

**METROPCS MASSACHUSETTS, LLC NOTICE OF INTENT TO MODIFY  
AN EXISTING TELECOMMUNICATIONS FACILITY AT  
219 NEW PARK AVE, HARTFORD, CT 06106**

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 219 New Park Ave, Hartford, CT 06106. The telecommunications facility is owned by Crown Atlantic Company LLC and leased to MetroPCS

**MetroPCS' Proposed Wireless Modifications**

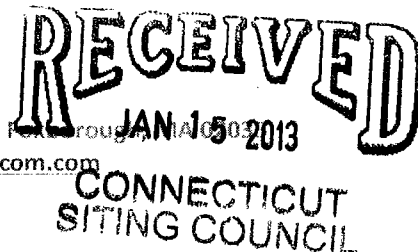
MetroPCS as successor in interest to Pocket Communications achieved an initial exempt modification approval from the Siting Council to install antennas and related ground equipment on August 25, 2011. The facility consists of a one hundred and eight (108) foot high self-support monopole telecommunications tower (the "Tower") within a fenced compound. MetroPCS now intends to modify the facility as shown on the enclosed plans prepared by Dewberry-Goodkind, Inc. 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 **The Town Clerk – Hartford City Hall, 550 Main Street, Hartford, CT 06103**. A copy of this submission is also being sent to **Connecticut Light and Power – PO Box 270, Hartford, CT 06141** the property owner on which the tower is located.

**MetroPCS' Proposed Wireless Modifications Constitutes An "Exempt Modification"**

The proposed modification to the New Park Ave 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.



- 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 by e-mail at [jclifford@trmcom.com](mailto:jclifford@trmcom.com).**

On behalf of MetroPCS Massachusetts, LLC

**cc: The Town Clerk – Hartford City Hall, 550 Main Street, Hartford, CT 06103**

**Property Owner: Connecticut Light and Power – PO Box 270, Hartford, CT 06141**

## Exhibit 1

### Site Plan

## Exhibit 2

### Power Density Calculation

Power Density Calculations

<u>Control Number</u>	<u>Site</u>	<u>Carrier</u>	<u>#Chann</u>	<u>ERP/C</u>	<u>Ant</u>	<u>Power</u>	<u>MHz</u>	<u>S</u>	<u>%MPE</u>	<u>Site Total</u>
			<u>els</u>	<u>h</u>	<u>Ht</u>	<u>Density</u>				
						<u>(mW/cm2)</u>				
EM-Nextel-064-050330	Hartford - 219 New Park Avenue	Sprint	11	250	98	0.1030	19625.5	1.0000	10.30%	
EM-Nextel-064-050330	Hartford - 219 New Park Avenue	Nextel	12	100	88	0.0557	851	0.5673	9.82%	
EM-Clearwire-064-100602	Hartford - 219 New Park Avenue	Clearwire	2	153	100	0.0110	2496	1.0000	1.10%	
EM-Clearwire-064-100602	Hartford - 219 New Park Avenue	Clearwire	1	211	104	0.0070	23 GHz	1.0000	0.70%	
Petition 889	Hartford - 219 New Park Avenue	Verizon	3	429	108	0.0397	1970	1.0000	3.97%	
Petition 889	Hartford - 219 New Park Avenue	Verizon	9	306	108	0.0849	869	0.5793	14.65%	40.54%
	Hartford - 219 New Park Avenue	metroPCS	3	727	80	0.1225	2135	1.0000	12.25%	52.79%
	Hartford - 219 New Park Avenue	metroPCS	1	1200	80	0.0674	2130	1.0000	6.74%	59.54%

# metroPCS

Unlimit Yourself.

## HFC1237A CROWN NEW PARK AVE HARTFORD (CROWN SITE # 876363)

219 NEW PARK AVE  
HARTFORD, CT 06106  
HARTFORD COUNTY

SITE TYPE: CO-LOCATION ON EXISTING MONOPOLE

### SITE INFORMATION:

PROPERTY OWNER: CONNECTICUT LIGHT & POWER  
PO BOX 270  
HARTFORD, CT 06141

TOWER OWNER: CROWN ATLANTIC COMPANY LLC  
PMB 353  
4017 WASHINGTON ROAD  
MCMURRAY, PA 15317

TOWER OWNER SITE ID: 876363

APPLICANT: METROPCS MASSACHUSETTS, LLC  
285 BILLERICA ROAD,  
CHELMSFORD, MA 01824  
(978) 244-7000

SITE ADDRESS: 219 NEW PARK AVE  
HARTFORD, CT 06106

COUNTY: HARTFORD

LATITUDE: 41° 45' 2.84" N

LONGITUDE: 72° 42' 49.07" W

ZONING CLASSIFICATION: B-4 BUSINESS DISTRICT (NEIGHBORHOOD BUSINESS)

ZONING JURISDICTION: CITY OF HARTFORD

TAX ID PARCEL NUMBER: 138-472-001

ARCHITECT / ENGINEER: ENGINEER: MATT TILDEN  
DEWBERRY-GOODKIND, INC.  
280 SUMMER STREET, 10TH FLOOR  
BOSTON, MA 02210

POWER COMPANY: CONNECTICUT LIGHT & POWER  
WESTERN DIVISION  
(800) 286-2000

TELEPHONE COMPANY: AT&T  
(888) 944-0447

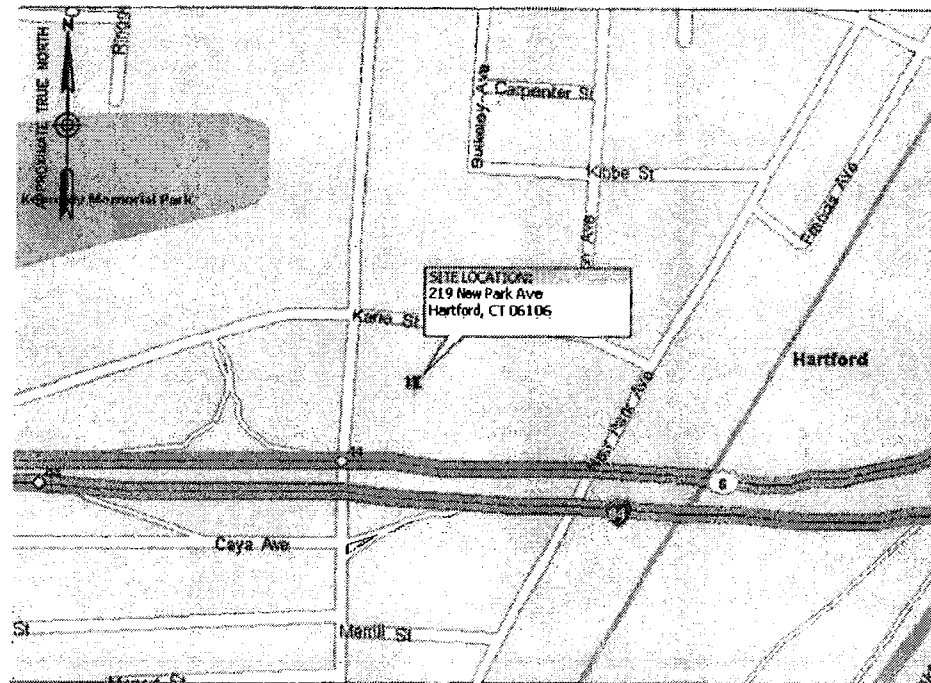
SITE ACQUISITION MANAGER: KELLIE DUNN  
(978) 244-7200

CONSTRUCTION MANAGER: DAVE BEAN  
(978) 244-7200

OPERATIONS MANAGER: MIKE WILBANKS  
(978) 244-7280

### VICINITY MAP

SCALE: N.T.S.



### DRIVING DIRECTIONS

TAKE I-495 SOUTH. TAKE EXIT 22 ONTO I-90 TOWARD MASS. TAKE EXIT 9 TO MERGE ONTO I-84 WEST ENTERING CONNECTICUT. TAKE EXIT 46 ONTO SISSON AVE. MERGE ONTO WEST BLVD. TURN LEFT ONTO SISSON AVE. CONTINUE ON NEW PARK AVE. TURN RIGHT AT 219 NEW PARK AVE INTO CL&P. FOLLOW ACCESS ROAD AROUND TO TOWER.

