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

Daniel F. Caruso
Chairman

March 2, 2007

Thomas J. Regan, Esq.
Brown Rudnick Berlack Israels LLP
CityPlace I, 185 Asylum Street
Hartford, CT 06103

RE: **TS-SPRINT-NEXTEL-034-070206** - Sprint Nextel Corporation request for an order to approve tower sharing at an existing telecommunications facility located at 41 Padanaram Road, Danbury, Connecticut.

Dear Attorney Regan:

At a public meeting held February 27, 2007, 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 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 may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction. Please be advised that the validity of this action shall expire one year from the date of this letter.

The proposed shared use is to be implemented as specified in your letter dated February 6, 2007, including the placement of all necessary equipment and shelters within the tower compound.

Thank you for your attention and cooperation.

Very truly yours,

Daniel F. Caruso
Chairman

DFC/MP/laf

c: The Honorable Mark D. Boughton, Mayor, City of Danbury
Dennis Elpern, City Planner, City of Danbury
Christine Farrell, T-Mobile

ORIGINAL

BROWNRUDNICK

THOMAS J. REGAN
direct dial: (860) 509-6522
tregan@brownrudnick.com

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185 Asylum
Street
Hartford
Connecticut
06103
tel 860.509.6500
fax 860.509.6501

VIA HAND DELIVERY

TS-SPRINT-NEXTEL-034-070206

February 6, 2007

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Sprint / 41 Padanaram Road, Danbury

Dear Mr. Phelps:

Enclosed for filing are an original and 20 copies of Sprint Nextel Corporation's Tower Sharing Application for Sprint to collocate on the T-Mobile tower at 41 Padanaram Road in Danbury. An electronic copy of this filing has been e-mailed to Ms. Fontaine and Ms. Mulcahy. Also enclosed is a check in the amount of $500.00 to cover the filing fee as well as a copy of the letter sent to the property owner informing them of the filing of the application.

Please feel free to contact me with any questions.

Very truly yours,

BROWN RUDNICK BERLACK ISRAELS LLP

By: _____
Thomas J. Regan

Enclosures

40239032 v1 - MERCIECM - 080563/3237

THOMAS J. REGAN
Counselor at Law
direct dial: 860.509.6522
tregan@brownrudnick.com

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06103
tel 860.509.6500
fax 860.509.6501

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

February 6, 2007

Robert Kaufman
41 Padanaram Road
Danbury, CT 06811-3701

RE: Sprint Nextel's Tower Sharing Application

Dear Mr. Kaufman:

I am writing on behalf of Sprint Nextel Corporation ("Sprint"). Today Sprint filed a Tower Sharing Application with the Connecticut Siting Council ("Council") requesting that the Council approve the addition of Sprint's antennas to the existing monopole located at 41 Padanaram Road in Danbury. The addition of Sprint's antennas will not increase the height of the structure. I have enclosed a copy of Sprint's petition for your reference.

The Council asked us to provide you with this notice as a courtesy. If you have any questions or comments on Sprint's application please feel free to contact either S. Derek Phelps, Executive Director of the Siting Council, at 860-827-2935, or myself at 860-509-6522. I would ask that you contact Mr. Phelps or myself by **February 16, 2007**, so your comments can be considered prior to the Council making its decision on this matter. Thank you.

Very truly yours,

BROWN RUDNICK BERLACK ISRAELS LLP

By: _____
Thomas J. Regan

40239038 v1 - MERCIECM - 080563/3202

Tab 1 – Site Plan

CASCADE NO. CT33XC093
M&M CONCRETE POLE

Sprint

CO-LOCATION

SITE INFORMATION

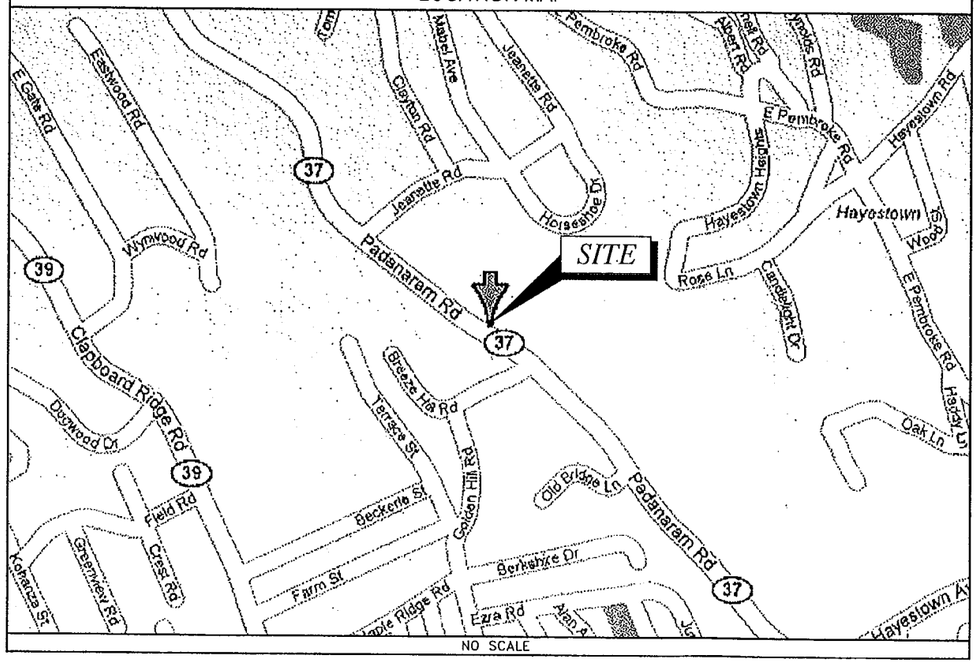
OWNER:	ROBERT KAUFMAN 41 PADANARAM ROAD DANBURY, CT. 06811 (203) 743-5559
SPRINT SITE I.D.#:	CT33XC093
APPLICANT:	SPRINT 6580 SPRINT PARKWAY OVERLAND PARK, KS 66251-6110
SITE ADDRESS:	41 PADANARAM ROAD DANBURY, CT. 06811
COUNTY:	FAIRFIELD
LATITUDE:	41° 25' 08.1" N
LONGITUDE:	73° 27' 43.0" W
ZONING CLASSIFICATION:	INDUSTRIAL CN20/RA20
JURISDICTION:	CITY OF DANBURY
POWER COMPANY:	NU PHONE: (800) 286-2000
TELEPHONE COMPANY:	SNET PHONE: (203) 382-8111
ENGINEER:	TECTONIC ENGINEERING & SURVEYING CONSULTAINS P.C PHONE: (845) 567-6656 FAX: (845) 567-8703

IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE

CONTACT INFORMATION

ENGINEER:	TECTONIC ENGINEERING & SURVEYING CONSULTAINS P.C. 955 LITTLE BRITAIN ROAD NEW WINDSOR, NY. 12553
CONTACT:	GREG LAHEY
PHONE:	(845) 567-6656 (EXT.113)

LOCATION MAP



NO SCALE

DRIVING DIRECTIONS

DIRECTIONS FROM SPRINT RF MARKET OFFICE:

START OUT GOING WEST ON BARNES INDUSTRIAL RD S TOWARD N MAIN ST EXT. TURN RIGHT ONTO N MAIN ST EXT. TURN LEFT ONTO IVES RD. HEAD SOUTH ON N COLONY RD/US-5 TOWARDS BERLIN TPKE/CT-15 S. TURN RIGHT AT BERLIN TPKE/CT-15 S. SLIGHT RIGHT AT N BROAD ST/US-5 S. TURN RIGHT TO MERGE ONTO I-691 W VIA THE I-84/I-691 W RAMP TO WATERBURY. MERGE ONTO I-84 W VIA EXIT 1 TO WATERBURY/DANBURY. TAKE THE CT-37 EXIT 6 TO NEW FAIRFILED. TURN RIGHT AT NORHT ST. CONTINUE ON CT-37/PADANARAM RD. END AT 41 PADANARAM ROAD.

APPROVALS

SPRINT REPRESENTATIVE: _____

SPRINT RF ENGINEER: _____

SITE OWNER: _____

_____

DRAWING INDEX

SHEET NO:	SHEET TITLE	REV.	DATE
T-1	TITLE SHEET	1	01/23/07
A-1	SITE PLAN	1	01/23/07
A-2	SITE DETAIL PLAN	1	01/23/07
A-3	ELEVATION & DETAILS	1	01/23/07

DO NOT SCALE DRAWINGS

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

UNDERGROUND SERVICE ALERT

CALL TOLL FREE 1-888-DIG-SAFE

THREE WORKING DAYS BEFORE YOU DIG

Sprint

6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

TECTONIC

- PLANNING
- ENGINEERING
- SURVEYING
- CONSTRUCTION MANAGEMENT

TECTONIC Engineering & Surveying Consultants P.C.
955 Little Britain Road
New Windsor, NY 12553
Phone: (845) 567-6656
Fax: (845) 567-8703
www.tectonicengineering.com

