

## Attachment 4

## Candidate B: General Facility Description

56 Hills Street  
East Hartford, Connecticut  
Owner: Kenneth and Michelle A. Dedominicis  
5.38 Acre Parcel

The property located at 56 Hills Street is part of a prior farm in an otherwise residentially developed area of East Hartford. The proposed AT&T telecommunications facility would be located in a central portion of the 5.38 acre parcel owned by Kenneth and Michelle A. Dedominicis. The proposed facility consists of a 50' x 50' fenced compound within a 100' by 100' lease area with access from Hills Street.

A proposed new self-supporting monopole tower 100' above grade level ("AGL") is proposed. The height of the structure has been minimized given the residential nature of the area. AT&T would install up to twelve panel antennas and related equipment on a platform at 100' AGL. The tower would be designed for future shared use of the structure by other competing wireless carriers at 90' and 80' AGL.

An associated 11'-5"x 20' equipment shelter would be installed at the tower base on a concrete pad within the tower compound together with provisions for a back-up power generator. The tower compound would consist of a 50' by 50' area to accommodate AT&T's equipment and provide for future shared use of the facility by other carriers. The tower compound would be enclosed by an 8' foot high chain link fence. Vehicle access to the facility would be provided over an existing driveway and over an improved/extended access drive in the location of an existing dirt drive to the tower compound. Utility connections would be run underground from and existing distribution pole on site.

## Candidate B: Site Evaluation Report

### I. LOCATION

- A. COORDINATES: 41° 44' 30.45" N 72° 36' 8.74" W
- B. GROUND ELEVATION: 60' AMSL
- C. USGS MAP: USGS 7.5 quadrangles for Glastonbury (revised 1992)
- D. SITE ADDRESS: 56 Hills Street, East Hartford, Connecticut
- E. ZONING WITHIN 1/4 MILE OF SITE: Residential

### II. DESCRIPTION

- A. SITE SIZE: 50' by 50' compound
- B. LESSOR'S PARCEL: 5.4 acres
- C. TOWER TYPE/HEIGHT: 100' AGL monopine with top of camouflaging at 107' AGL
- D. SITE TOPOGRAPHY AND SURFACE: Subject site is located in a grassy central area of the site bordered by stands of trees and forest to the north. Topography slopes toward the center of the lot from north to south, south to north and east to west.
- E. SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER: The southern portion of the site is residential with several outbuildings (barns, garages, etc). Pastures/fields occupy the majority of the center of the site and an onsite wetland system (378' north of the proposed facility) and wooded area occupy the northern portion of the site. The surrounding area slopes from east to west and from north to south. Primary use in the surrounding area is residential.
- F. LAND USE WITHIN 1/4 MILE OF SITE: General land uses include single-family residential, schools.

### III. FACILITIES

- A. POWER COMPANY: Connecticut Light and Power
- B. POWER PROXIMITY TO SITE: Existing distribution pole on site.
- C. TELEPHONE COMPANY: AT&T

- D. PHONE SERVICE PROXIMITY: Telephone facilities/service will be available from the existing distribution pole on site.
- E. VEHICLE ACCESS TO SITE: Access to the facility would be provided by an existing and proposed gravel access drive.
- F. OBSTRUCTIONS: None
- G. CLEARING AND FILL REQUIRED: The total area of disturbance will be 16,400 square feet. 51 cubic yards of cut will be required for trenching, 40 cubic yards net cut will be necessary for the road and compound which will require 135 cubic yards of crushed stone. Two trees 6" DBH or greater will have to be removed.

IV. LEGAL

- A. PURCHASE [ ] LEASE [ X ]
- B. OWNER: Kenneth and Michelle A. Dedominicis
- C. ADDRESS: 56 Hills Street, East Hartford, Connecticut
- D. DEED ON FILE AT: Volume 1656, Page 272

## Candidate B: Facilities and Equipment Specification

### I. TOWER SPECIFICATIONS:

- A. MANUFACTURER: To be determined
- B. TYPE: Self-Supporting monopole
- C. HEIGHT: 107' AGL (100' AGL monopole with camouflaging up to 107')
- D. TOWER LIGHTING: None proposed or required as per FAA determination

### II. TOWER LOADING:

#### A. AT&T

- 1. 12 Panel Antennas - 4/sector (SBNH-1D6565C or similar antenna)
- 2. 15 RRUs 5/sector mounted behind antennas
- 3. 2 Surge Arrestors (“squids”) – 1/per technology mounted on separate collar below antennas
- 4. 4 DC Trunks
- 5. 2 Fiber Trunks

#### B. Future Carriers – To be determined

### III. ENGINEERING ANALYSIS AND CERTIFICATION:

The tower will be designed in accordance with American National Standards Institute TIA/EIA-222-F “Structural Standards for Steel Antenna Towers and Antenna Support Structures” and the 2003 International Building Code with 2005 Connecticut Amendment. The foundation design would be based on soil conditions at the site. The details of the tower and foundation design will be provided as part of the final D&M plan.

## Candidate B: Environmental Assessment Statement

### I. PHYSICAL IMPACT

#### A. WATER FLOW AND QUALITY

Wetlands were identified approximately 378' from the proposed facility. As such the construction and operation of the tower and related site improvements will have no effect on any off-site watercourses or waterbodies, and the equipment associated with the facility will discharge no pollutants to area surface or groundwater systems. Moreover, Best Management Practices to control storm water and soil erosion during construction will be implemented.

#### B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at the proposed facility would emit no air pollutants of any kind. A diesel generator for emergency power will comply with DEEP air standards associated with its operation.

#### C. LAND

Some minimal clearing and grading will be necessary in the compound area and access drive. The remaining land of the lessor would remain unchanged by the construction and operation of the facility.

#### D. NOISE

The equipment to be in operation at the facility would not emit noise other than that provided by the operation of the installed heating, air-conditioning and ventilation system. Some construction related noise would be anticipated during facility construction, which is expected to take approximately four to six weeks. Temporary power outages could involve sound from the emergency generator.

#### E. POWER DENSITY

The cumulative worst-case calculation of power density from AT&T's operations at the facility would be 17.57% of the MPE standard. Please see Power Density Report included in Attachment 4(B).

#### F. VISIBILITY

The potential visual impact of the proposed monopole was determined by preparation of the attached Visibility Analysis. The potential visibility was assessed within an approximate two (2) mile radius using a computer-based, predictive view shed model and in-field visual analysis. Given relative height and surrounding terrain, views of the Candidate B Facility are expected to be confined to locations within less than 0.25 miles

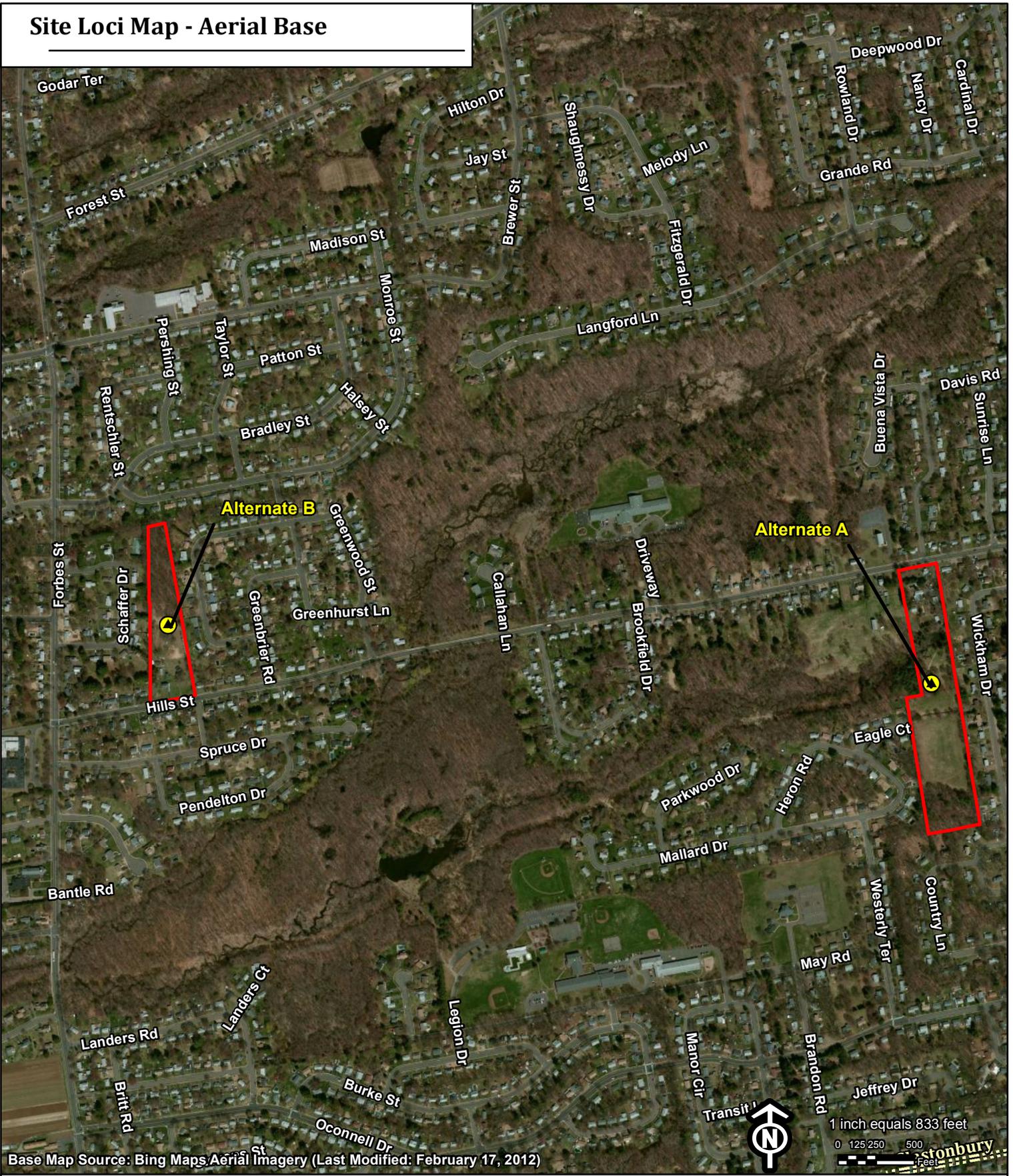
around the host property. No visibility was documented at any schools in the area. A complete analysis with photo simulations of the tower site from various vantage points is included in Attachment 4(C).

## II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

The parcel on which the facility is located and immediate surrounding areas exhibit no scenic, natural, historic or recreational characteristics which are unique. The Connecticut State Historic Preservation Officer (“SHPO”) has been contacted and issued a determination of “no effect” on historic resources. The Connecticut Department of Energy and Environmental Protection (“CTDEEP”) Natural Diversity Database (“NDDDB”) maps for the proposed site were reviewed and a request for further information from DEEP in 2011 indicated no endangered or special concern species in the area. All-Points Technology, consultants for the Applicants, expect no change in this status but have requested a supplemental review from DEEP in case this status has changed. Any correspondence from CTDEEP will be provided to the Siting Council upon receipt. At this point in time, there are no known historic, State scenic, natural or recreational values that would be impacted by the proposed tower facility.

