STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

January 26, 2001

Peter W. van Wilgen
Springwich Cellular Limited Partnership
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **TS-SCLP-033-010104** - Springwich Cellular Limited Partnership request for an order to approve tower sharing at an existing telecommunications facility located at 179 Shunpike Road, Cromwell, Connecticut.

Dear Mr. van Wilgen:

At a public meeting held January 25, 2001, 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 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 January 4, 2001.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable Stanley A. Terry, Jr., First Selectman, Town of Cromwell
Planning and Zoning Department
Frank Salerno, Director of Finance, Cromwell Fire District
Christopher B. Fisher, Esq., Cuddy & Feder & Worby LLP
Michael Fulton, VoiceStream Wireless Corporation

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500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7614

Peter W. van Wilgen
Director – Real Estate Operations

January 4, 2001

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

Re: Request by Springwich Cellular Limited Partnership for an Order to Approve the Shared Use of an Existing Wireless Telecommunications Tower Facility located at 179 Shunpike Road, Cromwell, Connecticut.

Dear Chairman Gelston:

Pursuant to Connecticut General Statutes (C.G.S.) Section 16-50aa, Springwich Cellular Limited Partnership ("SCLP") hereby requests an order from the Connecticut Siting Council ("Council") approving the proposed shared use by SCLP of an existing multi-carrier telecommunications tower facility at 179 Shunpike Road in Cromwell, Connecticut. The facility is owned and operated by the Cromwell Fire District ("Fire District"), with a principal address of 322 Main Street, Cromwell, CT 06416. The Fire District erected the 170-foot high, self-supporting lattice tower (the "Tower") in 1999 on property it owns for the purpose of meeting its and the Town's communications needs as well as generating revenue from co-located commercial carriers.

The Fire District and SCLP have agreed to the proposed shared use of this Tower pursuant to mutually acceptable terms and conditions. The Fire District has authorized SCLP to apply for all necessary permits, approvals, and authorizations which may be required for the proposed shared use of this facility. SCLP is licensed by the Federal Communications Commission ("FCC") to provide wireless telephone service in the state of Connecticut.

Enclosed with this request are a site location map, proposed site plans, and the proposed tower profile. A structural analysis report is attached showing that the Tower is capable of supporting the existing loads and the proposed SCLP antennas.

The existing facility is located west of Shunpike Road (Route 3), with coordinates of 41° 37' 23.6" N and 72° 40' 44.5" W (NAD 83). The site is a wooded hilltop with a clearing for a large, buried water storage tank owned by the Fire District. The Tower and associated equipment buildings lie immediately north of the water tank. The entire Fire District parcel is surrounded by a chain link security fence topped with barbed wire;

however, the Tower facility is not separately fenced.

The 170 foot Tower was designed to support multiple antenna arrays. At the present time, the Tower is shared by the Town of Cromwell (fire, police, ambulance), AT&T Wireless ("AT&T"), and VoiceStream Wireless ("VoiceStream"). The attached structural analysis demonstrates it can accommodate the proposed SCLP antennas as well at a height of approximately 115 feet.

- The Town of Cromwell operates redundant whip antenna arrays with centerlines at 180 feet above ground level ("AGL") and 142 feet AGL. The lower array is held in reserve should there be a failure of the upper array, and there is no reason to expect that they would ever operate simultaneously.
- AT&T operates 12 panel antennas with centerlines at 160 feet AGL.
- VoiceStream operates six panel antennas with centerlines at 125 feet AGL.

SCLP proposes to install up to twelve (12) Decibel Products DB846H80(E)-SX panel antennas, approximately six feet in height, on an antenna platform with the center of radiation approximately 114 feet AGL. SCLP proposes to use the westernmost room of the existing equipment building to house its equipment. A generator presently occupying that room, as well as an outdoor propane tank used to fuel the existing generator, will be removed from the facility. As a provision of its lease, SCLP will install a replacement generator on a concrete pad to be built just west of the existing building. The existing concrete pad holding the propane tank is not sufficient to support the weight of the proposed Katolight generator.

A copy of this letter is being sent to the First Selectman of the Town of Cromwell.

Statutory Considerations

SCLP requests the Council to find that the proposed shared use of the Tower facility satisfies the criteria stated in C.G.S. § 16-50aa, and to issue an order approving the proposed use.

C.G.S. § 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 § 16-50aa(c)(1))

The shared use of the Tower satisfies the criteria in C.G.S § 16-50aa as follows:

A. **Technical Feasibility.** The Shunpike Road self-supporting lattice Tower is structurally sound and capable of supporting the proposed shared use by SCLP as stated in the attached structural analysis. The proposed shared use is therefore technically feasible.

B. **Legal Feasibility.** Under C.G.S § 16-50aa, the Council has been authorized to issue

an order approving the proposed shared use of an existing tower facility such as the facility located on Shunpike Road (C.G.S § 16-50aa(c) (1)). This authority complements the Council's prior-existing authority under C.G.S § 16-50p to issue orders approving the construction of new towers that are subject to the Council's jurisdiction. C.G.S § 16-50x(a) directs the Council to "give such consideration to other state laws and municipal regulations as it shall deem appropriate" in ruling on applications for the shared use of existing tower facilities. Under the authority vested in the Council by C.G.S § 16-50aa, an order approving the shared use would enable the applicants to obtain building permits for the proposed installation.

C. **Environmental Feasibility.** The proposed shared use of this Tower facility would have a minimal environmental effect for the following reasons:

1. Installation of the proposed SCLP antennas on the Tower would have an insignificant incremental visual impact and would not cause any significant change or alteration in the physical or environmental characteristics of the property. Equipment belonging to SCLP will be housed in the existing 12 foot x 38 foot building.

