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@po.state.ct.us
www.ct.gov/csc

June 10, 2004

Thomas J. Regan, Esq.
Brown, Rudnick, Berlack, Israels LLP
City Place I, 38th Floor
185 Asylum Street
Hartford, CT 06103-3402

RE: **TS-SPRINT-078-040514** – Sprint Spectrum L.P. request for an order to approve tower sharing at an existing telecommunications facility located at 1725 Stafford Road, Mansfield, Connecticut.

Dear Attorney Regan:

At a public meeting held June 9, 2004, 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.

The proposed shared use is to be implemented as specified in your letter dated May 14, 2004.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/cm

c: Honorable Elizabeth Patterson, Mayor, Town of Mansfield
Gregory Padick, Town Planner, Town of Mansfield
Michele G. Briggs, Southwestern Bell Mobile Systems, LLC
Kenneth C. Baldwin, Esq., Robinson & Cole LLP
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae, L.L.P.

BROWN
RUDNICK
BERLACK
ISRAELS LLP

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

TS-SPRINT-078-040514

May 14, 2004

VIA HAND DELIVERY

Pamela B. Katz, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Sprint / Tower Share Proposal / Mansfield

Dear Chairman Katz:

Enclosed for filing are an original and twenty-five copies of Sprint Spectrum L.P. d/b/a Sprint PCS's Tower Sharing Proposal for the Town of Mansfield's tower at 1725 Stafford Road in Mansfield. Three full-size copies of the site plan are enclosed for bulk filing.

Also enclosed is a check in the amount of $500.00 representing the filing fee.

Please do not hesitate to contact me directly should you have any questions.

Very truly yours,

BROWN RUDNICK BERLACK ISRAELS LLP

By: _____
Thomas J. Regan

Enclosures

#40184213 v\1 - merciecm - nx@c501!.doc - 80563/2975

CityPlace I
Hartford, Connecticut 06103
860.509.6500
fax 860.509.6501
www.brownrudnick.com

Boston | Dublin | London | New York | Providence

ORIGINAL

CONNECTICUT SITING COUNCIL

In re:

Request of Sprint Spectrum, L.P. d/b/a Sprint PCS for the Approval of the Shared Use of the Town of Mansfield's tower located at 1725 Stafford Road in Mansfield, Connecticut.	:	Petition No. ____
	:	May 14, 2004

TOWER SHARING PROPOSAL

Sprint Spectrum L.P. d/b/a Sprint PCS ("Sprint") proposes to share a 170-foot monopole at 1725 Stafford Road in Mansfield (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 shared use of this Facility.

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

A. The Facility

The Facility, located at 1725 Stafford Road, is owned by the Town of Mansfield. The existing Facility contains a 170' monopole on which Verizon, Cingular and T-Mobile currently locate their antennas.

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

B. Proposed Project

Sprint will initially install 12 panel antennas on 13-foot low profile platform with an antenna centerline at 130 feet. Sprint will also install a small global positioning system antenna in the compound area. An ice bridge will connect the tower and Sprint's equipment building. The equipment building sits on a 9-foot 5-inch by 18-foot concrete foundation. Utilities will be brought in underground to the compound.

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' antennas and equipment at the TIA/EIA minimum recommended wind speed. Attached as Exhibit B is a report from Paul J. Ford and Company, Structural Engineers with additional information on the structural integrity of the tower.

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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185 ASYLUM STREET
HARTFORD, CT 06103
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E. Economic Feasibility

Sprint is a wireless telecommunications provider licensed by the Federal Communications Commission in 32 major United States trading areas, including Connecticut. Sprint has entered into a lease with the Town of Mansfield for the purpose of locating Sprint's antennas and associated equipment at the Facility to provide wireless telecommunications service to this area of Mansfield. 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 Town of Mansfield 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.
- The proposal will have an insignificant visual impact and will minimally alter the physical characteristics of the Facility.
- 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.

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CITYPLACE I
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(860) 509-6500

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

- 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 1 monthly maintenance/inspection visit.

G. Public Safety Concerns / Benefits

In accordance with the Statute, there are no known public safety concerns associated with this proposal. To verify that the Facility will not pose a health threat, Sprint analyzed the amount of radio-frequency energy which will be emitted by Sprint's antennas at the Facility (see Exhibit C). This analysis was performed using a worst case scenario with the antennas on the tower pointing straight down. Under this worse case scenario, the highest calculated levels of radio-frequency energy are measured at the base of the tower. Sprint's analysis determined that the amount of radio-frequency energy emitted by the antennas (known as the power density), as calculated at the base of the monopole would be 0.123130 milliwatts per centimeter squared ("mW/cm^2"). A power density of 0.123130 mW/cm^2 means the radio-frequency energy at the Facility will never be greater than 12.313 % of the maximum permissible exposure, which is 1.0 mW/cm^2 as specified by the Federal Communication Commission.

In addition, Sprint prepared a cumulative power density for all of the carriers on the tower (also included as Exhibit C). The cumulative power density indicates that the radio-frequency energy at the Facility will never be greater than 32.46 % of the maximum permissible exposure. Therefore, Sprint's analyses clearly show that the maximum level of radio-frequency

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

energy emitted from the Facility by Sprint's antennas, or cumulatively, will be well below all applicable health and safety limits.

Moreover, Sprint expects to enhance the safety of the Mansfield community by improving the wireless communications of local residents and travelers through the area. This Facility will improve Sprint's coverage gap on and around Route 32 and Route 195. Specifically, this Facility will cover approximately 1.93 miles of Route 32 and 2.83 miles along Route 195.

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 Town of Mansfield's tower at 1725 Stafford Road in Mansfield, Connecticut.

