

\$150.
P. 1

Town of Plainfield

Zoning Board

Application for Variance

Tax Map 217 Lot 15

Property Owner

Shirley L. Hudson
82 Black Hill Road,
Plainfield, New Hampshire 03781

Submitted by:

Gina Jacobson

WAVECOMM Inc.

94 Main Street

West Lebanon, New Hampshire 03784

603-298-9000

Public Safety Radio Project for the Town of Plainfield NH

December 17, 2012

Table of Contents

Statement of Purpose

Variance Application

Abutters List

Supplement to Application

Letter of Authorization

FCC Site Approval

Town Ordinance for Variance & Special Exception

Property Tax Cards

Area Tower Location Maps

Site Map

Proposed Coverage Maps

Rohn 25 G Specifications

Site Security and Removal Plan

Statement of Purpose

The purpose of his project it improve the radio communications system for the town of Plainfield Public Safety agencies. Our current system has many faults that create safety issues for our personnel.

Over the last several years the fire service has seen time when dispatch puts out a call and none of the pagers are activated by the Hanover based radio antennas. This creates delays in response to emergency calls. Numerous complaints have been filed, however the last rounds of grant money were spent to improve the radio system north of Interstate 89, which is where the majority of the towns are located that Hanover dispatches for.

On the Police side of the radio, we still have very limited portable radio coverage, meaning that when officers are out of their vehicles, they have limited communications ability to call for assistance.

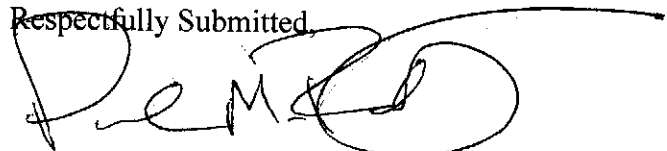
Our objective is to establish a radio relay sites that transmit all at once over the radio network. This greatly enhances the transmit ability to cover the entire community with the broadcast, ensuring that fire department personnel get their calls so that a response can occur.

After careful investigations, WaveComm Inc. has established three site to cover our community and area of the upper valley. These carefully selected sites will also give the police department the portable radio coverage needed to ensure that our officers can call for assistance and communicate with the dispatch center when the officers are not in the vehicles.

Again this project will establish a baseline of improvements in the communications systems in Plainfield. Eventually the goal would be to enhance the Public Works System and the Rescue.

Both the Police and Fire Department support this project and would like to thank you for the opportunity to speak on this subject.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "P. M. Roberts", with a large, sweeping flourish extending to the right.

Paul M. Roberts,
Chief of Police

Date	Book	Page	Type	Price	Grantor
05/10/11					
04/30/08					
09/17/03					
05/15/02					

HUDSON, SHIRLEY L
 82 BLACK HILL RD
 PLAINFIELD, NH 03781

WHITE; ANTIQUE REPLICA; NICE WOODWORK-BLT IN BOOKCASES; (2) 2-PC, (1) 5-PC (1) 4-PC, COUNT INCLUDES JET TUBS; WAS 6 1700; 4/08 TIN CEILING IN KIT; UFF WINDOWS NEED CONSTANT REPLACEMENT DUE TO WIND DRIVEN RAIN; IA; 2011 LOT SIZE PER 6/17/10 ANNEXATION PLAN

Feature Type	Units	Length x Width	Size Adj	Rate	Cond	Market Value	Notes
FIREPLACE 2-STAND	2		100	5,000.00	100	10,000	
SHED-WOOD	200	20 x 10	140	7.00	80	1,568	
						11,600	

PLAINFIELD ASSESSING OFFICE

Year	Building	Features	Land
2010	\$ 462,900	\$ 11,600	\$ 144,213
		Parcel Total: \$ 618,713	
2011	\$ 462,900	\$ 11,600	\$ 146,622
		Parcel Total: \$ 621,122	
2012	\$ 462,900	\$ 11,600	\$ 147,238
		Parcel Total: \$ 621,738	

Zone: RR-RURAL RES Minimum Acreage: 3.50 Minimum Frontage: 200

Land Type	Units	Base Rate	NC	Adj	Site	Road	DWay	Topography	Cond	Ad Valorem	SPT	R	Driveway:		Road:
													Tax	Value	
IF RES	3,500 ac	70,000	E	100	100	100	100	100	100	70,000	0	N	70,000	ACC/SITE/PRIV	
IF RES	8,650 ac	x 3,000	X	37					75	7,200	0	N	7,200	DRIVEWAY	
FARM LAND	65,000 ac	x 3,000	X	37					78	56,300	78	Y	18,102		
MNGD PINE	251,730 ac	x 3,000	X	37					68	190,000	68	Y	25,438		
MNGD HARDWD	109,000 ac	x 3,000	X	37					65	78,600	65	Y	3,671		
FARM LAND	2,000,000 ff	x 78	E	100					85	132,600	0	N	0	TOPO	
WETLANDS	15,850 ac	x 3,000	X	37					100	17,600	100	N	327		
IF RES	1,000 vu									22,500			22,500	TNL/3TIER VU	
	453,730 ac									574,800			147,238		

HUDSON, SHIRLEY L
 82 BLACK HILL RD
 PLAINFIELD, NH 03781

05/10/11 GWH
 05/15/02 THRL
 VACANT; WAS 6 1715; 2011 LOT SIZE REDUCED FROM 82 TO 66.3 ACRES
 AND ROAD FRONTAGE INCREASED FROM 1553' TO 1980' PER 6/17/10
 ANNEXATION PLAN APPROVAL; VIEW FACTOR??

