

SUPPLEMENTAL VISIBILITY ASSESSMENT

**CT1345
EAST LYME RELO
351A BOSTON POST ROAD
EAST LYME, CONNECTICUT**



Prepared for:

**SAI-AT&T
500 Enterprise Drive
Rocky Hill, CT 06078**

Prepared by:

**All-Points Technology Corporation, P.C.
3 Saddlebrook Drive
Killingworth, CT 06419**

DECEMBER 2015



SUPPLEMENTAL VISIBILITY ASSESSMENT

To: Dan Bilezikian
SAI Communications, Inc.
500 Enterprise Drive, Suite 3A
Rocky Hill, CT 06067

Date: December 8, 2015

Re: CT Siting Council Docket 463
351A Boston Post Road
East Lyme, Connecticut

From: Michael Libertine

At the request of SAI Communications, Inc. and on behalf of New Cingular Wireless PCS, LLC (d/b/a "AT&T"), All-Points Technology Corporation, P.C. ("APT") completed a supplemental visibility assessment to evaluate potential views associated with a proposed wireless telecommunications facility ("Facility") at 351A Boston Post Road in East Lyme, Connecticut (the "host Property"). The proposed Facility is designed to replace an existing tower located near the top of Plum Hill Road. The proposed Facility would consist of a 194-foot tall monopole within a 60-foot by 100-foot gravel based, fence-enclosed equipment compound.

APT previously prepared a Visibility Analysis Report (the "Report") in September 2015, which included photo-simulations of the proposed Facility during "leaf-on" conditions. During a pre-hearing conference call with the Connecticut Siting Council, and at the request of neighbors to the west, AT&T was asked to submit photographs/simulations of the proposed Facility from locations within and proximate to the neighborhood locally referred to as the Orchards (Plum Hill Road area). This supplemental submission provides the additional information requested.

On December 7, 2015, APT personnel conducted a balloon float and field reconnaissance to obtain the necessary additional field data. The balloon float consisted of raising an approximately 5.5-foot diameter, red and yellow helium-filled balloon tethered to a string height of 194 feet above ground level ("AGL") at the proposed Facility location. Weather conditions were favorable for the in-field activities, with calm winds (less than 4 miles per hour) and mostly sunny skies. Once the balloon was secured, APT conducted a reconnaissance of surrounding roads to observe where the balloon could be seen above/through the tree canopy. Photographs were obtained from several vantage points to document the views of a proposed Facility. The geographic coordinates of the camera's position at each photo location were logged using global positioning system ("GPS") technology. Similar to the images presented in the September Report, photographs were taken with a Canon EOS 6D digital camera body and Canon EF 24 to 105 millimeter ("mm") zoom lens, with the lens set to 50 mm.

Photographic simulations were generated to portray scaled renderings of the proposed Facility from representative locations where it was visible. Using field data, site plan information and 3-dimension (3D) modeling software, spatially referenced models of the site area and Facility were generated and merged. The geographic coordinates obtained in the field for the photograph locations were incorporated into the model to produce virtual camera positions within the spatial 3D model. Photo

simulations were then created using a combination of renderings generated in the 3D model and photo-rendering software programs. For presentation purposes in this report, the photographs were taken with a 50 mm focal length and produced in an approximate 7-inch by 10.5-inch format. Photo-documentation of the balloon float and photo-simulations of the proposed Facility are presented in the attachment at the end of this report.

The table below summarizes the photographs presented in the attachment to this report including a description of each location, view orientation, the distance from where the photo was taken relative to the proposed Facility and the general characteristics of that view. The photo locations are depicted on the attached photolog and viewshed maps.

