STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

August 23, 2010

Steven L. Levine
Real Estate Consultant
New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-118-100804** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 95 Halpin Lane, Ridgefield, Connecticut.

Dear Mr. Levine:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated August 4, 2010, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Melanie Bachman
Acting Executive Director

MB/CDM/laf

c: The Honorable Rudolph P. Marconi, First Selectman, Town of Ridgefield
Betty Brosius, Town Planner, Town of Ridgefield
Daniel J. Garstka, Senior Engineer, Transmission Projects, Northeast Utilities Service Company

G:\EM\CINGULAR\RIDGFLD\[illegible]\HalpinLe.DOC

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Internet: ct.gov/csc

Daniel F. Caruso
Chairman

August 9, 2010

The Honorable Rudolph P. Marconi
First Selectman
Town of Ridgefield
Town Hall
400 Main Street
Ridgefield, CT 06877

RE: **EM-CING-118-100804** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 95 Halpin Lane, Ridgefield, Connecticut.

Dear First Selectman Marconi:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by August 23, 2010.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jbw

Enclosure: Notice of Intent

c: Betty Brosius, Town Planner, Town of Ridgefield

EM-CING-118-100804

ular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

Steven L. Levine
Real Estate Consultant

ORIGINAL

HAND DELIVERED

August 4, 2010

Honorable Daniel F. Caruso, Chairman,
and Members of the Connecticut Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 95 Halpin Lane, Ridgefield, (owner, CL&P)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will be unaffected.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.

3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.

4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, New Cingular Wireless respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,

Steven L. Levine
Real Estate Consultant

Attachments

NEW CINGULAR WIRELESS
Equipment Modification

95 Halpin Lane, Ridgefield
Site Number 5068
Pet 489 approved 12/00

Tower Owner/Manager: CL&P

Equipment Configuration: Powermount

Current and/or Approved: Six Allgon panel antennas @ 116 ft AGL
Six runs 1 5/8 inch coax cable
Existing concrete pad with outdoor cabinets

Planned Modifications: Remove existing antennas
Install six Powerwave P65-15 antennas (or equiv.) @ 116 ft
Install six TMA's @ 116 ft
Install two new outdoor UMTS cabinets

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 2.2 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density following proposed modifications would be approximately12.6 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							0.00
AT&T GSM *	115	1900 Band	8	100	0.0218	1.0000	2.18
Total							**2.2%**

* Per CSC records

Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							0.00
AT&T UMTS	116	880 - 894	1	500	0.0134	0.5867	2.28
AT&T UMTS	116	1900 Band	2	500	0.0267	1.0000	2.67
AT&T GSM	116	1900 Band	2	427	0.0228	1.0000	2.28
AT&T GSM	116	880 - 894	4	296	0.0316	0.5867	5.39
Total							**12.6%**

* Per CSC records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed equipment modifications. (Centek, 7/10/10)

PROJECT INFORMATION

SCOPE OF WORK:	UNMANNED TELECOMMUNICATIONS FACILITY MODIFICATIONS
SITE ADDRESS:	95 HALPIN LANE RIDGEFIELD, CT 06877
LATITUDE:	41.282492 N 41° 16' 56.97" N
LONGITUDE:	-73.486899 W -73° 29' 12.84" W
JURISDICTION:	NATIONAL, STATE & LOCAL CODES OR ORDINANCES
CURRENT USE:	TELECOMMUNICATIONS FACILITY
PROPOSED USE:	TELECOMMUNICATIONS FACILITY
NOC#	866-915-5600

