STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

April 16, 2004

Christine Farrell
T-Mobile Real Estate and Zoning
100 Filley Street
Bloomfield, CT 06002

RE: **EM-T-MOBILE-049-040316** - Omnipoint Communications, Inc. (T-Mobile) notice of intent to modify an existing telecommunications facility located at Town Farm Road, Enfield, Connecticut.

Dear Ms. Farrell:

At a public meeting held on April 15, 2004, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated March 16, 2004. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. 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 will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such 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.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable William R. Vayda, Mayor, Town of Enfield
Jose Giner, Director of Planning and Community Development, Town of Enfield
Michele G. Briggs, Southwestern Bell Mobile Systems LLC
Eric Rabon, Spectrasite Communications

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.ct.gov/csc

March 17, 2004

Honorable William R. Vayda
Mayor
Town of Enfield
820 Enfield Street
Enfield, CT 06082

RE: **EM-T-MOBILE-049-040316** - Omnipoint Communications, Inc. (T-Mobile) notice of intent to modify an existing telecommunications facility located at Town Farm Road, Enfield, Connecticut.

Dear Mayor Vayda:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for April 15, 2004 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/cm

Enclosure: Notice of Intent

c: Jose Giner, Director of Planning and Community Development, Town of Enfield

EM-T-MOBILE-049-040316

T-Mobile
Get more from life®

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

March 16, 2004

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

RE: **Exempt Modification – Existing Wireless Telecommunications Facility**
Town Farm Road, Enfield, Connecticut
Latitude: 41-57-57.25 / Longitude: 72-33-9.69

Dear Chairman Katz:

Omnipoint Communications, Inc. a.k.a. T-Mobile (formerly Voicestream Wireless Corp.) ("T-Mobile") intends to co-locate antennas on the existing one hundred fifty two (152) foot monopole located at Town Farm Road in Enfield. The tower is currently occupied by Cingular at the 152' level.

Please accept this letter as notification pursuant to R.C.S.A §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A §16-50j72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Enfield Mayor, Patrick Tallarita.

The tower is owned and operated by SprectraSite Communications, Inc. ("SpectraSite"). It's coordinates are N 41° 57' 57.25" and W 72° 33' 9.69". The facility consists of a one hundred fifty two (152) foot monopole surrounded by an approximate 78'X93' fenced in compound.

The proposed modifications will not result in any substantial adverse environmental affect and therefore fall squarely within the activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modification will not increase the overall height of the existing tower. T-Mobile's antennas will be mounted with their centerline at the 140' level on the 152' tower. (See Exhibit A, CD's)
2. The proposed installation of six (6) antennas and 3 equipment cabinets will not require an extension of the site boundaries. (See Exhibit A, CD's)

3. The proposed antenna modification will not increase the noise levels at the facility by six decibels or more.
4. The operation of the antennas will not increase radio frequency (RF) power density levels at the facility at or above the Federal Communications Commission (FCC) adopted safety standard. The worst-case RF density calculations for a point at the base of the tower for T-Mobile antennas would be 3.8972 % of the FCC standard. Pursuant to RF Exposure Analysis prepared for Cingular the cumulative worst-case RF power density calculation for all current carriers and T-Mobile would be 8.7972% of the applicable FCC standard. A copy of the report is attached. (See Exhibit B, Power Density Calculations)

Also attached, please find an engineer's certification, verifying that the tower can support the antennas and associated equipment of T-Mobile, and Cingular. (See Exhibit C)

For the foregoing reasons, T-Mobile respectfully submits that the proposed antenna installation at the SpectraSite, Tower Farm Road Tower constitutes an exempt modification under R.C.S.A § 16-50j-72(b)(2).

T-Mobile's attached construction drawings, Exhibit A, reflect six (6) proposed antennas and three (3) future antennas. T-Mobile is only applying for the six (6) proposed antennas at this time. The structural report, Exhibit C, reflects the six (6) antennas. The RF Power Density Calculation, Exhibit B, reflects the existence of nine (9) antennas. The proposed six (6) will only lessen the emissions well beyond the applicable standard and fall well below the FCC standard. If you have any questions or need further information please feel free to contact me.

Very Truly Yours

Christine Farrell
T-Mobile Real Estate and Zoning

Attachments

Cc: Mayor Patrick Tallarita

EXHIBIT A

T-Mobile

SPECTRASITE–ENFIELD

TOWN FARM ROAD
ENFIELD, CT 06082

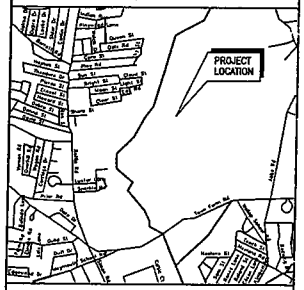
CT–11–534A

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 T–MOBILE 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 T–MOBILE 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 T–MOBILE 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, VT, NH, RI, VT): 1–888–344–7233
CALL BEFORE YOU DIG (CT): 1–800–922–4455

VICINITY MAP



VICINITY MAP
Not To Scale

N

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 AND GROUNDING NOTES, RISERS, AND DETAILS	0

