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

Bell Atlantic

April 18, 2000

HAND DELIVERED

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 104 Bunker Hill Road, Andover, 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 104 Bunker Hill Road, Andover, Connecticut. Deborah R. Green and Leon Price own the property, from whom Nextel Communications leases for the tower facility. Nextel Communications is proposing to mount antennas on the existing tower and will place its equipment shelter within the compound area at the base of the tower. 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 Tolland County New England County Metropolitan Area (NECMA), which includes the area to be served by the proposed Andover installation.

The facility at 104 Bunker Hill Road in Andover, consists of a 180 foot AGL monopole type tower located on a leased parcel in which Nextel has proposed to locate its equipment. The monopole tower will support several Nextel antennas, which provide mobile communications service to the public pursuant to a FCC license. Verizon Wireless and Nextel Communications have agreed to the proposed shared use of this tower pursuant to mutually acceptable terms and conditions. Nextel Communications 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 158 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 antennas. Enclosed is the structural analysis performed on the tower. Verizon 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 104 Bunker Hill 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. Section 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 Verizon's and Nextel's antenna arrays are as follows:

	Applicable ANSI Stnd.	Calculated "Worst-Case"	Percentage of Stnd.
Verizon	0.583 mW/cm2	0.0274 mW/cm2	4.69 %
Nextel	0.572 mW/cm2	0.0102 mW/cm2	1.78 %
		Total	6.47 %

The collective "worst-case" exposure would be only 6.47 % 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 emission; 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 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 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 Andover area, especially along the heavily traveled Routes 6 and 316 and 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 the residents to improve local public safety and emergency communications. The proposed shared use of this facility would likewise improve public safety in the Andover area.

Conclusion

For the reasons discussed above, the proposed shared use of the existing telecommunications tower facility at 104 Bunker Hill 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, Section 16-50v and Section 16-50v-1(a) of the Regulations of Connecticut State Agencies, Verizon Wireless has previously submitted a check in the amount of $500.00 for the required filing fee and the check has been deposited in your account.

Respectfully yours,

Sandy M. Carter

Sandy M. Carter
Manager – Regulatory
Verizon Wireless

Attachment
cc: Honorable Edward F. Turn, First Selectman

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

April 18, 2000

Honorable Edward F. Turn
First Selectman
Town Office Building
17 School Road
Andover, Connecticut 06232

Dear Mr. Turner:

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 104 Bunker Hill Road, Andover, Connecticut. I am enclosing a copy of Bell Atlantic Mobile'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

Nextel Communications
100 Corporate Place, Rocky Hill, CT 06067
860 513-5400 FAX 860 513-5444

NEXTEL®

April 14, 2000

Sandy Carter
Bell Atlantic Mobile
20 Alexander Drive
Wallingford, Connecticut 06492

RE: Lease Exhibit for 104 Bunker Hill Road, Andover CT (CT-0966)

Dear Sandy:

This letter is to confirm that Bell Atlantic Mobile (BAM) is approved for co-location at the above referenced tower location. I have included a "red-lined" lease exhibit that shows one change-BAM is to be located at the third slot on the tower, with a centerline of 158 feet AGL. I have spoken with Bob and clarified this was the height originally offered to BAM. Sprint is the other carrier that will be located at a centerline of 168 feet AGL.

Please consider this letter an authorization to file with the Siting Council for your necessary approvals. Review of construction drawings prior to application for a building permit should be coordinated through Rick Neller of this office. Please call me at (860) 513-5458 if you have any questions regarding this matter.

Very truly yours,

Stephen

Stephen M. Howard
Manager-Real Estate and Zoning

Enclosure

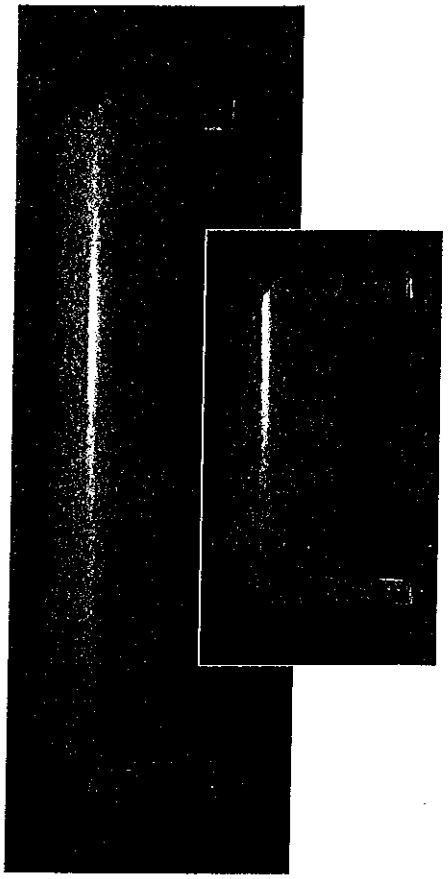
C: Robert Bennett

dB DIRECTOR™ LOG PERIODIC ANTENNAS
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.

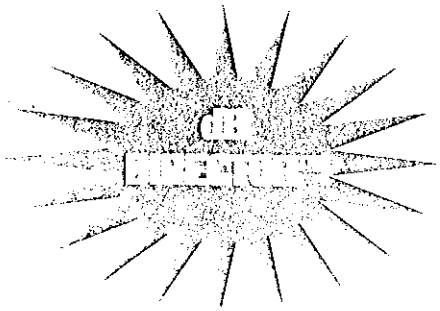
Side offset mounting bracket is included. For electrical downtilt of 6°, 8°, 11° or 13° add T6, T8, T11 or T13 before the "N" or "E" in any 4-foot model number. Example: DB844H80T6N-XY. Note: Electrical downtilt causes a gain loss of .05 dB, or , at the horizon, a reduction of 3, 6, 9 or 12 dB on downtilts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

Mechanical Data

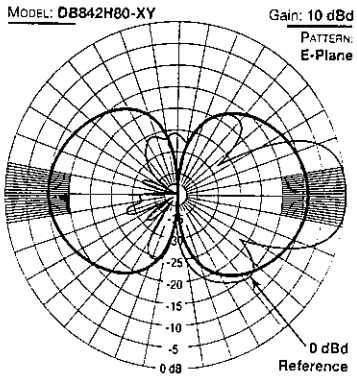
Width – in. (mm)	6 (152)
Depth – in. (mm)	8.5 (216)
Height	See table above
Maximum wind speed – mph (km/h)	125 (200)
Wind area – ft² (m²)	
24" (610 mm) antenna	1 (.093)
48" (1219 mm) antenna	2 (.186)
Wind load (at 100 mph/161 km/h) – lbf (N) kp	
24" (610 mm) antenna	40 (178) 18
48" (1219 mm) antenna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

Electrical Data

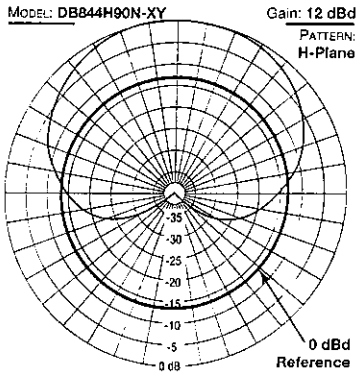
Frequency Range - MHz	806-960
Gain - dBd	See table above
Front-to-back ratio - dB	>40
Beamwidths	See table above
VSWR	<1.5:1
Null-fill and secondary lobe suppression	On 48" (1219 mm) models only
Maximum power input - watts	500
Nominal impedance - ohms	50
Lightning protection	All metal parts grounded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



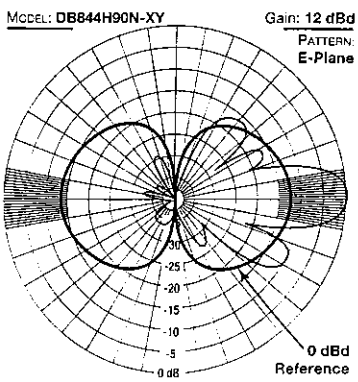
Typical DB842H80-XY Vertical Pattern



Typical DB842H90N-XY, DB844H90N-XY Horizontal Pattern



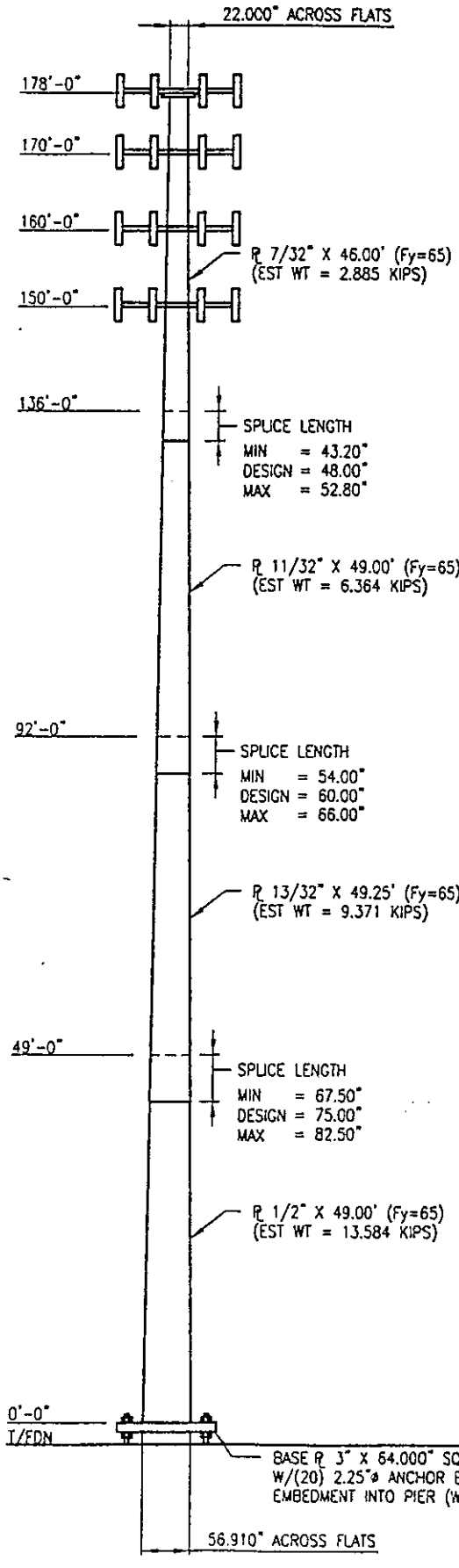
Typical DB844H90N-XY Vertical Pattern



SUMMIT MANUFACTURING, LLC

225 KIWANIS BOULEVARD, WEST HAZLETON, PA 18201
PHONE: (888) 847-6537 E-MAIL: SUMMITCA@EPIX.NET
FAX: (888) 460-6885 WWW.SUMMITMFGLLC.COM

