



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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

August 18, 1999

J. Brendan Sharkey
Omnipoint Communications, Inc.
100 Filley Street
Bloomfield, CT 06002

RE: TS-OCI-013-990719 - Omnipoint Communications request for an order to approve tower sharing at an existing telecommunications facility located at 131 Gifford Lane in Bozrah, Connecticut.

Dear Mr. Sharkey:

At a public meeting held August 16, 1999, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures.

This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. 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 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated July 16, 1999. Please notify the Council when all work is complete.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/tsg

c: Honorable Raymond C. Barber, First Selectman, Town of Bozrah

FILE
COT

16 July, 1999

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RECEIVED
JUL 19 1999
CONNECTICUT
SITING COUNCIL

**Re: Request by Omnipoint Communications, Inc. for an
Order to Approve the Shared Use of a Tower Facility
131 Gifford Lane, Bozrah, Connecticut**

Dear Chairman Gelston and Members of the Council:

Pursuant to Connecticut General Statutes §16-50aa, Omnipoint Communications, Inc. ("Omnipoint") hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed shared use by Omnipoint of an existing tower located at 131 Gifford Lane in Bozrah, Connecticut. The tower is owned and operated by SBA Towers, Inc. ("SBA"). Omnipoint proposes to install antennas on the existing tower located within the existing compound area, and the equipment associated with this facility would be located near the base of the tower (see "Exhibit A"). Omnipoint requests that the Council find that the proposed shared use of the tower satisfies the criteria stated in §16-50aa and issue an order approving the proposed use.

Background

Omnipoint Communications, Inc. is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telephone service in the State of Connecticut, which includes the area to be served by Omnipoint's proposed installation.

The tower at 131 Gifford Lane in Bozrah is an approximately 193-foot lattice structure located on an approximately 76'x 59', or 4,484 sq. ft. fenced and gated compound. This tower is privately owned and has been approved by the Bozrah Planning and Zoning Commission. With its approval of the tower, the Commission also approved the antenna installation of Sprint Spectrum ("Sprint") at the 178-foot level. At least three additional antenna installations are planned for the tower in the future.

Omnipoint and SBA have since agreed to the proposed shared use of this tower pursuant to mutually acceptable terms and conditions. SBA has also authorized Omnipoint to act on its

behalf to apply for all necessary local, state and federal permits, approvals, and authorizations which may be required for the proposed shared use of this facility.

Omnipoint proposes to install six (6) DAPA 59212 antennas, two per sector, at Sectors 60°, 180° and 300°. The platform supporting all six antennas will be at the top of the tower, with a centerline at 193 feet AGL. The radio transmission equipment associated with these antennas, a Nortel S8000 cabinet, would be located near the base of the tower. Exhibit B contains specifications for the proposed antennas and equipment cabinet.

C.G.S. §16-50aa (c) (1) provides that, upon written request for approval of a proposed shared use, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns, the council shall issue an order approving such shared use." The shared use of the tower satisfies those criteria as follows:

A. Technical Feasibility The existing tower is structurally sound and capable of supporting the proposed Omnipoint antennas. The proposed shared use of this tower therefore is technically feasible.

B. Legal Feasibility Under C.G.S. § 16-50aa, the Council has been authorized to issue orders approving the proposed shared use of an existing tower facility such as the facility on Gifford Lane in Bozrah. (Public Acts 93-268, Section 2; and 94-242, Section 6 (c)). This authority complements the Council's prior-existing authority under C.G.S. § 16-50p to issue orders approving the construction of new towers that are subject to the Council's jurisdiction. C.G.S. § 16-50x (a) vests exclusive jurisdiction over these facilities in the Council, which shall "give such consideration to other state laws and municipal regulations as it shall deem appropriate" in ruling on requests for the shared use of existing towers facilities. Under this statutory authority vested in the Council, an order by the Council approving the shared use would permit the applicant to obtain a building permit for the proposed installations.

C. Environmental Feasibility The proposed shared use would have a minimal environmental effect, for the following reasons:

1. The proposed installations would have an insignificant incremental visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing site. In particular, the proposed installations would not increase the height of the existing tower, and will not extend the boundaries of the existing SBA compound area.
2. The proposed installations would not increase the noise levels at the existing facility by six decibels or more.
3. Operation of antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the American National Standards Institute ("ANSI"). The "worst-case" exposure calculated for operation of this facility (i.e., calculated at the base of the tower, which represents the closest publicly accessible point within the broadcast field of the antennas), with

the Sprint and Omnipoint antennas combined, would be 0.023308 mW/cm² (2.33% of the ANSI standard). These calculations are attached as Exhibit C.

4. The proposed installations, would not require any water or sanitary facilities, or generate air emissions or discharges to water or sanitary facilities, or generate air emissions or discharges to water bodies. After construction is complete (approximately two weeks), the proposed installations would not generate any traffic other than periodic maintenance visits.

The proposed use of this facility would therefore have a minimal environmental effect, and is environmentally feasible.

E. Economic Feasibility As previously mentioned, SBA and Omnipoint have entered into a mutual agreement to share the use of the existing tower on terms agreeable to the parties. The proposed tower sharing is therefore economically feasible.

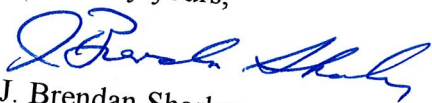
F. Public Safety Concerns As stated above, the existing tower is structurally capable of supporting the proposed Omnipoint antennas. The tower stands on a compound accessible from an existing driveway off Gifford Lane, and is surrounded by a eight-foot-high, gated chain link fence. Omnipoint is not aware of any other public safety concerns relative to the proposed sharing of the existing tower. In fact, the Bozrah Planning and Zoning Commission recently approved the construction of this tower, taking into consideration all public safety concerns as part of its review.

Conclusion

For the reasons discussed above, the proposed shared use of the existing tower facility on Gifford Lane in Bozrah, Connecticut satisfies the criteria stated in C.G.S. §16-50aa, and advances the General Assembly's and the Siting Council's goal of preventing the proliferation of towers in Connecticut. Omnipoint therefore requests that the Siting Council issue an order approving the proposed shared use.

Thank you for your consideration of this matter.