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE:  
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

### APPROVALS

LANDLORD: **APPROVED**  
By Mike Callahan at 11:31 am, Sep 22, 2011

FIELD CONST. MGR: **APPROVED**  
By Greg Knight at 4:23 pm, Sep 20, 2011

RF ENGINEER: **APPROVED**  
By Frantz Pierre at 4:11 pm, Sep 20, 2011

SITE ACQUISITION AGENT: \_\_\_\_\_

ARCHITECT/ENGINEER: \_\_\_\_\_

### SHEET INDEX

DWG.	DESCRIPTION	REV.
T-1	TITLE SHEET	1
G-1	GENERAL NOTES	1
C-1	DETAILED SITE PLAN & ELEVATION	1
C-2	CONSTRUCTION DETAILS & RF SCHEDULE	1
C-3	EQUIPMENT PAD DETAILS	1
E-1	RISER DIAGRAMS & NOTES	1
E-2	GROUNDING SCHEMATIC & DETAILS	1

### 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

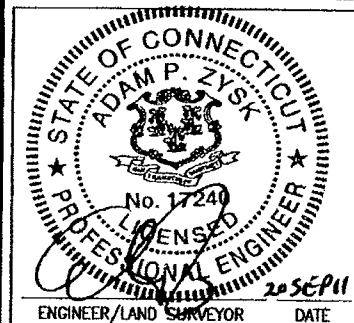
- THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
- THIS FACILITY WILL CONSUME NO UNRECOVERABLE ENERGY.
- NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.
- NO WASTE WATER WILL BE GENERATED AT THIS LOCATION.
- NO SOLID WASTE WILL BE GENERATED AT THIS LOCATION.
- 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) 244-7000  
FAX (978) 244-7240

**Dewberry**

Dewberry-Goodkind, Inc.  
280 SUMMER ST.  
10TH FLOOR  
BOSTON, MA 02210  
PHONE: 617.865.3400  
FAX: 617.865.3310



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	09/16/11	ISSUED FOR CONSTRUCTION
0	09/06/11	ISSUED FOR REVIEW

PROJECT NO.	DESIGNED BY:	HFT	SCALE:
50011495	DRWEN BY:	HT	AS SHOWN
JOB NO. 50043622	CHECKED BY:	HT	

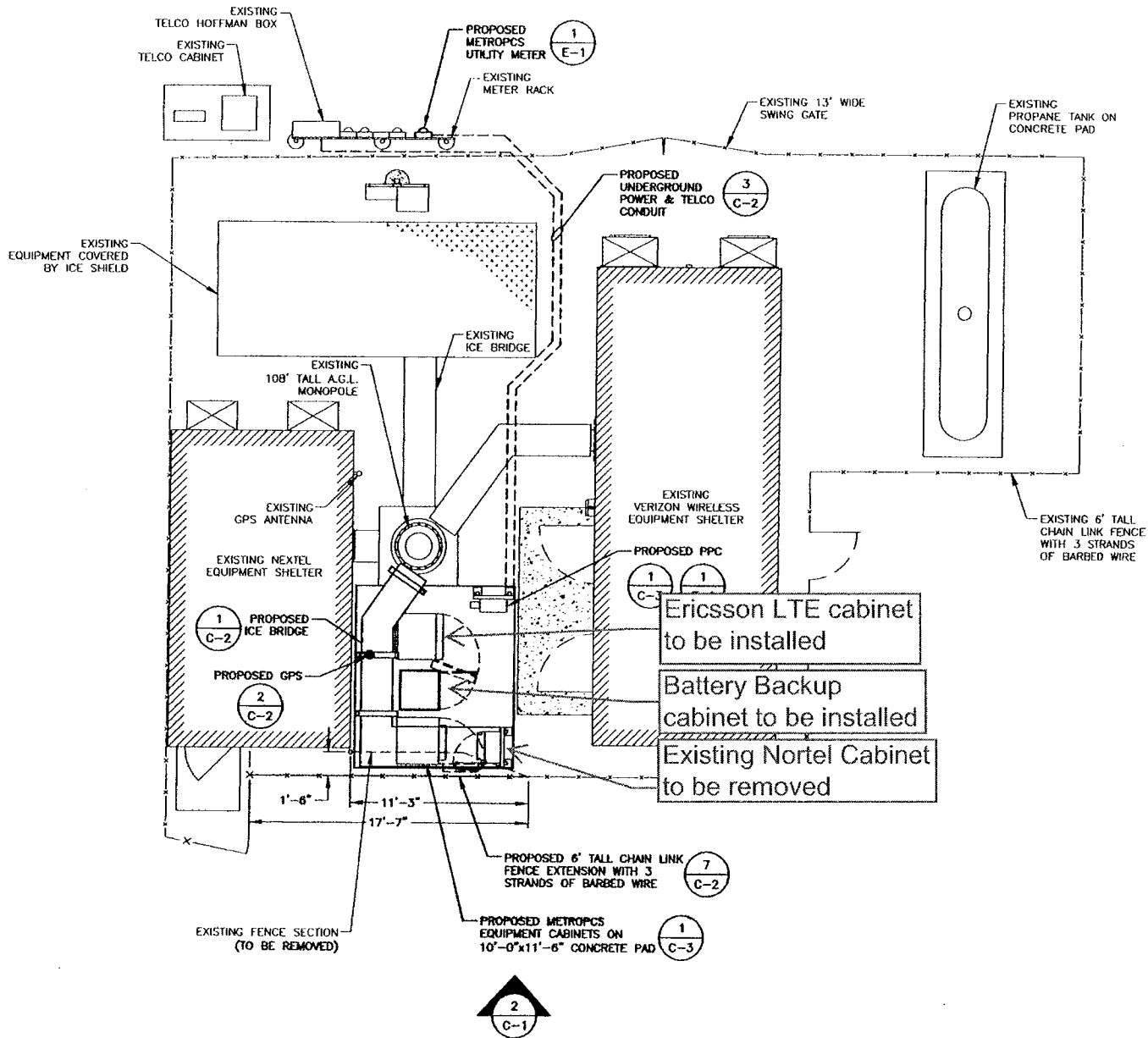
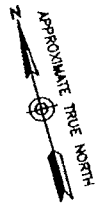
SITE NAME:  
**HFC1237A  
CROWN NEW PARK AVE  
HARTFORD  
(CROWN SITE # 876363)**

SITE ADDRESS:  
219 NEW PARK AVE  
HARTFORD, CT 06106

DRAWING TITLE:  
**TITLE SHEET**

DRAWING NO.:  
**T-1**

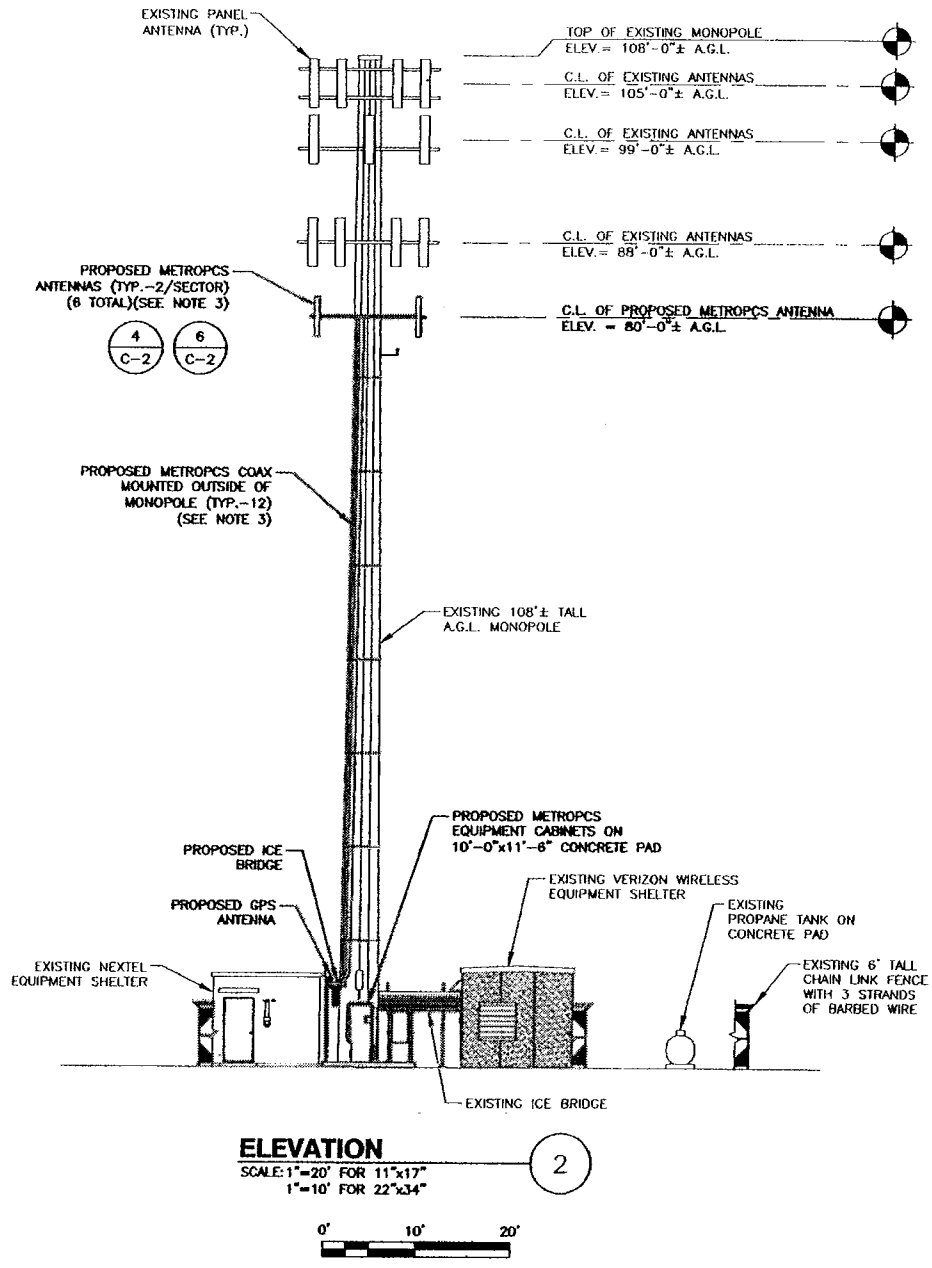




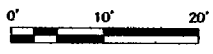
**1**  
**DETAILED SITE PLAN**  
 SCALE: 1"=10' FOR 11"x17"  
 1"=5' FOR 22"x34"



- NOTES:**
1. NORTH ARROW SHOWN AS APPROXIMATE.
  2. SOME ITEMS NOT SHOWN FOR CLARITY.
  3. INSTALL ANTENNAS, MOUNTS AND COAX PER STRUCTURAL ANALYSIS BY PAUL J. FORD AND COMPANY FOR METROPCS# HFC1237A AND CROWN CASTLE# 876363, PAUL J FORD PROJECT# 37511-1066, DATED MAY, 17 2011.



