

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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E-Mail: siting.council@po.state.ct.us

www.ct.gov/csc

December 22, 2004

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-033-041206** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at the Radisson Inn, Christian Hill Road, Cromwell, Connecticut.

Dear Attorney Baldwin:

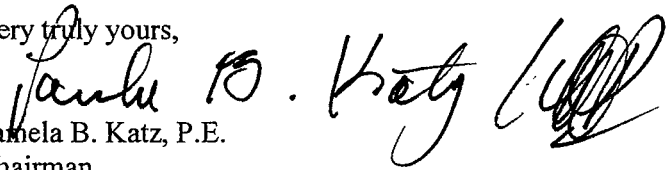
At a public meeting held on December 21, 2004, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated December 6, 2004, 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. 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,


Pamela B. Katz, P.E.
Chairman

PBK/laf

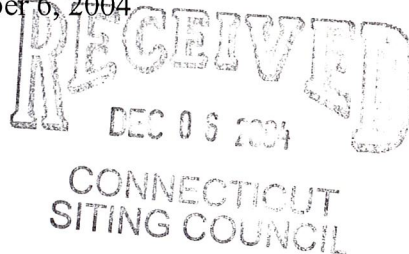
c: The Honorable Stanley A. Terry, Jr., First Selectman, Town of Cromwell
Frederic Curtin, Zoning Enforcement Officer, Town of Cromwell
Christopher B. Fisher, Esq., Cuddy & Feder LLP

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December 6, 2004

Via Hand Delivery

S. Derek Phelps
 Executive Director
 Connecticut Siting Council
 10 Franklin Square
 New Britain, CT 06051



Re: **Notice of Exempt Modification- Antenna Modification
 Radisson Inn, Christian Hill Road
 Cromwell, CT**

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility on an existing sign support structure, owned by Cellco, behind the Radisson Inn, Christian Hill Road in Cromwell, Connecticut. The structure no longer supports a sign. The facility consists of twelve (12) panel-type cellular antennas at the 88'-4" level and three (3) paging antennas at the 78'-3" level of the existing structure. Equipment associated with the antennas is located on the ground near the base of the structure.

Cellco's original use of this structure was approved by the Town of Cromwell. The Council approved AT&T's shared use of this same structure in 2001. More recently, the Council approved Cellco's modification of this structure for the installation of paging antennas on February 18, 2004 (EM-VER-033-040129). The facility consists of an 83-foot self-supporting sign support structure. Cellco now intends to modify its facility by removing three (3) cellular antennas and installing six (6) PCS antennas at the same height on the structure. Once completed, the facility will be served by a total of fifteen (15) antennas. Attached behind Tab 1 are antenna specification sheets for existing cellular and proposed PCS antennas for the Christian Hill Road facility.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Cromwell First Selectman, Stanley A. Terry, Jr.



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S. Derek Phelps
December 6, 2004
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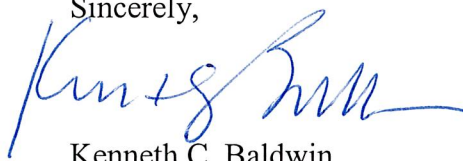
The planned modifications to the Cromwell facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modification will not increase the overall height of the existing structure. Cellco's replacement antennas will be mounted at the same height on the tower as its existing antennas.
2. The proposed modifications will not affect ground mounted equipment and will not require an extension of the site boundaries.
3. The proposed modification will not increase the noise levels at the facility by six decibels or more.
4. The operation of the antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. Attached behind Tab 2 is a new Power Density Calculation Table.

Also included as Attachment 3 is an engineer's certification prepared by URS Corporation ("URS"), indicating the structure can support the proposed antenna modifications.

For the foregoing reasons, Cellco respectfully submits that the proposed antenna modifications at the Cromwell facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