Sprint Spectrum, L.P.
d/b/a Sprint PCS

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

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

Certificate of Service

This is to certify that on this 14th day of May, 2004, the foregoing Tower Sharing Proposal was sent, via first class mail, to the following:

Martin Berliner, Town Manager
Town of Mansfield
4 South Eagleville Road
Storrs, CT 06268

By: _____
Thomas J. Regan

40184196

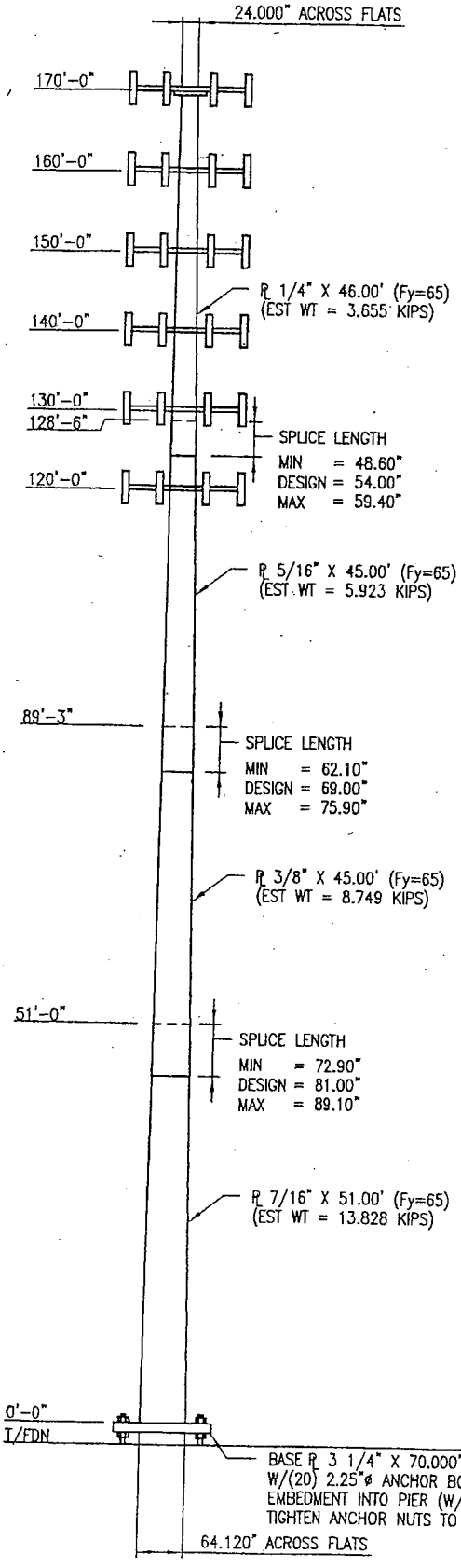
BROWN RUDNICK
BERLACK ISRAELS LLP
CITYPLACE I
185 ASYLUM STREET
HARTFORD, CT 06103
(860) 509-6500

CT 33 XC 557 TCP MANSFIE

Exhibit B

PennSummit Tubular, LLC
www.pennsummit.com
225 Kiwanis Boulevard, West Hazleton, PA 18202
Phone: (888) 847-6537 Fax: (888) 460-6885

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street, Suite 500, Columbus, Ohio 43215
(614) 221-6679 Fax: (614) 448-4105 www.PJFweb.com



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JOB DATA			
Page 1 of 2		Job No.	29202-0365
By	MFP	Design No.	#19122
Chk'd By	MFP	Date	12-06-2002
		Rev. No.	Rev. Date
Pole	170' MONOPOLE		
Site	MANSFIELD CENTER II, TOLLAND CO., CT		
Owner	TCP COMMUNICATIONS		
Ref. No.			
Design	85 MPH / 74 MPH + 1/2" RADIAL 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:	0.247029 IN/FT
Shaft Steel:	ASTM A607 GRADE 65
Base PL Steel:	ASTM A572 GRADE 55 (55 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) DECIBEL DB896H PANEL
-	TOP	14' LOW PROFILE PLATFORM
13-24	160.00	(12) DECIBEL DB896H PANEL
-	160.00	14' LOW PROFILE PLATFORM
25-36	150.00	(12) DECIBEL DB896H PANEL
-	150.00	14' LOW PROFILE PLATFORM
37-48	140.00	(12) DECIBEL DB896H PANEL
-	140.00	14' LOW PROFILE PLATFORM
49-60	130.00	(12) DECIBEL DB896H PANEL
-	130.00	14' LOW PROFILE PLATFORM
61-72	120.00	(12) DECIBEL DB896H PANEL
-	120.00	14' LOW PROFILE PLATFORM

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

STATE OF CONNECTICUT
KIRK R. HALL
No. PEN23050
LICENSED
PROFESSIONAL ENGINEER

12-6-02

Site #: CT0100 3
File Type: Const
Section: A+E

Elevation	85 MPH WIND		50 MPH WIND	
	Lateral Deflection (Inches)	Rotation (sway) (degrees)	Lateral Deflection (Inches)	Rotation (sway) (degrees)
TOP	121.5	6.217	42.0	2.151

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	0.2500	54.00	24.000	35.363
2	45.00	0.3125	69.00	33.752	44.868
3	45.00	0.3750	81.00	42.823	53.939
4	51.00	0.4375		51.521	64.120

