

EXHIBIT L -1

VISUAL RESOURCE EVALUATION

VISUAL RESOURCE EVALUATION
PROPOSED 135' TALL
TELECOMMUNICATIONS STRUCTURE

US-NY-5131
Quaker Road
4399 Transit Road, Aurora
Erie County, New York 14127

Submitted by:



Bell Atlantic Mobile Systems LLC
1275 John Street, Suite 100
West Henrietta, NY 14586



VB BTS II, LLC
750 Park of Commerce Dr
Boca Raton, FL 33487

Prepared by:



PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.
70 Pleasant Hill Road
Mountainville, New York 10953
845-534-5959
845-534-5999 FAX

December 18, 2023

VISUAL RESOURCE EVALUATION

Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C. (Tectonic) was contracted by Vertical Bridge to conduct a “Visual Resource Evaluation” to determine which areas within the Town of Aurora and the surrounding areas will contain views of the proposed 135-foot-tall wireless telecommunications structure.

Setting:

The proposed site is located at 4399 Transit Road, in the Town of Aurora in Erie County, New York 14127. The surrounding land use is predominantly wooded/ undeveloped land and agricultural fields with scattered residential, commercial, and recreational development. Within the study area the topography ranges in elevation from 760' +/- AMSL (Above Mean Sea Level) to 1066' +/- AMSL. The predominant forest trees are mixed deciduous and coniferous, with an estimated height of 60 to 70 feet. The field study for this visual resource evaluation was conducted in the fall season during leaf off conditions.

Methodology:

On November 20, 2023, Tectonic conducted a field investigation for the purpose of evaluating the viewshed associated with the proposed installation of the 135-foot-tall monopole (structure). The structure will have a total height of 139-feet above ground level (AGL) with the inclusion of the four (4) foot tall lighting rod. Conditions were clear, approximately 25°-37° Fahrenheit, with wind speeds of approximately 5-10 mph. The study area consisted of a two (2) mile radius from the project site. The two (2) mile radius generally consists of wooded/ undeveloped areas, residential properties, commercial properties, recreational properties within the Town of Aurora and Town of Orchard Park. Creating a viewshed greater than a two (2) mile radius is generally unwarranted. Due to the fact that objects tend to appear smaller the farther they are from the viewer, in this case, the structure would appear very small, if visible at all, from a distance of more than two (2) miles.

The methodology utilized during this field investigation is referred to as a “balloon test.” The height of the proposed structure was simulated by floating a three (3) foot diameter, helium-filled weather balloon at 135 feet AGL. The 135-foot height was utilized during the balloon test, as this is the proposed height of the structure.

Prior to being on site, desktop-level review viewshed maps for a two (2) mile radius from the proposed tower location were computer generated utilizing the ArcGIS Desktop/ ArcMap program, digital elevation data, and land cover data. The digital elevation data was provided by New York State via the digital elevation models (DEMs) produced cooperatively between the United States Geological Service and New York State’s Department of Environmental Conservation. The DEM represents topography only data, without buildings, structures, or other development on the elevation model. As such, the Multi-Resolution Land Characteristics (MRLC) land cover data, cooperatively compiled by federal agencies, was utilized to provide approximate land cover data information; this data set was up to date as of 2019. This land cover data provides information associated with various types of development densities and vegetation, including types of forests, woody wetlands, and shrublands. The land cover data associated with the approximate locations of primarily deciduous forests, evergreen forests, mixed forests, and woody wetlands for the study area were extracted from this comprehensive land data source into a raster form. Once extracted, an estimate was created for the height of the trees within these areas. This extracted forest cover location data along with the estimated tree height elevations were then added onto a copy of

the topographic only DEM in order to represent forested or wooded areas within the study area, creating a DEM that represents the topography and vegetated areas within the study area.

Next, the tower location was generated within ArcGIS Desktop with the proposed tower elevations, in a format that could be utilized by ArcGIS Desktop in order to run the Spatial Analyst “Viewshed” tool to evaluate surface areas within the two-mile study area where the tower could potentially be seen by observers within the study area. This tool takes into consideration the average height of a person above the ground surface at the observer locations when looking towards the proposed tower location, and makes note where something, either topography or vegetation, will be blocking the tower from sight by the person standing at that location. This process is run twice – once for topography only and once for the combined topography and vegetation. This method ensures that areas “blocked by topography” are differentiated from areas “blocked by vegetation”. Areas “blocked by topography” are places where the tower will be blocked from view to an observer due to intervening topography, such as hills, mountains, or other features. Areas “blocked by vegetation” are areas where the tower will potentially not be visible to an observer due to vegetated land cover. Colors are used to differentiate between areas from which the structure will be visible (White/ Transparent/ No color) and areas from which a view of the structure will be blocked by topography (Red) or vegetation (Yellow). These computer-generated maps were created in order to provide the best- and worse-case scenarios the different heights would have on visibility within the two (2) mile study area.