2. The proposed installation would not increase noise levels at the existing facility by six decibels or more.

3. Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the Tower base, to or above the standard adopted by the State of Connecticut and the FCC.

The "worst-case" exposure calculation in accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at the base of the Tower in relation to the operation of the currently proposed antenna array is as follows:

COMPANY	CENTERLINE HEIGHT (feet)	POWER DENSITY (mW/cm^2)	STANDARD LIMITS (mW/cm^2)	PERCENT OF STANDARD
AT&T	160	0.0122	1.0000	1.2
Town of Cromwell *	142 ±	Cumulative		1.3
VoiceStream *	125	0.0248	1.0000	2.5
SCLP	114	0.0592	0.5867	10.1
TOTAL				**15.1 %**

* Power densities taken from VoiceStream's application to the Council in TS-VoiceStream-033-000609, approved June 20, 2000. Town data utilize lower set of redundant antennas for worst-case analysis.

As the table demonstrates, the cumulative "worst-case" exposure would be 15.1 % of the ANSI/IEEE standard, as calculated for mixed frequency sites. With the addition of SCLP's antennas, cumulative power density levels from the Tower facility would remain well below applicable ANSI/IEEE standards.

4. The proposed installation would not require any water or sanitary facilities, or generate air emissions or discharges to water bodies. After construction

is completed (approximately four weeks), the proposed installation would not generate any vehicular traffic other than periodic maintenance visits. The proposed use of the facility would therefore have a minimal environmental effect and is environmentally feasible.

D. **Economic Feasibility.** SCLP has entered into a mutually acceptable agreement with the Fire District for shared use of the Tower and the existing equipment building. The proposed facility sharing is therefore economically feasible.

E. **Public Safety Concerns.** As stated above, the existing Tower is structurally capable of supporting the proposed antennas, and radio frequency emissions fall well below State and Federal safety standards. SCLP is not aware of any other public safety concerns relative to the proposed sharing of the Tower. In fact, the provision of new or improved wireless coverage in the area is expected to enhance safety and welfare for Cromwell's residents, as well as for travelers along Interstate 91, Route 9, and Route 3.

Conclusion

For the reasons discussed above, the proposed shared use of the Tower facility at 179 Shunpike Road in Cromwell satisfies the criteria stated in C.G.S. §16-50aa and advances the General Assembly's and the Council's goal of preventing the proliferation of communication towers in Connecticut. SCLP therefore respectfully requests that the Council issue an order approving the proposed shared use. Thank you for your attention to this matter.

