STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

April 27, 2004

Christine Farrell
T-Mobile
100 Filley Street
Bloomfield, CT 06002

RE: **TS-T-MOBILE-166-040408** - Omnipoint Communications, Inc. (T-Mobile) request for an order to approve tower sharing at an existing telecommunications facility located at 1140 Wolcott Road, Wolcott, Connecticut.

Dear Ms. Farrell:

At a public meeting held April 26, 2004, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures with the conditions that the antennas at the 60-foot and 150-foot levels of the tower be removed prior to the addition of the new antennas, and that the Council is notified in writing that the antenna removal has taken place. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated April 8, 2004.

Thank you for your attention and cooperation.

Very truly yours,

PBK/LRE

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable Thomas G. Dunn, Mayor, Town of Wolcott
George Leggio, Zoning Enforcement Officer, Town of Wolcott
Roger Lane, General Communications

T-Mobile®

TS-T-MOBILE-166-040408

RECEIVED
APR 0 8 2004
CONNECTICUT
SITING COUNCIL

April 8, 2004

BY HAND

Pamela B. Katz, Chairman and
Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Tower Sharing Request by T-Mobile
General Communications Tower
1140 Wolcott Road, Wolcott
Latitude: 41-37-03/ Longitude: 72-58-30

Dear Ms. Katz and Members of the Siting Council:

Pursuant to Connecticut General Statutes (C.G.S.) § 16-50aa, T-Mobile USA, Inc. acting through its wholly owned subsidiary Omnipoint Communications, Inc. ("T-Mobile") hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed shared use of an existing communications tower, located at 1140 Wolcott Road ("Facility"), owned by General Communications. T-Mobile and General Communications have agreed to the shared use of the Facility, as detailed below.

FACILITY

The Facility consists of an one hundred eighty (180) foot high Lattice Tower ("Tower") owned and operated by General Communications. T-Mobile will be at a mounting height of One Hundred Sixty (160) feet. A chain link fence surrounds the Facility. There is a two way radio antenna located at the one hundred eighty (180) foot level. The existing antenna's located at the one hundred fifty (150) foot and sixty (60) foot levels are not in use and will be removed when T-Mobile makes their installation.

T-Mobile USA, Inc.
Office: (401) 588-5600
Fax: (401) 588-5658
50 Vision Boulevard
East Providence, RI 02914

T-MOBILE FACILITY

As shown on the enclosed plans prepared by Clough, Harbour & Assoc.'s, including a site plan and tower elevation of the Facility, annexed hereto as Exhibit A, T-Mobile proposes a shared use of the Facility by placing antennas on the Tower and equipment needed to provide personal communications services ("PCS") within the existing fenced compound. T-Mobile will install six (6) antennas at the One Hundred Sixty (160) foot level of the Tower. Associated unmanned equipment cabinets will be located on a concrete pad near the base of the tower within the existing compound.

Connecticut General Statutes § 16-50aa provides that, upon written request for shared use approval, an order approving such use shall be issued, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns." (C.G.S. § 16-50aa(c)(1).) Further, upon approval of such shared use, it is exclusive and no local zoning or land use approvals are required C.G.S. §16-50x. Shared use of the Facility satisfies the approval criteria set forth in C.G.S. § 16-50aa as follows:

A. Technical Feasibility The existing Tower and compound were designed to accommodate multiple carriers. A structural analysis of the Tower with multiply carriers has been performed and is attached as Exhibit B. The structural analysis concludes that the existing tower can safely accommodate the proposed T-Mobile antennas. The proposed shared use of this Tower is technically feasible. Further there is sufficient room in the fenced compound for our facility, thus the site plan will not have to be altered.

B. Legal Feasibility Pursuant to C.G.S. § 16-50aa, the Council has been authorized to issue an order approving shared use of the Facility. (C.G.S. § 16-50aa (C)(1)). Under the authority vested in the Council by C.G.S. § 16-50aa, an order by the Council approving the shared use of a tower would permit the Applicant to obtain a building permit for the proposed installation.

C. Environmental Feasibility The proposed shared use would have a minimal environmental effect, for the following reasons:

1.) The proposed installation would have a de minimis visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing facility;

2.) The proposed installation by T-Mobile would not increase the height of the tower or extend the boundaries of the Facility;

3.) The proposed installation would not increase the noise levels at the existing facility boundaries by six decibels or more;

4.) Operation of T-Mobile's antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. The "worst case" exposure calculated for the operation of this facility for all carriers, would be approximately 1.8504 % of the standard. See Cumulative Emissions Compliance Report dated April 7, 2004, prepared by Sumit Nahar, T-Mobile Radio Frequency Engineer, annexed hereto as Exhibit C;

5.) The proposed shared use of the Facility would not require any water or sanitary facilities, or generate any air emissions or discharges to water bodies. Further, the installation will not generate any traffic other than for periodic maintenance visits.

D. Economic Feasibility The Applicant and the tower owner have agreed to share use of the Facility on terms agreeable to both parties. The proposed tower sharing is therefore economically feasible.

E. Public Safety As stated above and evidenced in the Cumulative Emissions Compliance Report annexed hereto as Exhibit C, the operation of T-Mobile's antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. Further, the addition of T-Mobile's telecommunications service in the Wolcott area through shared use of the Facility is expected to enhance the safety and welfare of local residents and travelers through the area resulting in an improvement to public safety in this area.

Conclusion

As delineated above, the proposed shared use of the Facility satisfies the criteria set forth in C.G.S. § 16-50aa, and advances the General Assembly's and the Siting Council's goal of preventing the proliferation of tower in the State of Connecticut. T-Mobile therefore requests the Siting Council issue an order approving the proposed shared use of the Facility.

Respectfully submitted,

Christine Farrell
T-Mobile
100 Filley St.
Bloomfield, CT 06002
(860) 694-6427

cc: Mayor Tom Dunn

Exhibit A

GENERAL COMMUNICATIONS SST

1140 WOLCOTT ROAD
WOLCOTT, CT 06107

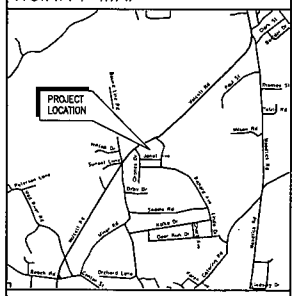
CT-11-477B

CO-LOCATE

GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE LESSEE/LICENSEE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS / CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE ON WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
15. THE CONTRACTOR SHALL NOTIFY THE LESSEE/LICENSEE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESSEE/LICENSEE.
16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72-HOURS PRIOR TO ANY EXCAVATION ACTIVITY:
   DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 1-888-344-7233
   CALL BEFORE YOU DIG (CT): 1-800-922-4455

VICINITY MAP



VICINITY MAP
Not To Scale

N

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE LESSEE/LICENSEE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET INDEX

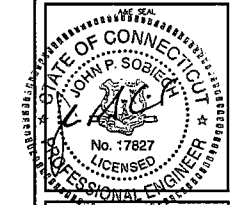
SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	0
A-1	PLOT PLAN & PARTIAL SITE PLAN	0
A-2	SITE ELEVATION & ANTENNA PLAN	0
S-1	STRUCTURAL NOTES & DETAILS	0
E-1	ELECTRICAL, GROUNDING NOTES, RISERS & DETAILS	0

PROJECT SUMMARY

SITE NUMBER:	CT-11-477B
SITE NAME:	GENERAL COMMUNICATIONS SST
SITE ADDRESS:	1140 WOLCOTT ROAD WOLCOTT, CT 06107
ASSESSOR'S PLAT/MAP:	112
ASSESSOR'S LOT/PARCEL:	65
CONSTRUCTION TYPE:	CO-LOCATE
STRUCTURE OWNER:	GENERAL COMMUNICATIONS 1140 WOLCOTT ROAD WOLCOTT, CT 06107 CONTACT: ROGER LANE PHONE: (203) 879-2546
PROPERTY OWNER:	GENERAL COMMUNICATIONS 1140 WOLCOTT ROAD WOLCOTT, CT 06107 CONTACT: ROGER LANE PHONE: (203) 879-2546
APPLICANT:	OMNIPOINT COMMUNICATIONS, INC. 100 FILLEY STREET BLOOMFIELD, CT 06002

OMNIPOINT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC.
100 FILLEY STREET
BLOOMFIELD, CT 06002
OFFICE: (860)-692-7100
FAX: (860)-692-7159

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS SURVEYORS PLANNERS & LANDSCAPE ARCHITECTS
2139 SLAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 257-4357



LANDLORD _____
LEASING _____
R.F. _____
ZONING _____
CONSTRUCTION _____
A/E _____

PROJECT NO: 10585-1039
DRAWN BY: PAL
CHECKED BY: RJT

SUBMITTALS

0	02/17/04	CONSTRUCTION

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPOINT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.

CT-11-477B
GENERAL COMMUNICATIONS SST
1140 WOLCOTT ROAD
WOLCOTT, CT 06107

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

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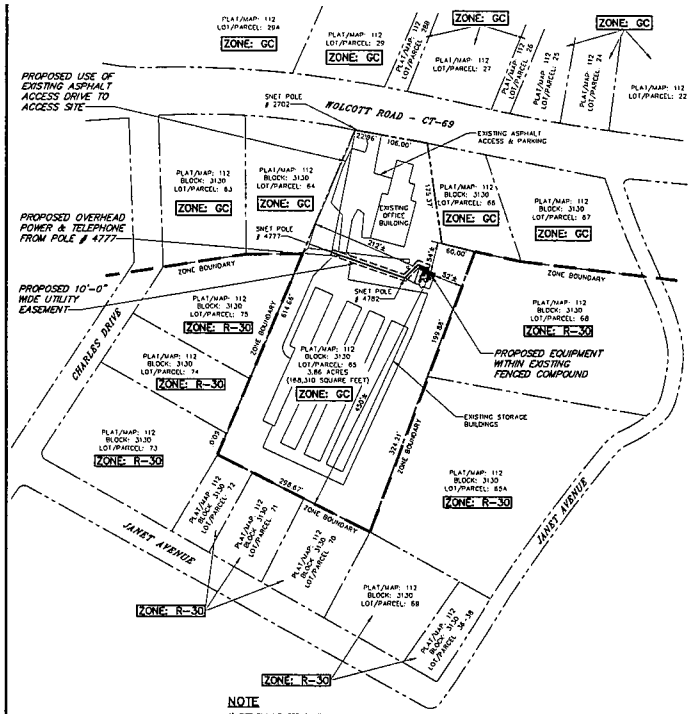
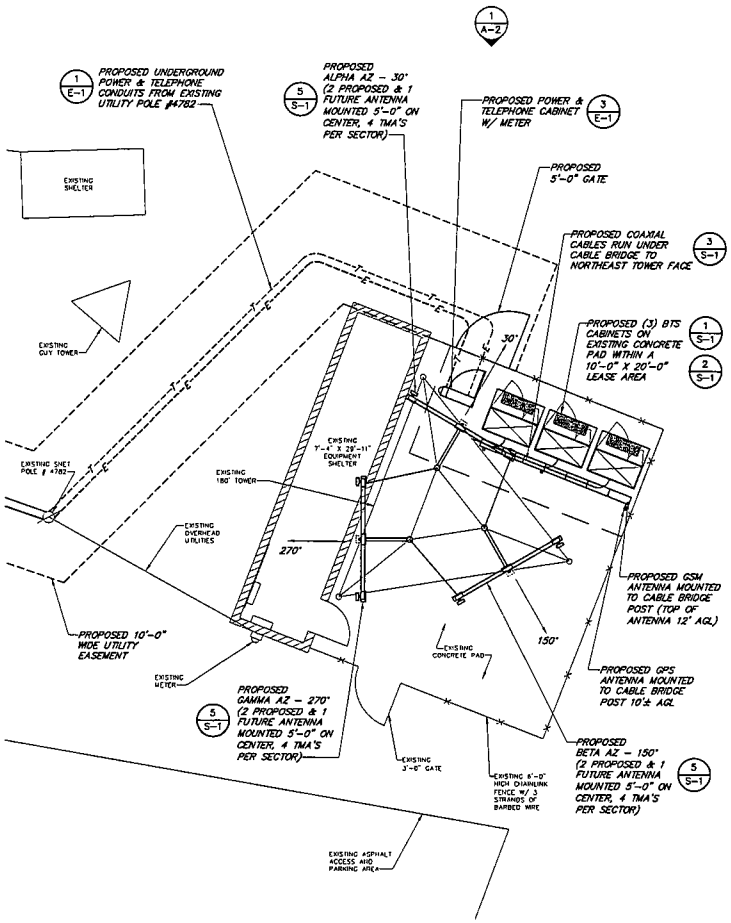


GENERAL NOTES

1. ALL DIMENSIONS SHOWN THUS ± ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WHICH EFFECTS THE CONTRACTORS WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH OWNER PRIOR TO CONSTRUCTION.
2. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. CONTRACTOR SHALL VERIFY TRUE NORTH AND INFORM CONSTRUCTION MANAGER OF ANY DISCREPANCIES BEFORE STARTING CONSTRUCTION.
3. THE GENERAL CONTRACTOR AND OR HIS SUB CONSULTANT SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTRY OR LOCAL GOVERNMENT AUTHORITY.
4. ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.
5. COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE PROVIDED BY THE OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. A SCHEDULE OF OWNER SUPPLIED MATERIALS IS ATTACHED TO THE BID DOCUMENTS (SEE ATTACHMENT H). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTOR HARDWARE SHALL BE STAINLESS STEEL.
6. ANY EQUIPMENT THAT IS TO BE PAINTED SHALL BE PAINTED TO MATCH EXISTING. PAINT SHALL BE SHERWIN WILLIAMS, COROTHANE II, SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AND OMNIPOINT GUIDELINES.
7. COORDINATION, LAYOUT, AND FURNISHING OF CONDUIT, CABLE AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. EQUIPMENT WILL BE INDEPENDENTLY POWERED WITH SEPARATE METER.
9. PRIOR TO EXCAVATION NEAR (E)TOWER, CONTRACTOR TO CONTACT AND COORDINATE WITH PROPERTY OWNER.
10. ALL (E)ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
11. ALL (E)INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING.
12. THE AREAS OF THE PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT, DRIVEWAY OR GRAVEL, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED AND COVERED WITH MULCH.
13. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROLS AT ALL TIMES DURING CONSTRUCTION.
14. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.



