TS-BAM-063-000607

Bell Atlantic Mobile
20 Alexander Drive
P.O. Box 5029
Wallingford, CT 06492-2430
203-269-8858

Bell Atlantic

June 6, 2000

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

Re: **Request by Cellco Partnership d/b/a Verizon Wireless for an Order to Approve the Shared Use of a Tower Facility located at 185 Fisk Road, Hampton, Connecticut.**

Dear Chairman Gelston:

Pursuant to Connecticut General Statutes (C.G.S.) Sec. 16-50aa, Cellco Partnership d/b/a Verizon Wireless hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed shared use by Verizon Wireless of an existing tower located at 185 Fisk Road, Hampton, Connecticut. The property is owned by The Charles Halbach Trust and the tower is owned and managed by American Tower Management, Inc. As shown on the attached drawing and as further described below, Verizon Wireless proposes to install antennas on the existing tower and to locate an equipment shelter at the base of the tower. Verizon Wireless requests that the Council finds that the proposed shared use of the tower facility satisfy the criteria stated in C.G.S. Sec. 16-50aa, and to issue an order approving the proposed shared use.

Background

Verizon Wireless is licensed by the Federal Communications Commission to provide cellular telephone service in the Windham County New England County Metropolitan Area (NECMA), which includes the area to be served by the proposed Hampton installation.

The facility at 185 Fisk Road in Hampton, consists of a 160 foot AGL guyed tower built by Cordless Data Transfer and sold to American Tower Management, Inc. and is located on a leased parcel. The guyed tower supports the antennas of Sprint Spectrum PCS and Nextel Communications, both wireless carriers that provide mobile communications service to the public pursuant to its FCC licenses. Verizon Wireless and American Tower Management, Inc. have agreed to the proposed-shared use of this tower pursuant to mutually acceptable terms and conditions. American Tower Management, Inc. has authorized Verizon Wireless to apply for all necessary permits, approvals and authorizations which may be required for the proposed shared use of this facility.

Verizon Wireless proposes to install twelve (12) Decibel Model DB844H90 antennas, approximately 48 inches in height, on a platform with their center of radiation at approximately 142.3 feet above ground level ("AGL"). Verizon Wireless will also install one (1) GPS antenna on the tower. Equipment associated with these antennas, as well as a 40 KW diesel-fueled emergency stand-by generator, would be located in a new approximately 12-foot x 30-foot equipment building located at the base of the tower.

C.G.S. Sec. 16-50aa 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" (C.G.S. Sec. 16-50aa(c)(1).)

Discussion

A. Technical Feasibility. The existing tower is structurally sound and capable of supporting the proposed Verizon Wireless antennas. The tower will not require any structural modification to support the proposed attachments. A letter from Fred A. Nudd Corporation regarding the tower design and loading is attached to this application. Verizon Wireless engineers have determined that the proposed antenna installations present minimal potential for interference to or from existing radio transmissions from this location. In addition, the applicant is unaware of any occasion where its operations have caused interference with AM, FM or television reception. The proposed shared use of this tower therefore is technically feasible.

B. Legal Feasibility. Under C.G.S. Sec. 16-50aa, the Council has been authorized to issue an order approving the proposed-shared use of an existing communications tower facility such as the facility at 185 Fisk Road. (C.G.S. Sec. 16-50aa(c)(1).) This authority complements the Council's prior-existing authority under C.G.S. Sec. 16-50p to issue orders approving the construction of new towers that are subject to the Council's jurisdiction. C.G.S. Sec. 16-50x(a) directs the Council to "give consideration to other state laws and municipal regulations as it shall deem appropriate" in ruling on requests for the shared use of existing tower facilities. Under the authority vested in the Council by C.G.S. Sec. 16-50aa, 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. The addition of the proposed antennas would not increase the height of the tower, and would not extend the boundaries of the tower site, including the placement of the equipment building near the base of the existing tower.

2. The proposed installation would not increase the noise levels at the existing facility by six decibels or more. The only additional noise will occur during emergency use or periodic exercising of the generator.

3. Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base to a level at or above the applicable standard. "Worst-case" exposure calculations for a point at the base of the tower in relation to operation of each of the various carriers' antenna arrays are as follows:

	Applicable ANSI Stnd	Calculated "Worst-Case"	Percentage of Stnd.
Verizon Wireless	0.583 mW/cm2	0.0337 mW/cm2	5.78%
Sprint	1.000 mW/cm2	0.0208 mW/cm2	2.08%
Nextel	0.572 mW/cm2	0.0127 mW/cm2	2.22%
		Total	10.08%

The collective "worst-case" exposure would be only 10.08 % of the ANSI standard, as calculated for mixed frequency sites. Power density levels from shared use of the tower facility would thus be well below applicable ANSI standards.

4. The proposed installations would not require any water or sanitary facilities, or generate discharges to water bodies. Operation of the emergency back-up generator will result in limited air emissions; pursuant to R.C.S.A. Section 22a-174-3, the generator will require the issuance of a permit from the Department of Environmental Protection Bureau of Air Management. After construction is complete, the proposed installation 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.

D. Economic Feasibility. As previously mentioned, the tower owner and the applicant have entered into a mutual agreement to share the use of the existing tower on terms agreeable to the parties, and the proposed tower sharing is thus economically feasible.

E. Public Safety Concerns. As stated above, the existing tower is structurally capable of supporting the proposed Verizon Wireless antennas. The Applicant is not aware of any other public safety concerns relative to the proposed tower sharing of the existing tower. In fact, the provision of new or improved cellular phone service in the Hampton area, especially along the heavily traveled Routes 6 and 97 and the surrounding area, through shared use of the tower is expected to enhance the safety and welfare of area residents and travelers. The public safety benefits of wireless service are further illustrated by the decision of local authorities elsewhere in Connecticut to provide cellular phones to residents to improve local public safety and emergency communications. The proposed-shared use of this facility would likewise improve public safety in the Hampton area.

Conclusion

For the reasons discussed above, the proposed shared use of the existing telecommunications tower facility at 185 Fisk Road satisfies the criteria stated in C.G.S. Sec. 16-50aa, and advances the General Assembly's and the Council's goal of preventing the proliferation of towers in Connecticut. The Applicant therefore requests that the Council issue an order approving the proposed shared use.

Thank you for your consideration of this matter.

Pursuant to Connecticut General Statutes Sec. 16-50v and Section 16-50v-1(a) of the Regulations of Connecticut State Agencies, Verizon Wireless has enclosed a check in the amount of $500.00 for the required filing fee.

Respectfully yours,

Sandy M. Carter

Sandy M. Carter
Manager – Regulatory
Verizon Wireless

Attachments
cc: Walter A. Stone, First Selectman

Bell Atlantic Mobile
20 Alexander Drive
P.O. Box 5029
Wallingford, CT 06492-2430
203-269-8858

June 6, 2000

Honorable Walter A. Stone
First Selectman
Town Office Building
164 Main Street
Hampton, Connecticut 06247

Dear Mr. Stone:

This letter is to inform you that Cellco Partnership d/b/a Verizon Wireless plans to install antennas and associated equipment at the existing tower facility located at 185 Fisk Road, Hampton, Connecticut. I am enclosing a copy of Verizon Wireless's tower sharing application to the Connecticut Siting Council.

The application fully sets forth the Company's proposal. However, if you have any questions or require further information on our plans or the Siting Council's procedures, please contact me at (203) 294-8519 or Mr. Joel Rinebold, Executive Director of the Connecticut Siting Council at (860) 827-2935.

