

## Jericho Rise Wind Farm



Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 1: FEIS Project Site

February 2016

Notes: 1. Basemap: ESR ArcGIS Online "USA Topo Maps" Map Service.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

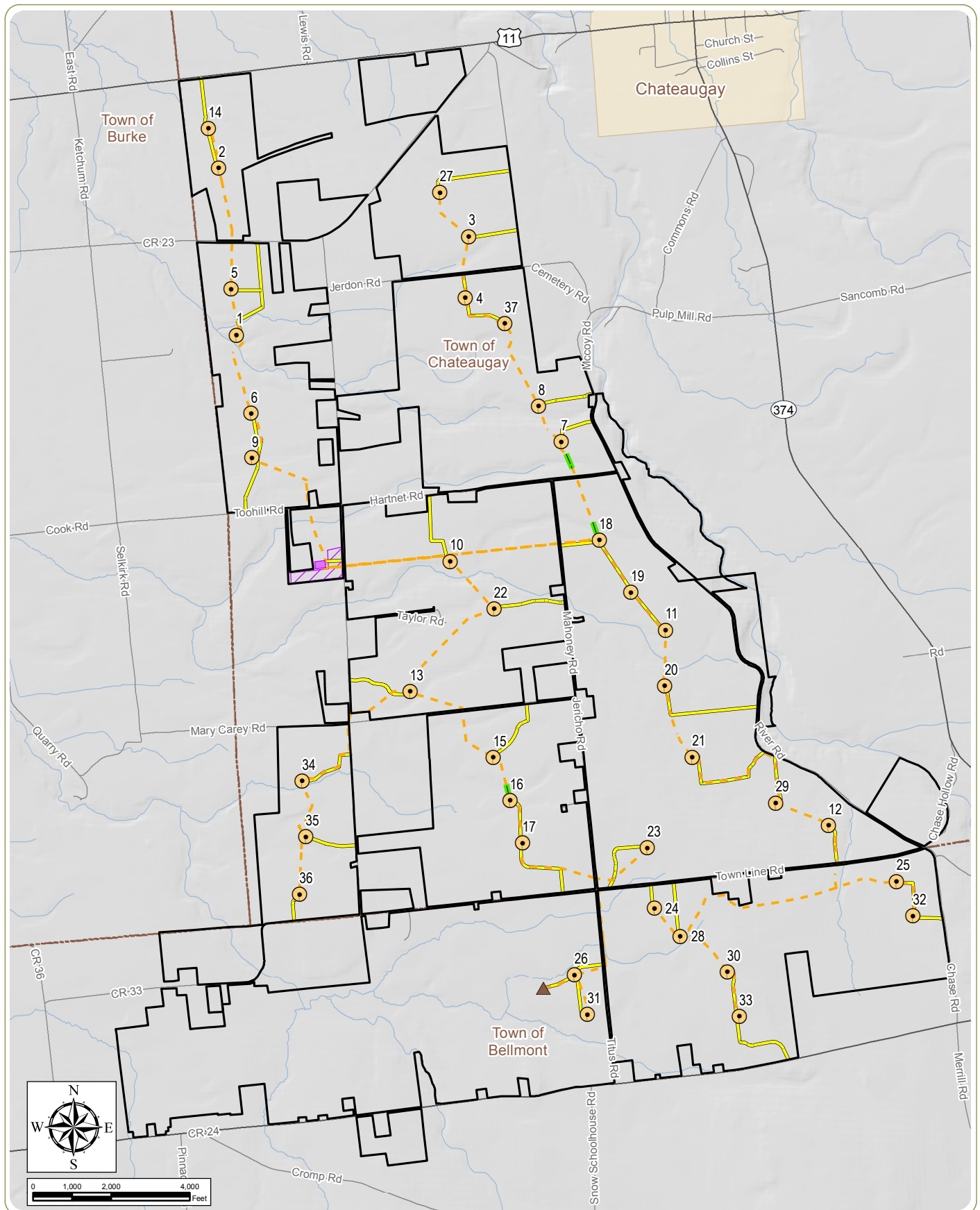
-  Parcel Boundary
-  Project Site



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## Jericho Rise Wind Farm

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### Figure 2: FEIS Project Layout

February 2016

**Notes:** 1. Basemap: Hillshade derived from USGS digital elevation model data.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

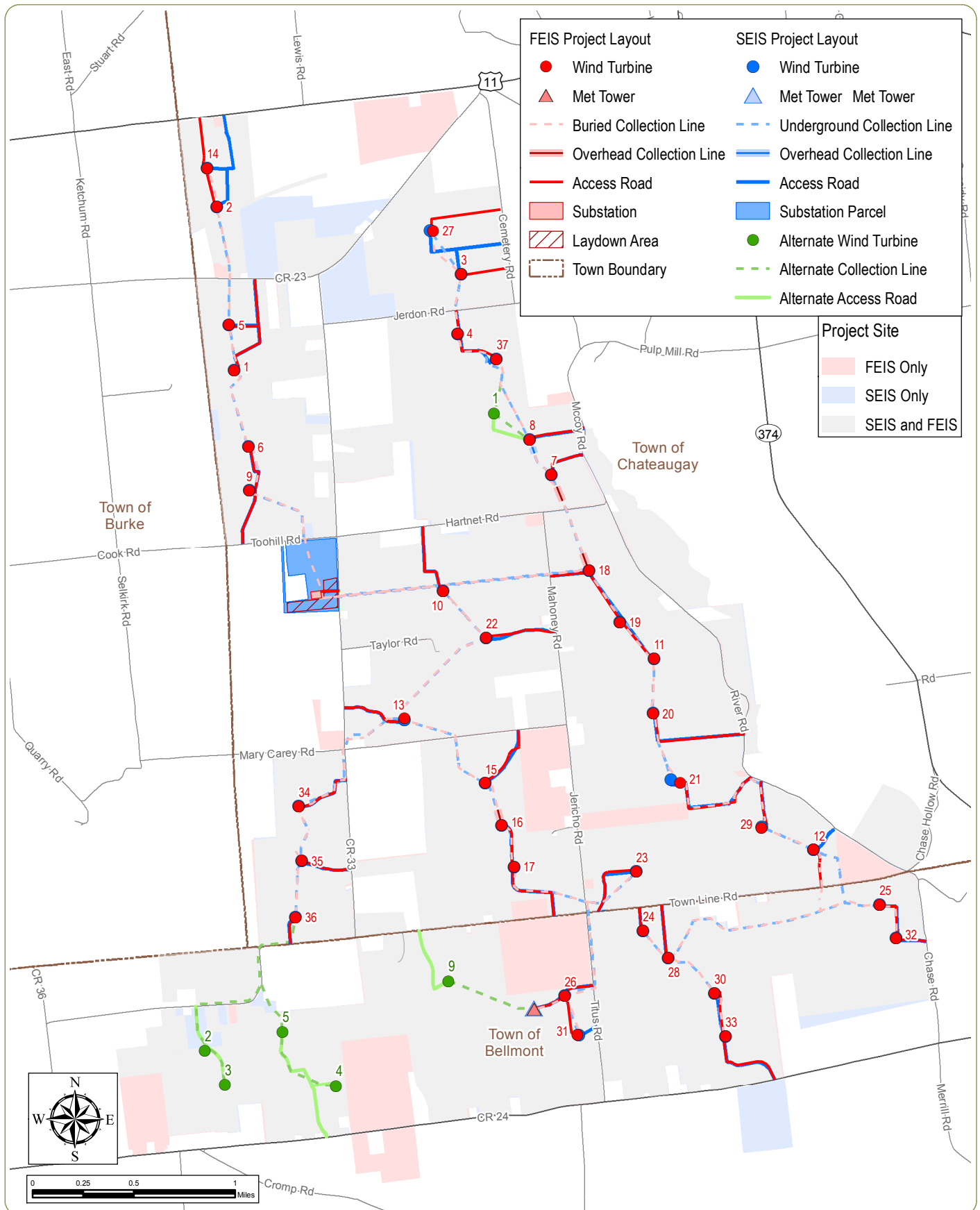
- Wind Turbine
- Met Tower
- Overhead Collection Line
- Buried Collection Line
- Access Road
- Substation
- Laydown Area
- Project Site
- Town Boundary



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## Jericho Rise Wind Farm

Towns of Chateaugay and Bellmont - Franklin County, New York

### Figure 3: Project Layout Comparison

February 2016

**Notes:** 1. Basemap: ESRI StreetMap North America, 2008

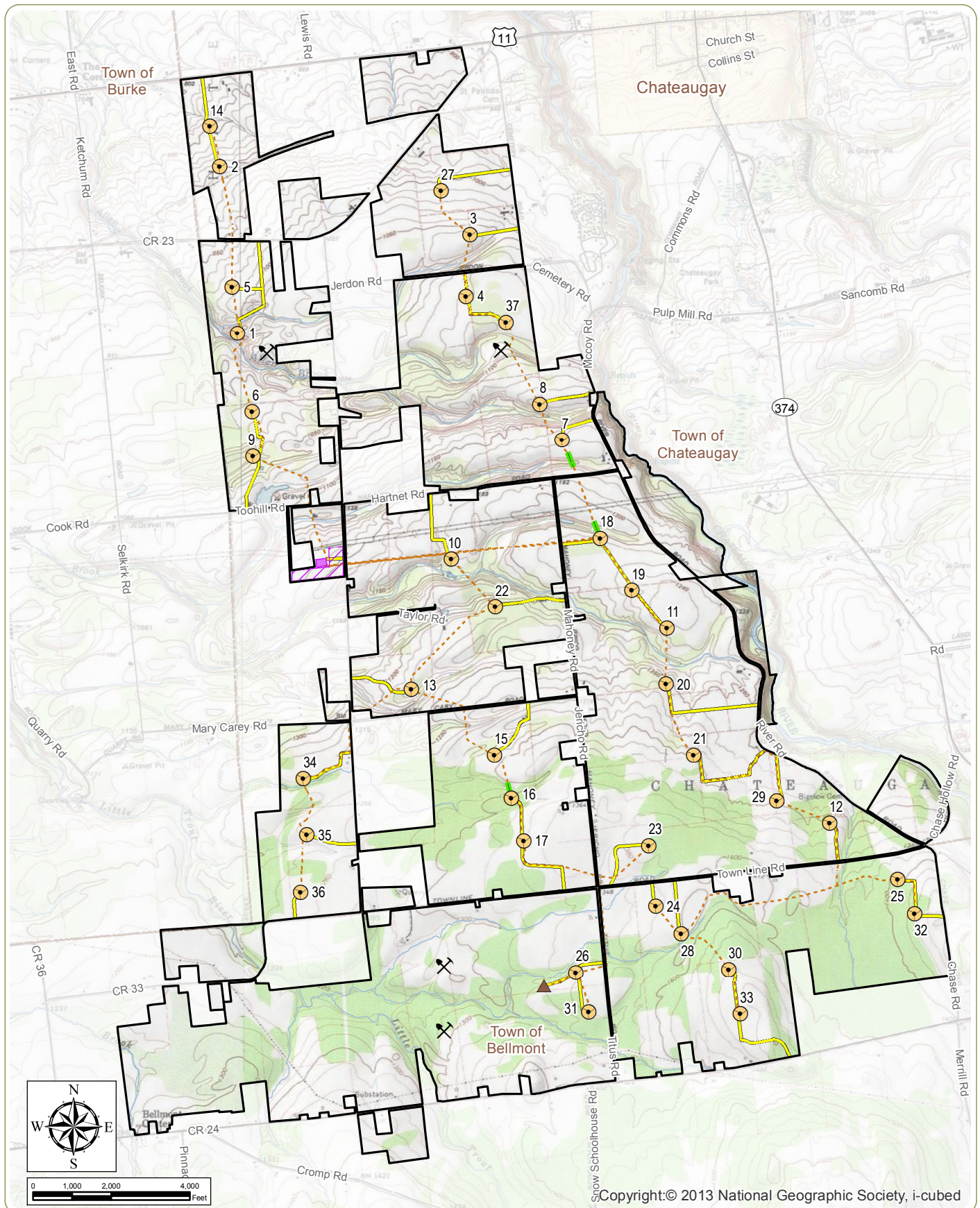
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.



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### Figure 4: Mine Locations within the Project Site

February 2016

**Notes:** 1. Basemap: ESRI ArcGIS Online "USA Topo Maps" Map Service. 2. Mine locations obtained from NYSDEC Division of Mineral Resources Mined Lands permit files, downloaded in May of 2015. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- |                          |               |
|--------------------------|---------------|
| Mine Location            | Access Road   |
| Wind Turbine             | Substation    |
| Met Tower                | Laydown Area  |
| Buried Collection Line   | Project Site  |
| Overhead Collection Line | Town Boundary |



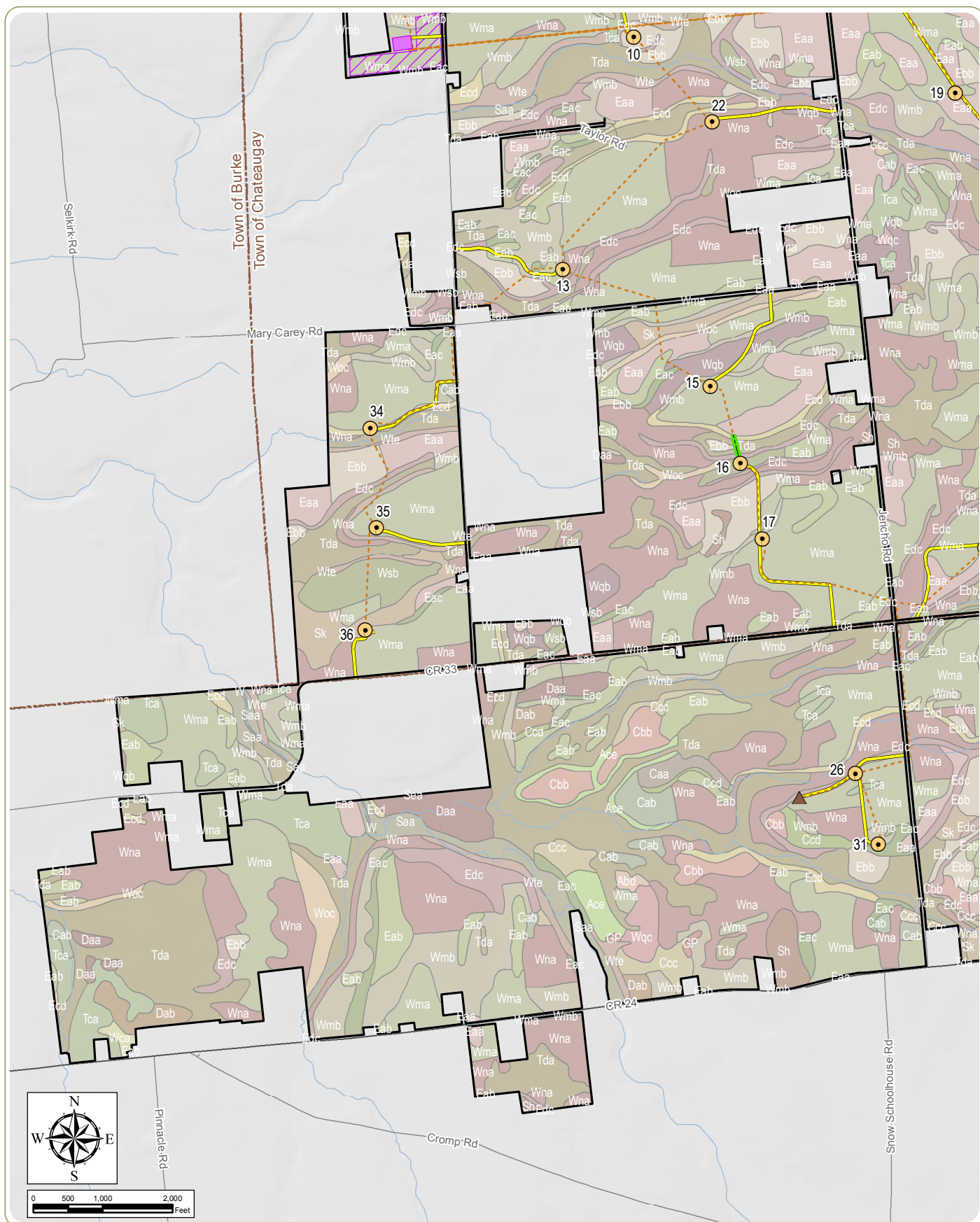
JERICHO RISE  
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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 5: Project Site Soils Sheet 2 of 3