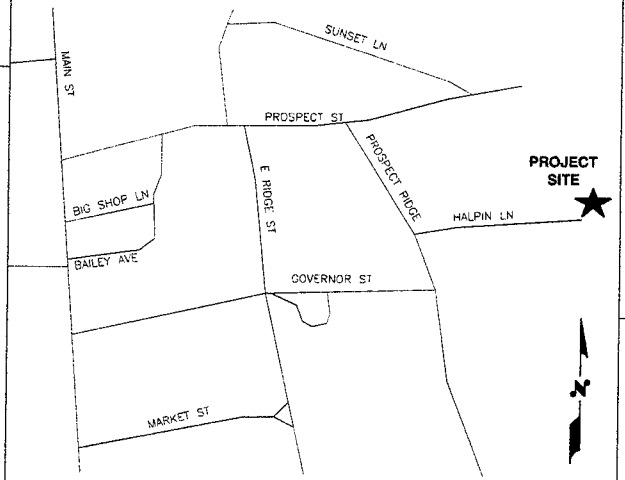
at&t

SITE NUMBER: CT5068
NORTH RIDGEFIELD
CL&P POLE #3308

DRAWING INDEX

VICINITY MAP

START OUT GOING NORTHEAST ON ENTERPRISE DR TOWARD CAPITOL BLVD. 0.4 MI TURN LEFT ONTO CAPITOL BLVD. 0.3 MI TURN LEFT ONTO WEST ST. 0.3 MI MERGE ONTO I-91 S VIA THE RAMP ON THE LEFT TOWARD NEW HAVEN. 9.1 MI MERGE ONTO I-691 W VIA EXIT 18 TOWARD MERIDEN/WATERBURY. 7.9 MI MERGE ONTO I-84 W VIA EXIT 1 ON THE LEFT TOWARD WATERBURY/DANBURY. 37.1 MI KEEP LEFT TO TAKE US-7 S VIA EXIT 3 TOWARD NORWALK. 4.9 MI TURN RIGHT ONTO DANBURY RD/CT-35. 2.6 MI TURN LEFT ONTO GROVE ST. 0.5 MI TURN LEFT ONTO PROSPECT ST. 0.1 MI TURN RIGHT ONTO PROSPECT RDG. 0.2 MI TURN LEFT ONTO HALPIN LN. 0.2 MI 95 HALPIN LN IS ON THE LEFT.



GENERAL NOTES

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL

BEFORE YOU DIG

CALL TOLL FREE 800-922-4455

UNDERGROUND SERVICE ALERT

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 2-101
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI communications
22 KEEWAYDIN DRIVE
SALEM, NH 03079

SITE NUMBER: CT5068
SITE NAME: NORTH RIDGEFIELD - CL&P POLE #3308
95 HALPIN LANE
RIDGEFIELD, CT 06877
FAIRFIELD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

