



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

January 24, 1997

George L. Davis
Engineer of Telecommunications
Department of Public Safety
Division of State Police
P.O. Box 2794
Middletown, CT 06457-9294

Re: Department of Public Safety, Division of State Police, notice of intent to modify an existing telecommunications facility located off Interstate Route 84 in the Town of Middlebury, Connecticut.

Dear Mr. Davis:

At a public meeting held on January 22, 1997, the Connecticut Siting Council (Council) acknowledged your notice to modify an existing telecommunications facility in Middlebury, Connecticut, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modification is to be implemented as specified in your notice dated January 10, 1997. The modification is in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This change has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used and proposed for use on this tower. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Science and Technology, Bulletin No. 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

A handwritten signature in cursive script, reading "Mortimer A. Gelston".

Mortimer A. Gelston
Chairman

MAG/JMR/ss

c: The Honorable Edward B. St. John, First Selectman, Town of Middlebury



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC SAFETY

1111 Country Club Road
P.O. Box 2794
Middletown, CT 06457-9294

January 10, 1997

RECEIVED

JAN 10 1997

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

CONNECTICUT
SITING COUNCIL

SUBJECT; EXEMPT MODIFICATION - CTS SITE 20 MIDDLEBURY

Dear Chairman Gelston:

Attached please find an original and 20 copies of a Notice of Intent to Erect Exempt Telecommunications Associated Equipment pursuant to Connecticut General Statutes 16-50g et. Seq. and Section 16-50j-73 of the Regulations of the Connecticut Siting Council.

The Council's acknowledgment of the attached Notice would be appreciated.

Sincerely,

A handwritten signature in blue ink, appearing to read "George L. Davis".

George L. Davis
Public Safety Engineer
of Telecommunications

cc: P. Seaha
File

STATE OF CONNECTICUT
SITING COUNCIL

NOTICE OF INTENT TO ERECT EXEMPT
TELECOMMUNICATIONS ASSOCIATED EQUIPMENT

Pursuant to Connecticut General Statute 16-50g et. Seq. and Section 16-50j-73 of the Regulations of the Connecticut Siting Council. The Division of State Police hereby gives Notice of its intent to erect Exempt Telecommunications Associated Equipment at its Middlebury site located on Interstate Route 84 in Middlebury, Connecticut.

The site is currently occupied by an existing, active 160 foot three legged self supporting Telecommunications tower. Equipment on the existing tower or previously proposed to the Council consists of fourteen (14) antennas. The Division of State Police proposes to allow Sprint Spectrum Limited Partnership (SSLP) to install nine (9) Panel antennas on the tower. All current and proposed antennas are depicted in the Tower Elevation Drawing attached as ATTACHMENT A. This project is part of a Division of State Police effort to share tower space with other users.

The Division of State Police believes that this project is exempt from the need to obtain a Certificate of Environmental Compatibility and Public Need pursuant to Siting Council Reg. Sec. 16-50j-72(b) for the following reasons:

1. Existing Tower Site

The proposed location is currently occupied by an existing, active, one hundred sixty foot three-legged self supporting lattice type tower and equipment shelter.

2. Site Boundaries

As depicted in ATTACHMENT B, the property boundaries at the site will not be extended. No three cutting or extensive grading will be conducted at the site.

3. Tower Height

The existing one hundred sixty foot lattice tower will be retained and the height will not change.

4. Noise Levels

The proposed antenna addition will not increase noise levels at the existing facility by six decibels or more.

5. Radiation Power Density

The radio frequency sending or receiving capability of the additional antennas will not increase the total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard considered by the State Department of Environmental Protection (DEP). The current ANSI standard applicable to the Division of State Police facility and the total radio frequency electromagnetic radiation power density calculated for the tower site boundary are set forth in ATTACHMENT C.

CONCLUSION

For all of the above stated reasons, the Division of State Police requests the Siting Council to rule that this Notice is in compliance with the exception criteria for changes to an existing facility pursuant to Reg. Sec. 16-50j-72 (b).