PROJECT NO:	2080.CT093
DRAWN BY:	VG
CHECKED BY:	GL

REV	DATE	DESCRIPTION
1	01/23/07	FOR ZONING
0	12/13/06	FOR COMMENT

STATE OF CONNECTICUT
MANOJKUMAR R. VASHI
No. 20068
LICENSED PROFESSIONAL ENGINEER

THIS PLAN IS NULL AND VOID UNLESS SIGNED WITH AN ORIGINAL BLUE WET STAMP

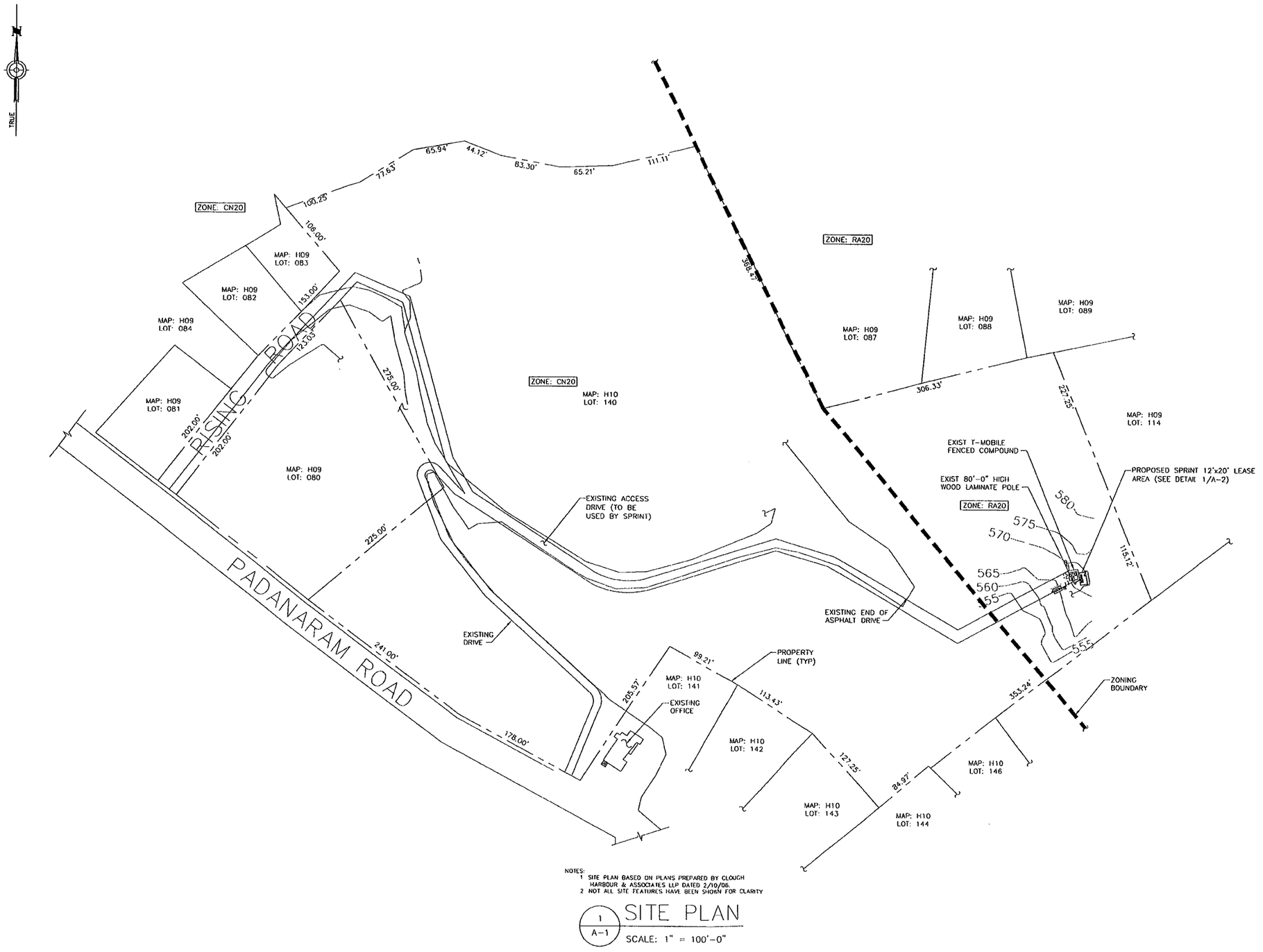
CT33XC093
M&M CONCRETE POLE
41 PADANARAM ROAD
DANBURY, CT. 06811
CO-LOCATION

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



NOTES:
1 SITE PLAN BASED ON PLANS PREPARED BY CLOUGH HARBOUR & ASSOCIATES LLP DATED 2/10/06.
2 NOT ALL SITE FEATURES HAVE BEEN SHOWN FOR CLARITY

1/A-1 SITE PLAN

SCALE: 1" = 100'-0"

Sprint

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OVERLAND PARK, KANSAS 66251

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New Windsor, NY 12553
Phone: (845) 567-6656
Fax: (845) 567-8703
www.tectonicengineering.com

PROJECT NO:	2080.CT093
DRAWN BY:	VG
CHECKED BY:	GL

REV	DATE	DESCRIPTION
1	01/23/07	FOR ZONING
0	12/13/06	FOR COMMENT

STATE OF CONNECTICUT
MANOJKUMAR PATEL
No. 22939
LICENSED PROFESSIONAL ENGINEER

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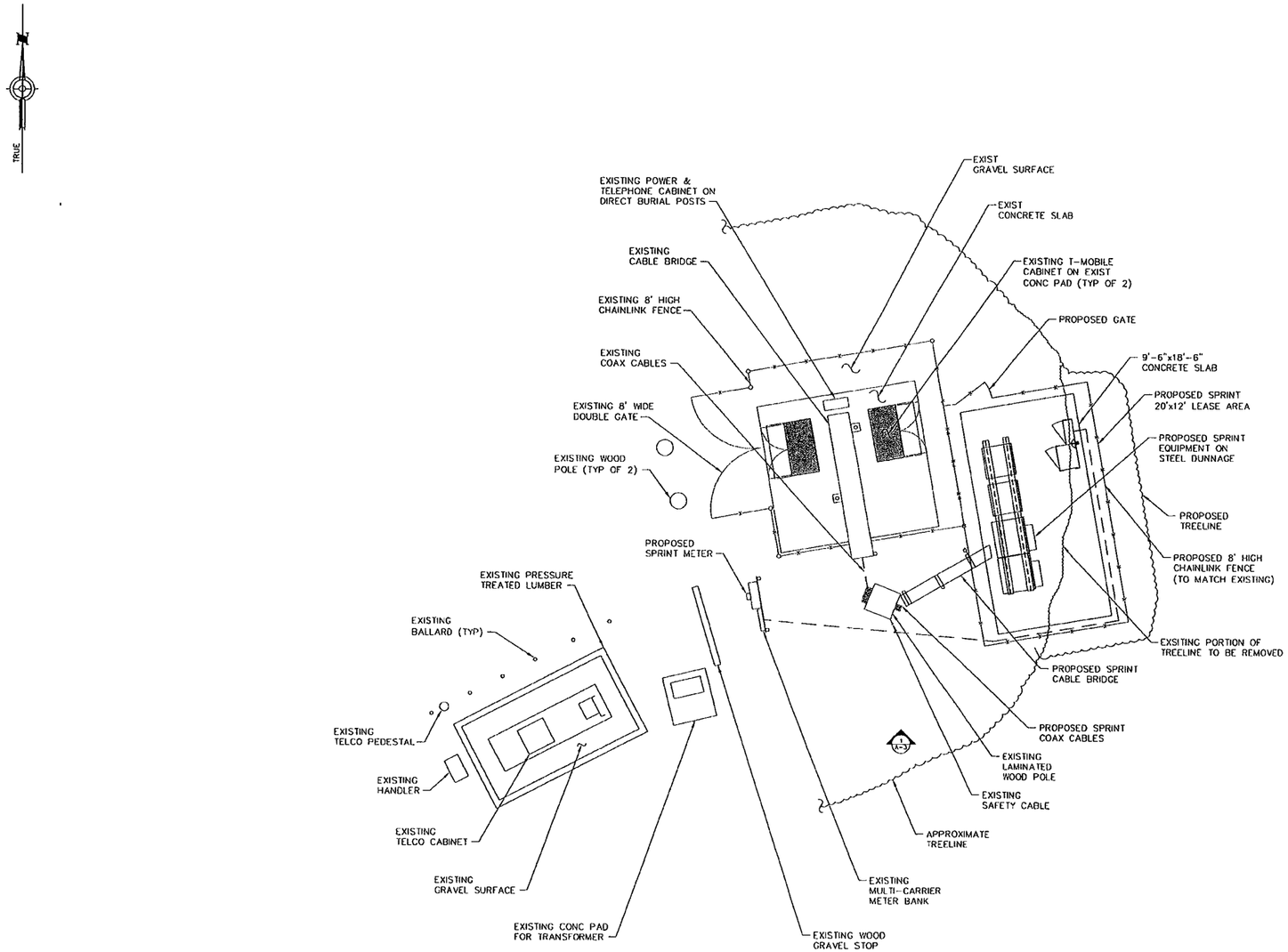
CT33XC093
M&M CONCRETE POLE
41 PADANARAM ROAD
DANBURY, CT. 06811
CO-LOCATION

SHEET TITLE
SITE PLAN

SHEET NUMBER
A-1



1/A-2 SITE DETAIL PLAN

SCALE: 1" = 5'-0"

Sprint

6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

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New Windsor, NY 12553
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Fax: (845) 567-8703
www.tectonicengineering.com

