METROPCS MASSACHUSETTS, LLC NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 4 OLIVER ROAD, ENFIELD, CT 06082

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. Seq. ("PUESA"), and Sections 16-50j-72(b) and 16-50j-73 of the Regulations of Connecticut State Agencies ("R.C.S.A") adopted pursuant to the PUESA, Metro PCS, Inc., by and through its agent MetroPCS Massachusetts, LLC ("MetroPCS") and as successor in interest to Pocket Communications hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 4 Oliver Road, Enfield, Connecticut 06082. The telecommunications facility is owned by Crown Castle, LLC and leased to MetroPCS

MetroPCS' Proposed Wireless Modifications

MetroPCS as successor in interest to Pocket Communications achieved an initial exempt modification approval from the Siting Council to install antennas and related ground equipment on July 28, 2011. The facility consists of a one hundred sixty two (162) foot high self-support monopole telecommunications tower (the "Tower") within a fenced compound. MetroPCS now intends to modify the facility as shown on the enclosed plans prepared by Chappell Engineering Associates, LLC and annexed hereto as Exhibit 1. The modifications will consist of ground work only and includes installing equipment within the existing MetroPCS lease area. The modifications consist of removing the one (1) existing radio cabinet and replacing with one (1) proposed radio cabinet and one (1) proposed battery cabinet. The existing ppc cabinet will remain resulting in a final ground configuration of one (1) radio cabinet, one (1) battery cabinet and one (1) ppc cabinet all within the existing metroPCS lease area. MetroPCS will not be modifying the existing antennas and related equipment installed on the tower at this time and therefore; will not affect the structural capacity of the existing tower.

In accordance with R.C.S.A Section 16-50j-73, a copy of this submission is being sent to **Town Manager – Matthew W. Coppler, 820 Enfield Street, Enfield, CT 06082**. A copy of this submission is also being sent to **Oliver Road Holding, LLC, 4 Oliver Road, Enfield, CT 06082,** the property owner on which the tower is located.

MetroPCS' Proposed Wireless Modifications Constitutes An "Exempt Modification"

The proposed modification to the Oliver Road Facility constitutes an exempt modification of an existing facility provided for in R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

1) The proposed modifications are restricted to ground equipment only and will not result in an increase in the height of the existing tower.
2) The proposed modifications will not require expansion of the site boundaries.

TRM INC. – Jacky Clifford, 16 Chestnut Street, Suite 220, Foxboro, Sharon, MA 02035
Contact: 508-446-1047 or e-mail jclifford@trmcom.com

3) The proposed modifications will not increase noise levels at the facility by six decibels or more.
4) MetroPCS' proposed facility will not increase the cumulative radio frequency electromagnetic radiation power density at the Tower site's boundary to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. A cumulative General Power Density table for MetroPCS' proposed modified facility is included as Exhibit 2.

For all the foregoing reasons, MetroPCS' respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A Section 16-50j-72(b)(2)

Respectfully submitted,

TRM Inc. – Jacky Clifford, 16 Chestnut Street, Suite 220, Foxborough, MA 02035
Contact: 508-446-1047 or jclifford@trmcom.com
On behalf of MetroPCS Massachusetts, LLC

cc: **Town Manager – Matthew W. Coppler, 820 Enfield Street, Enfield, CT 06082**

Property Owner: Oliver Road Holding, LLC, 4 Oliver Road, Enfield, CT 06082

Exhibit 1

Site Plan

metroPCS.
Unlimit Yourself.

HFC1552A

CROWN OLIVER ROAD ENFIELD

CROWN SITE #806373

OLIVER ROAD
ENFIELD, CT 06082
HARTFORD COUNTY

SITE TYPE: COLOCATION ON EXISTING MONOPOLE

SITE INFORMATION:

PROPERTY OWNER:	MICHAEL E. SMYTH C/O BELL ATLANTIC MOBILE 4017 WASHINGTON ROAD CANONSBURG, PA 15317
TOWER OWNER:	CROWN CASTLE 500 WEST CUMMINGS PARK SUITE 3600 WOBURN, MA 01801
TOWER OWNER SITE ID:	CROWN SITE: #806373
APPLICANT:	MetroPCS MASSACHUSETTS, LLC 285 BILLERICA ROAD, THIRD FLOOR CHELMSFORD, MA 01824 (978) 244-7200
SITE ADDRESS:	OLIVER ROAD ENFIELD, CT 06082
COUNTY:	HARTFORD
LATITUDE:	N 41.96012°
LONGITUDE:	W 72.59235°
ZONING CLASSIFICATION:	ONE FAMILY RESIDENCE (R-44)
ZONING JURISDICTION:	TOWN OF ENFIELD
TAX ID PARCEL NUMBER:	MAP 17 LOT 94
ARCHITECT / ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 301 MARLBOROUGH, MA 01752
POWER COMPANY:	CONNECTICUT LIGHT & POWER CENTRAL DIVISION P.O. BOX 270 HARTFORD, CT 06141 (800) 286-2000
TELEPHONE COMPANY:	AT&T CONNECTICUT 2147 SUMMER STREET STAMFORD, CT 06905-4523 (203) 708-9992
SITE ACQUISITION MANAGER:	KELLIE DUNN (978) 244-7200
CONSTRUCTION MANAGER:	DAVE BEAN (978) 244-7200
OPS CONTACT:	MIKE WILBANKS (978) 244-7200

VICINITY MAP

SCALE: 1"=1000'

DRIVING DIRECTIONS

TAKE I-495 SOUTH TOWARD MARLBOROUGH. TAKE EXIT 22 FOR I-90 WEST TOWARD MASS. PIKE/ALBANY NY. TAKE EXIT 6 TO MERGE ONTO I-291 W TOWARD SPRINGFIELD/HARTFORD. TAKE EXIT 1A TOWARD I-91 S HARTFORD CT. TAKE EXIT 46 FOR US-5/KING ST. TURN RIGHT ONTO US-5 N/KING ST. TAKE THE 1ST RIGHT ONTO OLIVER RD. ACCESS WILL BE ON YOUR RIGHT.

APPROVALS

LANDLORD: _____

FIELD CONST. MGR: _____

RF ENGINEER: _____

SITE ACQUISITION AGENT: _____

ARCHITECT/ENGINEER: _____

SHEET INDEX

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DO NOT SCALE DRAWINGS

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

PROJECT DESCRIPTION

1. THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
2. THIS FACILITY WILL CONSUME NO UNRECOVERABLE ENERGY.
3. NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.
4. NO WASTE WATER WILL BE GENERATED AT THIS LOCATION.
5. NO SOLID WASTE WILL BE GENERATED AT THIS LOCATION.
6. METRO PCS MAINTENANCE CREW (TYPICALLY ONE PERSON) WILL MAKE AN AVERAGE OF ONE TRIP PER MONTH AT ONE HOUR PER VISIT.

metroPCS.
Unlimit Yourself.
285 BILLERICA ROAD
THIRD FLOOR
CHELMSFORD, MA 01824
TEL (978) 244-7200
FAX (978) 244-7240

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil · Structural · Land Surveying
R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 301
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com

STATE OF CONNECTICUT * JAMES M. FITZGERALD * No. 25997 LICENSED PROFESSIONAL ENGINEER

ENGINEER/LAND SURVEYOR DATE

REVISIONS

REV. #	DATE	DESCRIPTION
1	08/19/11	ISSUED FOR Z/C FINAL
0	08/08/11	ISSUED FOR Z/C REVIEW

PROJECT NO.	DESIGNED BY: JMF	SCALE:
736.395	DRAWN BY: RJK	AS SHOWN
	CHECK'D BY: JMF	

SITE NAME:
HFC1552A
CROWN OLIVER ROAD
ENFIELD
(CROWN SITE: #806373)

SITE ADDRESS:
OLIVER ROAD
ENFIELD, CT 06082

DRAWING TITLE:
TITLE SHEET

DRAWING NO:
T-1

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – METRO PCS
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – METRO PCS
   OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.

4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.

10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.

12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.

13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.

15. CONSTRUCTION SHALL COMPLY WITH ALL METRO PCS STANDARDS AND SPECIFICATIONS.

16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

18. IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

2. ALL EXISTING 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 SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.

3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.

6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

8. ALL EXISTING 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 ENGINEERING, OWNER AND/OR LOCAL UTILITIES.

9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE METRO PCS SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF .....1½ IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....¾ IN.
   BEAMS AND COLUMNS .....1½ IN.

5. A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.

7. CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.

8. AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.

9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND METRO PCS SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾"ø) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.

4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ⅝" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.

5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.

6. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.

2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.

3. AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.

4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.

5. AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, METRO PCS ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.

2. COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.

3. CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.

3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.

5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.

6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.

7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).

