

Daniel F. Caruso Chairman 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@ct.gov Internet: ct.gov/csc

March 16, 2007

Aaron Cowher SBA Network Services, Inc. 318 Main Street, Suite B Southbridge, MA 01550

RE: EM-SPRINT-NEXTEL-126-070206 - Nextel of the Mid-Atlantic, Inc. d/b/a Nextel

Communications notice of intent to modify an existing telecommunications facility located at 162 Birdseye Road, Shelton, Connecticut.

Dear Mr. Cowher:

At a public meeting held on March 13, 2007, 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 received February 6, 2007, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. 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.

Carl /

Chairman

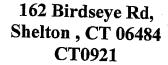
DFC/MP/laf

c: The Honorable Mark A. Lauretti, Mayor, City of Shelton Richard Schultz, Planning Administrator, City of Shelton Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP Michele G. Briggs, New Cingular Wireless PCS, LLC Christopher B. Fisher, Esq., Cuddy & Feder LLP

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CONNECTICUT SITING COUNCIL
Affirmative Action / Equal Opportunity Employer





Pursuant to Section 15-59I(a)(5) of the Connecticut General Statues and Section 16-50j-72(b)(2), as amended, of the Regulations of Connecticut State Agencies, Nextel of the Mid-Atlantic, Inc. d/b/a Nextel Communications ("Nextel") hereby notifies the Connecticut Siting Council of its intent to modify an existing communications facility located on162 Birdseye Rd, Shelton, CT 06484 which is owned and operated by Nextel Communications.

#### **Background**

The 162 Birdseye Road facility is an existing 119' Monopole. Nextel currently has (12) antennas currently installed at the height of 121'.

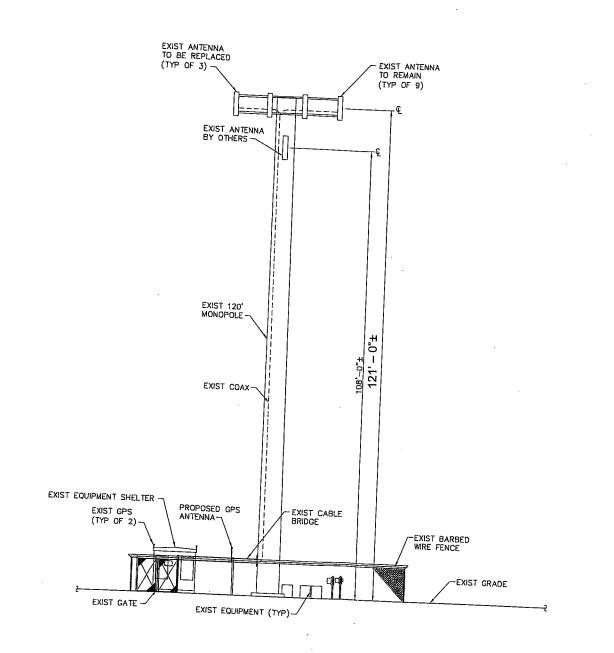
#### **Discussion**

Nextel plans to install replace 3 existing antennas with 3 new antennas 1 per sector at the current height of 121'. The associated radio equipment will be installed within the existing compound. The power density information and related calculations are presented on the following pages.

#### Conclusion

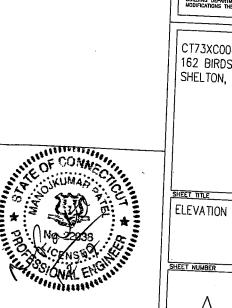
The proposed addition does not constitute a "modification" of an existing facility as defined in Connecticut General Statues Section 16-50I(d). The addition of Nextel's equipment to the tower will not result in an increase in the tower's height or extend the boundaries of the site. Further, there will be no increase in noise levels by (6) decibels or more at the site's boundaries and the total radio frequency electromagnetic radiation is not at or above the standard set forth in Section 22 (a)-162 of the Connecticut General Statues. This addition will also not have a substantially adverse environmental effect.

