



STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

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

October 4, 2001

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

RE: **EM-VER-158-010921** - Celco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 880 Post Road East, Westport, Connecticut. (Docket No. 123)

Dear Attorney Baldwin:

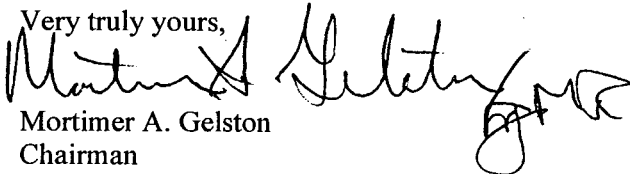
At a public meeting held on October 3, 2001, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated September 20, 2001. 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.

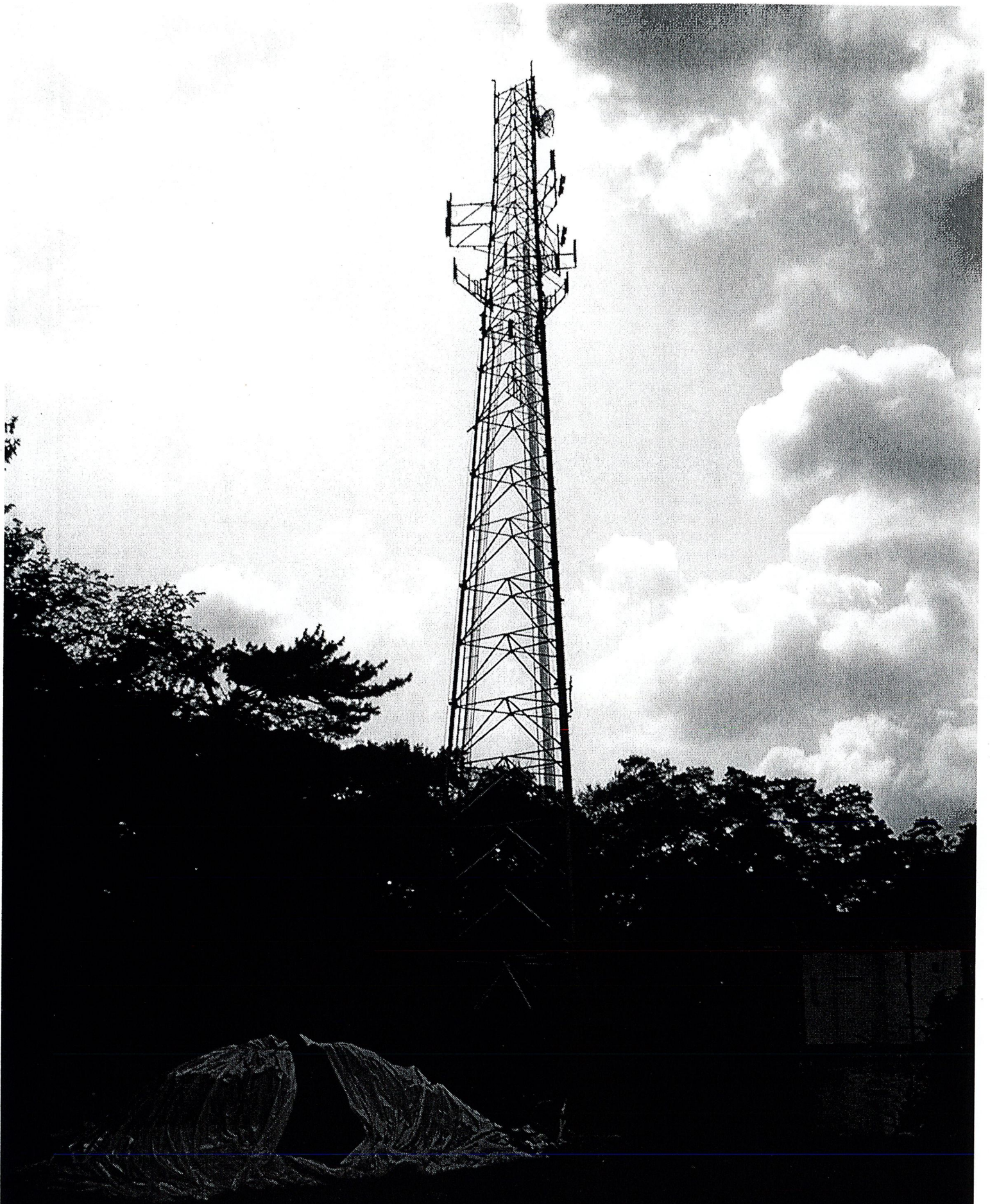
Very truly yours,



Mortimer A. Gelston  
Chairman

MAG/RKE/laf

c: Honorable Diane G. Farrell, First Selectman, Town of Westport  
Katherine Barnard, Director, Planning & Zoning, Town of Westport  
Peter W. van Wilgen, SNET Mobility LLC  
Christopher B. Fisher, Esq., Cuddy & Feder & Worby LLP



**Verizon, 880 Post Road East, Westport 08/24/01**



STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

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

September 21, 2001

Honorable Diane G. Farrell  
First Selectman  
Town of Westport  
Town Hall  
110 Myrtle Avenue  
P. O. Box 549  
Westport, CT 06881