Feature Type	Units	Length x Width	Size Adj	Rate	Cond	Market Value	Notes

PLAINFIELD ASSESSING OFFICE

Year	Building	Features	Land
2010	\$ 0	\$ 0	\$ 18,890
			Parcel Total: \$ 18,890
2011	\$ 0	\$ 0	\$ 16,722
			Parcel Total: \$ 16,722
2012	\$ 0	\$ 0	\$ 16,821
			Parcel Total: \$ 16,821

Zone: RR-RURAL RES Minimum Acreage: 3.50 Minimum Frontage: 200

Land Type	Units	Base Rate	NC	Adj	Site	Road	DWay	Topography	Cond	Ad Valorem	SPI	R	Driveway:	Tax Value	Notes
MNGD PINE	3.500 ac	70,000	E	100	100	100	100		80	56,000	100	N		495	UND
MNGD PINE	21.500 ac	x 3,000	X	92					80	47,500	100	N		3,043	
MNGD PINE	1,600.000 ff	x 78	E	100					80	99,800	0	N		0	
MNGD PINE	16.300 ac	x 3,000	X	92					80	36,000	100	N		2,307	
FARM LAND	25.000 ac	x 3,000	X	92					80	55,200	100	N		10,976	
	66.300 ac									294,500				16,821	

SPECIAL VARIANCE

APPLICATION

PLAINFIELD ZONING BOARD OF ADJUSTMENT
APPLICATION FOR APPEAL

PLEASE READ: This form should be completed after discussions with the town's zoning administrator about the proposal. If you have not already done so, please contact the zoning administrator (469-3201).

Applicant's name: Shirley L. HUDSON

Mailing address: 82 Black Hill Road, Plainfield NH

Property Street address: 82 Black Hill, Plainfield

Tax Map / Lot Number: Map 000217 Lot 000014

Zoning district: RR-RURAL RES.

Property owner of record:

Type of appeal (check one): variance
 special exception #
 administrative decision

Applicants signature: *Shirley L. Hudson*

Required Attachments: a) applicant signed description of the proposal.
b) site map(s) exterior/interior.
c) abutter list with mailing addresses.

Fee: application \$
notification \$ Total \$ *\$150*

Hearing Date: *11/4/12*

In order to be on the meeting agenda for the above date, your paid application must be received at the town office no later than Monday _____ (ZBA rule 9.3).

Office Use

date filed: *11/2/12*
case number: *13-01*
attachments: *1 in*
fee paid: *10 One*

List of Abutters

ARNOLD, ELLEN L REVOC TRUST
ARNOLD, ELLEN L TRUSTEE
63 BLACK HILL RD
PLAINFIELD, NH 03781

BINGER, DAVID G QUALIFIED
PERSONAL RESIDENCE TR
366 OLD COUNTY RD
PLAINFIELD, NH 03781

BROWN, LYNDON L
& DORIS F
PO BOX 396
MERIDEN, NH 03770

DANIELS, JOHN S
305 OLD COUNTY RD
PLAINFIELD, NH 03781

GARCIA, ALEXANDRA J
89 BLACK HILL ROAD
PLAINFIELD, NH 03781

HAZELTON JR, WALTER H
215 OLD COUNTY RD
PLAINFIELD, NH 03781

HAZELTON JR, WALTER H
& ELIZABETH F
215 OLD COUNTY RD
PLAINFIELD, NH 03781

HEWES, JEAN
& GENE
21 HEDGEHOG RD
PLAINFIELD, NH 03781

MOGIELNICKI, ROBERT PETER
& NANCY P
120 BLACK HILL RD
PLAINFIELD, NH 03781

MORGAN, MARC
& AUDREY
290 PORTER ROAD
PLAINFIELD, NH 03781

PLAINFIELD CIDER ORCHARDS
98 POVERTY LN
LEBANON, NH 03766

PLUMMER, KAREN LOUISE
313 OLD COUNTY RD
PLAINFIELD, NH 03781

ROBILLARD, ROBERT D
235 OLD COUNTY RD
PLAINFIELD, NH 03781

ROSOFF, WILLIAM MISHA
PO BOX 142
MERIDEN, NH 03770

SMITH, DEREK N &
STACEY M
163 OLD COUNTY ROAD
PLAINFIELD, NH 03781

SMITH, PAUL J
& VICTORIA L
225 OLD COUNTY RD
PLAINFIELD, NH 03781

STEPHENSON, JANE F REV TRUST
STEPHENSON, JANE F TRUSTEE
8 BLACK HILL RD
PLAINFIELD, NH 03781

STONE HOUSE HILL LLC
PO BOX 5251
WEST LEBANON, NH 03784

TELL, HAKAN P
& SOPHIE E
100 BLACK HILL RD
PLAINFIELD, NH 03781

WILLIAMS, HEIRS OF NORMAN C
C/O WILLIAMS, HERBERT
761 RTE 12A
PLAINFIELD, NH 03781

WILSON, ALLAN J
& JEAN B
109 BLACK HILL RD
PLAINFIELD, NH 03781

20 mile Radius of Plainfield

Acworth
Alexandria
Andover
Boscawen
Bradford
Bristol
Canaan
Canterbury
Charlestown
Claremont
Cornish
Danbury
Dorchester
Enfield
Franklin
Goshen
Grafton
Grantham
Groton
Hanover
Henniker
Hill
Hillsborough
Langdon
Lebanon
Lempster
Lyme
New London
Newport
Orange
Plainfield
Salisbury
Springfield
Sunapee
Sutton
Unity
Warner

Washington
Webster
Windsor
Woodstock

Supplement to Application

The Subject property is owned by Shirley L. Hudson of Plainfield New Hampshire. The property consists of a single family home located on 66.3 acres. The original parcel consisted of 82 acres which was reduced in 2011. The owner agrees to lease or barter the land with WaveComm Inc, 94 Main Street, West Lebanon New Hampshire. WaveComm, Established in 1991 offers Pagers, 2 way radio, Radio Repeater Services, Voice over IP and Broadband Services

1. Purpose of Project: The purpose of this project is to establish a broadband relay site at the homestead of Shirley Hudson, located at 82 Black Hill Road. The overall objective of this site is to create a radio relay site for the local public safety services of Plainfield New Hampshire.

2 Current Radio Configuration Currently the Town of Hanover operates a 24 hour, seven day a week Public Safety Dispatch Center. The Operational facility is located at 36 Lyme Road, Hanover NH. This facility operates a series of radio networks which service a total of 7 Police Agencies, 19 Fire Agencies, and 15 Emergency Medical Service agencies.

