

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 www.ct.gov/csc

March 5, 2005

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

RE: EM-VER-080-050218 - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 38 Elm Street, Meriden, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on March 3, 2005, 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 February 18, 2005, 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.

amela B. Katz, P.E.

ruly yours.

Chairman

PBK/laf

 The Honorable Mark Benigni, Mayor, City of Meriden Dominick Caruso, City Planner, City of Meriden Ashley Harriman, LLC





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Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us www.ct.gov/csc

February 22, 2005

The Honorable Mark Benigni Mayor City of Meriden 142 East Main Street Meriden, CT 06450

RE: EM-VER-080-050218 – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 38 Elm Street, Meriden, Connecticut.

Dear Mayor Benigni:

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 March 3, 2005 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the council by March 2, 2005.

Thank you for your cooperation and consideration.

X / / / / /

Executive Director

SDP/cm

Very truly

Enclosure: Notice of Intent

c: Dominick Caruso, City Planner, City of Meriden



ROBINSON & COLELLP

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

EM-VER-080-050218

February 18, 2005

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 38 Elm Street Meriden, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility on the existing roof-top lattice tower owned by Ashley Harriman, LLC at 38 Elm Street in Meriden. The Connecticut Siting Council ("the Council") approved Cellco's shared use of the tower on June 20, 1995 for fifteen (15) panel antennas with their centerline approximately 66-feet above ground level. To date, only twelve (12) panel-type antennas were installed. Equipment associated with the antennas is located inside the existing building.

Cellco now intends to modify its facility by removing three (3) cellular antennas (ALP 9212) and installing six (6) PCS antennas (DB948F85T2E-M) for a total of fifteen (15) antennas at the same height on the tower. Attached behind <u>Tab 1</u> are specifications for the existing cellular antennas and the proposed PCS antennas for the Elm Street 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 Meriden Mayor, Mark Benigni.

The planned modifications to the Elm Street facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).



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S. Derek Phelps February 18, 2005 Page 2

- 1. The proposed modifications will not result in any increase in the overall height of the existing structure. Cellco's replacement antennas will be mounted at the same height on the tower.
- 2. The proposed modifications will not affect associated equipment and will not require the extension of the site boundaries.
- 3. The proposed modifications will not increase noise levels at the facility by six decibels or more.
- 4. The proposed modifications will not result in radio frequency (RF) power density levels at the facility that exceed the Federal Communications Commission (FCC) adopted safety standard. Attached behind <u>Tab 2</u> is a new Power Density Calculation Table.

Also attached, behind <u>Tab 3</u> is a structural analysis stating that the tower can support the proposed modification.

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

Sincerely

Kenneth C. Baldwin

Enclosures

cc:

Mark Benigni, Mayor

Sandy M. Carter



Swedcom Corporation

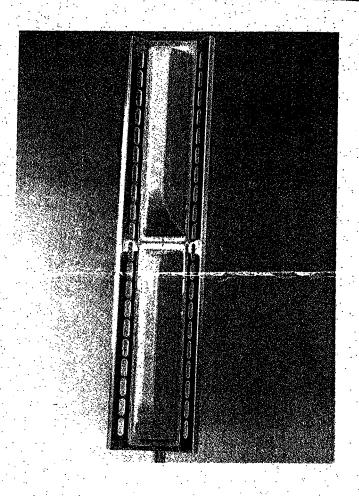
ALP 9212-N

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

VSWR 1.5 1.0 820 840 860 880

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

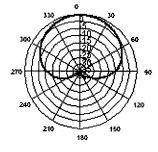
1850-1990 MHz

MaxFill™

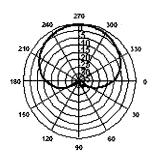
dB Director®

- 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





Azimuth 1850 MHz (Tilt=2)



270 40 150
180

Vertical 1850 MHz (Tilt=2)