RE: **EM-VER-158-010921** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 880 Post Road East, Westport, Connecticut. (Docket No. 123)

Dear Ms. Farrell:

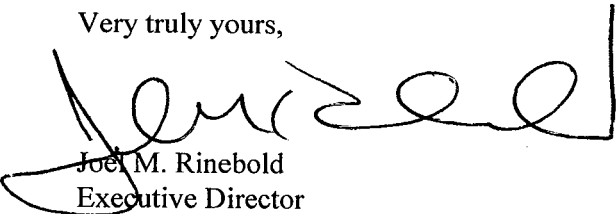
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for Wednesday, October 3, 2001, at 1:30 p.m. in Hearing Room Two, 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,



Joel M. Rinebold  
Executive Director

JMR/RKE/laf

Enclosure: Notice of Intent

c: Katherine Barnard, Director, Planning & Zoning, Town of Westport

Em-VER-158-010921

# ROBINSON & COLE LLP

HARTFORD • STAMFORD • GREENWICH • NEW YORK • BOSTON

LAW OFFICES

280 Trumbull Street  
Hartford, CT 06103-3597  
860-275-8200  
Fax 860-275-8299

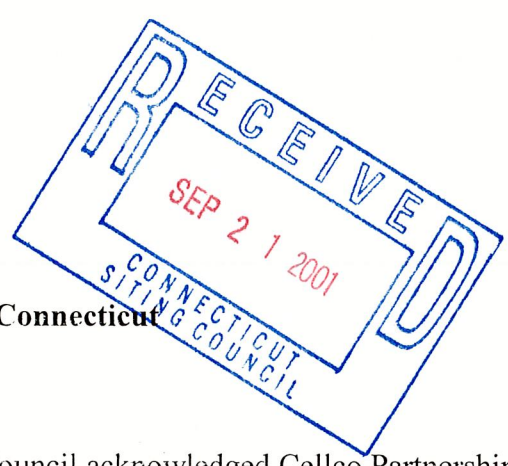
Kenneth C. Baldwin  
860-275-8345  
Internet: kbaldwin@rc.com

September 20, 2001

*Via Airborne Express*

Mr. Joel M. Rinebold  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

**Re: Notice of Exempt Modification  
Siting Council Docket No. 123  
880 Post Road East, Westport, Connecticut**



Dear Mr. Rinebold:

On August 29, 2001, the Siting Council acknowledged Cellco Partnership's notice of intent to modify the existing 180-foot State Police tower at 880 Post Road East in Westport. Please accept this letter as notice to the Council of Cellco's intent to further modify the State Police tower by relocating a 10-foot whip antenna, owned and operated by the State Police, from the 90-foot level on the tower to the 180-foot level on the tower. This notification letter is filed pursuant to R.C.S.A. § 16-50j-73, for activity that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). A copy of this notice is being sent to Westport First Selectwoman, Diane G. Farrell.

As stated in Cellco's August 2, 2001 notice, the existing State Police tower at 880 Post Road East is currently shared by the State Police, Cellco, Cingular Wireless and AT&T Wireless. Although contemplated at the time of our August 2, 2001 filing, the relocation of the State Police whip antenna was not included in the prior notification. Please note that the structural analysis and the RF power density calculations included in Cellco's August 2<sup>nd</sup> filing both contemplated the relocation of the State Police whip antenna.

The additional modification to the State Police tower described above falls squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

# ROBINSON & COLE LLP

Mr. Joel M. Rinebold  
September 20, 2001  
Page 2

1. The proposed modification will not increase the overall height of the existing tower. While the State Police whip antenna may extend above the top of the 180-foot structure, the tower height itself will not be increased.
2. The relocation of the State Police whip antenna does not effect any ground level equipment or structure and therefore will not require the extension of the facility boundaries.
3. The proposed antenna relocation will not increase the noise levels at the facility by six decibels or more.
4. The operation of the facility with the relocated whip antenna will not result in an increase in existing radio frequency (RF) power density levels. In fact, the relocation of the antenna to a higher point on the tower will effectively reduce power density levels from the site. As mentioned above, the power density calculations prepared by the State Police and included in Cellco's August 2, 2001 filing, contemplated the antenna relocation described above. A copy of those calculations are attached hereto.

Also attached is a copy of a letter dated April 17, 2001, from URS Corporation verifying that the tower is structurally capable of supporting the modifications to the facility including the relocation of the State Police antenna to the top of the tower.