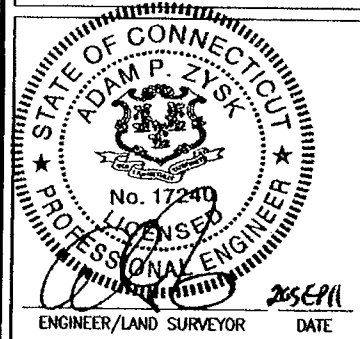
**2**  
**ELEVATION**  
 SCALE: 1"=20' FOR 11"x17"  
 1"=10' FOR 22"x34"



**metroPCS.**  
 Unlimit Yourself.  
 285 BILLERICA ROAD  
 THIRD FLOOR  
 CHELMSFORD, MA 01824  
 TEL (978) 244-7000  
 FAX (978) 244-7240

**Dewberry**

Dewberry-Goodkind, Inc.  
 280 SUMMER ST.  
 10TH FLOOR  
 BOSTON, MA 02210  
 PHONE: 617.695.3400  
 FAX: 617.695.3310



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	09/16/11	ISSUED FOR CONSTRUCTION
0	09/06/11	ISSUED FOR REVIEW

PROJECT NO. 50011495	DESIGNED BY: HFT	SCALE: AS SHOWN
JOB NO. 50043622	DRAWN BY: HR	
	CHECK'D BY: HFT	

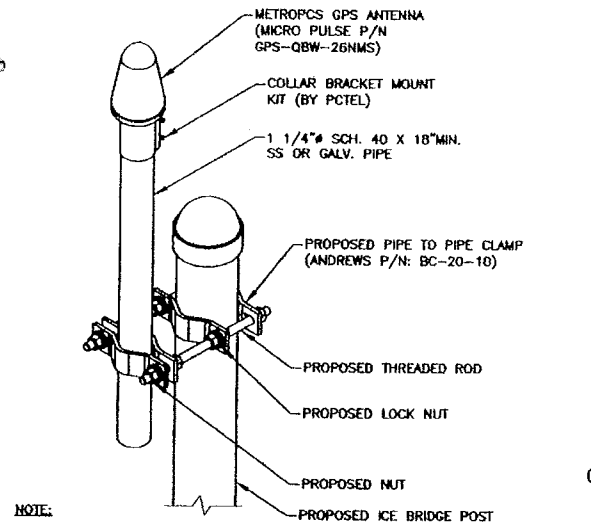
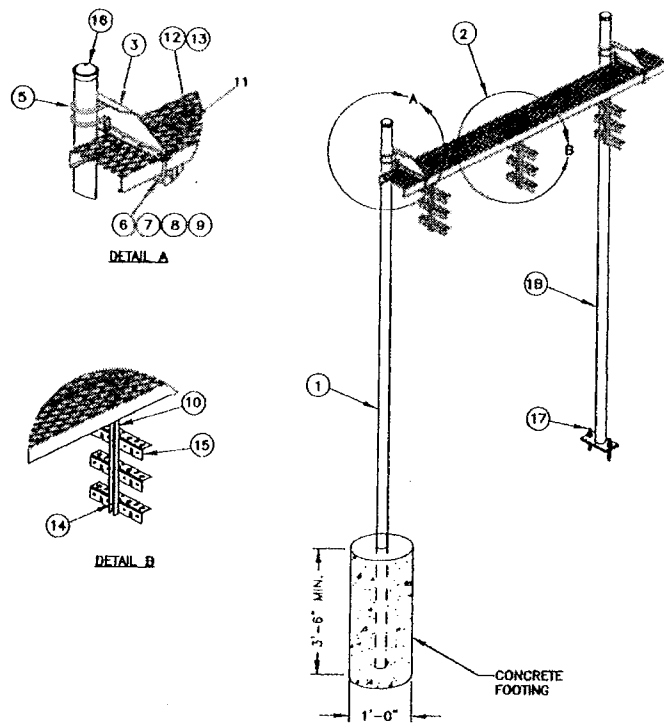
**SITE NAME:**  
 HFC1237A  
 CROWN NEW PARK AVE  
 HARTFORD  
 (CROWN SITE # 876363)

**SITE ADDRESS:**  
 219 NEW PARK AVE  
 HARTFORD, CT 06106

**DRAWING TITLE:**  
 DETAILED SITE PLAN  
 & ELEVATION

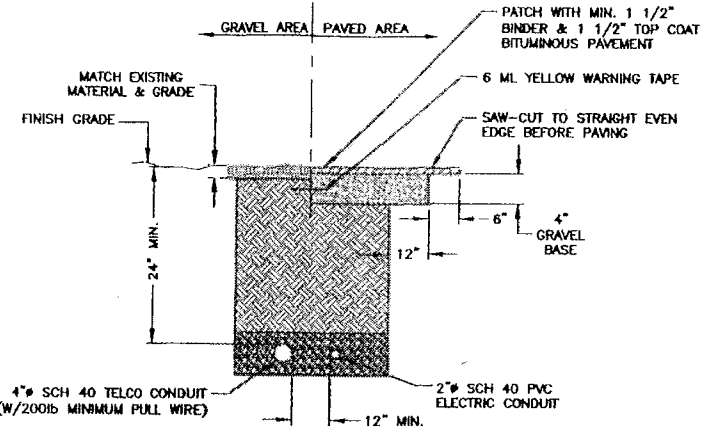
**DRAWING NO.:**  
**C-1**





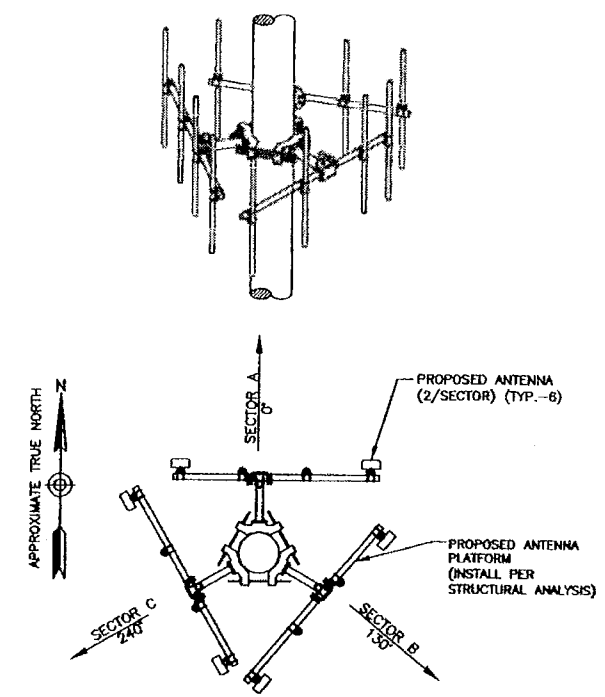
NOTE:  
 1. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1"-1 1/4" DIAMETER GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA POST.

GPS POLE MOUNTED 2  
 SCALE: N.T.S.



NOTES:  
 1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.  
 2. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.  
 3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.  
 4. CONCRETE ENCASE CONDUIT WHEN TRENCHING UNDER SITE ACCESS ROAD.

JOINT SERVICE TRENCH BURIED CONDUIT (ELECTRIC/TELEPHONE) 3  
 SCALE: N.T.S.



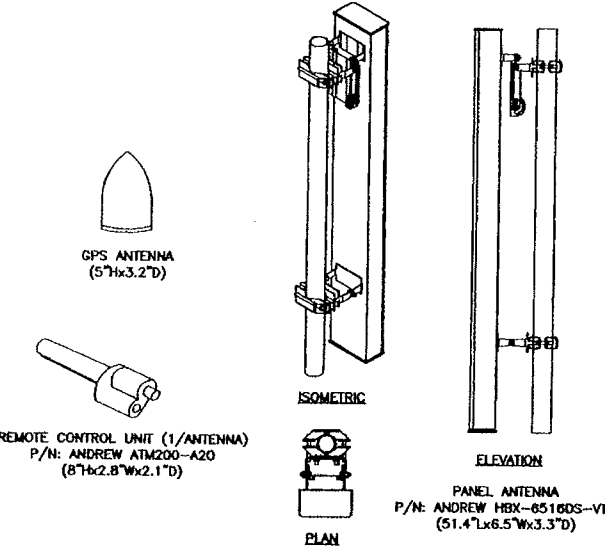
NOTES:  
 1. ANTENNA MOUNTING FRAME TO BE INSTALLED PER TOWER DESIGN & STRUCTURAL ANALYSIS.  
 2. AZIMUTHS BASED ON TRUE NORTH.  
 3. CONTRACTOR TO VERIFY FINAL AZIMUTHS PRIOR TO ANTENNA INSTALLATION.

ANTENNA MOUNTING PLAN 6  
 SCALE: N.T.S.