8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

21. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

23. CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

24. CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

25. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

32. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25997
LICENSED PROFESSIONAL CIVIL ENGINEER

ENGINEER/LAND SURVEYOR DATE

REVISIONS		
1	08/19/11	ISSUED FOR Z/C FINAL
0	08/08/11	ISSUED FOR Z/C REVIEW
REV. #	DATE	DESCRIPTION

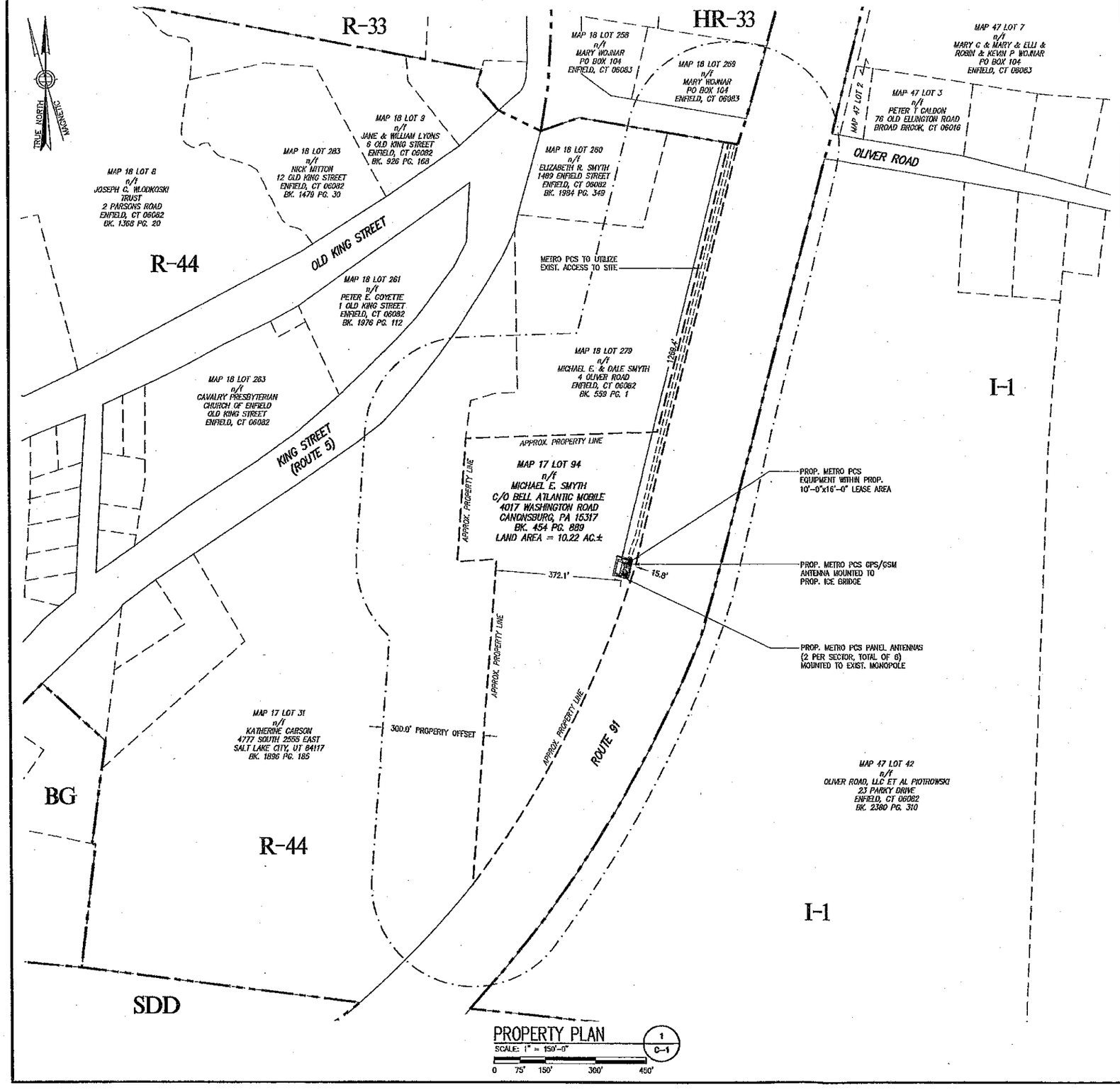
PROJECT NO.	DESIGNED BY: JMT	SCALE:
736.395	DRAWN BY: RJK	AS SHOWN
	CHECK'D BY: JMT	

SITE NAME:
HFC1552A
CROWN OLIVER ROAD
ENFIELD
(CROWN SITE: #806373)

SITE ADDRESS:
OLIVER ROAD
ENFIELD, CT 06082

DRAWING TITLE:
GENERAL NOTES

DRAWING NO:
GN-1



PROPERTY PLAN
SCALE: 1" = 150'-0"
0 75' 150' 300' 450'
1 C-1

GENERAL NOTES:

1.	FIELD SURVEY DATE:	04/13/11
2.	VERTICAL DATUM:	NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
3.	HORIZONTAL DATUM:	NORTH AMERICAN DATUM OF 1983 (NAD83)
4.	SITE CONTROL POINT:	CENTER OF MONOPOLE LATITUDE: N.41.96012' (NAD 83) LONGITUDE: W.72.59235' (NAD 83)
5.	PROPERTY OWNER:	MICHAEL E. SMYTH C/O BELL ATLANTIC MOBILE 4017 WASHINGTON ROAD CANONSBURG, PA 15317
6.	SITE NAME:	CROWN OLIVER ROAD ENFIELD
7.	SITE ADDRESS:	OLIVER ROAD ENFIELD, CT 06082
8.	APPLICANT:	MetroPCS MASSACHUSETTS, LLC 285 BILLERICA ROAD, THIRD FLOOR CHELMSFORD, MA 01824
9.	JURISDICTION:	TOWN OF ENFIELD
10.	TAX ID:	MAP 17 LOT 94
11.	DEED REFERENCE:	N/A
12.	PLAN REFERENCES:	TOWN OF ENFIELD ASSESSOR/GIS MAPS
13.	ZONING JURISDICTION:	ONE FAMILY RESIDENCE (R-44)

14. ALL UNDERGROUND UTILITY INFORMATION PRESENTED HEREON WAS DETERMINED FROM SURFACE EVIDENCE AND PLANS OF RECORD. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO THE COMMENCEMENT OF ANY SITE WORK. CALL DIGSAFE 1-888-344-7233 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.
15. THE PROPERTY LINES SHOWN WERE COMPILED UTILIZING TOWN ASSESSOR'S PLANS, GIS, RECORDED DEEDS AND PLANS OF REFERENCE AS INDICATED.
16. THE SITE IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON FLOOD INSURANCE RATE MAP FOR THE TOWN OF ENFIELD, COMMUNITY PANEL 09003C MAP 0229F DATED 09/26/2008.
17. BEARING SYSTEM OF THIS PLAN IS BASED ON TRUE NORTH. TRUE NORTH WAS ESTABLISHED FROM EXIST. PLAN REFERENCE. IT IS NOT INTENDED TO BE AN EXACT REPRESENTATION OF TRUE NORTH.

LEGEND

- PROPERTY LINE
- ABUTTING PROPERTY LINE
- EXIST. EASEMENT
- EXIST. CHAIN LINK FENCE
- EXIST. STOCKADE FENCE
- EXIST. EDGE OF PAVEMENT
- OHW — OHW — EXIST. OVERHEAD UTILITIES
- OHW — OHW — PROP. OVERHEAD UTILITIES
- T/E — T/E — T/E — PROP. UTILITIES
- EXIST. UTILITY POLE
- ZONING BOUNDARY

ZONING INFORMATION

ZONING DISTRICT: ONE FAMILY RESIDENCE (R-44)

DESCRIPTION	REQUIRED	EXISTING	PROP.
MIN. LOT AREA:	44,000 S.F.	10.22 AC.±	N/A
MIN. FRONTAGE:	175'	28'±	N/A
PROPERTY SETBACKS			
FRONT	50'	1267.9'±	1269.4'±
SIDE	35'	8.1'±	15.8'±
REAR	60'	346.4'±	372.1'±
MAX. TOWER HEIGHT	80'	162.0'±	106.0'±

NOTE:

1. PLOT PLAN BASE ON TOWN OF ENFIELD ASSESSORS MAPS AND FIELD VISIT BY CHAPPELL ENGINEERING ASSOCIATES, LLC. ON 04/13/11.
2. SETBACKS ARE TAKEN FROM THE CLOSEST POINT OF EQUIPMENT TO PROPERTY LINES.