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street, Suite 500, Columbus, Ohio 43215
(614) 221-6679 Fax: (614) 221-0166 www.PJFweb.com



JOB DATA

Page 1 of 2		Job No.	29200-028
By	KJS	Design No.	SUMMIT #6027-00
Chk'd By	KJS	Date	01-14-2000
		Rev. No.	Rev. Date
Pole	178-FT POLE - ANDOVER, CT		
Site	CT-0966		
Owner	NEXTEL COMMUNICATIONS		
Ref. No.			
Design	85 MPH / 74 MPH + 1/2" ICE ACCORDING TO TIA/EIA-222-F 1996		

LOAD CASES

CASE 1	85 MPH WITH NO ICE	DESIGN WIND
CASE 2	74 MPH WITH 1/2" RADIAL ICE	REDUCED WIND WITH ICE
CASE 3	50 MPH WITH NO ICE	OPERATIONAL WIND

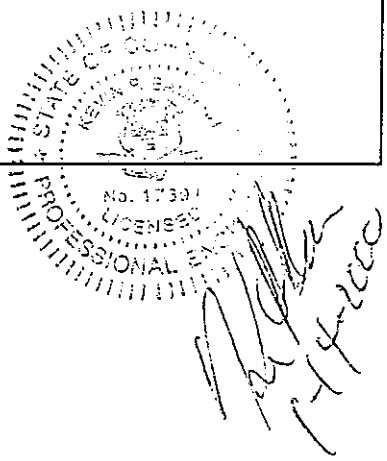
POLE SPECIFICATIONS

Pole Shape Type:	18-SIDED POLYGON
Taper:	0.207008 IN/FT
Shaft Steel:	ASTM A607 GRADE 65
Base PL Steel:	ASTM A572 GRADE 50 (50 KSI)
Anchor Bolts:	2 1/4"ø x 8'-0" LONG #18J ASTM A615 GRADE 75

ANTENNA LIST

No.	Elev.	Description
-	TOP	5/8" LIGHTNING ROD
1-12	TOP	(12) SWEDCOM ALP-9212-N
-	TOP	14' LOW PROFILE PLATFORM
13-24	170.00	(12) SWEDCOM ALP-9212-N
-	170.00	14' LOW PROFILE PLATFORM
25-36	160.00	(12) SWEDCOM ALP-9212-N
-	160.00	14' LOW PROFILE PLATFORM
37-48	150.00	(12) SWEDCOM ALP-9212-N
-	150.00	14' LOW PROFILE PLATFORM
-	90.00	GPS ANTENNA W/ MOUNT

STEP BOLTS FULL HEIGHT.
ANTENNA FEED LINES RUN INSIDE OF POLE.



Elevation	85 MPH WIND		50 MPH WIND	
	Lateral Deflection (Inches)	Rotation (sway) (degrees)	Lateral Deflection (Inches)	Rotation (sway) (degrees)
TOP	149.6	7.825	51.6	2.707

SHAFT SECTION DATA

Shaft Section	Section Length (feet)	Plate Thickness (in.)	Lap Splice (in.)	Diameter Across Flats (inches) @ Top	Diameter Across Flats (inches) @ Bottom
1	46.00	0.2188	48.00	22.000	31.522
2	49.00	0.3438	60.00	30.257	40.400
3	49.25	0.4063	75.00	38.678	48.873
4	49.00	0.5000		46.767	56.910

NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES

FOUNDATION DESIGN BASE REACTIONS

MOMENT = 4675 ft-kips
SHEAR = 35.5 kips
AXIAL = 39.0 kips

SUMMIT MANUFACTURING INC.

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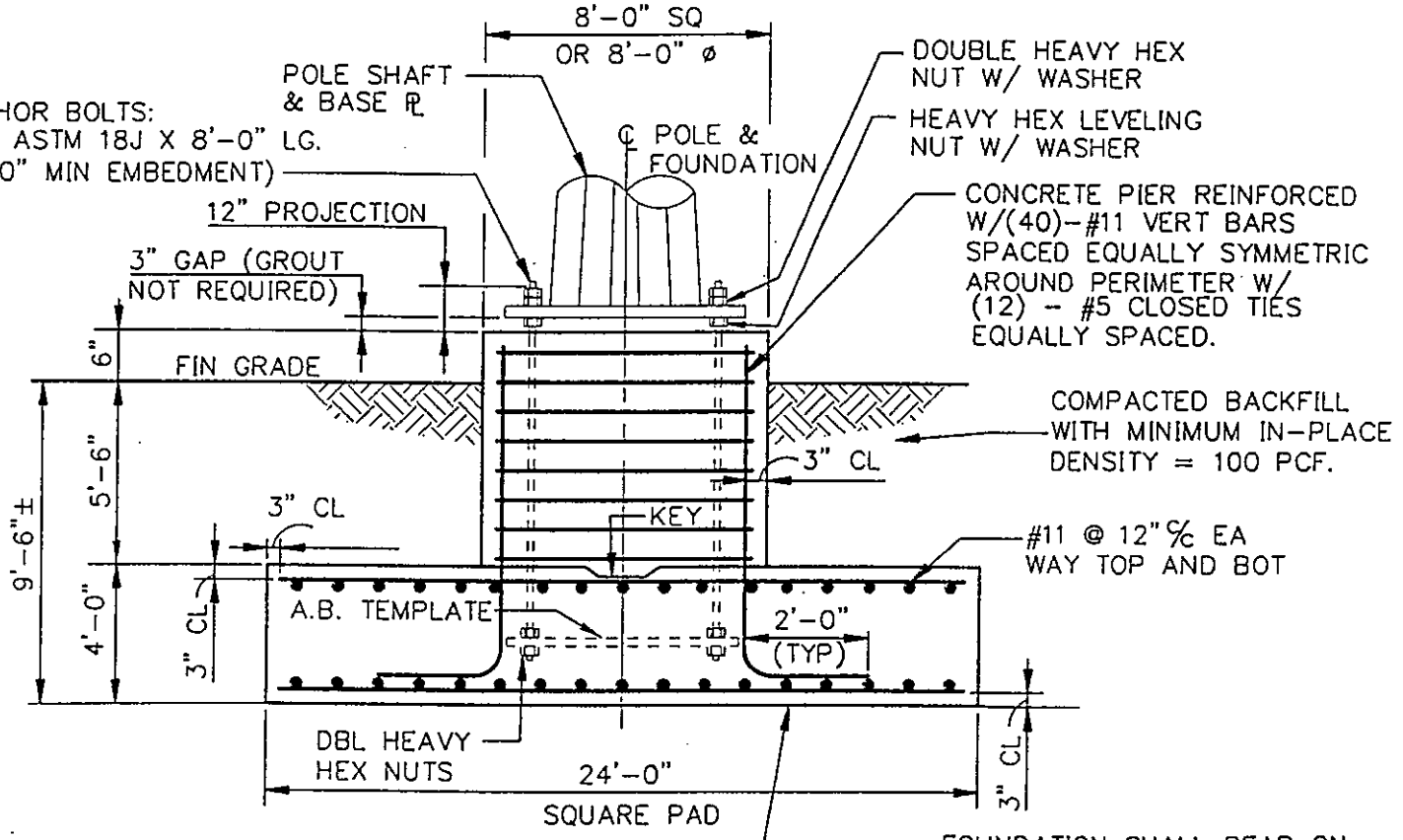
PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street, Suite 500, Columbus, Ohio 43215
(614)-221-6679 FAX (614)-221-0166

Pole 178 FT MONOPOLE
Location ANDOVER, CT
Site CT-0966
Owner NEXTEL COMMUNICATIONS
Design 85 MPH / 74 MPH + 1/2" RADIAL ICE

Page 2 Of 2
By KJS Date 01-14-2000
Summit Job No. 6027 Job No. 29200-012
Revision No. Date

According to TIA/EIA-222-E 1991 & TIA/EIA-222-F 1996



PAD & PIER FOUNDATION

FOUNDATION SHALL BEAR ON LEVEL NATIVE SOIL OR ENGINEERED BACKFILL W/ MINIMUM ALLOWABLE BEARING CAPACITY OF 6000 PSF. (REFER TO GEOTECHNICAL REPORT)

NOTES:

1. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF AT LEAST 3000 PSI AT 28 DAYS.

2. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (GRADE 60) EXCEPT PIER TIES MAY BE ASTM A615 GRADE 40).

3. SEE MONOPOLE DRAWING FOR ANCHOR BOLT QUANTITY, SIZE, LENGTH AND BOLT CIRCLE.

4. TOTAL CONCRETE = 100 CUBIC YARDS.

5. FOUNDATION DESIGN BASED UPON GEOTECHNICAL EXPLORATION REPORT NO. W.O.1170.C966 , PREPARED BY TECTONIC, DATED NOV. 30, 1999.

6. CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT AND CONSULT THE GEOTECHNICAL ENGINNER AS NECESSARY PRIOR TO CONSTRUCTION.

7. FOUNDATION DESIGN BASED ON THE FOLOWING SERVICE LOADS: OVERTURNING MOMENT= 4675 FT*KIPS, SHEAR = 35.5 KIPS, and AXIAL = 39.0 KIPS

C:\TOWER\DRAWINGS\MONOPOLE\SUMMIT\29200300\29200300.dwg 1-14-2000

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am
(c) 1993 to 1998 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

S U M M A R Y O F A N A L Y S I S R E S U L T S

Pole Height.....: 178.00 ft
Top Diameter.....: 22.000 in
Bottom Diameter.....: 56.910 in
Pole Shape.....: 18-Sided Polygon
Splice Joint Type...: Taper shaft - Slip Joint Splice
Shaft Taper.....: 0.207008 (in/ft)
Shaft Steel Weight..: 32.204 kips

POLE SHAFT PROPERTIES:

Shaft Section Number	Section Length (ft)	Wall Thickness [t] (in)	Steel Yield [Fy] (ksi)	Top Diameter [Dt] (in)	Bottom Diameter [Db] (in)	Slip Joint Overlap (in)
1.	46.000	0.21875	65	22.000	31.522	48.00
2.	49.000	0.34375	65	30.257	40.400	60.00
3.	49.250	0.40625	65	38.678	48.873	75.00
4.	49.000	0.50000	65	46.767	56.910	

POLE SHAFT SECTION MAXIMUM FORCES AND MOMENTS:

Shaft Section Number	Wind Load No.	Wind Speed (mph)	Radial Ice (in)	At Base of Section: Sect. Elev. (ft)	Axial Load (kips)	Horiz. Shear (kips)	Bending Moment (ft-kips)	Max. Ratio Actual/ Allowable [Ftot/Fb]
1.	1	85.0	0.00	136.00	9.560	20.692	602.679	0.8867
2.	1	85.0	0.00	92.00	15.959	24.391	1638.544	0.9315
3.	1	85.0	0.00	49.00	25.580	28.529	2821.058	0.9287
4.	1	85.0	0.00	0.00	38.914	32.827	4345.069	0.8141
>> MAXIMUM BASE REACTIONS :					38.914	32.827	4345.069 <<	

POLE DEFLECTION AND ROTATION AT TOP AND AT HIGHEST MICROWAVE DISH ELEVATION:

Wind Load No.	Wind Speed (mph)	Radial Ice (in)	Location	Elev (ft)	Deflection (in)	Rotation (deg)	Max. Allowable Rotation Limit (deg)
1.	85.0	0.00	Top	178.00	149.613	7.825	
2.	73.6	0.50	Top	178.00	124.388	6.549	
3.	50.0	0.00	Top	178.00	51.601	2.707	

PJF_Pole (tm) - Monopole Design Program
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Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

Pole Height : 178 ft
Pole Shape : 18-Sided Polygon
Pole Type : Taper shaft - Slip Joint Splice
Pole Taper : 0.207008 (in/ft)

INPUT TUBE PROPERTIES:

Tube Sect No.	Top / Splice Elev (ft)	Bot Tube Elev (ft)	Tube Length (ft)	Wall Thick [t] (in)	Steel [Fy] (ksi)	Top Diam [Dt] (in)	Bot Diam [Db] (in)	Slip Joint Overlap (in)
1.	178.00	132.00	46.000	0.21875	65	22.000	31.522	48.00
2.	136.00	87.00	49.000	0.34375	65	30.257	40.400	60.00
3.	92.00	42.75	49.250	0.40625	65	38.678	48.873	75.00
4.	49.00	0.00	49.000	0.50000	65	46.767	56.910	

TUBE SECTION PROPERTIES:

Tube Sect No.	Section Weight (kips)	Location	Elev (ft)	Diam. Across Flats (in)	Wall Thick [t] (in)	[W/t] Ratio	Diam/ Thick [D/t] Ratio	Area (in^2)	Ix (in^4)
1	2.885	@Top	178.0	22.000	0.2188	15.97	100.57	15.12	906.2
		@Splice	136.0	30.694		22.98	140.32	21.16	2482.0
		@Bot	132.0	31.522		23.65	144.10	21.73	2689.9
2	6.364	@Top	136.0	30.257	0.3438	13.76	88.02	32.64	3688.6
		@Splice	92.0	39.365		18.43	114.52	42.57	8187.8
		@Bot	87.0	40.400		18.96	117.53	43.70	8856.7
3	9.371	@Top	92.0	38.678	0.4063	15.02	95.21	49.35	9129.6
		@Splice	49.0	47.579		18.89	117.12	60.82	17095.6
		@Bot	42.8	48.873		19.45	120.30	62.49	18541.1
4	13.584	@Top	49.0	46.767	0.5000	14.73	93.53	73.42	19852.0
		@Bot	0.0	56.910		18.31	113.82	89.52	35979.2

Total Shaft Steel Weight = 32.204 kips

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

Segment Properties: (@ Max Segment = 10 ft)

Tube Segmt No.	Segment Feature Location	Segment Elev. (ft)	Diam. Across Flats (in)	Wall Thick [t] (in)	[W/t] Ratio	Diam/ Thick [D/t] Ratio	Area (in^2)	Ix (in^4)
1.	top	178.000	22.000	0.21875	15.97	100.57	15.12	906.2
2.	<arm [1]>	178.000	22.000	0.21875	15.97	100.57	15.12	906.2
3.	<arm [2]>	178.000	22.000	0.21875	15.97	100.57	15.12	906.2
4.	<arm [3]>	178.000	22.000	0.21875	15.97	100.57	15.12	906.2
5.		170.000	23.656	0.21875	17.31	108.14	16.27	1129.0
6.	<arm [4]>	170.000	23.656	0.21875	17.31	108.14	16.27	1129.0
7.	<arm [5]>	170.000	23.656	0.21875	17.31	108.14	16.27	1129.0
8.		160.000	25.726	0.21875	18.97	117.61	17.71	1455.3
9.	<arm [6]>	160.000	25.726	0.21875	18.97	117.61	17.71	1455.3
10.	<arm [7]>	160.000	25.726	0.21875	18.97	117.61	17.71	1455.3
11.		150.000	27.796	0.21875	20.64	127.07	19.15	1839.2
12.	<arm [8]>	150.000	27.796	0.21875	20.64	127.07	19.15	1839.2
13.	<arm [9]>	150.000	27.796	0.21875	20.64	127.07	19.15	1839.2
14.		140.000	29.866	0.21875	22.31	136.53	20.58	2285.2
15.	top sec(2)	136.000	30.694	0.21875	22.98	140.32	21.16	2482.0
16.	bot sec(1)	132.000	31.522	0.34375	14.41	91.70	34.02	4176.8
17.		130.000	31.499	0.34375	14.39	91.63	33.99	4167.4
18.		120.000	33.569	0.34375	15.46	97.66	36.25	5054.5
19.		110.000	35.639	0.34375	16.52	103.68	38.51	6059.2
20.		100.000	37.709	0.34375	17.58	109.70	40.77	7189.0
21.	top sec(3)	92.000	39.365	0.34375	18.43	114.52	42.57	8187.8
22.		90.000	39.092	0.40625	15.20	96.23	49.88	9429.0
23.	<arm [10]>	90.000	39.092	0.40625	15.20	96.23	49.88	9429.0
24.	bot sec(2)	87.000	40.400	0.40625	15.77	99.45	51.57	10418.4
25.		80.000	41.162	0.40625	16.10	101.32	52.55	11025.0
26.		70.000	43.232	0.40625	17.00	106.42	55.22	12791.6
27.		60.000	45.302	0.40625	17.90	111.51	57.89	14737.5
28.		50.000	47.372	0.40625	18.80	116.61	60.56	16871.5
29.	top sec(4)	49.000	47.579	0.40625	18.89	117.12	60.82	17095.6
30.	bot sec(3)	42.750	48.061	0.50000	15.19	96.12	75.48	21564.3
31.		40.000	48.630	0.50000	15.39	97.26	76.38	22347.9
32.		30.000	50.700	0.50000	16.12	101.40	79.66	25357.1
33.		20.000	52.770	0.50000	16.85	105.54	82.95	28624.9
34.		10.000	54.840	0.50000	17.58	109.68	86.23	32162.1
35.	base	0.000	56.910	0.50000	18.31	113.82	89.52	35979.2

Total Number of Antennas / Arms = 10

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

ANTENNA AND ARM PROPERTIES AND LOAD DATA:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Ant Arm No.	Arm Mount. Elev. (ft)	Load Applic. Elev. (ft)	Arm Length (ft)	Ice Load Case	Antenna Area [CaAa] (sf)	Antenna Force [qzGhCaAa] (lbs)	Antenna Weight (lbs)
[1]	178.000	181.000	0.0000	No Ice:	5.00	254.17	108.00
Description: 5/8" Lightning Rod					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.626	No Ice:	30.079	50.834	
[2]	178.000	178.000	0.0000	No Ice:	66.66	3372.45	324.00
Description: (12) Swedcom ALP-9212-N					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.619	No Ice:	29.936	50.592	
[3]	178.000	178.000	2.0000	No Ice:	21.52	1088.74	1300.00
Description: 14' Low Profile Platform					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.619	No Ice:	29.936	50.592	
[4]	170.000	170.000	0.0000	No Ice:	66.66	3328.43	324.00
Description: (12) Swedcom ALP-9212-N					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.597	No Ice:	29.545	49.931	
[5]	170.000	170.000	2.0000	No Ice:	21.52	1074.53	1300.00
Description: 14' Low Profile Platform					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.597	No Ice:	29.545	49.931	
[6]	160.000	160.000	0.0000	No Ice:	66.66	3271.28	324.00
Description: (12) Swedcom ALP-9212-N					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.570	No Ice:	29.038	49.074	
[7]	160.000	160.000	2.0000	No Ice:	21.52	1056.07	1300.00
Description: 14' Low Profile Platform					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.570	No Ice:	29.038	49.074	
[8]	150.000	150.000	0.0000	No Ice:	66.66	3211.51	324.00
Description: (12) Swedcom ALP-9212-N					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.541	No Ice:	28.507	48.177	
[9]	150.000	150.000	2.0000	No Ice:	21.52	1036.78	1300.00
Description: 14' Low Profile Platform					[qz]	[qz] [Gh]	

		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.541	No Ice:	28.507	48.177	
[10]	90.000	90.000	2.0000	No Ice:	6.00	249.81	210.00
	Description: GPS Antenna w/ Mount						
					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.332	No Ice:	24.636	41.635	

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

POLE SHAFT LOADS:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Design Loads per TIA/EIA-222-F Standard; Gust Factor ..... Gh = 1.69
Pole DL Overload Factor = 1
Per TIA/EIA Table 1: Note 3: For all cross sectional shapes,
Force Coefficient [Cf] need not exceed 1.2
for any value of C. (Where C=sqrt(Kz)*V*D.)