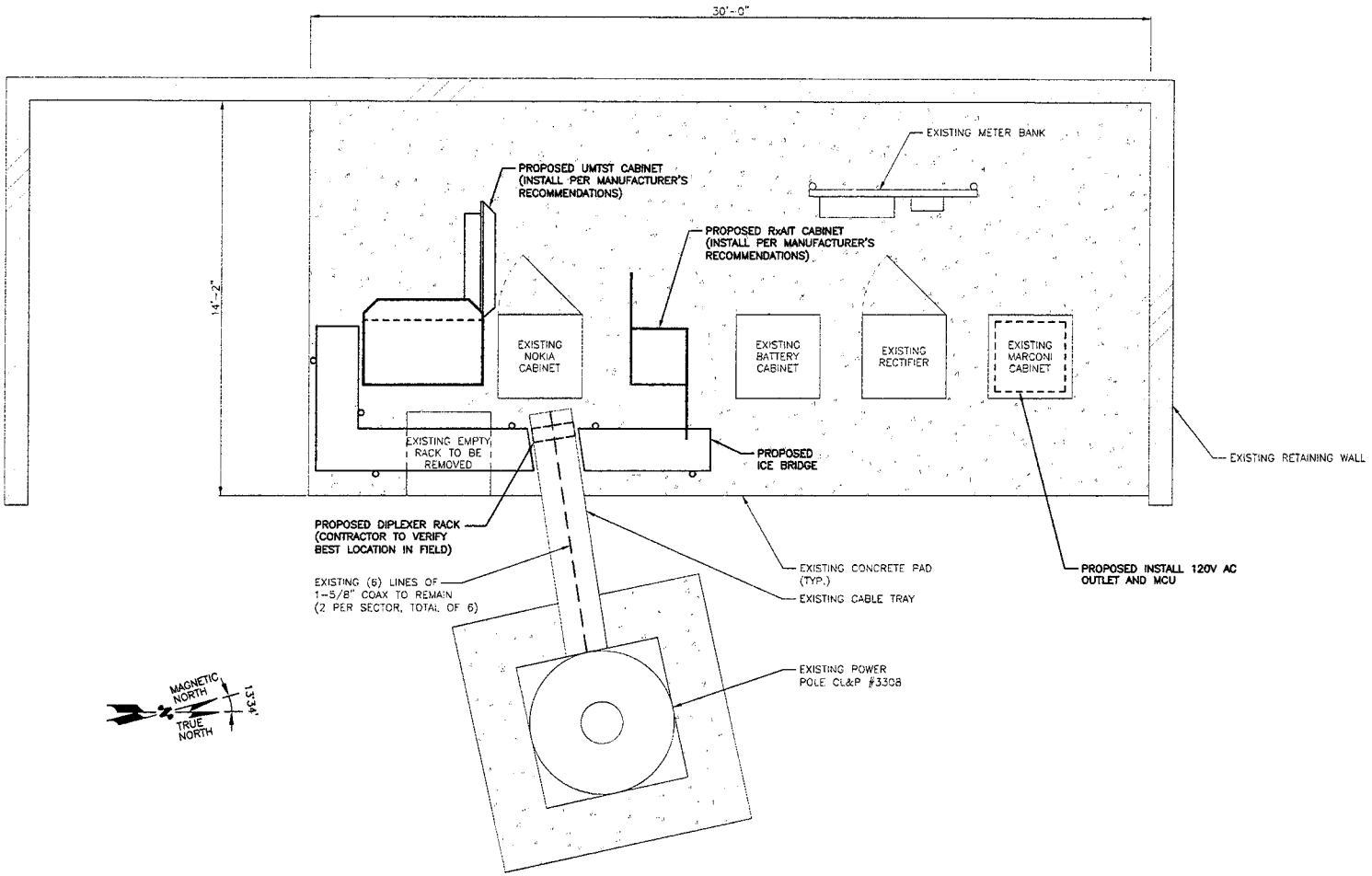
NO.	DATE	REVISIONS	BY	CHK	APP'D
2	07/28/10	CONSTRUCTION FINAL	DB	DC	DPH
1	07/26/10	CONSTRUCTION REVISED	DB	DC	DPH
0	06/09/10	ISSUED FOR CONSTRUCTION	DB	DC	DPH

SCALE: AS SHOWN DESIGNED BY: DC DRAWN BY: DB

AT&T

TITLE SHEET
UMTS

JOB NUMBER	DRAWING NUMBER	REV
5068.01	T-1	2



COMPOUND PLAN

SCALE: 1/2"=1'-0"

0 1'-0" 2'-0" 4'-0" 6'-0"

Hudson Design Groupllc
1400 OSGOOD STREET
BUILDING 20 NORTH, SUITE 2-101
N. ANDOVER MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI communications
22 KEEWAYDIN DRIVE
SALEM, NH 03079

SITE NUMBER: CT5068
SITE NAME: NORTH
RIDGEFIELD - CL&P POLE #3308
95 HALPIN LANE
RIDGEFIELD, CT 06877
FAIRFIELD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

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SCALE: AS SHOWN | DESIGNED BY: DC | DRAWN BY: DB