For the reasons discussed above, Nextel requests that the Connecticut Siting Council acknowledge that this Notice of Intent meets the Council's exemption criteria.





NOTE:
ANALYSIS OF EXISTING MONOPOLE AND
THE ANTENNA SUPPORT FRAME TO VERIFY
STRUCTURAL CAPACITY TO BE PERFORMED
BY OTHERS SEE NOTE 1 ON THIS SHEET.



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TEC TECHNICAL STATE STAT	BER DRAWN BY 14 GG ISSUE 6 FOR REVIEW
SITE DEVELOPMEN RFOWNER FIELD OPERATIONS	PROVALS  DATE: DAT

CT73XC004/CT-0921 162 BIRDSEYE ROAD SHELTON, CT 06484

SHEET TITLE

# Daniel F. Caruso

Chairman

#### 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@ct.gov Internet: ct.gov/csc

February 16, 2007

The Honorable Mark A. Lauretti Mayor City of Shelton 54 Hill Street P.O. Box 364 Shelton, CT 06484

RE: EM-SPRINT-NEXTEL-126-070206 – Nextel Communications of the Mid-Atlantic, Inc. notice of intent to modify an existing telecommunications facility located at 162 Birdseye Road, Shelton, Connecticut.

Dear Mayor Lauretti:

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 Tuesday, February 27, 2007 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the Council by February 26, 2007.

Thank you for your cooperation and consideration.

-8. Derek Phelps Executive Director

SDP/MP

Enclosure: Notice of Intent

c: Richard Shultz, Planning Administrator, City of Shelton







### ORIGINAL

Mr. Daniel F. Caruso, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Dear Chairman Caruso:

Enclosed please find one original and 25 copies of a Notice of Intent to Modify an Exempt Tower and Associated Equipment for an existing telecommunications facility owned by Nextel Communications of the Mid Atlantic. The enclosed Notice of Intent is for the tower located at 162 Birdseye Rd, Shelton , CT 06484

The enclosed notice and attached materials detail how the addition of Nextel's antennas and other equipment at the tower site meet all of the criteria set forth in Section 16-50j-72(b)(2) of the Regulations of Connecticut State Agencies and therefore is an exempt modification pursuant to Section 16-50j-53 of the regulations.

Thank you in advance for your consideration of the enclosed Notice of Intent.

Haran Couler

#### 162 Birdseye Rd, Shelton, CT 06484 CT0921

Pursuant to Section 15-59I(a)(5) of the Connecticut General Statues and Section 16-50j-72(b)(2), as amended, of the Regulations of Connecticut State Agencies, Nextel of the Mid-Atlantic, Inc. d/b/a Nextel Communications ("Nextel") hereby notifies the Connecticut Siting Council of its intent to modify an existing communications facility located on 162 Birdseye Rd, Shelton, CT 06484 which is owned and operated by Nextel Communications.

#### **Background**

The 162 Birdseye Road facility is an existing 120' Monopole. Nextel currently has (12) antennas currently installed at the height of 118'.

#### Discussion

Nextel plans to install replace 3 existing antennas with 3 new antennas 1 per sector at the current height of 118'. The associated radio equipment will be installed within the existing compound. The power density information and related calculations are presented on the following pages.

#### **Conclusion**

The proposed addition does not constitute a "modification" of an existing facility as defined in Connecticut General Statues Section 16-50I(d). The addition of Nextel's equipment to the tower will not result in an increase in the tower's height or extend the boundaries of the site. Further, there will be no increase in noise levels by (6) decibels or more at the site's boundaries and the total radio frequency electromagnetic radiation is not at or above the standard set forth in Section 22 (a)-162 of the Connecticut General Statues. This addition will also not have a substantially adverse environmental effect.

For the reasons discussed above, Nextel requests that the Connecticut Siting Council acknowledge that this Notice of Intent meets the Council's exemption criteria.