View	Location	Orientation	Distance	View
11	Partridge Lane	South	±0.50 Mile	Not Visible
12	Arbor Crossing at Peach Lane	Southeast	±0.47 Mile	Not Visible
13	Arbor Crossing	Southeast	±0.37 Mile	Not Visible
14	Arbor Crossing	Southeast	±0.31 Mile	Seasonal
15	Arbor Crossing	Southeast	±0.24 Mile	Seasonal
16	Plum Hill Road	Southeast	±0.21 Mile	Seasonal
17	Plum Hill Road	East	±0.17 Mile	Seasonal
18	Plum Hill Road	East	±0.19 Mile	Seasonal
19	Hickory Court	East	±0.27 Mile	Not Visible
20	Hickory Court	Northeast	±0.26 Mile	Year-round
21	Hickory Court at Plum Hill Road	Northeast	±0.26 Mile	Seasonal
22	Plum Hill Road	Northeast	±0.25 Mile	Year-round
23	Plum Hill Road	Northeast	±0.28 Mile	Seasonal
24	Joshua Valley Road at Boston Post Road*	Northeast	±0.74 Mile	Not Visible
25	Esther Pond Lane*	Northeast	±1.19 Miles	Not Visible
26	North Bridle Brook Road	Northeast	±0.91 Mile	Seasonal
27	Woodrow Drive*	Northeast	±0.90 Mile	Year-round
28	Woodrow Drive	Northeast	±0.83 Mile	Seasonal
29	Lovers Lane	Northwest	±0.48 Mile	Seasonal
30	Jean Drive	Northwest	±0.45 Mile	Seasonal
31	Lovers Lane	Northwest	±0.34 Mile	Year-round
32	Maplewood Drive*	Northwest	±0.32 Mile	Year-round
33	MacKinnon Place at Morris Lane*	Southwest	±0.36 Mile	Year-round
34	Boston Post Road	Southwest	±0.34 Mile	Year-round
35	Boston Post Road	Southwest	±0.53 Mile	Year-round
36	Legendary Road	South	±0.56 Mile	Not Visible
37	Naomi Road	South	±0.25 Mile	Seasonal
38	Entrance to Host Property	East	±0.12 Mile	Year-round

*Existing tower is visible in the photograph.

Note: Photo-locations #1 – #10 were previously presented in the September 2015 Report; the photographs obtained on December 8, 2015 were assigned sequential numbers beginning at #11.

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

Supplemental Visibility Assessment Results

Results of this analysis are graphically displayed on the viewshed maps provided in the attachment at the end of this report. Information obtained from the December 8, 2015 balloon float was incorporated into the viewshed maps to account for seasonal variations; both maps depict revised total visibility acreages.¹ Those areas from where the proposed Facility would be visible above the tree canopy year-round comprise a total of approximately 115 acres. When the leaves are off the trees, seasonal views through intervening tree trunks and branches are anticipated to occur over some locations within an area of 844± additional acres. The topographic View Shed Map presented in the attachment to this report includes the original photo locations (1-10) and the recent additions (11-38). The aerial base View Shed Map depicts the new photo locations only (11-38).

Consistent with the findings presented in the September 2015 Report, year-round views of the Facility would be limited primarily to locations east of the Property. During the June 30, 2015 reconnaissance, the balloon could not be seen from publicly-accessible areas to the west, including within the Orchards development. Seasonal views were anticipated along Plum Hill Road and the southern portions of Arbor Crossing and Hickory Court (note these areas all currently have prominent year-round views of the existing tower). This was confirmed during the December balloon float (see photos 14 through 23), where seasonal views are heavily obscured by intervening trees and branches. Four locations (represented in photos 20 through 23) within approximately 150 feet of each other are presented to depict the variability of views within a close proximity. Two of these locations (20 and 22) are called out as year-round in the table above and accompanying photographs. In the case of location 20, during the June reconnaissance intervening vegetation obstructed direct lines of sight. With the leaves off the trees, the specific location in the road from where this photo was taken provided a view of the balloon above the trees. Similarly, photo location 22 was taken from the sidewalk where, at this time of year, a brief view of the top of the proposed tower would be obtained.

Additional supplemental photographs are provided from other locations to the west, south and east to provide leaf-off documentation. Several of these locations were presented in the September 2015 Report. One additional area worth noting is Woodrow Drive, located approximately 0.75 mile to the southwest. The southern end of the road would have views of the new tower; the existing tower is visible from these locations today (see photo 27). Year-round views diminish in the northern part of the road circle, transitioning briefly to seasonal (photo 28), before the intervening topography and trees obscure the Facility. During the June 2015 reconnaissance, the balloon was not observed in this area, likely due to the presence of landscape trees in full leaf. With these exceptions, the views observed in December are consistent with the information presented in the September Report.