Very truly yours,



J. Brendan Sharkey
for Omnipoint Communications, Inc.

Attachments

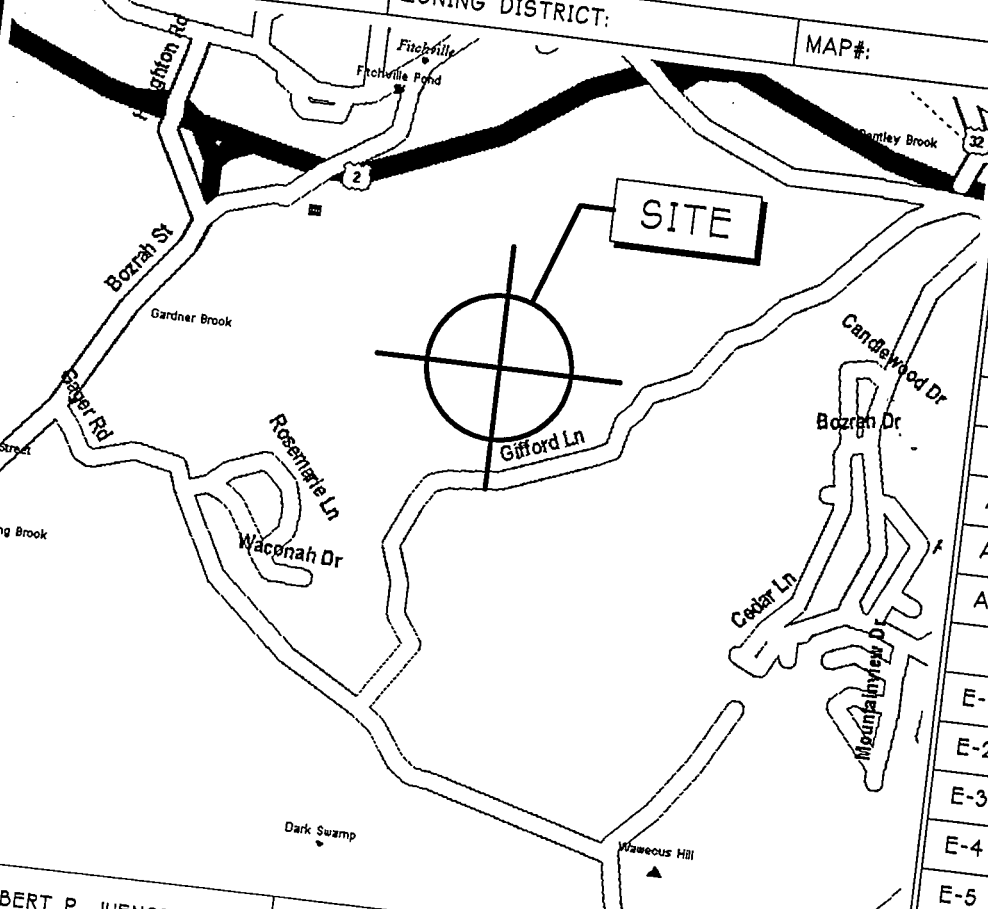
Exhibit A

Design Drawings
131 Gifford Lane
Bozrah, CT

BOZRAH 131 GIFFORD LANE BOZRAH, CT

SEARCH AREA: **BOZRAH**
SITE I.D. #: **CT-11-313A**

LOT#: _____ BLOCK#: _____ ZONING DISTRICT: _____ MAP#: _____



ROBERT P. JUENGERT

DIRECTIONS TO SITE:
HIGHWAY 2 SOUTH TO EXIT 23 (BOZRAH ST.) GO STRAIGHT THROUGH STOP SIGN. GO APPROXIMATELY 1/2 MILE, MAKE A LEFT ON GAGER RD. APPROXIMATELY 2 MILES MAKE A LEFT ON GIFFORD LN. DRIVEWAY IS ON THE LEFT SIDE FOLLOW ACCESS ROAD TO SITE.

CT-4208

SITE LOCATION MAP

SCALE:
NTS

ARCNET
ARCHITECTS, INC.
North Beers Street, Building 2, Holmdel, NJ 07733
732.739.3200 Fax: 732.739.0440

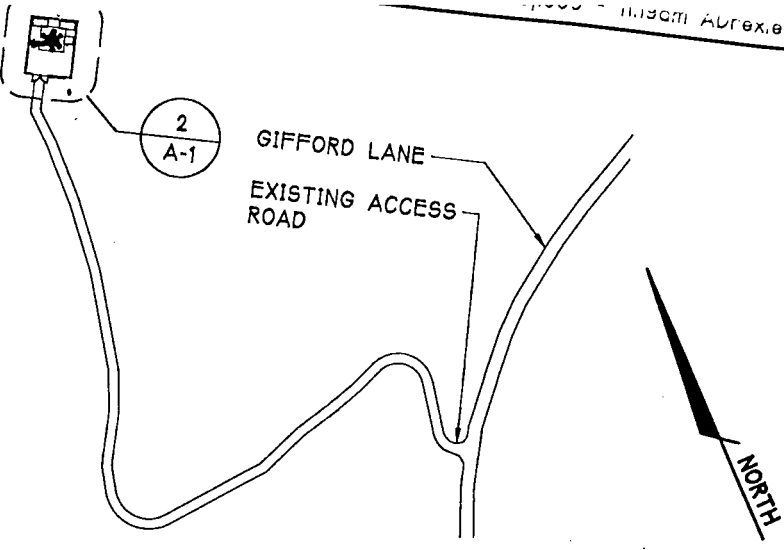
ELECTRICAL ENGINEER: DLB ASSOCIATES, INC.
Electrical/Mechanical Consulting Engineers
Wanamassa, NJ

STRUCTURAL ENGINEER: PAUL BECK ASSOCIATES, P.A.
Structural Engineers

ARCNET PROJECT NO. **A99.506-858A** P.C. **JDi** DATE: **8/28/99**

CIVIL ENGINEER: LAPATKA ASSOCIATES
12 ROUTE 17 NORTH
PARAMUS, NJ 07652
(201) 267-1800
ENGINEERS - LANDSCAPE ARCHITECTS - SURVEYORS

DWG.:	TITLE:
A-1	SITE LAYOUT
A-2	EQUIPMENT LAYOUT
A-3	ELEVATION
A-4	EQUIPMENT ELEVATION
A-5	CABINET DETAILS
A-6	SUB-BASE DETAILS
A-7	ICE BRIDGE DETAILS
A-8	ICE BRIDGE DETAILS
A-9	CABLE ROUTE DETAILS
A-10	CABLE ROUTE DETAILS
A-11	ANTENNA MOUNT DETAILS
A-12	ELECTRIC/TELCO MOUNT DETAILS
A-13	GENERAL NOTES
A-14	GENERAL NOTES (CONT.)
A-15	GENERAL NOTES (CONT.)
A-16	CONCRETE NOTES
A-17	MATERIAL LIST
E-1	GENERAL INFORMATION
E-2	SERVICE PLAN
E-3	GROUNDING PLAN
E-4	RISER
E-5	GROUNDING DETAILS
E-6	GROUNDING DETAILS
E-7	GROUNDING DETAIL



