

EM-POCKET-052-090226

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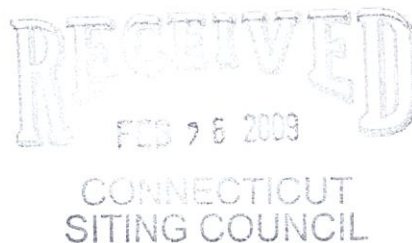
www.pullcom.com

ORIGINAL

February 25, 2009

Via Federal Express

S. Derek Phelps, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051



**Re: Notice of Exempt Modification
Communication Site Management, LLC Telecommunications Facility
200 Colt Highway a/k/a Rattlesnake Mountain, Farmington, Connecticut**

Dear Mr. Phelps:

Youghiogheny Communications-Northeast, LLC, doing business as Pocket Communications ("Pocket"), intends to install antennas and appurtenant equipment at the existing 1339-foot Guyed Tower facility owned by Communication Site Management, LLC and located at 200 Colt Highway a/k/a Rattlesnake Mountain, Farmington, Connecticut ("Facility"). Pocket Communications provides prepaid, flat rate wireless voice and data services to more than a quarter of a million subscribers. Pocket is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telecommunications service in the State of Connecticut, which includes the area to be served by the proposed installation. This installation constitutes an exempt modification pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes Section 16-50g et. seq. (PUESA), and Section 16-50j-72(b)(2) of the Regulations of the Connecticut State Agencies adopted pursuant to PUESA. In accordance with R.C.S.A. Section 16-50j-73, a copy of this notice has been sent to Kathleen Eagen, Town Manager, Town of Farmington.

The existing Facility consists of a 1339-foot Guyed Tower capable of supporting multiple carriers within a fenced compound. The coordinates for the Facility are **Lat:41°-42'-13" and Long:72°-49'-55"**. The tower is located in the southeastern corner of Farmington approximately 5000 feet west of the New Britain Town Line and approximately 1600 feet southwest of Colt Highway (Route 6), and roughly one and a half miles west of Interstate 84. (see Site Map, attached as Exhibit A. The tower currently supports Sprint antennas at the one hundred sixty foot level (160') AGL (above ground level); Verizon antennas at the two hundred thirty-five foot level centerline (235') AGL (Verizon also currently has microwave dish at the 87' level); XM Radio Satellite antennas at the four hundred sixty foot level (460') AGL; and United Cable TV Services antennas at the five hundred foot level centerline (500') AGL. The CSC database lists an AT&T antenna at 140', but AT&T never installed and the tower owner subsequently leased

Page 2

that space to Pocket. Pocket proposes to install three Kathrein 742-213 antennas at the one hundred forty foot level (140') AGL, and a Nortel CDMA Micro BTS 3231 cabinet, mounted on an "H-Frame," contained within a six foot by six foot (6'-0" x 6'-0") lease area. An ice bridge which will run from the lease area to the tower. Utilities will be run via a proposed underground conduit from existing utilities (See Design Drawings and Equipment Specifications, attached as Exhibits B and C respectively).

For the following reasons, the proposed modifications to the Colt Highway Facility meet the exempt modification criteria set forth in R.C.S.A. Section 16-50j-72(b)(2):

1. The proposed modification will not increase the height of the tower as Pocket's antennas will be installed at a center line height of approximately 140 feet.
2. The installation of Pocket's equipment and shelter will not require an extension of the site boundaries.
3. The proposed modifications will not increase the noise levels at the existing Facility by six decibels or more.
4. The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the site boundary, to a level at or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. The worst-case RF power density calculations for the proposed Pocket antennas would be 27.65% of the FCC standard (see general power density calculations table, attached as Exhibit D).

Also attached, Exhibit E, is a structural analysis confirming that the tower can support the existing and proposed antennas and associated equipment.

For the foregoing reasons, Pocket respectfully submits that the proposed antenna installation and equipment at the Farmington Facility constitutes an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Respectfully Submitted,



Carrie L. Larson

cc: Kathleen Eagen, Town Manager
Communications Site Management, LLC underlying property owner

Exhibit A

Site Map

Pocket Site HFCT0378A

200 Colt Highway

aka Rattlesnake Mountain

Farmington, Connecticut

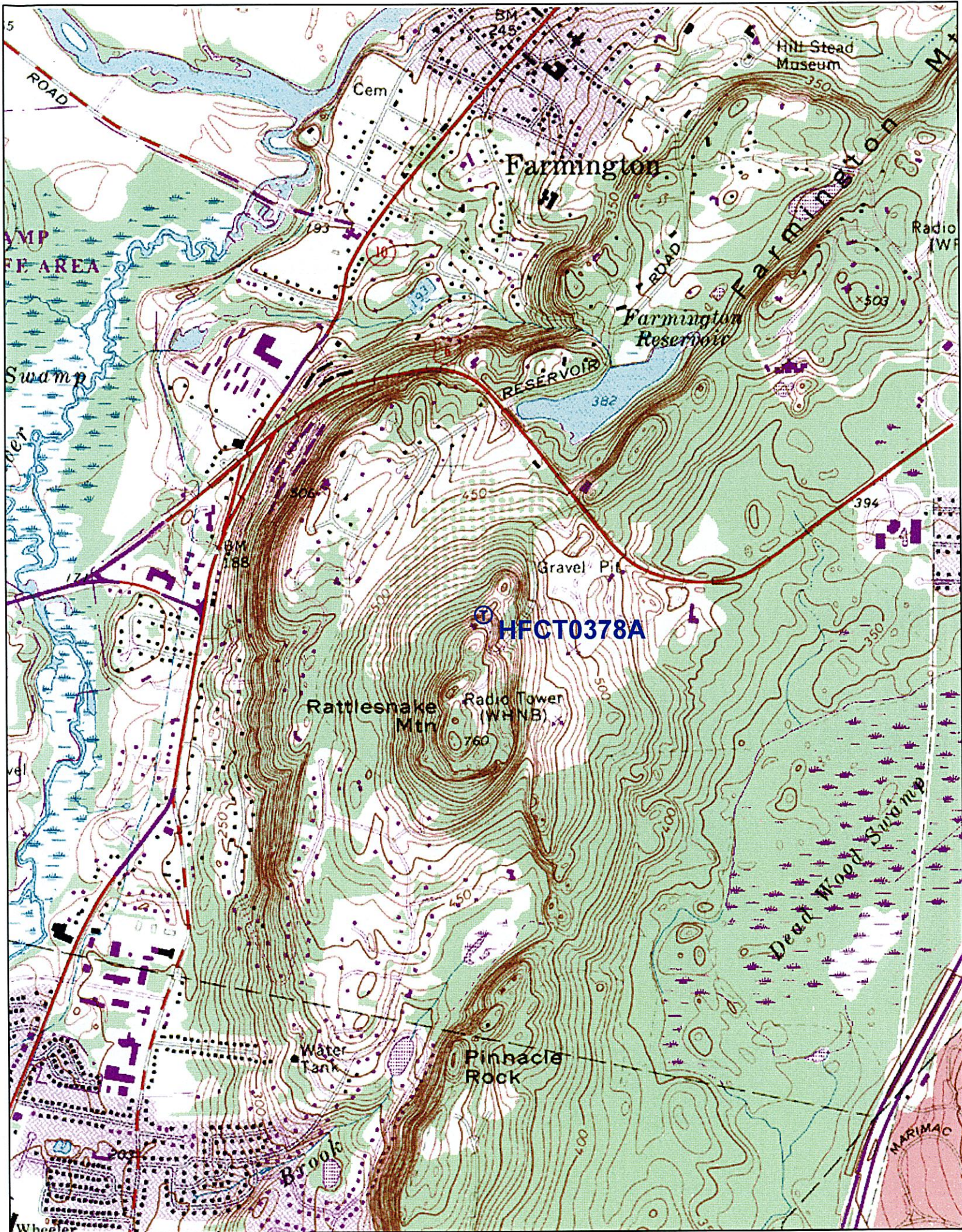


Exhibit B

Design Drawings

Pocket Site HFCT0378A

200 Colt Highway

aka Rattlesnake Mountain

Farmington, Connecticut

pocket COMMUNICATIONS

HFCT0378A RATTLESLAKE MTN. 1339' GUYED TOWER

SITE INFORMATION

OWNER: COMMUNICATIONS SITE MANAGEMENT, LLC
225 ASTUM ST., 28TH FLOOR
HARTFORD, CT 06103

OWNER SITE ID#: RATTLESLAKE MOUNTAIN

APPLICANT: YOUNGKUBERTY COMMUNICATIONS-NORCHESTER, LLC
2819 NW LOOP 410
SAN ANTONIO, TX 78230

SITE ADDRESS: 200 COLE HIGHWAY ROUTE 6
FARMINGTON, CT 06032

COUNTY: HARTFORD

LATITUDE: N 41° 42' 12.96"

LONGITUDE: W 72° 48' 54.84"

ZONING CLASSIFICATION: N/A

ZONING JURISDICTION: CONNECTICUT SITING COUNCIL

POWER COMPANY: CL&P (860) 379-5582

TELEPHONE COMPANY: AT&T (860) 521-6601

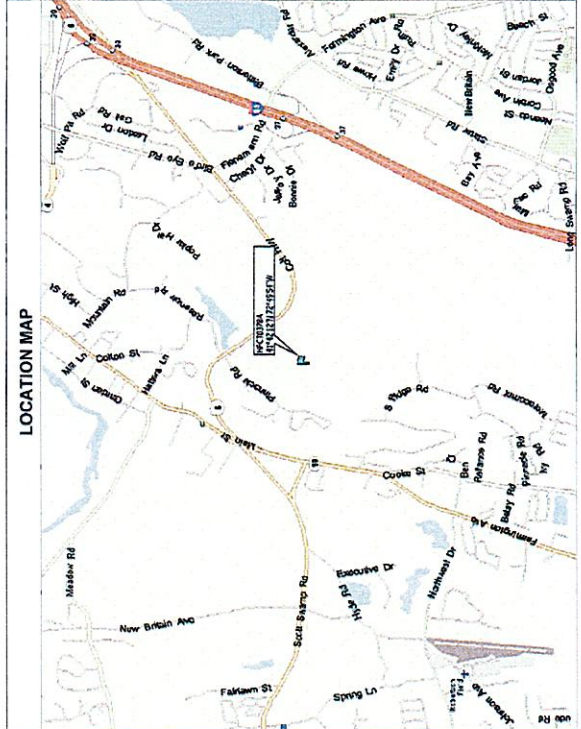
DESIGN FIRM: TRIVIS
180 CHANDALAR PLACE DRIVE
PELHAM, AL 35124
PHONE: (205) 621-0108

DRAWING INDEX

1	TITLE SHEET
2	SITE PLAN
3	TOWER, ANTENNA, H-FRAME DESIGN
4	GROUNDING PLAN & DETAILS
5	COAX SUPPORT STRUCTURE DETAIL & GROUNDING DETAILS
6	ELECTRICAL SITE PLAN & DETAILS

APPROVALS

REAL ESTATE	_____
RF	_____
OPS/CONSTRUCTION	_____
LEGAL/COMPLIANCE	_____
NET DESIGN	_____



DRIVING DIRECTIONS

BEAVY TO EXIT 38 AND STAY ON US 6 (COLE HWY) FOR 2.5 MILES AND TURN L ON COMM. SITE ACCESS ROAD TO BROADCAST TOWER. TOWER ACCESS REQUIRES ESDORT.

SITE INFORMATION

CONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN. CONTRACTOR SHALL COMPLY WITH SECTION 107.1 OF THE 2000 I.E.C. CODES AND THE 2004 CITY PUBLIC SERVICE ELECTRICAL SERVICE STANDARDS.

BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC), 2006

ELECTRICAL CODE: NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 - 2005, NATIONAL ELECTRICAL CODE LIGHTNING PROTECTION CODE: [NFPA 780 - 2005, LIGHTNING PROTECTION CODE]

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, 13TH EDITION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES;
- TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
- IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT
- IEEE C82-41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SURFACE EXPOSURE")
- TELECOMIA GR-1275, GENERAL INSTALLATION REQUIREMENTS
- TELECOMIA GR-1503, COAXIAL CABLE CONNECTIONS
- ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN

SITE INFORMATION

- THIS SITE IS UNMANNED AND IS RESTRICTED TO OUTDOOR EQUIPMENT. IT WILL BE USED EXCLUSIVELY FOR TRANSMISSION ON RADIO SIGNALS FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
- POCKET COMMUNICATIONS CERTIFIES THAT THIS TELEPHONE EQUIPMENT FACILITY WILL BE SERVED ONLY BY LOCAL COMMUNICATIONS EMPLOYEES AND THE WORK ASSOCIATED WITH THE FACILITY WILL BE LIMITED TO MAINTENANCE AND REPAIR PURPOSES ONLY. THIS FACILITY IS EXEMPT FROM THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), APPENDIX B, SECTION 4.11.9(19).
- NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.
- NO WASTE WATER WILL BE GENERATED AT THIS LOCATION.
- NO SOLID WASTE WILL BE GENERATED AT THIS LOCATION.
- POCKET COMMUNICATIONS MAINTENANCE CREW (TYPICALLY ONE PERSON) WILL MAKE AN AVERAGE OF ONE TRIP PER MONTH AT ONE HOUR PER VISIT.

TRIVIS
The Complete Solution Provider
For Telecommunications
1111 W. ALABAMA STREET, SUITE 200
PELHAM, AL 35124
(205) 621-0108

DESIGNED BY: JSW
DRAWN BY: JHB
DATE: 01/16/09
JOB NO.: 08473
SHEET NO.: 01

SELLER: TRIVIS INC.
FOR CT 13008

NO.	DATE	REVISIONS
1	1/14/09	CHANGED TOWER HEIGHT
2	01/11/09	ISSUED FOR CONSTRUCTION
3	01/11/09	ISSUED FOR CONSTRUCTION

PROJECT: RATTLESLAKE MTN.
TITLE SHEET

THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF TRIVIS INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF TRIVIS INC.