Attachment 4(A)

# Site Loci Map - Aerial Base



Base Map Source: Bing Maps Aerial Imagery (Last Modified: February 17, 2012)

## Proposed MCM Telecommunications Facility 465 (Alternate A) & 56 (Alternate B) Hills Street East Hartford, Connecticut

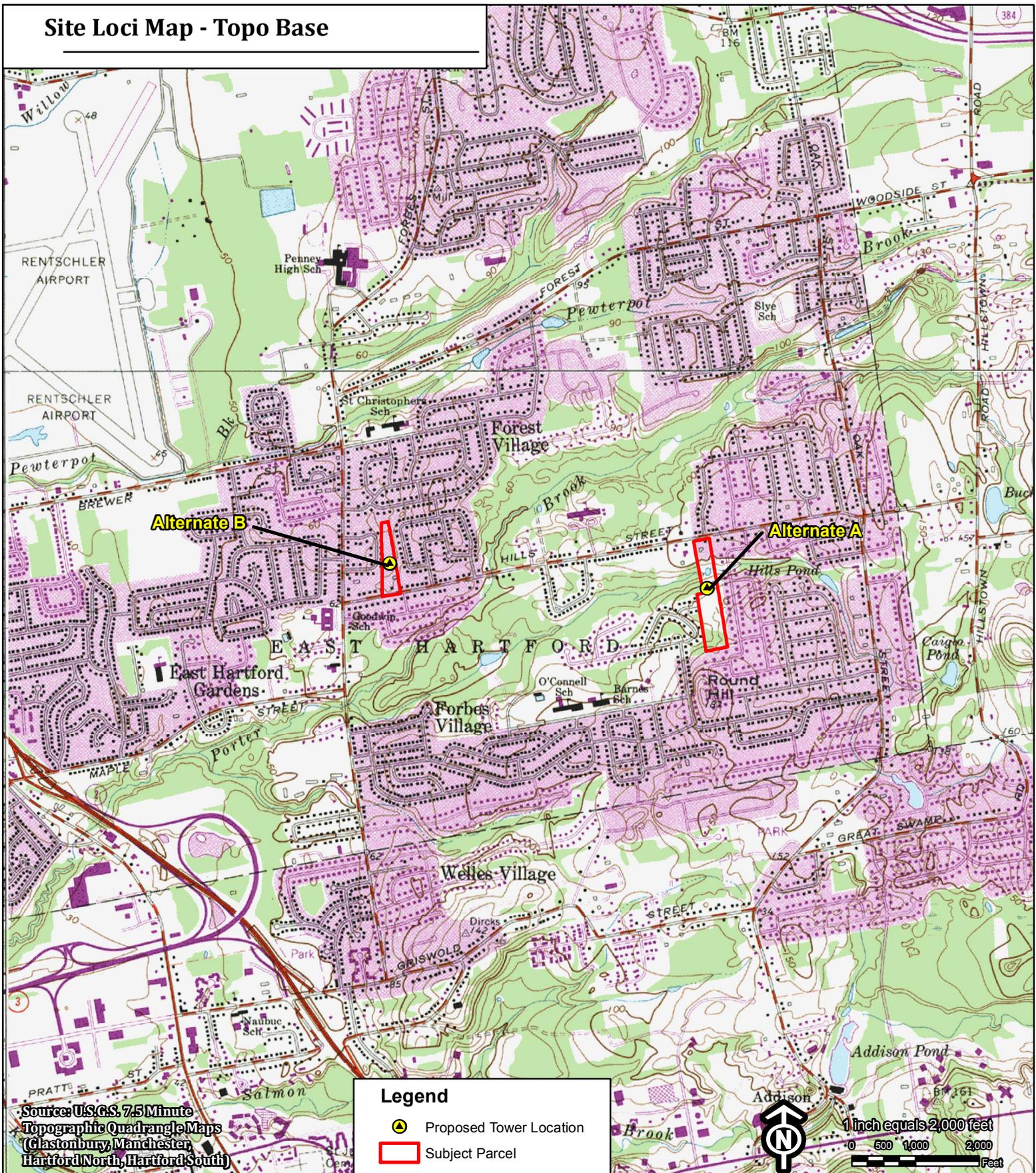
### Legend

-  Proposed Tower Location
-  Subject Parcel

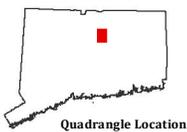
**Monday, January 28, 2013**



# Site Loci Map - Topo Base



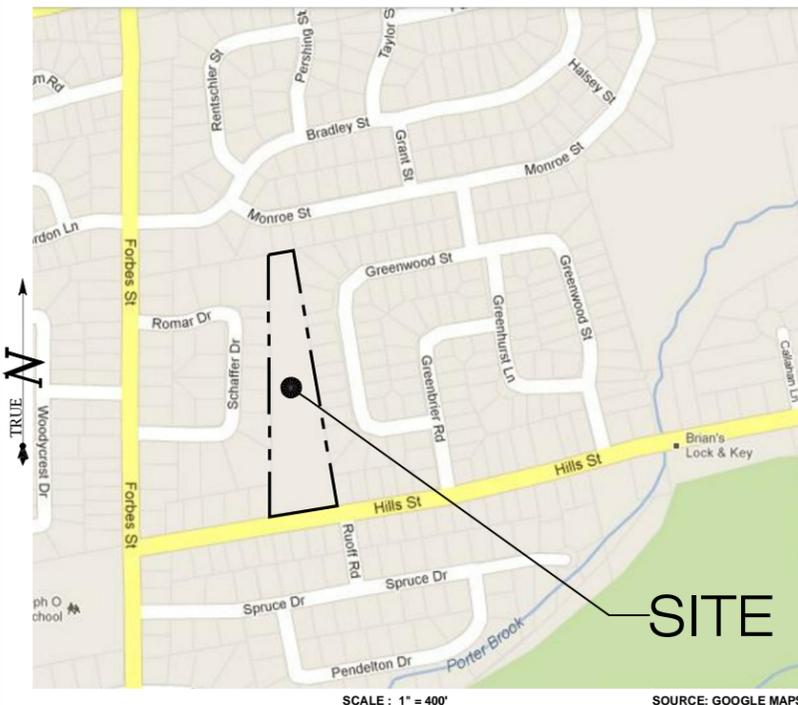
**Proposed MCM Telecommunications Facility  
465 (Alternate A) & 56 (Alternate B) Hills Street  
East Hartford, Connecticut**



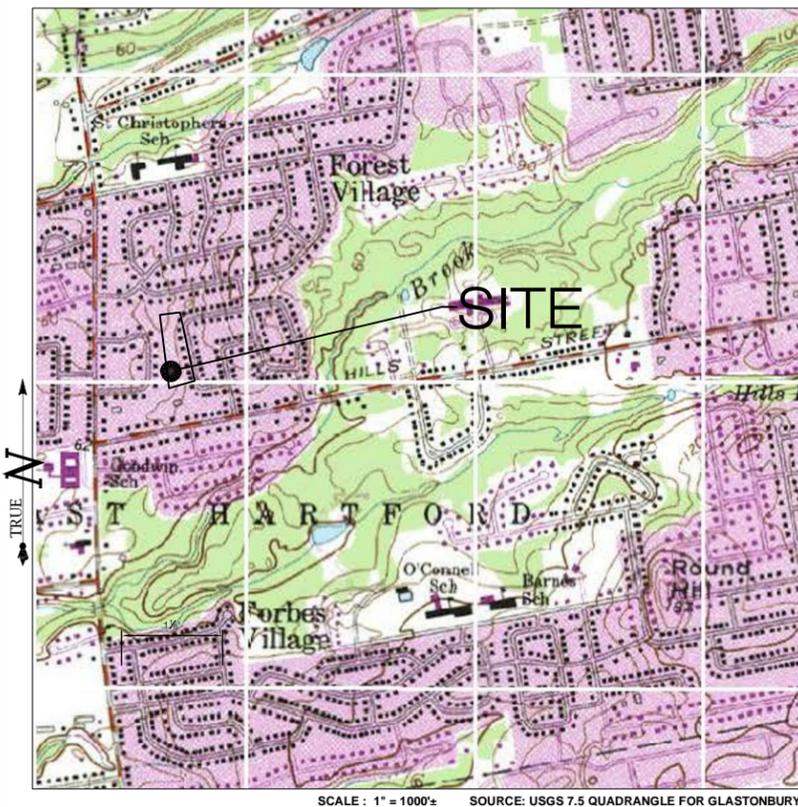
**Monday, January 28, 2013**



## LOCATION MAP



## USGS TOPOGRAPHIC MAP



3 SADDLEBROOK DRIVE  
KILLINGWORTH, CT 06419  
WWW.ALLPOINTSTECH.COM

PHONE: (860)-663-1697  
FAX: (860)-663-0935

## CONTACT PERSONNEL

APPLICANTS:  
MESSAGE CENTER MANAGEMENT  
40 WOODLAND STREET  
HARTFORD, CT 06105

LANDLORD  
MICHELLE A. & KENNETH DEDOMINICIS  
56 HILLS STREET  
EAST HARTFORD, CT 06118

MCM PROJECT MANAGER:  
VIRGINIA KING (860) 727-5790

MCM PROJECT ATTORNEY:  
CUDDY & FEDER, LLP  
445 HAMILTON AVE., 14TH FLOOR  
WHITE PLAINS, NY 10601  
914-761-1300

POWER PROVIDER:  
CL&P (203) 280-2507  
ERIC LOPES

TELCO PROVIDER:  
AT&T: (800)-727-8368  
(SCOT DELUCA: (860) 725-4504

CALL BEFORE YOU DIG:  
(800) 922-4455

GOVERNING CODEs:

2009 CONNECTICUT BUILDING CODE (2003 IBC BASIS)  
NATIONAL ELECTRIC CODE  
EIA/TIA 222F

**MESSAGE CENTER  
MANAGEMENT**  
40 WOODLAND STREET  
HARTFORD, CT 06105  
OFFICE: (888) 973-7483

**MCM**

## DRAWING INDEX

- T-1 TITLE SHEET & INDEX
- A-1 ABUTTERS MAP
- 1 OF 1 LIMITED PROPERTY BOUNDARY SURVEY
- SP-1 SITE PLAN
- SP-2 COMPOUND PLAN AND TOWER ELEVATION

\*SITE INFORMATION:

-SITE NAME:..... EAST HARTFORD  
-SITE ID NUMBER:..... CT-503  
  
-SITE ADDRESS:..... 56 HILLS STREET  
EAST HARTFORD, CT 06118

-MAP:..... 42  
-LOTS:..... 370

-ZONE:..... R-2  
-LATITUDE - ..... 41° 44' 30.45" N  
-LONGITUDE - ..... 72° 36' 08.74" W  
-ELEVATION - ..... 60± AMSL

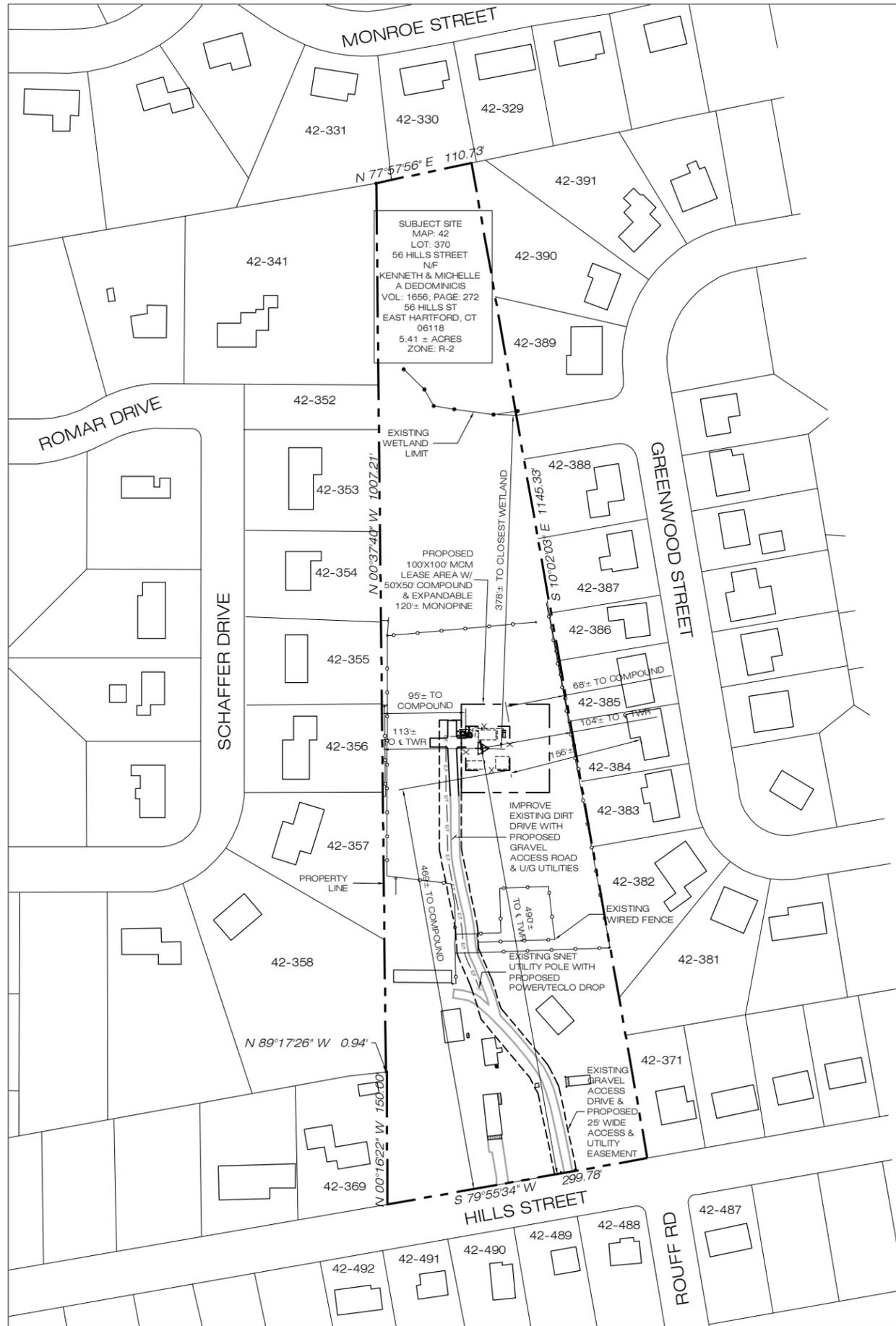
-FEMA/FIRM  
DESIGNATION:..... PANEL #09003C0526F - ZONE 'X'  
-ACREAGE:..... 5.41 ± Ac