ITEM	PART NO.	DESCRIPTION	QTY.
1	MF-130	DIRECT BURIAL PIPE COLUMN, 13' 4"	TBD
1B	MF-126.01	BASE SHOE PIPE COLUMN 10'-6"	TBD
2	WB-CY210	24" SAFETY GRATING	1
3	WBLB243.08	24" WAVEGUIDE BRIDGE SUPPORT BRACKET	1
4A	WBK2106H	24" HARDWARE KIT ITEM#5-16	1
5	GUB-4356	1/2" X 3-5/8" X 6" GALV U-BOLT KIT	4
6	WB-JB-6	1/2" J-BOLT	4
7	GW-04	1/2" GALV FLAT WASHER	4
8	GWL-04	1/2" GALV LOCK WASHER	4
9	GN-04	1/2" GALV HEX NUT	4
10	WBT243.01	VERTICAL TRAPEZE SECTION	3
11	MT-387	SQUARE WASHER, 1 1/2" X 1 1/2" W/ 7/16" HOLE	18
12	GB-03205	3/8" X 2" GALV BOLT KIT	9
13	GW-03	3/8" GALV FLAT WASHER	9
14	GB-03105	3/8" X 1" GALV BOLT KIT	18
15	WBT123.02	12" HORIZONTAL TRAPEZE SECTION	9
16	PC-034	PIPE CAP 3-1/2"	2
17	MT-287	ANCHOR, 3/4" X 7" WEDGE	2

NOTE:  
 1. ICE BRIDGE TO BE ANDREWS OR APPROVED EQUAL. ICE BRIDGE WIDTH MUST BE 18" MINIMUM.

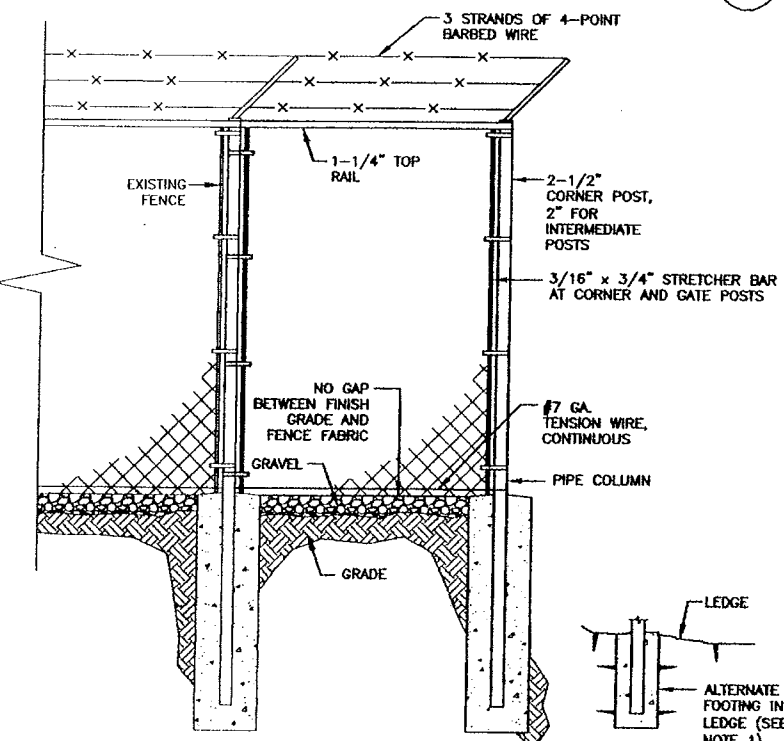
CABLE BRIDGE DETAIL 1  
 SCALE: N.T.S.



ANTENNA & GPS DETAILS 4  
 SCALE: N.T.S.

ANTENNA INFORMATION								MAIN FEEDLINE					TOP JUMPER		BOTTOM JUMPER	
SECTOR	TYPE	AZIMUTH	ELECTRICAL DOWNTILT	MECHANICAL DOWNTILT	RAD CTR, AGL	MAKE	MODEL	FEED	CABLE	MFG	LENGTH	COLOR	SIZE	LENGTH	SIZE	LENGTH
ALPHA	Tx/Rx	0°	2' elec	-	80°-0°±	ANDREW	HBX-6518DS-VTM	BOTTOM	FXL 780	COMMSCOPE	110'±	RED WITH 1 STRIPE	1/2"	6'	1/2"	10'
								BOTTOM	FXL 780	COMMSCOPE	110'±	RED WITH 2 STRIPES	1/2"	6'	1/2"	10'
	Tx/Rx	0°	2' elec	-	80°-0°±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL 780	COMMSCOPE	110'±	YELLOW WITH 1 STRIPE	1/2"	6'	1/2"	10'
								BOTTOM	FXL 780	COMMSCOPE	110'±	YELLOW WITH 2 STRIPES	1/2"	6'	1/2"	10'
BETA	Tx/Rx	130°	2' elec	-	80°-0°±	ANDREW	HBX-6518DS-VTM	BOTTOM	FXL 780	COMMSCOPE	110'±	BLUE WITH 1 STRIPE	1/2"	6'	1/2"	10'
								BOTTOM	FXL 780	COMMSCOPE	110'±	BLUE WITH 2 STRIPES	1/2"	6'	1/2"	10'
	Tx/Rx	130°	2' elec	-	80°-0°±	ANDREW	HBX-6518DS-VTM	BOTTOM	FXL 780	COMMSCOPE	110'±	WHITE WITH 1 STRIPE	1/2"	6'	1/2"	10'
								BOTTOM	FXL 780	COMMSCOPE	110'±	WHITE WITH 2 STRIPES	1/2"	6'	1/2"	10'
GAMMA	Tx/Rx	240°	2' elec	-	80°-0°±	ANDREW	HBX-6518DS-VTM	BOTTOM	FXL 780	COMMSCOPE	110'±	GREEN WITH 1 STRIPE	1/2"	6'	1/2"	10'
								BOTTOM	FXL 780	COMMSCOPE	110'±	GREEN WITH 2 STRIPES	1/2"	6'	1/2"	10'
	Tx/Rx	240°	2' elec	-	80°-0°±	ANDREW	HBX-6516DS-VTM	BOTTOM	FXL 780	COMMSCOPE	110'±	VIOLET WITH 1 STRIPE	1/2"	6'	1/2"	10'
								BOTTOM	FXL 780	COMMSCOPE	110'±	VIOLET WITH 2 STRIPES	1/2"	6'	1/2"	10'
-	GPS	-	-	-	-	ANDREW	GPS-QBW-26N	BOTTOM	LDF4-50A	ANDREW	25'±	-	-	-	-	

RF SYSTEM SCHEDULE 5  
 SCALE: N.T.S.



FENCE NOTES:  
 1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN LEDGE. IF LEDGE IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE LEDGE. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF LEDGE IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.  
 2. ATTACH EACH GATE WITH 1-1/2" PAIR OF NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL.

FENCE EXTENSION DETAIL 7  
 SCALE:

**metroPCS.**  
 Unlimit Yourself.  
 285 BILLERICA ROAD  
 THIRD FLOOR  
 CHELMSFORD, MA 01824  
 TEL (978) 244-7000  
 FAX (978) 244-7240

**Dewberry**  
 Dewberry-Goodkind, Inc.  
 280 SUMMER ST.  
 10TH FLOOR  
 BOSTON, MA 02210  
 PHONE: 617.695.3400  
 FAX: 617.695.3310

STATE OF CONNECTICUT  
 ADAM P. ZYSK  
 No. 17240  
 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.

REV#	DATE	DESCRIPTION
1	09/16/11	ISSUED FOR CONSTRUCTION
0	09/06/11	ISSUED FOR REVIEW

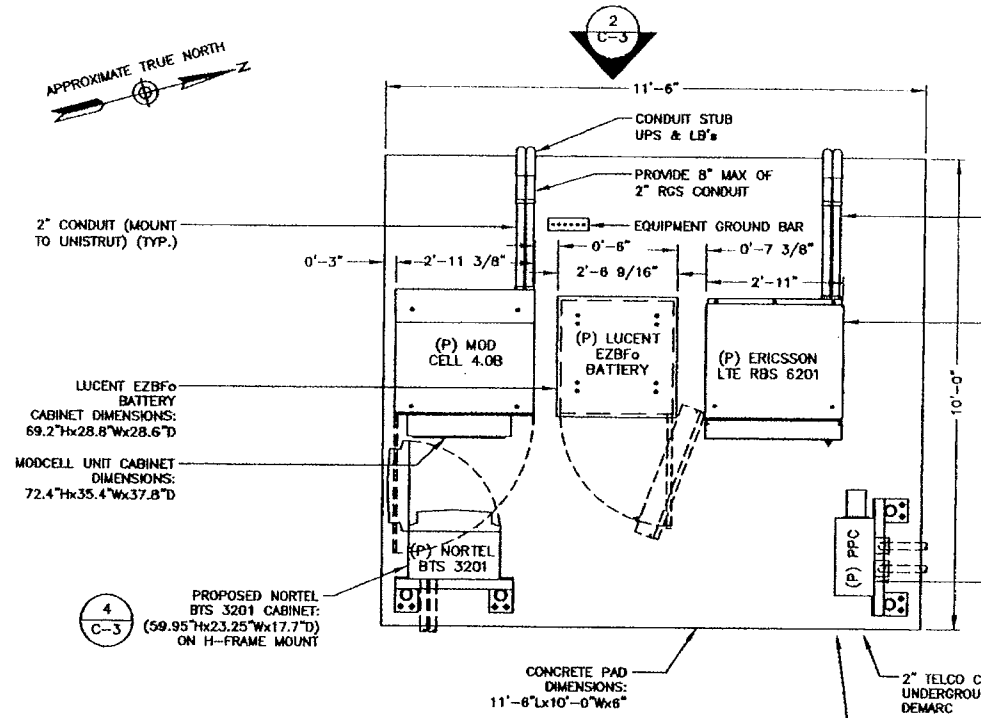
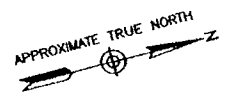
PROJECT NO.	DESIGNED BY:	NET	SCALE:
50011495	NET		AS SHOWN
JOB NO.	DRAWN BY:	HR	CHECKED BY:
50043622	NET		