01

CONSTRUCTION NOTES

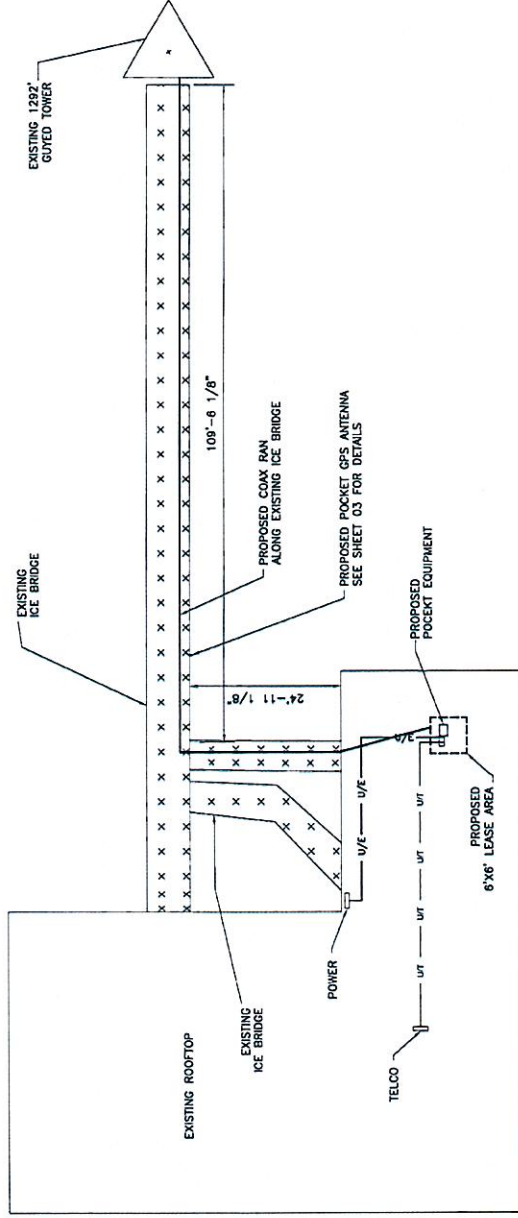
1. FIELD VEGETATION, CONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, POCKET COMMUNICATIONS ANTENNA MOUNT LOCATION AND ANTENNAS TO BE INSTALLED.
2. COORDINATION OF WORK, CONTRACTOR SHOULD COORDINATE RF WORK AND PROCEDURES WITH POCKET COMMUNICATIONS.
3. GRAVEL SURFACE IN AREAS OF CONSTRUCTION SHALL BE REPLACED TO ORIGINAL CONDITION BY CONTRACTOR.

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
(CONSTRUCTION) - GENERAL CONTRACTOR
(OWNER) - POCKET COMMUNICATIONS
(OEM) - ORIGINAL EQUIPMENT MANUFACTURER
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE HIMSELF WITH THE WORK AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE

4. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, APPURTENANCES, AND LABOR NECESSARY TO COMPLY WITH THE DRAWINGS.
5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH
6. CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL GOVERNMENT ACTIONS REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
7. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, APPURTENANCES, AND LABOR NECESSARY TO COMPLY WITH THE DRAWINGS.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH
9. CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL GOVERNMENT ACTIONS REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
10. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, APPURTENANCES, AND LABOR NECESSARY TO COMPLY WITH THE DRAWINGS.
11. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH
12. CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL GOVERNMENT ACTIONS REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

13. MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
14. IF THE SPECIFIED EQUIPMENT CANNOT BE OBTAINED FROM THE MANUFACTURER, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL.
15. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CABLES AND SHOW ON THE POWER, GROUNDING AND TELCO PLAN DRAWING.
16. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND SHOW ON THE ELECTRICAL PLAN CABLES AS SHOWN ON THE ELECTRICAL PLAN.
17. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS
18. COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
19. CONTRACTOR TO OBTAIN REQUIRED NOTICE TO PROCEED DOCUMENTS FROM THE TOWER OWNER BEFORE COMMENCING CONSTRUCTION.



SITE PLAN
11x17 SCALE: 1/8" = 1'
22x34 SCALE: 1/4" = 1'



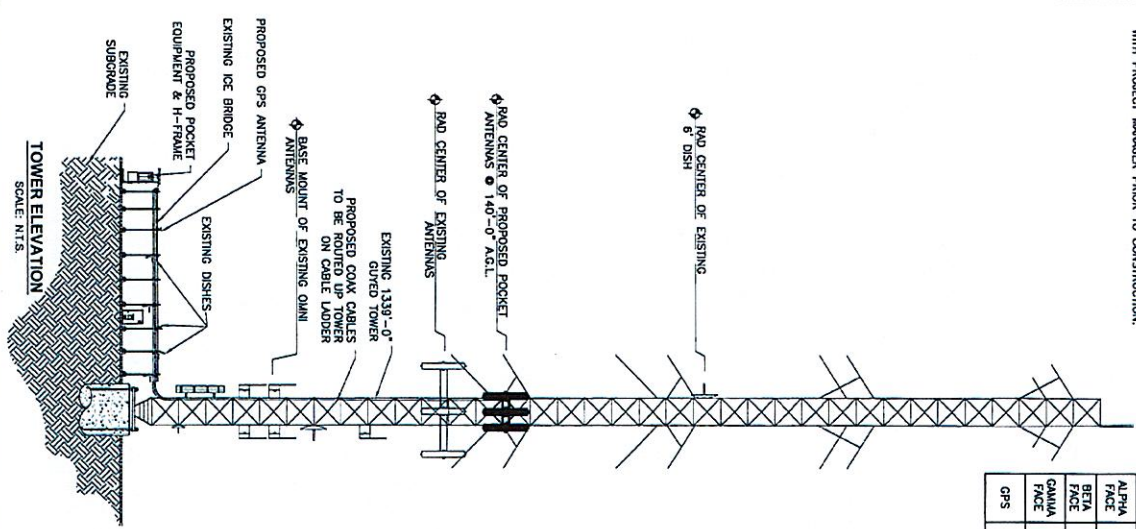
02

TRAVIS
The Nevada State Board of Professional Engineers
1000 South Main Street
Las Vegas, NV 89101
Phone: 702-733-1111
Fax: 702-733-1112

POCKET COMMUNICATIONS
PROJECT: RATTLESNAKE MTN.
SHEET: SITE PLAN

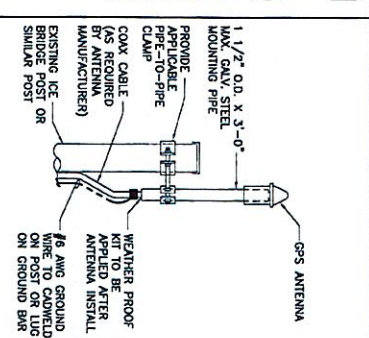
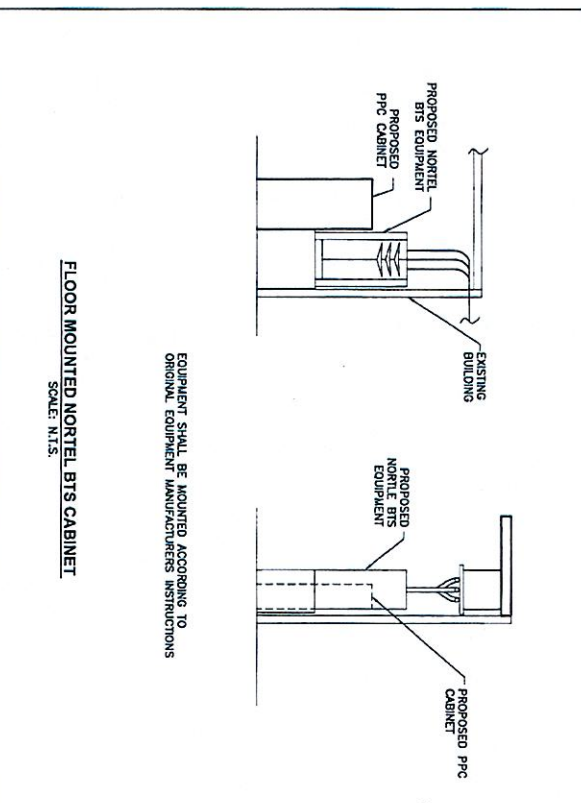
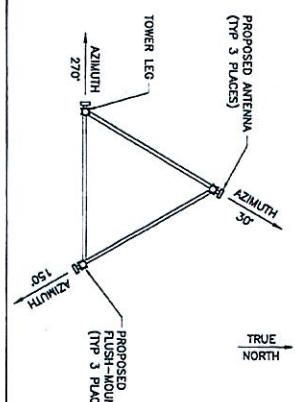
NO.	DATE	REVISIONS
1	1/14/09	REVISED EQUIPMENT MOUNTING
0	10-1-08	ISSUED FOR CONSTRUCTION
JSW		
JSW		

- TOWER NOTES**
- FOR DETAILED TOWER INFORMATION, REFER TO TOWER ERECTION DRAWINGS BY OTHERS. THE TOWER ON THIS SHEET IS SHOWN FOR GENERAL INFORMATION ONLY. ANY CHANGES TO THE TOWER ANTENNA CONFIGURATION IS SUBJECT TO CHANGE. VERIFY ANTENNA HEIGHT, DOWN-TILT, AND AZIMUTH WITH PROJECT MANAGER PRIOR TO CONSTRUCTION.

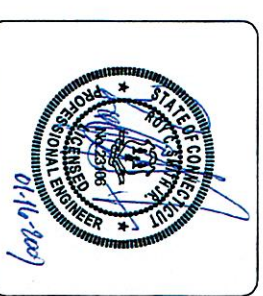


ANTENNA KEY												
ANTENNA PER SECTOR	ANTENNA NUMBER	COAX COLOR CODE	ANTENNA VENDOR	MODEL NUMBER	AZIMUTH	C/A HEIGHT	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	COAX SIZE	# COAX PER ANTENNA	COAX MODEL NUMBER	COAX LENGTH
1	A-1	(1)-RED BAND	RFS	APV18-20641-7S-C	30°	140'-0"	0°	0°	1 5/8"	2	COMSCOPE	323'-0"
1	B-1	(1)-GREEN BAND	RFS	APV18-20641-7S-C	150°	140'-0"	0°	0°	1 5/8"	2	COMSCOPE	323'-0"
1	C-1	(1)-BROWN BAND	RFS	APV18-20641-7S-C	270°	140'-0"	0°	0°	1 5/8"	2	COMSCOPE	323'-0"
		YELLOW	NORTEL	NRG801MA					1/2"	1		59'

- ANTENNA NOTES**
- ALL COAX SHALL BE COLOR-CODED AT (3) PLACES EACH: 1. AT THE ANTENNA, 2. AT THE COAX CONNECTION POINTS, AND 3. AT THE COAX TERMINAL POINTS. CONTRACTOR SHALL VERIFY COAX COLOR-CODING AND CONNECTIONS PRIOR TO CONSTRUCTION. CONTRACTOR IS SOLELY RESPONSIBLE FOR THIS COORDINATION.
 - (2) COLOR BANDS DENOTES TRANSMIT, TRANSMITS TO BE CONNECTED TO THE +49 PORTS OF THE ANTENNAS.
 - PRIOR TO ORDERING ANY ANTENNAS OR COAX, CONTRACTOR SHALL CONTACT THE CONSTRUCTION MANAGER AND VERIFY ALL CONNECTIONS AND COORDINATION IS SOLELY RESPONSIBLE FOR THIS COORDINATION.



- NOTES:**
- LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY OBSTACLES EXCEEDING 25% OF THE SPACE AROUND THE ANTENNA.
 - ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE SIGNALS FROM AT LEAST FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.
- GPS ANTENNA PIPE MOUNT**
SCALE: N.T.S.



