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.state.ct.us/csc/index.htm

August 27, 2003

Stephen J. Humes
LeBoeuf, Lamb, Greene & MacRae
Goodwin Square
225 Asylum Street
Hartford, CT 06103

RE: **EM-T-MOBILE-015-030808** - Omnipoint Communications, Inc. notice of intent to modify an existing telecommunications facility located at 1875 Noble Avenue, Bridgeport, Connecticut.

Dear Attorney Humes:

At a public meeting held on August 26, 2003, 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 August 7, 2003. 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: Honorable John Fabrizi, Mayor, City of Bridgeport
Michael P. Nidoh, City Planner, City of Bridgeport
Christopher B. Fisher, Esq., Cuddy & Feder LP

STATE OF CONNECTICUT

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Web Site: www.state.ct.us/csc/index.htm

August 11, 2003

Honorable John Fabrizi
Mayor
City of Bridgeport
City Hall
999 Broad Street
Bridgeport, CT 06604

RE: **EM-T-MOBILE-015-030808** – Omnipoint Communications, Inc. notice of intent to modify an existing telecommunications facility located at 1875 Noble Avenue, Bridgeport, Connecticut.

Dear Mr. Fabrizi:

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 26, 2003 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 truly yours,

S. Derek Phelps
Executive Director

SDP/ld

Enclosure: Notice of Intent

c: Michael P. Nidoh, City Planner, City of Bridgeport

LeBoeuf, Lamb, Greene & MacRae
L.L.P.
A LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

NEW YORK
WASHINGTON, D.C.
ALBANY
BOSTON
DENVER
HARRISBURG
HARTFORD
HOUSTON
JACKSONVILLE
LOS ANGELES
NEWARK
PITTSBURGH
SALT LAKE CITY
SAN FRANCISCO

GOODWIN SQUARE
225 ASYLUM STREET, 13TH FLOOR
HARTFORD, CT 06103
(860) 293-3500
FACSIMILE: (860) 293-3555
E-MAIL ADDRESS: STEPHEN.HUMES@LLGM.COM
WRITER'S DIRECT DIAL: (860) 293-3744
WRITER'S DIRECT FACSIMILE: (860) 241-[illegible]

LONDON
(A LONDON-BASED MULTINATIONAL PARTNERSHIP)
PARIS
BRUSSELS
JOHANNESBURG
(PTY) LTD.
MOSCOW
RIYADH
(AFFILIATED OFFICE)
TASHKENT
BISHKEK
ALMATY
BEIJING

August 7, 2003

BY HAND

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

EM-T-MOBILE-015-030808

Re: Notice of Exempt Modification
1875 Noble Avenue, Bridgeport, Connecticut

Dear Chairman Katz and Members of the Council:

Please be advised that LeBoeuf, Lamb, Greene & MacRae, L.L.P. represents Omnipoint Facilities Network 2, LLC, a subsidiary of T-Mobile USA, Inc. (hereinafter T-Mobile) in the above-referenced matter. T-Mobile intends to swap out its existing six-antenna array for a new six-antenna array and add coaxial cables to its existing 120-foot flagpole at the Beardsley Zoo, 1875 Noble Avenue in Bridgeport. Please accept this letter as notification, pursuant to R.C.S.A. § 16-50j-73, of 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 Bridgeport Mayor John Fabrizi.

Background

T-Mobile holds the "A block" "Wideband PCS" license for the 2-GHz PCS frequencies for the greater New York City area, including the entire State of Connecticut. T-Mobile is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telecommunications service in the State of Connecticut, which includes the area to be served by the proposed installation.

Discussion

The existing facility consists of a one hundred twenty foot (120') flagpole (see attached drawing, attached as Exhibit B) and surrounding compound. The coordinates for the site are **Lat: 41.2113889°** and **Long: 73.18083333.** The tower is approximately 1,225 feet east of State Route 8, about 1,000 feet east of Bunnells Pond, and 643 feet northwest of Huntington Road (see site location map, attached as exhibit A).

T-Mobile proposes to remove its existing six (6) antennas and replace them with six (6) new antennas at the same elevations and additional coaxial cables. The proposed configuration is a cluster of two sectors with three antennas per sector stacked within fiberglass shrouds inside the pole. The antennas will be mounted at the one hundred seventeen foot (117') centerline above ground level ("AGL") position and one hundred seven foot (107') AGL position. The model number for the replacement antennas is EMS Wireless DR6518-02-DPL2Q. A structural analysis of the tower has been completed and is attached as Exhibit D. As stated in the structural analysis, the existing tower is capable of supporting the proposed T-Mobile installation. A new booster cabinet will be added to the existing fourteen foot by six foot (14' x 6') concrete pad that supports two (2) existing radio equipment cabinets. The two (2) existing radio equipment cabinets will be replaced with three (3) Nortel S12000 radio equipment cabinets, the third of which will be installed on a new seven foot eight inch by five foot (7'8" x 5') concrete pad. Two booster cabinets will be added to the new concrete pad (see drawing attached as part of Exhibit B). The existing fenced compound surrounding the monopole will not be altered in any way by the T-Mobile installation. Utilities will be run from those currently in place.

The planned modifications to the Bridgeport 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 height of T-Mobile's approved antennas on the tower and will not extend the boundaries of the existing leased compound area. The enclosed tower drawings confirm that the planned changes will not increase the overall height of the tower.

2. The installation of T-Mobile equipment, as reflected on the attached site plan, will not require an extension of the site boundaries.

3. The proposed modification to the facility will not increase the noise levels at the existing facility by six decibels or more. T-Mobile's equipment is self-contained and requires no additional heating, ventilation or cooling equipment.