The proposed replacement Facility's overall visibility, in terms of acreage, is similar to the existing tower on Plum Hill Road. By comparison, the existing tower is more visible westward than the proposed Facility due to its location on the top of the hill, one of the high points in the general area. The proposed replacement Facility would be somewhat more visible to the east because of its placement on the southeast shoulder of the hill. However, this location substantially reduces visibility to the west.

¹ The September 2015 Report relied primarily on computer modeling to estimate the amount of seasonal visibility. The revised totals presented herein are based on the initial modeling with the inclusion of field observations under leaf-off conditions.

Limitations

The viewshed maps presented in the attachment to this report depict areas where the proposed Facility may potentially be visible to the human eye without the aid of magnification based on a viewer eye-height of 5 feet above the ground and intervening topography and tree canopy. This analysis may not necessarily account for all visible locations, as it is based on the combination of computer modeling, incorporating 2012 aerial photographs, and in-field observations from publicly-accessible locations. No access to private properties was provided to APT personnel. This analysis does not claim to depict the only areas, or all locations, where visibility may occur; it is intended to provide a representation of those areas where the Facility is likely to be seen.

The balloon float photos provide visual reference points for the approximate height and location of the proposed Facility relative to the scene. The simulations provide a representation of the Facility under similar settings as those encountered during the balloon floats and reconnaissance. Views of the Facility can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location. Weather conditions on the day of the balloon float included partly cloudy skies and the photo-simulations presented in this report provide an accurate portrayal of the Facility during comparable conditions. The photo-simulations are intended to provide the reader with a general understanding of the different views that might be achieved of the Facility. It is important to consider that the publicly-accessible locations selected are typically representative of a “worst case” scenario. They were chosen to present unobstructed view lines (wherever possible), are static in nature and do not necessarily fairly characterize the prevailing views from all locations within a given area. From several locations, moving a few feet in any direction will result in a far different perspective of the Facility than what is presented in the photographs. In several cases, a view of the Facility may be limited to the immediate area of the specific photo location.

