



# 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](mailto:siting.council@po.state.ct.us)

Web Site: [www.state.ct.us/csc/index.htm](http://www.state.ct.us/csc/index.htm)

February 20, 2002

Christopher B. Fisher, Esq.  
Cuddy & Feder & Worby LLP  
90 Maple Avenue  
White Plains, NY 10601-5196

RE: **EM-AT&T-015-034-083-084-097-103-107-135-167-020131** - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Bridgeport, Stamford, Milford, Danbury, Middletown, Orange, Newtown, Norwalk, and Woodbridge, Connecticut.

Dear Attorney Fisher:

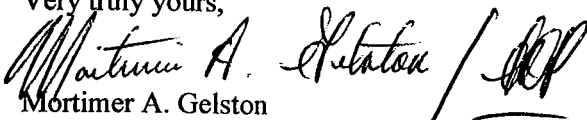
At a public meeting held on February 14, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify eleven of the twelve this existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies. The 38 Kaechele Place, Bridgeport site will be presented at a future Council meeting after requested information is received. Although no conditions have been placed on this approval, I am attaching a letter from the Town of Newtown, dated February 14, 2002, for your review and consideration.

The proposed modifications are to be implemented as specified here and in your notice dated January 29, 2002. 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 sites that would not increase tower height, extend the boundaries of the tower sites, increase noise levels at any 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. These facilities 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 these towers.

This decision is under the exclusive jurisdiction of the Council. Any additional change to these facilities 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,

  
Mortimer A. Gelston  
Chairman

MAG/RM/laf

Enclosure

c: See attached list.

Honorable Joseph P. Ganim, Mayor, City of Bridgeport  
Honorable Michael P. Nidoh, City Planner, City of Bridgeport  
Melanie J. Howlett, Assistant City Attorney, City of Bridgeport  
Honorable Mark D. Boughton, Mayor, City of Danbury  
Dennis Elpern, City Planner, City of Danbury  
Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown  
Gary Frenette, Zoning Enforcement Officer, Town of Newtown  
Honorable Domenique S. Thornton, Mayor, City of Middletown  
Planning and Zoning Official, City of Middletown  
Honorable James L. Richetelli, Jr., Mayor, City of Milford  
Wade Pierce, City Planner, City of Milford  
Honorable Alex A. Knopp, Mayor, City of Norwalk  
Stephen Thomas, Planning Chairman, City of Norwalk  
Honorable Mitchell R. Goldblatt, First Selectman, Town of Orange  
Paul Dinice, Zoning Enforcement Officer, Town of Orange  
Honorable Dannel P. Malloy, Mayor, City of Stamford  
Robin Stein, Planning and Zoning Director, City of Stamford  
Honorable Amey Marrella, First Selectman, Town of Woodbridge  
Samuel Spielvogel, Town Planner, Town of Woodbridge

**CUDDY & FEDER & WORBY LLP**

90 MAPLE AVENUE  
WHITE PLAINS, NEW YORK 10601-5196

**CUDDY & FEDER**  
1971-1995

NEIL J. ALEXANDER (also CT)  
CHARLES T. BAZYDLO (also NJ)  
THOMAS R. BEIRNE (also DC)  
THOMAS M. BLOOMER  
JOSEPH P. CARLUCCI  
KENNETH J. DUBROFF  
ROBERT FEDER  
CHRISTOPHER B. FISHER (also CT)  
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SUSAN E.H. GORDON  
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KENNETH F. JURIST  
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JOSHUA E. KIMERLING (also CT)  
DANIEL F. LEARY (also CT)  
BARRY E. LONG

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STAMFORD, CONNECTICUT  
NORWALK, CONNECTICUT

WILLIAM S. NULL  
DAWN M. PORTNEY  
ELISABETH N. RADOW  
NEIL T. RIMSKY  
RUTH E. ROTH  
JENNIFER L. VAN TUYL  
CHAUNCEY L. WALKER (also CA)  
ROBERT L. WOLFE  
DAVID E. WORBY

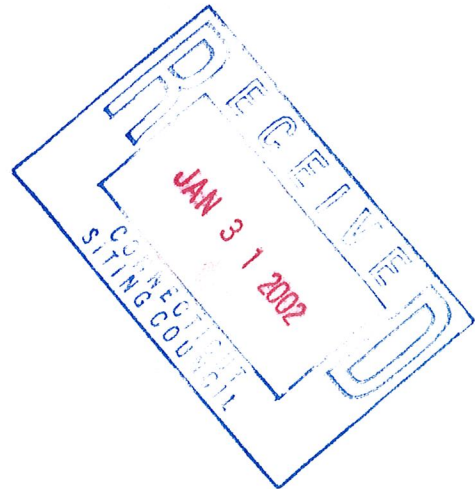
Of Counsel  
MICHAEL R. EDELMAN  
ANDREW A. GLICKSON (also CT)  
ROBERT L. OSAR (also TX)  
MARYANN M. PALERMO  
ROBERT C. SCHNEIDER  
LOUIS R. TAFFERA

January 29, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members  
of the Siting Council  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

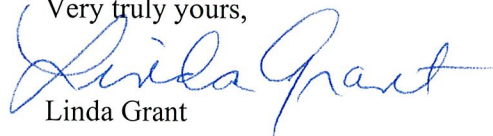
Re: AT&T Wireless Notice of Exempt Modification  
38 Kaechele Place, Bridgeport, Connecticut  
1590 Newfield Avenue, Stamford, Connecticut  
111 School House Road, Milford, Connecticut  
36 Sugar Hollow Road, Danbury, Connecticut  
90 Industrial Park, Middletown, Connecticut  
525 Orange Center Road, Orange, Connecticut  
Berkshire Road, Newtown, Connecticut  
10 Willard Road, Norwalk, Connecticut  
1027 Racebrook Road, Woodbridge, Connecticut



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On behalf of AT&T Wireless, we respectfully enclose an original and twenty copies of its notice of exempt modification with respect to the above mentioned facilities together with a check in the amount of \$500.00. We would appreciate it if these matters were placed on the next available agenda for acknowledgment by the Council. Should the Council or staff have any questions regarding this matter, please do not hesitate to contact us.

Very truly yours,

  
Linda Grant

cc: Christopher B. Fisher, Esq.