For the foregoing reasons, Cellco respectfully submits that the proposed relocation of the State Police whip antenna from the 90-foot level to the 180-foot level on the Westport facility tower constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

KCB/kmd

Attachments

cc: Diane G. Farrell, Westport First Selectwoman  
Ira W. Bloom, Esq.  
Howard G. Polnow

ANT

SITE/ANT	USER	USE	FREQ	TX	HGT	TWR	ANT	SZ	MANUF	MODEL	GAIN	CABLE	DESCRIPTION
32						26							
32	1	CSP	42.04	330	180		OMNI	16	DECIBEL	PD-1142		0 LDF5-50A	WHIP
32	2	VERI	824-869		160			4	DECIBEL	DB844H90		10 LDF7-50A	PANEL
32	7	VERI	824-869		160			4	DECIBEL	DB844H90		10 LDF7-50A	PANEL
32	8	VERI	10552.5	1	170B			6	ANDREW	PAR6-105	43	EW-8D	DISH WRADOME
32	9	VERI	1900		160			4	DECIBEL	DB948F85		10 LDF7-50A	PANEL
32	14	VERI	1900		160			4	DECIBEL	DB948F85		10 LDF7-50A	PANEL
32	15	VERI	1575	0	60C							10 LDF4-50A	GPS
32	16	CSP	954.4	1	169C			6	MARK	P-972GR	20	10 LDF5-50A	GRID DISH
32	17	SNET	887	11	135			4	SWEDCOM		11	10 LDF7-60A	PANEL
32	25	SNET	887	11	135			4	SWEDCOM		11	10 LDF7-60A	PANEL
32	26	ATT	1965	4	145			4	ALLGON	7184	14	10 LDF7-50A	PANEL
32	31	ATT	1965	4	145			4	ALLGON	7184	14	10 LDF7-50A	PANEL
32	32	CSP	6700	0	177C	294							FUTURE DISH

**RADIO/ANTENNA SYSTEMS DATA**  
 =====

SITE NAME:  
TOWER HEIGHT:

WESTPORT  
180 FEET

PREPARED BY: D.P.S.  
ON DATE: 07-20-2001

O	OPERATING FREQUENCY (MHz)	-TRANSMIT POWER (WATTS)	ANTENNA				ERP (W)
			HEIGHT (FEET)	TYPE	VERTICAL SIZE (FT)	GAIN (dB)	
1	42.0400	330	180	FOLDED MONOPOLE	10	0.0	330
2	875.0000	19 x 4	160	PANEL ANTENNA	4	14.0	1900
3	875.0000	0	160	PANEL ANTENNA	4	14.0	0
4	875.0000	19 x 4	160	PANEL ANTENNA	4	14.0	1900
5	875.0000	0	160	PANEL ANTENNA	4	14.0	0
6	875.0000	19 x 4	160	PANEL ANTENNA	4	14.0	1900
7	875.0000	0	160	PANEL ANTENNA	4	14.0	0
8	10555.0000	1	170	SOLID DISH	6	43.6	13875
9	1900.0000	6 x 40	160	PANEL ANTENNA	4	14.0	6029
0	1900.0000	0	160	PANEL ANTENNA	4	14.0	0
1	1900.0000	6 x 40	160	PANEL ANTENNA	4	14.0	6029
2	1900.0000	0	160	PANEL ANTENNA	4	14.0	0
3	1900.0000	6 x 40	160	PANEL ANTENNA	4	14.0	6029
4	1900.0000	0	160	PANEL ANTENNA	4	14.0	0
5	1575.0000	0	60	PANEL ANTENNA	1	0.0	0
6	954.4000	1	169	GRID DISH	4	19.2	50
7	887.0000	0	135	PANEL ANTENNA	4	11.0	0
8	887.0000	0	135	PANEL ANTENNA	4	11.0	0
9	887.0000	0	135	PANEL ANTENNA	4	11.0	0
0	887.0000	0	135	PANEL ANTENNA	4	11.0	0
1	887.0000	0	135	PANEL ANTENNA	4	11.0	0
2	887.0000	0	135	PANEL ANTENNA	4	11.0	0
3	887.0000	0	135	PANEL ANTENNA	4	11.0	0
4	887.0000	0	135	PANEL ANTENNA	4	11.0	0
5	887.0000	0	135	PANEL ANTENNA	4	11.0	0
6	1967.5000	8 x 4	145	PANEL ANTENNA	4	14.0	804
7	1967.5000	0	145	PANEL ANTENNA	4	14.0	0
8	1967.5000	8 x 4	145	PANEL ANTENNA	4	14.0	804
9	1967.5000	0	145	PANEL ANTENNA	4	14.0	0
0	1967.5000	8 x 4	145	PANEL ANTENNA	4	14.0	804
1	1967.5000	0	145	PANEL ANTENNA	4	14.0	0

- NOTES: 1. TRANSMIT POWER ENTRIES SHOWN AS '5 x 25' SHOULD BE INTERPRETED AS '5 TRANSMITTERS, EACH HAVING A POWER OF 25 WATTS'. ENTRIES OF '0' MEAN 'RECEIVE ONLY'- i.e. NO TRANSMITTER. ALL OTHER ENTRIES REFER TO ONE TRANSMITTER WITH THE POWER SHOWN.
2. ERP (EFFECTIVE RADIATED POWER) IS THE PRODUCT OF ALL TRANSMITTER POWERS AND THE NUMERICAL VALUE OF THE GAIN (ANTILOG OF dB) RELATIVE TO A DIPOLE ANTENNA.

