

Visibility Analysis

Figure 1: Viewshed/Photo Location Map South Hill Road Wind Project Town of Villenova, Chautauqua County, NY

Legend

- Area of Likely Turbine Visiblity (Incl. screening vegetation)
- Photo Locations
- O Tower Location

Note: Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

This "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. The location and height of vegetated areas and buildings is based on USGS NYSGPO_Southwest17_Spring_LiDAR data aquired from NYSGIS Clearinghouse.

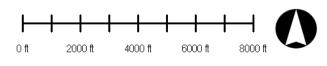








Photo 1 - NY83 at Pine Valley Central School **EXISTING CONDITION**



Camera:

Date: May 23, 2023 Time: 10:05 AM Focal Length: 50 mm

10:05 AM 50 mm Canon EOS 6D Mark II Photo Location: 42° 20′ 23.9549″ N 79° 05′ 24.5277″ W Distance to Nearest Turbine: 2.0 miles



Figure 2A PHOTO SIMULATIONS







Focal Length:

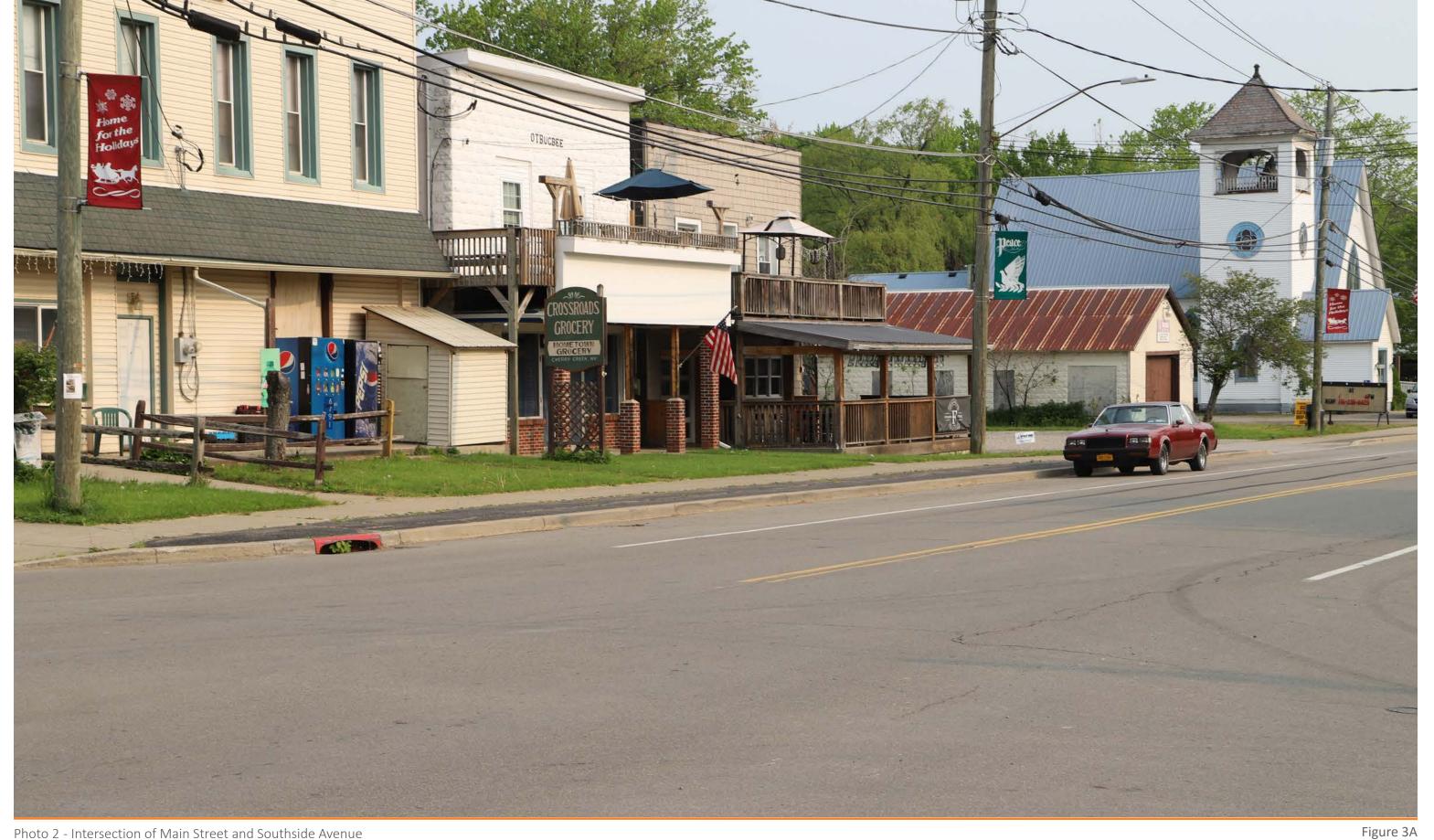
May 23, 2023 10:05 AM

Canon EOS 6D Mark II

42° 20′ 23.9549″ N 79° 05′ 24.5277″ W Distance to Nearest Turbine: 2.0 miles



PHOTO SIMULATIONS



EXISTING CONDITION

Photograph Information

61 mm Focal Length:

May 23, 2023 8:40 AM

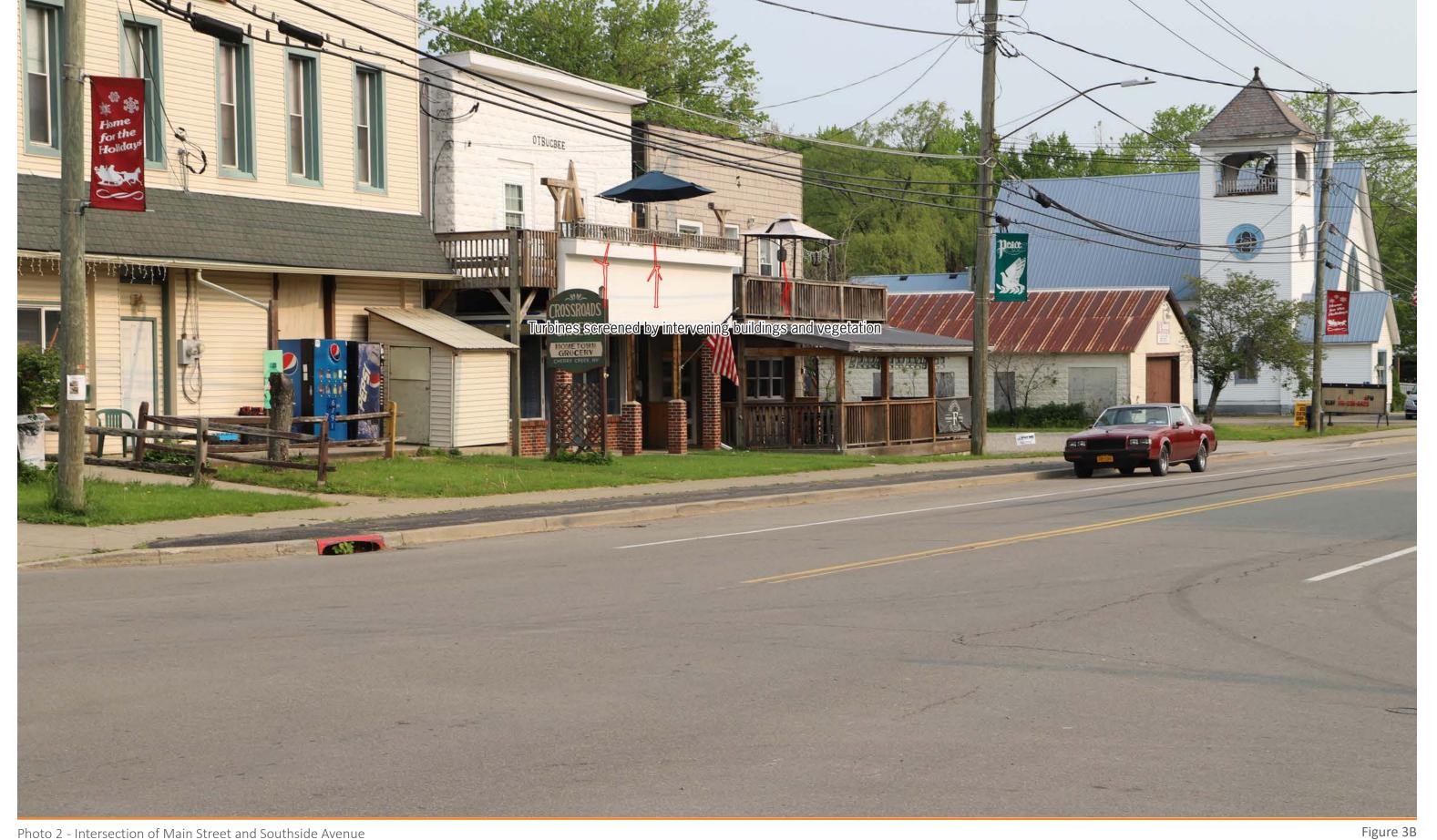
Canon EOS 6D Mark II

Distance to Nearest Turbine: 4.3 miles

42° 17′ 39.3660″ N 79° 05′ 58.0559″ W



PHOTO SIMULATIONS



SIMULATED CONDITION

Photograph Information

Focal Length:

May 23, 2023 8:40 AM 61 mm

Canon EOS 6D Mark II

42° 17′ 39.3660″ N 79° 05′ 58.0559″ W Distance to Nearest Turbine: 4.3 miles



PHOTO SIMULATIONS



Photo 3 - Farrington Hollow Road near 7925 Farrington Hollow Road **EXISTING CONDITION**