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JOSHUA E. KIMERLING (also CT)  
DANIEL F. LEARY (also CT)  
BARRY E. LONG

January 28, 2002

### VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members  
of the Siting Council

Connecticut Siting Council

10 Franklin Square

New Britain, Connecticut 06051

Re: AT&T Wireless - EM-AT&T-107-991213  
525 Orange Center Road, Orange, Connecticut  
Notice of Further Exempt Modification



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Crown Atlantic Company LLC ("Crown") holds the Siting Council certificate for the existing communications tower and related facility located at 525 Orange Center Road, Orange, Connecticut (Docket No. 177A). On December 20, 1999 AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM-AT&T-107-991213) permitting AT&T to install up to twelve (12) panel antennas at the 111' level on the existing tower, with associated equipment cabinets located on a 14' x 8'-6" concrete pad within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. In order for AT&T to install an additional equipment cabinet (approximately 76"H x 76"W x 30"D) at the facility, the existing concrete pad must be extended. AT&T proposes to add an 8'-7" x 6' poured concrete pad to the existing pad within the existing fenced compound. See plans prepared by URS Corporation annexed hereto as Exhibit 1. There will be no other infrastructure changes to AT&T's facility.



January 28, 2002

Page 2

The proposed addition of an equipment cabinet and associated concrete pad to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed addition to AT&T Wireless' facility will not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto as Exhibit 2, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased 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. For all the foregoing reasons, addition of AT&T Wireless' cabinet to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed extension of the existing equipment pad and addition of the cabinet to the Orange Center Road Facility meets the Council's exemption criteria and requests an acknowledgment of same.

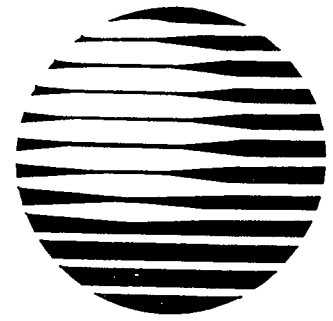
Respectfully Submitted,



Christopher B. Fisher, Esq.

On behalf of AT&T Wireless

cc: First Selectman, Town of Orange  
Darryl Hendrickson, Bechtel Telecommunications  
Kenneth C. Baldwin, Robinson & Cole



# AT&T WIRELESS

## SITE NUMBER: 15 EAST PARKWAY

### SITE NAME: ORANGE CENTER-CROWN ATLANTIC MONOPOLE

#### DRAWING INDEX

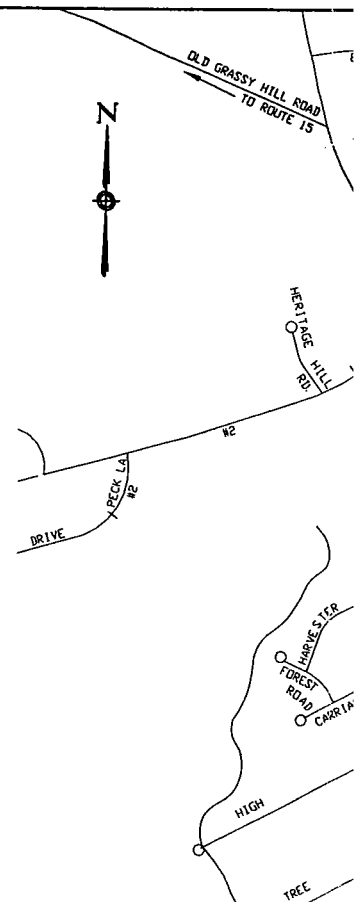
#### REV.

24623-313-CT-158-01	TITLE SHEET	0
24623-313-CT-158-02	SITE PLAN	0
24623-313-CT-158-03	EQUIPMENT LAYOUT PLAN AND GENERAL NOTES	0
24623-313-CT-158-04	ANTENNA PLAN AND TOWER ELEVATION	0
24623-313-CT-158-05	BILL OF MATERIALS AND ANTENNA SCHEMATIC	0
24623-313-CT-158-06	POWER/TELCO/GROUNDING PLAN	0
24623-313-CT-158-07	ELECTRICAL DETAILS	0
24623-313-CT-158-08	ELECTRICAL DETAILS	0

#### DIRECTIONS

TAKE ROUTE 17 NORTH TO RIDGEWOOD AVE. FOLLOW ROUTE 17 NORTH ON GOING NORTH. STAY ON THE GARDEN ST. STATE THRUWAY (RT. 87 SOUTH) TOWARDS THE TA WESTCHESTER PARKWAY/RT. 287) EAST TO I-95. 39B. WHEN YOU LOOP ONTO RT-1 GO 2.1 MILES FOLLOW THIS 1 MILE AND TURN RIGHT ONTO THE DRIVE ALONG POWER LINES TO THE BACK AND Y

#### VICINITY MAP



#### STRUCTURAL REVIEW

EXISTING ANTENNA AND EQUIPMENT SUPPORT STRUCTURE HAVE BEEN EVALUATED FOR THE REPLACEMENT/ADDITION OF ANTENNA AND COAX CABLES AND NO MODIFICATIONS TO THE ANTENNA AND SUPPORT STRUCTURE ARE REQUIRED.

