



100 Filley Street, Bloomfield, CT 06002
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hkarina@adelphia.net

TS-T-MOBILE-058-051005

October 5, 2005

BY HAND

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

RECEIVED
OCT - 5 2005
CONNECTICUT
SITING COUNCIL

RE: **Tower Sharing Request by T-Mobile**
2172 Glasgo Road Griswold, CT
Latitude: 41 32 13 / Longitude: 71 52 23

Dear Ms. Katz and Members of the Siting Council:

Pursuant to Connecticut General Statutes (C.G.S.) § 16-50aa, Omnipoint Communications, Inc. a.k.a. T-Mobile (formerly Voicestream Wireless Corp.) hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed shared use of an existing communications tower, located at 2172 Glasgo Road, in Griswold ("Wireless Solutions Griswold "), owned by Wireless Solutions. T-Mobile and Wireless Solutions have agreed to the shared use of the Wireless Solutions Griswold Facility, as detailed below.

Wireless Solutions Griswold Facility

The Wireless Solutions Griswold Facility consists of a one hundred ninety (190) foot high-guyed tower ("Tower") owned and operated by Wireless Solutions. T-Mobile proposes to locate antennas at a mounting centerline height of one hundred eighty five (185) feet. The equipment will be located within the existing leased area located at the base of the tower.

~ ORIGINAL ~

Wireless Solutions Griswold Facility

As shown on the enclosed plans prepared by Westcott and Mapes, Inc. including a site plan and tower elevation of the Wireless Solutions Griswold Facility, annexed hereto as Exhibit 1, 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 site plan. T-Mobile will install nine (9) antennas at the one hundred eighty-five (185) foot level of the Tower. Three (3) associated unmanned equipment cabinets will be located at the base of the tower.

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 Wireless Solutions Griswold 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 the proposed T-Mobile installation has been performed and is attached as Exhibit 2. The structural analysis concludes that the tower can safely accommodate the proposed T-Mobile antennas. The proposed shared use of this Tower is technically feasible. There is sufficient room at the base of the facility, T-Mobile will locate their equipment within the existing leased area and then will replace the fence to surround their equipment.
- B. Legal Feasibility Pursuant to C.G.S. § 16-50aa, the Council has been authorized to issue an order approving shared use of the existing Wireless Solutions Griswold 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 nor expand the existing leased area at the Wireless Solutions Griswold and will be of minimal impact to 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 4.9% of the standard. See Radio Frequency memo dated October 3, 2005 prepared by Marlon DePaz, annexed hereto as Exhibit 3;
 - 5.) The proposed shared use of the Wireless Solutions Griswold Facility will 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 Wireless Solutions Griswold 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 Radio Frequency Field Survey annexed hereto as Exhibit 3, 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 Griswold area through shared use of the Wireless Solutions Griswold Facility is expected to enhance the safety and

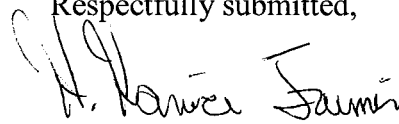
welfare of local residents and travelers through the area resulting in an improvement to public safety in this area.

Page 4

Conclusion

As delineated above, the proposed shared use of the Wireless Solutions Griswold 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 Wireless Solutions Griswold Facility.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "K. Fournier" followed by a flourish.

Karina Fournier
Zoning Dept.
T-Mobile
100 Filley St.
Bloomfield, CT 06002
(860) 692-7100

cc: Griswold First Selectmen, Paul J. Brycki

Exhibit 1

WIRELESS SOLUTION

2172 GLASGO ROAD
GRISWOLD, CT 06434

SITE NUMBER: CT-001

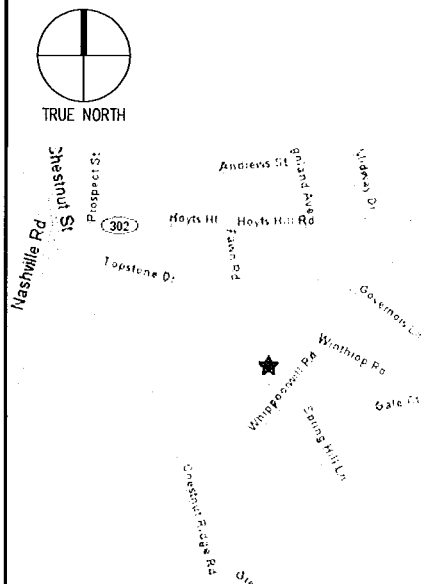
SITE TYPE: CO-LOC

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 REPRESENTATIVE 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 OR 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 REPRESENTATIVE 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 REPRESENTATIVE.
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

NO SCALE



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 REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

WIRELESS SOLUTIONS GRISWOLD

SITE NUMBER: CTNL-082-B

SITE TYPE: CO-LOCATE

2172 GLASGO ROAD
GRISWOLD, CT 06351

GENERAL NOTES	
1.	THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LOCAL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND COUNTY COMPANY SPECIFICATIONS AND LOCAL AND STATE SUBORDINATE CODES PERFORMED ON THE PERFORMANCE OF THE WORK.
2.	THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BEING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DURING CONSTRUCTION, UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY. IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
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4.	THE SCOPE OF WORK SHALL INCLUDE BURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
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7.	THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
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9.	THE CONTRACTOR SHALL SUPERSEDE 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 GRABES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
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16.	THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
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CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE LESSEE/LICENSEE REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET INDEX		
REV.	NO.	DESCRIPTION
0	T-1	TITLE SHEET
0	A-1	PLANS, ELEVATION, DETAILS AND NOTES
0	S-1	STRUCT. NOTES, PLANS, SECTIONS & DETAILS
0	E-1	ELEC. & GROUNDING NOTES, RISERS & DETAILS

PROJECT SUMMARY	
SITE NUMBER:	CTNL-082-B
SITE NAME:	WIRELESS SOLUTIONS GRISWOLD
SITE ADDRESS:	2172 GLASGO ROAD GRISWOLD, CT 06351
ASSESSOR'S PARCEL NO.:	MAP 91, BLOCK 162, LOT 3A
CONSTRUCTION TYPE:	EXISTING TOWER
STRUCTURE OWNER:	KINNIE FAMILY TRUST 2172 GLASGO ROAD GRISWOLD, CT 06351
PROPERTY OWNER:	KINNIE FAMILY TRUST 2172 GLASGO ROAD GRISWOLD, CT 06351
APPLICANT:	OMNIPONT COMMUNICATIONS, INC. 100 FILLEY STREET BLOOMFIELD, CT 06002

OMNIPONT 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	Westcott and Mapee, Inc. Consulting Engineers and Architects since 1916 142 Temple Street New Haven, CT 06510 TEL (203) 789-1260 • FAX (203) 789-8261	STATE OF CONNECTICUT MICHAEL J. COOPER LICENSED ARCHITECT No. B4922	APPROVALS LANDLORD _____ LEASING _____ R.F. _____ ZONING _____ CONSTRUCTION _____ A/E _____	PROJECT NO.: 05062.19 DRAWN BY: MJE/MMC CHECKED BY: GJM	SUBMITTALS 0 9/26/05 CONSTRUCTION	THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF OMNIPONT COMMUNICATIONS, INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.	CTNL-082-B WIRELESS SOLUTIONS GRISWOLD	2172 GLASGO ROAD GRISWOLD, CT 06351	TITLE SHEET	T-1 SHEET NUMBER
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OMNIPONT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY
OF T-MOBILE USA, INC.
100 FILEY STREET
BLOOMFIELD, CT 06002
OFFICE: (860)-692-7100
FAX: (860)-692-7159

CONSULTING ENGINEERS AND ARCHITECTS SINCE 1916
Westcott and Mapeo, Inc.
142 Temple Street
New Haven, CT 06510
TEL (203) 769-1260 • FAX (203) 769-8261



APPROVALS

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

PROJECT NO: 05062.19
DRAWN BY: RGC
CHECKED BY: CMM

SUBMITTALS

0	9/26/05	CONSTRUCTION
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CNTL-082-B
WIRELESS SOLUTIONS
2172 GLASSO ROAD
GRISWOLD, CT 06351

