ATTACHMENT 4

WIRELESS COMMUNICATIONS FACILITY

CT1345 (SITE B)
EAST LYME RELO.
351A BOSTON POST ROAD
EAST LYME, CT 06333

SITE DIRECTIONS

FROM: 500 ENTERPRISE DRIVE
ROCKY HILL, CONNECTICUT

TO: 351A BOSTON POST RD
EAST LYME, CT

1.	HEAD NORTHEAST ON ENTERPRISE DR TOWARD CAPITAL BLVD	0.3 MI.
2.	TURN LEFT ONTO CAPITAL BLVD	0.2 MI.
3.	TURN LEFT ONTO WEST ST	0.3 MI.
4.	TURN LEFT TO MERGE ONTO I-91 S	0.3 MI.
5.	MERGE ONTO I-91 S	1.2 MI.
6.	TAKE EXIT 22S ON THE LEFT TO MERGE ONTO CT-9 S TOWARD MIDDLETOWN/OLD SAYBROOK	29.2 MI.
7.	TAKE THE EXIT ON THE LEFT ONTO I-95 N/US-1 N TOWARD NEW LONDON/PROVIDENCE	5.7 MI.
8.	TAKE EXIT 71 FOR 4 MILE RIVER RD	0.3 MI.
9.	TURN RIGHT ONTO 4 MILE RIVER RD	1.5 MI.
10.	TURN RIGHT ONTO US-1 N	2.0 MI.
11.	END AT 351A BOSTON POST RD	0.0 MI.

GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY AT&T.

SITE INFORMATION

THE SCOPE OF WORK SHALL INCLUDE:

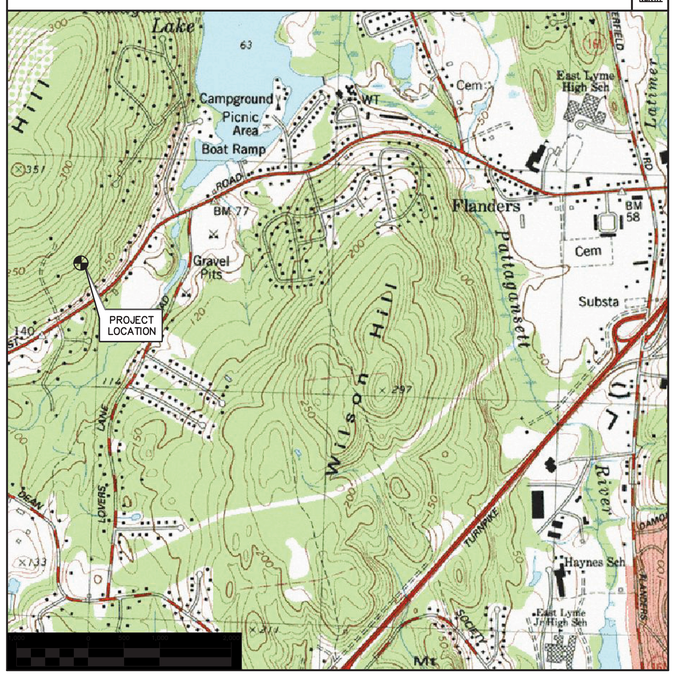
1. THE INSTALLATION OF A SHARED WIRELESS COMMUNICATION TOWER, AN AT&T EQUIPMENT SHELTER & T-MOBILE EQUIPMENT ON A CONC. PAD WITHIN A ±120'x70' GRAVEL FENCED COMPOUND AREA.
2. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
3. POWER AND TELCO UTILITIES SHALL BE ROUTED UNDERGROUND FROM RESPECTIVE DEMARCS TO THE PROPOSED UTILITY BACKBOARD. FINAL DEMARC LOCATION AND UTILITY ROUTING TO PROPOSED BACKBOARD WILL BE VERIFIED/DETERMINED BY LOCAL UTILITY COMPANIES. UTILITIES WILL BE ROUTED UNDERGROUND FROM UTILITY BACKBOARD TO THE PROPOSED NOMINAL 12'x20' TEMPORARY AT&T WIRELESS EQUIPMENT SHELTER AND TO T-MOBILES EQUIPMENT CABINETS LOCATED WITHIN FENCED COMPOUND AREA.

MISCELLANEOUS SITE INFORMATION

SCHOOL/DAYCARE FACILITY:	DISTANCE:
1. FLANDERS ELEMENTARY SCHOOL	1.24 mi.
2. EAST LYME HIGH SCHOOL	1.39 mi.
3. EAST LYME MIDDLE SCHOOL	1.59 mi.
4. CARELOT CHILDREN'S CENTER	1.59 mi.
5. KIDDIE KAMPUS LEARNING CENTER	1.61 mi.
6. CREATIVE PLAYSCHOOL, INC.	1.80 mi.
7. CHILDREN'S GATHERING	2.69 mi.
8. LYME FAMILY DAY CARE	2.93 mi.

