



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@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

August 16, 2002

Peter W. van Wilgen
Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-086-101-020807** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Montville and North Haven, Connecticut.

Dear Mr. van Wilgen:

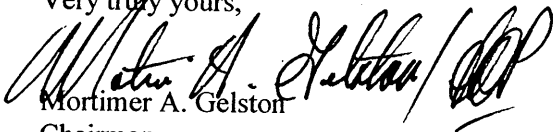
At a public meeting held on August 15, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated August 6, 2002. 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 sites that would not increase tower heights, extend the boundaries of the tower site, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

This decision is under the exclusive jurisdiction of the Council. Any additional change to these facilities 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,



Mortimer A. Gelston

Chairman

MAG/DM/laf

c: Honorable Howard R. Beetham, Jr., Mayor, Town of Montville
Marcia Vlaun, Town Planner, Town of Montville
Honorable Kevin J. Kopetz, First Selectman, Town of North Haven
Robert Burns, Zoning Enforcement Officer, Town of North Haven



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

August 8, 2002

Honorable Kevin J. Kopetz
First Selectman
Town of North Haven
Town Hall
18 Church Street
North Haven, CT 06473

RE: **EM-CING-086-101-020807** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Montville and North Haven, Connecticut.

Dear Mr. Kopetz:

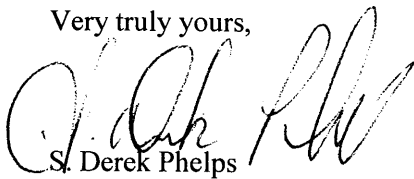
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for August 15, 2002 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Robert Burns, Zoning Enforcement Officer, Town of North Haven



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

August 8, 2002

Honorable Howard R. Beetham, Jr.
Mayor
Town of Montville
Town Hall
310 Norwich New London Turnpike
Uncasville, CT 06382

RE: **EM-CING-086-101-020807** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Montville and North Haven, Connecticut.

Dear Mayor ~~Beetham~~ *Rust*:

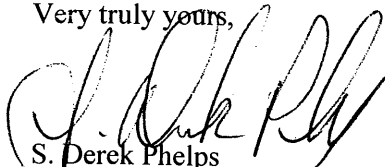
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for August 15, 2002 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,


S. Derek Phelps
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Marcia Vlaun, Town Planner, Town of Montville



Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

HAND DELIVERED

August 6, 2002

RECEIVED

AUG -7 2002

**CONNECTICUT
SITING COUNCIL**

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Montville and North Haven

Dear Mr. Gelston:

In order to accommodate technological changes, implement E-911 capability and enhance system performance, Southwestern Bell Mobile Systems, LLC ("SNET" or "Cingular Wireless"; formerly SNET Mobility, LLC) plans to modify the antenna configurations at 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 each of the municipalities in which an affected cell site is located.

Attached are summary sheets detailing the planned changes, including power density calculations reflecting the change in the effect of Cingular's operations at each site. Also included is documentation of the structural sufficiency of each tower to accommodate the revised antenna configuration.

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

Mr. Mortimer A. Gelston

July 30, 2002

Page 2

1. The height of the overall structure will be unaffected. At almost all sites, new panel antennas approximately the same size will replace those previously installed. Tower mount amplifiers, approximately 5" x 9" x 13", will be added to the platform on which the panel antennas are mounted to enhance signal reception at the cell site. In addition, the mandated provision of E-911 capability will require installation of one LMU ("location measurement unit"), approximately nine inches high, on either the tower, the equipment shelter or the ice bridge. One GPS receive-only antenna will be attached to the equipment shelter at each site. None of the modifications will extend the height of the tower.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
4. Radio frequency power density will increase due to use of additional channels broadcasting at higher power. 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, Cingular Wireless respectfully submits that the proposed changes at the referenced sites constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7730 with questions concerning this matter. Thank you for your consideration.