PLANS, ELEVATION,
DETAILS AND NOTES
SHEET NUMBER
A-1

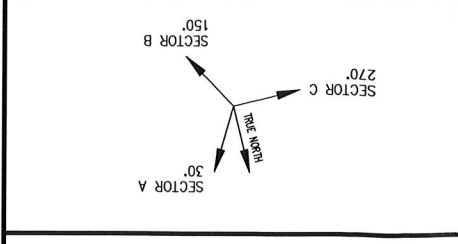
ABBREVIATIONS

ADJ	ADJUSTABLE	OC	ON CENTER
ACL	ABOVE GRADE LEVEL	OPP	OPPOSITE
APPROX	APPROXIMATE	SF	SQUARE FOOT
C	CONDUIT	SHT	SHEET
CONC	CONCRETE	SM	SMALLER
CONT	CONTINUOUS	STL	STEEL
CI	CONSTRUCTION JOINT	TOC	TOP OF CONCRETE
DIA	DIAMETER	TOM	TOP OF MASONRY
DWG	DRAWING	TRP	TYPICAL
EQB	EQUIPMENT GROUND BAR	VF	VERIFY IN FIELD
EA	EACH	UG	UNDERGROUND
ELEC	ELECTRICAL	UN	UNLESS OTHERWISE NOTED
EL	ELEVATION	WLF	WELOD WIRE FABRIC
EQ	EQUAL	W/	WITH
EQUIP	EQUIPMENT	BTS	BASE TRANSMISSION STATION
(E)	EXISTING	LNA	LOW NOISE AMPLIFIER
EXT	EXTERIOR	PCS	PERSONAL COMMUNICATIONS SERVICES
FF	FINISHED FLOOR	FF	FINISHED GRADE
GA	GALVANIZED	GA	GAUGE
GENL	GENERAL CONTRACTOR	GC	GENERAL CONTRACTOR
LG	LONG	LG	LONG
MAX	MAXIMUM	MECH	MECHANICAL
MFR	MANUFACTURER	MFR	MANUFACTURER
MOB	MASTER GROUND BAR	MOB	MASTER GROUND BAR
MIN	MINIMUM	MIN	MINIMUM
MTL	METAL	MTL	METAL
NIC	NOT IN CONTRACT	NIC	NOT IN CONTRACT
NTS	NOT TO SCALE	NTS	NOT TO SCALE

SYMBOLS AND MATERIALS

	NEW ANTENNA		GROUT OR PLASTER
	EXISTING ANTENNAS		BRICK
	CONCRETE		MASONRY
	ASPHALT		NEW ACCESS EASEMENT
	EARTH		CONCRETE
	GRAVEL		ELECTRIC BOX
	PLYWOOD		LIGHT POLE
	SAND		FIND MONUMENT
	WOOD CONT.		SPOT ELEVATION
	WOOD BLOCKING		SET POINT
	STEEL		REVISION
	CENTER LINE		GRID REFERENCE
	PROPERTY LINE		DETAIL REFERENCE
	MATCH LINE		ELEVATION
	WORK POINT		SECTIONS & DETAILS

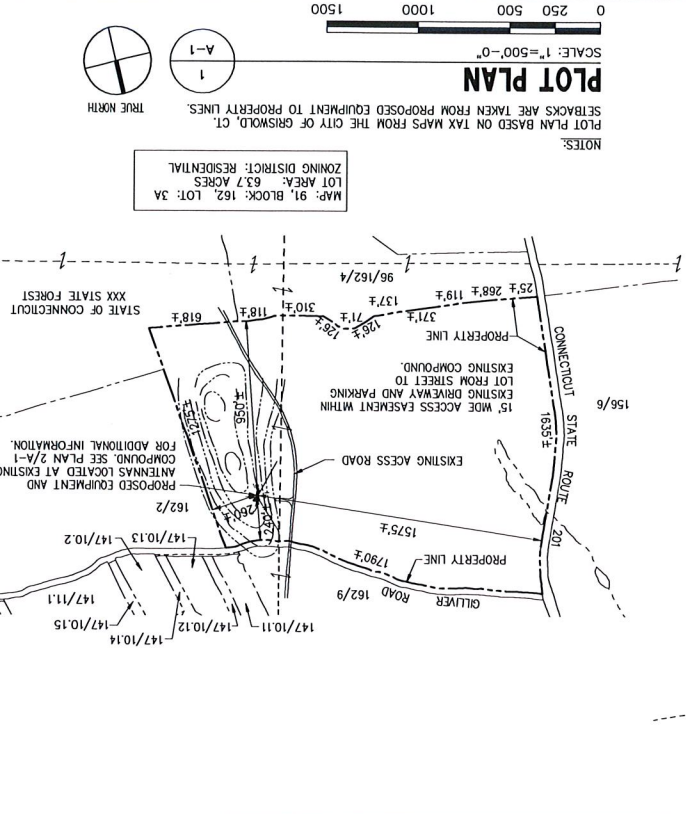
ANTENNA ORIENTATION KEY



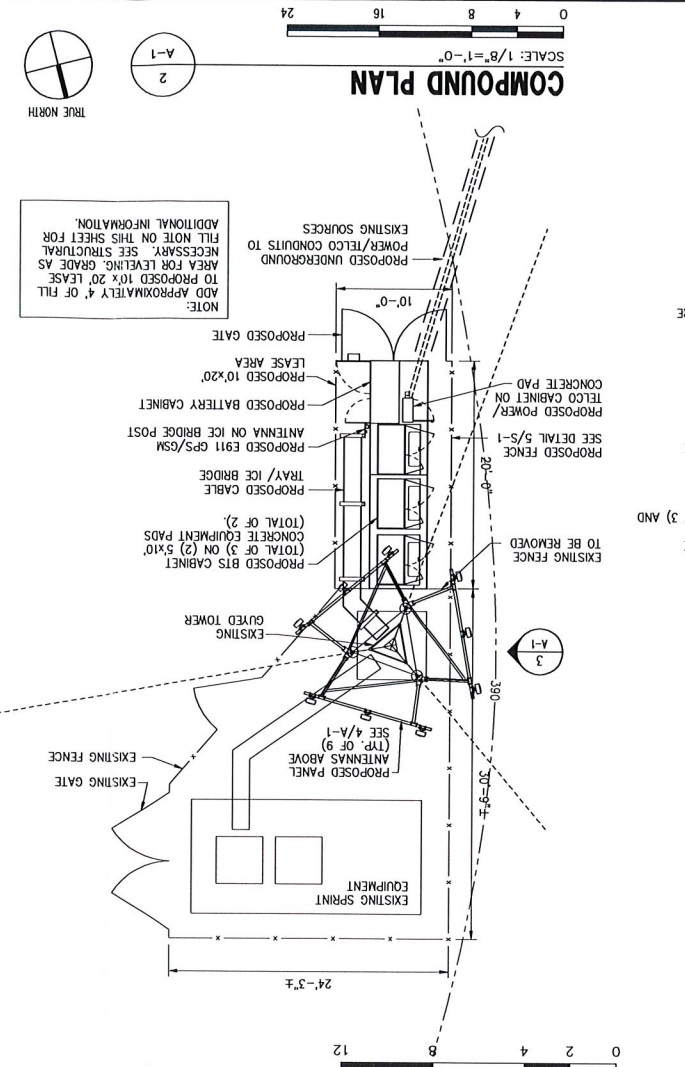
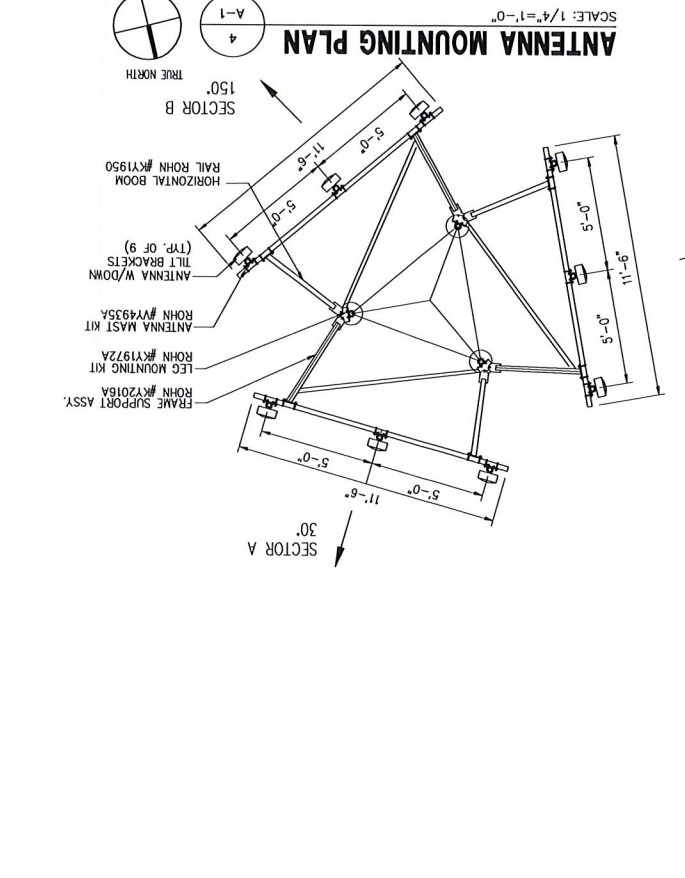
NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS SHOWN HEREIN.
2. ALL DIMENSIONS SHOWN THIS & ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH AND ELEVATIONS WHICH EFFECT THE CONTRACTORS WORK. THE CONTRACTOR TO VERIFY ALL DIMENSIONS WITH OWNER PRIOR TO CONSTRUCTION.
3. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. PRIOR TO THE START OF CONSTRUCTION, ORDERING OR FABRICATION OF ANTENNA MOUNTS, CONTRACTOR SHALL CONSULT WITH PROJECT OWNER'S RF ENGINEER AND FIELD VERIFY ALL ANTENNA SECTOR LOCATIONS AND ANTENNA AZIMUTHS.
4. THE CONTRACTOR AND OR HIS SUB 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.
5. ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.
6. ANTENNA CABLE CONNECTIONS 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 DOCUMENT (SEE ATTACHMENT K). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
7. ANTENNAS, SUPPORTS AND CABLE MOUNTS SHALL BE PAINTED TO MATCH EXISTING SURFACES TO WHICH IT IS ATTACHED. PAINT SHALL BE SHERWIN WILLIAMS, CORONA II, SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AND LESSEE/LICENSEE GUIDELINES.
8. 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.
9. EQUIPMENT WILL BE INDEPENDENTLY POWERED WITH SEPARATE METER.
10. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
12. ALL (ACTIVE) SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROTECTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
13. ALL (INACTIVE) SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING.
14. 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.
15. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROLS AT ALL TIMES DURING CONSTRUCTION.
16. PER FCC MANUATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. LESSEE/LICENSEE IMPLEMENTATION REQUIRES DEPLOYMENT OF 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.