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

SITE NAME:	EAST LYME RELO. – CT1345 (SITE B)
SITE ADDRESS:	351A BOSTON POST RD EAST LYME, CT 06333
PROPERTY OWNER:	A. JAMES & BONNIE L. DECOSTA 351A BOSTON POST RD EAST LYME, CT 06333
LESSEE/TENANT:	AT&T MOBILITY 500 ENTERPRISE DRIVE, SUITE 3A ROCKY HILL, CT 06067
CONTACT PERSON:	DAVID VIVIAN SAI COMMUNICATIONS (413) 218-5042
ENGINEER:	CENTEK ENGINEERING 63-2 NORTH BRANFORD ROAD, BRANFORD, CT 06405 (203) 488-0580
TOWER COORDINATES:	LATITUDE: 41°-21'-48.131" LONGITUDE: 72°-14'-20.279" EX. GROUND ELEVATION: 199.4'± A.M.S.L. COORDINATES AND GROUND ELEVATION BASED ON FAA 1-A SURVEY CERTIFICATION PREPARED BY MARTINEZ COUCH AND ASSOCIATES, DATED OCTOBER 10, 2014.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	3
C-1.0	ABUTTERS AND SITE ACCESS MAP	2
C-2.0	COMPOUND PLAN AND ELEVATION	2

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
3	09/28/15	CAG	LVP	CSC – REVISED PER CLIENT'S COMMENTS
2	05/04/15	CAG	HMR	CSC – REVISED PER CLIENT'S COMMENTS
1	04/29/15	CAG	HMR	CSC – TECH REPORT FILING
0	04/24/15	CAG	HMR	CSC – ISSUED FOR CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

STATE OF CONNECTICUT – REGISTERED PROFESSIONAL ENGINEER

at&t

SAI communications

CENTEK engineering
Centered on Solutions℠
(203) 488-0580
(203) 488-8587 Fax
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Branford, CT 06405
www.CentekEng.com

AT&T MOBILITY
WIRELESS COMMUNICATIONS FACILITY
EAST LYME RELO.
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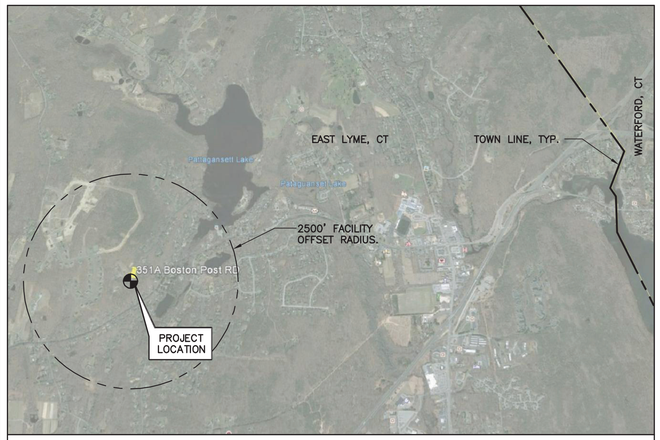
351A BOSTON POST ROAD
EAST LYME, CT 06333

DATE: 04/24/15
SCALE: AS NOTED
JOB NO. 15046.000

TITLE SHEET

T-1

Sheet No. 1 of 3



MUNICIPALITY NOTIFICATION LIMIT MAP

N/F
ORCHARDS AT
EAST LYME, INC.
375 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 29.1 162
MAILING ADDRESS:
PO BOX 55071 #16230
BOSTON, MA 02205-5071

N/F RICHARD W. &
EVELYN A. PERRY
351B BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 29.0 44
MAILING ADDRESS: SAME

N/F A. JAMES &
BONNIE L. DECOSTA
351A BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 29.0 45
MAILING ADDRESS: SAME

HOUSE

1 / C-2.0 PROPOSED TOWER COMPOUND LOCATION.

PROPOSED 12' WIDE GRAVEL ACCESS DRIVE TO PROPOSED COMPOUND

SUBJECT PROPERTY

N/F CYNTHIA L. &
LEWIS J. MOSTOWY
335 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 30.3 5
MAILING ADDRESS: SAME

N/F
HOWARD C. &
DIANE R. CIOCI
359 BOSTON POST RD
EAST LYME, CT 06333
PARCEL ID: 29.0 42
MAILING ADDRESS: SAME

N/F LEONIDE &
JOAN MARTIN
353 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 29.0 43
MAILING ADDRESS: SAME

N/F ROBERT H. LINDNER
347 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 29.0 47
MAILING ADDRESS: SAME

N/F CRAIG &
HEATHER TOOKER
345 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 30.3 1
MAILING ADDRESS:
342 BOSTON POST RD.
EAST LYME, CT 06333

N/F
JEANETTE D'ANNE LEFEBVRE
343 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 30.3 2
MAILING ADDRESS:
PO BOX 646
EAST LYME, CT 06333

N/F KIRK PETERSON
341 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 30.3 3
MAILING ADDRESS: SAME

N/F RONALD J. &
NANCY M. BIRCHALL
339 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 30.3 4
MAILING ADDRESS: SAME

N/F JEFFREY BEAUDRY
& CANDICE DIVITA
349 BOSTON POST RD.
EAST LYME, CT 06333
PARCEL ID 29.0 46
MAILING ADDRESS: SAME

SHED
HOUSE
GARAGE

BOSTON POST ROAD (CT ROUTE 1)

N

TRUE

SURVEY NOTES:

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THRU 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPT. 26, 1996. IT IS A TOPOGRAPHIC MAP AND IS BASED UPON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND A VERTICAL ACCURACY OF CLASS T-2 AND IS INTENDED TO BE USED TO DEPICT A PROPOSED TELECOMMUNICATION SITE.

