



CRAIG CODY

16 Chestnut Street, Suite 420
Foxboro, MA 02035
Tel (781) 831-1281
ccody@trmcom.com

11/17/2015

Melanie Bachman
Acting Executive Director
Connecticut Siting Counsel
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification**
18 Titicus Mountain Road, New Fairfield
41.45070 / -73.51597

Dear Ms. Bachman:

T-Mobile Northeast, LLC (T-Mobile) currently maintains six (6) antennas at the One-Hundred Ninety Three foot (193') level of the existing One-Hundred Ninety foot tower at 18 Titicus Mountain Road, New Fairfield, CT. The tower is owned by American Tower Corporation. The property is also owned by American Tower. T-Mobile now intends to add Three (3) antennas with Three (3) new 700MHz antennas. These antennas would be installed at the One-Hundred Ninety (191') foot level of the tower. T-Mobile does not intend to remove any other equipment from the tower at this time.

This facility was not originally approved by the Connecticut Siting Council and was approved by the Board of Selectmen of the Town of New Fairfield on February 17th, 2000. The approval did not include any conditions.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73 a copy of this letter is being sent to the Chief Elected Official, First Selectman, Susan Chapman for the Town of New Fairfield, as well as the property owner and the tower owner.

The planned modifications to the facility fall squarely within those activities provided for in R.C.S.A. § 50j-72(b)(2).

- 1) The proposed modification will not result in an increase in the height of the existing structure.
- 2) The modifications will not require an extension of the site boundary.
- 3) The proposed modification will not increase the noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4) The operation and replacement of antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
- 5) The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
- 6) The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile Northeast LLC respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitute an exempt modification under R.C.S.A § 16-50j-72(b)(2)

Sincerely,



Craig Cody

On behalf of American Tower Corporation
c/o Tower Resource Management, Inc.
16 Chestnut Street, Suite 420
Foxboro, MA 02035
781-831-1281
ccody@trmcom.com

cc: **Town of New Fairfield**
American Tower Corporation
American Tower Corporation

Exhibit 1

Site Plan

Exhibit 2

Power Density Report

Exhibit 3

Structural Analysis

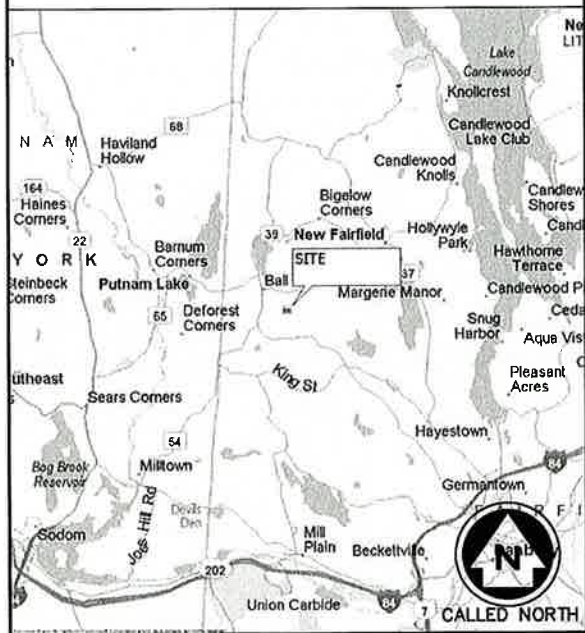
T-MOBILE NORTHEAST LLC

CT11106A NEW FAIRFIELD (AT&T)

16 TITICUS MOUNTAIN RD
NEW FAIRFIELD, CT 06812

(702Cu CONFIGURATION)

VICINITY MAP



GENERAL NOTES

- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
- THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONSTRUCT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE T-MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
- THE CONTRACTOR SHALL NOTIFY THE T-MOBILE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE T-MOBILE REPRESENTATIVE.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
- THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

PROJECT SUMMARY

| | | | |
|--------------------|---|---------------------|---|
| SITE NUMBER: | CT11106A | APPLICANT: | T-MOBILE NORTHEAST LLC 400 STREET RD BENSALEM, PA 19020 |
| SITE NAME: | NEW FAIRFIELD (AT&T) | PROJECT MANAGER: | AMERICAN TOWER CORPORATION 319 QUARRY ROAD SPRING CITY, PA 19475 |
| SITE ADDRESS: | 16 TITICUS MOUNTAIN RD NEW FAIRFIELD, CT 06812 | CONTACT: | BRUCE HOFFMASTER 484-942-6339 |
| PROPERTY OWNER: | AMERICAN TOWER CORPORATION | ARCHITECT/ENGINEER: | INFINIGY ENGINEERING 1033 WATERVLIET SHAKER ROAD ALBANY, NY 12205 |
| PARCEL: | 27/2/7.3// | CONTACT: | ALEX WELLER 518-690-0790 |
| CURRENT ZONING: | 2 | | |
| JURISDICTION: | TOWN OF NEW FAIRFIELD | | |
| ATC SITE NUMBER: | 88014 | | |
| LAT./LONG.: | N 41.45070° / W -73.51597° | | |
| CONSTRUCTION TYPE: | L700 UPGRADE | | |

PROJECT DESCRIPTION

- | | | |
|--|---|---|
| <input type="checkbox"/> EXISTING MONOPOLE | <input checked="" type="checkbox"/> EXISTING CABINET(S) | <input type="checkbox"/> OUTDOOR |
| <input checked="" type="checkbox"/> EXISTING LATTICE TOWER | <input type="checkbox"/> EXISTING RBS 2106 | <input type="checkbox"/> INDOOR |
| <input type="checkbox"/> EXISTING TRANSMISSION TOWER | <input checked="" type="checkbox"/> EXISTING RBS 3106 | <input checked="" type="checkbox"/> EXISTING CONCRETE PAD |
| <input type="checkbox"/> EXISTING WATER TANK | <input checked="" type="checkbox"/> EXISTING S8000 | <input type="checkbox"/> EXISTING STEEL PLATFORM |
| <input type="checkbox"/> EXISTING BUILDING | <input type="checkbox"/> SITE SUPPORT KIT | <input checked="" type="checkbox"/> EXISTING PPC |
| <input type="checkbox"/> EXISTING FLAGPOLE | <input type="checkbox"/> SITE SUPPORT CABINET | <input type="checkbox"/> PANELBOARD |
| <input type="checkbox"/> EXISTING FORT WORTH | <input checked="" type="checkbox"/> GPS | |

T-MOBILE NORTHEAST LLC PROPOSES THE MODIFICATION OF AN UNMANNED WIRELESS BROADBAND FACILITY. ADDITION OF PROPOSED LTE 700 PANEL ANTENNAS & RRUS. REUSE EXISTING HYBRID CABLE, GPS ANTENNA AND EXISTING EQUIPMENT CABINETS.

SHEET INDEX

| SHEET | DESCRIPTION | REVISION |
|-------|------------------------------|----------|
| T-1 | TITLE SHEET | 0 |
| C-1 | SITE PLAN | 0 |
| C-2 | COMPOUND PLAN & ELEVATION | 0 |
| C-3 | ANTENNA DETAIL & RF SCHEDULE | 0 |
| C-4 | EQUIPMENT SPECIFICATIONS | 0 |
| E-1 | GROUNDING AND POWER DIAGRAMS | 0 |
| E-2 | COAX/FIBER PLUMBING DIAGRAM | 0 |
| N-1 | GENERAL AND ELECTRICAL NOTES | 0 |

DO NOT SCALE DRAWINGS

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



CALL:

"CALL BEFORE YOU DIG"
WWW.CBYD.COM
CALL 811, OR 1-800-922-4455

CALL THREE WORKING DAYS PRIOR TO DIGGING

SAFETY PRECAUTIONS SHALL BE IMPLEMENTED BY CONTRACTORS AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

COLOR CODE FOR UTILITY LOCATIONS

| | | |
|-------------------|-----------------------------|--|
| ELECTRIC - RED | SEWER - GREEN | |
| GAS/OIL - YELLOW | SURVEY - PINK | |
| TEL/CATV - ORANGE | PROPOSED EXCAVATION - WHITE | |
| WATER - BLUE | RECLAIMED WATER - PURPLE | |

T-Mobile

T-MOBILE NORTHEAST LLC
400 STREET ROAD
BENSALEM, PA 19020

INFINIGY

1033 Waterliet Shaker Rd
Albany, NY 12205
Office: (518) 690-0790
Fax: (518) 690-0793

SUBMITTALS

| DATE | DESCRIPTION | REVISION |
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| RFE | | | |
| RF MAN | | | |
| ZONING | | | |
| OPS | | | |
| CONSTR. | | | |
| SITE AC. | | | |

PROJECT NO: 317-000
DRAWN BY: MAP
CHECKED BY: ASW



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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CT11106A

SITE NAME:
NEW FAIRFIELD (AT&T)
16 TITICUS MOUNTAIN RD
NEW FAIRFIELD, CT 06812

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

SHEET 1 OF 8 SHEETS

GENERAL SITE NOTES:

1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINIGY. BOUNDARY INFORMATION IF SHOWN WAS OBTAINED FROM INFORMATION PROVIDED BY OTHERS. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. BASEMAPPING INFORMATION BASED ON PROVIDED INFORMATION.
3. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
5. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
6. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
7. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
8. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT MISS UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
9. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

SUBMITTALS

| DATE | DESCRIPTION | REVISION |
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| RFE | | | |
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| CONSTR. | | | |
| SITE AC. | | | |