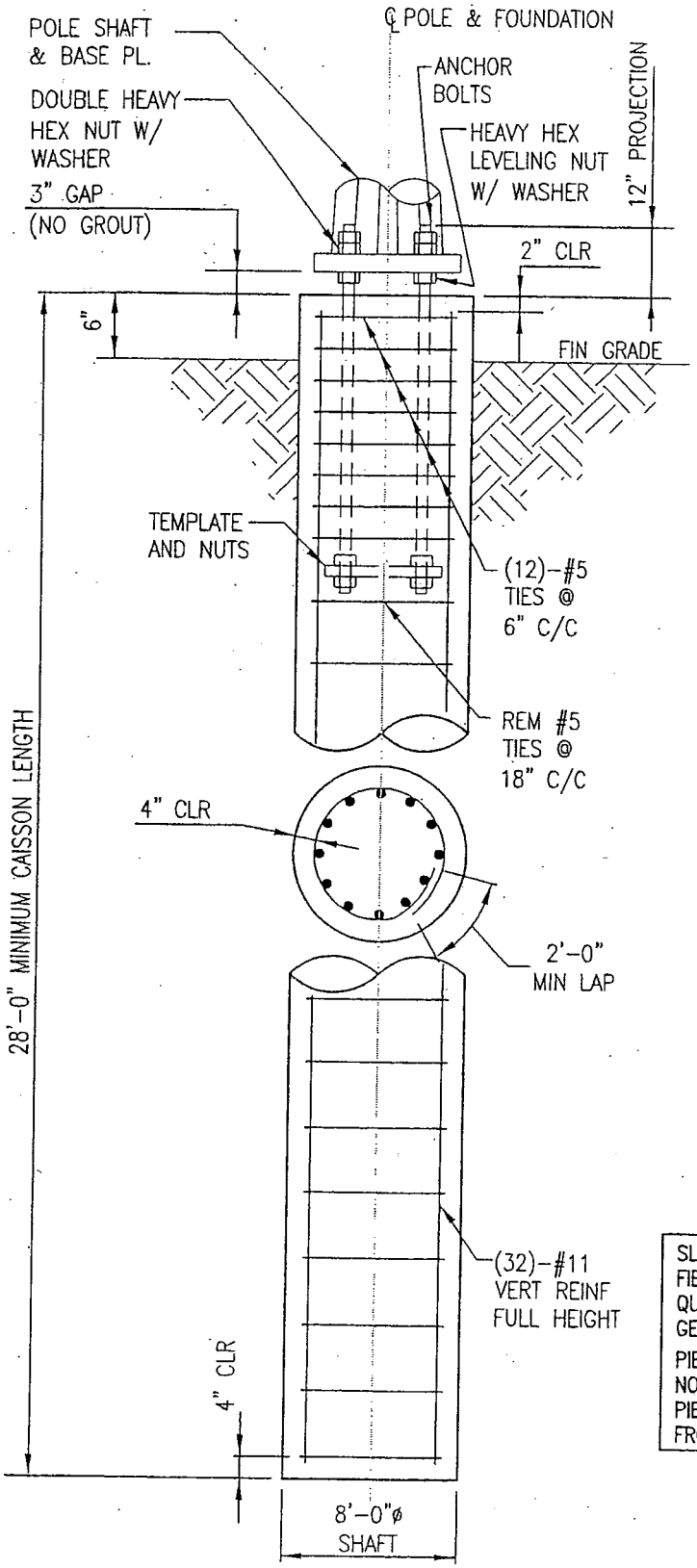
NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES

BASE REACTIONS FOR FOUNDATION DESIGN

MOMENT =	5555 ft-kips
SHEAR =	45 kips
AXIAL =	45 kips

PennSummit Tubular, LLC
www.pennsummit.com
225 Kiwanis Boulevard, West Hazleton, PA 18202
Phone: (888) 847-6537 Fax: (888) 460-6885

P. J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street, Suite 500, Columbus, Ohio 43215
(614) 221-6679 Fax: (614) 448-4105 www.PJFweb.com



JOB DATA			
Page 2 of 2		Job No.	29202-0365
By	MFP	Design No.	#19122
Chk'd By	MFP	Date	12-06-2002
		Rev. No.	Rev. Date
Pole	170' MONOPOLE		
Site	MANSFIELD CENTER II, TOLLAND CO., CT		
Owner	TCP COMMUNICATIONS		
Ref. No.			
Design	85 MPH / 74 MPH + 1/2" RADIAL ICE ACCORDING TO TIA/EIA-222-F 1996		

THERE ARE TWO NOTCHES ON THE ANCHOR BOLT TEMPLATES LOCATED 180° APART. THE CONTRACTOR SHALL POSITION THE ANCHOR BOLTS AND TEMPLATES IN THE FOUNDATION PER THE SUMMIT MANUFACTURING ANCHOR BOLT TEMPLATE DRAWING.

NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. CONCRETE SHALL BE AIR ENTRAINED (6±1.5%). CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.46. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318, LATEST EDITION. FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 336, "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF DRILLED PIERS", LATEST EDITION.

2. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 (GRADE 60) EXCEPT THAT CAISSON TIES MAY BE ASTM A-615 (GRADE 40). ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION, UNLESS DETAILED OTHERWISE ON THIS DRAWING.

3. SEE PAGE 1 FOR ANCHOR BOLT QUANTITY, SIZE, LENGTH, AND BOLT CIRCLE.

4. TOTAL CONCRETE = 52.5 CUBIC YARDS.

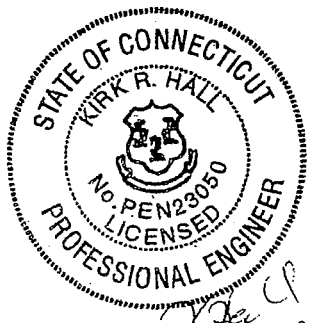
5. FOUNDATION DESIGN IS BASED UPON GEOTECHNICAL EXPLORATION REPORT
PREPARED BY: JAWORSKI GEOTECH, INC.
REPORT NO.: 01257G
DATED: 04-12-2001

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

7. THE FOUNDATION WAS DESIGNED USING THE FOLLOWING SERVICE LOADS:
MOMENT: 5555 FT-KIPS
SHEAR: 45 KIPS
AXIAL: 45 KIPS

SLOPE STABILITY SHALL BE FIELD VERIFIED BY QUALIFIED, REGISTERED, GEOTECHNICAL ENGINEER.

PIER SHALL BE PLACED NO CLOSER THAN 3 PIER DIAMETERS AWAY FROM ANY CUT SLOPE



12-6-02

CAISSON (DRILLED PIER) FOUNDATION

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.04.0000 Fri Dec 6, 2002 - 10:57:50 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29202-0365 Design No: #19122 Engineer : MFP
Description : 170' Monopole - MANSFIELD CENTER II, TOLLAND CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : - Client: PennSummit Tubular, LLC
Status..... : Final Design Revision: Rev. Date :

S U M M A R Y O F C U R R E N T C A I S S O N D E S I G N

Diameter (ft) .....:	8.00	Compression (kips):	45.00	Friction S.F .....:	2.00
Min. Depth (ft) ...:	27.50	Horizontal (kips) :	45.00	Lateral S.F .....:	2.00
Depth Used (ft) ...:	27.50	Uplift (kips) ....:	0.00	Concrete S.F .....:	1.30
Rebar Area (in^2) .:	49.92	Moment (Ft-kips) .:	5555.0	Concrete F'c (psi) :	3000.0
Rebar Used .....:	(32)#11	Full Cohesion (ft):	24.00	Steel Cover (in) ..:	4.00
Water at (ft) .....:	31.00	Rock at (ft) .....:	99.00		

SOIL PROFILE :