Sincerely,

Sandy M. Carter

Sandy M. Carter
Manager- Regulatory
Verizon Wireless

Enclosure

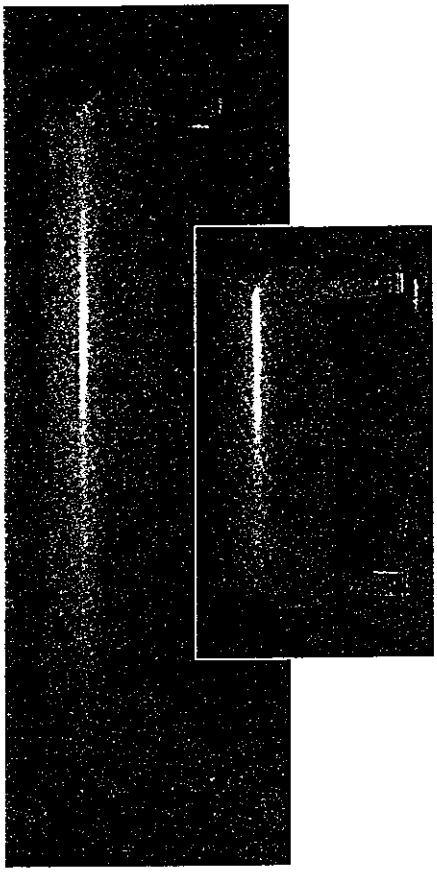
DB842H80N-XY, DB842H90N-XY dB DIRECTOR™ LOG PERIODIC ANTENNAS
DB844H80N-XY, DB844H90N-XY 9-13 dBd GAIN, 40 dB F/B RATIO, 806-960 MHz

Ideal for cellular and trunking/ESMR applications, these high quality log periodics are now available from Decibel in four new models with 80 or 90 degree horizontal apertures. They're compact, lightweight, and provide an **unmatched front-to-back ratio of 40 dB.**

- Less Wind Loading - They measure only 24 or 48 inches (610 or 1219 mm) tall, 8.5 inches deep (216 mm), and 6 inches wide (152 mm). They weigh only 5 or 10 pounds.
- Downtilt - Electrical downtilt is available on all 4-foot models, 6°, 8°, 11°, 13°, or for mechanical downtilt, order DB5083 bracket.
- Null-Fill - Four-foot models provide null-fill and upper lobe suppression.
- Most Stringent IM Test - Each antenna is tested for the absence of IM with 16 carriers at 500 watts of composite power.
- Sturdy Construction - Made in the U.S. of high-strength aluminum alloy backs, brass elements and UV resistant ABS plastic radomes. No rivets are used!
- Lightning Resistant - All metal parts are grounded.
- Terminations and Mounts - All models are available with N-Female or 7/16 DIN connectors. DB380 pipe mount is included.

Ordering information - See table for models to fit your requirements.

UPS Shippable



4-Foot and 2-Foot dB DIRECTORS

Models Available

Model*	DB842H80N-XY	DB844H80N-XY	DB842H90N-XY	DB844H90N-XY
Gain – dBd/dBi	10/12.1	13/15.1	9/11.1	12/14.1
F/B Ratio – dB	40	40	40	40
Horizontal beamwidth**	80°	80°	90°	90°
Vertical beamwidth**	30°	15°	30°	15°
Height – in. (mm)	24 (610)	48 (1219)	24 (610)	48 (1219)
Weight – lbs. (kg)	5 (2.3)	10 (4.6)	5 (2.3)	10 (4.6)
Shipping weight – lbs. (kg)	8 (3.6)	15 (6.8)	8 (3.6)	15 (6.8)

* For 7/16 DIN connectors substitute "E" for "N" in the model numbers. Example: DB842H80E-XY.

** 3 dB from maximum.

Side offset mounting bracket is included. For electrical downtilt of 6°, 8°, 11° or 13° add T6, T8, T11 or T13 before the "N" or "E" in any 4-foot model number. Example: DB844H80T6N-XY. Note: Electrical downtilt causes a gain loss of .05 dB, or , at the horizon, a reduction of 3, 6, 9 or 12 dB on downtilts of 6°, 8°, 11° or 13° respectively. For mechanical downtilt order DB5083 bracket.