Tectonic traveled the study area along publicly accessible roadways to confirm the potential visibility of the structure based on the computer-generated viewshed map. Areas delineated as “blocked by topography” and “blocked by vegetation” were confirmed by viewing the site from public roadways within a two (2) mile radius. It was found that the topography only computer-generated viewshed map was correct and accurate within the areas surveyed, and that the balloon was in fact not visible from areas indicated to be blocked by topography. The combined computer-generated and in-field review of the viewshed analysis resulted in the discovery that the proposed structure would be visible from only a select few locations within the two (2) mile radius, represented on the attached Combined Viewshed Map. Photograph locations are shown on the Photographic Log Map. The in-field review noted the visibility of the structure will be limited to the surrounding areas to the proposed Tower location where vegetation has been cleared along Transit Road, Colony Drive, Quaker Road/ Route 20A, Stonybrook Road, Stewart Ct, Idlewood Drive, and Davis Rd.

Photographs were taken from various vantage points within the study area to document the actual view towards the proposed structure, as well as the general character of the viewshed. Each photograph attached includes a brief description of the location and orientation from which it was taken, and the photo number corresponds to the key number on the attached photograph log map.

Process:

Photographs of the weather balloon from the viewpoints noted were taken with a Nikon D3200 using a 55-120 focal length lens set to the equivalent of 55mm focal length, as determined to best mimic the view as observed from the human eye. A three (3) foot diameter red helium filled balloon was floated to a height of 135 feet.

In order to analyze the potential visual impacts of the proposed structure, Tectonic took photographs of the balloons from locations within the search area for the purpose of preparing simulations of the proposed structure. Photographs for which there is a corresponding simulated view (#3, 8, 9, 20, and 28)

of the proposed structure were produced by first creating a 3-dimensional (3D) structure based on the proposed design plans and scaling, then mimicking the site conditions and view looking towards the proposed site where the marker balloon was set to a height of 135' AGL. This 3D structure was then rendered to produce a digital image of the proposed structure to scale and at the proposed perspective. The digital images of the field photograph and rendered image were then merged and scaled through the use of the image editing software, "Krita", an open-source Adobe Photoshop alternative. During this process, the rendered structure's height and width is checked against the known height and width by scaling the similar type structure using measurements obtained from the marker balloon. The similar type structure used has an antenna array that spans eight (8) feet high and eight (8) feet wide. By measuring the balloon diameter of three (3) foot, one can determine the proper scaling of the antenna array by multiplying the balloon height and width by a factor of 2.667. The image and structure are then composited together, and the image exported, producing the final digital image.

We note that the simulations provided are artistic renderings of views from chosen locations and should not be interpreted to be the actual view of the tower following construction. While we utilize best efforts to simulate the view of the proposed tower from a particular location, some variance between the simulations, manufacturer products, and final installed towers is to be expected.

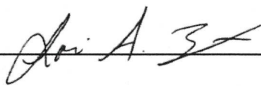
Conclusion:

The Viewshed Analysis Map presents a conservative delineation of the viewshed within the study area and along public roadways and public parks. The photo simulations have been prepared per the methodology described above and provide a general depiction of the appearance of the structure from the photographed viewpoints.

Sincerely,
TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.

By:  _____

Dina Peoples
GIS Specialist

Reviewed By:  _____

Lori A. Bart
Environmental Project Manager



Service Layer Credits Sources: Esri, HERE, Garmin, Intermap, iPC, GEBCO, USGS, FAO, NPS, NRCAN, GeoBC, IGN, Kartchner, NCT, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo contributors, and the GIS User Community

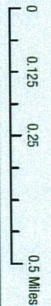
Legend

- Proposed Tower Location
- Tower Location (1 mile buffer)
- Topographic Viewshed**
- Not Visible due to Topography
- Potentially Visible
- Field Vegetative Viewshed**
- Not Visible due to Vegetation
- Potentially Visible/Not Publicly Accessible

