July 28, 2006

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@ct.gov www.ct.gov/csc

Karina Fournier Zoning Department T-Mobile 30 Cold Spring Road Rocky Hill, CT 06067

RE:

TS-T-MOBILE-011-060621 - Omnipoint Communications, Inc. request for an order to approve tower sharing at an existing telecommunications facility located at 785 Park Avenue, Bloomfield, Connecticut.

Dear Ms. Fournier:

At a public meeting held July 27, 2006, 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. 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. Please be advised that the validity of this action shall expire one year from the date of this letter.

The proposed shared use is to be implemented as specified in your letter dated June 21, 2006, including the placement of all necessary equipment and shelters within the tower compound.

Thank you for your attention and coop attion.

Colin C. Tait Chairman

CCT/MP/laf

c: The Honorable Sydney Schulman, Mayor, Town of Bloomfield Louie Chapman, Jr., Town Manager, Town of Bloomfield Thomas B. Hooper, Director of Planning, Town of Bloomfield Betsy J.S. Hard, Chief of Police, Bloomfield Police Department Christopher B. Fisher, Esq., Cuddy & Feder LLP Kenneth C. Baldwin, Esq., Robinson & Cole LLP Thomas F. Flynn III, Sprint Nextel Communications



TO TAKE TO STORY OF THE PARTY O

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 www.ct.gov/csc

June 28, 2006

The Honorable Sydney Schulman Mayor Town of Bloomfield Town Hall 800 Bloomfield Avenue P. O. Box 337 Bloomfield, CT 06002-0337

RE:

TS-T-MOBILE-011-060621 - Omnipoint Communications, Inc. request for an order to approve tower sharing at an existing telecommunications facility located at 785 Park Avenue, Bloomfield, Connecticut.

Dear Mayor Schulman:

The Connecticut Siting Council (Council) received this request for tower sharing, pursuant to Connecticut General Statutes § 16-50aa.

The Council will consider this item at the next meeting scheduled for July 27, 2006, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the council by July 20, 2006.

Thank you for your cooperation and consideration.

Very truly yours

S. Lierek Phelps

Executive Director

SDP/ap

Enclosure: Notice of Tower Sharing

c: Thomas B. Hooper, Director of Planning, Town of Bloomfield



ORICINAL

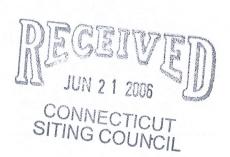


30 Cold Spring Road, Rocky Hill, CT 06067 <u>Karina.Fournier@T-mobile.com</u> 860-796-3988

June 21, 2006

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 785 Park Avenue Blomfield, CT Latitude: 41 49 41 / Longitude: 72 44 00

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 ("Bloomfield Police MP"), in Bloomfield, CT owned by the Town of Bloomfield. T-Mobile and the Town of Bloomfield have agreed to the shared use of the Bloomfield Police MP Tower, as detailed below.

Bloomfield Police MP

The Bloomfield Police MP Tower facility consists of a one hundred thirty six (136') foot monopole ("Tower") owned and operated by the Town of Bloomfield. T-Mobile proposes to locate antennas at a centerline mounting height of one hundred (135') feet. The equipment will be located within a compound at the base of the tower.

Bloomfield Police MP

As shown on the enclosed plans prepared by Natcomm including a site plan and tower elevation of the June 9, 2006, 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 (135) 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 Bloomfield Police MP Tower satisfies the approval criteria set forth in C.G.S. § 16-50aa as follows:

- A. <u>Technical Feasibility</u> 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. Further there is sufficient room at the base of the facility, thus the site plan will not have to be altered.
- B. <u>Legal Feasibility</u> Pursuant to C.G.S. § 16-50aa, the Council has been authorized to issue an order approving shared use of the existing Bloomfield Police MP. (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. <u>Environmental Feasibility</u> 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 site plan at the Bloomfield Police MP 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 T-Mobile would be approximately 52.75% of the standard. See Radio Frequency Memo dated June 20, 2006, annexed hereto as Exhibit 3.
- 5.) The proposed shared use of the Bloomfield Police MP Tower 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. <u>Economic Feasibility</u> The Applicant and the tower owner have agreed to share use of the Bloomfield Police MP Tower 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 Bloomfield area through shared use of the Bloomfield Police MP Tower 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

Bloomfield Police MP Tower 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 Bloomfield Police MP Tower.

Respectfully submitted,

Karina Fournier Zoning Dept.