PROJECT SUMMARY

SITE NUMBER:	CT–11–534A
SITE NAME:	SPECTRASITE–ENFIELD
SITE ADDRESS:	TOWN FARM ROAD ENFIELD, CT 06082
ASSESSOR'S PLAT/MAP:	71
ASSESSOR'S LOT/PARCEL:	3
CONSTRUCTION TYPE:	CO–LOCATE
STRUCTURE OWNER:	SPECTRASITE COMMUNICATIONS 146 EAGLE ROCK ROAD STOUGHTON, MA 02072 CONTACT: CRAIG HARTMAN PHONE: (781) 297–7725
PROPERTY OWNER:	LARRY S. CHASE TOWN FARM ROAD ENFIELD, CT 06082
APPLICANT:	OMNIPOINT COMMUNICATIONS, INC. 100 FILLEY STREET BLOOMFIELD, CT 06002

DO NOT SCALE DRAWINGS

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

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

CHA
CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
2136 SILAS DEANE HIGHWAY
ROCKY HILL, CT 06067
(860) 257-4557

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

APPROVALS

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

PROJECT NO: 10585–1021
DRAWN BY: PAL
CHECKED BY: RJT

SUBMITTALS

0	06/23/03	CONSTRUCTION

CT–11–534A
SPECTRASITE–ENFIELD
TOWN FARM ROAD
ENFIELD, CT 06082

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T–1

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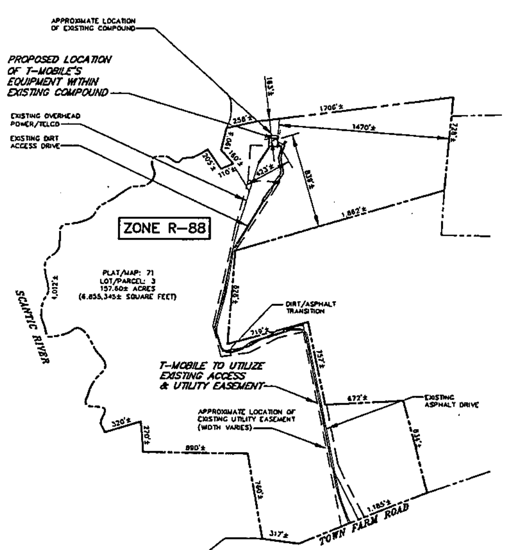


NOTE

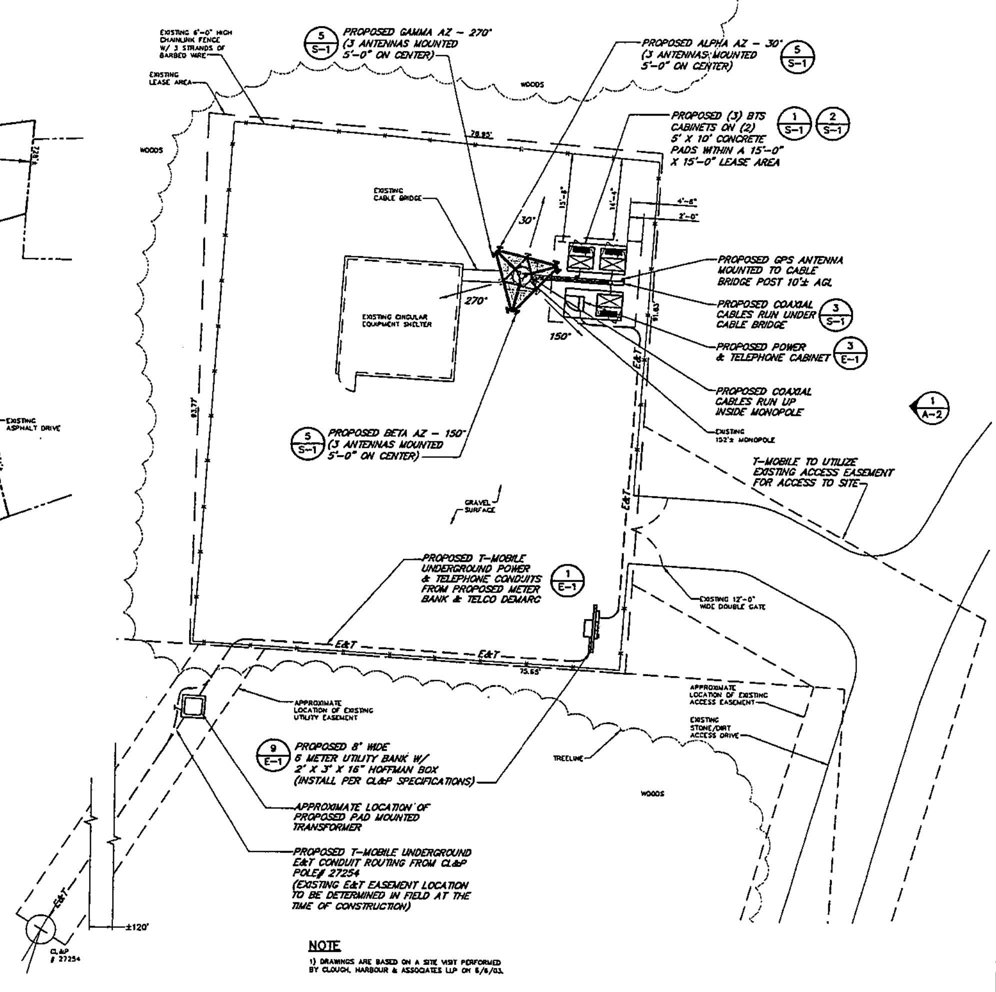
1) PLOT PLAN BASED ON TAX MAP FROM TOWN OF ENFIELD AND PLANS PREPARED BY GIRARD & CO. ENGINEERS ON 06/06/85 FOR SOUTHERN NEW ENGLAND TELEPHONE.
2) SETBACKS ARE FROM PROPERTY LINES TO T-MOBILE EQUIPMENT.