Sincerely,



Peter W. van Wilgen
Senior Manager - Construction

Enclosures

**CINGULAR WIRELESS
Antenna Modification**

Site Address: 695 Old Colchester Road, Montville
Exempt modification approved 7/6/89

Tower Owner/Manager: Eastern Connecticut Cable

Antenna configuration

Approved: "6 antennas" per 1989 exempt modification
(currently four ASPD951 omni on 230 ft AGL platform)
(approx. 225 ft center of radiation for transmitters)

Planned: Nine CSS DUO4-8670 panels or comparable
6 tower mount amplifiers and 3 diplexers
(on existing platform with center of radiation located
between 230 and 237 ft AGL, as platform allows)

Power Density:

Calculations for Cingular's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the tower base, of approximately 2.3% of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for Cingular's planned operations would be approximately 3.1%, or an additional 0.8% of the standard.

Cingular Current

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
SBMS	225	880 - 894	19	100	0.0135	0.5867	2.3

Cingular Planned

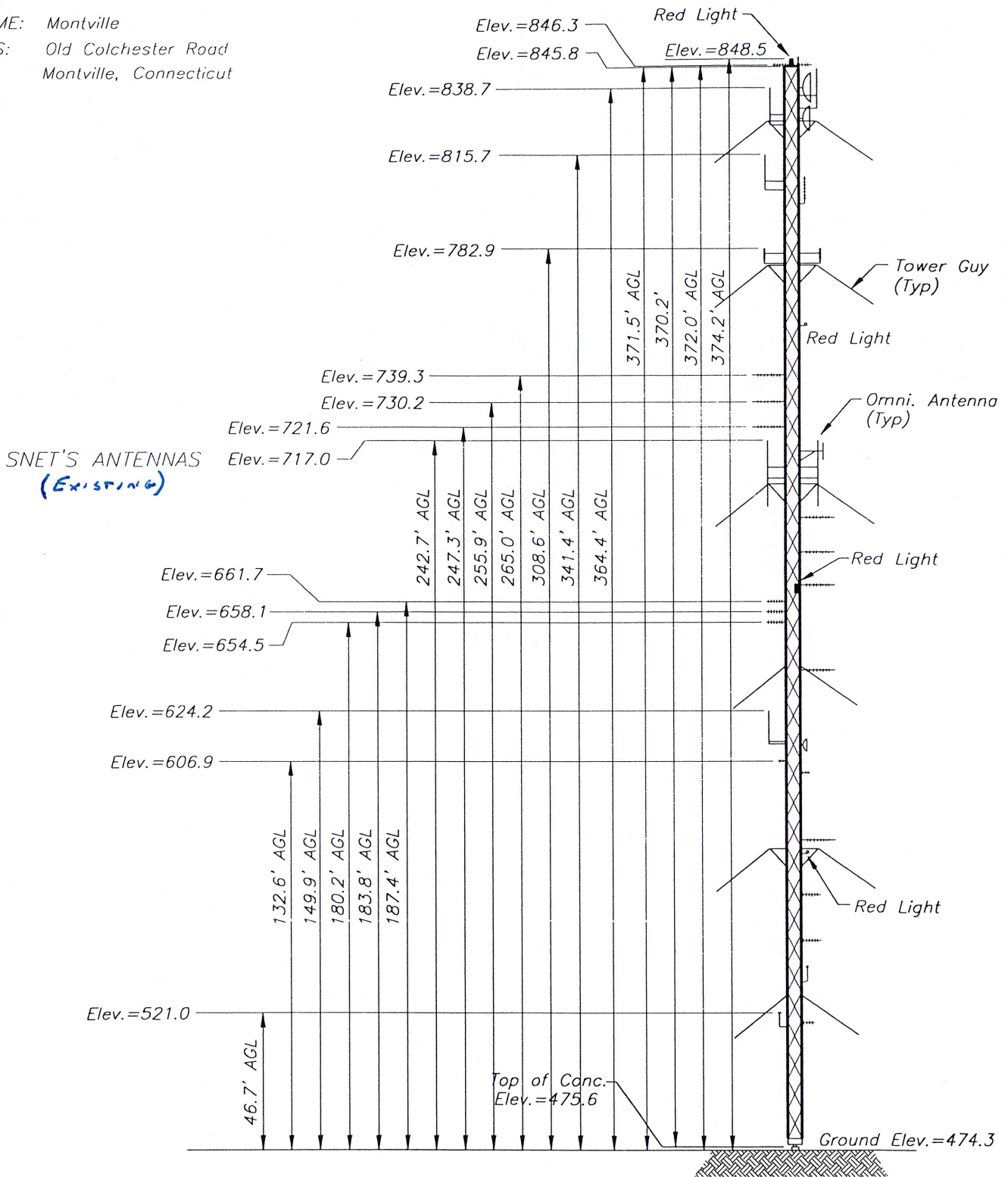
Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
SBMS TDMA	230	880 - 894	16	100	0.0109	0.5867	1.9
SBMS GSM	230	880 - 894	2	296	0.0040	0.5867	0.7
SBMS GSM	230	1930 - 1935	2	427	0.0058	1.0000	0.6
Total							3.1%