PROJECT NO:	2080.CT093
DRAWN BY:	VG
CHECKED BY:	GL

REV	DATE	DESCRIPTION
1	01/23/07	FOR ZONING
0	12/13/06	FOR COMMENT

STATE OF CONNECTICUT
MANOJKUMAR R. PATEL
No. 22036
LICENSED
PROFESSIONAL ENGINEER

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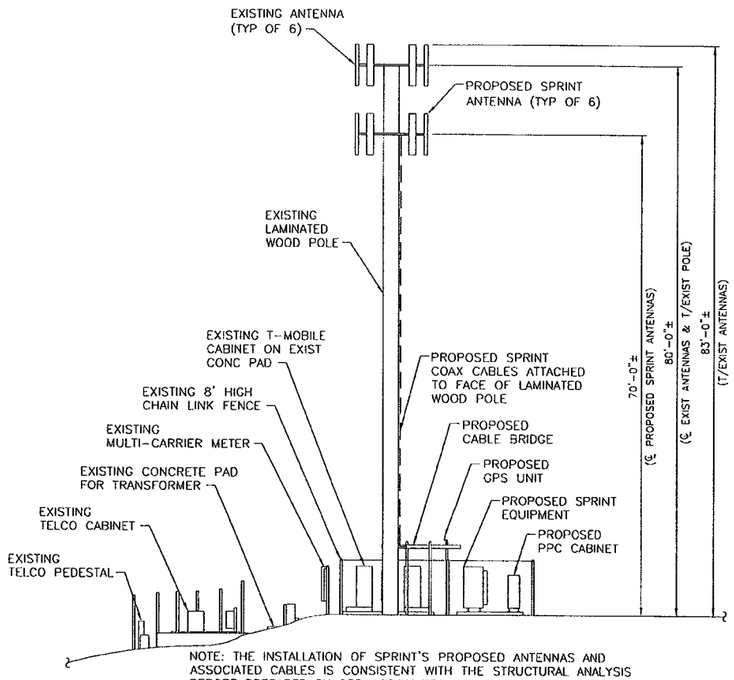
CT33XC093
M&M CONCRETE POLE
41 PADANARAM ROAD
DANBURY, CT. 06811
CO--LOCATION

SHEET TITLE

SITE DETAIL PLAN

SHEET NUMBER

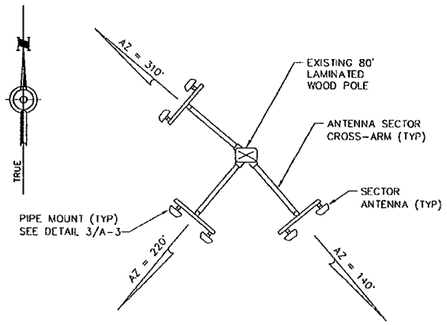
A-2



NOTE: THE INSTALLATION OF SPRINT'S PROPOSED ANTENNAS AND ASSOCIATED CABLES IS CONSISTENT WITH THE STRUCTURAL ANALYSIS REPORT PREPARED BY GPD ASSOCIATES, DATED NOVEMBER 22, 2006.

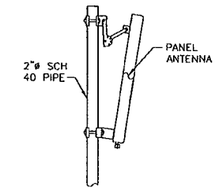
1/A-3 ELEVATION

SCALE : 1" = 10'-0"



2/A-3 ANTENNA MOUNTING PLAN

SCALE : 1-1/2" = 1'-0"



MOUNT ANTENNA IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURE

3/A-3 ANTENNA MOUNT DETAIL

SCALE: N.T.S.

Sprint

6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

TECTONIC

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TECTONIC Engineering & Surveying Consultants P.C.
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New Windsor, NY 12553
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Fax: (845) 567-8703
www.tectonicengineering.com

PROJECT NO:	2080.CT093
DRAWN BY:	VG
CHECKED BY:	CL

REV	DATE	DESCRIPTION
1	01/23/07	FOR ZONING
0	12/13/06	FOR COMMENT

STATE OF CONNECTICUT
MANOJKUMAR J. PATEL
No. 22059
LICENSED
PROFESSIONAL ENGINEER

THIS PLAN IS NULL AND VOID UNLESS SIGNED WITH AN ORIGINAL BLUE WET STAMP

CT33XC093
M&M CONCRETE POLE
41 PADANARAM ROAD
DANBURY, CT. 06811
CO-LOCATION

SHEET TITLE

ELEVATION & DETAILS

SHEET NUMBER

A-3

CONNECTICUT SITING COUNCIL

In re:

Request of Sprint Nextel Corporation for the	:	
Approval of the Shared Use of the Existing	:	
Tower Located at 41 Padanaram Road in	:	
Danbury, Connecticut.	:	February 6, 2007

TOWER SHARING APPLICATION

Sprint Nextel Corporation ("Sprint") proposes herein to share an existing telecommunications tower (the "Tower") located at 41 Padanaram Road in Danbury, Connecticut (the "Facility"). Pursuant to Connecticut General Statutes §16-50aa (the "Statute"), Sprint requests a finding from the Connecticut Siting Council (the "Council") that the shared use of this Facility is technically, legally, environmentally and economically feasible, will meet public safety concerns, will avoid the unnecessary proliferation of towers and is in the public interest. Sprint further requests an order approving the proposed shared use of this Facility.

The purpose of this request is to use an existing telecommunications tower in Danbury to meet Sprint's CDMA network coverage needs in the Danbury area and to avoid the construction of an additional tower in Danbury.

A. The Facility

The Facility is located at 41 Padanaram Road in Danbury, Connecticut. Mr. Robert Kaufman owns the property and T-Mobile owns the Tower. The existing tower is an 80-foot wood laminate monopole with T-Mobile's at the top with a centerline of 80 feet. A site plan is attached under Tab 1.

BROWN, RUDNICK,
BERLACK, ISRAELS LLP
CITYPLACE I
185 ASYLUM STREET
HARTFORD, CT 06103
(860) 509-6500

B. Proposed Project

Sprint will install nine panel antennas in three sectors with an antenna centerline at 70 feet to serve its CDMA network. Sprint's base station equipment will be located within a 20-foot by 12-foot lease area at the base of the monopole, adjacent to T-Mobile's existing compound. Within the compound will Sprint's 9-foot 6-inch by 18-foot 6-inch concrete slab where the equipment cabinets will be located. Sprint will have to push back the tree line by up to 10 feet in order to accommodate its compound. No upgrades to the access road or parking area will be necessary.

