Attachment 4

ATTACHMENT 4

Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

No significant water flow and/or water quality changes are anticipated as a result of the construction or operation of the proposed facility. The construction and operation of the tower and related site improvements will have no direct 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. 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-powered generator for emergency power is proposed which will have compliant air emissions associated with its operation.

C. LAND

Clearing and grading will be necessary for the access drive and the compound area. The remaining land of the host parcel and the access parcel 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 six to eight 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 6.9% of the federally promulgated emissions standard. Attached is a copy of a Power Density Report dated February 8, 2013 prepared by AT&T's radio frequency consultant C Squared Systems.

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. The majority of year-round visibility associated with the proposed Facility occurs over portions of Second Hill Road, located to the southeast of the proposed facility. Year-round visibility would be limited to these areas due to the topography and vegetative cover in the area.

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 that has been formally documented as unique. The Connecticut State Historic Preservation Officer ("SHPO") has provided a "no effect" determination. Available Natural Diversity Database maps indicate no extant endangered or special concern species and a final confirmation by the Connecticut Department of Energy and Environmental Protection is forthcoming.

C Squared Systems
65 Dartmouth Drive
Auburn, NH 03032
603-644-2800
support@csquaredsystems.com

C Squared Systems, LLC

February 8, 2013

Connecticut Siting Council

Subject: New Cingular Wireless, Bridgewater, 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 111 Second Hill Rd, Bridgewater, 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^2)	Limit	% FCC MPE Limit General Public/ Uncontrolled
Ground Level	AT&T UMTS	156	880	1	500	0.0080	0.5867	1.36%
	AT&T UMTS	156	1900	1	500	0.0080	1.0000	0.80%
	AT&T LTE	156	734	1	500	0.0080	0.4893	1.63%
	AT&T GSM	156	880	3	296	0.0142	0.5867	2.42%
	AT&T GSM	156	1900	1	427	0.0068	1.0000	0.68%
							Total	**6.90%**

Summary: Under worst-case assumptions, the RF Power Density at the proposed site located at 111 Second Hill Rd, Bridgewater, CT will not exceed 6.90% of the FCC MPE limit for General Public/Uncontrolled Environments.

Sincerely,

anthony wells

Anthony Wells
Managing Partner

TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** 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

PASS SLOPE(50:1): NO FAA REQ-RWY 10499 MTRS OR LESS & 7502.65 MTRS (7.50269) KM AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	41-33-56.00N	073-27-35.00W	CANDLELIGHT FARMS	LITCHFIELD NEW MILFORD, CT	197.8	883.89999999999998

PASS SLOPE(25:1): NO FAA REQ-HELIPORT 7597.74 MTRS (7.59769 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
HELI	C	41-34-4.00N	073-27-38.00W	CANDLELIGHT	LITCHFIELD NEW MILFORD, CT	205.7	15.199999999999999

Your Specifications

NAD83 Coordinates

Latitude	41-33-17.9 north
Longitude	073-22-15.2 west

Measurements (Meters)

Overall Structure Height (AGL)	48.8
Support Structure Height (AGL)	48.8
Site Elevation (AMSL)	276.8

Structure Type

MTOWER - Monopole

ALL-POINTS TECHNOLOGY CORPORATION

WETLAND INVESTIGATION

November 7, 2012

New Cingular Wireless PCS, LLC
500 Enterprise Drive, Suite 3A
Rocky Hill, CT 06067

APT Project No.: CT193870

Attn: Tim Burks

Re: Proposed AT&T Facility
111 Second Hill Road
Bridgewater, Connecticut

Dear Mr. Burks,

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by New Cingular Wireless PCS, LLC ("AT&T") at 111 Second Hill Road in Bridgewater, Connecticut. An APT Professional Soil Scientist, Dean Gustafson, inspected the Site on October 26, 2012 for the purposes of reviewing and reflagging a previous delineation of wetland resources. The results of this wetland investigation are provided below.