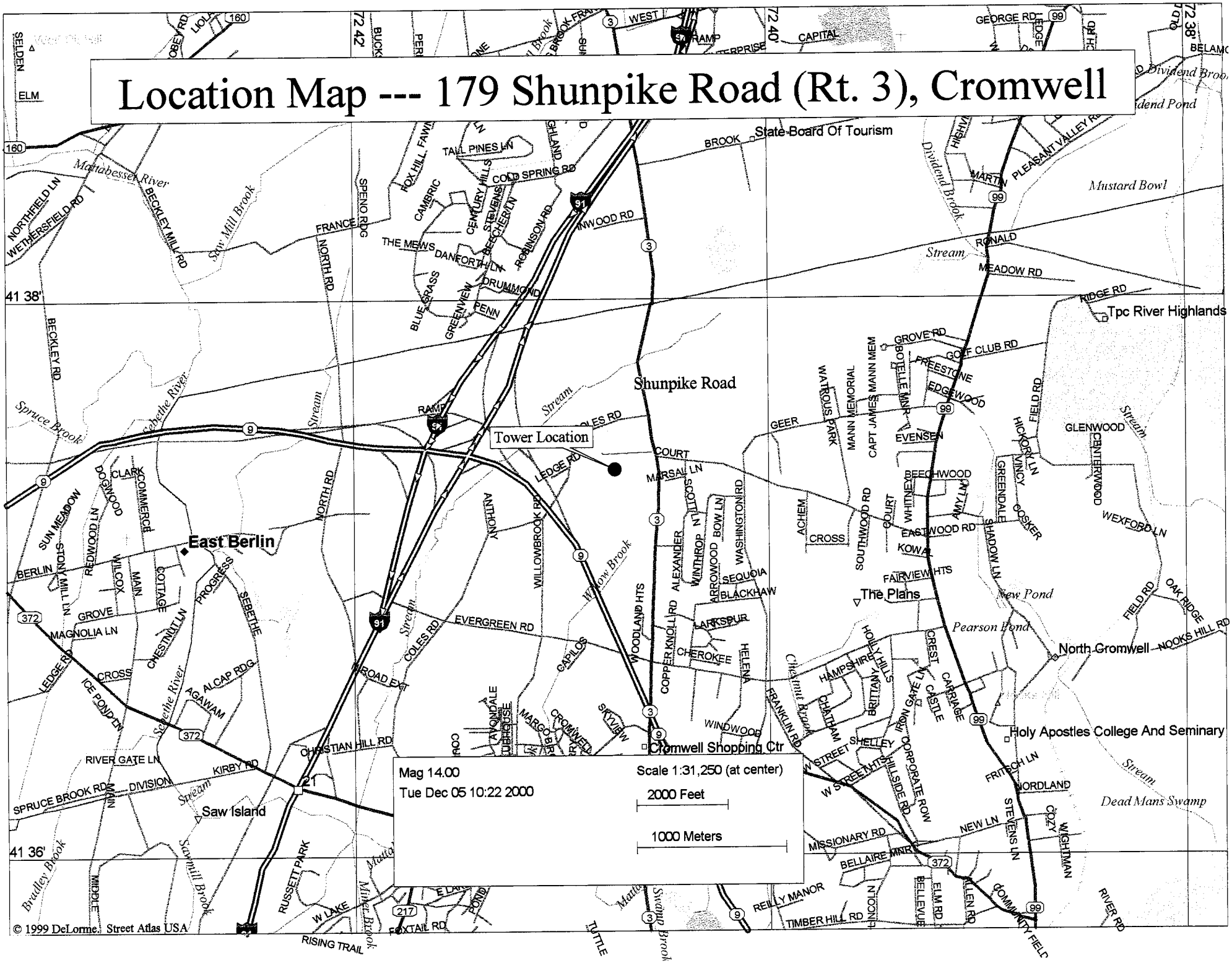
Sincerely,

Peter W. van Wilgen
Director – Real Estate Operations

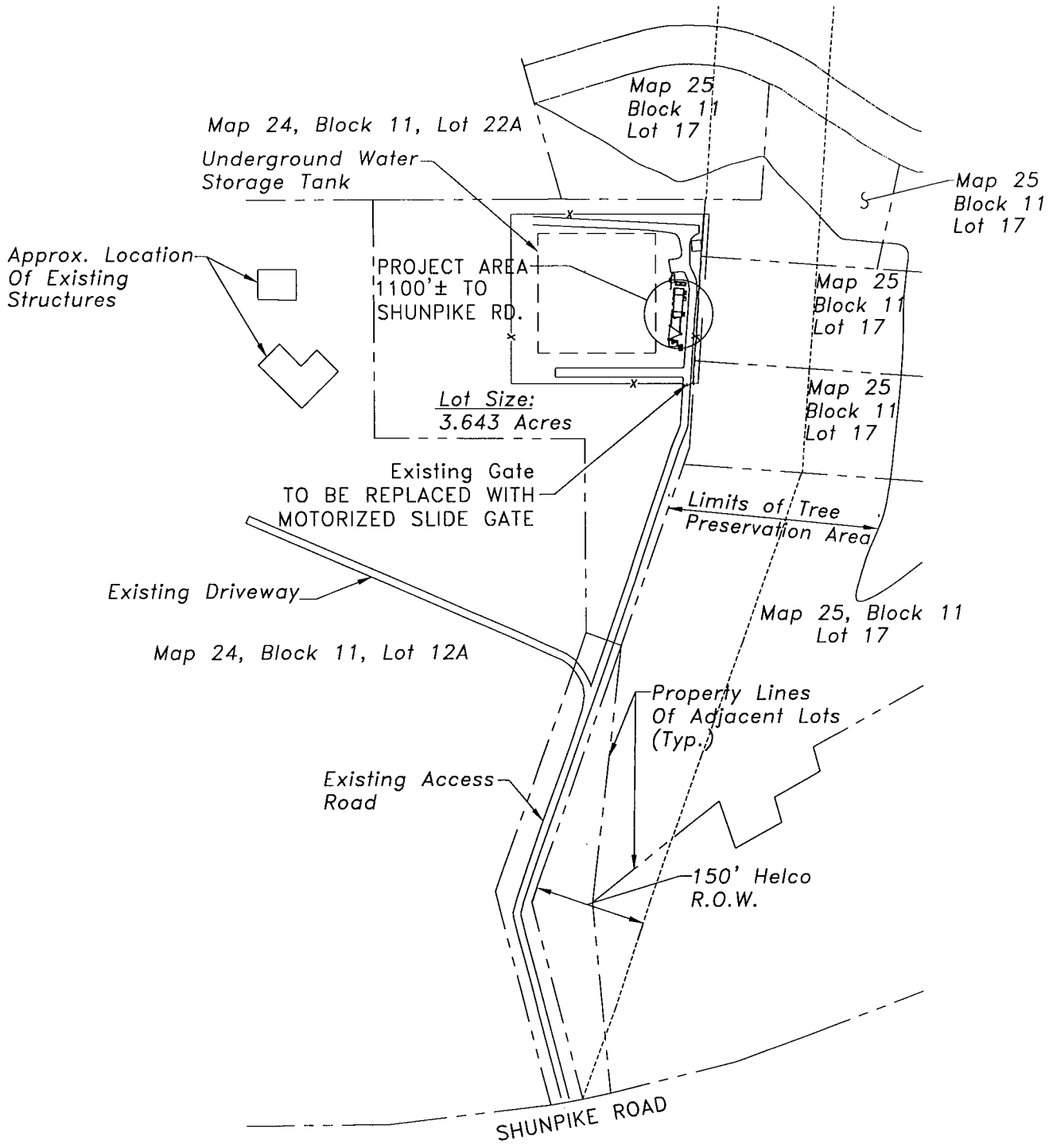
cc: Stanley A. Terry, Jr., First Selectman, Town of Cromwell
Frank Salerno, Director of Finance, Cromwell Fire District

Enclosures

Location Map --- 179 Shunpike Road (Rt. 3), Cromwell



RAD. CENTER: _____ FT. (AGL)