VERTICAL DATUM IS BASED ON NAVD 88.

COORDINATES REFER TO NAD 83.

PARCEL OWNER OF RECORD: JAMES A. DeCOSTA & BONNIE L. DeCOSTA
PARCEL AREA = 7.23± ACRES.

PARCEL ID: 29.0 45 EAST LYME ASSESSOR'S OFFICE.

PARCEL IS IN ZONING DISTRICT R40

PARCEL IS IN ZONE X ON THE FLOOD INSURANCE RATE MAP, NEW LONDON COUNTY, CONNECTICUT, PANEL 476 OF 554, COMMUNITY PANEL NUMBER 09011C0476G, EFFECTIVE DATE JULY 18, 2011

SUBJECT PARCEL BENEFITS FROM AND IS BURDENED BY AGREEMENT VOL. 148 P. 361 FOR COMMON DRIVEWAY.

SUBJECT PARCEL IS SUBJECT TO EASEMENT IN FAVOR OF CONNECTICUT LIGHT AND POWER COMPANY VOL. 116 P. 101.

MAP REFERENCES:

1.) SECTION 2 APPLE HILL SUBDIVISION PROPERTY OF JAMES J. GALLAGHER & PETER IMMORDINO BOSTON POST ROAD EAST LYME CONN. SCALE 1"=100' DATE JANUARY 10, 1973. PREPARED BY HUB CORPORATION.

2.) FINAL SUBDIVISION SECTION I, APPLE HILL OF EAST LYME STEVENS ASSOCIATES OWNER AND DEVELOPER BOSTON POST ROAD EAST LYME CONN. SCALE 1"=40' DATE JULY 11, 1966. PREPARED BY ENGINEERING/LANDSCAPE COLLABORATIVE.

NOT ALL IMPROVEMENTS SHOWN.

TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL

A. RAFAEL MARTINEZ LLS #18833 DATE

1 / C-1.0 **ABUTTERS AND SITE ACCESS MAP**
SCALE: 1" = 50'

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/24/15	CAG	HMR	CSC - ISSUED FOR CLIENT REVIEW
1	04/27/15	CAG	HMR	CSC - TECH REPORT FILING
2	09/28/15	CAG	LVP	CSC - REVISED PER CLIENT'S COMMENTS

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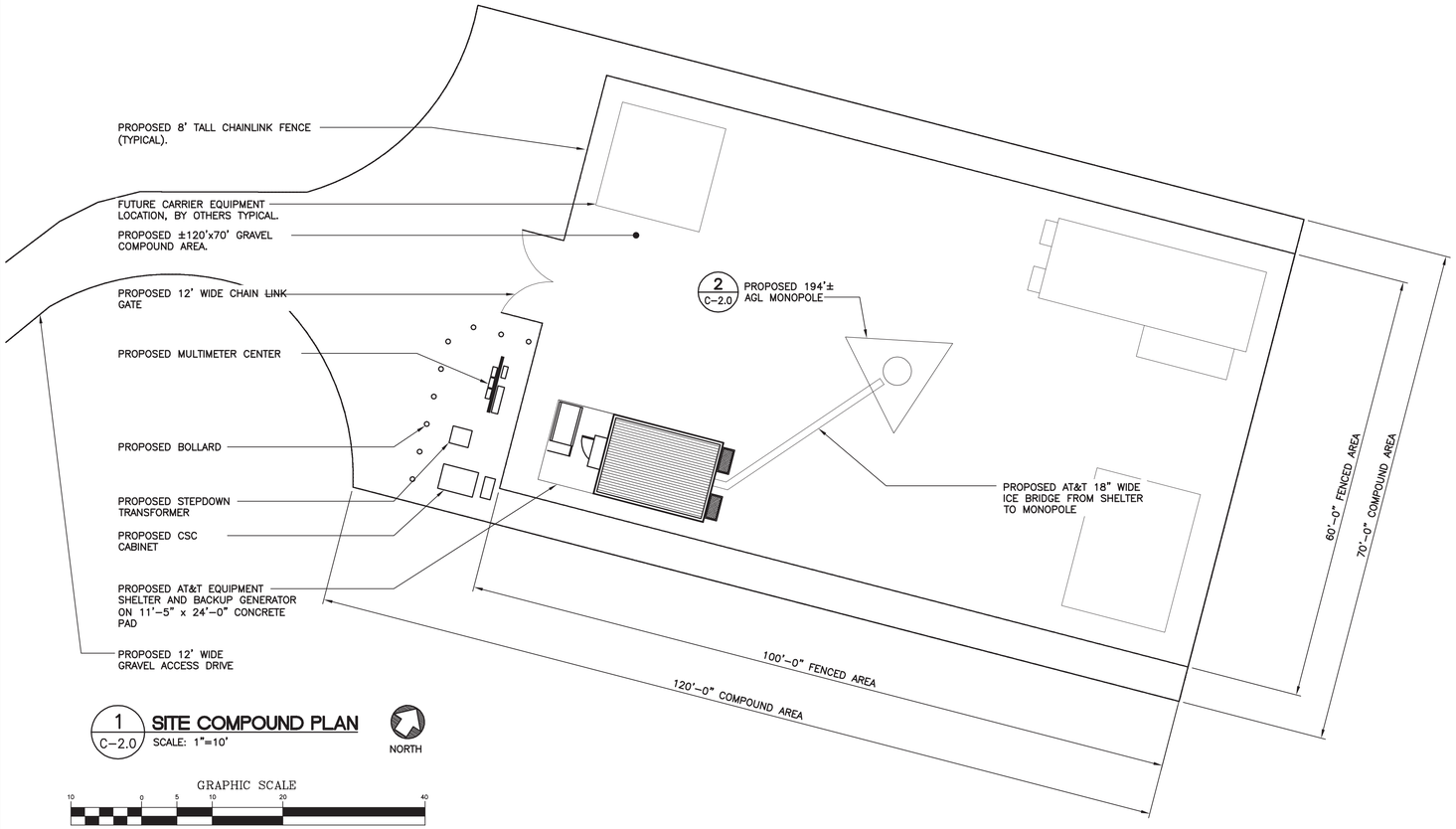
CT1345 (SITE B)
351A BOSTON POST ROAD
EAST LYME, CT 06333