Site and Project Description:

The subject property consists of an approximately 4.5 acre parcel developed with a residence identified as 111 Second Hill Road in Bridgewater, Connecticut. The surrounding land-use consists of residences and agriculture.

AT&T proposes to construct its new telecommunications Facility in an undeveloped wooded corridor in the property's northeast corner (the "Site") as depicted on the attached Site Access Map (sheet C02) prepared by CHA with latest revision date 01/25/11. The Site is currently occupied by red maple, red oak, black cherry and white ash. The proposed Facility would consist of a self-supporting monopole tower (160 feet in height) and a single shelter designed to house AT&T's equipment and a diesel generator; the tower and equipment would be surrounded by a chain link fence and underlain with gravel. Access to the Facility is proposed via a new gravel drive extending approximately 353 feet east from Second Hill Road.

The Site was previously investigated for wetlands by Dean Gustafson, Professional Soil Scientist with Vanasse Hangen Brustlin, Inc. ("VHB"), on January 11, 2011. A scrub/shrub wetland area was identified in the northwest corner of the Site and delineated with wetland flags WF 1 to 10. Refer to the attached Site Access Map. A review of this delineation on October 26, 2012 revealed most of the wetland flags still existed but were generally illegible; new flagging was added where necessary. The wetland boundary was found to be substantially accurate with no corrections required.

Regulation of Wetlands:

Wetlands and watercourses are regulated by local, state and federal regulations, with the local and state sharing definitions of these resources whereas the federal definition differs. The proposed Facility is under the exclusive jurisdiction of the State of Connecticut Siting Council, and therefore exempt from local regulation. Wetlands identified on the Site are considered Waters of the United States and therefore any impact would be subject to jurisdiction by the U.S. Army Corps of Engineers ("ACOE") New England District.

Town of Bridgewater: The Town of Bridgewater 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: 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.

U.S.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."

Soil Description:

Soil types encountered throughout the study area were generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service ("NRCS"). The exception is the lack of mapped wetland soils on the Site by NRCS, which was field identified as Ridgebury fine sandy loam. The non-wetland soils were examined along the wetland boundary and more distant upland areas during the delineation and found to be dominated by Woodbridge fine sandy loam and Paxton and Montauk fine sandy loams. Detailed descriptions of wetland and upland soil types are provided below.

Wetland Soils:

The **Ridgebury** series consists of very deep, somewhat poorly and poorly drained soils formed in glacial till derived mainly from granite, gneiss and schist. They are nearly level to gently sloping soils in low areas in uplands. This series includes phases that are poorly drained and the wetter part of somewhat poorly drained. A perched, fluctuating water table above the dense till saturates the solum to or near the surface for 7 to 9 months of the year.

Upland Soils:

The **Woodbridge** series consists of moderately well drained loamy soils formed in compact, subglacial till. They are very deep to bedrock. They are nearly level to moderately steep soils on till plains, hills, and drumlins. Depth to the compact layer (hardpan) is 18 to 40 inches. Depth to bedrock is commonly more than 6 feet. Woodbridge soils have a seasonal high water table on top of the compact layer (18-40") from fall through late spring.

The **Paxton** and **Montauk** series consists of very deep, well drained loamy soils formed in subglacial till derived primarily from granitic materials. The soils formed in thick moderately coarse or medium textured glacial till mantles underlain by firm to dense sandy till (known locally as hardpan). They are nearly level to steep soils on till plains, hills, and drumlins. The depth to the densic contact and material is commonly 20 to 40 inches but the range includes 18 to 40 inches. Depth to bedrock is commonly more than 6 feet. Permeability is moderate or moderately rapid in the solum and slow or moderately slow in the substratum.