## MPE STUDY

# Nextel: 162 Birdseye Road, Shelton CT06484

Control Number Address Carrier EM-AT&T-126-020322 Shelton - 165 Birdseye Road AT&T EM-AT&T-126-020322 Shelton - 165 Birdseye Road Nextel
Carrier AT&T Nextel
# of Channels 12 9
Watts ERP/Ch He 250 100
Height (ft) 108 120
PD 0.0925 0.0225
Frequency Max PD 1945 1.0000 860 0.5733
Max PD 1.0000 0.5733
%MPE 9.25% 3.92%

#### STRUCTURAL ANALYSIS **SUMMARY REPORT**

**Project Information** 

W.O.

4624.CT73004

Client:

Sprint/Nextel

Site Name: Owner:

Shelton North

Northeast Tower

Site Address: City, State:

162 Birdseye Road

Shelton, CT

Site No.:

County:

FCC Reg. No.:

CT0921

Fairfield

Report Date: 12/28/2006

Revision:

Structure Information

Structure Type: Monopole Structure Height: 118 feet

Manufacturer: Year Built:

Unknown

Diagram:

Unknown See Figure 1

Pole Shape:

12 Sided Polygon

Orientation:

Flat-Flat

Shaft Information:

**Approx** Base OD Top OD **Thickness** Section Length (in) (in) (in) 44' 8" 3 29.8 22.4 0.1875 40' 8" 2 35.6 28.8 0.3125 40' 7" 41.0 34.3 0.375

Foundation Type:

22' x 22' concrete mat at grade, thickness unknown

Base Plate:

46" square x 3.25" thick

Anchor Bolt Diameter:

2.25 inch 12

Quantity:

49 inch dia bolt circle on a

**Documentation** 

Original Drawings:

Structure:

No

Foundation:

No

Original Design Criteria: Unknown

Previous Analysis:

None

Other Documents Provided:

<u>Item</u>

**EBTS Worksheet** 

By Sprint Ref. No.

Date 8/3/06

#### STRUCTURAL ANALYSIS SUMMARY REPORT (CONT.)

W.O. 4624.CT73004 Report Date: 12/28/2006 Client: Sprint/Nextel Revision: 0 Site Name: Shelton North

Inspection

Type:

Date:

12/12/2006

General Condition:

Tower:

Climb

Good

Foundation: Good

Observations:

No defects observed

Finish:

Galvanized, no paint

Condition: Intact

Existing Appurtenances

Antennas:

120

107

Height (ft)

Carrier Nextel Cingular

Qty Manufacturer 12 Decibel Allgon

Model **DB844H90E-XY** 7250 or similar

Mount 14' wide platform with handrails

(3) pipe mounts

Cables:

Height (ft) Qty 120

6

Nom. Size 1-1/4" dia 1-1/4" dia

3

Location / Support On interior of pole On interior of pole

Lights:

107

None None

Step Bolts: Safety Cable: Yes 3/8" dia

Lightning rod: Ladder:

None

Other:

None

#### Proposed Installation

Antennas:

Remove three (3) of the existing twelve (12) Nextel antennas, and replace them with the following:

Height (ft) 120

Carrier Qty Sprint/Nextel

Manufacturer Decibel

Model DB932LG65R2E-B

Mount Exist 14' wide platform

Remove three (3) of the existing twelve (12) Nextel 1-1/4" dia coax cables, and install the following:

Height (ft) Qty 120

Nom. Size 1-5/8" dia

3

Location / Support On interior of pole

#### STRUCTURAL ANALYSIS SUMMARY REPORT (CONT.)

W.O. 4624.CT73004 Report Date: 12/28/2006 Client: Sprint/Nextel Revision: Site Name: **Shelton North** 

**Analysis Criteria** 

Design Standard: ANSI/TIA-222-G-2005

**Building Code:** International Building Code 2003, with 2005 Connecticut Supplement

Wind Speed:

Capacity (no ice)

Capacity w/ ice

Basic Ice Thickness:

105 mph 0 inch

50 mph

60 mph

Structure Class:

0.75 inch

Seismic:

No

0 inch

2

Exposure Category: Topo Category:

C 3

Assumptions:

- 1. The monopole was designed, manufactured, and constructed in accordance with the applicable codes and standards.
- 2. The foundation was designed and constructed based on site-specific geotechnical info.
- 3. The slip jointed splices were assembled in accordance with the manufacturer's specs.
- 4. The yield stresses of the materials used for the pole sections and base plate are 65 ksi.
- 5. The yield stress of the anchor bolt material is 75 ksi.