PROJECT NO: 317-000
DRAWN BY: MAP
CHECKED BY: ASW



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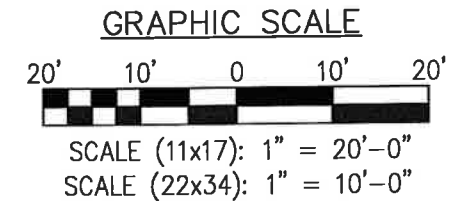
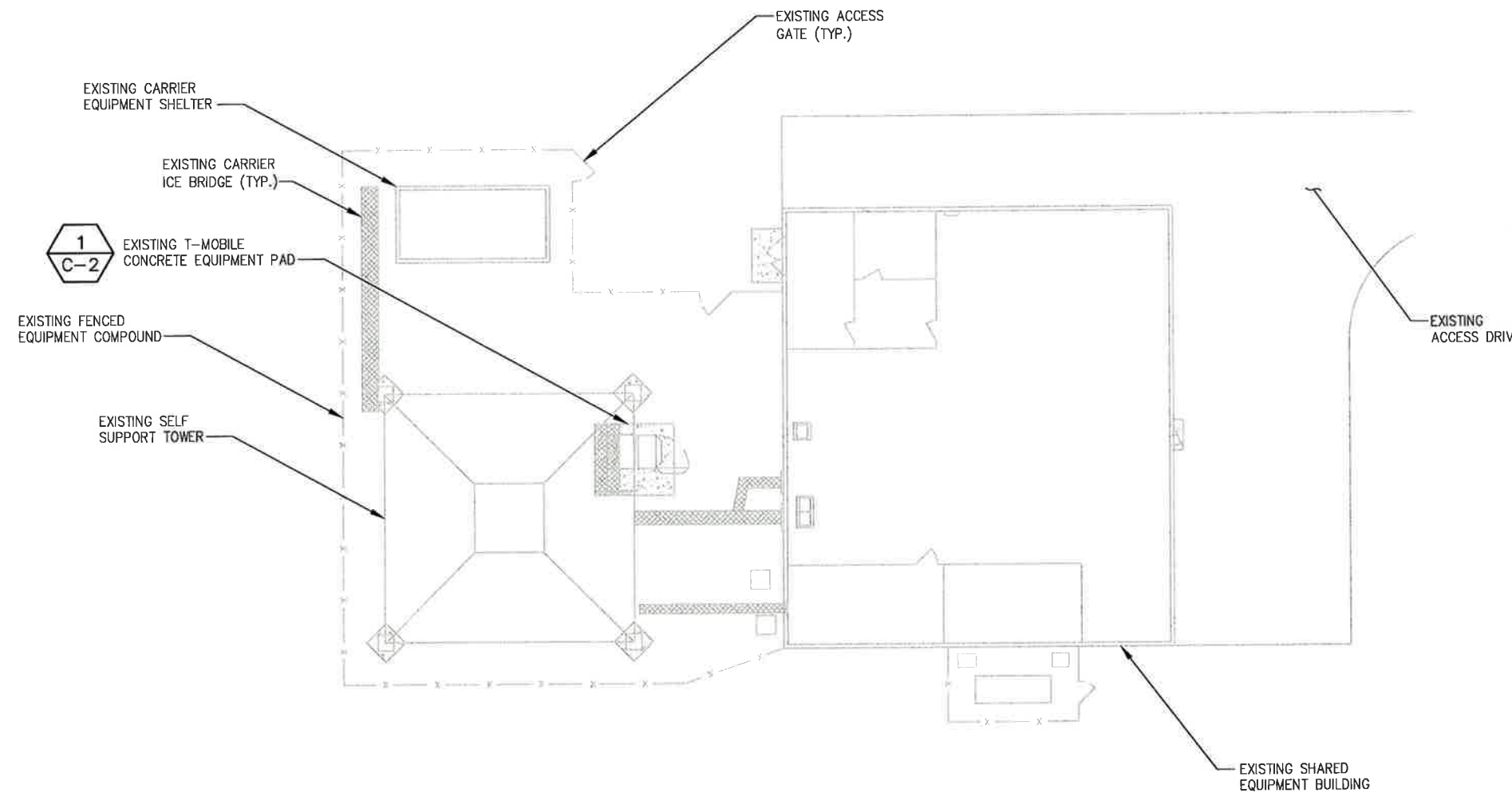
SITE NUMBER:
CT11106A
SITE NAME:
NEW FAIRFIELD (AT&T)
18 TITICUS MOUNTAIN RD
NEW FAIRFIELD, CT 06812

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1
SHEET 2 OF 8 SHEETS

SITE LEGEND

- - - - SITE PROPERTY LINE
- STREET OR ROAD
- x - x - CHAIN LINK FENCE
- o - o - OPAQUE WOODEN FENCE
- ⊗ TREES/SHRUBS
- ⌒ TREE LINE
- ⊗ UTILITY POLE
- (E) EXISTING
- (N) NEW
- (P) PROPOSED
- (F) FUTURE



NOTE:
 INFINIGY ENGINEERING HAS NOT EVALUATED THE
 TOWER OR LOADING FOR THIS SITE, AND ASSUMES
 NO RESPONSIBILITY FOR ITS STRUCTURAL
 INTEGRITY REGARDING ITS EXISTING OR PROPOSED
 LOADING. FINAL INSTALLATION TO COMPLY WITH
 RESULTS OF PASSING STRUCTURAL ANALYSIS.

2
 C-3

PROPOSED T-MOBILE WMAX
 MOUNT (TYP. OF (1) PER
 SECTOR (3) SECTORS TOTAL)

PROPOSED T-MOBILE PANEL ANTENNA
 W/ RRUS 11 MOUNTED BEHIND (TYP. OF
 (1) PER SECTOR (3) SECTORS TOTAL)

2
 C-3

3,4
 C-4

EXISTING T-MOBILE PANEL
 ANTENNAS TO REMAIN (TYP. OF (2)
 PER SECTOR (3) SECTORS TOTAL)

EXISTING CARRIER PANEL
 ANTENNAS (TYP.)

EXISTING SELF
 SUPPORT TOWER

EXISTING CARRIER
 OMNI ANTENNA (TYP.)

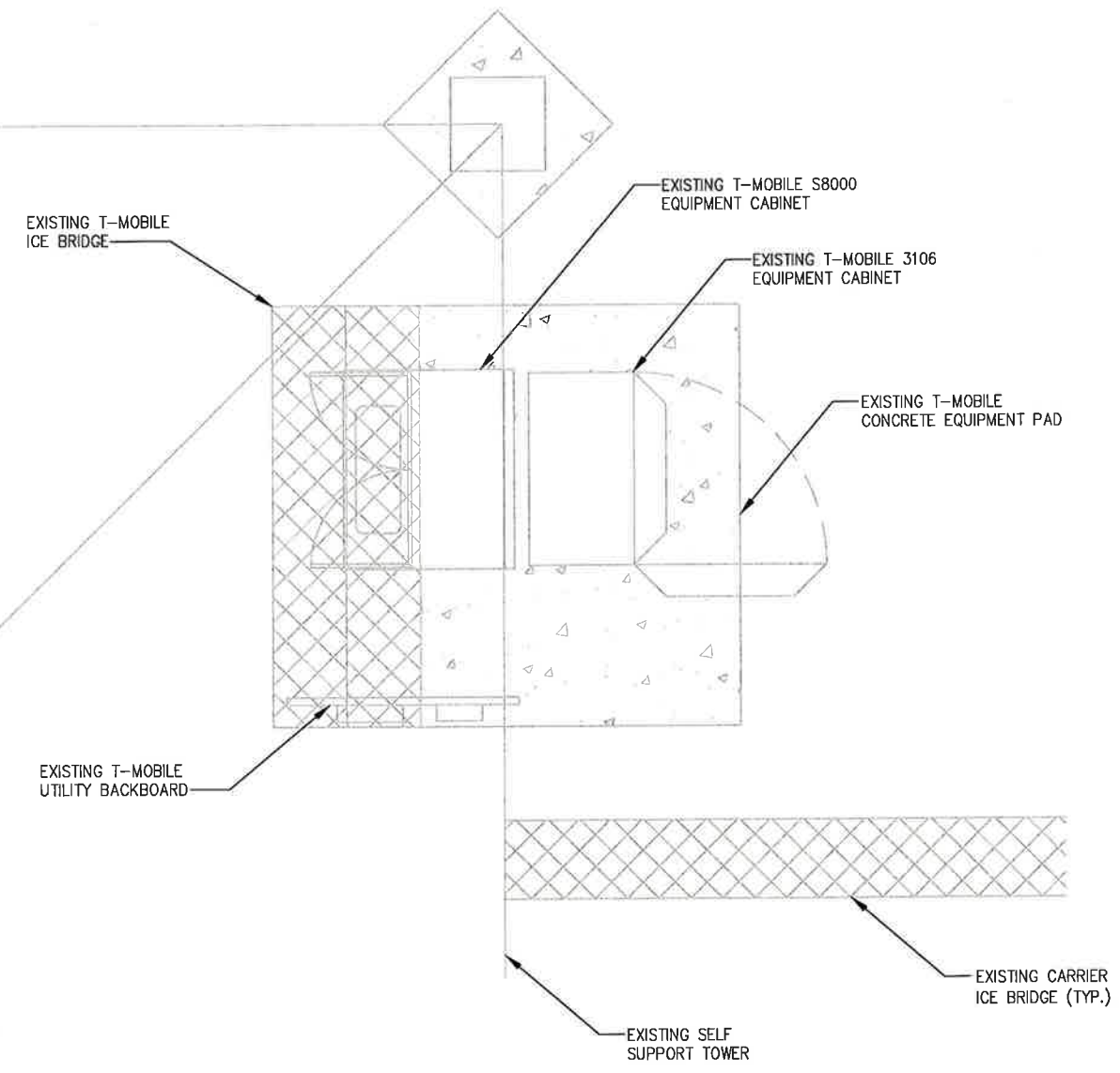
CENTERLINE OF EXISTING T-MOBILE PANEL ANTENNAS = ±193' AGL

CENTERLINE OF PROPOSED T-MOBILE PANEL ANTENNAS = ±191' AGL

TOP OF EXISTING SELF SUPPORT TOWER = ±190' AGL

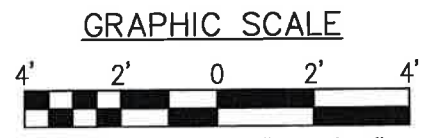
GROUND LEVEL

2
 TOWER ELEVATION
 NOT TO SCALE



CALLED NORTH

1
 COMPOUND PLAN
 SCALE: AS NOTED



SCALE (11x17): 1" = 4'-0"
 SCALE (22x34): 1" = 2'-0"

| SUBMITTALS | | |
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| RF | | | |
| RF MAN. | | | |
| ZONING | | | |
| OPS | | | |
| CONSTR. | | | |
| SITE AC. | | | |

PROJECT NO: 317-000
 DRAWN BY: MAP
 CHECKED BY: ASW



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NOTE: IF DRAWINGS ARE 22"x34", USE
 GRAPHICAL SCALE AND/OR 1/2 TIMES
 OF THE NOTED SCALE.