**POWER DENSITY ANALYSIS**  
 =====  
 AT THE TOWER BASE, FOR EACH RADIO/ANTENNA SYSTEM  
 -----

SITE NAME: WESTPORT  
 TOWER HEIGHT: 180 FEET

PREPARED BY: D.P.S.  
 ON DATE: 07-20-2001

No	OPERATING FREQUENCY (MHz)	EIRP (WATTS)	DISTANCE TO BASE OF TOWER (FEET)	MAXIMUM PERMISSIBLE EXPOSURE (MW/SQ-CM)	AT THE BASE OF THE TOWER	
					POWER DENSITY (MW/SQ-CM)	PERCENT OF MAX. EXPOSURE
1	42.0400	541	185	0.200	0.0005417	0.2709
2	875.0000	3117	160	0.583	0.0041699	0.7153
3	875.0000	0	160	0.583	0.0000000	0.0000
4	875.0000	3117	160	0.583	0.0041699	0.7153
5	875.0000	0	160	0.583	0.0000000	0.0000
6	875.0000	3117	160	0.583	0.0041699	0.7153
7	875.0000	0	160	0.583	0.0000000	0.0000
8	10555.0000	22762	170	1.000	0.0004756	0.0476
9	1900.0000	9890	160	1.000	0.0132309	1.3231
10	1900.0000	0	160	1.000	0.0000000	0.0000
11	1900.0000	9890	160	1.000	0.0132309	1.3231
12	1900.0000	0	160	1.000	0.0000000	0.0000
13	1900.0000	9890	160	1.000	0.0132309	1.3231
14	1900.0000	0	160	1.000	0.0000000	0.0000
15	1575.0000	0	60	1.000	0.0000000	0.0000
16	254.4000	23	169	0.636	0.0000007	0.0001
17	887.0000	0	135	0.591	0.0000000	0.0000
18	887.0000	0	135	0.591	0.0000000	0.0000
19	887.0000	0	135	0.591	0.0000000	0.0000
20	887.0000	0	135	0.591	0.0000000	0.0000
21	887.0000	0	135	0.591	0.0000000	0.0000
22	887.0000	0	135	0.591	0.0000000	0.0000
23	887.0000	0	135	0.591	0.0000000	0.0000
24	887.0000	0	135	0.591	0.0000000	0.0000
25	887.0000	0	135	0.591	0.0000000	0.0000
26	1967.5000	1319	145	1.000	0.0021480	0.2148
27	1967.5000	0	145	1.000	0.0000000	0.0000
28	1967.5000	1319	145	1.000	0.0021480	0.2148
29	1967.5000	0	145	1.000	0.0000000	0.0000
30	1967.5000	1319	145	1.000	0.0021480	0.2148
31	1967.5000	0	145	1.000	0.0000000	0.0000

TOTAL PERCENT OF MAXIMUM PERMISSIBLE EXPOSURE FOR  
 UNCONTROLLED ENVIRONMENTS FOR ALL 31 RADIO SYSTEMS = 7.0780

- NOTES: 1. THE POWER DENSITIES REPRESENTING THE 'MAXIMUM PERMISSIBLE EXPOSURE FOR UNCONTROLLED ENVIRONMENTS' ARE CALCULATED IN ACCORDANCE WITH IEEE C95.1-1991 (REVISION OF ANSI C95.1-1982).
2. POWER DENSITIES ARE CALCULATED IN ACCORDANCE WITH THE METHODS DEFINED IN FCC DOCUMENT 'OET BULLETIN NO.65', AUGUST 1997
3. EIRP (EFFECTIVE ISOTROPICALLY RADIATED POWER) REFERENCES THE RADIATED POWER TO A POINT SOURCE, WHICH YIELDS POWERS 1:6400 TIMES HIGHER THAN ERP.



POWER DENSITY ANALYSIS

=====

POWER DENSITY (% OF MAX. EXPOSURE VS DISTANCE FROM THE TOWER BASE

-----  
 SITE NAME: WESTPORT PREPARED BY: D.P.S.  
 TOWER HEIGHT: 180 FEET ON DATE: 07-20-2001  
 -----

DISTANCE (FEET)	POWER DENSITY (% OF MAX. EXPOSURE)
-----	-----
0	7.0780
50	6.4451
100	5.3491
150	4.2499
200	3.2826
250	2.5598
300	2.0184
350	1.6154
400	1.3131
450	1.0835
500	0.9065
550	0.7679
600	0.6577
650	0.5691
700	0.4967
750	0.4371
800	0.3874
850	0.3456
900	0.3101
950	0.2797
1000	0.2535
1050	0.2308
1100	0.2110
1150	0.1936
1200	0.1783
1250	0.1647



September 21, 2001

Mr. Mark Gauger  
Verizon Wireless  
20 Alexander Drive  
Wallingford, CT 06492

**Reference: Proposed Telecommunications Facility  
Verizon Wireless  
880 Post Road East  
Westport, Connecticut  
F300002063.04**

Dear Mr. Gauger:

Per your request, URS Corporation (URS) has performed a review and re-evaluation of the tower structural analysis performed by URS revised date March 28, 2001. The purpose of this re-evaluation was to determine the effect of substituting (12) ALP 9212 Verizon antennas at 155' elevation with (6) DB844 H 90E - SX and (6) DB948f8 SE-M at the 155' elevation. The number, size and location of the coaxial cables will remain unchanged. The Verizon 6' grid dish at the 177' elevation will be replaced with a new dish produced by Andrew Corporation, Model No.: PAR6-105 at elevation 170'. The associated coaxial cables will be the same size and location as indicated in the original evaluation dated March 28, 2001.