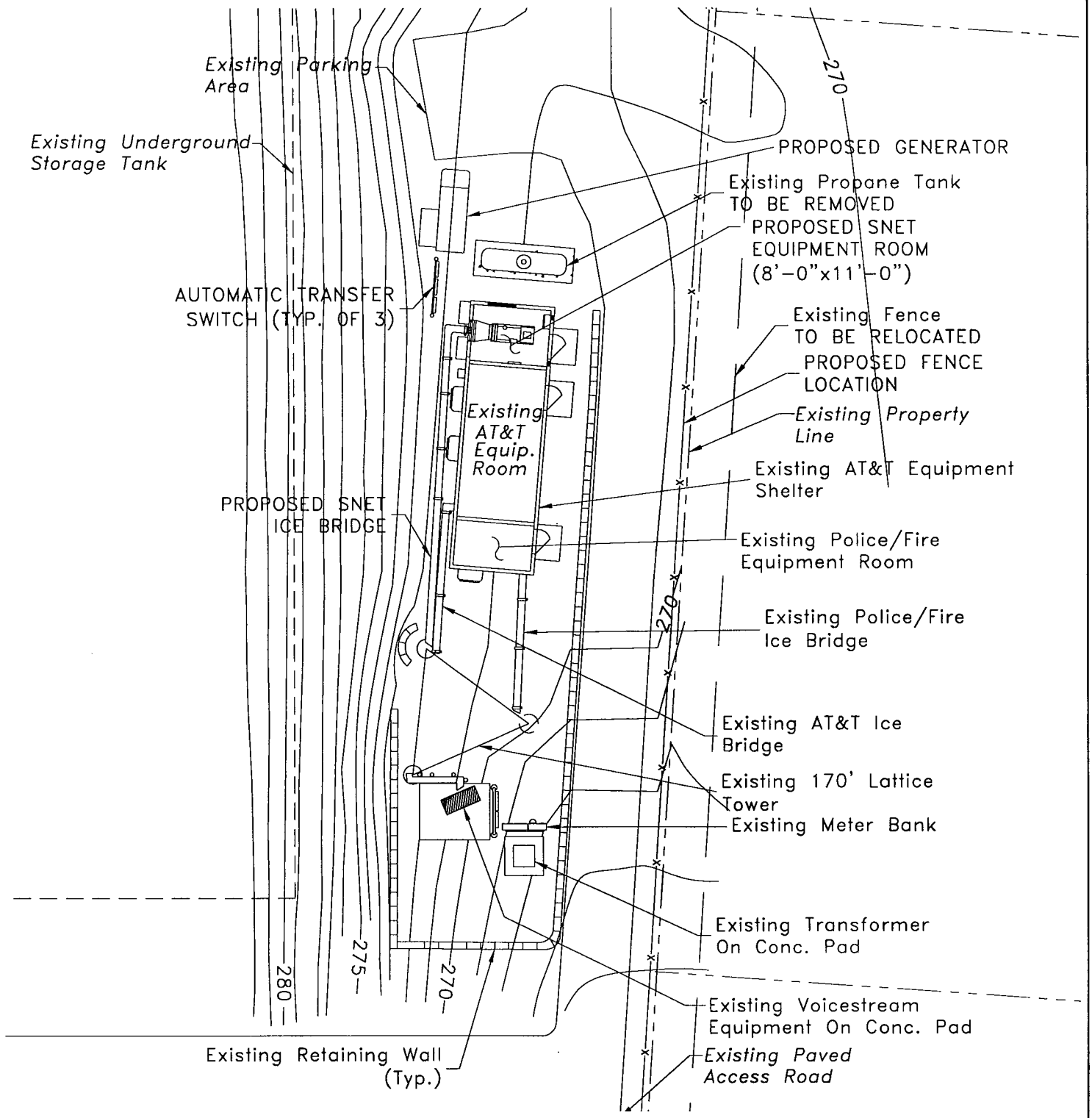


SITE PLAN

SNET MOBILITY PRELIMINARY DESIGN EXHIBIT	NORTH	SITE NAME: CROMWELL FIRE DEPARTMENT	SNET #:
		ADDRESS: 179 SHUNPIKE ROAD CROMWELL, CT 06416	MGI #: 15364
			TASK #: 1171
		DRAWN: MDJ | CHECKED: GMP | SCALE: N.T.S.	DATE: 11/6/00

Maguire Group Inc.
Architects · Engineers · Planners
One Court Street
New Britain, Connecticut 06051

RAD. CENTER: _____ FT. (AGL)