PROPOSED CONFIGURATION

Three broadband relay sites located at,

- A. Mount Ascutney Radio Tower
- B. 82 Black Hill Road, (Hudson Property)
- C. 198 Rt. 120 Plainfield (Ericson Property)

These Sites have been carefully selected as to the topography of the Community that makes the system affordable to implement.

This new radio system will provide new technology to the Public Safety Services. The following are some of the new features that would be available:

Standard Group Calling,	Fire to Fire, Police to Police Police to Fire Fire3 to Police Dispatch to Police Dispatch to Fire
-------------------------	--

Priority Group Call	Gives the Command Position the ability to override other communications
---------------------	---

- Messaging
- a. Status Messages
 - b. Text Messaging
 - c. Radio to Radio messaging
 - d. Radio to phone messaging
 - e. Computer to Radio Messaging
- GPS Location Service
- to include fully integrated single chip GPS Receiver. With Position information transmission during emergency alarms

PROPOSED LOCATION ENVIRONMENT

The proposed site is located in Rural Conservation II Zoning District. This district was established in the Town of Plainfield Zoning Ordinance dated 2010. The facility as proposed has over 300 acres and no houses within several hundred feet.

This facility is not located near a stream or water course

The facility doesn't involve development of subdivision on or near a river, lake, pond or reservoir.

The site location is not vulnerable to potential erosion problems. The terrain does not have an extreme slope where the facility will be located. The only ground disturbance proposed will be a 4 x 4 pad.

The adjoining property is not near any hay bales, dams, stone check dams or silt fences, daily mulching, diversion ditches, sediment basins, etc.

No construction or improvements to any roads or power lines corridors

The existing road is a dirt road; no new construction will be needed for this facility

No utility services are needed for this project

The facility is not located near any necessary wildlife habitat or endangered species, the minimal amount of disturbance associated with the installation of the facility and the minimum amount of maintenance they require, the facility should have no impact on deer winter habits, black bear habits, endangered species and related habitats, or other habitats that may be considered "necessary".

This facility should have no impact on breeding and migrating birds. The disturbance associated with the installation of the facility is minimal, the facility will not create noise, nor have lights.

The facility is over 2 direct miles to the nearest governmental or public utility facilities, services and lands, including highways, airports, waste disposal facilities, building, fire and police stations, universities, schools, cultural facilities including museums, hospitals, electric generation and transmission facilities, oil, gas pipelines, parks.



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76137

Aeronautical Study No.
 2012-ANE-1552-OE

Issued Date: 11/21/2012

Gina Watkins
 WaveComm LLC
 94 Main Street
 West Lebanon, NH 03784

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower (rohn 25g)
 Location: West Lebanon, NH
 Latitude: 43-34-28.07N NAD 83
 Longitude: 72-19-00.59W
 Heights: 1125 feet site elevation (SE)
 100 feet above ground level (AGL)
 1225 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 05/21/2014 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

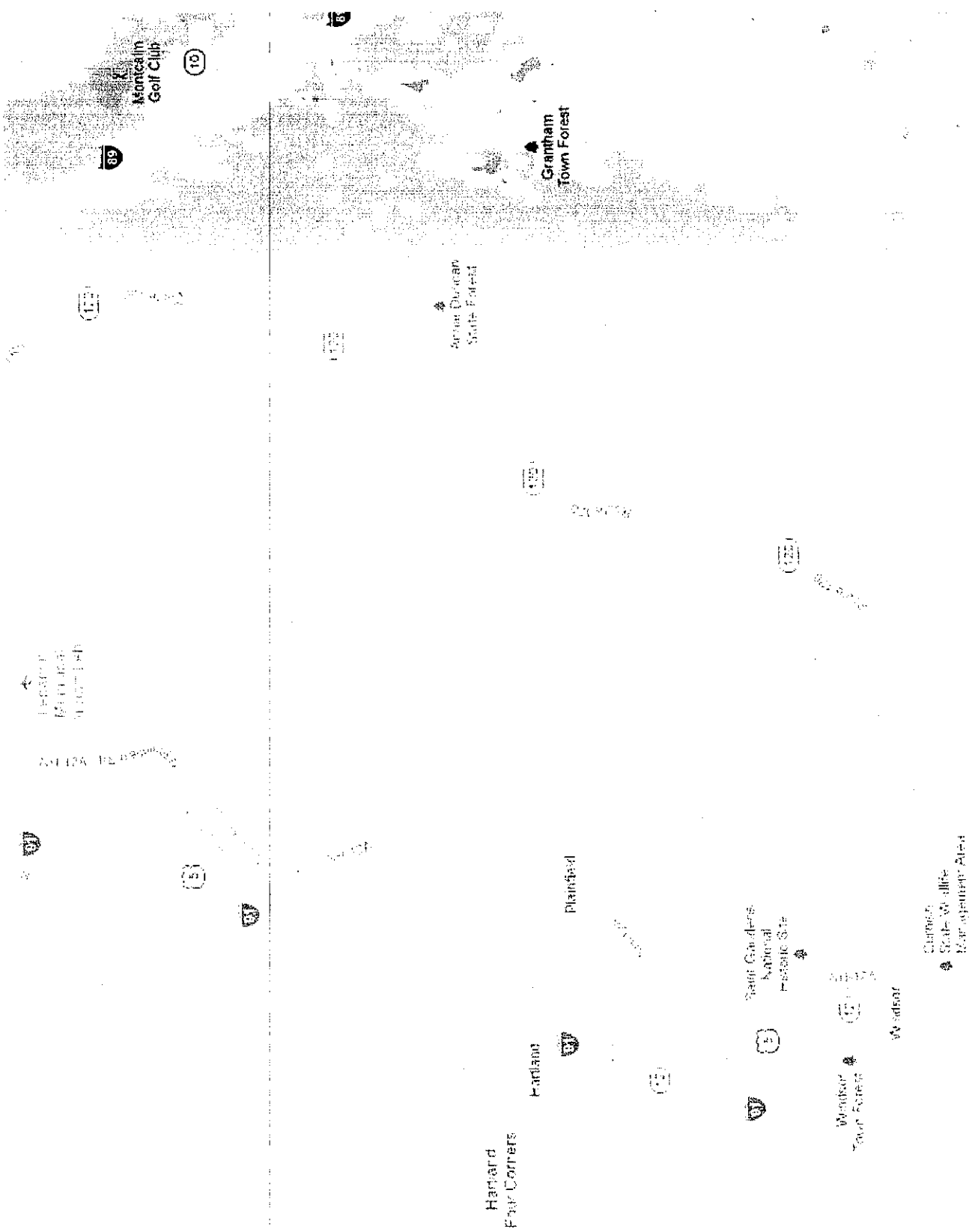
If we can be of further assistance, please contact our office at (781) 238-7522. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2012-ANE-1552-OE.