Note: Calculations run at 230' c.l. are conservative estimate.

Structural information: Please see attached.

SNET MOBILITY, INC.

SITE NAME: Montville
 ADDRESS: Old Colchester Road
 Montville, Connecticut



EAST ELEVATION

NOTES:

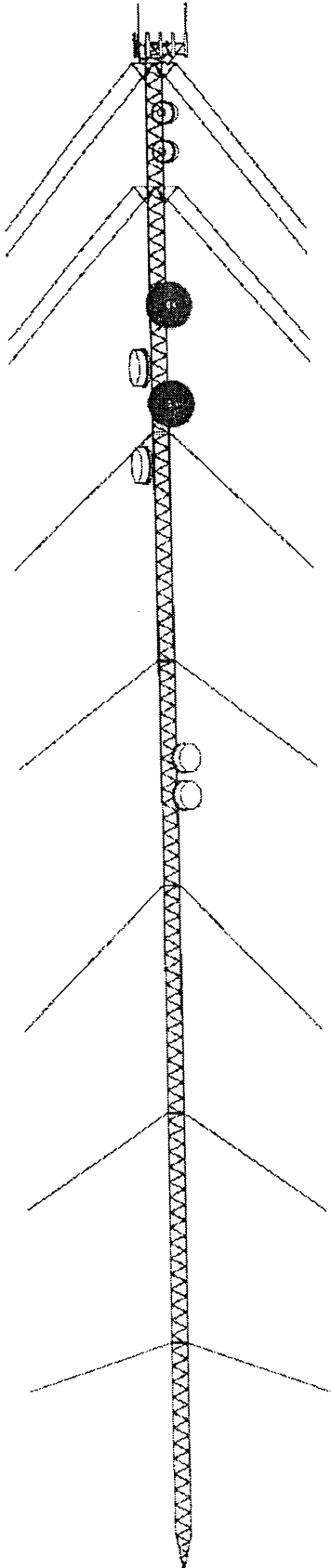
1. ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
2. EQUIPMENT BUILDINGS AND CABLE TRAYS NOT SHOWN.

URS Greiner Woodward Clyde

Surveying and Mapping by:
 URS Greiner Woodward-Clyde, Inc. A-E-S
 500 Enterprise Drive, Suite 3B
 Rocky Hill, Connecticut 06067-4002
 Tel. (860) 529-8882

Scale: 1" = 50'
 Date: JANUARY 1999

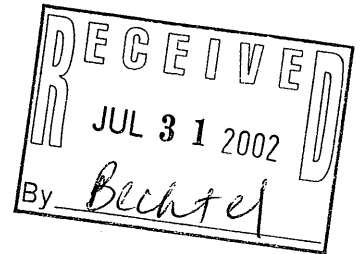
Field book # 1458-34	Crew Chief G.NEVIN	Project # F3-00001787.08	
Search # ~	Drawn by E.LEWIS	Checked by <i>[Signature]</i>	Map file # 3 of 7