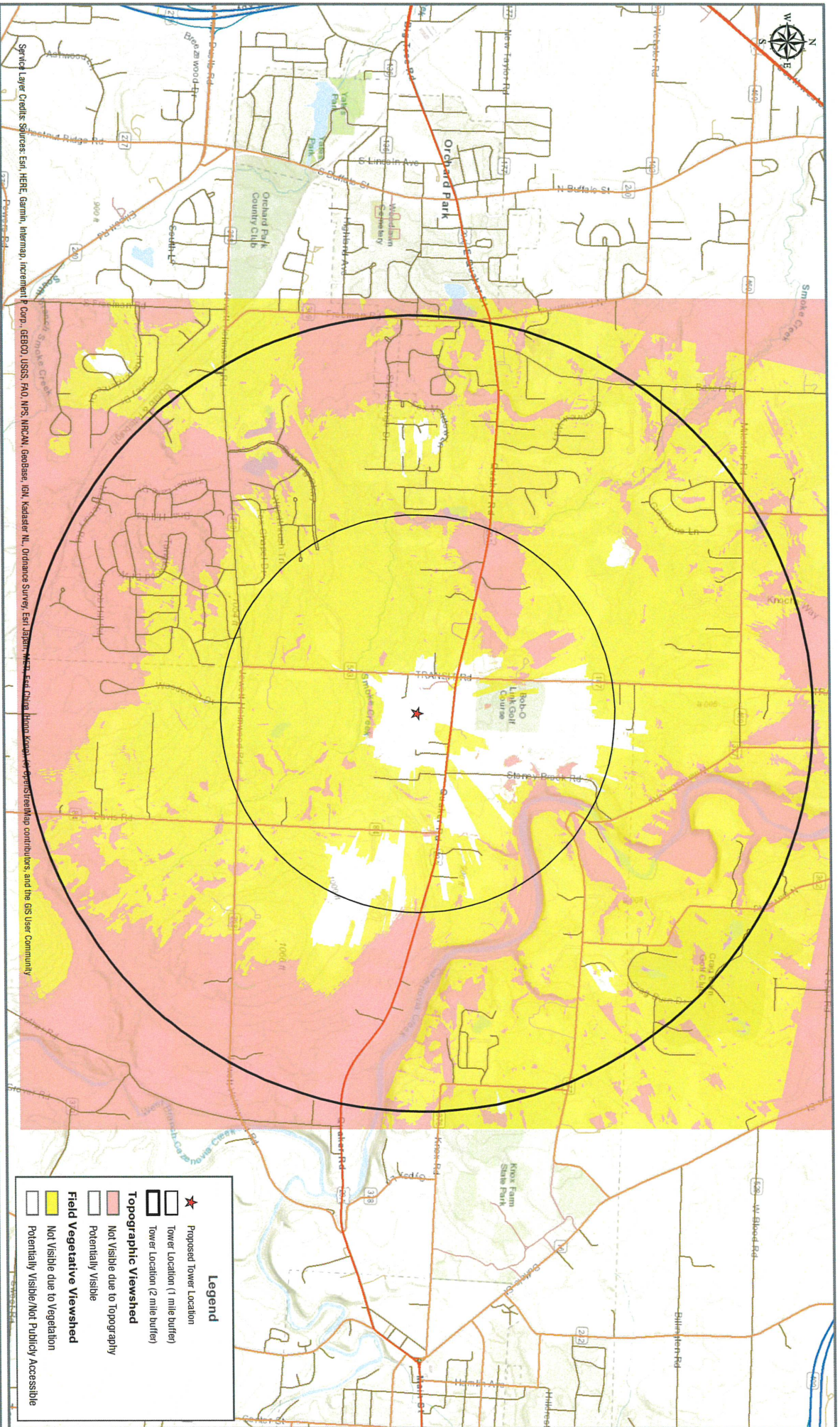
Tectonic
TECHNOLOGICAL SOLUTIONS FOR A BETTER WORLD

135ft Tower
65ft Mixed Forests, 20ft Woody Wetlands,
30ft Development

US-NY-5131 Quaker Road
4399 Transit Rd
Orchard Park, NY 14127



Combined
Viewshed Map
11947.004

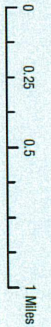


- Legend**
- ★ Proposed Tower Location
 - Tower Location (1 mile buffer)
 - Tower Location (2 mile buffer)
 - Topographic Viewshed**
 - Not Visible due to Topography
 - Potentially Visible
 - Field Vegetative Viewshed**
 - Not Visible due to Vegetation
 - Potentially Visible/Not Publicly Accessible