SITE NUMBER:
CT11106A
 SITE NAME:
 NEW FAIRFIELD (AT&T)
 16 TITICUS MOUNTAIN RD
 NEW FAIRFIELD, CT 06812

SHEET TITLE
**COMPOUND PLAN
 & ELEVATION**

SHEET NUMBER
C-2
 SHEET 3 OF 8 SHEETS

| RF SYSTEM SCHEDULE (702cu CONFIGURATION) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------|--------------|---------------|-----------------|----------|---------------|-----------|---------|--------|---------|--------------------|-------------|--------|-------------|--------|--------------------------|----------------|------------|---------------|--------|---------------|--------------|-------------|----------------|--------------|--------------------|----------|---|---|---|---|---|---|---|---|-------|
| SECTOR | TECHNOLOGY | ANTENNA PORT | BAND | ANTENNA MODEL # | VENDOR | QTY (REMOVED) | QTY (NEW) | AZIMUTH | M-TILT | E-TILT | ANTENNA CENTERLINE | TMA MODEL # | VENDOR | RRU MODEL # | VENDOR | CABLE LENGTH | CABLE DIAMETER | CABLE TYPE | CABLE MODEL # | VENDOR | CABLE TAGGING | COLOR CODING | JUMPER TYPE | JUMPER TAGGING | COLOR CODING | | | | | | | | | | | |
| A | UMTS AWS | RF #1 | B4P | AIR21 B4P/B2A | ERICSSON | 0 | 0 | 60° | 0° | 2° | 193'-0" | - | - | - | - | EXISTING | 1 5/8" | COAX | EXISTING | N/A | UMTS AWS A1 | - | COAX | - | - | | | | | | | | | | | |
| | | RF #2 | | | | | | | | | | | | | | - | - | - | - | - | | | | | | | | | | | | | | | | |
| | GSM | OPTICAL #1 | B2A | | | | | | | | | | | | | (EXISTING) KRY 112 144/1 | ERICSSON | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | UMTS | OPTICAL #2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LTE 700 | TBD | B12P | | | | | | | | | | | | | LNX-6515DS-VTM | COMMSCOPE | 0 | 1 | 60° | 0° | 2° | 191'-0" | - | - | (PROPOSED) RRUS 11 | ERICSSON | - | - | - | - | - | - | - | - | FIBER |
| LTE AWS | OPTICAL #1 | B4A | AIR21 B4A/B2P | ERICSSON | 0 | 0 | 60° | 0° | 2° | 193'-0" | - | - | - | - | - | - | - | - | - | - | - | - | FIBER | - | - | | | | | | | | | | | |
| B | UMTS AWS | RF #1 | B4P | AIR21 B4P/B2A | ERICSSON | 0 | 0 | 180° | 0° | 2° | 193'-0" | - | - | - | - | EXISTING | 1 5/8" | COAX | EXISTING | N/A | UMTS AWS A1 | - | COAX | - | - | | | | | | | | | | | |
| | | RF #2 | | | | | | | | | | | | | | - | - | - | - | - | | | | | | | | | | | | | | | | |
| | GSM | OPTICAL #1 | B2A | | | | | | | | | | | | | (EXISTING) KRY 112 144/1 | ERICSSON | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | UMTS | OPTICAL #2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LTE 700 | TBD | B12P | | | | | | | | | | | | | LNX-6515DS-VTM | COMMSCOPE | 0 | 1 | 180° | 0° | 2° | 191'-0" | - | - | (PROPOSED) RRUS 11 | ERICSSON | - | - | - | - | - | - | - | - | FIBER |
| LTE AWS | OPTICAL #1 | B4A | AIR21 B4A/B2P | ERICSSON | 0 | 0 | 180° | 0° | 2° | 193'-0" | - | - | - | - | - | - | - | - | - | - | - | - | FIBER | - | - | | | | | | | | | | | |
| C | UMTS AWS | RF #1 | B4P | AIR21 B4P/B2A | ERICSSON | 0 | 0 | 300° | 0° | 2° | 193'-0" | - | - | - | - | EXISTING | 1 5/8" | COAX | EXISTING | N/A | UMTS AWS A1 | - | COAX | - | - | | | | | | | | | | | |
| | | RF #2 | | | | | | | | | | | | | | - | - | - | - | - | | | | | | | | | | | | | | | | |
| | GSM | OPTICAL #1 | B2A | | | | | | | | | | | | | (EXISTING) KRY 112 144/1 | ERICSSON | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | UMTS | OPTICAL #2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LTE 700 | TBD | B12P | | | | | | | | | | | | | LNX-6515DS-VTM | COMMSCOPE | 0 | 1 | 300° | 0° | 2° | 191'-0" | - | - | (PROPOSED) RRUS 11 | ERICSSON | - | - | - | - | - | - | - | - | FIBER |
| LTE AWS | OPTICAL #1 | B4A | AIR21 B4A/B2P | ERICSSON | 0 | 0 | 300° | 0° | 2° | 193'-0" | - | - | - | - | - | - | - | - | - | - | - | - | FIBER | - | - | | | | | | | | | | | |

| SUBMITTALS | | |
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| DATE | DESCRIPTION | REVISION |
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| DEPT. | DATE | APP'D | REVISIONS |
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| RFE | | | |
| RF MAN. | | | |
| ZONING | | | |
| OPS | | | |
| CONSTR. | | | |
| SITE AC. | | | |

PROJECT NO: 317-000
 DRAWN BY: MAP
 CHECKED BY: ASW

| KEY | |
|------------------|--------------------------|
| EXISTING | R - RED - GSM |
| PROPOSED | G - GREEN - UMS 1900 |
| FIBER CONNECTION | B - BLUE - UMS AWS |
| | Y - YELLOW - LTE |
| | O - ORANGE - FIBER CABLE |

1 RF SCHEDULE
 NOT TO SCALE



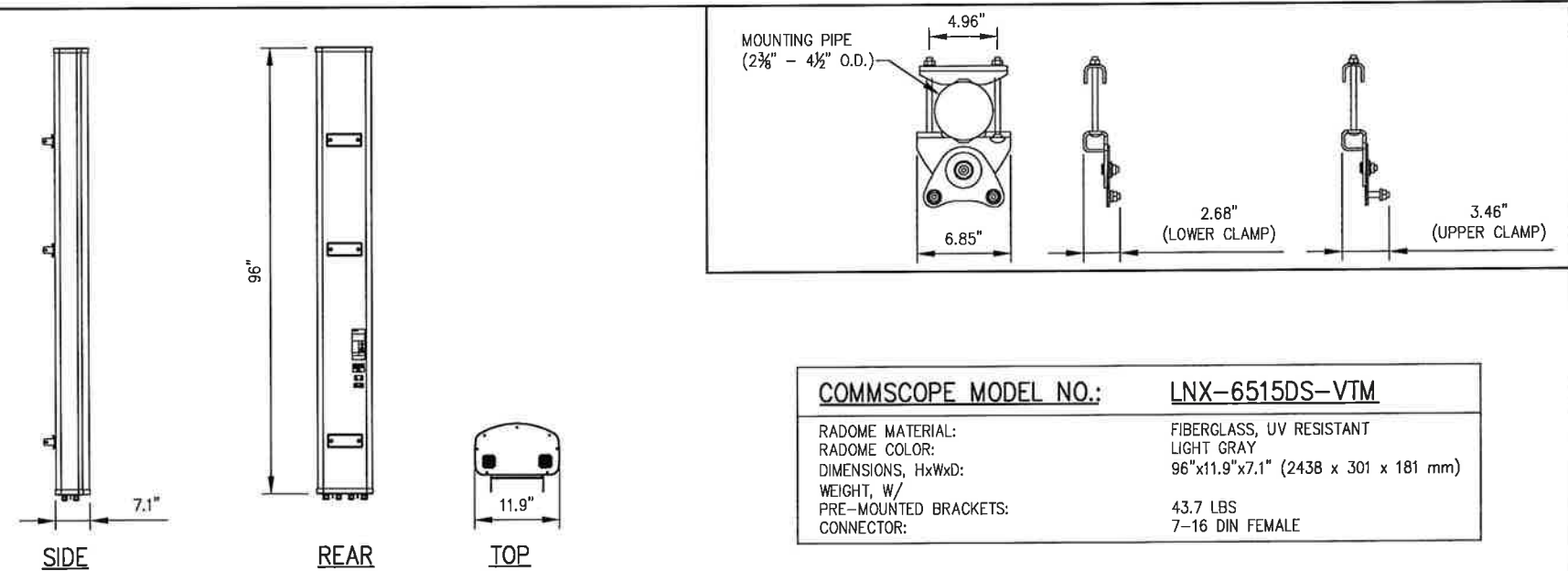
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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CT11106A
 SITE NAME:
 NEW FAIRFIELD (AT&T)
 16 TITICUS MOUNTAIN RD
 NEW FAIRFIELD, CT 06812

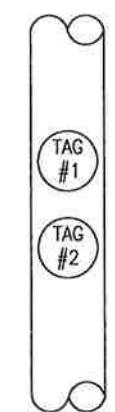
SHEET TITLE
ANTENNA DETAIL & RF SCHEDULE

SHEET NUMBER
C-3
 SHEET 4 OF 8 SHEETS



COMMSCOPE MODEL NO.: LNX-6515DS-VTM

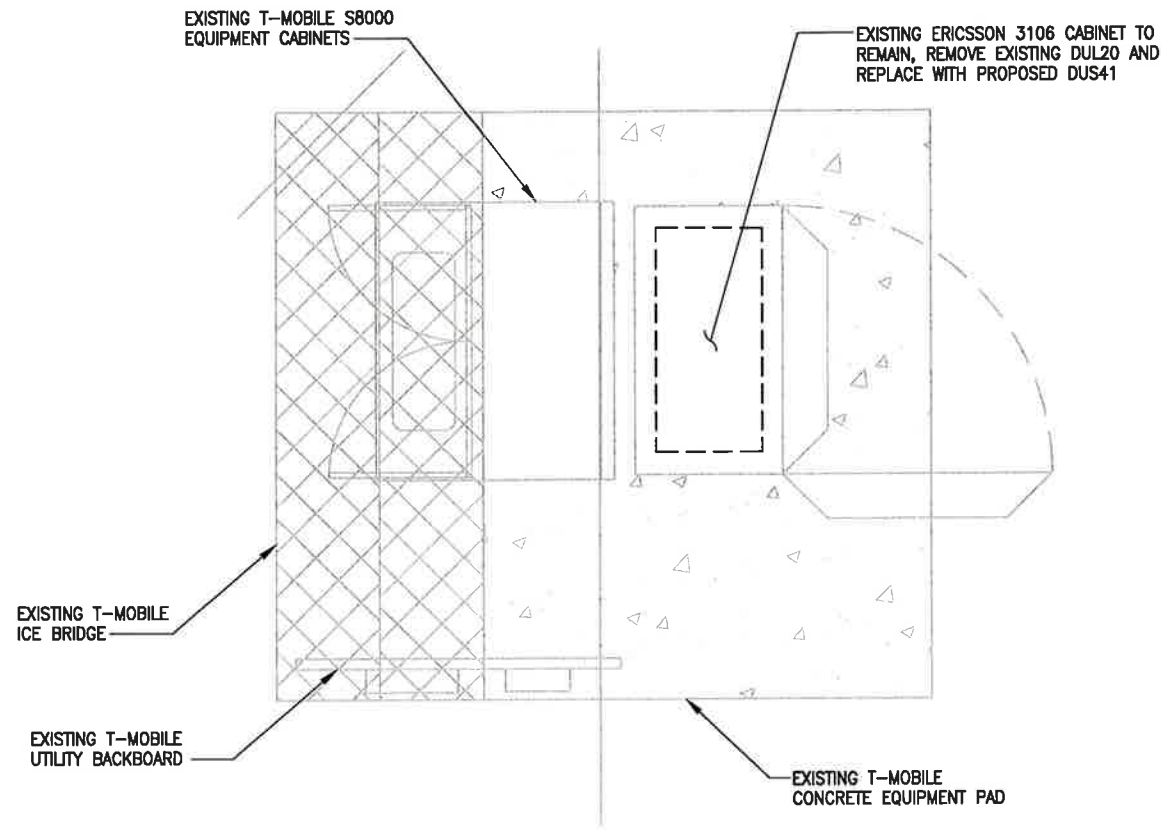
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|----------------------------------|--------------------------------------|
| RADOME MATERIAL: | FIBERGLASS, UV RESISTANT |
| RADOME COLOR: | LIGHT GRAY |
| DIMENSIONS, HxWxD: | 96"x11.9"x7.1" (2438 x 301 x 181 mm) |
| WEIGHT, W/ PRE-MOUNTED BRACKETS: | 43.7 LBS |
| CONNECTOR: | 7-16 DIN FEMALE |