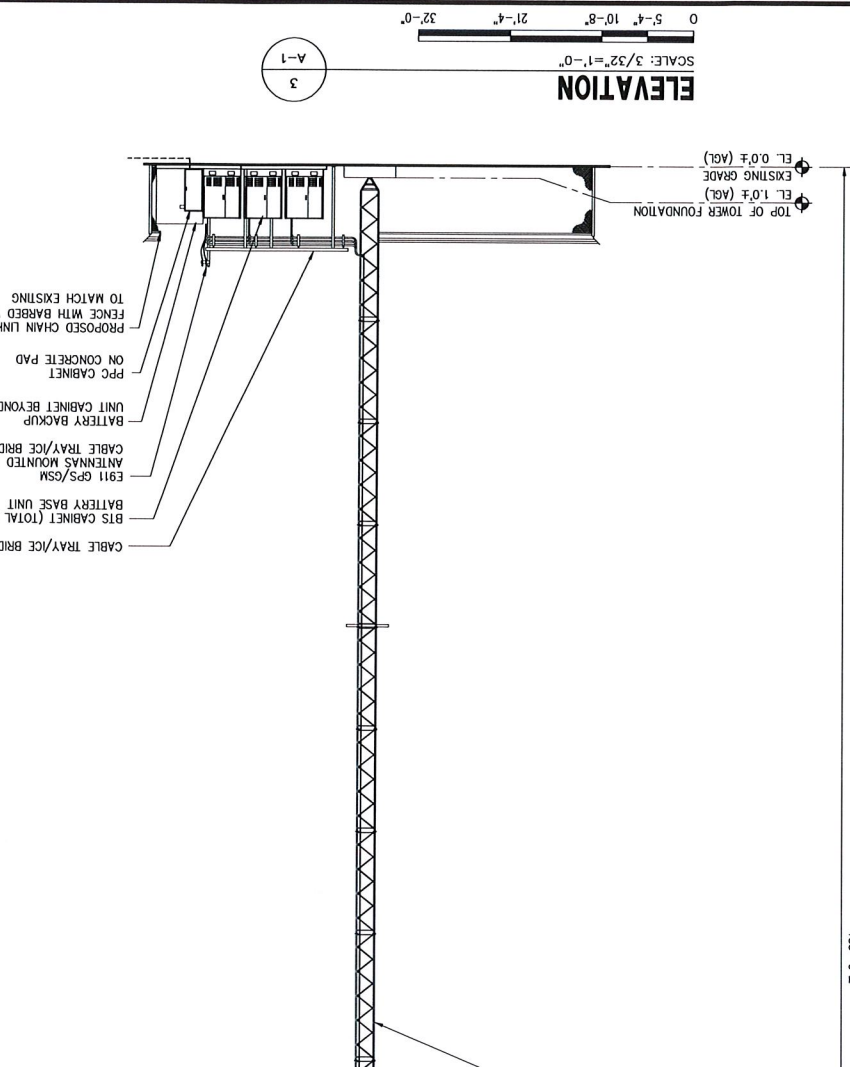
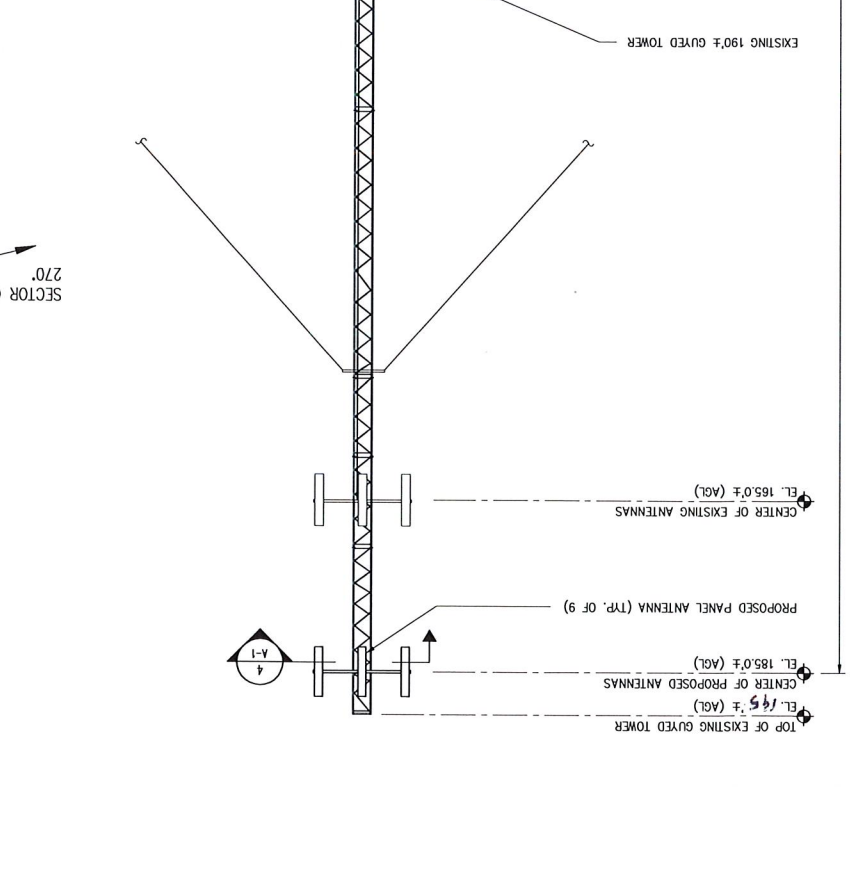
STRUCTURAL FILL NOTE:
FILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MODIFIED OPTIMUM DENSITY (ASTM D1557). STRUCTURAL FILL SHALL MEET THE FOLLOWING GRADATIONS:
SIEVE SIZE * PERCENT PASSING *
#100 100
#40 5-30
#10 20-50
#5 30-65
#20 100
PERCENT PASSING *



COMPOUND PLAN



ELEVATION



STRUCTURAL NOTES

1. DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, ANSI/ASCE7, EIA/78A-222-F

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 STEEL WIDE-FLANGE SHAPES SHALL CONFORM TO ASTM 992A. ALL OTHER SHAPES AND MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL, UNLESS OTHERWISE NOTED.

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 5/8" DIA UNF.

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. ZIP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROMPTON OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE 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 PROCESSORS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING EXPOSURE ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING EXPOSURE ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING EXPOSURE ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES".

11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISSING 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. UNITS SHALL BE FORMER STEEL CHANNELS. STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP. W/ W/ POSITIVE FRAME GATE MECHANISM SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.

13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF 1/2" DIAMETER STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A GREEN TUBE 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 I, HILTI KIMK 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 ... 2 INCHES.

#5 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 WOOD 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.

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FUNCTIONS IS SPECIFICALLY ALLOWED.

REGULATORY AND ADMINISTRATIVE AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED FUNCTIONS IS SPECIFICALLY ALLOWED.