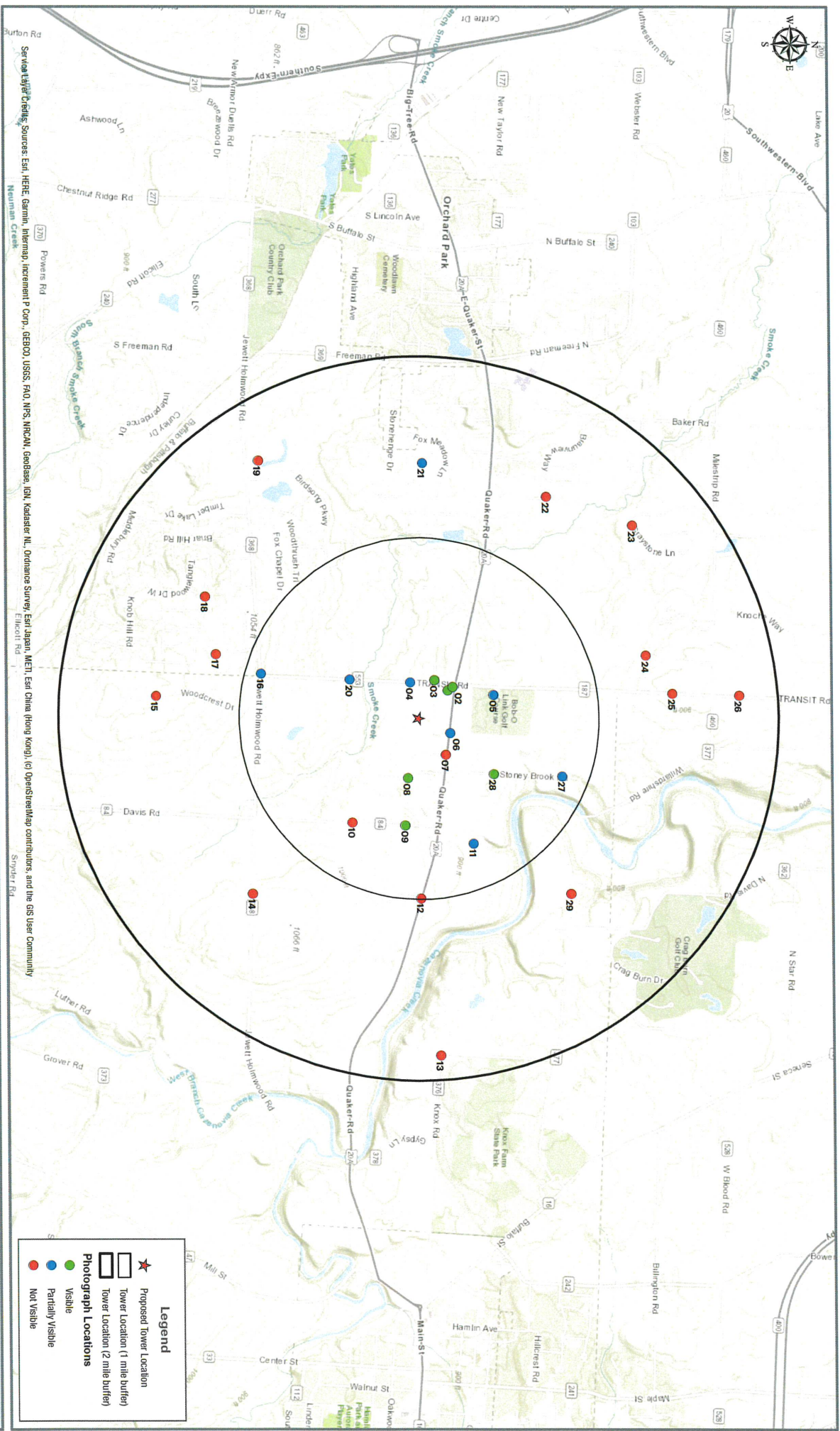
Tectonic
Map Data Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, Swisstopo, Esri China (Beijing), Swisstopo contributors, and the GIS User Community

135ft Tower
 65ft Mixed Forests, 20ft Woody Wetlands,
 30ft Development

US-NY-5131 Quaker Road
 4399 Transit Rd
 Orchard Park, NY 14127



Combined
 Viewshed Map
 11947.004



Legend

- ★ Proposed Tower Location
- Tower Location (1 mile buffer)
- Tower Location (2 mile buffer)