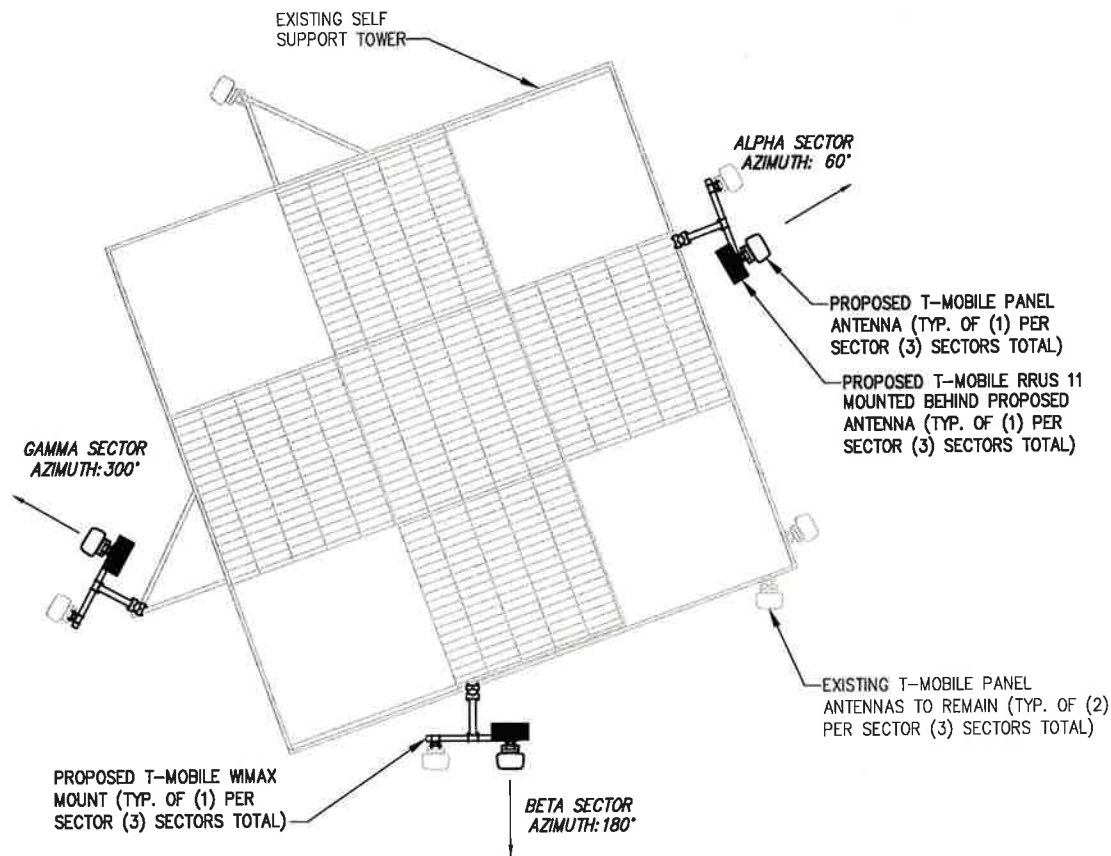
- METALLIC TAG NOTES:**
1. TWO METALLIC TAGS SHALL BE ATTACHED AT EACH END OF EVERY CABLE LONGER THAN (3) THREE FEET.
 2. CABLES LESS THAN (3) THREE FEET WILL HAVE TWO METALLIC TAGS ATTACHED AT THE CENTER OF THE CABLE.
 3. TAGS WILL BE FASTENED WITH STAINLESS STEEL ZIP TIES APPROPRIATE FOR CABLE DIAMETER.
 4. STANDARDIZED METALLIC TAG KITS WILL BE ASSEMBLED WITH TAGS ALREADY ENGRAVED TO ACCOMODATE ALL CONFIGURATIONS.

2 ANTENNA DETAIL
 NOT TO SCALE

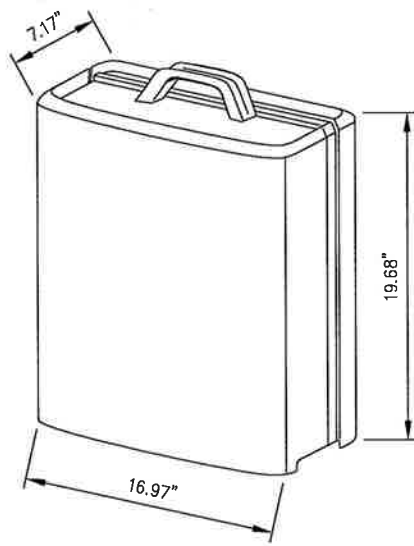
3 METALLIC TAG DETAIL
 NOT TO SCALE



1 EQUIPMENT PAD LAYOUT PLAN
NOT TO SCALE

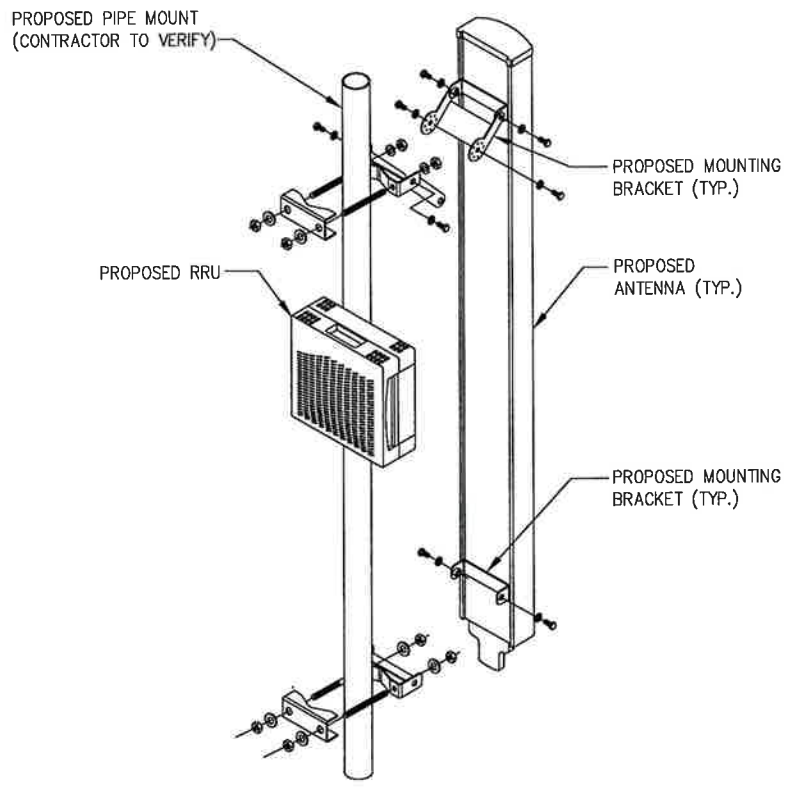


2 ANTENNA ORIENTATION PLAN
NOT TO SCALE

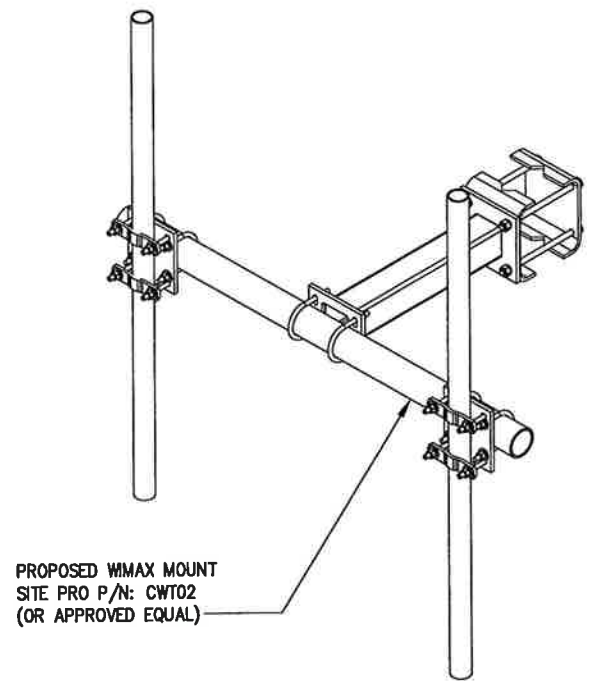


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| ERICSSON MODEL NO.: | RRUS11 B12 |
| COLOR: | GRAY |
| DIMENSIONS, HxWxD: | 19.68"x16.97"x7.17" (500 x 431 x 182 mm) |
| WEIGHT: | 50.71 LBS (23 kg) |

3 RRUS11 B12 DETAIL
NOT TO SCALE



4 MOUNTING DETAIL
NOT TO SCALE



5 STAND-OFF MOUNT DETAIL
NOT TO SCALE

STRUCTURAL NOTES:

1. SPECIFICATIONS / CODES:
 -CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
 -STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
 -WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING" CODE-STEEL.
 -REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE."

2. MATERIALS:
 -CONCRETE: $f_c' - 3000$ psi. (MIN. U.N.O.)
 -REINFORCING STEEL: ASTM A615, GRADE 60.
 -WIRE MESH: ASTM A185.
 -STRUCTURAL STEEL: ASTM A36.
 -ELECTRODES FOR WELDING: E 70xx.
 -GALVANIZING: ASTM A153 (BOLTS) OR ASTM A123 (SHAPES, PLATES).
 -EXPANSION BOLTS: HILTI KWIK BOLT II, STAINLESS STEEL, 3/4"Øx43/4" EMBEDMENT OR AN APPROVED EQUAL.