Signature Control No: 175843666-177449942
Suzanne Dempsey
Technician

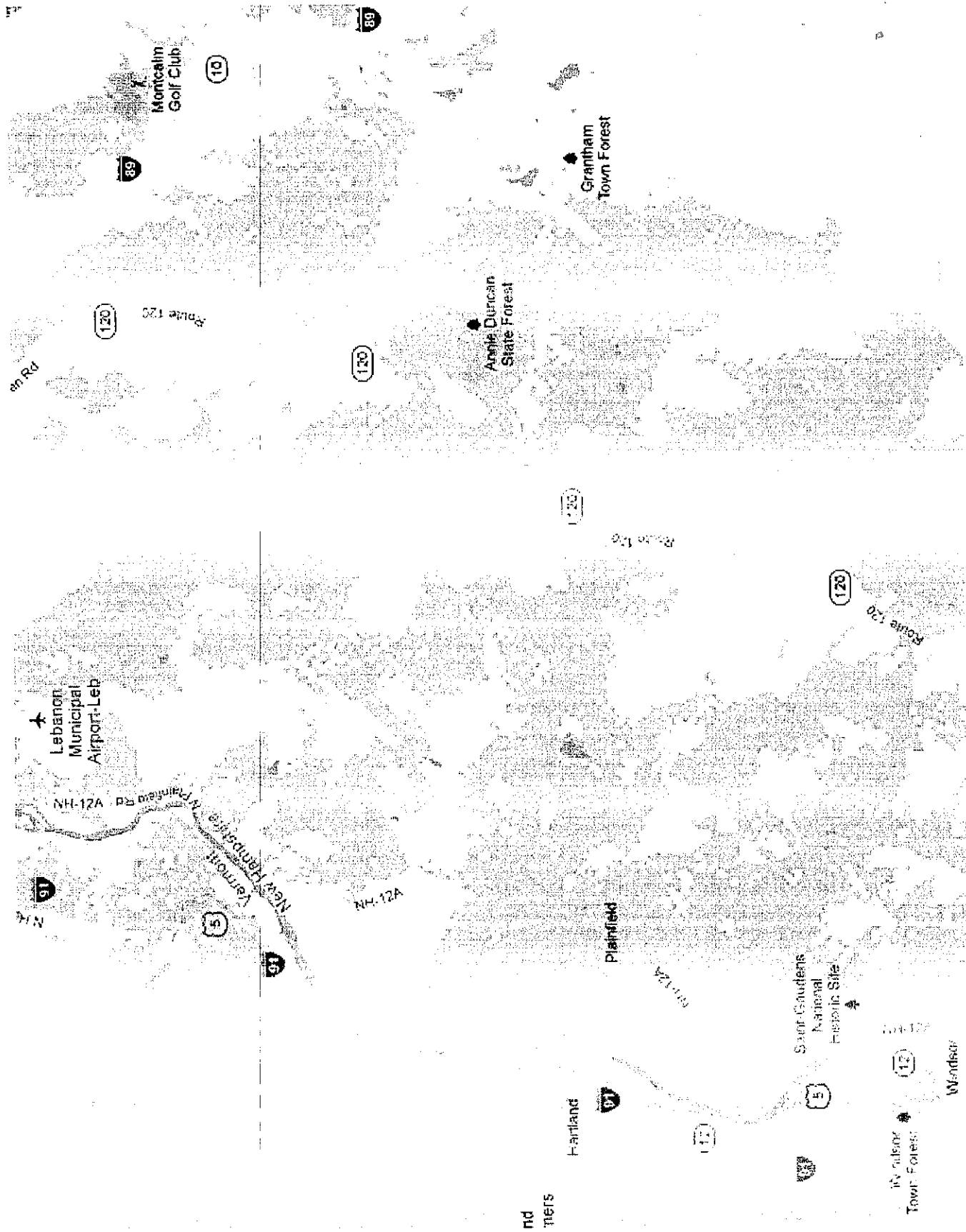
(DNE)