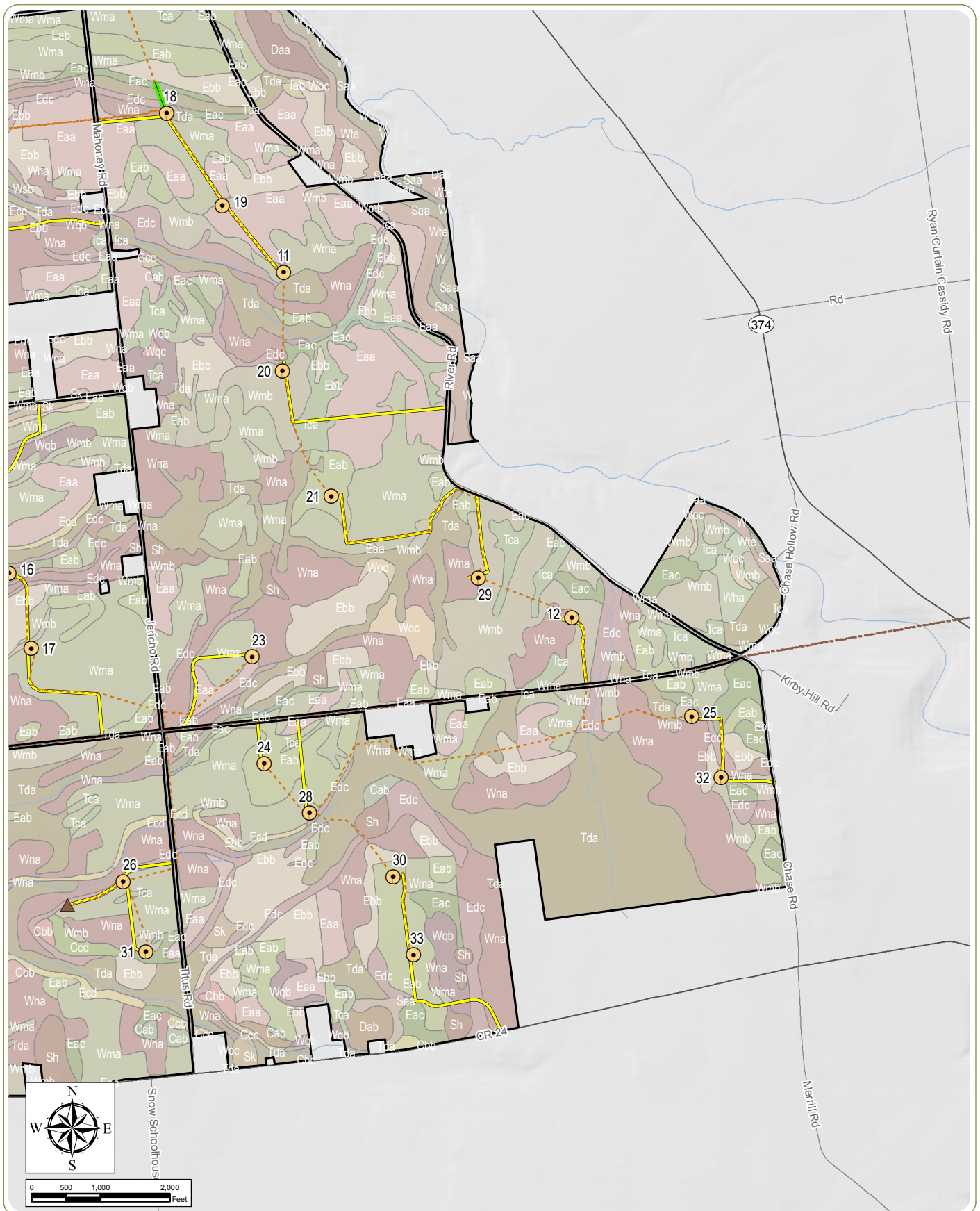
February 2016

**Notes:** 1. Basemap: Hillshade derived from USGS digital elevation model data. 2. Soils data from the NRCS Soil Survey Geographic Database. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- Laydown Area
- Project Site
- Town Boundary







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 5: Project Site Soils** Sheet 3 of 3

February 2016

**Notes:** 1. Basemap: Hillshade derived from USGS digital elevation model data. 2. Soils data from the NRCS Soil Survey Geographic Database. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

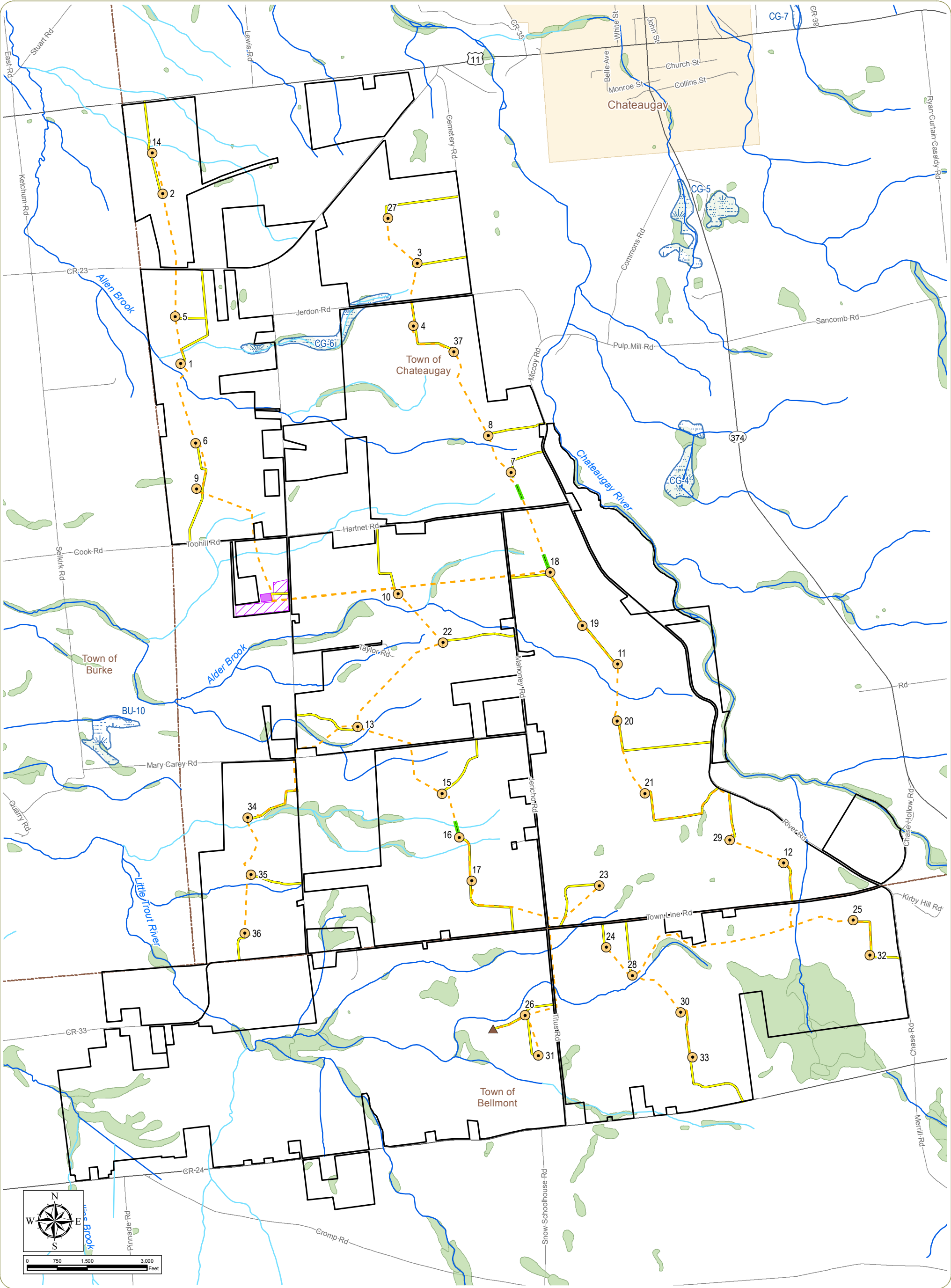
- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- Laydown Area
- Project Site
- Town Boundary



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Towns of Chateaugay and Belmont - Franklin County, New York

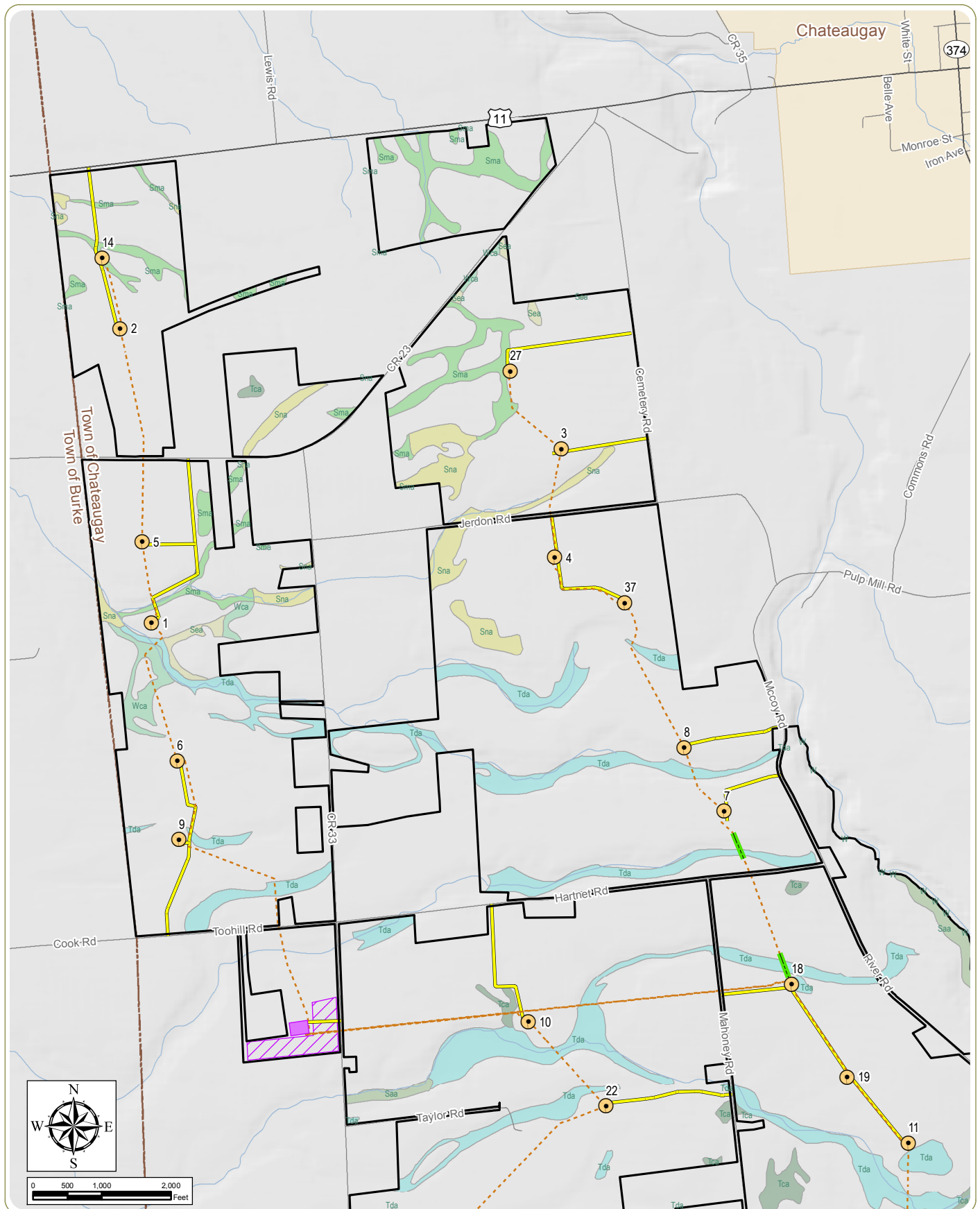
**Figure 6: Surface Waterbodies**

February 2016

**Notes:** 1. Basemap: ESRI StreetMap North America, 2008.  
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- |                          |               |                         |
|--------------------------|---------------|-------------------------|
| Wind Turbine             | Substation    | NYSDEC Protected Stream |
| Met Tower                | Laydown Area  | Unprotected Stream      |
| Buried Collection Line   | Project Site  | NYSDEC Wetland          |
| Overhead Collection Line | Town Boundary | NWI Wetland             |
| Access Road              |               |                         |





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### Figure 7: Project Site Soils - Hydric

February 2016

Sheet 1 of 3

**Notes:** 1. Basemap: Hillshade derived from USGS digital elevation model data. 2. Soils data from the NRCS Soil Survey Geographic Database and includes soils classified as "all hydric" and "partially hydric." 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

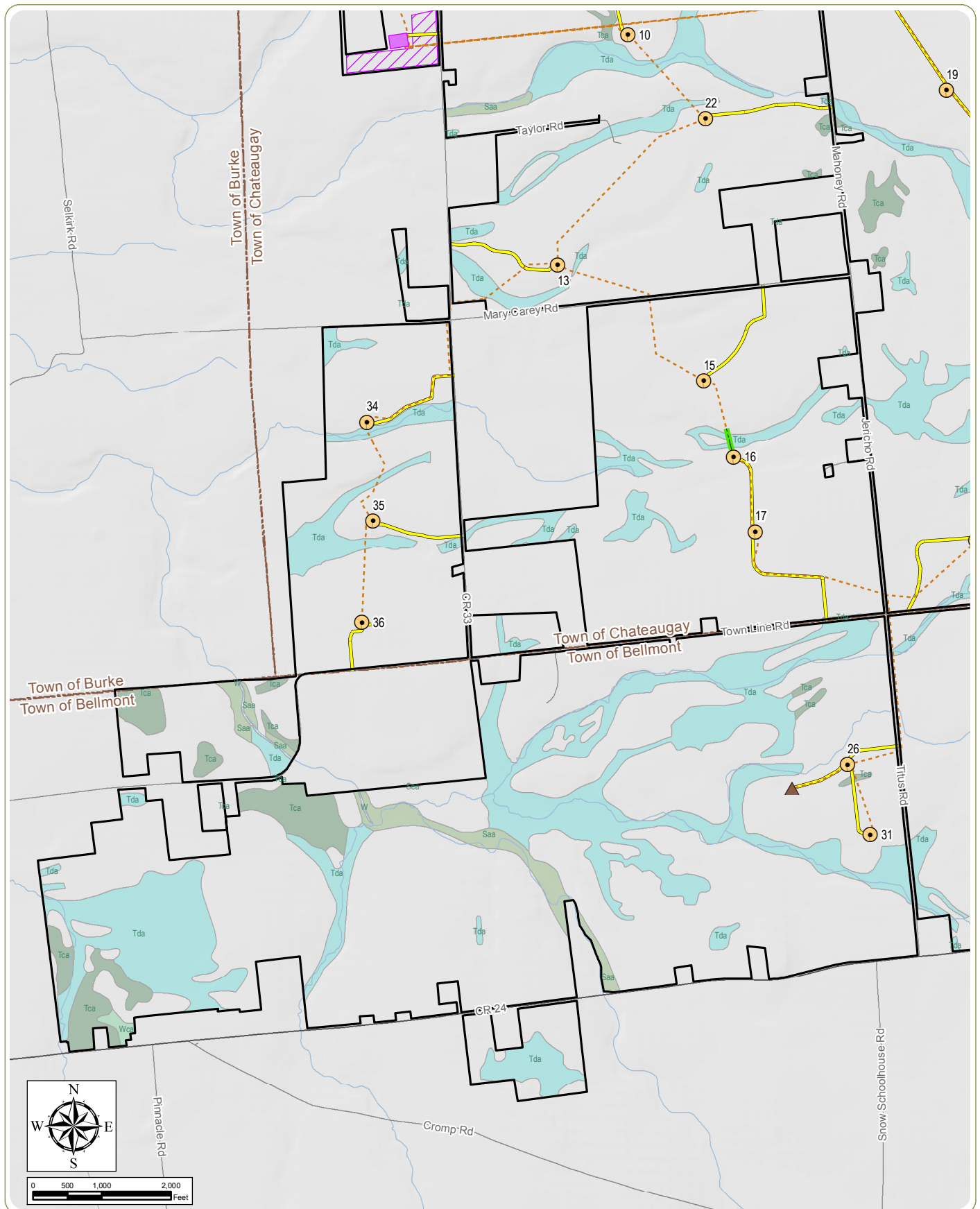
- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- Laydown Area
- Project Site
- Town Boundary



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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 7: Project Site Soils - Hydric