T-Mobile
 T-MOBILE NORTHEAST LLC
 400 STREET ROAD
 BENSLEM, PA 15020

INFINIGY
 1033 Waterlily Shaker Rd
 Albany, NY 12205
 Office # (518) 880-0796
 Fax # (518) 880-0795

SUBMITTALS

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| RFE | | | |
| RF MAN. | | | |
| ZONING | | | |
| OPS | | | |
| CONSTR. | | | |
| SITE AC. | | | |

PROJECT NO: 317-000
 DRAWN BY: MAP
 CHECKED BY: ASW



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SITE NUMBER:
CT11106A

SITE NAME:
NEW FAIRFIELD (AT&T)
16 TITICUS MOUNTAIN RD
NEW FAIRFIELD, CT 06812

SHEET TITLE
EQUIPMENT SPECIFICATIONS

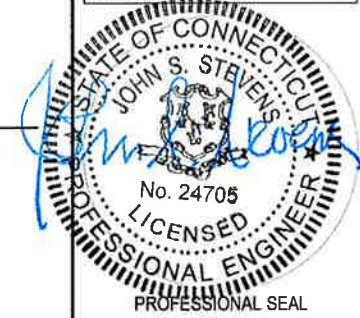
SHEET NUMBER
C-4
SHEET 5 OF 8 SHEETS

SUBMITTALS

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| PROJECT NO: | 317-000 |
| DRAWN BY: | MAP |
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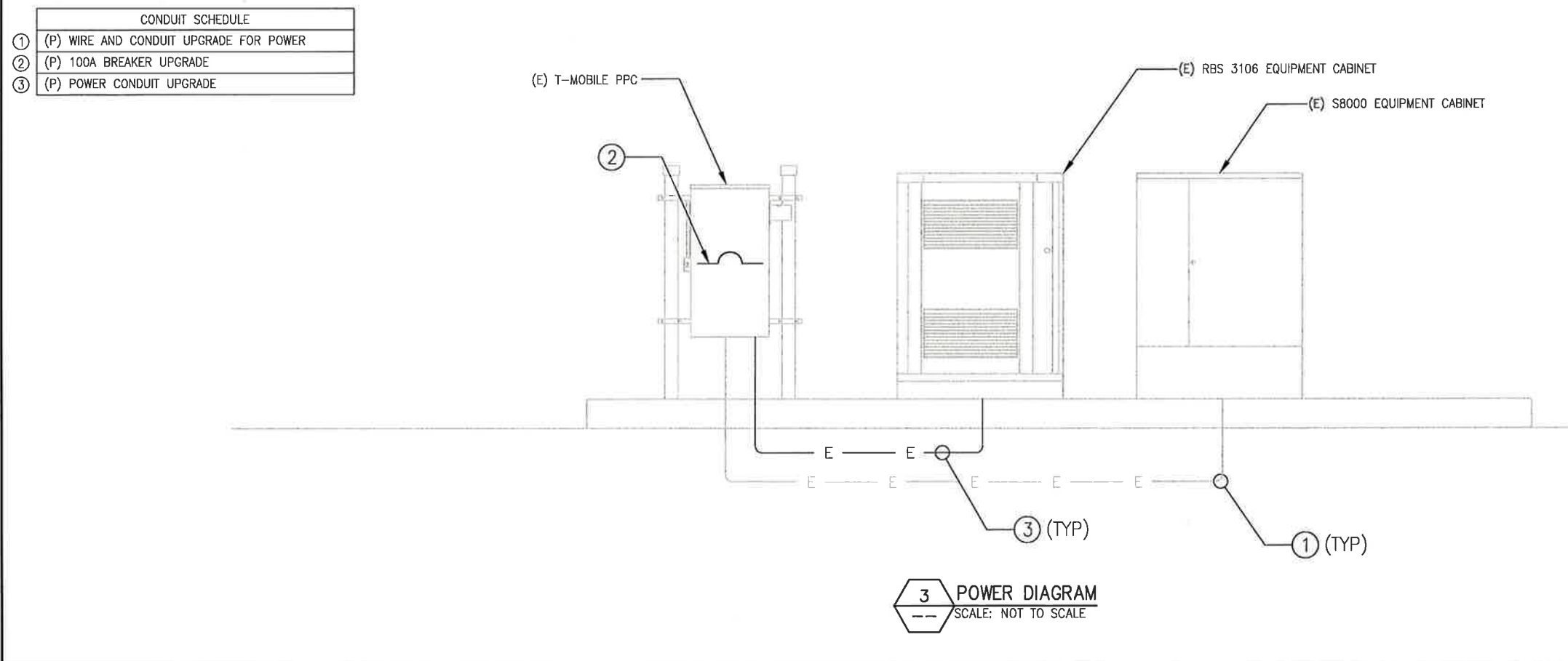
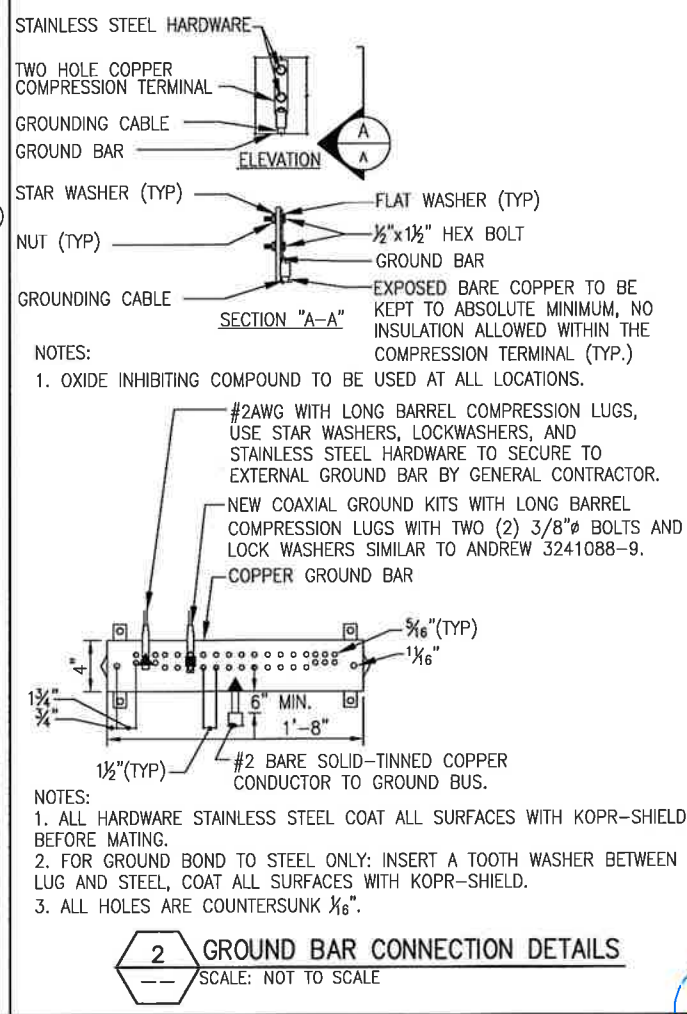
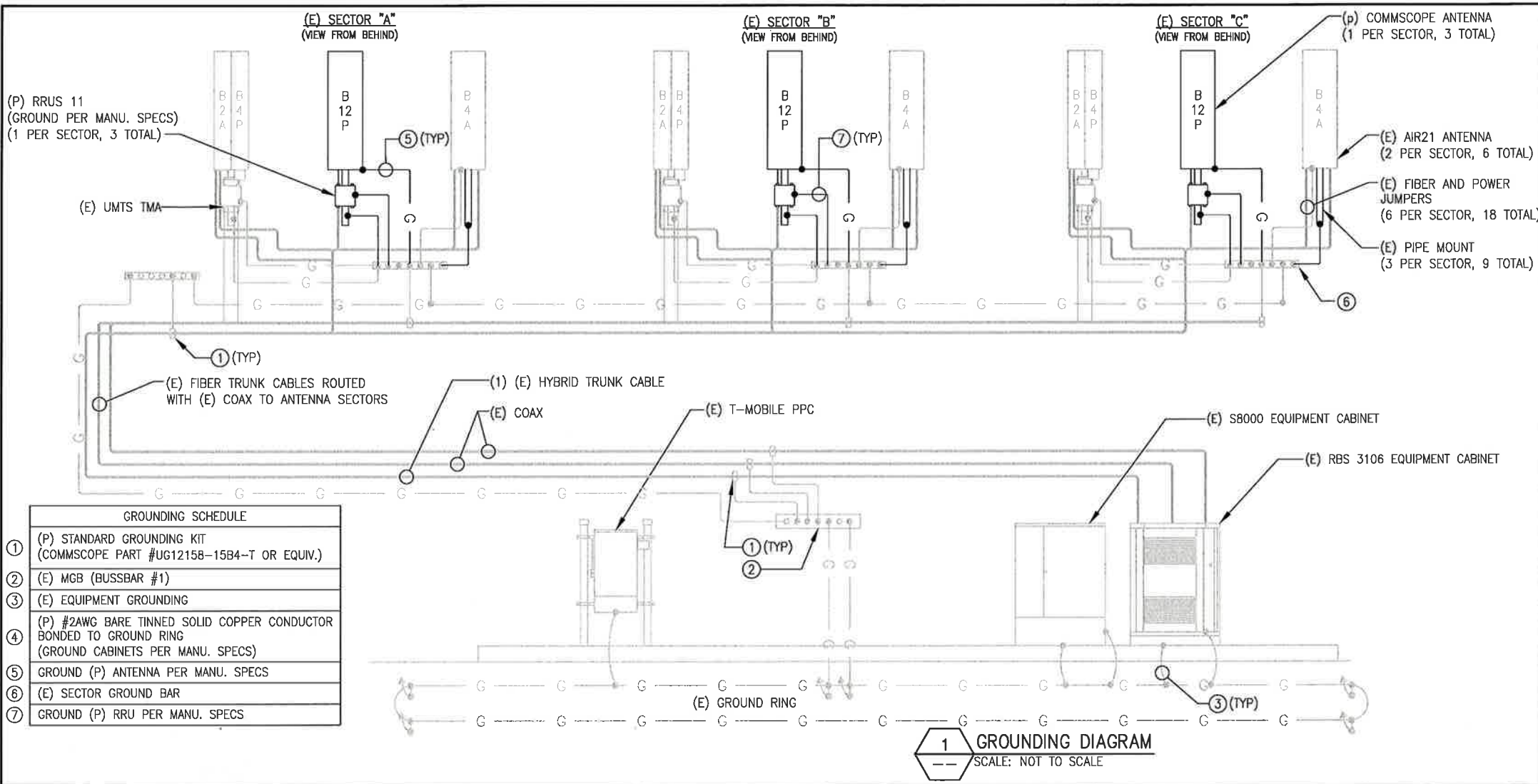
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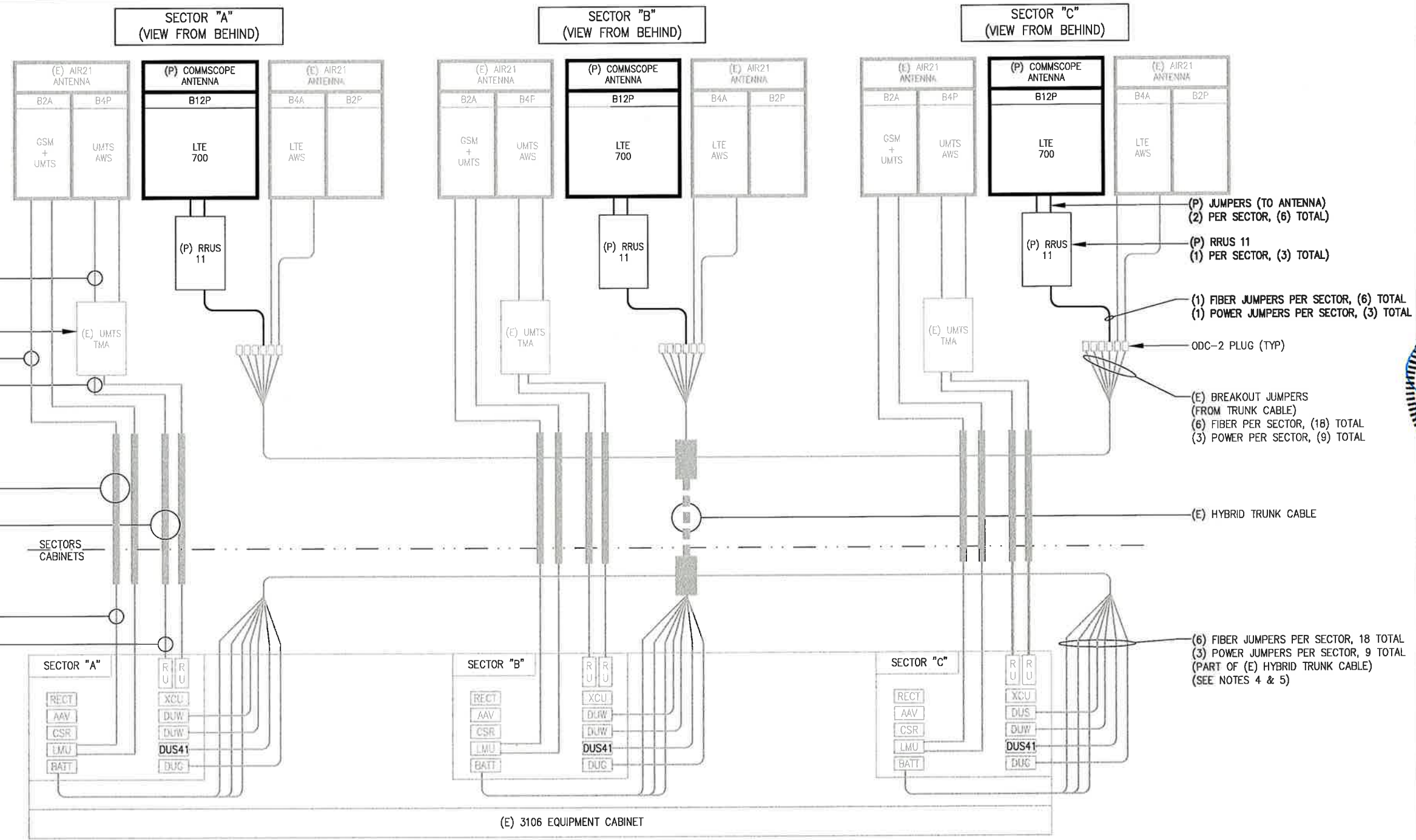
SITE NUMBER:
CT11106A
SITE NAME:
NEW FAIRFIELD (AT&T)
16 TITICUS MOUNTAIN RD
NEW FAIRFIELD, CT 06812