NOTE

DRAWINGS ARE BASED ON A SITE VISIT PERFORMED BY CLOUGH, HARBOUR & ASSOCIATES LLP ON JANUARY 30, 2004.

GRAPHIC SCALE

3 0 3.0 3 10 20

(IN FEET)

TRUE NORTH

PARTIAL SITE / EQUIPMENT PLAN
SCALE: 1" = 5'
2 A-1

PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. LESSEE/LICENSEE IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. LESSEE/LICENSEE RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

ABBREVIATIONS

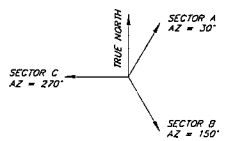
ADJ	ADJUSTABLE	SF	SQUARE FOOT
AGL	ABOVE GROUND LEVEL	SHT	SHEET
ARL	ABOVE ROOF LEVEL	SIM	SIMILAR
APPROX	APPROXIMATE	STL	STEEL
C	CONDUIT	TOC	TOP OF CONCRETE
CONC	CONCRETE	TOM	TOP OF MASONRY
CONT	CONTINUOUS	TYP	TYPICAL
CJ	CONSTRUCTION JOINT	VIF	VERIFY IN FIELD
DIA	DIAMETER	UON	UNLESS OTHERWISE NOTED
DWG	DRAWING	WWF	WELDED WIRE FABRIC
ECB	EQUIPMENT GROUND BAR	W/	WITH
EA	EACH	BTS	BASE TRANSMISSION STATION
ELEC	ELECTRICAL	LNA	LOW NOISE AMPLIFIER
EL	ELEVATION		
EQ	EQUAL	PCS	PERSONAL COMMUNICATIONS SERVICES
EQUIP	EQUIPMENT		
(E)	EXISTING		
EXT	EXTERIOR		
FF	FINISHED FLOOR	A-1	ANTENNA MARK NO.
FG	FINISHED GRADE		
GA	GAUGE	PL	PLATE
GALV	GALVANIZED		
GC	GENERAL CONTRACTOR	&	AND
LG	LONG	@	AT
MAX	MAXIMUM		
MECH	MECHANICAL		
MFR	MANUFACTURER		
MGB	MASTER GROUND BAR		
MIN	MINIMUM		
MTL	METAL		
NIC	NOT IN CONTRACT		
NTS	NOT TO SCALE		
OC	ON CENTER		
OPP	OPPOSITE		

SYMBOLS AND MATERIALS

NEW ANTENNA
EXISTING ANTENNA
ASPHALT
NEW ACCESS EASEMENT
CONCRETE
ELECTRIC BOX
LIGHT POLE
FND. MONUMENT
SPOT ELEVATION
SET POINT
REVISION
GRID REFERENCE
DETAIL REFERENCE
ELEVATION
SECTIONS & DETAILS

GROUT / PLASTER
BRICK
MASONRY
CONCRETE
EARTH
GRAVEL
PLYWOOD
SAND
WOOD CONT.
WOOD BLOCKING
STEEL
CENTER LINE
PROPERTY LINE
STEPPED FOOTING
MATCH LINE
WORK POINT
GROUND WIRE
COAXIAL CABLE

ANTENNA ORIENTATION KEY



OMNIPOINT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC.
100 FILLEY STREET
BLOOMFIELD, CT 06002
OFFICE: (860)-692-7100
FAX: (860)-692-7159

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
2139 SILAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 257-4057

STATE OF CONNECTICUT
JOHN P. SOBIERAJ
No. 17827
LICENSED PROFESSIONAL ENGINEER

APPROVALS

LANDLORD _____
LEASING _____
R.F. _____
ZONING _____
CONSTRUCTION _____
A/E _____

PROJECT NO: 10585-1039
DRAWN BY: PAL
CHECKED BY: RJT

SUBMITTALS

0	02/17/04	CONSTRUCTION

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CT-11-477B
GENERAL COMMUNICATIONS SST
1140 WOLCOTT ROAD
WOLCOTT, CT 06107

SHEET TITLE
PLOT PLAN & PARTIAL SITE PLAN

SHEET NUMBER
A-1

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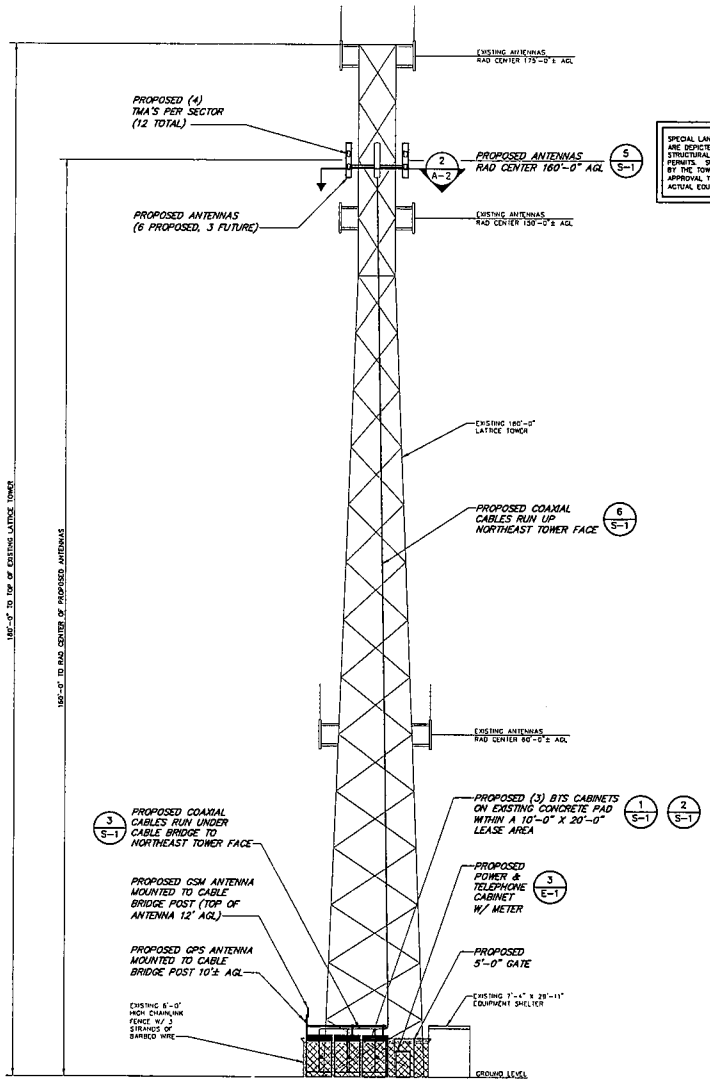


GRAPHIC SCALE

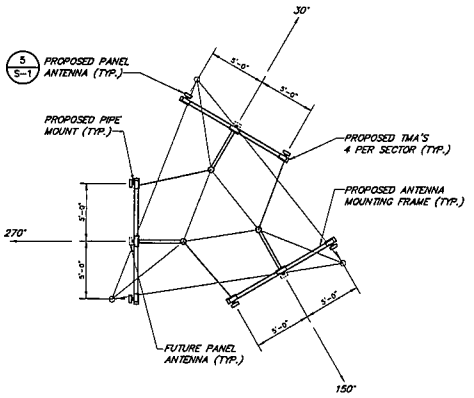
(IN FEET)

NORTH ELEVATION 1 / A-2

SCALE: 1" = 10'

SPECIAL LANDLORD NOTE: LESSEE/LICENSEE "FUTURE" PANEL ANTENNAS ARE DEPICTED FOR THE PURPOSES OF DETERMINING TOWER/MONOPOLE STRUCTURAL CAPACITY, OBTAINING ZONING APPROVALS AND BUILDING PERMITS. SUBSEQUENT ENDORSEMENT OR ACCEPTANCE OF THIS DRAWING BY THE TOWER OWNER IS NOT TO BE CONSTRUED AS PERMISSION OR APPROVAL TO INSTALL "FUTURE" ANTENNAS THAT EXCEED "PROPOSED" OR ACTUAL EQUIPMENT LISTED IN THE LESSEE/LICENSEE LEASE AGREEMENT.

ANALYSIS OF THE STRUCTURAL ADEQUACY OF THE EXISTING TOWER AND FOUNDATION ARE NOT INCLUDED IN THIS DESIGN. THE EXISTING TOWER AND FOUNDATION HAVE BEEN ANALYZED BY OTHERS.



GRAPHIC SCALE

(IN FEET)

TRUE NORTH

ANTENNA MOUNTING PLAN 2 / A-2

SCALE: 1" = 5'

PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. LESSEE/LICENSEE IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. LESSEE/LICENSEE RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

OMNIPOINT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC.
100 FILLEY STREET
BLOOMFIELD, CT 06002
OFFICE: (860)-692-7100
FAX: (860)-692-7159

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
2139 SILAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 257-4057

STATE OF CONNECTICUT
JOHN P. SOBIECKI
No. 17827
LICENSED PROFESSIONAL ENGINEER

APPROVALS

LANDLORD _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 10585-1039

DRAWN BY: PAL

CHECKED BY: RJT

SUBMITTALS

0	02/17/04	CONSTRUCTION

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CT-11-477B
GENERAL COMMUNICATIONS SST
1140 WOLCOTT ROAD
WOLCOTT, CT 06107

SHEET TITLE

SITE ELEVATION & ANTENNA PLAN

SHEET NUMBER

A-2

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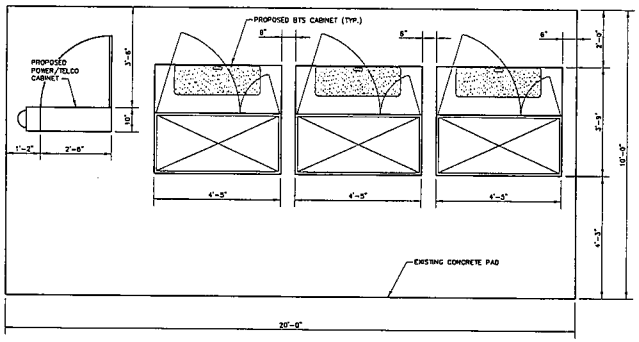
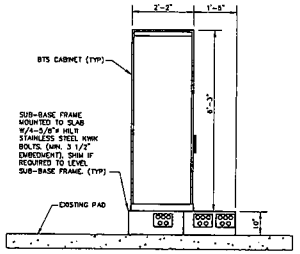
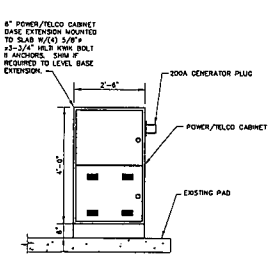
STRUCTURAL NOTES:

1. DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, ANSI/ASCE7, EIA/TIA-222-F STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER.
3. DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
4. STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
5. STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE A, OR ASTM A53 PIPE STEEL, BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL ACTUAL OUTSIDE DIAMETER IS LARGER.
6. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE)AND CONFORM TO ASTM A325 "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/8" DIA UON.
7. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
8. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
9. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZRP BY DURICAN GALVANIZING, CALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DLL WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION.
11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE ANNOYING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
12. UNISTRUTS SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP, WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"W X 1 5/8"H X 12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF 1/2" DIAMETER STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS, AN INTERNALLY THREADED INSERT, A SCREEEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI HIT HY-20 AND OR HY-150 SYSTEMS (AS SPECIFIED AN DWG.) OR ENGINEERS APPROVED EQUAL WITH 4-1/4" MIN. EMBEDMENT DEPTH.
14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS 1, HILTI KWIK BOLT II OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE THREE AND ONE HALF (3 1/2) INCHES.
15. GRAVEL SUB BASE AND CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL.
16. CONCRETE FOR FENCE AND ICE BRIDGE SUPPORT SHALL BE 3000 PSI AIR ENTRAINED (4%-6%) NORMAL WEIGHT CONCRETE.
17. ALL CAST IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 AND ACI 301.
18. THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCING STEEL SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
    CONCRETE CAST AGAINST EARTH ... 3 INCHES.
    CONCRETE EXPOSED TO EARTH OR WATER
    #6 AND LARGER ..... 2 INCHES
    #5 AND SMALLER ..... 1 1/2 INCHES
    ALL EXPOSED EDGES SHALL BE PROVIDED WITH A 3/4"x3/4" CHAMFER UNLESS NOTED OTHERWISE.
19. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
20. WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT VOID THE EXISTING ROOF WARRANTY.