2172 GLASCO ROAD
GRISWOLD, CT 06351

9/26/05 CONSTRUCTION

0

2172 GLASCO ROAD
GRISWOLD, CT 06351

STRUCTURAL NOTES, PLAN

SECTIONS AND DETAILS

SHEET NUMBER

S-1

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9/26/05 CONSTRUCTION

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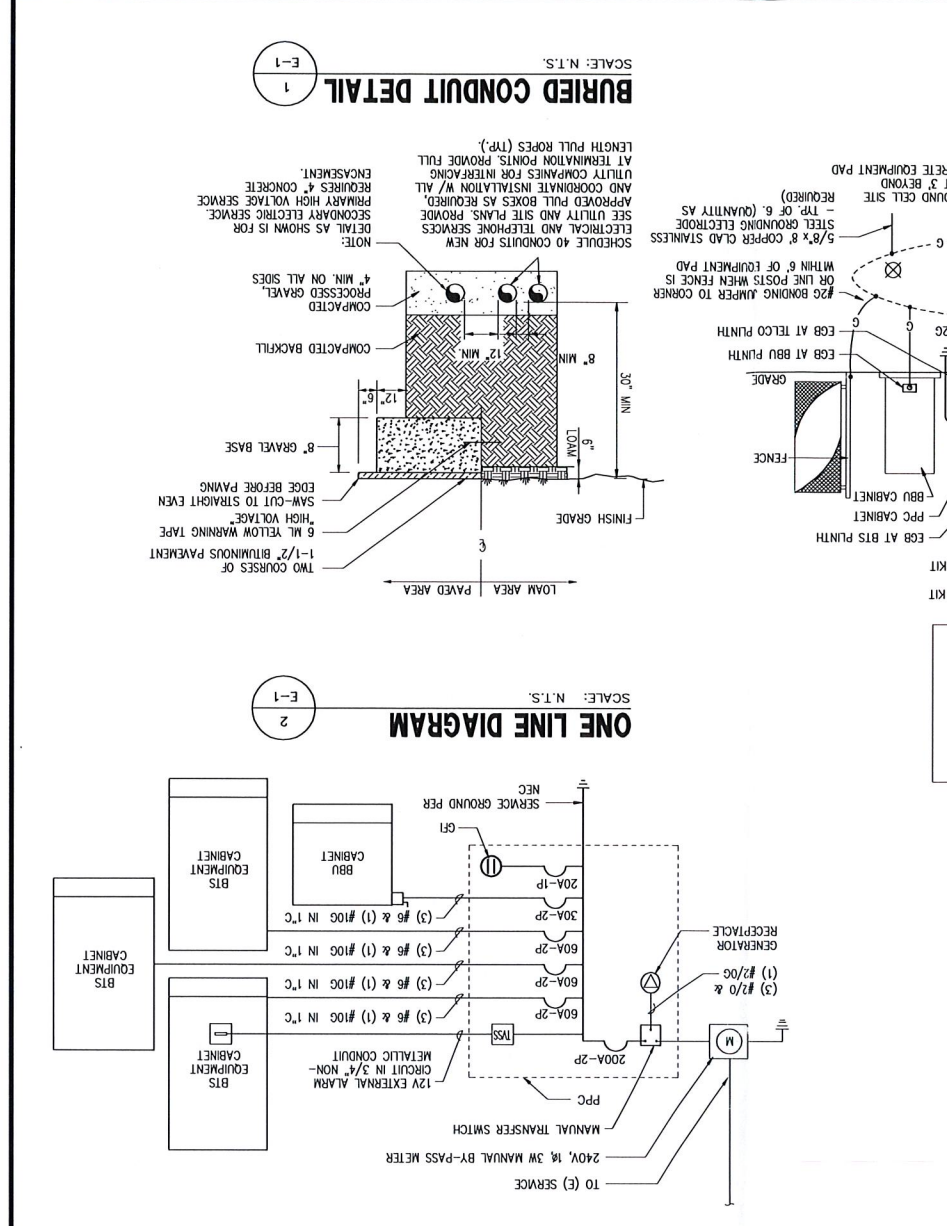
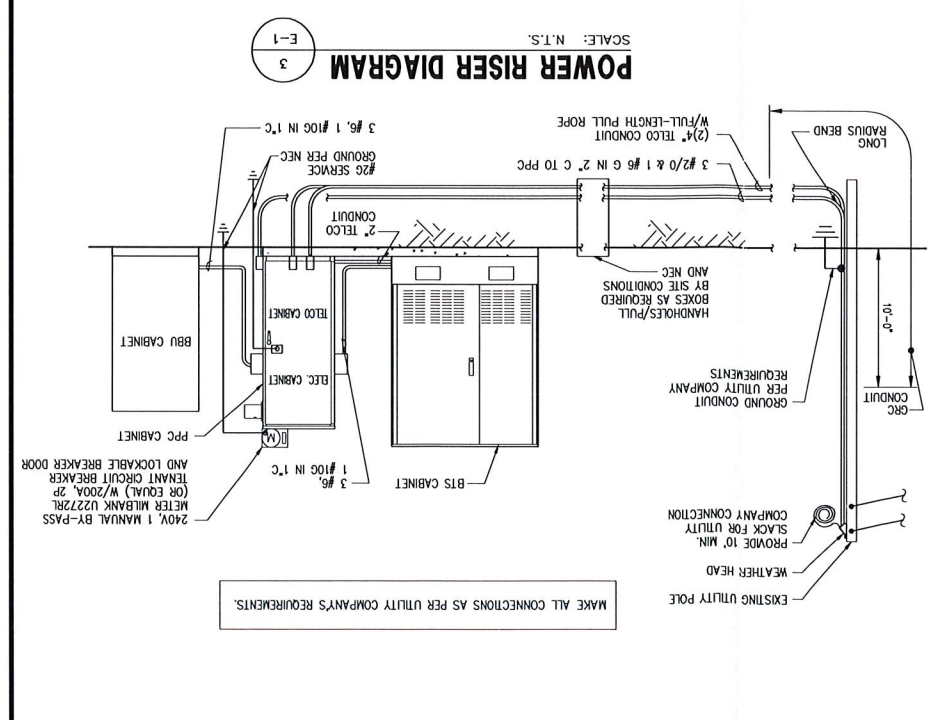
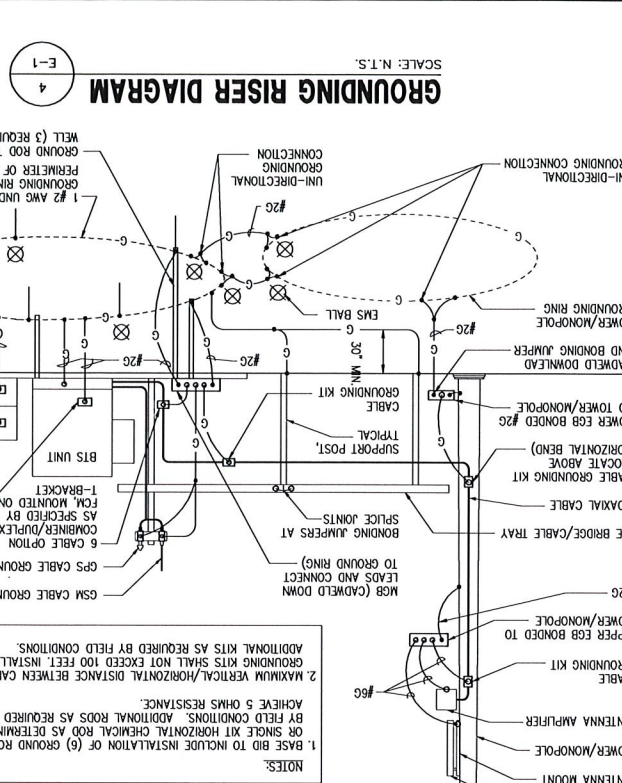
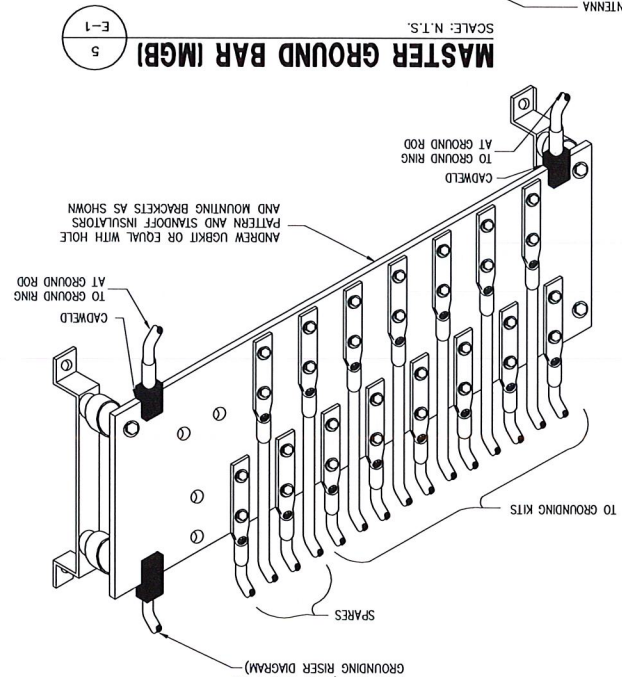
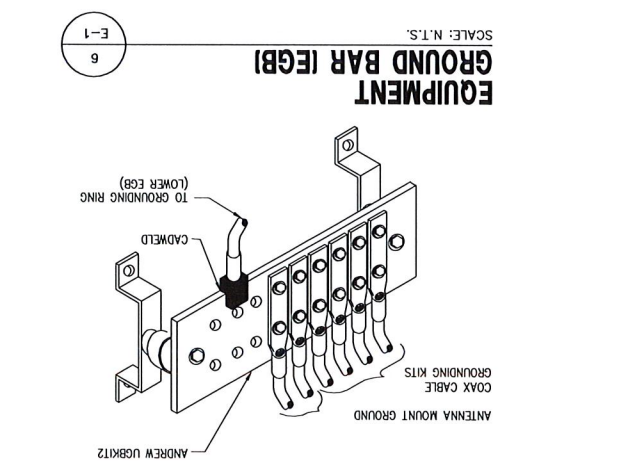
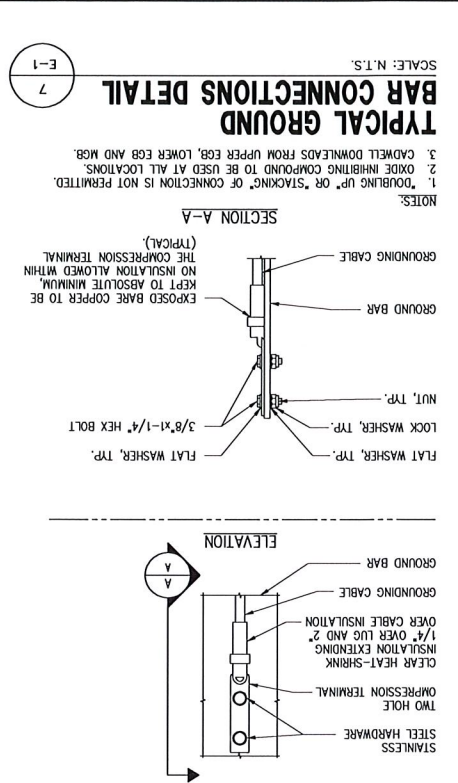
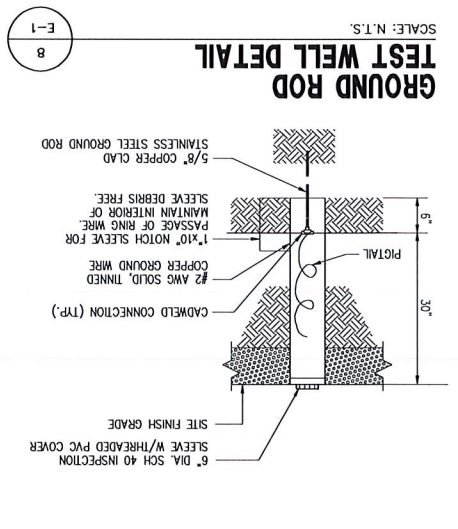
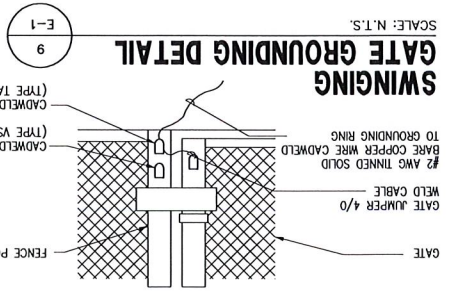
9/26/05 CONSTRUCTION