This shall also serve to confirm that relocation of the State Police's whip antenna from the 90' level to the 180' level was included in the original analysis.

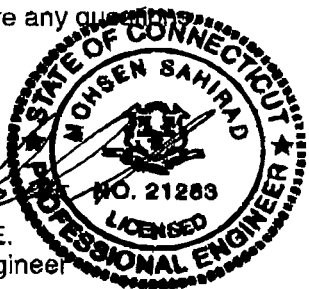
Our review and re-evaluation have determined that these substitutions will have minimal effect on the result of the original analysis. The report date March 28, 2001 is valid for the proposed installation.

Please call if there are any questions.

Sincerely,

*URS Corporation*

*Mohsen Sahirad*  
Mohsen Sahirad, P.E.  
Senior Structural Engineer



MS/mks

- cc: S. Carter, Verizon Wireless
- Howard Polnow, Verizon Wireless
- Mike Stemmler, State Police
- I. Artaiz/URS
- D. Roberts/URS
- A. Abadjian/URS
- CF/Book

URS Corporation  
500 Enterprise Drive, Suite 3B  
Rocky Hill, CT 06067  
Tel: 860.529.8882  
Fax: 860.529.3991

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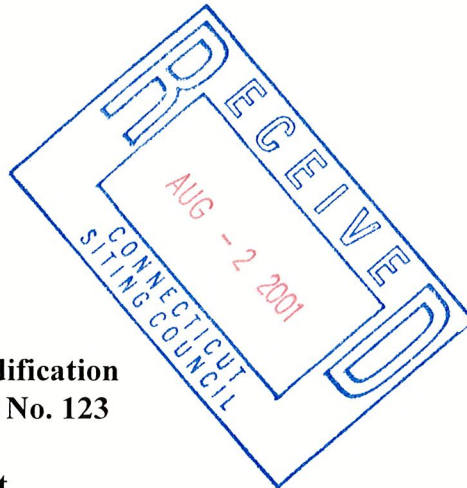
Kenneth C. Baldwin  
860-275-8345  
Internet: kbaldwin@rc.com

August 2, 2001

*Via Hand Delivery*

Mr. Joel M. Rinebold  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

**Re: Notice of Exempt Modification  
Siting Council Docket No. 123  
880 Post Road East  
Westport, Connecticut**



Dear Mr. Rinebold:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") intends to install antennas on the existing 180-foot State Police tower at 880 Post Road East in Westport, Connecticut. 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 Westport First Selectwoman, Diane G. Farrell.

The existing State Police tower at 880 Post Road East is currently shared by the State Police, Cellco, Cingular Wireless and AT&T Wireless. Cellco intends to replace its existing antennas at the 155-foot level with six (6) DB844H-90E-SX antennas and six (6) DB948f8SE-M antennas at the same level. Cellco will also replace its existing 6-foot dish antenna at the 177-foot level on the tower with a new 6-foot dish antenna at the same level. There are no changes proposed to any ground mounted structures or equipment.

The planned modifications to the 880 Post Road East 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 tower. Cellco's panel antennas will remain at the 155-foot level and its dish antenna will remain at the 177-foot level, on the existing 180-foot tower.

# ROBINSON & COLE LLP

Mr. Joel M. Rinebold

August 2, 2001

Page 2

2. The installation of proposed antennas does not effect any ground level equipment or structure and therefore will not require an extension of facility boundaries.

3. The proposed antenna modification will not increase the noise levels at the facility by six decibels or more.

4. The operation of the replacement antennas does not result in an increase in existing radio frequency (RF) power density levels at the facility. Updated RF power density calculations, performed by the Department of Public Safety, are attached hereto.

Also attached is a letter from URS Corporation verifying that the tower is capable of supporting the Cellco antennas. For the foregoing reasons, Cellco respectfully submits that the proposed addition of six panel antennas at the Westport facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

KCB/kmd

Enclosure

cc: Diane G. Farrell, Westport First Selectwoman  
Ira W. Bloom, Esq.  
Sandy M. Carter



April 17, 2001

Mr. Mark Gauger  
Verizon Wireless  
20 Alexander Drive  
Wallingford, CT 06492

**Reference: Proposed Telecommunications Facility  
Verizon Wireless  
880 Post Road East  
Westport, Connecticut  
F300002063.04**

Dear Mr. Gauger:

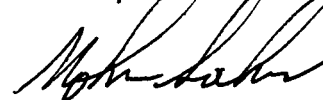
Per your request, URS Corporation (URS) has performed a review and re-evaluation the tower structural analysis performed by URS revised date March 28, 2001. The purpose of this re-evaluation was to determine the effect of substituting (12) ALP 9212 Verizon antennas at 155' elevation with (6) DB844 H 90E – SX and (6) DB948f8 SE-M at the 155' elevation. The number, size and location of the coaxial cables will remain unchanged. The Verizon 6' grid dish at the 177' elevation will be replaced with a new dish produced by Andrew Corporation, Model No.: PAR6-105 at elevation 170'. The associated coaxial cables will be the same size and location as indicated in the original evaluation dated March 28, 2001.