T-Mobile

30 Cold Spring Road Rocky Hill, CT 06067

(860) 796-3988

cc: Mayor, Sydney T. Schulman Town Manager, Louie Chapman, Jr Exhibit 1

BLOOMFIELD POLICE MP

785 PARK AVE BLOOMFIELD, CT 06002

CTHA140A

CO-LOCATE

GENERAL NOTES

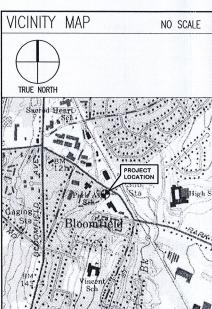
- 1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STRET JURISOCHOMAL COCES BEARNS ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STREAT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND GROWANCES.
- 2. THE ARCHITED/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF MORK. THE CONTRACTOR BOOMS THE JOB IS INVENTIBLES CAUTIONED THAT MINRO MUSSIONS OR ERRORS IN THE DRAWNISS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETION THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- 3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF MOTIFINING (IN WOTHING) THE LESSEE/LUCENSEE REPRESENTATING OF ANY CONFLOTS, ERRORS, OR DISSONS PROR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCEPANCIES THE CONTRACTOR SHALL PRICE THE MORE. COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING CONSENSES.
- 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 FAMILIARZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERBY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DETINED BY THE CONSTRUCTION DRAWNES / CONTRACT DOCUMENT.
- 7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS MOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES THE DESCRIPTIONS. TAKE PRECEDENCE.
- 8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUAS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- 9. THE CONTRACTOR SHALL SUPERMSE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION BEAMS, METHODS, TECHNOLOGY, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMING ALL INE CONTINUOUS SALL BE RESONABLE FOR PROVIDING ALL
 MECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND
 MAINTAINIG ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL
 IMPROVEMENTS AS SHOWN HEREIN.
- 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 COVERNMENT
 AUTHORITY.
- 12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PANING, CURRING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTIOR 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, DERBS, RUBBERS AND REMOVE EQUIPMENT HOT SECOPIED AS REMAINING ON THE PROPERTY, PREMISES SHALL BE LET IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST OR SMIDDES OF ANY MATURE.
- THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- 15. THE CONTRACTOR SHALL NOTIFY THE LESSEZ/LICENSEE REPRESENTATINE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO GROER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESSEZ/LICENSEE REPRESENTATIVE.
- 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 CONTRIBUTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PROOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION HOTIFICATION 72 HOURS PROOR TO ANY EXCAVATION ACTIVITY:

 DIG SAFE SYSTEM (AM, AE, HH, R, W): 1-888-344-7233

 CALL BEFORE YOU DIG (CT): 1-800-922-4455
- OLL BEFORE TOU US (CIT): 1-00U-92Z-440S

 18. PER FCC MANDATE, ENHANCED EMERGENCY (E911)
 SERVICE IS REQUIRED TO MEET MATIONIMOE
 STANDARDS FOR WRELESS COMMUNICATIONS SYSTEMS.
 LESSEL/CLENSEE IMPELMENTATION REQUIRES
 DEPLOTMENT OF EQUIPMENT AND ANTENMAS CENTRALLY
 DEPLOTED ON THIS PLAN, ATTACHED TO OR MOUNTED
 IN CLOSE PROXIMITY TO THE 8TS RADIO CABINTS.
 LESSEL/CLENSE RESERVES THE RIGHT TO MAKE
 RESONABLE MODIFICATIONS TO 6911 EQUIPMENT AND
 LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED
 SPECIFICATIONS.



| | | | <u> </u> | | |
|--|----|-----|----------|----------|--|
| | | | | | |
| | 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