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2172 GLASCO ROAD
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STRUCTURAL NOTES, PLAN

SECTIONS AND DETAILS



ELECTRICAL LEGEND

NEW PANEL BOARD, SURFACE MOUNTED	EXISTING PANEL BOARD, SURFACE MOUNTED	DRY TYPE TRANSFORMER	METER	CIRCUIT BREAKER
NON-FUSIBLE DISCONNECT SWITCH, MOUNTED 54\"/>				
FUSIBLE DISCONNECT SWITCH, MOUNTED 54\"/>				
TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH BUILT-IN FUSES, SURFACE MOUNTED	DUPLICATE OUTLET, SURFACE MOUNTED	20 AMP, 125 VOLTS, SINGLE PHASE	142 Temple Street New Haven, CT 06510 TEL (203) 789-1260 • FAX (203) 789-8261	

- ### ELECTRICAL AND GROUNDING NOTES
- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
 - ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROVIDED PER SPECIFICATION REQUIREMENTS.
 - THE ELECTRICAL WORK INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
 - GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
 - ELECTRICAL AND TIE-OUT WORKING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
 - BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
 - ELECTRICAL WIRING SHALL BE COPPER WITH TYPE THWN, THWN, OR THHN/INSULATION.
 - POINT ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEBARCATION POINT AND PROJECT OWNER CELL SITE POC AS INDICATED ON THIS DRAWING.
 - PROVIDE FULL LENGTH PULL ROPE, COORDINATE INSTALLATION WITH UTILITY COMPANY.
 - RIN TIE-OUT CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEBARCATION POINT AND PROJECT OWNER CELL SITE TIE-OUT CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TIE-OUT CONDUIT.
 - WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE POC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TIE-OUT CABINET ARE UNDERGROUND USE POC SCHEDULE GREEN/TELECOM MEASURING TAPE AT EACH END.
 - CONDUCTORS OF TWO COURSES OF 1-1/2\"/>

- USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID THINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- GROUND CONDUIT SHALL BE BURIED HORIZONTALLY UNDERGROUND TYPE CONNECTIONS OR CABLED EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12\"/>

- OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
- CONTRACTOR SHALL PROVIDE AND INSTALL GROUNDING ELECTRICAL MARKER SYSTEM (EAS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXISTING TOWER/MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
- CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MINIMUM RESISTANCE REQUIRED.
- CONTRACTOR SHALL CONDUCT ANTENNA COAX AND LNA RETURN-LOSS AND DISTANCE-TO-FULL MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE-OUT.

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APPROVALS

LANDLORD _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO. 05062.19

DRAWN BY: MMC

CHECKED BY: GMM

SUBMITTALS

9/26/05 CONSTRUCTION

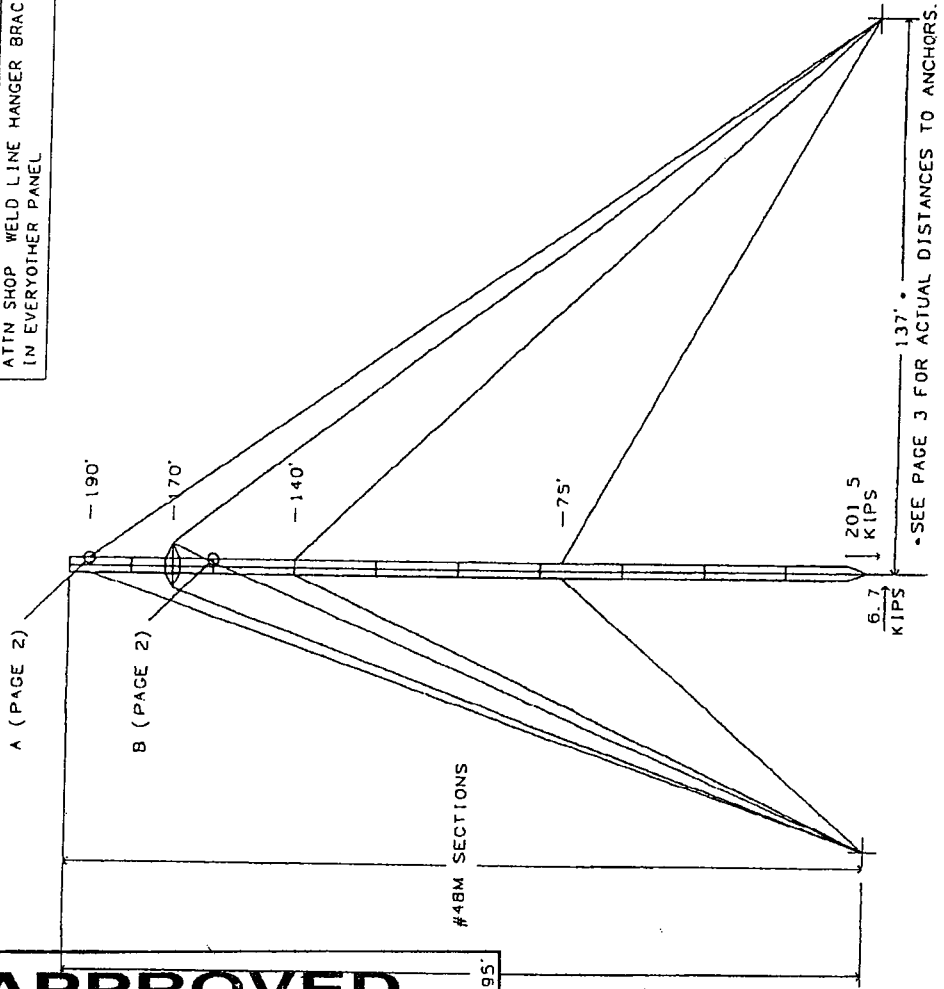
WIRELESS SOLUTIONS
2172 GLASSO ROAD
GRISWOLD, CT 06351