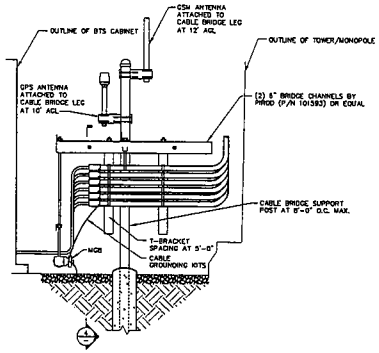


EQUIPMENT PAD LAYOUT (1/S-1) SCALE: N.T.S.



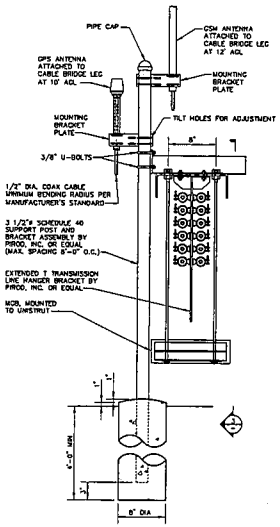


SECTION AT EQUIPMENT PAD (2/S-1) SCALE: N.T.S.

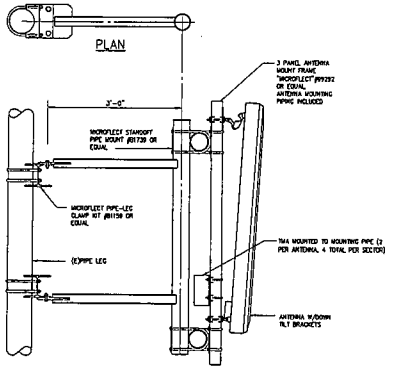


NOTES:
1. REFER TO EQUIPMENT PLAN ON SHEET A-1 FOR DIMENSIONS OF CABLE BRIDGE.
2. INSTALL CABLE BRIDGE PER MANUFACTURER'S RECOMMENDATIONS.

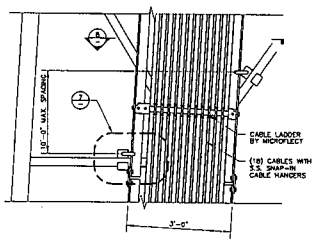
SECTION AT CABLE BRIDGE (3/S-1) SCALE: N.T.S.



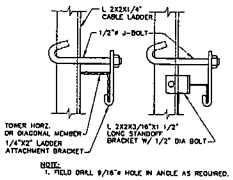
PROFILE AT CABLE BRIDGE (4/S-1) SCALE: N.T.S.



ANTENNA MOUNTING DETAIL (5/S-1) SCALE: N.T.S.

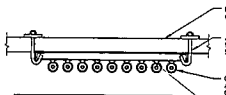


CABLE LADDER DETAIL (6/S-1) SCALE: N.T.S.



NOTE:
1. FIELD DRILL 9/16"ø HOLE IN ANGLE AS REQUIRED.

CABLE LADDER ATTACHMENT (7/S-1) SCALE: N.T.S.



MICROFLECT P/N	DESCRIPTION
81730	COAX SUPPORT LADDER, 5 FT LONG
81736	COAX SUPPORT LADDER, 10 FT LONG
81737	COAX SUPPORT LADDER, 20 FT LONG
81751	LADDER BASE KIT

NOTE:
1. LADDER ATTACHES TO TOWER GIRTS OR DIAGONALS WITH INCLUDED J-BOLTS AND BACKING PLATES.
2. LADDER BASE KIT INCLUDES SPLICES FOR ATTACHING THE FIRST LADDER SECTION.

COAXIAL LADDER SUPPORT (8/S-1) SCALE: N.T.S.

OMNIPOINT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC.
100 FILLEY STREET
BLOOMFIELD, CT 06002
OFFICE: (860)-692-7100
FAX: (860)-692-7159

CHA
CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
2139 SILAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 257-4057

STATE OF CONNECTICUT
JOHN P. SOBIESK
No. 17827
LICENSED PROFESSIONAL ENGINEER

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PROJECT NO: 10585-1039
DRAWN BY: BAS
CHECKED BY: JJS

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CT-11-477B
GENERAL COMMUNICATIONS SST
1140 WOLCOTT ROAD
WOLCOTT, CT 06107

SHEET TITLE
STRUCTURAL NOTES DETAILS

SHEET NUMBER
S-1

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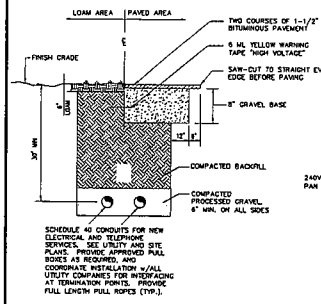
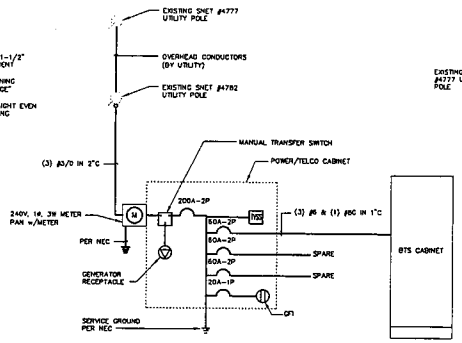
JMR 2/16/04 PRT

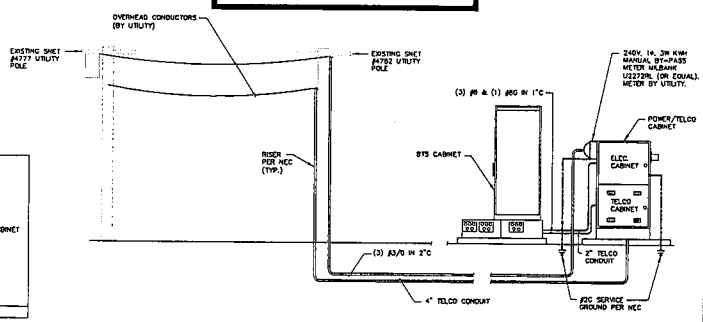


BURIED CABLE DIAGRAM (1, E-1)
SCALE: N.T.S.



ONE LINE DIAGRAM (2, E-1)
SCALE: N.T.S.

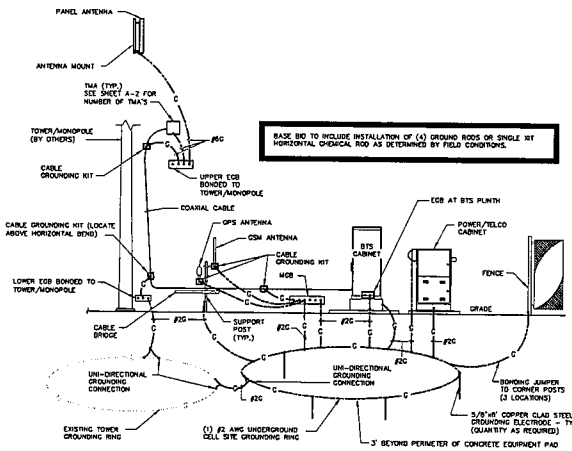
MAKE ALL CONNECTIONS AS PER UTILITY COMPANY'S REQUIREMENTS.



POWER RISER DIAGRAM (3, E-1)
SCALE: N.T.S.

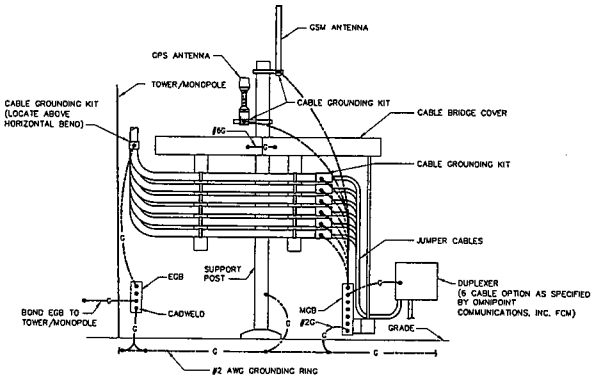
ELECTRICAL LEGEND

	NEW PANEL BOARD, SURFACE MOUNTED
	EXISTING PANEL BOARD, SURFACE MOUNTED
T	DRY TYPE TRANSFORMER
M	METER
	CIRCUIT BREAKER
	NON-FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.
	FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH BUILT-IN FUSES, SURFACE MOUNTED
	DUPLEX OUTLET, SURFACE MOUNTED, 20 AMPS, 125 VOLTS, SINGLE PHASE
J	JUNCTION BOX, SURFACE MOUNTED 18" A.F.F.
	EXPOSED WIRING
	HOME RUNS, MINIMUM (2)#10 + (1)#10G IN 3/4" CONDUIT U.O.N.
A.F.F.	ABOVE FINISHED FLOOR
U.O.N.	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF
GFI	GROUND FAULT INTERRUPTER
A	AMPERE
V	VOLT
KWH	KILOWATT-HOUR
C	CONDUIT
G	GROUND
	GROUND
MGB	MASTER GROUND BAR 1/4"x4"x24" COPPER
EGB	EQUIPMENT GROUND BAR 1/4"x4"x12" OR 1/4"x4"x18" COPPER
#G	GROUND COPPER WIRE, SIZE AS NOTED
	EXPOSED WIRING
	COAXIAL CABLE
	5/8"x8' COPPER CLAD STEEL GROUND ROD
	EXOTHERMIC (CADWELD) OR MECHANICAL (COMPRESSION TYPE) CONNECTION



BASE BID TO INCLUDE INSTALLATION OF (4) GROUND RODS OR SINGLE 10' HORIZONTAL CHEMICAL ROD AS DETERMINED BY FIELD CONDITIONS.

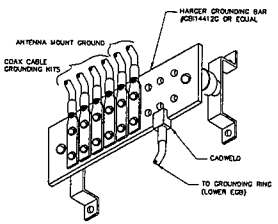
GROUNDING RISER DIAGRAM (4, E-1)
SCALE: N.T.S.



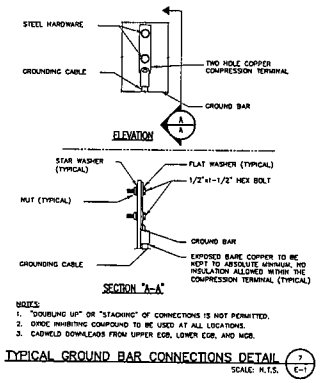
CABLE BRIDGE GROUNDING DETAIL (5, E-1)
SCALE: N.T.S.

ELECTRICAL AND GROUNDING NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL LAWS.
2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATIONS INCLUDING INCIDENTAL WORK TO PROVIDE A COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATERTIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND, WHERE REQUIRED, IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THHN, OR THWN INSULATION.
8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND OMNIPOINT COMMUNICATIONS, INC. CELL SITE POWER PEDESTAL AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND OMNIPOINT COMMUNICATIONS, INC. CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE INSTALLED IN TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
10. WHERE CONDUIT BETWEEN BTS AND OMNIPOINT COMMUNICATIONS, INC. CELL SITE POWER PEDESTAL AND BETWEEN BTS AND OMNIPOINT COMMUNICATIONS, INC. CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND, USE PVC, SCHEDULE 40 CONDUIT. ABOVE GROUND PORTIONS OF THESE CONDUITS SHALL BE PVC CONDUIT.
11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE A NEMA 3R ENCLOSURE.
12. POWER PEDESTAL PROVIDED BY OMNIPOINT COMMUNICATIONS, INC.
13. GROUNDING SHALL COMPLY WITH NEC ARTICLE 250.
14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURER'S COAX CABLE GROUNDING KITS SUPPLIED BY OMNIPOINT COMMUNICATIONS, INC.
15. USE #6 COPPER STRANDED WIRE GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THIS DRAWING.
16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. EXCEPT AS OTHERWISE INDICATED, GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLES. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 8" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 7 FEET OF OMNIPOINT COMMUNICATIONS, INC. EQUIPMENT OR CABINET TO MASTER GROUND BAR.
18. CONNECTION TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
20. BOND ANTENNA MOUNTING BRACKETS, GPS ANTENNA, COAXIAL CABLE GROUND KITS, AND ALMA TO EGB PLACED NEAR THE ANTENNA LOCATION.
21. BOND ANTENNA EGB's AND MGB TO GROUND RING.
22. TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION.