C. Technical Feasibility

Consistent with the requirements of the Statute, it is technically feasible for Sprint to collocate at this Facility. The Tower has been designed to carry the loads resulting from the collocation of Sprint's antennas at 70 feet. Attached as Tab 2 is a report from GPD Associates dated November 22, 2006 which states, "based on our analysis results, the design for the existing structure is structurally satisfactory for the proposed loading configuration " (page 4).

D. Legal Feasibility

The Council has the authority, pursuant to the Statute, to issue an order approving the shared use of this Tower. By issuing an order approving Sprint's use of the Tower, Sprint will be able to proceed with obtaining a building permit for its proposed installation on the tower. Therefore, consistent with the Statute, Sprint's proposal is legally feasible.

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BERLACK, ISRAELS LLP
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HARTFORD, CT 06103
(860) 509-6500

E. Economic Feasibility

Sprint is a wireless telecommunications provider licensed by the Federal Communications Commission in many major United States trading areas, including Connecticut. Sprint has entered into a lease with T-Mobile for the purpose of locating Sprint's antennas and associated equipment at the Facility to provide wireless telecommunications service to this area of Danbury. Therefore, the shared use of this Facility is economically feasible.

F. Environmental Feasibility

Pursuant to the Statute, the proposal will be environmentally feasible for the following reasons:

- The overall impact on the City of Danbury will be decreased with the sharing of a single tower versus the proliferation of towers in this area.
- The proposal will not increase the height of the tower.
- There will be an insignificant increase in visibility with the addition of Sprint's nine antennas below T-Mobile's existing antennas.
- There will be no increased impact on any wetlands or water resources.
- There will be no increased impact on air quality because no air pollutants will be generated during the normal operation of the Facility.

BROWN, RUDNICK,
BERLACK, ISRAELS LLP
CITYPLACE I
185 ASYLUM STREET
HARTFORD, CT 06103
(860) 509-6500

- There will only be a brief, slight increase in noise pollution during the attachment of the antennas and clearing of the compound.

- During construction, the proposed project will generate a small amount of traffic as workers arrive and depart and materials are delivered. Upon completion, traffic will be limited to an average of one monthly maintenance/inspection visit.

G. Public Safety Concerns / Benefits

There will be no adverse impact to the health and safety of the surrounding community or the workers at the Facility due to the addition of Sprint's antennas to the Tower. The total radio frequency exposure measured at the Facility will be well below the National Council on Radiation Protection and Measurements' (NCRP) standard adopted by the Federal Communications Commission ("FCC"). The worst-case power density analysis for Sprint's antennas, measured at the base of the transmission tower, indicates that Sprint's antennas will emit 56.1754 % of the NCRP's standard for maximum permissible exposure (see Tab 3). In addition, Sprint prepared a cumulative power density for all of the carriers on the tower (also included as Tab 3). The cumulative power density indicates that the radio-frequency energy at the Facility will never be greater than 65.1059 % of the maximum permissible exposure. Therefore, Sprint's analyses clearly show that the maximum level of radio-frequency energy emitted from the Facility only by Sprint's antennas, or in conjunction with the other carrier's antennas, will be well below the FCC mandated radio frequency exposure limits in all locations around the Tower, even with extremely conservative assumptions.

BROWN, RUDNICK,
BERLACK, ISRAELS LLP
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185 ASYLUM STREET
HARTFORD, CT 06103
(860) 509-6500

Moreover, Sprint expects to enhance the safety of the Danbury by improving the wireless communications of local residents and travelers throughout the area. Currently, Sprint is unable to provide an acceptable level of service along Route 37. The addition of this Tower to Sprint's CDMA network will not only provide coverage along Route 37, it will improve coverage in the surrounding neighborhoods as well as offload traffic from a highly utilized nearby cell site.

Conclusion

For the reasons stated above, the attachment of Sprint's antennas to this Tower would meet all the requirements set forth in the Statute. This proposal is technically, legally, environmentally and economically feasible and meets all public safety concerns. Therefore, Sprint respectfully requests that the Council approve this request for the shared use of the T-Mobile Tower located at 41 Padanaram Road in Danbury, Connecticut.

Sprint Nextel Corporation,

By: _____

Thomas J. Regan
Brown Rudnick Berlack Israels LLP
185 Asylum Street, CityPlace I
Hartford, CT 06103-3402
Phone - (860) 509-6522
Fax - (860) 509-6501

40239023 v1 - MERCIECM - 080563/3202

BROWN, RUDNICK,
BERLACK, ISRAELS LLP
CITYPLACE I
185 ASYLUM STREET
HARTFORD, CT 06103
(860) 509-6500

Tab 2 – Structural Report

GPD ASSOCIATES

STRUCTURAL ANALYSIS REPORT

T-Mobile

SITE NUMBER: CT11896A
SITE NAME: CT896/M&M CONCRETE POLE

APPROVED - 11/27/06
T-Mobile Site Marketing

NEW ANTENNA INSTALLATION BY:

Sprint

ON AN EXISTING
80' WOOD POLE

RECEIVED
NOV 27 2006

November 22, 2006

2006193.04

WOOD POLE

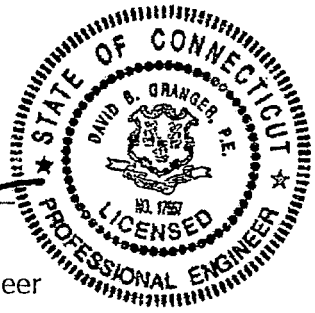
STRUCTURAL ANALYSIS REPORT

CT11896A CT896/M&M CONCRETE POLE
Danbury, Connecticut
Project 2006193.04

New Antenna Installation
Existing 80 ft. Wood Pole

For:
T-Mobile USA
Bellevue, Washington

Prepared By:



David B. Granger, P.E.
Registered Professional Engineer
Connecticut # 17557

November 22, 2006

GPD ASSOCIATES ENGINEERS • ARCHITECTS • PLANNERS
520 South Main Street • Suite 2531 •Akron • Ohio • 44311-1010 • Tel: 330-572-2100 • Fax: 330-572-2101

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The purpose of this analysis was to verify whether the design for the existing tower is structurally adequate to carry the new antenna and coax loads as specified by T-Mobile, USA. This report was commissioned by Mr. Andrew Tung of T-Mobile.