Wetlands Discussion:

Wetland 1 Classification Summary:

Wetland 1[1] (WF 1 - 10)	System Palustrine	Subsystem	Class Scrub-Shrub	Subclass Broad-leaved Deciduous	Water Regime Saturated	Special Modifier Partly Drained
Watercourse Type (none)	Perennial ☐	Intermittent ☐	Tidal ☐	**Special Aquatic Habitat** (none)	Vernal Pool ☐	Other ☐

Wetland 1 Description:

Wetland 1 is a relatively small scrub/shrub area located along the east side of Second Hill Road. The wetland hydrology appears to be affected by an under drain along Second Hill Road and a culvert conveying flows to the west under the road. Although native vegetation is present within this wetland feature, both within the wetland and adjoining upland area, there is an abundance of invasive species including multiflora rose, reed canary grass, Japanese barberry, Japanese honeysuckle bush, Asian bittersweet and winged euonymus.

Wetland 1 Dominant Vegetation:

Dominant Wetland Species Common Name (*Latin Name*)	Dominant Adjacent Upland Species Common Name (*Latin Name*)
green ash (*Fraxinus pennsylvanica*)	red maple (Acer rubrum)
common winterberry (*Ilex verticillata*)	Red oak (Quercus rubrum)
gray dogwood (*Cornus racemosa*)	Black cherry (Prunus serotina)
multiflora rose (*Rosa multiflora*)*	Oriental bittersweet (Celastrus orbiculatus)*
fox grape (*Vitis labrusca*)	multiflora rose (Rosa multiflora)*
goldenrod sp. (*Solidago sp.*)	winged burning bush (Euonymus alatus)*
reed canary grass (*Phalaris arundinacea*)*	Japanese honeysuckle bush (Lonicera sp.)*
Sensitive fern (*Onoclea sensibilis*)	Japanese barberry (Berberis thunbergii) *

* denotes Connecticut Invasive Plants Council invasive species

[1] 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.

Summary:

Based on a review of the Site Access Map prepared by CHA - (revision date 01/25/11), no direct impact to wetlands is associated with the proposed AT&T development. Although portions of the proposed access drive are located in close proximity to wetland resources (within approximately 8 feet of wetland flag 6), no temporary impacts associated with construction activities are anticipated provided sedimentation and erosion controls are designed, installed and maintained during construction activities in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control*. Long term secondary impacts to wetland resources possibly associated with the operation of this Facility are minimized by the fact the development is unmanned, it minimizes the creation of impervious surfaces with the use of a gravel access drive and gravel compound, and it creates minimal traffic. APT recommends that stormwater generated by the proposed development be properly handled and treated in accordance with the *2004 Connecticut Stormwater Quality Manual*. Provided these recommendations are implemented, it is APT's opinion that the proposed AT&T development will not result in a likely adverse impact to wetland resources.

In addition, as no direct impact to federal wetlands is associated with AT&T'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 or at dgustafson@allpointstech.com.