Horizontal 1850 MHz (Tilt=2)			
ELECTRICAL		MECH	ANICAL
Frequency (MHz):	1850-1990	Weight:	8.5 lbs (3.9 kg)
Polarization: Gain (dBd/dBi):	Vertical 14/16.1	Dimensions (LxWxD):	48 X 3.5 X 7 in (1219 X 89 X 178 mm)
Azimuth BW:	85°	Max. Wind Area:	1.18 ft² (0.11 m²)
Elevation BW:	8°	Max. Wind Load (@ 100mph):	65 lbf (289 N)
Beam Tilt:	2°	Max. Wind Speed:	125 mph (201 km/h)
USLS* (dB):	>18	Radiator Material:	Low Loss Circuit Board
Null Fill* (dB):	15	Reflector Material:	Aluminum
Front-to-Back Ratio* (dB):	40	Radome Material:	ABS, UV Resistant
VSWR:	<1.33:1	Mounting Hardware Material:	Galvanized Steel
IM Suppression - Two 20 Watt Carriers:	-150 dBc	Connector Type:	7-16 DIN - Female (Bottom)
Impedance:	50 Ohms	Color:	Light Gray
Max Input Power:	250 Watts	Standard Mounting Hardware:	DB390 Pipe Mount Kit, included
Lightning Protection:	DC Ground	Downtilt Mounting Hardware:	DB5098, optional
Opt Electrical Tilt:	0°.4°.6°	Opt. Mounting Hardware:	DB5094-AZ Azimuth Wall Mount



Opt Electrical Tilt:

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

0°,4°,6°

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.

Site Name: Meriden E Tower Height: 66 FT

Operator	Operating Frequency	Number of Trans.	ERP Per Trans:	Total ERP	Distance to	Calculated Power Tower Tower	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
Verizon	880	6	200	1800	99	0.1486	0.586	25.36%
Verizon	1900	3	200	600	99	0.0495	1	4.95%
Total Percen	otal Percentage of Maxim		ım Permissible Exposure	cposure				30.31%

*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/cm^2 = milliwatts per square centimeter ERP = Effective Radiated Power





February 16, 2005

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

Reference:

Existing Telecommunications Facility Modification

Verizon Wireless

EVDO

Meriden East 38 Elm Street

Meriden, Connecticut VZ1 123/36930570.00000

Doar Ms. Katz:

URS Corporation (URS) conducted a structural review of the existing 45' self supporting tower located on the roof of the existing building at 38 Elm Street in Meriden, Connecticut. The purpose of our review was to evaluate the effect of proposed Verizon Wireless antenna modifications on the existing tower structure. Verizon Wireless proposes to replace three (3) Cellular antennas, Model number ALP 9212 with six (6) Decibel PCS antennas, Model number DB948F85T2E-M and relocate three (3) existing antennas to the center of the existing Verizon platform. All antennas will remain on the existing platform at the existing elevation of 66' A.G.L.

The proposed Verizon antenna replacements considered in this review are as follows:

Antenna and Mount Modification	Carrier	Antenna Mount Elevation
(6) ALP 9212 Cellular antennas to be replaced with (6) Decibel DB948F85T2E-M PCS antennas, and relocating (3) existing ALP 9212 cellular antennas to center of existing Verizon platform.	Verizon Wireless	66' A.G.L.

The existing antennas, Swedcom ALP-9212 are $43^{\circ}\text{L} \times 6.5^{\circ}\text{W} \times 8^{\circ}\text{D}$ with a weight of 20 lbs while the proposed antennas are Decibel D8948F85T2E-M are $48^{\circ}\text{L} \times 3.5^{\circ}\text{W} \times 7^{\circ}\text{D}$ and weigh 8.5 lbs . The wind loading of the proposed antennas the existing antennas are approximately the same. Therefore, the new loading for the proposed antenna condition will be structurally acceptable .

If you should have any questions, please call.

Sincerely.

URS Corporation AES

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

cc:

Mark Gauger - Verizon Wireless

Rachel A. Mayo - Robinson & Cole LLP

Douglas Roberts, AIA - URS

URS Corporation 500 Enterprise Drive. Suite 3B Rocky Hill. \$1 06067 Tel. 800.529.8882 Tex: 880.529.3991