4. The operation of the replacement antennas will not increase the total radio frequency (RF) power density, measured at the site boundary, to a level at or above the applicable standard. The "worst-case" RF power density calculations, for a point at the site boundary, are attached hereto as Exhibit E.

For the foregoing reasons, T-Mobile respectfully submits that the proposed addition of antennas and equipment at the Bridgeport facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Thank you for your consideration of this matter.

Respectfully submitted,

OMNIPOINT FACILITIES NETWORK 2, LLC

By: _____
Stephen J. Humes
Its Counsel

cc: Mayor John Fabrizi

Exhibit A

Site Map
1875 Noble Avenue
Bridgeport, Connecticut

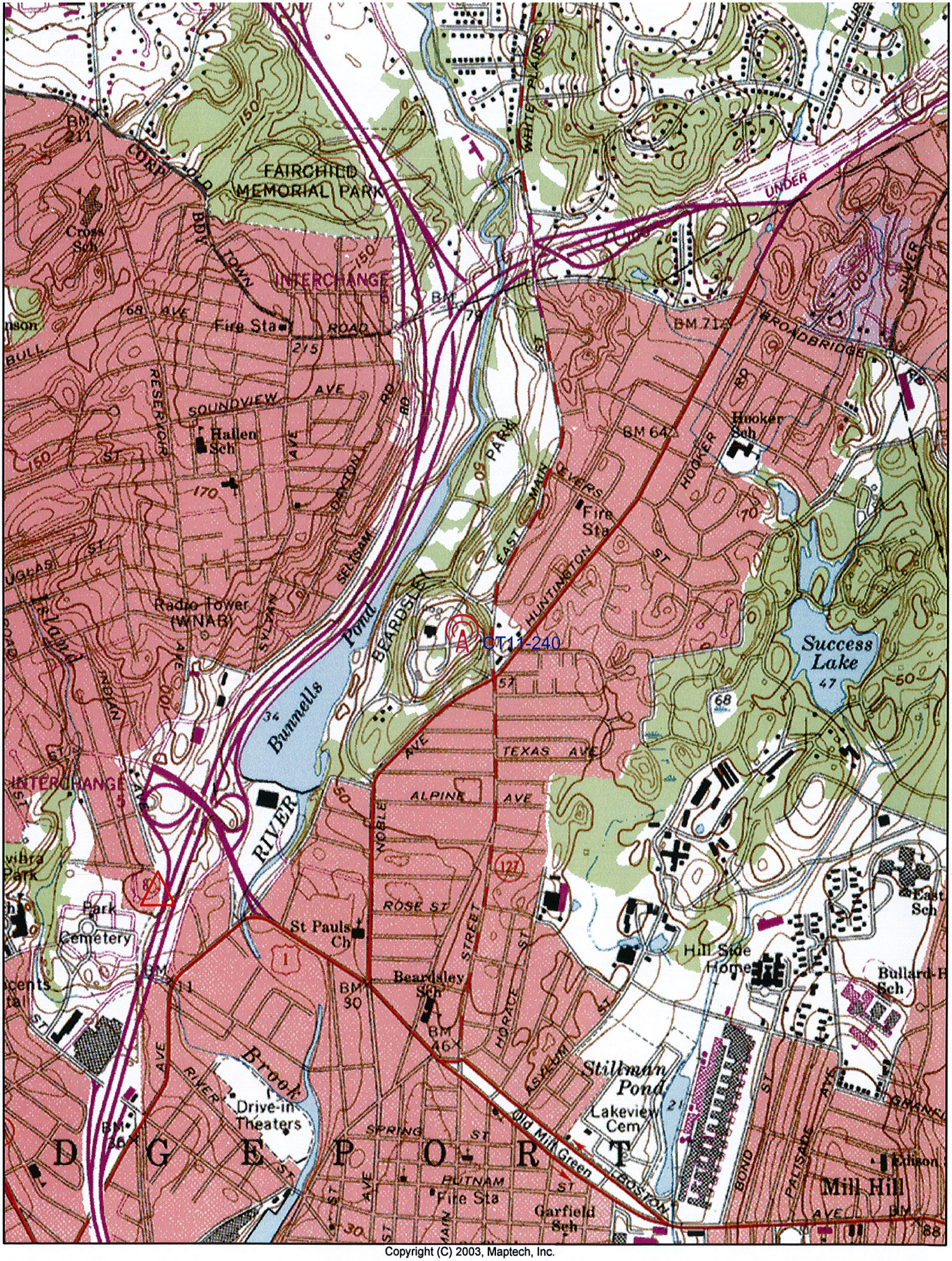
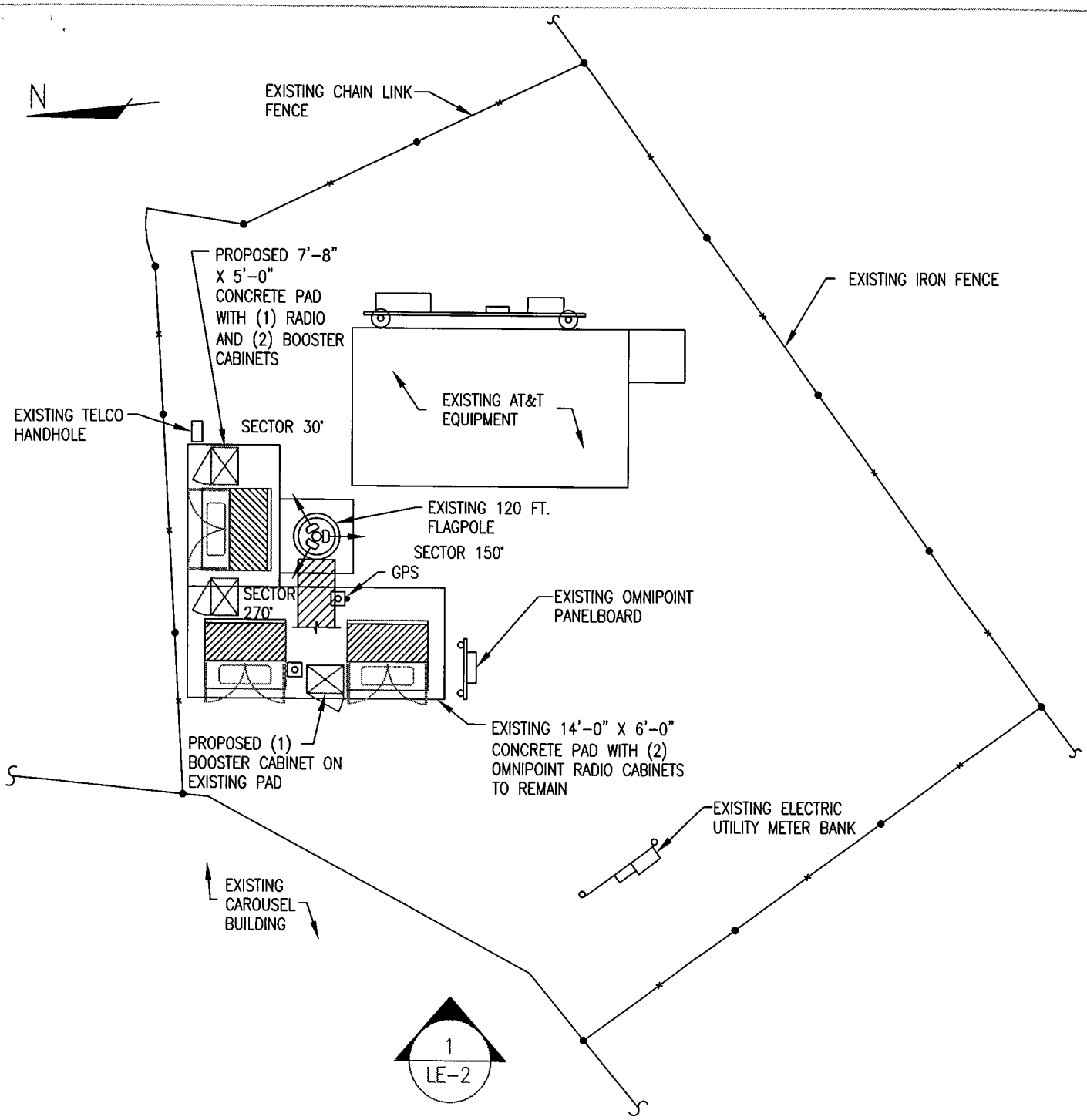