Photograph Locations

- Visible
- Partially Visible
- Not Visible

Tectonic
AN ESRI COMPANY

135ft Tower

US-NY-5131 Quaker Road
 4399 Transit Rd
 Orchard Park, NY 14127

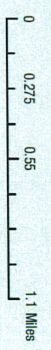
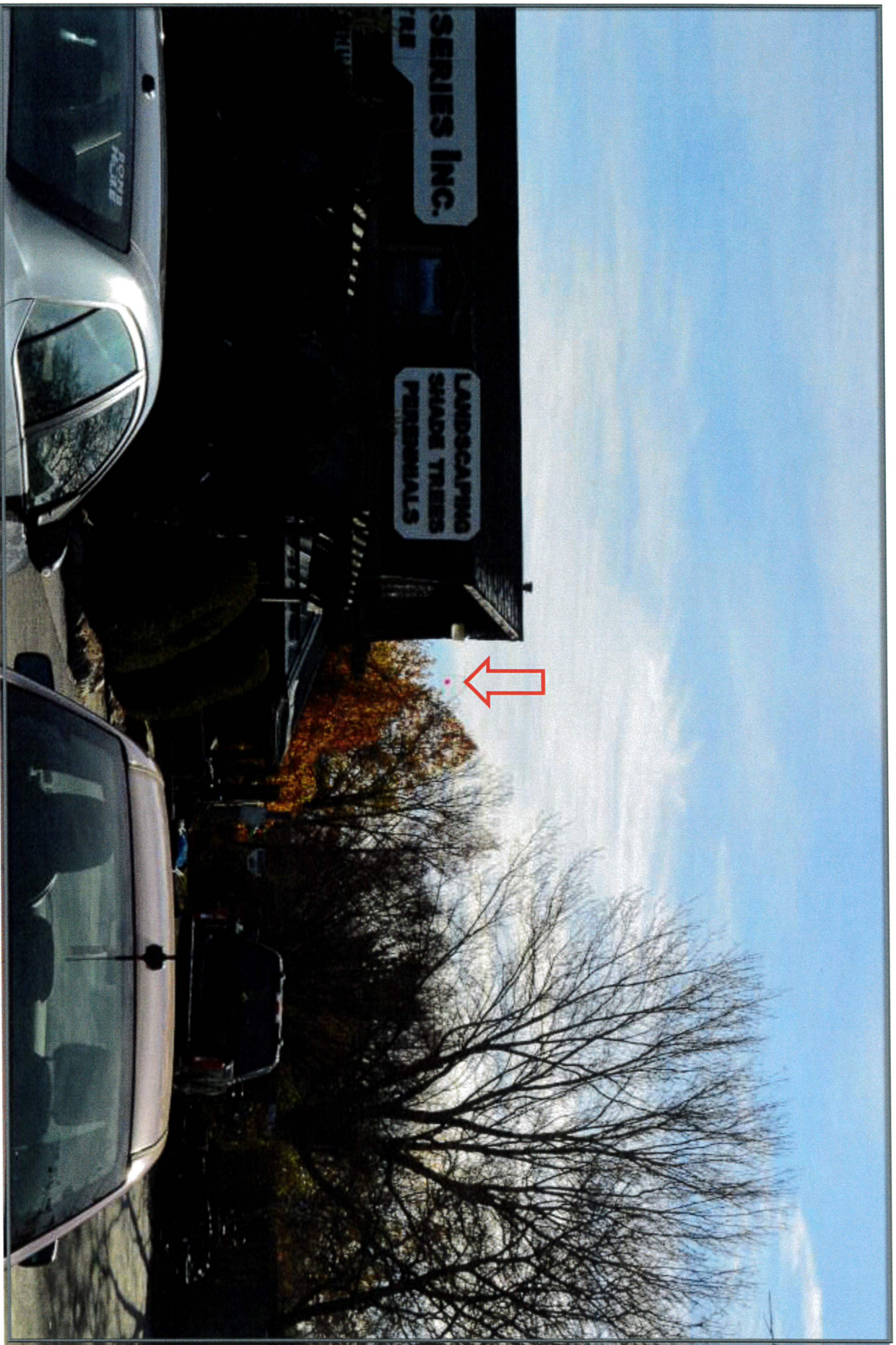


Photo Location Map
 11947.004

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) Swisstopo contributors, and the GIS User Community



Looking southeast from Murray Bro Nurseries parking lot.
Proposed installation will be visible from this location.