GUYED TOWER STRUCTURAL ANALYSIS REPORT

for

BECHTEL CORPORATION
175 CAPITAL BOULEVARD
SUITE 100
ROCKY HILL, CT 06067



July 30, 2002
Revision 2

SITE:
Montville, 2049
New London County, CT
370' Guyed Tower
Project Designer: Hachem K. Domloj
o2wireless Job No. 103-3637-9

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 370' guyed tower at the Montville site in New London County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
370'	EXISTING	1- YAGI ANTENNA	1- 1 5/8" COAX
370'	EXISTING	1- OMNI WHIP ANTENNA	1- 1 5/8" COAX
328'	EXISTING	2- GRID PANEL ANTENNAS	2- 1 5/8" COAX
303'	EXISTING	12- ALP9011	12- 1 5/8" COAX
270'	EXISTING	1- ASP712	1- 1 5/8" COAX
260'	EXISTING	1- QCS-5	1- 7/8" COAX
239'	PROPOSED	9- DB PANEL ANTENNAS *	9- 1 1/4" COAX
205'	EXISTING	1- QCS-2	1- 7/8" COAX
200'	EXISTING	1- QCS-UHF	1- 7/8" COAX
180'	EXISTING	1- QCS-10/12	1- 7/8" COAX
160'	EXISTING	1- QCA-3	1- 1/2" COAX
140'	EXISTING	1- QCA-UHF	1- 1/2" COAX
125'	EXISTING	1- OMNI WHIP ANTENNA	1- 7/8" COAX
125'	EXISTING	1- QCA-6	1- 1/2" COAX
105'	EXISTING	1- QCA-6	1- 1/2" COAX
85'	EXISTING	1- TFM-2	1- 1/2" COAX
85'	EXISTING	1- YAGI ANTENNA	1- 7/8" COAX
70'	EXISTING	1- YAGI ANTENNA	1- 7/8" COAX
55'	EXISTING	1- TFM-1	1- 1/2" COAX
50'	EXISTING	1- QCA-UHF	1- 1/2" COAX
45'	EXISTING	1- TFM-1	1- 1/2" COAX
45'	EXISTING	1- QCA-UHF	1- 1/2" COAX
30'	EXISTING	1- QCA-UHF	1- 1/2" COAX

* 9 DDD TMA 1900 to accompany DB antennas at level 239'.

AVAILABLE DOCUMENTS

All tower data information, antenna types and locations were obtained from Manzi Engineering structural analysis as supplied by Bechtel. o2wireless Solutions can not be held responsible for it's accuracy.

- RF data sheet

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

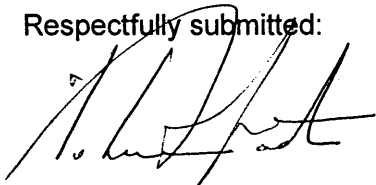
CONCLUSIONS AND RECOMMENDATIONS:

The Montville tower will support the proposed loading and meet the requirements of the EIA Standard without any modifications required. The analysis is reflected in run GM3637-9 and shown in the drawing pages.

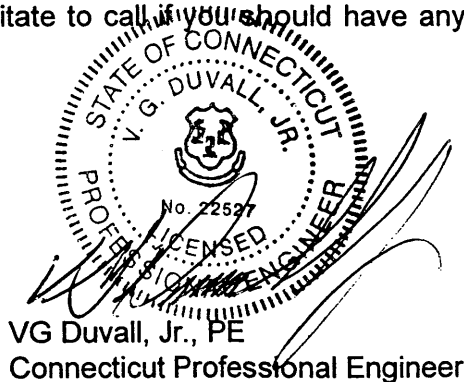
Information on the foundations and the geotechnical information were not provided, Thus, precluding any comment on their performance under the proposed loading criteria.