Dated at Middletown CT this day of January, 1997.

by: 

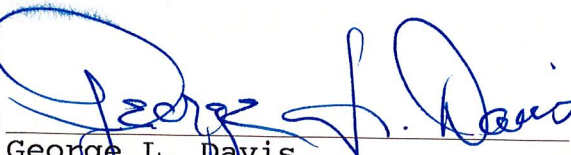
George L. Davis
Public Safety Engineer
of Telecommunications
P.O. Box 2794
Middletown, CT 06457-9294

CERTIFICATION

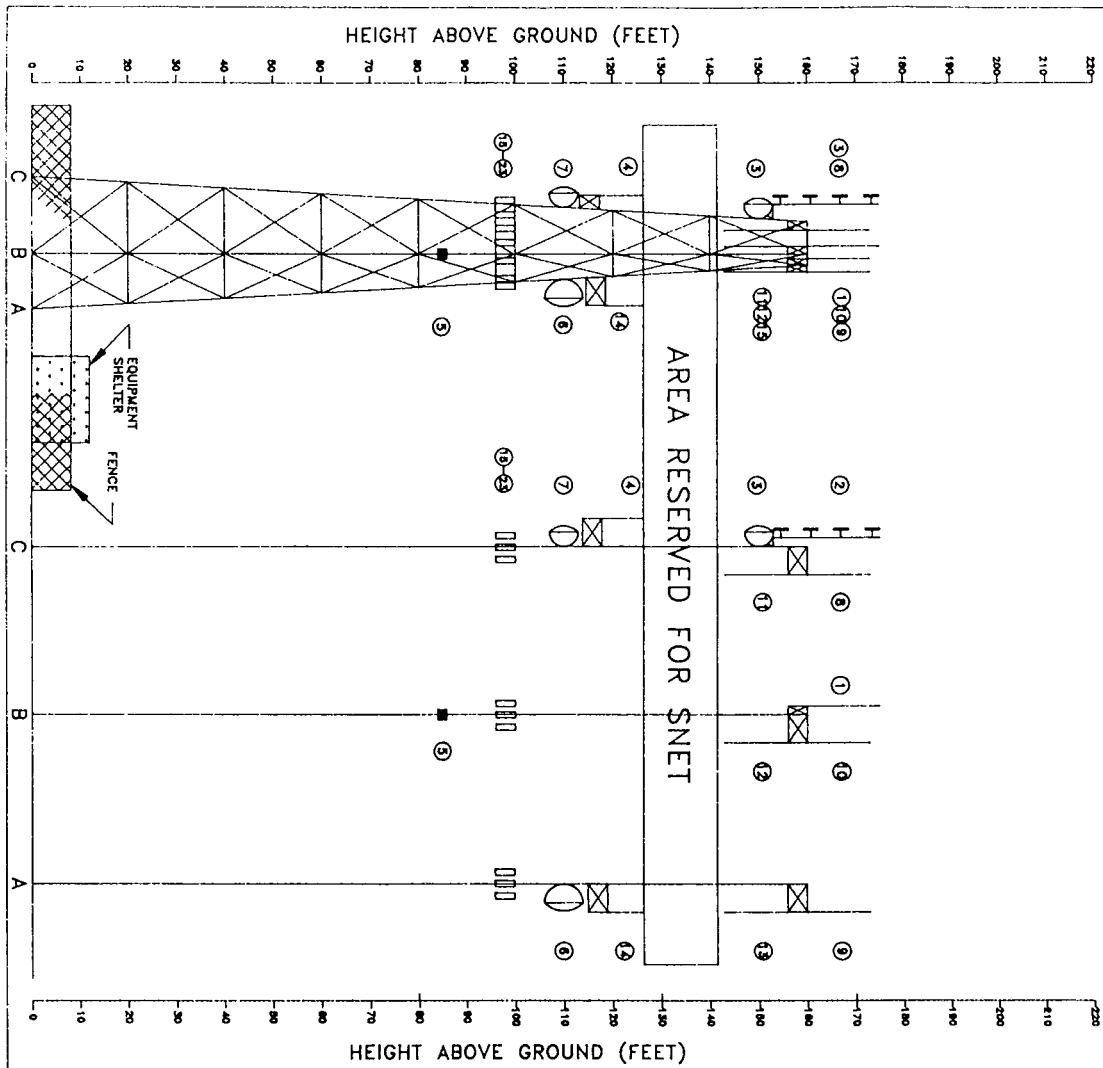
The undersigned hereby certifies that a copy of the foregoing Notice of Intent to Erect Telecommunications Associated Equipment was mailed this day of January 1997, to the below named chief elected official in Middlebury, Connecticut pursuant to Reg. Sec. 16-50j-73.