**URS CORPORATION AES**

795 BROOK STREET, BUILDING 5  
ROCKY HILL, CONNECTICUT  
1-(860)-529-8882

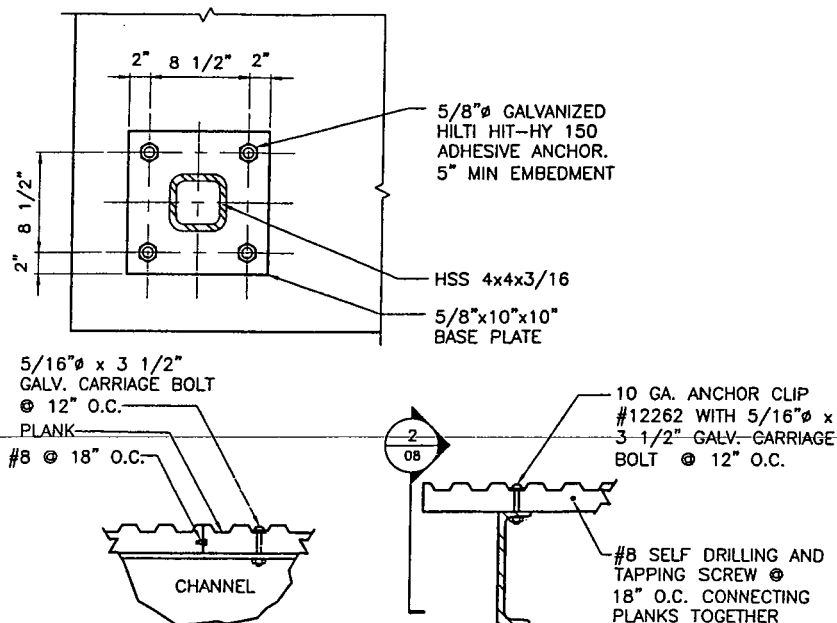
URS JOB NUMBER: F302099.39

**ORANGE CENTER-CROWN ATLANTIC MONOPOLE  
CT-158**

525 ORANGE CENTER ROAD  
ORANGE, CONNECTICUT



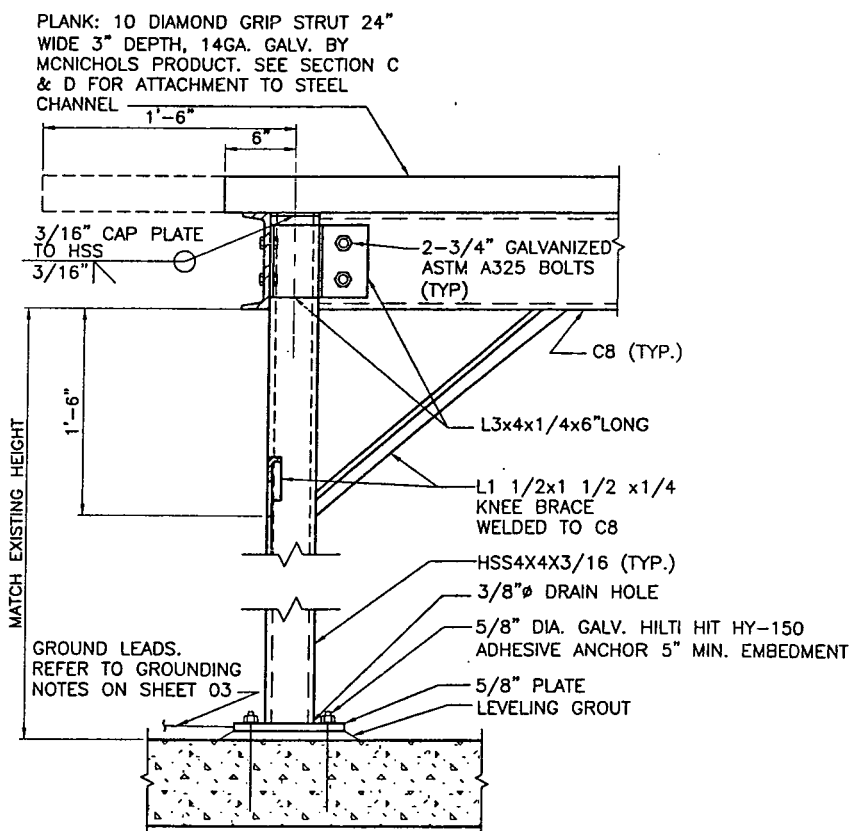
AT&T WIRELESS  
15 EAST PARKWAY



UNIDENTIFIED  
WIRELESS  
CARRIER

## TYPICAL ICE CANOPY DETAILS

SCALE: 2  
N.T.S.



SUPPORT POSTS FOR NEW ICE CANOPY (TYP.) REFER TO DETAIL, 3/02 FOR MORE INFORMATION

LOCATION OF 3G GSM OUTDOOR EQUIPMENT CABINET (INSTALLED BY GSM VENDOR).

NEW EQUIPMENT PAD EXTENSION. REFER TO SHEET 03 FOR MORE INFORMATION.

## SUPPORT POST FOR ICE CANOPY DETAIL

SCALE: 3  
N.T.S.

SITE

**URS CORPORATION AES**

795 BROOK STREET, BUILDING 5  
ROCKY HILL, CONNECTICUT  
1-(860)-529-8882

URS JOB NUMBER: F302099.39

ORANGE CENTER-CROWN ATLANTIC MONOPOLE  
CT-158

525 ORANGE CENTER ROAD  
ORANGE, CONNECTICUT



AT&T W  
15 EAS  
PAR

## GENERAL NOTES:

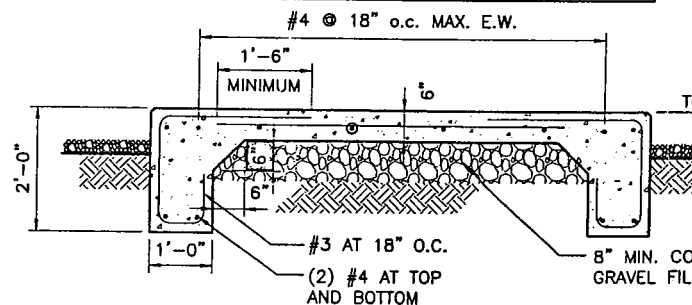
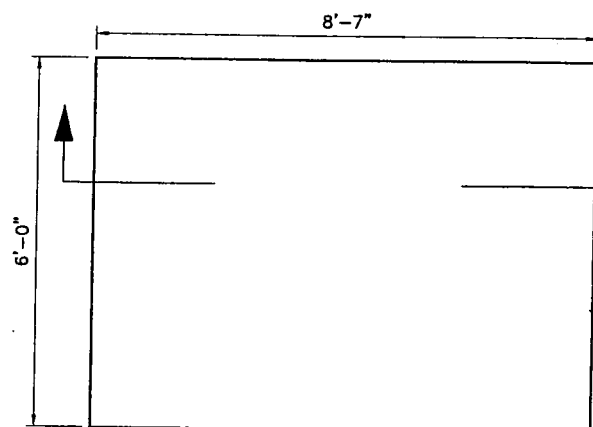
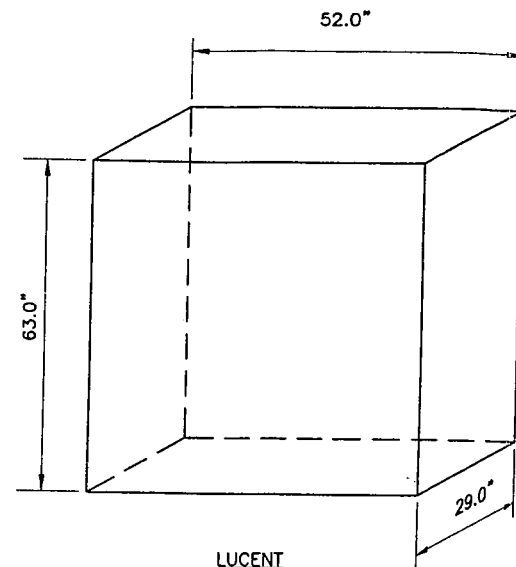
1. ALL WORK SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF NATIONAL, STATE, CITY AND LOCAL CODES, STANDARDS AND AMENDMENTS.
2. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM INFORMATION AND DRAWINGS PROVIDED BY BECTEL. SUBCONTRACTOR SHALL NOTIFY THE BECTEL CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
3. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.
4. ALL ITEMS OTHER THAN WHAT IS NOTED IN THE BILL OF MATERIALS FOR ANTENNAS, WILL BE PROVIDED BY THE SUBCONTRACTOR.
5. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE BECTEL CONSTRUCTION MANAGER.
6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF SPECIFICATIONS LISTED BELOW.
7. FIELD ROUTE ALL CONDUITS, CABLES, ETC. AS REQUIRED. CONFIRM THE EXACT ROUTING WITH THE ON-SITE BECTEL CONSTRUCTION MANAGER PRIOR TO THE START OF WORK.
8. ALL DAMAGE TO THE EXISTING STRUCTURE DURING THE CELL SITE UPGRADE MUST BE MADE GOOD TO THE PRE-CONSTRUCTION CONDITION OR BETTER.
9. REMOVE AND CLEAN UP ANY DEBRIS OR MATERIAL FROM THE SITE THROUGHOUT THE DURATION OF THE CONTRACT UPON COMPLETION OF THE WORK AS DIRECTED BY THE BECTEL CONSTRUCTION MANAGER.
10. THIS CELL SITE IS IN FULL COMMERCIAL OPERATION, THE SUBCONTRACTOR IS NOT TO DISRUPT THE EXISTING SITES NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH BECTEL AND AWS AND SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT. SINCE THIS 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 ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