Top of Segment Elev. (ft)	Expos Coeff [Kz]	Veloc Press [qz] (psf)	Pole Veloc Coeff [C]	Force Coeff [Cf]	Projected Area Shaft [Ae] (sf)	Segment [Cf Ae] (sf)	Segment Wind Force (lbs)	Shaft Segment Weight (lbs)
178.000	1.619	29.94	198.25	0.650	0.000	0.000	0.00	0.00
178.000	1.619	29.94	198.25	0.650	0.000	0.000	0.00	0.00
178.000	1.619	29.94	198.25	0.650	0.000	0.000	0.00	0.00
178.000	1.619	29.94	198.25	0.650	1.842	1.197	60.57	51.70
170.000	1.597	29.55	211.78	0.650	13.377	8.695	437.01	375.61
170.000	1.597	29.55	211.78	0.650	0.000	0.000	0.00	0.00
170.000	1.597	29.55	211.78	0.650	1.980	1.287	64.26	55.62
160.000	1.570	29.04	228.33	0.650	18.596	12.087	598.34	522.55
160.000	1.570	29.04	228.33	0.650	0.000	0.000	0.00	0.00
160.000	1.570	29.04	228.33	0.650	2.152	1.399	68.66	60.51
150.000	1.541	28.51	244.43	0.650	20.149	13.097	636.82	566.56
150.000	1.541	28.51	244.43	0.650	0.000	0.000	0.00	0.00
150.000	1.541	28.51	244.43	0.650	2.325	1.511	72.81	65.40
140.000	1.511	27.95	260.06	0.650	24.199	15.729	749.62	680.86
136.000	1.499	27.72	266.17	0.650	10.144	6.594	309.86	577.43
132.000	1.486	27.48	272.19	0.650	10.329	6.714	312.86	455.06
130.000	1.480	27.37	271.39	0.650	5.250	3.412	157.99	231.33
120.000	1.446	26.75	285.94	0.650	27.284	17.735	809.98	1202.75
110.000	1.411	26.09	299.82	0.650	29.009	18.856	840.82	1279.60
100.000	1.373	25.39	312.95	0.650	30.734	19.977	867.84	1356.45
92.000	1.340	24.79	322.82	0.650	25.801	16.771	710.08	1873.17
90.000	1.332	24.64	319.57	0.650	3.249	2.112	88.21	169.28
90.000	1.332	24.64	319.57	0.650	3.266	2.123	88.39	170.19
87.000	1.319	24.40	328.67	0.650	9.960	6.474	267.80	519.03
80.000	1.288	23.82	330.88	0.650	23.709	15.411	626.88	1235.82
70.000	1.240	22.93	340.96	0.650	35.337	22.969	905.75	1842.65
60.000	1.186	21.94	349.50	0.650	37.062	24.090	911.58	1933.48
50.000	1.126	20.83	356.07	0.650	38.787	25.211	909.09	2024.30
49.000	1.120	20.71	356.60	0.650	3.940	2.561	89.62	1516.96
42.750	1.077	19.92	353.25	0.650	23.797	15.468	529.76	1525.87
40.000	1.057	19.54	354.06	0.650	12.132	7.886	262.24	778.03
30.000	1.000	18.50	359.12	0.650	41.560	27.014	858.92	2666.09
20.000	1.000	18.50	373.79	0.650	43.285	28.135	879.46	2777.87
10.000	1.000	18.50	388.45	0.650	45.010	29.256	914.51	2889.65
1.000	1.000	18.50	401.65	0.650	41.984	27.290	853.02	2696.26
					Summation TOTAL =		14882.76	32100.06

---------(END LOAD CASE 1 -- POLE SHAFT LOADS)----------

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Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

POLE SHAFT SEGMENTS -- AXIAL AND SHEAR FORCES:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Tube Segment No.	Segment Elevation (ft)	Axial Load (kips)	Cumulative Axial Load (kips)	Horiz. Shear (kips)	Cumulative Horiz. Shear (kips)
1.	178.000	0.000	0.000	0.000	0.000
2.	178.000	0.108	0.108	0.254	0.254
3.	178.000	0.324	0.432	3.372	3.627
4.	178.000	1.352	1.784	1.149	4.776
5.	170.000	0.376	2.159	0.437	5.213
6.	170.000	0.324	2.483	3.328	8.541
7.	170.000	1.356	3.839	1.139	9.680
8.	160.000	0.523	4.361	0.598	10.279
9.	160.000	0.324	4.685	3.271	13.550
10.	160.000	1.361	6.046	1.125	14.675
11.	150.000	0.567	6.613	0.637	15.311
12.	150.000	0.324	6.937	3.212	18.523
13.	150.000	1.365	8.302	1.110	19.632
14.	140.000	0.681	8.983	0.750	20.382
15.	136.000	0.577	9.560	0.310	20.692
16.	132.000	0.455	10.015	0.313	21.005
17.	130.000	0.231	10.247	0.158	21.163
18.	120.000	1.203	11.449	0.810	21.973
19.	110.000	1.280	12.729	0.841	22.814
20.	100.000	1.356	14.085	0.868	23.681
21.	92.000	1.873	15.959	0.710	24.391
22.	90.000	0.169	16.128	0.088	24.480
23.	90.000	0.380	16.508	0.338	24.818
24.	87.000	0.519	17.027	0.268	25.086
25.	80.000	1.236	18.263	0.627	25.713
26.	70.000	1.843	20.106	0.906	26.618
27.	60.000	1.933	22.039	0.912	27.530
28.	50.000	2.024	24.063	0.909	28.439
29.	49.000	1.517	25.580	0.090	28.529
30.	42.750	1.526	27.106	0.530	29.058
31.	40.000	0.778	27.884	0.262	29.321
32.	30.000	2.666	30.550	0.859	30.180
33.	20.000	2.778	33.328	0.879	31.059
34.	10.000	2.890	36.218	0.915	31.974
35.	1.000	2.696	38.914	0.853	32.827
Base	0.000		38.914		32.827

---------(END LOAD CASE 1 -- AXIAL AND SHEAR FORCE)----------

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am
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Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

POLE SHAFT SEGMENTS -- MOMENTS and DEFLECTIONS:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Segmnt Elev (ft)	[-------- MOMENTS (ft-kips) ---------] From Ant/ Arm	From Shaft Wind	From P-Delta Effects	Total Moment	[--DEFLECTIONS (inch)-------] No P-Delta Effects	Total W/ P-Delta Effects	Total Rotation (deg)
178.00	0.763	0.000	0.000	0.763	143.009	149.613	7.825
178.00	0.763	0.000	0.000	0.763	143.009	149.613	7.825
178.00	0.763	0.000	0.000	0.763	143.009	149.613	7.825
178.00	0.763	0.000	0.059	0.822	141.437	147.963	7.825
170.00	38.485	2.220	1.925	42.630	130.451	136.437	7.778
170.00	38.485	2.220	1.925	42.630	130.451	136.437	7.778
170.00	38.485	2.220	2.264	42.970	128.889	134.798	7.778
160.00	129.669	10.803	7.216	147.688	114.963	120.189	7.572
160.00	129.669	10.803	7.216	147.688	114.963	120.189	7.572
160.00	129.669	10.803	7.838	148.311	113.442	118.594	7.572
150.00	264.125	26.251	15.210	305.586	100.038	104.537	7.183
150.00	264.125	26.251	15.210	305.586	100.038	104.537	7.183
150.00	264.125	26.251	16.084	306.460	98.596	103.024	7.183
140.00	441.065	48.977	26.512	516.554	84.713	88.473	6.618
136.00	511.841	60.193	30.645	602.679	79.505	83.016	6.351
132.00	582.617	72.652	34.905	690.173	74.488	77.761	6.151
130.00	618.004	79.352	37.059	734.415	72.038	75.195	6.053
120.00	794.944	117.658	47.991	960.594	60.405	63.017	5.530
110.00	971.884	164.206	59.037	1195.126	49.854	51.979	4.978
100.00	1148.823	219.286	69.977	1438.087	40.426	42.122	4.412
92.00	1290.375	269.665	78.505	1638.544	33.704	35.099	3.956
90.00	1325.763	283.148	79.608	1688.519	32.909	34.269	3.852
90.00	1325.763	283.148	80.694	1689.605	32.136	33.462	3.852
87.00	1379.594	304.037	83.995	1767.627	29.860	31.086	3.700
80.00	1505.200	355.907	91.557	1952.665	24.904	25.913	3.347
70.00	1684.638	437.664	101.868	2224.170	18.679	19.422	2.848
60.00	1864.076	528.509	111.384	2503.969	13.444	13.968	2.358
50.00	2043.513	628.468	119.858	2791.839	9.178	9.529	1.881
49.00	2061.457	638.963	120.638	2821.058	8.804	9.140	1.834
42.75	2173.606	706.562	125.331	3005.500	6.736	6.990	1.581
40.00	2222.951	737.390	127.522	3087.863	5.812	6.030	1.472
30.00	2402.389	855.035	133.993	3391.417	3.234	3.353	1.086
20.00	2581.826	981.322	138.957	3702.105	1.422	1.473	0.711
10.00	2761.264	1116.560	142.142	4019.966	0.352	0.364	0.350
0.00	2940.702	1261.102	143.266	4345.069	0.000	0.000	0.000