SITE NAME:  
**HFC1237A**  
**CROWN NEW PARK AVE**  
**HARTFORD**  
**(CROWN SITE # 876363)**

SITE ADDRESS:  
 219 NEW PARK AVE  
 HARTFORD, CT 06106

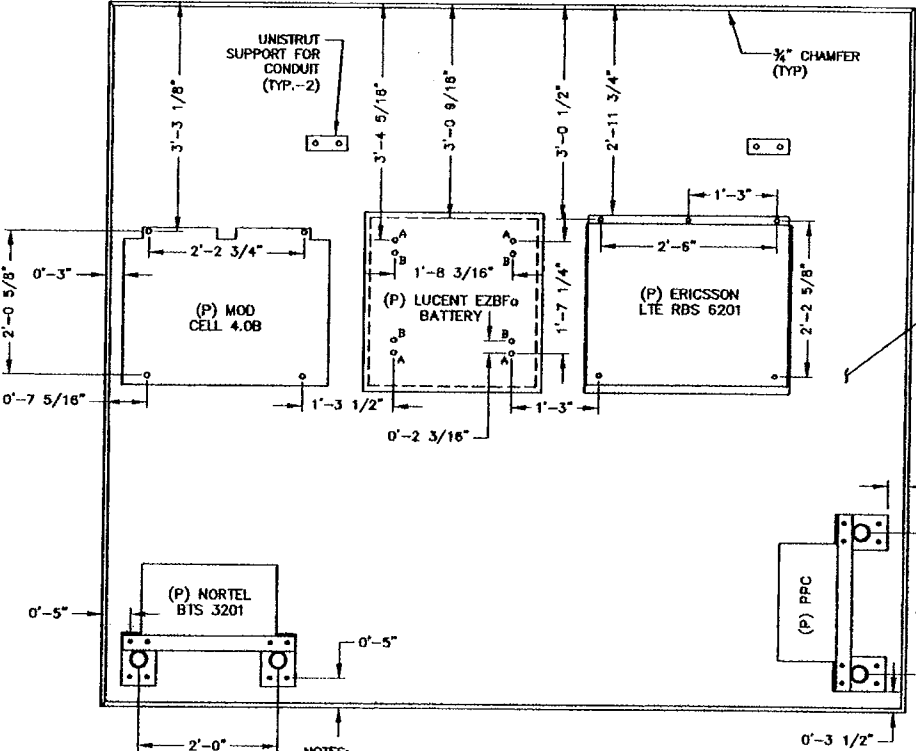
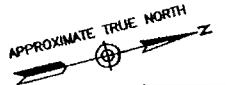
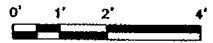
DRAWING TITLE:  
**CONSTRUCTION DETAILS & RF SCHEDULE**

DRAWING NO:  
**C-2**



**PLAN AT EQUIPMENT PAD**

SCALE: 1/4"=1' FOR 11"x17"  
1/2"=1' FOR 22"x34"



- 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**

SCALE: 3/8"=1' FOR 11"x17"  
3/4"=1' FOR 22"x34"



PROVIDE 2" LIQUID-TITE CONDUIT (SUPPORT LIQUID-TITE WITHIN 12" OF TERMINATION) (TYP.)

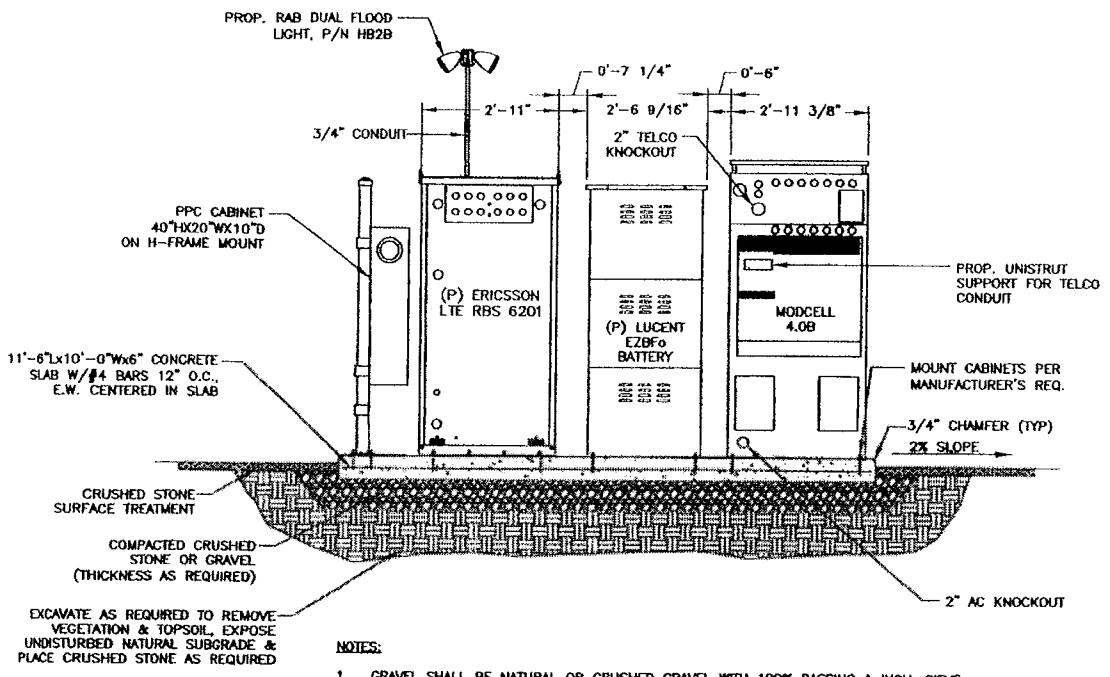
PROPOSED ERICSSON LTE RBS CABINET DIMENSIONS: 72.0"x35.0"x36.0"D

PPC CABINET DIMENSIONS: 40"x20"x10"D

CONCRETE PAD DIMENSIONS: 11'-6"x10'-0"x6"

2" TELCO CONDUIT UNDERGROUND TO TELCO DEMARC

UNDERGROUND ELECTRICAL CONDUIT TO POWER DEMARC

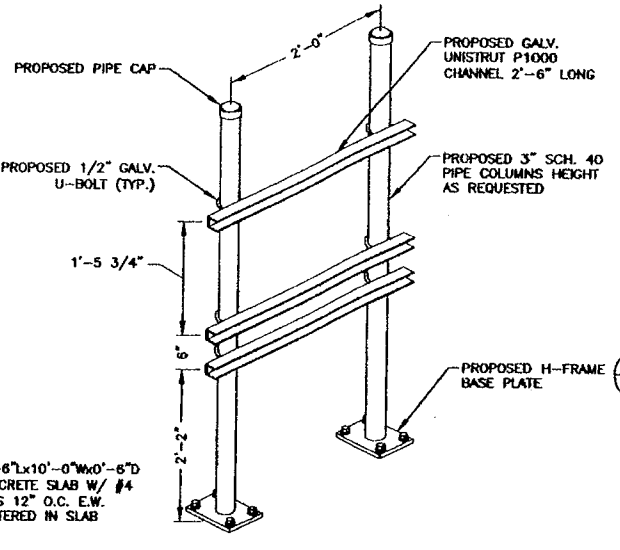
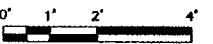


**NOTES:**

1. GRAVEL SHALL BE NATURAL OR CRUSHED GRAVEL WITH 100% PASSING 1 INCH. SIEVE
2. GRADE SHALL SLOPE AWAY FROM THE CONCRETE PAD TO ALLOW FOR PROPER WATER RUN OFF.
3. CONTRACTOR TO VERIFY STUBUP & UNDERGROUND CONDUIT LOCATIONS FOR THE POWER AND TELCO PRIOR TO POURING CONCRETE.
4. BEARING STRATA MEDIUM TO DENSE INSET GRANULAR MATERIAL OR COMPACTED GRAVEL FILL 95% COMPACTION.
5. SUBGRADE & FILL SHALL CONSIST OF CLEAN SOIL. NO DELETERIOUS MATERIALS OR ORGANICS.

