

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-086-050127A** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 557 Route 82, Montville, 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 January 27, 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.

Pamela B. Katz, P.E.

Chairman

PBK/laf

c: The Honorable Joseph W. Jaskiewicz, Mayor, Town of Montville Marcia Vlaun, Town Planner, Town of Montville Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP Michele G. Briggs, New Cingular Wireless PCS, LLC



Town Transport

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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

January 31, 2005

The Honorable Joseph W. Jaskiewicz Mayor Town of Montville 310 Norwich New London Turnpike Uncasville, CT 06382

RE: EM-VER-86-050127A - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 557 Route 82, Montville, Connecticut.

Dear Mayor Jaskiewicz:

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.

Very truly your

Executive Director

SDP/cm

Enclosure: Notice of Intent

c: Marcia Vlaun, Town Planner, Town of Montville

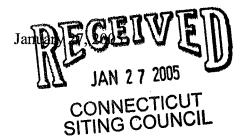


ROBINSON & COLE

KENNETH C. BALDWIN

EM-VER-086-050127A

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



Via Hand Delivery

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

Re: Notice of Exempt Modification – Antenna Swap 557 Route 82 Telecommunications Facility Montville, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility, on an existing tower owned by Sprint Sites USA at 557 Route 82 in Montville. This facility consists of twelve (12) panel-type cellular antennas at the 170-foot level of the 180-foot tower. Equipment associated with the antennas is located in a shelter near the base of the tower.

The Connecticut Siting Council ("the Council") approved Cellco's shared use of the Route 82 facility on April 12, 2001 (TS-VER-086-010328). Cellco now intends to modify its facility by replacing all twelve (12) cellular antennas (Model DB844H90E-XY) with six (6) new cellular (Model DB844H80E-XY) and six (6) PCS antennas (Model 948F85T2E-M) at the same 170-foot level on the tower. Attached behind Tab 1 are specifications for the existing cellular antennas and the proposed cellular and PCS antennas for the Route 82 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 Montville Mayor, Joseph W. Jaskiewicz.

The planned modifications to the Route 82 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 January 27, 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 170-foot level on the 180-foot tower.
- 2. The proposed modifications will not affect ground-mounted 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.

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: Joseph W. Jaskiewicz, Mayor

Sandy M. Carter



DECIBEL

Base Station Antennas

DB844H90E-XY

Directed Dipole Antenna

806 - 896 MHz 870 - 960 MHz

Excellent azimuth roll-off 15-20% reduction in cell to cell overlap ■ : Superiorationt to back ratio

L Low profile ilow wind load force asy zoning

্য , (@uistanding,fieldtrecord, with thousands of milits deployed, world wida

ELECTRICAL

Frequency (MHz): 806 - 896 870 - 960 Polarization: Vertical Vertical Gain (dBd/dBi): 12/14.1 12.4/14.5 Azimuth BW (Deg.): 90 90 Elevation BW (Deg.): 15 15 Beam Tilt (Deg.): 0 0 USLS* (dB): >15 >15 Front-To-Back Ratio* (dB): 40 40 **VSWR:** <1.35:1 <1.35:1 500 500

Max. Input Power (Watts):

Impedance (Ohms): 50 **Lightning Protection:**

DC Ground

Opt. Electrical Tilt:

6

MECHANICAL

Weight:

Dimensions (LxWxD):

6.3 kg (14 lb)

1,219 x 165 x 203 mm (48 x 6.5 x 8 in)

Max. Wind Area:

0.10 m² (1.1 ft²)

Max. Wind Load (@ 100 mph):

262.4 N (59 lbf)

Max. Wind Speed:

241 km/h (150 mph)

Galvanized Steel

Hardware Material:

7-16 DIN - Female

Connector Type:

(1, Back)

Color:

Light Gray

Alt. Connectors:

N - Type Female

Standard Mounting Hardware:

DB380

Standard Downtilt

Mounting Hardware:

DB5083



Andrew Corporation 2601 Telecom Parkway Richardson, Texas U.S.A 75082-3521 Tel: 214.631.0310