ZONING DISTRICT LEGEND

R-44	ONE FAMILY RESIDENCE
I-1	INDUSTRIAL
BG	GENERAL BUSINESS
HR-33	ONE FAMILY RESIDENCE
R-33	ONE FAMILY RESIDENCE
SDD	SPECIAL DEVELOPMENT

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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD ★ No. 25997 ★ LICENSED PROFESSIONAL CIVIL ENGINEER

ENGINEER/LAND SURVEYOR DATE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

REVISIONS

REV. #	DATE	DESCRIPTION
1	08/19/11	ISSUED FOR Z/C FINAL
0	08/08/11	ISSUED FOR Z/C REVIEW

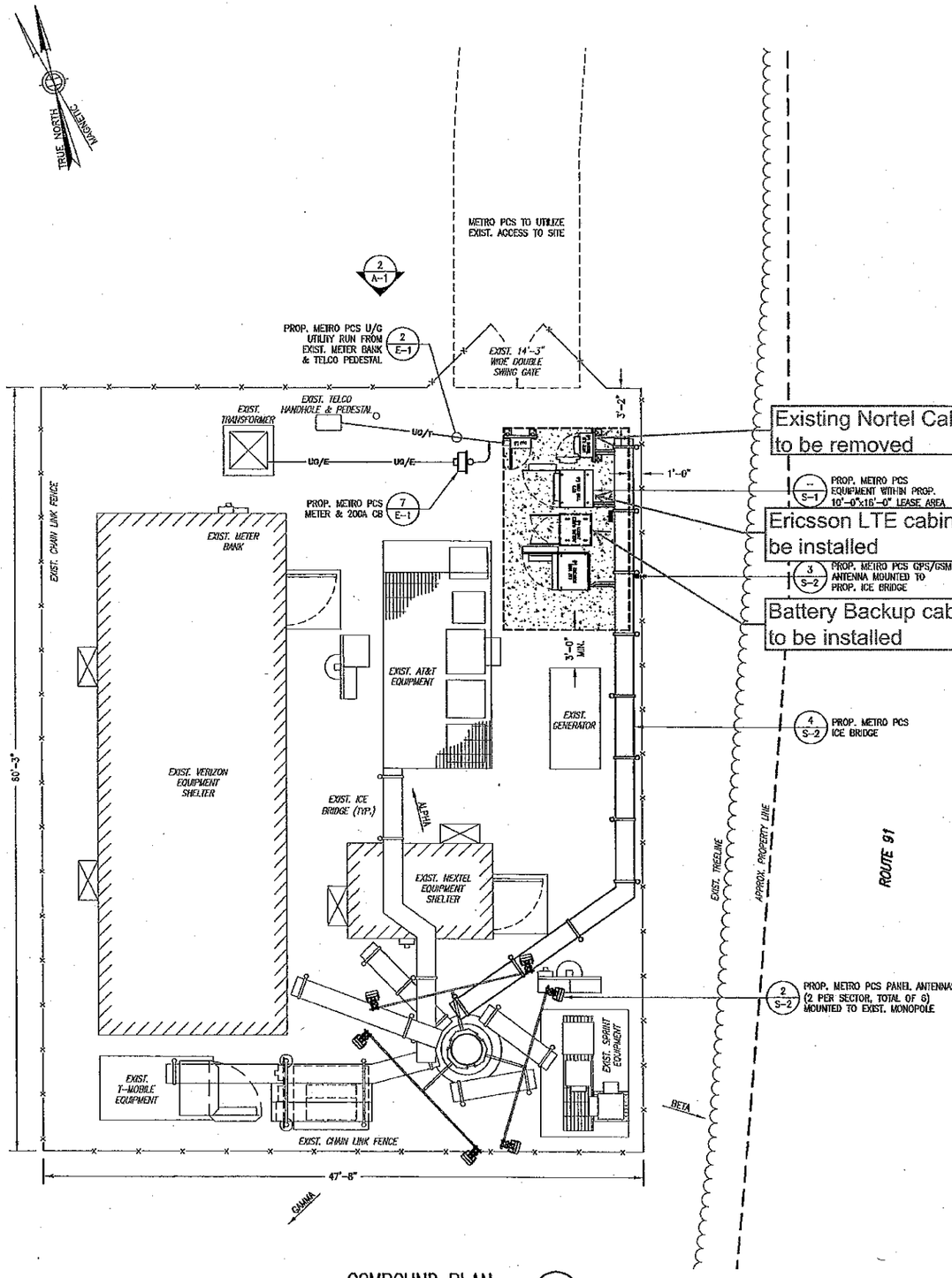
PROJECT NO.	DESIGNED BY: JMT	SCALE:
736.395	DRAWN BY: RJK	1" = 150'
	CHECK'D BY: JMT	

SITE NAME:
HFC1552A
CROWN OLIVER ROAD
ENFIELD
(CROWN SITE: #806373)

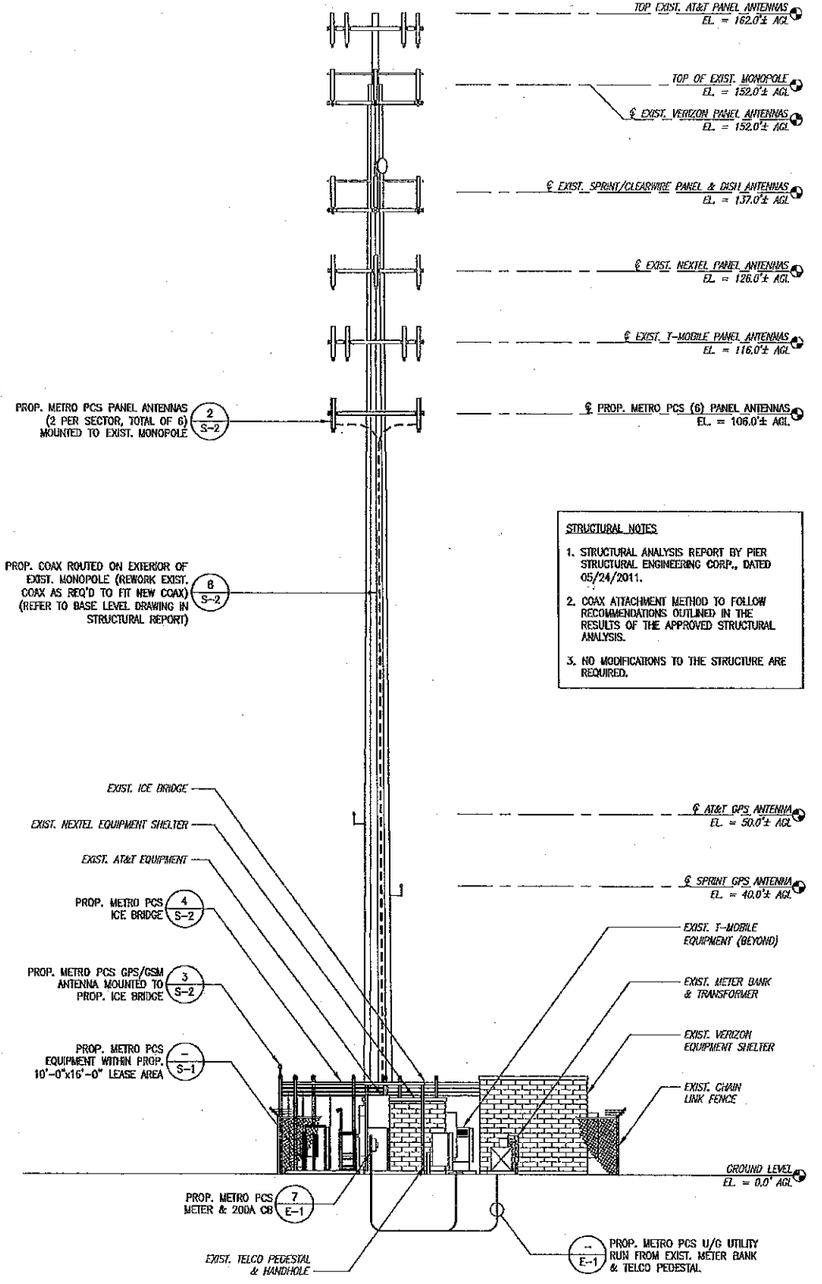
SITE ADDRESS:
OLIVER ROAD
ENFIELD, CT 06082

DRAWING TITLE:
PROPERTY PLAN

DRAWING NO:
C-1



COMPOUND PLAN 1 A-1
SCALE: 1" = 5'-0"
0 2.5' 5' 10' 15'



NORTH TOWER ELEVATION 2 A-1
SCALE: 1" = 10'-0"
0 5' 10' 20' 30'

STRUCTURAL NOTES

1. STRUCTURAL ANALYSIS REPORT BY PIER STRUCTURAL ENGINEERING CORP., DATED 05/24/2011.
2. COAX ATTACHMENT METHOD TO FOLLOW RECOMMENDATIONS OUTLINED IN THE RESULTS OF THE APPROVED STRUCTURAL ANALYSIS.
3. NO MODIFICATIONS TO THE STRUCTURE ARE REQUIRED.