SHEET TITLE
GROUNDING & POWER DIAGRAMS

SHEET NUMBER
E-1
SHEET 6 OF 8 SHEETS



- NOTES:**
1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER T-MOBILE SPECIFICATIONS (SEE RF SCHEDULE/C-3)
 2. SEE RF SCHEDULE/C-3 FOR CABLE AND JUMPER LENGTHS.
 3. IF NEW GPS ADDED TO SITE, CAP AND WEATHERPROOF ANY UNUSED COAX FOR FUTURE USE.
 4. TRIM POWER JUMPERS PER MANU. SPECS TO CORRECT LENGTH FOR CONNECTION.
 5. COIL EXCESS FIBER IN CABINET BASE.

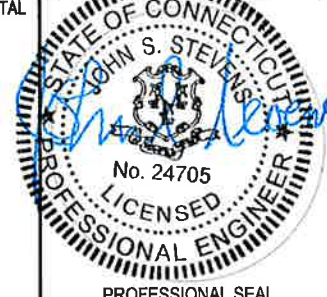


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| RF MAN. | | | |
| ZONING | | | |
| OPS | | | |
| CONSTR. | | | |
| SITE AC. | | | |

PROJECT NO: 317-000
DRAWN BY: MAP
CHECKED BY: ASW



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SITE NUMBER:
CT11106A
SITE NAME:
NEW FAIRFIELD (AT&T)
16 TITICUS MOUNTAIN RD
NEW FAIRFIELD, CT 06812

SHEET TITLE
COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER
E-2
SHEET 7 OF 8 SHEETS

1 702Cu CONFIGURATION COAX/FIBER PLUMBING DIAGRAM
NOT TO SCALE

ELECTRICAL NOTES:

WORK INCLUDED

1. INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - A. PREPARE AND SUBMIT SHOP DRAWINGS, DIAGRAMS AND ILLUSTRATIONS.
 - B. PROCURE ALL NECESSARY PERMITS AND APPROVALS AND PAY ALL REQUIRED FEES AND CHARGES IN CONNECTION WITH THE WORK OF THIS CONTRACT.
 - C. SUBMIT AS-BUILT DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUALS.
 - D. EXECUTE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING OF EXISTING OR NEWLY INSTALLED CONSTRUCTION REQUIRED FOR THE WORK OF THIS CONTRACT. FOR SLAB PENETRATIONS THROUGH POST TENSION SLABS, X-RAY EXACT AREA OF PENETRATION PRIOR TO PERFORMING WORK. COORDINATE ALL X-RAY WORK WITH BUILDING ENGINEER.
 - E. PROVIDE HANGERS, SUPPORTS, FOUNDATIONS, STRUCTURAL FRAMING SUPPORTS, AND BASES FOR CONDUIT AND EQUIPMENT PROVIDED OR INSTALLED UNDER THE WORK OF HIS CONTRACT. PROVIDE COUNTER FLASHING, SLEEVES AND SEALS FOR FLOOR AND WALL PENETRATIONS.
 - F. MAINTAIN ALL EXISTING ELECTRICAL SERVICES IN THE BUILDING AREAS NOT AFFECTED BY THE ALTERATION DURING THE PROGRESS OF THE WORK INCLUDING PROVIDING ALL TEMPORARY JUMPERS, CONDUITS, CAPS, PROTECTIVE DEVICES, CONNECTIONS AND EQUIPMENT REQUIRED. PROVIDE TEMPORARY LIGHT AND POWER FOR CONSTRUCTION PURPOSES.
2. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF AN ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT. FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT USUALLY FURNISHED OR NEEDED TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

GENERAL REQUIREMENTS

1. PROVIDE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL AND STATE ELECTRICAL CODES.
2. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING.
3. LOAD CALCULATIONS ARE BASED ON EXISTING BUILDING INFORMATION/DRAWINGS PROVIDED TO ENGINEERING. CONTRACTOR IS TO VERIFY ALL EXISTING RATINGS AND LOADS PRIOR TO PURCHASING OF SPECIFIED EQUIPMENT FOR COMPLIANCE TO NEC. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES AND REQUEST FURTHER DIRECTION BY ENGINEER.
4. EXISTING BUILDING EQUIPMENT IS NOTED ON THE DRAWINGS. NEW OR RELOCATED EQUIPMENT IS SHOWN WITH SOLID LINES. FUTURE EQUIPMENT (NOT IN THIS CONTRACT) IS DEPICTED WITH SHADED LINES. REQUEST CLARIFICATION OF DRAWINGS OR SPECIFICATIONS PRIOR TO PRICING OR INSTALLATION.
5. GENERAL
 - A. AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, MAKE A MANDATORY SITE VISIT TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO NOTIFY THE OWNER, IN WRITING, OF ANY DISCREPANCIES THAT MAY HAVE BEEN NOTED BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS AND SPECIFICATIONS.
 - B. VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR CORRECTNESS OF SAME.
 - 6. QUALITY, WORKMANSHIP, MATERIALS AND SAFETY
 - A. PROVIDE NEW MATERIALS AND EQUIPMENT OF A DOMESTIC MANUFACTURER BY THOSE REGULARLY ENGAGED IN THE PRODUCTION AND MANUFACTURE OF SPECIFIED MATERIALS AND EQUIPMENT. WHERE UL OR OTHER AGENCY, HAS ESTABLISHED STANDARDS FOR MATERIALS, PROVIDE MATERIALS WHICH ARE LISTED AND LABELED ACCORDINGLY. THE COMMERCIAL STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES MENTIONED HEREIN ARE INTENDED FOR THE PROPER FUNCTIONING OF THE WORK.
 - B. WORK SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE REQUIRED FOR THE WORK. INSTALL MATERIALS AND EQUIPMENT TO PRESENT A NEAT APPEARANCE WHEN COMPLETED AND IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER AND IN ACCORDANCE WITH CONTRACT DOCUMENTS.
 - C. PROVIDE LABOR, MATERIALS, APPARATUS AND APPLIANCES ESSENTIAL TO THE FUNCTIONING OF THE SYSTEMS DESCRIBED OR INDICATED HEREIN, OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL WHENEVER MENTIONED IN THE CONTRACT DOCUMENT OR NOT.
 - D. MAKE WRITTEN REQUESTS FOR SUPPLEMENTARY INSTRUCTIONS TO ARCHITECT/ENGINEER IN CASE OF DOUBT AS TO WORK INTENDED OR IN EVENT OF NEED FOR EXPLANATION THEREOF.
 - E. PERFORMANCE AND MATERIAL REQUIREMENTS SCHEDULED OR SPECIFIED ARE MINIMUM STANDARD ACCEPTABLE. THE RIGHT TO JUDGE THE QUALITY OF EQUIPMENT THAT DEVIATES FROM THE CONTRACT DOCUMENT REMAINS SOLELY WITH ARCHITECT/ENGINEER. CONTRACT DOCUMENT OR NOT.
- GUARANTEE
 - 1. GUARANTEE MATERIALS, PARTS AND LABOR FOR WORK FOR ONE YEAR FROM THE DATE OF ISSUANCE OF OCCUPANCY PERMIT. DURING THAT PERIOD, MAKE GOOD FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIALS OR WORKMANSHIP WITH NO ADDITIONAL COMPENSATION AND AS DIRECTED BY ARCHITECT.