Attachment(s)
Frequency Data

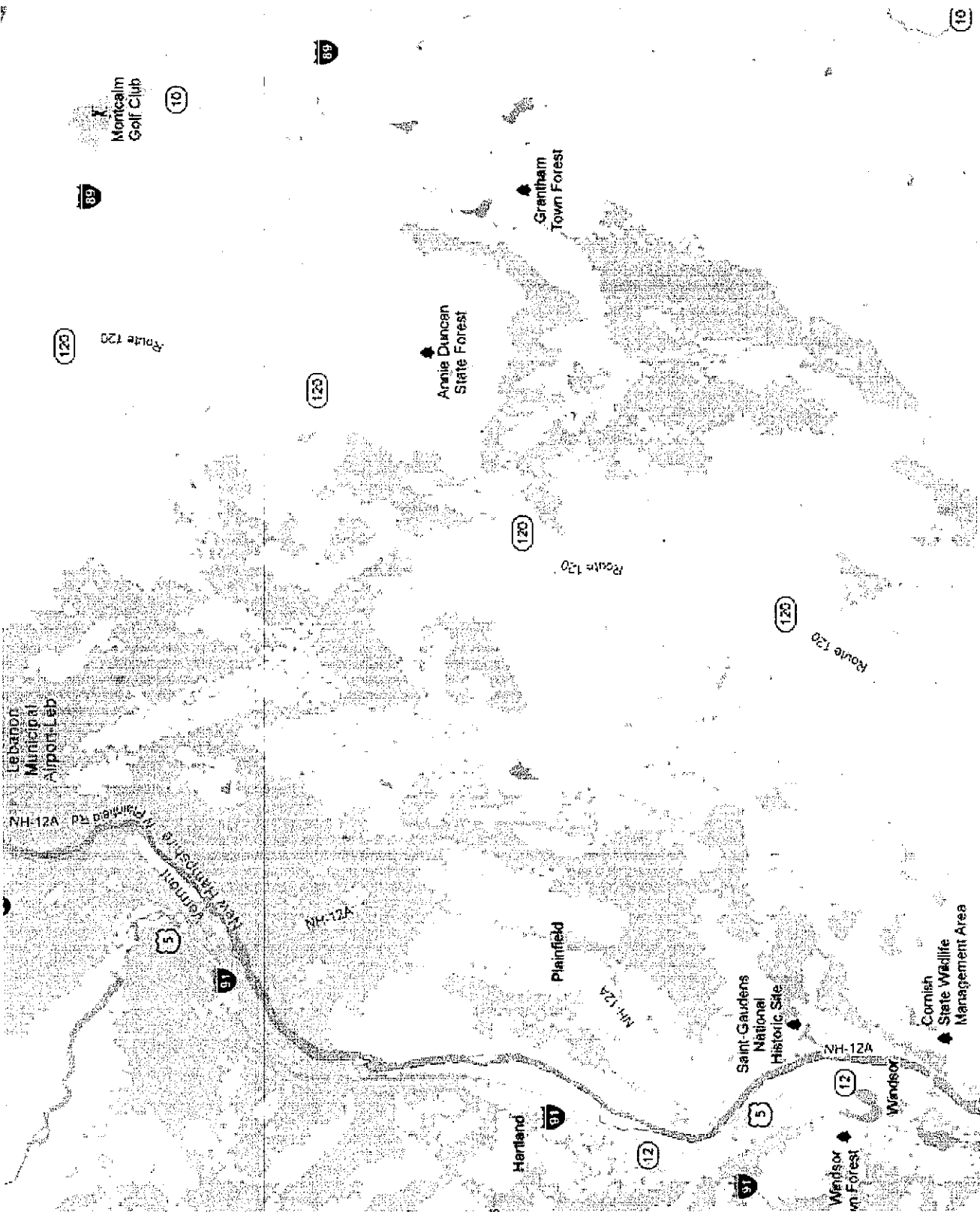
cc: FCC



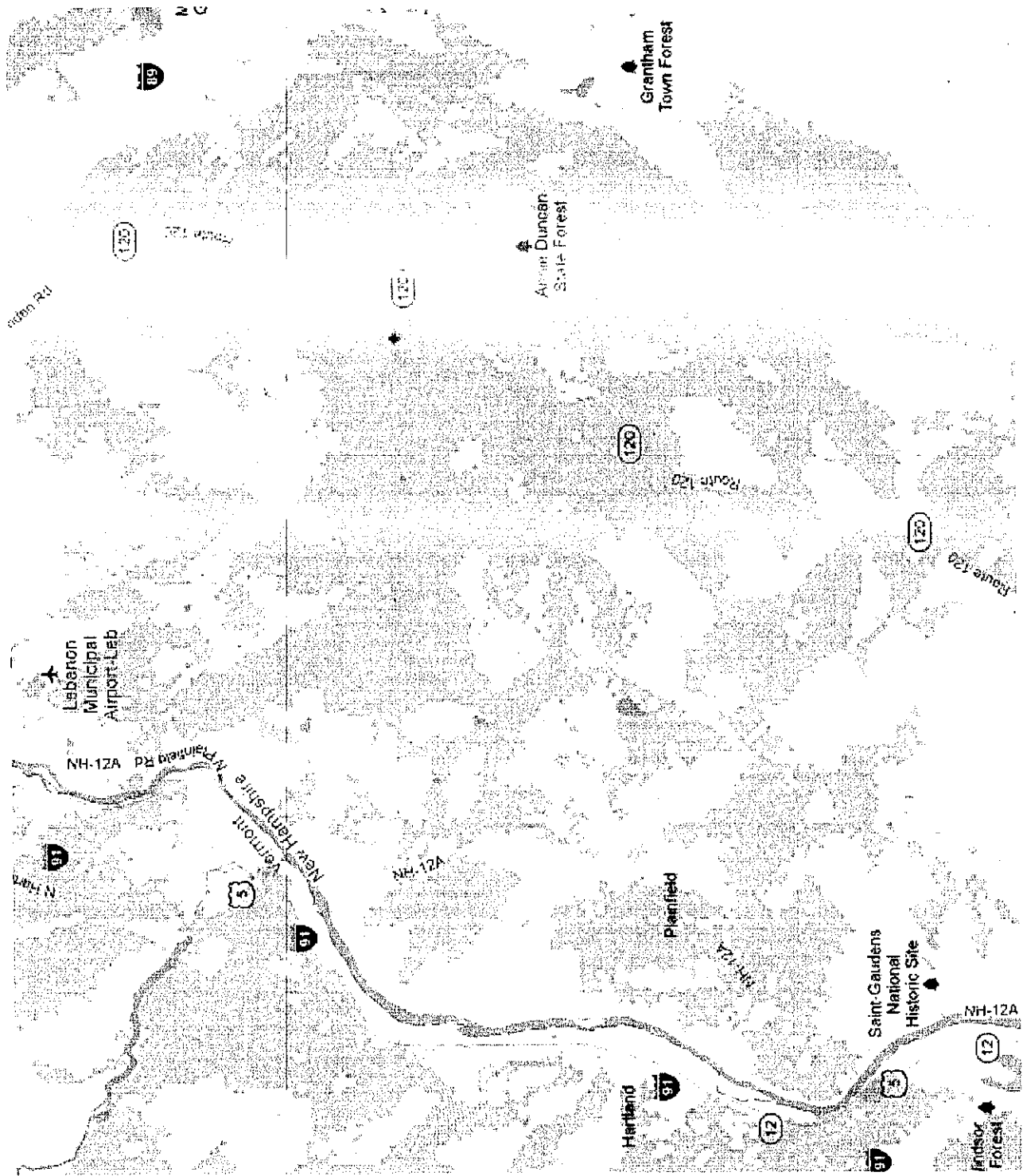
PLAINFIELD PROJECT



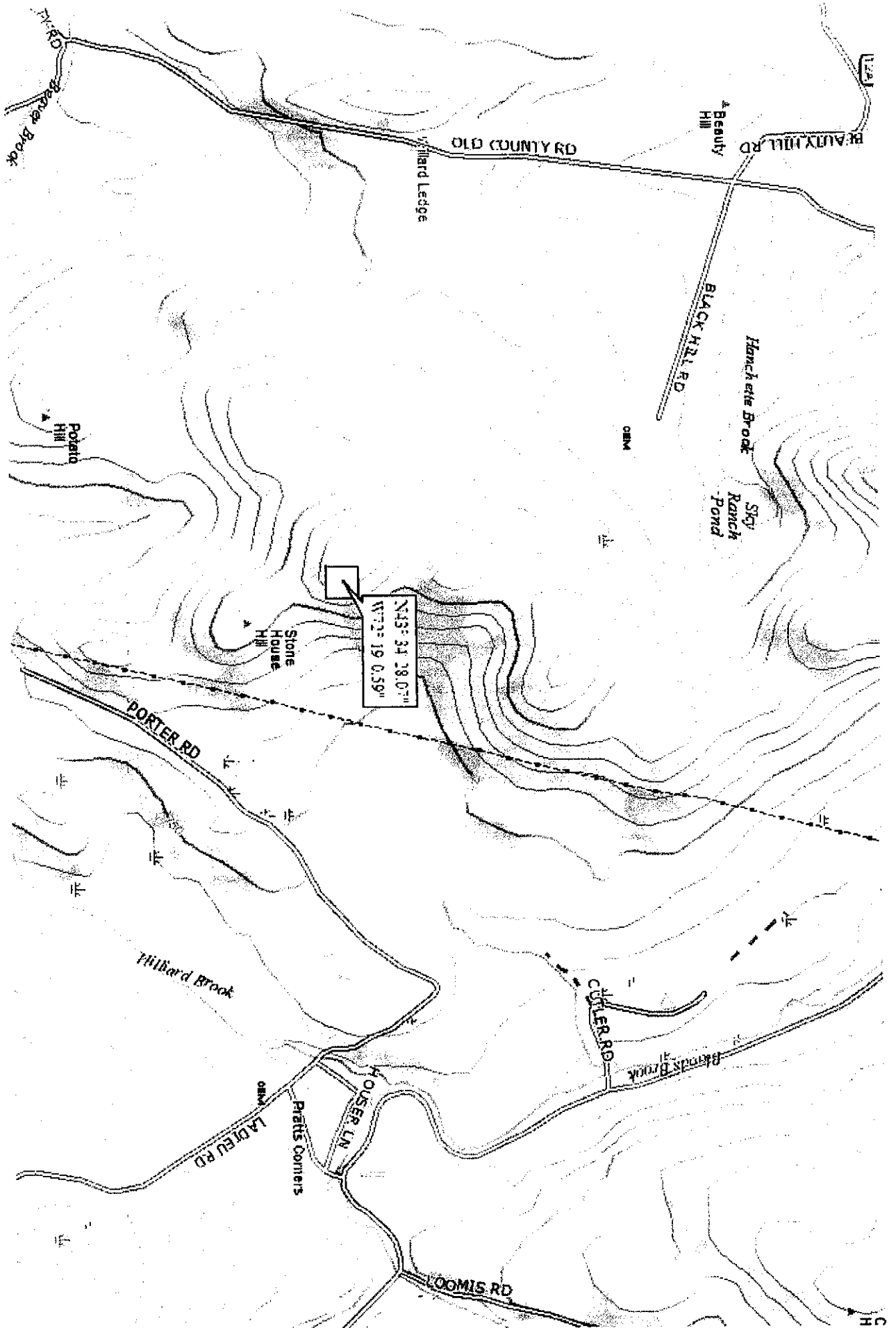
ASCUTNEY



HUDSON



ERICKSON