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738.395	DRAWN BY: RJK	AS SHOWN
	CHECKED BY: JMF	

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(CROWN SITE: #806373)

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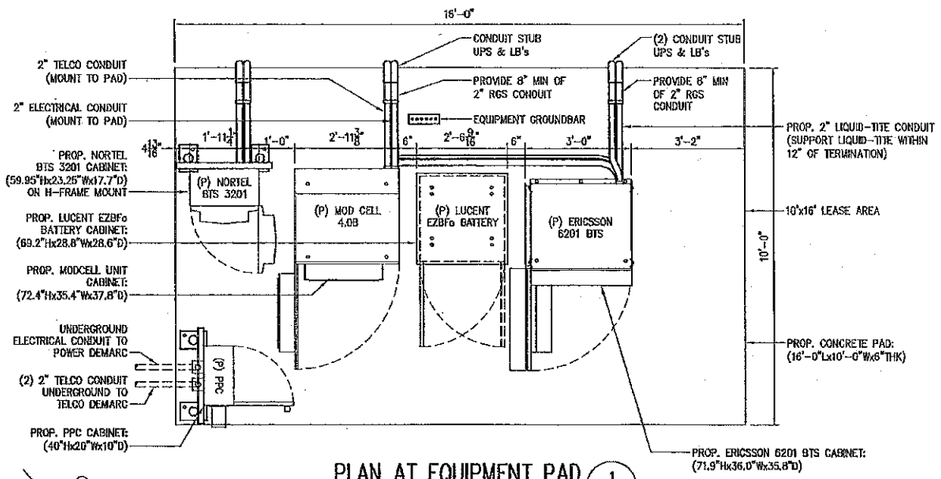
ENFIELD, CT 06082

DRAWING TITLE:
COMPOUND PLAN & ELEVATION

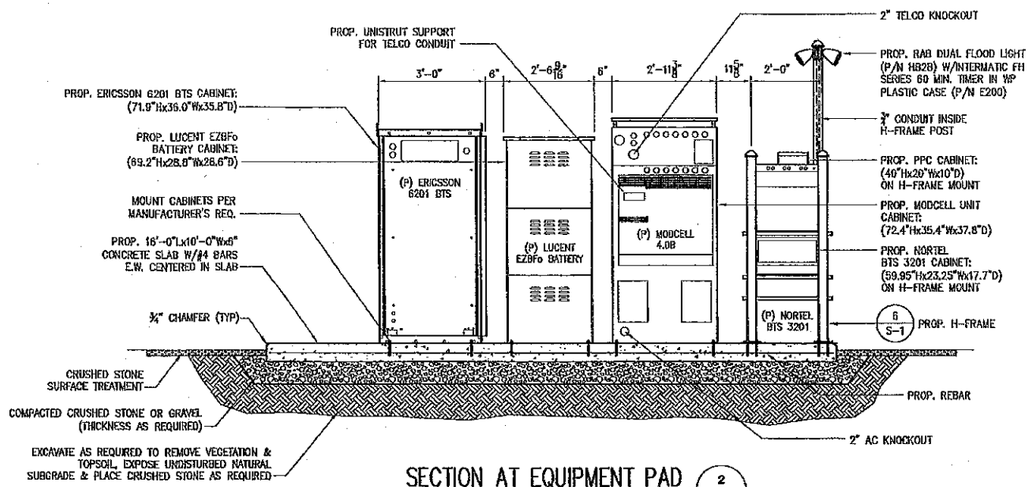
DRAWING NO:
A-1



PLAN AT EQUIPMENT PAD (1 S-1)

SCALE: 1/2" = 1'-0"

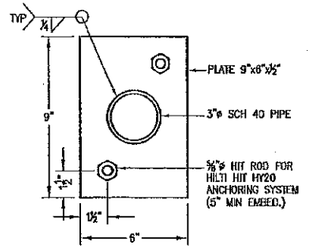
0 1 2 4 6



SECTION AT EQUIPMENT PAD (2 S-1)

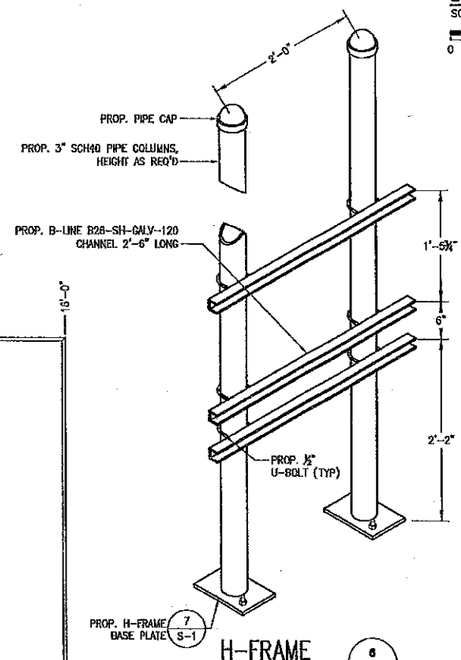
SCALE: 1/2" = 1'-0"

0 1 2 4 6



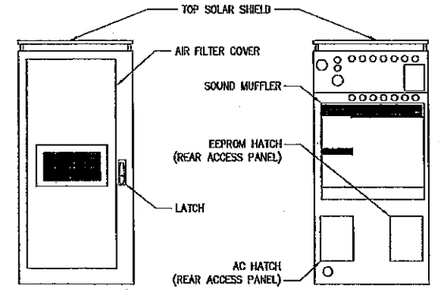
H-FRAME BASE PLATE (7 S-1)

SCALE: NTS



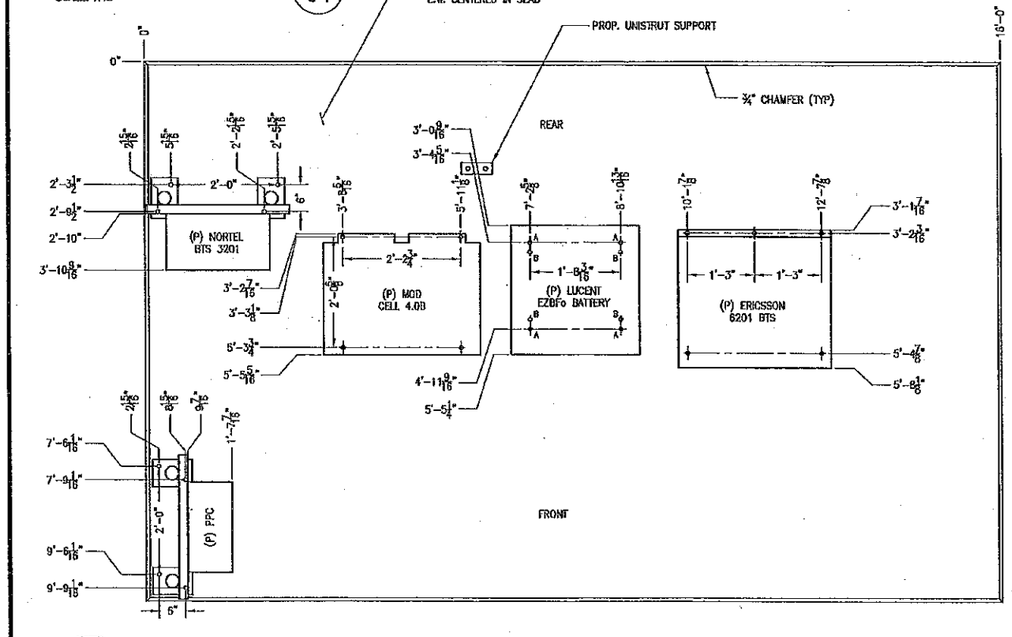
H-FRAME (6 S-1)

SCALE: NTS



MODCELL 4.0B CABINET DETAIL (4 S-1)

SCALE: NOT TO SCALE



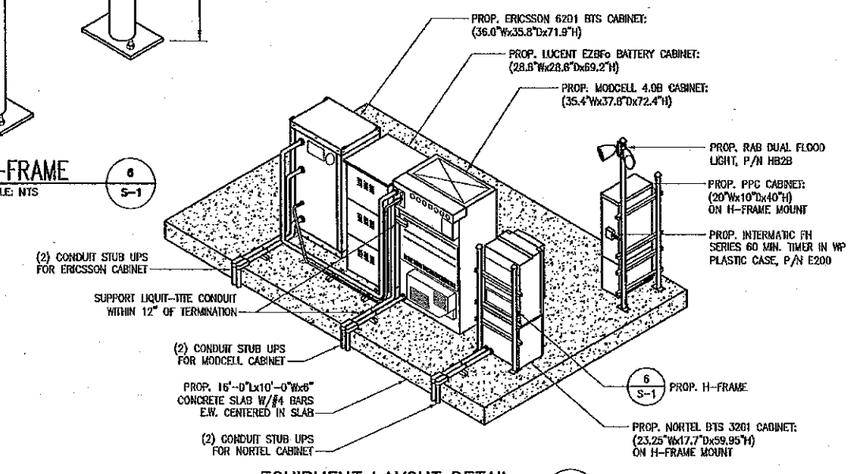
NOTES:

1. MOUNT CABINETS TO CONCRETE PAD PER MANUFACTURER'S REQUIREMENTS.
2. PROVIDE 3'-0" MIN SERVICE ACCESS IN FRONT AND REAR OF ALL CABINETS.
3. MOUNT PPC TO CONCRETE WITH PROVIDED HARD RUBBER GASKET TO MINIMIZE CORROSION.