#### **Analysis Results**

Pole Shaft:

	<u>Section</u>	Maximum Usage (%)	
Тор	3	87 80	
Middle	2		
Bottom	1	96	

Service Load Deflections:

Top

Horizontal:

1.37 feet

Twist & Sway:

1.19 degrees

Foundation Reactions (Envelope):

Vertical

37.6 kips

Shear

34.3 kips

Moment

2344.8 k-ft

Note: Original design reactions are not available for comparison

Base plate:

76 % of capacity

Anchor bolts:

88 % of capacity

TECTONIC

#### STRUCTURAL ANALYSIS SUMMARY REPORT (CONT.)

W.O. 4624.CT73004 Report Date: 12/28/2006
Client: Sprint/Nextel Revision: 0
Site Name: Shelton North

#### Conclusions

The existing monopole is stressed to 96% of its capacity, and is therefore adequate to support the proposed configuration.

The overall change in the wind area and loads due to the proposed configuration is small. Based on the magnitude of the stresses in the shaft and anchor bolts, we therefore expect that the existing foundation is adequate to support the proposed installation.

No structural problems for the monopole or its foundation are anticipated, and no modifications are necessary.

Any further changes to the antenna configuration or other appurtenances should be reviewed with respect to their effect on structural loads prior to implementation.

Prepared by:

Kavish M. Zawar Senior Engineer

Approved by:

Jeffrey B. Kirby, P.E. Chief Structural Engineer Date: 12/28/06

#### **TECTONIC**

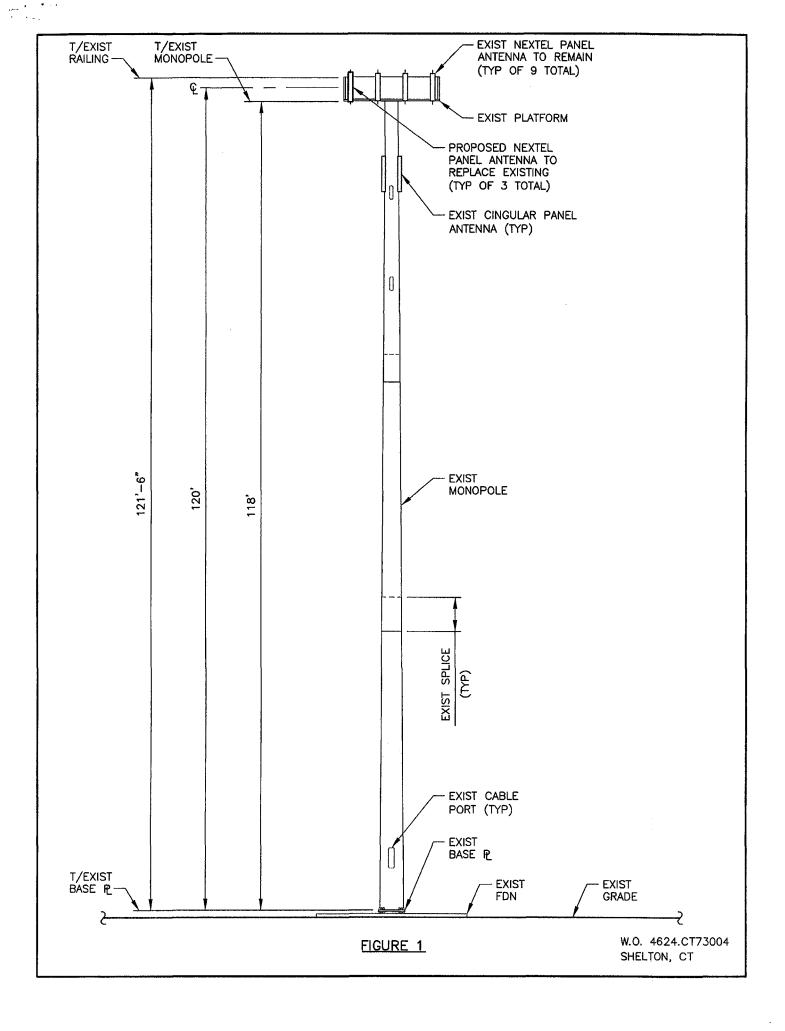
Practical Solutions, Exceptional Service