Thank you for this opportunity to work with you and do not hesitate to call if you should have any questions.

Respectfully submitted:

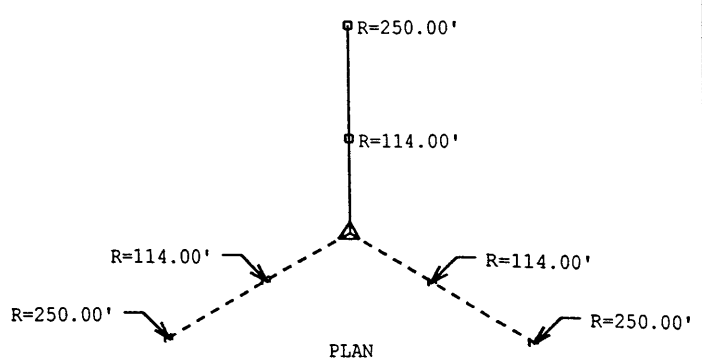
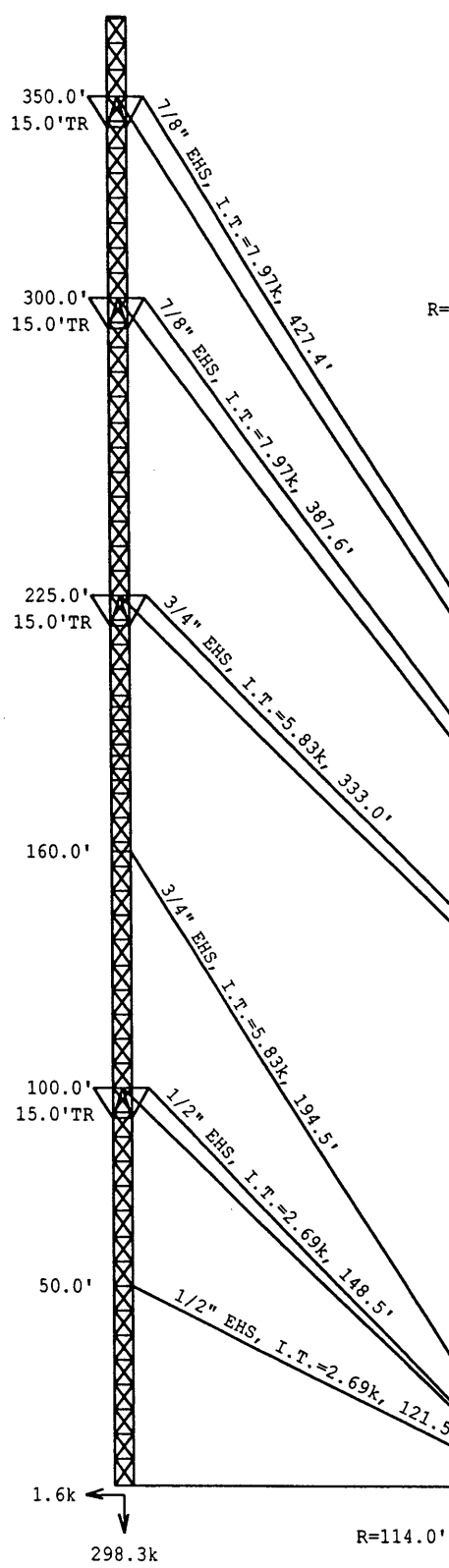