## SITE INFORMATION

**EAST HARTFORD  
56 HILLS STREET  
EAST HARTFORD, CT 06118**

PERMITTING DOCUMENTS	TITLE SHEET AND INDEX
EAST HARTFORD 56 HILLS STREET EAST HARTFORD, CT 06118	
DESIGN TYPE:	APT FILING NUMBER: CT-242-281
RAW LAND	APT DRAWING NUMBER: T-1
	DRAWN BY: KRS SCALE: AS NOTED
	CHECKED BY: SMC DATE: 12/07/12
REVISIONS:	SHEET NUMBER:
REV.0: 01/28/13: FOR REVIEW: SMC	<b>T-1</b>
REV.1: 02/11/13: GENERAL COMMENTS: SMC	
REV.2:	
REV.3:	
REV.4:	
REV.5:	





### ABUTTERS LIST

MAP LOT	OWNER	LOCATION	MAILING ADDRESS
42 329	PAUL & REGINA SENECA, IRREVOCABLE TRUST JANE PETERS TRUSTEE	220 MONROE ST EAST HARTFORD, CT 06118	220 MONROE ST EAST HARTFORD, CT 06118
42 330	MERLIN B CHRISTIANSON	228 MONROE ST EAST HARTFORD, CT 06118	228 MONROE ST EAST HARTFORD, CT 06118
42 331	IRENE M HOVANEC	232 MONROE ST EAST HARTFORD, CT 06118	232 MONROE ST EAST HARTFORD, CT 06118
42 341	KENNETH & EILEEN E KUMMER	34 ROMAR DR EAST HARTFORD, CT 06118	34 ROMAR DR EAST HARTFORD, CT 06118
42 353	LYDIA CASSARINO	67 SCHAFER DR EAST HARTFORD, CT 06118	67 SCHAFER DR EAST HARTFORD, CT 06118
42 353A	LYDIA CASSARINO	71 SCHAFER DR EAST HARTFORD, CT 06118	67 SCHAFER DR EAST HARTFORD, CT 06118
42 354	LAWRENCE J & SHARON J JACKSON	57 SCHAFER DR EAST HARTFORD, CT 06118	57 SCHAFER DR EAST HARTFORD, CT 06118
42 355	SIMONE M ST ONGE	49 SCHAFER DR EAST HARTFORD, CT 06118	49 SCHAFER DR EAST HARTFORD, CT 06118
42 356	OTIS RODGERS	41 SCHAFER DR EAST HARTFORD, CT 06118	41 SCHAFER DR EAST HARTFORD, CT 06118
42 357	LOUIS A & BERTHE Y CHAMBERLAND	35 SCHAFER DR EAST HARTFORD, CT 06118	35 SCHAFER DR EAST HARTFORD, CT 06118
42 358	PETER HYDOCK	31 SCHAFER DR EAST HARTFORD, CT 06118	31 SCHAFER DR EAST HARTFORD, CT 06118
42 369	FRANK A MASTROPASQUA	42 HILLS ST EAST HARTFORD, CT 06118	42 HILLS ST EAST HARTFORD, CT 06118
42 370	KENNETH & MICHELLE A DEDOMINICIS	56 HILLS ST EAST HARTFORD, CT 06118	56 HILLS ST EAST HARTFORD, CT 06118
42 371	BEACON FIELD GROUP, LLC	74 HILLS ST EAST HARTFORD, CT 06118	POB 370173 WEST HARTFORD, CT 06137
42 381	PAMELA LAWRENCE	208 GREENWOOD ST EAST HARTFORD, CT 06118	208 GREENWOOD ST EAST HARTFORD, CT 06118
42 382	PATRICIA BELTON	206 GREENWOOD ST EAST HARTFORD, CT 06118	206 GREENWOOD ST EAST HARTFORD, CT 06118
42 383	SUSAN E ROGWOSON	202 GREENWOOD ST EAST HARTFORD, CT 06118	202 GREENWOOD ST EAST HARTFORD, CT 06118
42 384	CONSTANCE M & WILLIAM E LANDRY	196 GREENWOOD ST EAST HARTFORD, CT 06118	196 GREENWOOD ST EAST HARTFORD, CT 06118
42 385	VANESSA & JOSE ROLDAN	190 GREENWOOD ST EAST HARTFORD, CT 06118	190 GREENWOOD ST EAST HARTFORD, CT 06118
42 386	RICARDO D & ROXANA MARDALES	184 GREENWOOD ST EAST HARTFORD, CT 06118	184 GREENWOOD ST EAST HARTFORD, CT 06118
42 387	MARCO & CARLA SOUSA	178 GREENWOOD ST EAST HARTFORD, CT 06118	178 GREENWOOD ST EAST HARTFORD, CT 06118
42 388	JOHN M SCHREIBER	172 GREENWOOD ST EAST HARTFORD, CT 06118	172 GREENWOOD ST EAST HARTFORD, CT 06118
42 389	RUTH JOHNSON	162 GREENWOOD ST EAST HARTFORD, CT 06118	162 GREENWOOD ST EAST HARTFORD, CT 06118
42 390	A'YI KELES	156 GREENWOOD ST EAST HARTFORD, CT 06118	156 GREENWOOD ST EAST HARTFORD, CT 06118
42 391	HERBERT E BYNUM & CARLOS A VARGAS MARTII	152 GREENWOOD ST EAST HARTFORD, CT 06118	152 GREENWOOD ST EAST HARTFORD, CT 06118
42 487	ROSE M DAHMIS	77 HILLS ST EAST HARTFORD, CT 06118	77 HILLS ST EAST HARTFORD, CT 06118
42 488	ARTHUR J. Jr. & KIMBERLY L WILLIAMS	67 HILLS ST EAST HARTFORD, CT 06118	67 HILLS ST EAST HARTFORD, CT 06118
42 489	RAYMOND W. & SUSAN M HUTT	61 HILLS ST EAST HARTFORD, CT 06118	61 HILLS ST EAST HARTFORD, CT 06118
42 490	JASON A. & LUZ D. MILLER	55 HILLS ST EAST HARTFORD, CT 06118	55 HILLS ST EAST HARTFORD, CT 06118
42 491	RACHEL & CESAR A. Jr. RIVERA	49 HILLS ST EAST HARTFORD, CT 06118	49 HILLS ST EAST HARTFORD, CT 06118
42 492	CHARLES J & DOLORES A CIOHOWICZ	43 HILLS ST EAST HARTFORD, CT 06118	43 HILLS ST EAST HARTFORD, CT 06118

BASE MAPPING FROM:

1. PLAN ENTITLED "LIMITED BOUNDARY SURVEY - PROPERTY SITUATE 56 HILLS STREET EAST HARTFORD, CT" PREPARED BY BARRETT, BONACCI, AND VAN WEELE OF HAUPPAUGE, NY DATED DECEMBER 7, 2012.
2. TOWN OF EAST HARTFORD ASSESSORS MAP #42.
3. TOWN OF EAST HARTFORD GIS WEBSITE
4. DIGITAL GLOBAL 2010 DIGITAL ORTHOPHOGRAPHS.

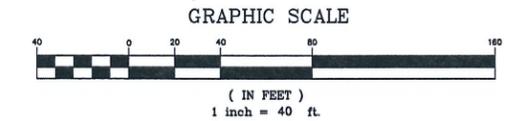
**ABUTTERS MAP**  
SCALE: 1" = 100'-0"

<p>MCM SITE NAME: <b>EAST HARTFORD CT-503</b></p> <p>APT FILING NUMBER: <b>CT-242-281</b></p> <p>MESSAGE CENTER MANAGEMENT 40 WOODLAND STREET HARTFORD, CT 06105 OFFICE: (888) 973-7483</p> <p><b>MCM</b></p>	<p>PERMITTING DOCUMENTS</p> <p><b>EAST HARTFORD 56 HILLS STREET EAST HARTFORD, CT 06118</b></p>	<p><b>ABUTTERS MAP</b></p> <p>APT FILING NUMBER: CT-242-281</p> <p>APT DRAWING NUMBER: A-1</p> <p>DRAWN BY: KRS</p> <p>CHECKED BY: SMC</p> <p>SCALE: AS NOTED</p> <p>DATE: 12/07/12</p>
	<p>DESIGN TYPE:</p> <p><b>RAW LAND</b></p>	
<p><b>ALL-POINTS TECHNOLOGY CORPORATION</b></p> <p>3 SADDLEBROOK DRIVE KILLINGWORTH, CT 06419 WWW.ALLPOINTSTECH.COM</p> <p>PHONE: (860)-663-1697 FAX: (860)-663-0935</p>	<p>REVISIONS:</p> <p>REV.0: 01/28/13: FOR REVIEW: SMC</p> <p>REV.1: 02/11/13: GENERAL COMMENTS: SMC</p> <p>REV.2:</p> <p>REV.3:</p> <p>REV.4:</p> <p>REV.5:</p>	<p>SHEET NUMBER:</p> <p><b>A-1</b></p>





MAP OF GREEN ACRES INC.



**SURVEY NOTES**

- THIS MAP AND SURVEY HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT," AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
- MAPPING INFORMATION  
 SURVEY TYPE: IMPROVEMENT LOCATION SURVEY  
 CATEGORY: DEPENDANT RESURVEY (REFERENCE MAP A)  
 HORIZONTAL CLASS: A-2  
 TOPOGRAPHIC CLASS: T-2 (ELEVATIONS REFER TO N.A.V.D. 1988).
- REFERENCE MAPS  
 (A) BOUNDARY PLAN PREPARED BY MESSIER & ASSOCIATES, INC DATED 04/97.  
 (B) MAP OF SHAEFFER PARK FILED AUGUST 23 1962.  
 (C) MAP OF GREEN ACRES (GREENWOOD STREET) FILED APRIL 25, 1952.  
 (D) MAP OF FORBES MANOR SECTION 4 FILED AUGUST 5, 1956.
- PARCEL OWNER OF RECORD: KENNETH & MICHELLE DEDOMINICIS  
 MAP 42 - LOT 370;  
 56 HILLS STREET, EAST HARTFORD, CT 06118
- SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS PART OF THIS SURVEY.
- WETLAND FLAGS SET BY ALL POINTS TECHNOLOGY CORP, DEAN GUSTAFSON, SENIOR SOILS SCIENTIST 12/12/2012.
- TREES HAVING A CALIPER OF 6" AND GREATER LOCATED ONLY ON A PORTION OF THE PROPERTY.