Edward B. St. John
First Selectman
Town Hall
1212 Whittemore Rd.
P.O. Box 392
Middlebury, Connecticut 06762

by:

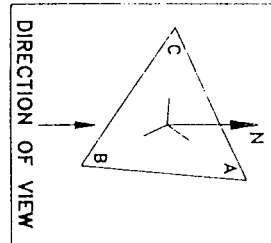


George L. Davis
Public Safety Engineer
of Telecommunications
P.O. Box 2794
Middletown, CT 06457-9294



LEGEND

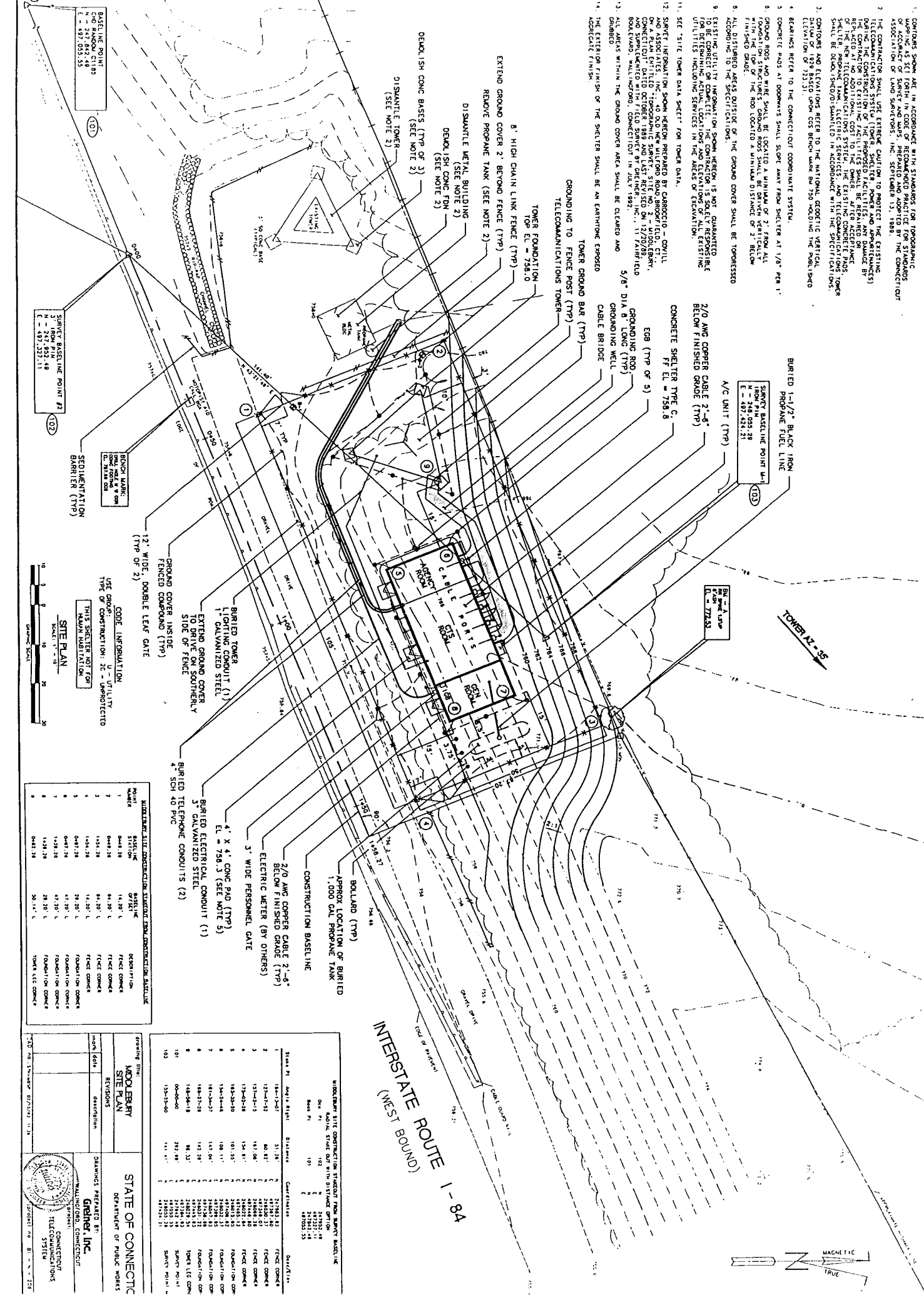
- ① 15' WHIP ON PIPE MOUNT (CSP)
- ② 22' 4-DIPOLE ARRAY (ATF)
- ③ 6' DISH (DOT)
- ④ 9' WHIP ON PIPE MOUNT (DOT)
- ⑤ 2' CORNER REFLECTOR (CSP)
- ⑥ 8' DISH W/RADOME (CSP)
- ⑦ 6' DISH W/RADOME (CSP)
- ⑧-⑬ 13' WHIP (CSP)
- ⑭ 9' WHIP (EMS)
- ⑮-⑲ 4' PANEL ARRAY (SPRINT)