The design for the existing structure is structurally satisfactory for the proposed loading configuration. The foundation reactions, with the proposed loading, were found to be less than the design capacity of the existing foundation. Therefore, the foundation will be adequate assuming it was properly constructed according to original design.

Section Results

Glue-Lam Pole	% Capacity	Result
Longitudinal Direction	92.2%	Pass
Transverse Direction	96.8%	Pass
Foundation	**% Capacity**	**Result**
Tower Base	96.3%	Adequate
Tower Rating:	**96.8%**	

TOWER DESCRIPTION

The existing glue-laminated tower is located in Danbury, Connecticut. It was originally designed for T-Mobile by Laminated Wood Systems, Inc. of Seward, Nebraska. The original design load for the tower was for a 90 mph wind speed (51.19 psf wind load) in accordance with 1997 UBC. The tower was originally designed to hold the following:

Original Configuration

Antennas:	
Elev. 80′	(6) Panel Antennas on (3) Arm Assemblies (29.4 ft^2 total)
Elev. 70′	(6) Panel Antennas on (3) Arm Assemblies (29.4 ft^2 total)
Miscellaneous:	
Elev. 0′ – 80′	Cable Covers or exposed cables (40 ft^2 total)

The existing 80′ wood tower has one major section. It has a rectangular cross section, with a constant width of 26.25″ in the transverse direction, and a linearly decreasing width of 27.5″ at the base to 12″at the top in the longitudinal direction.

All structural information was provided by T-Mobile in the form of the original tower calculations by Laminated Wood Systems, Inc. (Dwg #: TM0B-0018.06A1, dated September 29, 2005). The existing, reserved, and proposed antenna information was provided by T-Mobile USA. This analysis and report are based solely on this information.

TOWER MATERIALS

Data on wood strength was available from the information provided. The following table details the wood strength used in the analysis.

Glue Laminated Beam	F_{bx} = 2400 psi (longitudinal) F_{by} = 1750 psi (transverse)

TOWER LOADING

The following data shows the major loading that the tower supports. The existing, reserved, and proposed antenna information was provided by T-Mobile USA.

Existing & Reserved Configuration

Elevation	Carrier	Antennas
80′	T-Mobile	(12) EMS RR65-19-xxDP Antennas, (12) LNA's, & (1) 4′ Dish on (3) 10′ T-Arm, w/ (25) 1-5/8″ external coax

Proposed Configuration

Elevation	Carrier	Antennas
80′	T-Mobile	(12) EMS RR65-19-xxDP Antennas, (12) LNA's, & (1) 4′ Dish on (3) 10′ T-Arm, w/ (25) 1-5/8″ external coax
70′	**Sprint**	**(2) Decibel DB950F40T2E-M, (2) DB950F65T2E-M, & (2) DB950F65E-M Antennas on (3) 6′ Arm Assemblies, w/ (12) 1-1/4″ external cable**
Note:	External coax to 80′ shall be banded flush to the tower in three rows. Proposed coax to 70′ shall be banded flush to the tower in two rows.	

Note: **BOLD** type indicates a new appurtenance.

The purpose of this independent structural analysis review is to determine if the design for the existing tower, with the proposed configuration, is in conformance with the provisions of 2003 International Building Code (IBC).

ANALYSIS

The purpose of this structural analysis review is to determine if the design for the existing tower is in conformance with the latest building code requirements. Wind loading was taken from ASCE7-02, as required in 2003 International Building Code (IBC).

Wind loads were determined from hand calculations in accordance with 2003 IBC. The current wind speed requirement for Danbury, Connecticut is for a 100 mph 3 second gust. Refer to Appendix 1 for Wind Calculations.

Wood strengths were obtained from the original design calculations. Design parameters were calculated in accordance with the 2001 National Design Specifications for Wood Construction using working stress formulas and the corresponding strength parameters.

ANALYSIS 3 SECOND GUST:	100 MPH

The tower and foundations are assumed, for the purpose of this analysis, to have been properly fabricated, constructed, maintained, and to be in good condition with no structural defects.

CONCLUSIONS AND RECOMMENDATIONS

Based on the structural analysis results, the design for the existing 80' glue-laminated tower does meet the requirements of the 2003 International Building Code and 2001 NDS for a 100 mph 3 second gust for the proposed antenna configuration.

The foundation reactions, with the proposed loading, were found to be less than the design capacity of the existing foundation. Therefore, the foundation will be adequate assuming it was properly constructed according to original design.

Summary of Findings

Glue-Laminated Pole	Satisfactory
Foundation	Adequate

Therefore, based on our analysis results, the design for the existing structure is structurally satisfactory for the proposed loading configuration.

DISCLAIMER OF WARRANTIES

The engineering services rendered by GPD ASSOCIATES in connection with this Structural Analysis are limited to analyses of the tower structure, size and capacity of its members. GPD ASSOCIATES does not analyze the fabrication, except as included in this report.

The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD ASSOCIATES, but are beyond the scope of this report.

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APPENDICES

1. Wind Load Calculations

2. Tower Elevation Drawing

T-Mobile - PO04021E Cresent
WOOD POLE ANALYSIS

Wind Loading	ASCE 7-02
Strength Design	2001 NDS
Wind Speed	100 mph

TOWER (Transverse)

Z (ft)	SECTION HEIGHT (ft)	SECTION WIDTH (in)	AG * 1.05 (ft2)	KZ 1<KZ<2.58	qZ (lb/ft2)	GH	CF	FORCE (kips)	M
75.00	10.00	12.97	11.35	1.19	30.50	0.85	1.80	0.53	39.71
65.00	10.00	14.91	13.04	1.16	29.59	0.85	1.80	0.59	38.38
55.00	10.00	16.84	14.74	1.12	28.57	0.85	1.80	0.64	35.43
45.00	10.00	18.78	16.43	1.07	27.39	0.85	1.80	0.69	30.99
35.00	10.00	20.72	18.13	1.01	25.98	0.85	1.80	0.72	25.22
25.00	10.00	22.66	19.82	0.95	24.20	0.85	1.80	0.73	18.35
15.00	10.00	24.59	21.52	0.85	21.73	0.85	1.80	0.72	10.73
5.00	10.00	26.53	23.21	0.67	17.24	0.85	1.80	0.61	3.06
							Sub Total	5.24	201.87