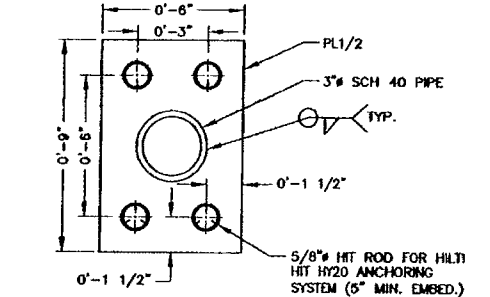
**CONCRETE PAD SECTION**

SCALE: 1/4"=1' FOR 11"x17"  
1/2"=1' FOR 22"x34"



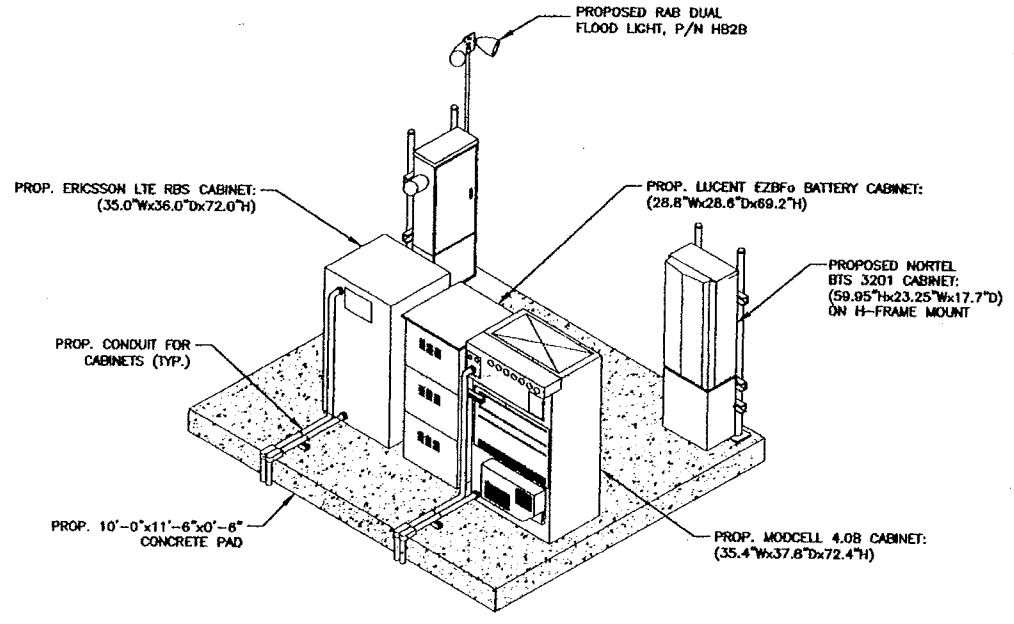
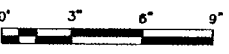
**H-FRAME**

SCALE: N.T.S.



**H-FRAME BASE PLATE**

SCALE: 1 1/2"=1' FOR 11"x17"  
3"=1' FOR 22"x34"



**EQUIPMENT LAYOUT ISOMETRIC**

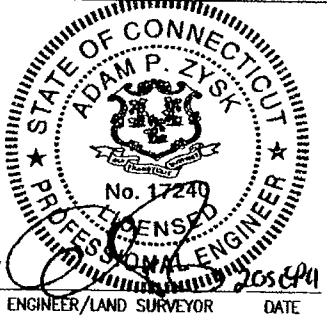
SCALE: N.T.S.

**metroPCS.**  
Unlimit Yourself.

285 BILLERICA ROAD  
THIRD FLOOR  
CHELMSFORD, MA 01824  
TEL (978) 244-7000  
FAX (978) 244-7240

**Dewberry**

Dewberry-Goodkind, Inc.  
280 SUMMER ST.  
10TH FLOOR  
BOSTON, MA 02210  
PHONE: 617.695.3400  
FAX: 617.695.3310



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	09/16/11	ISSUED FOR CONSTRUCTION
0	09/06/11	ISSUED FOR REVIEW

PROJECT NO. 50011495	DESIGNED BY: MFT	SCALE:
JOB NO. 50043622	DRAWN BY: HR	AS SHOWN
	CHECKED BY: MFT	

**SITE NAME:**  
HFC1237A  
CROWN NEW PARK AVE  
HARTFORD  
(CROWN SITE # 876363)

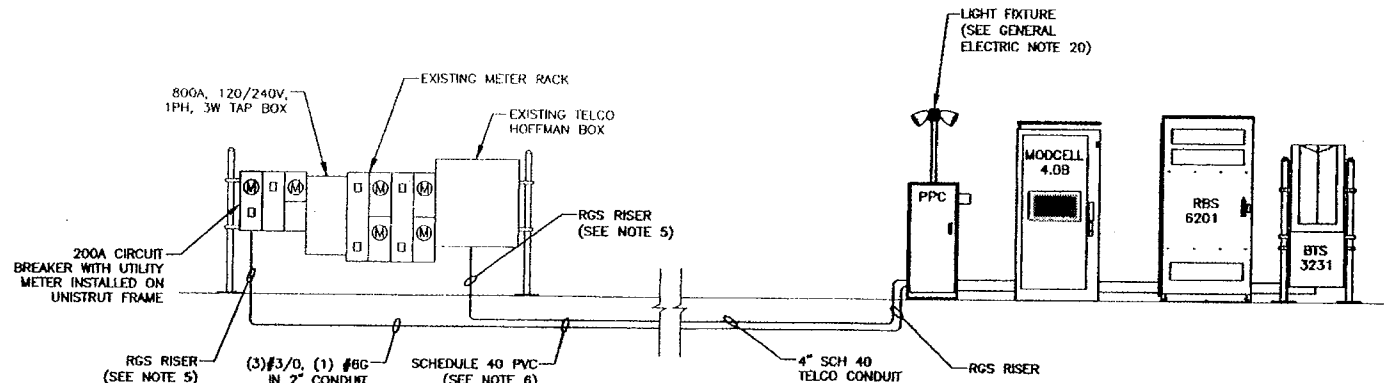
**SITE ADDRESS:**  
219 NEW PARK AVE  
HARTFORD, CT 06106

**DRAWING TITLE:**  
EQUIPMENT PAD DETAILS

**DRAWING NO.:**  
C-3

**GENERAL ELECTRICAL & GROUNDING NOTES**

- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
- BURIED CONDUIT SHALL BE SCHEDULE 40 PVC. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THHN, OR THIN INSULATION.
- RUN ELECTRICAL CONDUIT OR CABLE BETWEEN UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
- RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
- ABOVE GROUND PORTION OF CONDUIT BETWEEN BTS AND PROJECT OWNER'S CELL SITE PPC SHALL BE SCHEDULE 40 PVC CONDUIT.
- ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH PROJECT OWNER'S SITE GROUNDING STANDARDS.
- GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS.
- USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MINIMUM RESISTANCE REQUIRED.
- CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LMA RETURN-LOSS AND DISTANCE-TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE-OUT.
- PROPOSED RAB DUAL FLOOD LIGHT, P/N HB2B & INTERMATIC FH SERIES 60 MIN. TIMER IN WP PLASTIC CASE, P/N E200. FIELD LOCATE LIGHT AND SWITCH AS NEEDED.
- LIQUID-TIGHT FLEXIBLE CONDUIT SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATIONS OCCUR OR FLEXIBILITY IS NEEDED.

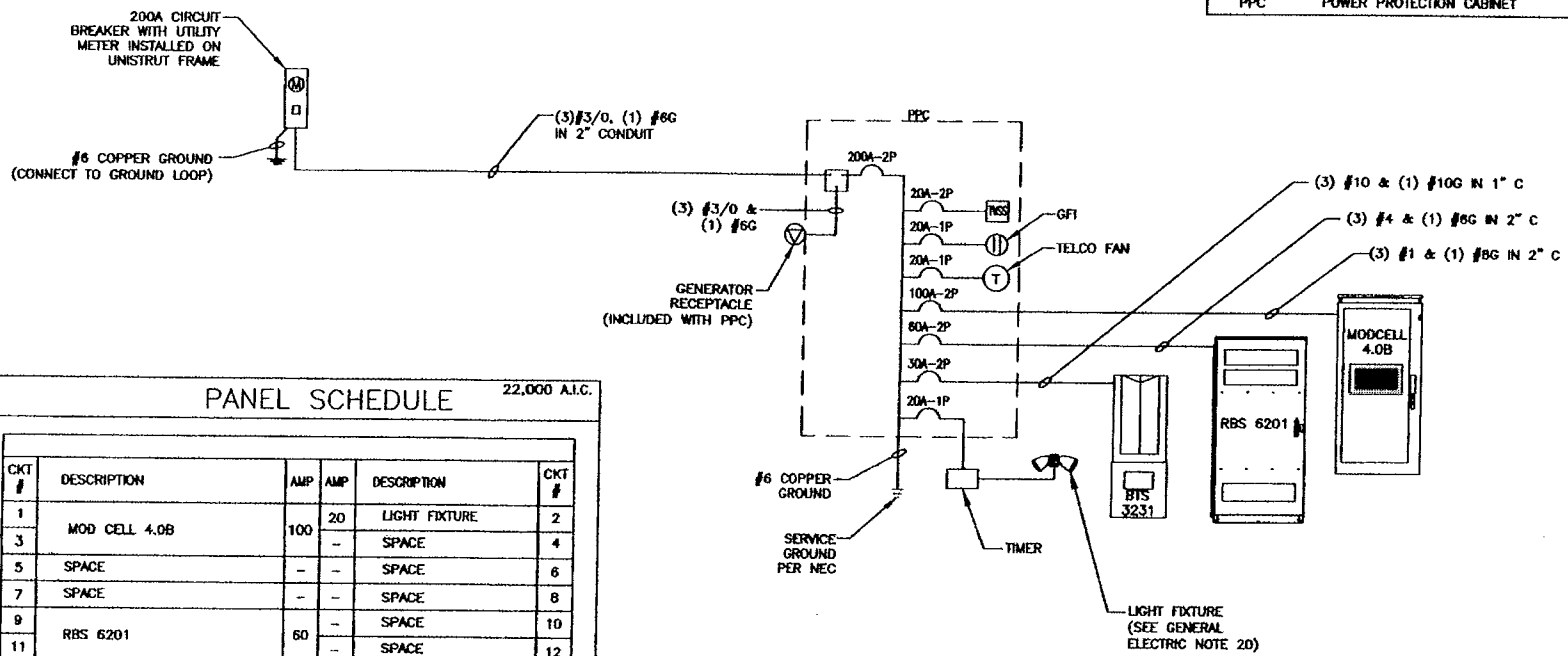


- NOTES:**
- COORDINATE THE INSTALLATION OF THE UTILITY METER WITH LOCAL UTILITY PROVIDER.