| SHE | SHEET INDEX | | | |
|------|---|-------------|--|--|
| SHT. | DESCRIPTION | REV. NO. | | |
| T-1 | TITLE SHEET | 1 | | |
| | | | | |
| A-1 | PLANS, ELEVATION, DETAIL & NOTES | 1 | | |
| | | | | |
| S-1 | STRUCTURAL DETAILS AND NOTES | 1 | | |
| | | | | |
| E-1 | ELEC. & GROUNDING NOTES, RISERS & DETAILS | 1 | | |
| - | | | | |
| | | | | |
| | | | | |
| - | *(C | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| ET INDEX | | PROJECT SUM | IMARY |
|---|-------------|---------------------------------|---|
| DESCRIPTION | REV. NO. | SITE NUMBER: | CTHA140A |
| TITLE SHEET | 1 | SITE NAME: | BLOOMFIELD POLICE MP |
| Plans, Elevation, Detail & Notes | 1 | SITE ADDRESS: | 785 PARK AVE BLOOMFIELD, CT 06002 |
| | | ASSESSOR'S PARCEL NO.: | MAP: 177-3, BLOCK: 0, LOT: 006 |
| STRUCTURAL DETAILS AND NOTES | 1 | CONSTRUCTION TYPE: | CO-LOCATE |
| ELEC. & GROUNDING NOTES, RISERS & DETAILS | 1 | PROPERTY OWNER: | TOWN OF BLOOMFIELD 800 PARK AVE BLOOMFIELD, CT 06002 |
| | | CONTACT NAME: CONTACT PHONE: | CHIEF BETSY HARD (860) 242-5501 |
| | | APPLICANT: | OMNIPOINT COMMUNICATIONS INC. 100 FILLEY STREET BLOOMFIELD, CT 06002 OFFICE: (860) 692-7100 FAX: (860) 692-7159 |
| | | | |

OMNIPOINT COMMUNICATIONS INC

100 FILLEY STREET BLOOMFIELD, CT 06002 OFFICE: (860) 692-7100 FAX: (860) 692-7159



Tel. (203) 488-0380 Fax (203) 488-8587 Consulting Engineers Project Manager Char Structural Mechanical Electrical

NDI ORD

LEASING

R.F.

ZONING CONSTRUCTION

PROJECT NO: 06052

CHECKED BY: CFC

DEB

SUBMITTALS

1 06/09/06 CONSTRUCTION 0 05/25/06 CONSTRUCTION

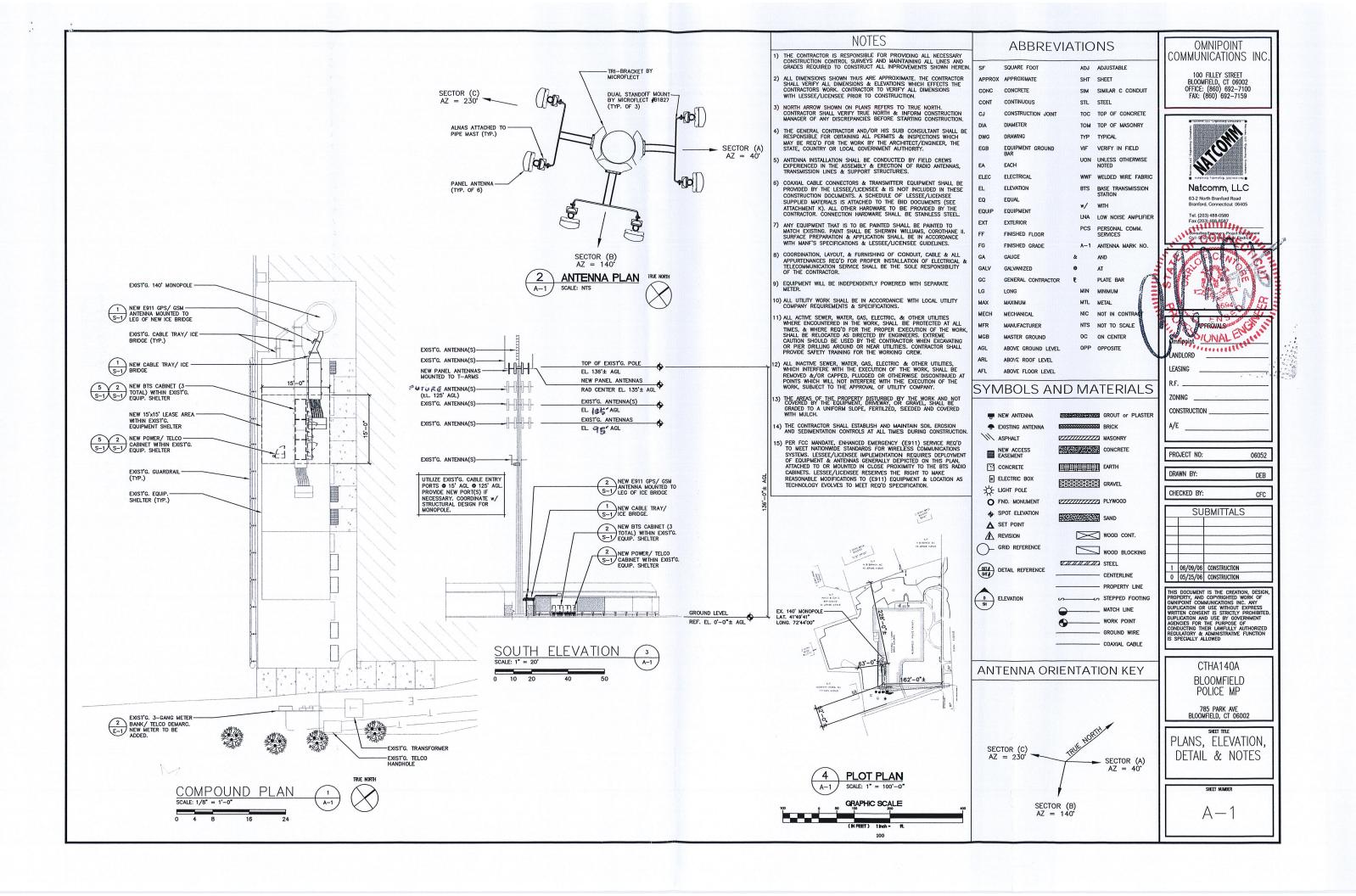
THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY, AND COPYRIGHTED WORK OF ONLY FOR THE COMMINIONI COMMINISTRATIVE FUNCTION IS SPECIALLY ALLOWED