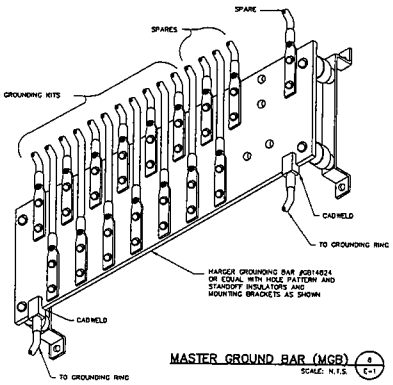


EQUIPMENT GROUND BAR (EGB) (8, E-1)
SCALE: N.T.S.



NOTES:
1. "DOUBLING UP" OR "STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB.

TYPICAL GROUND BAR CONNECTIONS DETAIL (7, E-1)
SCALE: N.T.S.



MASTER GROUND BAR (MGB) (6, E-1)
SCALE: N.T.S.

OMNIPOINT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY OF T-MOBILE USA, INC.
100 FILLEY STREET
BLOOMFIELD, CT 06002
OFFICE: (860)-692-7100
FAX: (860)-692-7159

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3139 SILAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 257-4557

STATE OF CONNECTICUT
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APPROVALS

LANDLORD _____
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ZONING _____
CONSTRUCTION _____
A/E _____

PROJECT NO: 10585-1039
DRAWN BY: MJO
CHECKED BY: CMM

SUBMITTALS

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1140 WOLCOTT ROAD
WOLCOTT, CT 06107

SHEET TITLE
ELECTRICAL, GROUNDING NOTES, RISERS & DETAILS

SHEET NUMBER
E-1

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Exhibit B

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III WINNERS CIRCLE
P.O. BOX 5269 • ALBANY, NEW YORK 12205-0269
TEL: 518-453-4500 • FAX: 518-458-1735
www.cloughharbour.com

March 31, 2004

Mr. Bryan Bakis, P.E.
Omnipoint Communication, Inc.
50 Vision Blvd.
East Providence, RI 02914

RE: ***Structural Analysis of the General Communications Self Supporting Tower Located in New Haven County, CT***
Omnipoint Project No. CT11-477-B
CHA Project No. 10585.1039.1601

Dear Mr. Bakis:

Clough, Harbour & Associates LLP (CHA) has performed an analysis of the referenced tower for the purpose of evaluating its ability to support the existing equipment loads in addition to the equipment proposed by Omnipoint. In summary, our analysis indicates that the tower is structurally capable of supporting the existing and proposed equipment.

Our analysis is based on the following information:

- Tower member sizes and configuration obtained from design documents by Rohn Industries, Eng. File #: 23963DB, dated Nov. 28, 1988.
- Proposed equipment information, including antenna models and elevations, provided by Omnipoint on a T-Mobile RF Engineering/Site Visit Summary sheet.
- Existing equipment information based on a letter from the tower owner to T-Mobile dated 03/15/04.

Our analysis includes data for the following proposed antennas and cables:

T-Mobile: - Six (6) EMS RR90-17-02DP panel antennas and (12) TMA's mounted on (3) 12' lightweight T-frames at an antenna centerline of 160'-0" with (12) 1 5/8" coaxial cables.

Future - Three (3) EMS RR90-17-02DP panel antennas and (6) TMA's mounted on (3) 12' lightweight T-frames at an antenna centerline of 160'-0" with (6) 1 5/8" coaxial cables.

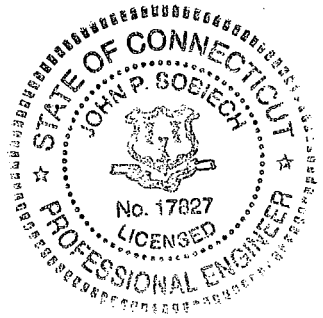
The existing and proposed antenna elevations and coaxial cable sizes have been listed in the attached Executive Summary and Cable Layout Diagram.

With this information, ANSI/TIA/EIA-222-F, and *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures*, the analysis was performed to determine the structural integrity of the tower. Based on the data provided, the section properties, member strengths, and projected areas, applicable loads were calculated. Knowing the projected area of the tower and all of its appurtenances, wind loads were calculated with and without the code defined ice load. These wind and ice loads were then reduced to member forces in the tower components through PLS Tower structural analysis software. The member forces were then compared to the maximum allowable stress for each member type.

Based upon the information provided, the analysis indicates that the existing tower is structurally capable of supporting the existing and proposed loads.

Foundation information was obtained from original Rohn tower design drawings. Foundation reactions with the proposed and future loading are less than the capacities calculated from the drawings. Based on this information, it can be concluded that the tower foundation is adequate for supporting the existing and proposed loads provided the foundation was designed and built in accordance with national, state, and local building codes and standards and the approved foundation drawings.

As requested, we have included a copy of the governing structural analysis calculations referenced above for your review and use. If you have any questions or if we can be of further assistance, please do not hesitate to call.



Very truly yours,

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS

John P. Sobiech, P.E.
Partner

/mwc
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EXECUTIVE SUMMARY

General Communications site # CT-11-477 B

March 31, 2004

Tower Information:

Tower Owner:	Roger Levesque
Tower Manufacturer:	Rohn
Tower Height:	180 feet
Tower Type:	Self Support

Proposed Antenna Data:

T-Mobile

- (6) EMS RR90-17-02DP panel antennas and (12) TMA's mounted on 12' lightweight T-frames at an antenna centerline elevation of 160' with (12) 1 5/8" coaxial cables.

Existing Antenna and Appurtenance Data:

- (1) Celwave 60B B6012 omni antenna at an antenna centerline of 180' with (1) 1" coaxial cable.

Future Antenna Data:

T-Mobile

- (3) EMS RR90-17-02DP panel antennas and (6) TMA's mounted at an antenna centerline elevation of 160' with (6) 1 5/8" coaxial cables.

Code Data:

Applicable Code:	ANSI/EIA/TIA-222-F, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures
Wind Velocity:	85 mph for New Haven County, CT
Load Cases:	(1) Weight of Tower, Antennas, and Appurtenances plus Wind Load without radial ice. (2) Weight of Tower, Antennas, and Appurtenances plus Wind Load on iced tower plus weight of 1/2" radial ice. *

*Reduction for wind forces applied simultaneously per the ANSI/TIA/EIA-222-F Code allowance.

Tower Leg Members: *(50 ksi)*

0' – 20':	5" STD pipe
20' – 60':	4" X-STR pipe
60' – 100':	3" EH pipe
100' – 120':	2 1/2" EH pipe
120' – 140':	2 1/2" STD pipe
140' – 180':	2" STD pipe

Tower Diagonal Members: *(36 ksi steel unless noted otherwise)*

0' – 20':	3.5x3.5x1/4" angle (50 ksi)
40' – 60':	3x3x3/16" angle (50 ksi)
60' – 100':	2.5x2.5x3/16" angle
100' – 120':	2x2x3/16" angle
120' – 180':	1.5x1.5x1/8" angle

Tower Superstructure:

The governing tower section is stressed at 98.88% of its allowable capacity.

Foundation Reactions:

	Design Reactions per Rohn Design (per leg)	Reactions with proposed& future antennas & coax	Results
Compression	122.5 kips	123.35 kips	Pass
Tension	109.8 kips	103.64 kips	Pass
Shear	20.7 kips	14.87 kips	Pass
Overturning	2075.8 ft-kips	2100.66 ft-kips	Allowable*

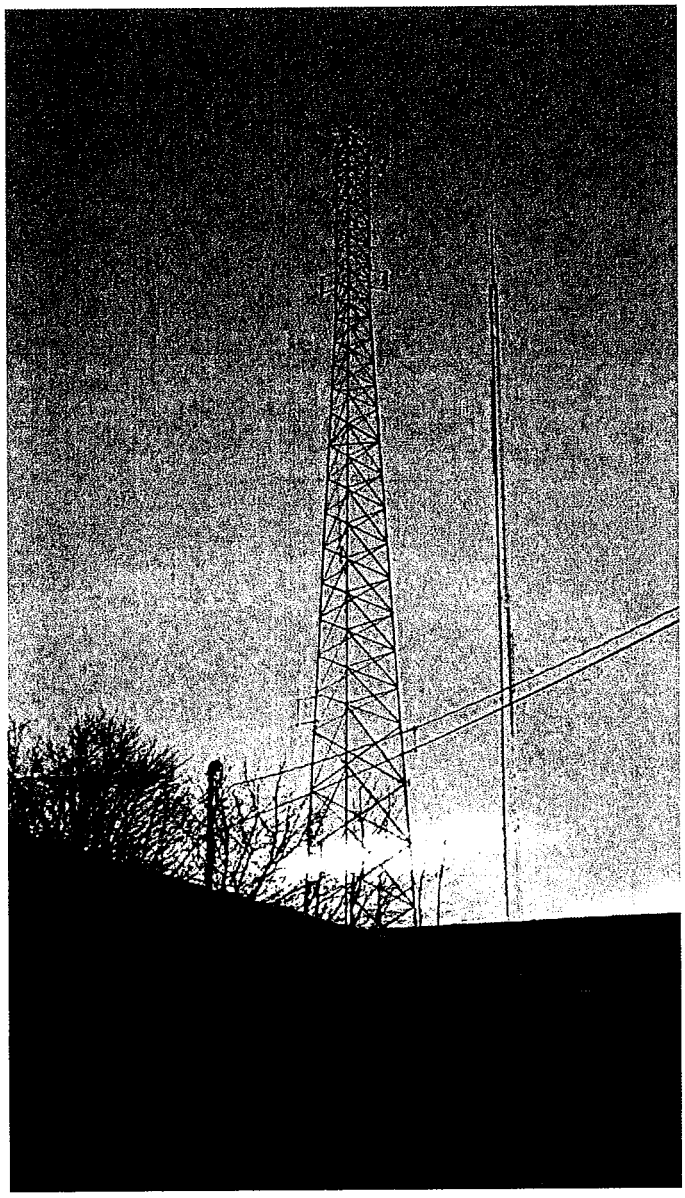
* The reaction is 1.1% over the design reaction provided in the Rohn design drawings. This is within acceptable limits of the foundation's capacity.

Conclusion:

The analysis indicates that the existing tower, with the addition of the proposed and future antennas, and loaded as stated above, is capable of supporting the existing and proposed load.