NOTES:
 1.) FOR A LIST OF ITEMS SUPPLIED BY OTHERS, (SEE MATERIAL LIST, DRAWING A-18)
 2.) CONTRACTOR TO LOCATE AND MARK-OUT ALL PUBLIC & PRIVATE UNDERGROUND UTILITIES AND STRUCTURES THROUGH THE USE OF A LOCATING SERVICE PRIOR TO ANY EXCAVATION WORK. HAND DIG IN AREAS OF EXISTING UTILITIES AND/OR STRUCTURES
 4.) TRUE NORTH TO BE CONFIRMED BY CIVIL ENGINEER

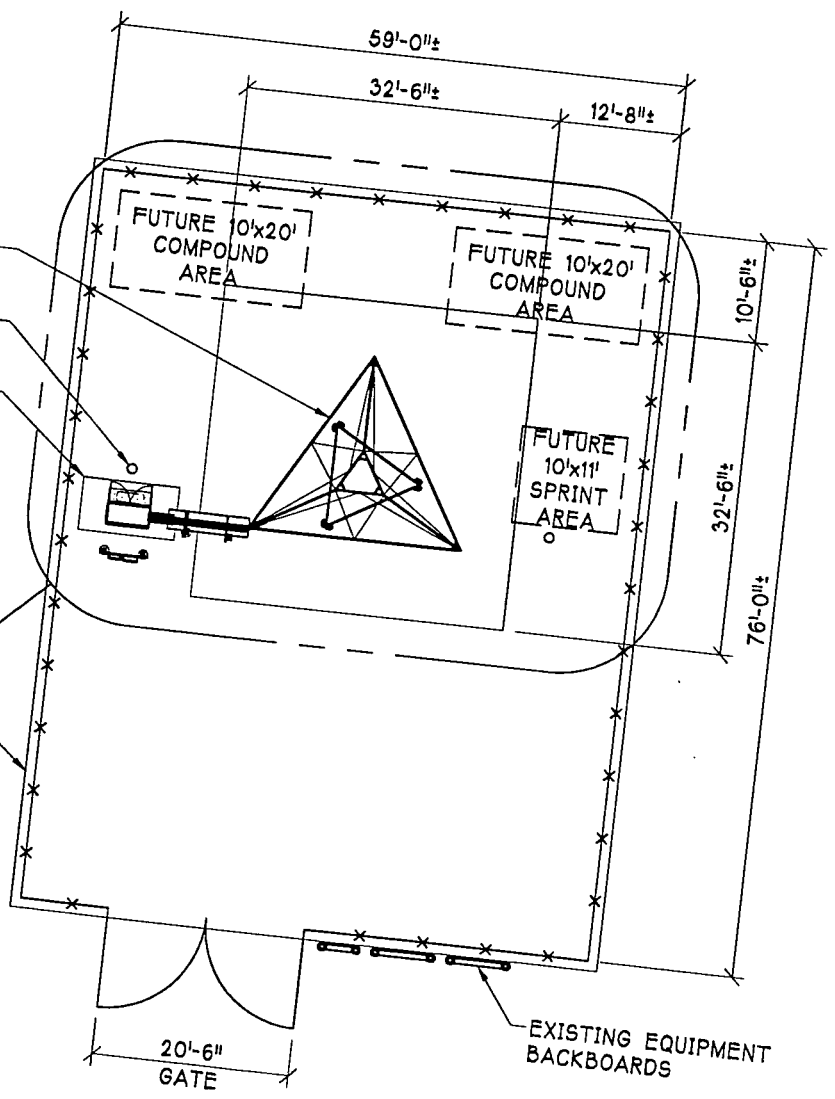
1
A-1
KEY LAYOUT
SCALE: N.T.S.

EXISTING PIROD TOWER
193'-0" ABOVE GRADE

EXISTING GROUND TEST WELL (TYPICAL)

NEW OMNIPPOINT LOCATION
(SEE DRAWING A-2 FOR DETAILS)

EXISTING (1'-0") EDGING PLACED AROUND PERIMETER



2
A-2

2
A-1
SITE LAYOUT
SCALE: 1"=20'-0"

ROBERT P. JUENGERT

CT- 4208

ARCNET
ARCHITECTS, INC.

North Beers Street, Building 2, Holmdel, NJ 07733
732.739.3200 Fax: 732.739.0440

Drawing Title: **KEY & SITE LAYOUT**

Client: **OCS**

ARCNET Project No. **A99.506-858A**

Drawn: **ADr** Date: **6/28/99**

Project: **BOZRAH**
Address: **131 GIFFORD LANE BOZRAH, CT**
Search Area: **BOZRAH**
Site ID No: **CT-11-313A**

Approved By: **CLIENT**
DATE:

Copyright 1999 by **ARCNET Architects, Inc.**

Revision No. Date.
Drawing No. **A-1**

TOP OF TOWER
193'-0"± ABOVE GRADE

TOP OF ANTENNA
195'-0"± ABOVE GRADE

EXISTING PIROD TOWER 193'-0"±
ABOVE GRADE

NEW DAPA ANTENNA MOUNTED
TO NEW ANTENNA PLATFORM
(SEE DRAWING A-11)

FUTURE SPRINT ANTENNA
178'-0"± ABOVE GRADE

FUTURE ANTENNA
163'-0"± ABOVE GRADE

FUTURE ANTENNA
148'-0"± ABOVE GRADE

FUTURE ANTENNA
133'-0"± ABOVE GRADE

NEW DAPA ANTENNA MOUNTED
TO NEW ANTENNA PLATFORM
(SEE DRAWING A-11)

60°
SECTOR

60°
SECTOR

300°
SECTOR

300°
SECTOR

180°
SECTOR

180°
SECTOR

NORTH

NEW NORTEL S8000 EQUIPMENT
CABINET MOUNTED ON NEW
CONCRETE SLAB (SEE DRAWING
A-5 & A-6)

EXISTING ANTENNA PLATFORM
(SEE DRAWING A-11)

2 ANTENNA ORIENTATION
A-3 SCALE: 3/32"=1'-0"

EXISTING 8'-0"± HIGH CHAIN
LINK FENCE WITH BARBED
WIRE

NEW COAXIAL CABLES TO BE
ROUTED UP TOWER LEG (SEE
DRAWING A-10)

NEW COAXIAL CABLES TO BE
ROUTED ALONG NEW CABLE
BRIDGE TO TOWER LEG (SEE
DRAWING A-7 & A-8)

NEW COAXIAL CABLES TO BE
ROUTED INSIDE NEW COVERED
CABLE TRAY TO CABLE BRIDGE
(SEE DRAWING A-9)