---------(END LOAD CASE 1 -- MOMENTS AND DEFLECTIONS)----------

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

POLE SHAFT SEGMENTS -- ACTUAL VS. ALLOWABLE STRESSES:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph
Note: Per TIA/EIA Sec. 3.1.1.1: Allow a 1/3 stress increase for poles under 700 feet in height. The allowable stresses shown include the factor of 1.333

Segmnt Elev (ft)	[---------- ACTUAL STRESSES ----------] Bending [fb] (ksi)	Axial [fa] (ksi)	Torsion [ft] (ksi)	Shear [fv] (ksi)	Combined [Ftot] (ksi)	Allow. Stress [Fb] (ksi)	Actual/ Allowable [Ftot/Fb] Ratio
178.00	0.113	0.000	0.000	0.000	0.113	52.00	0.0022
178.00	0.113	0.007	0.017	0.034	0.148	52.00	0.0029
178.00	0.113	0.029	0.239	0.479	1.251	52.00	0.0241
178.00	0.122	0.118	0.396	0.630	1.793	52.00	0.0345
170.00	5.442	0.133	0.342	0.639	5.828	52.00	0.1121
170.00	5.442	0.153	0.546	1.047	6.238	52.00	0.1200
170.00	5.485	0.236	0.679	1.187	6.571	52.00	0.1264
160.00	15.906	0.246	0.573	1.158	16.428	52.00	0.3159
160.00	15.906	0.265	0.757	1.527	16.647	52.00	0.3201
160.00	15.973	0.341	0.868	1.653	16.889	52.00	0.3248
150.00	28.139	0.345	0.743	1.596	28.770	52.00	0.5533
150.00	28.139	0.362	0.909	1.930	28.922	52.00	0.5562
150.00	28.219	0.434	1.002	2.046	29.135	52.00	0.5603
140.00	41.132	0.436	0.867	1.976	41.859	52.00	0.8050
136.00	45.408	0.452	0.821	1.951	46.111	52.00	0.8867
132.00	31.734	0.294	0.499	1.232	32.169	52.00	0.6186
130.00	33.820	0.301	0.500	1.242	34.254	52.00	0.6587
120.00	38.869	0.316	0.439	1.209	39.289	52.00	0.7556
110.00	42.828	0.331	0.389	1.182	43.244	52.00	0.8316
100.00	45.958	0.346	0.347	1.159	46.377	52.00	0.8919
92.00	47.996	0.375	0.319	1.143	48.437	52.00	0.9315
90.00	42.651	0.323	0.274	0.979	43.029	52.00	0.8275
90.00	42.678	0.331	0.280	0.993	43.065	52.00	0.8282
87.00	41.761	0.330	0.262	0.971	42.145	52.00	0.8105
80.00	44.416	0.348	0.253	0.976	44.815	52.00	0.8618
70.00	45.798	0.364	0.229	0.962	46.208	52.00	0.8886
60.00	46.894	0.381	0.208	0.949	47.318	52.00	0.9100
50.00	47.760	0.397	0.190	0.937	48.197	52.00	0.9269
49.00	47.835	0.421	0.189	0.936	48.295	52.00	0.9287
42.75	40.810	0.359	0.151	0.768	41.200	52.00	0.7923
40.00	40.938	0.365	0.147	0.766	41.333	52.00	0.7949
30.00	41.313	0.383	0.135	0.756	41.725	52.00	0.8024
20.00	41.581	0.402	0.125	0.747	42.010	52.00	0.8079
10.00	41.761	0.420	0.115	0.740	42.207	52.00	0.8117
0.00	41.873	0.435	0.107	0.732	42.333	52.00	0.8141

---------(END LOAD CASE 1 -- ACTUAL VS. ALLOWABLE STRESSES)----------

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

ANTENNA AND ARM PROPERTIES AND LOAD DATA:

LOAD CASE 2: WIND VELOCITY = 73.61 mph + 0.50 inches Radial Ice.

Ant Arm No.	Arm Mount. Elev. (ft)	Load Applic. Elev. (ft)	Arm Length (ft)	Ice Load Case	Antenna Area [CaAa] (sf)	Antenna Force [qzGhCaAa] (lbs)	Antenna Weight (lbs)
[1]	178.000	181.000	0.0000	W/ Ice:	6.70	255.44	144.00
Description: 5/8" Lightning Rod							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.626	W/ Ice:	22.559	38.126	
[2]	178.000	178.000	0.0000	W/ Ice:	72.99	2769.52	864.00
Description: (12) Swedcom ALP-9212-N							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.619	W/ Ice:	22.452	37.944	
[3]	178.000	178.000	2.0000	W/ Ice:	22.90	868.91	2100.00
Description: 14' Low Profile Platform							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.619	W/ Ice:	22.452	37.944	
[4]	170.000	170.000	0.0000	W/ Ice:	72.99	2733.37	864.00
Description: (12) Swedcom ALP-9212-N							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.597	W/ Ice:	22.159	37.449	
[5]	170.000	170.000	2.0000	W/ Ice:	22.90	857.57	2100.00
Description: 14' Low Profile Platform							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.597	W/ Ice:	22.159	37.449	
[6]	160.000	160.000	0.0000	W/ Ice:	72.99	2686.44	864.00
Description: (12) Swedcom ALP-9212-N							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.570	W/ Ice:	21.778	36.806	
[7]	160.000	160.000	2.0000	W/ Ice:	22.90	842.85	2100.00
Description: 14' Low Profile Platform							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.570	W/ Ice:	21.778	36.806	
[8]	150.000	150.000	0.0000	W/ Ice:	72.99	2637.35	864.00
Description: (12) Swedcom ALP-9212-N							
		[Gh]	[Kz]		[qz] (psf)	[qz] [Gh] (psf)	
		1.69	1.541	W/ Ice:	21.381	36.133	
[9]	150.000	150.000	2.0000	W/ Ice:	22.90	827.45	2100.00
Description: 14' Low Profile Platform							
					[qz]	[qz] [Gh]	

		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.541	W/ Ice:	21.381	36.133	
[10]	90.000	90.000	2.0000	W/ Ice:	8.00	249.81	320.00
	Description: GPS Antenna w/ Mount						
					[qz]	[qz] [Gh]	
		[Gh]	[Kz]		(psf)	(psf)	
		1.69	1.332	W/ Ice:	18.477	31.226	

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

POLE SHAFT LOADS:

LOAD CASE 2: WIND VELOCITY = 73.61 mph with 0.50 inches Radial Ice.

Design Loads per TIA/EIA-222-F Standard; Gust Factor ..... Gh = 1.69
Pole DL Overload Factor = 1
Per TIA/EIA Table 1: Note 3: For all cross sectional shapes,
Force Coefficient [Cf] need not exceed 1.2
for any value of C. (Where C=sqrt(Kz)*V*D.)

Top of Segment Elev. (ft)	Expos Coeff [Kz]	Veloc Press [qz] (psf)	Pole Veloc Coeff [C]	Force Coeff [Cf]	Projected Area Shaft [Ae] (sf)	Segment [Cf Ae] (sf)	Segment Wind Force (lbs)	Shaft Segment Weight (lbs)
178.000	1.619	22.45	171.69	0.650	0.000	0.000	0.00	0.00
178.000	1.619	22.45	171.69	0.650	0.000	0.000	0.00	0.00
178.000	1.619	22.45	171.69	0.650	0.000	0.000	0.00	0.00
178.000	1.619	22.45	171.69	0.650	1.925	1.251	47.48	65.65
170.000	1.597	22.16	183.41	0.650	13.960	9.074	342.05	476.84
170.000	1.597	22.16	183.41	0.650	0.000	0.000	0.00	0.00
170.000	1.597	22.16	183.41	0.650	2.063	1.341	50.22	70.59
160.000	1.570	21.78	197.74	0.650	19.346	12.575	466.86	663.04
160.000	1.570	21.78	197.74	0.650	0.000	0.000	0.00	0.00
160.000	1.570	21.78	197.74	0.650	2.236	1.453	53.49	76.76
150.000	1.541	21.38	211.69	0.650	20.899	13.584	495.39	718.55
150.000	1.541	21.38	211.69	0.650	0.000	0.000	0.00	0.00
150.000	1.541	21.38	211.69	0.650	2.408	1.565	56.56	82.92
140.000	1.511	20.96	225.22	0.650	25.032	16.271	581.58	863.16
136.000	1.499	20.79	230.51	0.650	10.478	6.810	240.03	731.82
132.000	1.486	20.61	235.72	0.650	10.662	6.931	242.21	532.79
130.000	1.480	20.52	235.03	0.650	5.416	3.521	122.25	270.82
120.000	1.446	20.06	247.63	0.650	28.117	18.276	626.04	1407.90
110.000	1.411	19.57	259.65	0.650	29.843	19.398	648.73	1497.52
100.000	1.373	19.04	271.02	0.650	31.568	20.519	668.53	1587.15
92.000	1.340	18.59	279.57	0.650	26.468	17.204	546.32	2191.32
90.000	1.332	18.48	276.76	0.650	3.332	2.166	67.85	193.65
90.000	1.332	18.48	276.76	0.650	3.350	2.177	67.99	194.69
87.000	1.319	18.30	284.64	0.650	10.210	6.636	205.89	593.71
80.000	1.288	17.87	286.55	0.650	24.293	15.790	481.73	1413.56
70.000	1.240	17.20	295.28	0.650	36.170	23.510	695.34	2107.43
60.000	1.186	16.46	302.68	0.650	37.895	24.632	699.06	2211.03
50.000	1.126	15.62	308.37	0.650	39.620	25.753	696.47	2314.63
49.000	1.120	15.53	308.82	0.650	4.023	2.615	68.63	1734.39
42.750	1.077	14.94	305.93	0.650	24.297	15.793	405.67	1703.96
40.000	1.057	14.66	306.62	0.650	12.382	8.048	200.73	868.80
30.000	1.000	13.87	311.01	0.650	42.393	27.556	657.11	2976.95
20.000	1.000	13.87	323.71	0.650	44.118	28.677	672.29	3101.51
10.000	1.000	13.87	336.41	0.650	45.843	29.798	698.58	3226.07
1.000	1.000	13.87	347.84	0.650	42.734	27.777	651.20	3009.96
					Summation TOTAL =		11456.32	36887.18