General Communications Tower

New Haven County, Connecticut
T-Mobile site # CT-11-477-B



Prepared for:
Omnipoint Communications, Inc.
50 Vision Blvd.
East Providence, RI 02914
March 31, 2004

Clough, Harbour and Associates LLP
III Winners Circle
P.O. Box 5269
Albany, NY 12205
CHA Project No. 10585-1039-1601

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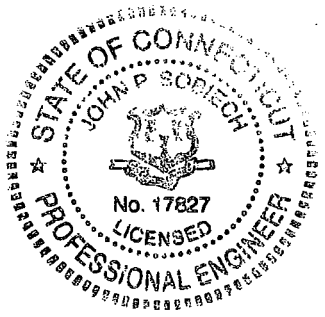

Very truly yours,

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John P. Sobiech, P.E.
Partner

/mwc
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EXECUTIVE SUMMARY

General Communications site # CT-11-477 B

March 31, 2004

Tower Information:

Tower Owner:	Roger Levesque
Tower Manufacturer:	Rohn
Tower Height:	180 feet
Tower Type:	Self Support

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T-Mobile

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Conclusion:

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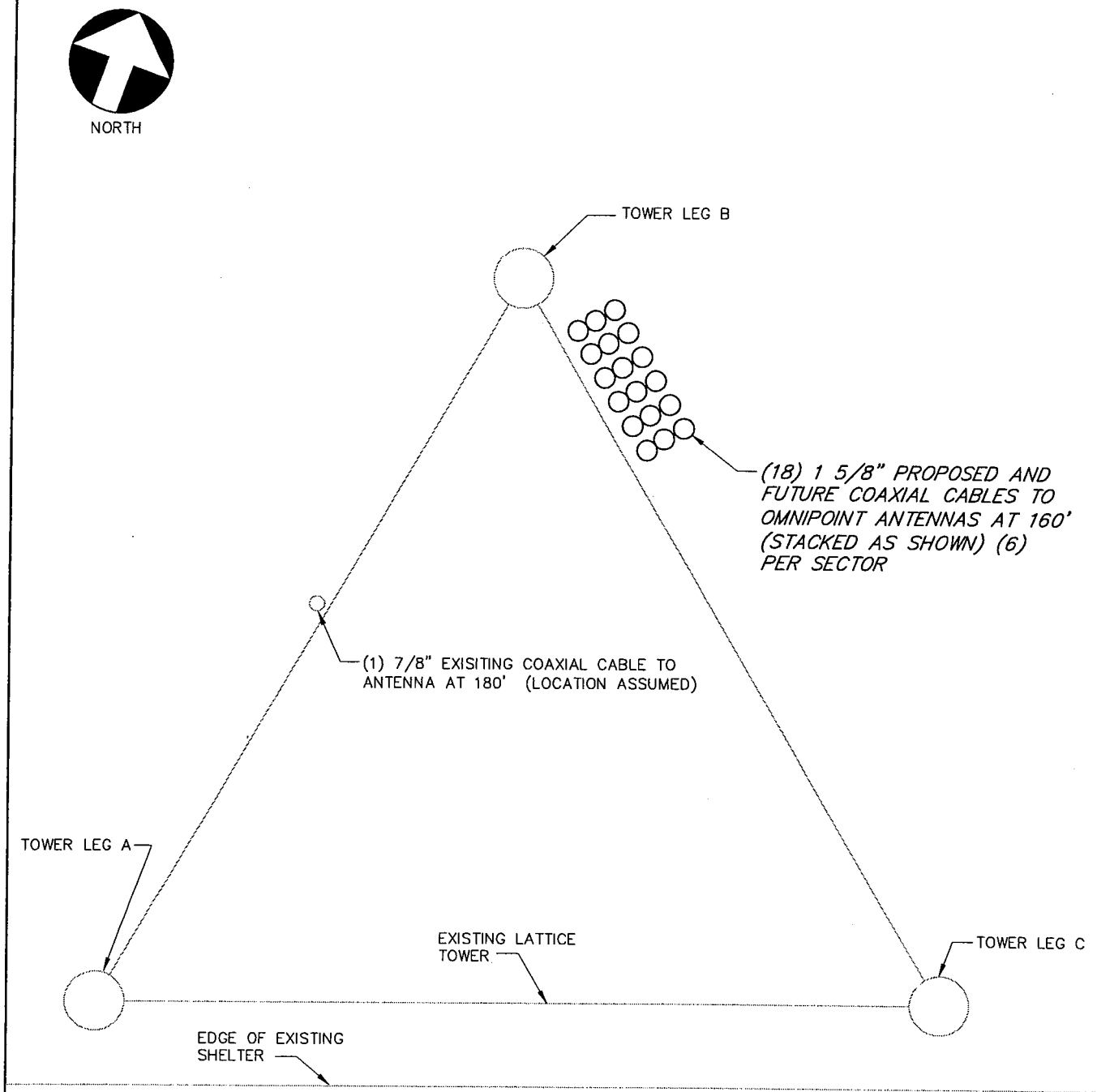
CABLE LAYOUT DIAGRAM



1 — COAXIAL CABLE LAYOUT
NO SCALE

CHA
CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
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CHA Project No. 10585.1039.1601

GENERAL COMMUNICATIONS TOWER

COAXIAL CABLE LAYOUT

DATE: 3/31/04	BY: MWC	CHK: JJS	SKETCH: 1	REV: 0

ANALYSIS SUMMARY WITH NO RADIAL ICE PER TIA/EIA-222-F

Project Name : Voice Stream - General Communications CT-11-477B
Project Notes: Self Supporting Tower
Project File : w:\voice stream\new england\10585\sites\1039\structural tower info\10585-1039-r0 (no ice).tow
Date run : 3:23:37 PM Wednesday, March 31, 2004
by : Tower Version 6.32
Licensed to : Clough, Harbour & Associates

Successfully performed nonlinear analysis

Loads from file: w:\struct\tower\85-(no ice).eia

*** Analysis Results:

Maximum element utilization is 96.79% for Angle "g1752" in load case "90 Rotation"

Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)
0 Rotation	0P	-14.87	-0.00	122.18	14.87	-0.00	-1.29	-0.00	1.29
0 Rotation	01	-4.29	-4.08	-52.98	5.92	-0.31	0.24	-0.00	0.39
0 Rotation	02	-4.29	4.08	-52.98	5.92	0.31	0.24	0.00	0.39
60 Rotation	0P	-7.48	-1.57	59.95	7.64	-0.07	-0.97	-0.00	0.97
60 Rotation	01	-5.73	-9.90	-103.64	11.44	-0.11	0.06	0.00	0.13
60 Rotation	02	2.41	-7.25	59.92	7.64	0.80	0.55	0.00	0.97
90 Rotation	0P	-1.15	-1.84	5.43	2.17	-0.07	-0.69	-0.00	0.70
90 Rotation	01	-4.23	-9.08	-90.70	10.02	-0.19	0.07	0.00	0.20
90 Rotation	02	5.39	-11.15	101.50	12.38	1.00	0.63	0.00	1.18

Summary of Joint Support Reactions For All Load Cases in Direction of Leg:

Load Case	Support Joint	Origin Joint	Leg Member	Force In Leg Dir. (kips)	Force Perpendicular To Leg (kips)
0 Rotation	0P	1S	g1P	122.840	7.694
0 Rotation	01	11	g11	-53.218	3.070
0 Rotation	02	12	g12	-53.218	3.070
60 Rotation	0P	1S	g1P	60.284	4.258
60 Rotation	01	11	g11	-104.131	5.351
60 Rotation	02	12	g12	60.252	4.249
90 Rotation	0P	1S	g1P	5.489	2.018
90 Rotation	01	11	g11	-91.130	4.738
90 Rotation	02	12	g12	102.046	6.452

EIA Sections Information:

Section Label	Top Elevation (ft)	Bottom Elevation (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft^2)	Face Af Adjust Factor	Face Ar Adjust Factor	Dead Load Factor
9	180.000	160.000	18	45	6.51	6.54	130.51	1.0000	1.0000	1.000
8	160.000	140.000	15	45	6.54	6.56	131.03	1.0000	1.0000	1.000
7	140.000	120.000	12	36	6.56	8.60	151.60	1.0000	1.0000	1.000
6	120.000	100.000	9	27	8.60	10.63	192.23	1.0000	1.0000	1.000
5	100.000	80.000	9	27	10.63	12.66	232.86	1.0000	1.0000	1.000
4	80.000	60.000	9	27	12.66	14.69	273.49	1.0000	1.0000	1.000
3	60.000	40.000	6	18	14.69	16.72	314.12	1.0000	1.0000	1.000
2	40.000	20.000	6	18	16.72	18.75	354.75	1.0000	1.0000	1.000
1	20.000	0.000	6	18	18.75	20.78	395.38	1.0000	1.0000	1.000

*** Overall summary for all load cases - Usage = Maximum Stress / Allowable Stress
Printed capacities do not include EIA allowable stress increase for wind load cases.
Printed capacities are unfactored and do not include the strength factor entered for each loadcase.

Group Summary (Compression Portion):

Group	Group	Angle	Angle	Steel	Max	Max	Comp.	Comp.	Comp.	L/R Comp.	Conn.	Comp.	Conn.	RLX	RLY	RLZ	L/R	Length	Curve No.	Of

Label	Desc.	Type	Size	Strength (ksi)	Usage %	Use In Comp. %	Control Member	Force (kips)	Control Load Case	Capacity (kips)	Shear Capacity (kips)	Bearing Capacity (kips)				Comp. Member (ft)	No.	Bolts Comp.
Leg1	Leg 0-20	Pipe 40	5"	50.0	93.18	93.18	g1P	-117.7020	Rotation	94.745	0.000	0.000	1.000	1.000	1.000	63.94	10.017	1	0
Leg2	Leg 20-60	Pipe 80	4"	50.0	93.77	93.77	g4P	-103.4710	Rotation	82.764	0.000	0.000	1.000	1.000	1.000	81.22	10.017	1	0
Leg3	Leg 60-80	Pipe EH	3"	50.0	91.20	91.20	g16P	-76.3940	Rotation	62.824	0.000	0.000	1.000	1.000	1.000	70.58	6.681	1	0
Leg4	Leg 80-100	Pipe 80	3"	50.0	74.20	74.20	g25P	-62.3730	Rotation	63.046	0.000	0.000	1.000	1.000	1.000	70.33	6.681	1	0
Leg5	Leg 100-120	Pipe EH	2.5"	50.0	91.67	91.67	g34P	-48.5520	Rotation	39.725	0.000	0.000	1.000	1.000	1.000	86.77	6.681	1	0
Leg6	Leg 120-140	Pipe 40	2-1/2"	50.0	71.13	71.13	g43P	-35.6560	Rotation	37.599	0.000	0.000	1.000	1.000	1.000	63.47	5.009	1	0
Leg7	Leg 140-180	Pipe 40	2"	50.0	64.14	64.14	g55P	-20.6310	Rotation	24.126	0.000	0.000	1.000	1.000	1.000	60.99	4.000	1	0
Diag1	Diag 0-20	SAE	3.5X3.5X0.25	50.0	54.51	54.51	g852	-4.80090	Rotatio	6.604	0.000	0.000	0.500	0.500	0.500	195.48	22.610	4	0
Diag2	Diag 20-60	SAE	3X3X0.1875	50.0	84.44	84.44	g972	-4.17690	Rotatio	3.709	0.000	0.000	0.500	0.500	0.500	209.48	20.808	4	0
Diag3	Diag 60-100	SAE	2.5X2.5X0.1875	36.0	62.75	62.75	g1212	-3.06290	Rotatio	3.660	0.000	0.000	0.500	0.500	0.500	191.84	15.827	4	0
Diag4	Diag 100-120	SAE	2X2X0.1875	36.0	54.77	54.77	g1572	-2.22090	Rotatio	3.040	0.000	0.000	0.500	0.500	0.500	186.75	12.263	4	0
Diag5	Diag 120-180	SAE	1.5X1.5X0.125	36.0	96.79	96.79	g1752	-1.78590	Rotatio	1.383	0.000	0.000	0.500	0.500	0.500	197.16	9.727	4	0

Group Summary (Tension Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Max Use In Tens. %	Tension Control Member	Tension Force (kips)	Tension Control Load Case	Net Tens. Section Capacity (kips)	Conn. Shear Capacity (kips)	Conn. Bearing Capacity (kips)	Tens. Conn. Rupture Capacity (kips)	Length Tens. Member (ft)	No. Of Bolts Tens.	No. Of Holes
Leg1	Leg 0-20	Pipe 40	5"	50.0	93.18	58.94	g11	101.37360	Rotatio	129.000	0.000	0.000	0.000	10.017	0	0.000
Leg2	Leg 20-60	Pipe 80	4"	50.0	93.77	50.82	g41	89.64360	Rotatio	132.300	0.000	0.000	0.000	10.017	0	0.000
Leg3	Leg 60-80	Pipe EH	3"	50.0	91.20	55.39	g161	66.81560	Rotatio	90.480	0.000	0.000	0.000	6.681	0	0.000
Leg4	Leg 80-100	Pipe 80	3"	50.0	74.20	45.28	g251	54.69460	Rotatio	90.600	0.000	0.000	0.000	6.681	0	0.000
Leg5	Leg 100-120	Pipe EH	2.5"	50.0	91.67	47.64	g341	42.94860	Rotatio	67.620	0.000	0.000	0.000	6.681	0	0.000
Leg6	Leg 120-140	Pipe 40	2-1/2"	50.0	71.13	46.18	g431	31.39960	Rotatio	51.000	0.000	0.000	0.000	5.009	0	0.000
Leg7	Leg 140-180	Pipe 40	2"	50.0	64.14	41.49	g551	17.75860	Rotatio	32.100	0.000	0.000	0.000	4.000	0	0.000
Diag1	Diag 0-20	SAE	3.5X3.5X0.25	50.0	54.51	6.33	g942	4.28090	Rotatio	50.700	0.000	0.000	0.000	21.704	0	0.000
Diag2	Diag 20-60	SAE	3X3X0.1875	50.0	84.44	8.81	g1062	3.84290	Rotatio	32.700	0.000	0.000	0.000	19.923	0	0.000
Diag3	Diag 60-100	SAE	2.5X2.5X0.1875	36.0	62.75	11.00	g1302	2.85890	Rotatio	19.483	0.000	0.000	0.000	15.211	0	0.000
Diag4	Diag 100-120	SAE	2X2X0.1875	36.0	54.77	10.37	g1602	2.12190	Rotatio	15.336	0.000	0.000	0.000	12.263	0	0.000
Diag5	Diag 120-180	SAE	1.5X1.5X0.125	36.0	96.79	20.97	g2022	2.17590	Rotatio	7.776	0.000	0.000	0.000	7.685	0	0.000