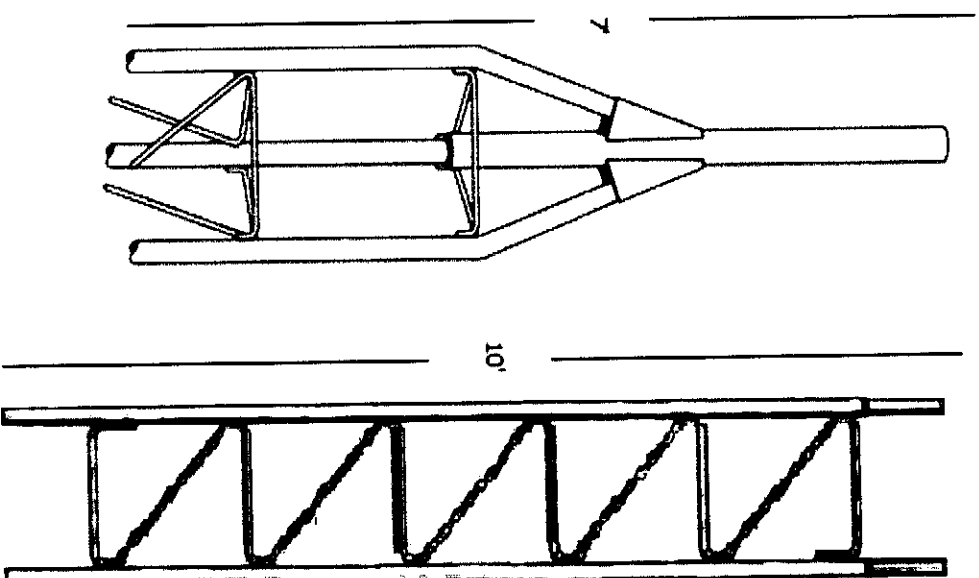


Frequency Data for ASN 2012-ANE-1552-OE

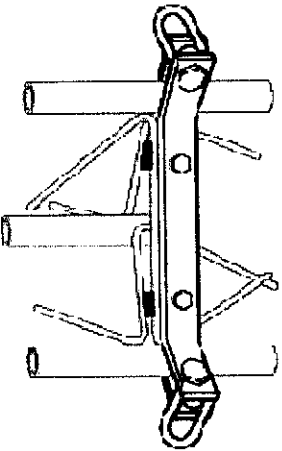
LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
2412	2462	MHz	24	dBm
5470	5825	MHz	24	dBm