1 SOUTH ELEVATION
A-3 SCALE: 1"=20'-0"

NEW NORTEL S8000 EQUIPMENT
CABINET WITH SUB-BASE
MOUNTED ON NEW CONCRETE
SLAB (SEE DRAWING A-5 &
A-6)

ROBERT P. JUENGERT

CT- 4208

ARCNET
ARCHITECTS, INC.
North Beers Street, Building 2, Holmdel, NJ 07733
732.739.3200 Fax: 732.739.0440

Drawing Title:
ELEVATION

Client:
OCS

ARCNET Project No.
A99.506-858A

Drawn: Date:
ADr 6/28/99

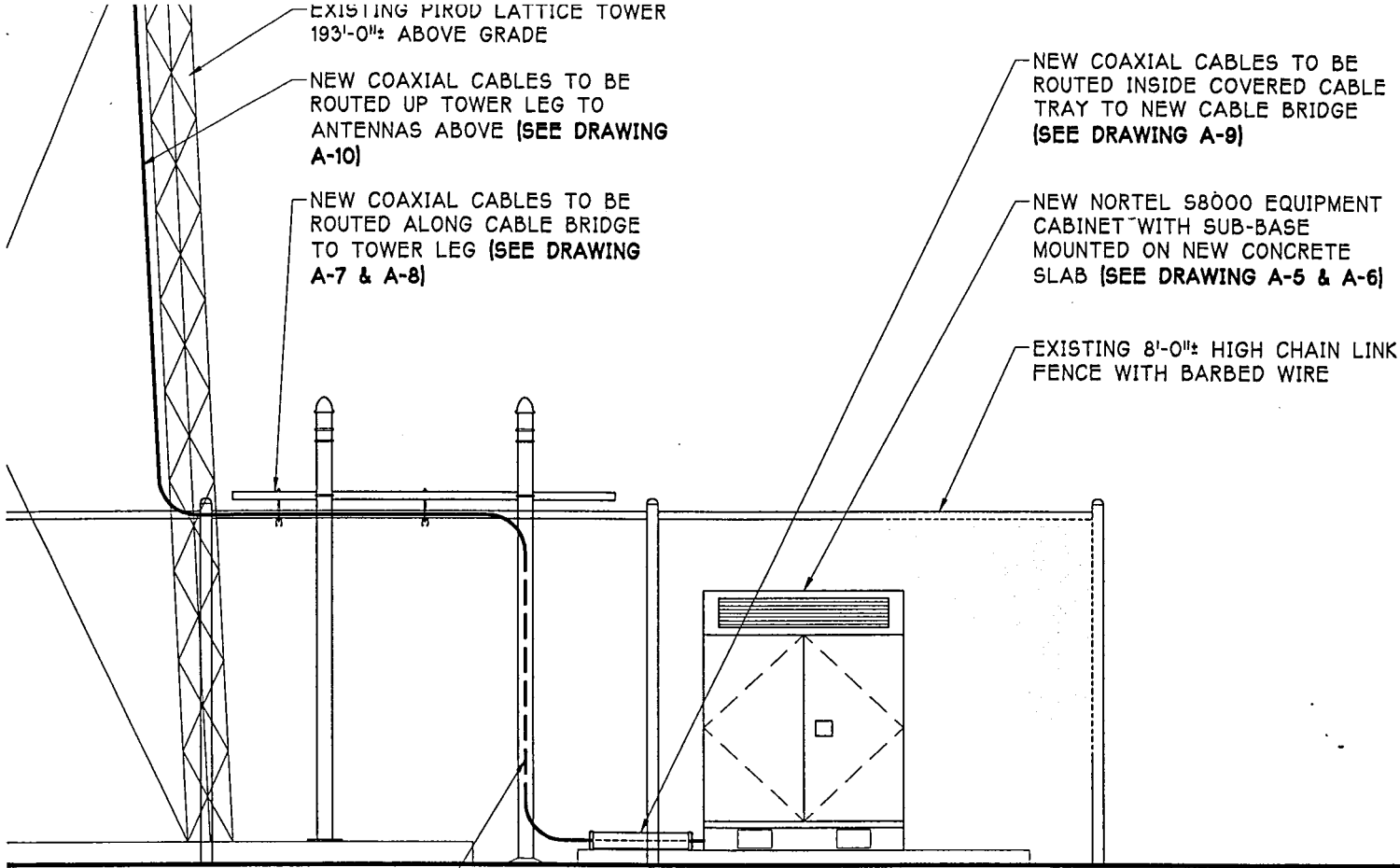
Project: **BOZRAH**
Address: 131 GIFFORD LANE
BOZRAH, CT
Search Area:
BOZRAH
Site ID No.:
CT-11-313A

Approved By:
CLIENT: _____
DATE: _____

Revision No. Date:

Drawing No.

A-3



NEW COAXIAL CABLES TO BE
ROUTED UP ICE BRIDGE SUPPORT
POST (SEE DRAWING A-10)

1 EQUIPMENT ELEVATION
A-4 SCALE: 1/4"=1'-0"

ROBERT P. JUENGERT

CT- 4208



670 North Beers Street, Building 2, Holmdel, NJ 07733
Tel: 732.739.3200 Fax: 732.739.0440

Drawing Title:
EQUIPMENT ELEVATION

Client:
OCS

Project: **BOZRAH**
Address: 131 GIFFORD LANE
BOZRAH, CT
Search Area:
BOZRAH
Site ID No.:
CT-11-313A

Revision No. Date:

P.C.:	P.C. Chkd.:	Chkd. by:	ARCNET Project No.:	Drawn:	Date:
JDi			A99.506-858A	ADr	6/28/99

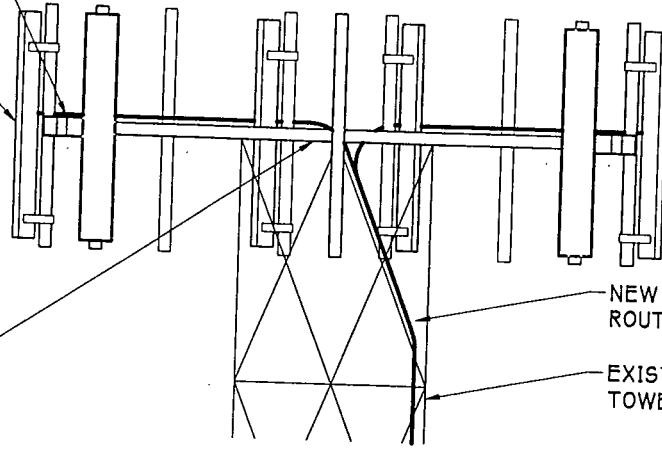
Approved By: _____ DATE: _____
CLIENT: _____