Exhibit B

Design Drawings
1875 Noble Avenue

Bridgeport, Connecticut



NOTE: EXHIBITS SUBMITTED ARE A CONCEPTUAL REPRESENTATION OF THE LEASE AGREEMENT ONLY. ACTUAL CONSTRUCTION DOCUMENTATION MAY VARY TO COMPLY WITH ALL APPLICABLE CODES.

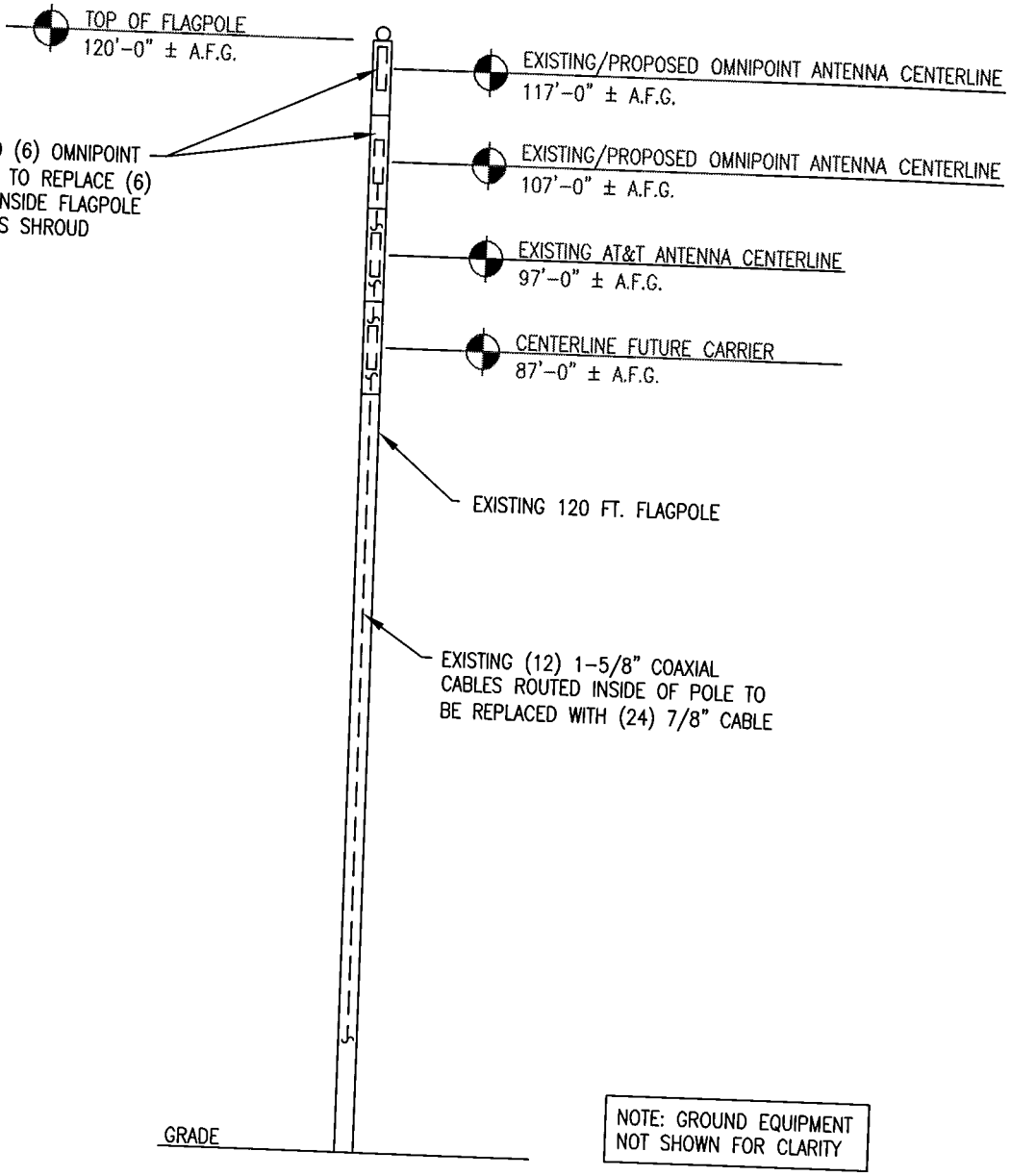
NOTE: PER FCC MANDATE, ENHANCED EMERGENCY (E911) POSITION LOCATION EQUIPMENT IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. IMPLEMENTATION REQUIRES DEPLOYMENT OF 1 GLOBAL POSITIONING SYSTEM (GPS) ANTENNA. THIS PLAN DEPICTS A SCHEMATIC DESIGN AND LOCATION OF ANTENNAS AND OFN2, LLC/OCI RESERVES THE RIGHT TO CHANGE THE LOCATION AND CONFIGURATION OF THE E911 EQUIPMENT AS REQUIRED.