**POWER/TELCO RISER DIAGRAM**  
SCALE: N.T.S.

**ELECTRICAL LEGEND**

[Symbol]	NEW PANELBOARD, SURFACE MOUNTED
[Symbol]	EXISTING PANELBOARD, SURFACE MOUNTED
[Symbol]	DRY TYPE TRANSFORMER
[Symbol]	METER
[Symbol]	CIRCUIT BREAKER
[Symbol]	NON-FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.
[Symbol]	FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.
[Symbol]	TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH BUILT-IN FUSES, SURFACE MOUNTED
[Symbol]	DUPLEX OUTLET, SURFACE MOUNTED, 20 AMPS, 125 VOLTS, SINGLE PHASE
[Symbol]	JUNCTION BOX, SURFACE MOUNTED 18" A.F.F.
[Symbol]	EXPOSED WIRING
[Symbol]	HOME RUNS, MINIMUM 2#10 + 1#10G IN 3/4" CONDUIT U.O.N.
[Symbol]	A.F.F. ABOVE FINISHED FLOOR
[Symbol]	U.O.N. UNLESS OTHERWISE NOTED
[Symbol]	WP WEATHERPROOF
[Symbol]	GFI GROUND FAULT INTERRUPTER
[Symbol]	A AMPERE
[Symbol]	V VOLT
[Symbol]	KWH KILOWATT - HOUR
[Symbol]	C CONDUIT
[Symbol]	G GROUND
[Symbol]	GROUND ROD
[Symbol]	MECHANICAL CONNECTION
[Symbol]	MBR MASTER GROUND BAR
[Symbol]	CADWELD CONNECTION
[Symbol]	EGB EQUIPMENT GROUND BAR
[Symbol]	MECHANICAL CONNECTION
[Symbol]	CADWELD CONNECTION
[Symbol]	G GROUND COPPER WIRE, SIZE AS NOTED
[Symbol]	EXPOSED WIRING
[Symbol]	COAXIAL CABLE
[Symbol]	5/8"x8" COPPER CLAD STEEL GROUND ROD
[Symbol]	EXOTHERMIC (CADWELD) OR MECHANICAL (COMPRESSION TYPE) CONNECTION
[Symbol]	PPC POWER PROTECTION CABINET

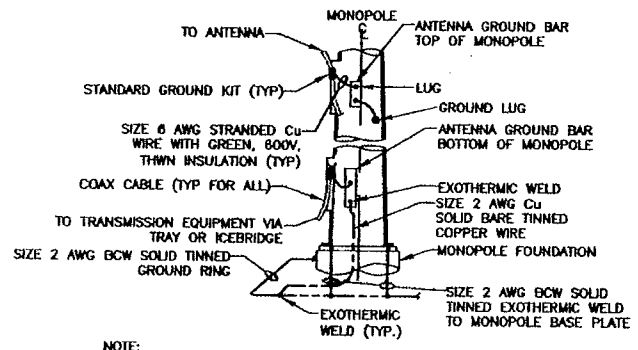


**PANEL SCHEDULE** 22,000 A.I.C.

CKT #	DESCRIPTION	AMP	AMP	DESCRIPTION	CKT #
1	MOD CELL 4.0B	100	20	LIGHT FIXTURE	2
3	SPACE	-	-	SPACE	4
5	SPACE	-	-	SPACE	6
7	SPACE	-	-	SPACE	8
9	SPACE	-	-	SPACE	10
11	RBS 6201	60	-	SPACE	12
13	SPACE	-	-	SPACE	14
15	SPACE	-	-	SPACE	16
17	SPACE	-	-	SPACE	18
19	BTS 3231	30	-	SPACE	20
21	TVSS	20	20	TELCO FAN	22
23	SPACE	-	-	GFI RECEPTACLE	24

- NOTES:**
- COORDINATE THE INSTALLATION OF THE UTILITY METER WITH LOCAL UTILITY PROVIDER.
  - NEW SERVICE SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250.

**ONE LINE DIAGRAM-ELECTRIC**  
SCALE: N.T.S.



- NOTE:**
- NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF MONOPOLE, ANTENNA LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED. GROUND BAR IS NOT REQUIRED FOR SITES WITH ONE COAX CABLE.
  - AT MINIMUM, INSTALL CABLE GROUND BAR AT TOWER TOP AND BOTTOM WITH CABLE GROUND KITS.

**MONOPOLE - ANTENNA CABLE GROUNDING**  
SCALE: N.T.S.

**metroPCS.**  
Unlimit Yourself.  
285 BILLERICA ROAD  
THIRD FLOOR  
CHELMSFORD, MA 01824  
TEL (978) 244-7000  
FAX (978) 244-7240

**Dewberry**  
Dewberry-Goodkind, Inc.  
280 SUMMER ST.  
10TH FLOOR  
BOSTON, MA 02210  
PHONE: 617.685.3400  
FAX: 617.685.3310

STATE OF CONNECTICUT  
ADAM P. ZISK  
No. 17240  
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**

REV#	DATE	DESCRIPTION
1	09/16/11	ISSUED FOR CONSTRUCTION
0	08/06/11	ISSUED FOR REVIEW

PROJECT NO. 50011495	DESIGNED BY: NFT	SCALE: AS SHOWN
DWG NO. 50043622	DRAWN BY: NR	CHECKED BY: NFT

**SITE NAME:**  
HFC1237A  
CROWN NEW PARK AVE  
HARTFORD  
(CROWN SITE # 876363)

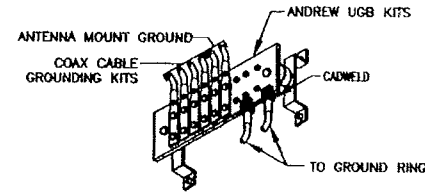
**SITE ADDRESS:**  
219 NEW PARK AVE  
HARTFORD, CT 06106

**DRAWING TITLE:**  
RISER DIAGRAMS & NOTES

**DRAWING NO.:**  
E-1

**GROUNDING NOTES**

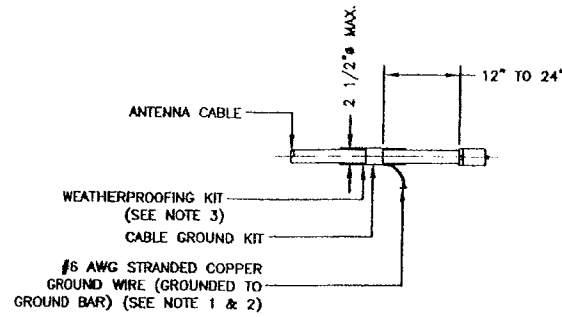
- GROUND SHALL COMPLY WITH NEC ART. 250.
- GROUND CONDUCTORS SHALL BE #6 AWG COPPER ST
- ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- ROUTE GROUNDING CONNECTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NOT BE BENT AT RIGHT ANGLE. ALWAYS MAKE 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY.
- CONNECTIONS TO GROUND BAR SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- TEST COMPLETED GROUND SYSTEM AND RECORD RESISTANCE VALUES FOR PROJECT CLOSE-OUT DOCUMENTATION. GROUND RESISTANCE SHALL NOT EXCEED 5 OHMS.
- PRIOR TO POURING CONCRETE, ALL REBAR LOCATED NEAR THE BOTTOM OF THE FOUNDATION SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE, BY STEEL TIES OR OTHER EFFECTIVE MEANS APPROVED BY NEC 2008 AND STRUCTURAL ENGINEER, AND BONDED TO THE GROUND RING AS DETAILED IN THESE PLANS. (INSPECTION MAY BE REQUIRED PRIOR TO POURING CONCRETE AND MUST BE COORDINATED BY CONTRACTOR.)
- IN ACCORDANCE WITH NEC 2008 REQUIREMENTS, ALL GROUNDING ELECTRODES PRESENT ON SITE SHALL BE BONDED TOGETHER (REFERENCE 2008 NEC ARTICLE 250.50).



**COAX GROUND BAR (CGB)**

SCALE: N.T.S.

1



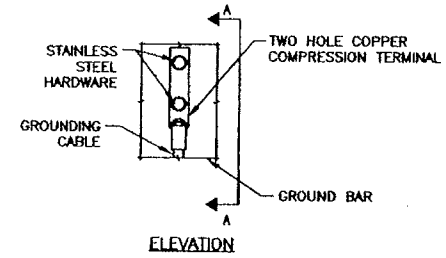
**NOTES:**

- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- GROUNDING KIT SHALL BE ANDREW SUREGROUND TYPE KIT WITH TWO-HOLE LUG.
- WEATHER PROOFING SHALL BE ANDREW TWO-PART TAPE SUPPLIED WITH KIT. COLD SHRINK SHALL NOT BE USED.

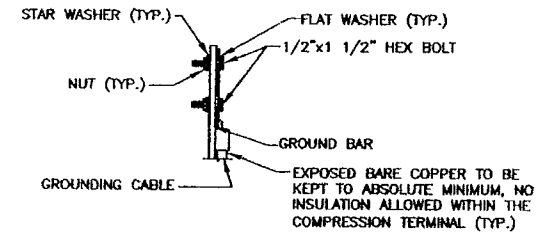
**CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE DETAIL**

SCALE: N.T.S.