February 2016

Sheet 2 of 3

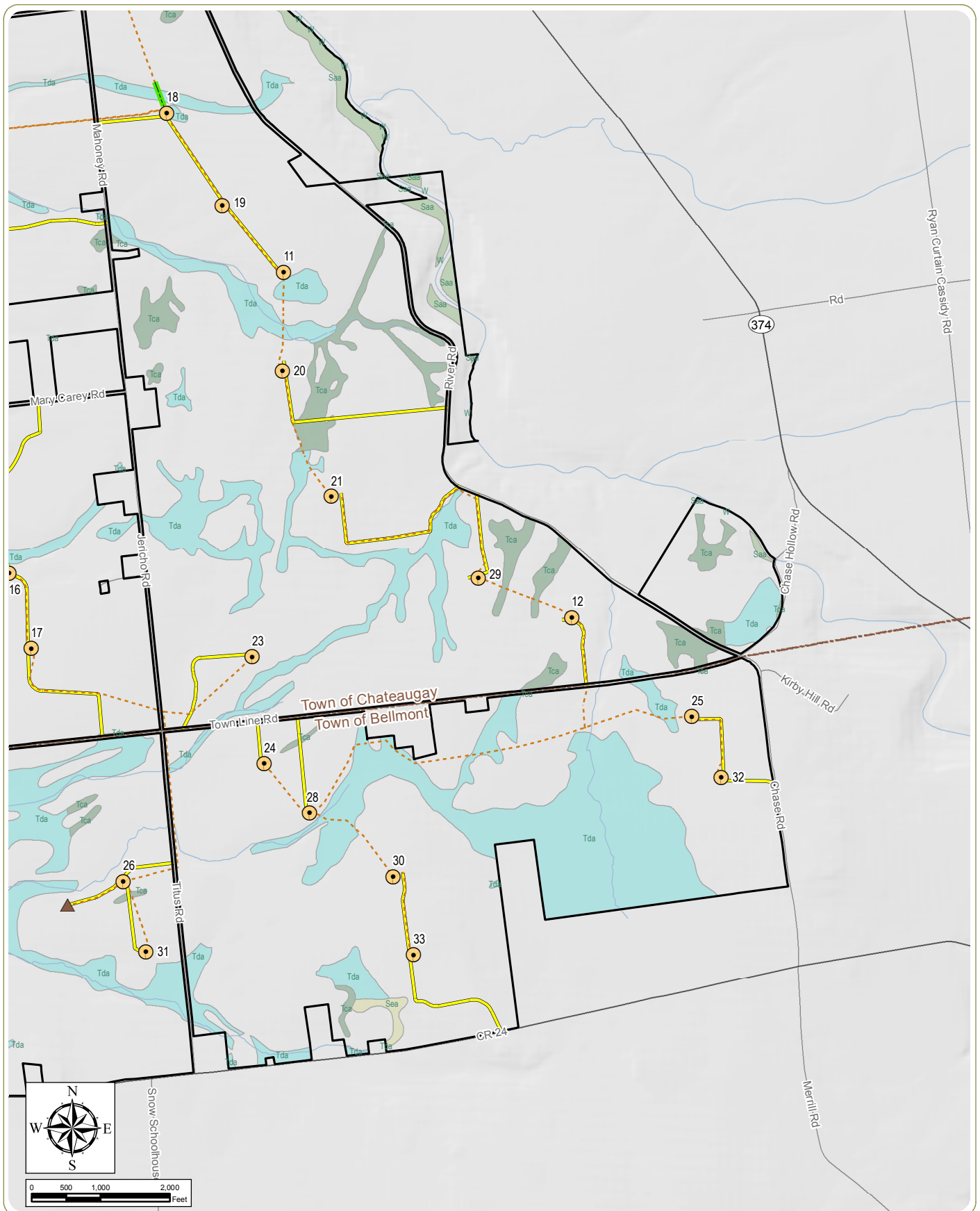
**Notes:** 1. Basemap: Hillshade derived from USGS digital elevation model data. 2. Soils data from the NRCS Soil Survey Geographic Database and includes soils classified as "all hydric" and "partially hydric." 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- Laydown Area
- Project Site
- Town Boundary



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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 7: Project Site Soils - Hydric

February 2016

Sheet 3 of 3

**Notes:** 1. Basemap: Hillshade derived from USGS digital elevation model data. 2. Soils data from the NRCS Soil Survey Geographic Database and includes soils classified as "all hydric" and "partially hydric." 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

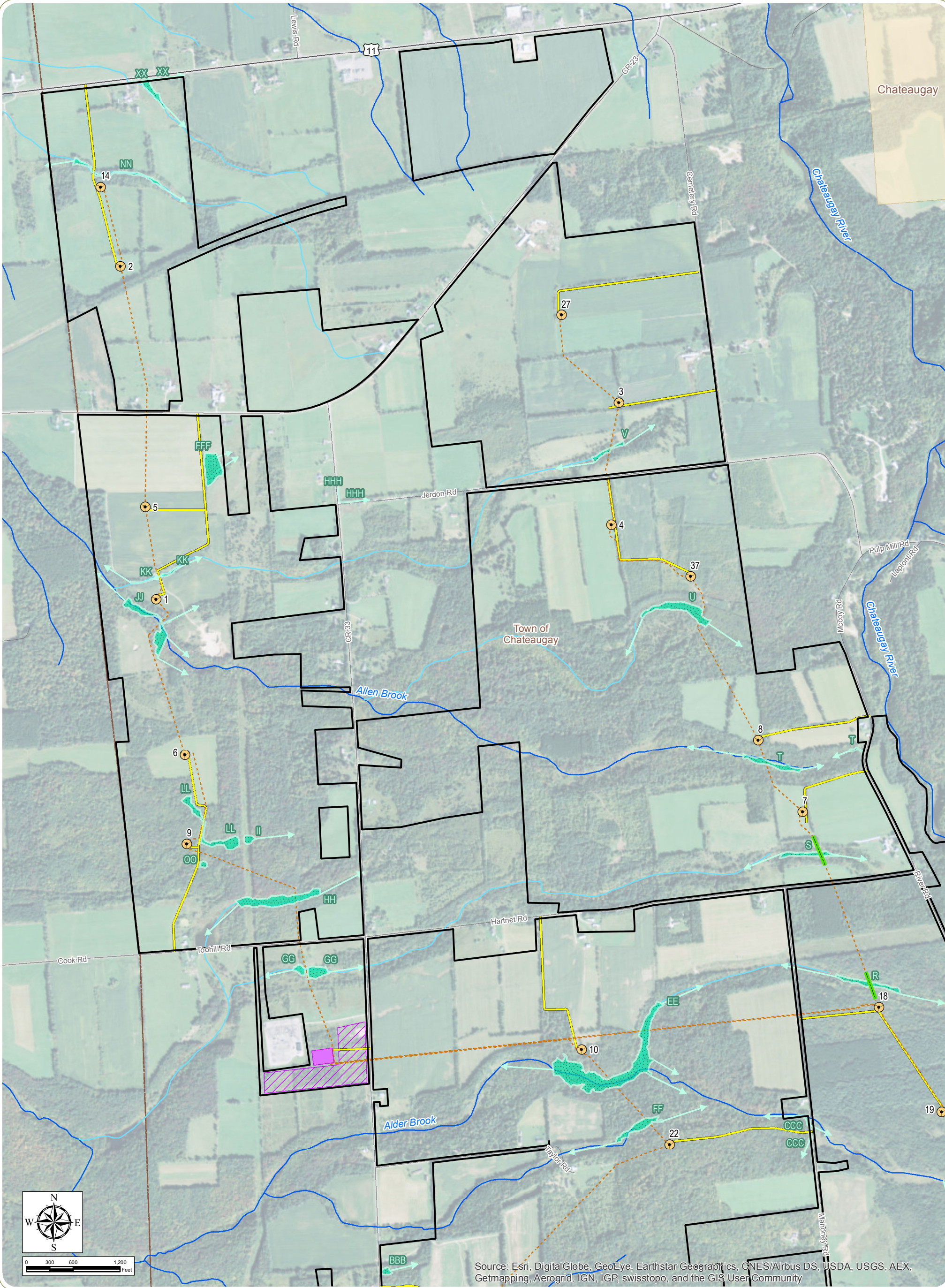
- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- Laydown Area
- Project Site
- Town Boundary



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**Jericho Rise Wind Farm**  
Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 8: Delineated Wetlands**

February 2016

Sheet 1 of 3

**Notes:** 1. Basemap: ESRI ArcGIS Online "World Imagery" Map Service.  
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

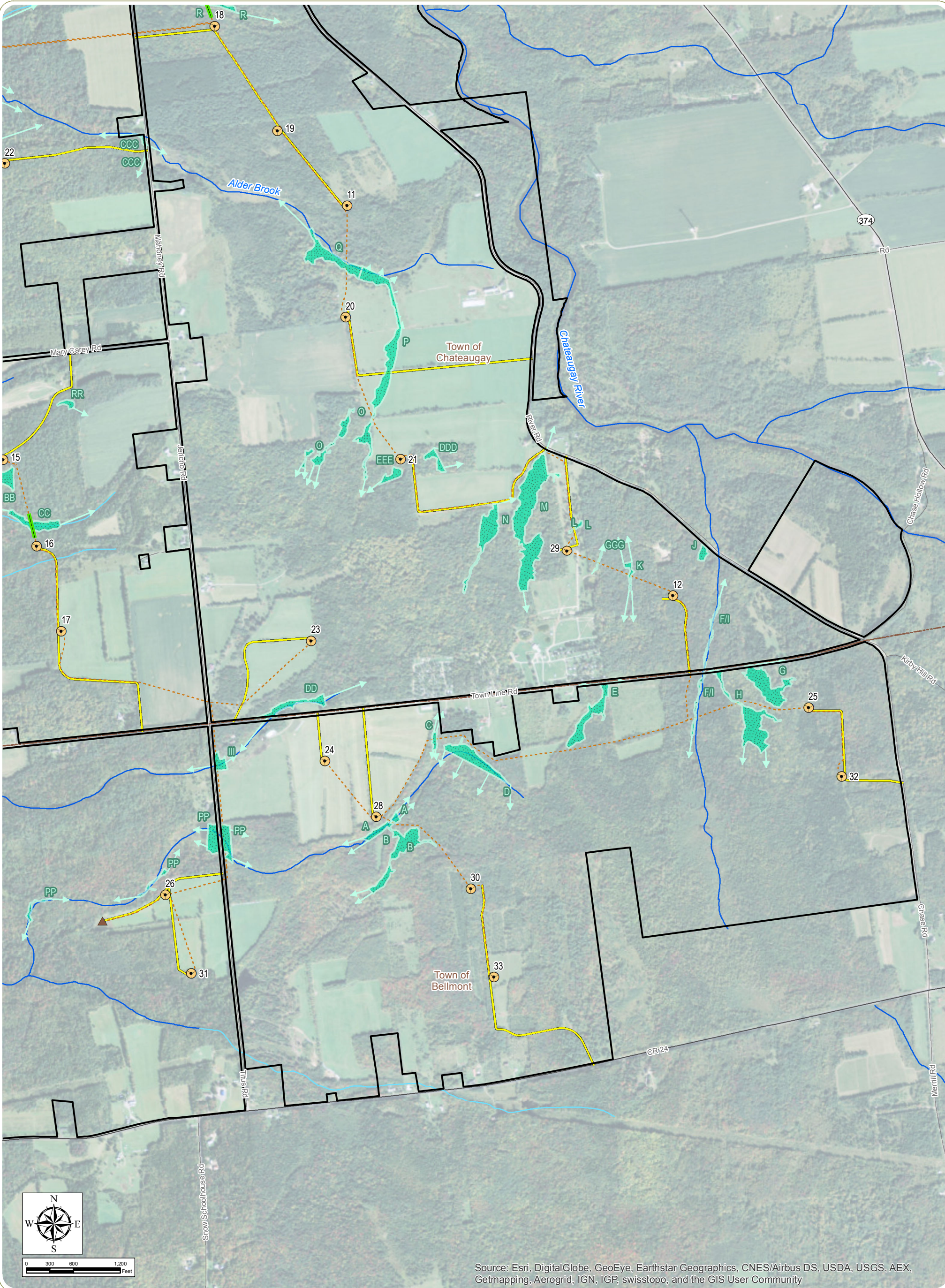
- |                          |               |                         |
|--------------------------|---------------|-------------------------|
| Wind Turbine             | Substation    | NYSDEC Protected Stream |
| Met Tower                | Laydown Area  | Unprotected Stream      |
| Buried Collection Line   | Project Site  | Delineated Wetland      |
| Overhead Collection Line | Town Boundary | Wetland Continues       |
| Access Road              |               |                         |











**Jericho Rise Wind Farm**  
Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 8: Delineated Wetlands**

February 2016

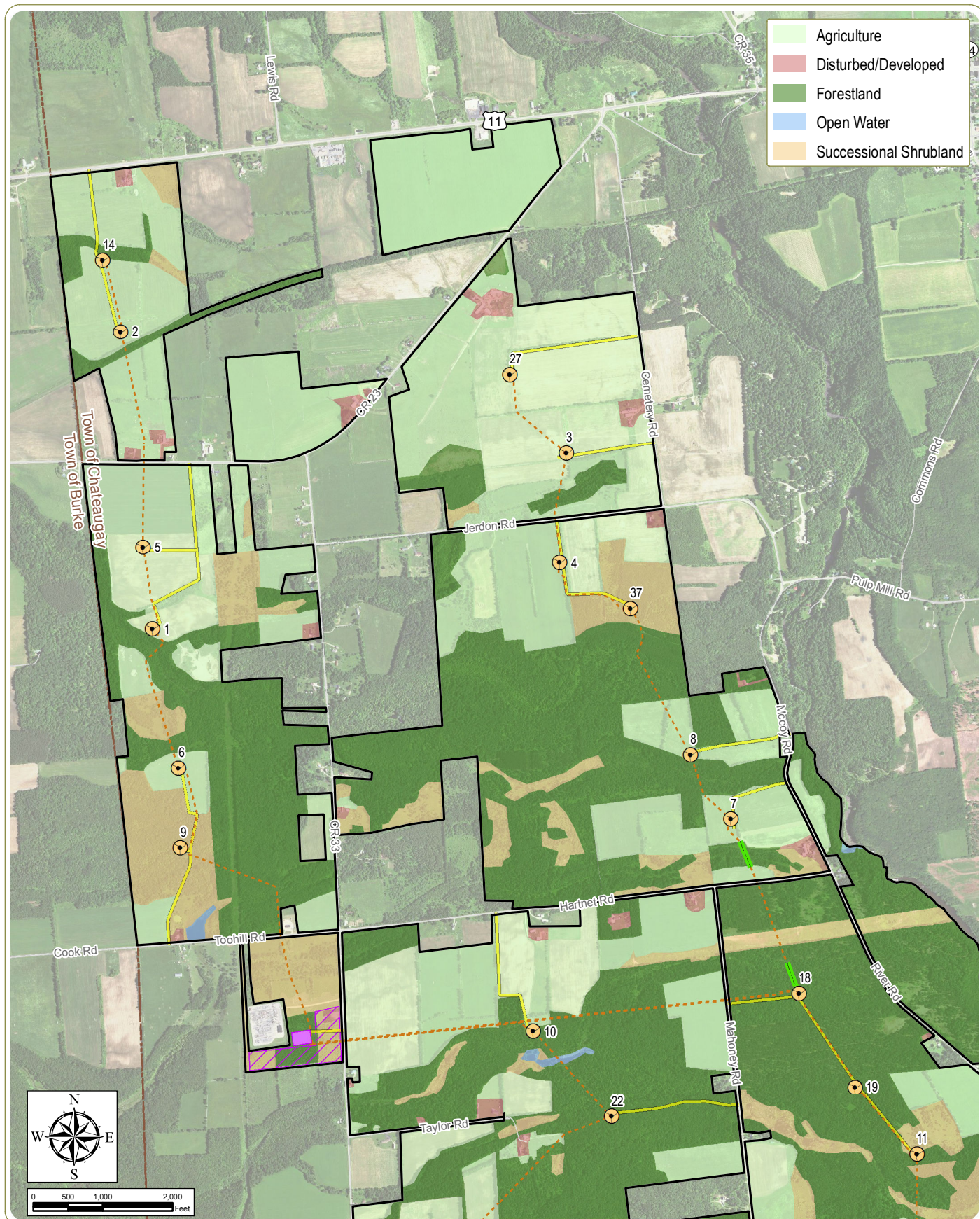
Sheet 3 of 3

**Notes:** 1. Basemap: ESRI ArcGIS Online "World Imagery" Map Service.  
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- |                              |               |                         |
|------------------------------|---------------|-------------------------|
| ● Wind Turbine               | Substation    | NYSDEC Protected Stream |
| ▲ Met Tower                  | Laydown Area  | Unprotected Stream      |
| --- Buried Collection Line   | Project Site  | Delineated Wetland      |
| --- Overhead Collection Line | Town Boundary | Wetland Continues       |
| --- Access Road              |               |                         |







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 9: Vegetative Cover Types

February 2016

Sheet 1 of 3

Notes: 1. Basemap: USDA NAIP 0.5 meter resolution orthoimagery, 2015.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

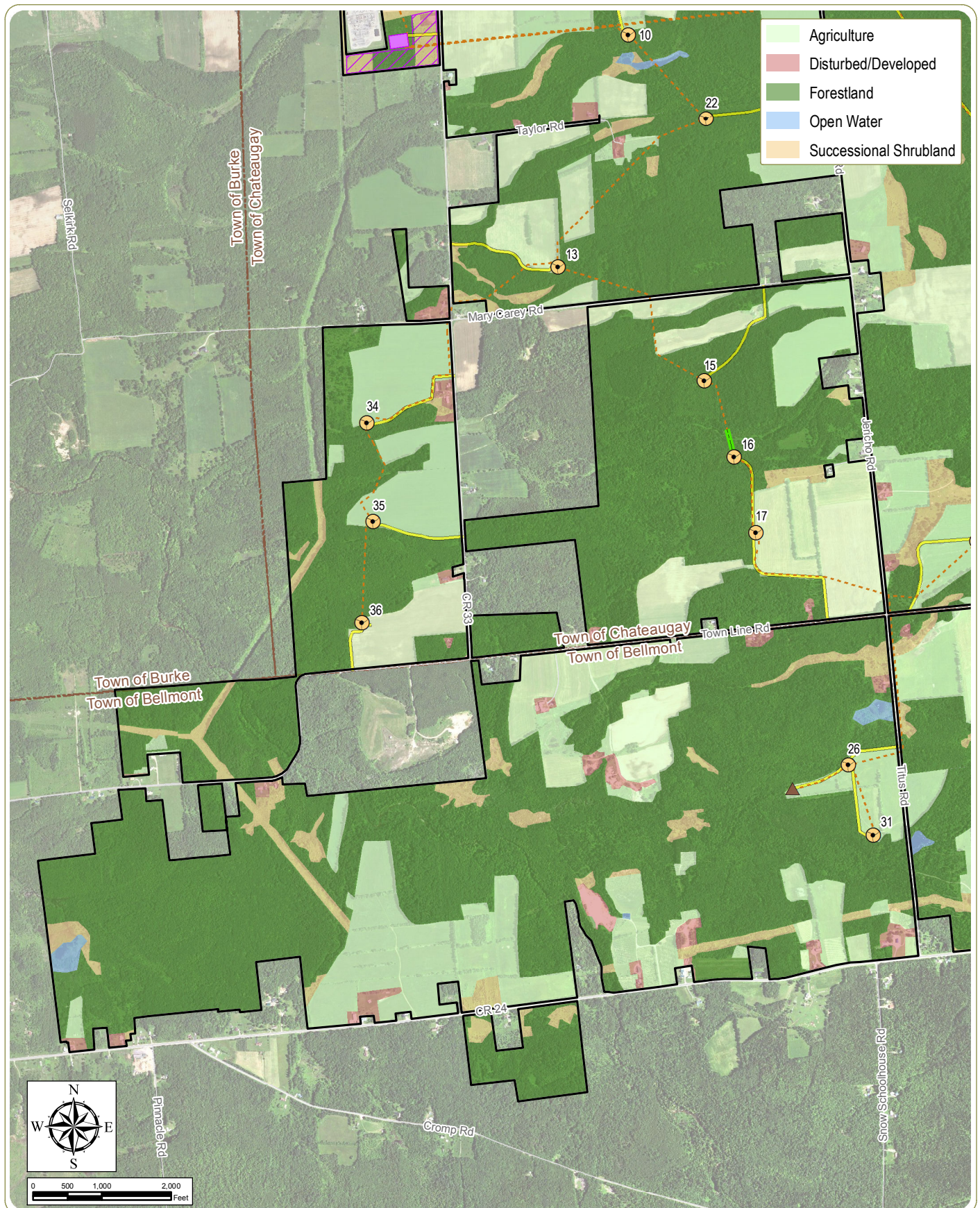
- Wind Turbine
- ▲ Met Tower
- - - Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- ▨ Laydown Area
- Project Site
- - - Town Boundary