Hachem K. Domloj, EIT
Project Designer



VG Duvall, Jr., PE
Connecticut Professional Engineer

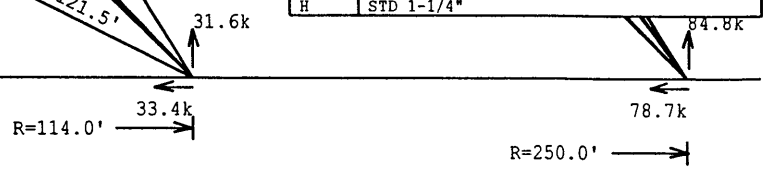
Leg	36 KSI	SR 3-1/4"	A	SR 3-1/4"	SR 3"	B	SR 3"	C
Diagonal	36 KSI	SR 5/8"	D	SR 5/8"	SR 5/8"	E	SR 5/8"	F
Horizontal	36 KSI	STD 1-1/4"	G	STD 1-1/4"	STD 1-1/4"	H	STD 1-1/4"	D
Sub Horizontal								
Face Width								
Panel Height#Panels								#3



NOTES:
 1. MEMBER ALLOWABLE VALUES BASED ON ORIGINAL CROSS SECTION PROPERTIES WITH NO ALLOWANCES FOR ANY POSSIBLE CORROSION.
 2. ALL STRUCTURAL BOLTS ASSUMED TO BE A325.
 3. 9 DDD TMA 1900 TO ACCOMPANY DB ANTENNAS AT LEVEL 239'.

ANTENNA LIST			
NO	ELEV	ANTENNA	TX-LINE
1	370'	EXISTING 1- YAGI ANTENNA	1- 1 5/8" COAX
2	370'	EXISTING 1- OMNI WHIP ANT.	1- 1 5/8" COAX
3	328'	EXISTING 2- GRID PANEL ANT.	2- 1 5/8" COAX
4	303'	EXISTING 12- ALP9011	12- 1 5/8" COAX
5	270'	EXISTING 1- ASP712	1- 1 5/8" COAX
6	260'	EXISTING 1- QCS-5	1- 7/8" COAX
7	239'	PROPOSED 9- DB PANEL ANTENNAS	9- 1 1/4" COAX
8	205'	EXISTING 1- QCS-2	1- 7/8" COAX
9	200'	EXISTING 1- QCS-UHF	1- 7/8" COAX
10	180'	EXISTING 1- QCS-10/12	1- 7/8" COAX
11	160'	EXISTING 1- QCA-3	1- 1/2" COAX
12	140'	EXISTING 1- QCA-UHF	1- 1/2" COAX
13	125'	EXISTING 1- OMNI WHIP ANT.	1- 7/8" COAX
14	125'	EXISTING 1- QCA-6	1- 1/2" COAX
15	105'	EXISTING 1- QCA-6	1- 1/2" COAX
16	85'	EXISTING 1- TFM-2	1- 1/2" COAX
17	85'	EXISTING 1- YAGI ANT.	1- 7/8" COAX
18	70'	EXISTING 1- YAGI ANT.	1- 7/8" COAX
19	55'	EXISTING 1- TFM-1	1- 1/2" COAX
20	50'	EXISTING 1- QCA-UHF	1- 1/2" COAX
21	45'	EXISTING 1- TFM-1	1- 1/2" COAX
22	45'	EXISTING 1- QCA-UHF	1- 1/2" COAX
23	30'	EXISTING 1- QCA-UHF	1- 1/2" COAX

MATERIAL LIST	
NO	TYPE
A	SR 3"
B	SR 3-1/4"
C	SR 2-3/4"
D	T 2-1/2"x2-1/2"x3/16"
E	L 2-1/2"x2-1/2"x3/16"
F	T 3"x3"x1/4"
G	T 2"x2"x3/16"
H	STD 1-1/4"



Elevation on azimuth 0.00 deg

o2wireless Solutions
 plan. design. deploy. maintain.

