-050.pdf

Somerset Solar Facility
Data Sources

Data Source	Description	Link to Source
New York State GIS Clearinghouse GIS Data Sets		
DEC Lands and Campgrounds (*revised April 2018*)	Lands under the care, custody and control of DEC, including Wildlife Management areas, Unique Areas, State Forests, Forest Preserve, and DEC-operated campgrounds.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1114
DEC Points of Interest (*revised April 2018*)	Point data locating and differentiating assets on state lands. Assets represented as point features are man-made items, which require periodic maintenance or inspection. Examples include custodial, asset, lean-to, parking lot, lean-to, pit privy, campsite, trail structure, parking, primitive site, fire tower, scenic vista, picnic site, day use area, and others.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1258
DEC Roads and Trails (*revised April 2018*)	Line data locating and differentiating transportation corridors on state DEC lands.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1167
New York State Historic Sites and Park Boundary (revised October 2018)	State Park and Historic Site Boundaries - Data include boundaries of state park and historic site facilities. Facility types include state parks, marine parks, boat launch sites, historic sites, historic parks, and park preserves.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=430
New York State Schools and School District Boundaries	New York State Education related datasets (public schools K-12)	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1326
New York State Heritage Areas	New York State Heritage Areas Data include boundaries of twenty Heritage Areas designated in Parks, Recreation and Historic Preservation law, Section 33.03, from 1977 to the present. Designations include urban cultural parks, heritage areas, and heritage corridors.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1188
Parks and Recreation	Shapefiles representing the boundaries of municipal parks, state parks and preservation lands, and Mohawk Hudson Land Conservancy areas within Albany County.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1181
Public Fishing Stream Parking Areas	Displays the locations public fishing stream parking areas in New York State.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1193
Scenic Areas of Statewide Importance (*revised November 2014*)	Statutory boundary describing scenic areas designated by the Department of State. Designations completed for the Hudson River Valley only.	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=321
Town of Somerset		
Town of Somerset Comprehensive Plan Update (2016)	This comprehensive plan provides guidance for development in a manner that encourages growth while minimizing impacts to natural resources and the town's rural character.	https://www.somersetny.org/sites/g/files/vyhlif3826/f/u83/final_plan_update_adopted_2016.pdf
Town of Somerset Local Waterfront Revitalization Program	This plan provides guidance for developing the Lake Ontario waterfront.	https://dos.ny.gov/system/files/documents/2020/08/town_of_somerset_lwrp_compressed.pdf
U.S. Department of Transportation, Federal Highway Administration		
America Byways: New York	Online map of America's Byways within New York	https://www.fhwa.dot.gov/byways/states/NY/maps

Somerset Solar Facility
Data Sources

Data Source	Description	Link to Source
U.S. Geological Survey (USGS)		
National Hydrology	The NHD represents the nation's drainage networks and related features, including rivers, streams, canals, lakes, ponds, glaciers, coastlines, dams, and stream gages.	https://www.usgs.gov/core-science-systems/ngp/national-hydrography
The National Map (TNM) Download (V1.0)	This site provides applications and web map services for accessing 'Topographic Information for the Nation'. This information includes topographic maps, and GIS data for elevation, hydrography, watersheds, geographic names; orthoimagery; governmental units/boundaries; transportation; and land cover.	https://viewer.nationalmap.gov/basic/ https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/USTopo/PDF/NY/NY_Kinderhook_20160817_TM_geo.pdf https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/USTopo/PDF/NY/NY_Delmar_20160817_TM_geo.pdf https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/USTopo/PDF/NY/NY_Alcove_20160817_TM_geo.pdf https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/USTopo/PDF/NY/NY_Clarksville_20160817_TM_geo.pdf https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/USTopo/PDF/NY/NY_Ravena_20160824_TM_geo.pdf https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/USTopo/PDF/NY/NY_East_Chatham_20160817_TM_geo.pdf