*** Maximum Stress Summary for Each Load Case

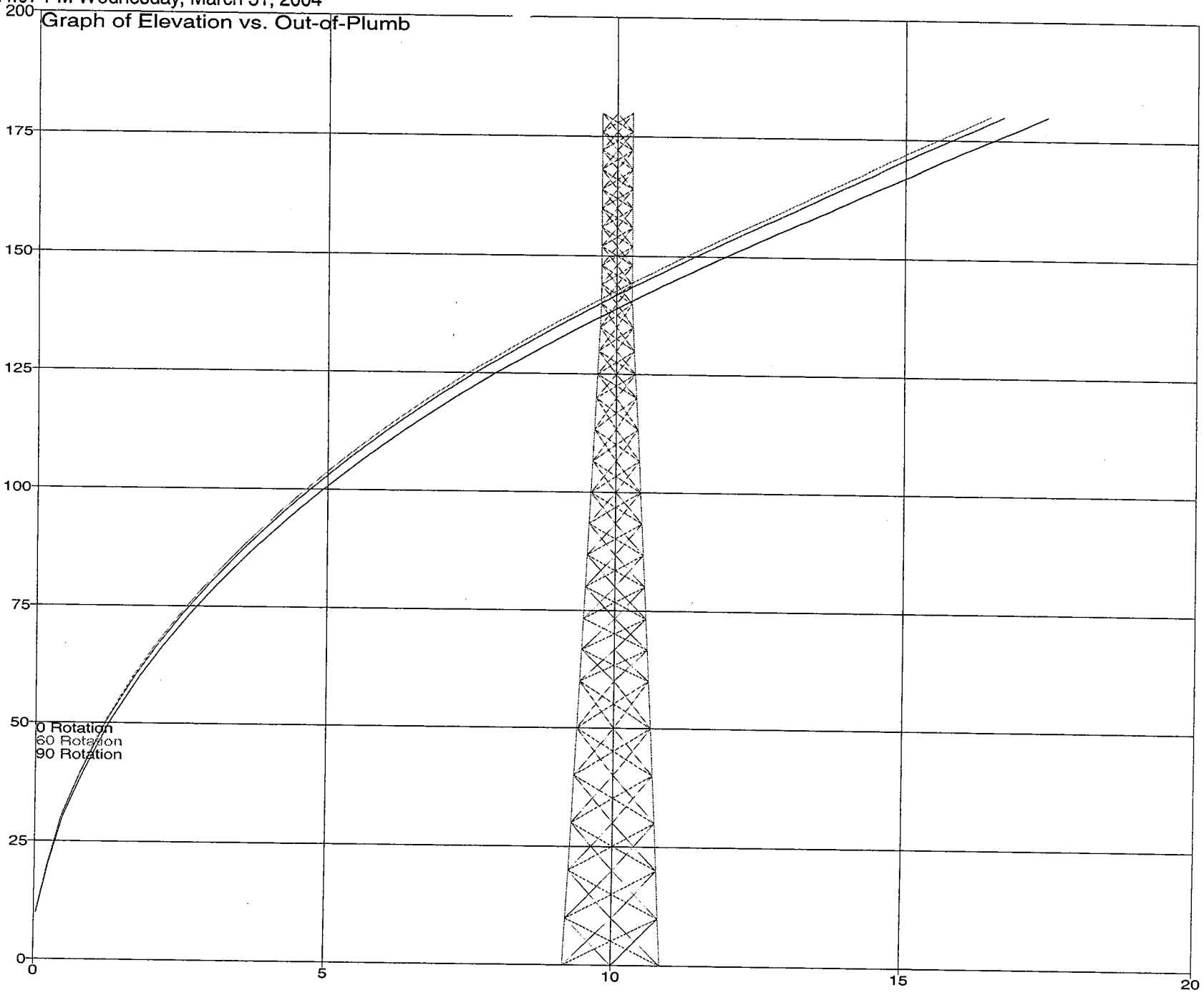
Summary of Maximum Usages by Load Case:

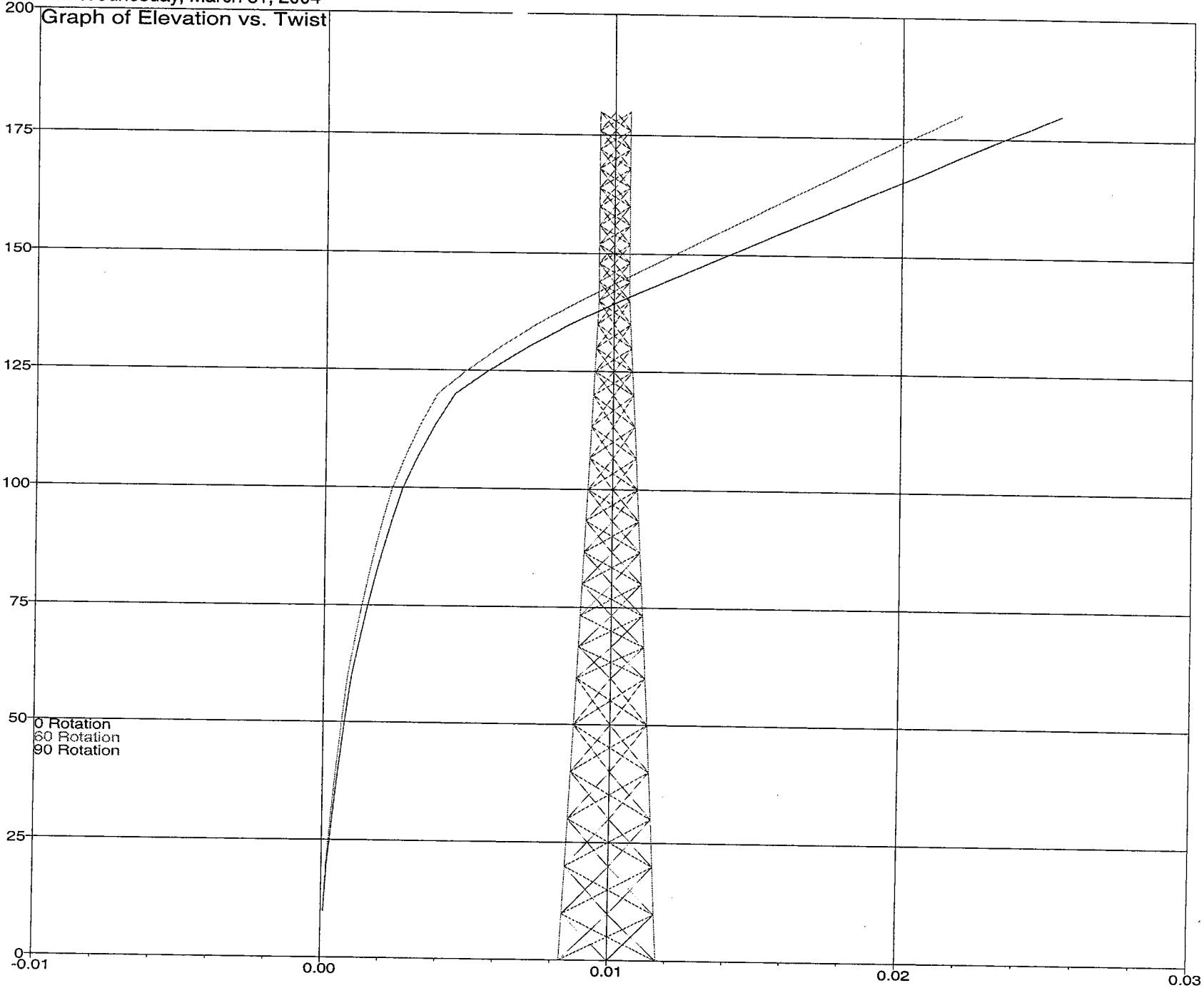
Load Case	Maximum Usage %	Element Label	Element Type
0 Rotation	93.77	g4P	Angle
60 Rotation	87.46	g1781	Angle
90 Rotation	96.79	g1752	Angle

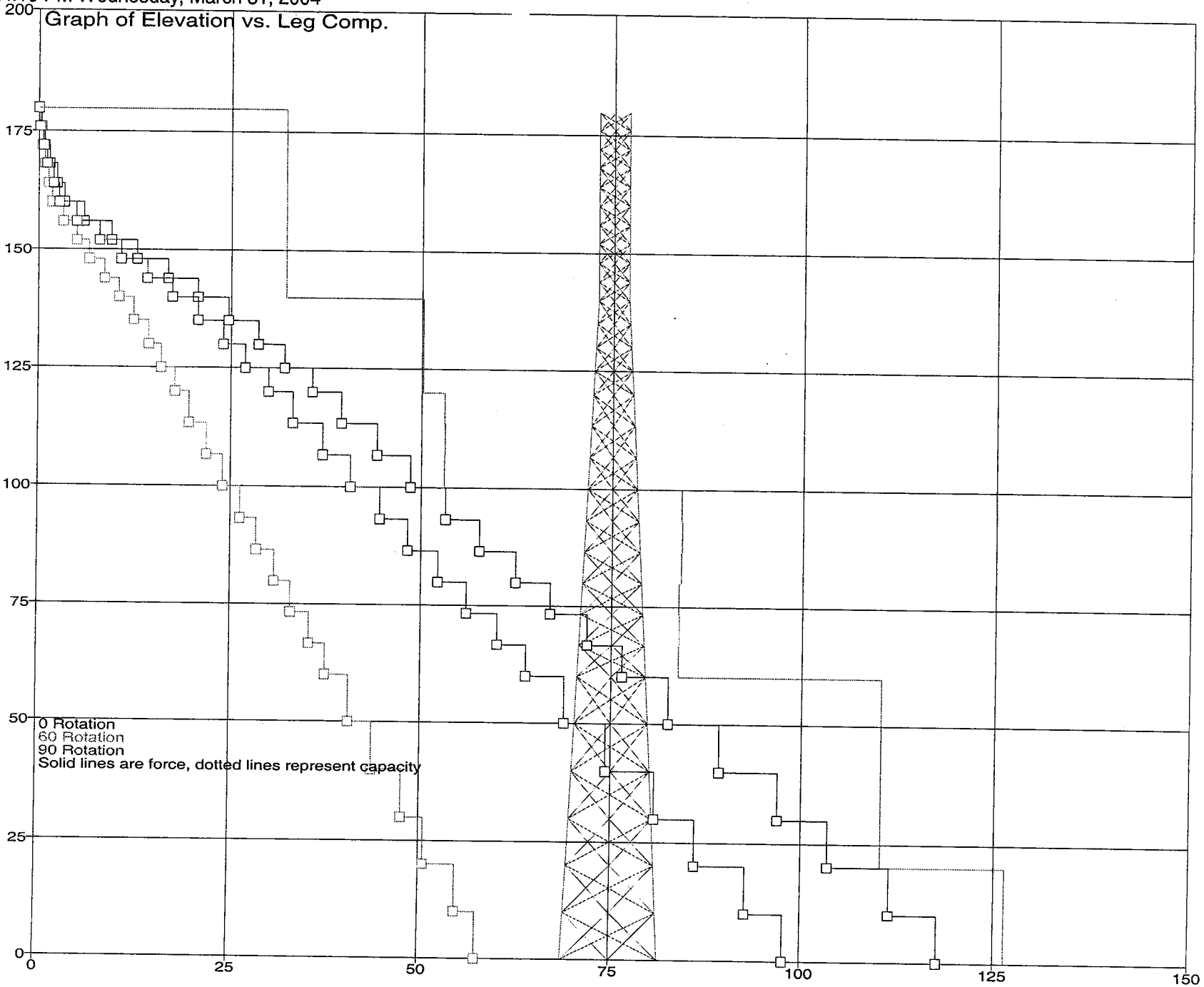
*** Weight of structure (lbs):

Weight of Angles*Section DLF:	11368.2
Weight of Equipment:	1579.0
Total:	12947.2

*** End of Report


Graph of Elevation vs. Out-of-Plumb
200
175
150
125
100
75
50
25
0
0
5
10
15
20
0 Rotation
60 Rotation
90 Rotation
Elevation (ft)
Out-of-Plumb per TIA/EIA 222-F (in)


Graph of Elevation vs. Twist
200
175
150
125
100
75
50
25
0
Elevation (ft)
0 Rotation
60 Rotation
90 Rotation
-0.01
0.00
0.01
0.02
0.03
Twist per TIA/EIA 222-F (deg)



Elevation (ft)

Marker Represents Max. Compression in Legs Above Marker (kips)