---------(END LOAD CASE 2 -- POLE SHAFT LOADS)----------

PJF_Pole (tm) - Monopole Design Program
Windows Version 1.28.0100 Fri Jan 14, 2000 - 10:18:28 am
(c) 1993 to 1998 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
Description : 178-Ft Pole - Andover, CT - CT-0966
Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

POLE SHAFT SEGMENTS -- AXIAL AND SHEAR FORCES:

LOAD CASE 2: WIND VELOCITY = 73.61 mph with 0.50 inches Radial Ice.

Tube Segment No.	Segment Elevation (ft)	Axial Load (kips)	Cumulative Axial Load (kips)	Horiz. Shear (kips)	Cumulative Horiz. Shear (kips)
1.	178.000	0.000	0.000	0.000	0.000
2.	178.000	0.144	0.144	0.255	0.255
3.	178.000	0.864	1.008	2.770	3.025
4.	178.000	2.166	3.174	0.916	3.941
5.	170.000	0.477	3.650	0.342	4.283
6.	170.000	0.864	4.514	2.733	7.017
7.	170.000	2.171	6.685	0.908	7.925
8.	160.000	0.663	7.348	0.467	8.391
9.	160.000	0.864	8.212	2.686	11.078
10.	160.000	2.177	10.389	0.896	11.974
11.	150.000	0.719	11.107	0.495	12.470
12.	150.000	0.864	11.971	2.637	15.107
13.	150.000	2.183	14.154	0.884	15.991
14.	140.000	0.863	15.018	0.582	16.573
15.	136.000	0.732	15.749	0.240	16.813
16.	132.000	0.533	16.282	0.242	17.055
17.	130.000	0.271	16.553	0.122	17.177
18.	120.000	1.408	17.961	0.626	17.803
19.	110.000	1.498	19.458	0.649	18.452
20.	100.000	1.587	21.046	0.669	19.120
21.	92.000	2.191	23.237	0.546	19.667
22.	90.000	0.194	23.430	0.068	19.735
23.	90.000	0.515	23.945	0.318	20.052
24.	87.000	0.594	24.539	0.206	20.258
25.	80.000	1.414	25.952	0.482	20.740
26.	70.000	2.107	28.060	0.695	21.435
27.	60.000	2.211	30.271	0.699	22.134
28.	50.000	2.315	32.586	0.696	22.831
29.	49.000	1.734	34.320	0.069	22.899
30.	42.750	1.704	36.024	0.406	23.305
31.	40.000	0.869	36.893	0.201	23.506
32.	30.000	2.977	39.870	0.657	24.163
33.	20.000	3.102	42.971	0.672	24.835
34.	10.000	3.226	46.197	0.699	25.534
35.	1.000	3.010	49.207	0.651	26.185
Base	0.000		49.207		26.185

---------(END LOAD CASE 2 -- AXIAL AND SHEAR FORCE)----------

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Job No.....: 29200-028 Design No: Summit #6027-00 Engineer : KJS
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Design..... : 85 mph / 74 mph + 1/2" ice
Owner..... : Nextel Communications Client: Summit Manufacturing, LLC
Status..... : Engineering Final Design Revision: Rev. Date :

POLE SHAFT SEGMENTS -- MOMENTS and DEFLECTIONS:

LOAD CASE 2: WIND VELOCITY = 73.61 mph with 0.50 inches Radial Ice.

Segmnt Elev (ft)	[-------- MOMENTS (ft-kips) ---------] From Ant/ Arm	From Shaft Wind	From P-Delta Effects	Total Moment	[--DEFLECTIONS (inch)-------] No P-Delta Effects	Total W/ P-Delta Effects	Total Rotation (deg)
178.00	0.766	0.000	0.000	0.766	115.737	124.388	6.549
178.00	0.766	0.000	0.000	0.766	115.737	124.388	6.549
178.00	0.766	0.000	0.000	0.766	115.737	124.388	6.549
178.00	0.766	0.000	0.116	0.882	114.463	123.010	6.549
170.00	31.917	1.738	2.824	36.480	105.559	113.382	6.509
170.00	31.917	1.738	2.824	36.480	105.559	113.382	6.509
170.00	31.917	1.738	3.339	36.995	104.292	112.013	6.509
160.00	106.766	8.451	10.429	125.646	93.008	99.814	6.332
160.00	106.766	8.451	10.429	125.646	93.008	99.814	6.332
160.00	106.766	8.451	11.340	126.557	91.775	98.482	6.332
150.00	216.907	20.510	21.802	259.220	80.916	86.751	6.001
150.00	216.907	20.510	21.802	259.220	80.916	86.751	6.001
150.00	216.907	20.510	23.061	260.478	79.747	85.489	6.001
140.00	361.696	38.225	37.752	437.673	68.504	73.358	5.521
136.00	419.612	46.958	43.491	510.061	64.286	68.812	5.295
132.00	477.527	56.654	49.306	583.487	60.224	64.437	5.127
130.00	506.485	61.867	52.215	620.568	58.241	62.301	5.044
120.00	651.274	91.646	66.710	809.630	48.825	52.170	4.602
110.00	796.063	127.789	80.938	1004.791	40.288	42.997	4.138
100.00	940.852	170.512	94.676	1206.041	32.661	34.816	3.662
92.00	1056.684	209.551	105.164	1371.400	27.225	28.992	3.281
90.00	1085.642	219.995	106.496	1412.132	26.582	28.305	3.193
90.00	1085.642	219.995	107.803	1413.439	25.957	27.635	3.193
87.00	1129.828	236.171	111.762	1477.760	24.117	25.667	3.066
80.00	1232.929	276.319	120.731	1629.979	20.110	21.384	2.771
70.00	1380.216	339.555	132.753	1852.524	15.079	16.014	2.355
60.00	1527.503	409.766	143.646	2080.916	10.850	11.508	1.948
50.00	1674.791	486.962	153.191	2314.943	7.405	7.844	1.552
49.00	1689.519	495.064	154.062	2338.646	7.103	7.524	1.513
42.75	1781.574	547.237	159.232	2488.043	5.434	5.752	1.303
40.00	1822.078	571.023	161.627	2554.728	4.688	4.960	1.213
30.00	1969.365	661.760	168.634	2799.760	2.608	2.756	0.893
20.00	2116.652	759.107	173.936	3049.694	1.146	1.210	0.585
10.00	2263.939	863.294	177.294	3304.528	0.283	0.299	0.287
0.00	2411.227	974.585	178.468	3564.280	0.000	0.000	0.000

---------(END LOAD CASE 2 -- MOMENTS AND DEFLECTIONS)----------

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Design..... : 85 mph / 74 mph + 1/2" ice
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POLE SHAFT SEGMENTS -- ACTUAL VS. ALLOWABLE STRESSES:

LOAD CASE 2: WIND VELOCITY = 73.61 mph with 0.50 inches Radial Ice.
Note: Per TIA/EIA Sec. 3.1.1.1: Allow a 1/3 stress increase for poles under 700 feet in height. The allowable stresses shown include the factor of 1.333