Soil Layer	Layer Thickness (ft)	Unit Weight (pcf)	Ult. Skin Friction (psf)	Allowable Bearing (psf)	Friction Angle- Phi (deg)	Passive Coeff.- KP	Cohesion (c) (psf)
1	5.00	100.00	0.00	0.00	0.00	1.000	0.00
2	19.00	115.00	0.00	0.00	28.00	2.770	0.00
3	7.00	125.00	0.00	3000.00	35.00	3.690	0.00
4	10.00	62.60	0.00	3000.00	35.00	3.690	0.00

LATERAL / MOMENT CAPACITY (CHECK) :	Min Design	Actual Design
Caisson Diameter (ft) .....:	8.00	8.00
Height Above Grade (ft) .....:	0.50	0.50
Depth Below Grade (ft) .....:	27.50	27.50
Concrete Volume (CY) .....:	52.13	52.13
Applied Moment From Loads (Working), Mwork(Ft-kip):	6520.25	6520.25
Resisting Moment From Soil (Ult), Mult(Ft-kip) ...:	13190.10	13190.10
Moment S.F. (Mult / Mwork) .....:	2.02	2.02
Applied Horizontal Load (Working), Hwork (Kips) ..:	45.00	45.00
Horizontal Soil Resistance (Ultimate), Hult (Kips):	93.63	93.63
Horizontal S.F. (Hult / Hwork) .....:	2.08	2.08
Center of Rotation (from grade) (ft) .....:	20.95	20.95
Inflection Point (Max Design Moment Location (ft) :	7.30	7.30
Maximum Factored Design Moment for Reinf. (Ft-kip):	8560.81	8560.81
Area Steel Required From Loads (in^2) .....:	45.00	45.00
ACI Minimum Steel (0.5%) (in^2) .....:	36.19	36.19
Area Reinf. Steel Provided (in^2) .....:	49.92	49.92

UPLIFT CAPACITY CHECK :		
Actual Uplift on Caisson (Kips) .....:	0.00	0.00
Allowable Uplift Capacity (Kips) .....:	168.89	168.89

COMPRESSION CAPACITY CHECK :		
Actual Compression on Caisson (Kips) .....:	45.00	45.00
Total Compression (Includes Concrete Wt.) (Kips) .:	117.88	117.88
Allowable Compression Capacity (Kips) .....:	150.80	150.80

CAISSON DESIGN:
USE: 8.00 ft Diameter X 28.00 ft Long (Concrete Volume = 52.13 CY)
Reinf: (32)#11 Vert, w/Closed Ties: (12)#5 @6.0", remaining ties @18.0" (ASTM A615)

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.04.0000 Fri Dec 6, 2002 - 10:38:23 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29202-0365 Design No: #19122 Engineer : MFP
Description : 170' Monopole - MANSFIELD CENTER II, TOLLAND CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : - Client: PennSummit Tubular, LLC
Status..... : 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.....: 170.00 ft
Top Diameter.....: 24.000 in
Bottom Diameter.....: 64.120 in
Pole Shape.....: 18-Sided Polygon
Splice Joint Type.....: Taper shaft - Slip Joint
Shaft Taper.....: 0.247029 (in/ft)
Shaft Steel Weight.....: 32.155 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	0.25000	65	24.000	35.363	54.00
2.	45.000	0.31250	65	33.752	44.868	69.00
3.	45.000	0.37500	65	42.823	53.939	81.00
4.	51.000	0.43750	65	51.522	64.120	

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	128.50	11.966	25.523	577.206	0.6051
2.	1	85.0	0.00	89.25	20.025	33.300	1825.158	0.9361
3.	1	85.0	0.00	51.00	29.831	37.183	3215.491	0.9480
4.	1	85.0	0.00	0.00	44.776	42.195	5264.724	0.8838
>> MAXIMUM BASE REACTIONS :					44.776	42.195	5264.724 <<	

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	170.00	121.513	6.217	
2.	73.6	0.50	Top	170.00	102.441	5.266	
3.	50.0	0.00	Top	170.00	41.955	2.151	

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.04.0000 Fri Dec 6, 2002 - 10:38:23 am

Job No.....: 29202-0365 Design No: #19122 Engineer : MFP
Description : 170' Monopole - MANSFIELD CENTER II, TOLLAND CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : - Client: PennSummit Tubular, LLC
Status..... : 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	170.000	24.000	0.25000	15.16	96.00	18.84	1342.6
2.	<arm [1]>	170.000	24.000	0.25000	15.16	96.00	18.84	1342.6
3.	<arm [2]>	170.000	24.000	0.25000	15.16	96.00	18.84	1342.6
4.	<arm [3]>	170.000	24.000	0.25000	15.16	96.00	18.84	1342.6
5.		160.000	26.470	0.25000	16.91	105.88	20.81	1806.6
6.	<arm [4]>	160.000	26.470	0.25000	16.91	105.88	20.81	1806.6
7.	<arm [5]>	160.000	26.470	0.25000	16.91	105.88	20.81	1806.6
8.		150.000	28.941	0.25000	18.65	115.76	22.77	2366.8
9.	<arm [6]>	150.000	28.941	0.25000	18.65	115.76	22.77	2366.8
10.	<arm [7]>	150.000	28.941	0.25000	18.65	115.76	22.77	2366.8
11.		140.000	31.411	0.25000	20.39	125.64	24.73	3032.3
12.	<arm [8]>	140.000	31.411	0.25000	20.39	125.64	24.73	3032.3
13.	<arm [9]>	140.000	31.411	0.25000	20.39	125.64	24.73	3032.3
14.		130.000	33.881	0.25000	22.13	135.52	26.69	3812.1
15.	<arm [10]>	130.000	33.881	0.25000	22.13	135.52	26.69	3812.1
16.	<arm [11]>	130.000	33.881	0.25000	22.13	135.52	26.69	3812.1
17.	top sec(2)	128.500	34.252	0.25000	22.39	137.01	26.98	3939.5
18.	bot sec(1)	124.000	35.363	0.31250	18.19	113.16	34.76	5394.6
19.		120.000	35.851	0.31250	18.47	114.72	35.25	5623.1
20.	<arm [12]>	120.000	35.851	0.31250	18.47	114.72	35.25	5623.1
21.	<arm [13]>	120.000	35.851	0.31250	18.47	114.72	35.25	5623.1
22.		110.000	38.322	0.31250	19.86	122.63	37.70	6879.0
23.		100.000	40.792	0.31250	21.25	130.53	40.15	8309.2
24.		90.000	43.262	0.31250	22.65	138.44	42.60	9925.1
25.	top sec(3)	89.250	43.448	0.31250	22.75	139.03	42.78	10054.1
26.	bot sec(2)	83.500	44.243	0.37500	19.04	117.98	52.21	12690.7
27.		80.000	45.108	0.37500	19.45	120.29	53.24	13455.9
28.		70.000	47.578	0.37500	20.61	126.87	56.18	15810.4
29.		60.000	50.048	0.37500	21.77	133.46	59.12	18424.7
30.	top sec(4)	51.000	52.272	0.37500	22.82	139.39	61.77	21011.0
31.		50.000	51.769	0.43750	19.10	118.33	71.28	23720.8
32.	bot sec(3)	44.250	53.189	0.43750	19.67	121.57	73.25	25744.8
33.		40.000	54.239	0.43750	20.10	123.97	74.71	27312.7
34.		30.000	56.709	0.43750	21.09	129.62	78.14	31250.1
35.		20.000	59.179	0.43750	22.09	135.27	81.57	35548.8
36.		10.000	61.650	0.43750	23.08	140.91	85.00	40224.7
37.	base	0.000	64.120	0.43750	24.08	146.56	88.43	45293.7