ANCHORING FOOTPRINT DETAIL (3 S-1)

SCALE: 3/4"=1'-0"

0 8" 1'-4" 2'-8" 4'-0"



EQUIPMENT LAYOUT DETAIL (5 S-1)

SCALE: NOT TO SCALE

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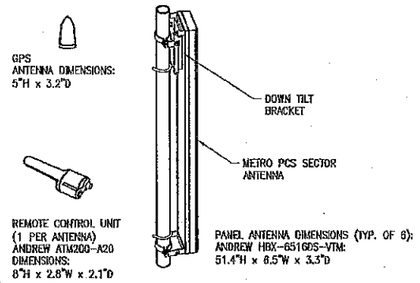
ENFIELD, CT 06082

DRAWING TITLE:
EQUIPMENT PLAN, SECTIONS & DETAILS

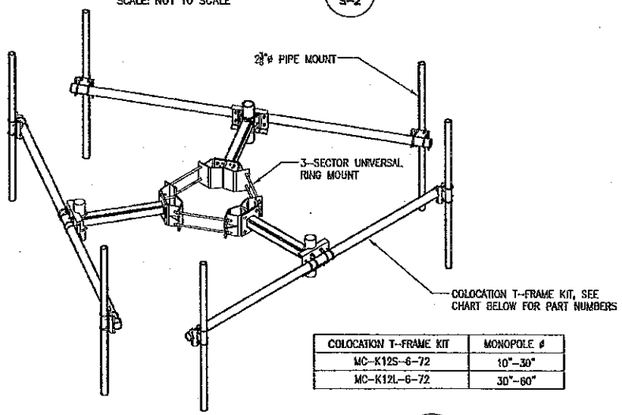
DRAWING NO:
S-1

RF SYSTEM SCHEDULE

ANTENNA INFORMATION								MAIN FEEDLINE					TOP JUMPER		BOTTOM JUMPER		RET SYSTEM INFO			
SECTOR	TYPE	AZIMUTH	ELECTRICAL DOWNTILT	MECHANICAL DOWNTILT	RAD CTR, AGL	MAKE	MODEL	FEED	CABLE	MFG	LENGTH	COLOR	SIZE	LENGTH	SIZE	LENGTH	MFG	MODEL	CABLE	LENGTH
ALPHA	Tx/Rx	0°	–	–	106'±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL-780	COMMSCOPE	160'±	1 R	½"	6'	½"	6'	ANDREW	ATM200-A20	⅜" (860-100nn)	160'±
								BOTTOM	FXL-780	COMMSCOPE	160'±	11 R	½"	6'	½"	6'				
	Tx/Rx	0°	–	–	106'±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL-780	COMMSCOPE	160'±	TBD	½"	6'	½"	6'	ANDREW	ATM200-A20	⅜" (860-10010)	10M, 32.8'± (DIASY CHAIN)
								BOTTOM	FXL-780	COMMSCOPE	160'±	TBD	½"	6'	½"	6'				
BETA	Tx/Rx	120°	–	–	106'±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL-780	COMMSCOPE	160'±	1 B	½"	6'	½"	6'	ANDREW	ATM200-A20	⅜" (860-10010)	10M, 32.8'± (DIASY CHAIN)
								BOTTOM	FXL-780	COMMSCOPE	160'±	11 B	½"	6'	½"	6'				
	Tx/Rx	120°	–	–	106'±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL-780	COMMSCOPE	160'±	TBD	½"	6'	½"	6'	ANDREW	ATM200-A20	⅜" (860-10010)	10M, 32.8'± (DIASY CHAIN)
								BOTTOM	FXL-780	COMMSCOPE	160'±	TBD	½"	6'	½"	6'				
GAMMA	Tx/Rx	240°	–	–	106'±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL-780	COMMSCOPE	160'±	1 G	½"	6'	½"	6'	ANDREW	ATM200-A20	⅜" (860-10010)	10M, 32.8'± (DIASY CHAIN)
								BOTTOM	FXL-780	COMMSCOPE	160'±	11 G	½"	6'	½"	6'				
	Tx/Rx	240°	–	–	106'±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL-780	COMMSCOPE	160'±	TBD	½"	6'	½"	6'	ANDREW	ATM200-A20	⅜" (860-10010)	10M, 32.8'± (DIASY CHAIN)
								BOTTOM	FXL-780	COMMSCOPE	160'±	TBD	½"	6'	½"	6'				
–	GPS	–	–	–	10'±	PCTEL	KS24019	BOTTOM	½"	COMMSCOPE	25'±	TBD	–	–	–	–	–	–	–	–



GPS AND PANEL ANTENNA DETAIL (1 / S-2)
SCALE: NOT TO SCALE

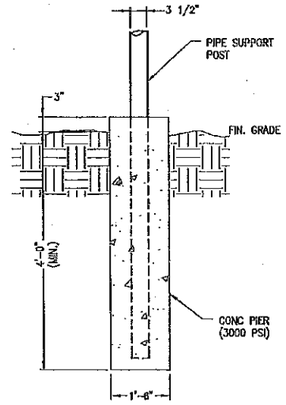


COLOCATION T-FRAME KIT	MONOPOLE ø
MC-K12S-6-72	10"–30"
MC-K12L-6-72	30"–60"

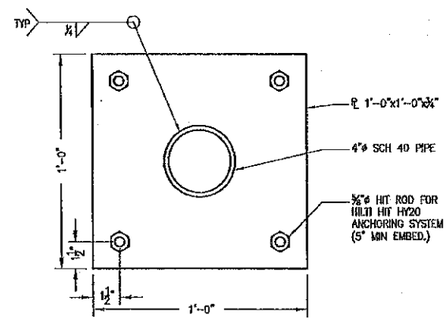
ANTENNA MOUNT (2 / S-2)
SCALE: NTS

NOTES:

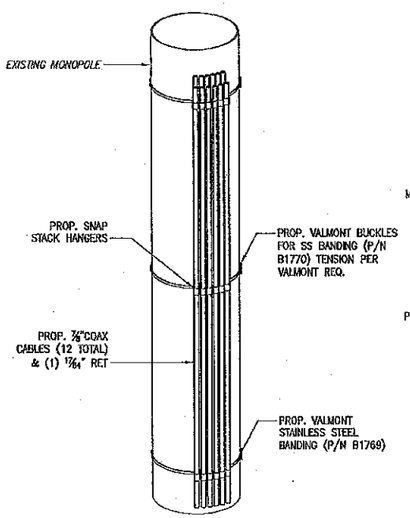
1. FOR EXPOSED LEDGE, PROVIDE GROUT LEVELING PAD. INSTALL (2) ⅝" EXPANSION ANCHORS, 6" LONG.
2. FOR BURIED LEDGE AT LESS THAN 3'–6" BELOW FINISH GRADE, CORE 8"ø HOLE INTO LEDGE 16" DEEP. FILL AROUND PIPE WITH NON-SHRINK GROUT. USE COAL TAR ON BURIED LENGTH OF PIPE, AND BACKFILL TO FINISH GRADE
3. FOR CONCRETE, FASTEN BASEPLATE W/ (2) ⅝" EXPANSION ANCHORS, 6" LONG.
4. FOR POSTS ON CONCRETE OR EXPOSED LEDGE, PROVIDE 4"x8"x¾" BASEPLATE WITH (2) 1⅛" HOLES 6" O.C.