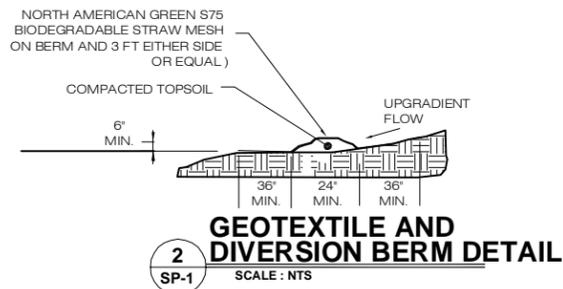
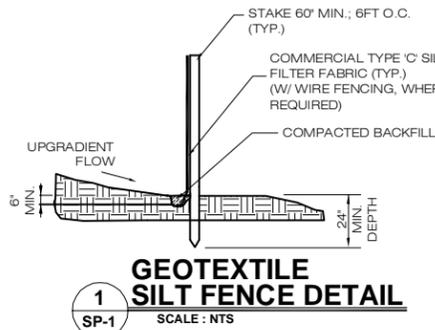
**LEGEND**

	CONCRETE CURB
	DROP CURB
	EDGE OF PAVEMENT
	OVERHEAD WIRES
	ELECTRIC CONTROL BOX
	UTILITY POLE
	CHAIN LINK FENCE
	FENCE OTHER
	TOP/BOTTOM OF CURB
	SPOT ELEVATION
	CONTOURS
	CONCRETE
	GUY WIRE
	TREE

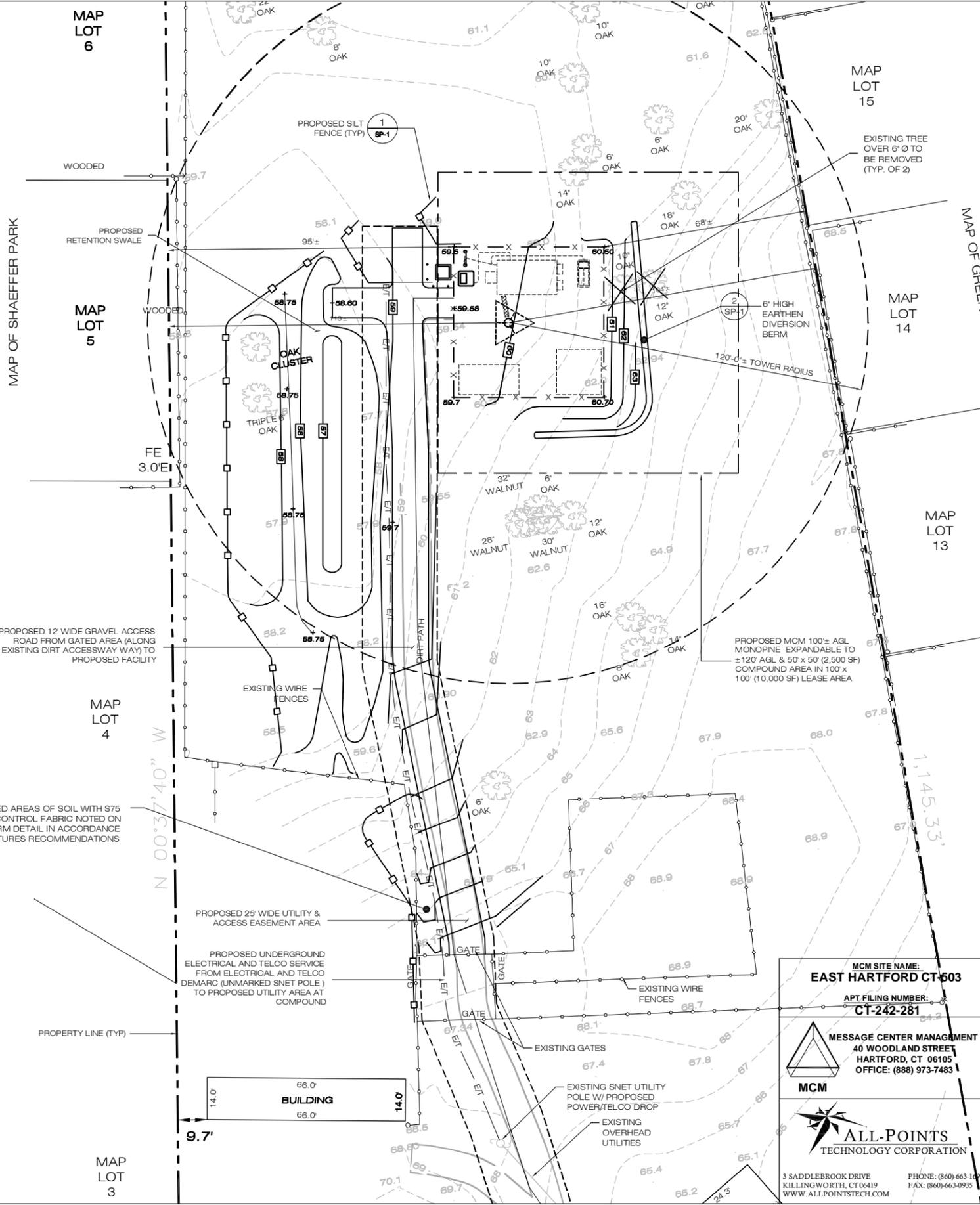
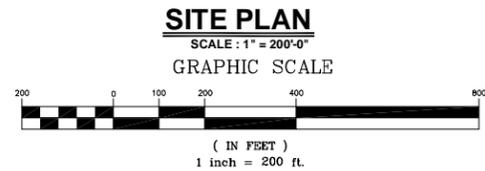
1/29/2013 PR REVISED		Tax Map: MAP 42 LOT 370	
1/28/2013 PR REVISE NOTES		Date DECEMBER 7, 2012	
Date	By	Drafted by: PR	Checked by: GJB
Surveyed by: PF		REBAR FOUND (1,145.25' DEED)	
<b>Barrett Bonacci &amp; Van Weele, PC</b> Civil Engineers Surveyors Planners		<b>PROPERTY SITUATE</b> <b>56 HILLS STREET</b> EAST HARTFORD CONNECTICUT <b>LIMITED PROPERTY SURVEY</b>	
		TO MY KNOWLEDGE AND BELIEF THIS MAP AND THE INFORMATION CONTAINED THEREIN IS A SUBSTANTIALLY CORRECT AND ACCURATE REPRESENTATION OF THE FACTS AND CONDITIONS AS OF THE DATE OF THE SURVEY AND THE PREPARATION OF THIS MAP.	
Scale 1" = 40'	Project No. C120009	Sheet No. 1 of 1	© 2012 BBV PC

J:\DATA12\C120009\C120009.dwg, Half, 1/29/2013 2:37:09 PM, Barrett, Bonacci & Van Weele, P.C., PR

LEGEND			
	CURB		DRAINAGE INLET/STRUCTURE
	DROP CURB		CATCH BASIN
	WALL		SIGN
	STONE WALL		LIGHT POLE
	EDGE OF PAVEMENT		UTILITY POLE
	OVERHEAD WIRES		STOCKADE FENCE
	STRUCTURE - MANHOLE		CONTOURS
	GAS VALVE		TOP/BOTTOM OF CURB
	WATER VALVE		SPOT ELEVATION
	HANDICAP PARKING		CONCRETE
	PARKING STALL COUNT		GUY WIRE
	UNDERGROUND ELECTRICAL AND TELCO UTILITIES		NEW FENCE



LINE DISTURBED AREAS OF SOIL WITH S75 EROSION CONTROL FABRIC NOTED ON DIVERSION BERM DETAIL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS



**SURVEY NOTES**

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THE TYPE OF SURVEY PERFORMED AND THE MAPPED FEATURES DEPICTED HEREON ARE IN ACCORDANCE WITH THE REQUIREMENTS OF A (PARTIAL) TOPOGRAPHIC SURVEY. BOUNDARY LINES ARE COMPILED FROM OTHER MAPS, DEEDS, AND A LIMITED FIELD SURVEY. THEY DO NOT REPRESENT A PROPERTY BOUNDARY OPINION AND ARE SUBJECT TO CHANGE BASED ON A COMPLETE FIELD SURVEY.
- MAPPING INFORMATION:  
SURVEY TYPE - IMPROVEMENT LOCATION SURVEY  
CATEGORY - DEPENDANT RESURVEY (REFERENCE MAP A)  
HORIZONTAL CLASS - A-2  
VERTICAL CLASS - T-2 (ELEVATIONS REFER TO N.A.V.D. 1988).
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- TREES HAVING A CALIPER OF 6" AND GREATER LOCATED ONLY ON A PORTION OF THE PROPERTY.

SITE AREAS & VOLUMES OF EARTHWORK	
SITEWORK SHALL ENTAIL APPROXIMATELY 51 CUBIC YARDS OF CUT FOR TRENCH EXCAVATION AND 40 CY CUT (COMPOUND & DRIVEWAY) W/ APPROXIMATELY 135 CUBIC YARDS OF CRUSHED STONE SHALL BE IMPORTED TO CONSTRUCT THE COMPOUND AND ACCESS ROAD.	
COMPOUND AREA SLOPES:	
EXISTING -	4.9%
PROPOSED -	2.0%
TOTAL AREA OF DISTURBANCE = 16,400± SF	
STORMWATER VELOCITY: PRIOR TO GROUND COVER < 5.0 FT/SEC FOLLOWING GROUND COVER < 5.0 FT/SEC	
GROUND COVER TO BE ESTABLISHED AS FOLLOWS (U.O.N.): - WHITE CLOVER @ 0.20#/- SF - TALL FESCUE @ 0.45#/- SF - RYEGRASS @ 0.10#/- SF	
NOTE: 2 TREES WILL BE REMOVED IN CONSTRUCTING THE FACILITY	

<p>MCM SITE NAME: <b>EAST HARTFORD CT-503</b></p> <p>APT FILING NUMBER: <b>CT-242-281</b></p> <p>MESSAGE CENTER MANAGEMENT 40 WOODLAND STREET HARTFORD, CT 06105 OFFICE: (888) 973-7483</p> <p><b>MCM</b></p> <p><b>ALL-POINTS</b> TECHNOLOGY CORPORATION</p> <p>3 SADDLEBROOK DRIVE KILLINGWORTH, CT 06419 WWW.ALLPOINTSTECH.COM</p> <p>PHONE: (860)-663-1477 FAX: (860)-663-0935</p>	<p>PERMITTING DOCUMENTS</p> <p><b>EAST HARTFORD</b> <b>56 HILLS STREET</b> <b>EAST HARTFORD, CT 06118</b></p> <p>DESIGN TYPE: <b>RAW LAND</b></p>	<p><b>PARTIAL</b> <b>SITE &amp; GRADING</b> <b>PLAN</b></p>
	<p>REVISIONS:</p> <p>REV.0: 01/28/13: FOR REVIEW: SMC REV.1: 02/11/13: GENERAL COMMENTS: SMC REV.2: REV.3: REV.4: REV.5:</p>	<p>APT FILING NUMBER: CT-242-281 APT DRAWING NUMBER: SP-1 DRAWN BY: KRS CHECKED BY: SMC</p> <p>SCALE: AS NOTED DATE: 12/07/12</p>



**Site: East Hartford**  
**Site Address: 56 Hills Street**  
**East Hartford, CT 06118**

**Access distances:**

Distance of improved access driveway: 250' +/-  
Distance of overall access driveway from Hills St: 530'+/-

**Distance to Nearest Wetlands**

378' north of the proposed telecommunications facility

**Distance to Property Lines:**

652' to the northern property boundary from the tower  
490' to the southern property boundary from the tower  
113' to the western property boundary from the tower  
104' to the eastern property boundary from the tower

624' to the northern property boundary from the compound  
469' to the southern property boundary from the compound  
95' to the western property boundary from the compound  
68' to the eastern property boundary from the compound

**Residence Information:**

There are 211 residences within 1,000' feet of the compound. The closest onsite residence is 390' from the proposed tower. The closest off site residence is 156' to the east and is located at Map 42, Lot 384 (162 Greenwood St).

**Tree Removal Count:**

Two trees need to be removed to construct the proposed compound area.

6" – 8" dbh	- 0 trees
8" – 10" dbh	- 0 trees
10" – 14" dbh	- 2 trees
14" or greater dbh	- 0 trees

**Cut/Fill:** 51 CY of cut will be required for trenching, 40 CY net cut will be necessary for the road and compound which will require 135 CY of crushed stone.

**Clearing/Grading Necessary:** Total area of disturbance = 16,400 SF



# ALL-POINTS TECHNOLOGY CORPORATION, P.C.

January 28, 2013

Cuddy & Feder, LLP  
445 Hamilton Avenue  
14<sup>th</sup> Floor  
White Plains, NY 10601

RE: Tree Inventory  
Site: East Hartford  
56 Hills Street  
East Hartford, CT 06118

Dear Atty. Laub:

A Tree Inventory was completed at the subject site on December 7, 2012 to determine the size and quantity of existing trees that will need to be removed for the installation of the proposed facility. Access to the facility is proposed from an existing gravel drive and improved dirt access way currently servicing the rear of the subject property. Utilities are proposed to originate from an existing unmarked SNET utility pole onsite and traverse underground from said pole to the proposed facility. The existing and improved 12' +/- wide access drive and underground utilities will travel along the western gutter line of the aforementioned access ways. Installation of the proposed access drive, utilities and compound area improvements will require the removal of trees summarized as follows:

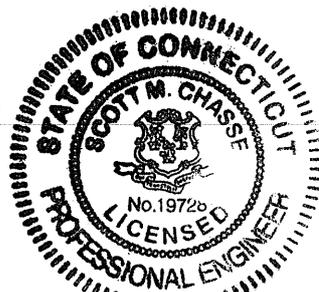
6" – 8" dbh	- 0 trees
8" – 10" dbh	- 0 trees
10" – 14" dbh	- 2 tree
14" or greater dbh	- 0 trees

A tree buffer will remain on the north and partial east side of the facility. Some tree trimming and brush clearing will be required along the northeastern corner of the proposed facility.