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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 9: Vegetative Cover Types

February 2016

Sheet 2 of 3

Notes: 1. Basemap: USDA NAIP 0.5 meter resolution orthoimagery, 2015.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

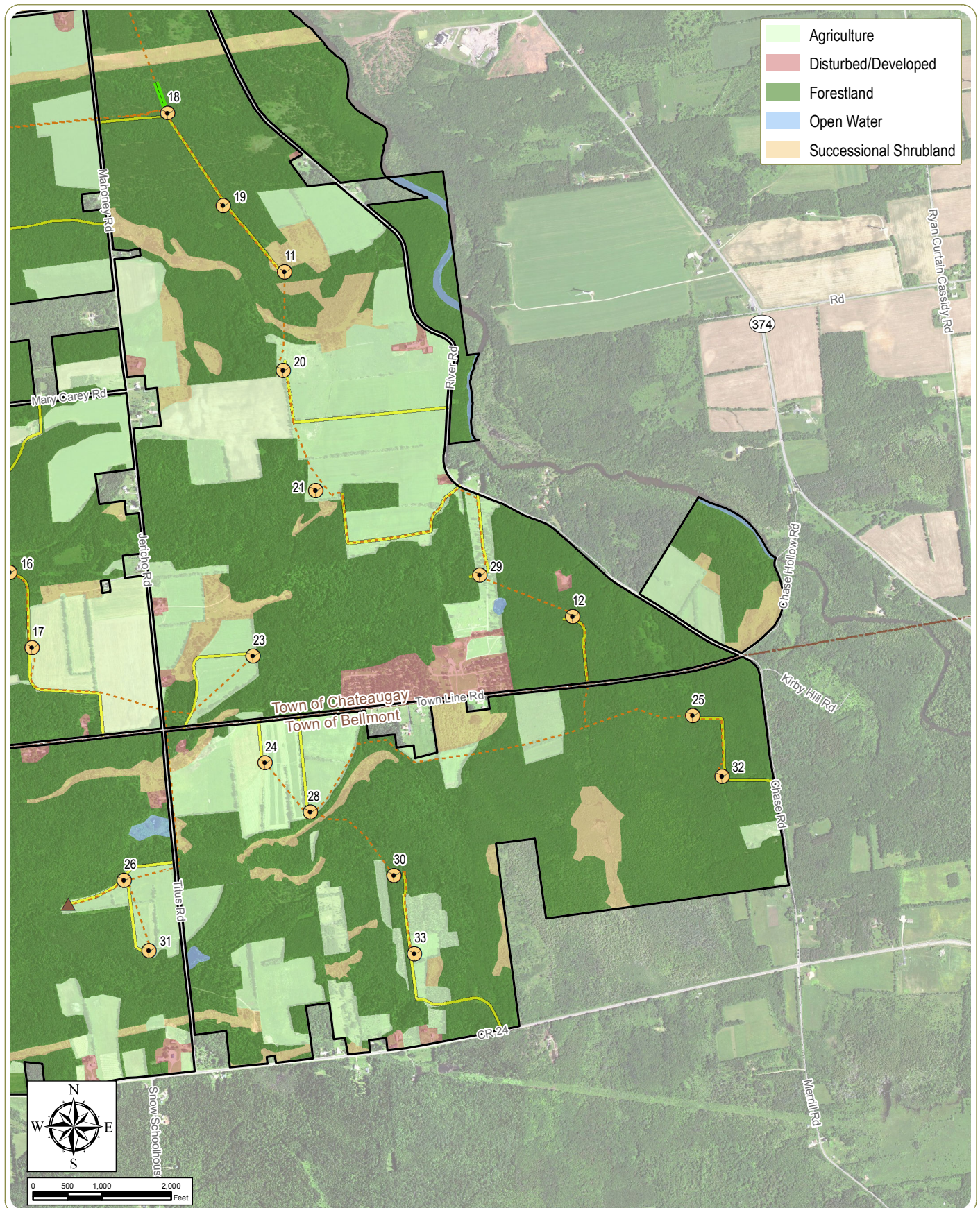
- Wind Turbine
- ▲ Met Tower
- - - Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- ▨ Laydown Area
- Project Site
- - - Town Boundary



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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 9: Vegetative Cover Types

February 2016

Sheet 3 of 3

Notes: 1. Basemap: USDA NAIP 0.5 meter resolution orthoimagery, 2015.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

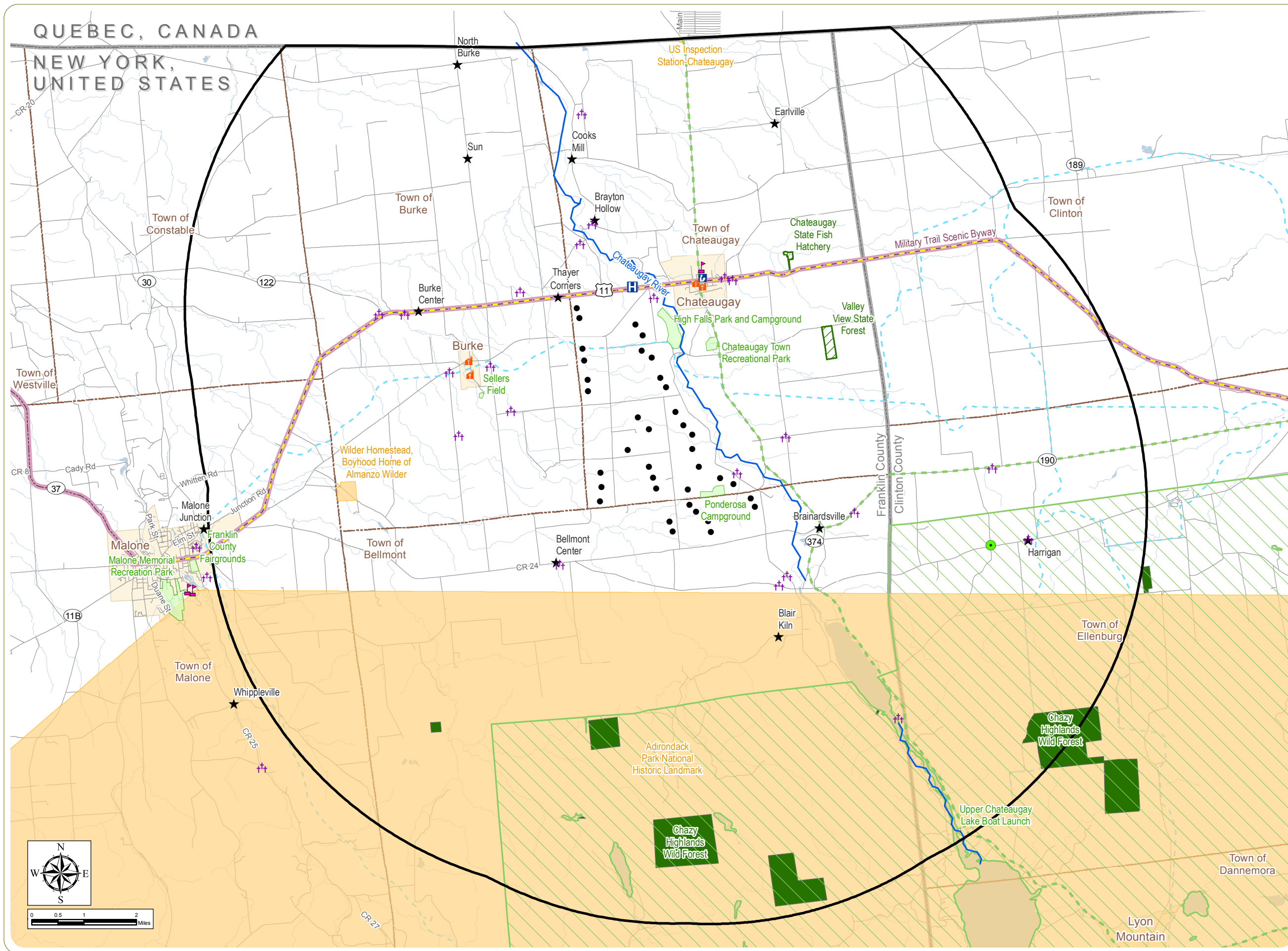
- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- Substation
- Laydown Area
- Project Site
- Town Boundary



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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 10: Visually Sensitive Resources**

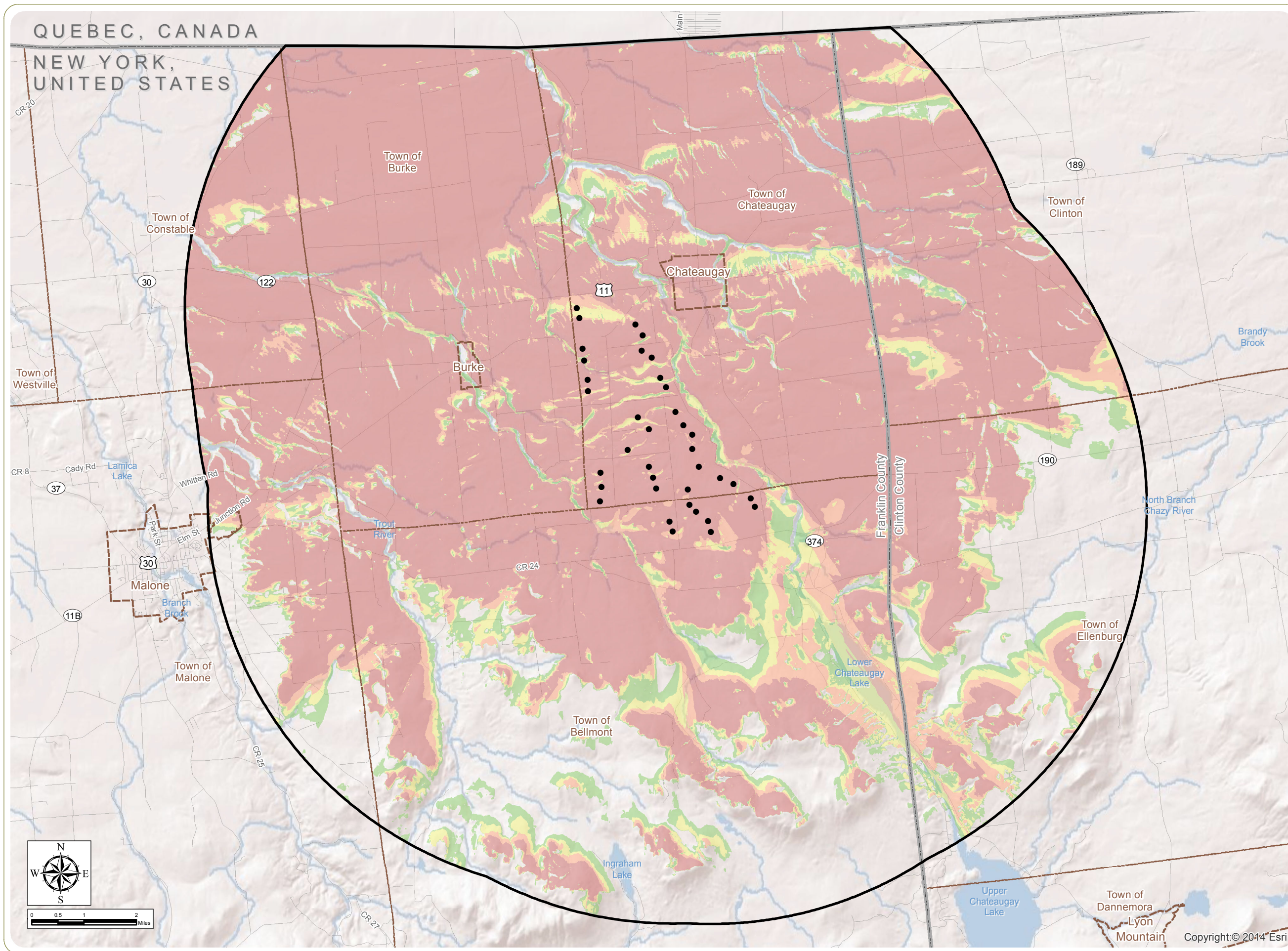
February 2016

- Wind Turbine
- ★ Hamlet
- ✚ School
- ✚ Cemetery
- ✚ Church
- ✚ Library
- ✚ Hospital
- Scenic Vista
- National River Inventory
- Adirondack Scenic Corridor
- NYS Scenic Byway
- Bike Route
- Snowmobile Trail
- NRHP-Listed Site
- Forest Preserve
- Adirondack Forest Preserve
- NYSDEC Land
- Local Park
- City or Village Boundary
- Visual Study Area
- Town Boundary
- County Boundary

**Notes:**

1. Basemap: ESRI StreetMap North America, 2008.
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.





## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 11: Viewshed Analysis

Sheet 1 of 4: Blade Tip Visibility Based on Topography Only

February 2016

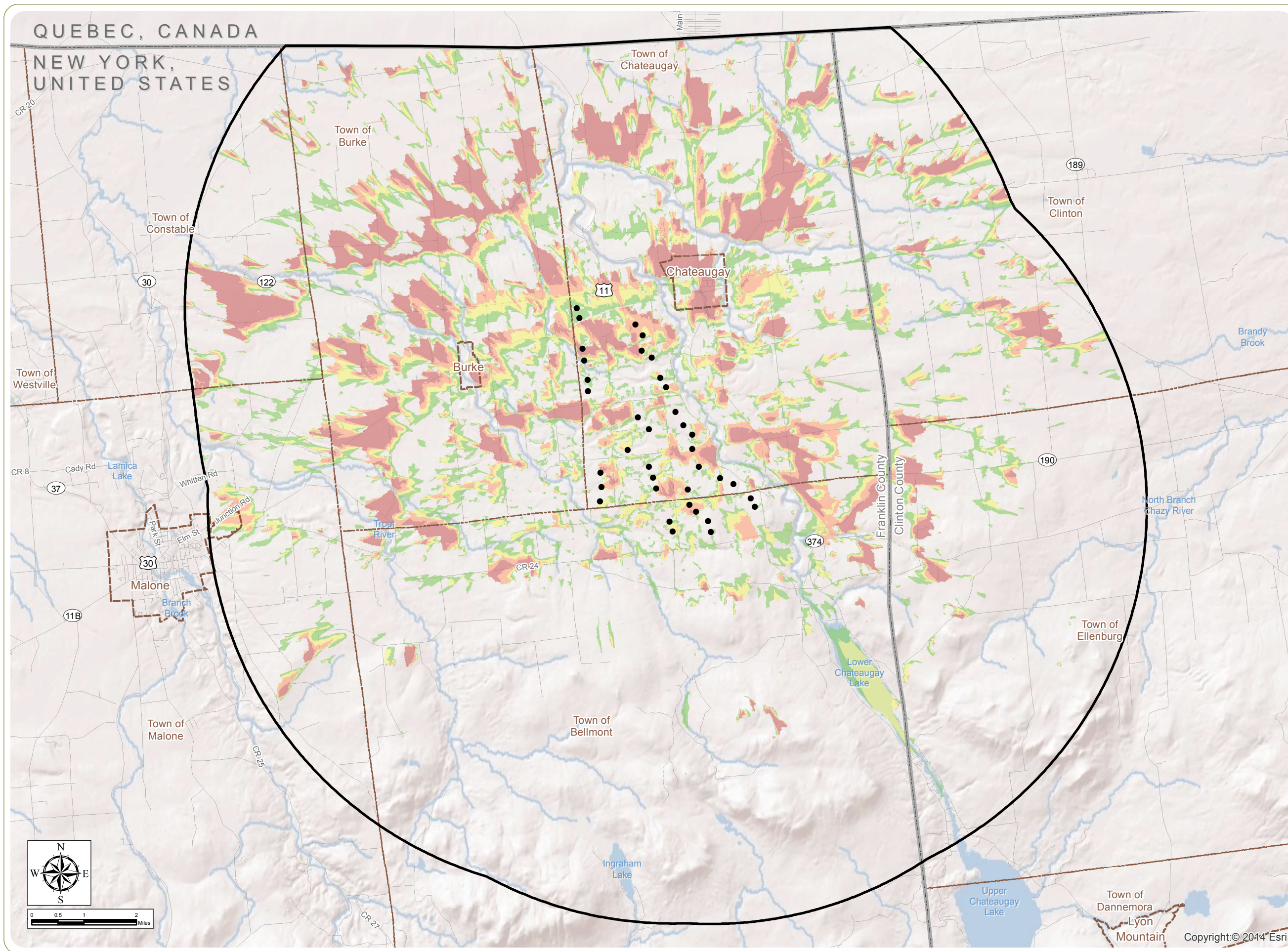
- Wind Turbine
  - Visual Study Area
  - City/Village Boundary
  - Town Boundary
  - County Boundary
- Potential Visibility
- 1-10 Turbines Visible
  - 11-20 Turbines Visible
  - 21-30 Turbines Visible
  - 31-37 Turbines Visible

**Notes:**

1. Basemap: ESRI ArcGIS Online "World Shaded Relief" Map Service.
2. Potential turbine visibility based on topography only. Screening effects of buildings, trees or other factors are not accounted for.
3. Viewshed analysis based on a maximum blade tip height of 150 meters.
4. This is a color graphic. Reproduction in grayscale may misrepresent the data.