CLEANING

1. REMOVE ALL CONSTRUCTION DEBRIS RESULTING FROM THE WORK.
2. CLEAN EQUIPMENT AND SYSTEMS FOLLOWING THE COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER.

COORDINATION AND SUPERVISION

1. CAREFULLY LAY OUT ALL WORK IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, PATCH AND REPAIR THE WORK IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER. RENDER FULL COOPERATION TO OTHER TRADES WHERE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES. ASSIST IN WORKING OUT SPACE CONDITIONS. IF WORK IS INSTALLED BEFORE COORDINATION WITH OTHER TRADES, OR CAUSES INTERFERENCE, MAKE CHANGES NECESSARY TO CORRECT CONDITIONS WITHOUT EXTRA CHARGE.

SUBMITTALS

1. AS-BUILT DRAWINGS:
 - A. UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER "AS-BUILT" DRAWINGS.
2. SERVICE MANUALS:
 - A. UPON COMPLETION OF THE WORK, FULLY INSTRUCT T-MOBILE AS TO THE OPERATION AND MAINTENANCE OF ALL MATERIAL, EQUIPMENT AND SYSTEMS.
 - B. PROVIDE 3 COMPLETE BOUND SETS OF INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT.

CUTTING AND PATCHING

1. PROVIDE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING REQUIRED TO COMPLETE THE WORK.
2. OBTAIN OWNER APPROVAL PRIOR TO CUTTING THROUGH FLOORS OR WALLS FOR PIPING OR CONDUIT.

TESTS, INSPECTION AND APPROVAL

1. BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.
2. PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.

SPECIAL REQUIREMENTS

1. DO NOT LEAVE ANY WORK INCOMPLETE NOR ANY HAZARDOUS SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. DO NOT INTERFERE WITH OR CUTOFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S WRITTEN PERMISSION.
2. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING BUILDING UTILITIES AND SERVICE SYSTEMS, INCLUDING FEEDER OR BRANCH CIRCUITING SUPPLYING EXISTING FACILITIES, CONFER WITH THE OWNER AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON. SHUTDOWN NOTE: SCHEDULE AND NOTIFY OWNER 48 HOURS PRIOR TO SHUTDOWN. ALL SHUTDOWN WORK TO BE SCHEDULED AT A TIME CONVENIENT TO OWNER.

GROUNDING

1. ROUTE ALL GROUNDING CONDUCTORS AS SHOWN ON CONDUIT/GROUNDING RISER.
2. ROUTE 500 KCMIL CU. THHN CONDUCTOR FROM THE MGB LOCATION TO BUILDING STEEL. VERIFY BUILDING STEEL IS EFFECTIVELY GROUNDED PER NEC TO THE MAIN SERVICE GROUNDING ELECTRODE CONDUCTOR (GEC).
3. MAKE ALL GROUND CONNECTIONS FROM MGB TO ELECTRICAL EQUIPMENT WITH 2 HOLE, CRIMP TYPE, BURNDY COMPRESSION TERMINATIONS, SIZED AS REQUIRED.
4. USE 1 HOLE, CRIMP TYPE, BURNDY COMPRESSIONS TERMINATIONS, SIZED AS REQUIRED, AT EQUIPMENT GROUND CONNECTIONS.
5. HIRE AN INDEPENDENT LAB TO PERFORM THE SPECIFIED OHMS TESTING. PROVIDE 4 SETS OF THE CERTIFIED DOCUMENTS TO THE OWNER FOR VERIFICATION PRIOR TO THE PROJECT COMPLETION.

RACEWAYS

1. ALL WIRING TO BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE FOLLOWING:
 - A. EXTERIOR FEEDERS AND CONTROL, WHERE UNDERGROUND, TO BE IN SCH 40 PVC.
 - B. EXTERIOR, ABOVE GROUND POWER CONDUITS TO BE GALVANIZED RIGID STEEL (RGS).
 - C. ALL TELECOMMUNICATION CONDUITS, INTERIOR/EXTERIOR, TO BE EMT.
 - D. INSTALL PULL ROPES IN ALL NEW EMPTY CONDUITS INSTALLED ON THIS PROJECT.
 - E. ALL TELECOM CONDUITS AND PULL BOXES INSTALLED ON THIS PROJECT TO BE LABELED "T-MOBILE". OWNER WILL PROVIDE LABELS FOR CONTRACTOR TO INSTALL.
 - F. INTERIOR FEEDERS TO BE INSTALLED IN E.M.T. WITH STEEL COMPRESSION FITTINGS.
 - G. MINIMUM SIZE CONDUIT TO BE 3/4" TRADE SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
 - H. FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT TO BE INSTALLED IN LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
 - I. CONDUIT TO BE RUN CONCEALED IN CEILINGS, FINISHED AREAS OR DRYWALL PARTITIONS, UNLESS OTHERWISE NOTED.
 - J. THE ROUTING OF CONDUITS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. BEFORE INSTALLING ANY WORK, EXAMINE THE WORKING LAYOUTS AND SHOP DRAWINGS OF THE OTHER TRADES TO DETERMINE THE EXACT LOCATIONS AND CLEARANCES.
 - K. ALL EXTERIOR MOUNTING HARDWARE TO BE GALVANIZED STEEL. COORDINATE WITH BUILDING ENGINEER PRIOR TO ATTACHING TO BUILDING STRUCTURE.

RACEWAYS CONT'D

- L. PENETRATIONS OF WALLS, FLOORS AND ROOFS, FOR THE PASSAGE OF ELECTRICAL RACEWAYS, TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS SO AS TO MAINTAIN THE STRUCTURAL OR WATERPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS OR SMOKE TIGHT CORRIDOR PARTITIONS TO MAINTAIN PROPER RATING OF WALL OR CEILING.
- M. PROVIDE ALL CONDUIT ENDS WITH INSULATED METALLIC GROUNDING BUSHINGS.
- N. CONDUIT TO BE SUPPORTED AT MAXIMUM DISTANCE OF 8'-0", OR AS REQUIRED BY NEC, IN HORIZONTAL AND VERTICAL DIRECTIONS.
- O. PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR ALL JUNCTION BOXES AND/OR OUTLET BOXES NOT USED IN EXPOSED AREAS. PROVIDE ALL OTHER UNUSED BOXES WITH STANDARD STEEL COVER PLATES.
- P. WHERE APPLICABLE, PROVIDE ROOFTOP CONDUIT SUPPORT SYSTEM, CONFORMING TO ROOFTOP WARRANTY REQUIREMENTS, PER BUILDING.

WIRES AND CABLES

1. CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.
2. ALL EQUIPMENT/DEVICES TO BE PROVIDED WITH INSULATED GROUND CONDUCTOR.
3. ALL WIRE AND CABLE TO BE 600VOLT, COPPER, WITH THWN/THHN INSULATION, EXCEPT AS NOTED.
4. WIRE FOR POWER AND LIGHTING WILL NOT BE LESS THAN NO. 12AWG. ALL WIRE NO. 8 AND LARGER TO BE STRANDED.
5. CONTROL WIRING IS NOT TO BE LESS THAN NO. 14AWG, FLEXIBLE IN SINGLE CONDUCTORS OR MULTI-CONDUCTOR CABLES. CONTROL WIRING WILL CONSIST OF MULTI-CONDUCTOR CABLES WHEREVER POSSIBLE. CABLES TO BE PROVIDED WITH AN OVERALL FLAME-RETARDANT, EXTRUDED JACKET AND RATED FOR PLENUM USE. ALL CONTROL WIRE TO BE 600VOLT RATED.
6. WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.
7. HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V CIRCUITS:

| LENGTH (FT.) | HOME RUN WIRE SIZE |
|--------------|--------------------|
| 0 TO 50 | NO. 12 |
| 51 TO 100 | NO. 10 |
| 101 TO 150 | NO. 8 |
8. VOLTAGE DROP IS NOT TO EXCEED 3%.
9. MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.

WIRING DEVICES

1. ALL RECEPTACLES INSTALLED IN THIS PROJECT TO BE GROUNDING TYPE, WITH GROUNDING PIN SLOT CONNECTED TO DEVICE GROUND SCREW FOR GROUND WIRE CONNECTION.
- DISCONNECT SWITCHES AND FUSES
 1. DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.
 2. PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.
 3. PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.
 4. DISCONNECT SWITCHES TO BE MANUFACTURED BY:
 - A. GENERAL ELECTRIC COMPANY
 - B. SQUARE-D
 5. PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.

INSTALLATION

1. INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.
2. INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.
3. FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.
4. FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:
 - A. THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.
 - B. TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING. IN NO CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

GENERAL NOTES:

- INTENT**
1. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.
 2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY, HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.
 3. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
 4. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
 5. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

CONFLICTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATIONS OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
2. THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.
3. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

CONTRACTS AND WARRANTIES

1. CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.
2. SEE MASTER CONTRACTION SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

STORAGE

1. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

CLEANUP

1. THE CONTRACTORS SHALL, AT ALL TIMES, KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK. THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY TO USE.
2. EXTERIOR
 - A. VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
 - B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
 - C. IF NECESSARY, TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.
3. INTERIOR
 - A. VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.
 - B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
 - C. REMOVE PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

CHANGE ORDER PROCEDURE:

1. REFER TO SECTION 17 OF SIGNED MCSA: SEE PROFESSIONAL SERVICE AGREEMENT FOR MCSA.

RELATED DOCUMENTS AND COORDINATION

1. GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.
2. ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

PRODUCTS AND SUBSTITUTIONS

1. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST, IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
2. SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

QUALITY ASSURANCE

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE, BUT NOT BE LIMITED TO THE APPLICABLE CODES SET FORTH BY THE LOCAL GOVERNING BODY. SEE "CODE COMPLIANCE" T-1.