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

* - Indicates Typical Values 1/11/2005 dbtech@andrew.com

DECIBEL*
Base Station Antennas

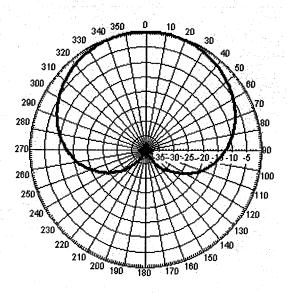
DB844H90E-XY

Directed Dipole Antenna

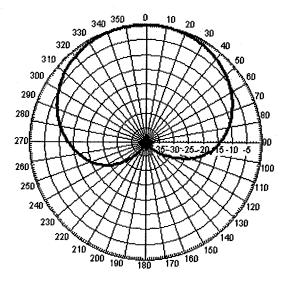
806 - 896 MHz 870 - 960 MHz

AZIMUTH PATTERN

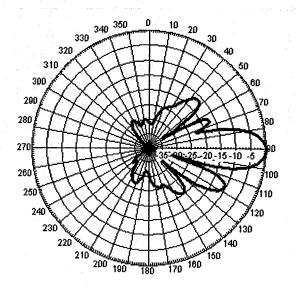
ELEVATION PATTERN



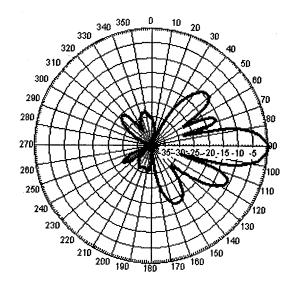
Freq: 860 MHz, Tilt: 0



Freq: 940 MHz, Tilt: 0



Freq: 860 MHz, Tilt: 0



Freq: 940 MHz, Tilt: 0



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1/11/2005
dbtech@andrew.com

DECIBEL

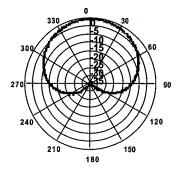
Base Station Antennas

DB844H80E-XY

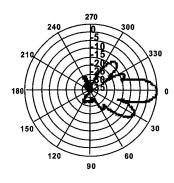
12.5 dBd, Directed Dipole Antenna 806-896, 870-960 MHz 806-896 MHz 870-960 MHz

- 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





Horizontal 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
	•	Ť	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

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* - Indicates Typical Values

DECIBEL

Base Station Antennas

948F85T2E-M

16.1 dBi, Directed Dipole Antenna 1850-1990 MHz

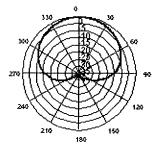
1850-1990 MHz

MaxFill™

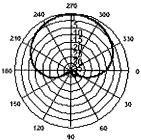
dB Director®

- 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)



Horizontal 1850 MHz (Tilt=2)

300 £	330			∕eo	
240	1			120	
		. 1	205		

Vertical 1850 MHz (Tilt=2)

ZTQ
240
210
100
150
120 60

ELECTRICAL		MECHA	ANICAL
Frequency (MHz):	1850-1990	Weight:	8.5 lbs (3.9 kg)
Polarization:	Vertical	Dimensions (LxWxD):	48 X 3.5 X 7 in
Gain (dBd/dBi):	14/16.1	` '	(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



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

dbtech@andrew.com.

Site Name: Montville NW Tower Height: 170 Ft. rad center

4.90%				posure	mum Permissible Exposure	mum Pern	tal Percentage of Maxi	Fotal Percen
0.95%	1	0.0095	170	765	255	3	1900	Verizon
3.95%	0.56733	0.0224	170	1800	200	6	880	Verizon
(%)	$(mW/cm^{^{\prime}}2)$ $ (mW/cm^{^{\prime}}2) $	(mW/cm^2)	(feet)	(watts)	(watts)		(MHz)	
Fraction of MPP	Maxamum Permissable Exposure	Calculated Rower Density	Distance to Target	Total ERP	DRP Per Trans	Nimberol Trems	Operating Frequency	Operator

*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.