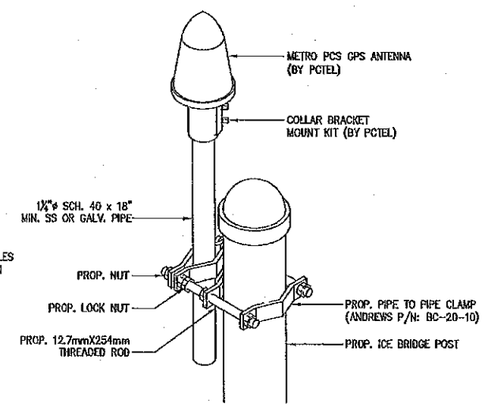
CABLE BRIDGE PIER (5 / S-2)
SCALE: NTS



CABLE BRIDGE BASE PLATE (6 / S-2)
SCALE: NTS

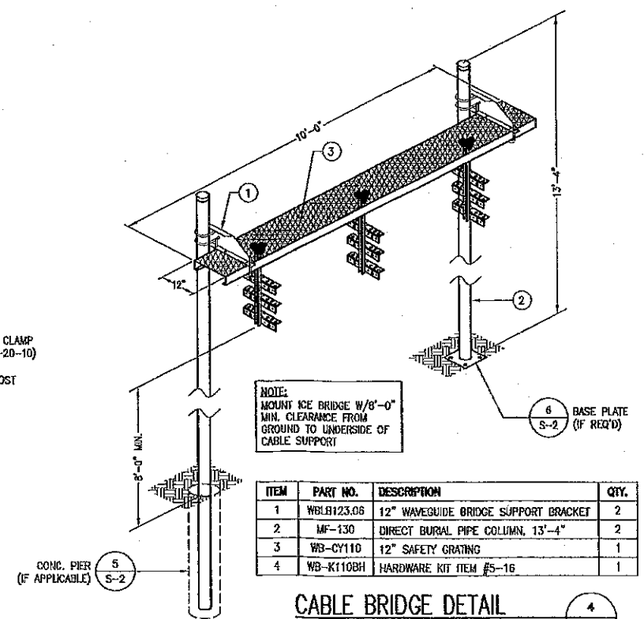


COAX MOUNTING DETAIL (6 / S-2)
SCALE: N.T.S.



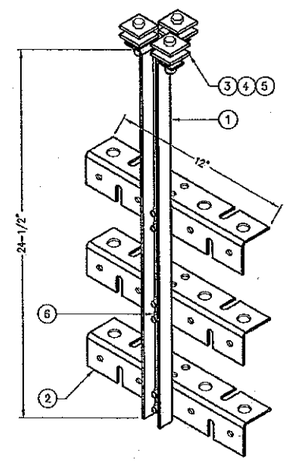
1. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1"–1¼" DIAMETER GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.

GPS MOUNTING DETAIL (3 / S-2)
SCALE: 3" = 1'-0"



ITEM	PART NO.	DESCRIPTION	QTY.
1	WBLB123.08	12" WAVEGUIDE BRIDGE SUPPORT BRACKET	2
2	MF-130	DIRECT BURIAL PIPE COLUMN, 13'-4"	2
3	WB-CY110	12" SAFETY GRATING	1
4	WB-K110BH	HARDWARE KIT ITEM #5-16	1

CABLE BRIDGE DETAIL (4 / S-2)
SCALE: NTS



ITEM	PART NO.	DESCRIPTION	QTY.
1	WBT243.01	VERTICAL TRAPEZE SECTION	1
2	WBT123.02	12" HORIZONTAL TRAPEZE SECTION	3
3	MT-387	SQUARE WASHER, 1 1/2"x1 1/2"W/7/16" HOLE	6
4	GB-03205	3/8"x2" GALV. BOLT KIT	3
5	GWF-03	3/8" GALV. FLAT WASHER	3
6	GB-03105	3/8"x1" GALV. BOLT KIT	6

CABLE LADDER DETAIL (7 / S-2)
SCALE: NTS

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25997
LICENSED PROFESSIONAL ENGINEER

ENGINEER/LAND SURVEYOR DATE

REVISIONS		
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0	08/08/11	ISSUED FOR Z/C REVIEW
REV. #	DATE	DESCRIPTION

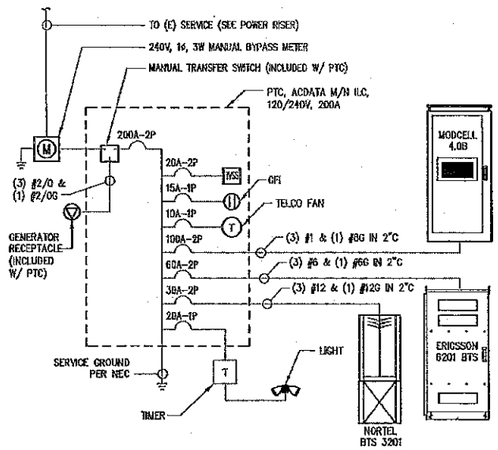
PROJECT NO.	DESIGNED BY: JMT	SCALE:
736.395	DRAWN BY: BJK	AS SHOWN
	CHECK'D BY: JMT	

SITE NAME:
HFC1552A
CROWN OLIVER ROAD
ENFIELD
(CROWN SITE: #806373)

SITE ADDRESS:
OLIVER ROAD
ENFIELD, CT 06082

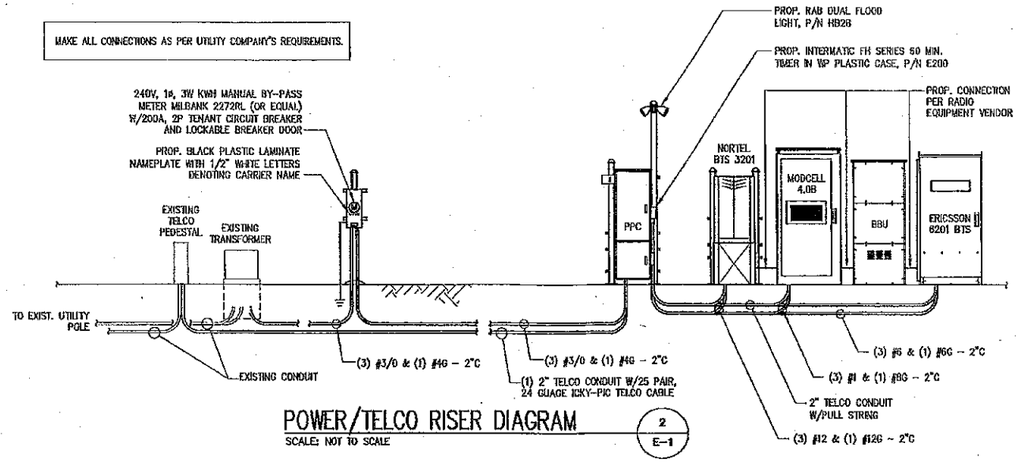
DRAWING TITLE:
ANTENNA MOUNTING PLAN, SCHEDULES & DETAILS

DRAWING NO:
S-2

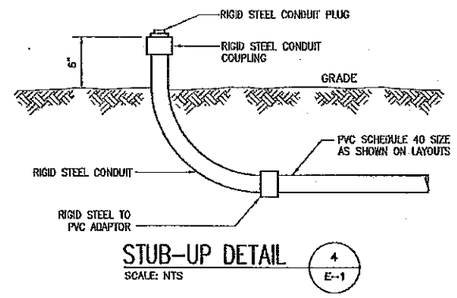


ONE LINE DIAGRAM (1, E-1)
SCALE: NOT TO SCALE

MAKE ALL CONNECTIONS AS PER UTILITY COMPANY'S REQUIREMENTS.



POWER/TELCO RISER DIAGRAM (2, E-1)
SCALE: NOT TO SCALE



STUB-UP DETAIL (4, E-1)
SCALE: NTS

ELECTRICAL AND GROUNDING NOTES:

ELECTRICAL

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND ALL APPLICABLE LOCAL CODES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
3. SERVICE TO EQUIP. SHALL BE 120/240 VAC, 200 AMP, 1ø, 60 Hz.
4. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.

GROUNDING

5. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC (CADWELD) CONNECTIONS.
6. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD).
7. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
8. ALL EXOTHERMIC CONNECTIONS TO THE GROUND RODS SHALL START AT THE TOP & HAVE A VERTICAL SEPARATION OF 6" FOR EVERY ADDITIONAL CONNECTION.
9. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
10. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
11. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8"ø 10-FT. LONG, AND SHALL BE DRIVEN VERTICALLY WITH THEIR TOPS 48" BELOW FINAL GRADE.
12. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
13. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
14. MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH PROJECT SPECIFICATION FOR FACILITY GROUNDING, USING FALL OF POTENTIAL METHOD.
15. ANTENNA GROUND KITS SHALL BE FURNISHED BY METRO PCS AND INSTALLED BY CONTRACTOR.