Attachments

cc: Stanley A. Terry, Jr., Cromwell First Selectman
Sandy M. Carter



Swedcom Corporation

ALP 9212-N

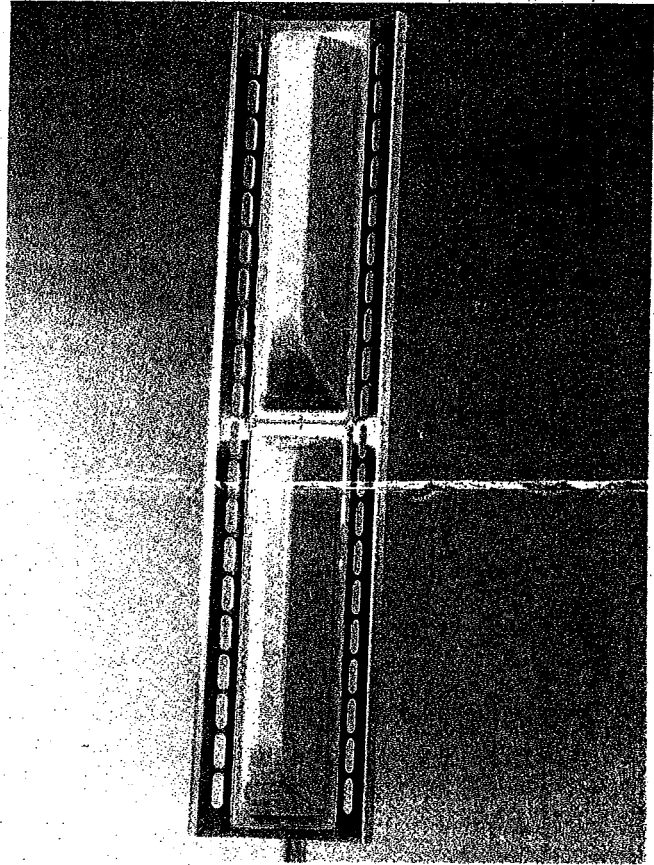
Log-Periodic Reflector Antenna

92 Degrees 12 dBd

Features:

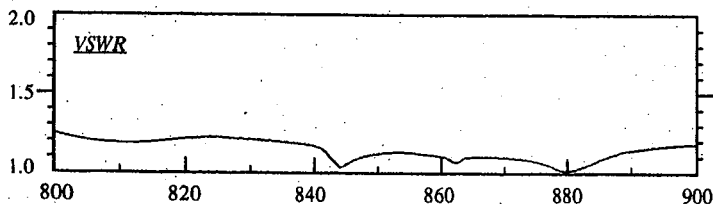
- Broadbanded. (800-900 MHz)
- Low backlobe radiation. Front-to-back ratio better than 28 dB
- Low Intermodulation Products.
- Low Wind-load.
- Low weight.
- Small size.
- Rugged design.

Please see the following pages including radiation patterns/tables for ALP 9212-N.



Electrical Specifications:

Frequency range:	806-896 MHz
Impedance:	50 ohm
Connector:	N-female or 7/8" EIA
VSWR:	Typ. 1.3:1 max 1.5:1
Polarization:	Vertical
Gain:	12 dBd
Front to back ratio:	>28 dB
Side-lobe supression:	>18 dB
Intermodulation: (2x25W):	IM3 >146 dB IM5 >153 dB IM7 & IM9 >163 dB
Power Rating:	500 W
H-Plane: -3 dB	95 °
E-Plane: -3 dB	15 °
Lightning Protection:	DC Grounded



Mechanical Specifications:

Overall Height:	52 in	(1320 mm)
Width:	11.4 in	(290 mm)
Depth:	11.4 in	(290 mm)
Weight including brackets:	26.7 lbs	(12 Kg)
Rated wind velocity:	113 mph	(180 Km/h)
Wind Area (CxA/Front):	3.9 sq.ft	(0.36 sq.m)
Lateral thrust at rated wind		
Worst case:	570 N	

Materials:

Radiating elements:	Aluminum
Element housing:	Grey PVC
Back-plate:	Aluminum
Mounting hardware	
clamps:	Hot dip galvanized steel
bolts:	Stainless steel

Manufactured by: Allgon System AB

DECIBEL®
Base Station Antennas

948F85T2E-M

16.1 dBi, Directed Dipole Antenna
1850-1990 MHz

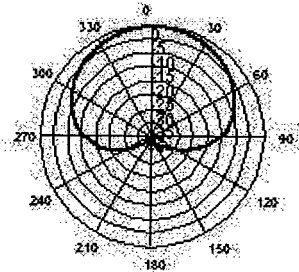
1850-1990 MHz

MaxFill™

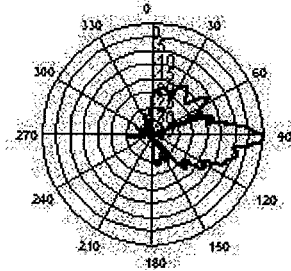
dB Director®

- Exceptional azimuth roll-off reducing soft hand-offs and improving capacity
- Excellent upper side lobe suppression
- Deep null filling below the horizon assures improved signal intensity
- Low profile appearance and low wind loading profile for easier zoning approvals