AT&T

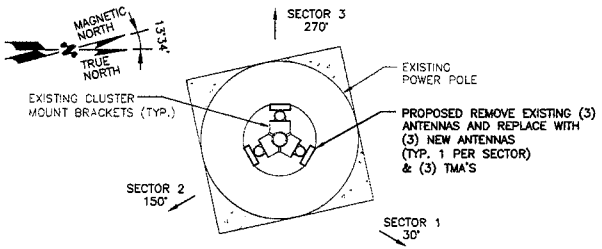
COMPOUND PLAN
UMTS

JOB NUMBER	DRAWING NUMBER	REV
9068.01	A-1	2

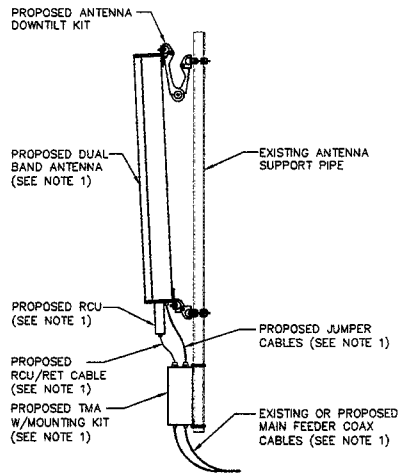
RF TABLE									
SECTOR	SECTOR NAME	ANTENNA MAKE & MODEL	ANTENNA COUNT	AZIMUTH	RAD CENTER	MECHANICAL DOWNTILT	TMA COUNT	DIPLEXER COUNT	# OF COAX CABLES
1	ALPHA	POWERWAVE P65-15-XLH-RR	1 PROPOSED 0 EXISTING	30°*	116'±	0*	1 PROPOSED-POWERWAVE TT08-19DB11-001	0 PROPOSED 0 EXISTING	0 PROPOSED 2 EXISTING
2	BETA	POWERWAVE P65-15-XLH-RR	1 PROPOSED 0 EXISTING	150°*	116'±	0*	1 PROPOSED-POWERWAVE TT08-19DB11-001	0 PROPOSED 0 EXISTING	0 PROPOSED 2 EXISTING
3	GAMMA	POWERWAVE P65-15-XLH-RR	1 PROPOSED 0 EXISTING	270°*	116'±	0*	1 PROPOSED-POWERWAVE TT08-19DB11-001	0 PROPOSED 0 EXISTING	0 PROPOSED 2 EXISTING

NOTE:
ANTENNA & MOUNTING DETAILS SHALL CONFORM TO REFERENCED STRUCTURAL CALCULATIONS & TOWER MANUFACTURER'S RECOMMENDATIONS.
FOR ANTENNA & COAX MOUNTING DETAIL REFER TO STRUCTURAL ANALYSIS REPORT BY OTHERS.

NOTE:*
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.



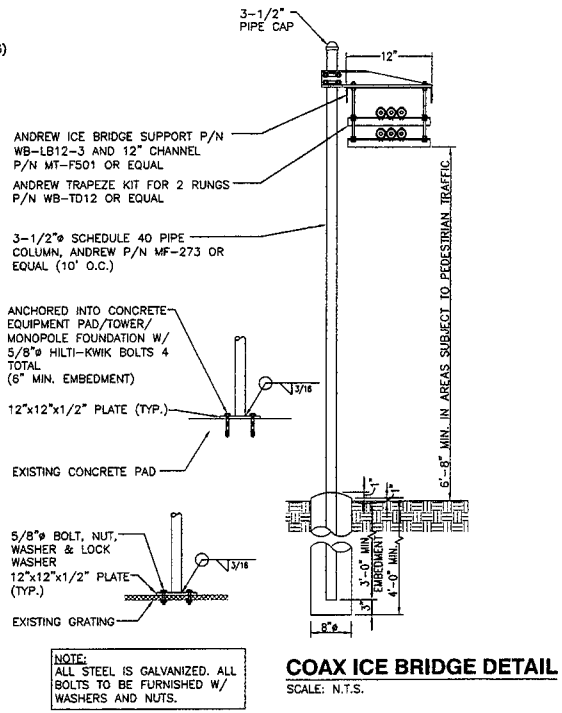
ANTENNA PLAN
SCALE: N.T.S.