ATTACHMENTS

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

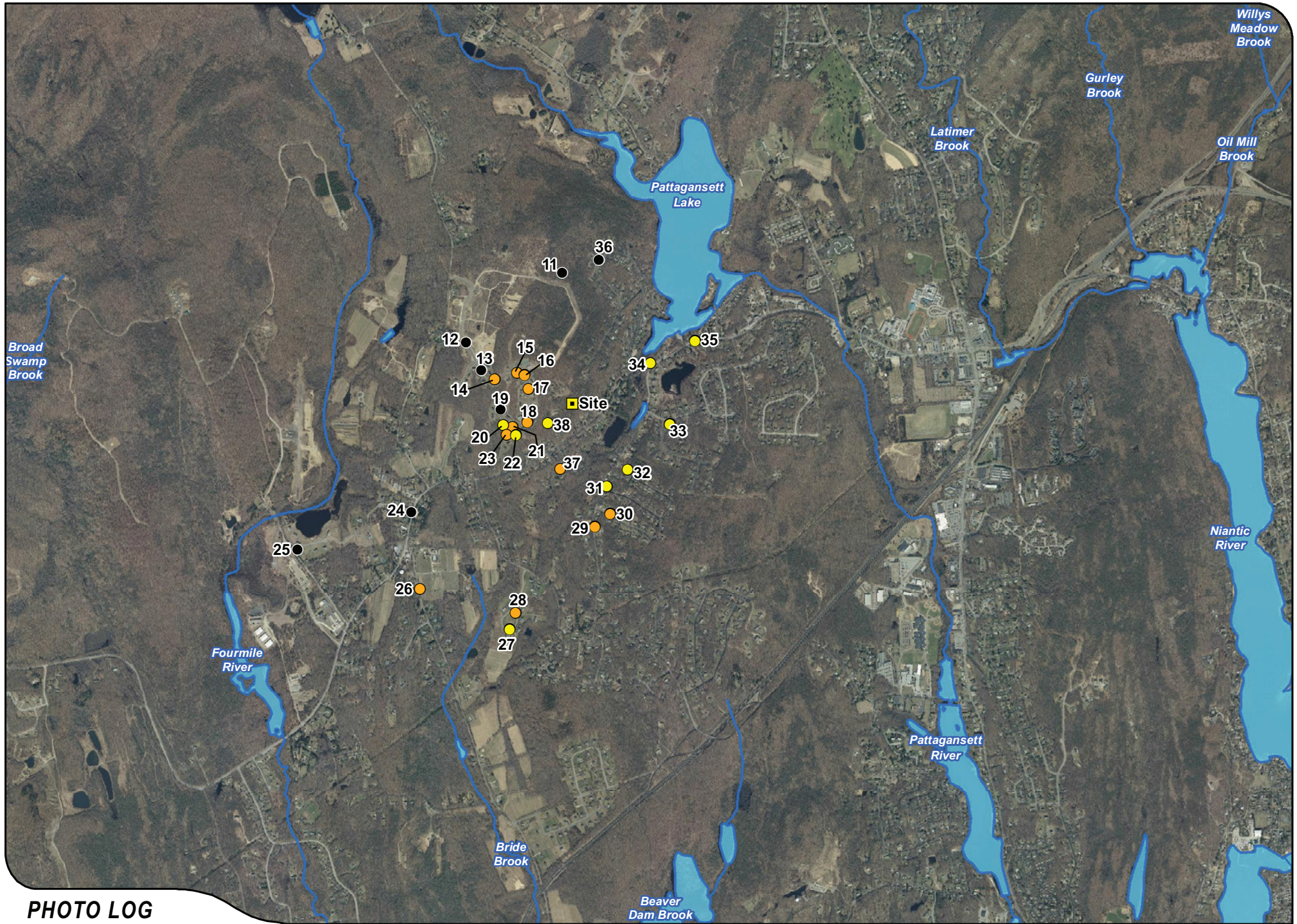
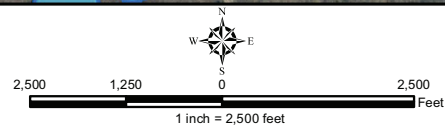


PHOTO LOG

Legend

- Site
- Year-Round Visibility
- No Visible
- Watercourse (CTDEEP)
- Waterbody (CTDEEP)





EXISTING

PHOTO

11

LOCATION

PARTRIDGE LANE

ORIENTATION

SOUTH

DISTANCE TO SITE

+/- 0.50 MILE

VISIBILITY

NOT VISIBLE



EXISTING

PHOTO

12

LOCATION

ARBOR CROSSING AT PEACH LANE

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.47 MILE

VISIBILITY

NOT VISIBLE



EXISTING

PHOTO

13

LOCATION

ARBOR CROSSING

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.37 MILE

VISIBILITY

NOT VISIBLE



EXISTING

PHOTO

14

LOCATION

ARBOR CROSSING

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.31 MILE

VISIBILITY

SEASONAL



EXISTING

PHOTO

15

LOCATION

ARBOR CROSSING

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.24 MILE

VISIBILITY

SEASONAL





EXISTING

PHOTO

16

LOCATION

PLUM HILL ROAD

ORIENTATION

SOUTHEAST

DISTANCE TO SITE

+/- 0.21 MILE

VISIBILITY

SEASONAL



EXISTING

PHOTO

17

LOCATION

PLUM HILL ROAD

ORIENTATION

EAST

DISTANCE TO SITE

+/- 0.17 MILE

VISIBILITY

SEASONAL



PROPOSED

PHOTO

17

LOCATION

PLUM HILL ROAD

ORIENTATION

EAST

DISTANCE TO SITE

+/- 0.17 MILE

VISIBILITY

SEASONAL



EXISTING

PHOTO

18

LOCATION

PLUM HILL ROAD

ORIENTATION

EAST

DISTANCE TO SITE

+/- 0.19 MILE

VISIBILITY

SEASONAL