DATE: 04/24/15
SCALE: AS NOTED
JOB NO. 15046.000

ABUTTERS AND SITE ACCESS MAP

C-1.0

Sheet No. 2 of 3

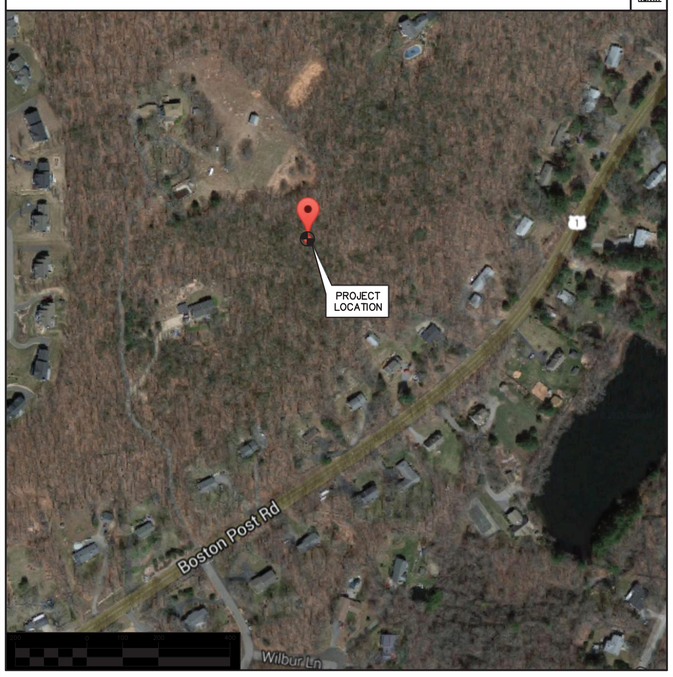


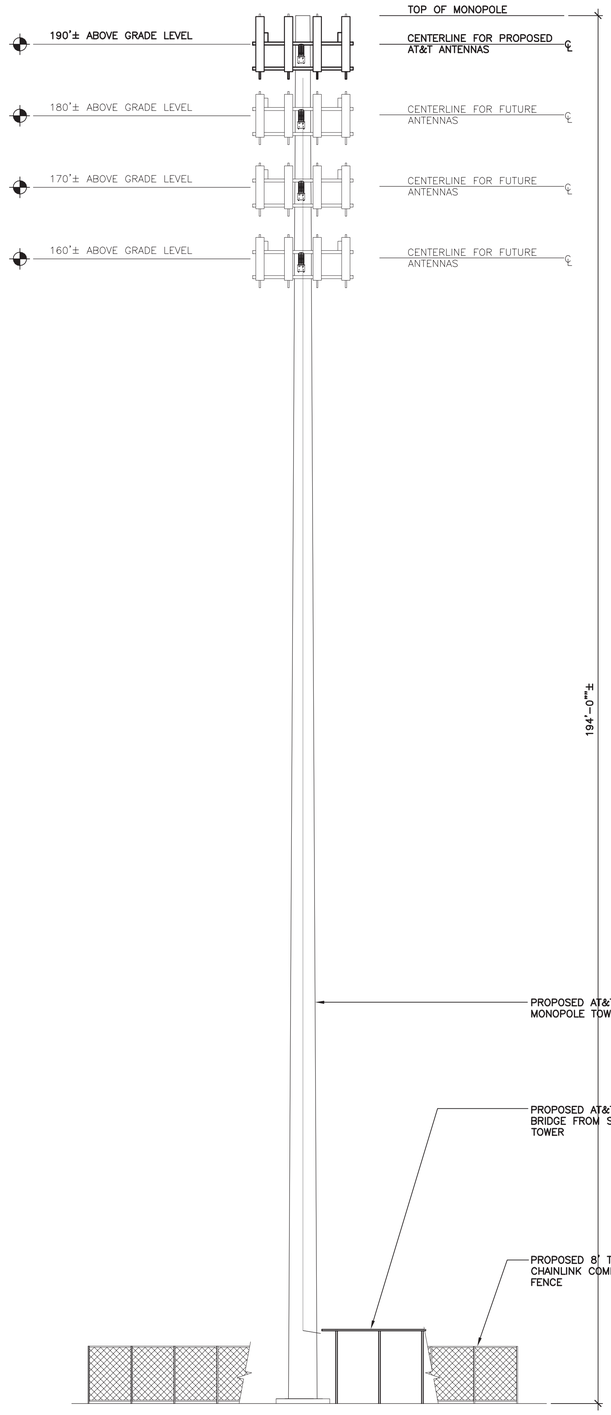
1 C-2.0 **SITE COMPOUND PLAN**
SCALE: 1"=10'