ELECTRICAL AND GROUNDING NOTES, RISERS, AND DETAILS

SHEET NUMBER **E-1**

Exhibit 2

ATTN SHOP WELD LINE HANGER BRACKETS P/N 132573
IN EVERY OTHER PANEL



APPROVED

T-Mobile Site No: CTNLO82-B
 A & E Manager: D. O'Connor
 Date: 9/23/05
 Antenna Make: EMV Model No.: DRG5DP2
 Number Antennas: 9 Rad. Center (AGL): 185 Feet
 Coax Cables: Number: 24 7/8" 1-5/8" 2-1/4"
 Tower and Foundation Acceptable: No Upgrades Required
 Tower Upgrades Required
 Foundation Upgrades Required
 Special Coax Placement or Bundling Required



				WIRELESS SOLUTIONS GRISWOLD, CONNECTICUT # 48M X 195' GUYED TOWER	
D	REVISED GUY ANCHOR FOUNDATION	HBR	03/01/1999	APPROVED/ENG.	WBR 03/01/1999
C	REVISED SHACKLE - PG 2	KWD	02/16/1999	APPROVED/FOUND.	N/A
B	ADDED ROCK BOLT DETAILS	WRH	02/12/1999		
A	ADDED FOUNDATIONS PER ASSUMED SOIL PARAMETERS	WRH	02/12/1999		
REV	DESCRIPTION OF REVISIONS	INI	DATE	DRAWN BY	KWD
From: B1446 DFT - 02/08/99 09:14 Printed from: 204549.DWG - 03/01/1999 09:38 B 03/04/1999 13:38				ENG. FILE NO	A-115450- ARCHIVE 0-B1446
				DRAWING NO	204649-B PAGE 1 OF 9



SECTION DATA									
SPAN HEIGHT	SEC#	LEN	LEGS	BRACES	PART#	BOLT DIAM	BOLT LEN	LEG CONNECTION	
180'-195'	48M	15'	1- 3/4"	1	103919				
140'-180'	48M	20'	1- 3/4"	1	103919	5/8"	4"	12	
80'-140'	48M	20'	2	7/8"	103924	5/8"	4-1/2"	15	
20'-80'	48M	20'	2	7/8"	103924	5/8"	4-1/2"	15	
0'-20'	48M	20'	2		130605	5/8"	4-1/2"	15	

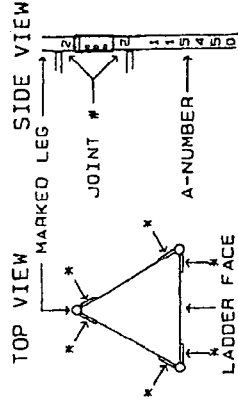
HT.	GUY SIZE	# GUYS	THEORETICAL LENGTH ***		
			EAST (B)	WEST (C)	NORTH
190'	3/4" B.S.	3	245.7'	244.1'	240.0'
170'	3/4" B.S.	6	229.4'	227.8'	223.8'
140'	3/4" B.S.	3	206.1'	204.6'	200.9'
75'	11/16" B.S.	3	163.4'	162.3'	159.7'

*** THEORETICAL LENGTH SHOWN IS NOT THE CUT LENGTH. ADD 5% TO 10% TO VALUE LISTED TO ARRIVE AT CUT LENGTH QUANTITY OF CABLE SHIPPED IS THEORETICAL LENGTH +10%.

HT.	GUY SIZE	TORQ SIZE	LUG PART#	SHCKL SIZE	THMBLE SIZE	TURN BCKLE	PREFORM	INITIAL TENSION **					
								8-30°F @	30°F @	50°F @	90°F @		
190'	3/4" B.S.	12	105064	1"	7/8"	1-1/4"	80-MS-3690	8073#	7655#	7240#	6800#	6364#	5960#
170'	3/4" B.S.	12	105064	7/8"	7/8"	1-1/4"	80-MS-3690	8260#	7780#	7303#	6800#	6303#	5840#
140'	3/4" B.S.	12	105064	1"	7/8"	1-1/4"	80-MS-3690	7136#	6553#	5975#	5440#	4920#	4386#
75'	11/16" B.S.	12	105062	7/8"	3/4"	1-1/4"	80-MS-1035	6943#	6150#	5369#	4640#	3940#	3254#

** TENSIONS SHOWN ARE FOR GUY LINE (A). INTERPOLATION IS PERMITTED FOR OTHER TEMPERATURES. TOLERANCE IS +/- 10% OF INITIAL TENSION SHOWN.

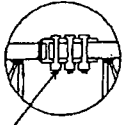
GUY HARDWARE DETAIL



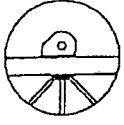
THE MARKED LEG OF EACH SECTION IS STAMPED WITH THE TOWER SERIAL # AT THE TOP OF EACH SECTION AND THE JOINT # AT EACH END OF THE SECTION. JOINTS ARE NUMBERED CONSECUTIVELY STARTING WITH 1 AT THE TOP OF THE BASE SECTION. ASSEMBLE TOWER WITH MARKED LEGS TOGETHER IN PROPER SEQUENCE.

* INDICATES RELATIVE POSITION OF LINE HANGING BRACKETS P/N 132573 AT NOMINAL 5" VERTICAL SPACING.

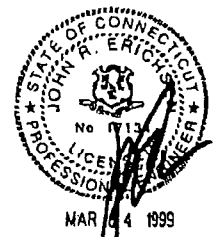
A-325 BOLTS SEE LEG CONNECT TABLE FOR SIZE



VIEW B TYPICAL LEG CONNECTION



VIEW A TYPICAL GUY CONNECTION LUG



WIRELESS SOLUTIONS
GRISWOLD, CONNECTICUT
48M X 195' GUYED TOWER

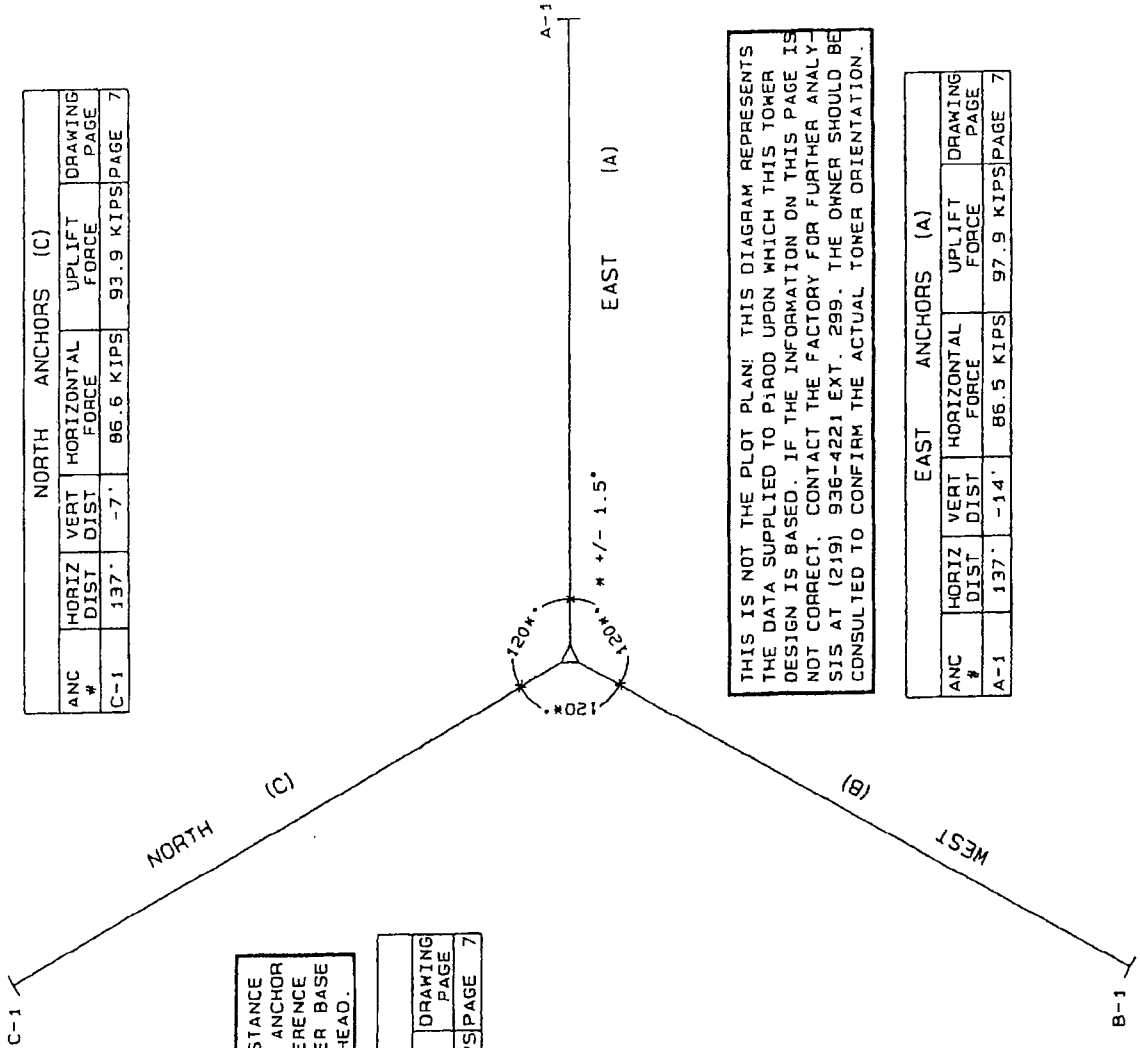
APPROVED/ENG	WBR 03/01/1999
APPROVED/F GUND	N/A