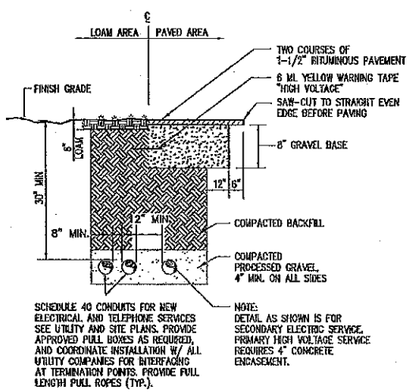
SQUARE D, TYPE QO
SQUARE D, TYPE Q 200A,2P MAIN

PANEL SCHEDULE

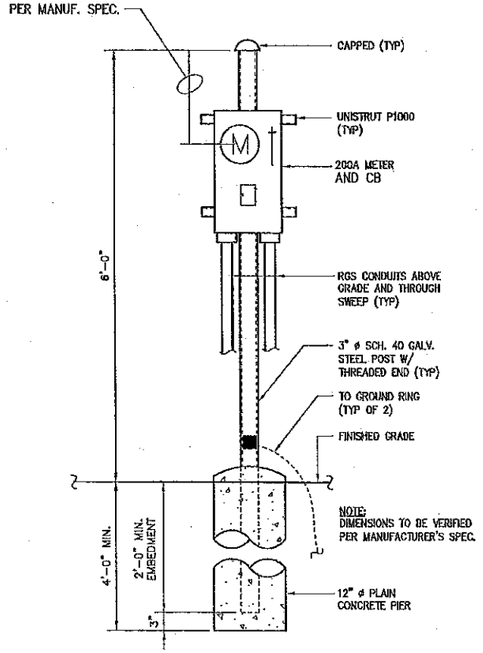
22,000 A.I.C.
NEMA 1

CKT #	DESCRIPTION	AMP	AMP	DESCRIPTION	CKT #
1	MODCELL	100	–	SPARE	2
3			–	SPARE	4
5	SPARE	–	–	SPARE	6
7	SPARE	–	–	SPARE	8
9	ERICSSON 6201	60	–	SPARE	10
11			–	SPARE	12
13	SPARE	–	–	SPARE	14
15	SPARE	–	–	SPARE	16
17	NORTEL 3201	30	–	SPARE	18
19			20	LIGHT & TIMER	20
21	SURGE SUPPRESSOR	20	10	TELCO FAN (IF REQ'D)	22
23			15	GFI RECEPTACLE	24

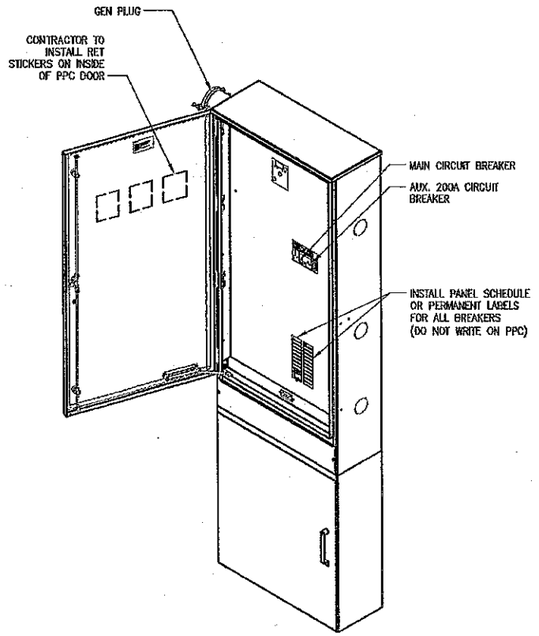
PANEL SCHEDULE (3, E-1)
SCALE: NTS



BURIED CONDUIT DETAIL (5, E-1)
SCALE: NOT TO SCALE



METER BANK DETAIL (7, E-1)
SCALE: NOT TO SCALE



PPC DETAIL (6, E-1)
SCALE: NOT TO SCALE

LEGEND:

- ⊗ GROUND TEST WELL
- GROUND ROD
- DISCONNECT SWITCH
- (M) METER
- ▲ CADWELD TYPE CONNECTION
- ● COMPRESSION TYPE CONNECTION
- GROUNDING WIRE
- XXX / XXX — REPRESENTS DETAIL NUMBER / REF. DRAWING NUMBER

ABBREVIATIONS:

AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
CGBE	COAX GROUND BAR EXTERNAL
CIGBE	COAX ISOLTAED GROUND BAR EXTERNAL
DWG	DRAWING
EMT	ELECTRICAL METALLIC TUBING
MGB	MASTER GROUND BAR
PCS	PERSONAL COMMUNICATION SYSTEM
PVC	RIGID (SCH. 40) POLYVINYL CHLORIDE CONDUIT
RGS	RIGID GALVANIZED STEEL
RWY	RACEWAY
TYP	TYPICAL

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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD ★ No. 25997 LICENSED PROFESSIONAL ENGINEER

ENGINEER/LAND SURVEYOR DATE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

REVISIONS

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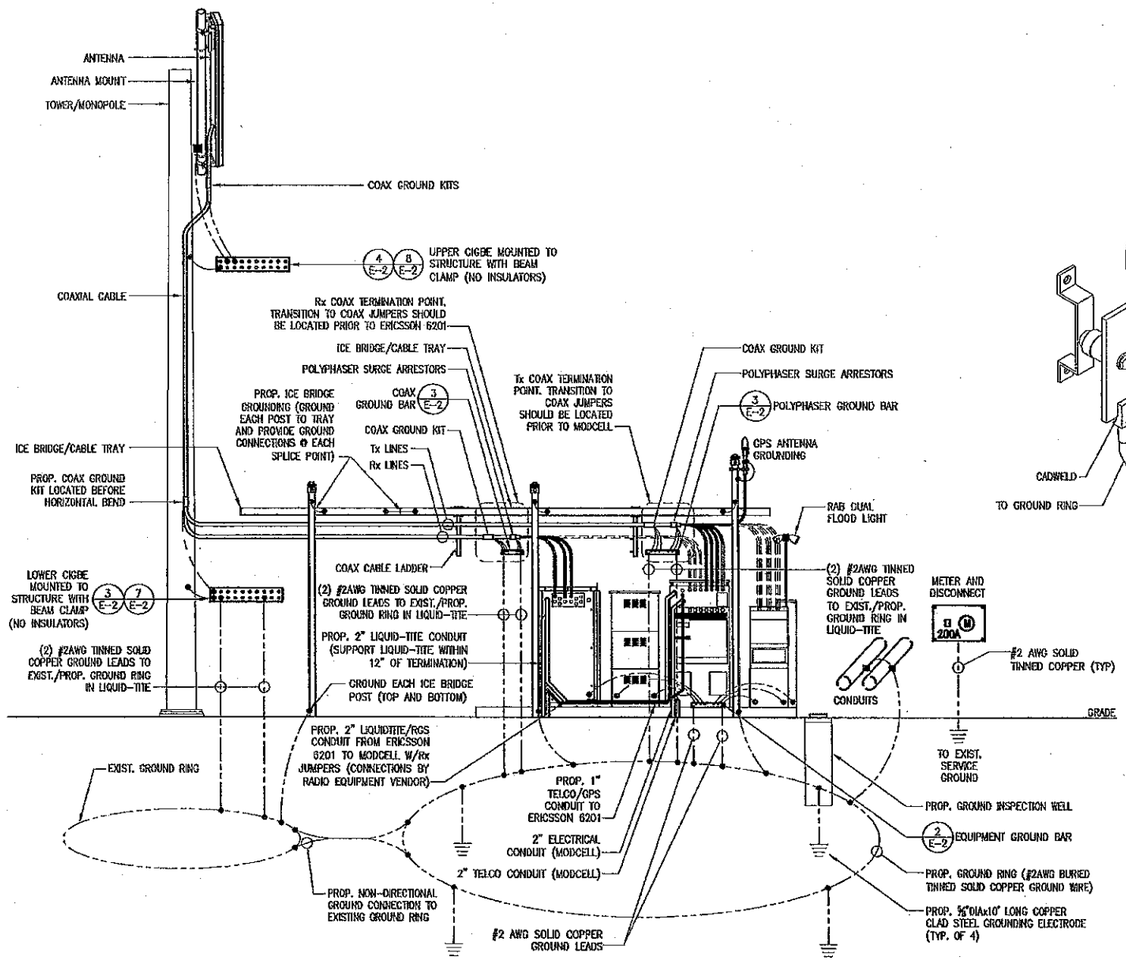
CROWN OLIVER ROAD
ENFIELD
(CROWN SITE: #806373)