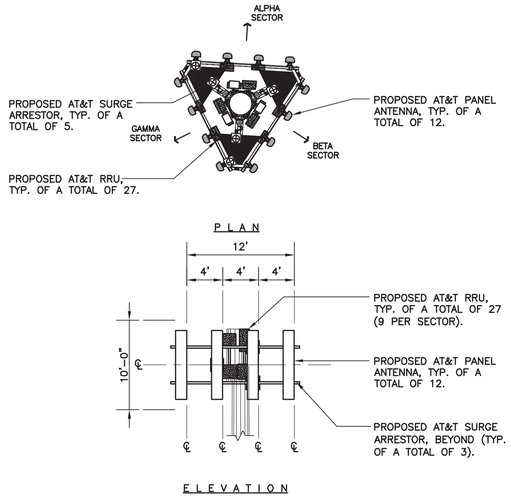
NORTH

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

AERIAL MAP SCALE: 1" = 200'







3 C-2.0 **ANTENNA MOUNTING CONFIGURATION**
SCALE: 1/8"=1'-0"

2 C-2.0 **TOWER EAST ELEVATION**
SCALE: 1"=10'

NORTH

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
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SCALE: AS NOTED
JOB NO. 15046.000

SITE DEVELOPMENT PLAN AND MISC. SITE DETAILS

C-2.0
Sheet No. 3 of 3

FAA 1-A SURVEY CERTIFICATION

Applicant:	American Tower 10 Presidential Way Woburn, MA 01801
Site Name:	EAST LYME
Address	351A Boston Post Road East Lyme, Connecticut 06333
Horizontal Datum:	NAD 83
Vertical Datum:	N.A.V.D. 88
Structure Type:	Proposed Monopole
Latitude: **Longitude:**	41°- 21'- 48.131" N NAD 83 72°- 14'- 20.279'' W NAD 83
Existing Ground Elevation:	199.4'± feet N.A.V.D. 88
Proposed Top of Monopole	199.0'± feet A.G.L. (398.4' ± N.A.V.D. 88)

Certification:

I certify that the Latitude and Longitude noted hereon are accurate to within ± 3 feet horizontally and that the site elevation is accurate to within ± 1 feet vertically. With a proposed top of tower of 199.0'± AGL, the overall height will be 398.4'± N.A.V.D. 88. The horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD 83) and are expressed in degrees minutes and seconds to the nearest thousandth of a second. The vertical datum (heights) are in terms of the North American Vertical Datum of 1988 and expressed to the nearest foot.

Company: Martinez Couch and Associates L.L.C.

Signature:

Surveyor/seal: Angel R. Martinez L. S. 18833

Date: October 10, 2014

TOWAIR Determination Results

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results	
Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.	
Your Specifications	
NAD83 Coordinates	
Latitude	41-21-48.1 north
Longitude	072-14-20.3 west
Measurements (Meters)	
Overall Structure Height (AGL)	59.1
Support Structure Height (AGL)	57.9
Site Elevation (AMSL)	60.7
Structure Type	
MTOWER - Monopole	

Tower Construction Notifications
Notify Tribes and Historic Preservation Officers of your plans to build a tower.

ATTACHMENT 5

ATTACHMENT 5

ENVIRONMENTAL ASSESSMENT STATEMENT

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

The tower site is located on a residential parcel of property that is mostly wooded. The lease area and proposed areas of disturbance are located in the northern corner of the Parcel. The closest wetland to the proposed tower facility is approximately 730'+/- away. There are no on-site wetlands. No direct impact to any wetlands or watercourses are anticipated as a result of the tower site construction. The overall amount of impervious surface is low in comparison to other development and storm water will be managed with Best Management Practices to be implemented during construction. (DEEP Sedimentation and Erosion Control manual 2002 and the ConnDot Drainage Manual.)

