

# 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.ct.gov/csc

August 13, 2004

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

RE: **EM-VER-014-040712** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 405 Brushy Plain Road, Branford, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on August 12, 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 July 12, 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/cm

c: Honorable John E. Opie, First Selectman, Town of Branford Justine K. Gillen, Zoning Enforcement Officer, Town of Branford Michele Briggs, Southwestern Bell Mobile Systems, LLC





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July 12, 2004

Honorable John E. Opie First Selectman Town of Branford 1019 Main Street Branford, CT 06405-0150

RE: **EM-VER-014-040712** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 405 Brushy Plain Road, Branford, Connecticut.

Dear Mr. Opie:

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 12, 2004 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 tru¶y yours

Executive Director

SDP/cm

Enclosure: Notice of Intent

c: Justine K. Gillen, Zoning Enforcement Officer, Town of Branford



# ROBINSON & COLELLP

EM-VER-014-040712

ENNETH C. BALDWIN

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

July 12, 2004

### Via Hand Delivery

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

Re: Notice of Exempt Modification – Antenna Swap 405 Brushy Plain Road Telecommunications Facility Branford, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at 405 Brushy Plain Road in Branford. This facility consists of twelve (12) panel-type cellular antennas at the 110-foot level of the 150-foot tower. Equipment associated with the antenna is located in an equipment shelter near the base of the tower.

The Connecticut Siting Council ("the Council") approved Cellco's shared use of the Brushy Plain Road facility on October 19, 2000. Cellco now intends to modify its facility by replacing the six (6) cellular antennas with six (6) PCS antennas at the same 110-foot level on the tower. Attached behind <u>Tab 1</u> are specifications for the existing antennas and the proposed antennas for the Brushy Plain 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 Branford First Selectman, Anthony J. DaRos.

As the Council knows, on May 23, 2003, Cellco acquired, from Northcoast Communications, a license to provide PCS service throughout Connecticut. The proposed modifications to the Brushy Plain Road facility will allow Cellco to provide its customers in the Branford area with enhanced wireless voice and data services.



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# ROBINSON & COLE LLP

S. Derek Phelps July 12, 2004 Page 2

The planned modifications to the Brushy Plain Road facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(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 110-foot level on the 150-foot 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 Power Density Calculation Table.

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:

Anthony J. DaRos, First Selectman

Sandy M. Carter



## **DECIBEL**

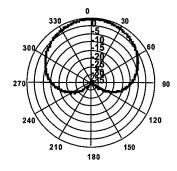
Base Station Antennas

#### **DB844H80E-XY**

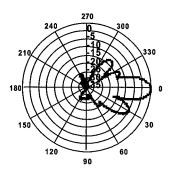
12.5 dBd, Directed Dipole Antenna 806-896, 870-960 MHz 806-896 MHz 870-960 MHz

- Excellent azimuth roll-off, 15-20% reduction in cell to cell overlap
- Superior front to back ratio
- Low profile, low wind load for easy zoning
- Outstanding field record, with thousands of units deployed, world wide

 $30^{\circ}$ 



Horizontal 835 MHz (Tilt=0)



Vertical 835 MHz (Tilt=0)



EL	ECTRICAL		MEG	CHANICAL
Frequency (MHz):	806-896	870-960	Weight:	14 lbs (6.4 kg)
Polarization:	Vertical	Vertical	Dimensions (LxWxD):	48 X 6.5 X 8 in
Gain (dBd/dBi):	12.5/14.6	12.8/14.9	, ,	(1219 X 165 X 203 mm)
Azimuth BW:	80°	80°	Max. Wind Area:	1.08 ft² (0.10 m²)
Elevation BW:	15°	15°	Max. Wind Load (@ 100mph):	59 lbf (262 N)
Beam Tilt:	0°	0°	Max. Wind Speed:	125 mph (201 km/h)
USLS* (dB):	>15	>15	Radiator Material:	Brass
Front-to-Back Ratio* (dB):	40	40	Reflector Material:	Aluminum
VSWR:	<1.5:1	<1.5:1	Radome Material:	ABS, UV Resistant
Impedance:	50 Ohms	50 Ohms	Mounting Hardware Material:	Galvanized Steel
Max Input Power:	500 Watts	500 Watts	Connector Type:	7-16 DIN - Female (Back)
Lightning Protection:	DC Ground	DC Ground	Alt. Connectors:	N Type - Female
Opt Electrical Tilt:	6°	6°	Color:	Light Gray
•	•	•	Standard Mounting Hardware:	DB380 Pipe Mount Kit, included
			Downtilt Mounting Hardware:	DB5083, optional
			Opt. Mounting Hardware:	DB5084-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: 4/23/2004
\* - Indicates Typical Values