10430 Rodgers Road, Houston, TX 77070
 Phone: (713) 973-6904 Fax: (713) 973-0205

Client: BECHTEL Job No: 103-3637-9 Date: 30 jul 2002
 Location: NEW LONDON, CT Tower Height: 370.00'
 Standard: TIA/EIA-222-F Design Wind & Ice: 85 MPH NO ICE & 74 MPH 1/2" ICE

**CINGULAR WIRELESS
Antenna Modification**

Site Address: 125 Washington Avenue (aka 127), North Haven
TS-SCLP-101-980923 (approved 10/8/98)

Tower Owner/Manager: Candid Communications

Antenna configuration Antenna Centerline – 126 ft

Approved: up to 12 panel antennas
(currently nine ALP11011)

Planned: Nine CSS DUO-1417-8686-4 panels or comparable
6 tower mount amplifiers

Power Density:

Calculations for Cingular's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the tower base, of approximately 7.3% of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for Cingular's planned operations would be approximately 10.4%, or an additional 3.1% of the standard.

Cingular Current

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
SBMS	126	880 - 894	19	100	0.0430	0.5867	7.3

Cingular Planned

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
SBMS TDMA	126	880 - 894	16	100	0.0362	0.5867	6.2
SBMS GSM	126	880 - 894	2	296	0.0134	0.5867	2.3
SBMS GSM	126	1930 - 1935	2	427	0.0193	1.0000	1.9
Total							10.4%

Structural information: Please see attached.

GEM ENGINEERING COMPANY

2500 Wilcrest, Suite 100
Houston, Texas 77042

Phone 713-339-1550
Fax 713-339-9922



A Subsidiary
of Quanta
Services, Inc.

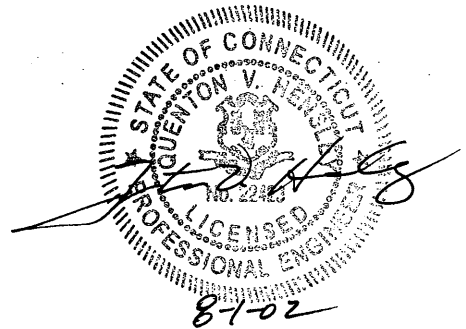


TOWER ANALYSIS REPORT

Bechtel Telecommunications
Site Name: North Haven
Site Number: 2209

Revision 2

(120' Monopole Tower)



GEM Engineering Company, Inc.
July 31, 2002

Section 1 Introduction

The purpose of this report is to reanalyze the structural adequacy of an existing monopole tower for supporting new antennas; in addition to all the existing antennas. Nine (9) antennas at elevation 126' shall be removed.

The information on the 120' Monopole tower was obtained from "Engineered Endeavors Incorporated", drawing No.GS53154, dated 02/26/2001. Information on the existing and proposed antennas was provided by Bechtel Telecommunication.

Information for the existing and the new proposed antennas are listed in the "Tower Loading Information & Criteria," in Section 2. The main forces considered in the analysis of the tower are those resulting from wind. Per TIA/EIA 222-F, the basic wind speed for New Haven County, Connecticut is 85 mph and analyzed with 0.5" ice. Wind load combination with ice includes reduction in the tower loading.

The Monopole tower was analyzed for the following load combinations:

- Dead Load + Wind Load
- Dead Load + Wind Load + Ice

Allowable stresses were increased by 1/3 for both load combinations. This is according to TIA/EIA code. Dead Load consists of the loads due to the weight of all existing and future antennas, coaxes, monopole members, and all related appurtenances.

Section 2 Tower Loading Information and Criteria

Customer: Bechtel Telecommunications
Station: North Haven, CT

TOWER ANALYSIS DATA:

Tower Analysis Criteria: TIA/EIA-222-F
Tower Height: 120'
Ice Load: 0.5"

Wind Load: 85 mph
Frequency: N/A

ANTENNAS:

Model	Carrier Name	Level	Azimuth	Existing/ New	Ice Shield	Waveguide Type and #
(1) Omni		80'		E		(1) 7/8"φ*
(9) ALP11011 **		126'		E		(9) 7/8"φ*
(9) ALP11011		102'		E		(9) 7/8"φ*
(9) DUO-1417-8686-4 (6) TMA-1900		126'		N		(9) 7/8"φ*