## REFERENCE SPECIFICATIONS:

1. 23-033-3PS-A00Z-00002, SCOPE OF WORK (EXHIBIT "D") FOR GENERAL CONSTRUCTION SERVICES.
2. 24623-033-3PS-A00Z-00005, (EXHIBIT "E") FOR GENERAL CONSTRUCTION SERVICES.

## ELECTRICAL NOTES:

1. POWER:  
SUBCONTRACTOR SHALL PROVIDE AND INSTALL ONE (1) 80A-2P BRANCH CIRCUIT BREAKER IN EXISTING AT&T POWER DISTRIBUTION PANEL IN AVAILABLE POSITION. PROVIDE TWO (2) #4 AWG AND ONE (1) #4 AWG (NEUTRAL) AND ONE (1) #4 AWG, GROUND IN 1" GRC FROM EXISTING AT&T DISTRIBUTION PANEL TO NEW 3G, GSM OUTDOOR CABINET. REFER TO SHEET 06 FOR ROUTING CONDUIT AND LOCATION OF EQUIPMENT. ROUTE CONDUIT UNDERGROUND TO EQUIPMENT PAD EXTENSION, STUB UP CONDUIT AND CONTINUE ROUTING ON EQUIPMENT PAD TO 3G GSM CABINET. FINAL TERMINATION OF WIRES WILL BE MADE BY LUCENT. REFER TO SHEET 08 (DETAIL 1) FOR CIRCUITING.
2. TELCO:  
SUBCONTRACTOR SHALL PROVIDE (1.5 MBIT/S) CAT 5E, T-1 TELEPHONE CABLE IN 1" GRC FROM EXISTING TELCO BOX TO NEW 3G, GSM OUTDOOR CABINET. REFER TO SHEET 06 FOR ROUTING CONDUIT AND LOCATION OF EQUIPMENT. ROUTE CONDUIT UNDERGROUND TO EQUIPMENT PAD EXTENSION, STUB UP CONDUIT AND CONTINUE ROUTING ON EQUIPMENT PAD TO 3G GSM CABINET. FINAL TERMINATION OF WIRES WILL BE MADE BY LUCENT.
3. GROUND:  
SUBCONTRACTOR SHALL PROVIDE #2 AWG STRANDED COPPER WIRE FOR GROUNDING THE LUCENT GSM CABINET FRAMES TO EXISTING GROUND RING. CONNECTION TO CABINET WILL BE MADE BY LUCENT. EXISTING GROUND BAR (IF CONVENIENTLY LOCATED) CAN BE USED FOR EQUIPMENT GROUNDING. 2 GROUND CONNECTIONS TO BE PROVIDED GROUND CONOPY EXTENSION SUPPORT POSTS TO EXISTING AT&T MAIN GROUND BAR WITH #2 AWG, BCW. REFER TO SHEET 06 FOR MORE INFORMATION. WITH #2 AWG, BCW. REFER TO SHEET 06 FOR MORE INFORMATION.



### NOTES:

1. GRAVEL SHALL BE NATURAL OR CRUSHED GRAVEL WITH 100 PERCENT PASSING 1 INCH SIEVE.

EQUIPMENT PAD  
EXTENSION DETAIL  
NTS

## GENERAL NOTES

SCALE:  
N.T.S.

2

**URS CORPORATION AES**

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1-(860)-529-8882

URS JOB NUMBER: F302099.39

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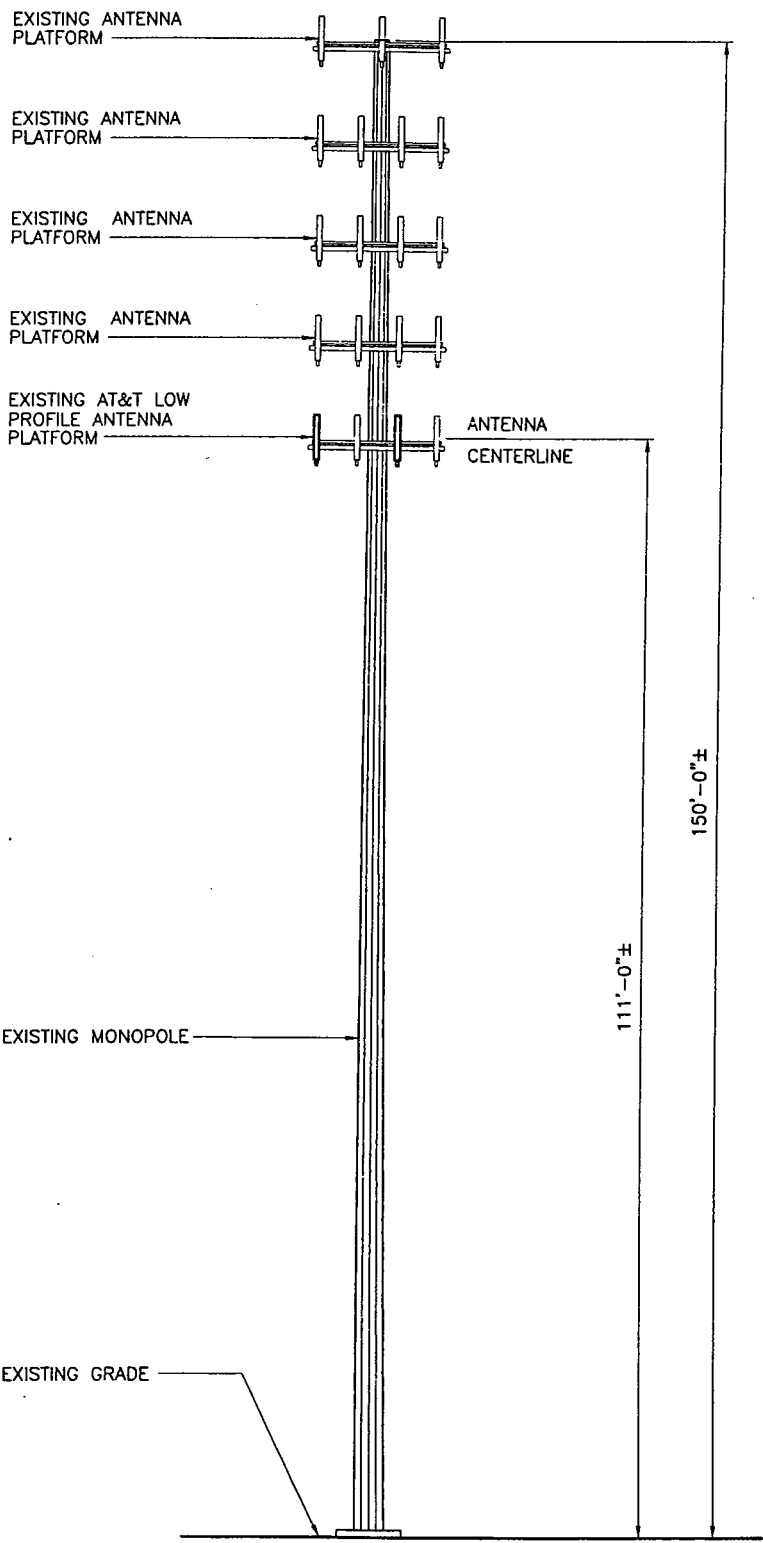