Total Number of Antennas / Arms = 13

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.04.0000 Fri Dec 6, 2002 - 10:38:23 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29202-0365 Design No: #19122 Engineer : MFP
Description : 170' Monopole - MANSFIELD CENTER II, TOLLAND CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : - Client: PennSummit Tubular, LLC
Status..... : 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 = 1.1
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)
170.000	1.597	29.55	214.86	0.650	0.000	0.000	0.00	0.00
170.000	1.597	29.55	214.86	0.650	0.000	0.000	0.00	0.00
170.000	1.597	29.55	214.86	0.650	0.000	0.000	0.00	0.00
170.000	1.597	29.55	214.86	0.650	2.010	1.307	65.25	70.90
160.000	1.570	29.04	234.93	0.650	19.019	12.362	611.94	671.16
160.000	1.570	29.04	234.93	0.650	0.000	0.000	0.00	0.00
160.000	1.570	29.04	234.93	0.650	2.216	1.440	70.69	78.24
150.000	1.541	28.51	254.50	0.650	20.872	13.567	659.67	737.19
150.000	1.541	28.51	254.50	0.650	0.000	0.000	0.00	0.00
150.000	1.541	28.51	254.50	0.650	2.422	1.574	75.85	85.58
140.000	1.511	27.95	273.51	0.650	22.724	14.771	704.67	803.22
140.000	1.511	27.95	273.51	0.650	0.000	0.000	0.00	0.00
140.000	1.511	27.95	273.51	0.650	2.628	1.708	80.69	92.91
130.000	1.480	27.37	291.92	0.650	24.577	15.975	746.71	869.25
130.000	1.480	27.37	291.92	0.650	0.000	0.000	0.00	0.00
130.000	1.480	27.37	291.92	0.650	2.834	1.842	85.18	100.25
128.500	1.475	27.27	294.62	0.650	2.844	1.849	85.25	562.48
124.000	1.460	27.00	302.64	0.650	14.414	9.369	429.41	636.33
120.000	1.446	26.75	305.38	0.650	8.870	5.766	261.85	391.69
120.000	1.446	26.75	305.38	0.650	0.000	0.000	0.00	0.00
120.000	1.446	26.75	305.38	0.650	2.998	1.949	88.08	132.40
110.000	1.411	26.09	322.39	0.650	31.111	20.222	901.73	1374.41
100.000	1.373	25.39	338.53	0.650	33.170	21.560	936.61	1466.12
90.000	1.332	24.64	353.67	0.650	34.323	22.310	942.02	1517.77
89.250	1.329	24.58	354.76	0.650	0.899	0.585	24.28	975.74
83.500	1.304	24.11	357.83	0.650	21.813	14.178	583.52	1156.09
80.000	1.288	23.82	362.60	0.650	14.954	9.720	393.36	792.74
70.000	1.240	22.93	375.23	0.650	38.825	25.236	995.15	2058.87
60.000	1.186	21.94	386.12	0.650	40.883	26.574	1005.57	2168.93
51.000	1.132	20.95	394.01	0.650	38.524	25.041	905.38	3630.13
50.000	1.126	20.83	389.12	0.650	4.324	2.811	98.94	267.44
44.250	1.087	20.11	392.88	0.650	21.930	14.255	492.76	1356.44
40.000	1.057	19.54	394.90	0.650	22.445	14.589	488.48	1388.54
30.000	1.000	18.50	401.69	0.650	46.434	30.182	959.65	2873.37
20.000	1.000	18.50	419.19	0.650	48.493	31.520	985.27	3001.76
10.000	1.000	18.50	436.69	0.650	50.551	32.858	1027.09	3130.15
1.000	1.000	18.50	452.43	0.650	47.256	30.717	960.15	2926.92
				Summation TOTAL =	15665.19	35316.98		