Drawing No.
A-4

NEW TOP-MOUNT PIROD MONOPOLE PLATFORM (INSTALL PER MANUFACTURER'S SPECIFICATIONS)

NEW DAPA ANTENNA (MODEL 59212) (TYPICAL OF 6) MOUNTED TO PLATFORM PIPE MAST USING DOWNTILT BRACKETS (SEE DRAWING 3/A-11)

ATTACH HOISTING GRIPS TO TOWER AS PER MANUFACTURERS SPECIFICATIONS



NEW COAXIAL CABLES TO BE ROUTED UP INSIDE MONOPOLE

EXISTING PIROD LATTICE TOWER 193'-0" ABOVE GRADE

NEW DAPA ANTENNA (MODEL 59212) (TYPICAL OF 6) MOUNTED TO PLATFORM PIPE MAST USING DOWNTILT BRACKETS

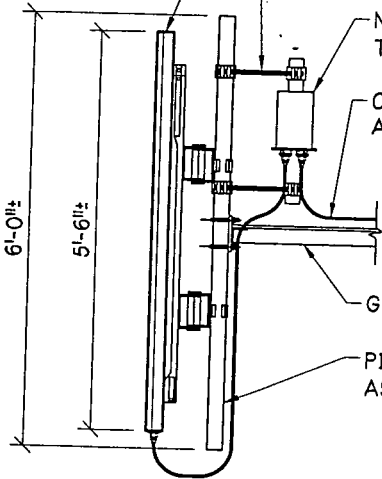
PIPE TO PIPE STANDOFF CLAMP (VANCOMM VCCS-6)

NEW MHA AMPLIFIER MOUNTED TO PIPE (TYPICAL OF 6)

COAXIAL CABLES ROUTED ACROSS PLATFORM

GRATE PLATFORM

PIPE MAST (PART OF PLATFORM ASSEMBLY)



6'-0"
5'-6"

2 ANTENNA PLATFORM ELEVATION
A-11 SCALE: 1/4"=1'-0"

60° SECTOR

90°

300° SECTOR

NEW TOP-MOUNT 16'-6" PIROD TOWER PLATFORM (INSTALL PER MANUFACTURER'S SPECIFICATIONS)

60° SECTOR

180° SECTOR

300° SECTOR

300° SECTOR

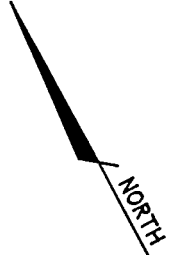
180° SECTOR

SECURE NEW PLATFORM TO TOWER HUB (BY PIROD) MOUNTED TO TOP OF TOWER

NEW DAPA ANTENNA (MODEL NUMBER 59212) (TYPICAL OF 6) WITH DOWNTILT BRACKET MOUNTED TO PLATFORM PIPE MAST AZIMUTH BEARINGS SHOWN (SEE DRAWING 3/A-11)

3 ANTENNA MOUNT DETAIL
A-11 SCALE: 3/8"=1'-0"

1 ANTENNA PLATFORM PLAN
A-11 SCALE: 1/4"=1'-0"



ROBERT P. JUENGERT

CT- 4208

<p>ARCNET ARCHITECTS, INC. 670 North Beers Street, Building 2, Holmdel, NJ 07733 Tel: 732.739.3200 Fax: 732.739.0440</p>	<p>Drawing Title: ANTENNA MOUNT DETAILS</p>		<p>Project: BOZRAH</p>		<p>Revision No. _____ Date: _____</p>
	<p>Client: OCS</p>		<p>Address: 131 GIFFORD LANE BOZRAH, CT</p>		
<p>P.C.: JDi</p>	<p>P.C. Chkd. _____</p>	<p>ARCHNET Project No. A99.506-858A</p>	<p>Drawn: ADr</p>	<p>Date: 6/28/99</p>	<p>Drawing No. A-11</p>
<p>Approved By: _____</p>		<p>CLIENT: _____ DATE: _____</p>			

Electrical Specifications

Split Single-Phase

3 wires plus ground

L1: Black 6 gauge

L2: Red 6 gauge

Neutral: White 6 gauge

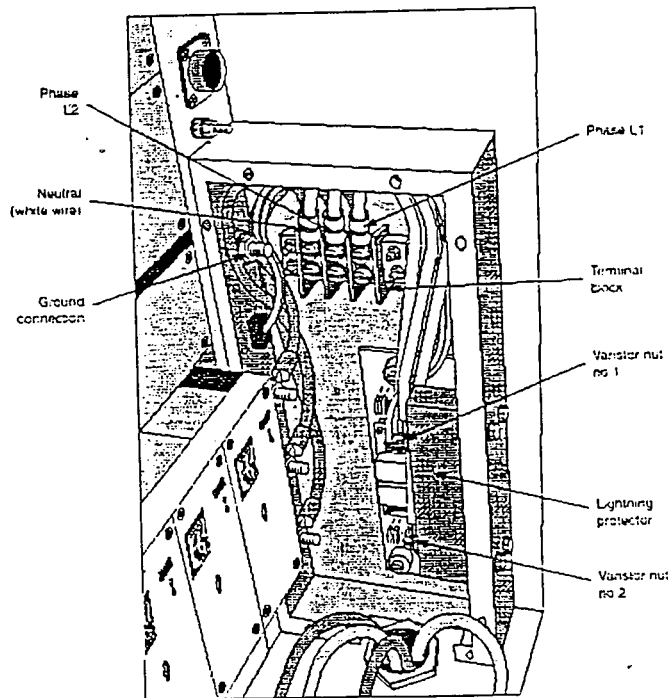
Ground: Yellow/Green 6 gauge

Maximum distance between AC box and BTS: 105 feet

187 ~ 254 VAC between L1 and L2

99 ~ 127 VAC between Neutral and L1 or L2

45 ~ 65 Hertz



AC connection to BTS located at the front, lower, right-hand side of BTS

Circuit Breaker in AC Box

Up to 4 transmitters

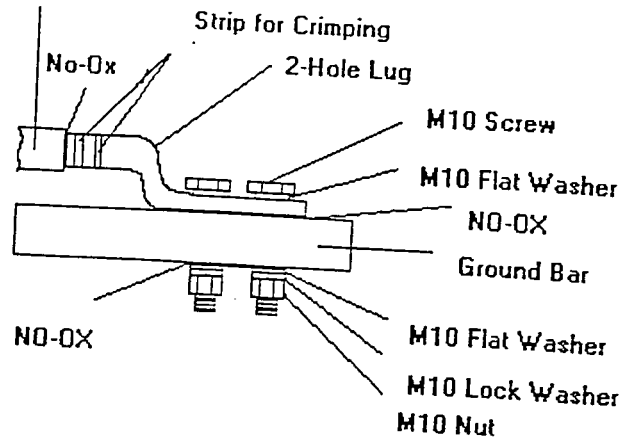
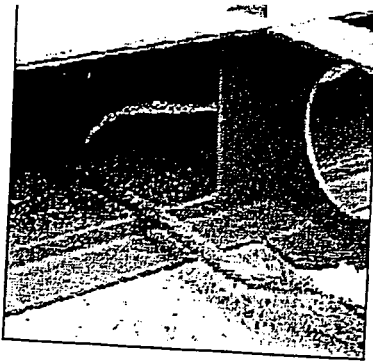
30 A, bipolar, C curve

5 or more transmitters

40A, bipolar, C curve

BTS to Ground connection

Minimum 2 AWG, run in most direct route as possible towards true earth, minimizing bends. No bend shall be less than 90 degrees.