Photograph Information

Date: May 23, 202: Time: 9:07 AM Focal Length: 50 mm

 May 23, 2023
 Photo Location:
 42° 20′ 34.1520″ N

 9:07 AM
 79° 10′ 25.3680″ W

 50 mm
 Distance to Nearest Turbine:
 2.5 miles

 Canon EOS 6D Mark II

new leaf energy Figure 4A PHOTO SIMULATIONS



Photo 3 - Farrington Hollow Road SIMULATED CONDITION



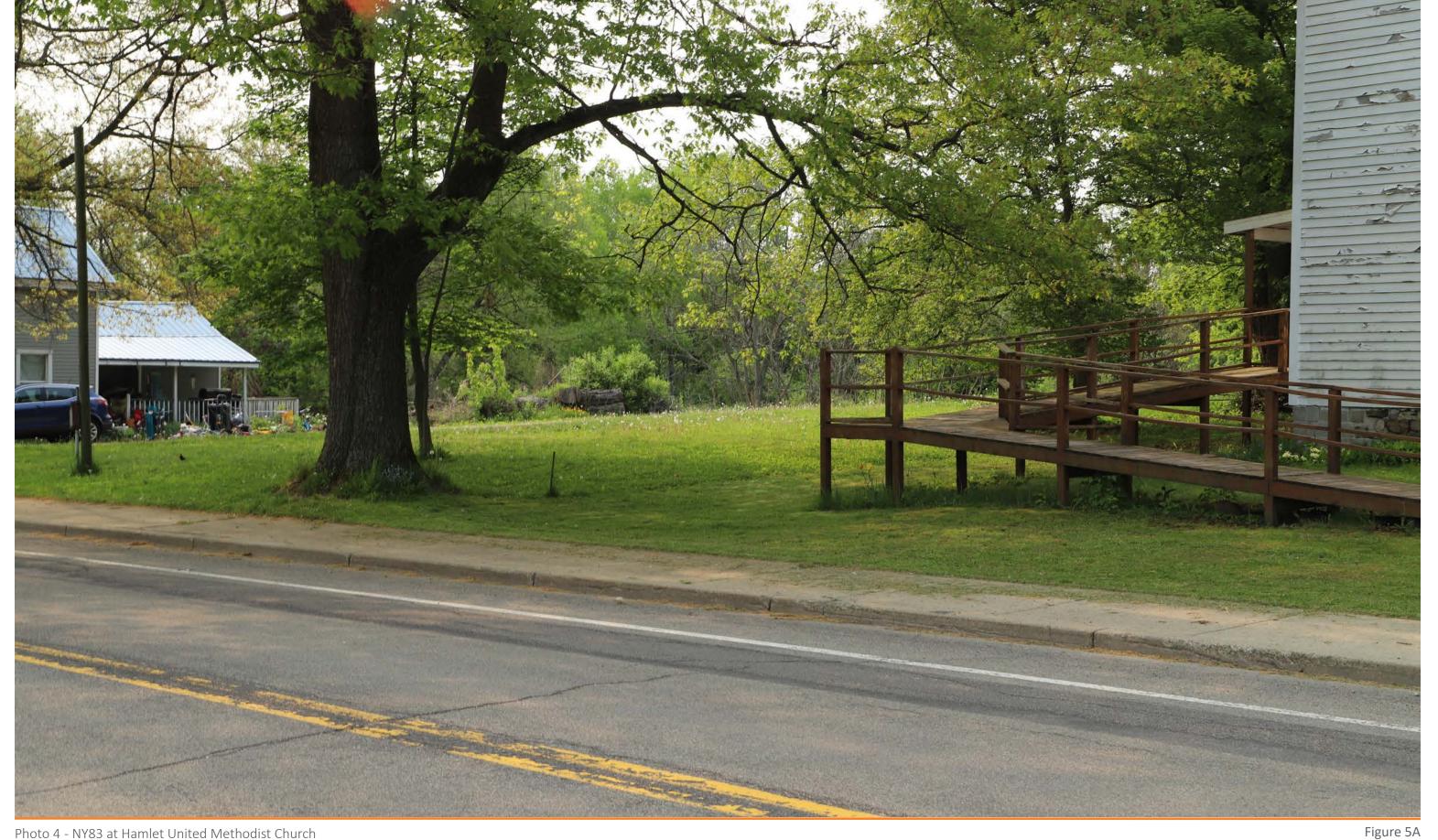
Date: May 23, 2023
Time: 9:07 AM
Focal Length: 50 mm

9:07 AM 50 mm Canon EOS 6D Mark II

Photo Location: 42° 20′ 34.1520″ N 79° 10′ 25.3680″ W Distance to Nearest Turbine: 2.5 miles



Figure 4B PHOTO SIMULATIONS



EXISTING CONDITION

Photograph Information

Focal Length:

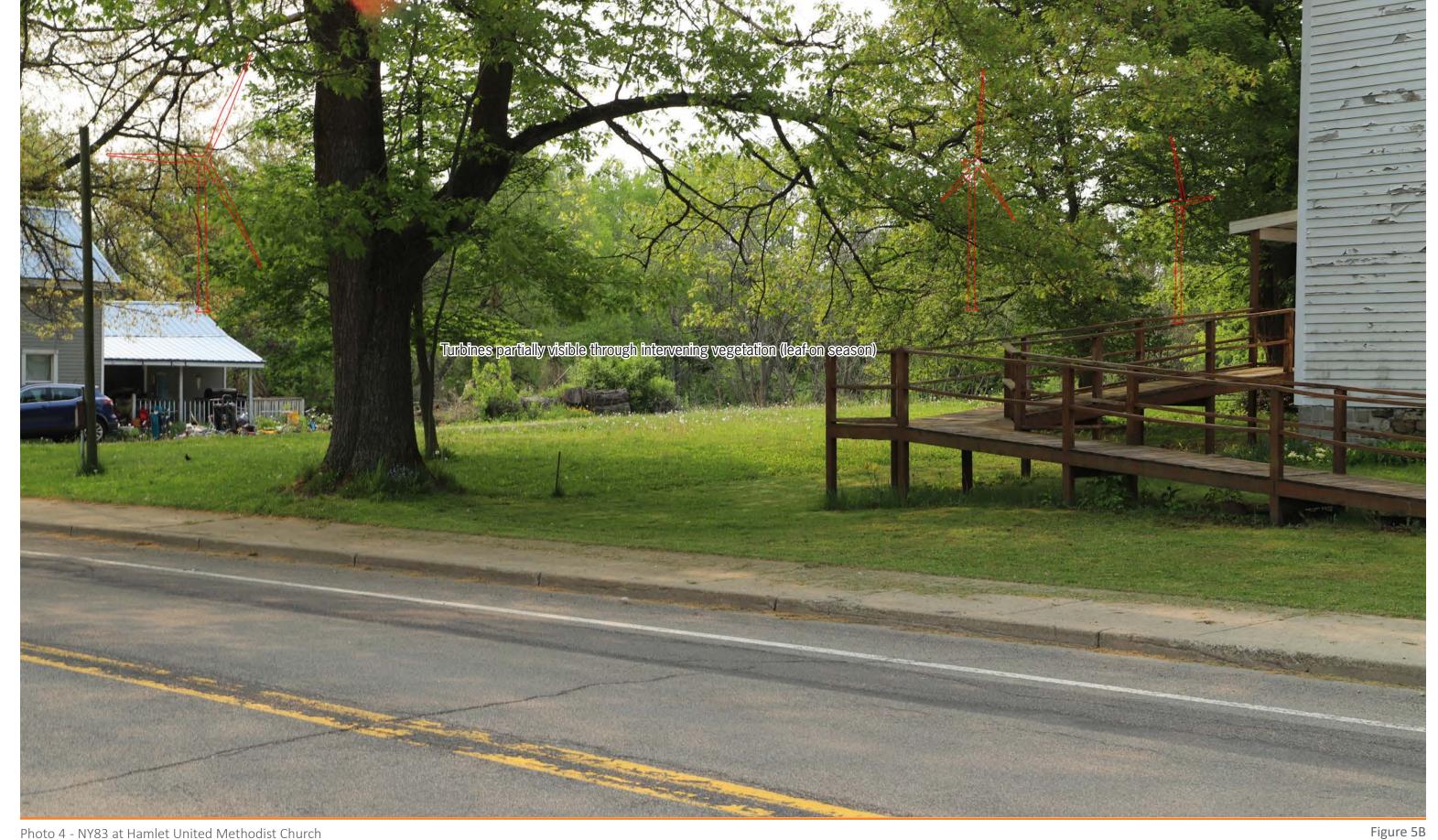
Canon EOS 6D Mark II

Distance to Nearest Turbine: 0.9 miles

44° 22′ 11.9100″ N 79° 08′ 04.1699″ W



Figure 5A PHOTO SIMULATIONS





Photograph Information

Date: May 23, 2 Time: 9:24 AM Focal Length: 50 mm

May 23, 2023 9:24 AM 50 mm Canon EOS 6D Mark II

79° 08′ 04
Distance to Nearest Turbine: 0.9 miles

44° 22′ 11.9100″ N 79° 08′ 04.1699″ W ne: 0.9 miles