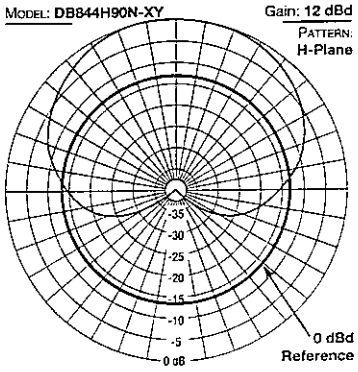
Mechanical Data

Width – in. (mm)	6 (152)
Depth – in. (mm)	8.5 (216)
Height	See table above
Maximum wind speed – mph (km/h)	125 (200)
Wind area – ft² (m²)	
24" (610 mm) antenna	1 (.093)
48" (1219 mm) antenna	2 (.186)
Wind load (at 100 mph/161 km/h) – lbf (N) kp	
24" (610 mm) antenna	40 (178) 18
48" (1219 mm) antenna	80 (356) 36
Radome	Gray ABS
Backplate	Passivated aluminum
Radiators	Brass
Mounting hardware	Galvanized steel
Weight	See table above

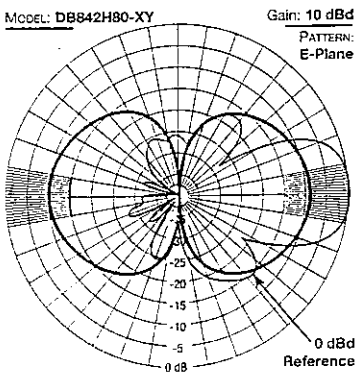
Electrical Data

Frequency Range - MHz	806-960
Gain - dBd	See table above
Front-to-back ratio - dB	>40
Beamwidths	See table above
VSWR	<1.5:1
Null-fill and secondary lobe suppression	On 48" (1219 mm) models only
Maximum power input - watts	500
Nominal impedance - ohms	50
Lightning protection	All metal parts grounded
Termination	N-Female or 7/16 DIN

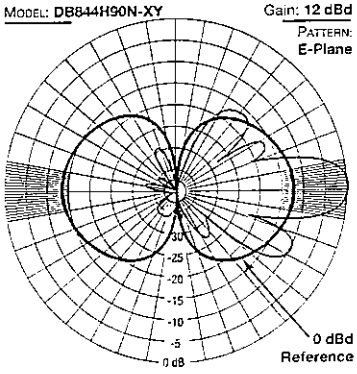
Typical DB842H90N-XY, DB844H90N-XY Horizontal Pattern



Typical DB842H80-XY Vertical Pattern



Typical DB844H90N-XY Vertical Pattern



FRED A. NUDD CORPORATION
1743 Route 104
PO Box 577
ONTARIO, NEW YORK 14519

(315) 524-2531
FAX (315) 524-4249

DATE: 9/1/99
QUOTE #: 7064

CDT
PO Box 363
17 Ridgewood Drive
Marlborough, CT 06447

Name: Bob Francis

Phone: (860) 295-0445
Fax: (860) 295-1473

Location: Hampton, CT.
Description: 160' G42WPAR

DIMENSIONS: Model G42WPAR tower will be 160' above specified foundation. The face dimension will be 42" on leg centerlines. Total tower weight is approximately 9000 lbs.

CONSTRUCTION: Model G42WPAR tower is triangular, all welded construction with pipe legs, angle iron horizontal bracing, and rod diagonal bracing.
Tower is supplied in 20' flange mounted sections.
The entire assembly is hot dip galvanized to ASTM A-123 specifications

CLIMBING LADDER: An integral climbing ladder is included on one tower face for ease of climbing on the outside of the tower. A DBI/SALA flexible cable safety climb is included.

DESIGN SPECS: Tower is designed for 85 mph windload with 1/2" ice and the wind/ice reduction, or 85 mph with no ice, whichever is worse, per ANSI/EIA/TIA 222-E specifications.

ANTENNA MOUNTS: Included are three 12' azimuth-adjustable booms on a star mount, **without tilt mechanisms.**

ANTENNA DESIGN LOAD:

QTY	DESCRIPTION	(above foundation) ELEVATION	T-LINE
3	12' booms on a star mount	160'	
12	Sinclair SSRL-410C9R130	160'	1-5/8" Heliax
10	PD10017	160'	1-5/8" Heliax
3	12' booms	150'	
12	SRL - 410C9R130	150'	1-5/8" Heliax
3	12' booms	140'	
12	Sinclair SSRL-410C9R130	140'	1-5/8" Heliax
3	12' booms	130'	
12	SRL - 410C9R130	130'	1-5/8" Heliax
3	12' Booms	120'	1-5/8" Heliax
12	SRL - 410C9R130	120'	1-5/8" Heliax
2	6' MHP dish	100'	1-5/8" Heliax