TOWER (Longitudinal)

Z (ft)	SECTION HEIGHT (ft)	SECTION WIDTH (in)	AG * 1.05 (ft2)	KZ 1<KZ<2.58	qZ (lb/ft2)	GH	CF	FORCE (kips)	M
75.00	10.00	26.25	22.97	1.19	30.50	0.85	1.80	1.07	80.38
65.00	10.00	26.25	22.97	1.16	29.59	0.85	1.80	1.04	67.59
55.00	10.00	26.25	22.97	1.12	28.57	0.85	1.80	1.00	55.22
45.00	10.00	26.25	22.97	1.07	27.39	0.85	1.80	0.96	43.31
35.00	10.00	26.25	22.97	1.01	25.98	0.85	1.80	0.91	31.95
25.00	10.00	26.25	22.97	0.95	25.60	0.85	1.80	0.90	22.49
15.00	10.00	26.25	22.97	0.85	25.60	0.85	1.80	0.90	13.49
5.00	10.00	26.25	22.97	0.67	25.60	0.85	1.80	0.90	4.50
							Sub Total	7.69	318.93

APPURTENANCES

	Z (ft)	AC (ft2)	KZ 1<KZ<2.58	qZ (lb/ft2)	GH	Ca	FORCE (kips)	Weight (kips)	M
ANTENNAS	80.00	41.60	1.21	30.91	0.85	1.47	1.60	0.276	128.25
LNA'S	80.00	2.60	1.21	30.91	0.85	1.40	0.10	0.06	7.65
10' T-Arms	80.00	10.14	1.21	30.91	0.85	1.20	0.32	0.75	25.58
DISH	80.00	12.57	1.21	30.91	0.85	1.40	0.46	0.17	36.98
ANTENNAS	70.00	23.83	1.17	30.06	0.85	1.40	0.85	0.12	59.67
AMB-TBS-AD3 Arms	70.00	5.20	1.17	30.06	0.85	1.20	0.16	0.561	11.16
EXTERNAL COAX	75.00	4.95	1.19	30.50	0.85	1.20	0.15	0.205	11.55
	65.00	7.53	1.16	29.59	0.85	1.20	0.23	0.284	14.78
	55.00	7.53	1.12	28.57	0.85	1.20	0.22	0.284	12.07
	45.00	7.53	1.07	27.39	0.85	1.20	0.21	0.284	9.47
	35.00	7.53	1.01	25.98	0.85	1.20	0.20	0.284	6.99
	25.00	7.53	0.95	25.60	0.85	1.20	0.20	0.284	4.92
	15.00	7.53	0.85	25.60	0.85	1.20	0.20	0.284	2.95
	5.00	7.53	0.67	25.60	0.85	1.20	0.20	0.284	0.98
						Sub Total	5.09	4.13	333.00

TOTAL

Spread Sheet

Longitudinal			Transverse		
MOMENT (k*ft)	SHEAR (kips)	AXIAL (kips)	MOMENT (k*ft)	SHEAR (kips)	AXIAL (kips)
651.93	12.78	14.90	534.88	10.33	14.90

LONGITUDINAL (2001 N.D.S.)

BOTTOM SECTION PROPERTIES AND STRESSES (SPREAD SHEET RESULTS)

ELEVATION (ft)	WIDTH (in)	DEPTH (in)	F_B** (ksi)	S (in^3)	AREA (in^2)	I (in^4)	f_b (ksi)	F_B' (ksi)	f_b/F_b	f_a (ksi)	F_a (ksi)	f_a/F_a	Interaction
0.00	26.50	27.50	2.40	3340.10	728.75	45926.43	2.34	2.541	92.19%	0.020	650	0.00%	92.20%

TRANSVERSE (2001 N.D.S.)

BOTTOM SECTION PROPERTIES AND STRESSES (SPREAD SHEET RESULTS)

ELEVATION (ft)	WIDTH (in)	DEPTH (in)	F_B** (ksi)	S (in^3)	AREA (in^2)	I (in^4)	f_b (ksi)	F_B' (ksi)	f_b/F_b	f_a (ksi)	F_a (ksi)	f_a/F_a	Interaction
0.00	27.50	26.50	1.75	3218.65	728.75	42647.06	1.99	2.061	96.77%	0.020	650	0.00%	96.77%