3



**ELEVATION**



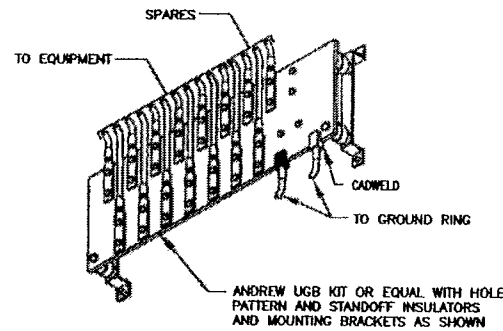
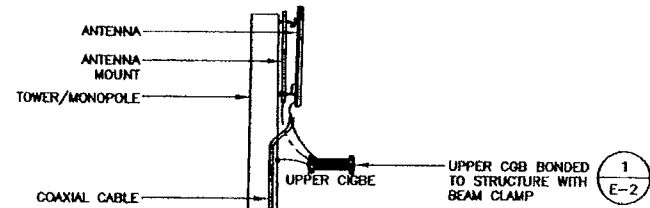
**NOTES:**

- DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED.
- OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

**TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL**

SCALE: N.T.S.

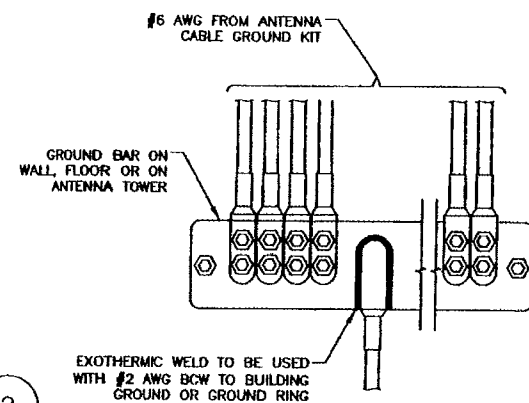
4



**EQUIPMENT GROUND BAR (EGB)**

SCALE: N.T.S.

2



EXOTHERMIC WELD TO BE USED WITH #2 AWG BCW TO BUILDING GROUND OR GROUND RING

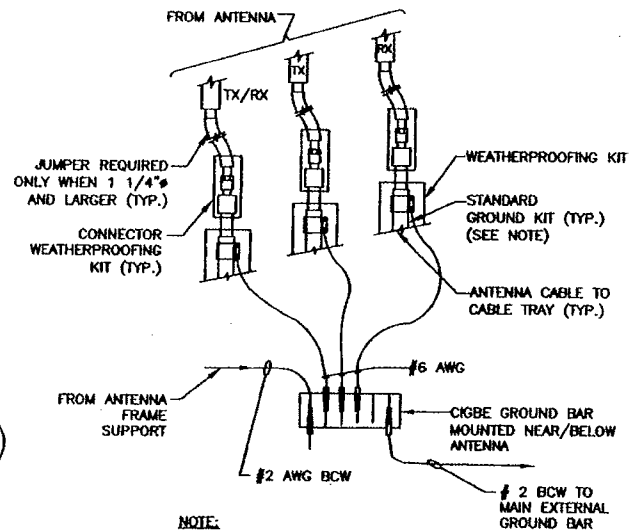
**NOTE:**

- GROUND BARS AT BOTTOM OF TOWERS OR MONOPOLES SHALL USE EXOTHERMIC WELD.

**INSTALLATION OF GROUND WIRE TO GROUND BAR**

SCALE: N.T.S.

5



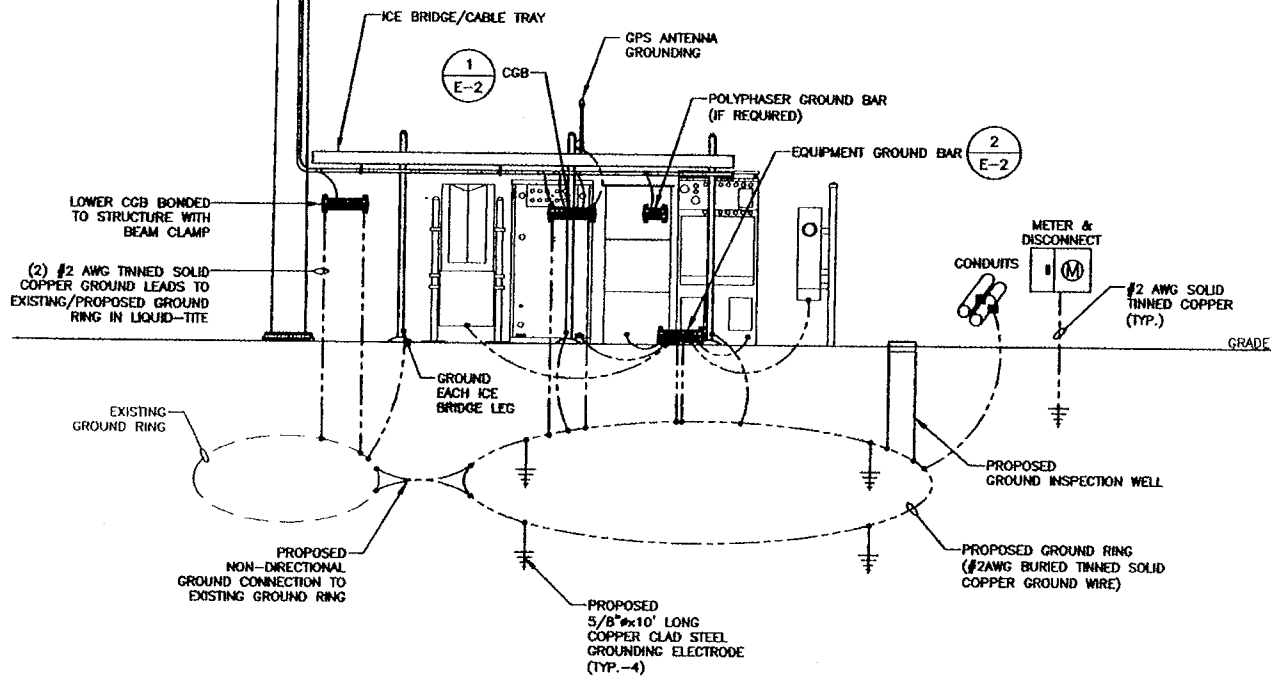
**NOTE:**

- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

**CONNECTION OF GROUND WIRES TO GROUNDING BAR (CIGBE)**

SCALE: N.T.S.

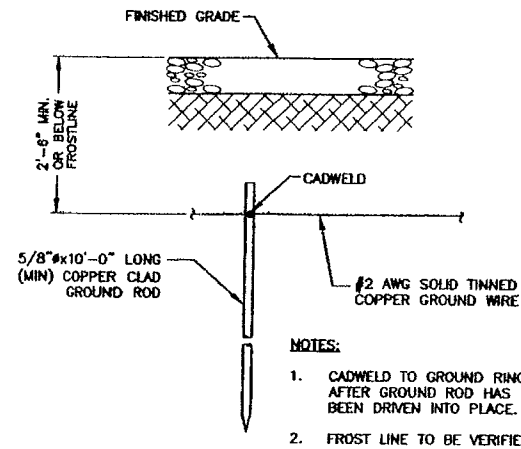
6



**GROUNDING SCHEMATIC**

SCALE: N.T.S.

7



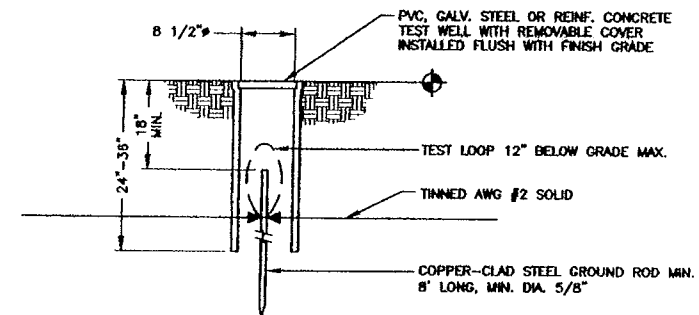
**NOTES:**

- CADWELD TO GROUND RING AFTER GROUND ROD HAS BEEN DRIVEN INTO PLACE.
- FROST LINE TO BE VERIFIED.

**GROUND ROD**

SCALE: N.T.S.

8



**GROUND SYSTEM TESTING WELL**

SCALE: N.T.S.

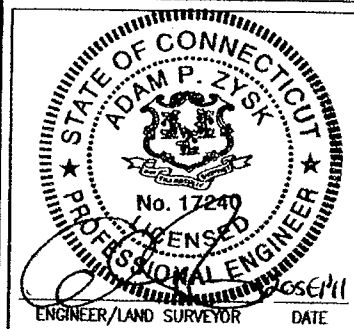
9

**metroPCS**  
Unlimit Yourself.

285 BILLERICA ROAD  
THIRD FLOOR  
CHELMSFORD, MA 01824  
TEL (978) 244-7000  
FAX (978) 244-7240

**Dewberry**

Dewberry-Goodkind, Inc.  
280 SUMMER ST.  
10TH FLOOR  
BOSTON, MA 02210  
PHONE: 617.895.3400  
FAX: 617.895.3310



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	09/16/11	ISSUED FOR CONSTRUCTION
0	09/06/11	ISSUED FOR REVIEW

PROJECT NO. 50011495	DESIGNED BY: HFT	SCALE: AS SHOWN
JOB NO. 50043622	DRAWN BY: NR	CHECKED BY: HFT

**SITE NAME:**  
HFC1237A  
CROWN NEW PARK AVE  
HARTFORD  
(CROWN SITE # 876363)

**SITE ADDRESS:**  
219 NEW PARK AVE  
HARTFORD, CT 06106

**DRAWING TITLE:**  
GROUNDING SCHEMATIC & DETAILS

**DRAWING NO.:**  
E-2