ANALYSIS SUMMARY WITH 1/2" RADIAL ICE PER TIA/EIA-222-F

Project Name : Voice Stream - General Communications CT-11-477B
Project Notes: Self Supporting Tower
Project File : w:\voice stream\new england\10585\sites\1039\structural tower info\10585-1039-r0 (ice).tow
Date run : 3:24:36 PM Wednesday, March 31, 2004
by : Tower Version 6.32
Licensed to : Clough, Harbour & Associates

Successfully performed nonlinear analysis

Loads from file: w:\struct\tower\85-(ice).eia

*** Analysis Results:

Maximum element utilization is 98.88% for Angle "g1752" in load case "90 Rotation"

Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)
0 Rotation	0P	-13.68	-0.00	123.25	13.68	0.00	-0.62	0.00	0.62
0 Rotation	01	-4.31	-4.45	-47.84	6.20	0.23	-0.07	-0.00	0.24
0 Rotation	02	-4.31	4.45	-47.84	6.20	-0.23	-0.07	0.00	0.24
60 Rotation	0P	-6.75	-1.45	63.68	6.90	-0.07	-0.33	-0.00	0.34
60 Rotation	01	-5.92	-10.23	-99.77	11.83	0.42	-0.25	0.00	0.49
60 Rotation	02	2.14	-6.55	63.64	6.89	0.24	0.23	0.00	0.34
90 Rotation	0P	-0.54	-1.69	9.21	1.77	-0.08	-0.06	-0.00	0.09
90 Rotation	01	-4.47	-9.34	-86.28	10.36	0.35	-0.24	0.00	0.42
90 Rotation	02	5.00	-10.34	104.62	11.49	0.43	0.31	0.00	0.53

Summary of Joint Support Reactions For All Load Cases in Direction of Leg:

Load Case	Support Joint	Origin Joint	Leg Member	Force In Leg Dir. (kips)	Force Perpendicular To Leg (kips)
0 Rotation	0P	1S	g1P	123.836	6.439
0 Rotation	01	11	g11	-48.114	3.538
0 Rotation	02	12	g12	-48.114	3.538
60 Rotation	0P	1S	g1P	63.968	3.337
60 Rotation	01	11	g11	-100.290	5.964
60 Rotation	02	12	g12	63.930	3.327
90 Rotation	0P	1S	g1P	9.227	1.688
90 Rotation	01	11	g11	-86.733	5.319
90 Rotation	02	12	g12	105.114	5.375

EIA Sections Information:

Section Label	Top Elevation (ft)	Bottom Elevation (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft^2)	Face Af Adjust Factor	Face Ar Adjust Factor	Dead Load Factor
9	180.000	160.000	18	45	6.51	6.54	130.51	1.0000	1.0000	1.000
8	160.000	140.000	15	45	6.54	6.56	131.03	1.0000	1.0000	1.000
7	140.000	120.000	12	36	6.56	8.60	151.60	1.0000	1.0000	1.000
6	120.000	100.000	9	27	8.60	10.63	192.23	1.0000	1.0000	1.000
5	100.000	80.000	9	27	10.63	12.66	232.86	1.0000	1.0000	1.000
4	80.000	60.000	9	27	12.66	14.69	273.49	1.0000	1.0000	1.000
3	60.000	40.000	6	18	14.69	16.72	314.12	1.0000	1.0000	1.000
2	40.000	20.000	6	18	16.72	18.75	354.75	1.0000	1.0000	1.000
1	20.000	0.000	6	18	18.75	20.78	395.38	1.0000	1.0000	1.000

*** Overall summary for all load cases - Usage = Maximum Stress / Allowable Stress
Printed capacities do not include EIA allowable stress increase for wind load cases.
Printed capacities are unfactored and do not include the strength factor entered for each loadcase.

Group Summary (Compression Portion):

Group	Group	Angle	Angle	Steel	Max	Max	Comp.	Comp.	Comp.	L/R	Comp. Conn.	Comp. Conn.	RLX	RLY	RLZ	L/R	Length	Curve No.	Of

Label	Desc.	Type	Size	Strength (ksi)	Usage %	Use In Comp. %	Control Member	Force (kips)	Control Load Case	Capacity (kips)	Shear Capacity (kips)	Bearing Capacity (kips)				Comp. Member (ft)	No.	Bolts Comp.
Leg1	Leg 0-20	Pipe 40	5"	50.0	94.32	94.32	g1P	-119.1540	Rotation	94.745	0.000	0.000	1.000	1.000	1.000	63.94	10.017	1	0
Leg2	Leg 20-60	Pipe 80	4"	50.0	95.24	95.24	g4P	-105.0920	Rotation	82.764	0.000	0.000	1.000	1.000	1.000	81.22	10.017	1	0
Leg3	Leg 60-80	Pipe EH	3"	50.0	93.40	93.40	g16P	-78.2320	Rotation	62.824	0.000	0.000	1.000	1.000	1.000	70.58	6.681	1	0
Leg4	Leg 80-100	Pipe 80	3"	50.0	76.19	76.19	g25P	-64.0470	Rotation	63.046	0.000	0.000	1.000	1.000	1.000	70.33	6.681	1	0
Leg5	Leg 100-120	Pipe EH	2.5"	50.0	94.52	94.52	g34P	-50.0620	Rotation	39.725	0.000	0.000	1.000	1.000	1.000	86.77	6.681	1	0
Leg6	Leg 120-140	Pipe 40	2-1/2"	50.0	73.44	73.44	g43P	-36.8170	Rotation	37.599	0.000	0.000	1.000	1.000	1.000	63.47	5.009	1	0
Leg7	Leg 140-180	Pipe 40	2"	50.0	66.45	66.45	g55P	-21.3750	Rotation	24.126	0.000	0.000	1.000	1.000	1.000	60.99	4.000	1	0
Diag1	Diag 0-20	SAE	3.5X3.5X0.25	50.0	46.70	46.70	g852	-4.11290	Rotatio	6.604	0.000	0.000	0.500	0.500	0.500	195.48	22.610	4	0
Diag2	Diag 20-60	SAE	3X3X0.1875	50.0	75.78	75.78	g972	-3.74890	Rotatio	3.709	0.000	0.000	0.500	0.500	0.500	209.48	20.808	4	0
Diag3	Diag 60-100	SAE	2.5X2.5X0.1875	36.0	59.27	59.27	g1212	-2.89290	Rotatio	3.660	0.000	0.000	0.500	0.500	0.500	191.84	15.827	4	0
Diag4	Diag 100-120	SAE	2X2X0.1875	36.0	54.96	54.96	g1572	-2.22890	Rotatio	3.040	0.000	0.000	0.500	0.500	0.500	186.75	12.263	4	0
Diag5	Diag 120-180	SAE	1.5X1.5X0.125	36.0	98.88	98.88	g1752	-1.82390	Rotatio	1.383	0.000	0.000	0.500	0.500	0.500	197.16	9.727	4	0

Group Summary (Tension Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Max Use In Tens. %	Tension Control Member	Tension Force (kips)	Tension Control Load Case	Net Tens. Section Capacity (kips)	Conn. Tens. Shear Capacity (kips)	Conn. Tens. Bearing Capacity (kips)	Conn. Tens. Rupture Capacity (kips)	Length Tens. Member (ft)	No. Of Bolts Tens.	No. Of Holes
Leg1	Leg 0-20	Pipe 40	5"	50.0	94.32	56.68	g11	97.49060	Rotatio	129.000	0.000	0.000	0.000	10.017	0	0.000
Leg2	Leg 20-60	Pipe 80	4"	50.0	95.24	49.24	g41	86.85260	Rotatio	132.300	0.000	0.000	0.000	10.017	0	0.000
Leg3	Leg 60-80	Pipe EH	3"	50.0	93.40	54.33	g161	65.53960	Rotatio	90.480	0.000	0.000	0.000	6.681	0	0.000
Leg4	Leg 80-100	Pipe 80	3"	50.0	76.19	44.76	g251	54.06360	Rotatio	90.600	0.000	0.000	0.000	6.681	0	0.000
Leg5	Leg 100-120	Pipe EH	2.5"	50.0	94.52	47.19	g341	42.54560	Rotatio	67.620	0.000	0.000	0.000	6.681	0	0.000
Leg6	Leg 120-140	Pipe 40	2-1/2"	50.0	73.44	45.72	g431	31.08860	Rotatio	51.000	0.000	0.000	0.000	5.009	0	0.000
Leg7	Leg 140-180	Pipe 40	2"	50.0	66.45	40.75	g551	17.44060	Rotatio	32.100	0.000	0.000	0.000	4.000	0	0.000
Diag1	Diag 0-20	SAE	3.5X3.5X0.25	50.0	46.70	5.77	g88P	3.89890	Rotatio	50.700	0.000	0.000	0.000	22.610	0	0.000
Diag2	Diag 20-60	SAE	3X3X0.1875	50.0	75.78	8.29	g1002	3.61490	Rotatio	32.700	0.000	0.000	0.000	20.808	0	0.000
Diag3	Diag 60-100	SAE	2.5X2.5X0.1875	36.0	59.27	10.92	g1242	2.83790	Rotatio	19.483	0.000	0.000	0.000	15.827	0	0.000
Diag4	Diag 100-120	SAE	2X2X0.1875	36.0	54.96	10.53	g1602	2.15390	Rotatio	15.336	0.000	0.000	0.000	12.263	0	0.000
Diag5	Diag 120-180	SAE	1.5X1.5X0.125	36.0	98.88	21.19	g2022	2.19790	Rotatio	7.776	0.000	0.000	0.000	7.685	0	0.000

*** Maximum Stress Summary for Each Load Case

Summary of Maximum Usages by Load Case:

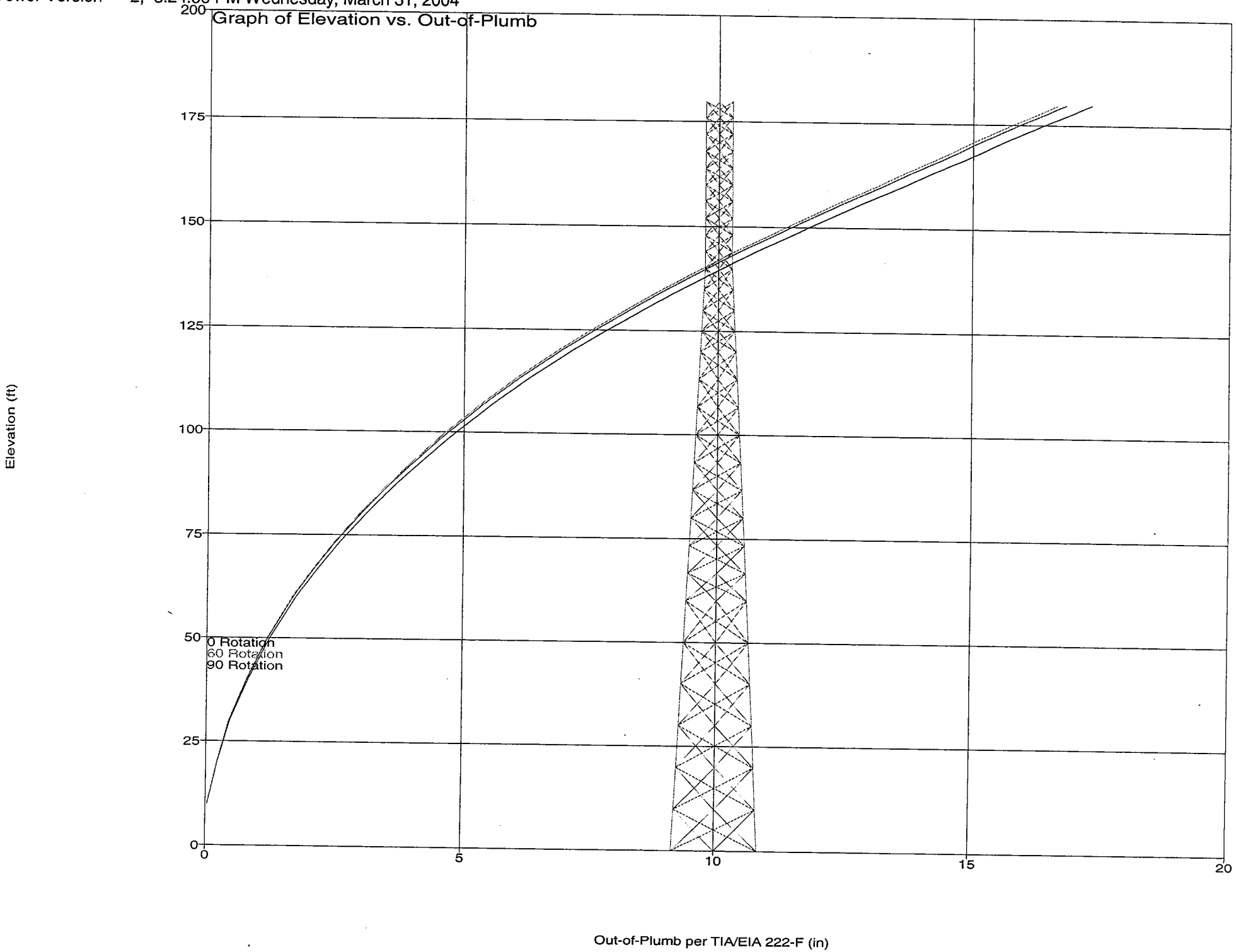
Load Case	Maximum Usage %	Element Label	Element Type
0 Rotation	95.24	g4P	Angle
60 Rotation	89.91	g1781	Angle
90 Rotation	98.88	g1752	Angle