Segmnt Elev (ft)	[---------- ACTUAL STRESSES ----------] Bending [fb] (ksi)	Axial [fa] (ksi)	Torsion [ft] (ksi)	Shear [fv] (ksi)	Combined [Ftot] (ksi)	Allow. Stress [Fb] (ksi)	Actual/ Allowable [Ftot/Fb] Ratio
178.00	0.113	0.000	0.000	0.000	0.113	52.00	0.0022
178.00	0.113	0.010	0.017	0.034	0.151	52.00	0.0029
178.00	0.113	0.067	0.199	0.399	1.052	52.00	0.0202
178.00	0.130	0.210	0.324	0.520	1.502	52.00	0.0289
170.00	4.657	0.224	0.280	0.525	5.077	52.00	0.0976
170.00	4.657	0.277	0.448	0.860	5.430	52.00	0.1044
170.00	4.723	0.411	0.554	0.972	5.774	52.00	0.1110
160.00	13.532	0.415	0.468	0.945	14.160	52.00	0.2723
160.00	13.532	0.464	0.619	1.248	14.365	52.00	0.2762
160.00	13.630	0.587	0.707	1.349	14.656	52.00	0.2819
150.00	23.869	0.580	0.605	1.300	24.671	52.00	0.4744
150.00	23.869	0.625	0.742	1.574	24.821	52.00	0.4773
150.00	23.985	0.739	0.816	1.666	25.095	52.00	0.4826
140.00	34.851	0.730	0.706	1.607	35.805	52.00	0.6886
136.00	38.430	0.744	0.668	1.585	39.369	52.00	0.7571
132.00	26.829	0.479	0.406	1.000	27.416	52.00	0.5272
130.00	28.577	0.487	0.407	1.008	29.167	52.00	0.5609
120.00	32.761	0.495	0.358	0.980	33.337	52.00	0.6411
110.00	36.007	0.505	0.317	0.956	36.579	52.00	0.7034
100.00	38.543	0.516	0.283	0.936	39.116	52.00	0.7522
92.00	40.171	0.546	0.259	0.922	40.768	52.00	0.7840
90.00	35.669	0.470	0.223	0.789	36.182	52.00	0.6958
90.00	35.702	0.480	0.230	0.802	36.226	52.00	0.6967
87.00	34.913	0.476	0.215	0.784	35.431	52.00	0.6814
80.00	37.076	0.494	0.207	0.787	37.610	52.00	0.7233
70.00	38.145	0.508	0.187	0.775	38.690	52.00	0.7440
60.00	38.971	0.523	0.170	0.763	39.527	52.00	0.7601
50.00	39.601	0.538	0.156	0.752	40.170	52.00	0.7725
49.00	39.655	0.564	0.154	0.751	40.250	52.00	0.7740
42.75	33.784	0.477	0.123	0.616	34.285	52.00	0.6593
40.00	33.870	0.483	0.120	0.614	34.376	52.00	0.6611
30.00	34.106	0.500	0.111	0.605	34.628	52.00	0.6659
20.00	34.253	0.518	0.102	0.597	34.792	52.00	0.6691
10.00	34.329	0.536	0.095	0.591	34.885	52.00	0.6709
0.00	34.349	0.550	0.088	0.584	34.918	52.00	0.6715

---------(END LOAD CASE 2 -- ACTUAL VS. ALLOWABLE STRESSES)----------

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 500 • Columbus, Ohio 43215
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MONOPOLE BASE PLATE DESIGN SPREADSHEET (Ver 1.21 6/1/96)

TITLE: **178-FT POLE**
SITE: **ANDOVER, CT**
OWNER: **NEXTEL COMMUNICATIONS**
COMM. NO: **29200-028**
DATE: 14-Jan-00

MOMENT	**4345**	FT-KIPS
AXIAL	**39.0**	KIPS
BASE DIAM, DF	**56.910**	INCHES
(PT-to-PT), DP	**57.788**	INCHES *(18-SIDED SHAFT)*
MIN. BOLT CIRCLE, BC	**63.788**	INCHES

USE: BC = **64.00** INCHES

NUMBER OF BOLTS	**16**	**20**	**24**	**28**	**32**
Y-DISTANCE	9	12	15	18	21
D_bpl (a)	59.788	59.788	59.788	59.788	59.788
D_bpl (b)	62.156	64.923	67.188	68.872	69.845
MAX: D_bpl	62.16	64.92	67.19	68.87	69.85

USE BASE PL WIDTH = **64** INCHES (SQUARE)

MOM. INERTIA, IB	8192.00	10240.00	12288.00	14336.00	16384.00
BOLT TENSION, T	203.67	162.94	135.78	116.38	101.84
ALLOWABLE TENSION = 3.25 in^2 X 0.6 F_Y X 1.333	195.00	195.00	195.00	195.00	195.00
BOLT COMPR, C	206.11	164.89	137.41	117.78	103.05

USE: N = **20** BOLTS BOLT DIAM **2 - 1/4** INCHES

SPECIFICATION **ASTM A615 #18J GR 75**

PLATE MOMENT, Mpl	1995.14	1995.14	1995.14	1995.14	1995.14
BEND PLANE, W	33.60	34.90	38.11	40.49	41.87

	BASE PLATE THICKNESS, (INCHES)				
FY = 36 KSI	3.146	3.087	2.954	2.866	2.818
FY = 42 KSI	2.913	2.858	2.735	2.653	2.609
FY = 50 KSI	2.669	2.619	2.506	2.432	2.391
FY = 60 KSI	2.437	2.391	2.288	2.220	2.183
FY = 65 KSI	2.341	2.297	2.198	2.133	2.097

USE: PLATE THK = **3** INCHES USE: F_Y = **50** KSI

BASE PL WEIGHT = **1662** LBS SPECIFICATION **ASTM A572, GR 50**

Corner Chamfer = ***14.0 in.*** *(14.50 in. max)*
Hole Cut Out = ***46.0 in.*** *(51.91 in. max)*

BASE PLATE DESIGN SUMMARY

USE: BASE PLATE **3** INCHES THICK X **64** IN. SQUARE
PLATE WEIGHT **1.662** KIPS FY = **50** KSI
WITH **20** BOLTS BOLT CIRCLE = **64.00** INCHES
BOLT DIAMETER **2 - 1/4** INCHES SPECIFICATION = ASTM A615 #18J GR 75

SPREAD FOOTING FOR POLES PROGRAM BY PAUL J. FORD and COMPANY

JOB NO. 29200-028 DATE 01-14-2000

178-FT POLE: ANDOVER_CT

INPUT: SPREAD FOOTING (PAD and PIER) FOR POLES

POLE LOADS: POLE WEIGHT = 39.00 kips (pole,antenna,ice,mounts,etc.)
OVERTURNING MOMENT = 4675.00 ft-k (at the top of the pier)
TOTAL HORIZONTAL = 35.50 kips (at the top of the pier)
DESIGN SAFETY FACTOR AGAINST OVERTURNING = 1.50

CONCRETE: CONCRETE STRENGTH = 3000 psi at 28 days
REINFORCING STEEL STRENGTH = 60000 psi (ASTM A615 grade 60)

SOIL: WATER TABLE BELOW BOTTOM OF FOOTING
SOIL WT = 100 pcf (dry)
ALLOWABLE SOIL BEARING = 6000 psf

FOOTING SIZE: WIDTH = 24.0 ft LENGTH = 24.0 ft
THICKNESS = 4.00 ft DEPTH = 9.50 ft to bottom
PIERS = 8.00 ft square PIER 0.5 ft above grade
CONCRETE WEIGHT = 150 pcf

OUTPUT: SPREAD FOOTING (PAD and PIER) FOR POLES

VOLUME OF CONCRETE = 2688 ft^3 (99.56 cubic yards)

WEIGHT OF POLE =====> 39.00 kips
WEIGHT OF CONCRETE => 403.20 kips (2688 x 0.150)
WEIGHT OF SOIL =====> 281.60 kips (2816 x 0.100)
TOTAL WEIGHT = 723.80 kips

OVERTURNING MOMENT = 4675.00 ft-k + (35.50 k x 10.00 ft) = 5030 ft-kips
RESISTING MOMENT = 723.80 k x (24.00 ft / 2) = 8686 ft-kips

SAFETY FACTOR = Mresist / O.T.M. = 8686 / 5030 = 1.73 > 1.50 O.K.

ULTIMATE OVERTURNING MOMENT = 5030 ft-k x 1.50 = 7545 ft-kips
ULTIMATE NET SOIL BEARING PRESSURE = 11809 psf

GROSS SOIL BEARING = 3981 psf (includes soil overburden)
SOIL OVERBURDEN = 950 psf (soil overburden)
NET SOIL BEARING = 3031 psf < 6000 psf O.K.

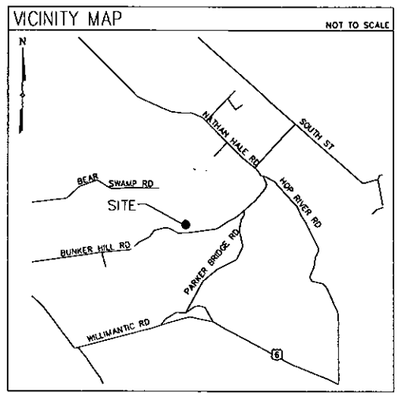
BENDING MOMENT IN PIER = 4675 ft-k +(35.50 k x 6.00 ft) = 4888 ft-kips
AREA OF REINF STEEL REQUIRED IN THE PIER = 56.69 sq in (40 no. 11 bars)
(.5 % = 46.08 sq in)

BENDING MOMENT IN FOOTING = 5030 ft-kips
FOOTING REINFORCING = 1.44 in^2/ft = 28 no. 10 bars @ 10.59 in. o.c.
(.18 % = 1.04 in^2/ft)

BENDING SHEAR IN THE FOOTING = 598.36 kips
ALLOWABLE BENDING SHEAR = 897.32 kips O.K.

verizonwireless

VICINITY MAP — NOT TO SCALE



SITE NAME:
ANDOVER

104 BUNKER HILL ROAD
ANDOVER, CT 06232
TOLLAND COUNTY

PROJECT SUMMARY

SITE NAME:	ANDOVER
CANDIDATE ADDRESS:	104 BUNKER HILL ROAD ANOVER, CT 06232 TOLLAND COUNTY
PROPERTY OWNER:	DEBORAH R. GREEN & LEON PRICE 104 BUNKER HILL ROAD ANDOVER, CT 06232 TOLLAND COUNTY
APPLICANT:	VERIZON WIRELESS 20 ALEXANDER DRIVE WALLINGFORD, CT 06492
ARCHITECT:	TECTONIC ENGINEERING CONSULTANTS 4 WEST MAIN STREET SUITE 401 NORTHBOROUGH, MA 01532
SURVEYOR:	TECTONIC ENGINEERING CONSULTANTS 4 WEST MAIN STREET SUITE 401 NORTHBOROUGH, MA 01532
USGS QUAD SHEET:	COLUMBIA
HORIZONTAL DATUM:	NORTH AMERICAN DATUM OF 1983 (NAD83)
VERTICAL DATUM:	NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD)
JURISDICTION:	TOWN OF ANDOVER
ZONING:	R-80 - RESIDENTIAL
TAX IDENTIFICATION:	MAP 33, BLOCK 36, LOT 3
SITE COORDINATES:	CENTER OF LEASE AREA LATITUDE: 41°44'16" (NAD 83) LONGITUDE: 72°20'59" (NAD 83) ELEVATION: 524' (NGVD 29)