DRAWN		1-06-87		CTS PROJECT	
DESIGNED				MIDDLEBURY	
CHECKED				ELEVATION & ANTENNA LOCATIONS	
REVISED				PROJECT	
APPROVED		41:30:49N		DRAWING NUMBER	
APPROVED FOR		73:07:22W		REV.	
760 FT AMSL				1	
SCALE		AS SHOWN		SHEET 1 of 1	

PLAN NOTES

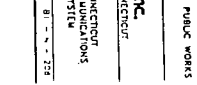
1. CONDITIONS SHOWN ARE IN ACCORDANCE WITH STANDARDS FOR TOPOGRAPHIC MAPPING AS SET FORTH IN CODE OF REGULATED PRACTICE FOR STANDARDS ASSOCIATION OF LAND SURVEYORS, INC. (REVISED 11, 1985).
2. THE CONTRACTOR SHALL USE EXTREME CAUTION TO PROTECT THE EXISTING TELECOMMUNICATIONS FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TELECOMMUNICATIONS FACILITIES. ANY DAMAGE TO EXISTING TELECOMMUNICATIONS FACILITIES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE EXISTING TELECOMMUNICATIONS FACILITIES SHALL BE DEMONSTRATED TO THE CONTRACTOR'S SATISFACTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TELECOMMUNICATIONS FACILITIES.
3. CONDITIONS AND ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NGVD 88) UNLESS OTHERWISE NOTED. THE PROPOSED ELEVATION OF 723.31.
4. BEARINGS REFER TO THE CONNECTOR COORDINATE SYSTEM.
5. CONCRETE PADS AT DOMAINS SHALL SLOPE AWAY FROM SHELTER AT 1/8" PER 1'.
6. GROUND RODS AND WIRE SHALL BE LOCATED A MINIMUM OF 2' FROM ALL UTILITIES. THE TOP OF THE ROD SHOULD BE MINIMUM 5' BELOW FINISHED GRADE.
7. ALL DISBURSED AREAS OUTSIDE OF THE GROUND COVER SHALL BE IMPROVED ACCORDING TO THE SPECIFICATIONS.
8. EXISTING UTILITY INFORMATION SHOWN HEREON IS NOT GUARANTEED TO BE CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES INCLUDING UTILITIES INCLUDING SERVICES IN THE AREAS OF DEVALUATION.
9. ALL AREAS WITHIN THE GROUND COVER AREA SHALL BE CLEARED AND SHELTERED.
10. THE EXTERIOR FINISH OF THE SHELTER SHALL BE AN EARTH-TONE EXPOSED ASPHALTIC FINISH.
11. SEE "SITE TOWER DATA SHEET" FOR TOWER DATA.
12. SURVEY INFORMATION SHOWN HEREON PREPARED BY CARROCCIO - CIVILLI AND ASSOCIATES, INC. 100 NEW MILFORD ROAD, BROOKFIELD, CT. 06031. CONDUCTED DATED OCTOBER 1988 AND LAST REVISED ON 12/20/88 AND SUPPLEMENTED WITH FIELD SURVEY BY CHARNER, INC., 11 FAIRFIELD BOULEVARD, WALLINGFORD, CONNECTICUT IN JULY 1992.