GRAPHIC SCALE (IN FEET) — TRUE NORTH

PLOT PLAN (1/A-1) SCALE: 1" = 500'

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 K). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTION 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

1) DRAWINGS ARE BASED ON A SITE VISIT PERFORMED BY CLOUGH, HARBOUR & ASSOCIATES LLP ON 6/6/03.

GRAPHIC SCALE (IN FEET) — TRUE NORTH

PARTIAL SITE / EQUIPMENT PLAN (2/A-1) SCALE: 1" = 10'

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

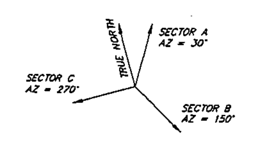
ABBREVIATIONS

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
EGB	EQUIPMENT GROUND BAR	W/	WITH
EA	EACH	BTS	BASE TRANSMISSION STATION
ELEC	ELECTRICAL		
EL	ELEVATION	LNA	LOW NOISE AMPLIFIER
EQ	EQUAL		
EQUIP	EQUIPMENT	PCS	PERSONAL COMMUNICATIONS SERVICES
(E)	EXISTING		
EXT	EXTERIOR		
FF	FINISHED FLOOR	A-1	ANTENNA MARK NO.
FG	FINISHED GRADE		
GA	GAUGE	℄	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	GROUT / PLASTER
EXISTING ANTENNA	BRICK
ASPHALT	MASONRY
NEW ACCESS EASEMENT	CONCRETE
CONCRETE	EARTH
ELECTRIC BOX	GRAVEL
LIGHT POLE	PLYWOOD
FND. MONUMENT	SAND
SPOT ELEVATION	WOOD CONT.
SET POINT	WOOD BLOCKING
REVISION	STEEL
GRID REFERENCE	CENTER LINE
DETAIL REFERENCE	PROPERTY LINE
	STEPPED FOOTING
ELEVATION	MATCH LINE
	WORK POINT
	GROUND WIRE
SECTIONS & DETAILS	COAXIAL CABLE

ANTENNA ORIENTATION KEY



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STATE OF CONNECTICUT — JOHN P. SOBIECK — No. 17827 — LICENSED PROFESSIONAL ENGINEER