Apply a light coating of No Oxidation (NO-OX) to the ground bar area.

Dimensions, Weights & Clearances

BTS

Weight: 915 pounds
 Dimensions: 53.2"W x 26"D x 63"H

Clearances while transporting in building:

Door Access:
 Height: 6.6 feet
 Width 3 feet

Corridor Access:
 Height: 6.6 feet
 Width: 3.6 feet (straight), 6.6 feet (right angle)

Clearances when installed:
 Above: 28 inches for opening of hood
 Rear: 8 inches for installation of outer skin
 Sides: 8 inches for adjustment of door hinges
 Front: 54 inches to open door and technician access

Plinth

Weight:
 87 pounds
 Dimensions:
 53.2"W x 44"D x 10.2"H

Floor Characteristics

Minimum Floor Resistance:
 123 pounds/foot²

Flatness:
 ¼ inch over 78 inches

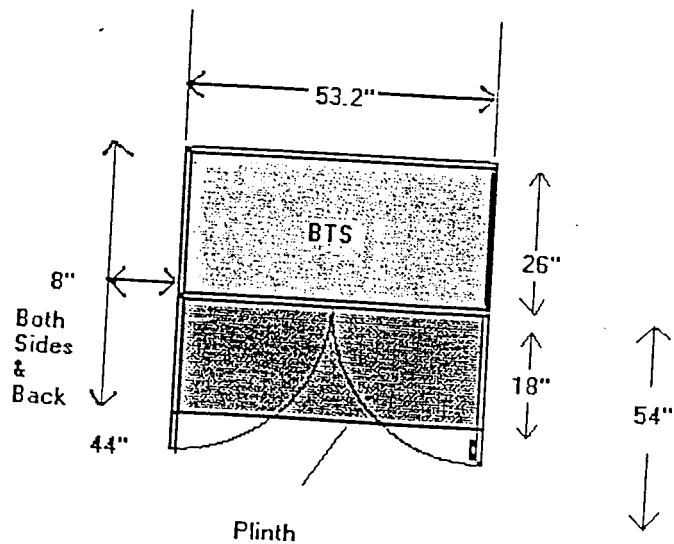


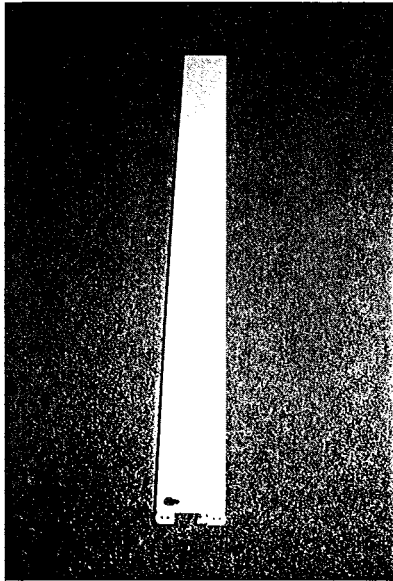
Exhibit B

Equipment Specifications

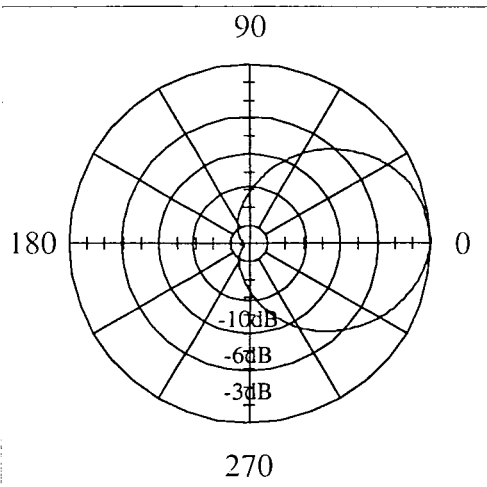
131 Gifford Lane

Bozrah, CT

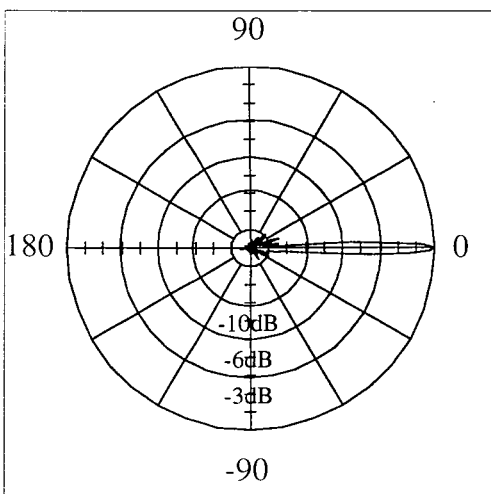
Model 59000 / 59010 92°, 16.4 dBd Panel



2



H-plane



E-plane

GENERAL CHARACTERISTICS

Frequency Range	1710 - 1990 MHz
Impedance	50 Ω
VSWR	< 1.4:1
Polarization	Vertical
Rated Power	500 W

ELECTRICAL CHARACTERISTICS

Beamwidth:	H-plane	92° ± 3° (at -3 dB)
	E-plane	5.5° ± 1° (at -3 dB)
Maximum / Minimum Gain		16.4 dBd / 15.4 dBd
Electrical Downtilt		0° (available -1° to -15°)
Side Lobes		< -15 dB
Front-to-Back Ratio		< -25 dB

MECHANICAL CHARACTERISTICS

Height x Width x Depth	70.3" x 6.3" x 2.7" (1785 x 159 x 68 mm)
Weight	14.6 lbs (6.6 kg)
Wind Survival Rating	125 mph (200 km/h)
Wind Load (at 100 mph)	510 N (frontal F1) 217 N (lateral F2)
Flat Plate Equivalent Area	3.05 ft ² (0.28 m ²)
Connector Types (Female)	Type N, or 7/16 DIN
Materials: Antenna / Radome	Aluminum / ABS