Sincerely,

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

Scott M. Chasse, P.E.  
Principal



Attachment 4(B)

*Site visit*

June 2, 2011

Ms. Susan R. Chandler, Historical Architect  
State Historic Preservation Office  
Connecticut Commission on Culture & Tourism  
One Constitution Plaza, Second Floor  
Hartford, CT 06103



Subject: Submission Packet, FCC Form 621, for proposed Collocation Project  
CT2022/ Dedominicis  
56 Hills Street, East Hartford, CT 06118  
EBI Project Number: 61111425

Dear Ms. Chandler:

In accordance with the Federal Communication Commission (FCC) National Environmental Policy Act (NEPA) rules and Section 106 of the National Historic Preservation Act (NHPA), the above-referenced telecommunications project is being evaluated by EBI for its potential effects to districts, sites, buildings, structures, or objects significant in American history, architecture, archeology, engineering, or culture that are listed, or potentially eligible for listing in the National Register of Historic Places (NRHP). Based on EBI's review of the characteristics and location of the proposed project, the project does not meet the exclusions stated in the "Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission," dated September 2004 ("Nationwide Agreement"); therefore, the project is required to undergo Section 106 review with the State Historic Preservation Office.

In accordance with the Nationwide Agreement, please find the attached Submission Packet, FCC Form 621, which presents the details on the proposed project as well as efforts that have been taken to identify, assess, and make determinations of effect on the impacts of the proposed project on Historic Properties.

I would appreciate your review of the data for the proposed project presented above and shown on the attached form and attachments. On behalf of AT&T Mobility, LLC, I would appreciate your comments for this proposed telecommunications installation in a letter directed to the address noted above. Please do not hesitate to contact me if you have any questions or concerns about the proposed project or the information contained in this Submission Packet.

Sincerely,

*Sarah L. Farley*

Ms. Sarah L. Farley  
Architectural Historian

**NO EFFECT**

*Daniel Baker* DEPUTY SHPO

STATE HISTORIC PRESERVATION OFFICE

Date 7-12-11 Project \_\_\_\_\_



# STATE OF CONNECTICUT

## DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Natural Resources/Wildlife Division  
79 Elm Street, Sixth Floor  
Hartford, CT 06106  
Natural Diversity Data Base

July 1, 2011

Nicole Piretti  
EBI Consulting  
8 Sprucewood Rd  
West Babylon, NY 11704

Project: New telecommunications tower facility Dedominicis/CT 2022 at 56 Hills St., East Hartford  
Request No.: 201105443

Dear Nicole Piretti,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed New telecommunications tower facility Dedominicis/CT 2022 at 56 Hills St., East Hartford, Connecticut. I have determined that the proposed activities will not impact any extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur in the vicinity of this property.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Environmental Protection's Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions at (860) 424-3592, or [dawn.mckay@ct.gov](mailto:dawn.mckay@ct.gov). Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,

A handwritten signature in cursive script that reads "Dawn M. McKay".

Dawn M. McKay  
Environmental Analyst 3



Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
2601 Meacham Boulevard  
Fort Worth, TX 76137

Aeronautical Study No.  
2012-ANE-1490-OE  
Prior Study No.  
2011-ANE-1235-OE

Issued Date: 11/14/2012

Maria A. Scotti  
Message Center Management  
40 Woodland Street  
Hartford, CT 06405

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Monopole East Hartford - 56  
Location: East Hartford, CT  
Latitude: 41-44-30.44N NAD 83  
Longitude: 72-36-08.64W  
Heights: 61 feet site elevation (SE)  
127 feet above ground level (AGL)  
188 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact our office at (817) 321-7751. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2012-ANE-1490-OE.

**Signature Control No: 174847874-176914738**

( DNE )

Chris Shoulders  
Specialist

Attachment(s)  
Frequency Data  
Map(s)

cc: FCC

**Frequency Data for ASN 2012-ANE-1490-OE**

<b>LOW FREQUENCY</b>	<b>HIGH FREQUENCY</b>	<b>FREQUENCY UNIT</b>	<b>ERP</b>	<b>ERP UNIT</b>
698	806	MHz	1000	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W



Civil Engineers  
Surveyors  
Planners

NY  
175A Commerce Dr.  
Hauppauge, NY 11788  
T 631 435-1111  
F 631 435-1022

CT  
15 Hosley Avenue  
Branford, CT 06405  
T 203 483-4322  
F 203 483-4323

www.bbvpc.com

**FAA 2-C SURVEY CERTIFICATION**

**Applicant:** Message Center Management  
**Site Number:** CT-503  
**Site Name:** East Hartford  
**Site Address:** 56 Hills Street, East Hartford, CT 06118

**Survey Method:** GPS survey

**Vertical Datum:** NAVD 1988

**Structure Type:** Proposed Monopole

**Latitude:** N. 41° 44' 30.45"  
**Longitude:** W. 72° 36' 08.74"

**Ground Elevation:** 60' AMSL

**Proposed Antenna Elevation:** 167' AMSL (top of proposed antenna, 107' AGL, provided by others)

**Certification:** I certify that the above antennas are located at the stated latitude and longitude and elevation. The location coordinates are accurate to within  $\pm 50$  feet horizontal and that the site elevation above, is accurate within  $\pm 20$  foot vertically. The horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD83) are expressed as degrees, minutes and seconds, to the nearest (tenth / hundredth) of a second. The vertical datum (height) is in the terms of the North American Vertical Datum of 1988 (NAVD) and is determined to the nearest foot.

**Company:** **BARRETT, BONACCI & Van WEELE, P.C.**



**Surveyor:** Gregory Brouillet  
Connecticut State Licensed Surveyor # 70251

**Date:** December 7, 2012

G:\WP\_Share\MISC-AMJ\FAA 2C\APT\_Hills St\_FAA2C\_C120009.doc



Tony Wells  
 C Squared Systems  
 920 Candia Road  
 Manchester, NH 03109  
 603-644-2800  
 Tony.Wells@csquaredsystems.com



February 5, 2013

Connecticut Siting Council

Subject: New Cingular Wireless, East Hartford, CT

Dear Connecticut Siting Council:

C Squared Systems has been retained by New Cingular Wireless to investigate the RF Power Density at the proposed site located at 56 Hills Street in East Hartford, CT.

Calculations were done in accordance with FCC OET Bulletin 65. These worst-case calculations assume that all transmitters are simultaneously operating at full power and pointing directly at the ground. The calculation point is 6 feet above ground level to model the RF power density at the head of a person standing at the base of the tower.

Location	Carrier	Antenna Centerline Height Above Ground Level (Ft.)	Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Power Density (mw/cm <sup>2</sup> )	Limit	% FCC MPE Limit General Public/Uncontrolled
Ground Level	AT&T UMTS	100	880	1	500	0.0204	0.5867	3.47%
	AT&T UMTS	100	1900	1	500	0.0204	1.0000	2.04%
	AT&T LTE	100	734	1	500	0.0204	0.4893	4.16%
	AT&T GSM	100	880	3	296	0.0362	0.5867	6.16%
	AT&T GSM	100	1900	1	427	0.0174	1.0000	1.74%
<b>Total</b>								<b>17.57%</b>

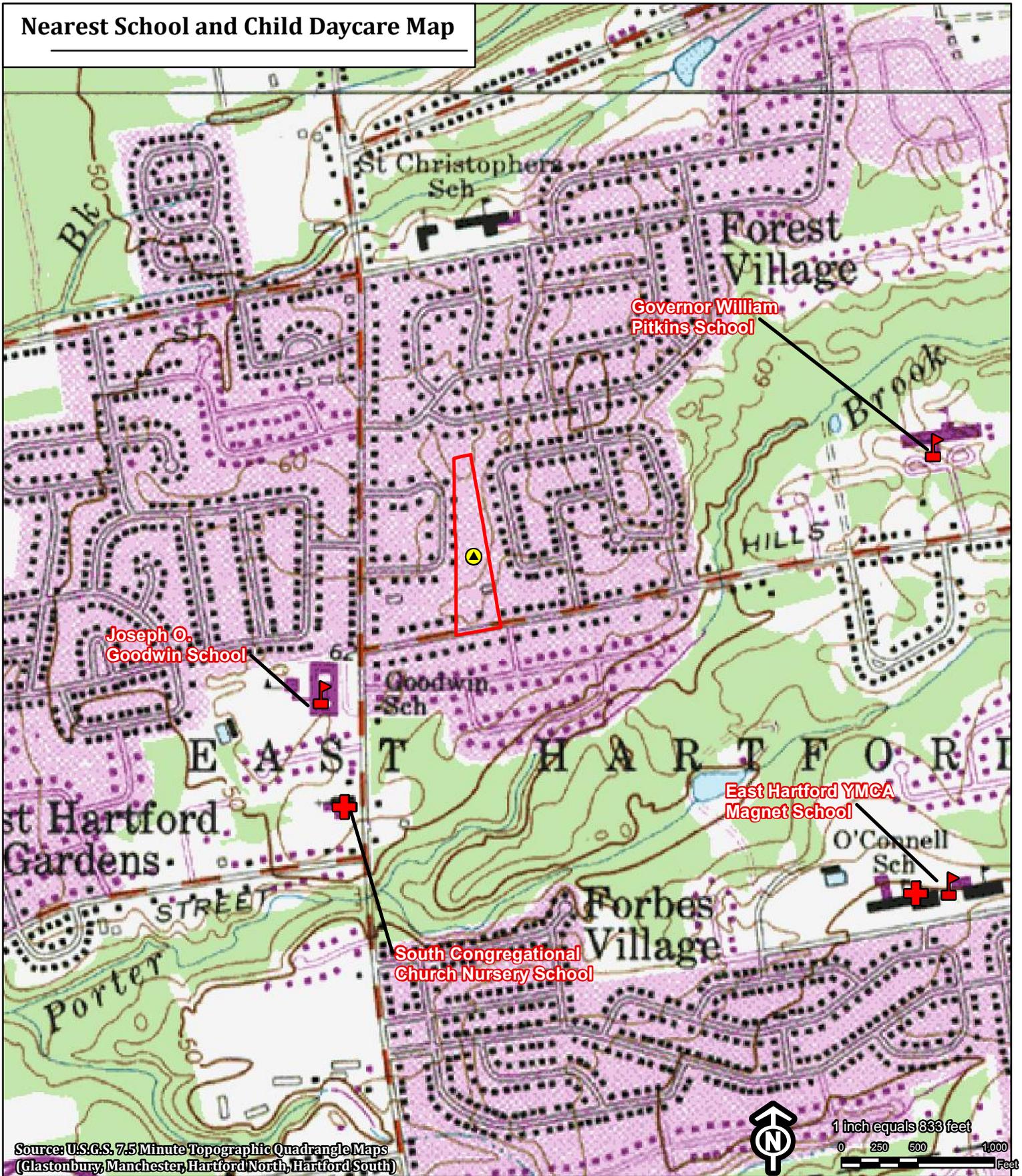
**Summary:** Under worst-case assumptions, the RF Power Density at the proposed site located at 56 Hills Street in East Hartford, CT will not exceed 17.57% of the FCC MPE limit for General Public/Uncontrolled Environments.

Sincerely,

Anthony Wells  
 Managing Partner

## Attachment 4(C)

# Nearest School and Child Daycare Map



Source: U.S.G.S. 7.5 Minute Topographic Quadrangle Maps (Glastonbury, Manchester, Hartford North, Hartford South)

- Legend**
- Proposed Tower Location
  - DPH Certified Daycare Facility Location
  - CT Geoplaces - School Location
  - Subject Parcel

**Proposed MCM Telecommunications Facility**  
**56 Hills Street**  
**East Hartford, Connecticut**

**Monday, January 28, 2013**



# Visibility Analysis

Proposed Wireless Facility  
MCM, Inc.  
CT-2022  
56 Hills Street  
East Hartford, CT

*Prepared in January 2013 by:*  
All-Points Technology Corporation, P.C.  
3 Saddlebrook Drive  
Killingworth, CT 06141



# Project Introduction

Message Center Management, Inc. (“MCM”) is pursuing a Certificate of Environmental Compatibility and Public Need (“Certificate”) from the Connecticut Siting Council for the construction, maintenance and operation of a wireless communications facility (“Facility”) at in East Hartford, Connecticut. The parcel located at 56 Hills Street in East Hartford (identified herein as the “host Property”) is being considered as one of two potential alternative sites for the Facility.

The proposed Facility would consist of a 107-foot tall stealth, “monopine” tower. New Cingular Wireless PCS, LLC (“AT&T”) would install a total of twelve (12) panel-type antennas at a center line height of 100 feet above ground level (“AGL”). An additional seven feet of faux branching will extend above the antenna centerline to simulate the conical top of a pine tree. Supporting ground equipment would be housed within a free-standing equipment shelter located near the base of the monopole. The entire Facility would be enclosed within a fenced compound measuring approximately 50 feet by 50 feet. The Facility would be located at a ground elevation of approximately 61 feet Above Mean Sea Level (“AMSL”). Access to the Facility would extend from an existing driveway originating north of Hills Street via a new gravel drive (to be developed) through an open pasture. Both the tower and compound are designed to accommodate multiple carriers and municipal emergency service providers, should the need arise.