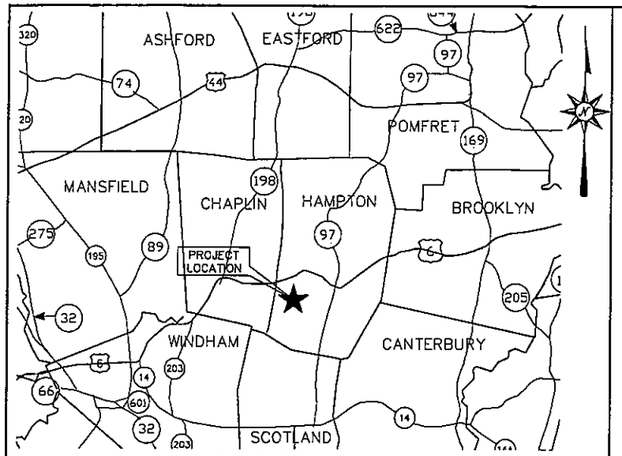
AVIATION MARKING: No painting or lighting are provided.

GUYING: Three (3) levels of guying at 80% guy radius (150') utilizing EHS guy strand with one (1) set of anchors and two (2) torque arms to enhance tower rigidity.

WAVEGUIDE LADDER: A Nudd-developed waveguide ladder to support the waveguide runs down the face face of the tower is included. This waveguide ladder is capable of holding 13 lines each on three faces and will support them every 36". The ladder uses 3/8" holes and not only supports your transmission lines, but keeps them neat and orderly. Also included are two sets of 9-run snap-in hanger adapters.

GROUNDING: A 4' lightning rod is included.
Also included are two base ground rods and guy anchor ground rods and wire.

FOUNDATIONS: Foundation design will be based on customer-supplied boring logs. Soil testing is necessary to establish soil conditions and is the responsibility of the customer prior to foundation design.

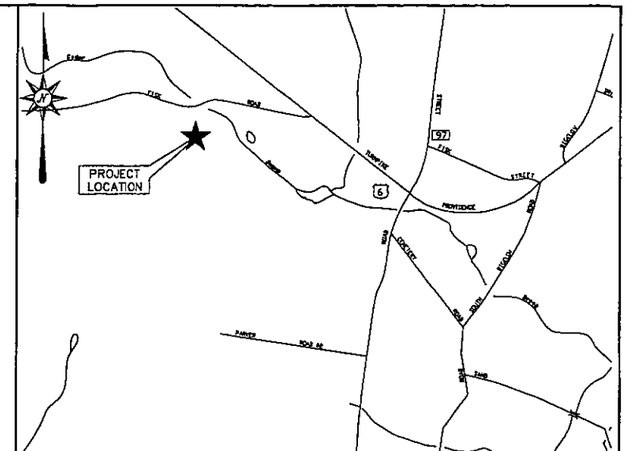


LOCATION MAP

SCALE: NONE

SITING COUNCIL SUBMISSION

HAMPTON
TELECOMMUNICATION FACILITY



VICINITY MAP

SCALE: 1"=1000'

FISKE ROAD
HAMPTON, CONNECTICUT

PREPARED FOR:

VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CONNECTICUT 06492

CONTENTS

PREPARED BY:

BL Companies

ARCHITECTURE ENGINEERING PLANNING LANDSCAPE ARCHITECTURE
LAND SURVEYING ENVIRONMENTAL SCIENCES ANALYTICAL SERVICES

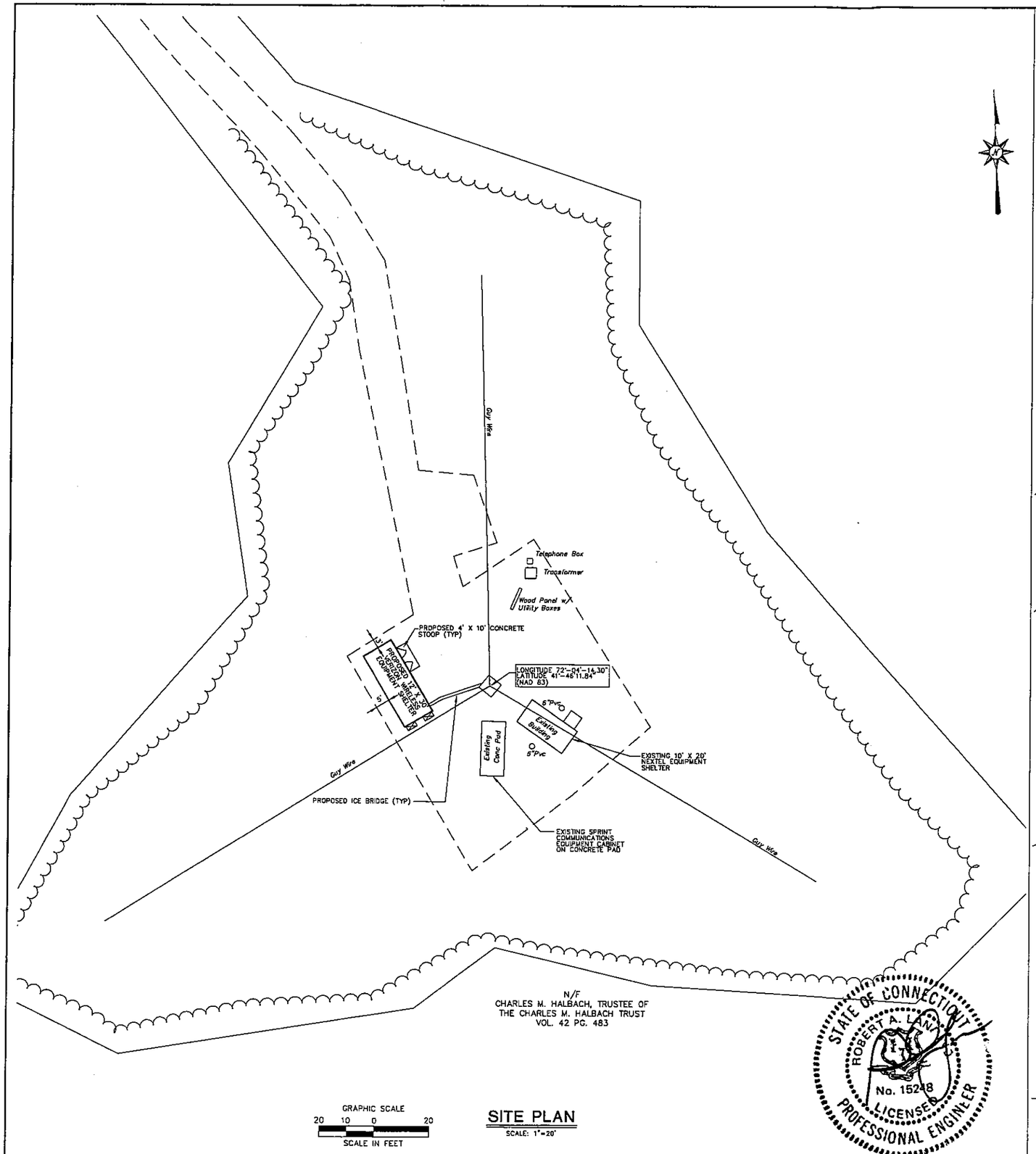
355 RESEARCH PARKWAY
MERIDEN, CONNECTICUT 06450
(203) 630-1406
(203) 630-2615 Fax

STATE OF CONNECTICUT
ROBERT A. LAM
No. 15248
LICENSED
PROFESSIONAL ENGINEER

DATES

ISSUE DATE: MAY 23, 2000
REVISION:

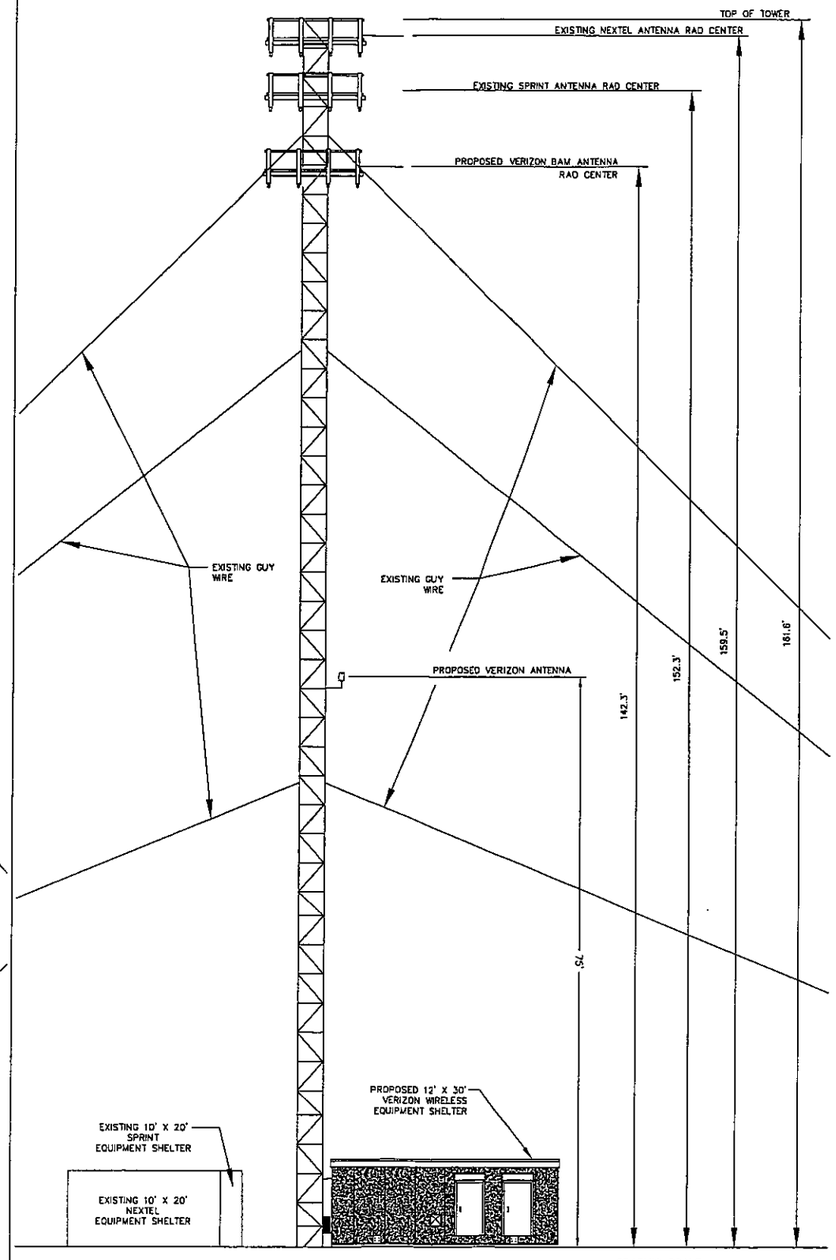
CAD FILE: CVC66501



SITE PLAN

SCALE: 1"=20'

STATE OF CONNECTICUT
ROBERT A. LYNN
No. 15248
LICENSED
PROFESSIONAL ENGINEER



TOWER ELEVATION

SCALE: 1"=10'

BL Companies
ARCHITECTURE
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PLANNING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
ENVIRONMENTAL SCIENCES
ANALYTICAL SERVICES

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(203) 630-1406
(203) 630-2815 Fax

SITE PLAN AND ELEVATION

HAMPTON TELECOMMUNICATION FACILITY

FISKE ROAD
HAMPTON, WINDHAM COUNTY, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	R.C.B.
Drawn	K.A.K.
Checked	S.N.
Approved	R.A.L.
Scale	AS SHOWN
Project No.	00C565
Date	05/23/00
CAD File	SCC56501

Sheet No.

SC-1

Xref (s):XC56501, XC56501