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 11: Viewshed Analysis

Sheet 2 of 4: Blade Tip Visibility Based on Topography and Vegetation

February 2016

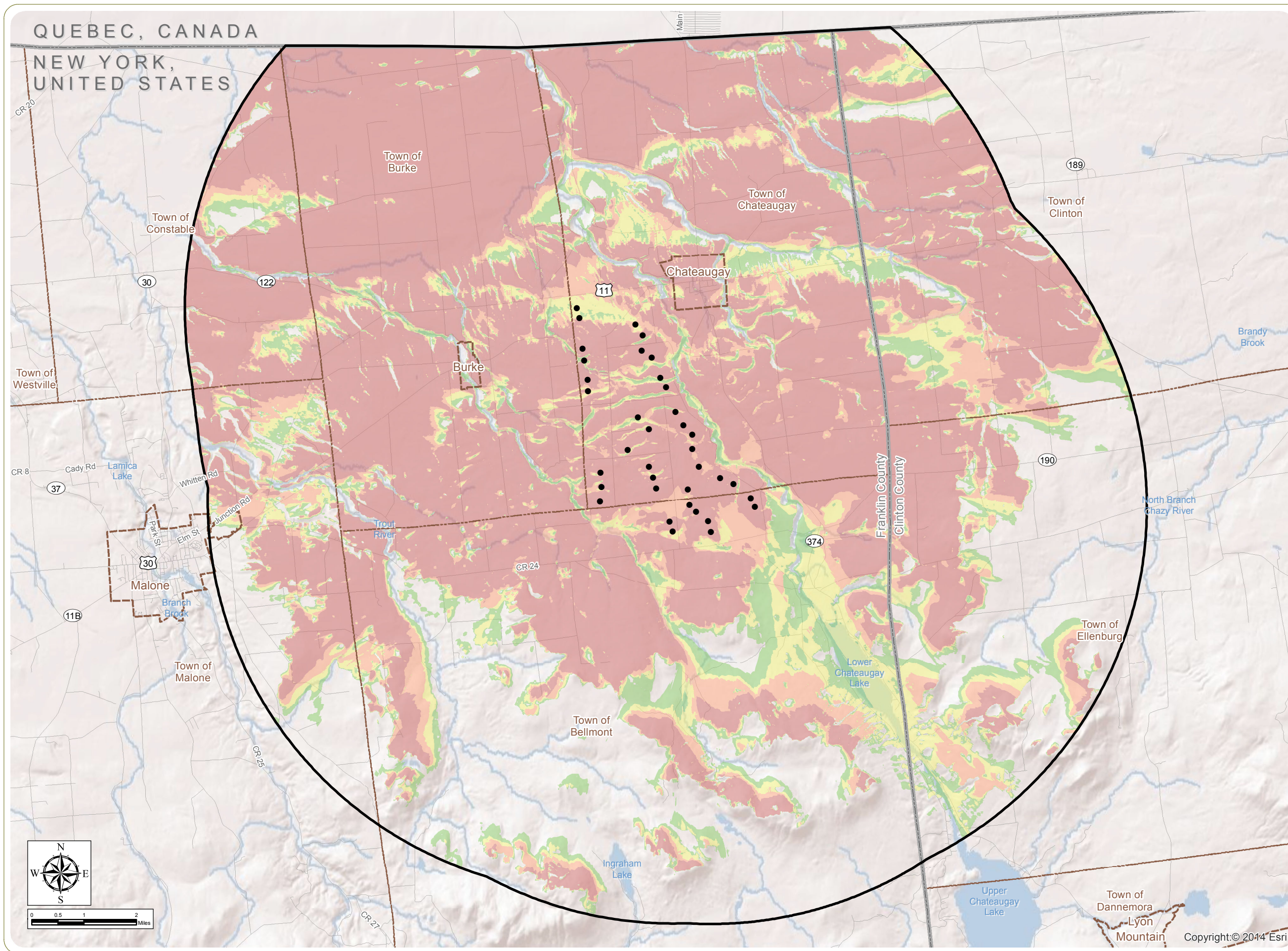
- Wind Turbine
  - Visual Study Area
  - City/Village Boundary
  - Town Boundary
  - County Boundary
- Potential Visibility
- 1-10 Turbines Visible
  - 11-20 Turbines Visible
  - 21-30 Turbines Visible
  - 31-37 Turbines Visible

**Notes:**

1. Basemap: ESRI ArcGIS Online "World Shaded Relief" Map Service.
2. Potential turbine visibility based on topography and potential screening by mapped forest vegetation (with an assumed height of 40 ft).
3. Viewshed analysis based on a maximum blade tip height of 150 meters.
4. This is a color graphic. Reproduction in grayscale may misrepresent the data.







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 11: Viewshed Analysis

Sheet 3 of 4: FAA Warning Light Visibility Based on Topography Only

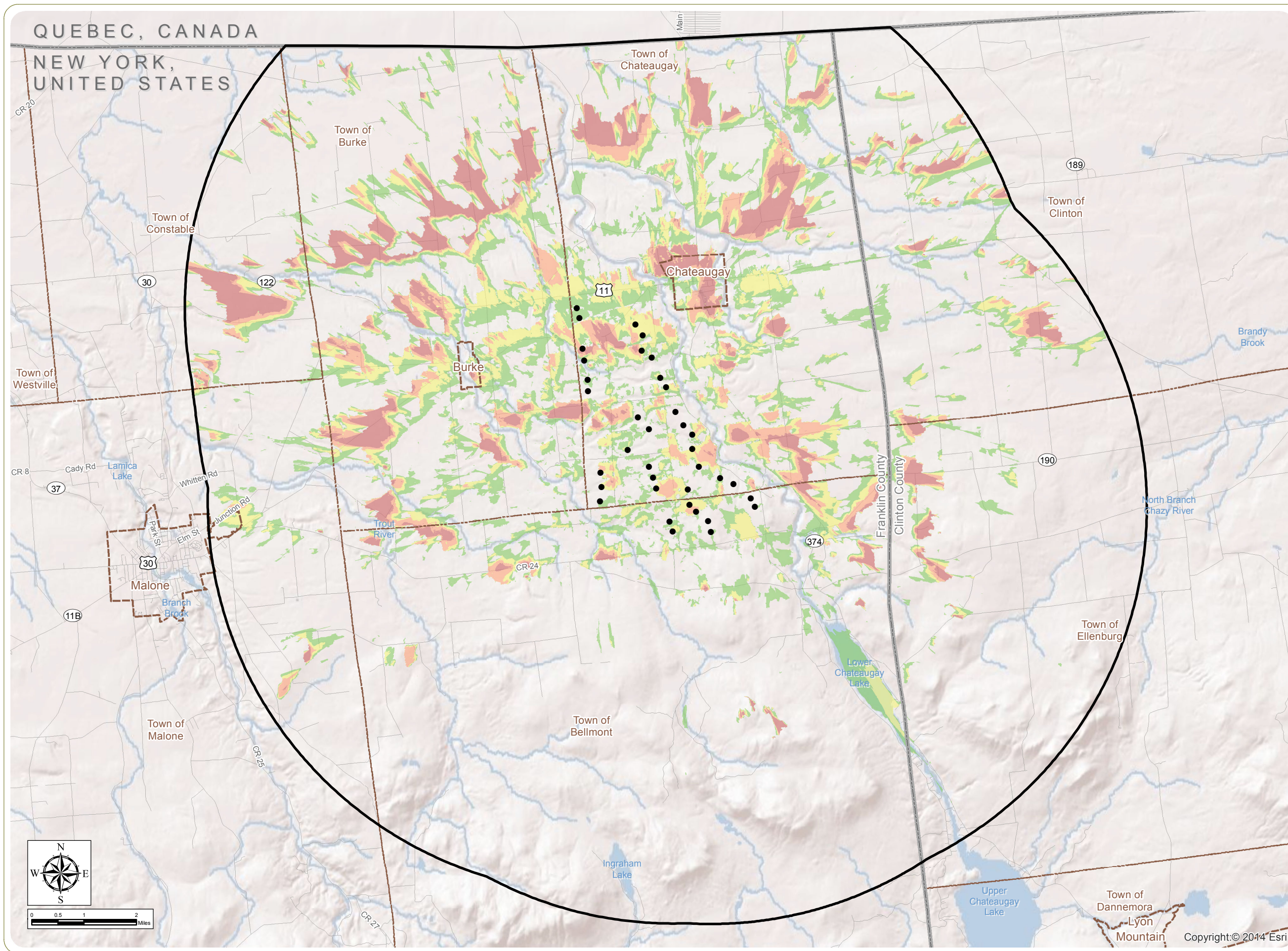
February 2016

- Wind Turbine
- Visual Study Area
- City/Village Boundary
- Town Boundary
- County Boundary
- Potential Visibility
  - 1-10 Lights Visible
  - 11-20 Lights Visible
  - 21-30 Lights Visible
  - 31-37 Lights Visible

**Notes:**  
1. Basemap: ESRI ArcGIS Online "World Shaded Relief" Map Service.  
2. Potential FAA warning light visibility based on topography only. Screening effects of buildings, trees or other factors are not accounted for.  
3. Viewshed analysis based on an approximate FAA light height of 100 meters.  
4. This is a color graphic. Reproduction in grayscale may misrepresent the data.







## Jericho Rise Wind Farm

Towns of Chateaugay and  
Bellmont - Franklin County,  
New York

### Figure 11: Viewshed Analysis

Sheet 4 of 4: FAA Warning Light  
Visibility Based on Topography  
and Vegetation

February 2016

- Wind Turbine
- Visual Study Area
- City/Village Boundary
- Town Boundary
- County Boundary
- Potential Visibility
  - 1-10 Lights Visible
  - 11-20 Lights Visible
  - 21-30 Lights Visible
  - 31-37 Lights Visible

**Notes:**  
1. Basemap: ESRI ArcGIS Online "World Shaded Relief" Map Service.  
2. Potential FAA warning light visibility based on topography and potential screening by mapped forest vegetation (with an assumed height of 40 ft).  
3. Viewshed analysis based on an approximate FAA light height of 100 meters.  
4. This is a color graphic. Reproduction in grayscale may misrepresent the data.





Existing View



SEIS Simulation (2015)



FEIS Simulation (2016)



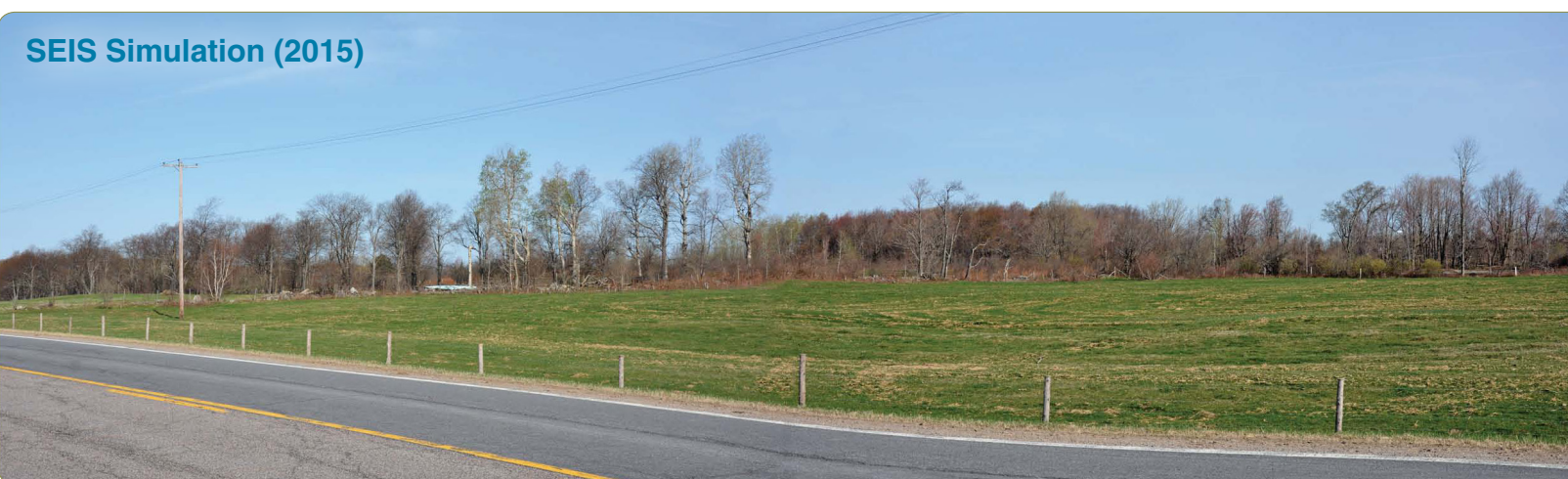
**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 12: Viewpoint 3 - View from CR 24 near the hamlet of Belmont Center**

February 2016





# Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

Figure 12: Viewpoint 10 - View from CR 54 near the hamlet of Harrigan

February 2016

Sheet 2 of 10



Existing View



SEIS Simulation (2015)



FEIS Simulation (2016)



**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 12 : Viewpoint 14 - View from the intersection of Cassidy Road and Number 5 Road, north of the hamlet of Brainardsville**

February 2016



Existing View



SEIS Simulation (2015)



FEIS Simulation (2016)



**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 12: Viewpoint 15 - View from U.S. Route 11, approximately one mile east of the Village of Chateaugay**

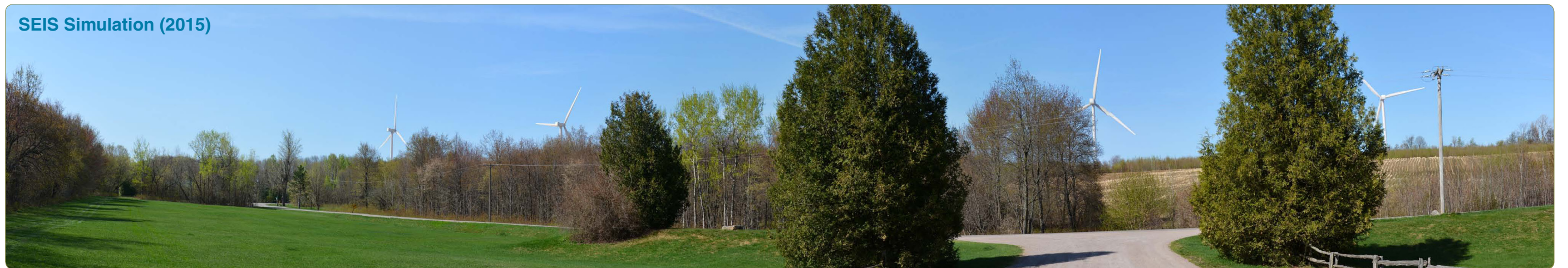
February 2016



Existing View



SEIS Simulation (2015)



FEIS Simulation (2016)



**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 12: Viewpoint 19 - View from the entrance of High Falls Park off River Road, outside the Village of Chateaugay**

February 2016



Existing View



SEIS Simulation (2015)



FEIS Simulation (2016)







# **Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 12: Viewpoint 26A - View from Field Road at the south edge of the Village of Burke**

February 2016



Existing View



SEIS Simulation (2015)



FEIS Simulation (2016)



**Jericho Rise Wind Farm**

Towns of Chateaugay and Bellmont - Franklin County, New York

**Figure 12: Viewpoint 31 - View from the intersection of Callahan and Covey Roads**

February 2016



Existing View



SEIS Simulation (2015)



FEIS Simulation (2016)



**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 12: Viewpoint 34 - View from Childs Road near the Town of Malone**

February 2016



Existing View



FEIS Simulation (2016)