At the request of MCM, All-Points Technology Corporation, P.C. (“APT”) prepared this Visibility Analysis to evaluate potential views associated with the Facility from within a two-mile radius (“Study Area”). In addition to the Town of East Hartford, the adjoining municipalities of Manchester and Glastonbury are located in the east and south portions of the Study Area.

The 5.4-acre host Property is owned by Kenneth and Michelle Dedominicis and identified in East Hartford land records as Map 42, Lot 370. The host Property is developed with a residence and several outbuildings located in its southern portion near Hills Street. A pasture located in the central portion of the host Property transitions to woods northward. The Facility would be located in the central portion of the host Property within the open field. Land use within the vicinity of the host Property consists generally of dense residential development.

# Methodology

APT used the combination of a predictive computer model and in-field analysis to evaluate the visibility associated with the proposed Facility. The predictive model provides an assessment of potential visibility throughout the entire Study Area, including private properties and other areas inaccessible for direct observations. A balloon float was also conducted to field verify results of the model, inventory visible and nonvisible locations, and to provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

## Preliminary Computer Modeling

Two computer modeling tools are used to calculate those areas from which at least the top of the proposed Facility is estimated to be visible: IDRISI image analysis program (developed by Clark Labs, Clark University) and ArcGIS®, developed by Environmental Systems Research Institute, Inc. Project- and Study Area-specific data were incorporated into the computer model, including the Facility's location, height, and ground elevation, as well as the surrounding topography and existing vegetation which are two primary features that might serve to prohibit direct lines of sight. Information used in the model included Connecticut LiDAR<sup>1</sup>-based digital elevation data and a digital forest (or tree canopy) layer developed specifically for the Study Area. The LiDAR-based Digital Elevation Model ("DEM") represents topographic information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDAR-based data collected in the year 2000 and has a horizontal resolution of ten (10) feet. The data was edited in 2007 and made available by the University of Connecticut through its Center for Land Use Education and Research ("CLEAR"). The tree canopy layer, representing mature trees and woodland areas, was created using the Land Use / Land Cover data set (2006), also made available through CLEAR, which was updated using a combination of National Agricultural Imagery Program (USDA) aerial photography (most recent available, 2011) and the current USGS topographic quadrangles (2011-2012).

Once the data layers were entered, the image processing tools were applied to achieve an estimate of locations where the Facility might be visible. First, only topography was used as a possible visual constraint; the tree canopy was omitted to evaluate potential visibility with no intervening vegetative screening. The initial omission of this data layer results in an excessive over-prediction, but provides an opportunity to identify and evaluate those areas with direct sight lines towards the Facility and gain some insight regarding potential seasonal views. Visibility varies seasonally with increased, albeit mostly obstructed, views occurring during "leaf-off" conditions. Each individual Study Area includes mature vegetation with a unique and variable composition and density of woodlands, with mast or pole timber and branching providing the majority of screening in leafless conditions. Because tree spacing, dimensions and branching patterns and the understory vary greatly, creating an accurate Study Area-specific "leaf-off" tree density data layer is not realistic. Considering that any given Study Area has its own discrete forest characteristics, modeling for seasonal variations of visibility is problematic and, in our experience, even when

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<sup>1</sup> LiDAR is an acronym for Light Detection and Ranging. It is a technology that utilized lasers to determine the distance to an object or surface. LiDAR is similar to radar, but incorporates laser pulses rather than sound waves. It measures the time delay between transmission and reflection of the laser pulse.

incorporating conservative constraints into the model, the results over-predict visibility in “leaf-off” conditions. Eliminating the tree canopy altogether, as performed in the preliminary analysis, exaggerates areas of visibility because it assumes unobstructed sight lines everywhere. However, using this technique allows us to initially identify areas where seasonal visibility may occur and is especially useful during the in-field activities (described below) to further evaluate “leaf-off” scenarios.

Approximately 4,172 acres of tree cover exists within the 8,042-acre Study Area (52%). A conservative average tree canopy height of 50 feet was incorporated into the forest data layer and added to the DEM, thus providing a baseline assessment of intervening vegetation. These preliminary visibility maps were used during the in-field activities to compare the outcome of the initial computer modeling with direct observations of the balloon float.

Additional data layers are incorporated into the preliminary visibility map, including protected and private, state and federal open space, obtained from the State of Connecticut Department of Energy and Environmental Protection (“CTDEEP”), which depict various land and water resources such as parks and forests, recreational facilities, dedicated open space, hiking and multi-use trails, public boat launches and schools, among other categories. Based on a review of publicly-available information, no local or State-designated scenic roadways, or Connecticut blue-blazed hiking trails are present within the Study Area.

## **In-Field Activities**

To supplement and substantiate the results of the computer modeling efforts, APT completed in-field verification activities consisting of a balloon float, vehicular and pedestrian reconnaissance, and photo-documentation.

### **Balloon Float and Field Reconnaissance**

A balloon float was conducted on September 7, 2012. The balloon float activities consisted of raising an approximately four-foot diameter, helium-filled balloon tethered to a string height of 100 feet AGL at the proposed Facility location. Once the balloon was secured, a Study Area reconnaissance was performed by driving along the local and State roads and locations where the balloon could be seen above/through the tree mast and canopy were inventoried. Visual observations from the reconnaissance were also used to evaluate the results of the preliminary visibility mapping and identify any discrepancies in the initial modeling. Weather conditions included sunny skies and calm winds (less than 5 mph), with a temperature of approximately 80 degrees Fahrenheit.

The tree cover within the Study Area consists of mixed deciduous hardwood species with intermixed stands of conifers. During the balloon float, several trees were randomly surveyed using a hand-held infrared laser range finder and Suunto clinometer to ascertain their heights. Numerous locations were selected to obtain tree canopy heights, including along roadways, wooded lots, and high- and low-lying areas to provide for the irregularities associated with different land characteristics and uses found within the Study Area. The average canopy height was developed based on measurements and comparative observations, in this case approximately 65 feet AGL.

Throughout Connecticut, the tree canopy height typically varies from about 55 feet to in excess of 80 feet (where eastern white pine becomes a dominant component of the forest type, average tree heights may be even higher). This general uniformity is most likely the result of historic state-wide clear cutting of forests for charcoal production in the late 1800s and early 1900s. Approximately 69% of Connecticut's forests are characterized as mature<sup>2</sup>. In this Study Area, substantial stands of eastern white pines occur, although not necessarily in close proximity to the proposed Facility location; several specimens were found to extend to heights over 90 feet tall.

Information obtained during the balloon float was subsequently incorporated into the computer model to refine the visibility map.

## Photographic Documentation

During the balloon float, a field reconnaissance was completed by driving the public roads within the Study Area and recording observations, including photo-documentation, of those areas where the balloon was and was not visible. Photographs were obtained from several vantage points to document the view towards the proposed Facility. At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") equipment technology.

Photographs were taken with a Nikon D-3000 digital camera body and Nikon 18 to 135 millimeter ("mm") zoom lens, with the lens set to 50mm. Focal lengths ranging from 24 mm to 50 mm approximate views similar to that achieved by the human eye. However, two key aspects of an image can be directly affected by the specific focal length that is selected: field of view and relation of sizes between objects in the frame. A 24 mm focal length provides a wider field of view, representative of the extent the human eyes may see (including some peripheral vision), but the relation of sizes between objects at the edges of the photos can become minimally skewed. A 50 mm focal length has a narrower field of view than the human eye but the relation of sizes between objects is represented similar to what the human eye might perceive.

*"The lens that most closely approximates the view of the unaided human eye is known as the normal focal-length lens. For the 35 mm camera format, which gives a 24x36 mm image, the normal focal length is about 50 mm."<sup>3</sup>*

When taking photographs for these analyses, APT prefers a focal length of 50 mm. Regardless of the lens setting, the scale of subject in the photo (the Facility) remains proportional to its surroundings.

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<sup>2</sup> USDA Resource Bulletin NE-160, 2004.

<sup>3</sup> Warren, Bruce. Photography, West Publishing Company, Eagan, MN, c. 1993, (page 70).

The table below summarizes characteristics of the photographs presented in the attachment to this report including a description of each location, view orientation and the distance from where the photo was taken relative to the proposed Facility.

<b>Photo No.</b>	<b>Location</b>	<b>View Orientation</b>	<b>Distance to Facility</b>
1	Adjacent to #56 Hills Street	North	±0.10-Mile
2	Hills Street	Northwest	±0.13-Mile
3	Hills Street	Northwest	±0.19-Mile
4	Greenwood Street	Northwest	±0.25-Mile
5	Greenhurst Lane and Greenbrier Road	Southwest	±0.18-Mile
6	Greenwood Street	Northwest	±0.07-Mile
7	Adjacent to #122 Greenwood Street	Southwest	±0.16-Mile
8	Joseph O. Goodwin School	Northeast	±0.23-Mile
9	Adjacent to #25 Schaffer Drive	Northeast	±0.08-Mile

### **Final Visibility Mapping**

Field data and observations were incorporated into the mapping data layers, including the photo locations, areas that experienced land use changes since the 2010-11 aerial photo flights, and those places where the initial model was found to either under or over-predict visibility.

The revised average tree canopy height data layer (using 65 feet AGL) was merged with the DEM and added to the base ground elevations. As a final step, forested areas were extracted from areas of potential visibility, assuming that a person standing within a forest would not be able to view the Facility from beyond a certain distance due to the presence of intervening tree mast and/or understory. APT elected to use a distance of 500 feet for this analysis. Each location is dependent on the specific density and composition of the surrounding woodlands, and it is understood that some locations within this distance could provide visibility of at least portions of the Facility at any time of the year. In “leaf-on” conditions, this distance may be overly conservative as the deciduous vegetation would substantially hinder direct views in many cases at close range. However, even in “leaf off” conditions when views expand, tree mast can still serve to block lines of sight, even at distances less than 500 feet. For purposes of this analysis, it was reasoned that contiguous forested land beyond 500 feet of the Facility would consist of light-impenetrable trees of a uniform height. Once the supplemental data was integrated into the model, APT re-calculated the visibility of the Facility from within the Study Area to produce the final visibility map.

## Photographic Simulations

Simulations of the proposed Facility were generated for those photographs where the balloon was visible during the in-field activities and portray scaled renderings of the Facility from these locations. 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<sup>4</sup>.

Photo-documentation and simulations are presented in the attachment at the end of this report. The photographs depict the balloon at a height of 100 feet to provide visual reference points for the location, height and proportions of the proposed Facility relative to the scene.

As stated earlier, APT elected to use a 50 mm focal length for the majority of photographs presented in this report. For presentation purposes in this report, the photographs are produced in an approximate 7" by 10.5" format. When viewing in this format size, we believe it is important to provide the largest representational image while maintaining an accurate relation of sizes between objects within the frame of the photograph.

## Visibility Analysis Results

Results of this analysis are graphically displayed on the visibility analysis map provided in the attachment at the end of this report. As depicted on the map, year-round views of the proposed Facility are expected to be confined primarily to locations within less than 0.25 mile around the host Property, covering approximately 31 acres of land. In general, year-round views of the Facility would be limited to a modest geographic footprint by the combination of the relatively short height of the Facility and intervening mature vegetation. Approximately 77 residential properties within the Study Area are expected to have at least partial views of the monopine above the tree canopy during "leaf-on" conditions from select locations on the respective parcel.

Based on the results of the analysis, we estimate that seasonal visibility (during "leaf-off" conditions) would extend over approximately 125 acres. This includes approximately 220 additional residential properties within the Study Area which could have obstructed views of the monopine through the intervening trees and buildings on at least a portion of the parcel. The views from the majority of these potential locations would not only be heavily obscured, but because of its design the monopine would not be a focal point (as might a steel monopole with full array in this instance) and would blend more naturally within its surroundings. In several locations, only the upper reaches of the monopine might be partially visible, further reducing its potential visual impact.

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<sup>4</sup> As a final step, the accuracy and scale of select simulations are tested against photographs of existing Facilities with recorded camera position, focal length, photo location, and Facility location.

The table below presents an inventory of residential properties<sup>5</sup> within the Study Area that have the potential for views of the monopine.