APPROVALS
LANDLORD ____
LEASING ____
R.F. ____
ZONING ____
CONSTRUCTION ____
A/E ____

PROJECT NO: 10585-1021
DRAWN BY: PAL
CHECKED BY: RJT

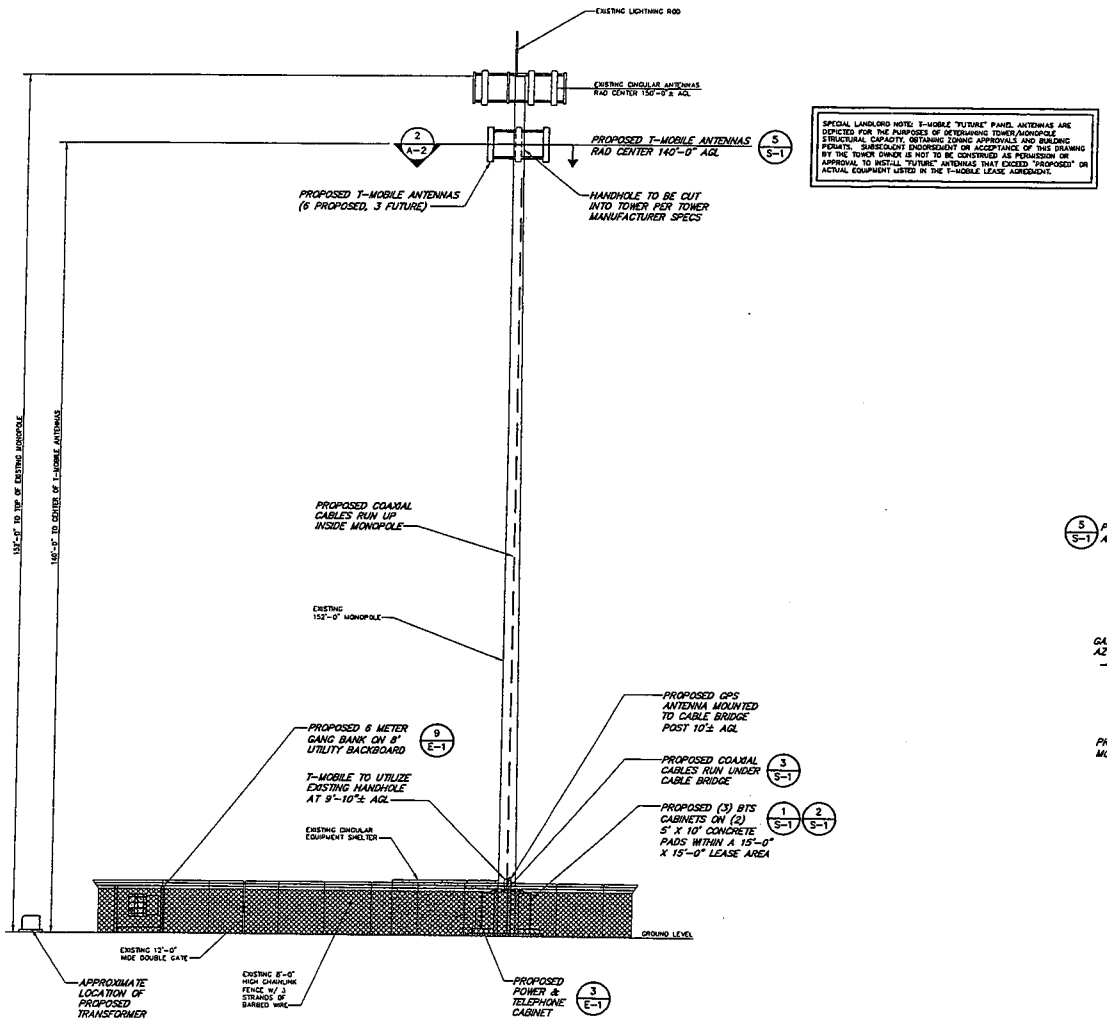
SUBMITTALS

0	06/23/03	CONSTRUCTION

CT-11-534A
SPECTRASITE–ENFIELD
TOWN FARM ROAD
ENFIELD, CT 06082

SHEET TITLE
PLOT PLAN & PARTIAL SITE PLAN

SHEET NUMBER
A-1



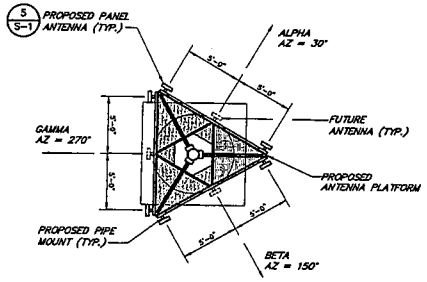
SPECIAL LANDLORD NOTE: T-MOBILE "FUTURE" PANEL ANTENNAS ARE DEPICTED FOR THE PURPOSES OF DETERMINING TOWER/MONOPOLE STRUCTURAL CAPACITY, OBTAINING ZONING APPROVALS AND BUILDING PERMITS. SUBSEQUENT ENDORSEMENT OR ACCEPTANCE OF THIS DRAWING BY THE TOWER OWNER IS NOT TO BE CONSTRUED AS PERMISSION OR APPROVAL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

EAST ELEVATION (1 A-2)
SCALE: 1" = 10'



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. T-MOBILE IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GEOGRAPHICALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. T-MOBILE RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

T-Mobile
100 FILLEY STREET
BLOOMFIELD, CT 06002
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FAX: (860)-692-7159

CHA
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ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
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ROCKY HILL, CT 06067
(860) 257-4857

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

APPROVALS

LANDLORD	
LEASING	
R.F.	
ZONING	
CONSTRUCTION	
A/E	

PROJECT NO:	10585-1021
DRAWN BY:	PAL
CHECKED BY:	RJT

SUBMITTALS

0	06/23/03	CONSTRUCTION

CT-11-534A
SPECTRASITE-ENFIELD
TOWN FARM ROAD
ENFIELD, CT 06082

SHEET TITLE
SITE ELEVATION & ANTENNA PLAN

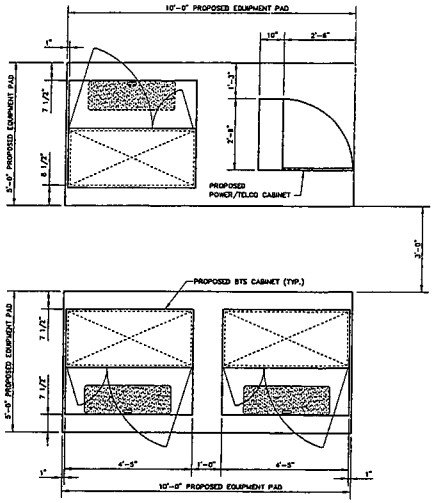
SHEET NUMBER
A-2

JT 6/20

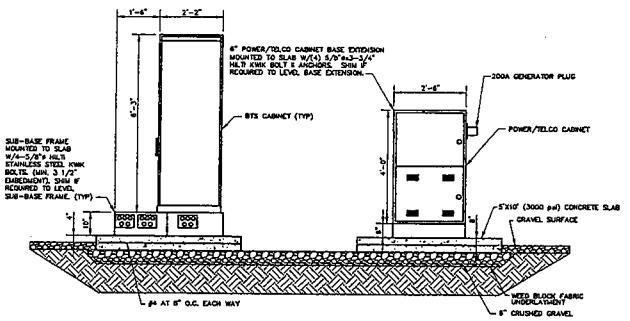
STRUCTURAL NOTES:

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 5/8" 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 DONDON GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN 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 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 DLI. 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 MISFITTING 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"d x 1 5/8"w13GA, 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 SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-20 AND OR HY-150 SYSTEMS (AS SPECIFIED AH 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

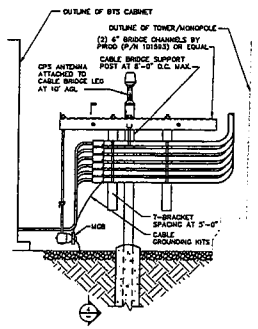
    ALL EXPOSED EDGES SHALL BE PROVIDED WITH A 3/4"x3/4" CHAMFER UNLESS NOTED OTHERWISE.
19. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE 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.

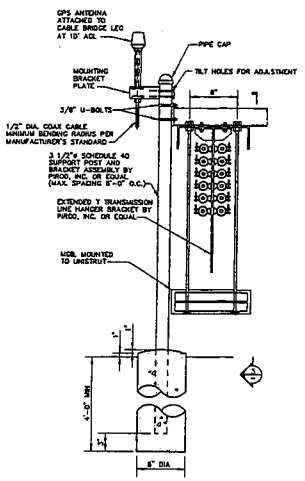


SECTION AT EQUIPMENT PAD (2 / S-1)
SCALE: N.T.S.

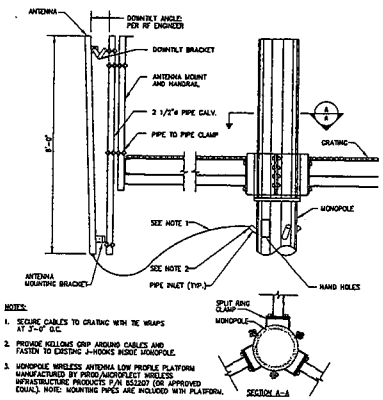


NOTES:
1. REFER TO EQUIPMENT PLAN ON SHEET A-1 FOR DIMENSIONS OF CABLE BRIDGE.
2. INSTALL CABLE BRIDGE PER MANUFACTURER'S RECOMMENDATIONS.

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



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



NOTES:
1. SECURE CABLES TO GRATING WITH TIE WRAPS AT 3'-0" O.C.
2. PROVIDE KELLEMS GRIP AROUND CABLES AND FASTEN TO EXISTING J-HOOKS INSIDE MONOPOLE.
3. MONOPOLE WIRELESS ANTENNA LOW PROFILE PLATFORM MANUFACTURED BY PIROD/MICROFLECT WIRELESS INFRASTRUCTURE PRODUCTS P/N B53207 (OR APPROVED EQUAL). NOTE: MOUNTING PIPES ARE INCLUDED WITH PLATFORM.