Model 59000 / 59010 92°, 16.4 dBd Panel

MOUNTING HARDWARE (INFORMATION AND DRAWINGS)

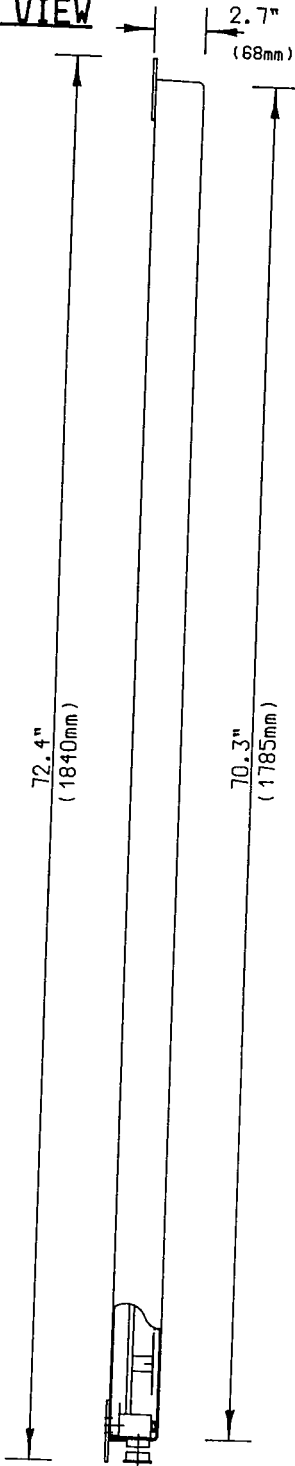
Pipe Mount Brackets

Fix 903 (1.25" - 3.5" OD pipe)

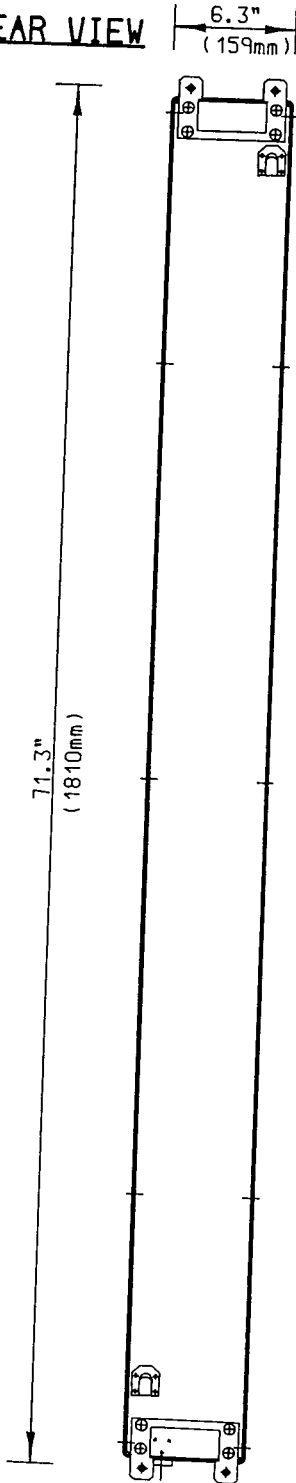
Mechanical Tilt Bracket (optional)

Model TB-9

SIDE VIEW

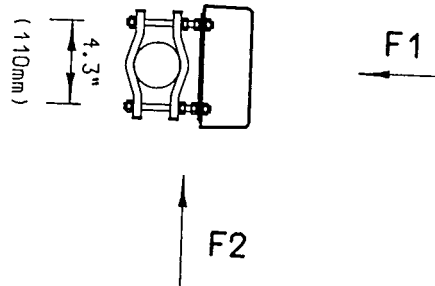


REAR VIEW



NOTE: Mechanical specifications on these pages would apply to all other electrical tilt and/or connector location options.

TOP VIEW

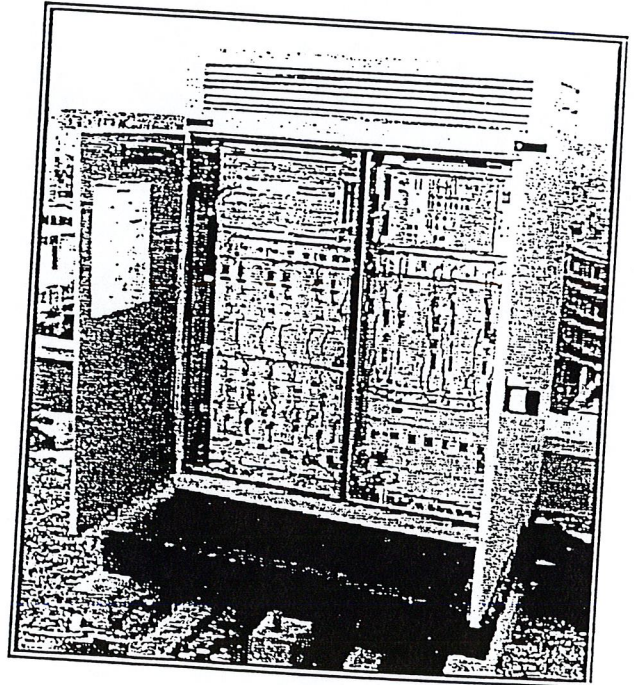
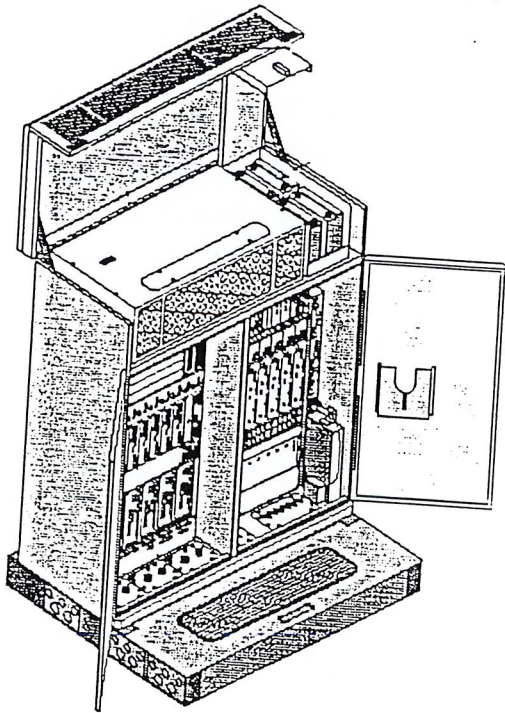