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. An emergency diesel fuel generator with secondary containment systems will comply with Connecticut Department of Energy and Environmental Protection ("CTDEEP") air standards for such facilities.

C. LAND

Some trees are proposed to be removed. Minimal cut and fill will be required for the facility. The remaining land of the lessor would remain undisturbed 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 3.42% of the MPE standard. Attachment 7 includes a copy of a Power Density Report for the facility.

F. VISIBILITY

The Visibility Analysis included in Attachment 8 contains an evaluation of the visibility of the proposed tower from the east and localized views from residential properties. Potential visibility was assessed within an approximately two (2) mile radius using a computer-based, predictive view shed model. Areas from where the proposed Facility would be visible above the tree canopy year-round comprise a total of approximately 144+/- acres. When leaves are off the trees, seasonal views through intervening tree trunks and branches are anticipated to occur over an additional ±851 acres. Topography, vegetation and the relative height of the tower will heavily obscure views of the tower from many locations in the study area during leaf on conditions, with the greatest visibility occurring in areas of 0.5 miles of the Site. No schools or licensed child

day care centers are located within 250' of the site. On-site at grade photographs are also included in the report prepared for SHPO.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

The Connecticut State Historic Preservation Officer ("SHPO"), United States Fish and Wildlife Service ("USFWS") and the Connecticut Department of Energy and Environmental Protection ("CTDEEP") have been contacted. Initial consultation with the USFWS revealed two federally-listed threatened species may occur in the vicinity of the proposed project; northern long-eared bat and the small whorled pogonia. CTDEEP has indicated that only the red bat, a State species of special concern, was identified on or within the vicinity of the site. No other species were identified by CTDEEP. CTDEEP recommended tree clearing activities for construction not occur between May 1 and August 15 when red bats are active. To date, no direct impact to a historical or natural resource has been identified by the project's consultants. The site is also under evaluation in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969 ("NEPA") and no known impacts to federally recognized environmental resources are known at this time.

ATTACHMENT 6

WETLAND INSPECTION

July 30, 2014

HPC Wireless Services,LLC
22 Shelter Rock Lane
Building C
Danbury, CT 06810

APT Project No.: CT255140

Re: Proposed East Lyme Facility
351A Boston Post Road
East Lyme, Connecticut

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by American Tower Corporation ("ATC") at 351A Boston Post Road in East Lyme, Connecticut ("Subject Property"). At your request, Matthew Gustafson, a Connecticut registered Soil Scientist with APT conducted an inspection of the Subject Property on July 16, 2014 to determine the presence or absence of wetlands and watercourses within approximately 200 feet of proposed development activities ("Study Area"). The delineation methodology followed was consistent with both the Connecticut Inland Wetlands and Watercourses Act (IWWA) and the *Corps of Engineers Wetland Delineation Manual* (1987) 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 residentially-developed Subject Property consists of an approximately 7.16 acre parcel identified as 351A Boston Post Road in East Lyme, Connecticut. The area proposed for the Facility is located in the northeast corner of the Subject Property in an area that is currently comprised of mature upland hardwood forest. Access to the Facility is proposed to come off Boston Post Road up the existing resident's driveway then veering off to the east through wooded uplands. The Study Area is dominated by mature upland hardwood forest consisting of a red, white, and black oak overstory and mountain laurel understory on a moderate southeast facing slope. The surrounding land-use consists of residential development and undeveloped forested areas.

No wetlands or watercourses were identified within the Study Area or on the Subject Property. The nearest wetland or watercourse resource to the proposed Facility is associated with a pond, bordering forested wetland and associated unnamed perennial stream system located approximately 900 feet to the south-southeast. The nearest wetland or watercourse resource to the proposed development (proposed access route) is located approximately 730 feet to the south-southeast, associated with the same wetland resource. This wetland system flows to the northeast draining into Pattagansett Lake, located approximately a third of a mile from the proposed Facility. Please refer to the enclosed Wetland Investigation Map for the approximate location of the identified resource area. General weather conditions encountered during the above-referenced inspection include mid 70° F temperatures with partly cloudy skies.

Soil Descriptions:

Soils field identified within and surrounding the Study Area are classified as Charlton-Chatfield complex and Canton and Charlton soils. The Canton series consists of very deep, well drained soils formed in a loamy mantle underlain by sandy glacial till. They are on nearly level to very steep glaciated plains, hills, and ridges. Slope ranges from 0 to 35 percent. Permeability is moderately rapid in the solum and rapid in the substratum. The soils developed in a fine sandy loam mantle over acid sandy glacial till of Wisconsin age derived mainly from granite and gneiss and some fine-grained sandstone. The Chatfield series consists of moderately deep, well drained, and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges from 0 to 70 percent. Crystalline bedrock is at depths of 20 to 40 inches. The soils formed in a moderately thick mantle of glacial till overlying granite, gneiss, or schist bedrock. Rock outcrops are rare to common and are limited to the more resistant bedrock; several large boulders were observed, however, no obvious rock outcrops were noted on the Subject Property during this investigation. The Charlton series is a very deep, well drained loamy soil formed in friable till. They are nearly level to very steep soils on till plains and hills. Depth to bedrock and the seasonal high water table is commonly more than 6 feet.