Our review and re-evaluation have determined that these substitutions will have minimal effect on the result of the original analysis. The report date March 28, 2001 is valid for the proposed installation.

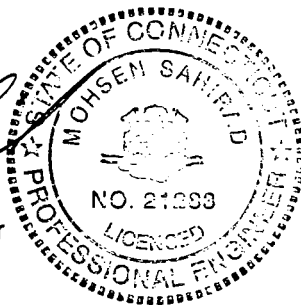
Please call if there are any questions.

Sincerely,

**URS Corporation**



Mohsen Sahirad, P.E.  
Senior Structural Engineer



MS/mks

cc: S. Carter, Verizon Wireless  
Howard Polnow, Verizon Wireless  
Brian Benito, State Police  
I. Artaiz/URS  
D. Roberts/URS  
A. Abadjian/URS  
CF/Book

URS Corporation  
500 Enterprise Drive, Suite 3B  
Rocky Hill, CT 06067  
Tel: 860.529.8882  
Fax: 860.529.3991

Site Name: Westport  
 Coordinates: 41-08-16 N 73-20-07 W

Site #: 108  
 GEL: 70'



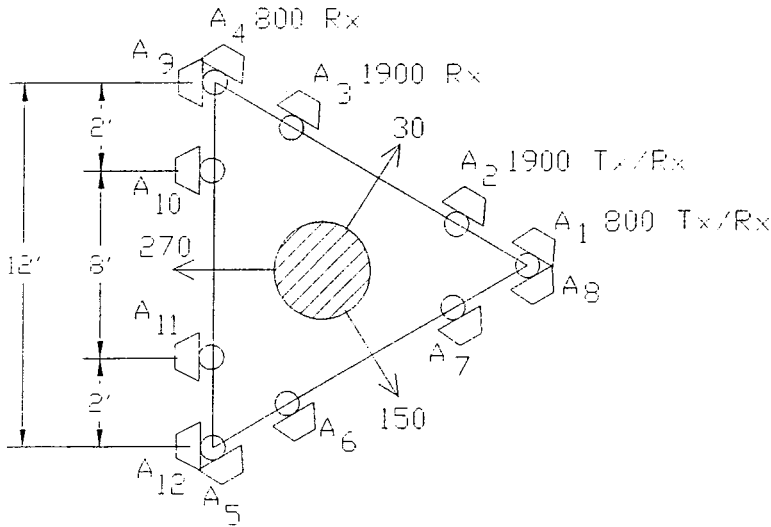
850 MHz Cellular Site	ALPHA	BETA	GAMMA
EQUIPMENT TYPE	SII	SII	SII
ANTENNA TYPE	DB844H90E-SX	DB844H90E-SX	DB844H90E-SX
QUANTITY PER FACE	2	2	2
ORIENTATION	30°	150°	270°
DOWN TILT (DEG.)	0°	10°	10°
RAD CTR (FT AGL)	160'	160'	160'

1900 MHz PCS Site Information	ALPHA	BETA	GAMMA
EQUIPMENT TYPE	TBD	TBD	TBD
ANTENNA TYPE	DB948F85E-M	DB948F85E-M	DB948F85E-M
QUANTITY PER FACE	2	2	2
ORIENTATION	30°	150°	270°
DOWN TILT (DEG.)	0°	0°	0°
RAD CTR (FT AGL)	160'	160'	160'

Cable Information	ALPHA	BETA	GAMMA
FEEDLINE SIZE	1 5/8	1 5/8	1 5/8
FEEDLINE LENGTH	≈180'	≈180'	≈180'
JUMPER SIZE	1/2"	1/2"	1/2"
JUMPER LENGTH	10'	10'	10'

ALPHA				BETA				GAMMA			
Ant	Freq.	Func.	Color Code	Ant	Freq.	Func.	Color Code	Ant	Freq.	Func.	Color Code
A1	800	Tx1/Rx0	RED	A5	800	Tx2/Rx0	BLUE	A9	800	Tx3/Rx0	GREEN
A2	1900	Tx/Rx	RED/WHITE	A6	1900	Tx/Rx	BLUE/WHITE	A10	1900	Tx/Rx	GREEN/WHITE
A3	1900	Rx	RED/RED/WHITE	A7	1900	Rx	BLUE/BLUE/WHITE	A11	1900	Rx	GREEN/GREEN/WHITE
A4	800	Tx4/Rx1	RED/RED	A8	800	Tx5/Rx1	BLUE/BLUE	A12	800	Tx6/Rx1	GREEN/GREEN