PJF_Pole (tm) - Monopole Design Program
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Description : 170' Monopole - MANSFIELD CENTER II, TOLLAND CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : - Client: PennSummit Tubular, LLC
Status..... : 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.	170.000	0.000	0.000	0.000	0.000
2.	170.000	0.075	0.075	0.013	0.013
3.	170.000	0.264	0.339	3.703	3.716
4.	170.000	1.371	1.710	0.993	4.709
5.	160.000	0.671	2.381	0.612	5.321
6.	160.000	0.264	2.645	3.640	8.961
7.	160.000	1.378	4.023	0.983	9.944
8.	150.000	0.737	4.760	0.660	10.604
9.	150.000	0.264	5.024	3.573	14.177
10.	150.000	1.386	6.410	0.971	15.149
11.	140.000	0.803	7.213	0.705	15.853
12.	140.000	0.264	7.477	3.504	19.357
13.	140.000	1.393	8.870	0.959	20.316
14.	130.000	0.869	9.739	0.747	21.062
15.	130.000	0.264	10.003	3.430	24.493
16.	130.000	1.400	11.404	0.945	25.438
17.	128.500	0.562	11.966	0.085	25.523
18.	124.000	0.636	12.603	0.429	25.952
19.	120.000	0.392	12.994	0.262	26.214
20.	120.000	0.264	13.258	3.353	29.567
21.	120.000	1.432	14.691	0.928	30.495
22.	110.000	1.374	16.065	0.902	31.397
23.	100.000	1.466	17.531	0.937	32.333
24.	90.000	1.518	19.049	0.942	33.275
25.	89.250	0.976	20.025	0.024	33.300
26.	83.500	1.156	21.181	0.584	33.883
27.	80.000	0.793	21.973	0.393	34.277
28.	70.000	2.059	24.032	0.995	35.272
29.	60.000	2.169	26.201	1.006	36.277
30.	51.000	3.630	29.831	0.905	37.183
31.	50.000	0.267	30.099	0.099	37.282
32.	44.250	1.356	31.455	0.493	37.774
33.	40.000	1.389	32.844	0.488	38.263
34.	30.000	2.873	35.717	0.960	39.222
35.	20.000	3.002	38.719	0.985	40.208
36.	10.000	3.130	41.849	1.027	41.235
37.	1.000	2.927	44.776	0.960	42.195
Base	0.000		44.776		42.195

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

'PJF_Pole (tm) - Monopole Design Program
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Job No.....: 29202-0365 Design No: #19122 Engineer : MFP
Description : 170' Monopole - MANSFIELD CENTER II, TOLLAND CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : - Client: PennSummit Tubular, LLC
Status..... : Final Design Revision: Rev. Date :

POLE SHAFT SEGMENTS -- ACTUAL VS. ALLOWABLE STRESSES:

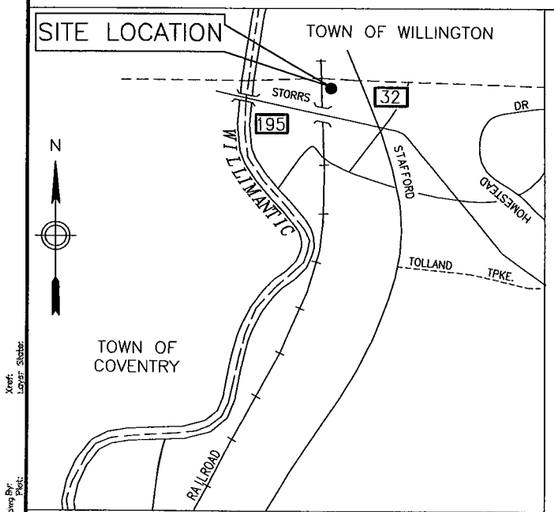
LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph
Note: Per TIA/EIA Sec. 3.1.1.1: Allow a 1/3 stress increase for poles under 700 feet in height. The allowable stresses shown include the factor of 1.333

	[---------- ACTUAL STRESSES ----------]					Allow.	Actual/
Segmnt Elev (ft)	Bending [fb] (ksi)	Axial [fa] (ksi)	Torsion [ft] (ksi)	Shear [fv] (ksi)	Combined [Ftot] (ksi)	Stress [Fb] (ksi)	Allowable [Ftot/Fb] Ratio
170.00	0.004	0.000	0.000	0.000	0.004	52.00	0.0001
170.00	0.004	0.004	0.001	0.001	0.009	52.00	0.0002
170.00	0.004	0.018	0.393	0.393	1.362	52.00	0.0262
170.00	0.008	0.091	0.491	0.499	1.717	52.00	0.0330
160.00	4.656	0.114	0.403	0.510	5.026	52.00	0.0966
160.00	4.656	0.127	0.719	0.859	5.509	52.00	0.1059
160.00	4.681	0.193	0.798	0.954	5.742	52.00	0.1104
150.00	11.871	0.209	0.667	0.929	12.392	52.00	0.2383
150.00	11.871	0.221	0.926	1.243	12.661	52.00	0.2435
150.00	11.910	0.282	0.991	1.328	12.836	52.00	0.2468
140.00	20.270	0.292	0.840	1.279	20.886	52.00	0.4017
140.00	20.270	0.302	1.055	1.562	21.066	52.00	0.4051
140.00	20.317	0.359	1.109	1.639	21.217	52.00	0.4080
130.00	29.078	0.365	0.952	1.575	29.766	52.00	0.5724
130.00	29.078	0.375	1.134	1.831	29.897	52.00	0.5749
130.00	29.129	0.427	1.179	1.902	30.035	52.00	0.5776
128.50	30.575	0.444	1.153	1.888	31.463	52.00	0.6051
124.00	27.900	0.363	0.868	1.490	28.556	52.00	0.5491
120.00	31.322	0.369	0.845	1.484	31.946	52.00	0.6143
120.00	31.322	0.376	0.971	1.674	32.027	52.00	0.6159
120.00	31.367	0.417	1.003	1.726	32.133	52.00	0.6180
110.00	38.332	0.426	0.877	1.662	39.006	52.00	0.7501
100.00	43.676	0.437	0.773	1.607	44.305	52.00	0.8520
90.00	47.799	0.447	0.687	1.559	48.403	52.00	0.9308
89.25	48.053	0.468	0.681	1.553	48.675	52.00	0.9361
83.50	43.028	0.406	0.549	1.295	43.551	52.00	0.8375
80.00	43.907	0.413	0.528	1.285	44.431	52.00	0.8544
70.00	45.995	0.428	0.474	1.253	46.519	52.00	0.8946
60.00	47.608	0.443	0.428	1.224	48.136	52.00	0.9257
51.00	48.738	0.483	0.392	1.201	49.298	52.00	0.9480
50.00	43.262	0.422	0.343	1.044	43.750	52.00	0.8413
44.25	43.727	0.429	0.325	1.029	44.219	52.00	0.8504
40.00	44.036	0.440	0.313	1.022	44.535	52.00	0.8564
30.00	44.599	0.457	0.286	1.002	45.112	52.00	0.8675
20.00	44.993	0.475	0.262	0.984	45.519	52.00	0.8754
10.00	45.254	0.492	0.242	0.968	45.794	52.00	0.8807
0.00	45.408	0.506	0.223	0.952	45.959	52.00	0.8838

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

Sprint PCS℠

MANSFIELD CENTER
1725 STAFFORD ROAD
MANSFIELD, CONNECTICUT
CT33XC557



MANSFIELD

SCALE
500 0 500 1000 1500 FEET

LOCATION MAP

LEGEND

DATUM IS MEAN SEA LEVEL

—— x —— x —— 8' HIGH WOOD FENCE

—— · · —— · · —— PROPOSED LEASE AREA

NOTE:

1. THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

DIRECTIONS:

TAKE I-91 N TO I-84 E. TAKE I-84 E TO EXIT 68 TURN RIGHT ON ROUTE 195. SITE IS ON LEFT ON CORNER OF ROUTE 32 AND ROUTE 195.