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 jurisdiction of the State of Connecticut Siting Council and therefore exempt from local regulation, although local wetland regulations are considered by the Siting Council. If wetlands are identified on the Subject Property and direct impact is proposed, those wetlands may be considered Waters of the United States and therefore the activity may also be subject to jurisdiction by the U.S. Army Corps of Engineers ("ACOE") New England District.

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

State of Connecticut: **Freshwater Wetlands:** 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 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 ACOE 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 ACOE.

Conclusion:

Based on APT's understanding of the proposed development, no direct or indirect impact to wetlands is anticipated due to the ± 730-foot distance separating the proposed development from the nearest wetland resource area.

If you have any questions regarding the above-referenced information, please feel free to contact me by phone at (860) 663-1697 ext. 202 or via email at mgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

Matthew Gustafson

Registered Soil Scientist

Enclosure

Wetland Investigation Map

Wetland Investigation Map

Legend

- Proposed Facility
- Proposed Access Route
- Subject Parcel
- Inland Wetland Soils

Proposed East Lyme Facility
351A Boston Post Road
East Lyme, Connecticut

Wednesday, July 30, 2014

ALL-POINTS TECHNOLOGY CORPORATION

Path: C:\All_Points_Tech\Projects\Client\ATC\EastLyme\GIS\Maps\CT_Wetlands_Delineation_Map.mxd

ATTACHMENT 7

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C Squared Systems, LLC

April 24, 2015

Connecticut Siting Council

Subject: New Cingular Wireless PCS, LLC ("AT&T") – CT1345C – 351A Boston Post Road, East Lyme, CT

Dear Connecticut Siting Council:

C Squared Systems has been retained by New Cingular Wireless PCS, LLC ("AT&T") to investigate RF Power Density levels for the AT&T antenna arrays, to be installed on the proposed monopole tower, to be located at 351A Boston Post Road in East Lyme, CT

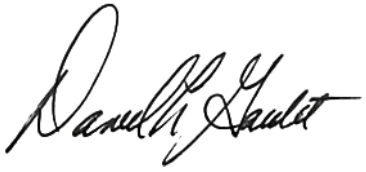
Calculations were done in accordance with FCC OET Bulletin 65. These worst-case calculations assume that all transmitters are simultaneously operating at full power and that there is 0 dB of cable loss. The calculation point is 6 feet above ground level to model the RF power density at the head of a person standing at the base of the tower.

Due to the directional nature of the proposed AT&T and T-Mobile antennas, the majority of the RF power is focused out towards the horizon. As a result, there will be less RF power directed below the antennas relative to the horizon, and consequently lower power density levels around the base of the tower. Please refer to the Attachment for the vertical patterns of the proposed AT&T and T-Mobile antennas. The calculated results below include a nominal 10 dB off-beam pattern loss to account for the lower relative gain directly below the antennas.

Location	Carrier	Vertical Distance to Antenna (Ft.)	Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Power Density (mw/cm^2)	Limit	%MPE
Ground Level	AT&T UMTS	190	880	1	1028	0.0011	0.5867	0.19%
	AT&T UMTS	190	1900	1	1265	0.0013	1.0000	0.13%
	AT&T LTE	190	710	2	1254	0.0027	0.4733	0.56%
	AT&T LTE	190	880	1	1542	0.0016	0.5867	0.28%
	AT&T LTE	190	1900	3	1897	0.0060	1.0000	0.60%
	AT&T LTE	190	2300	1	2179	0.0023	1.0000	0.23%
	T-Mobile UMTS	180	1900	1	1706	0.0020	1.0000	0.20%
	T-Mobile GSM	180	1900	2	2558	0.0061	1.0000	0.61%
	T-Mobile UMTS	180	2100	1	1706	0.0020	1.0000	0.20%
	T-Mobile LTE	180	2100	1	3413	0.0041	1.0000	0.41%
							Total	**3.42%**

Summary: Under worst-case assumptions, RF Power Density levels for the proposed AT&T and T-Mobile antenna arrays will not exceed 3.4**2%**[1] of the FCC MPE limit for General Public/Uncontrolled Environments.