<b>Street</b>	<b>Year-round Visibility</b>	<b>Seasonal Visibility</b>
Bantle Road	2	8
Bradley Street	6	23
Brewer Street	3	11
Callahan Lane	0	1
Forbes Street	3	7
Grant Street	0	2
Greenbrier Road	5	12
Greenhurst Lane	2	10
Greenwood Street	21	30
Halsey Street	0	1
Hills Street	12	22
Langford Lane	0	1
Mallard Street	0	2
May Road	0	3
Monroe Street	5	24
Patton Street	0	1
Pendelton Drive	5	12
Pershing Street	2	4
Rentschler Street	3	10
Romar Drive	0	3
Schaffer Drive	5	7
Spruce Drive	3	19
Taylor Street	0	7

Note: Seasonal visibility denotes residential properties **in addition** to those with potential year-round views.

### **Proximity to Schools and Commercial Child Day Care Centers**

No schools or commercial child day care centers are located within 250 feet of the host Property. The nearest school (Joseph O. Goodwin School) is located at 330 Hill Street, approximately 0.23 mile to the southwest. The nearest commercial child day care center is located at the South Congregational Church Nursery School (1301 Forbes Street), approximately 0.28 mile to the southwest. Neither of these locations would have views of the proposed Facility.

<sup>5</sup> For purposes of this analysis, the term "residential property" may, in addition to parcels occupied by homes, also include agricultural land, forested tracts with some clearing, and/or parcels with uninhabited structures. Potential visibility identified on a residential property does not necessarily mean that views would be achieved from within dwellings, or on exterior decks, porches or patios that might be associated with a parcel.

## ATTACHMENTS



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	ADJACENT TO HOST PROPERTY AT 56 HILLS STREET	NORTH	+/- 0.10 MILE	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	ADJACENT TO HOST PROPERTY AT 56 HILLS STREET	NORTH	+/- 0.10 MILE	YEAR ROUND



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	HILLS STREET	NORTHWEST	+/- 0.13 MILE	YEAR ROUND



## **SIMULATION**

PHOTO

**2**

LOCATION

**HILLS STREET**

ORIENTATION

**NORTHWEST**

DISTANCE TO SITE

**+/- 0.13 MILE**

VISIBILITY

**YEAR ROUND**





## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	HILLS STREET	NORTHWEST	+/- 0.19 MILE	YEAR ROUND



***SIMULATION***

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	HILLS STREET	NORTHWEST	+/- 0.19 MILE	YEAR ROUND



**DOCUMENTATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	GREENWOOD STREET	NORTHWEST	+/- 0.25 MILE	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	GREENWOOD STREET	NORTHWEST	+/- 0.25 MILE	YEAR ROUND



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	GREENHURST LANE AND GREENBRIER ROAD	SOUTHWEST	+/- 0.18 MILE	YEAR ROUND



**SIMULATION**

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	GREENHURST LANE	SOUTHWEST	+/- 0.18 MILE	YEAR ROUND



## DOCUMENTATION

PHOTO

6

LOCATION

**GREENWOOD STREET**

ORIENTATION

**NORTHWEST**

DISTANCE TO SITE

**+/- 0.07 MILE**

VISIBILITY

**YEAR ROUND**



**SIMULATION**

PHOTO

6

LOCATION

**GREENWOOD STREET**

ORIENTATION

**NORTHWEST**

DISTANCE TO SITE

**+/- 0.07 MILE**

VISIBILITY

**YEAR ROUND**





## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7	ADJACENT TO 122 GREENWOOD STREET	SOUTHWEST	+/- 0.16 MILE	YEAR ROUND



## ***SIMULATION***

PHOTO

7

LOCATION

**ADJACENT TO 122 GREENWOOD STREET**

ORIENTATION

**SOUTHWEST**

DISTANCE TO SITE

**+/- 0.16 MILE**

VISIBILITY

**YEAR ROUND**



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8	JOSEPH O. GOODWIN SCHOOL	NORTHEAST	+/- 0.23 MILE	NOT VISIBLE



## DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
9	ADJACENT TO 25 SCHAFER DRIVE	NORTHEAST	+/- 0.08 MILE	YEAR ROUND



***SIMULATION***

PHOTO

9

LOCATION

**ADJACENT TO 25 SCHAFER DRIVE**

ORIENTATION

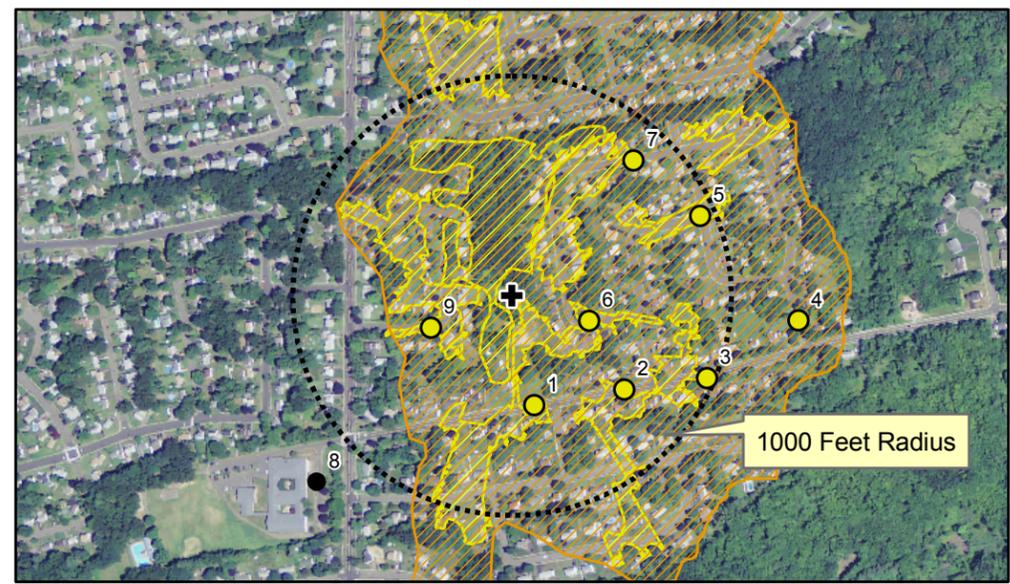
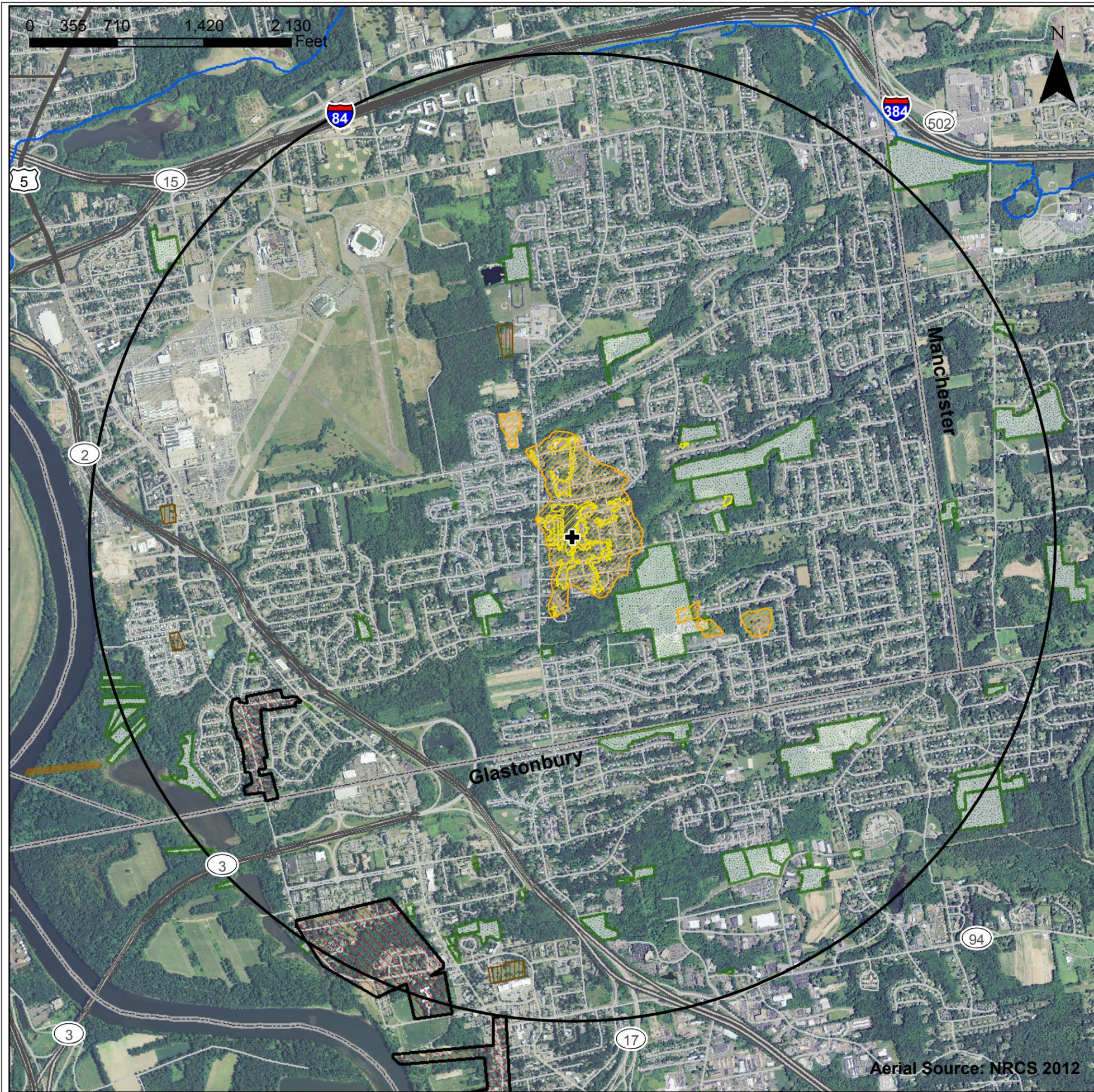
**NORTHEAST**

DISTANCE TO SITE

**+/- 0.08 MILE**

VISIBILITY

**YEAR ROUND**



### VISIBILITY ANALYSIS

Proposed Wireless Telecommunications Facility

56 Hills Street  
East Hartford, CT

**Photo Locations**

- No Visibility
- Year-round

Proposed facility height is 107 feet AGL  
Existing tree canopy height estimated as 65 feet  
Study area includes 8,042 acres of land

Map compiled 1/15/2013

*Map information field verified by All-Points Technology Corporation on September 7, 2012*

*Only those resources located within the Study Area are depicted. For a complete list of data sources consulted for this analysis, please refer to the Documentation Page.*

- Legend**
- ✚ Proposed Tower
  - ▨ Predicted Seasonal Visibility
  - ▨ Predicted Year-Round Visibility
  - ▭ 2-Mile Study Area
  - ▨ National Register
  - ▨ Private
  - ▨ Protected Open Space(f)
  - Trails
  - Town



# DOCUMENTATION

## SOURCES CONSULTED FOR VISIBILITY ANALYSES

### *Physical Geography / Background Data*

Center for Land Use Education and Research, University of Connecticut (<http://clear.uconn.edu>)  
Land Use / Land Cover (2006)  
Coniferous and Deciduous Forest (2006)  
LiDAR data – topography (2007)  
National Agricultural Imagery Program (USDA)  
(<http://www.fsa.usda.gov/FSA/apfoapp?area=home&subject=prog&topic=nai>)  
Aerial photography (2010-2011)  
United States Geological Survey  
USGS topographic quadrangles (2011-2012)  
USGS National Hydrographic Data Set (2012) (<http://nhd.usgs.gov/>)

### *Cultural Resources*

Heritage Consultants LLC  
DOT Scenic Strips (based on Department of Transportation data)  
National Register (based on Office of Culture and Tourism, Division of Historic Preservation  
data, updated biweekly)  
State Scenic Highways (based on Department of Transportation data, updated monthly)  
Local Municipalities  
Scenic Roads (by phone and/or email/fax - current)

### *Dedicated Open Space & Recreation Areas*

Connecticut Department of Energy and Environmental Protection  
([http://www.ct.gov/dep/cwp/view.asp?a=2698&q=322898&depNav\\_GID=1707](http://www.ct.gov/dep/cwp/view.asp?a=2698&q=322898&depNav_GID=1707))  
DEEP Property (current)  
Federal Open Space (1997) (updated 2009 by Heritage Consultants LLC)  
Municipal and Private Open Space (1997) (corrected to POSM data)  
Protected Open Space Mapping (POSM) (2011)  
DEEP Boat Launches (2008)  
Connecticut Trails (State, Municipal, and National) (2006)  
Connecticut Forest & Parks Association  
Connecticut Walk Book East – The Guide to the Blue-Blazed Hiking Trails of Eastern Connecticut  
Connecticut Walk Book West – The Guide to the Blue-Blazed Hiking Trails of Western Connecticut

### *Other*

Connecticut State Department of Education  
Schools (current)  
Connecticut Department of Public Health  
Commercial Day Care Centers (current)  
ESRI Inc. and U.S. Census TIGER Line Files  
Roads (2011)  
Heritage Consultants LLC  
Appalachian Trail (2000)

Attachment 4(D)



## **WETLANDS DELINEATION REPORT**

**January 15, 2013**

**Message Center Management, Inc.  
40 Woodland St  
Hartford, CT 06105**

**APT Project No.: CT242281**

**Attn: Virginia King**

**Re: Wetlands Delineation Report  
56 Hills Street  
East Hartford, Connecticut**

Dear Ms. King,

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by Message Center Management, Inc. ("MCM") at 56 Hills Street in East Hartford, Connecticut ("Site" or "Subject Property"). At your request, Dean Gustafson, a Connecticut registered Professional Soil Scientist with APT conducted an inspection of the Subject Property on December 12, 2012 to determine the presence or absence of wetlands and watercourses. The delineation methodology followed was consistent with both the Connecticut Inland Wetlands and Watercourses Act (IWWA) and the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0 (January 2012). The results of this wetland investigation are provided below.