# **DECIBEL'**Base Station Antennas

### 932DG90T2E-M

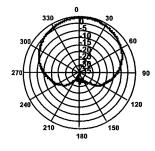
16.7 dBi, ±45° Diversity Panel Antenna 1850-1990 MHz

### 1850-1990 MHz

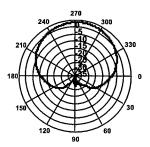
Diversity Master™ GEN3XPOL™

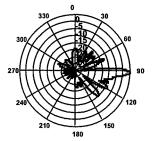
- Features air dielectric feed system for maximum array efficiency and lowest loss
- · No fasteners, rivets, soldering or welding in critical element-to-transformer circuit
- Strong first upper side lobe suppression
- Excellent gain per unit length of antenna





Azimuth 1850 MHz (Tilt=2)





Vertical 1850 MHz (Tilt=2)

Horizontal 1850 MHz (Tilt=2)

ELECTRICAL		MECHA	ANICAL
Frequency (MHz): Polarization: Gain (dBd/dBi): Azimuth BW: Elevation BW: Beam Tilt: USLS* (dB): Front-to-Back Ratio* (dB): Isolation (dB): VSWR: IM Suppression - Two 20 Watt Carriers: Impedance: Max Input Power: Lightning Protection: Opt Electrical Tilt:	1850-1990 +45°/-45° 14.6/16.7 90° 7° 2° >18 30 >30 <1.33:1 -150 dBc 50 Ohms 250 Watts DC Ground 0°.4°, Variable 1-8°	Weight: Dimensions (LxWxD): Max. Wind Area: Max. Wind Load (@ 100mph): Max. Wind Speed: Radiator Material: Reflector Material: Radome Material: Mounting Hardware Material: Connector Type: Color: Standard Mounting Hardware: Downtilt Mounting Hardware: Opt. Mounting Hardware:	9.5 lbs (4.3 kg) 51.5 X 7 X 3.5 in (1308 X 178 X 89 mm) 0.86 ft² (0.08 m²) 50 lbf (222 N) 125 mph (201 km/h) Aluminum Aluminum Polycarbonate, UV Resistant Galvanized Steel 7-16 DIN - Female (Bottom) Light Gray DB390 Pipe Mount Kit, included DB5098, optional DB5094-AZ Azimuth Wall Mount



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Date: 4/2/2004
\* - Indicates Typical Values

dbtech@andrew.com.

Site Name: Barnford 2, CT Tower Height: 110 ft rad center

			12.0	32 32 32 32		Calculated	Morimum	3.5	
Operator	Орегация	Number of Trans.	Trans.	Total ERP	Distance to Target	Power	Permissable	Fraction of	
		12.0				Density	Exposure*		<del>-</del>
	(MHz)		(watts)	(watts)	(feet)	$(mW/cm^2)$ $(mW/cm^2)$	(mW/cm^2)	(%)	
Verizon	869	6	200	1800	110	0.0535	0.5793	ľ	
Verizon	1900	3	200	009	110	0.0178	1	1 78%	
Total Percen	tal Percentage of Maxin	imum Permissible Exposure	nissible Ex	posure			-	11.02%	

\*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

Absolute worst case scenario, maximum values used.