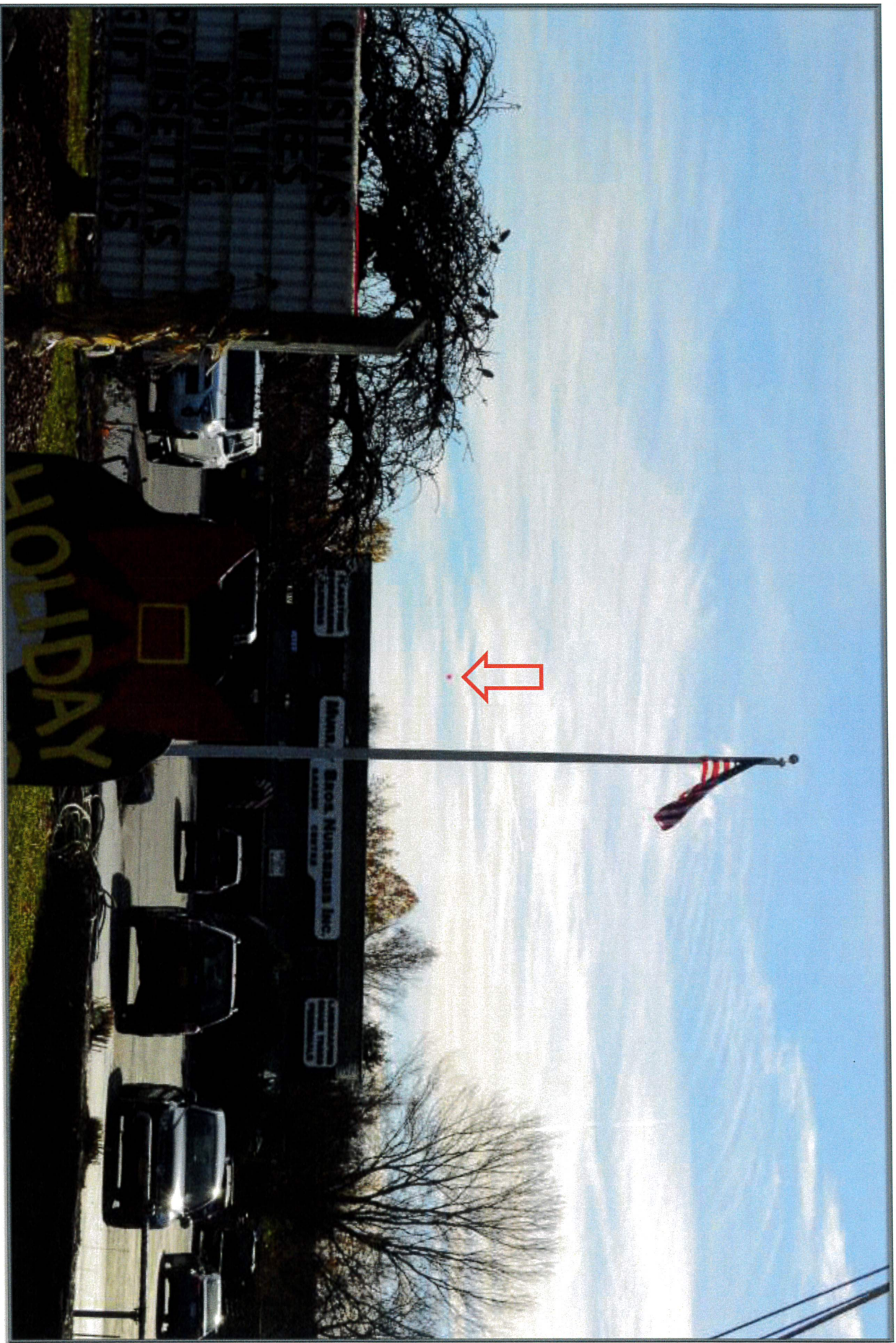
Distance from the photographic location to the proposed installation is \pm 0.22 miles.

Tectonic

PROJECT: MOUNTAIN VIEW SCHOOL SECTOR 1

P-1

11947.004



Looking southeast from intersection of Quaker Road and Transit Road.
Proposed installation will be visible from this location.

Distance from the photographic location to the proposed installation is ± 0.26 miles.

Tectonic

PAVE IT. SEAL IT. SOLIDIFY IT. RESTORE IT. SEAL IT.

P-2

11947.004



Looking east from intersection of Colony Drive and Transit Road.
Proposed installation will be visible from this location.