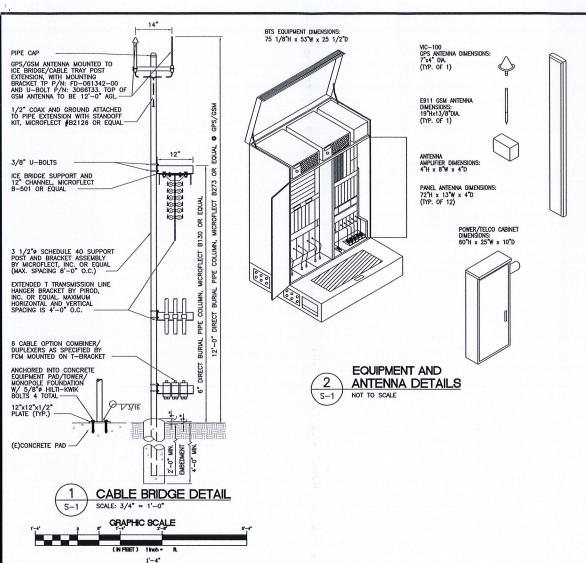
CTHA140A **BLOOMFIELD** POLICE MP

785 PARK AVE BLOOMFIELD, CT 06002

TITLE SHEET

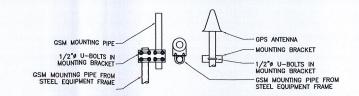
T-1





BTS UNIT

FLOOR OF EXIST'G .- EQUIPMENT SHELTER



GPS/GSM MOUNTING DETAIL SCALE: 1 1/2" = 1'-0'

PPC CABINET
DIMENSIONS: 54"Hx30"Wx10"D SUB-BASE FRAME MOUNTED SUB-BASE FRAME MOUNTED TO EXIST'G. EQUIP. SHELTER FLOOR W/4-5/8"9 HILTI STAINLESS STEEL KWIK BOLTS. SHIM IF REQUIRED TO LEVEL SUB-BASE FRAME. (TYPICAL AT EACH CABINET, TOTAL OF

SECTION AT EQUIPMENT PAD S-1

BTS UNIT

BTS UNIT

STRUCTURAL NOTES:

- 1) DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE & APPLICABLE SUPPLEMENTS, ANSI/ASCE7, EIA/TIA-222-F STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES.
- 2) CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS IN THE FIELD PRIOR TO FABRICATION & ERECTION of ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION of THE CONSTRUCTION MANAGER.
- 3) DESIGN & CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- 4) STRUCTURAL & MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 STRUCT. STEEL UNLESS OTHERWISE INDICATED.
- 5) STEEL PIPE SHALL CONFORM TO ASTM ASOO "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE A, or ASTM AS3 PIPE STEEL BLACK & HOT-DIPPED ZINC-COATED WELDED & 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) & CONFORM TO ASTM A325 "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS & PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 45 (2" IUGN)
- 7) ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE w/ ASTM A123 "ZINC (HOT-DIP GALVANIZED COATINGS on IRON & STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
- 8) ALL BOLTS, ANCHORS & MISCELLANEOUS HARDWARE SHALL BE GALY. IN ACCORDANCE W/ ASTM A153 "ZINC-COATING (HOT-DIP) on IRON & STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- 9) FIELD WELDS, DRILL HOLES, SAW CUTS & ALL DAMAGED GALVANIZED SURFACES 9) FIELD WELDS, DRILL HOLES, SAW CUTS & ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED W/ AN ORGANIC ZINC REPAIR PAINT COMPLYING W/ REQUIREMENTS of ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OF EQUAL THICKNESS of APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW DRY TIME BETWEEN COATS) W/A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 or A153 os APPLICABLE.
- 10) CONTRACTOR SHALL COMPLY w/ AWS CODE FOR PROCEDURES, APPEARANCE & QUALITY of WELDS, & FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS & WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE w/ AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING ETOXX ELECTRODES & WELDING SHALL CONFORM TO AISC % DIJ. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL of STEEL CONSTRUCTION." OF THE CHICAULT. CONSTRUCTION". 9TH EDITION.11.
- 11) INCORRECTLY FABRICATED, DAMAGED or OTHERWISE MISFITTING or NONCONFORMING MATERIALS OF CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDUL OF CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION
- 12) UNISTRUTS SHALL BE FORMED STEEL CHANNEL STRUT FRAMING OF MANUFACTURED TAY UNISTRUT CORP, WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1-5/8'x 1-5/8'x 120A, UNLESS OTHERWISE NOTED, & SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- 13) EPOXY ANCHOR ASSEMBLY SHALL CONSIST of 1/2" DIAMETER STAINLESS STEEL ANCHOR ROD W/ NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE & A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-20 and/or HY-190 SYSTEMS (as SPECIFIED AN DWG.) or ENGINEERS APPROVED EQUAL W/ 4-1/4" MIN. EMBEDMENT DEPTH.
- 14) EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT II Or APPROVED EQUAL INSTALLATION SHALL BE IN ACCORDANCE W/ THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE THREE & ONE HALF (3 1/2) INCHES.
- 15) GRAVEL SUB BASE & CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL.
- 16) CONCRETE FOR FENCE & ICE BRIDGE SUPPORT SHALL BE 3000 PSI AIR ENTRAINED (4%-6%) NORMAL WEIGHT CONCRETE.
- 17) ALL CAST IN PLACE CONCRETE SHALL BE MIXED & PLACED IN ACCORDANCE w/ THE REQUIREMENTS OF ACI 318 & ACI 301.

19) LUMBER SHALL COMPLY w/ THE REQUIREMENTS of THE AMERICAN INSTITUTE of TIMBER CONSTRUCTION & THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED & SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.

20) WHERE ROOF PENETRATIONS ARE REQ'D, THE CONTRACTOR SHALL CONTACT & COORDINATE RELATED WORK w/ THE BUILDING OWNER & THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER OF TO NOT VOID THE EXISTING ROOF WARDDANTY.

21) PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERNCE REQ'D TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. LESSEE/LICENSEE IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT & 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 & LOCATION OF TECHNOLOGY EVOLVES TO MEET REQ'D SPECIFICATION.

OMNIPOINT COMMUNICATIONS INC

> 100 FILLEY STREET BLOOMFIELD, CT 06002 OFFICE: (860) 692-7100 FAX: (860) 692-7159



63-2 North Branford Road

Branford, Connecticut 06405

Consulting Engineers - Project Manage Civil - Structural - Machain Galf Electrical