Client: OMNIPOINT COMMUNICATIONS INC. doing business as T-Mobile
70 PROGRESS DRIVE, 2ND FL. STAMFORD, CT 06902

Project: BEARDSLEY ZOOLOGICAL GARDENS
Address: 1875 NOBLE AVE. BRIDGEPORT, CT
Project No.: CT-11-240-B
Search Area:

On Air Engineering
201 WALNUT STREET, TWP. OF WASHINGTON, NJ 07676

P.M.:	Drawn:	Chkd. by:	Date:	Drawing Title:	Drawing No.
DW	MJ		5-21-03	COMPOUND PLAN	LE-1



1 / LE-2 ELEVATION
SCALE: 1"=20'-0"

NOTE: EXHIBITS SUBMITTED ARE A CONCEPTUAL REPRESENTATION OF THE LEASE AGREEMENT ONLY. ACTUAL CONSTRUCTION DOCUMENTATION MAY VARY TO COMPLY WITH ALL APPLICABLE CODES.

NOTE: PER FCC MANDATE, ENHANCED EMERGENCY (E911) POSITION LOCATION EQUIPMENT IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. IMPLEMENTATION REQUIRES DEPLOYMENT OF 1 GLOBAL POSITIONING SYSTEM (GPS) ANTENNA. THIS PLAN DEPICTS A SCHEMATIC DESIGN AND LOCATION OF ANTENNAS AND DFN2, LLC/DCI RESERVES THE RIGHT TO CHANGE THE LOCATION AND CONFIGURATION OF THE E911 EQUIPMENT AS REQUIRED.

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Search Area:

On Air Engineering
201 WALNUT STREET, TWP. OF WASHINGTON, NJ 07676

P.M.:	Drawn:	Chkd. by:	Date:
DW	MJ		5-21-03

Drawing Title: ELEVATION
Drawing No.: LE-2

Exhibit C

Equipment Specifications
1875 Noble Avenue

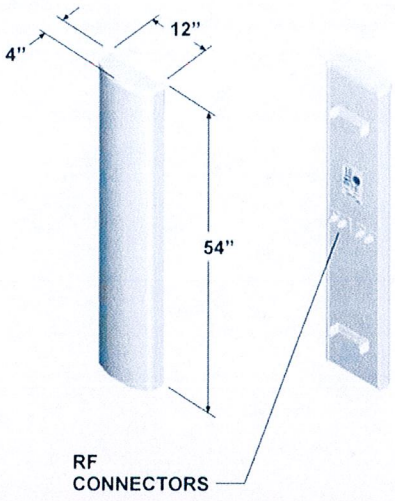
Bridgeport, Connecticut

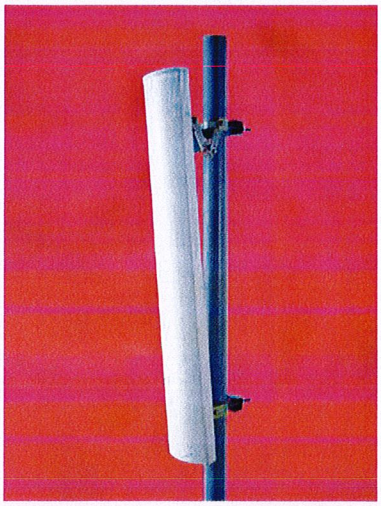
EMS Wireless

OptiRange™ Suppressor™

DR65-18-XXDPL2Q

1850 MHz - 1990 MHz (P)





65° beamwidth

17.3 dBi gain

±45° Dual DualPol®

54 inch

SPECIFICATIONS

Electrical

Azimuth Beamwidth (-3 dB)	65°
Elevation Beamwidth (-3 dB)	6°
Elevation Sidelobes (Upper)	>18 dB
Gain	17.3 dBi (15.2 dBd)
Polarization	Slant, ± 45°
Port-to-Port Isolation	>30 dB
Front-to-Back Ratio	>35 dB
Electrical Downtilt Options	0°, 2°
VSWR	1.35:1 Max
Connectors	4; 7-16 DIN (female)
Power Handling	250 Watts CW
Passive Intermodulation	-147 dBc [2x20W (+43 dBm)]
Lightning Protection	Chassis Ground