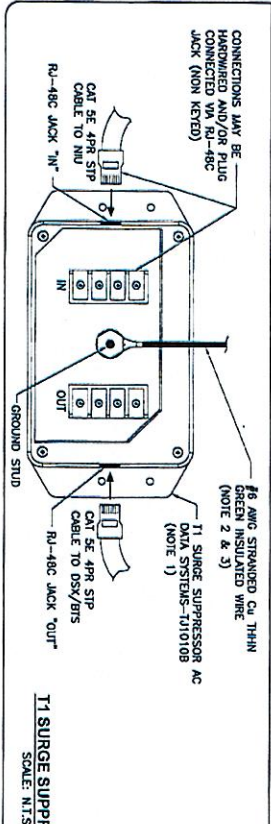
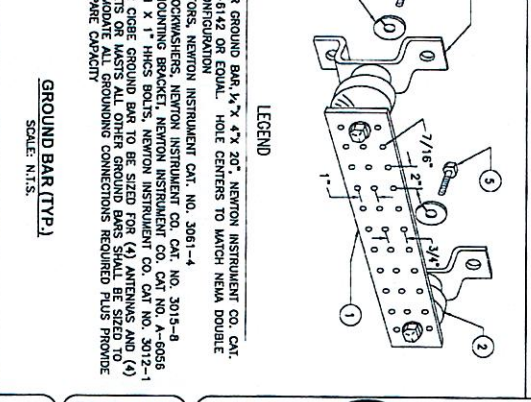
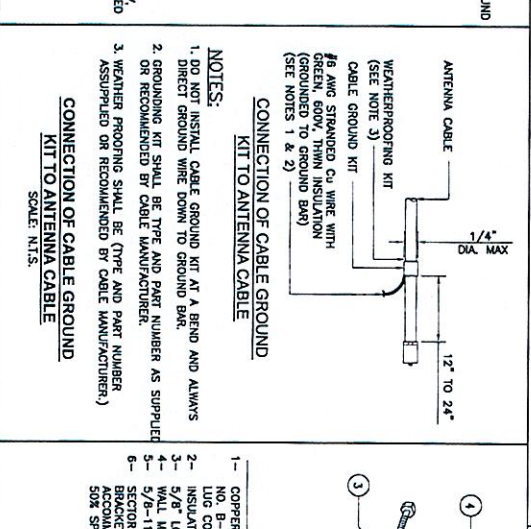
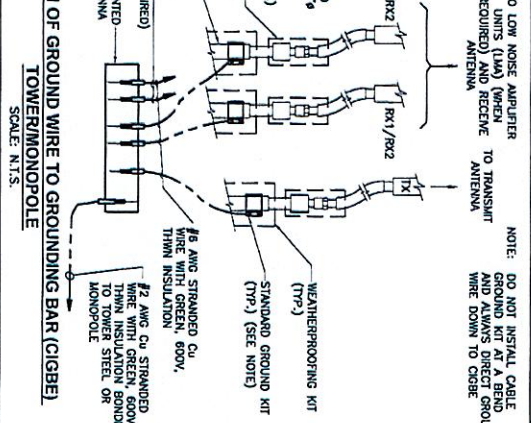
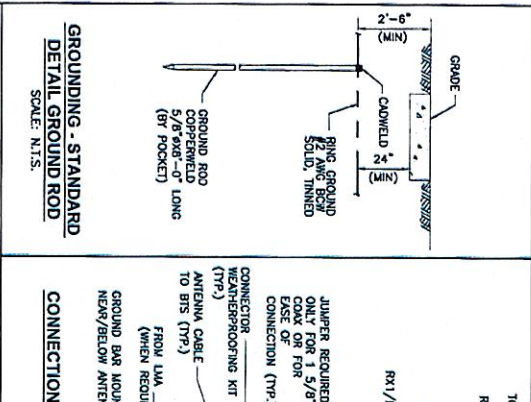
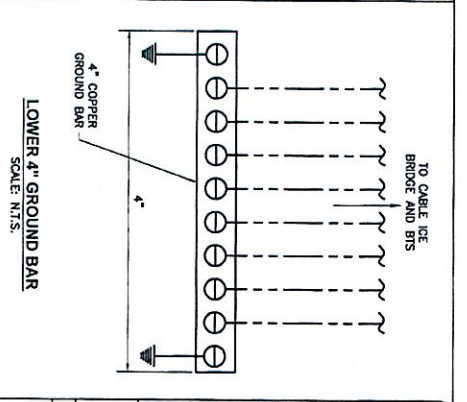
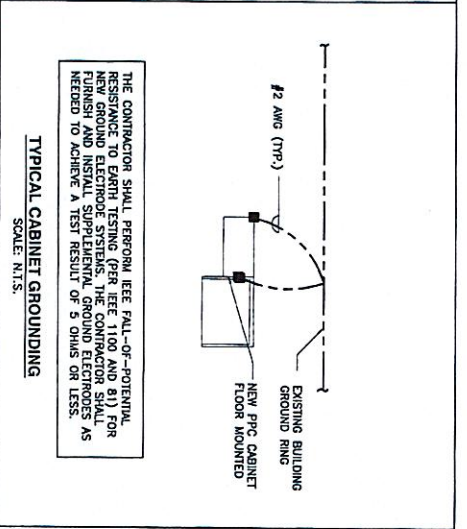
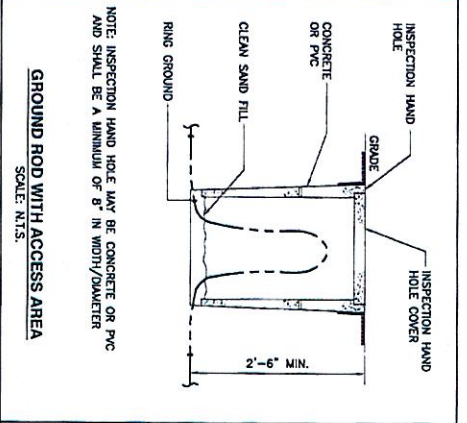
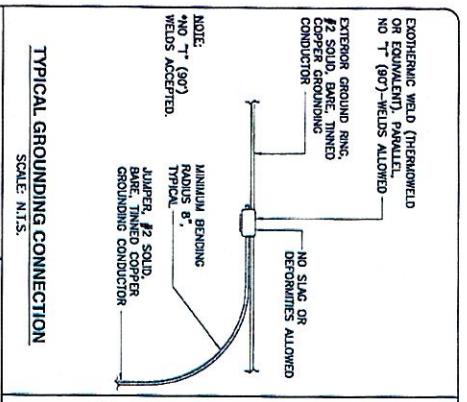
TRAVIS
PROFESSIONAL ENGINEER
STATE OF TENNESSEE
LICENSE NO. 25906
DATE: 01/16/2009

DESIGNED BY: JSW
DRAWN BY: JHB
DATE: 08/4/73
SHEET NO. 03

packet COMMUNICATIONS

PROJECT: RATTLESNAKE MTN.
SHEET: 03

NO.	DATE	REVISIONS
1	1/14/09	REVISED EQUIPMENT
0	10-1-08	ISSUED FOR CONSTRUCTION



NOTES:

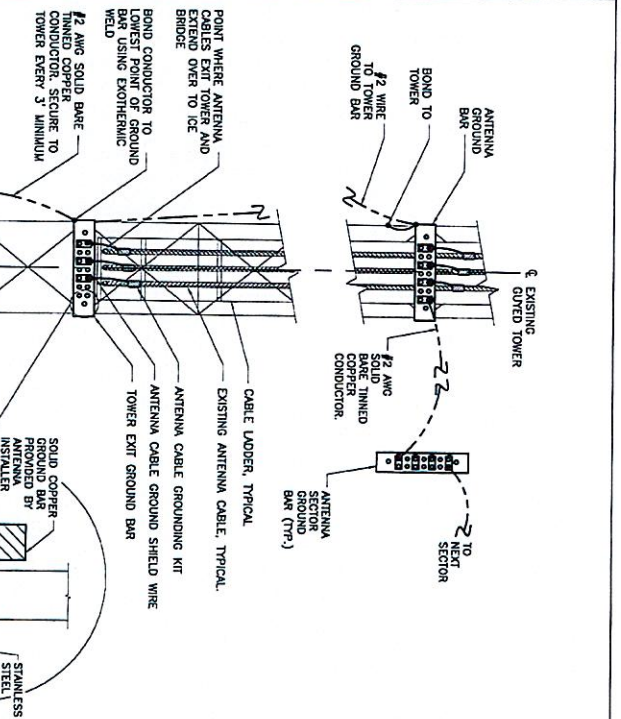
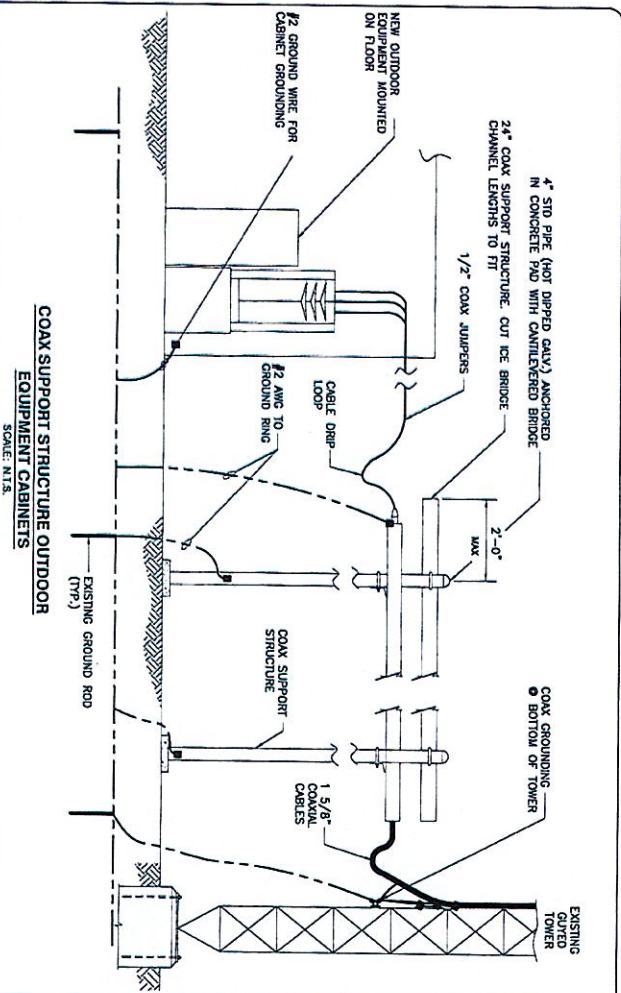
1. MOUNT T1-TYPES UNIT ON EQUIPMENT FRAME HOUSING THE ROW UNIT. USE APPROPRIATE STAINLESS STEEL BOLTS WITH FLAT WASHERS AND A LOCK WASHER ON THE NUT SIDE. THE TYES MAY BE LOCATED ON THE TELCO BACKBOARD. REFER TO MANUFACTURER'S INSTRUCTIONS.
2. ATTACH RING TERMINAL FROM SUPPLIED GROUND CONDUCTORS TO TIES TO MANUFACTURER'S INSTRUCTIONS. FOR PROPER PERFORMANCE, THE GROUND CONDUCTOR LENGTH SHOULD BE LIMITED WITH NO SHARP BENDS ON COILS.
3. GROUND STUD SECURELY FASTEN WITH SUPPLIED INSULATION REFER TO MANUFACTURER'S INSTRUCTIONS. ENSURE PROPER GROUNDING TO THE EQUIPMENT FRAME. BOND THE GROUND CONDUCTOR TO THE EQUIPMENT FRAME GROUND. ENSURE PROPER BOND OR NEAREST GROUND BAR.

TRAVIS M. SHAW
PROFESSIONAL ENGINEER
STATE OF CONNECTICUT
LICENSE NO. 02-14-100

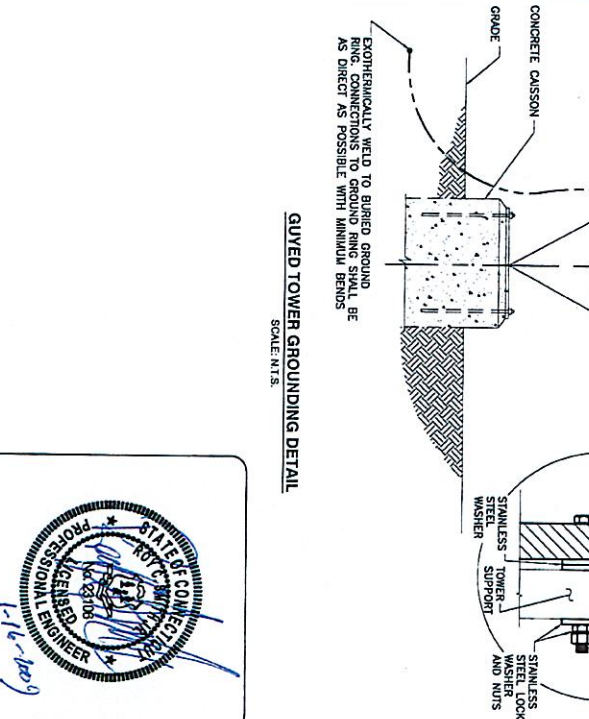
TRAVIS COMMUNICATIONS
PROJECT NO. 08473
DATE: 08/08/09
SCALE: N.T.S.

POCKET COMMUNICATIONS
BOX MT./ECHO 1
GROUNDING PLAN & DETAILS

NO.	DATE	REVISION	BY
1	1/14/09	REVISED EQUIPMENT GROUNDING	JSW
0	10-1-08	ISSUED FOR CONSTRUCTION	JSW
NO.	DATE	REVISION	BY



- NOTES:**
1. WHEN USING COMPONENTS AS SHOWN IN STANDARD REF. S, MAXIMUM SPAN FOR BRIDGE SHALL BE 6 FEET FOR 10 FEET BRIDGE CHANNEL. SHALL BE 6 FEET FOR 10 FEET BRIDGE CHANNEL.
 2. WHEN USING COMPONENTS FOR SPACING BRIDGE CHANNEL SECTIONS, THE SPACE SHOULD BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.
 3. WHEN USING COMPONENTS, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE ENDS OF ICE BRIDGES, WITH A MAXIMUM OVERLEAF DISTANCE OF 2 FEET FROM THE SUPPORT TO THE FREE END OF THE ICE BRIDGE.
 4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES FINISHED WITH A LATERAL TO RESTORE EQUIPMENT. FINISH.
 5. ICE BRIDGES MAY BE CONSTRUCTED WITH COMPONENTS FROM OTHER MANUFACTURERS. GUIDELINES ARE FOLLOWED.
 6. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH THE RESPECTIVE MANUFACTURER'S APPROVAL.
 7. REQUIRE ENGINEERING APPROVAL.
 8. THE DESIGN IS BASED ON ASCE 7-08, 3 SECOND ELEVATION AT GRADE.
 9. THIS DESIGN IS BASED ON 2x4 WIDE ICE BRIDGE POST SUPPORT SPACING OF 10'-0\"/>



TRAVIS
 PROFESSIONAL ENGINEER
 LICENSE NO. 08473
 STATE OF MINNESOTA
 1-16-1009

packet COMMUNICATIONS

RATTLESNAKE MTN. COAX SUPPORT STRUCTURE

NO.	DATE	REVISIONS
1	11/14/09	REVISED EQUIPMENT
0	10-1-08	ISSUED FOR CONSTRUCTION

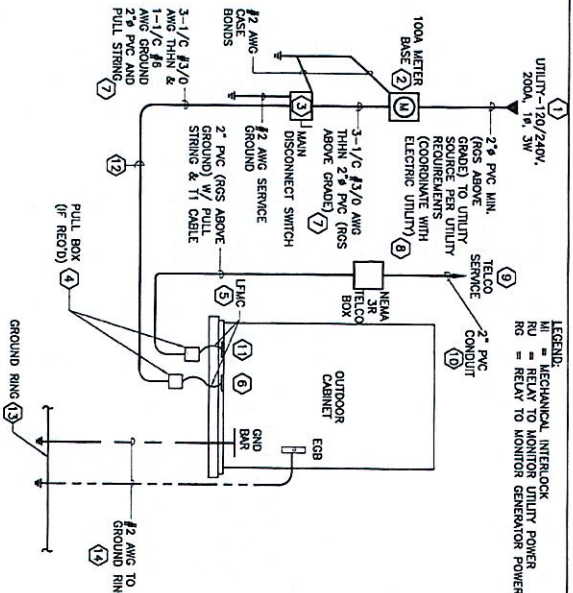
PANEL "SSC"			
LOAD DESCRIPTION	LOAD (KVA)	BREAKER SIZE (NO. A B)	PHASE (CCT) BREAKER NO. (NO. SIZE) LOAD (KVA)
LOAD DESCRIPTION	LOAD (KVA)	BREAKER SIZE (NO. A B)	PHASE (CCT) BREAKER NO. (NO. SIZE) LOAD (KVA)
BITS CABINET	2.5	30/2	1 2 30/2 2.2
LIGHTING	.9	10/1	5 6 2.2
SPACE	-	-	7 8 -
SPACE	-	-	9 10 -
SPACE	-	-	11 12 -
SPACE	-	-	13 14 -
SPACE	-	-	15 16 -
SPACE	-	-	17 18 -
SPACE	-	-	19 20 -
SPACE	-	-	21 22 -
SPACE	-	-	23 24 -
LOAD SUB-TOTAL	5.6	LOAD TOTAL	10.3 kVA
100A MCB, 120/240V, 1φ, 3W, 65,000 AIC			
TOTAL CONNECTED LOAD	10.3 KW		
2% OF LARGEST CONT. LOAD	1.26 KW		
TOTAL LOADS	11.9 KW	47.9 AMPS	

NOTE: ALL NON-OPTIONAL BREAKERS PROVIDED BY SSC MFR

PANEL SCHEDULE

GENERAL ELECTRICAL NOTES:

1. ALL ELECTRICAL AND GROUNDING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL VERIFY WIRING, RECEIVING AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
3. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
4. THE CONTRACTOR SHALL PROVIDE NECESSARY TAPING ON THE MAIN SERVICE PANELS TO ACCOMMODATE THE SERVICE PANELS WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.