2

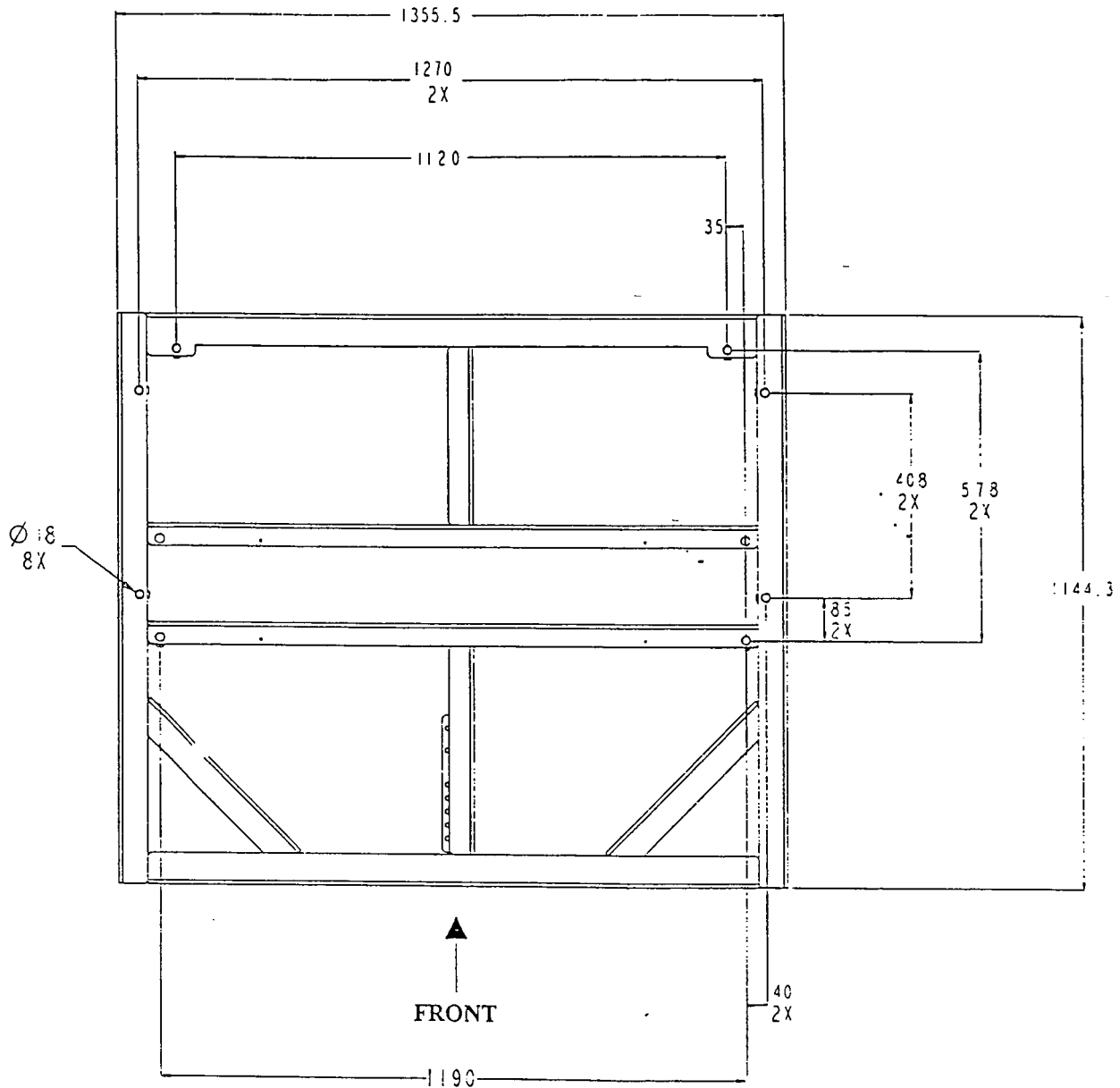
NORTEL
NETWORKS™

S8000 BTS

Site Specifications



Appendix 3 BTS plinth type 1 floor print



BTS Plinth type 1 Top View

The BTS plinth type 1 floor print can be directly deducted from the dimensions given above for the top view.

All dimensions are expressed in mm.

Mention '2X' or '8X' means that the same dimension applies to another part of the print (symmetrical part).

Exhibit C

Power Density Calculations

131 Gifford Lane

Bozrah, CT

Technical Memo

To: Brendan Sharkey
From: Michael Walker (Radio Engineering Consultant)
cc: Mike Fulton
Subject: Power Density Report for CT11313A
Date: 7/16/99

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the proposed OMNIPOINT Communications Inc. PCS antenna installation on SBA Tower at 131 Gifford Lane, Bozrah, CT. This study incorporates the most conservative considerations for determining the practical combined worst case power density levels that would be theoretically encountered from several locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

- 1) The emissions from the OCI transmitters are in the 1930-1950 MHZ frequency band.
- 2) The antenna cluster consists of three sectors, with 2 antenna per sector. The model number for each antenna is DAPA 59212.
- 3) The antenna height is 192.07 feet Center Line.
- 4) The maximum transmit power from each sector is 1120.0 Watts Effective Isotropic Radiated Power (EiRP).
- 5) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
- 6) 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.
- 7) The average ground level of the studied area does not significantly change 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 worse case assumptions, the power density calculations from the proposed OMNIPOINT Communications Inc., PCS antenna installation are on the order of **1,000** to **10,000** times less than the FCC/ANSI/IEEE C95.1-1991 standard of 1000 microwatts per square centimeter ($\mu\text{w}/\text{cm}^2$). Details are shown in the attachment. Furthermore, the proposed antenna location for Omnipoint Communications at SBA Tower at 131 Gifford Lane, Bozrah, CT will not interfere with existing public safety telecommunications, AM band and FM band radio broadcast, TV, Police Communication, HAM Radio communications and other signals in the area.

Region 11 - Connecticut Power Density Calculation - Worst Case	
Base Station TX output	20 W
Number of channels	2
Antenna Model	DAPA: 59210
Antenna Gain	18.5 dBi
Cable Size	1 5/8"
Cable Length	215 ft
Jumper & Connector loss	1 dB
Cable Loss per foot	0.0116
Total Cable Loss	2.494 dB
Total Attenuation	3.494 dB
Total EIRP per channel	58.02 dB
Total EIRP per sector	61.03 dB
Ground Reflection	1.6
Frequency	1930 MHz
Antenna Height	192.07 ft
msg	15.006
Power Density (S)	0.007533 mW / cm²
% MPE	0.7533%

Equation Used :

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

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

Sprint's worst case power density of 0.015775 at the base of the tower (0 ft) and, the combination of Sprint's and Omnipoint's power densities will be 0.023308 mW/cm², which 42.903 times lower than the Federal Standard of 1.0 mW/cm².