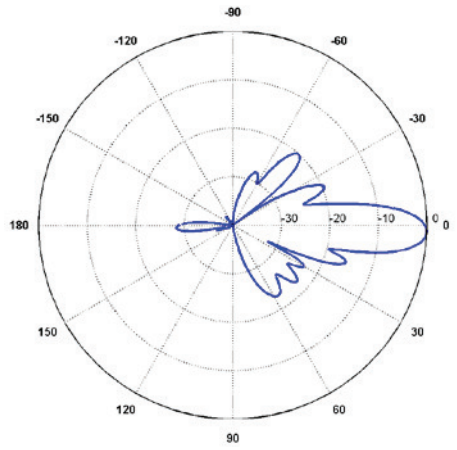
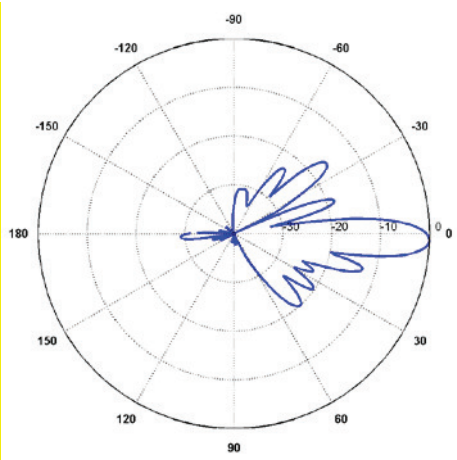
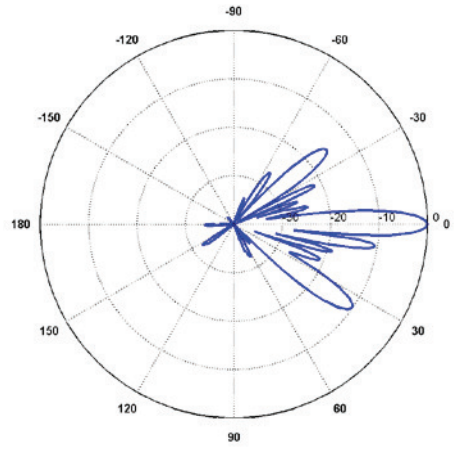
Sincerely,



Daniel L. Goulet
C Squared Systems, LLC

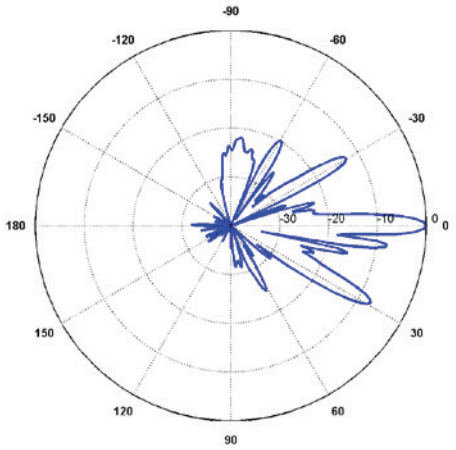
[1] The total %MPE is a summation of each unrounded contribution. Therefore, summing each rounded value may not reflect the total value listed in the table.

Attachment: AT&T's Antenna Data Sheets and Electrical Patterns

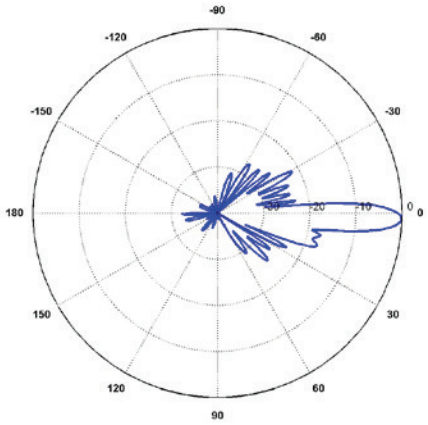
750 MHz Manufacturer: CCI Products Model #: HPA-65R-BUU-H8 Frequency Band: 698-806 MHz Gain: 13.2 dBd Vertical Beamwidth: 10.1° Horizontal Beamwidth: 65° Polarization: Dual Pol ± 45° Size L x W x D: 92.4" x 14.8" x 7.4"	
850 MHz Manufacturer: CCI Products Model #: HPA-65R-BUU-H8 Frequency Band: 824-894 MHz Gain: 14.1 dBd Vertical Beamwidth: 8.4° Horizontal Beamwidth: 61° Polarization: Dual Pol ± 45° Size L x W x D: 92.4" x 14.8" x 7.4"	
1900 MHz Manufacturer: CCI Products Model #: HPA-65R-BUU-H8 Frequency Band: 1850-1990 MHz Gain: 15.0 dBd Vertical Beamwidth: 5.6° Horizontal Beamwidth: 62° Polarization: Dual Pol ± 45° Size L x W x D: 92.4" x 14.8" x 7.4"	

2300 MHz

Manufacturer:	CCI Products
Model #:	HPA-65R-BUU-H8
Frequency Band:	2305-2360 MHz
Gain:	15.6 dBd
Vertical Beamwidth:	4.5°
Horizontal Beamwidth:	60°
Polarization:	Dual Pol ± 45°
Size L x W x D:	92.4" x 14.8" x 7.4"



Attachment: T-Mobile's Antenna Data Sheets and Electrical Patterns

1900 MHz Manufacturer: RFS Products Model #: APX16DWV-16DWVS Frequency Band: 1850-1990 MHz Gain: 15.6 dBd Vertical Beamwidth: 7.7° Horizontal Beamwidth: 64° Polarization: Dual Pol ± 45° Size L x W x D: 55.9" x 13" x 3.15"	
2100 MHz Manufacturer: RFS Products Model #: APX16DWV-16DWVS Frequency Band: 1900-2200 MHz Gain: 15.9 dBd Vertical Beamwidth: 6.6° Horizontal Beamwidth: 65° Polarization: Dual Pol ± 45° Size L x W x D: 55.9" x 13" x 3.15"