PHOTO SIMULATIONS

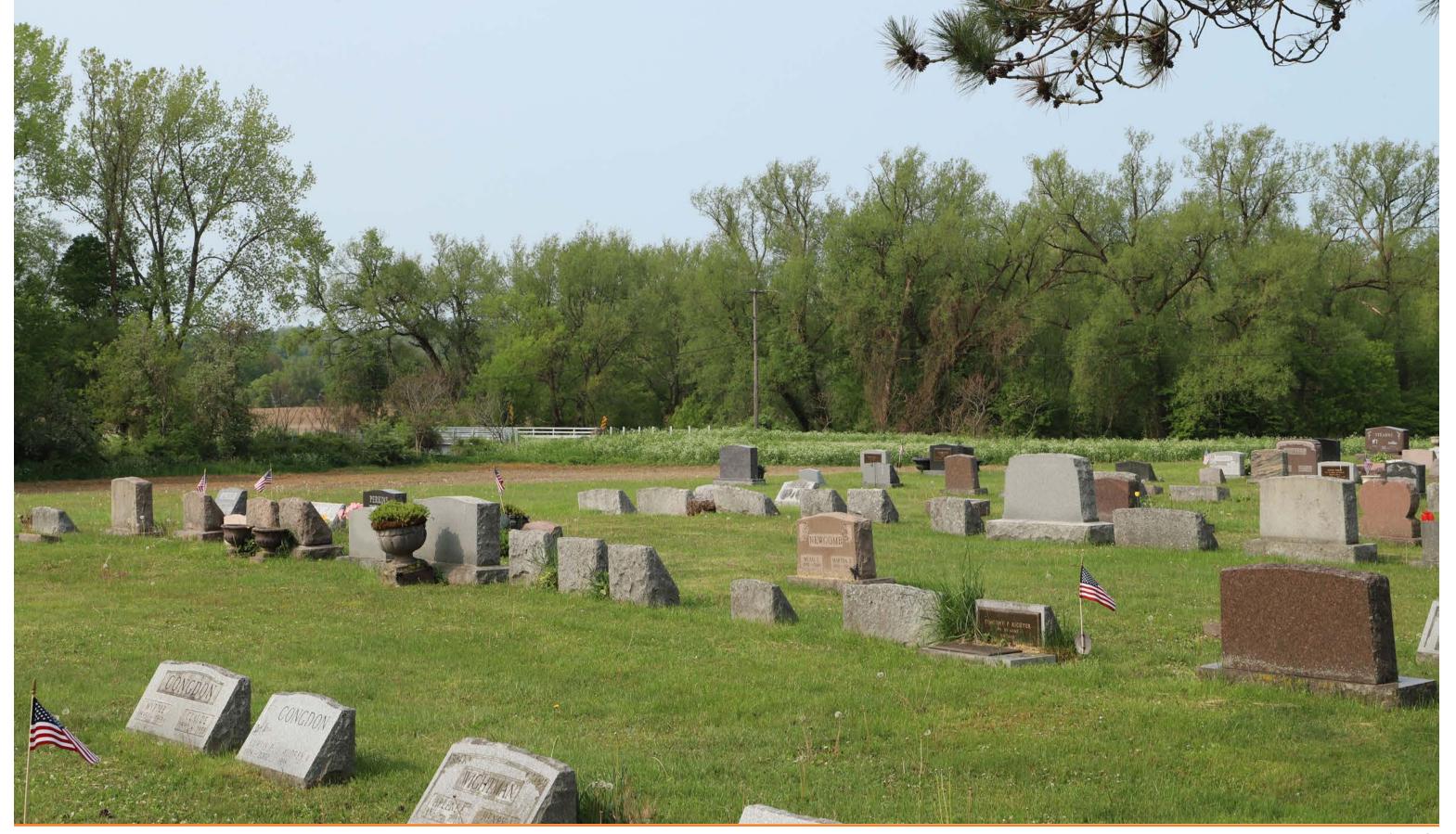


Photo 5 - Villenova Cemetery EXISTING CONDITION

Photograph Information

Focal Length:

55 mm

Canon EOS 6D Mark II

Distance to Nearest Turbine: 1.6 miles

42° 22′ 35.1674″ N 79° 05′ 50.0729″ W







Date: May 23, 2 Time: 9:49 PM Focal Length: 55 mm

May 23, 2023 9:49 PM 55 mm Canon EOS 6D Mark II

79° 05′ 50 Distance to Nearest Turbine: 1.6 miles

42° 22′ 35.1674″ N 79° 05′ 50.0729″ W 1.6 miles



PHOTO SIMULATIONS



Photo 6 - Wentworth Road at Cassadaga Road **EXISTING CONDITION**

Photograph Information

Date: August 25, Time: 9:03 AM Focal Length: 50 mm

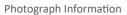
August 25, 2023 9:03 AM 50 mm Canon EOS 6D Mark II Photo Location: 42° 21′ 54.4975″ N 79° 09′ 34.2019″ W Distance to Nearest Turbine: 1.8 miles