CODE INFORMATION:
 TYPE OF CONSTRUCTION: 2 - UNPROTECTED
 THIS SHELTER NOT FOR
 MAINTENANCE USE

POINT NUMBER	BASIS LINE	STATIONING	DESCRIPTION
1	141.20' L	141.20' L	TRUCK CORNER
2	84.20' L	84.20' L	TRUCK CORNER
3	14.20' L	14.20' L	TRUCK CORNER
4	28.20' L	28.20' L	FOUNDATION CORNER
5	42.20' L	42.20' L	FOUNDATION CORNER
6	56.20' L	56.20' L	FOUNDATION CORNER
7	70.20' L	70.20' L	FOUNDATION CORNER
8	84.20' L	84.20' L	FOUNDATION CORNER
9	98.20' L	98.20' L	FOUNDATION CORNER
10	112.20' L	112.20' L	FOUNDATION CORNER
11	126.20' L	126.20' L	FOUNDATION CORNER
12	140.20' L	140.20' L	FOUNDATION CORNER
13	154.20' L	154.20' L	FOUNDATION CORNER
14	168.20' L	168.20' L	FOUNDATION CORNER
15	182.20' L	182.20' L	FOUNDATION CORNER
16	196.20' L	196.20' L	FOUNDATION CORNER
17	210.20' L	210.20' L	FOUNDATION CORNER
18	224.20' L	224.20' L	FOUNDATION CORNER
19	238.20' L	238.20' L	FOUNDATION CORNER
20	252.20' L	252.20' L	FOUNDATION CORNER
21	266.20' L	266.20' L	FOUNDATION CORNER
22	280.20' L	280.20' L	FOUNDATION CORNER
23	294.20' L	294.20' L	FOUNDATION CORNER
24	308.20' L	308.20' L	FOUNDATION CORNER
25	322.20' L	322.20' L	FOUNDATION CORNER
26	336.20' L	336.20' L	FOUNDATION CORNER
27	350.20' L	350.20' L	FOUNDATION CORNER
28	364.20' L	364.20' L	FOUNDATION CORNER
29	378.20' L	378.20' L	FOUNDATION CORNER
30	392.20' L	392.20' L	FOUNDATION CORNER
31	406.20' L	406.20' L	FOUNDATION CORNER
32	420.20' L	420.20' L	FOUNDATION CORNER
33	434.20' L	434.20' L	FOUNDATION CORNER
34	448.20' L	448.20' L	FOUNDATION CORNER
35	462.20' L	462.20' L	FOUNDATION CORNER
36	476.20' L	476.20' L	FOUNDATION CORNER
37	490.20' L	490.20' L	FOUNDATION CORNER
38	504.20' L	504.20' L	FOUNDATION CORNER
39	518.20' L	518.20' L	FOUNDATION CORNER
40	532.20' L	532.20' L	FOUNDATION CORNER
41	546.20' L	546.20' L	FOUNDATION CORNER
42	560.20' L	560.20' L	FOUNDATION CORNER
43	574.20' L	574.20' L	FOUNDATION CORNER
44	588.20' L	588.20' L	FOUNDATION CORNER
45	602.20' L	602.20' L	FOUNDATION CORNER
46	616.20' L	616.20' L	FOUNDATION CORNER
47	630.20' L	630.20' L	FOUNDATION CORNER
48	644.20' L	644.20' L	FOUNDATION CORNER
49	658.20' L	658.20' L	FOUNDATION CORNER
50	672.20' L	672.20' L	FOUNDATION CORNER
51	686.20' L	686.20' L	FOUNDATION CORNER
52	700.20' L	700.20' L	FOUNDATION CORNER
53	714.20' L	714.20' L	FOUNDATION CORNER
54	728.20' L	728.20' L	FOUNDATION CORNER
55	742.20' L	742.20' L	FOUNDATION CORNER
56	756.20' L	756.20' L	FOUNDATION CORNER
57	770.20' L	770.20' L	FOUNDATION CORNER
58	784.20' L	784.20' L	FOUNDATION CORNER
59	798.20' L	798.20' L	FOUNDATION CORNER
60	812.20' L	812.20' L	FOUNDATION CORNER
61	826.20' L	826.20' L	FOUNDATION CORNER
62	840.20' L	840.20' L	FOUNDATION CORNER
63	854.20' L	854.20' L	FOUNDATION CORNER
64	868.20' L	868.20' L	FOUNDATION CORNER
65	882.20' L	882.20' L	FOUNDATION CORNER
66	896.20' L	896.20' L	FOUNDATION CORNER
67	910.20' L	910.20' L	FOUNDATION CORNER
68	924.20' L	924.20' L	FOUNDATION CORNER
69	938.20' L	938.20' L	FOUNDATION CORNER
70	952.20' L	952.20' L	FOUNDATION CORNER
71	966.20' L	966.20' L	FOUNDATION CORNER
72	980.20' L	980.20' L	FOUNDATION CORNER
73	994.20' L	994.20' L	FOUNDATION CORNER
74	1008.20' L	1008.20' L	FOUNDATION CORNER
75	1022.20' L	1022.20' L	FOUNDATION CORNER
76	1036.20' L	1036.20' L	FOUNDATION CORNER
77	1050.20' L	1050.20' L	FOUNDATION CORNER
78	1064.20' L	1064.20' L	FOUNDATION CORNER
79	1078.20' L	1078.20' L	FOUNDATION CORNER
80	1092.20' L	1092.20' L	FOUNDATION CORNER
81	1106.20' L	1106.20' L	FOUNDATION CORNER
82	1120.20' L	1120.20' L	FOUNDATION CORNER
83	1134.20' L	1134.20' L	FOUNDATION CORNER
84	1148.20' L	1148.20' L	FOUNDATION CORNER
85	1162.20' L	1162.20' L	FOUNDATION CORNER
86	1176.20' L	1176.20' L	FOUNDATION CORNER
87	1190.20' L	1190.20' L	FOUNDATION CORNER
88	1204.20' L	1204.20' L	FOUNDATION CORNER
89	1218.20' L	1218.20' L	FOUNDATION CORNER
90	1232.20' L	1232.20' L	FOUNDATION CORNER
91	1246.20' L	1246.20' L	FOUNDATION CORNER
92	1260.20' L	1260.20' L	FOUNDATION CORNER
93	1274.20' L	1274.20' L	FOUNDATION CORNER
94	1288.20' L	1288.20' L	FOUNDATION CORNER
95	1302.20' L	1302.20' L	FOUNDATION CORNER
96	1316.20' L	1316.20' L	FOUNDATION CORNER
97	1330.20' L	1330.20' L	FOUNDATION CORNER
98	1344.20' L	1344.20' L	FOUNDATION CORNER
99	1358.20' L	1358.20' L	FOUNDATION CORNER
100	1372.20' L	1372.20' L	FOUNDATION CORNER