PROJECT SUMMARY

APPLICANT / LESSEE
SPRINT PCS
ONE INTERNATIONAL BOULEVARD, SUITE 800
MAHWAH, NJ 07495
(201) 684-4085

PROPERTY OWNER
TOWN OF MANSFIELD
4 SOUTH EAGLEVILLE ROAD
MANSFIELD, CT 06268

PROJECT DESCRIPTION:

THE PROJECT CONSISTS OF INSTALLATION AND OPERATION OF ANTENNAS AND ASSOCIATED EQUIPMENT. THE ASSOCIATED CABINETS WILL BE LOCATED ON A CONCRETE SLAB WITH OUTDOOR EQUIPMENT CABINETS. AN EXISTING MONOPOLE TOWER WILL BE USED TO SUPPORT SPRINT ANTENNAS. THIS SYSTEM WILL BOTH TRANSMIT AND RECEIVE RADIO SIGNALS.

POWER AND TELCO UTILITIES NECESSARY FOR THIS FACILITY WILL BE TAKEN FROM THE EXISTING POWER METER PANEL AND TELCO DEMARCATION PANEL.

THE PROPOSED USE DOES NOT REQUIRE FULL-TIME OR PART-TIME EMPLOYEES AT THE SITE.

ELECTRIC UTILITY: CL&P
"CALL BEFORE YOU DIG" (800) 922-4455

TELEPHONE UTILITY: SBC

PROJECT DIRECTORY	
ADDRESS	1725 STAFFORD ROAD
CURRENT OWNER	TOWN OF MANSFIELD
DEED	N/A
ASSESSORS ID	N/A
FEMA FIRM MAP	–
ZONING DISTRICT	–
AREA OF LEASE PARCEL	290 SF

DRAWING INDEX	
DRAWING	TITLE
YT0557T1	TITLE SHEET
YT0557SC1	EQUIPMENT LAYOUT PLAN & ELEVATION

Dewberry-Goodkind, Inc.
A Dewberry Company
59 Elm Street, Suite 101
New Haven, CT 06510
p. (203) 776-2277
f. (203) 776-2288

Engineers
Planners
Surveyors

MANSFIELD CENTER
1725 STAFFORD ROAD
MANSFIELD, CT 06268
CT33XC557

Sprint Spectrum LP
HARTFORD MTA

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	05/12/04	FINAL ISSUE FOR SITING COUNCIL	EAE	CKD	FDK
0	03/30/04	PRELIMINARY ISSUE FOR SITING COUNCIL	MJS	CKD	FDK

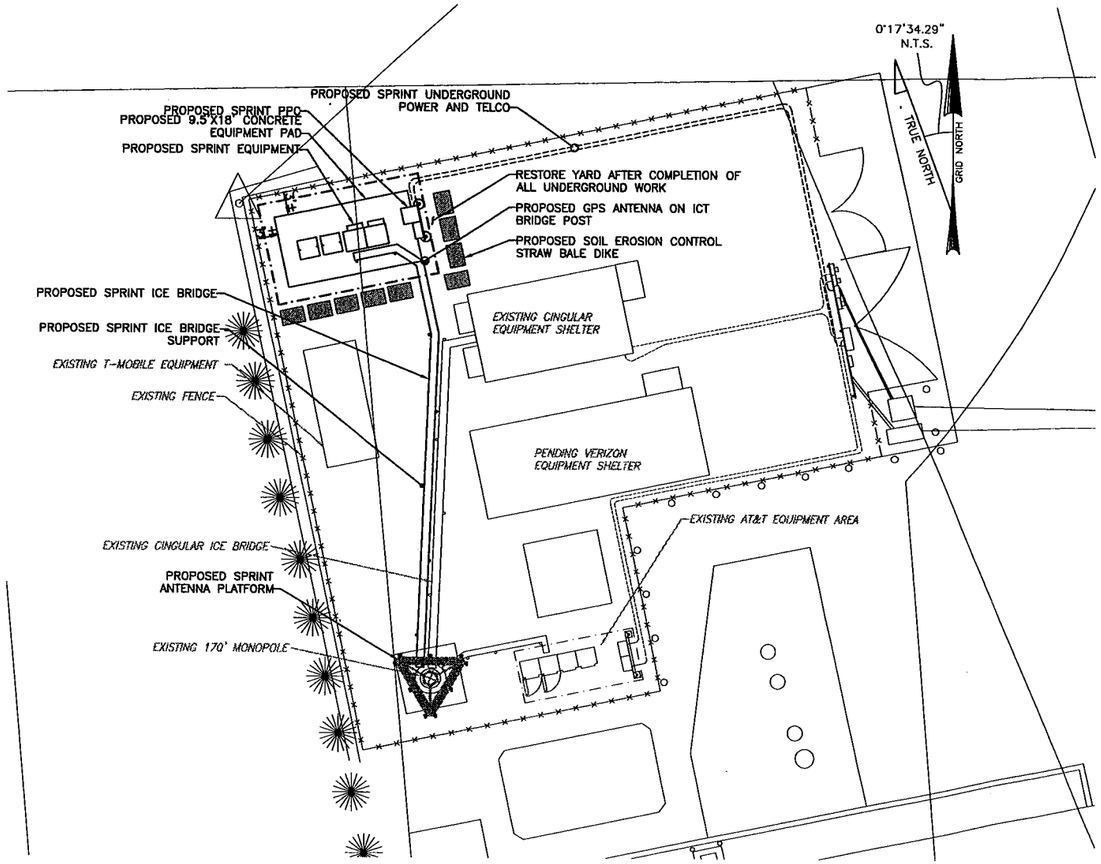
SCALE AS NOTED | DESIGNED CKD | DRAWN MJS