POWER, TELCO & GROUND SINGLE LINE DIAGRAM FOR OUTDOOR CABINET

LEGEND:
 MI = MECHANICAL INTERLOCK
 RU = RELAY TO MONITOR UTILITY POWER
 RG = RELAY TO MONITOR GENERATOR POWER

REFERENCE NOTES

1. ELECTRICAL DEPARTAMENT POINT ELECTRICAL CONTRACTOR TO COORDINATE WITH LOCAL POWER FOR SERVICE TO METER.
2. CONTRACTOR TO SUPPLY AND INSTALL A 100A 120/208/240V 1φ, 3W METER BASE. METER BASE TO BE NEMA 3R RATED AND ACCEPTABLE TO LOCAL UTILITY. PROVIDE WITH MECHANICALLY ATTACHED ENGRAVED IDENTIFICATION LABEL INDICATING "POCKET COMMUNICATIONS METERS".
3. CONTRACTOR TO SUPPLY AND INSTALL NEMA 3R 100A TRIPBLE DISCONNECT SWITCH WITH 100A TRIP AND 100A TRIP RELEASE. FUSES, AIC RATING TO COORDINATE WITH LOCAL UTILITY REQUIREMENTS. PROVIDE WITH MECHANICALLY ATTACHED ENGRAVED IDENTIFICATION LABEL INDICATING "POCKET COMMUNICATIONS SERVICE DISCONNECT".
4. WEATHER TIGHT JUNCTION BOX (IF REQUIRED), SIZE TO NEC CODE FOR APPLICATION.
5. LIQUID TIGHT FLEXIBLE METALLIC CONDUIT W/ W/ WEATHER TIGHT FITTINGS AND SUPPORTS. SIZE AND CONTENTS TO MATCH ASSOCIATED USE (POWER OR TELCO).
6. UTILITY POWER ENTRY INTO CABINET. COORDINATE TERMINATION WITH CABINET MANUFACTURER.
7. CONTRACTOR SUPPLY AND INSTALL 2" ORG. AFG AND PNC 24" BRG C/W #5/0 AWG THIN & (1) #6 GRND FOR UTILITY SERVICE.
8. CONTRACTOR SUPPLY AND INSTALL 4" ORG. AFG AND PNC 24" BRG C/W #5/0 AWG THIN FOR UTILITY SERVICE.
9. TELCO DEPARTAMENT POINT. ELECTRICAL CONTRACTOR TO COORDINATE WITH LOCAL TELCO FOR SERVICE TO TELCOBOX OR CABINET.
10. CONTRACTOR TO SUPPLY AND INSTALL (1) 2" ORG. AFG AND PNC 24" BRG C/W PULL CORDS FOR TELCO SERVICE TO CABINET TERMINATION POINT.
11. TELCO SERVICE ENTRY INTO CABINET. COORDINATE TERMINATION IN WITH CABINET MANUFACTURER.
12. CONTRACTOR TO ARRANGE AND PAY FOR UNDERGROUND UTILITY LOCATION SURVEY FOR ALL TRENCHING. REUSE NATIVE BACKFILL AND RE-INSTATE TO ORIGINAL CONDITION. INSTALL 6" WIDE METALLIC UNED RED PLASTIC MARKER TYPE 8 ABOVE ALL BURIED CONDUIT.
13. PART OF CABINET BURIED GROUND RING.
14. (1) #2 SOLID BARE THINNE CU GEC BONDED TO 5/8"x10" COPPER CLAD STEEL GROUNDING ELECTRODE. LOCATE GROUNDING ELECTRODE ADJACENT TO "CABINET". BOND GROUNDING ELECTRODE SYSTEM TO CABINET GROUND RING.

NOTES

1. CONTRACTOR SHALL PROVIDE 100AMP, SINGLE PHASE, 120/240 VAC, 60HZ SERVICE FOR SITE.
2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY BEFORE THE START OF CONSTRUCTION. POWER AND TELCO CONDUIT SHALL BE PROVIDED AND INSTALLED PER UTILITY REQUIREMENTS.
3. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO DRAWINGS PROVIDED BY AC OR TELCO PANEL MANUFACTURER.
4. ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE REQUIREMENTS.
5. CONTRACTOR SHALL INSTALL SUFFICIENT LENGTHS OF LFMC INCLUDING ALL CONDUIT FITTINGS (NUTS, REDUCING BUSHINGS, ELBOWS, COUPLINGS, ETC) NECESSARY FOR CONNECTION FROM MC CONDUIT TO THE PUNCELL POWER CABINET.
6. CONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
7. CONTRACTOR SHALL VERIFY THAT THE MAIN BONDING JUMPER AND GROUNDING ELECTRODE CONDUCTOR IS INSTALLED PROPERLY IN MAIN DISCONNECT SWITCH.



TRAVIS
 14150 E. 14th Avenue
 Denver, CO 80231
 (303) 555-8800

DESIGNED BY: JSH
 DRAWN BY: JHB
 DATE: 09/04/06
 JOB NO.: 08473
 SHEET NO.: 06

packet COMMUNICATIONS
 RATTLESNAKE MTN.
 ELECTRICAL PLAN & DETAILS

NO.	DATE	ISSUED FOR CONSTRUCTION
0	10-1-08	ISSUED FOR CONSTRUCTION
1		REVISIONS

Exhibit C

Equipment Specifications

Pocket Site HFCT0378A

200 Colt Highway

aka Rattlesnake Mountain

Farmington, Connecticut

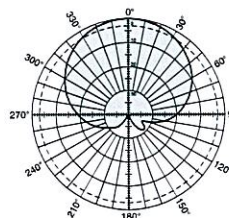
Kathrein's X-polarized adjustable electrical downtilt antennas offer the wireless carrier the ability to tailor polarization diversity sites for optimum performance. Using variable downtilt, only a few models need be procured to accommodate the needs of widely varying conditions. Remotely controlled downtilt is available as a retrofitable option.

- 0-6° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.
- Will accommodate future 3G / UMTS applications.

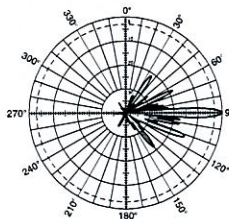
General specifications:

Frequency range	1710–2170 MHz	
VSWR	< 1.5:1	
Impedance	50 ohms	
Intermodulation (2x20w)	IM3: <-150 dBc	
Polarization	+45° and -45°	
Front-to-back ratio (180°±30°)	>30 dB (co-polar) >25 dB (total power)	
Maximum input power	300 watts per input (at 50°C)	
Electrical downtilt continuously adjustable	0–6 degrees	
Connector	2 x 7/16 DIN female	
Isolation	>30 dB	
Cross polar ratio		
Main direction 0°	25 dB (typical)	
Sector ±60°	>10 dB	
Weight	22 lb (10 kg)	
Dimensions	76.5 x 6.1 x 2.7 inches (1942 x 155 x 69 mm)	
Equivalent flat plate area	4.62 ft ² (0.429 m ²)	
Wind survival rating*	120 mph (200 kph)	
Shipping dimensions	87.2 x 6.8 x 3.6 inches (2214 x 172 x 92 mm)	
Shipping weight	24.3 lb (11 kg)	
Mounting	Fixed and tilt mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.	

See reverse for order information.



Horizontal pattern
±45°- polarization



Vertical pattern
±45°- polarization

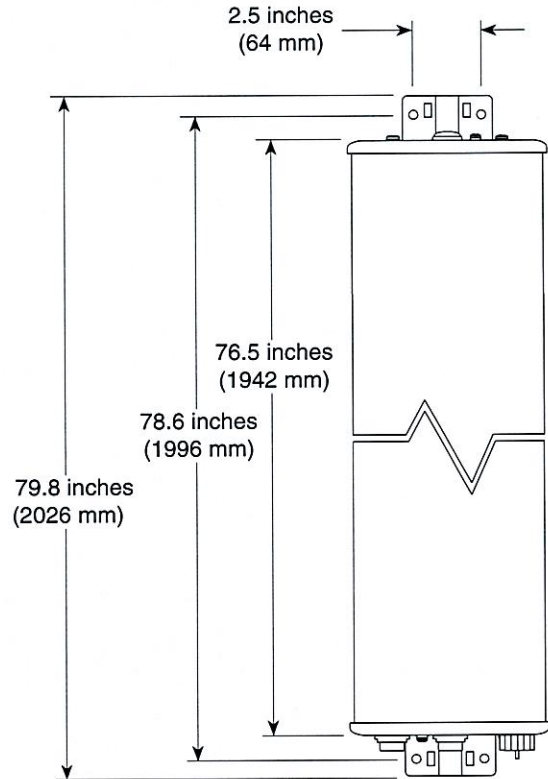
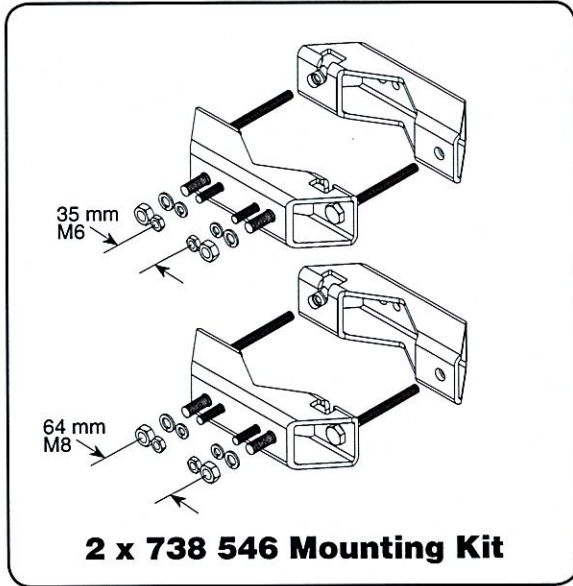


Specifications:	1710–1880 MHz				1850–1990 MHz				1920–2170 MHz			
Gain	19 dBi				19.2 dBi				19.5 dBi			
+45° and -45° polarization horizontal beamwidth	67° (half-power)				65° (half-power)				63° (half-power)			
+45° and -45° polarization vertical beamwidth	4.7° (half-power)				4.5° (half-power)				4.3° (half-power)			
Vertical Pattern—sidelobe suppression for first side-lobe above main beam	0°	2°	4°	6° T	0°	2°	4°	6° T	0°	2°	4°	6° T
	18	17	15	15 dB	18	18	17	15 dB	18	18	17	15 dB



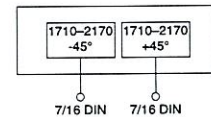
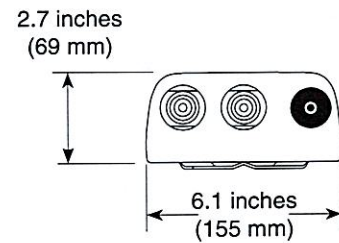
10642-H
936.2074/h

*Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



Mounting Options:

Model	Description
2 x 738 546	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
737 978	Tilt Kit for use with the above mounting kit, 0–11 degrees downtilt angle. (requires 2 x 738 546 Mounting Kit)
742 263	Three-panel Sector Mounting Kit (120 deg. ea.) for 3.5 inch (89 mm) OD mast.