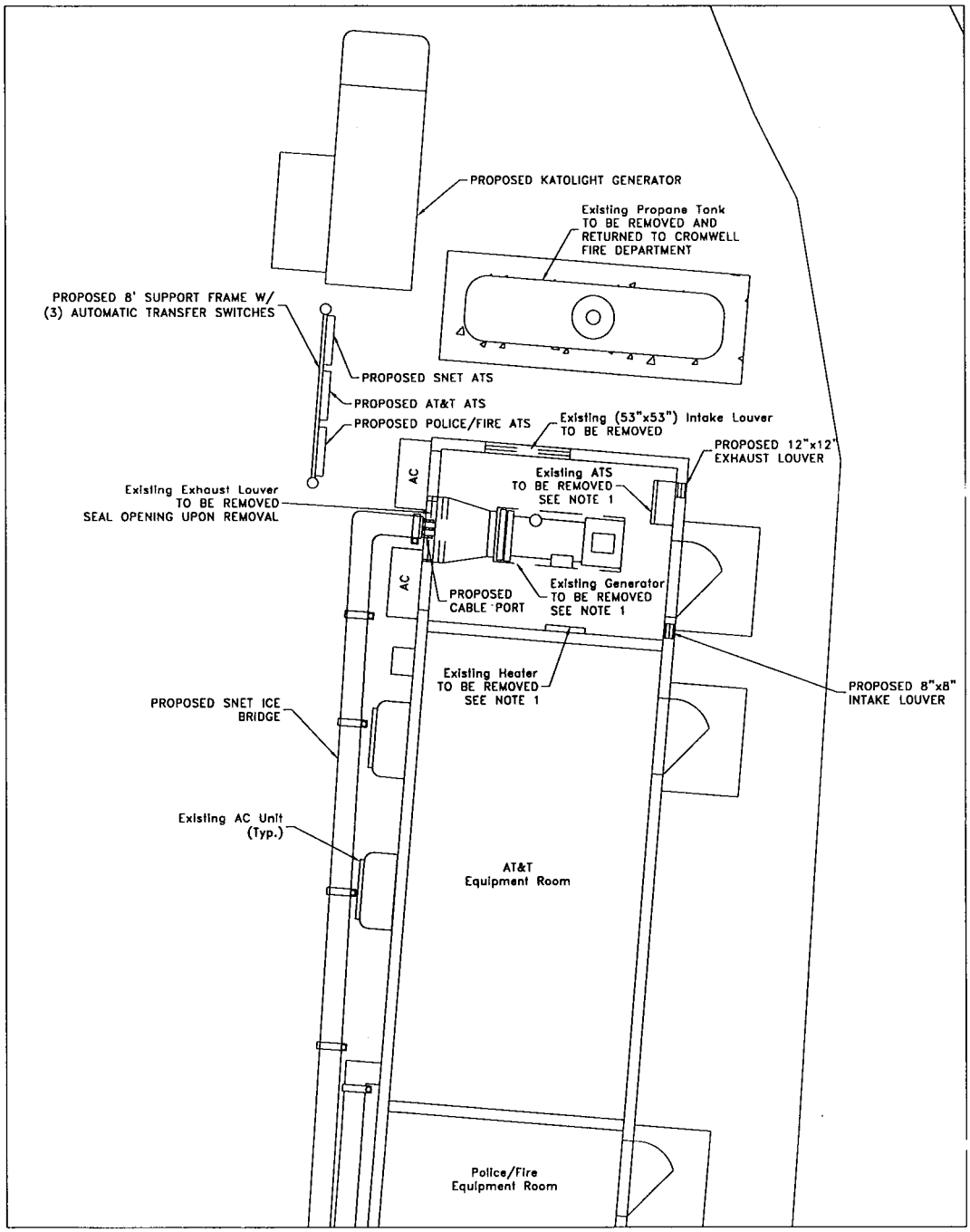


PARTIAL SITE PLAN

SNET MOBILITY PRELIMINARY DESIGN EXHIBIT	NORTH	SITE NAME: CROMWELL FIRE DEPARTMENT	SNET #:
		ADDRESS: 179 SHUNPIKE ROAD CROMWELL, CT 06416	MGI #: 15364
			TASK #: 1171
		DRAWN: MDJ | CHECKED: GMP | SCALE: N.T.S.	DATE: 11/6/00

Maguire Group Inc.
Architects · Engineers · Planners
One Court Street
New Britain, Connecticut 06051

RAD. CENTER: _____ FT. (AGL)



SNET EQUIPMENT LAYOUT

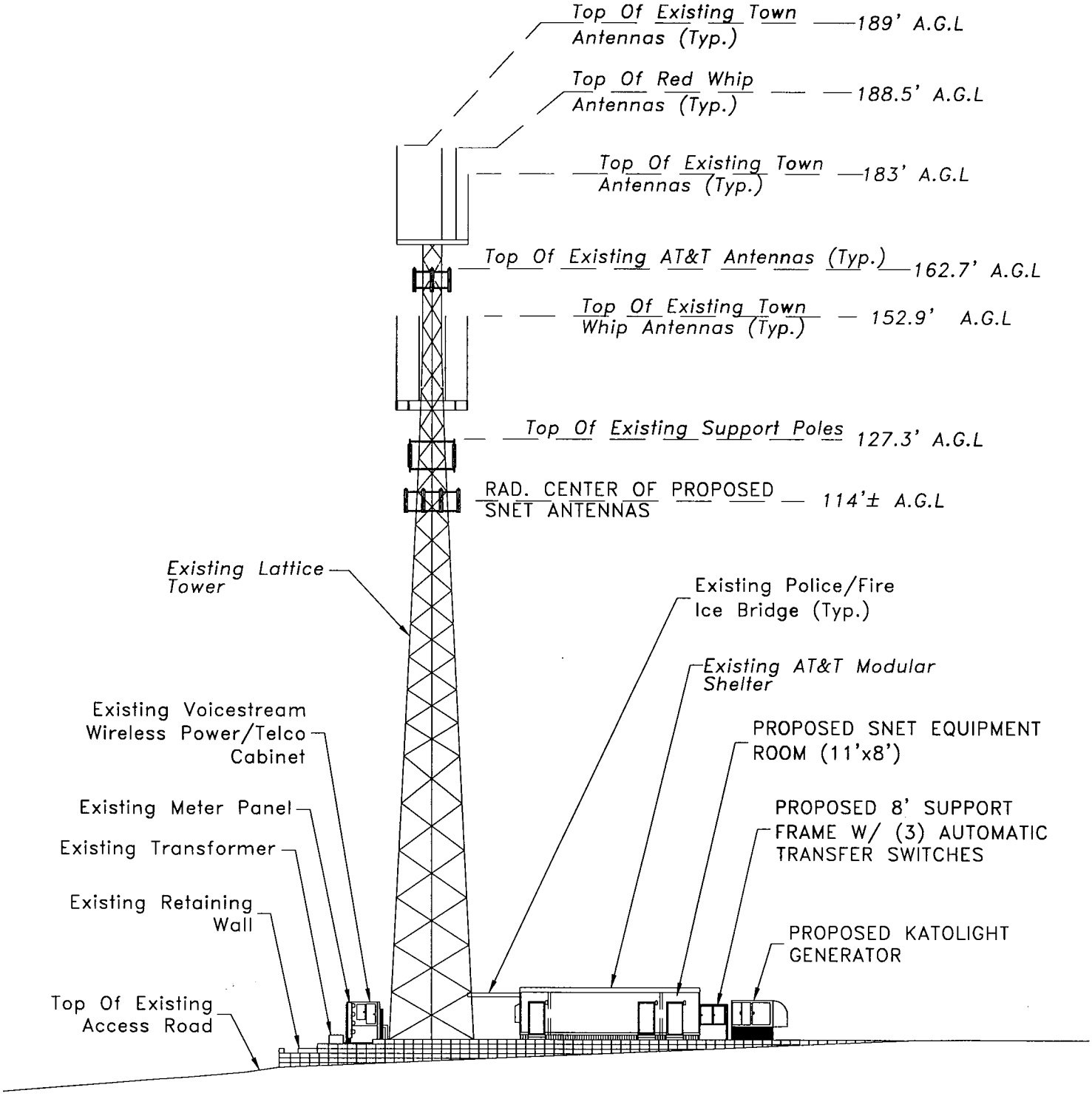
NOTE 1:

ALL EQUIPMENT REMOVED FROM THE GENERATOR ROOM TO BE RETURNED TO CROMWELL FIRE DEPARTMENT

SNET MOBILITY PRELIMINARY DESIGN EXHIBIT	NORTH	SITE NAME: CROMWELL FIRE DEPARTMENT	SNET #:
		ADDRESS: 179 SHUNPIKE ROAD CROMWELL, CT 06416	MGI #: 15364
			TASK #: 1171
		DRAWN: MDJ | CHECKED: GMP | SCALE: 1/8"=1'-0"	DATE: 11/6/00

Maguire Group Inc.
Architects · Engineers · Planners
One Court Street
New Britain, Connecticut 06051

RAD. CENTER: 114± FT. (AGL)



SOUTH ELEVATION VIEW

SNET MOBILITY PRELIMINARY DESIGN EXHIBIT	NORTH	SITE NAME: CROMWELL FIRE DEPARTMENT	SNET #:
		ADDRESS: 179 SHUNPIKE ROAD CROMWELL, CT 06416	MGI #: 15364
			TASK #: 1171
		DRAWN: MDJ | CHECKED: GMP | SCALE: N.T.S.	DATE: 11/8/00

Maguire Group Inc.
Architects · Engineers · Planners
One Court Street
New Britain, Connecticut 06051

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 500 • Columbus, Ohio 43215

May 4, 2000

ARCNET
100 Filley Street
Bloomfield, CT 06002

Attn: Mr. Joe Dibernardo

Re: Existing 170-ft. self-supporting tower
Cromwell, CT (Rocky Hill Site - #059C)
(PJF Job No. 34300-4)

Dear Joe,

We have completed our analysis of the existing Cromwell tower. The existing tower was originally manufactured by PiRod Inc. in 1999. Our analysis was performed to determine if the existing tower has the capacity to safely support the revised loading as shown on page one of the enclosed sketches. Please note that we assumed all (44) coax to be distributed to all three tower legs, with no more than (15) runs on any one tower leg.

Our analysis was performed in accordance with the Electronic Industries Association Standard ANSI/EIA-222 revision F 1996. The standard recommends a minimum design wind velocity of 85-mph for Middlesex County. If ice accumulation is to be considered, then the EIA standard allows a reduced design wind velocity of 74 mph with simultaneous ½" radial ice. The existing tower has the capacity to safely withstand 100 mph winds with no ice and 83 mph winds with ½" ice. As you can see, the existing tower has the capacity to safely support the revised loading, and no modifications are required at this time.

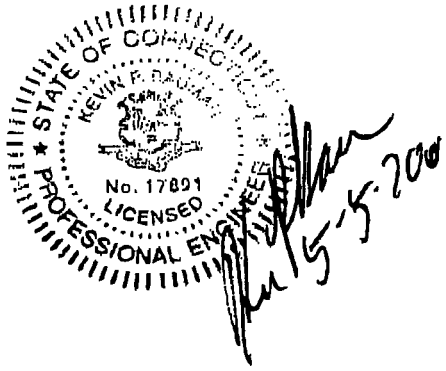
We could not calculate the capacity of the existing foundation system since a site specific soils report was not available. The revised base reactions we calculated, however, are less than the original design reactions as shown on the 1999 PiRod drawings.

If you have any questions or require any additional information, please call.

Sincerely,

PAUL J. FORD AND COMPANY

Kirk R. Hall, EIT
Project Engineer
Email: khall@pjfweb.com



5-5-2000

COLUMBUS, OHIO • ATLANTA, GEORGIA • ORLANDO, FLORIDA
614-221-6679 404-266-2407 407-898-9039
FAX 614-221-2540 FAX 404-869-4608 FAX 407-897-3662
• www.pjfweb.com •