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

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APPROVALS

LANDLORD	
LEASING	
R.F.	
ZONING	
CONSTRUCTION	
A/E	

PROJECT NO:	10585-1021
DRAWN BY:	JJS
CHECKED BY:	JT

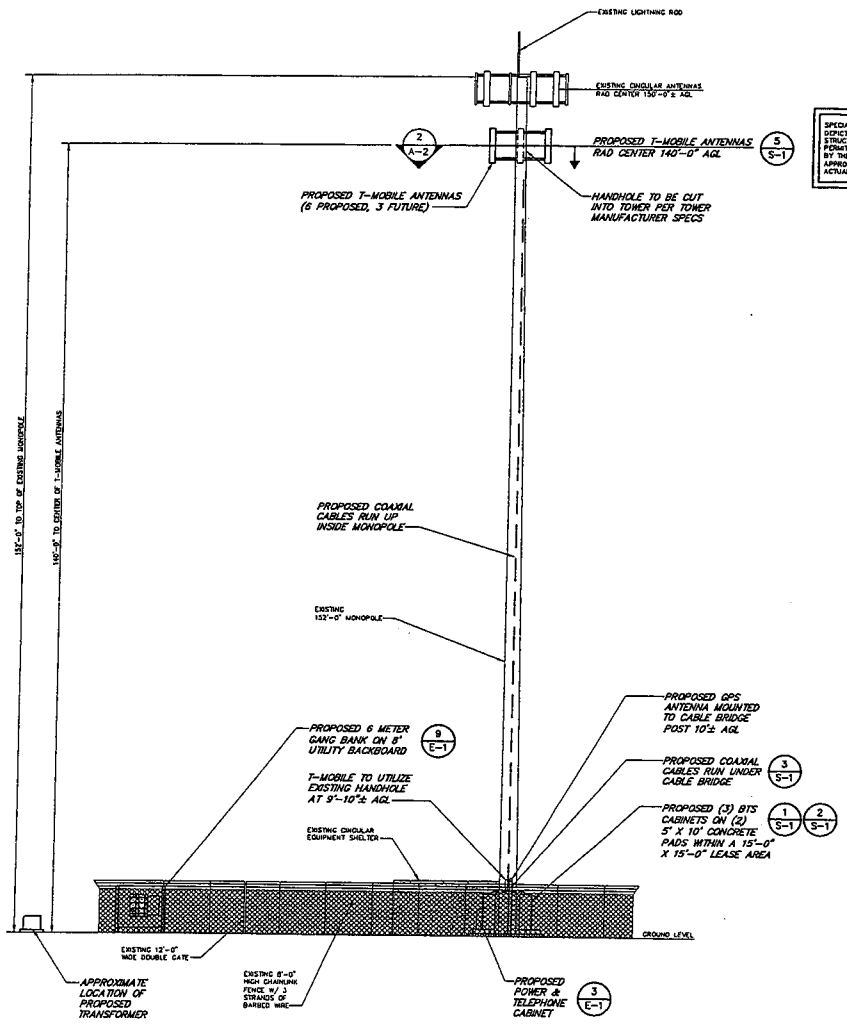
SUBMITTALS

0	06/23/03	CONSTRUCTION

CT-11-534A
SPECTRASITE-ENFIELD
TOWN FARM ROAD
ENFIELD, CT 06082

SHEET TITLE
STRUCTURAL NOTES & DETAILS

SHEET NUMBER
S-1



SPECIAL LANDLORD NOTE: T-MOBILE "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 T-MOBILE 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

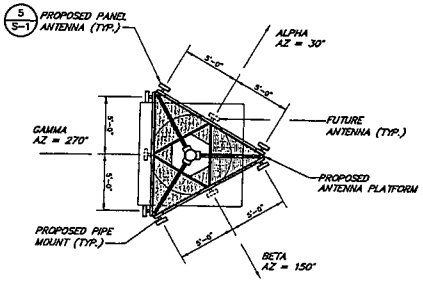
10 0 5 10 20 40

(IN FEET)

EAST ELEVATION 1 A-2

SCALE: 1" = 10'

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



GRAPHIC SCALE

0 1.5 3 5 10 20

(IN FEET)

TRUE NORTH

ANTENNA MOUNTING PLAN 2 A-2

SCALE: 1" = 5'

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APPROVALS

LANDLORD _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 10585-1021

DRAWN BY: PAL

CHECKED BY: RJT

SUBMITTALS

0	06/23/03	CONSTRUCTION

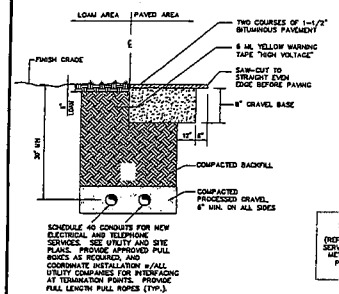
CT-11-534A
SPECTRASITE-ENFIELD
TOWN FARM ROAD
ENFIELD, CT 06082

SHEET TITLE

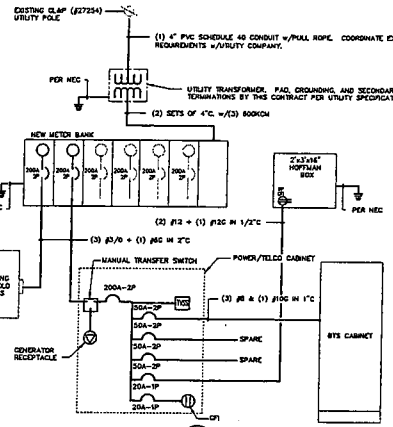
SITE ELEVATION & ANTENNA PLAN

SHEET NUMBER

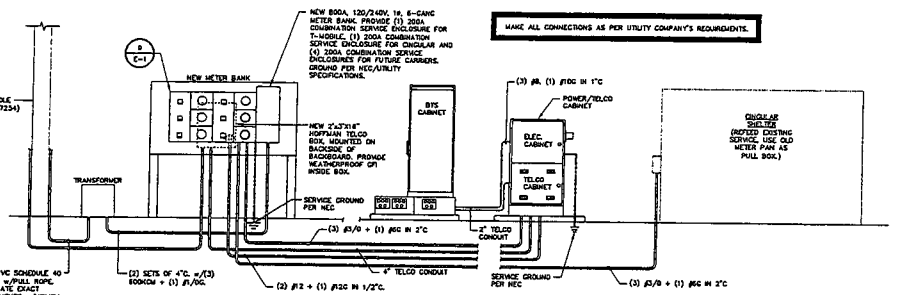
A-2



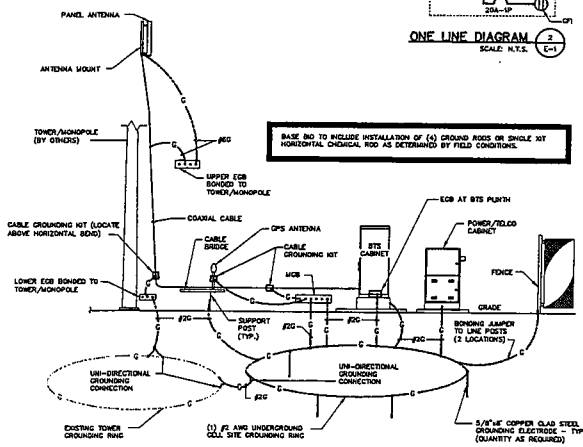
BURIED CABLE DIAGRAM (1, C-1)
SCALE: N.T.S.