Mechanical

Dimensions (L x W x D)	54in x 12in x 4in (137.2 cm x 30.5 cm x 10.2 cm)
Rated Wind Velocity	130 mph (209 km/hr)
Equivalent Flat Plate Area	4.5ft² (.42 m²)
Front Wind Load @ 100 mph (161 kph)	130 lbs (576 N)
Side Wind Load @ 100 mph (161 kph)	43 lbs (192 N)
Weight	24 lbs (11 kg)

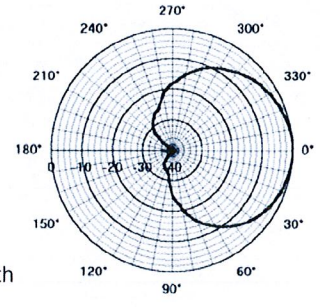
Note: Patent Pending and US Patent number 5, 757, 246.

Values and patterns are representative and variations may occur. Specifications may change without notice due to continuous product enhancements. Digitized pattern data is available from the factory or via the web site www.emswireless.com and reflect all updates.

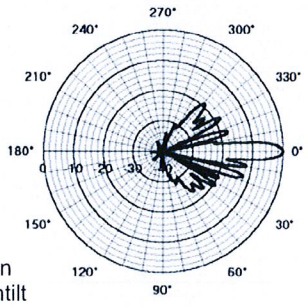
MOUNTING OPTIONS

Model Number	Description	Comments
MTG-P00-10	Standard Mount (Supplied with antenna)	Mounts to Wall or 1.5 inch to 5.0 inch O.D. Pole (3.8 cm to 12.7 cm)
MTG-S02-10	Swivel Mount	Mounting kit providing azimuth adjustment.
MTG-DXX-20*	Mechanical Downtilt Kits	0° - 10° or 0° - 15° Mechanical Downtilt
MTG-CXX-10*	Cluster Mount Kits	3 antennas 120° apart or 2 antennas 180° apart
MTG-C02-10	U-Bolt Cluster Mount Kit	3 antennas 120° apart , 4.5" O.D. pole.
MTG-TXX-10*	Steel Band Mount	Pole diameters 7.5" - 45"

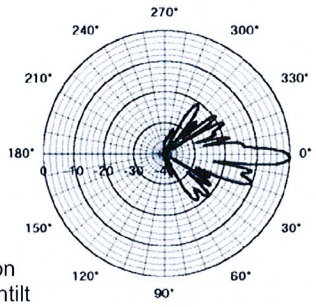
* Model number shown represents a series of products. See mounting options section for specific model number.



Azimuth



Elevation
0° Downtilt



Elevation
2° Downtilt

www.emswireless.com +1 770.582.0555 Fax +1 770.729.0036

4.1.1 Dimensions and Weight

Table 1 – Dimensions of the S12000 BTS

	Populated cabinet		Depopulated cabinet	
	(cm)	(in)	(cm)	(in)
Height	191	75.2	172	67.7
Depth	65	25.6	65	25.6
Width	135	53.2	135	53.2

Table 2 – Weight of the S12000 BTS

	Populated cabinet (full configuration)		Depopulated cabinet	
	(kg)	(lb.)	(kg)	(lb.)
S12000	570	1257	200	441

Note: The pallet weights 19kg (42 lb.) and has a height of 13cm (5.1 in)

Note: The height of S12000 Outdoor with the hood open is 256 cm (100.8 in)

The BTS floor print can be found in section 10.2 Appendix B.

4.1.2 Key Cabled Cabinet Components

A low mass, mechanically strong external cabinet housing containing:

- All mechanical sub-racks and mechanical support systems required for the installation, transport and operation of the GSM wireless equipment to be housed within.
- A forced ventilation, low acoustic Direct Ambient Cooling System (DACS)
- An AC/DC power system
- A fixed DC distribution system to power the enclosed electronic equipment
- A Power Amplifier Interconnection module (PAICO)
- DRX interconnection modules (DRX ICO) (A&B)
- Combiner interconnection modules (COMICO) (A&B)
- A batteries box

Refer to section 10.1 Appendix A for a general overview of the S12000.

4.1.3 Environmental Requirements

Table 3 – Operational Temperature and Humidity

Normal	Range
Optimized operating temperature	-20°C (-4°F) to 40°C (104°F)
Total operating temperature	-40°C (-40°F) to 50°C (122°F)
Normal Operating humidity	15% to 100% relative humidity (non-condensing)
Absolute humidity	0,26 g/m3 to 36 g/m3

- Storage requirements

The S12000 meets the requirements of reference document R10 class 1.2

- Transport requirements

The S12000 meets the requirements of reference document R11 class 2.2

- Ingress protection

The cabinet shall be weather resistant to prevent ingress of rain, snow, dust and other solid foreign objects to a minimum level of IP55 as specified by reference document R3. The maximum permitted water ingress under test conditions shall be 5ml.

- Noise

LWAd < 63 dB (A) measured in accordance with reference document R8 if $Temp_{ext}$ < 40°C (104°F)

The maximum sound power level emitted from the S12000 Outdoor cabled cabinet, when fully populated and measured in accordance with the requirements of reference document R8, shall not exceed:

- Normal speed operation: 63 dB (A) (when temperature is < 40°C)
- Maximum speed operation: 70 dB (A) (when temperature is >40°C)

Note: The noise may be higher than the one previously indicated due to the real configuration of the site (proximity of walls or any reflecting surfaces). Specific protections against noise can be added to comply with the local recommendations.