C_D	C_M	C_t	C_V**	C_N**	C_L	C_P
1.60	0.80	1.00	0.83	0.92	1.00	1.00

** As Specified by Tower Manufacturer

$Fb'\ (long) = F_b * C_D * C_M * C_t * C_V * C_L$

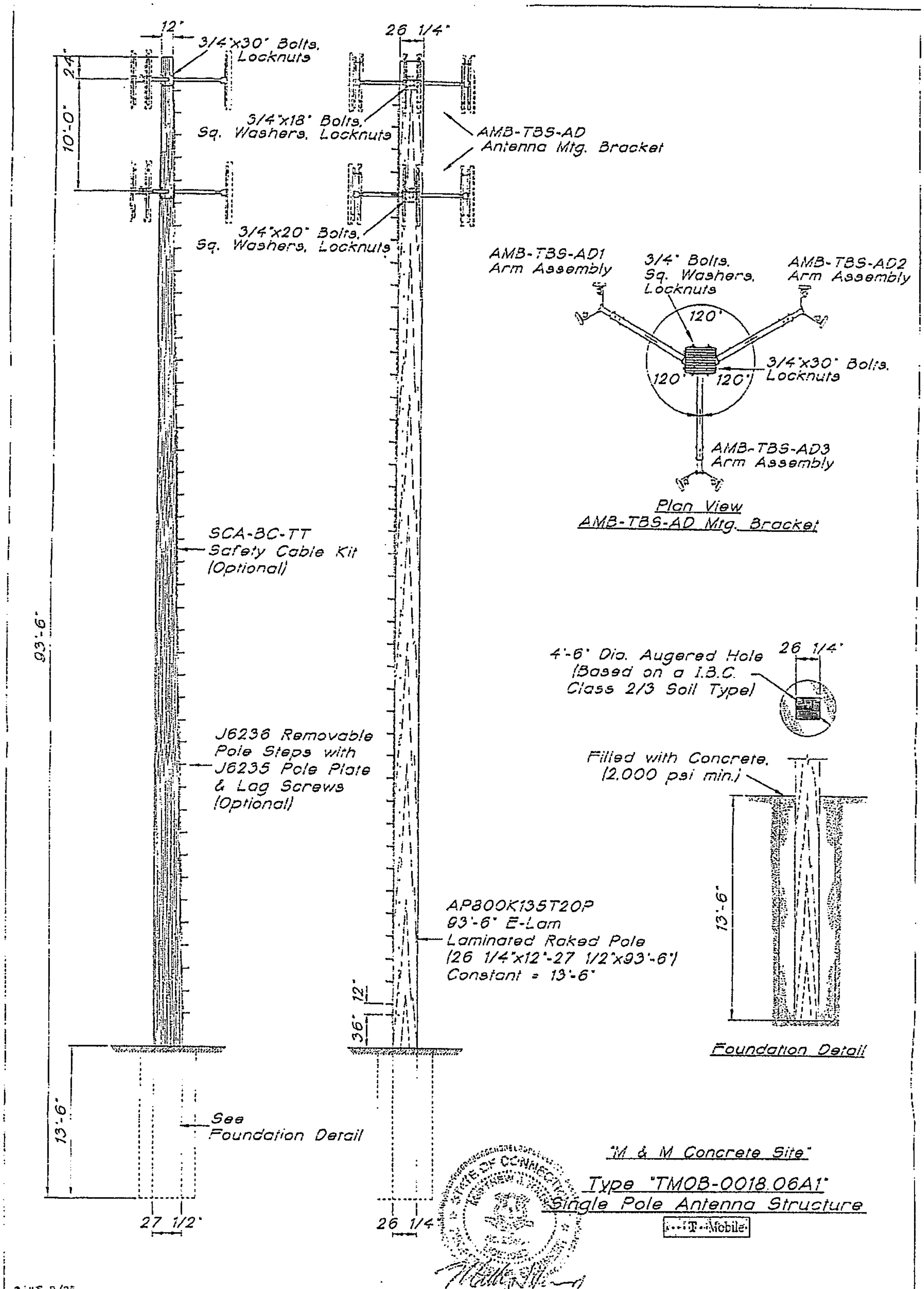
$Fb'\ (trans) = F_b * C_D * C_M * C_t * C_{FU} * C_L$

$Fa' = F_a * C_D * C_M * C_t * C_P * C_F$

Foundation

P	12.78	kips	
h	51.00	ft	
Diameter	4.5	ft	
S1	2700	psf	(per original design)
A	2.46199		
d	12.99	ft	IBC Ch. 18, Eq'n 18-1
Actual Embedment	13.5	ft	96.25% OK

TOWER ELEVATION DRAWING



"M & M Concrete Site"

Type "TMOB-0018.06A1" Single Pole Antenna Structure

T-Mobile

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Laminated Wood Systems, Inc.

E-LAM

P.O. BOX 386, SEWARD, NE 68434 1-800-949-ELAM

NO.	REVISION	DATE	CK.
1		9-28-05	

ACAD DWG. FILE: TMOB1806A1

DRAWN	DATE	DWG. NO.
D. Policky	9-20-05	TMOB-0018 06A1

Tab 3 – Power Density Analysis

41 Padanaram Rd, Danbury, CT.
Worst Case Power Density Analysis of Sprint PCS Antennas @ Base of Tower. Assumes Max ERP & No Antenna Pattern Adjustment

Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Total ERP (Watts)	Antenna Height (Feet)	Distance From Base of Tower (Feet)	Slant Distance (Feet)	Calculated Power Density (mW/cm2)	Maximum Permissable Exposure*	%MPE
1962.5	11	695.1	7646.1	70	0	70	0.561754	1	56.1754%
1962.5	11	695.1	7646.1	70	50	86	0.371972	1	37.1972%
1962.5	11	695.1	7646.1	70	100	122	0.184738	1	18.4738%
1962.5	11	695.1	7646.1	70	150	166	0.100460	1	10.0460%
1962.5	11	695.1	7646.1	70	200	212	0.061305	1	6.1305%
1962.5	11	695.1	7646.1	70	250	260	0.040840	1	4.0840%
1962.5	11	695.1	7646.1	70	300	308	0.029005	1	2.9005%
1962.5	11	695.1	7646.1	70	350	357	0.021606	1	2.1606%
1962.5	11	695.1	7646.1	70	400	406	0.016693	1	1.6693%
1962.5	11	695.1	7646.1	70	450	455	0.013272	1	1.3272%
1962.5	11	695.1	7646.1	70	500	505	0.010799	1	1.0799%
1962.5	11	695.1	7646.1	70	550	554	0.008954	1	0.8954%
1962.5	11	695.1	7646.1	70	600	604	0.007543	1	0.7543%
1962.5	11	695.1	7646.1	70	650	654	0.006440	1	0.6440%
1962.5	11	695.1	7646.1	70	700	703	0.005562	1	0.5562%
1962.5	11	695.1	7646.1	70	750	753	0.004851	1	0.4851%
1962.5	11	695.1	7646.1	70	800	803	0.004268	1	0.4268%
1962.5	11	695.1	7646.1	70	850	853	0.003784	1	0.3784%
1962.5	11	695.1	7646.1	70	900	903	0.003378	1	0.3378%
1962.5	11	695.1	7646.1	70	950	953	0.003033	1	0.3033%
1962.5	11	695.1	7646.1	70	1000	1002	0.002739	1	0.2739%

***Requirements set forth in OET Bulletin 65. Based on NCRP Report No. 86 and ANSI/IEEE C95.1-1992**

Cumulative Power Density Analysis of Sprint PCS & Other Co-location Antennas
41 Padanaram Rd, Danbury, CT.

Operator	Operating Frequency (MHz)	Distance to Target (ft)	Calculated Power Density (mW/cm^2)	Maximum Permissible Exposure* (mW/cm^2)	Fraction of MPE
T-Mobile[1]	1935	80	0.089305	1.0000	8.9305%
Sprint	1962.5	70	0.561754	1.0000	56.1754%
Total Percentage of Maximum Permissible Exposure					**65.1059%**

[1] **Information taken from the Power Density Information prepared by T-Mobile**