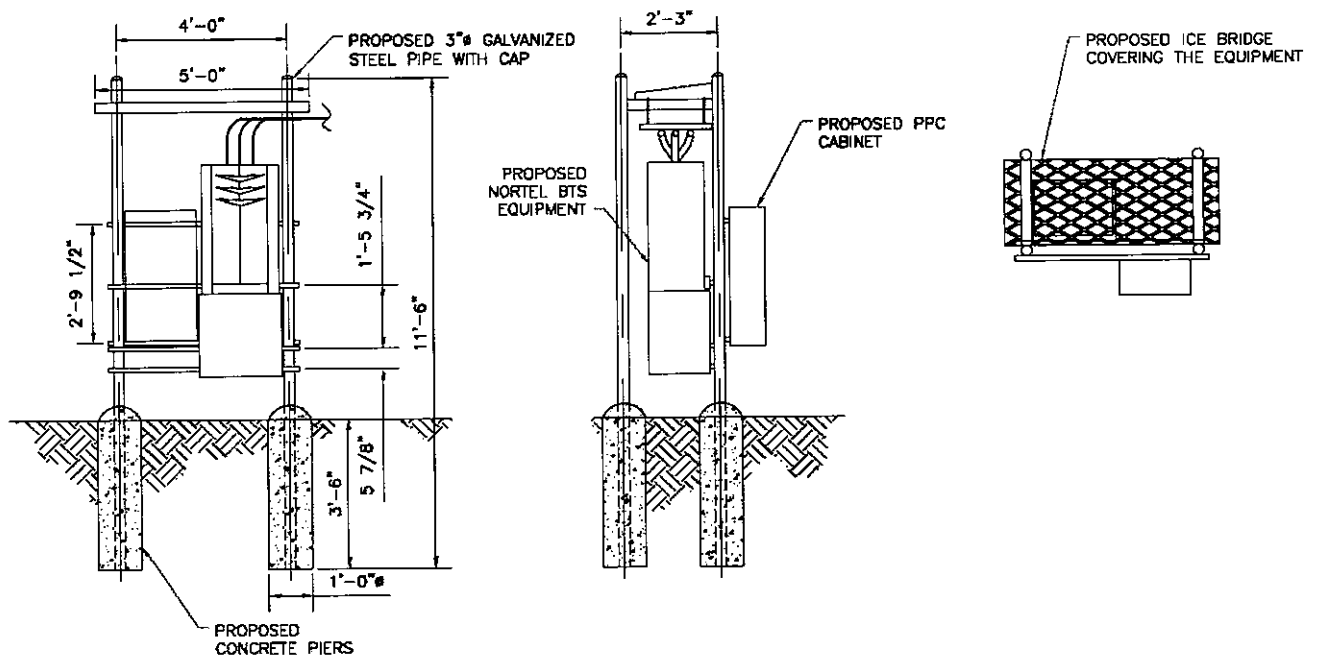


Order Information:

Model	Description
742 213	Antenna with 7/16 DIN connectors 0°–6° adjustable electrical downtilt

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com



Pocket/Youghiogheny Communications - Northeast, LLC
 Rack Detail



CDMA BTS 3231 AWS 1.7/2.1 GHz (Outdoor/Indoor)

CDMA BTS 3231

Industry's Highest Capacity AWS Micro BTS

The CDMA BTS 3231 is the latest extension to Nortel Networks BTS (Base Transceiver Station) portfolio providing the ideal solution for urban, sub-urban and rural deployments. The CDMA BTS 3231 is a 3-carrier, 3-sector outdoor/indoor BTS operating at the AWS band of 1.7/2.1 GHz supporting IS-95, 1XRTT and 1xEV-DO simultaneously. BTS 3231 provides flexible deployments solutions including floor, rack, and wall mount options. The power consumption of BTS3231 is industry leading consuming only 630W for 3C3S. The BTS 3231 is also very light at 240lbs making it easy

to transport to hard to reach locations such as the top of a high rise building.

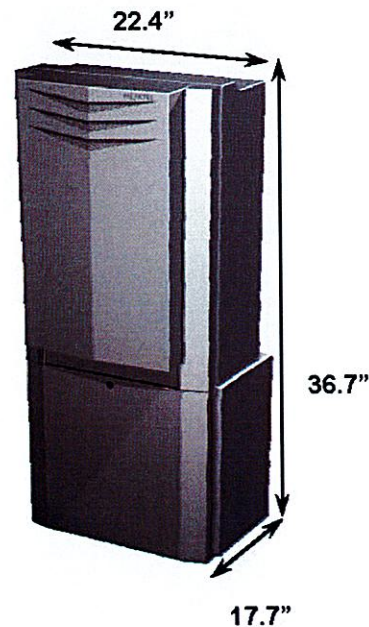


Exhibit D

Power Density Calculations

Pocket Site HFCT0378A

200 Colt Highway

aka Rattlesnake Mountain

Farmington, Connecticut



C Squared Systems, LLC
920 Candia Road
Manchester, NH 03109
Phone: (603) 657 9702
E-mail:

support@csquaredsystems.com

Calculated Radio Frequency Emissions



HFCT0378A

200 Colt Hwy (aka: Rattlesnake Mountain)

Farmington, CT

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3. RF Exposure Prediction Methods	2
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1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed Pocket antennas to be installed on the existing tower at 200 Colt Hwy (aka: Rattlesnake Mountain), Farmington, CT.

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are much more conservative (higher) than the actual signal levels will be from the finished installation.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (mW/cm^2). The number of mW/cm^2 emitted is called the power density. The general population exposure limit for the cellular band is $0.567\text{--}0.593 \text{ mW}/\text{cm}^2$, and the general population exposure limit for the PCS/AWS band is $1.0 \text{ mW}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

The FCC general population / uncontrolled limits set the maximum exposure to which most people may be subjected. General population / uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Higher exposure limits are permitted under the occupational / controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure (through training), and they must be able to exercise control over their exposure. General population / uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals.”

The FCC describes exposure to radio frequency (RF) energy in terms of percentage of maximum permissible exposure (MPE) with 100% being the maximum allowed. Rather than the FCC presenting the user specification in terms of complex power density figures over a specified surface area, this MPE measure is particularly useful, and even more so when considering that power density limits actually vary by frequency because of the different absorptive properties of the human body at different frequencies.

MPE limits are specified as time-averaged exposure limits. This means that exposure can be averaged over 30 minutes for general population / uncontrolled exposure (or 6 minutes for occupational / controlled exposure). However, for the case of exposure of the general public, time averaging is usually not applied because of uncertainties over exact exposure conditions and difficulty in controlling time of exposure. Therefore, the typical conservative approach is to assume that any RF exposure to the general public will be continuous.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population / uncontrolled exposure and for occupational / controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include limits for Maximum Permissible Exposure (MPE) for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP), the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit. As shown in these excerpts, each frequency band has different exposure limits, requiring power density to be reported as a percent of Maximum Permissible Exposure (MPE) when dealing with carriers transmitting in different frequency bands.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{0.64 \times \text{EIRP}}{\pi \times R^2} \right)$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna

V = Vertical Distance from bottom of antenna

Off Beam Loss is determined by the selected antenna patterns

4. Calculation Results

Table 1 below outlines the power density information for the site. All information for carriers other than Pocket was obtained from current CSC database, except where otherwise noted.¹

Carrier	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Antenna Height (Feet)	Operating Frequency (MHz)	Total ERP (Watts)	Power Density (mw/cm ²)	Limit	%MPE
MediaFLO	N/A	N/A	1132	719	N/A	N/A	N/A	0.04%
XM Radio	2	2558	460	2337	5116	0.0087	1.0000	0.87%
Verizon	9	200	235	875	1800	0.0117	0.5833	2.01%
Verizon	3	200	235	1900	600	0.0039	1.0000	0.39%
Sprint	11	433	160	1962.5	4763	0.0669	1.0000	6.69%
Pocket	3	631	140	2130-2133.75	1893	0.0347	1.0000	3.47%
All Other Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.18%
Total								27.65%

Table 1: Proposed Carrier Information

5. Conclusion

The above analysis verifies that emissions from the proposed site will be well below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Even when using conservative methods, the cumulative power density from the proposed transmit antennas at the existing facility is well below the limits for the general public. The highest expected percent of Maximum Permissible Exposure at the base of the tower is 27.65% of the FCC limit.

Please note that as indicated in the introduction, obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the finished installation.

¹ The CSC database lists AT&T at 140' based on AT&T's CSC filing, but AT&T never installed any equipment at this site. The 140' level is now leased by Pocket Communications.

6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.



Daniel I. Goulet
C Squared Systems, LLC

February 11, 2009
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

ANSI C95.1-1982, American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz. IEEE-SA Standards Board

IEEE Std C95.3-1991 (Reaff 1997), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave. IEEE-SA Standards Board

Attachment B: FCC Limits For Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

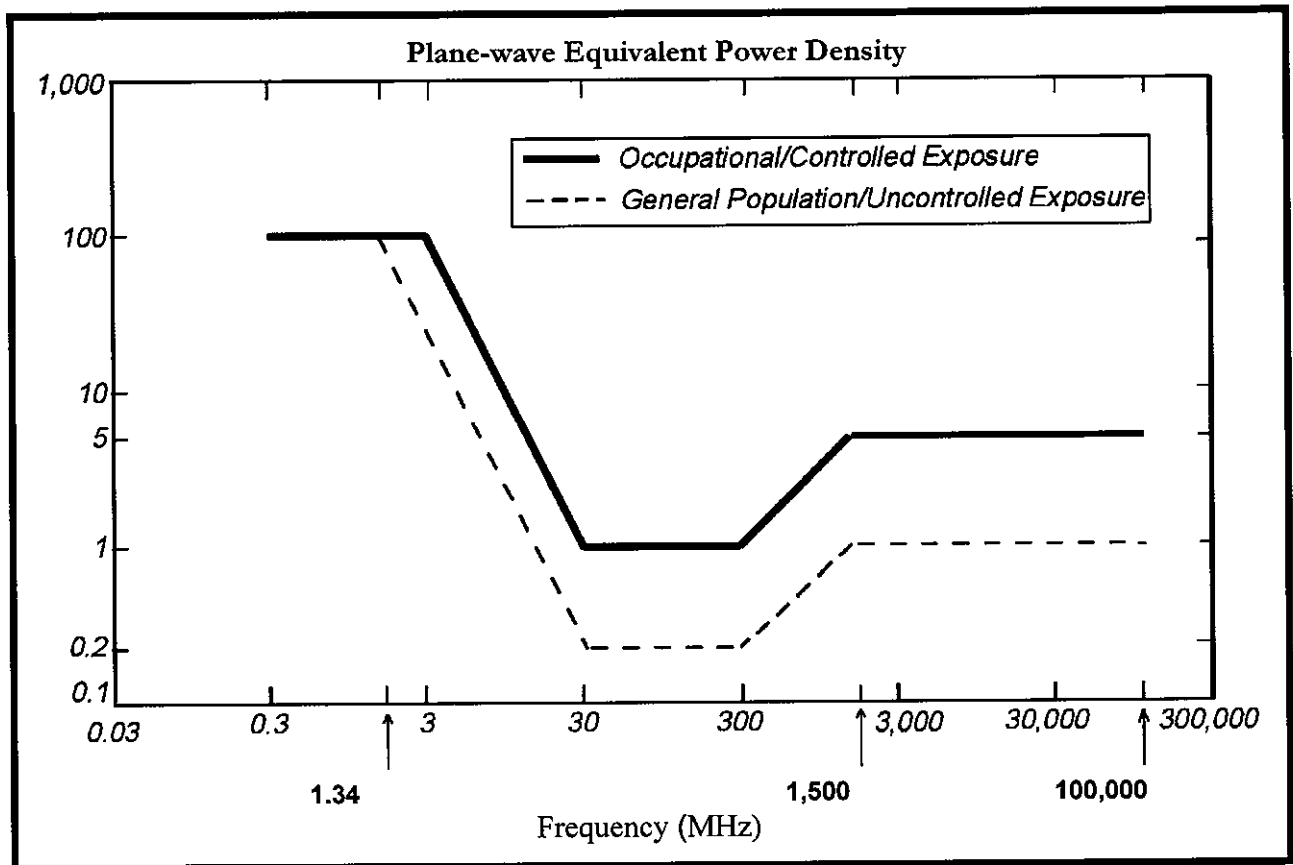
(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

NOTE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.



• FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Structural Analysis Tower Mapping



Turris Project: 08-0543

APPENDIX A Antenna Loading Chart

ID	Pos	Description	Qty	Elev (ft)	Tx Line	Qty	AZ	Comments	Status
Top Candelabra loading									
1	2b	TFU-16DSC-R C170	1	1273.00	7 3/16" **	** Shared		East Arm Bottom Up	E
1	3a	TFU-18JTHVP-R-04	1	1315.55	7 3/16" *	* Shared		NW Arm Top Up	E
1	3b	TFU-18DSCVP-R C170	1	1266.70	7 3/16" *	* Shared		NW Arm Bottom Up	E
				1248.25	6-1/8"	Spare			F
Miscellaneous loading on tower mast									
4	4	Radio Waves PR09-DRB-2C	1	1209	1 5/8" + 1"	1 Each	39	ProscanIII	P
5	5	SRL-110A-2	2	1200	7/8"	1	39, 159		E
6		TLP24A	1	1100	4 1/16"	1	None	Side mounted	E
7		Mount	1	960	None	None	E Face	For 10' Whip	E
8		Mount	1	920	None	None	E Face	For 10' Whip	E
9	7	FM ERI-1053-1CP	1	845	3 5/8" + 1 5/8"	1	1 Bay Each		E
10		DB809-H	1	800	3 1/8"	1	39		E
11	9	DB413	2	778	1 5/8"	1	39, S Face		E
12	10	DB413	2	755	1 5/8"	1	39, S Face		E
14	13	DB809K	1	740	1 5/8"	1	39		E
15		DB809-H	1	725	1 5/8"	1	39		E
16	14	DB254C	2	715	None	None	S Face		E
17	15	DB8983P	1	715	None	None	159		E
18	16	DB420B	1	708	None	None	39		E
19		DB809K	1	688	1 5/8"	1	39		E
20		DB224	1	671	1 5/8"	1	39		E
23		Kathrein 740-195	1	564	1 5/8"	1	279		E
25	25	Scala OGB9-900K	1	514	1 5/8"	1	39		E
26	26	Dish Mounts & I/G	3	512	None	None	39, 159, 279		E
27	29	TA2335	3	460	EW 20	1	1 Each Leg		E
28	30	Antel BCD 87010N25-6	1	440	1 5/8"	1	39		E
29	32	DB Dipole	1	416	7/8"	1	39		E
30	33	FM-XH 3A3	1	405	3 1/8"	1	159		E
31	34	DB225	1	400	1 1/4"	1	39		E
32	35	Ice Guards	2	374	None	None	39, 159		E
33	37	DB230	1	360	7/8"	1	279		E
34		6' Microwave Dish	2	355	WE71	2	39 & 159		E
35	51	DB408L & Scala OGB9-900N	2	320	7/8"	2	39, 279		E
36	52	I/G	3	310	None	None	1 Each Face		E
37	54	Tritek TA-2404-8-120 & BU-DS.11D RF Module	3	305	CAT 5	3	39, 159, 279		E
38	53	None		305	1/2"	8	None		E
39	55	Scala 450	1	300	7/8"	1	279		E
42		PXL8	1	283	EW 63	2	279		E
43		MF900B	1	270	1 1/4"	1	279		E
46	60	(2) ALP6014 (1) DB948F85T2E-M	3	240	7/8"	3	39		E
47		LGP TMA-DD 1900 Amp.	3	230	None	None	39, 159, 279		E
48	61	(2) ALP9212-N, (1) ALP6014 & (2) DB948F85T2E-M	5	230	7/8"	5	159, 279		E
51	62	PD220-3	1	180	7/8"	1	159		E