OFC WALL THE STATE OF THE STATE OF

CONSTRUCTION

ZONING

PROJECT NO: 06052

DRAWN BY: AAJ

CHECKED BY: CFC

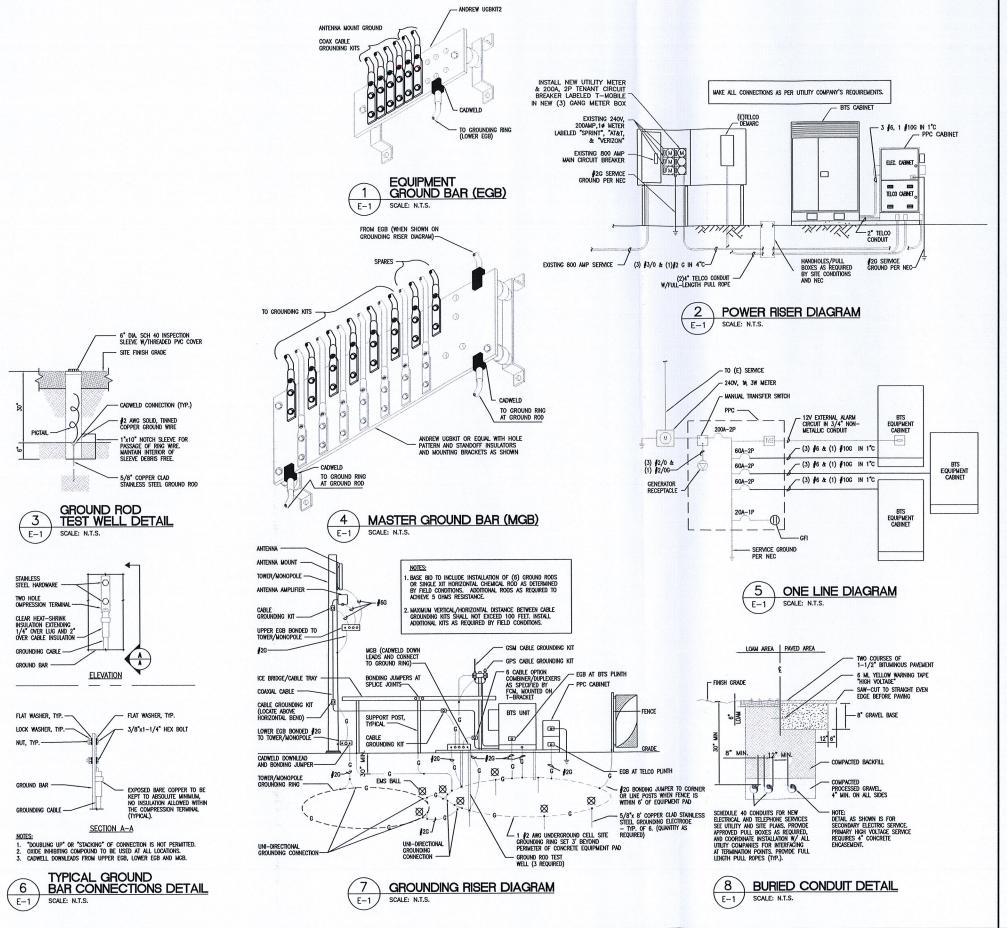
| 150 | SU | BMITTALS |
|-----|----------|--------------|
| | | |
| | | |
| | | |
| 1 | 06/09/06 | CONSTRUCTION |
| 0 | 05/25/06 | CONSTRUCTION |

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY, AND COPYRIGHTED WORK OF OMNIFIONIT COMMUNICATIONS INC. ANY DIPULCATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STREICTLY PROHIBITED, DUPUCATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSE OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY & ADMINISTRATIVE FUNCTION IS SPECIALLY ALLOWED

CTHA140A **BLOOMFIELD** POLICE MP

785 PARK AVE BLOOMFIELD, CT 06002

STRUCTURAL DETAILS AND NOTES



ELECTRICAL LEGEND NEW PANEL BOARD, SURFACE MOUNTED EXISTING PANEL BOARD, SURFACE MOUNTED T

O METER CIRCUIT BREAKER

ㅁ

(F) FUSIBLE DISCONNECT SWITCH, MOUNTED 54"A.F.F. TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH BUILT-IN FUSES, SURFACE MOUNTED TYSS

(J) JUNCTION BOX, SURFACE MOUNTED 18" A.F.F.

HOME RUNS, MINIMUM 2#10 + 1#10G IN 3/4" CONDUIT U.O.N.