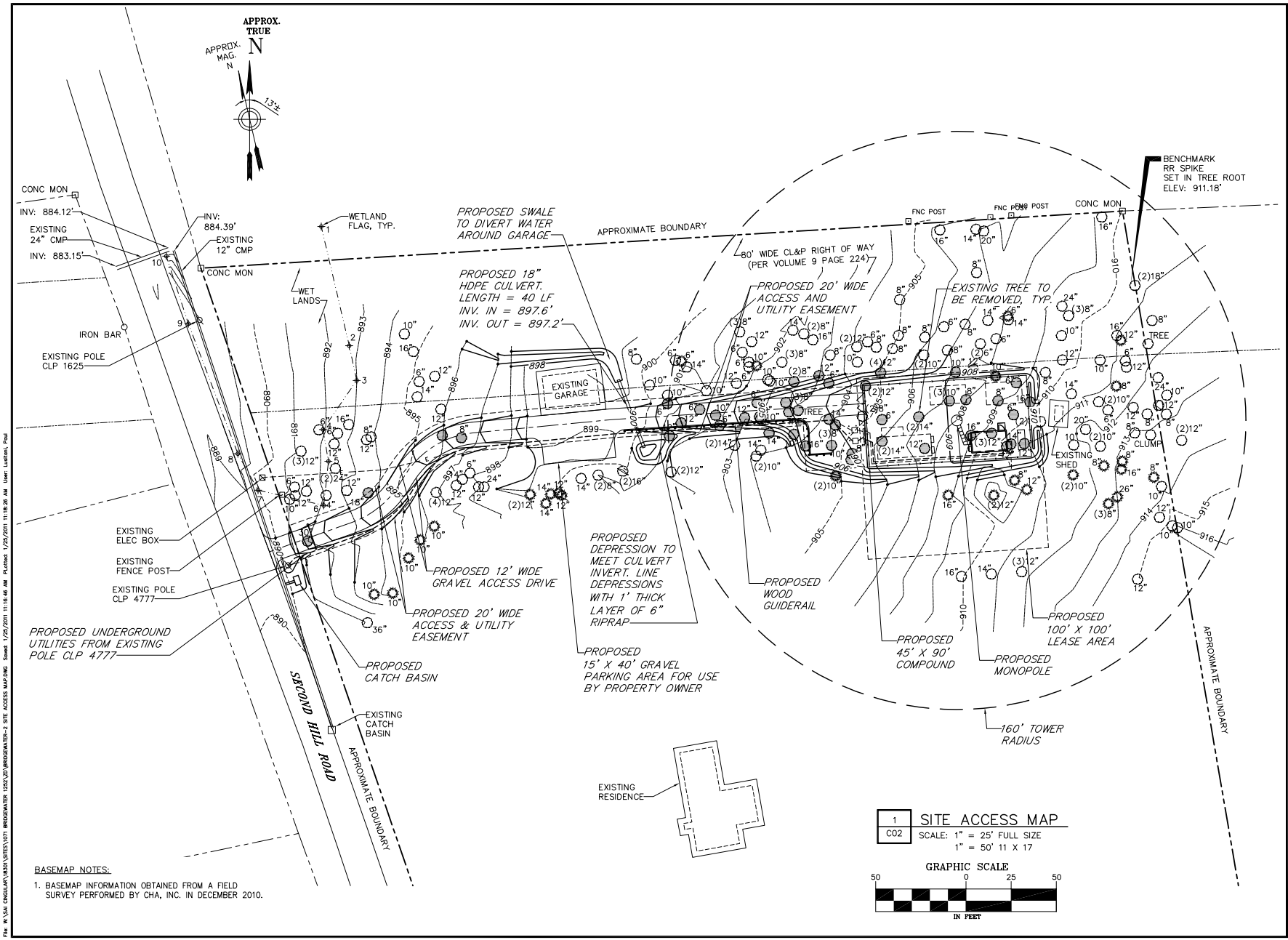
Sincerely,

All-Points Technology Corporation, P.C.

Dean Gustafson
Professional Soil Scientist

Enclosure

CHA Site Access Map
latest revision 01/25/11



1 / C02 SITE ACCESS MAP

SCALE: 1" = 25' FULL SIZE
1" = 50' 11 X 17

BASEMAP NOTES:

1. BASEMAP INFORMATION OBTAINED FROM A FIELD SURVEY PERFORMED BY CHA, INC. IN DECEMBER 2010.

at&t
Your world. Delivered.

NEW CINGULAR WIRELESS PCS, LLC
500 ENTERPRISE DRIVE
ROCKY HILL, CT 06067

CHA
2136 Silas Deane Highway, Suite 212 Rocky Hill, CT 06067-2336
Main: (860) 257-4567 www.chacompanies.com

CHA PROJECT NO:
18301 – 1071 – 43000

NO.	SUBMITTAL		
0	12/23/10	ISSUED FOR CSC CERTIFICATE	
	BY: JDM	CHK: PAL	APP'D: JPS
1	01/25/11	MOVED ROAD	
	BY: PAL	CHK: PAL	APP'D: PAL

SITE ID:
SR1252
SITE NAME:
BRIDGEWATER
SITE ADDRESS:
111 SECOND HILL ROAD
BRIDGEWATER, CT
06752
LITCHFIELD COUNTY

SHEET TITLE
SITE ACCESS MAP

SHEET NUMBER
C02