Radio Structure

The structure is a 12" face triangular design using 1-1/4" steel legs and continuous 5/16" steel rod bracing. Middle sections measure 10 feet long, top sections are approximately nine. sections fit together with a double-bolted joint. The structure is a guyed design; three anchors spaced radially 120° apart, are set out from the base 80% of the structure height. A wide variety of optional sections and options make the 25G an extremely versatile structure.

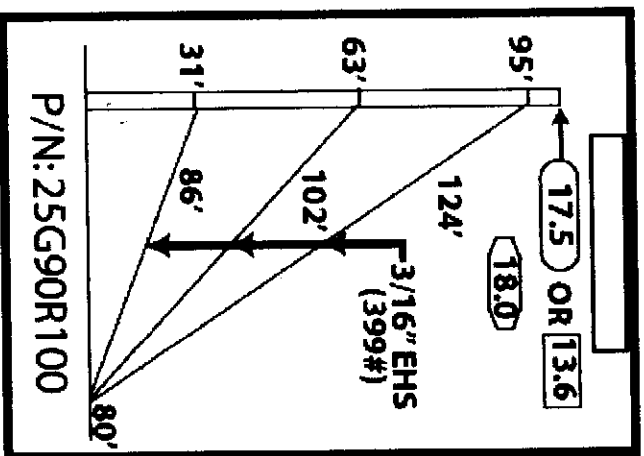


Guy Wire

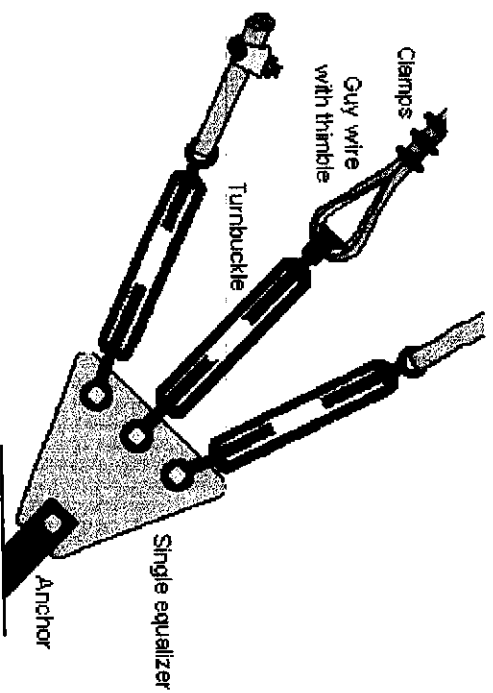


Structure Bracket

Wind Load Specs

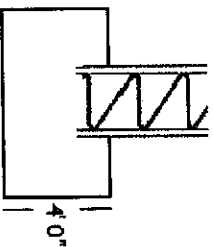
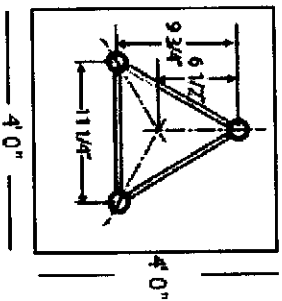