NOTES:

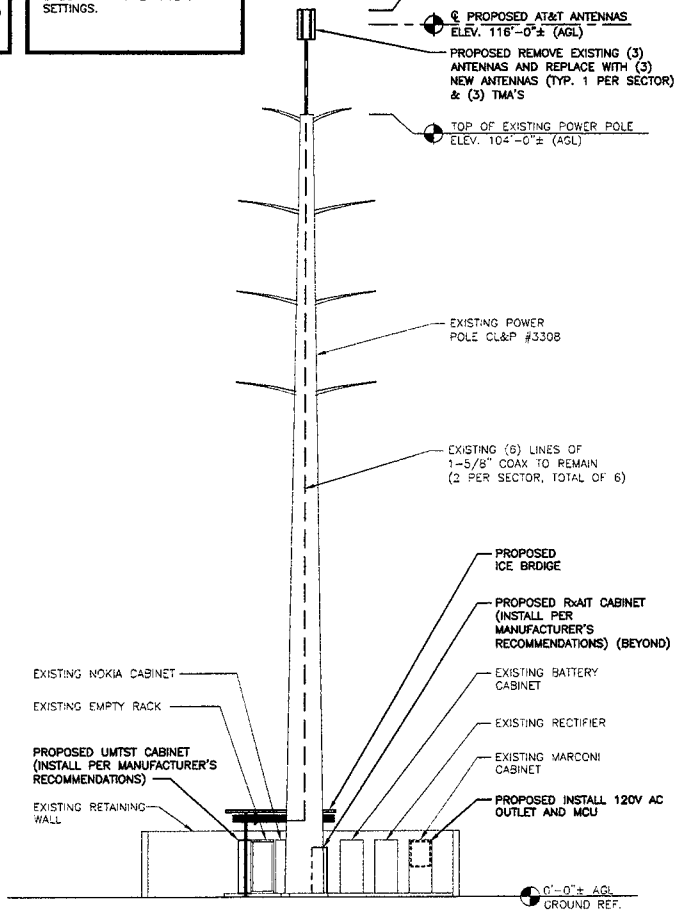
1. REFER TO RF CONFIG & SECTOR SCHEMATICS FOR MODEL, TYPE & QUANTITY REQUIRED PER SECTOR

PROPOSED ANTENNA DETAIL
SCALE: N.T.S.



NOTE:
ALL STEEL IS GALVANIZED. ALL BOLTS TO BE FURNISHED W/ WASHERS AND NUTS.

COAX ICE BRIDGE DETAIL
SCALE: N.T.S.



EAST ELEVATION
SCALE: 1/8"=1'-0"

0 4'-0" 8'-0" 16'-0" 24'-0"

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SITE NUMBER: CT5068
SITE NAME: NORTH RIDGEFIELD - CL&P POLE #3308
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FAIRFIELD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

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SCALE: AS SHOWN | DESIGNED BY: DC | DRAWN BY: DB

Robert P. Hamm
LICENSED PROFESSIONAL ENGINEER

AT&T

ANTENNA LAYOUT AND ELEVATION
UMTS

JOB NUMBER	DRAWING NUMBER	REV
8068.01	A-2	2

New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

Steven L. Levine
Real Estate Consultant

August 4, 2010

Rudolph P. Marconi, 1st Selectman
Town of Ridgefield
Town Hall 400 Main Street
Ridgefield, CT 06877

Re: Telecommunications Facility – 95 Halpin Lane

Dear Mr. Marconi:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review AT&T's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes AT&T's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7636 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine
Real Estate Consultant