WALLINGFORD, CONNECTICUT
 DEPARTMENT OF PUBLIC WORKS
 DRAWINGS PREPARED BY:
Greiner, Inc.
 PROJECT: TELECOMMUNICATIONS SYSTEM
 SHEET NO. 81-1-1-252



ATTACHMENT C

RADIO/ANTENNA SYSTEMS DATA
=====

SITE NAME: MIDDLEBURY PREPARED BY: D.P.S.
TOWER HEIGHT: 160 FEET ON DATE: 01-09-1997

No	OPERATING FREQUENCY (MHz)	TRANSMIT POWER (WATTS)	ANTENNA			ERP (W)	
			HEIGHT (FEET)	TYPE	VERTICAL SIZE (FT)		GAIN (dB)
1	42.0400	330	160	WHIP ON PIPE MOUNT	15	0.0	330
2	166.0000	250	153	FOUR DIPOLE ARRAY	22	6.0	995
3	2192.0000	3	150	SOLID DISH W/RADOME	6	29.9	1795
4	47.0000	100	122	WHIP ON PIPE MOUNT	18	0.0	100
5	460.3000	10	85	CORNER REFLECTOR	2	8.5	71
6	6700.0000	1	110	SOLID DISH W/RADOME	8	42.1	9939
7	6700.0000	1	110	SOLID DISH W/RADOME	6	39.6	5591
8	867.5000	5 x 25	160	WHIP	13	9.0	1000
9	867.0000	5 x 25	160	WHIP	13	9.0	1000
10	867.0000	5 x 25	160	WHIP	13	9.0	1000
11	822.5000	0	147	WHIP	13	9.0	0
12	822.5000	0	147	WHIP	13	9.0	0
13	822.5000	0	147	WHIP	13	9.0	0
14	458.0750	0	120	WHIP	22	10.0	0
15	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
16	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
17	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
18	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
19	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
20	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
21	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
22	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814
23	1957.5000	11 x 2	97	PANEL ANTENNA	4	15.0	814

NOTES: 1. TRANSMIT POWER ENTRIES SHOWN AS '5 x 25' SHOULD BE INTERPRETED AS '5 TRANSMITTERS, EACH HAVING A POWER OF 25 WATTS'. ENTRIES OF '0' MEAN 'RECEIVE ONLY'- i.e. NO TRANSMITTER. ALL OTHER ENTRIES REFER TO ONE TRANSMITTER WITH THE POWER SHOWN.
2. ERP (EFFECTIVE RADIATED POWER) IS THE PRODUCT OF ALL TRANSMITTER POWERS AND THE NUMERICAL VALUE OF THE GAIN (ANTILOG OF dB) RELATIVE TO A DIPOLE ANTENNA.