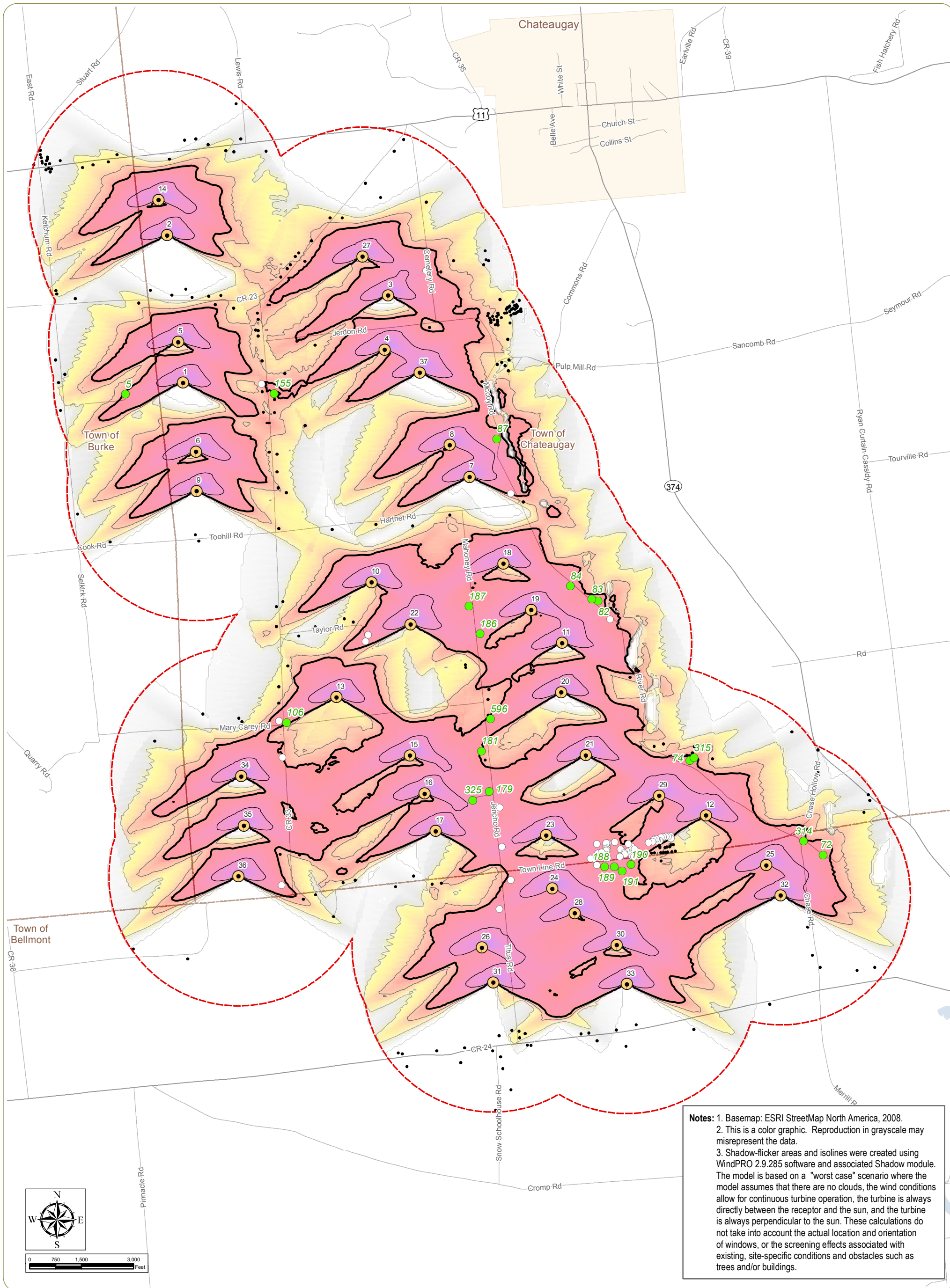
**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 12: Viewpoint 14 (EDR) - Jericho Road, East of Brainardsville**

February 2016





**Notes:** 1. Basemap: ESRI StreetMap North America, 2008.  
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.  
3. Shadow-flicker areas and isolines were created using WindPRO 2.9.285 software and associated Shadow module. The model is based on a "worst case" scenario where the model assumes that there are no clouds, the wind conditions allow for continuous turbine operation, the turbine is always directly between the receptor and the sun, and the turbine is always perpendicular to the sun. These calculations do not take into account the actual location and orientation of windows, or the screening effects associated with existing, site-specific conditions and obstacles such as trees and/or buildings.

**Jericho Rise Wind Farm**  
Towns of Chateaugay and Belmont - Franklin County, New York

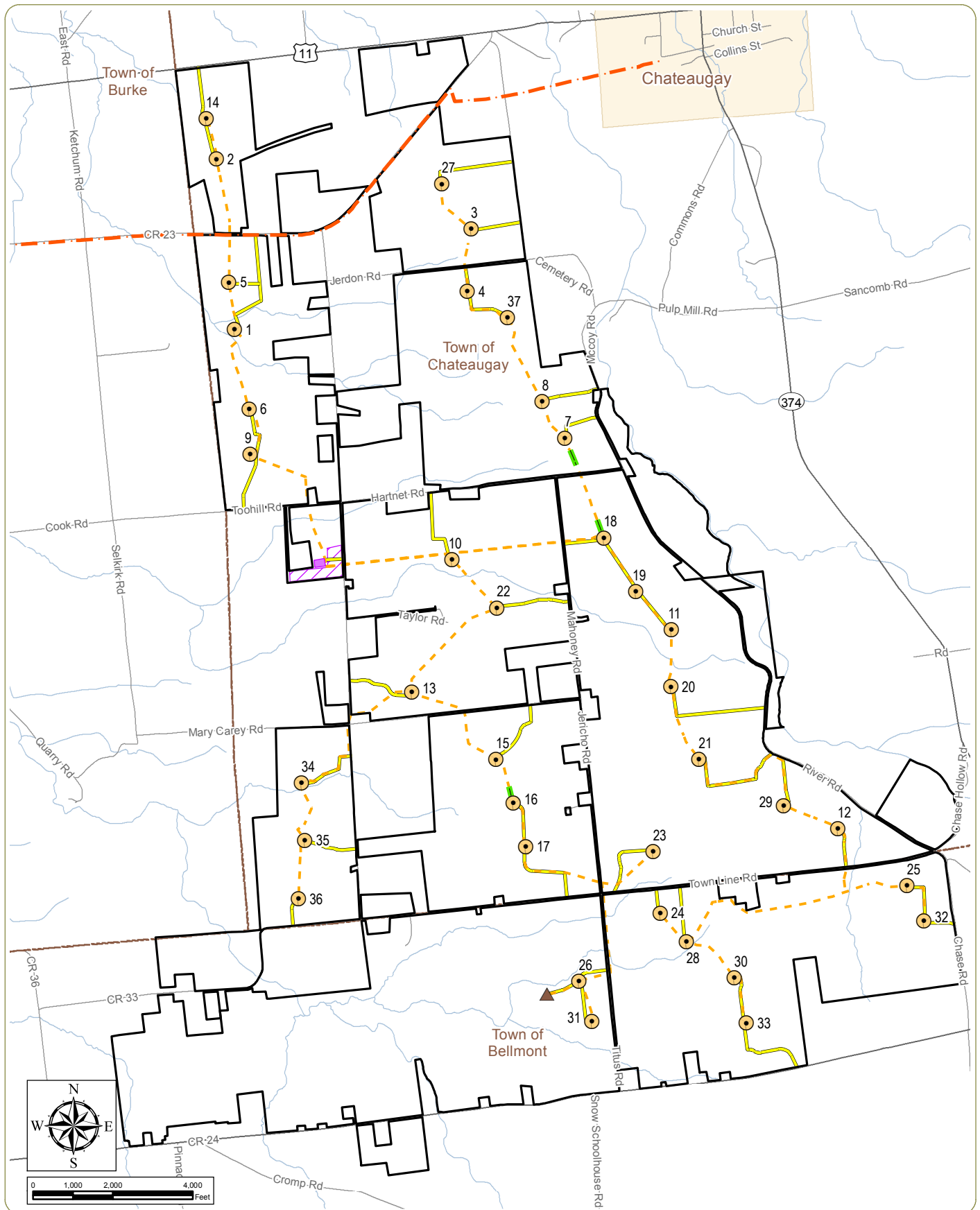
**Figure 13: Projected Shadow Flicker**

February 2016

Wind Turbine	Shadow Flicker Isolines	Shadow Flicker (hours/year)
● Residence < 30 hours/year	— 0 hours/year	□ < 1
○ Participant > 30 hours/year	— 10 hours/year	□ 1 - 10
● Non-Participant > 30 hours/year	— 20 hours/year	□ 10 - 20
▭ 1,140-meter Study Area	— 30 hours/year	□ 20 - 30
▭ Town Boundary	— 100 hours/year	□ 30 - 100
		□ > 100







## Jericho Rise Wind Farm

Towns of Chateaugay and Bellmont - Franklin County, New York

### Figure 14: Existing Underground Gas Infrastructure

February 2016

Notes: 1. Basemap: ESRI StreetMap North America, 2008.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

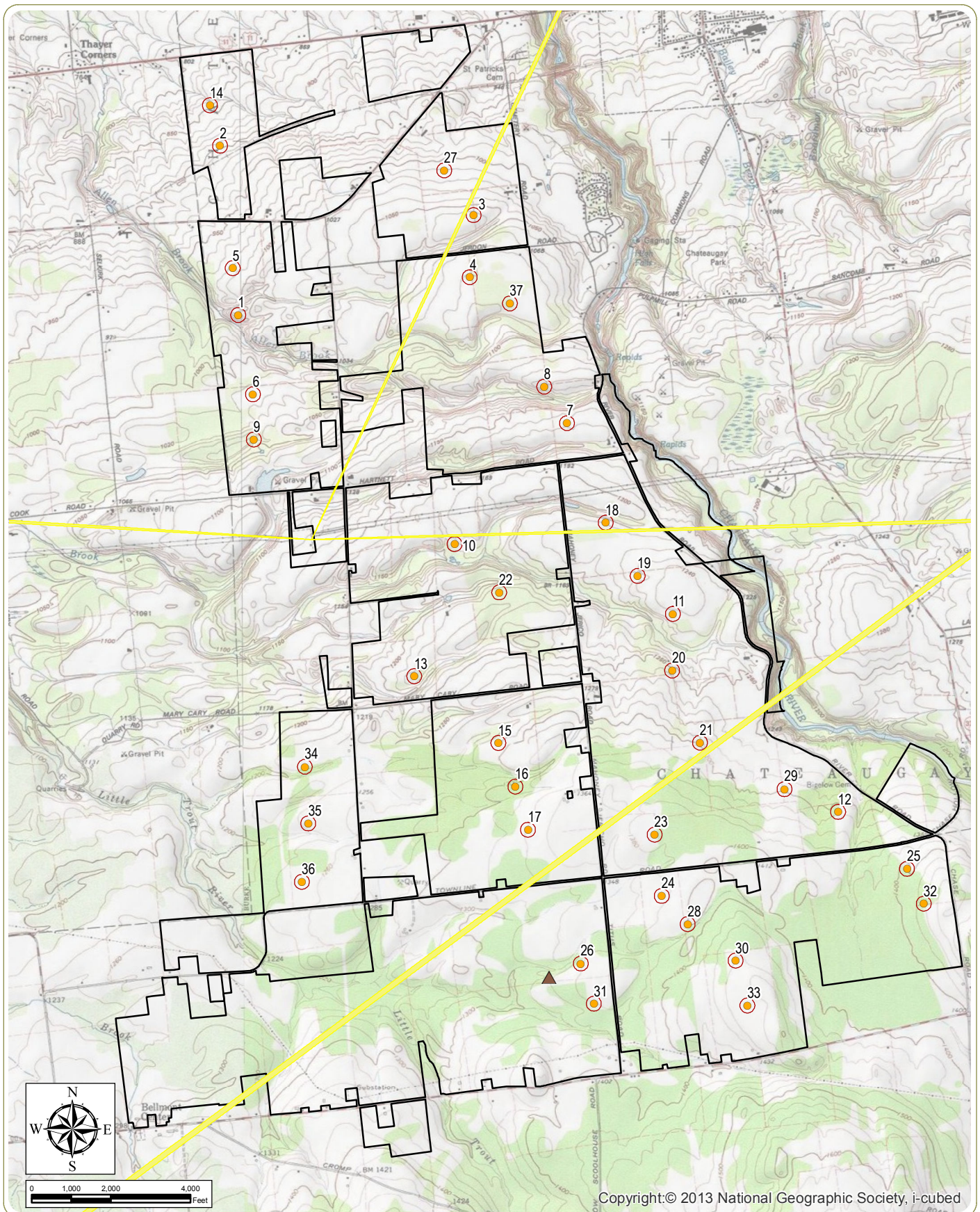
- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- St. Lawrence Gas Main Line
- Substation
- Laydown Area
- Project Site



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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 15: Microwave Path Analysis

February 2016

Notes: 1. Basemap: ESRI ArcGIS Online "USA Topo Maps" Map Service.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

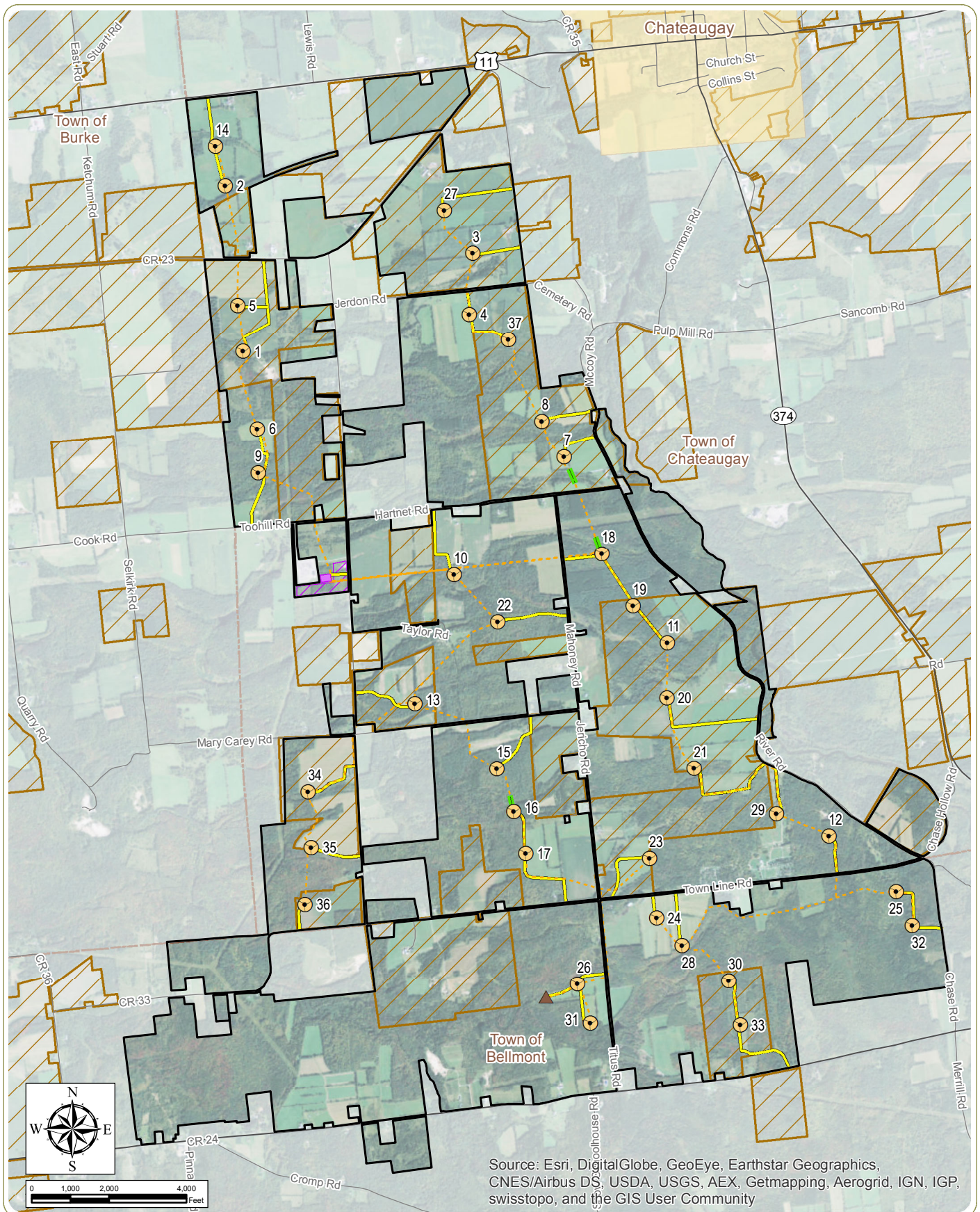
- Wind Turbine
- Rotor-Swept Area
- ▲ Met Tower
- Microwave Path
- Project Site



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## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 16: Agricultural Districts