CROUND FAULT INTERRUPTER

A.F.F. ABOVE FINISHED FLOOR U.O.N. UNI ESS OTHERWISE NOTED WP

AMPERE KWH KILOWATT - HOUR

CFI

GRC GALVANIZED RIGID CONDUI GROUND

MCB o MASTER CROUND BAR

OMECHANICAL CONNECTION

CADWELD CONNECTION EQUIPMENT GROUND BAR OMECHANICAL CONNECTION EG8 · CADWELD CONNECTION

— G — GROUND COPPER WIRE, SIZE AS NOTED EXPOSED WIRING

COAXWL CABLE 0 5/8"x8' COPPER CLAD STAINLESS STEEL GROUND ROD

 EXOTHERMIC (CADWELD) OR OMECHANICAL (COMPRESSION TYPE) CONNECTION PPC POWER PROTECTION CABINET Ø

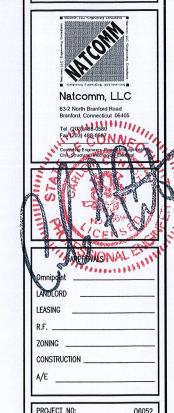
OMNI-DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALL

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.
- 2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLIDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLIDING 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 TELCO WRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALWAIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PYC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEGRIE METAL OR NONINETALLIC CONDUITS.
- 6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- 7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, ORTHWN.
- Run Electrical Conduit or Cable Between Electrical Utility Demarcation Point and T-mobile cell site PPC as indicated on this drawing. Provide full Length Pull Rope. Coordinate Installation with Utility Company.
- RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEWARCATION POINT AND T-MOBILE CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LEWETH PULL ROPE IN INSTALLED TELCO CONDUIT PROVIDE GREENLEE CONDUIT WESSIRNS TAPE AT EACH END.
- Where conduit between BTS and t-mobile cell site PPC and between BTS and t-mobile cell site telco servoe carnet are underground use PVC, schedule 40 conduit. Above the ground portion of these conduits shall be PVC conduit
- 11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEWA 3R ENCLOSURE
- 12. PPC SUPPLIED BY T-MOBILE.
- 13. GROUNDING SHALL COMPLY WITH NEC ART. 250.
- 14. GROUND COAXIAL CARLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CARLE GROUNDING KITS SUPPLIED BY T-MOBILE.
- 15. USE \$\int \text{ COPPER STRANGED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERMISE SPECIFIED) AND \$\int 2\text{ SOULD TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- 17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE MOICHED. GROUNDING LEADS SHOULD MORR BE BENT AT RIGHT ANGLE. ALWAYS MAYE AT LEAST 12" PAUDIS BENDS. \$4 WINE CAN BE BENT AT 6" ROUTS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF T-MOBILE EQUIPMENT OR CABINET OWNSTER GROUND BAY OR GROUNDING RING.
- 19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- 20. CONTRACTOR SHALL PROVIDE AND INSTALL OWNI DIRECTIONAL ELECTRONIC WARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXISTING TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
- 22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND UNA RETURN-LOSS AND DISTANCE— TO—FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.

OMNIPOINT COMMUNICATIONS INC

> 100 FILLEY STREET BLOOMFIELD, CT 06002 OFFICE: (860) 692-7100 FAX: (860) 692-7159



CHECKED BY: FRC **SUBMITTALS** 1 06/09/06 CONSTRUCTION 0 05/25/06 CONSTRUCTION

AAJ

DRAWN BY-

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY, AND COPYRIGHTED WORK OF MONIPPOINT COMMUNICATIONS INC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STREICTLY PROHIBITED DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSE OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY & ADMINISTRATIVE FUNCTION IS SPECIALLY ALLOWED

CTHA140A **BLOOMFIELD** POLICE MP

BLOOMFIELD, CT 06002

ELEC. & GROUNDING NOTES, RISERS, & DETAILS

Exhibit 2

Consulting Engineers

June 7, 2006

Mr. Daniel O'Connor **Ominipoint Communications** 100 Filley Street Bloomfield, Ct 06002

Re: T-Mobile ~ CTHA140A 785 Park Ave., Bloomfield, CT 06002

Natcomm Project No. 06052

Dear Mr. O'Connor,

We have reviewed the proposed T-Mobile antenna installation at the above referenced site. The purpose of the review is to determine the adequacy of an existing 136ft monopole to support the proposed antennas. The review considered the effects of wind load, dead load, ice load and seismic forces in accordance with TIA/EIA-222-F and Connecticut State Building Code. Structural design documents prepared by Paul J. Ford and Company job #29202-0288 dated August 13, 2002 were used as reference material.