PIROD INC.
1545 Pocco Dr.
Plymouth, IN 46563-0128
219-936-4221

REV	DESCRIPTION OF REVISIONS	INI	DATE
C	REVISED SHACKLE - PG 2	KWD	02/16/1999

ENG FILE NO	A-115450-	DRAWING NO.	204649-B
ARCHIVE	0-81446	PAGE	2 OF 9

NORTH ANCHORS (C)				
ANC #	HORIZ DIST	VERT DIST	UPLIFT FORCE	DRAWING PAGE
C-1	137'	-7'	86.6 KIPS	93.9 KIPS/PAGE 7



NOTE: THE HORIZONTAL DISTANCE IS THE DISTANCE MEASURED FROM THE TOWER BASE PIN TO THE ANCHOR HEAD. THE VERTICAL DISTANCE IS THE DIFFERENCE BETWEEN THE GROUND ELEVATION AT THE TOWER BASE AND THE GROUND ELEVATION AT THE ANCHOR HEAD.

WEST ANCHORS (B)				
ANC #	HORIZ DIST	VERT DIST	UPLIFT FORCE	DRAWING PAGE
B-1	137'	-12'	86.3 KIPS	96.5 KIPS/PAGE 7

THIS IS NOT THE PLOT PLAN! THIS DIAGRAM REPRESENTS THE DATA SUPPLIED TO PIROD UPON WHICH THIS TOWER DESIGN IS BASED. IF THE INFORMATION ON THIS PAGE IS NOT CORRECT, CONTACT THE FACTORY FOR FURTHER ANALYSIS AT (219) 936-4221 EXT. 299. THE OWNER SHOULD BE CONSULTED TO CONFIRM THE ACTUAL TOWER ORIENTATION.

EAST ANCHORS (A)				
ANC #	HORIZ DIST	VERT DIST	UPLIFT FORCE	DRAWING PAGE
A-1	137'	-14'	86.5 KIPS	97.9 KIPS/PAGE 7



MAR 01 1999

WIRELESS SOLUTIONS
GRISWOLD, CONNECTICUT
48M X 195' GUYED TOWER

APPROVED/ENG WBR 03/01/1999

APPROVED/FOUND WBR 03/01/1999

DRAWN BY KWD



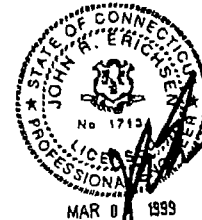
1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

ENG. FILE NO. A-115450-0-81446

DRAWING NO. 204649-B
PAGE 3 OF 9

GENERAL NOTES

1. TOWER DESIGN CONFORMS TO STANDARD EIA/TIA-222-F FOR 90 MPH BASIC WIND SPEED WITH 0.50" RADIAL ICE WITH LOAD DUE TO WIND REDUCED BY 25% WHEN CONSIDERED SIMULTANEOUSLY WITH ICE.
TOWER DESIGN CONFORMS TO STANDARD EIA/TIA-222-F FOR 90 MPH BASIC WIND SPEED WITH NO ICE.
2. MATERIAL: (A) SOLID ROOFS CONFORM TO ASTM A-572 GRADE 50 REQUIREMENTS.
(B) ANGLES CONFORM TO ASTM A-36 REQUIREMENTS.
(C) PIPE CONFORMS TO ASTM A-53 TYPE E, GRADE B REQUIREMENTS. (MIN YIELD STRENGTH=42 KSI)
(D) ALL STEEL PLATES CONFORM TO ASTM A-36 REQUIREMENTS.
3. FINISH: HOT DIPPED GALVANIZED AFTER FABRICATION.
4. ANTENNAS:
195' (12) 08854 AND (6) PD220 ALL USING 1-5/8" LINES MOUNTED ON THREE T-FRAME ASSEMBLIES ✓
185' (12) 08854 AND (6) PD220 ALL USING 1-5/8" LINES MOUNTED ON THREE T-FRAME ASSEMBLIES. ✓
175' (12) 08854 AND (6) PD220 ALL USING 1-5/8" LINES MOUNTED ON THREE T-FRAME ASSEMBLIES. ✓
165' (12) 10" SOLID DISHES USING EM63 CABLE.
155' (12) 08854 AND (6) PD220 ALL USING 1-5/8" LINES MOUNTED ON THREE T-FRAME ASSEMBLIES
5. MIN. WELDS 5/16" UNLESS OTHERWISE SPECIFIED. ALL WELDING TO CONFORM TO AWS SPECS.
6. ALL BOLTS AND NUTS MUST BE IN PLACE BEFORE THE ADJOINING SECTION(S) ARE INSTALLED.
7. ALL A-325 BOLTS ARE TO BE TIGHTENED TO A SNUG TIGHT CONDITION AS DEFINED BY AISC SPECIFICATION UNLESS OTHERWISE NOTED. A MORE QUANTITATIVE ALTERNATIVE APPROACH TO ACHIEVING A SNUG TIGHT CONDITION IS TO TIGHTEN USING THE TORQUE VALUES FROM DRAWING 123107-A.
8. EIA GROUNDING FOR TOWER.
9. ALL TRANSMISSION LINES MUST BE PLACED ON PIROD SUPPLIED LINE HANGER BRACKETS.



From: B1446.DFT - 02/08/99 09:34		WIRELESS SOLUTIONS GRISWOLD CONNECTICUT # 48M X 165' GUYED TOWER	
Printed from: 20464948.DWG - 02/08/1999 09:07 # 03/04/1999 13:38		APPROVED/ENG. WBR 03/01/1999	 1545 Plaza Dr. Plymouth, IN 46583-0128 219-936-4221
		APPROVED/FOUND. N/A	
		DRAWN BY KWD	
		ENG. FILE NO. A-115450-	DRAWING NO. 204649-8
		ARCHIVE 0-B1446	PAGE 4 OF 9

FOUNDATION NOTES

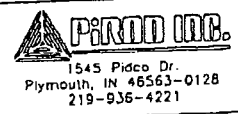
1. ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 10000 PSF. ALLOWABLE PASSIVE PRESSURE ASSUMED TO BE 0 PSF/FT. GROUND WATER TABLE ASSUMED TO BE AT GROUND LEVEL. THE PURCHASER & OWNER/CONTRACTOR MUST VERIFY THAT THE ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED THE ASSUMED SOIL PARAMETERS PER THIS NOTE. AND/OR SHOULD OBTAIN A SOIL REPORT TO DETERMINE THE SOIL CONDITIONS AT THE SITE. FOUNDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT THE ASSUMED SOIL PARAMETERS ARE NOT APPLICABLE FOR THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED.
2. CONCRETE TO BE 4000 PSI @28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR NOT PERMITTED.
3. ALL FILL SHOULD BE PLACED IN LOOSE LEVEL LIFTS OF NO MORE THAN 12" THICK. FILL MATERIALS SHOULD BE CLEAN AND FREE OF ORGANIC AND FROZEN MATERIALS OR ANY OTHER DELETERIOUS MATERIALS. COMPACT FILL TO 97% OF STANDARD PROCTOR MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM 0598.
4. A COLD JOINT IS PERMISSIBLE. AT THE TOWER BASE ONLY. UPON CONSULTATION WITH PIROD. ALL COLD JOINTS SHALL BE COATED WITH BONDING AGENTS PRIOR TO SECOND POUR.
5. THE TOWER BASE FOUNDATION MUST BEAR ON SOLID, COMPETENT BEDROCK. ANY LOOSE, WEATHERED OR FRACTURED MATERIAL MUST BE REMOVED FROM THE EXCAVATION PRIOR TO INSTALLATION OF THE FOUNDATION.
6. A QUALIFIED ON-SITE GEOTECHNICAL ENGINEER IS TO INSPECT THE BEARING SURFACE TO ENSURE THAT IT MEETS OR EXCEEDS THE ALLOWABLE BEARING CAPACITY THAT HAS BEEN ASSUMED. SEE NOTE #1 ABOVE.
7. DIFFICULTIES DURING EXCAVATION ARE TO BE EXPECTED DUE TO THE PRESENCE OF SHALLOM BEDROCK. PNEUMATIC HAMMERS AND/OR RIPPERS MAY BE REQUIRED TO REMOVE MATERIAL FROM THE EXCAVATION.
8. A SUMP PUMP OR OTHER DEWATERING SYSTEM MAY BE REQUIRED TO LOWER THE WATER TABLE TO FACILITATE THE INSTALLATION OF THE FOUNDATION.
9. THE SOIL PARAMETERS WERE ASSUMED BASED ON THE SOIL CLASSIFICATIONS BY NEW ENGLAND ENVIRONMENTAL SERVICES, INC.. DATED: 1/18/99.
10. A CONCRETE MAT MAY BE USED TO LEVEL THE BEARING SURFACE. THE CONCRETE IN THE LEVELING MAT IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS AND CAN NOT EXCEED 12" IN THICKNESS.