CABLE INSTALLATION:

- 1. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL FOR SAFETY AND PROTECTION
- 2. AXIAL CABLES SHALL BE PROTECTED FROM DAMAGE AND SHALL HAVE MINIMUM BEND RADIUS FOR THE SIZE AND MANUFACTURER OF THAT CABLE.
- 3. SLACK SHALL BE LEFT IN CABLES LEAVING THE RACK TO THEIR TERMINATION POINTS. THIS IS DONE IN ORDER TO PROVIDE A STRESS RELIEF ON THE BALES AND CONNECTIONS IN THE EVENT OF SEISMIC ACTIVITY.
- 4. ALL CABLES SHALL BE ROUTED AND INSTALLED IN A MANNER AS TO PROTECT THE CABLES FROM DAMAGE OF SHARP FIBER PAPER OR SPLIT PVC FIBER TUBING MAY BE USED.
- 5. SUBCONTRACTOR SHALL NOT ROUTE CABLES THROUGH CABLE LADDER RACK RUNGS.
- 6. SUBCONTRACTOR SHALL PROVIDE OR MODIFY CABLE TRAY AS REQUIRED TO FACILITATE EQUIPMENT INSTALLATION BASED ON THE LOCATION OF THE NEW EQUIPMENT.
- 7. SUBCONTRACTOR SHALL VERIFY THE ACTUAL LENGTHS OF EACH JUMPER AND COAXIAL CABLE BEFORE INSTALLATION.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER STATION
(E)	EXISTING
MIN	MINIMUM
N.T.S.	NOT TO SCALE
REF	REFERENCE
RF	RADIO FREQUENCY
T.B.D.	TO BE DETERMINED
T.B.R.	TO BE RESOLVED
TYP	TYPICAL
REQ	REQUIRED
V.I.F.	VERIFY IN FIELD
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE



TOWER ELEVATION

SCALE: N.T.S. 2



EXISTING AT&  
SERVICE BACI  
ON SUPPORT

EXISTING AT&  
GROUND BAR

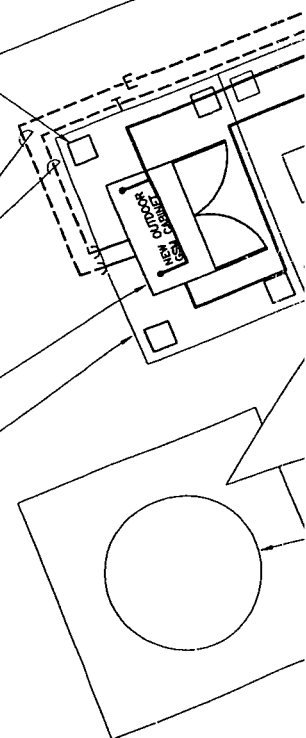
GROUND GSM  
CABINET PER  
NOTE ON DRAI

SUPPORT POSTS FOR  
NEW ICE CANOPY (TYP.)  
REFER TO DETAIL SHEET 02.  
GROUND SUPPORT POSTS  
PER GROUNDING NOTE  
ON DRAWING 03

UNDERGROUND ROUTING OF E/T  
CONDUITS. REFER TO DETAIL 1  
ON SHEET 07 FOR TRENCHING  
REFER TO ELECTRICAL NOTES  
ON SHEET 03 FOR MORE  
INFORMATION.

LOCATION OF 3G  
GSM OUTDOOR  
EQUIPMENT CABINET  
(INSTALLED BY GSM  
VENDOR).

NEW EQUIPMENT PAD  
EXTENSION. REFER  
TO SHEET 03 FOR  
MORE INFORMATION.



SCALE:  
N.T.S.

2

**URS CORPORATION AES**

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ROCKY HILL, CONNECTICUT  
1-(860)-529-8882