PLEASE SEE ATTACHED ANTENNA CONFIGURATIONS



APPROVALS	INITIALS	DATE
Prepared By : Michael Cafasso RF Engineer	MJC	3/9/01
Sharon D'Ambra System Design Manager		
Mark Gauger Construction Manager		
Sandy Carter Regulatory Manager		

SITE	ANT	USER	USE	FREQ	TX	HGT	TWR	ANT	SZ	MANUF	MODEL	GAIN	CABLE	DESCRIPTION
32							26							
32	1	CSP	LB MAIN	42.04	330	180		OMNI	16	DECIBEL	PD-1142	0	LDF5-50A	WHIP
32	2	VERI	CELLULAR	824-869		160			4	DECIBEL	DB844H90	10	LDF7-50A	PANEL
32	7	VERI	CELLULAR	824-869		160			4	DECIBEL	DB844H90	10	LDF7-50A	PANEL
32	8	VERI	MW-S.NORW.	10552.5	1	170B			6	ANDREW	PARG-105	43	EW-90	DISH W/RADOME
32	9	VERI	PCS	1900		160			4	DECIBEL	DB948F85		LDF7-50A	PANEL
32	14	VERI	PCS	1900		160			4	DECIBEL	DB948F85		LDF7-50A	PANEL
32	15	VERI	GPS	1575	0	60C							LDF4-50A	GPS
32	16	CSP	MW-WILTON	954.4	1	169C			6	MARK	P-972GR	20	LDF5-50A	GRID DISH
32	17	SNET	CELLULAR	887	11	135			4	SWEDCOM		11	LDF7-50A	PANEL
32	25	SNET	CELLULAR	887	11	135			4	SWEDCOM		11	LDF7-50A	PANEL
32	26	ATT	CELLULAR	1965	4	145			4	ALLGON	7184	14	LDF7-50A	PANEL
32	31	ATT	CELLULAR	1965	4	145			4	ALLGON	7184	14	LDF7-50A	PANEL
32	32	CSP	OPEN MOUNT	6700	0	177C	294							FUTURE DISH

RADIO/ANTENNA SYSTEMS DATA

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SITE NAME: WESTPORT  
TOWER HEIGHT: 180 FEET

PREPARED BY: D.P.S.  
ON DATE: 07-20-2001

O	OPERATING FREQUENCY (MHz)	-TRANSMIT POWER (WATTS)	ANTENNA				ERP (W)
			HEIGHT (FEET)	TYPE	VERTICAL SIZE (FT)	GAIN (dB)	
1	42.0400	330	180	FOLDED MONOPOLE	10	0.0	330
2	875.0000	19 x 4	160	PANEL ANTENNA	4	14.0	1900
3	875.0000	0	160	PANEL ANTENNA	4	14.0	0
4	875.0000	19 x 4	160	PANEL ANTENNA	4	14.0	1900
5	875.0000	0	160	PANEL ANTENNA	4	14.0	0
6	875.0000	19 x 4	160	PANEL ANTENNA	4	14.0	1900
7	875.0000	0	160	PANEL ANTENNA	4	14.0	0
8	10555.0000	1	170	SOLID DISH	6	43.6	13875
9	1900.0000	6 x 40	160	PANEL ANTENNA	4	14.0	6029
0	1900.0000	0	160	PANEL ANTENNA	4	14.0	0
1	1900.0000	6 x 40	160	PANEL ANTENNA	4	14.0	6029
2	1900.0000	0	160	PANEL ANTENNA	4	14.0	0
3	1900.0000	6 x 40	160	PANEL ANTENNA	4	14.0	6029
4	1900.0000	0	160	PANEL ANTENNA	4	14.0	0
5	1575.0000	0	60	PANEL ANTENNA	1	0.0	0
6	954.4000	1	169	GRID DISH	4	19.2	50
7	887.0000	0	135	PANEL ANTENNA	4	11.0	0
8	887.0000	0	135	PANEL ANTENNA	4	11.0	0
9	887.0000	0	135	PANEL ANTENNA	4	11.0	0
0	887.0000	0	135	PANEL ANTENNA	4	11.0	0
1	887.0000	0	135	PANEL ANTENNA	4	11.0	0
2	887.0000	0	135	PANEL ANTENNA	4	11.0	0
3	887.0000	0	135	PANEL ANTENNA	4	11.0	0
4	887.0000	0	135	PANEL ANTENNA	4	11.0	0
5	887.0000	0	135	PANEL ANTENNA	4	11.0	0
6	1967.5000	8 x 4	145	PANEL ANTENNA	4	14.0	804
7	1967.5000	0	145	PANEL ANTENNA	4	14.0	0
8	1967.5000	8 x 4	145	PANEL ANTENNA	4	14.0	804
9	1967.5000	0	145	PANEL ANTENNA	4	14.0	0
0	1967.5000	8 x 4	145	PANEL ANTENNA	4	14.0	804
1	1967.5000	0	145	PANEL ANTENNA	4	14.0	0

- NOTES: 1. TRANSMIT POWER ENTRIES SHOWN AS '5 x 25' SHOULD BE INTERPRETED AS '5 TRANSMITTERS, EACH HAVING A POWER OF 25 WATTS'. ENTRIES OF '0' MEAN 'RECEIVE ONLY'- i.e. NO TRANSMITTER. ALL OTHER ENTRIES REFER TO ONE TRANSMITTER WITH THE POWER SHOWN.
2. ERP (EFFECTIVE RADIATED POWER) IS THE PRODUCT OF ALL TRANSMITTER POWERS AND THE NUMERICAL VALUE OF THE GAIN (ANTILOG OF dB) RELATIVE TO A DIPOLE ANTENNA.