Distance from the photographic location to the proposed installation is ± 0.23 miles.

Tectonic

PHOTOGRAPHY BY SCOTT BROWN, APRIL 14, 2011

P-3

11947.004



Looking east from intersection of Colony Drive and Transit Road.
Proposed installation will be visible from this location.

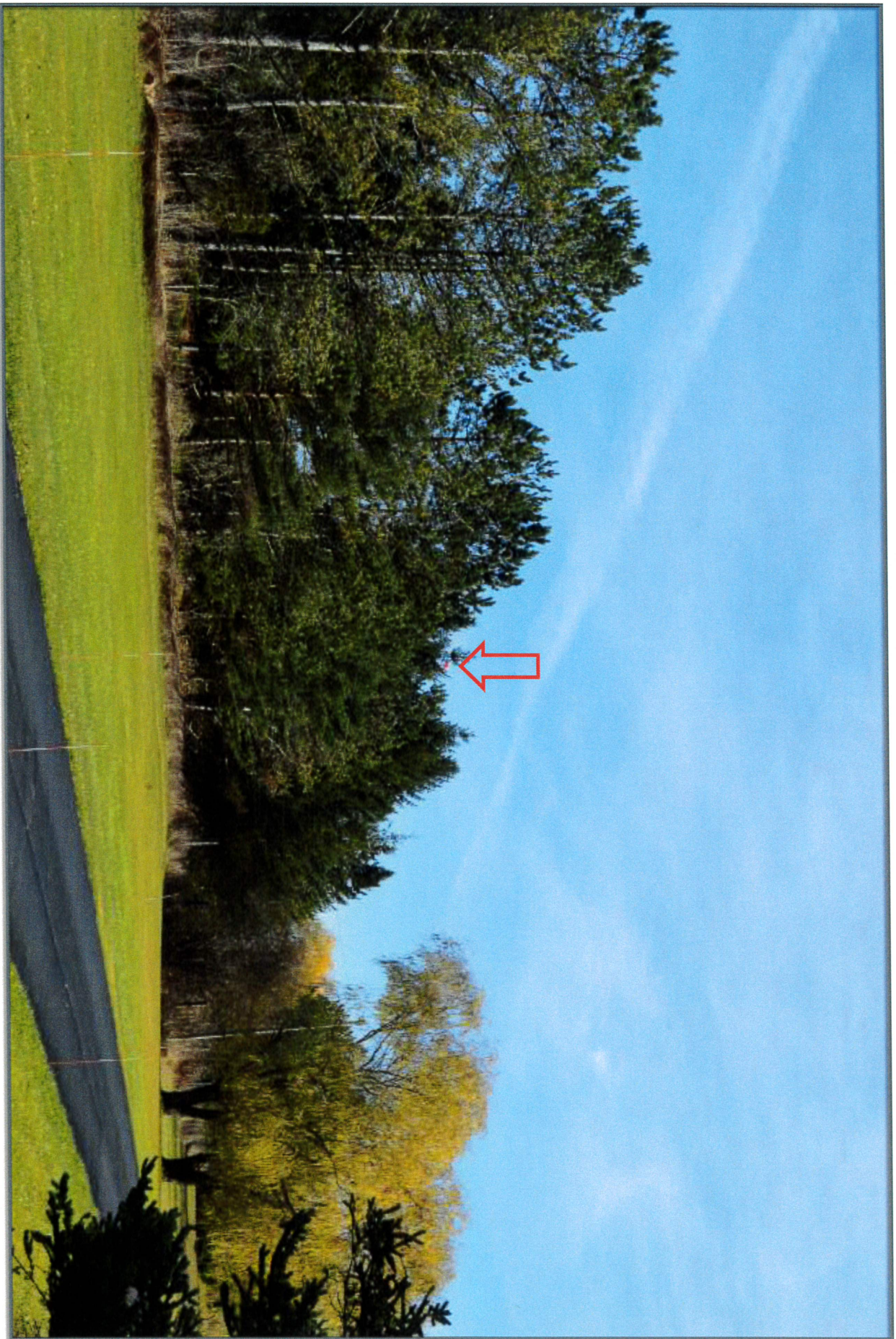
Distance from the photographic location to the proposed installation is ± 0.23 miles.

Tectonic

PAUL E. COE, NORTHERN CALIFORNIA REGIONAL SALES OFFICE

S-3

11947.004



Looking east from 4445 Transit Road.
Proposed installation will be partially visible from this location.
Distance from the photographic location to the proposed installation is ± 0.21 miles.