Rev	Date	Revision	By	Approved
1	02/24/00	ISSUED FOR COMMENT - ZONING	MLF	
2	4/11/00	ISSUED FOR CONNETICUT SITING COUNCIL	LSB	

DRAWING CONTROL

Designed by: CPK	Drawn by: MLF	Checked by: CPK

Purpose	Released by	Date
O For Comment		
● For Approval		
O For Bid		
O For Construction		

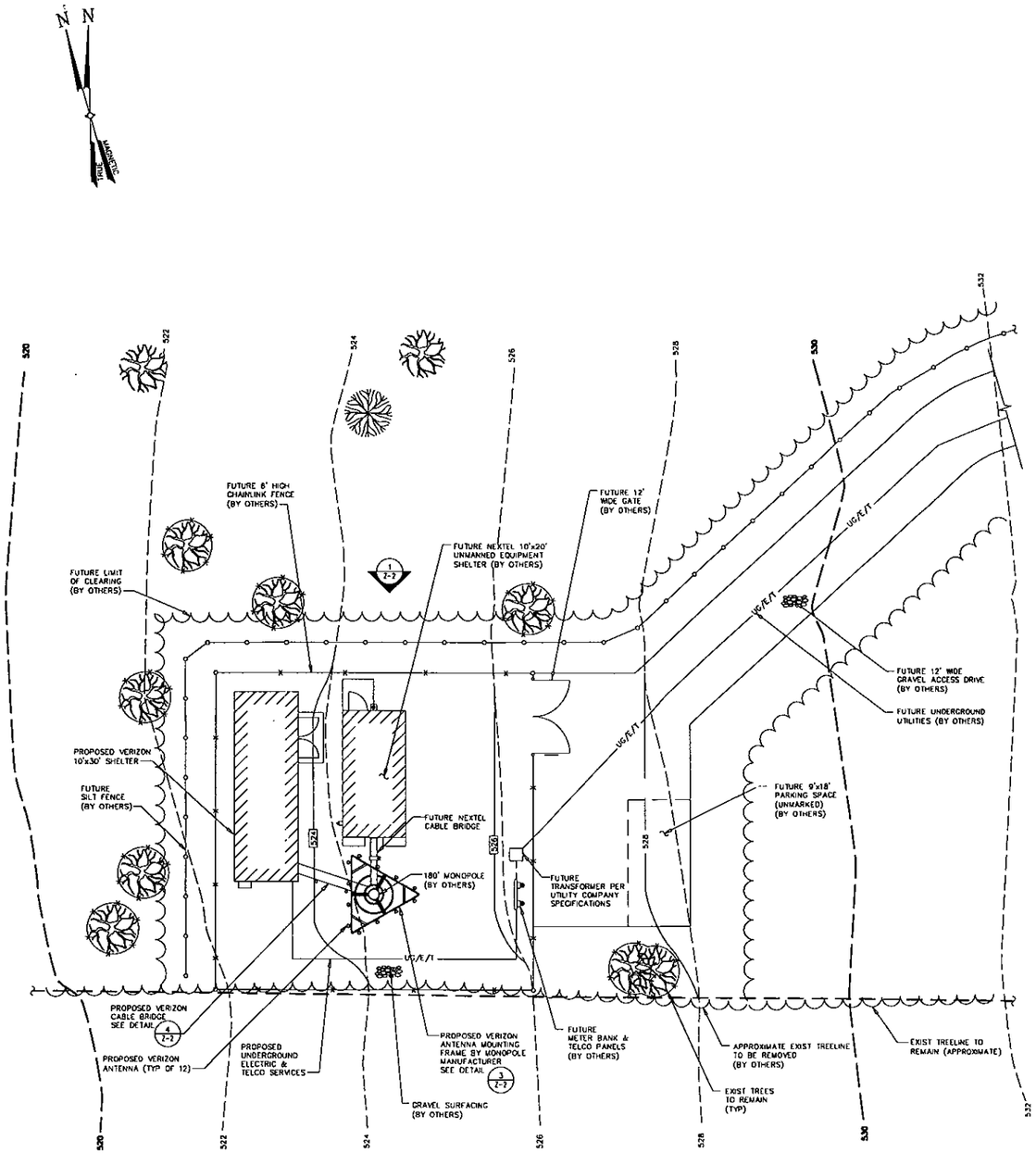
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492
verizonwireless
Phone: (860) 930-0911
Fax: (203) 294-7424

TECTONIC ENGINEERING CONSULTANTS P.C.
4 WEST MAIN STREET
NORTHBOROUGH, MA 01532
OFFICE: (508) 393-7411
FAX: (508) 393-4740

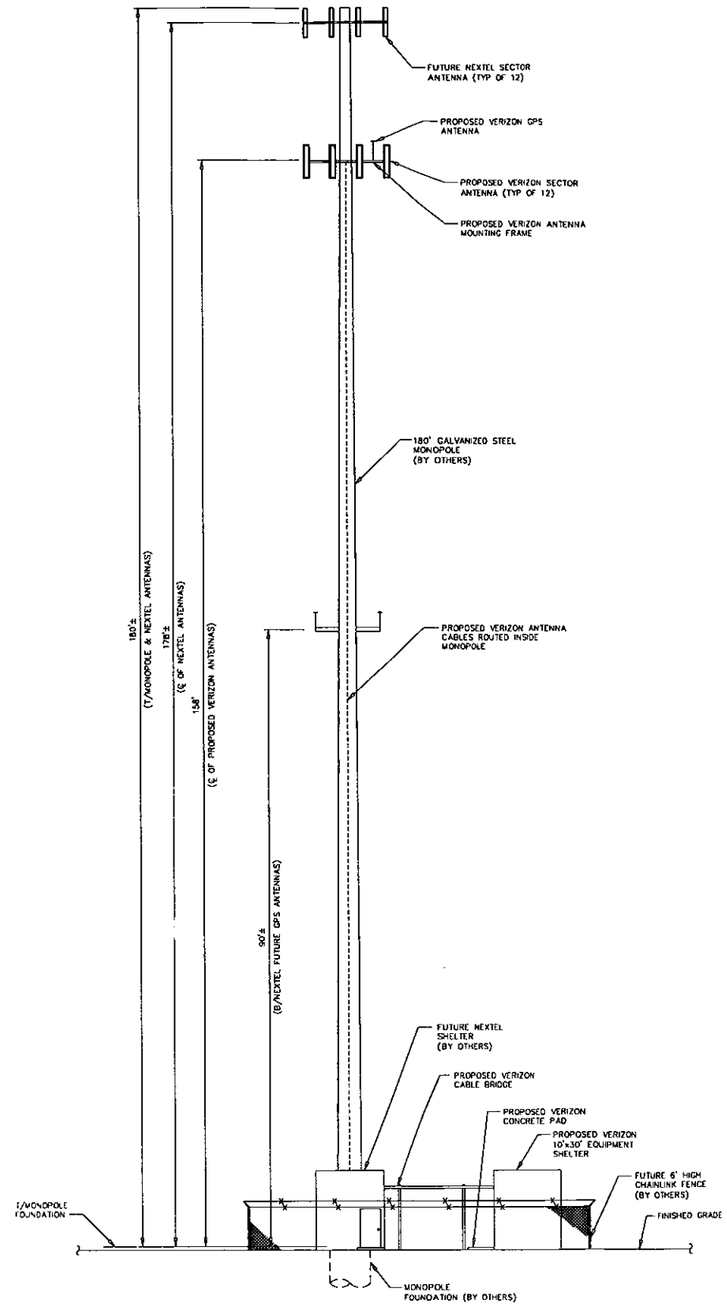
TITLE SHEET

ANDOVER
104 BUNKER HILL ROAD
ANDOVER, CT 06232
TOLLAND COUNTY

Date	Work Order	Drawing No	Rev
02/24/00	1994.ANDOVER	T-1	0
Scale: AS SHOWN			



1 Z-1 SITE DETAIL PLAN
SCALE : 1" = 10'
10' 0 5' 10' 20'



2 Z-1 ELEVATION
SCALE : 1" = 10'
10' 0 5' 10' 20'

LEGEND

532	CONTOUR
530	INDEX CONTOUR
	PROPOSED EASEMENT LINE
	EXIST UTILITY POLE
UG/E/T	PROPOSED UNDERGROUND ELECTRIC & TELCO SERVICES
UG/E/T	FUTURE UNDERGROUND UTILITIES (BY OTHERS)
	PROPOSED LIMIT OF CLEARING (BY OTHERS)
	EXIST TREE LINE
	EXIST TREE LINE (TO BE REMOVED BY OTHERS)
524	FUTURE CONTOURS (BY OTHERS)
	EDGE OF BUILDING
	FUTURE SILT FENCE (BY OTHERS)
	FUTURE CHAINLINK FENCE (BY OTHERS)

GENERAL NOTES

1. INTEGRITY OF FUTURE 180' MONOPOLE TO SUPPORT ADDITIONAL LOADS MUST BE VERIFIED BY A REGISTERED PROFESSIONAL ENGINEER PRIOR TO THE INSTALLATION OF ANTENNAS OR ANTENNA MOUNTING HARDWARE.

Rev	Date	Revision	Approved
1	2/24/00	ISSUED FOR COMMENT - ZONING MLF	
2	4/11/00	ISSUED FOR CONNECTICUT SITING COUNCIL LSB	

DRAWING CONTROL

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SITE DETAIL PLAN

ANDOVER
104 BUNKER HILL ROAD
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TOLLAND COUNTY

Date	Work Order	Drawing No.	Rev
2/24/00	1994.ANDOVER	Z-1	0

Scale: AS SHOWN