Tectonic Engineering & Surveying Consultants, P.C.

955 Little Britain Road New Windsor, NY 12553 Phone (845) 567-6656

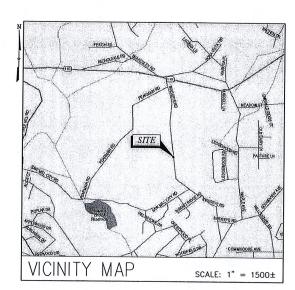
Fax: (845) 567-8703

Web: www.tectonicengineering.com



NEXTEL COMMUNICATIONS, INC.

## SITE NUMBER: CT73XC004/CT-0921 SHELTON



DIRECTIONS FROM MAHWAH OFFICE: \*START OUT GOING EAST ON MACARTHUR BLVD. \*NJ-17 N BECOMES I-287

\*MERGE ONTO I-287 E/II-87/NEW YOUK STATE THRUWAY S TOWARD TAPPAN ZEE BRIDGE. \*KEEP LEFT TO TAKE I-287 E/ CROSS WESTCHESTER EXPY VIA

EXIT 8 TOWARD WHITE PLAINS/RYE.

\*TAKE EXIT 9S-N TOWARD HUTCHINSON PKWY.

\*TURN SLIGHT LEFT ONTO WESTCHESTER AVE/CR-62 E.

\*TAKE THE HUTCHINSON PKWY EXIT-EXIT 9N-TOWARD MERRITT PKWY.

\*MERGE ONTO HUTCHINSON RIVER PKWY N. \*HUTCHINSON RIVER PKWY N BECOMES CT-15 N/MERRITT PKWY \*MERGE ONTO CT-25 N VIA EXIT 49N TOWARD DANBURY. \*TURN RIGHT ONTO MONROE TURNPIKE/CT-111.

\*TURN SLIGHT TIGHT ONTO SHELTON RD/CT-110. CONTINUE TO

\*TURN RIGHT ONTO SHELL \*TURN RIGHT ONTO BIRDSEYE RD. \*END AT 162 BIRDSEYE RD.

DRIVING DIRECTIONS

SITE NAME SHELTON SITE NUMBER: CT73XC004/ CT-0921 SITE ADDRESS: 162 BIRDSEYE RD SHELTON, CT 06484 PROPERTY OWNER: RUDOLPH & ROBERTA HUDACK 162 BIRDSEYE RD SHELTON, CT 06484 APPLICANT: NEXTEL COMMUNICATIONS INC. 9 CROSBY DRIVE BEDFORD, MA 01730 COUNTY: FAIRFIELD MUNICIPALITY: CITY OF SHELTON ZONE: LATITUDE (NAD 83): 14' 19' 33.06" N LONGITUDE (NAD 83): 73° 8' 55.14" W

#### PROJECT INDEX

TECTONIC CONTACT:

(845) 567-6656 ext.110

SITE CONTACT:

RUDOLPH HUDACK (860) 355-0271

ELECTRIC COMPANY:

CONNECTICUT LIGHT & POWER (860) 355-6534

TELEPHONE COMPANY:

VFRIZON. (800) 315-6489

#### PROJECT CONTACTS

DIG SAFELY - CONNECTICUT

Before You Dig, Drill Or Blast! CALL TOLL FREE 1-800-922-4455

SHT. NO.	DESCRIPTION	REV NO	REVISION DATE
T-1	TITLE SHEET	1	01/02/07
C-1	RADIUS MAP & SETBACK MAP	1	01/02/07
A-1	PLOT PLAN & DETAILS	1	01/02/07
A-2	ELEVATION	1	01/02/07
SH	EET INDEX		

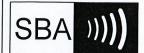
INSTALLATION OF EQUIPMENT CABINET IN EXISTING EQUIPMENT SHELTER. 3 (THREE) EXISTING ANTENNAS TO BE REPLACED WITH 3 (THREE) CDMA ANTENNAS. INSTALL 3 (THREE) NEW COAX CABLES & 1 (ONE) GPS.