SITE ADDRESS:
OLIVER ROAD
ENFIELD, CT 06082

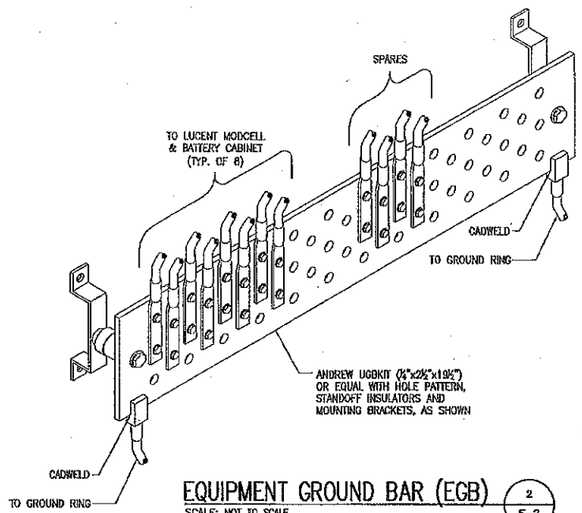
DRAWING TITLE:
ONE-LINE DIAGRAM, RISER, DETAILS & NOTES

DRAWING NO:
E-1



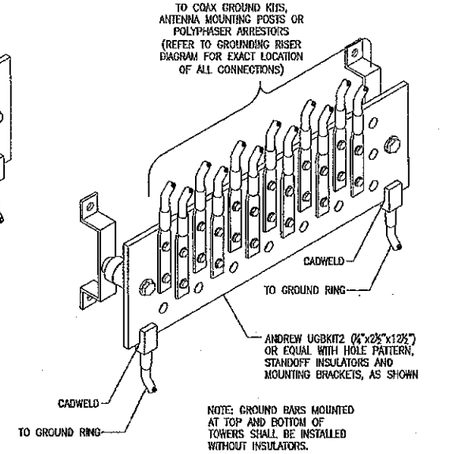
GROUNDING RISER DIAGRAM (1 / E-2)

SCALE: NOT TO SCALE



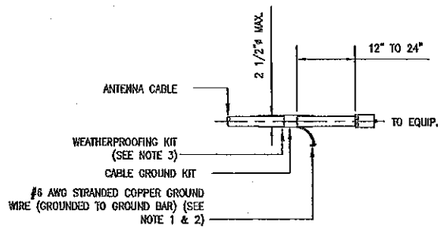
EQUIPMENT GROUND BAR (EGB) (2 / E-2)

SCALE: NOT TO SCALE



COAX GROUND BAR (CGB) (3 / E-2)

SCALE: NOT TO SCALE



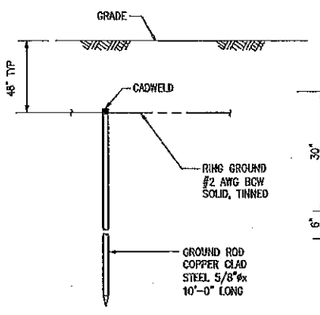
CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE

NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE SUPPLIED WITH KIT. COLD SHRINK SHALL NOT BE USED.

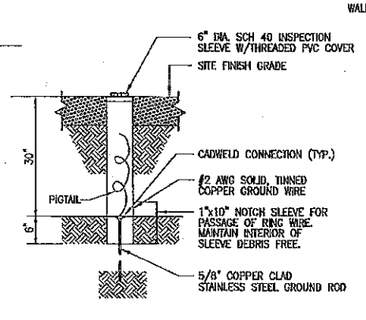
DETAIL (4 / E-2)

SCALE: NOT TO SCALE



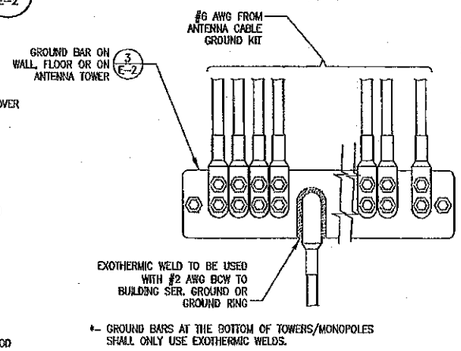
GROUND ROD (5 / E-2)

SCALE: NOT TO SCALE



GROUND ROD TEST WELL DETAIL (6 / E-2)

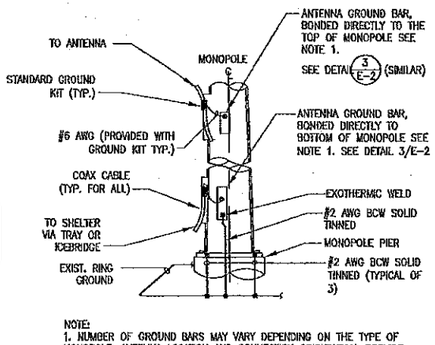
SCALE: NOT TO SCALE



INSTALLATION OF GROUND WIRE TO GROUND BAR

DETAIL (7 / E-2)

SCALE: NOT TO SCALE

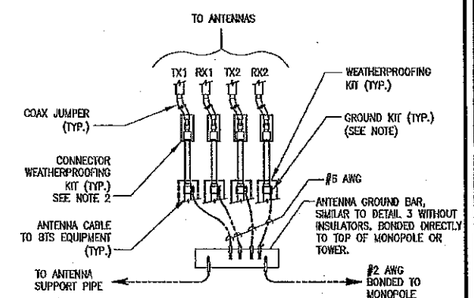


NOTE:
1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF MONOPOLE, ANTENNA LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.

ANTENNA CABLE GROUNDING – MONOPOLE

DETAIL (8 / E-2)

SCALE: NOT TO SCALE



CONNECTION OF GROUND WIRE TO GROUNDING BAR, TOWER/MONOPOLE

DETAIL (9 / E-2)

SCALE: NOT TO SCALE

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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD ★ No. 25907 LICENSED PROFESSIONAL ENGINEER

ENGINEER/LAND SURVEYOR DATE

REVISIONS

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738.395	DRAWN BY: RJK	AS SHOWN
	CHECK'D BY: JMF	

SITE NAME:
HFC1552A
CROWN OLIVER ROAD
ENFIELD
(CROWN SITE: #806373)

SITE ADDRESS:
OLIVER ROAD
ENFIELD, CT 06082

DRAWING TITLE:
GROUNDING DETAILS

DRAWING NO:
E-2

Exhibit 2

Power Density Calculation

TRM INC. – Jacky Clifford, 16 Chestnut Street, Suite 220, Foxborough, MA 02035
Contact: 508-446-1047 or e-mail jclifford@trmcom.com

Power Density Calculations

Control Number	Site	Carrier	#Channels	ERP/Ch	Ant Ht	Density (mW/cm2)	MHz	S	%MPE	Site Total
EM-CING-049-071129	Enfield - 4 Oliver Road	Cingular GSM	2	427	160	0.0120	1900	1.0000	1.20%	
EM-CING-049-071129	Enfield - 4 Oliver Road	Cingular UMTS	1	500	160	0.0070	880	0.5867	1.20%	
EM-VER-049-100114	**Enfield - 4 Oliver Road**	**Verizon**	**9**	**288**	**152**	**0.0403**	**869**	**0.5793**	**6.96%**	
EM-VER-049-100114	**Enfield - 4 Oliver Road**	**Verizon**	**3**	**436**	**152**	**0.0204**	**1970**	**1.0000**	**2.04%**	
EM-VER-049-100114	**Enfield - 4 Oliver Road**	**Verizon**	**1**	**834**	**152**	**0.0130**	**757**	**0.5047**	**2.57%**	
EM-T-Mobile-049-090429	Enfield - 4 Oliver Road	T-Mobile GSM	8	135	117	0.0284	1945	1.0000	2.84%	
EM-T-Mobile-049-090429	Enfield - 4 Oliver Road	T-Mobile UMTS	2	760	117	0.0399	2100	1.0000	3.99%	
EM-Clearwire-049-100527	**Enfield - 4 Oliver Road**	**Clearwire**	**2**	**153**	**137**	**0.0059**	**2496**	**1.0000**	**0.59%**	
EM-Clearwire-049-100527	**Enfield - 4 Oliver Road**	**Clearwire**	**1**	**211**	**139**	**0.0039**	**11 GHz**	**1.0000**	**0.39%**	
EM-AT&T-011-049-148-155-02070	Enfield - 4 Oliver Road	Sprint	11	132	140	0.0266	1900	1.0000	2.66%	
EM-AT&T-011-049-148-155-02070	Enfield - 4 Oliver Road	Nextel	1	541.7	130	0.0115	851	0.5673	2.03%	
EM-AT&T-011-049-148-155-02070	Enfield - 4 Oliver Road	XM Sat Radio	1	292.7	95	0.0117	2330	1.0000	1.17%	
EM-AT&T-011-049-148-155-02070	Enfield - 4 Oliver Road	Page Net	1	510.5	110	0.0152	930	0.6200	2.45%	**30.08%**
	Enfield - 4 Oliver Road	**metroPCS CDM**	**3**	**727**	**106**	**0.0698**	**2135**	1.0000	**6.98%**	**37.06%**
	Enfield - 4 Oliver Road	**metroPCS LTE**	**1**	**1200**	**106**	**0.0384**	**2130**	1.0000	**3.84%**	**39.70%**