FRANCIS D. KOBY — STATE OF CONNECTICUT — #10421 — REGISTERED PROFESSIONAL ENGINEER

Sprint PCS
MANSFIELD CENTER
TITLE SHEET

JOB NUMBER	DRAWING NUMBER	REV
3467-12	YT0557T1	A

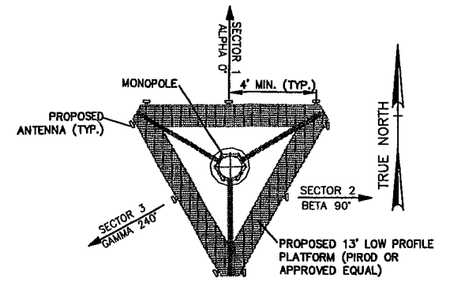
Q:\3467\12-Mansfield-2\CAD\Cad\Siting Council\YT0557T1.dwg By: Plotted: May 12, 2004 - 1:44:43pm
Xref: Layer States



EQUIPMENT LAYOUT PLAN

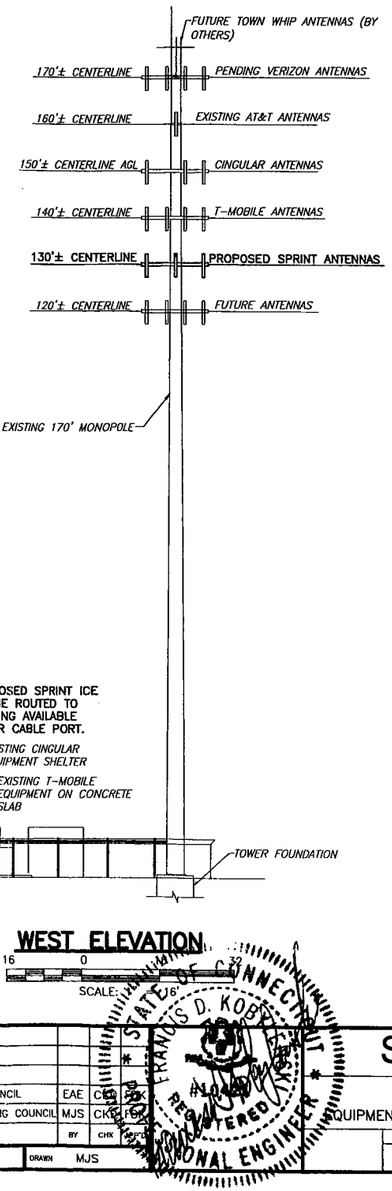
10 0 10 20

SCALE: 1" = 10'



TOP VIEW

NOT TO SCALE



WEST ELEVATION

16 0 32

SCALE: 1/16" = 1'-0"

STATE OF CONNECTICUT
FRANCIS D. KOBOSKI
REGISTERED
PROFESSIONAL ENGINEER

Dewberry-Goodkind, Inc.
A Dewberry Company
59 Elm Street, Suite 101
New Haven, CT 06510
p. (203) 776-2277
f. (203) 776-2288
Engineers
Planners
Surveyors

MANSFIELD CENTER
1725 STAFFORD ROAD
MANSFIELD, CT 06268
CT33XC557

Sprint Spectrum LP
HARTFORD MTA

NO.	DATE	REVISIONS	BY	CHK
1	05/12/06	FINAL ISSUE FOR SITING COUNCIL	EAE	CKD
2	03/30/06	PRELIMINARY ISSUE FOR SITING COUNCIL	MJS	CKD

SCALE AS NOTED | DESIGNED CKD | DRAWN MJS

Sprint PCS
MANSFIELD CENTER
EQUIPMENT LAYOUT PLAN AND ELEVATION

JOB NUMBER	DRAWING NUMBER	REV
3467-12	YT0557SC1	A

Q:\3467\12-Mansfield-2\CAD\Cad\Siting Council\YT0557SC1.dwg
Wed, May 12, 2004 - 1:43:34pm
Xref: Layer States:
Plot:

Cumulative Power Density Analysis of Sprint PCS and other antennas					
Operator	Frequency	Distance	Calculated Power Density	Maximum Permissable Exposure*	Percent of MPE
	(MHz)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
Town of Mansfield	138	170	0.002500	0.200	1.24%
	140		0.002500	0.200	1.24%
	150		0.002500	0.200	1.24%
Verizon Wireless*	880	170	0.022400	0.567	3.95%
	1900		0.007500	1.000	0.75%
AT&T Wireless**	1945 & 1985	160	0.065859	1.000	6.59%
Cingular GSM*	880 - 894	150	0.009500	0.587	1.61%
	1930 - 1935		0.013600	1.000	1.36%
T-Mobile*	1935.0	137	0.021717	1.000	2.17%
Sprint PCS	1962.5	130	0.123130	1.000	12.31%
Total Percentage of Maximum Permissible Exposure					**32.46%**

* Based on information supplied by other operators.

** Calculated from information supplied by AT&T Wireless.

Exhibit C

Power Density Analysis Table

Sprint Site Cascade : CT33XC557 - Mansfield, CT

1725 Stafford Road, Mansfield, 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)	Calculated Power Density (mW/cm^2)*	Maximum Permissable Exposure*	%MPE
1962.5	11	336.6	3703	130	0	0.123130	1.000	12.313%
1962.5	11	336.6	3703	130	50	0.107262	1.000	10.726%
1962.5	11	336.6	3703	130	100	0.077356	1.000	7.736%
1962.5	11	336.6	3703	130	150	0.052814	1.000	5.281%
1962.5	11	336.6	3703	130	200	0.036571	1.000	3.657%
1962.5	11	336.6	3703	130	250	0.026208	1.000	2.621%
1962.5	11	336.6	3703	130	300	0.019466	1.000	1.947%
1962.5	11	336.6	3703	130	350	0.014927	1.000	1.493%
1962.5	11	336.6	3703	130	400	0.011763	1.000	1.176%
1962.5	11	336.6	3703	130	450	0.009484	1.000	0.948%
1962.5	11	336.6	3703	130	500	0.007797	1.000	0.780%

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

Exhibit C