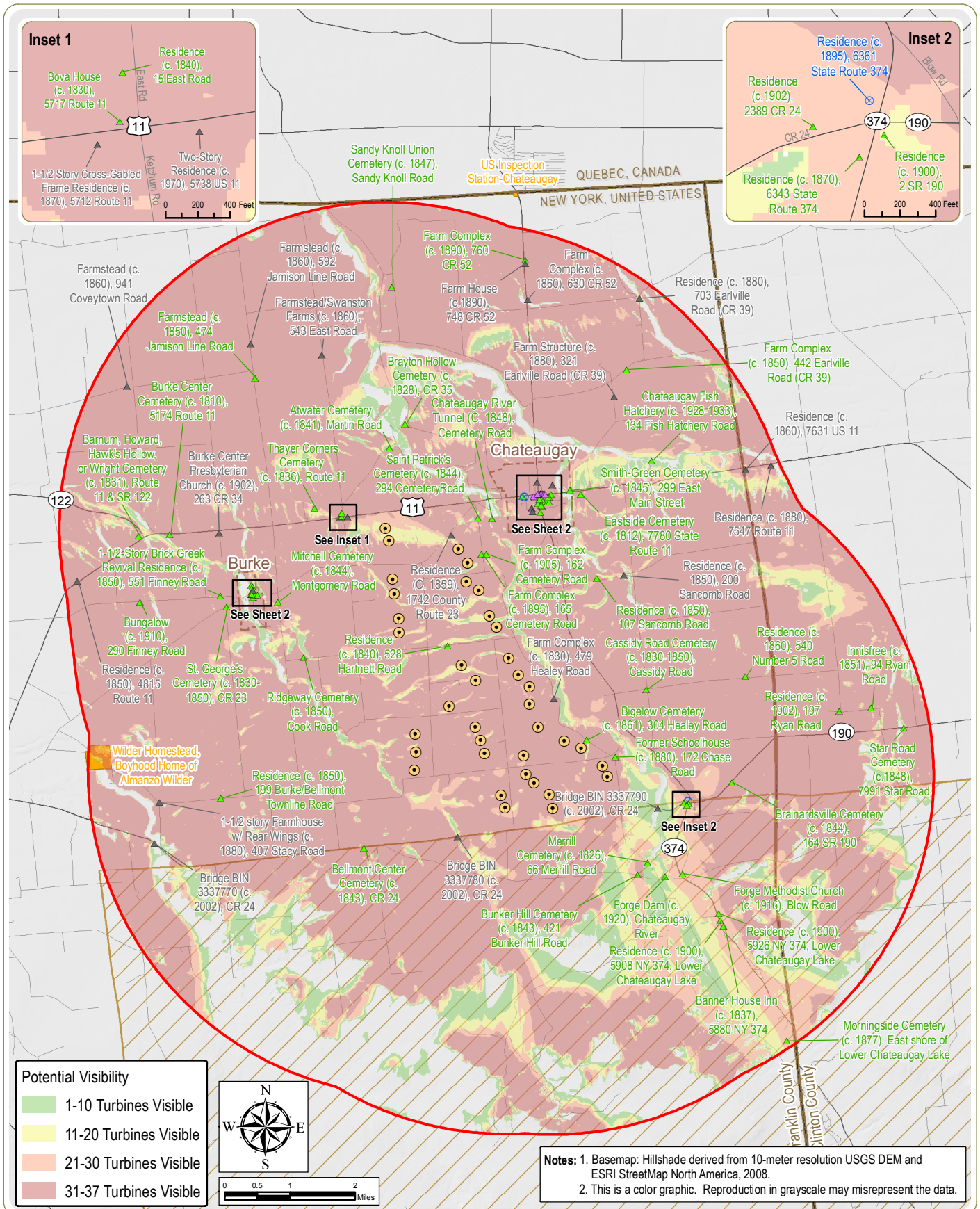
February 2016

**Notes:** 1. Basemap: ESRI ArcGIS Online "World Imagery" Map Service. 2. Franklin County Agricultural District boundaries published by Cornell Institute for Resource Information Sciences, 2014. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Wind Turbine
- Met Tower
- Buried Collection Line
- Overhead Collection Line
- Access Road
- Agricultural District
- Substation
- Laydown Area
- Project Site
- City or Village
- Town Boundary







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 17: Historic Resources Visibility Analysis

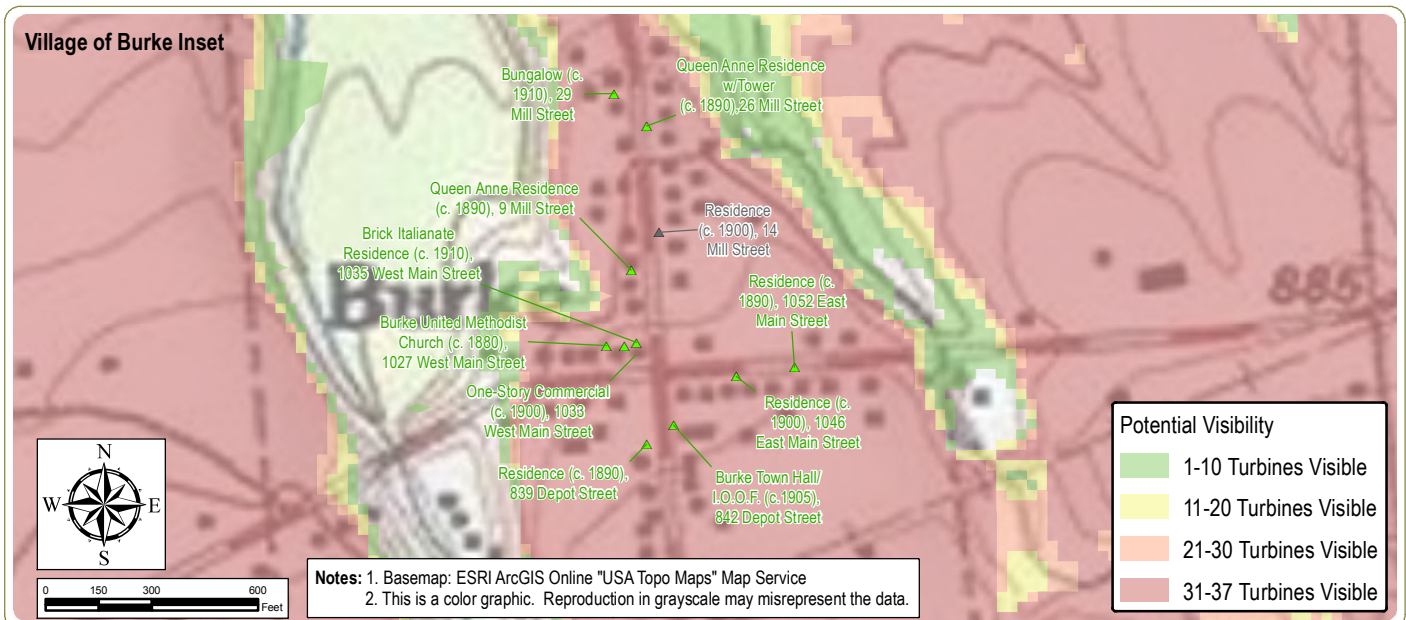
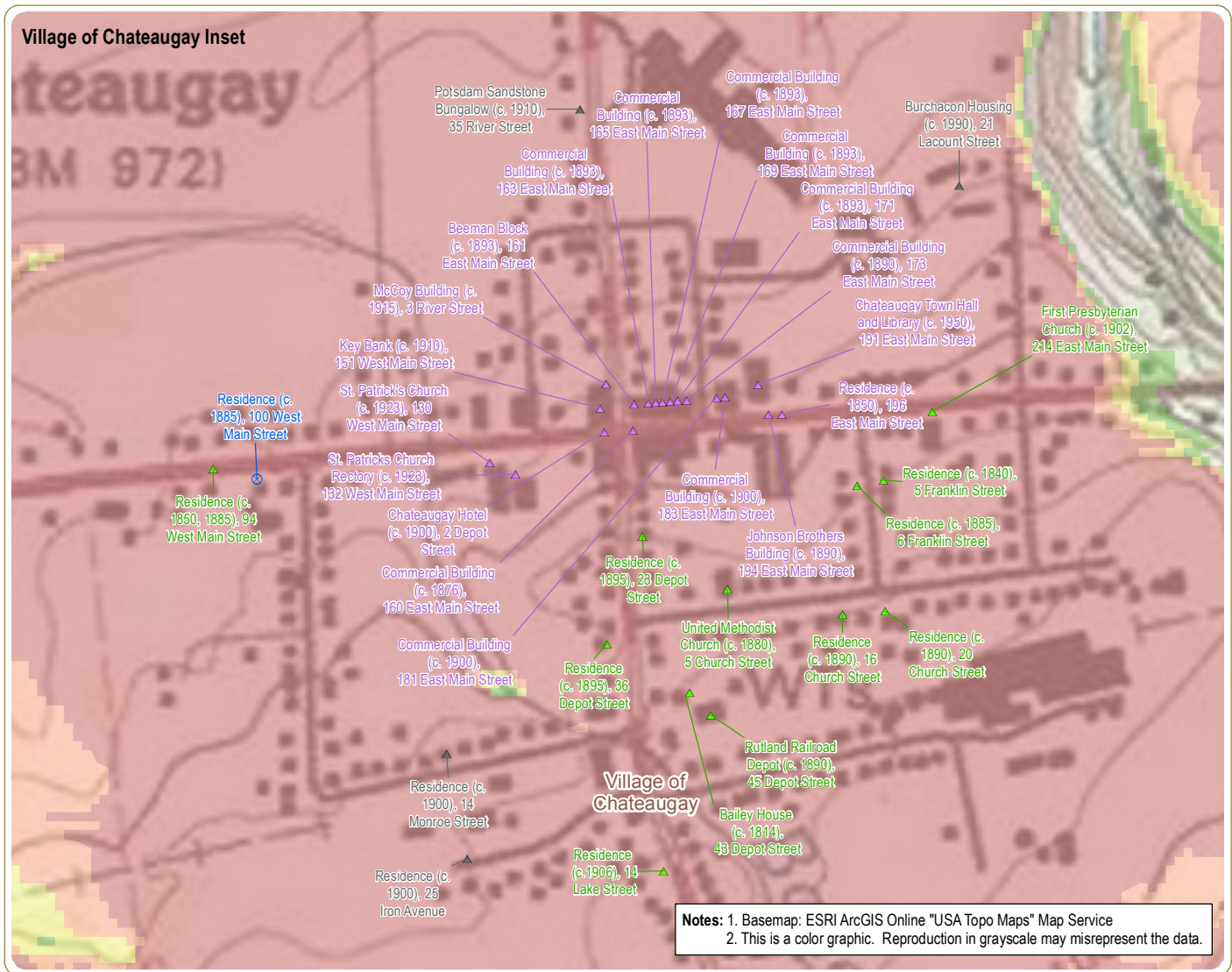
Sheet 1 of 4 - Topographic Viewshed

February 2016

- ▲ NRHP-Eligible (Individual)
- ▲ NRHP-Eligible (District)
- ▲ Not NRHP-Eligible
- ⊗ Demolished
- NRHP-Listed Site
- Proposed Wind Turbine
- ▭ Adirondack Park Boundary
- ▭ 5-Mile Study Area (APE for Indirect Effects)
- ▭ Village Boundary







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 17: Historic Resources Visibility Analysis

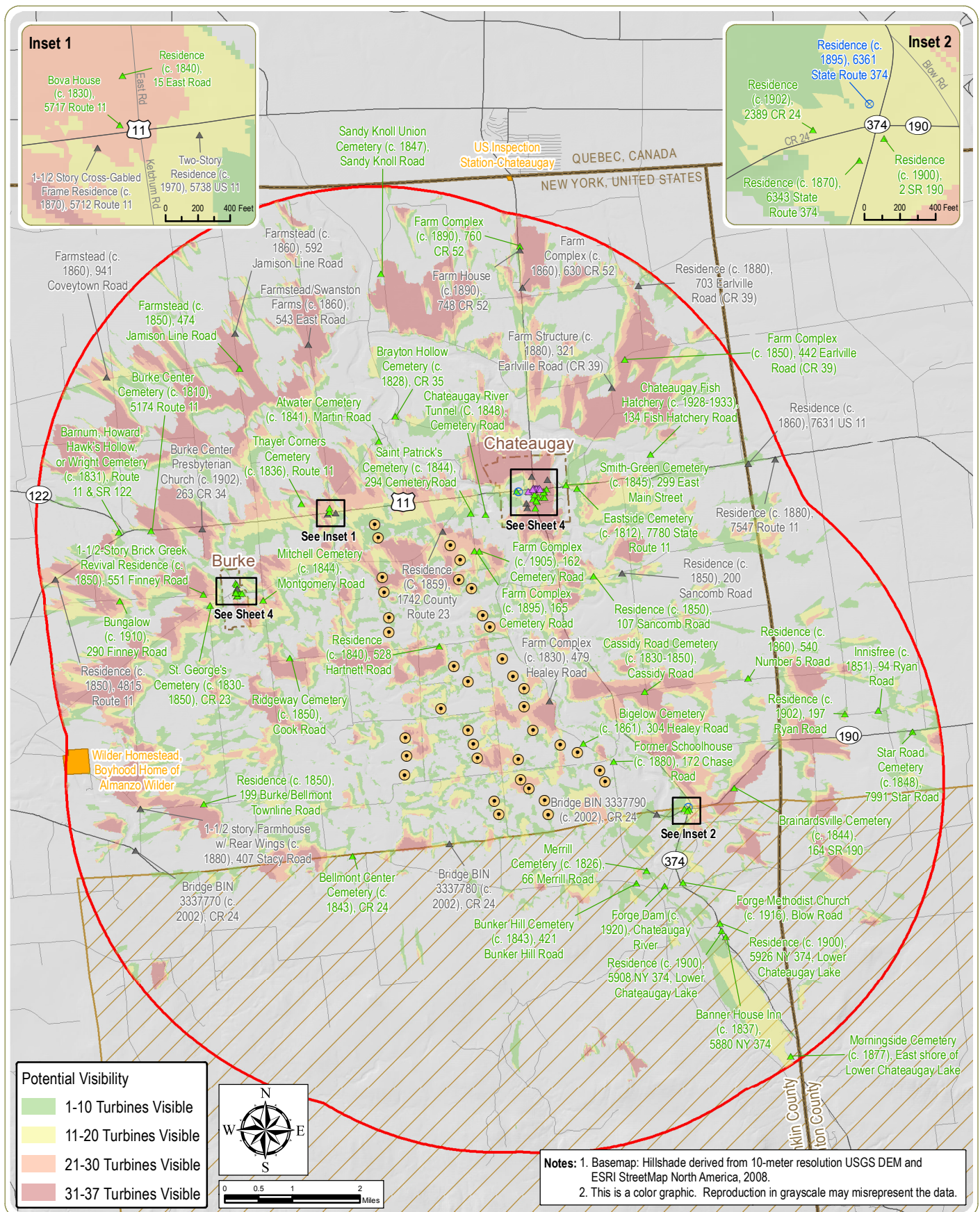
Sheet 2 of 4 - Topographic Viewshed

February 2016

- ▲ NRHP-Eligible (Individual)
- ▲ NRHP-Eligible (District)
- ▲ Not NRHP-Eligible
- ⊗ Demolished
- NRHP-Listed Site







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 17: Historic Resources Visibility Analysis

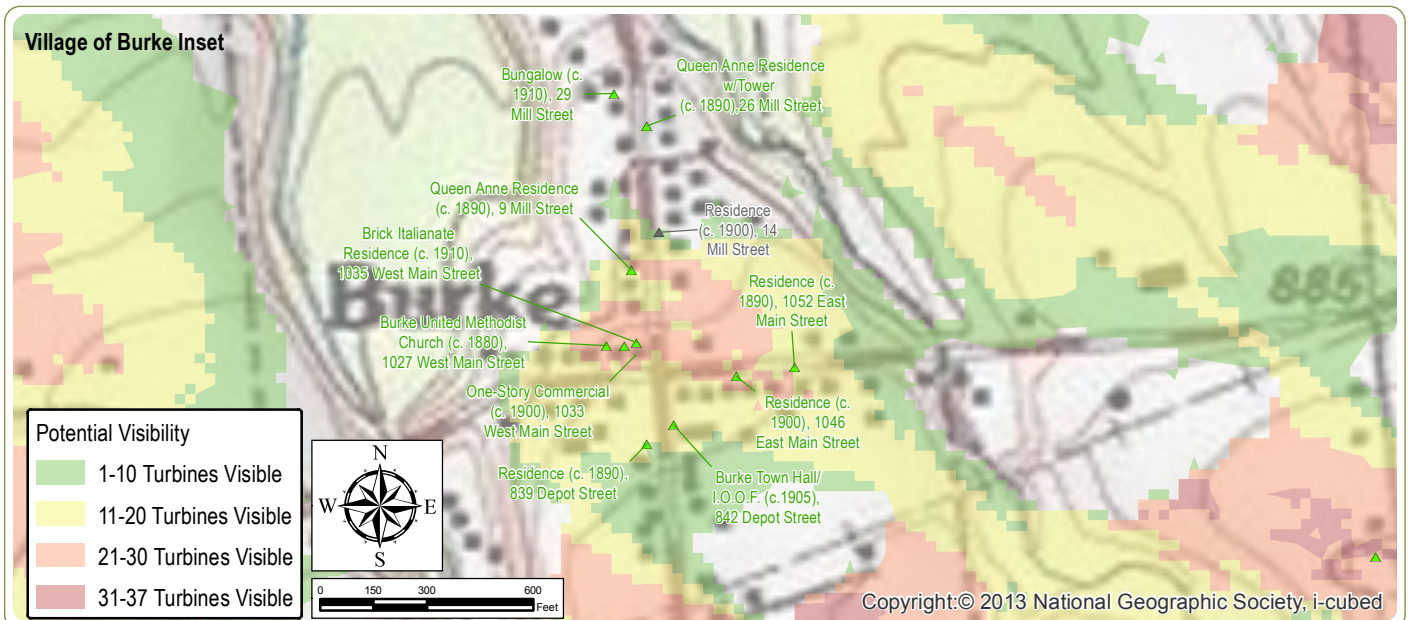
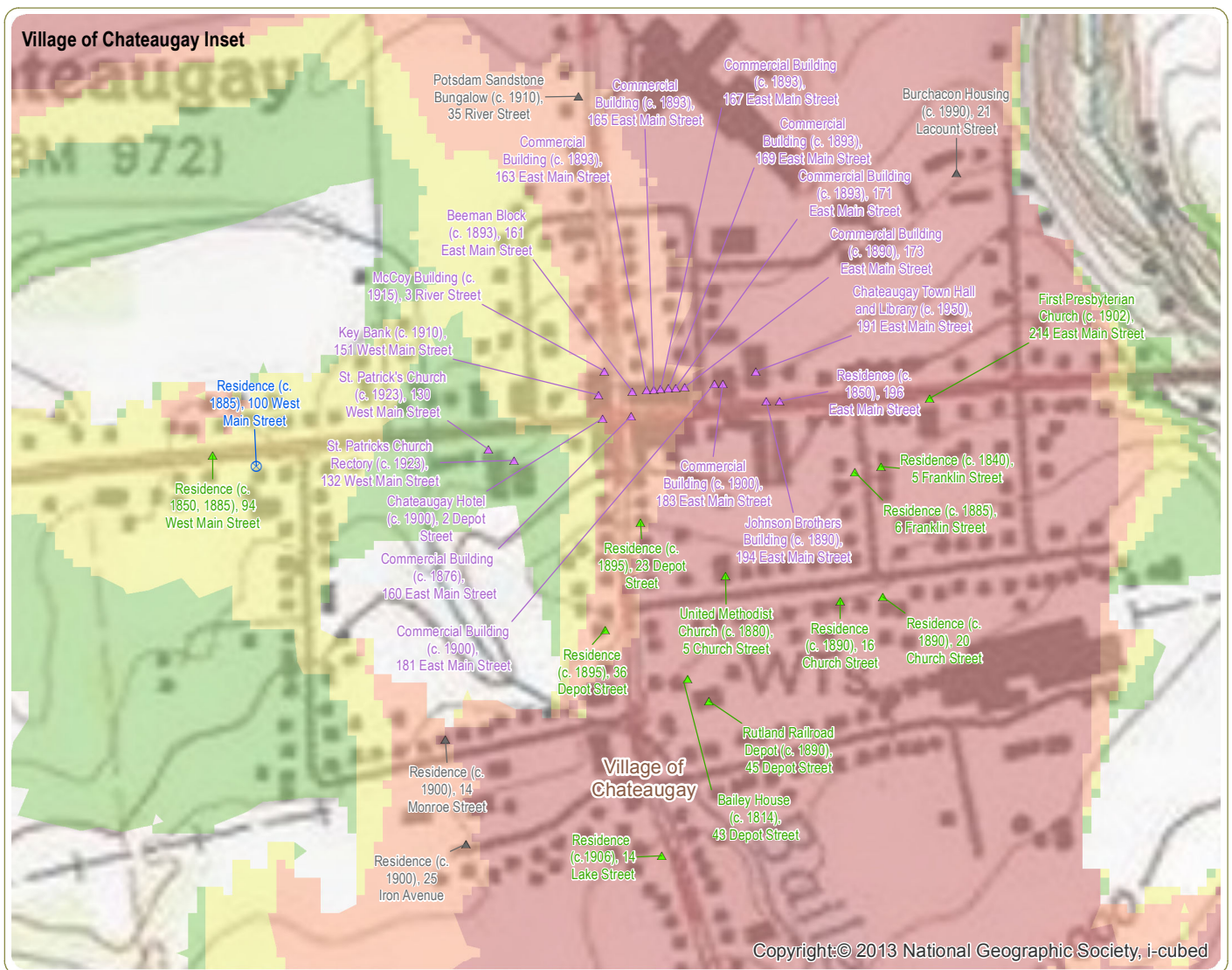
Sheet 3 of 4 - Topographic and Vegetation Viewshed