*** Weight of structure (lbs):

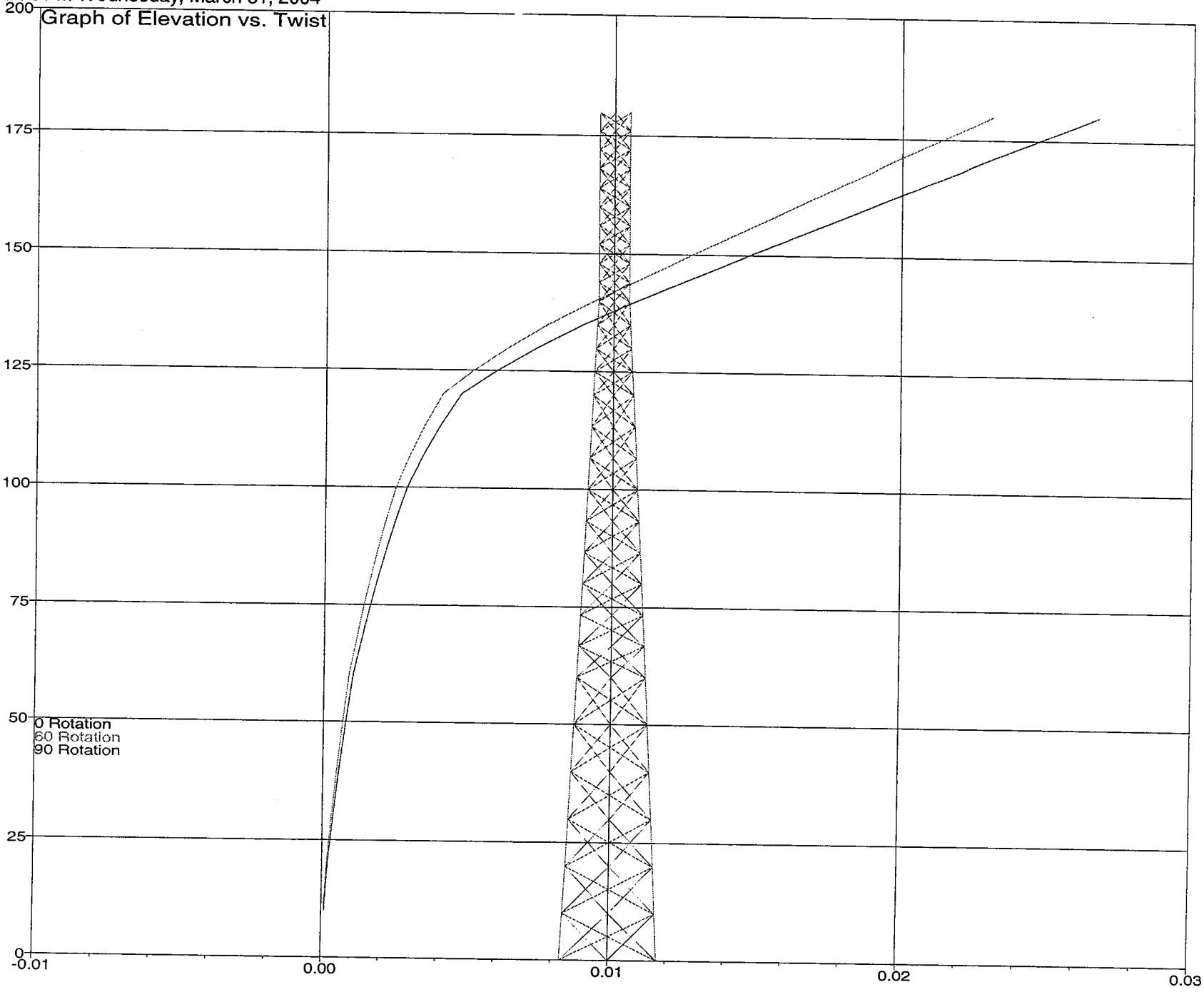
Weight of Angles*Section DLF:	11368.2
Weight of Equipment:	2166.1
Total:	13534.3

*** End of Report

Clough, Harbour & Associates, Project: "10585-1039-r0 (ice)"
Tower Version 2, 3:24:56 PM Wednesday, March 31, 2004



Clough, Harbour & Associates, Project: "10585-1039-r0 (ice)"
Tower Version 2, 3:25:02 PM Wednesday, March 31, 2004



Clough, Harbour & Associates, Project: "10585-1039-r0 (ice)"
Tower Version 2, 3:25:08 PM Wednesday, March 31, 2004

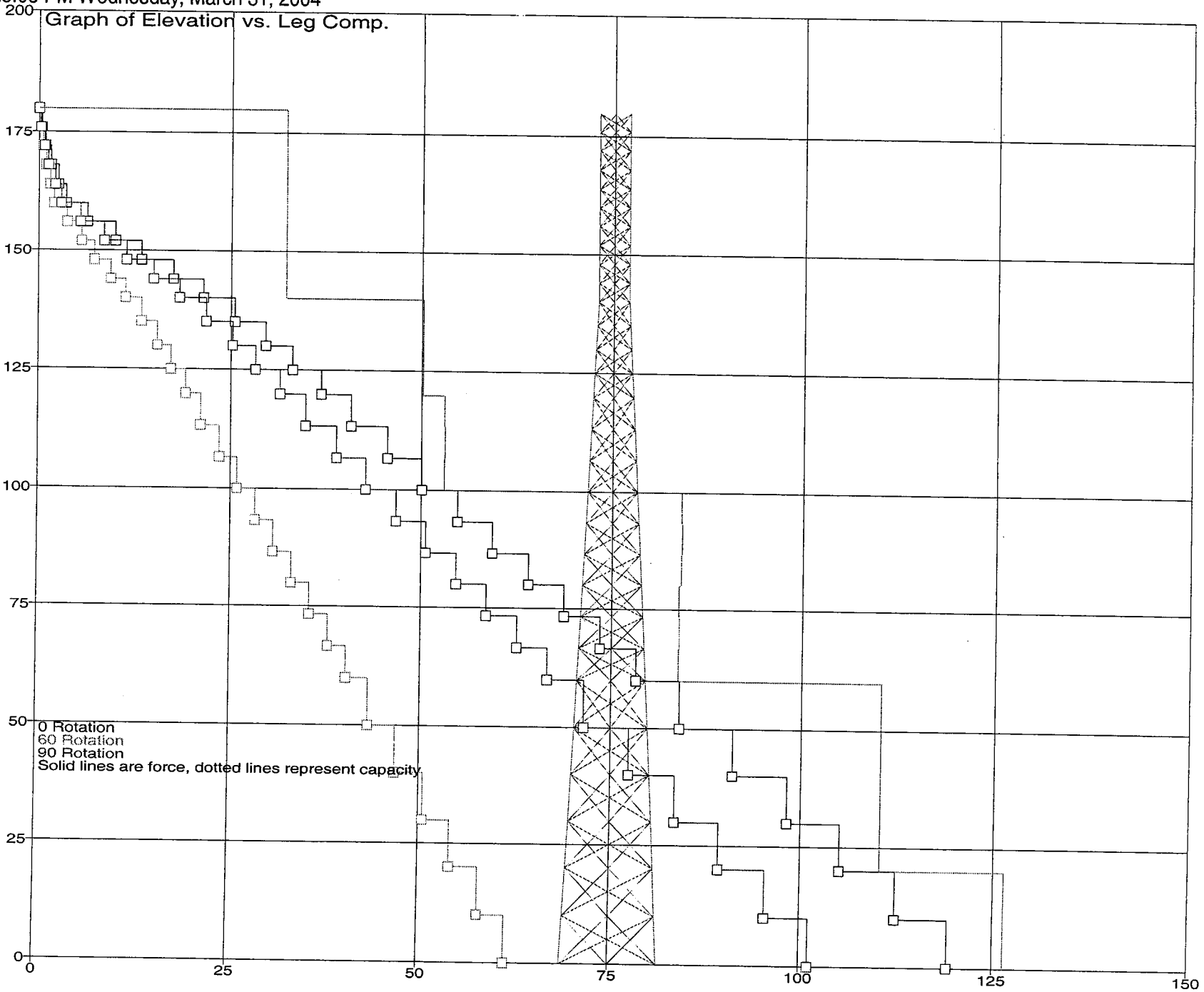


Exhibit C

T-Mobile

T-Mobile USA Inc.
100 Filley St, Bloomfield, CT 06002-1853
Phone: (860) 692-7100
Fax: (860) 692-7159

Technical Memo

To: Christine Farrell
From: Sumit Nahar - Radio Frequency Engineer
cc: Jason Overbey
Subject: Power Density Report for CT11477B
Date: April 7, 2004

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile PCS antenna installation on a Existing Lattice Tower at 1140, Wolcott Rd, Wolcott, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

1) The emissions from T-Mobile transmitters are in the 1935-1945 MHz frequency band.
2) The antenna array consists of three sectors, with 3 antennas per sector.
3) The model number for each antenna is EMS RR90-17-02DP.
4) The antenna center line height is 160 ft.
5) The maximum transmit power from any sector is 1567.91 Watts Effective Radiated Power (EiRP) assuming 8 channels per sector.
6) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
7) Power levels emitting from the antennas are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
8) The average ground level of the studied area does not change significantly with respect to the transmitting location

Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

3. Conclusion:

Based on the above worst case assumptions, the power density calculation from the T-Mobile PCS antenna installation on a Existing Lattice Tower at 1140, Wolcott Rd, Wolcott, CT, is 0.0145 mW/cm^2. This value represents 1.45% of the Maximum Permissible Emission (MPE) standard of 1 milliwatt per square centimeter (mW/cm^2) set forth in the FCC/ANSI/IEEE C95.1-1991. Furthermore, the proposed antenna location for T-Mobile will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.

The combined Power Density from other carriers is 0.4%. The combined Power Density for the site is 1.85% of the M.P.E. standard.

VoiceStream Wireless Corporation Proprietary

New England Market

Connecticut

Worst Case Power Density

Site:	**CT11477B**
Site Address:	**1140, Wolcott Rd**
Town:	**Wolcott**
Tower Height:	**180 ft.**
Tower Style:	**Existing Lattice Tower**
Base Station TX output	20 W
Number of channels	8
Antenna Model	EMS RR90-17-02DP
Cable Size	1 5/8 in.
Cable Length	180 ft.
Antenna Height	160.0 ft.
Ground Reflection	1.6
Frequency	1935.0 MHz
Jumper & Connector loss	4.50 dB
Antenna Gain	16.5 dBi
Cable Loss per foot	0.0116 dB
Total Cable Loss	2.0880 dB
Total Attenuation	6.5880 dB
Total EIRP per Channel	52.92 dBm
(In Watts)	195.99 W
Total EIRP per Sector	61.95 dBm
(In Watts)	1567.91 W
nsg	9.9120
Power Density (S) =	**0.014504 mW/cm^2**
T-Mobile Worst Case % MPE =	**1.4504%**

Equation Used :

$$S = \frac{(1000)(grf)^2(Power)*10^{(nsg/10)}}{4\pi(R)^2}$$

Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

Co-Location Total

Carrier	**% of Standard**
Verizon	
Cingular	
Sprint PCS	
AT&T Wireless	
Nextel	
2 way Radio	0.4000 %
Total Excluding T-Mobile	**0.4000 %**
T-Mobile	1.4504
Total % MPE for Site	**1.8504%**

Miscellaneous

100 Filley Street, Bloomfield, CT 06002
860-794-6427 fax 860-692-7159

April 8, 2004

Mayor Tom Dunn
10 Kenea Avenue
Wolcott, CT 06716

RE: **Wireless Telecommunications Facility**
1140 Wolcott Road, Wolcott, Connecticut

Dear Mayor Dunn:

Omnipoint Communications, Inc. a.k.a. T-Mobile (formerly Voicestream Wireless Corp.) intends to co-locate antennas on the future monopole located at 1140 Wolcott Road, Wolcott. Attached, please find a copy of our application to the CT Siting Council.

If you have any questions or concerns, please feel free to call me at 860-794-6427, or the CT Siting Council.

Very Truly Yours

Christine Farrell
T-Mobile Real Estate and Zoning

Attachment-Application

Cc: CSC