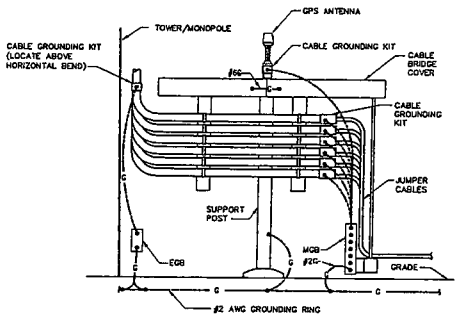
ONE LINE DIAGRAM (2, E-1)
SCALE: N.T.S.



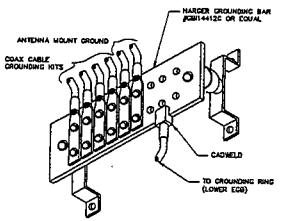
POWER RISER DIAGRAM (3, E-1)
SCALE: N.T.S.



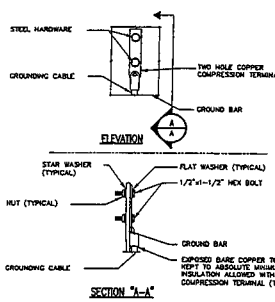
GROUNDING RISER DIAGRAM (4, E-1)
SCALE: N.T.S.



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

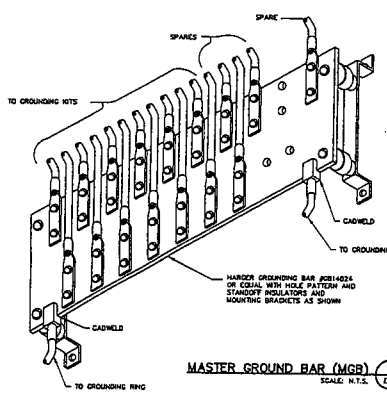


EQUIPMENT GROUND BAR (EGB) (6, E-1)
SCALE: N.T.S.

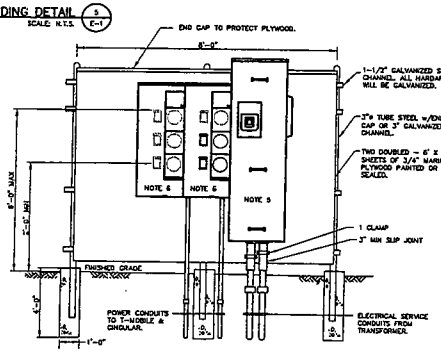


NOTES:
1. "DOUBLING UP" OR "STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

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



MASTER GROUND BAR (MGB) (8, E-1)
SCALE: N.T.S.



FRONT VIEW

NOTES:
1. ALL UNUSED METERS TO BE BARREL LOCKED BY CLASP.
2. INDIVIDUAL METER SOCKETS WITH INDIVIDUAL BARRIERS AS WELL AS PROVISIONS FOR SEALS AND BARREL LOCKS.
3. SINGLE-PHASE 120/208 VOLT NETWORK, THREE-PHASE 208/102 VOLT NETWORK AND THREE-PHASE 480/277 VOLT SERVICES SHALL BE COLD SEQUENCED.
4. ALL METERS MUST BE PROPERLY IDENTIFIED "UNIT #".
5. SQUARE D MAIN LUG CATALOG #EDH1600CDU OR APPROVED EQUIVALENT.
6. SQUARE D METER PACK CATALOG #QOMR13200 OR APPROVED EQUIVALENT.

METERBANK - ELEVATION (9)

ELECTRICAL LEGEND

	NEW PANEL BOARD, SURFACE MOUNTED
EXIST.	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
C	GROUND
	GROUND
MGB	MASTER GROUND BAR 1/4"x4"x24" COPPER
EGB	EQUIPMENT GROUND BAR 1/4"x4"x12" OR 1/4"x4"x16" COPPER
#G	GROUND COPPER WIRE, SIZE AS NOTED
	EXPOSED WIRING
	COAXIAL CABLE
	5/8"ø" COPPER CLAD STEEL GROUND ROD
	EXOTHERMIC (CADWELD) OR MECHANICAL (COMPRESSION TYPE) CONNECTION

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, THWN, OR THHN INSULATION.
8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND T-MOBILE 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 T-MOBILE CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING. PROVIDE PULL LENGTH PULL ROPE INSTALLED IN TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
10. WHERE CONDUIT BETWEEN BTS AND T-MOBILE CELL SITE POWER PEDESTAL AND BETWEEN BTS AND T-MOBILE 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 T-MOBILE.
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 T-MOBILE.
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 MOLD. 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 HAVE AT LEAST 12" RADIUS BENDS, #6 WIRE CAN BE BENT AT 8" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 7 FEET OF T-MOBILE 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.