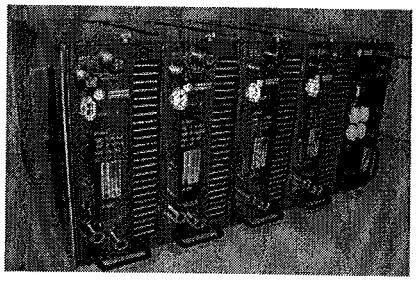
- External air flow rate

Normal speed operation: 800 m^3 / hour

Communication Components Inc.
Tel: 201-342-3338
Fax: 201-342-3339
Email: sales@cciproducts.com

PCS GSM Cell Booster/Combiner

General Information



CCI's PCS GSM Cell Booster provides the means to add capacity to existing PCS sites by combining multiple channels onto a common antenna port without suffering any combining losses. Consequently, capacity of existing sites can be expanded with the existing cabling and antenna infrastructure. The Cell Booster/Combiner allows the cost efficient implementation of multi-channel high capacity radio networks. The Cell Booster can also be deployed as a booster amplifier without combining, thus increasing the downlink power of the Base Transceiver Station (BTS). When used in conjunction with a Tower Mount Amplifier (TMA), the Cell Booster can significantly increase the footprint of rural sites and improve in-building penetration in urban locations.

- Model DAB-1819
- Model DAC-1819
- Model DDM-1819
- Model TDM-1819
- Model PDU-1819
- Model PSU-1819
- Model TRA-1819

Contents

General Info and Technical Description	1
Electrical /Mechanical Specifications	2—3
Mechanical Diagram	4

Technical Description

The PCS Cell Booster was specifically designed to integrate with GSM base stations without any need for retrofitting the original equipment. The system consists of 19" rack mount trays that can accommodate multiple modules. The core modules include a Dual Amplifier-Booster Module and a Dual Amplifier-Combiner Module. The Cell Booster system is further complemented with a range of Duplexer Modules, Power Supply Modules, and Splitter/VSWR modules. The Cell Booster system can be configured with any combination of the above modules to seamlessly integrate with the carriers BTS equipment and achieve the desired performance results.

The Dual Amplifier-Booster Module (DAB) consists of two linear power amplifiers with intermodulation level control circuitry, each capable of generating a 80 Watt GSM signal. The Dual Amplifier-Combiner Module (DAC) is identical to the DAB Module with the exception of a power hybrid combiner at the output which combines both signals to provide two 35 Watt GSM signals on a common output. The Duplexer Modules consist of high power duplexers which combine the transmit (TX) and receive (Rx) signals on a common antenna (ANT) port. A Splitter-Bias-Tee and Low Noise Amplifier (LNA) option is available to provide DC pass-thru and receive diversity for specific BTS equipment that require this feature. The Power Supply Modules are available with either 26VDC, -48VDC, or AC inputs. A built-in battery backup circuit is available that can tap into the existing battery bank during the loss of AC power. Both modules incorporate CCI's proprietary *GSM failure-detect* circuitry that tracks the amplified GSM signal by timeslot and actively controls and monitors the performance of both amplifiers, providing dry relay contact closures that can be tied into the BTS alarm circuit.

Dual Amplifier-Booster (DAB-1819) Module Electrical Specification

Operating Frequency:	1930-1990 MHz
Rated GSM Output Power:	80 Watts (Per Channel)
1 dB Compression Point:	49 dBm Min.
Pass Band Ripple:	+/-0.5 dB Max.
Power Supply Voltage:	28 VDC Nominal
Current Consumption:	12 AMPS Typical
Dimensions:	8.75"L x 3.5"W x 12"D
Number of Inputs/ Outputs:	2 Inputs / 2 Outputs
Connectors	N or SMA female
Weight	13 Lbs. Max.
Operating Temperature:	-25° to +65° C Ambient

Dual Amplifier-Combiner (DAC-1819) Module Electrical Specification

Operating Frequency:	1930-1990 MHz
Rated GSM Output Power:	35 Watts (Per Channel), 70 Watts Composite
1 dB Compression Point:	45.5 dBm Min. (Per Channel)
Pass Band Ripple:	+/-0.5 dB Max.
Power Supply Voltage:	28 VDC Nominal
Current Consumption:	12 AMPS Typical
Dimensions:	8.75"L x 3.5"W x 12"D
Number of Inputs/ Outputs:	2 Inputs / 1 Outputs
Connectors	N or SMA female
Weight	13 Lbs. Max.
Operating Temperature:	-25° to +65° C Ambient

AC Power Supply (PSU-1819-AC) Module Electrical Specification

Input Voltage	208-230 VAC, Single Phase
Maximum Input Current:	10 AMPS
Output Voltage:	28 VDC
Output Current:	64 AMPS
Dimensions:	8.75"L x 3.5"W x 12"D
Number of Inputs/ Outputs:	1 In/4 Out (each output protected by 20A circuit breaker)
Connectors	JST
Weight	13 Lbs. Max.
Operating Temperature:	-25° to +65° C Ambient

Communication Components Inc.