Enclosure

CENTEK engineering

Centered on Solutions℠

Structural Analysis of PCS Structure and CL&P Pole

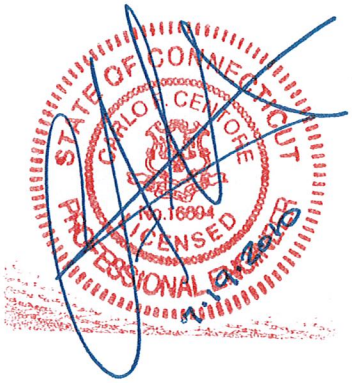
AT&T: CT5068

CL&P Structure No. 3308
105' Electric Transmission Pole

95 Halpin Lane
Ridgefield, CT

CENTEK Project No. 10071.CO2

~~Date: June 16, 2010~~
~~Rev 1: July 6, 2010~~
Rev 2: July 19, 2010



Prepared for:
AT&T Mobility
500 Enterprise Drive, Suite 3A
Rocky Hill, CT 06067

63-2 North Branford Road, Branford, CT 06405 203.488.0580 Fax 203.488.8587 www.CentekEng.com

Introduction

The purpose of this report is to analyze the existing PCS mast and 105' CL&P pole located at 95 Halpin Lane in Ridgefield, CT for the proposed antenna and equipment upgrade by AT&T Mobility.

The proposed loads consist of the following:

- AT&T MOBILITY (Existing to be removed):

  Antennas: Three (3) Allgon 7250 panel antennas mounted on a PCS mast with a RAD center elevation of 116-ft above tower base plate.

- AT&T MOBILITY (Existing to remain):

  Coax Cables: Six (6) 1-5/8" ∅ coax cables running on the outside of the tower as indicated in section 4 of this report.

- **AT&T MOBILITY (Proposed):**

  Antennas: Three (3) Powerwave P65-15-XL-2 panel antennas and three (3) Powerwave TT08-19DB111-01 TMAs mounted on a PCS mast with a RAD center elevation of 116-ft above tower base plate.

Primary assumptions used in the analysis

- Allowable steel stresses are defined by AISC-ASD 9th edition for design of the PCS Mast and antenna supporting elements.
- ASCE Manual No. 72, "Design of Steel Transmission Pole Structures Second Edition", defines allowable steel stresses for evaluation of the CL&P utility pole.
- All utility pole members are adequately protected to prevent corrosion of steel members.
- All proposed antenna mounts are modeled as listed above.
- All coaxial cable will be installed within the pipe mast unless specified otherwise.
- Pipe mast will be properly installed and maintained.
- No residual stresses exist due to incorrect pole erection.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds conform to the requirements of AWS D1.1.
- All proposed pipe mast members will be as specified in the construction documents to be prepared by CENTEK engineering, Inc.
- Pipe mast and utility pole will be in plumb condition.
- Utility pole was properly installed and maintained and all members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
- Any deviation from the analyzed loading will require a new analysis for verification of structural adequacy.

Analysis

Structural analysis of the existing *PCS Mast Structure* was independently completed using the current version of RISA-3D computer program licensed to CENTEK Engineering, Inc.

The existing mast consisting of an HSS5.563x0.258 x 16.67-ft long connected at two points to the existing tower was analyzed for its ability to resist loads prescribed by the TIA/EIA standard. Section 5 of this report details these gravity and lateral wind loads. NESC prescribed loads were also applied to the mast structure in order to obtain reactions needed for analyzing the CL&P pole structure. These loads are developed in Section 7 of this report. Load cases and combinations used in RISA-3D for TIA/EIA loading and for NESC/NU loading are listed in report Sections 6 and 8, respectively.

An envelope solution was first made to determine maximum and minimum forces, stresses, and deflections to confirm the selected section as adequate. Additional analyses were then made to determine the NESC forces to be applied to the CL&P pole structure.

The RISA-3D program contains a library of all AISC shapes and corresponding section properties are computed and applied directly within the program. The program's Steel Code Check option was also utilized. The forces calculated in RISA-3D using NESC guidelines were then applied to the CL&P pole using PLS-Pole. Maximum usage for the pole was calculated considering the additional forces from the mast and associated appurtenances.

Design Basis

Our analysis was performed in accordance with EIA-222-F-1996, ASCE Manual No. 72 – "Design of Steel Transmission Pole Structures Second Edition", NESC C2-2007 and Northeast Utilities Design Criteria.