Figure 7A PHOTO SIMULATIONS



Photo 6 - Wentworth Road at Cassadaga Road SIMULATED CONDITION



Focal Length:

August 25, 2023 9:03 AM 50 mm

Canon EOS 6D Mark II

42° 21′ 54.4975″ N 79° 09′ 34.2019″ W Distance to Nearest Turbine: 1.8 miles



Figure 7B PHOTO SIMULATIONS



Photo 7 - Farrington Hollow Road near Tri Val Farms **EXISTING CONDITION**

Photograph Information

50 mm Canon EOS 6D Mark II

42° 21′ 31.8276″ N 79° 11′ 09.4524″ W Distance to Nearest Turbine: 3.0 miles





Photo 7 - Farrington Hollow Road near Tri Val Farms SIMULATED CONDITION

50 mm Focal Length: Canon EOS 6D Mark II

42° 21′ 31.8276″ N 79° 11′ 09.4524″ W Distance to Nearest Turbine: 3.0 miles



PHOTO SIMULATIONS



EXISTING CONDITION

 $S\Lambda RATOG\Lambda$

ASSOCIATES

Photograph Information

Camera:

Time: 50 mm Focal Length: Canon EOS 6D Mark II

August 25, 2023 9:17 AM

42° 22′ 03.0432″ N 79° 08′ 29.7780″ W Distance to Nearest Turbine: 1.0 miles





SIMULATED CONDITION

 $S\Lambda RATOG\Lambda$

ASSOCIATES

Photograph Information

Camera:

Time: 50 mm Focal Length: Canon EOS 6D Mark II

August 25, 2023 9:17 AM

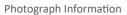
42° 22′ 03.0432″ N 79° 08′ 29.7780″ W Distance to Nearest Turbine: 1.0 miles



PHOTO SIMULATIONS



Photo 9 - Dybkas Road near 1225 Dybkas Road **EXISTING CONDITION**



Date: August 25, Time: 9:24 AM Focal Length: 50 mm

August 25, 2023 9:24 AM 50 mm Canon EOS 6D Mark II Photo Location: 42° 20′ 53.4579″ N 79° 08′ 19.2160″ W Distance to Nearest Turbine: 0.7 miles



Figure 10A PHOTO SIMULATIONS



Photo 9 - Dybkas Road near 1225 Dybkas Road SIMULATED CONDITION

Photograph Information

50 mm Focal Length: Canon EOS 6D Mark II

August 25, 2023 9:24 AM

42° 20′ 53.4579″ N 79° 08′ 19.2160″ W Distance to Nearest Turbine: 0.7 miles



Figure 10B PHOTO SIMULATIONS





Date: August 25 Time: 9:31 AM Focal Length: 50 mm

August 25, 2023 9:31 AM 50 mm Canon EOS 6D Mark II Photo Location: 42° 22′ 07.2120″ N 79° 07′ 18.3108″ W Distance to Nearest Turbine: 0.4 miles



PHOTO SIMULATIONS





Photograph Information

Date: August 25 Time: 9:31 AM Focal Length: 50 mm

August 25, 2023 9:31 AM 50 mm Canon EOS 6D Mark II

Photo Location: 42° 22 07 79° 07′ 18 Distance to Nearest Turbine: 0.4 miles

42° 22′ 07.2120″ N 79° 07′ 18.3108″ W bine: 0.4 miles



PHOTO SIMULATIONS



EXISTING CONDITION

Photograph Information

50 mm Focal Length:

August 25, 2023 9:38 AM

Canon EOS 6D Mark II

42° 21′ 09.3204″ N 79° 06′ 44.2548″ W Distance to Nearest Turbine: 0.7 miles





SIMULATED CONDITION

50 mm Focal Length: Canon EOS 6D Mark II

August 25, 2023 9:38 AM

42° 21′ 09.3204″ N 79° 06′ 44.2548″ W Distance to Nearest Turbine: 0.7 miles



Figure 12B PHOTO SIMULATIONS

South Hill Road Wind Energy Project Town of Villenova, Chautauqua County, NY



Photo 12 - Weaver Road **EXISTING CONDITION**



50 mm Focal Length:

August 25, 2023 9:45 AM

Canon EOS 6D Mark II

42° 19′ 34.3956″ N 79° 06′ 54.5148″ W Distance to Nearest Turbine: 1.9 miles



Figure 13A PHOTO SIMULATIONS



Photo 12 - Weaver Road SIMULATED CONDITION

Date: August 25, Time: 9:45 AM Focal Length: 50 mm

August 25, 2023 9:45 AM 50 mm Canon EOS 6D Mark II Photo Location: 42° 19′ 34.3956″ N 79° 06′ 54.5148″ W Distance to Nearest Turbine: 1.9 miles



Figure 13B PHOTO SIMULATIONS



EXISTING CONDITION

Photograph Information

50 mm Focal Length: Canon EOS 6D Mark II

August 25, 2023 9:53 AM

42° 19′ 51.7656″ N 79° 05′ 24.6948″ W Distance to Nearest Turbine: 2.3 miles

new leaf energy

Figure 14A PHOTO SIMULATIONS



Photo 13 - NY-83 near 7626 NY-83 SIMULATED CONDITION

50 mm Focal Length: Canon EOS 6D Mark II

August 25, 2023 9:53 AM

Distance to Nearest Turbine: 2.3 miles

42° 19′ 51.7656″ N 79° 05′ 24.6948″ W

new leaf energy

Figure 14B PHOTO SIMULATIONS



Photo 14 - NY-83 near Pine Valley High School EXISTING CONDITION



August 25, 2023 9:55 AM Focal Length:

50 mm Canon EOS 6D Mark II

42° 10′ 05.2448″ N 79° 05′ 24.5112″ W Distance to Nearest Turbine: 2.2 miles



PHOTO SIMULATIONS



Photo 14 - NY-83 near Pine Valley High School SIMULATED CONDITION



Focal Length:

August 25, 2023 9:55 AM 50 mm

Canon EOS 6D Mark II

42° 10′ 05.2448″ N 79° 05′ 24.5112″ W Distance to Nearest Turbine: 2.2 miles





Photo 15 - Intersection of Mile Strip Road and Kent Switch Road **EXISTING CONDITION**

Camera:

SARATOGA ASSOCIATES



50 mm Focal Length:

August 25, 2023 9:59 AM

Canon EOS 6D Mark II

42° 20′ 14.6760″ N 79° 04′ 42.8196″ W Distance to Nearest Turbine: 2.6 miles





Photo 15 - Intersection of Mile Strip Road and Kent Switch Road SIMULATED CONDITION

Camera:



50 mm Focal Length: Canon EOS 6D Mark II

August 25, 2023 9:59 AM

42° 20′ 14.6760″ N 79° 04′ 42.8196″ W Distance to Nearest Turbine: 2.6 miles



PHOTO SIMULATIONS





Time: Focal Length:

August 25, 2023 10:04 AM 50 mm

Canon EOS 6D Mark II

Distance to Nearest Turbine: 1.8 miles

42° 20′ 47.4036″ N 79° 05′ 24.4536″ W







Photograph Information

Time: Focal Length:

August 25, 2023 10:04 AM 50 mm

Canon EOS 6D Mark II

42° 20′ 47.4036″ N 79° 05′ 24.4536″ W Photo Location: Distance to Nearest Turbine: 1.8 miles







August 25, 2023 10:07 AM Time: 50 mm Distance to Nearest Turbine: 1.7 miles Focal Length: Canon EOS 6D Mark II

42° 21′ 18.0072″ N 79° 05′ 26.1312″ W







August 25, 2023 10:07 AM Time: 50 mm Focal Length: Canon EOS 6D Mark II

42° 21′ 18.0072″ N 79° 05′ 26.1312″ W Distance to Nearest Turbine: 1.7 miles