Guy Wire Anchor



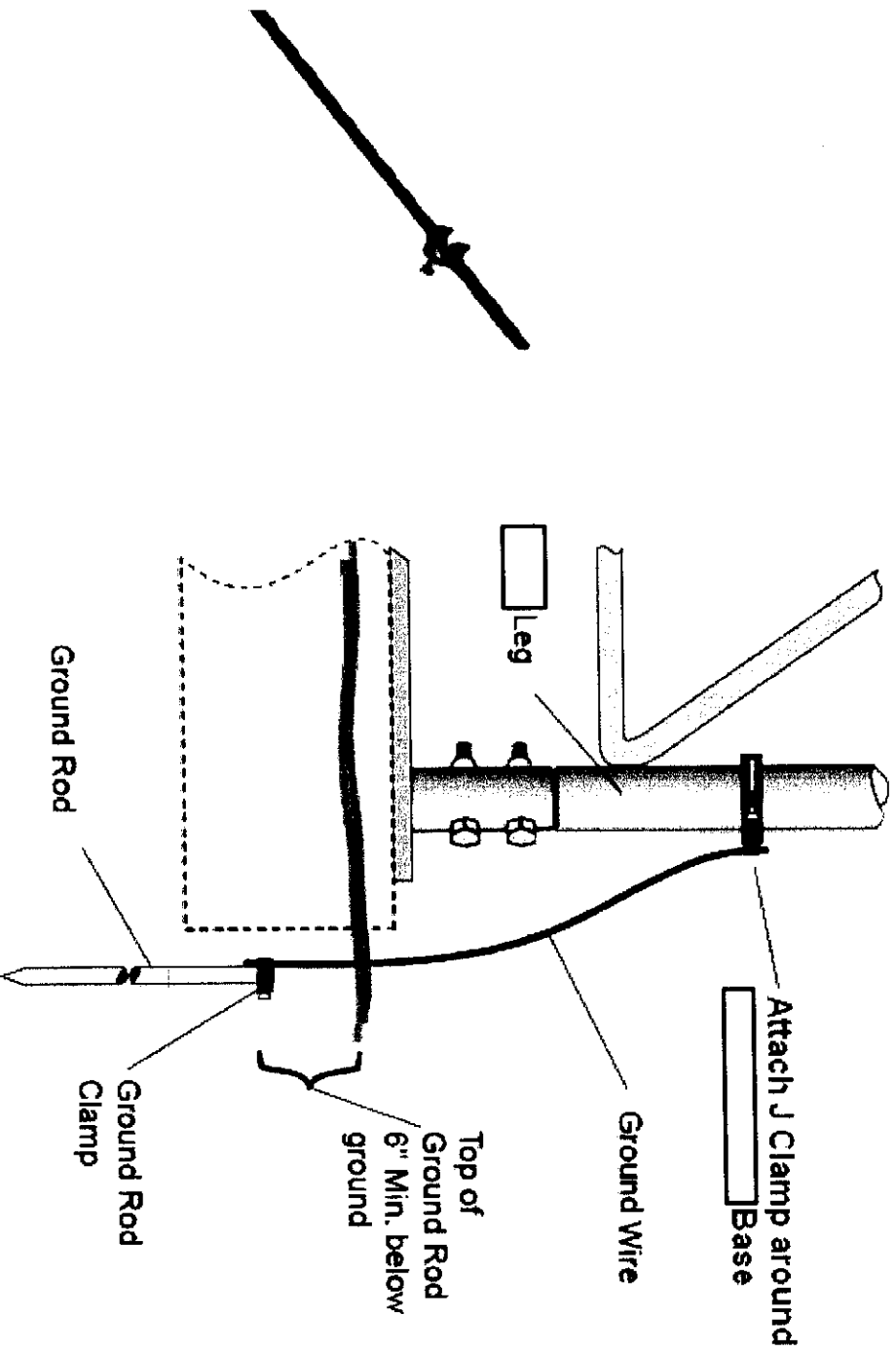
Base Plate

Base Plate



Base plate on Concrete pad

Structure Grounding

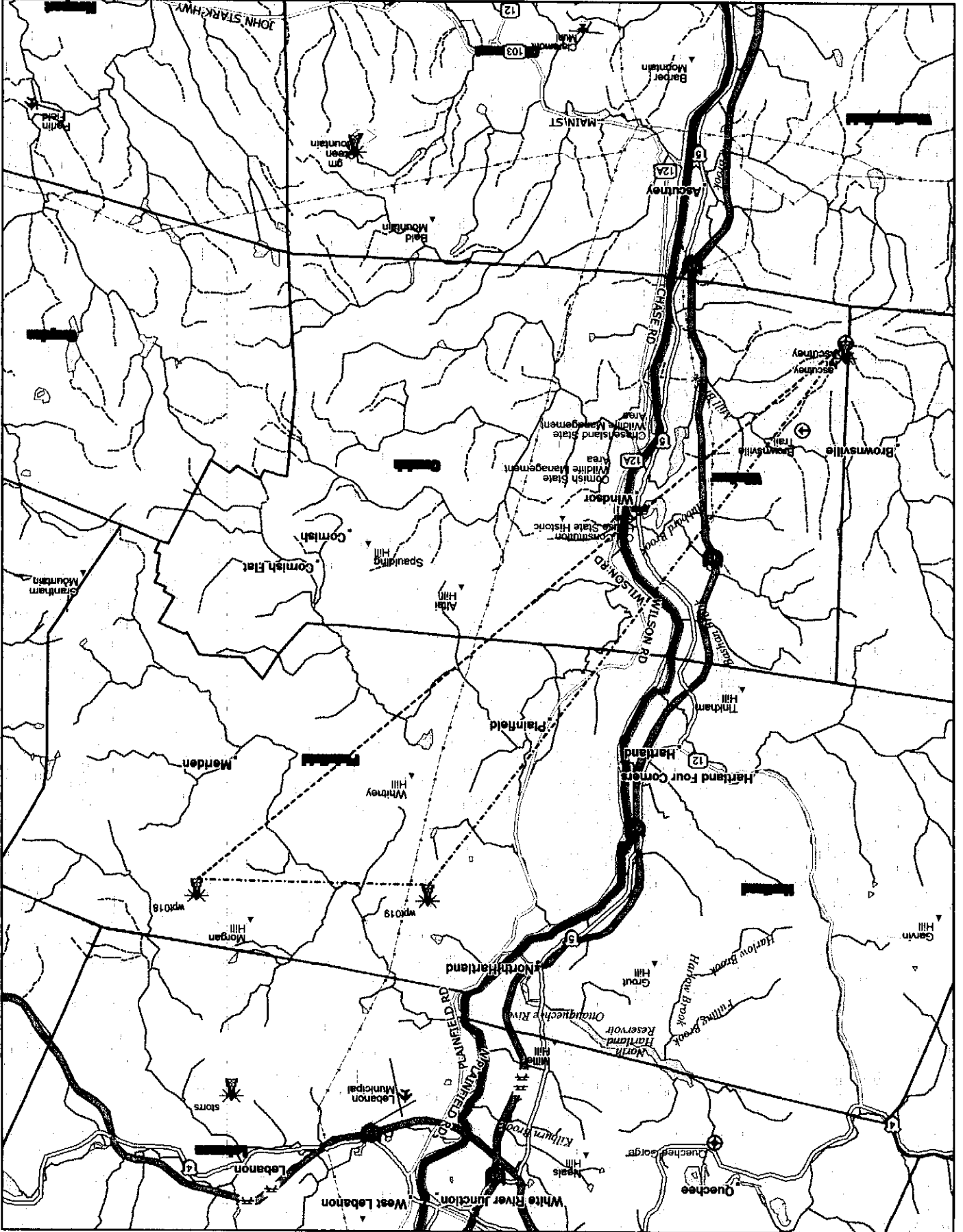


Actual 80' Structure



80' Rohn 25g 

picture taken 75' away



Removal Plan:

Once the structure is deemed inactive, WaveComm will remove the structure by sections, in reverse as the installation procedure. The guides will be removed and the ground to be restored as close as possible to the original state.

Security Measures

The Rohn 25G Structure is a 12 inch wide per side, 90 feet tall grey in color, lattice model unit. The Structure will be physically secured by metal security panels attached to the lower section, approximately 8 feet over the lattice works to prevent anyone from climbing on the structure itself.