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

PROJECT NO: 10585-1021
DRAWN BY: JMR
CHECKED BY: CMM

SUBMITTALS

0	06/23/03	CONSTRUCTION

CT-11-534A
SPECTRASITE-ENFIELD
TOWN FARM ROAD
ENFIELD, CT 06082

SHEET TITLE
ELECTRICAL AND GROUNDING NOTES, RISERS, AND DETAILS

SHEET NUMBER
E-1

RAP JMR 6/20/03

EXHIBIT B

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

Technical Memo

To: Karina Hansen
From: Hassan Syed - Radio Frequency Engineer
cc: Overbey Jason
Subject: Power Density Report for CT11534A
Date: June 26, 2003

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 Townfarm Road, Enfield, 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 140 ft.
5) The maximum transmit power from any sector is 3189.62 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 Townfarm Road, Enfield, CT, is 0.03897 mW/cm^2. This value represents 3.897% 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 4.9%. The combined Power Density for the site is 8.797% of the M.P.E. standard.

New England Market

Connecticut

Worst Case Power Density

T-Mobile

Site:	**CT11534A**
Site Address:	**Townfarm Road**
Town:	**Enfield**
Tower Height:	**152 ft.**
Tower Style:	**Monopole**
Base Station TX output	17 W
Number of channels	8
Antenna Model	EMS RR90-17-02DP
Cable Size	1 5/8 in.
Cable Length	155 ft.
Antenna Height	140.0 ft.
Ground Reflection	1.6
Frequency	1935.0 MHz
Jumper & Connector loss	1.00 dB
Antenna Gain	16.5 dBi
Cable Loss per foot	0.0116 dB
Total Cable Loss	1.7980 dB
Total Attenuation	2.7980 dB
Total EIRP per Channel	56.01 dBm
(In Watts)	398.70 W
Total EIRP per Sector	65.04 dBm
(In Watts)	3189.62 W
nsg	13.7020
Power Density (S) =	**0.038972 mW/cm^2**
Voicestream Worst Case % MPE =	**3.8972%**

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	4.9000 %
Sprint PCS	
AT&T Wireless	
Nextel	
Total Excluding Voicestream	**4.9000 %**
Voicestream	3.8972
Total % MPE for Site	**8.7972%**

EXHIBIT C

SpectraSite

CT-0025
3/2/2004

Level 1 Structural Evaluation [1]		
Site Number & Name	**CT-0025 Enfd - Enfield**	
Site Address	820 Enfield Street Enfield, CT 06082	
Tower Description	**152 ft ITT Meyer Monopole**	
Standards & Codes [2]	ANSI/TIA/EIA-222-F (1996) **80 mph (Hartford County) w/ 1/2" radial ice**	1996 BOCA National Building Code **80 mph w/ 1/2" radial ice**

Table 1: Existing and Proposed Antenna Configuration

HEIGHT (ft)	ANTENNA MODEL & MOUNT TYPE	CARRIER	COAX SIZE	[I]/[O][a]	STATUS
162 153	(1) DECIBEL DB809K-YP (9) CSS DUO1417-8686 on Platform w/Handrails	ARCH WIRELESS Cingular	(1) 1-5/8" (9) 7/8"	I	Existing
154	**(1) 6' Yagi on Platform w/Handrails**	**ARCH WIRELESS**	**(1) 1/2"**	**I**	**Remove Existing**
140	**(6) EMS RR90-17-02DP on PiRod Low Profile Platform (Part 852301)**	**T-Mobile**	**(12) 1-5/8"**	**I[b]**	**Proposed**
10	**(1) Channel Master 1.2 Meter on Pipe Mount**	**ARCH WIRELESS HOLDING**	**(1) RG6**	**O**	**Proposed**

[a] [I]/[O] denotes coax installed inside or outside the monopole, respectively.
[b] Coax to be run inside monopole up to 120', run lines outside from 120'to 140' in one row around monopole face.

The subject tower and foundation ***are adequate*** to support the above stated loads in conformance with specified requirements. [3]

DOUGLAS K. PINEO
No. 21110
LICENSED PROFESSIONAL ENGINEER
STATE OF CONNECTICUT

MAR 0 2 2004

Analysis prepared by:

Brenton S. Lockamy, P.E.
Project Engineer
(919) 466-5536

Douglas K. Pineo, P.E.
Senior Design Engineer

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Connecticut.

[1] The existing and proposed loads of *Table 1* are compared to the original tower design loads or previous analysis.

[2] The design wind criteria are compared to the current code requirements.

[3] The tower should be re-evaluated as future loads are added or if actual loads are found different from those mentioned in *Table 1*.

Miscellaneous

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

Mayor Patrick Tallarita
Town of Enfield
820 Enfield Street
Enfield, CT 06082

RE: **Exempt Modification – Existing Wireless Telecommunications Facility**
Town Farm Road, Enfield, Connecticut

Dear Mayor Tallarita:

Omnipoint Communications, Inc. a.k.a. T-Mobile (formerly Voicestream Wireless Corp.) intends to co-locate antennas on the existing monopole located at Town Farm Road in Enfield. 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