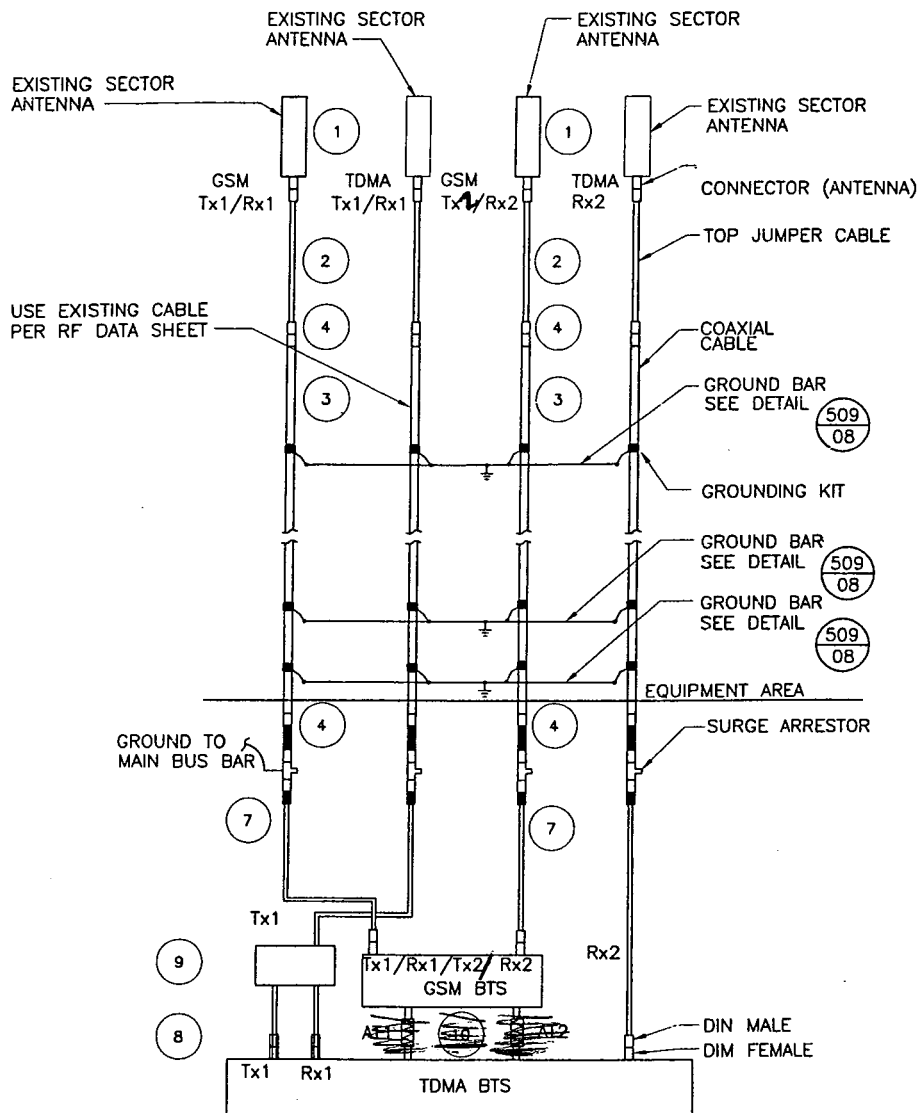
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**ORANGE CENTER-CROWN ATLANTIC MONOPOLE  
CT-158**

525 ORANGE CENTER ROAD  
ORANGE, CONNECTICUT



AT&T V  
15 EA  
PAR



### 55\_4/4 VP SCHEMATIC

### SECTORS 1, 2 AND 3 ANTENNA CONFIGURATION

AT1-AT2=ATTENUATOR

ITEM NO.	ITEM DESCRIPTION	SYS.	SECTION AZIMUTH	
		TDMA		Tx1/Rx1
		GSM	Tx1/Rx1	-
1	ANTENNA	ALLGON 7184.15	-	
		USE EXISTING	-	
	C/W DOWNTILT	AS IS	-	
2	ANTENNA JUMPER	EXISTING	-	
		-	-	
3	MAIN COAX	1 1/4"Ø (131 FEET)	-	
		USE EXISTING	-	
4	UNATTACHED DIN CONNECTOR	USE EXISTING	-	
		-	-	
5	COAX SURGE ARRESTOR	USE EXISTING	-	
6	DUPLEXER (L-3 COMM)	-	-	
7	JUMPER	L4A-PDMDM-25	-	L4A-
8	JUMPER	-	NEW 2	
9	DUPLEXER (L-3 COMM)	-	SFD41A1818-12 NEW 9	
10	ATTENUATOR	0	-	
		-	-	
	ID TAG	ALPHA A1	-	A
	COLOR CODE	1 RED	-	

#### NOTES:

- SUBCONTRACTOR SHALL VERIFY THE ACTUAL LENGTH IN THE
- TAG & COLOR CODE ALL MAIN CABLES AT LOCATIONS PER  
TOP OF TOWER END OF MAIN COAX  
BOTTOM OF TOWER SHELTER EXTERIOR AT CABLE ENTRY PORT  
WAVE GUIDE PORT SHELTER INTERIOR AT CABLE ENTRY PORT  
DIRECTLY BEFORE AND AFTER RF EQUIPMENT (DUPLEXERS, ATTENUATORS, END OF INTERIOR JUMPERS AT BTS EQUIPMENT
- ANTENNAS SHALL BE PROCURED AND INSTALLED WITH DOWN TILT
- PRIOR APPROVAL IS REQUIRED BEFORE PERFORMING ANY WORK
- WEATHER PROOFING AND GROUNDING KITS ARE PROVIDED
- RF DATA SHEET: 7/26/01 (REV 1)

#### ANTENNA SCHEMATIC

SCALE: NONE 2

#### BILL OF MATERIAL (RF ITEMS AND

**URS CORPORATION AES**

795 BROOK STREET, BUILDING 5  
ROCKY HILL, CONNECTICUT  
1-(860)-529-8882

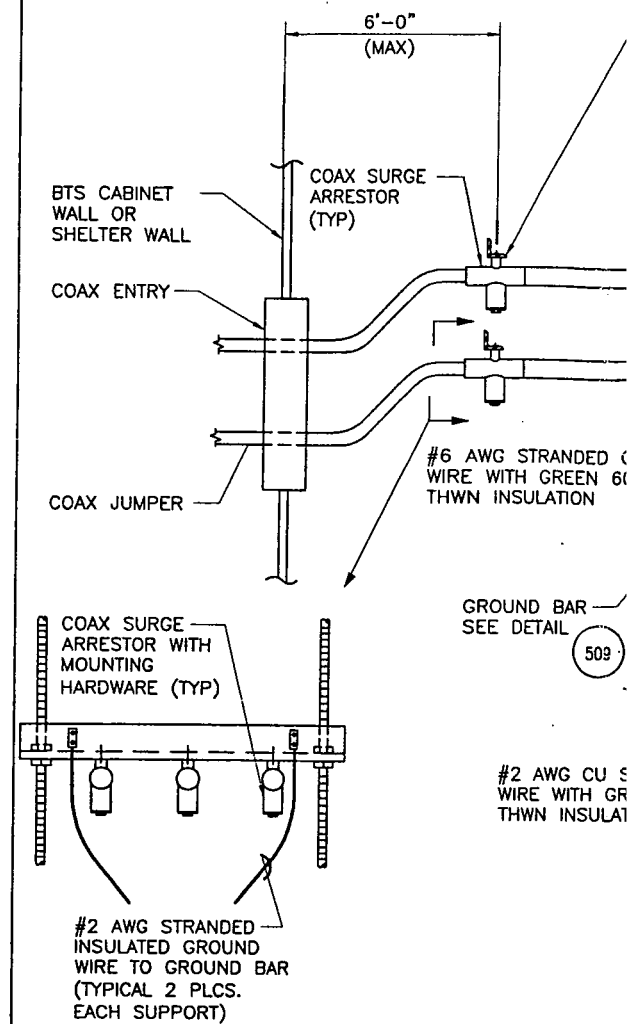
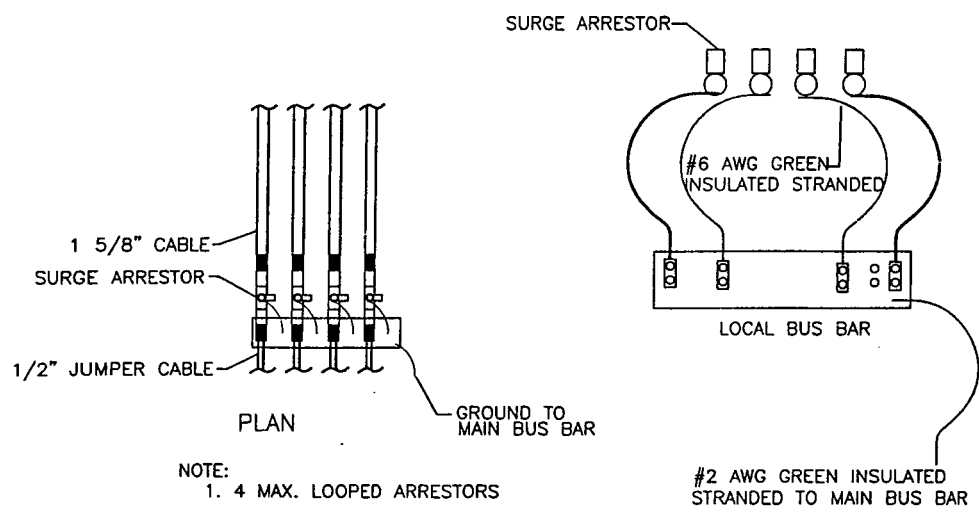
URS JOB NUMBER: F302099.39