PROJECT DESCRIPTION

#### DO NOT SCALE

CONTRACTOR SHALL VERIFY ALL PLANS AND EXIST DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY TH ENGINEER IN WRITING ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.





**TECTONIC** Phone: (845) 567-6658 Fax: (845) 567-8703

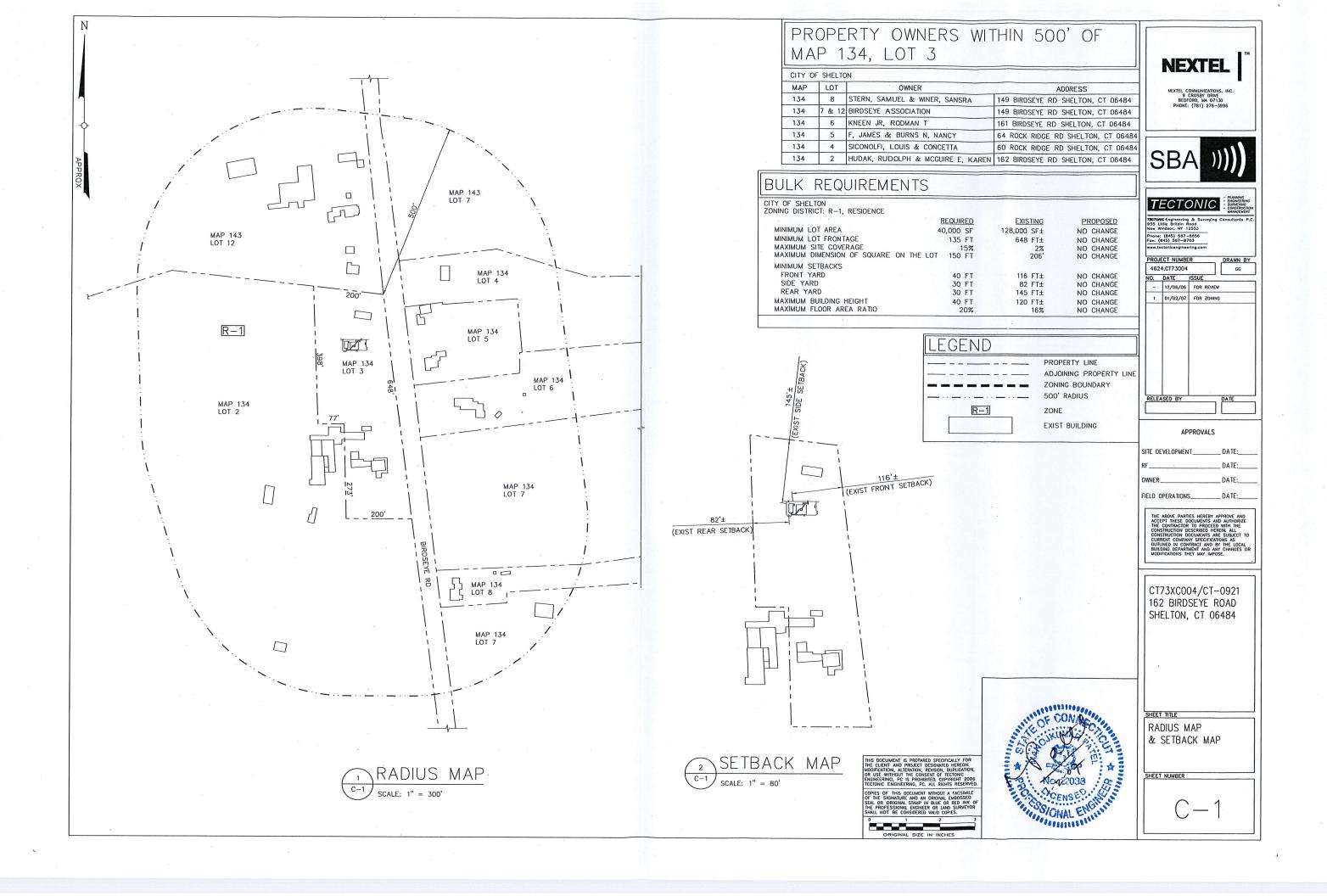
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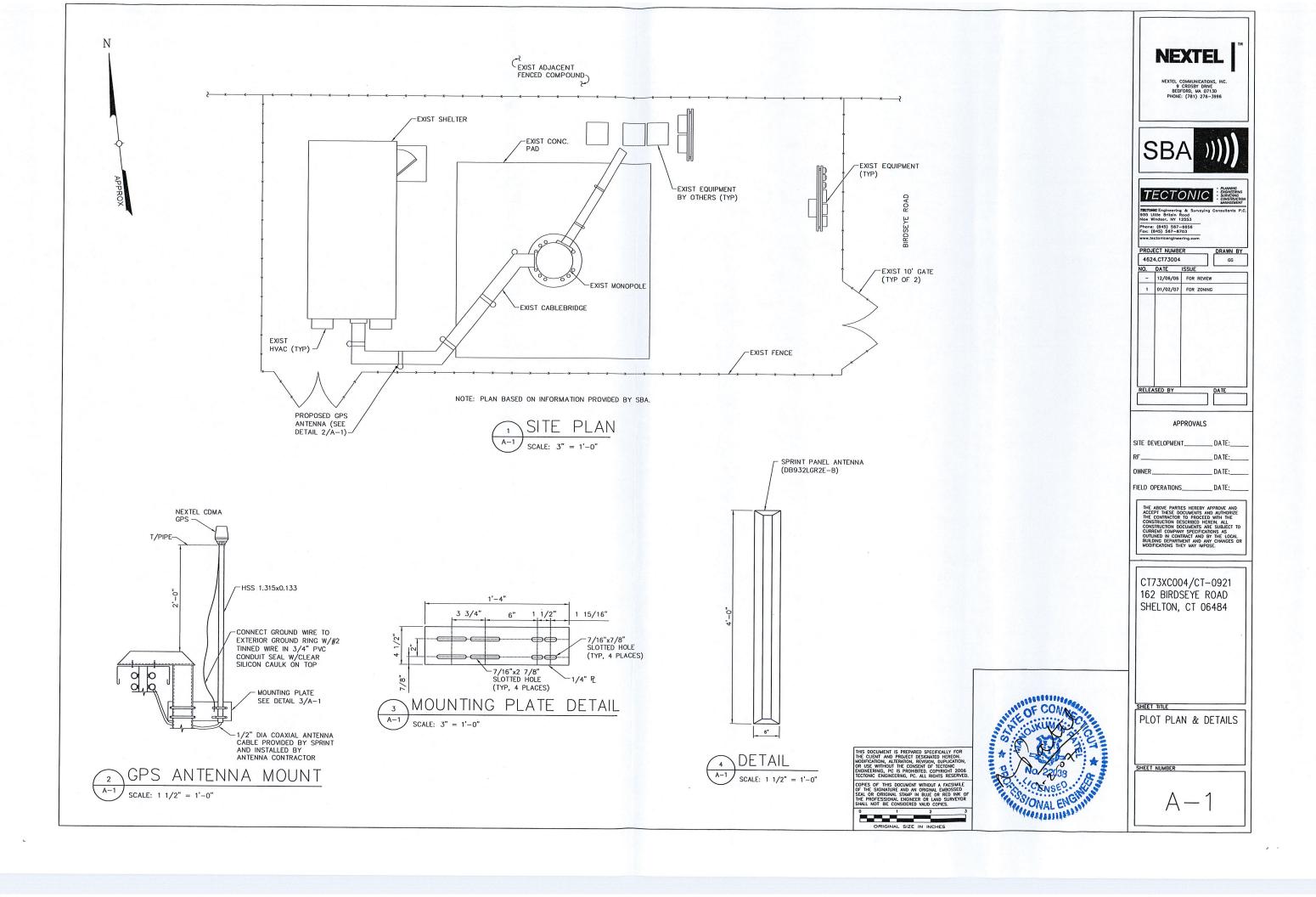
APPROVALS SITE DEVELOPMENT DATE: FIELD OPERATIONS\_