The CL&P pole structure, considering existing and future conductor and shield wire loading, with the proposed antenna mast was analyzed under two conditions:

- UTILITY POLE ANALYSIS

  The purpose of this analysis is to determine the adequacy of the existing utility pole to support the proposed antenna loads. The loading and design requirements were analyzed in accordance with the NU Design Criteria Table, NESC C2-2007 ~ Construction Grade B, and ASCE Manual No. 72.

  Load cases considered:

  Load Case 1: NESC Heavy

Wind Pressure.....	4.0 psf
Vertical Overload Capacity Factor.....	1.50
Wind Overload Capacity Factor.....	2.50
Wire Tension Overload Capacity Factor.....	1.65

  Load Case 2: NESC Extreme

Wind Speed.....	110 mph [1]
Radial Ice Thickness.....	0"

  Note 1: NESC C2-2007, Section25, Rule 250C: Extreme Wind Loading, 1.25 x Gust Response Factor (wind speed: 3-second gust)

- PCS MAST ANALYSIS

The PCS mast, appurtenances and connections to the utility pole were analyzed and designed in accordance with the NU Design Criteria Table, TIA/EIA-222-F, and AISC-ASD standards.

Load cases considered:

Load Case 1:
Wind Speed..... 85 mph (2)
Radial Ice Thickness..... 0"

Load Case 2:
Wind Pressure..... 75% of 85 mph wind pressure
Radial Ice Thickness..... 0.5"

Note 2: Per NU Mast Design Criteria Exception 1.

Results

- PCS MAST

The existing pipe mast was determined to be structurally adequate.

Component	Size	Stress Ratio (percentage of capacity)	Result
HSS5.563x0.258	16.67'	89.3%(1)	PASS

Note 1: 1/3 Increased used in allowable stress for mast per EIA/TIA section 3.1.1.1

- UTILITY POLE

This analysis finds that the subject utility pole is adequate to support the proposed antenna mast and related appurtenances. The pole stresses meet the requirements set forth by the ASCE Manual No. 72, "Design of Steel Transmission Pole Structures Second Edition", for the applied NESC Heavy and Hi-Wind load cases. The detailed analysis results are provided in Section 9 of this report. The analysis results are summarized as follows:

A maximum usage of **87.43%** occurs in the utility pole under the **NESC Heavy** loading condition.

POLE SECTION:

The utility pole was found to be within allowable limits.

Tower Section	Elevation	Stress Ratio (% of capacity)	Result
Tube Number 5	14.92' -29.92' (AGL)	87.43%	PASS

BASE PLATE:

The base plate was found to be within allowable limits from the PLS output based on 22 bend lines.

Tower Component	Design Limit	Stress Ratio (percentage of capacity)	Result
Base Plate	Bending	81.88%	PASS

- FOUNDATION AND ANCHORS

The existing foundation consists of a 9-ft x 9-ft x 10.0-ft long reinforced concrete pier with sixteen (16) rock anchors embedded 18-ft into rock. The base of the tower is connected to the foundation by means of sixteen (16) 2.25"∅, ASTM A615-75 anchor bolts embedded into the concrete foundation structure. Foundation information was obtained from NUSCO drawing # 01106-60001.

Review of the foundation and anchor design consisted of verification of applied loads obtained from the tower design calculations and code checks of allowable stresses:

BASE REACTIONS:

From PLS-Pole analysis of CL&P pole based on NESC/NU prescribed loads.

Load Case	Transverse	Axial	Overturning Moment
NESC Heavy Wind	55.3 kips	51.0 kips	4634.0 ft-kips
NESC Extreme Wind	46.9 kips	27.3 kips	3432.7 ft-kips

ANCHOR BOLTS:

The anchor bolts were found to be within allowable limits.

Tower Component	Design Limit	Stress Ratio (% of capacity)	Result
Anchor Bolts	Tension	82.5%	**PASS**

FOUNDATION:

The foundation was found to be within allowable limits.