**ORANGE CENTER-CROWN ATLANTIC MONOPOLE  
CT-158**

525 ORANGE CENTER ROAD  
ORANGE, CONNECTICUT

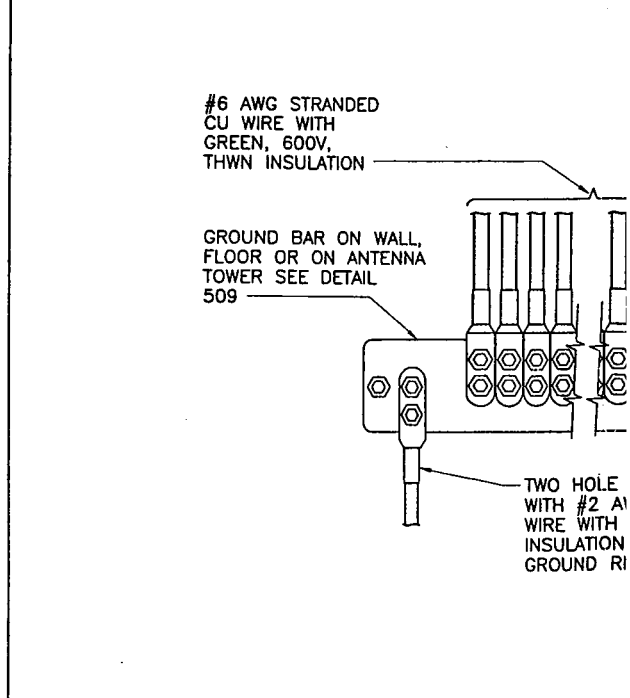
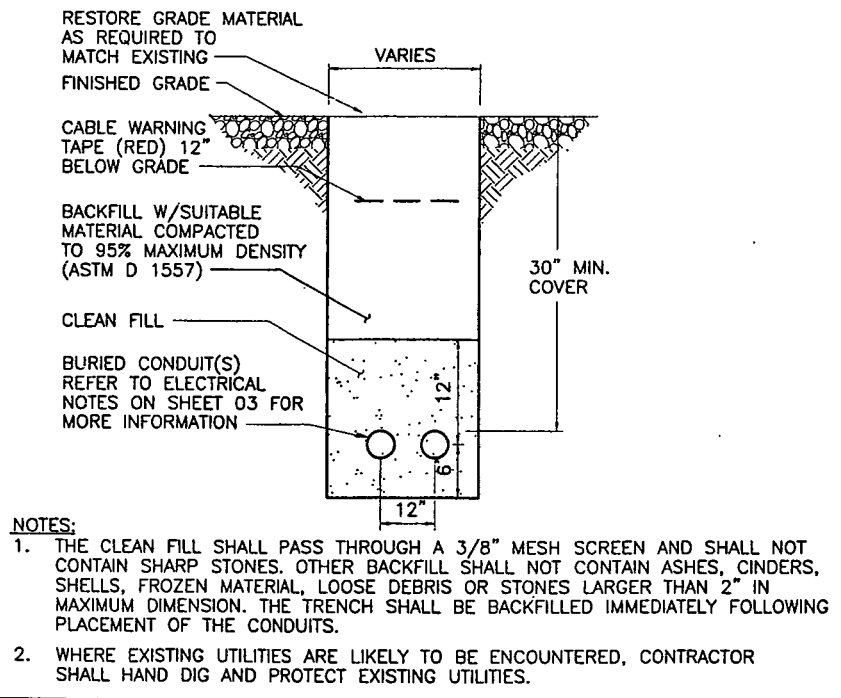