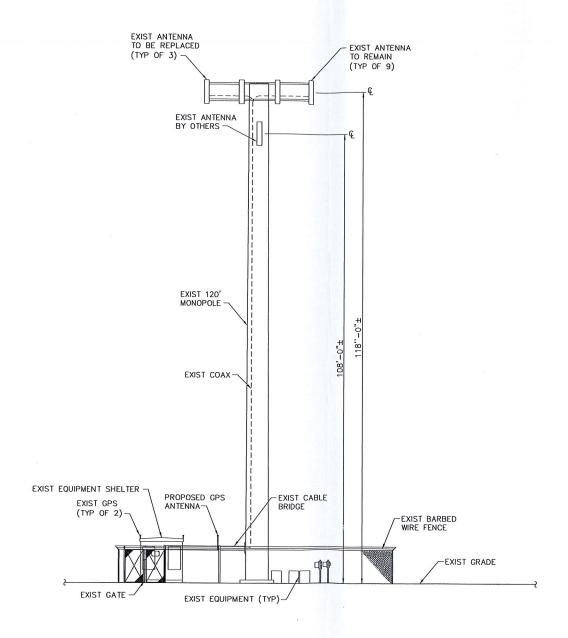
CT73XC004/CT-0921 162 BIRDSEYE ROAD SHELTON, CT 06484

SHEET TITLE

TITLE SHEET









NOTE:

ANALYSIS OF EXISTING MONOPOLE AND THE ANTENNA SUPPORT FRAME TO VERIFY STRUCTURAL CAPACITY TO BE PERFORMED BY OTHERS SEE NOTE 1 ON THIS SHEET.

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ORIGINAL SIZE IN INCHES



NEXTEL COMMUNICATIONS, INC 9 CROSBY DRIVE BEDFORD, WA 07130 PHONE: (781) 276-3996



TECTONIC : PLANNING : ENGINEERING : SURVEYING : CONSTRUCTION : CONSTRUCTION : MANAGEMENT : MANAGEMENT : PLANNING : PLANNI

TECTONIC Engineering & Surveying Consultonts 955 Little Britoin Road New Windson, NY 12553
Phone: (845) 587–8858
Fox: (845) 587–8703
www.tectonicengineering.com

PROJECT NUMBER DRAWN BY

4624.CT73004 GG

NO. DATE ISSUE

- 12/06/06 FOR REVIEW

1 01/02/07 FOR ZONING

RELEASED BY DATE

APPROVALS

SITE DEVELOPMENT \_\_\_\_\_ DATE: \_\_\_\_

RF \_\_\_\_\_ DATE: \_\_\_\_

OWNER \_\_\_\_\_ DATE: \_\_\_\_

FIELD OPERATIONS \_\_\_\_\_ DATE: \_\_\_\_

THE ABOVE PARTIES HEREBY APPROVE AN ACCEPT THESE DOCUMENTS MAD AUTHORIC THE CONSTRUCTION DESCRIBED HEREIN, ALL CONSTRUCTION DOCUMENTS ARE SUBJECT CURRENT COMPANY SPECIFICATIONS AS CONSTRUCTION SPECIFICATIONS AS CONSTRUCT

CT73XC004/CT-0921 162 BIRDSEYE ROAD SHELTON, CT 06484

SHEET TITLE

ELEVATION

SHEET NUMBER

A-2