Turriss Project: 08-0543

52	64	BMR 10A	1	165	1 5/8"	1	39		E
53		DB950F65T4E-M	2	160	2 1/4"	2	279		E
54		DB950F65T4E-M	1	160	2 1/4"	1	39		F
56	55	HP6	1	155	EW52	1	211		E
63		Feedline		130	7/8"	1	None		E
64	66	PD400	1	121	7/8"	1	159		E
66		PD1110	1	110	1 1/4"	1	159		E
67	70	Ice Guards	3	106	None	None	1 Each Leg		E
68	71	Dish Mounts	3	100	None	None	1 Each Leg		E
69		10' Microwave Dish	1	87	EW52	1	39		E
70		A-18A24	1	70	2 1/4"	1	39		E
71		Dish Mount	1	64	None	None	39		E
72		Dish Mount	1	57	None	None	39		E
73		Dish Mount	1	46	None	None	39		E
74	73	Ice Guards	1	35	None	None	39		E
75	74	PL6	1	30	EW63	1	39		E
76		Kathrein 742 213	3	140	1 5/8"	6	30, 150, 270	Leg flush mounted	E
77		Hyperlink 3ft dish w/ radome	1	210	Cat 5 cable^	1		Computer hospital	P
78		Proxim 5054R-LR Base panels	2	210	Cat 5 cable^	3		Computer hospital	P

^Cat 5 cables are bundled together to 210'

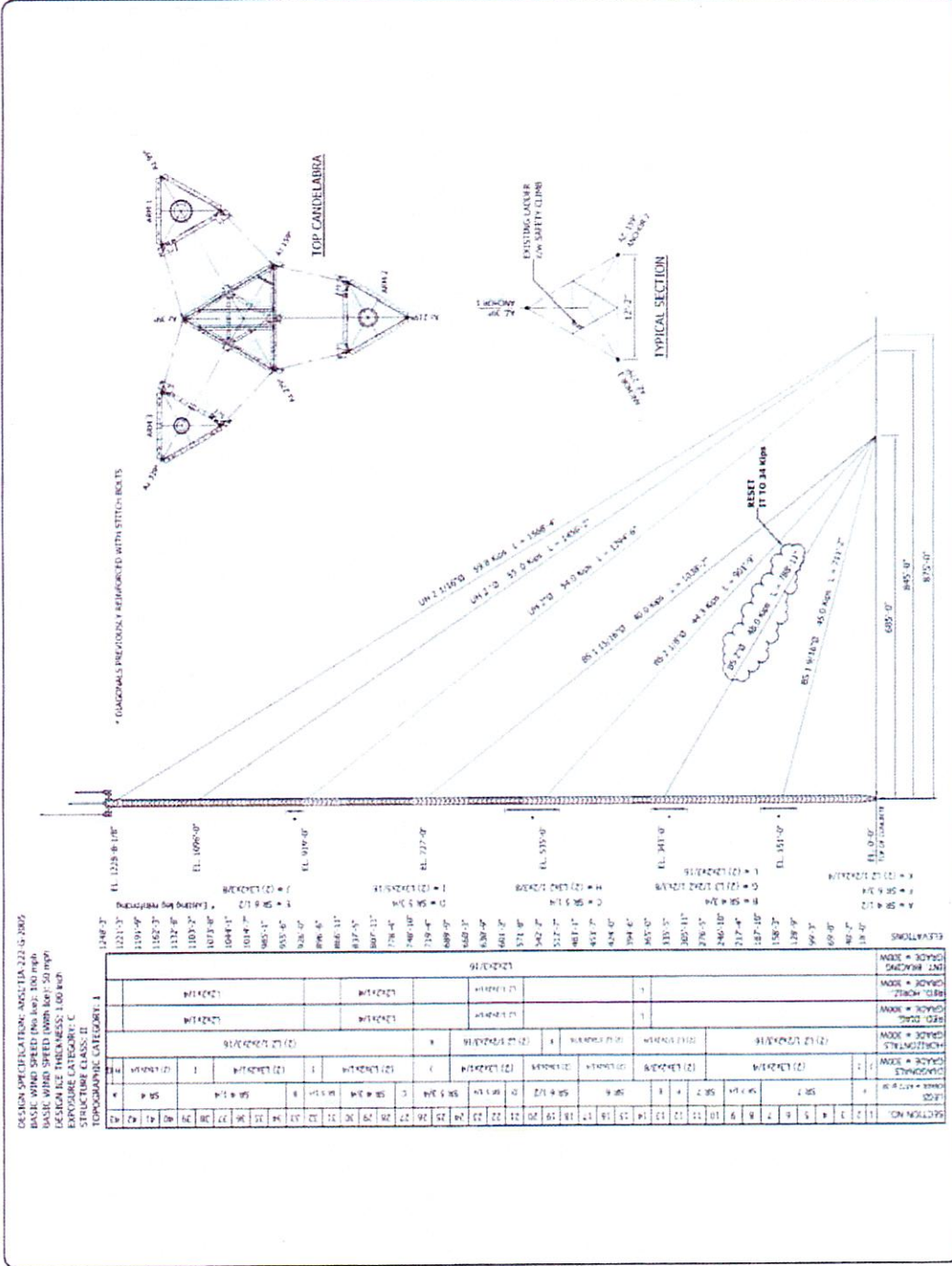


NO.	DESCRIPTION	DATE	BY

NO.	DESCRIPTION	DATE	BY

EXISTING LIFT ELEVATION
 PROPOSED LIFT ELEVATION
 BATHROOM (MATHING) CT, CT

TOWER PERIM			
NO.	DESCRIPTION	DATE	BY



DESIGN SPECIFICATION: ANGUS 222-S-2805
 BASIC WIND SPEED (3000 ft. high, 100 mph)
 BASIC WIND SPEED (3000 ft. high, 50 mph)
 DESIGN ICE THICKNESS: 1.00 INCH
 STRUCTURE CLASS: II
 TOPOGRAPHIC CATEGORY: I

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT
1	2	3	4	5	6	7	8

ELEVATIONS	NO.	DESCRIPTION	DATE	BY

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

SECTION NO.	LOAD	GRADE	HEIGHT	WIND	ICE	CLASS	CAT

Exhibit E

Structural Analysis

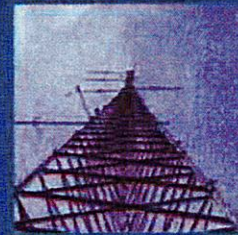
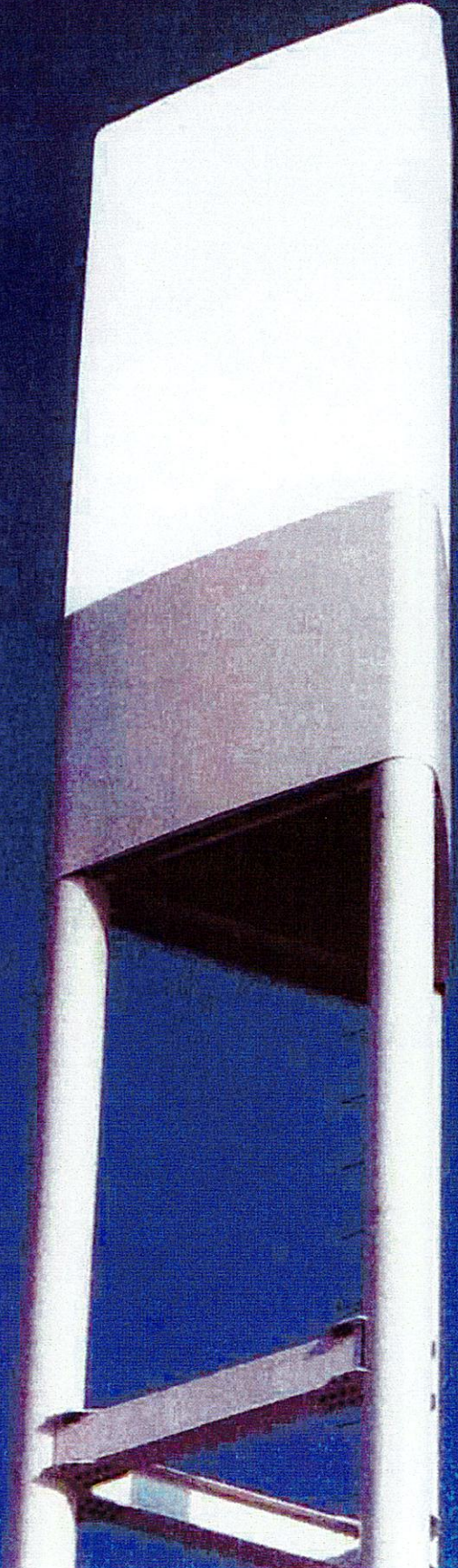
Pocket Site HFCT0378A

200 Colt Highway

aka Rattlesnake Mountain

Farmington, Connecticut

TURRIS



PROJECT:
STRUCTURAL ANALYSIS
of
Existing 1339ft
LRM3700 Guyed Mast

CUSTOMER:
Communications Site
Management LLC

SITE:
Rattlesnake
(a.k.a. Farmington), CT

TURRIS FILE:
08-0543



Turriss Project: 08-0543

STRUCTURAL ANALYSIS OF
Existing 1339 Ft. LRM3700 Guyed Mast
at Rattlesnake (a.k.a. Farmington), CT
FOR:
Communications Site Management LLC

Attention: Dave Emery, Division Manager
225 Asylum Street, 29th Floor
Hartford, CT 06103 USA

Prepared by: Simon Pong, P.Eng, P.E.
TURISS CORP.
995 Westport Cr., Mississauga, ON, Canada L5T 1E8
Phone: (905) 461-9699 Fax: (905) 461-0967

November 11, 2008

Introduction

We have completed the structural analysis of the existing 1339ft LRM3700 guyed mast at Rattlesnake (a.k.a Farmington), CT, and are pleased to submit our report for your attention.

The purpose of this analysis is to evaluate the tower for compliance with ANSI/TIA-222-G-2005 with the removal and addition of antennas and transmission lines as tabulated in Tables 1 and 2, respectively, from the antenna loading chart of previous analysis (Turriss Project: 08-0304).

Table 1 – Antennas and transmission lines to be removed.

ID	Description	Elev (ft)	Feedline Size	Antenna
1	Ch24 Analog Antenna (Top Mount)	1315	N/A	TFU-22JSC-R C170
1	Ch61 Analog Antenna (Top Mount)	1276.85	N/A	TWS-30
	Feedline	1248.25	(2) 7/8"	None
7	East Face	965	N/A	12' Antenna Mount
8	East Face	920	N/A	12' Antenna Mount
13	Feedline	750	1 1/4"	None
21	Feedline	655	7/8"	Lindsey ATV
22	Ch61 Back Up Antenna (Side Mount)	608	WR1475	Harris Wavestar TWS-15
24	DT31 Backup Antenna (Side Mount)	542	4 1/8"	RD16A
40	Antenna Only	295	None	TDB6172 A-B
41		295	1/2"	TDB6172 A-B
44		269	1/2"	BA3010
45	DT12 Digital Antenna (Side Mount)	250	1 5/8"	B6VA
49	Feedline	195	7/8"	None
50	Feedline	188	1 5/8"	None
55	Feedline	160	1 5/8"	None
57		140	(4) 1 5/8"	(2) Powerwave Dual Band Ant
58		140	NONE	(4) LPG2140X Pre Amp.
59		140	(4) 1 5/8"	(2) Powerwave Dual Band Ant
60		140	NONE	(4) LPG2140X Pre Amp.
61		140	NONE	(4) LPG2140X Pre Amp.
62		140	(4) 1 5/8"	(2) Powerwave Dual Band Ant
65	279 Degree Leg	121	7/8"	DB222-E-A

Table 2 – Antennas and transmission lines to be added.

ID	Description	Elev (ft)	Feedline Size	Antenna
4	Proscan III	1209	(1) 1 5/8" + (1) 1"	Radio Waves PR09-DRB-2C

We trust the analysis and recommendations presented in the report will meet your requirements. However, please do not hesitate to contact us if you have any questions, or require any further information regarding this study.

1.0 Terms of Reference

The following documents and drawings were examined:

Tower Profile:	Radian dwg. No. 37-1030-E01-01 Rev. 2 dated Jan/10/2005.
Tower Foundations:	LeBlanc dwg. No. 3.7A1001-FE10 Issue 2 dated Aug/31/84. LeBlanc dwg. No. 3.7A1001-FE1 Issue 1 dated May/7/84. LeBlanc dwg. No. 3.7A1001-FE2 Issue 1 dated May/1/84. LeBlanc dwg. No. 3.7A1001-FE3 Issue 1 dated Apr/30/84. LeBlanc dwg. No. 3.7A1001-FE4 Issue 1 dated Apr/30/84. LeBlanc dwg. No. 3.7A1001-FE5 Issue 1 dated May/1/84. LeBlanc dwg. No. 3.7A1001-FE6 Issue 1 dated Apr/30/84. Radian dwg. No. 37-1030-F01-01 Rev. 0 dated Oct/4/2004. Radian dwg. No. 37-1030-F02-01 Rev. 0 dated Oct/5/2004. Radian dwg. No. 37-1030-F03-01 Rev. 0 dated Oct/5/2004.
Antenna Inventory:	Refer to Appendix A.
Soil Report:	Dr. Clarence Welti, Geotechnical Engineering Report dated January 30, 2004

A tower inspection was not performed in conjunction with this analysis. The tower and loading data used in this analysis are based on and is as accurate as the data furnished/obtained.

2.0 Analysis Parameters

- Standard: ANSI/TIA-222-G-2005
- County: Hartford, CT
- Basic Wind Speed: 105.00(mph)
- Basic Wind Speed With Ice: 50.00(mph)
- Design Ice Thickness: 1.00(in)
- Structure Class: II
- Exposure Category: C
- Topographic Category: I

3.0 Assumptions

1. The tower is in good, non-corroded conditions.
2. This analysis assumes that all previous reinforcing recommendations and antenna rearrangement have been implemented.
3. All existing/future tx lines less than 3" in diameter are considered grouped together in blocks.
4. This analysis assumes that the back-to-back diagonals at sections 6, 7, 12, 13, 19, 20, 21, and 33 had been upgraded with (1) 5/8" stitch bolt on each side of the existing middle stitch bolt.