ARCNET
100 FILLEY ST. BLOOMFIELD, CONNECTICUT 06002
PH: (860) 692-7126 FAX: (860) 692-7159

THIS TOWER WAS MANUFACTURED BY PIROD INCORPORATED IN 1999

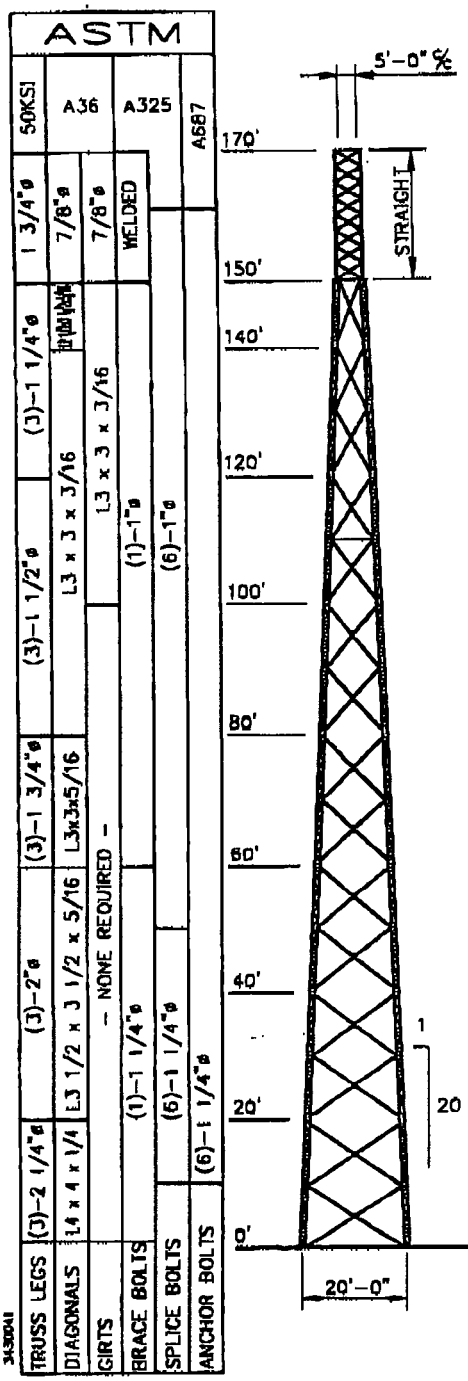
PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street Suite 500 Columbus, Ohio 43215
PH (614)-221-6679 FAX (614)-221-0166

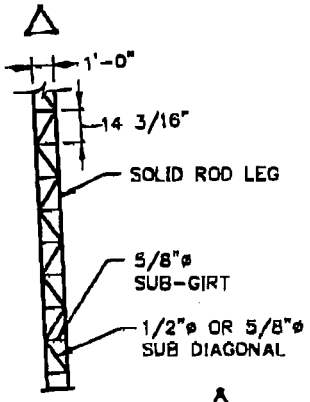
Page 1 Of 3
By KRH Date 5-5-2000
Job No. 34300-4
Revision No. Date
Tower EXISTING 170 FT SELF SUPPORT
Location CROMWELL, CONNECTICUT
Site ROCKY HILL - #059C
EIA Min 85 MPH/74 MPH + 1/2" RADIAL ICE
Capacity 100 MPH/83 MPH + 1/2" RADIAL ICE
According to ANSI/EIA-222-F 1996

ANTENNA LIST

NO.	EL.	ANTENNA	COAX
1	TOP	PD620	1 1/4"
2,3	TOP	(2) PD620	(2)-7/8"
4,5	TOP	(2) PD1142	(2)-7/8"
6	TOP	PD201-7	7/8"
7	TOP	(1) TX/RX ANTENNA	1 5/8"
	TOP	9'-ARM HALO MOUNT	
8-19	160'	(12) ALLGON 7184	(12)-1 5/8"
	160'	(3) PIROD T-FRAMES	
20	135'	PD620	7/8"
21,22	135'	(2) PD620	(2)-1/2"
23,24	135'	(2) PD1142	(2)-1/2"
25	135'	PD201-7	1/2"
26	135'	(1) TX/RX ANTENNA	1 1/4"
	135'	ANTENNA PLATFORM	
27-32	125'	(6) EMS RR90-17	(6)-1 5/8"
	125'	16' LOW PROFILE PLATFORM	
33-44	115'	(12) ALLGON 7184	(12)-1 5/8"
	115'	(3) PIROD T-FRAMES	

- 3/4" STEP RUNGS ONE FACE ONLY FROM 150' TO 170'
- COAX ASSUMED TO BE EQUALLY DISTRIBUTED TO ALL THREE TOWER FACES



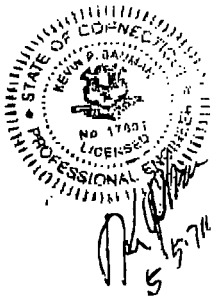


TYPICAL LEGS
(EL. 150' TO 0')