The existing antenna configuration is as follows:

- AT&T: Six (6) Allgon 7250.03 mounted on 14ft platform at an elevation of 135 ft.
- Town: One (1) DB205 (18' whip) mounted to 14ft platform at an elevation of 135 ft.
- <u>Town</u>: One (1) Celwave PD1610 (4' whip) mounted to 14ft platform at an elevation of 135 ft.
- <u>Town</u>: One (1) Telewave ANT450D6-9 & F6 (18' whip) mounted to 14ft platform at an elevation of 135ft.
- <u>Verizon:</u> Twelve (12) DB842H65 mounted on 14ft platform at an elevation of 105 ft.
- Town: One (1) DB205 (18' whip) mounted to stiff-arm at an elevation of 85 ft.
- Town: One (1) SRL-312 (2' whip) mounted to stiff-arm at an elevation of 87.5 ft.
- Town: One (1) SCALA MF-900B Rectangular grid at an elevation of 82.5 ft.
- Nextel: Twelve (12) DB844G65 mounted on 14ft platform at an elevation of 95 ft.

The proposed additional antenna loading is as follows:

• <u>T-Mo</u>: Nine (9) RFS APX1516PV-16PVL-E panel antennas w/ eighteen (18) REMEC G20057A1 TMA's mounted on 10ft T-Frames at an elevation of 135 ft in lieu of the existing six (6) panel antennas at that elevation.

T-Mobile's installation at the 135 ft. elevation will preclude the addition of any future carriers without a detailed structural analysis of the existing pole structure.

Based on the information provided, the existing structure meets all the requirements of the TIA/EIA-222-F standards for a basic wind speed of 80mph and Wradial ice.

In conclusion, the existing 136 ft monopole is adequate to support the proposed T-Mobile antennas and related equipment. If there are any questions regarding this matter, please feel free to call.

Submitted by:

Carlo F. Centore, PE Project Manager Exhibit 3



T-Mobile USA Inc.

100 Filley St, Bloomfield, CT 06002-1853

Phone: (860) 692-7100 Fax: (860) 692-7159

Technical Memo

To: Karina Fournier

From: Anand Rapolu - Radio Frequency Engineer

cc: Jason Overbey

Subject: Power Density Report for CTHA140A

Date: June 20, 2006

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 Monopole at 785 Park Ave, Bloomfield, 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 RFS APX16PV-16PVL-E.
- 4) The antenna center line height is 135 ft.
- 5) The maximum transmit power from any sector is 2115.05 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 Monopole at 785 Park Ave, Bloomfield, CT, is 0.02788 mW/cm². This value represents 2.788% 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 49.9638%. The combined Power Density for the site is 52.752% of the M.P.E. standard.

| New England Market | T Mabile |
|---|--|
| Connecticut | T · · Mobile · |
| Worst Case Power Density | |
| Site: | CTHA140A |
| Site Address: | 785 Park Ave |
| Town: | Bloomfield |
| Tower Height: | 140 ft. |
| | |
| Tower Style: | Monopole |
| Base Station TX output Number of channels | 20 W 8 |
| Antenna Model | RFS APX16PV-16PVL-E |
| Cable Size | 1 5/8 in. |
| Cable Length | 180 ft. |
| Antenna Height | 135.0 ft. |
| Ground Reflection | 1.6 |
| Frequency | 1935.0 MHz |
| Jumper & Connector loss | 4.50 dB |
| Antenna Gain | 17.8 dBi |
| Cable Loss per foot | 0.0116 dB |
| Total Cable Loss | 2.0880 dB |
| Total Attenuation | 6.5880 dB |
| Total EIRP per Channel | 54.22 dBm |
| (In Watts) | 264.38 W |
| Total EIRP per Sector | 63.25 dBm |
| (In Watts) | 2115.05 W |
| nsg | 11.2120 |
| Power Density (S) = | 0.027884 mW/cm^2 |
| T-Mobile Worst Case % MPE = | 2.7884% |
| Equation Used: $S = \frac{(1000)(grf)^{2}(Power) 10^{(nsg10)}}{4\pi (R)^{2}}$ | |
| Office of Engineering and Technology (OE | T) Bulletin 65, Edition 97-01, August 1997 |

| Co-Locatio | n Total | |
|--------------------------|---------------|--|
| Carrier | % of Standard | |
| Verizon | 12.1000 % | |
| Nextel | 9.5971 % | |
| Police UHF | 0.4825 % | |
| Police Backup Repeater | 0.9248 % | |
| Hartford County Fire | 6.3394 % | |
| State Police | 19.8499 % | |
| NPSAC | 0.1519 % | |
| RAFS | 0.5182 % | |
| Total Excluding T-Mobile | 49.9638 % | |
| T-Mobile | 2.7884 | |
| Total % MPE for Site | 52.7522% | |