POWER DENSITY ANALYSIS

=====

POWER DENSITY (% OF MAX. EXPOSURE VS DISTANCE FROM THE TOWER BASE

 SITE NAME: MIDDLEBURY PREPARED BY: D.P.S.
 TOWER HEIGHT: 160 FEET ON DATE: 01-09-1997

DISTANCE (FEET)	POWER DENSITY (% OF MAX. EXPOSURE)
-----	-----
0	6.1396
50	5.4134
100	4.6243
150	3.6917
200	2.8708
250	2.2264
300	1.7480
350	1.3935
400	1.1290
450	0.9290
500	0.7755
550	0.7101
600	0.6599
650	0.6133
700	0.5692
750	0.5276
800	0.4888
850	0.4528
900	0.4197
950	0.3893
1000	0.3615
1050	0.3362
1100	0.3215
1150	0.3077
1200	0.2945
1250	0.2819

ATTACHMENT C

POWER DENSITY ANALYSIS

=====

AT THE TOWER BASE, FOR EACH RADIO/ANTENNA SYSTEM

SITE NAME: MIDDLEBURY
TOWER HEIGHT: 160 FEET

PREPARED BY: D.P.S.
ON DATE: 01-09-1997

No	OPERATING FREQUENCY (MHz)	EIRP (WATTS)	DISTANCE TO BASE OF TOWER (FEET)	MAXIMUM PERMISSIBLE EXPOSURE (MW/SQ-CM)	AT THE BASE OF THE TOWER	
					POWER DENSITY (MW/SQ-CM)	PERCENT OF MAX. EXPOSURE
1	42.0400	541	168	0.200	0.0006608	0.3304
2	166.0000	1633	164	0.200	0.0020791	1.0395
3	2192.0000	2945	150	1.461	0.0000149	0.0010
4	47.0000	164	131	0.200	0.0003274	0.1637
5	460.3000	116	85	0.306	0.0005505	0.1799
6	6700.0000	16305	110	4.466	0.0004666	0.0104
7	6700.0000	9172	110	4.466	0.0004666	0.0104
8	867.5000	1641	167	0.578	0.0020267	0.3506
9	867.0000	1641	167	0.578	0.0020267	0.3506
10	867.0000	1641	167	0.578	0.0020267	0.3506
11	822.5000	0	154	0.548	0.0000000	0.0000
12	822.5000	0	154	0.548	0.0000000	0.0000
13	822.5000	0	154	0.548	0.0000000	0.0000
14	458.0750	0	131	0.305	0.0000000	0.0000
15	1957.5000	1335	97	1.305	0.0048607	0.3725
16	1957.5000	1335	97	1.305	0.0048607	0.3725
17	1957.5000	1335	97	1.305	0.0048607	0.3725
18	1957.5000	1335	97	1.305	0.0048607	0.3725
19	1957.5000	1335	97	1.305	0.0048607	0.3725
20	1957.5000	1335	97	1.305	0.0048607	0.3725
21	1957.5000	1335	97	1.305	0.0048607	0.3725
22	1957.5000	1335	97	1.305	0.0048607	0.3725
23	1957.5000	1335	97	1.305	0.0048607	0.3725

TOTAL PERCENT OF MAXIMUM PERMISSIBLE EXPOSURE FOR
UNCONTROLLED ENVIRONMENTS FOR ALL 23 RADIO SYSTEMS = 6.1396

- NOTES: 1. THE POWER DENSITIES REPRESENTING THE 'MAXIMUM PERMISSIBLE EXPOSURE FOR UNCONTROLLED ENVIRONMENTS' ARE CALCULATED IN ACCORDANCE WITH IEEE C95.1-1991 (REVISION OF ANSI C95.1-1982).
2. POWER DENSITIES ARE CALCULATED IN ACCORDANCE WITH THE METHODS DEFINED IN FCC DOCUMENT 'OST BULLETIN NO. 65', OCTOBER 1985.
3. EIRP (EFFECTIVE ISOTROPICALLY RADIATED POWER) REFERENCES THE RADIATED POWER TO A POINT SOURCE, WHICH YIELDS POWERS 1.6406 TIMES HIGHER THAN ERP.