### **Site and Project Description:**

The Subject Property consists of an approximately 5.4-acre residential property occupied by a residence and several barns and outbuildings in the southern portion of the property. The area proposed for the wireless communications facility in the central portion of the Site is used currently used as a goat pasture by the property owner. The north end of the property consists of undeveloped forest. The surrounding land use consists of residential development to the north, south, east, and west.

One wetland area was delineated in the north end of the Site consisting of an isolated depressional wetland formed in glaciofluvial (outwash) parent material. The wetland is currently forested with residential properties adjoining to the north, east and west. Please refer to the enclosed Wetlands Delineation Map for approximate location of the identified resource area. Wetlands were marked with pink and blue plastic flagging tape numbered with the following sequence: WF 1 to 6. General weather conditions encountered during the above-referenced inspection include mid 40 ° F temperatures with generally partly sunny skies. Weather conditions preceding the above-referenced inspection date resulted in ground conditions of no snow accumulation and no evidence of ground frost throughout the inspection.

### **ALL-POINTS TECHNOLOGY CORPORATION, P.C.**

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

P.O. BOX 504 · 116 GRANDVIEW ROAD · CONWAY, NH 03818 · PHONE 603-496-5853 · FAX 603-447-2124

## **Regulation of Wetlands:**

Wetlands and watercourses are regulated by local, state and federal regulations, with each regulatory agency differing slightly in their definition and regulatory authority of resource areas, as further discussed below. The proposed Facility is under the exclusive jurisdiction of the State of Connecticut Siting Council and therefore exempt from local regulation, although local wetland regulations are considered by the Siting Council. Wetlands identified on the Site may be considered Waters of the United States and therefore any activity that would result in direct impact would be subject to jurisdiction by the U.S. Army Corps of Engineers ("ACOE") New England District.

**Town of East Hartford:** The Town of East Hartford regulates activities within wetlands and watercourses and within 100 feet of wetlands and within 200 feet of watercourses through administration of the Connecticut Inland Wetlands and Watercourses Act (IWWA).

**State of Connecticut:** The IWWA requires the regulation of activities affecting or having the potential to affect wetlands under Sec. 22a-36 through 22a-45 of the Connecticut General Statutes. The IWWA is administered through local municipalities. The IWWA defines wetlands as areas of poorly drained, very poorly drained, floodplain, and alluvial soils, as delineated by a soil scientist. Watercourses are defined as bogs, swamps, or marshes, as well as lakes, ponds, rivers, streams, etc., whether natural or man-made, permanent or intermittent. Intermittent watercourse determinations are based on the presence of a defined permanent channel and bank, and two of the following characteristics: (1) evidence of scour or deposits of recent alluvium or detritus; (2) the presence of standing or flowing water for a duration longer than a particular storm incident; and (3) the presence of hydrophytic vegetation.

**ACOE:** The U.S. Army Corps of Engineers ("Corps") regulates the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Waters of the United States are navigable waters, tributaries to navigable waters, wetlands adjacent to those waters, and/or isolated wetlands that have a demonstrated interstate commerce connection. The Corps Wetlands Delineation Manual defines wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters is unlawful unless the work has been approved by the Corps.

## **Soil Description:**

Soil types encountered throughout the Site were generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service (NRCS)<sup>1</sup>. Wetland soils on the property

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<sup>1</sup> NRCS Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/>, accessed on December 10, 2012.

include Walpole fine sandy loam. The non-wetland soils were examined along the wetland boundary and more distant upland areas during the delineation, including the proposed Facility location. They are dominated by Enfield silt loam, Agawam fine sandy loam, and Windsor sandy loam. Detailed descriptions of wetland and upland soil types are provided below.

**Wetland Soils:**

The **Walpole** series consists of very deep, poorly drained sandy soils formed in water-sorted glacial outwash and stratified drift. They are nearly level to gently sloping soils in low-lying positions on terraces and plains. Walpole soils have a water table within one foot of the soil surface much of the year.

**Upland Soils:**

The **Agawam** series consists of very deep, well drained soils formed in a loamy mantle over sandy, water deposited materials. They are level to steep soils on outwash plains and high stream terraces. Steeper slopes are on terrace escarpments and steep sides of gullies in dissected outwash plains.

The **Enfield** series consists of very deep, well drained loamy soils formed in silty mantled glacial outwash. They are nearly level to sloping soils on outwash plains and terraces. Permeability of the Enfield soils is moderate in the surface layer and subsoil and rapid or very rapid in the substratum. The soils formed in a silty mantle over stratified sandy and gravelly fluvial materials derived from a variety of acid rocks.

The **Windsor** series consists of very deep, excessively drained soils formed in sandy glacial outwash. They are nearly level to very steep soils on glaciofluvial landforms.

**Wetlands Discussion:**

**Wetland 1 Classification Summary:**

Wetland 1 <sup>2</sup>	System	Subsystem	Class	Subclass	Water Regime	Special Modifier
(WF 1 - 6)	Palustrine		Forested	Broad-leaved Deciduous	Saturated	Partly Drained
<b>Watercourse Type</b>	Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>	<b>Special Aquatic Habitat</b> (none)	Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>

**Wetland 1 Description:**

Wetland 1 is a small isolated depressional wetland system that is primarily forested by deciduous hardwood species. This wetland system is confined to the east, west, and north by the rear yards of adjoining residential properties. A chain link fence confines the property along these boundaries. During the investigation an iron pan was identified creating an apparent perched seasonally high groundwater table (groundwater was not encountered during the investigation) and the hydrologic conditions for establishing a wetland. Mature trees within the wetland exhibited buttressing and shallow rooting, indicative of a high groundwater table. The surrounding residential development has likely resulted in alteration of the wetland hydrology through diversion of surface and subsurface runoff away from this wetland system.

<sup>2</sup> Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. <http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm - contents>.

**Wetland 1 Dominant Vegetation:**

<b>Dominant Wetland Species</b> Common Name ( <i>Latin Name</i> )	<b>Dominant Adjacent Upland Species</b> Common Name ( <i>Latin Name</i> )
red maple ( <i>Acer rubrum</i> )	sugar maple ( <i>Acer saccharum</i> )
sweet pepperbush ( <i>Clethra alnifolia</i> )	black oak ( <i>Quercus velutina</i> )
green briar ( <i>Smilax rotundifolia</i> )	red oak ( <i>Quercus rubra</i> )
poison ivy ( <i>Toxicodendron radicans</i> )	white oak ( <i>Quercus alba</i> )
red oak ( <i>Quercus rubra</i> )	American beech ( <i>Fagus grandifolia</i> )
	black cherry ( <i>Prunus serotina</i> )

\* denotes Connecticut Invasive Plants Council invasive species

**Summary:**

No likely adverse impact to wetlands is associated with the proposed MCM development due to the approximate 390 foot separating distance. No temporary impacts to wetlands associated with the proposed construction activities are anticipated provided sedimentation and erosion controls are designed, installed and maintained during construction in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control*.

In addition, as no direct impact to federal wetlands is associated with MCM's development activities, **NO significant change in surface features** (e.g., wetland fill, deforestation or water diversion) will result in accordance with the National Environmental Policy Act Categorical Exclusion checklist.

If you have any questions regarding the above-referenced information, please feel free to contact me at (860) 984-9515.

Sincerely,

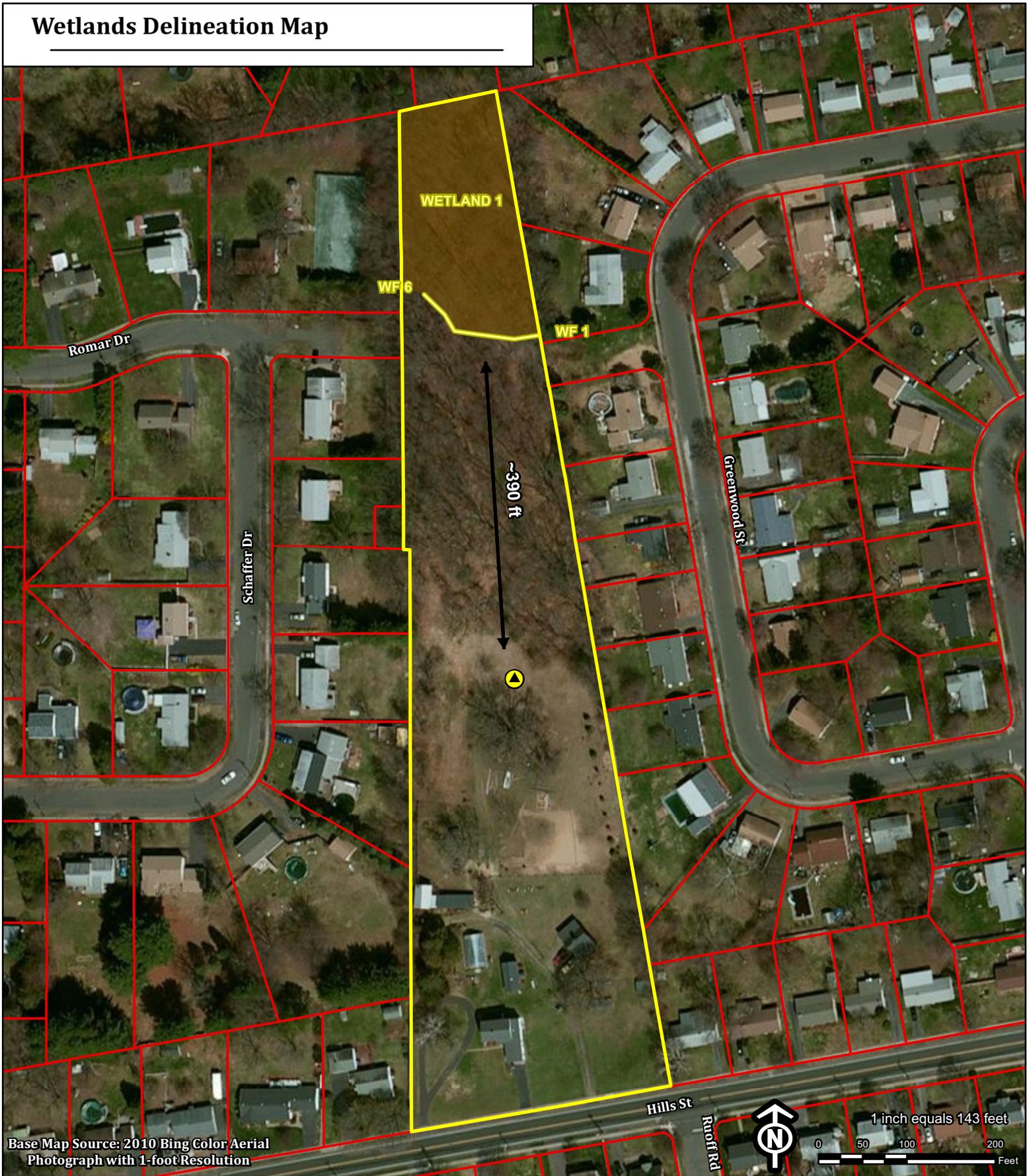
All-Points Technology Corporation, P.C.



Dean Gustafson  
Professional Soil Scientist

Enclosure

# Wetlands Delineation Map



Base Map Source: 2010 Bing Color Aerial Photograph with 1-foot Resolution

## Legend

- Proposed Alternate Tower Location
- APT Delineated Wetland Boundary
- Approximate Wetland Area
- Subject Parcel
- Connecticut Parcel

## Proposed MCM Telecommunications Facility 56 Hills Street East Hartford, Connecticut

Wednesday, January 16, 2013