** Nine (9) existing antennas shall be removed.
 * Inside monopole

Section 3 Results

Structural Element	Stress	Stress Ratio	Notes
Pole Shaft	O.K.	0.359	
Legs	N/A		-
Leg Bolts	N/A		-
Diagonals	N/A		-
Diagonal Bolts **	N/A		-
Girts	N/A		-
Girt Bolts **	N/A		-
Guy Wires	N/A		-

N/A = Not Applicable, N.G. = Not-Good (Structurally)
 Acceptable Stress Ratio is between 0%--1.05%

BASE REACTIONS	Moment (k-ft)	Shear (k)	Axial (k)
Original Base Reactions *	3723.5	31.8	36.5
New Foundation Loads	1499	17	33

* Base reactions were provided by "EEI" project No. 8821 Drawing
 No. D8821-120.0 dated 03/26/01.

Section 4 Conclusions

The existing 120' Monopole Tower was reanalyzed for a wind speed of 85 mph and 0.5" ice, with the existing and proposed antennas, their coaxial cables, and their supporting platforms. The results show that the existing Monopole Tower and the foundation are structurally adequate to support the six (9) proposed antennas and six (6) TMA at elevation 126' above ground level, in addition to all existing antennas. Nine (9) existing antennas at elevation 126' shall be removed.

120.0 ft

Section	1	2	3
Length (ft)	35'3-15/32"	47'6-17/32"	47'5-1/32"
Number of Sides	18	18	18
Thickness (in)	0.3750	0.4375	0.5000
Lap Splice (ft)	4'6-31/32"	5'9-31/32"	5'9-31/32"
Top Dia (in)	24.0900	30.7099	39.7710
Bot Dia (in)	32.5600	42.0300	51.0000
Grade		A572-65	
Weight (K)	4.0	8.1	11.5

84.7 ft

41.6 ft

0.0 ft

DESIGNED APPURTENANCE LOADING

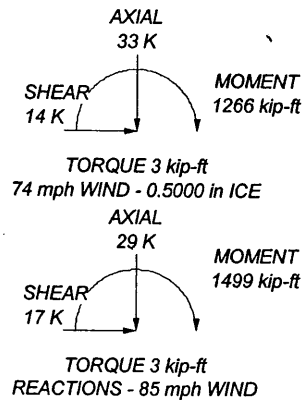
TYPE	ELEVATION	TYPE	ELEVATION
(3) DU04-1417-8686-4	126	(3) ALP11011	102
(3) DU04-1417-8686-4	126	PIROD 12' Universal T-Frame Sector Mount	102
(3) DU04-1417-8686-4	126		
(2) TMA-1900	126	PIROD 12' Universal T-Frame Sector Mount	102
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(2) TMA-1900	126	PIROD 12' Universal T-Frame Sector Mount	102
PIROD 12' Low Profile Circular Platform	120	Omni	80
(3) ALP11011	102	PIROD 6' Standard Bogner Mount	80
(3) ALP11011	102		

MATERIAL STRENGTH

GRADE	YIELD	GRADE	YIELD
A572-65	65 ksi		

TOWER DESIGN NOTES

1. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 50 mph wind.
4. TOWER RATING: 35.9%



<p>GEM Engineering</p>	<p>GEM Engineering, Inc. 2500 Wilcrest Drive Houston, Texas 77042-2759 Phone: (713) 339-1550 FAX: (713) 339-9922</p>		<p>Job: 460560</p>
	<p>Project: North Haven, 120' Monopole, Rev 02,2209</p>		
	<p>Client: Bechtel Telecommunication</p>	<p>Drawn by: Sami Agha</p>	<p>App'd:</p>
	<p>Code: TIA/EIA-222-F</p>	<p>Date: 08/01/02</p>	<p>Scale: NTS</p>
	<p>Path:</p>	<p>Dwg No. E-1</p>	