4.0 Analysis Results

Appendix A shows the tower profile, along with the antennas, transmission lines and ancillary loading considered in this analysis. The existing structure was analysed using the comprehensive computer program "TSTower". Graphical and tabular results are presented in Appendix B.

5.0 Conclusions & Recommendations

The existing 1339 ft LRM3700 guyed tower at Rattlesnake (a.k.a Farmington), CT, was examined for compliance with American standard ANSI/TIA-222-G-2005. A summary of member stresses are listed below:

Summary of member stress ratios

Leg				
Section	Maximum stress ratio	Location	Member size	Comment
15	1.03	first panel	SR 6	Unacceptable

Diagonal				
Section	Maximum stress ratio	Location	Member size	Comment
33	0.67	second panel	(2) L3x2x1/4	Acceptable
	0.67	first panel	(2) L3x2x1/4	Acceptable

Horizontal				
Section	Maximum stress ratio	Location	Member size	Comment
38	0.58	fourth panel	(2) L2 1/2x2x3/16	Acceptable
32	0.58	fourth panel	(2) L2 1/2x2x3/16	Acceptable
1	0.58	second panel	(2) L2 1/2x2x3/16	Acceptable

*Summary of original base reactions as per Rev. F**

Axial (Kips)	Shear (Kips)
3087.9	10.4

* values increased by 1.35 for comparison

*Summary of base reactions as per Rev. G***

Axial (Kips)	Shear (Kips)
3704.0	58.9

**foundation is acceptable after re-checking the original design.

*Summary of original anchor design reactions as per Rev. F**

Anchor #	Azimuth (deg)	Radius (ft)	Horizontal Load (Kips)	Vertical Load (Kips)	Axial Load (Kips)
1C	39.0	685.00	579.29	378.41	692.01
2C	159.0	645.00	582.39	409.32	711.86
3C	279.0	729.00	575.51	422.15	713.61
1B	39.0	845.00	143.51	166.46	219.78
2B	159.0	735.00	151.47	184.95	239.09
3B	279.0	827.00	149.45	175.91	230.85
1A	39.0	875.00	284.31	386.24	479.12
2A	159.0	765.00	295.79	423.77	515.97
3A	279.0	857.00	289.04	395.82	489.78

* values increased by 1.35 for comparison

Summary of anchor reactions as per Rev. G

Anchor #	Azimuth (deg)	Radius (ft)	Horizontal Load (Kips)	Vertical Load (Kips)	Axial Load (Kips)
1C	39.0	685.00	482.57	343.95	592.60
2C	159.0	645.00	483.72	365.84	606.48
3C	279.0	729.00	470.61	373.99	601.12
1B	39.0	845.00	125.85	159.14	202.89
2B	159.0	735.00	131.50	172.98	217.28
3B	279.0	827.00	129.73	166.06	210.73
1A	39.0	875.00	244.77	370.47	444.03
2A	159.0	765.00	251.49	397.00	469.95
3A	279.0	857.00	246.84	375.36	449.25

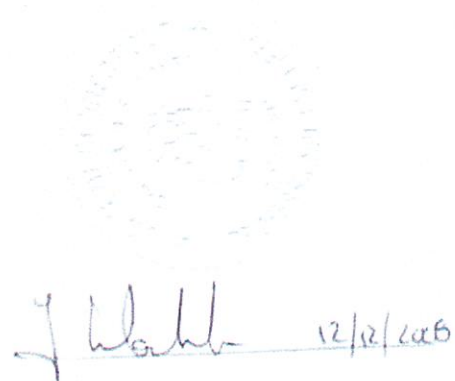
A check to the base foundation shows that it is adequate for the base reactions as per Rev.G. A comparison of the reactions shows that the anchor reactions as per Rev.G are less than the original design allowable reactions increased by 1.35 for comparison. We recommend that the second guy 2" BS to be reset at 34.5 kips (7%) to eliminate the 3% overstress in the tower leg, and the tower would conform with ANSI/TIA-222-G-2005.

Prepared by:

Reviewed by:



Simon Pong, P.Eng., P.E.
Project Engineer
Turriss Corp.



John Wahba, Ph. D, P. E., P. Eng.
Principal Engineer
Turriss Corp.

SCOPE & LIMITATIONS FOR THE PROVISION OF PROFESSIONAL ENGINEERING SERVICES FOR STRUCTURES

All engineering services performed by Turriss Corp. (Turriss) in connection with the structural analysis of the tower is limited to the strength of the members and does not account for any variations due fabrication, including welding and connection capacities and installations, except as outlined in this Report.

This analysis report is based on assumptions that the information below, but is not necessarily limited to:

- information supplied by the client regarding the structure and its components, foundations, soil conditions, appurtenances loading on the structure, and other site-specific information.
- information from documents and/or drawings in the possession of Turriss Corporation, or acquired from field inspections.

It is the responsibility of the client to ensure that the information provided to Turriss, and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications provided, and are in non-corroded condition and have not deteriorated. Therefore, we assume that the member capacities have not changed from the "as new" condition.

All services will be performed to meet the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed to in writing. If wind and ice loads or other relevant parameters are to be different than the minimum values recommended by the standards, the client shall specify the requirement.

All services are performed in accordance with generally accepted engineering principles and practices. Turriss is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

Furthermore, Turriss assumes no obligations to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulas are hereafter modified or revised. In addition, under no circumstances will Turriss have any obligations or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the report and the maximum liability of Turriss Corp., if any, pursuant to this Report shall be limited to the total funds actually received by Turriss Corp. for preparation of this Report.

APPENDIX A

Tower Profile and Antenna Loading Chart

APPENDIX A Antenna Loading Chart

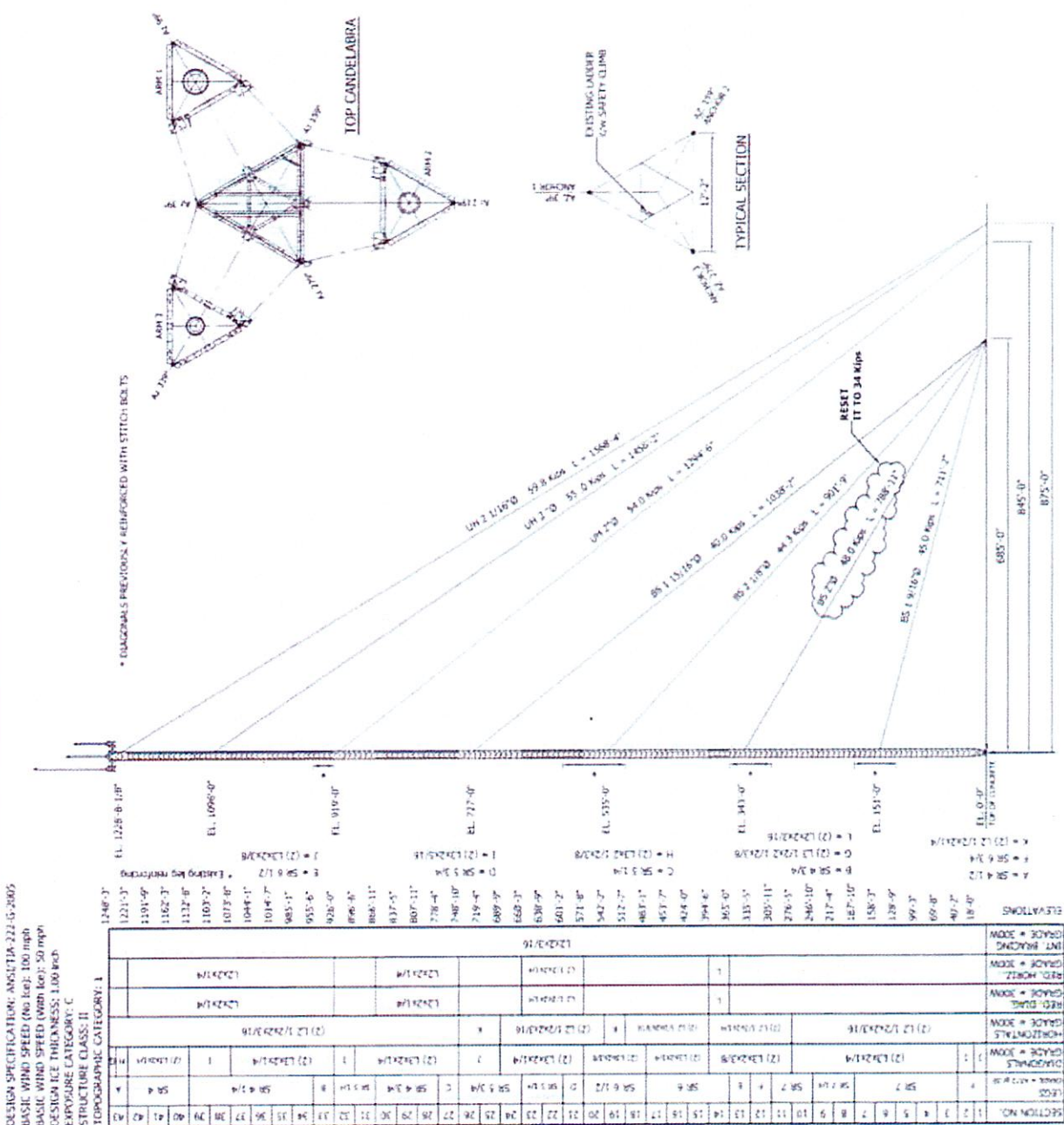
ID	Pos	Description	Qty	Elev (ft)	Tx Line	Qty	AZ	Comments	Status
Top Candelabra loading									
1	2b	TFU-16DSC-R C170	1	1273.00	7 3/16" **	** Shared		East Arm Bottom Up	E
1	3a	TFU-18JTH/VP-R-04	1	1315.55	7 3/16" *	* Shared		NW Arm Top Up	E
1	3b	TFU-18DSCVP-R C170	1	1266.70	7 3/16" **	* Shared		NW Arm Bottom Up	E
				1248.25	6-1/8"	Spare			F
Miscellaneous loading on tower mast									
4	4	Radio Waves PR09-DRB-2C	1	1209	1 5/8" + 1"	1 Each	39	ProscanIII	P
5	5	SRL-110A-2	2	1200	7/8"	1	39, 159		E
6		TLP24A	1	1100	4 1/16"	1	None	Side mounted	E
7		Mount	1	960	None	None	E Face	For 10' Whip	E
8		Mount	1	920	None	None	E Face	For 10' Whip	E
9	7	FM ERI-1053-1CP	1	845	3 5/8" + 1 5/8"	1	1 Bay Each		E
10		DB809-H	1	800	3 1/8"	1	39		E
11	9	DB413	2	778	1 5/8"	1	39, S Face		E
12	10	DB413	2	755	1 5/8"	1	39, S Face		E
14	13	DB809K	1	740	1 5/8"	1	39		E
15		DB809-H	1	726	1 5/8"	1	39		E
16	14	DB254C	2	715	None	None	S Face		E
17	15	DB8983P	1	715	None	None	159		E
18	16	DB420B	1	708	None	None	39		E
19		DB809K	1	688	1 5/8"	1	39		E
20		DB224	1	671	1 5/8"	1	39		E
23		Kathrein 740-195	1	564	1 5/8"	1	279		E
25	25	Scala OGB9-900K	1	514	1 5/8"	1	39		E
26	26	Dish Mounts & I/G	3	512	None	None	39, 159, 279		E
27	29	TA2335	3	460	EW 20	1	1 Each Leg		E
28	30	Antel BCD 87010N25-6	1	440	1 5/8"	1	39		E
29	32	DB Dipole	1	416	7/8"	1	39		E
30	33	FM-XH 3A3	1	405	3 1/8"	1	159		E
31	34	DB225	1	400	1 1/4"	1	39		E
32	35	Ice Guards	2	374	None	None	39, 159		E
33	37	DB230	1	360	7/8"	1	279		E
34		6' Microwave Dish	2	355	WE71	2	39 & 159		E
35	51	DB408L & Scala OGB9-900N	2	320	7/8"	2	39, 279		E
36	52	I/G	3	310	None	None	1 Each Face		E
37	54	Tiltek TA-2404-8-120 & BU-DS. 11D RF Module	3	305	CAT 5	3	39, 159, 279		E
38	53	None		305	1/2"	8	None		E
39	55	Scala 450	1	300	7/8"	1	279		E
42		PXL8	1	283	EW 63	2	279		E
43		MF900B	1	270	1 1/4"	1	279		E
46	60	(2) ALP6014 (1) DB948F85T2E-M	3	240	7/8"	3	39		E
47		LGP TMA-DD 1900 Amp.	3	230	None	None	39, 159, 279		E
48	61	(2) ALP9212-N, (1) ALP6014 & (2) DB948F85T2E-M	5	230	7/8"	5	159, 279		E
51	62	PD220-3	1	180	7/8"	1	159		E

52	64	BMR 10A	1	165	1 5/8"	1	39		E
53		DB950F65T4E-M	2	160	2 1/4"	2	279		E
54		DB950F65T4E-M	1	160	2 1/4"	1	39		F
56	65	HP6	1	155	EW52	1	211		E
63		Feedline		130	7/8"	1	None		E
64	66	PD400	1	121	7/8"	1	159		E
66		PD1110	1	110	1 1/4"	1	159		E
67	70	Ice Guards	3	106	None	None	1 Each Leg		E
68	71	Dish Mounts	3	100	None	None	1 Each Leg		E
69		10' Microwave Dish	1	87	EW52	1	39		E
70		A-18A24	1	70	2 1/4"	1	39		E
71		Dish Mount	1	64	None	None	39		E
72		Dish Mount	1	57	None	None	39		E
73		Dish Mount	1	46	None	None	39		E
74	73	Ice Guards	1	35	None	None	39		E
75	74	PL6	1	30	EW63	1	39		E
76		Kathrein 742 213	3	140	1 5/8"	6	30, 150, 270	Leg flush mounted	E
77		Hyperlink 3ft dish w/ radome	1	210	Cat 5 cable^	1		Computer hospital	P
78		Proxim 5054R-LR Base panels	2	210	Cat 5 cable^	3		Computer hospital	P