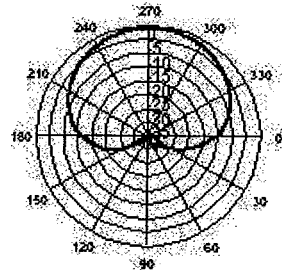
850



Azimuth 1850 MHz (Tilt=2)



Vertical 1850 MHz (Tilt=2)



Horizontal 1850 MHz (Tilt=2)



ELECTRICAL

Frequency (MHz):	1850-1990
Polarization:	Vertical
Gain (dBd/dBi):	14/16.1
Azimuth BW:	85°
Elevation BW:	8°
Beam Tilt:	2°
USLS* (dB):	>18
Null Fill* (dB):	15
Front-to-Back Ratio* (dB):	40
VSWR:	<1.33:1
IM Suppression - Two 20 Watt Carriers:	-150 dBc
Impedance:	50 Ohms
Max Input Power:	250 Watts
Lightning Protection:	DC Ground
Opt Electrical Tilt:	0°, 4°, 6°

MECHANICAL

Weight:	8.5 lbs (3.9 kg)
Dimensions (LxWxD):	48 X 3.5 X 7 in (1219 X 89 X 178 mm)
Max. Wind Area:	1.18 ft² (0.11 m²)
Max. Wind Load (@ 100mph):	65 lbf (289 N)
Max. Wind Speed:	125 mph (201 km/h)
Radiator Material:	Low Loss Circuit Board
Reflector Material:	Aluminum
Radome Material:	ABS, UV Resistant
Mounting Hardware Material:	Galvanized Steel
Connector Type:	7-16 DIN - Female (Bottom)
Color:	Light Gray
Standard Mounting Hardware:	DB390 Pipe Mount Kit, included
Downtilt Mounting Hardware:	DB5098, optional
Opt. Mounting Hardware:	DB5094-AZ Azimuth Wall Mount



Andrew Corporation
8635 Stemmons Freeway
Dallas, Texas U.S.A 75247-3701
Tel: 214.631.0310

Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342
Fax: 1.800.229.4706
www.andrew.com

Date: 4/29/2004
* - Indicates Typical Values

dbtech@andrew.com

General Power Density

Site Name: Cromwell SW, CT
 Tower Height: 88.4/78.4 ft rad - center

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure* (mW/cm ²)	Fraction of MPE (%)
Verizon	880	9	200	1800	88.4	0.0828	0.56733	14.60%
Verizon	1900	3	200	600	88.4	0.0276	1	2.76%
Verizon Paging	152.48	1	155	155	78.4	0.0091	0.10165	8.92%
Verizon Paging	158.7	1	222	222	78.4	0.0130	0.1058	12.28%
Total Percentage of Maximum Permissible Exposure								38.56%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
 mW/cm² = milliwatts per square centimeter
 ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



December 01, 2004

Ms. Pamela Katz, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

**Reference: Existing Telecommunications Facility
Verizon Wireless
Christian Hill Road
Cromwell, Connecticut
VZ1 102/36929368.00000**

Dear Ms. Katz:

URS Corporation (URS) conducted a structural review of the existing sign support structure located at Christian Hill Road in Cromwell, CT. The purpose of our review was to evaluate the effect of the proposed additional Verizon Wireless telecommunications antenna arrangement on the structure. The structure has recently undergone extensive analysis by URS. The structure and its foundation have been reinforced as a result of our recent analysis in order to comply with the current code requirements. The structure currently supports AT&T and Verizon Wireless telecommunication antennas between elevations 78'-4" and 98'-4" above grade. The structure is no longer used as a sign supporting structure. The proposed Verizon Wireless antenna inventory modification considered in this review is as follows:

Antenna and Mount Modification	Carrier	Antenna Center Elevation
Remove (3) ALP9212 panel antennas and replace with (6) Decibel DB948F85T2E-M panel antennas on existing support platform with (3) additional 1-5/8" coaxial cables mounted outside of the steel structure.	Verizon Wireless	88'-4" A.G.L.

The results of this review indicate the structure to be in compliance with the loading conditions and the material and member sizes for the structure and its foundation. The structure is considered feasible with the applicable TIA/EIA-222-F wind load classification specified and proposed Verizon Wireless and existing antenna loading. The structure and its foundation are in compliance with the BOCA 1996 and Connecticut State Building Code supplement 1999 including the latest amendments.

If you should have any questions, please call.

Sincerely,

URS Corporation AES


Richard A. Sambor, P.E.
Manager Facilities Design



RAS

cc: Mark Gauger - Verizon Wireless
Rachel A. Mayo - Robinson & Cole LLP
Douglas Roberts, AIA - URS
CF/Book