February 2016

- ▲ NRHP-Eligible (Individual)
- ▲ NRHP-Eligible (District)
- ▲ Not NRHP-Eligible
- ⊙ Demolished
- NRHP-Listed Site
- ⊙ Proposed Wind Turbine
- ▭ Adirondack Park Boundary
- ▭ 5-Mile Study Area (APE for Indirect Effects)
- ▭ Village Boundary







## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

### Figure 17: Historic Resources Visibility Analysis

Sheet 4 of 4 - Topographic and Vegetation Viewshed

February 2016

▲ NRHP-Eligible (Individual)

▲ NRHP-Eligible (District)

▲ Not NRHP-Eligible

⊙ Demolished

NRHP-Listed Site



JERICHO RISE  
WIND FARM



**Notes:** 1. Basemap: ESRI ArcGIS Online "USA Topo Maps" Map Service. 2. This is a color graphic. Reproduction in grayscale may misrepresent the data.





### Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

Figure 18: Historic Resources Visual Effects Analysis (Village of Burke - Main Street, view to the west)

February 2016



*Turbines screened by topography,  
vegetation and/or buildings.*







### Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 18: Historic Resources Visual Effects Analysis (Village of Burke - Depot Street, view to the southwest)**

February 2016



*Turbines screened by topography,  
vegetation and/or buildings.*





SIMULATION



### Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

Figure 18: Historic Resources Visual Effects Analysis (Village of Chateaugay - Iron Avenue, view to the west)

February 2016



*Turbines screened by topography,  
vegetation and/or buildings.*





**SIMULATION**



**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 18: Historic Resources Visual Effects Analysis**  
(Town of Chateaugay - US Route 11 and County Route 23, view to the south)

February 2016



*Turbines screened by topography,  
vegetation and/or buildings.*







**Jericho Rise Wind Farm**

Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 18: Historic Resources Visual Effects Analysis**  
 (North End of Lower Chateaugay Lake - State Route 374, view to the northwest)

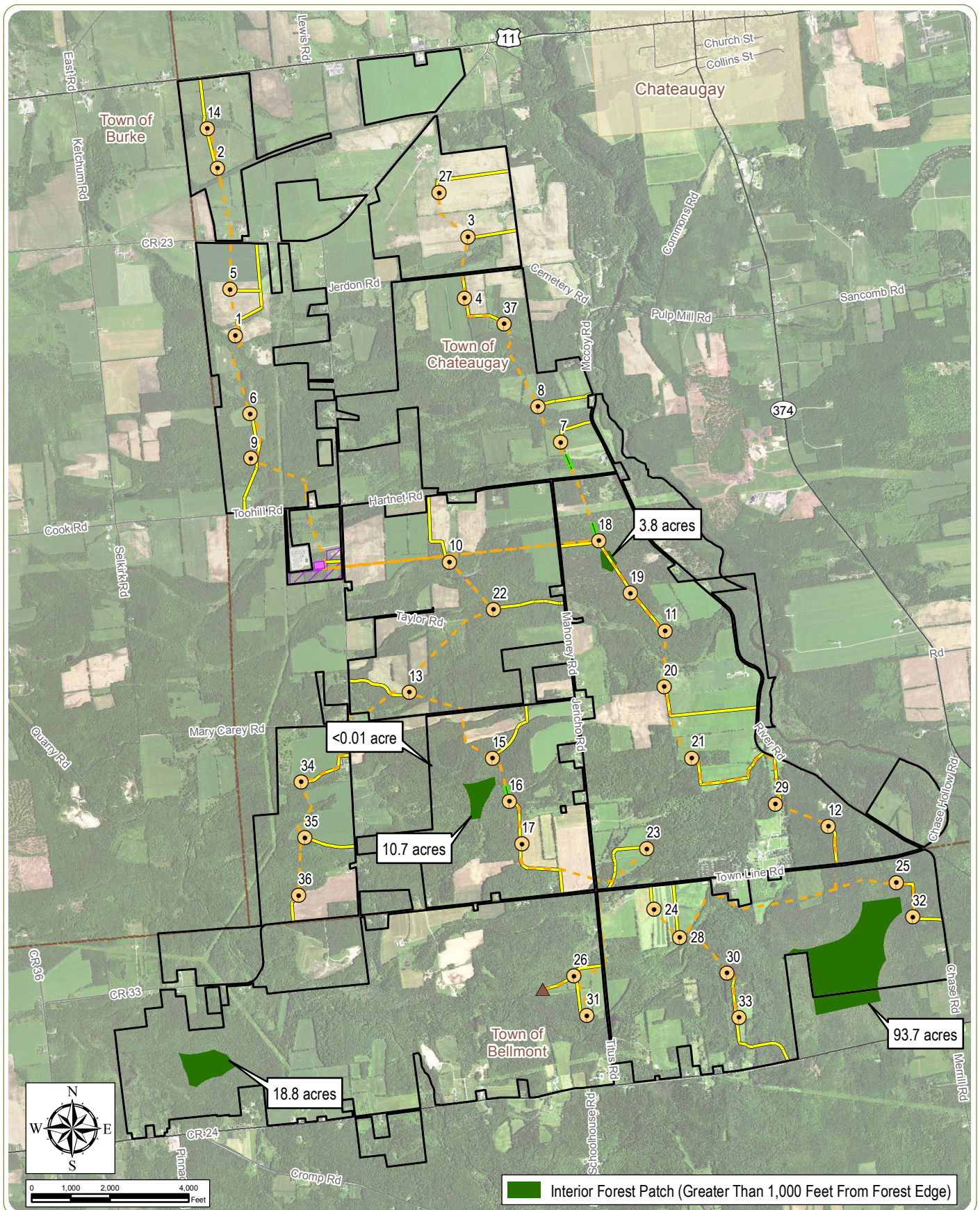
February 2016



*Turbines screened by topography,  
 vegetation and/or buildings.*



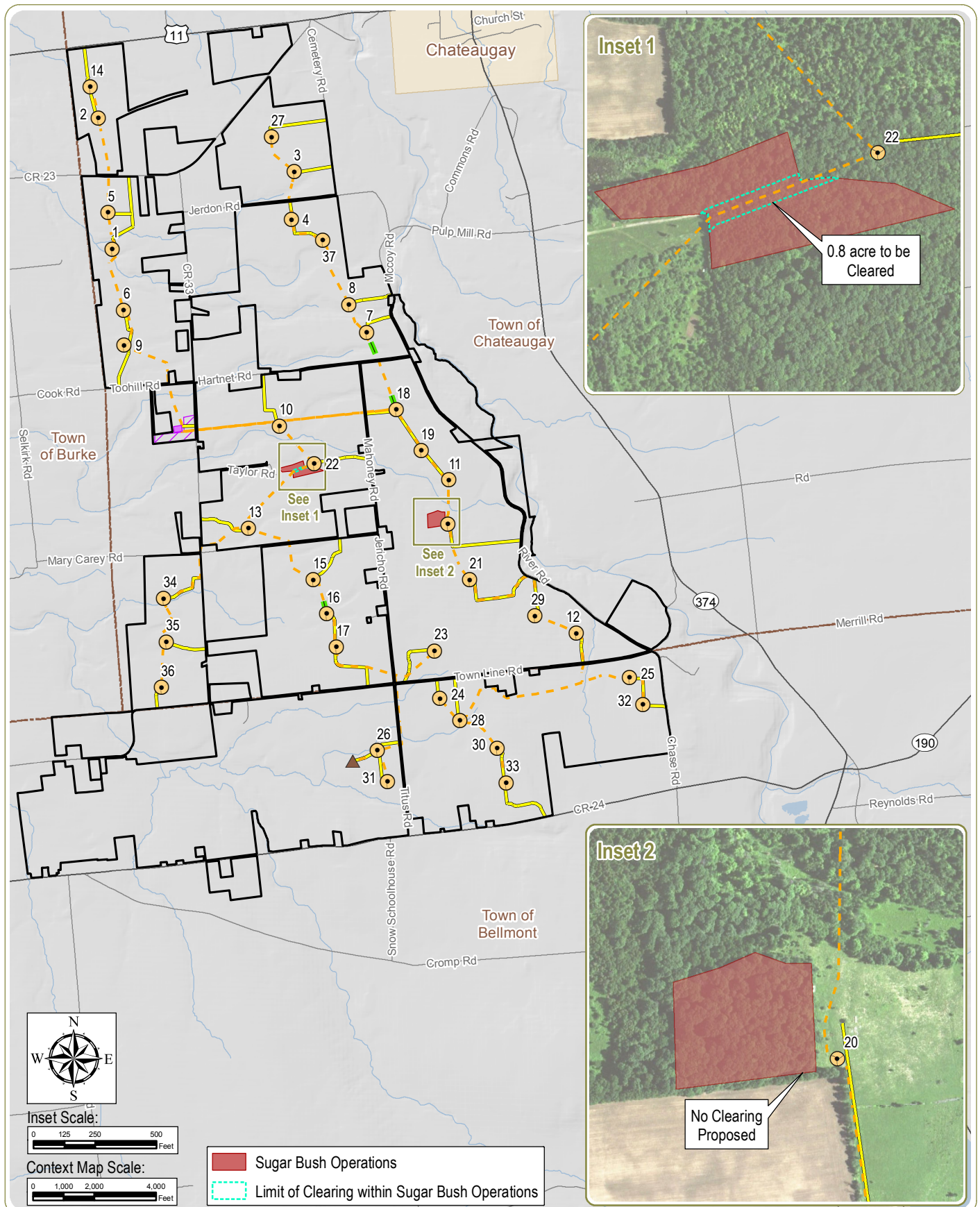




JERICO RISE  
WIND FARM

edr





## Jericho Rise Wind Farm

Towns of Chateaugay and Belmont - Franklin County, New York

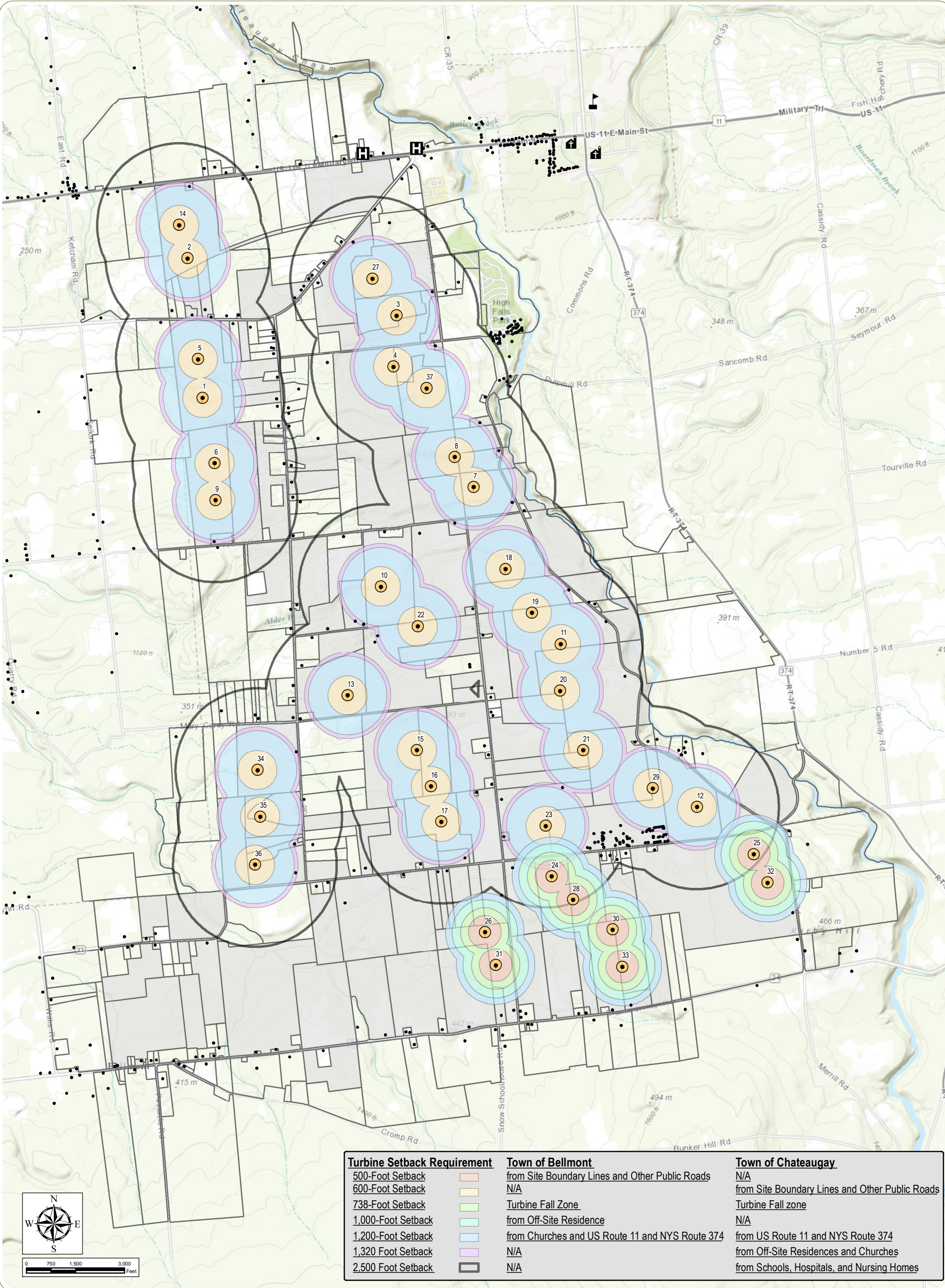
### Figure 20: Sugar Bush Operations

February 2016

**Notes:** 1. Basemap: Hillshade derived from USGS digital elevation model data (context map); USDA NAIP 0.5 meter resolution orthoimagery, 2015 (insets).

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.





**Jericho Rise Wind Farm**  
Towns of Chateaugay and Belmont - Franklin County, New York

**Figure 21: Wind Turbine Setback**

February 2016

**Notes:** 1. Basemap: ESRI ArcGIS Online "World Topo Map" Map Service.  
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.  
3. Only the town of Chateaugay has a 2,500 foot buffer from Schools, Hospitals, and Nursing Homes.

- Residence
- School
- Hospital
- Church
- Wind Turbine
- Parcel within 500 feet of Project Site
- Project Parcel