Tel: 201-342-3338

Fax: 201-342-3339

48V Power Supply (PSU-1819-48) Module Electrical Specification

Input Voltage	36-72 VDC
Maximum Input Current:	35 AMPS
Output Voltage:	28 VDC
Output Current:	54 AMPS Total
Dimensions:	8.75"L x 3.5"W x 12"D
Number of Inputs/ Outputs:	1 In/4 Out (each output protected by 20A circuit breaker)
Connectors	JST
Weight	13 Lbs. Max.
Operating Temperature:	-25° to +65° C Ambient

Triple Duplexer (TDM-1819) Module Electrical Specification

Operating Frequency:	PCS Band Specific
Insertion Loss:	< 1 dB
Pass Band Ripple:	+/-0.5 dB Max.
Input /Output VSWR:	1.5:1 Max.
Number of Antenna Outputs:	3
Dimensions:	8.75"L x 3.5"W x 12"D
Connectors:	N or SMA female
Weight:	13 Lbs. Max.
Operating Temperature:	-25° to +65° C Ambient

Dual Duplexer/LNA (DDM-1819) Module Electrical Specification

Operating Frequency:	PCS Band Specific
Transmit Insertion Loss:	< 1 dB
Receive Gain:	15 dB or 28 dB +/- 0.5 dB
Receive Noise Figure:	2 dB Max
Tx Rejection in Rx Band:	>85 dB
Pass Band Ripple:	+/-0.5 dB Max.
Input /Output VSWR:	1.5:1 Max.
Number of Antenna Outputs:	2
Dimensions:	8.75"L x 3.5"W x 12"D
Connectors:	N Female (Tx and Ant) ; SMA female (Rx)
Weight:	13 Lbs. Max.
Operating Temperature:	-25° to +65° C Ambient

Communication Components Inc.

Tel: 201-342-3338 Fax: 201-342-3339

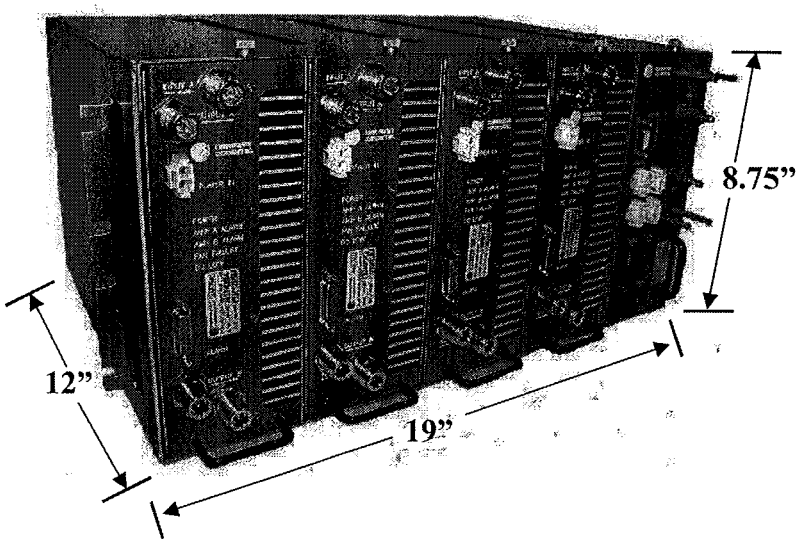
Communication Components Inc.

89 Leuning Street
South Hackensack, NJ 07606

Tel: 201-342-3338
Fax: 201-342-3339
Email: sales@cciproducts.com

Www.cciproducts.com

CCI's Cell Booster/Combiner for PCS Mechanical Drawing



Cell Booster 19" Rack Mountable Chassis

Ordering Information

Dual Amplifier-Booster Module:
CCI Model DAB-1819

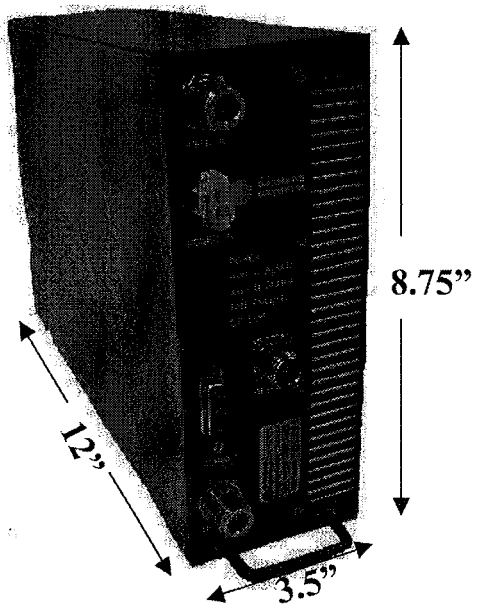
Dual Amplifier-Combiner Module:
CCI Model DAC-1819

Power Supply Modules:
CCI Model PSU-1819-AC
CCI Model PSU-1819-48
CCI Model PDU-1819

Duplexer Modules:
CCI Model TDM-1819 (Triple)
CCI Model DDM-1819 (Dual)
***Options*:**

- **01: Low Noise Rx Amplifier**
- **02: 2-Way Rx Power Splitter**
- **03: 3-Way Rx Power Splitter**
- **04: VSWR Monitoring**
- **AD: A & D Band Operation**
- **B: B Band Operation**
- **C: C Band Operation**
- **EF: E & F Band Operation**

19" Rack Mount Trays:
CCI Model TRA-1819-5U
CCI Model TRA-1819-2U



Cell Booster / Amplifier Plug-in Module

Exhibit D

Structural Analysis
1875 Noble Avenue

Bridgeport, Connecticut

On Air Engineering, LLC
201 Walnut Street
Township of Washington, NJ 07676
(201) 358-9541
(201) 358-9542 fax

May 21, 2003

Mr. Jeffrey Earle
T-Mobile
4 Sylvan Way
Parsippany, NJ 07054

Re: CT-11-240-B Existing T-Mobile/Omnipoint Telecommunications Site
Beardsley Zoo, 1875 Noble Ave., Bridgeport, CT

Dear Jeff:

On Air Engineering has completed a structural assessment and loading conditions for the 120 foot flagpole at the above referenced site to determine the adequacy of the structure for supporting additional T-Mobile coaxial cables and a swap-out of their existing antennas.