Foundation	Design Limit	Allowable Limit	Proposed Loading (4)	Result
Reinf. Conc. Pier w/ Rock Anchors	OTM (1)	1.5 FS (2)	2.2 FS (2)	**PASS**
	Bearing Pressure	50 ksf (3)	49.2 ksf	**PASS**

Note 1: OTM denote overturning moment.
Note 2: FS denotes Factor of Safety
Note 3: Bearing Capacity based on Weak Rock.
Note 4: 10% increase to PLS base reactions used in foundation analysis per OTRM 051.

Conclusions and Recommendations

This analysis shows that the subject utility pole **is adequate** to support the proposed AT&T Mobility equipment upgrade.

The analysis is based, in part on the information provided to this office by Northeast Utilities and AT&T Mobility. If the existing conditions are different than the information in this report, CENTEK engineering, Inc. must be contacted for resolution of any potential issues.

Please feel free to call with any questions or comments.

Respectfully Submitted by:

Carlo F. Centore, PE
Principal ~ Structural Engineer

STATE OF CONNECTICUT
CARLO F. CENTORE
No.16894
LICENSED
PROFESSIONAL ENGINEER

Prepared by:

Timothy J. Lynn, EIT
Structural Engineer

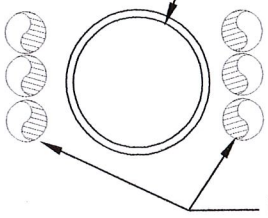
℄ AT&T ANTENNAS
EL. ±116'-0" AGL

TOP CONNECTION
EL. ±104'-0" AGL

BOTTOM CONNECTION
EL. ±101'-0" AGL

PROPOSED THREE (3) POWERWAVE P65-15-XL2 PANEL ANTENNAS AND THREE (3) POWERWAVE TT08-19DB111-01 TMAs MOUNTED ON THE PROPOSED PIPE MAST WITH VALMONT TRI-SECTOR CHAIN MOUNT PART NO. B1639. EXISTING (3) PANEL ANTENNAS TO BE REMOVED.

EXIST. HSS5.563X0.258 X 16.67' LONG PIPE MAST



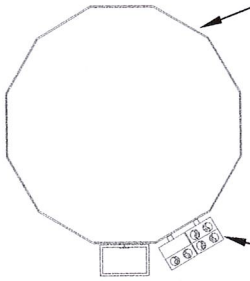
EXIST. SIX (6) 1-5/8" ø COAX CABLES

2 / EL-1 COAX PLAN
SCALE: NOT TO SCALE

3 / EL-1

EXISTING 105' TALL CL&P STEEL POLE STRUCTURE NO. 3308

EXIST. SIX (6) 1-5/8" DIA. COAX CABLES



EXISTING 105' TALL CL&P STEEL POLE STRUCTURE NO. 3308

EXIST. SIX (6) 1-5/8" ø COAX CABLES ATTACHED TO THE MONOPOLE @ 4-FT O.C. W/ ANDREW DOUBLE CLICK-ON HANNGERS PART NO. L7CLICK AND RELATED HARDWARE

3 / EL-1 COAX PLAN
SCALE: NOT TO SCALE

1 / EL-1 TOWER & MAST ELEVATION
SCALE: NOT TO SCALE

REVISIONS		
00	6/15/10	ISSUED FOR NU REVIEW
01	7/6/10	ISSUED FOR NU REVIEW
02	7/19/10	CONSTRUCTION

CENTEK engineering
Centered on Solutions℠
www.CentekEng.com
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road, Branford, CT 06405

CT5068
CL&P 3308

95 HALPIN LANE
RIDGEFIELD, CT 06877

PROJECT NO:	10071.CO2
DRAWN BY:	TJL
CHECKED BY:	CFC
SCALE:	AS NOTED
DATE:	6/15/10

TOWER AND MAST ELEVATION

EL-1

DWG. 1 OF 1