Looking south-southeast from Bob-O-Link Golf course parking lot.
Proposed installation will be partially visible from this location.

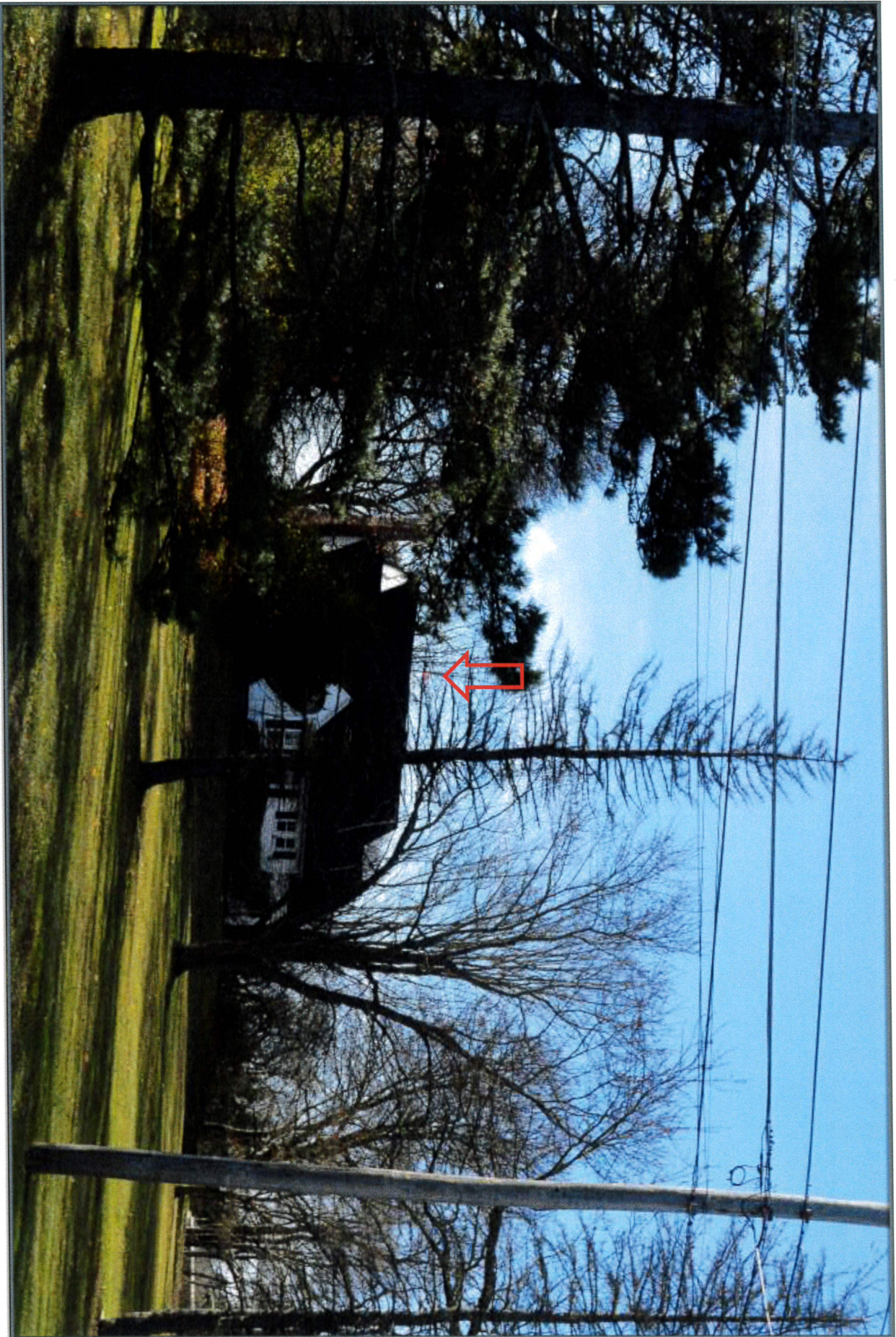
Distance from the photographic location to the proposed installation is ± 0.44 miles.

Tectonic

PAVING THE WAY TO A BETTER FUTURE

P-5

11947.004



Tectonic

Looking south-southwest from 1560 Quaker Road.
Proposed installation will be partially visible from this location.
Distance from the photographic location to the proposed installation is ± 0.19 miles.

P-6
11947.004