INTERIOR BRACING
- NONE REQUIRED -

FOUNDATION REACTIONS

UPLIFT:	220	KIPS MAX ONE LEG
COMP:	262	KIPS MAX ONE LEG
HORIZ:	24	KIPS MAX ONE LEG



ARCNET
100 FILLEY ST. BLOOMFIELD, CONNECTICUT 06002
PH: (860) 692-7126 FAX: (860) 692-7159

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

Page 2 of 3

By KRH Date 5-5-2000

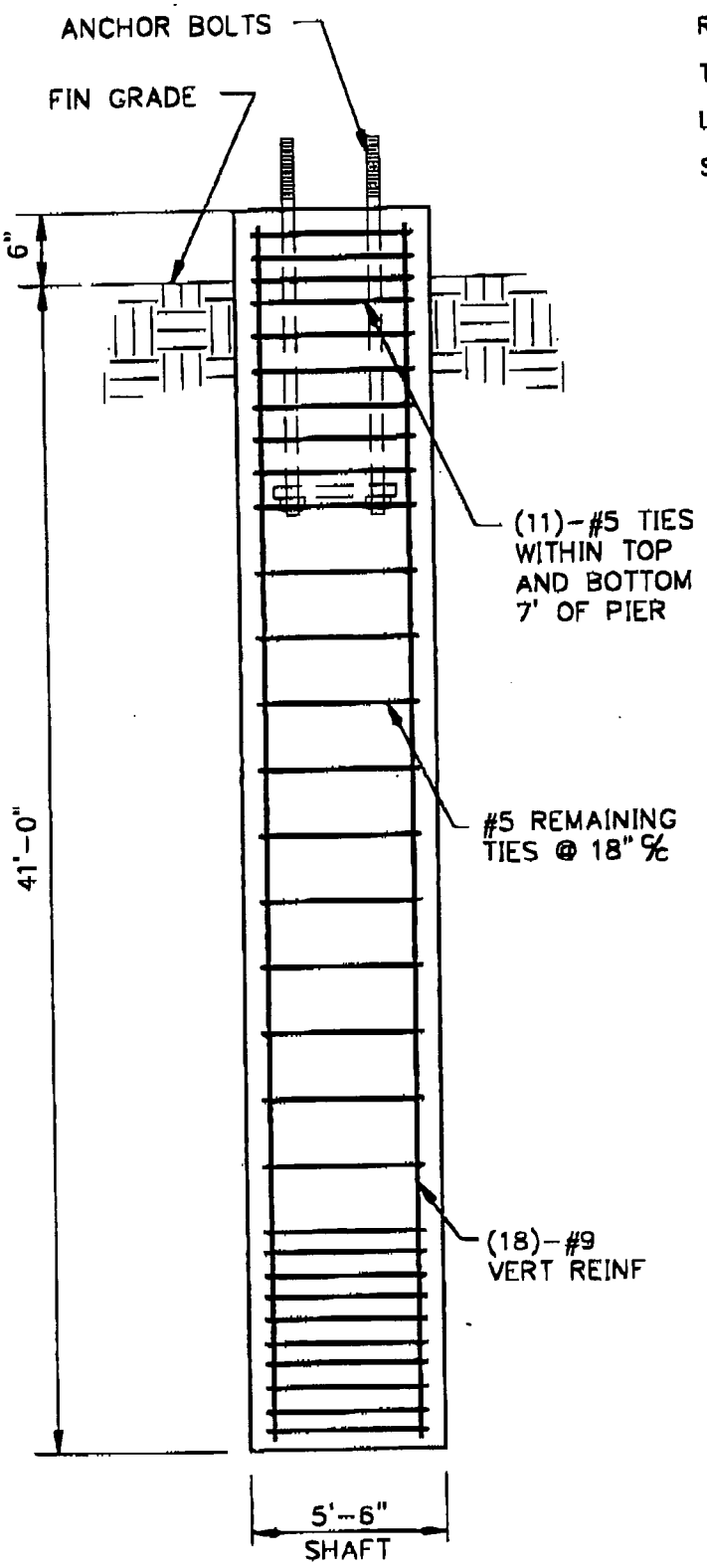
Job No. 34300-4

Revision No. Date

Tower EXISTING 170 FT SELF SUPPORT

Location CROMWELL, CONNECTICUT

Site ROCKY HILL - #059C



NOTES:

1. ALL CONCRETE ASSUMED TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
2. REINFORCING STEEL ASSUMED TO CONFORM TO THE REQUIREMENTS OF ASTM A-615 (GRADE 60) EXCEPT THAT CAISSON TIES ASSUMED TO BE ASTM A-615 (GRADE 40).

3430042

ARCNET
100 FILLEY ST. BLOOMFIELD, CONNECTICUT 06002
PH: (860) 692-7126 FAX: (860) 692-7159

Tower EXISTING 170 FT SELF SUPPORT
Location CROMWELL, CONNECTICUT
Site ROCKY HILL - #059C

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

Page 3 Of 3
By KRH Date 5-5-2000
Job No. 34300-4
Revision No. Date

STRUCTURAL ANALYSIS OF EXISTING TOWERS

1. PAUL J. FORD AND COMPANY has not made a field inspection to verify tower member sizes and dimensions. We were provided the original tower drawings by Pirod dated 1999. If the existing conditions are not as represented on these sketches, we should be contacted immediately to reevaluate the structural integrity of the tower.

2. No allowance was made for any damaged, missing, or rusted tower members. The analysis of this tower assumes that no physical deterioration has occurred in any of the structural components of the tower and that all the tower members have the same capacity as the day the tower was built.

3. It is not possible to have all of the very detailed information to perform a detailed and thorough analysis of every structural sub component of an existing tower. The structural analysis provided by PAUL J. FORD AND COMPANY verifies the adequacy of the main structural members of the tower. PAUL J. FORD AND COMPANY provides a limited scope of service in that we cannot verify the adequacy of every weld, plate, connection detail, etc.

4. The structural integrity of the existing tower foundations can only be verified if exact soils conditions are known. PAUL J. FORD AND COMPANY will not accept any responsibility for the adequacy of the existing foundations unless a site specific soils report is provided.

5. It is the owner's responsibility to determine the amount of ice accumulation, if any, that shall be used in the structural analysis.

6. The tower has been analyzed according to the minimum design wind loads recommended by the Electronics Industry Association Standard ANSI/EIA-222-F. If the owner or local or state agencies require a higher design wind load, PAUL J. FORD AND COMPANY should be made aware of this requirement.

7. The enclosed sketches are a schematic representation of the tower and foundation we have analyzed. If any material is fabricated from these sketches, the fabricator shall be responsible for field verifying the existing conditions and for proper fit and clearance in the field.

8. Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

3430043