Our office obtained pole and foundation drawings dated 6/1/00 directly from Pirod, Inc. The flagpole is 120 feet with a consistent diameter of 24" from bottom to top. The pole is designed for antennas at (4) elevations between 82 and 120 feet within the fiberglass shrouds.

The flagpole was constructed by Omnipoint who installed (3) panel antennas within the top shroud and (3) additional antennas within the second shroud with a total of (12) 1-5/8" coaxial cables running up the inside of the pole.

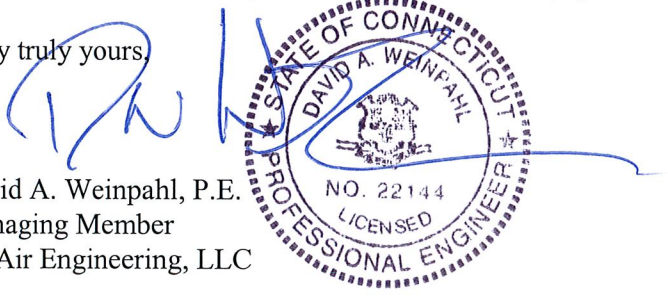
Subsequently, AT&T has installed (3) antennas within the third shroud with the fourth shroud remaining vacant as of our field inspection on 12/9/02.

T-Mobile proposes to replace their (6) existing antennas with (6) new EMS Wireless DR6518-02-DPL2Q antennas at the same elevations. T-Mobile also proposes to remove the existing (12) coaxial cables and replace them with (24) 7/8" coaxial cables, also running inside the pole.

After review of the flagpole design loads, actual loads and physical space within the pole, our office has determined that the flagpole can support T-Mobile's proposed expansion. The structure remains in compliance with the EIA/TIA-222-F standard for this location.

Please feel free to contact this office if you have any questions.

Very truly yours,



David A. Weinpahl, P.E.
Managing Member
On Air Engineering, LLC

Exhibit E

Power Density Calculations

1875 Noble Avenue

Bridgeport, Connecticut

T-Mobile USA, Inc.
76 Progress Drive, Stamford, CT 06902-3600
Phone: (203) 328-8900
Fax: (203) 328-8953

Technical Memo

To: Steve Humes, Esq.
From: Chetan Dhaduk - Radio Frequency Engineer
cc: Steve Hillsman
Subject: Power Density Report for CT11240
Date: July 7, 2003

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile USA, Inc. PCS antenna installation on a Flag Pole at 1875 Noble Ave, Bridgeport, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

1) The emissions from T-Mobile Wireless transmitters are in the 1930-1950 MHz frequency band.
2) The antenna array consists of three sectors, with 2 antennas per sector.
3) The model number for each antenna is EMS DR65-18-02DPL2Q.
4) The antenna center line height is 107 ft.
5) The maximum transmit power from any sector is 3995.95 Watts Effective Radiated Power (EiRP) assuming 8 channels per sector.
6) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
7) Power levels emitting from the antennas are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
8) The average ground level of the studied area does not change significantly with respect to the transmitting location

Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

3. Conclusion:

Based on the above worst case assumptions, the power density calculation from the T-Mobile USA, Inc. PCS antenna installation on a Flag Pole at 1875 Noble Ave, Bridgeport, CT, is 0.08594 mW/cm^2. This value represents 8.594% of the Maximum Permissible Emission (MPE) standard of 1 milliwatt per square centimeter (mW/cm^2) set forth in the FCC/ANSI/IEEE C95.1-1991. Furthermore, the proposed antenna location for T-Mobile USA will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.

The combined Power Density from other carriers is 11.06%. The combined Power Density for the site is 19.654% of the M.P.E. standard.

New York Market
Connecticut
Worst Case Power Density

T-Mobile

Site:	**CT11240**
Site Address:	**1875 Noble Ave**
Town:	**Bridgeport**
Tower Height:	**120 ft.**
Tower Style:	**Flag Pole**
Base Station TX output	20 W
Number of channels	8
Antenna Model	EMS DR65-18-02DPL2Q
Cable Size	7/8 in.
Cable Length	125 ft.
Antenna Height	107.0 ft.
Ground Reflection	1.6
Frequency	1935.0 MHz
Jumper & Connector loss	1.00 dB
Antenna Gain	17.3 dBi
Cable Loss per foot	0.0186 dB
Total Cable Loss	2.3250 dB
Total Attenuation	3.3250 dB
Total EIRP per Channel	56.99 dBm
(In Watts)	499.49 W
Total EIRP per Sector	66.02 dBm
(In Watts)	3995.95 W
nsg	13.9750
Power Density (S) =	**0.085940 mW/cm^2**
Voicestream Worst Case % MPE =	**8.5940%**

Equation Used :

$$S = \frac{(1000)(grf)^2 (Power) * 10^{(nsg/10)}}{4\pi (R)^2}$$

Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

Co-Location Total

Carrier	**% of Standard**
Verizon	
Cingular	
Sprint PCS	
AT&T Wireless	11.0600 %
Nextel	
Total Excluding Voicestream	**11.0600 %**
Voicestream	8.5940
Total % MPE for Site	**19.6540%**

Relative Gain Power Density

Antenna Relative Gain Factor	-21.5 dBi
Total Attenuation	3.3250 dB
Total EIRP per Channel	35.49 dBm
(In Watts)	3.54 W
Total EIRP per Sector	44.52 dBm
(In Watts)	28.29 W
nsg	-7.5250
Power Density (S) =	**0.000608 mW/cm^2**
Voicestream Relative Gain % MPE =	**0.0608%**