Attachment 2: Scenic Resources within the Visual Study Area

Somerset Solar
Scenic Resources within Visual Study Area

Visually Sensitive Resource	Town	County	Approximate Distance from Facility[1]	Distance Zone[2]	Project Visibility[3] (Views possible) ○	Project Visibility[3] (Not Visible) ●
Properties Listed in the National or State Register of Historic Places						
Thirty Mile Point Light House	Somerset	Niagara	4.5 mi.	Background		●
State Parks						
Golden Hill State Park	N/A	Niagara	4.5 mi.	Background		●
Heritage Area System						
None Identified within Visual Study Area						
State Forest Preserves						
None Identified within Visual Study Area						
National Wildlife Refuges, State Game Refuges and State Wildlife Management Areas (WMA)						
Hartland Swamp Wildlife Management Area	North Hartland	Niagara	3.5 mi	Middleground		●
National Natural Landmarks						
None Identified within Visual Study Area						
National Parks, Recreation Areas, Seashores, Forests						
None Identified within Visual Study Area						
Rivers Designated as National or State Wild, Scenic, or Recreational						
None Identified within Visual Study Area						
A site, area, lake, reservoir or highway designated or eligible for designation as scenic						
Great Lakes Seaway Trail Scenic Byway	Somerset, Olcott	Niagara	Adjacent	Foreground		●
Scenic Areas of Statewide Significance (SASS)						
None Identified within Visual Study Area						
State or federally-designated trail, or one proposed for designation						
None Identified within Visual Study Area						

Somerset Solar
Scenic Resources within Visual Study Area

Visually Sensitive Resource	Town	County	Approximate Distance from Facility[1]	Distance Zone[2]	Project Visibility[3] (Views possible) ○	Project Visibility[3] (Not Visible) ●
Adirondack Park Scenic Vistas						
None Identified within Visual Study Area						
State Nature and Historic Preserve Areas						
None Identified within Visual Study Area						
Palisades Park						
None Identified within Visual Study Area						
Other Resources of Statewide or Regional Significance						
Western Erie Canal Heritage Corridor	Various	Niagara	0	Background		●
Wetlands Reserve Program Conservation Easement	Town of Newfane	Niagara	0.9	Background		●
Krull (Niagara County) Park	Hounsfield	Niagara	4.5	Middleground		●
Keg Creek Conservation Easement (NYSDEC)	Town of Somerset	Niagara	0.5	Middleground		●
Locally Important Resources						
Babcock House (Museum)	Somerset	Niagara	315 ft.	Foreground	○	
Quaker Cemetery	Town of Somerset	Niagara	0.7	Middleground		●
Sawyer Cemetery	Town of Somerset	Niagara	0.5	Middleground		●
Somerset Cemetery	Town of Somerset	Niagara	1.4	Middleground		●
West Somerset Cemetery	Town of Somerset	Niagara	0.01	Foreground	○	
Somerset Town Park	Town of Somerset	Niagara	1.4	Middleground		●
Barker Bi-Centennial park	Village of Barker	Niagara	0.3	Foreground	○	

Somerset Solar
Scenic Resources within Visual Study Area

Visually Sensitive Resource	Town	County	Approximate Distance from Facility[1]	Distance Zone[2]	Project Visibility[3] (Views possible) ○	Project Visibility[3] (Not Visible) ●
Our Lady of the Lake Catholic Church	Village of Barker	Niagara	1.6	Middleground		●
Olcott Beach	Hamlet of Olcott	Niagara	4.8	Background		●
Major Transportation Corridors						
New York State Route 148/County Road 15/Quaker Road	Town of Hartland	Niagara	1 mi.	Middleground		●
Hosmer Road	West Somerset	Niagara	0	Foreground	○	
Lakes and Rivers or Village						
Lake Ontario	Somerset	Niagara	3.8	Middleground		●
Fish Creek	Somerset	Niagara	3.5	Middleground		●
Marsh Creek	Somerset	Niagara	0.05	Foreground	○	
Keg Creek	Town of Newfane	Niagara	0.03	Foreground	○	
Golden Hill Creek	Somerset	Niagara	0.01	Foreground	○	
Schools and Colleges						
Pratt Elementary School	Somerset	Niagara	1.9	Middleground		●
Barker Junior/Senior High School	Barker	Niagara	2.8	Middleground		●
Other/ Residential Areas						
Haight Road	Town of Somerset	Niagara	0.01	Foreground	○	
New York State Route 18 Residential 1	Town of Somerset	Niagara	0.2	Foreground	○	

Notes:
1 – Distance for sites comprised of large areas (i.e., parks, SASS, historic districts) or linear sites (i.e., roadways, trails, river), were measured from the sites closest point to the Facility.

Somerset Solar
Scenic Resources within Visual Study Area

Visually Sensitive Resource	Town	County	Approximate Distance from Facility[1]	Distance Zone[2]	Project Visibility[3]	
					(Views possible) ○	*(Not Visible)* ●

2 – Distance zones are defined as foreground (0 to 0.5 miles), middleground (0.5 to 4 miles), and background (greater than 4 miles).

3 – Project visibility is based off the results of the vegetated viewshed of the solar array and electrical equipment (i.e., substation and electrical infrastructure). Sites comprised of larger areas or linear sites noted as having "views possible" indicates that some portion of that site could potentially have views of some portion of Facility components. Potential visibility noted in the table is based on the viewshed analysis only not field conditions.