AT&T V  
15 EAS  
PAR



527- SURGE ARRESTOR GROUNDING DETAIL

572A-EXTERIOR ANTENNA CABLE



TYPICAL ELECTRICAL&TELEPHONE TRENCH DETAIL

SCALE: NTS 1 508A-GROUND WIRE TO GROUND

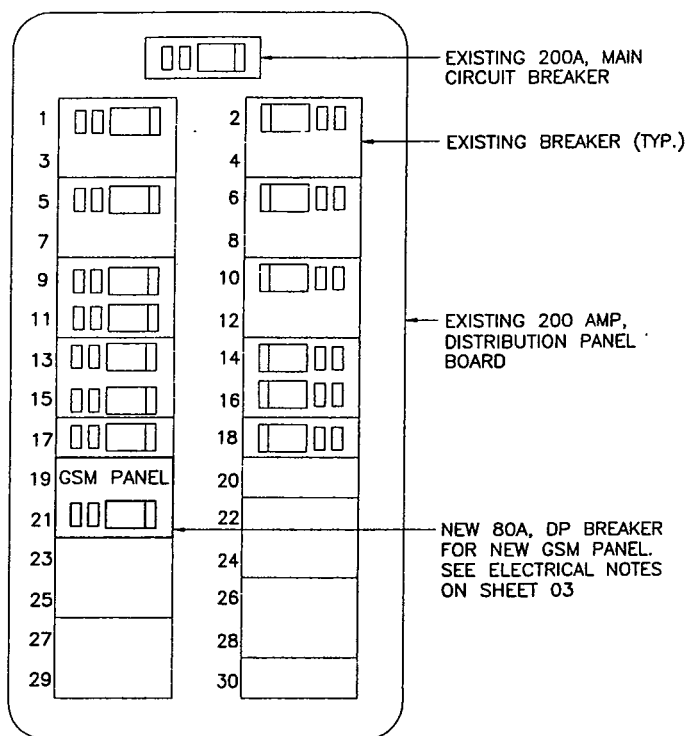
**URS CORPORATION AES**

795 BROOK STREET, BUILDING 5  
ROCKY HILL, CONNECTICUT  
1-(860)-529-8882  
URS JOB NUMBER: F302099.39

ORANGE CENTER-CROWN ATLANTIC MONOPOLE  
CT-158  
525 ORANGE CENTER ROAD  
ORANGE, CONNECTICUT

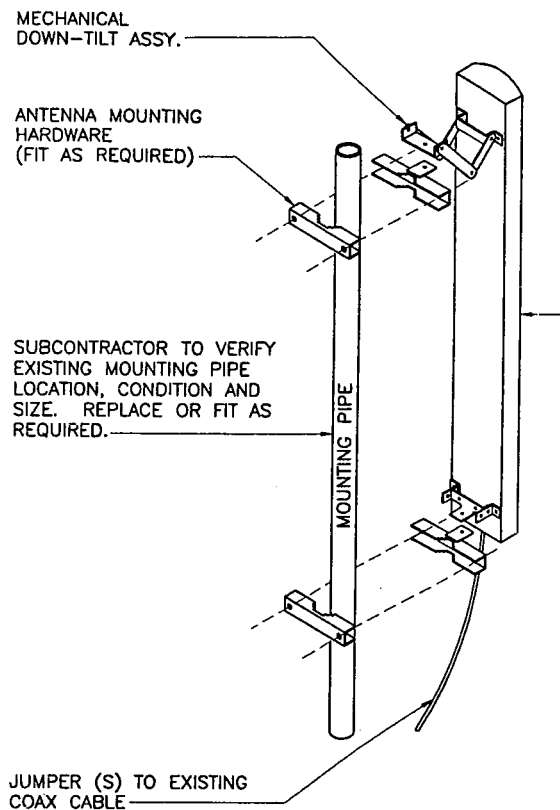


AT&T V  
15 EA  
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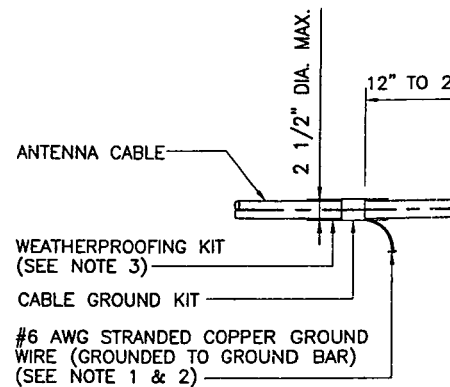


#### NOTES:

1. INSTALL 80A-2P NEW BRANCH CIRCUIT BREAKER IN AVAILABLE POSITION AND FEED ONE (1) NEW GSM CABINET AND LABEL "GSM PANEL". REFER TO ELECTRICAL NOTES ON SHEET 03 FOR MORE INFORMATION. THE NEW BREAKER SHALL MATCH THE EXISTING TYPE BREAKERS AND AIC RATINGS.
2. SUBCONTRACTOR SHALL VERIFY IN THE FIELD AND ADJUST AS REQUIRED.



#### ANTENNA MOUNTING DETAIL



#### CONNECTION OF CABLE GROUND KIT TO CABLE

- NOTE: 1. DO NOT INSTALL CABLE GROUND KIT AT A BEN DIRECT GROUND WIRE DOWN TO GROUND BAR
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER SUPPLIED OR RECOMMENDED BY CABLE MANUF.
3. WEATHER PROOFING SHALL BE (TYPE AND PART) SUPPLIED OR RECOMMENDED BY CABLE MANUF.

ELECTRICAL PANEL

SCALE: 1 NTS

513A-CONNECTION OF GROUND KIT

**URS CORPORATION AES**

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1-(860)-529-8882

URS JOB NUMBER: F302099.39

ORANGE CENTER-CROWN ATLANTIC MONOPOLE  
CT-158

525 ORANGE CENTER ROAD  
ORANGE, CONNECTICUT



AT&T V  
15 EA  
PM





Wireless Facilities, Inc.  
1840 Michael Faraday Drive  
Suite 200  
Reston, VA 20190

January 2, 2002

Mr. Mortimer A. Gelston, Chairman  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

**RE: FCC Compliance Statement for AT&T Site CT-158 (Orange Center)**

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

**Summary of the site configuration and technical parameters:**

Site ID	CT-158
Site Name	Orange Center
Latitude	41.27333
Longitude	-73.01888
Address of structure	525 Orange Center Road Orange, CT 06477
Type of structure	Monopole
Antenna structure owner	AT&T Wireless PCS
Address of antenna owner	AT&T Wireless PCS 15 East Midland Ave Paramus, NJ 07652
FCC class and Type of service	PCS TDMA (IS-136), PCS GSM
Operating frequency	D, E bands (PCS)
Azimuths	30,150,270
Elevation (ft)	111
Antenna manufacturer	Allgon
Antenna type	Panel

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where: S = Power density in W/m<sup>2</sup>  
 EIRP = Effective isotropic radiated power (W)  
 ERP = Effective radiated power (W)  
 D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μW/cm<sup>2</sup> is given by

$$S = \frac{33.4 * ERP}{D^2} \text{ (Section 2, OET bulletin 65).}$$

Where: S = Power density in μW/cm<sup>2</sup>  
 ERP = Effective radiated power (W)  
 D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm <sup>2</sup>	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm <sup>2</sup>	% of the Standard
<b>Current PCS TDMA configuration</b>	170 feet in front of the antenna	0.95	5000	0.019
<b>Future PCS TDMA and GSM configuration</b>	170 feet away in front of the antenna	1.29	1000	0.13

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than or equal to 0.45 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value $\mu\text{W}/\text{cm}^2$	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC $\mu\text{W}/\text{cm}^2$	% of the Standard
25 meters in front of sector 1	1.35	1000	0.135
15 meters in front of sector 2	3.35	1000	0.335
20 meters in front of sector 3	4.5	1000	0.45

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than or equal to 0.45 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,  
Wireless Facilities, Inc.



Dan Hardiman  
Senior Engineer II  
Fixed Network Engineering