**POWER DENSITY ANALYSIS**  
 =====  
**AT THE TOWER BASE, FOR EACH RADIO/ANTENNA SYSTEM**  
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SITE NAME: WESTPORT  
 TOWER HEIGHT: 180 FEET

PREPARED BY: D.P.S.  
 ON DATE: 07-20-2001

No	OPERATING FREQUENCY (MHz)	EIRP (WATTS)	DISTANCE TO BASE OF TOWER (FEET)	MAXIMUM PERMISSIBLE EXPOSURE (MW/SQ-CM)	AT THE BASE OF THE TOWER	
					POWER DENSITY (MW/SQ-CM)	PERCENT OF MAX. EXPOSURE
1	42.0400	541	185	0.200	0.0005417	0.2709
2	875.0000	3117	160	0.583	0.0041699	0.7153
3	875.0000	0	160	0.583	0.0000000	0.0000
4	875.0000	3117	160	0.583	0.0041699	0.7153
5	875.0000	0	160	0.583	0.0000000	0.0000
6	875.0000	3117	160	0.583	0.0041699	0.7153
7	875.0000	0	160	0.583	0.0000000	0.0000
8	10555.0000	22762	170	1.000	0.0004756	0.0476
9	1900.0000	9890	160	1.000	0.0132309	1.3231
10	1900.0000	0	160	1.000	0.0000000	0.0000
11	1900.0000	9890	160	1.000	0.0132309	1.3231
12	1900.0000	0	160	1.000	0.0000000	0.0000
13	1900.0000	9890	160	1.000	0.0132309	1.3231
14	1900.0000	0	160	1.000	0.0000000	0.0000
15	1575.0000	0	60	1.000	0.0000000	0.0000
16	954.4000	83	169	0.636	0.0000007	0.0001
17	887.0000	0	135	0.591	0.0000000	0.0000
18	887.0000	0	135	0.591	0.0000000	0.0000
19	887.0000	0	135	0.591	0.0000000	0.0000
20	887.0000	0	135	0.591	0.0000000	0.0000
21	887.0000	0	135	0.591	0.0000000	0.0000
22	887.0000	0	135	0.591	0.0000000	0.0000
23	887.0000	0	135	0.591	0.0000000	0.0000
24	887.0000	0	135	0.591	0.0000000	0.0000
25	887.0000	0	135	0.591	0.0000000	0.0000
26	1967.5000	1319	145	1.000	0.0021480	0.2148
27	1967.5000	0	145	1.000	0.0000000	0.0000
28	1967.5000	1319	145	1.000	0.0021480	0.2148
29	1967.5000	0	145	1.000	0.0000000	0.0000
30	1967.5000	1319	145	1.000	0.0021480	0.2148
31	1967.5000	0	145	1.000	0.0000000	0.0000

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TOTAL PERCENT OF MAXIMUM PERMISSIBLE EXPOSURE FOR  
 UNCONTROLLED ENVIRONMENTS FOR ALL 31 RADIO SYSTEMS = 7.0780

- NOTES: 1. THE POWER DENSITIES REPRESENTING THE 'MAXIMUM PERMISSIBLE EXPOSURE FOR UNCONTROLLED ENVIRONMENTS' ARE CALCULATED IN ACCORDANCE WITH IEEE C95.1-1991 (REVISION OF ANSI C95.1-1982).
2. POWER DENSITIES ARE CALCULATED IN ACCORDANCE WITH THE METHODS DEFINED IN FCC DOCUMENT 'OET BULLETIN NO.65', AUGUST 1997
3. EIRP (EFFECTIVE ISOTROPICALLY RADIATED POWER) REFERENCES THE RADIATED POWER TO A POINT SOURCE, WHICH YIELDS POWERS 1.6408 TIMES HIGHER THAN ERP.

POWER DENSITY ANALYSIS  
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POWER DENSITY (% OF MAX. EXPOSURE VS DISTANCE FROM THE TOWER BASE  
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SITE NAME: WESTPORT PREPARED BY: D.P.S.  
TOWER HEIGHT: 180 FEET ON DATE: 07-20-2001  
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DISTANCE (FEET)	POWER DENSITY (% OF MAX. EXPOSURE)
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0	7.0780
50	6.4451
100	5.3491
150	4.2499
200	3.2826
250	2.5598
300	2.0184
350	1.6154
400	1.3131
450	1.0835
500	0.9065
550	0.7679
600	0.6577
650	0.5691
700	0.4967
750	0.4371
800	0.3874
850	0.3456
900	0.3101
950	0.2797
1000	0.2535
1050	0.2308
1100	0.2110
1150	0.1936
1200	0.1783
1250	0.1647