^Cat 5 cables are bundled together to 210'

NO.	DESCRIPTION	DATE	BY

DATE REFERRED:



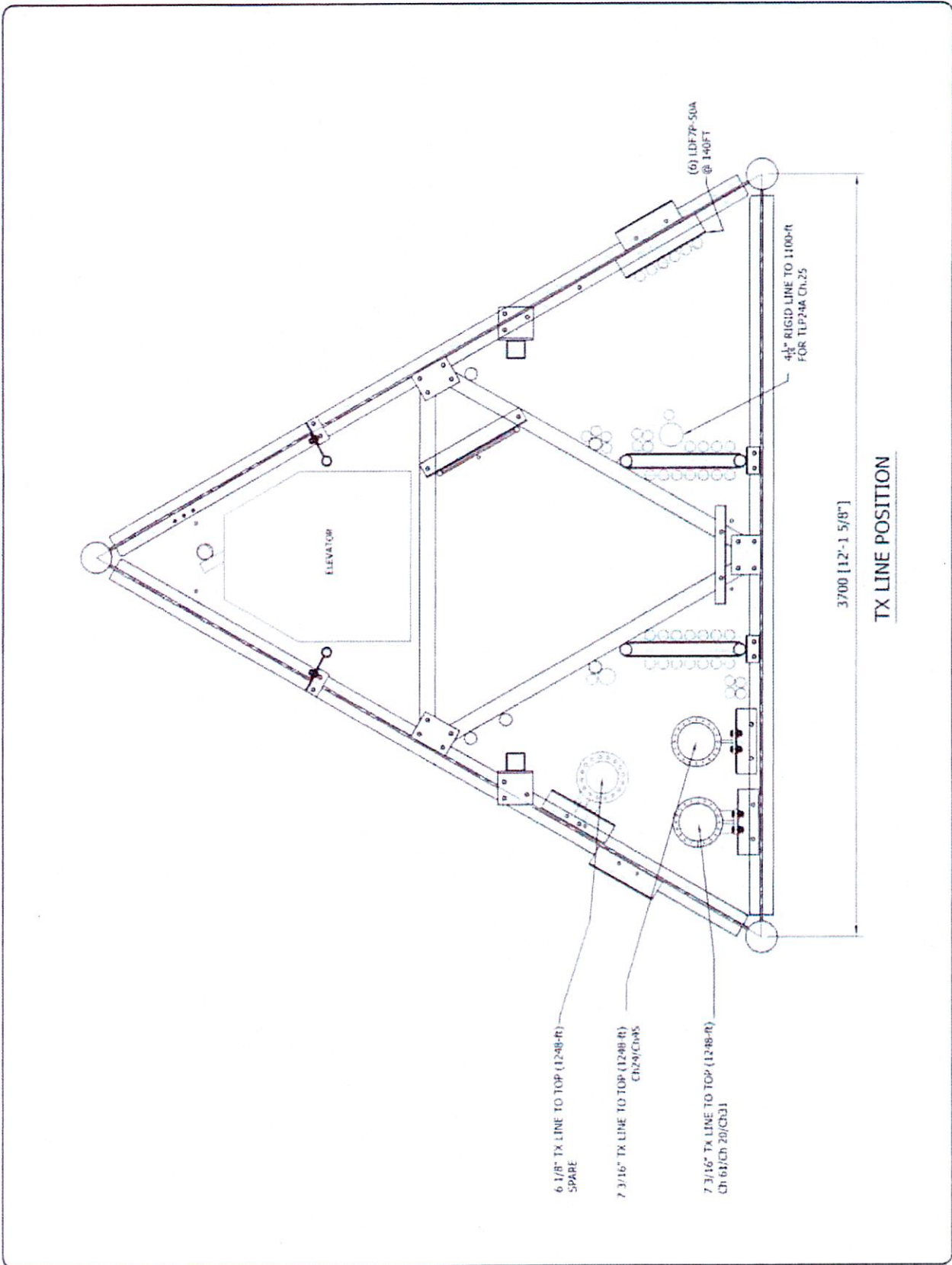
DESIGN SPECIFICATION: ANSUL-224-5-2005
 BASIC WIND SPEED (no ice): 100 mph
 BASIC WIND SPEED (with ice): 50 mph
 DESIGN ICE THICKNESS: 1.00 inch
 EXPOSURE CATEGORY: C
 STRUCTURE CLASS: II
 TOPOGRAPHIC CATEGORY: 1

SECTION NO.	COORD.	DIAGONALS	HORIZONTALS	REQ. DIA.	REQ. HORIZ.	INT. BRACING	MOUSE	ELEVATIONS
1	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
2	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
3	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
4	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
5	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
6	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
7	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
8	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
9	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
10	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
11	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
12	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
13	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
14	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
15	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
16	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
17	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
18	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
19	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
20	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
21	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
22	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
23	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
24	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
25	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
26	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
27	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
28	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
29	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
30	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
31	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
32	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
33	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
34	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
35	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
36	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
37	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
38	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
39	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
40	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
41	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
42	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"
43	58 4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	(2) L2X21/4	EL. 1225'-0.10"

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REV	DESCRIPTION	DATE	BY

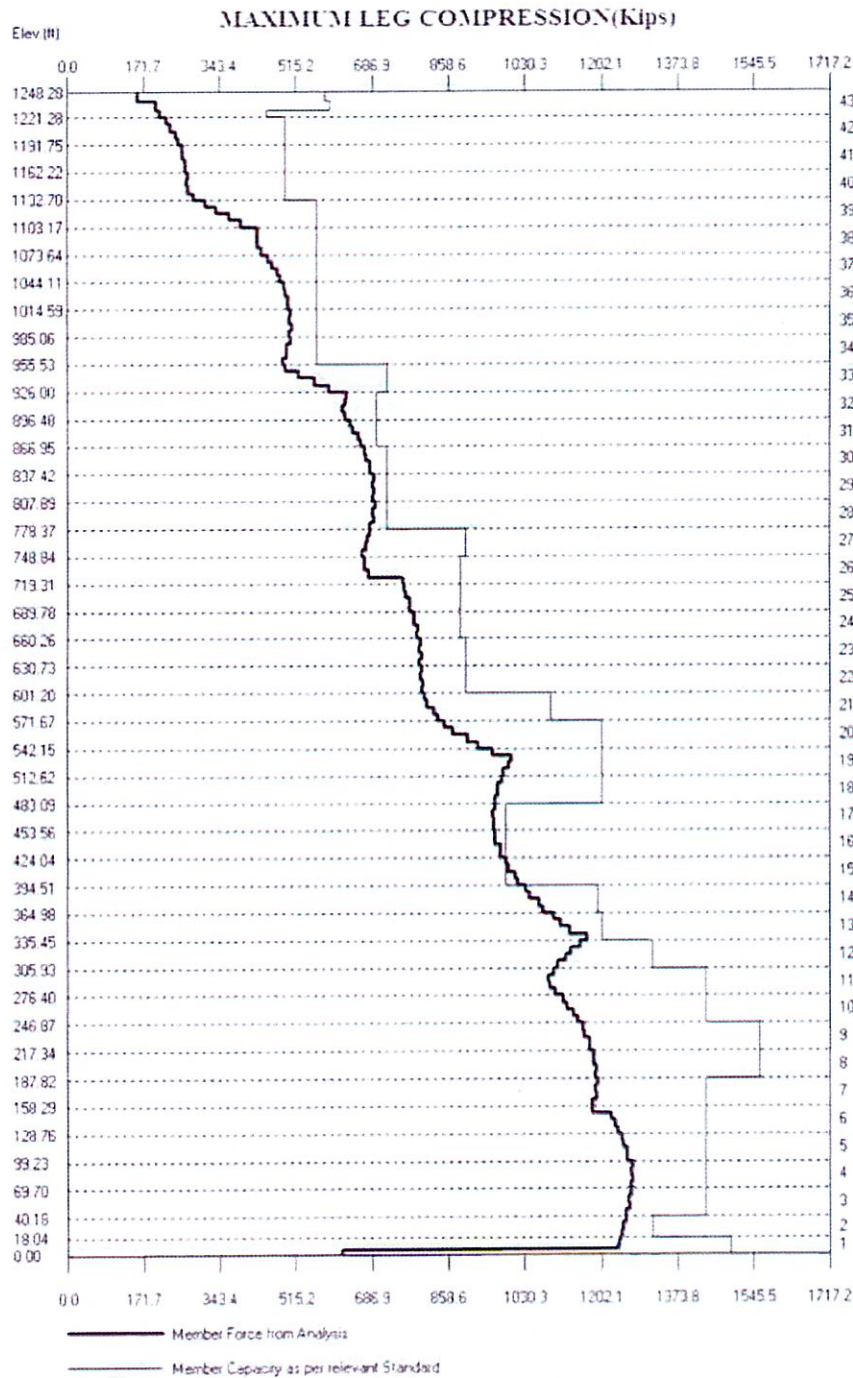
DATE: 11/28/13
 DRAWING NO: 13-001
 PROJECT: BATTLESTAR HARTFORD CT
 CLIENT: BATTLESTAR HARTFORD CT



**APPENDIX B
Results of Analysis**

Guy Elevation (ft)	Guy Maximum Stress Levels (% of Rated Capacity)
1228.68	72
1096.00	70
919.00	67
727.00	68
535.00	56
343.00	56
151.00	56

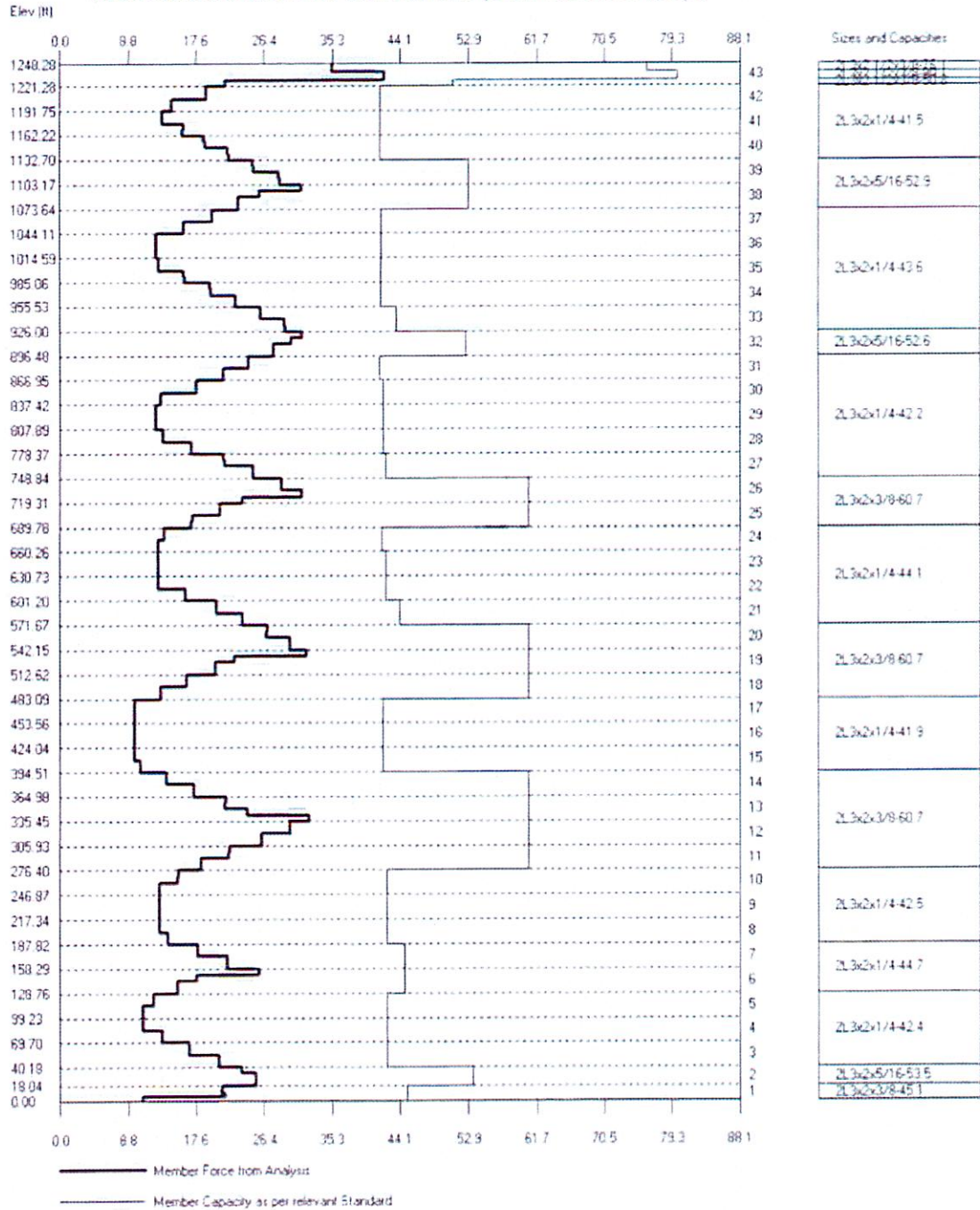
Elevation (ft)	Maximum Beam Rotation (Degrees) for Serviceability Conditions
1209.00	0.94
1200.00	0.92
800.00	0.69
740.00	0.70
726.00	0.70
688.00	0.71
671.00	0.71
564.00	0.69
440.00	0.64
355.00	0.57
283.00	0.53
210.00	0.44
155.00	0.33
140.00	0.32
110.00	0.26
87.00	0.23



Sizes and Capacities

SR 1 1/2-291.6
SR 4-490.2
SR 4 1/4-562.6
SR 4 3/4-720.9
SR 5 1/4-898.7
SR 4 3/4-720.9
SR 5 1/4-897.0
SR 5 3/4-885.9
SR 5 1/4-897.0
SR 5 3/4-1091.0
SR 6 1/2-1202.3
SR 6-986.5
SR 6-1194.6
SR 6 1/2-1202.3
SR 6 3/4-1317.4
SR 7-1436.9
SR 7 1/4-1561.1
SR 7-1436.9
SR 6 3/4-1317.6
SR 5 3/4-1494.8

MAXIMUM DIAGONALS CAPACITIES (COMPRESSION)(Kips)





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