MAR 04 1999

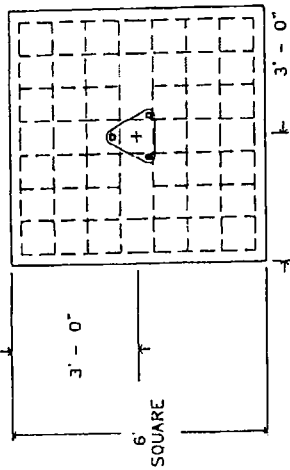
WIRELESS SOLUTIONS
GRISWOLD CONNECTICUT
48M X 195' GUYED TOWER

APPROVED/ENG WBR 03/01/1999
APPROVED/FOUND WBR 03/01/1999

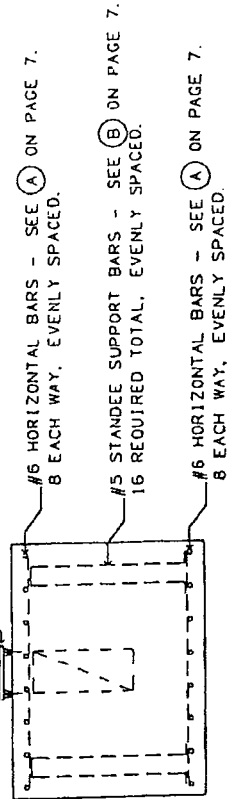


A		ADDED FOUNDATIONS PER ASSUMED SOIL PARAMETERS	WRH	02/12/1999	DRAWN BY	KWD	ENG FILE NO. A-115450- 0-81446	DRAWING NO	204649-B
REV	DESCRIPTION OF REVISIONS			INI	DATE		ARCHIVE	PAGE	5 OF 9
From: 81446.DFT - 02/12/99 12 06 Printed from 2046495A.DWG - 02/12/1999 13 36 @ 03/04/1999 13.38%									

THE FOUNDATIONS DEPICTED ON THIS DRAWING WERE DESIGNED PER ASSUMED SOIL PARAMETERS. ALTHOUGH, IT IS OUR EXPECTATION THAT THE SOIL WILL EXHIBIT SUFFICIENT STRENGTH TO COMPLY WITH THE ASSUMED STRENGTHS. IT IS POSSIBLE THAT THE SOIL MAY NOT EXHIBIT THE REQUIRED STRENGTHS. THEREFORE, IT IS HIGHLY RECOMMENDED THAT THE ASSUMED PROPERTIES BE CONFIRMED BY A GEOTECHNICAL ENGINEER VIA A SOIL REPORT OR AN ON SITE INSPECTION DURING INSTALLATION.



CAGE P/N 107261 CENTERED IN PIER
INSTALL WITH 6" OF THREADS EXPOSED.
FOUNDATION PLATE P/N 107260
GROUT AFTER LEVELING PLATE - BEFORE ERECTING TOWER.



COMPETENT BEDROCK
(SEE NOTE 5, PAGE 5)

NOTE: ALL REBAR IS EQUALLY SPACED AND
REQUIRES MIN. 3" CONCRETE COVER.

TOWER BASE FOUNDATION
6.0 CU YDS. CONCRETE REQUIRED



MAR 04 1999

WIRELESS SOLUTIONS
GRISWOLD CONNECTICUT
48M X 195' GUYED TOWER

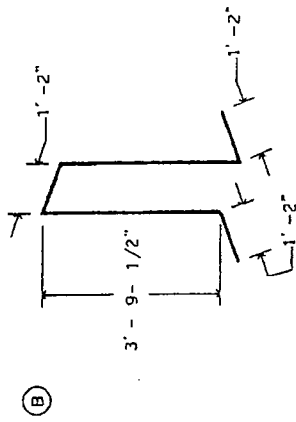


1545 Pidco Dr.
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219-936-4221

B		ADDED ROCK BOLT DETAILS	WRM	02/12/1999	APPROVED/ENG.	WBR	03/01/1999
A		ADDED FOUNDATIONS PER ASSUMED SOIL PARAMETERS	WRM	02/12/1999	APPROVED/FOUND.	WBR	03/01/1999
REV	DESCRIPTION OF REVISIONS		INT	DATE	DRAWN BY	KWD	
From 81446 DFT - 02/12/99 12 06					ENG FILE NO	A-115450-	
Printed from 204649568 DWG * 02/15/1999 10 28 @ 03/04/1999 13 3855					ARCHIVE	Q-81446	
						DRAWING NO.	204649-B
						PAGE	6 OF 9

REBAR SUPPORTS MAY CONSIST OF ANY ACCEPTABLE MEANS OF SECURELY SUPPORTING THE TOP REINFORCEMENT GRID ABOVE THE BOTTOM REINFORCEMENT GRID WHILE MAINTAINING A SEPARATION OF 4" (OUTSIDE REBAR TO OUTSIDE REBAR).

5 REBAR - 16 PIECES REQUIRED TOTAL
 TYPE 26 STANDEE PLACED BETWEEN REBAR GRIDS ON NOMINAL 4' SPACING THROUGHOUT
 APPROX UNBENT LENGTH = 10' - 11 - 7/8"
 APPROX WT = 11.5# EACH, 184# TOTAL



(A)

5' - 6" |

6 REBAR - 32 PIECES REQUIRED TOTAL
 APPROX WT = 8.3# EACH, 264# TOTAL



TOTAL APPROXIMATE REBAR WEIGHT = 448#
 REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS

TOWER BASE FOUNDATION
 REBAR DETAIL - NOT TO SCALE

				WIRELESS SOLUTIONS GRISWOLD, CONNECTICUT # 48M X 195' GUYED TOWER	
				APPROVED/ENG.	WBR 03/01/1999
				APPROVED/FOUND.	WBR 03/01/1999
				DRAWN BY	KWD
REV	DESCRIPTION OF REVISIONS	INI	DATE		
B	ADDED ROCK BOLT DETAILS	WRH	02/12/1999		
A	ADDED FOUNDATIONS PER ASSUMED SOIL PARAMETERS	WRH	02/12/1999		
From: 81446 DFT - 02/12/99 12 06 Printed from 2046497B.DWG = 02/15/1999 10 35 8 03/04/1999 13 38				ENG FILE NO A-115450- Q-B1446	DRAWING NO PAGE 204649-B 7 OF 9



Exhibit 3

Technical Memo

To: Karina Fournier
From: Marlon DePaz-RadioFrequencyEngineer
cc: Jason Overbey
Subject: Power Density Report for CTNL082B
Date: October 3, 2005

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 Guyed Tower at 2172 Glasgo Road, Griswold, 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 185 ft.
- 5) The maximum transmit power from any sector is 1447.17 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 Guyed Tower at 2172 Glasgo Road, Griswold, CT, is 0.00991 mW/cm². This value represents 0.991% of the Maximum Permissible Emission (MPE) standard of 1 milliwatt per square centimeter (mW/cm²) 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 3.86%. The combined Power Density for the site is 4.851% of the M.P.E. standard.

New England Market

Connecticut

Worst Case Power Density



Site:	CTNL082B
Site Address:	2172 Glasgo Road
Town:	Griswold
Tower Height:	190 ft.
Tower Style:	Guyed 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	210 ft.
Antenna Height	185.0 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	2.4360 dB
Total Attenuation	6.9360 dB
Total EIRP per Channel	52.57 dBm
(In Watts)	180.90 W
Total EIRP per Sector	61.61 dBm
(In Watts)	1447.17 W
nsg	9.5640
Power Density (S) =	0.009909 mW/cm^2
T-Mobile Worst Case % MPE =	0.9909%

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	3.8600 %
AT&T Wireless	
Nextel	
Total Excluding T-Mobile	3.8600 %
T-Mobile	0.9909
Total % MPE for Site	4.8509%