ADMINISTRATION

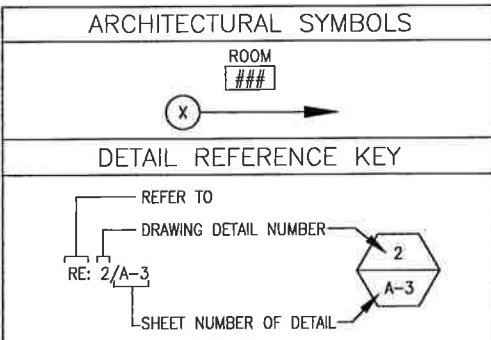
1. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. SUBMIT A BAR TYPE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE. PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
3. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
4. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER, NOR WILL WIRELESS SERVICE BE ARRANGED.
5. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL WPCS SAFETY REQUIREMENTS IN THEIR AGREEMENT.
6. PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.
7. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
8. NOTIFY THE OWNER/PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS.

INSURANCE AND BONDS

1. CONTRACTOR, AT THEIR OWN EXPENSE, SHALL CARRY AND MAINTAIN, FOR THE DURATION OF THE PROJECT, ALL INSURANCE, AS REQUIRED AND LISTED, AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER. REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS.
2. THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.
3. CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

ABBREVIATIONS

| | |
|----------|-------------------------------|
| ADJ | ADJUSTABLE |
| AGL | ABOVE GROUND LINE |
| & | AND |
| APPROX | APPROXIMATE |
| @ | AT |
| BTS | BASE TRANSMISSION STATION |
| CAB | CABINET |
| CLG | CEILING |
| CONC | CONCRETE |
| CONT | CONTINUOUS |
| DIA OR Ø | DIAMETER |
| DWG | DRAWING |
| EA | EACH |
| ELEC | ELECTRICAL |
| ELEV | ELEVATION |
| EQ | EQUAL |
| EQUIP | EQUIPMENT |
| EGB | EQUIPMENT GROUND BAR |
| (E) | EXISTING |
| EXT | EXTERIOR |
| FF | FINISHED FLOOR |
| GA | GAUGE |
| GALV | GALVANIZED |
| GC | GENERAL CONTRACTOR |
| GRND | GROUND |
| LG | LONG |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MW | MICROWAVE DISH |
| MFR | MANUFACTURER |
| MGB | MASTER GROUND BAR |
| MIN | MINIMUM |
| MTL | METAL |
| (N) | NEW |
| NIC | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OPP | OPPOSITE |
| (P) | PROPOSED |
| PCS | PERSONAL COMMUNICATION SYSTEM |
| PPC | POWER PROTECTION CABINET |
| SF | SQUARE FOOT |
| SHT | SHEET |
| SIM | SIMILAR |
| SS | STAINLESS STEEL |
| STL | STEEL |
| TOC | TOP OF CONCRETE |
| TOM | TOP OF MASONRY |
| TYP | TYPICAL |
| VIF | VERIFY IN FIELD |
| WON | UNLESS OTHERWISE NOTED |
| WWF | WELDED WIRE FABRIC |
| W/ | WITH |



T-Mobile
 T-MOBILE NORTHEAST LLC
 400 STREET ROAD
 BENSALEM, PA 19020

INFINIGY
 1033 Watervliet/Shaker Rd
 Albany, NY 12205
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 Fax # (518) 696-0793

| SUBMITTALS | | |
|------------|-------------|----------|
| DATE | DESCRIPTION | REVISION |
| 9/11/18 | FOR PERMIT | 0 |
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| DEPT. | DATE | APP'D | REVISIONS |
|----------|------|-------|-----------|
| RFE | | | |
| RF MAN. | | | |
| ZONING | | | |
| OPS | | | |
| CONSTR. | | | |
| SITE AC. | | | |

PROJECT NO: 317-000
 DRAWN BY: MAP
 CHECKED BY: ASW



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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NUMBER:
CT11106A

SITE NAME:
NEW FAIRFIELD (AT&T)
16 TITICUS MOUNTAIN RD
NEW FAIRFIELD, CT 06812

SHEET TITLE

GENERAL AND ELECTRICAL NOTES

SHEET NUMBER

N-1

SHEET 8 OF 8 SHEETS

**RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL
TO NON-IONIZING EMISSIONS**

T-Mobile Existing Facility

Site ID: CT11106A

**New Fairfield (AT&T)
37 Titicus Mountain Road
New Fairfield, CT 06812**

September 17, 2015

EBI Project Number: 6215004795

| Site Compliance Summary | |
|--|------------------|
| Compliance Status: | COMPLIANT |
| Site total MPE% of FCC general public allowable limit: | 5.52 % |

September 17, 2015

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Emissions Analysis for Site: **CT11106A – New Fairfield (AT&T)**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **37 Titicus Mountain Road, New Fairfield, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 MHz Band is approximately 467 $\mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS and AWS bands is 1000 $\mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **37 Titicus Mountain Road, New Fairfield, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

- 1) 2 GSM / UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel
- 2) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 5) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

- 6) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 7) The antennas used in this modeling are the **Ericsson AIR21 (B4A/B2P & B2A/B4P)** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **Ericsson (AIR21 B4A/B2P & B2A/B4P)** have a maximum gain of **15.9 dBd** at their main lobe. The **Commscope LNX-6515DS-VTM** has a maximum gain of **14.6 dBd** at its main lobe. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antenna mounting height centerline of the proposed antennas is **193 feet** above ground level (AGL).
- 9) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

T-Mobile Site Inventory and Power Data

| Sector: | A | Sector: | B | Sector: | C |
|-----------------|--------------------------------|-----------------|--------------------------------|-----------------|--------------------------------|
| Antenna #: | 1 | Antenna #: | 1 | Antenna #: | 1 |
| Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P |
| Gain: | 15.9 dBd | Gain: | 15.9 dBd | Gain: | 15.9 dBd |
| Height (AGL): | 193 | Height (AGL): | 193 | Height (AGL): | 193 |
| Frequency Bands | 2100 MHz (AWS) | Frequency Bands | 2100 MHz (AWS) | Frequency Bands | 2100 MHz (AWS) |
| Channel Count | 2 | Channel Count | 2 | # PCS Channels: | 2 |
| Total TX Power: | 120 | Total TX Power: | 120 | # AWS Channels: | 120 |
| ERP (W): | 4,668.54 | ERP (W): | 4,668.54 | ERP (W): | 4,668.54 |
| Antenna A1 MPE% | 0.48 | Antenna B1 MPE% | 0.48 | Antenna C1 MPE% | 0.48 |
| Antenna #: | 2 | Antenna #: | 2 | Antenna #: | 2 |
| Make / Model: | Ericsson AIR21 B2A/B4P | Make / Model: | Ericsson AIR21 B2A/B4P | Make / Model: | Ericsson AIR21 B2A/B4P |
| Gain: | 15.9 dBd | Gain: | 15.9 dBd | Gain: | 15.9 dBd |
| Height (AGL): | 193 | Height (AGL): | 193 | Height (AGL): | 193 |
| Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) | Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) | Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) |
| Channel Count | 4 | Channel Count | 4 | Channel Count | 4 |
| Total TX Power: | 120 | Total TX Power: | 120 | Total TX Power: | 120 |
| ERP (W): | 4,668.54 | ERP (W): | 4,668.54 | ERP (W): | 4,668.54 |
| Antenna A2 MPE% | 0.48 | Antenna B2 MPE% | 0.48 | Antenna C2 MPE% | 0.48 |
| Antenna #: | 3 | Antenna #: | 3 | Antenna #: | 3 |
| Make / Model: | Commscope LNX-6515DS-VTM | Make / Model: | Commscope LNX-6515DS-VTM | Make / Model: | Commscope LNX-6515DS-VTM |
| Gain: | 14.6 dBd | Gain: | 14.6 dBd | Gain: | 14.6 dBd |
| Height (AGL): | 193 | Height (AGL): | 193 | Height (AGL): | 193 |
| Frequency Bands | 700 MHz | Frequency Bands | 700 MHz | Frequency Bands | 700 MHz |
| Channel Count | 1 | Channel Count | 1 | Channel Count | 1 |
| Total TX Power: | 30 | Total TX Power: | 30 | Total TX Power: | 30 |
| ERP (W): | 865.21 | ERP (W): | 865.21 | ERP (W): | 865.21 |
| Antenna A3 MPE% | 0.19 | Antenna B3 MPE% | 0.19 | Antenna C3 MPE% | 0.19 |

| Site Composite MPE% | |
|---------------------------|---------------|
| Carrier | MPE% |
| T-Mobile (Per Sector Max) | 1.15 % |
| Sprint | 0.54 % |
| Clearwire | 0.05 % |
| Verizon Wireless | 1.77 % |
| AT&T | 0.78 % |
| Homeland Security | 1.23 % |
| Site Total MPE %: | 5.52 % |

| | |
|--------------------------|---------------|
| T-Mobile Sector 1 Total: | 1.15 % |
| T-Mobile Sector 2 Total: | 1.15 % |
| T-Mobile Sector 3 Total: | 1.15 % |
| Site Total: | 5.52 % |

| T-Mobile _per sector | # Channels | Watts ERP (Per Channel) | Height (feet) | Total Power Density ($\mu\text{W}/\text{cm}^2$) | Frequency (MHz) | Allowable MPE ($\mu\text{W}/\text{cm}^2$) | Calculated % MPE |
|------------------------------|------------|-------------------------|---------------|---|-----------------|---|------------------|
| T-Mobile 2100 MHz (AWS) LTE | 2 | 2334.27 | 193 | 4.80 | 2100 | 1000 | 0.48 % |
| T-Mobile 700 MHz LTE | 1 | 865.21 | 193 | 0.89 | 700 | 467 | 0.19 % |
| T-Mobile 1900 MHz (PCS) UMTS | 2 | 1167.14 | 193 | 2.40 | 1900 | 1000 | 0.24 % |
| T-Mobile 2100 MHz (AWS) UMTS | 2 | 1167.14 | 193 | 2.40 | 2100 | 1000 | 0.24 % |
| | | | | | | Total: | 1.15% |

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public exposure to RF Emissions.

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

| T-Mobile Sector | Power Density Value (%) |
|---------------------------------|-------------------------|
| Sector 1: | 1.15 % |
| Sector 2: | 1.15 % |
| Sector 3 : | 1.15 % |
| T-Mobile Per Sector Maximum: | 1.15 % |
| | |
| Site Total: | 5.52 % |
| | |
| Site Compliance Status: | COMPLIANT |

The anticipated composite MPE value for this site assuming all carriers present is **5.52%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803



AMERICAN TOWER®
CORPORATION

| Structural Evaluation | |
|------------------------------|---|
| ATC Site Number & Name | 88014, New Fairfield, CT |
| Carrier Site Number & Name | CT11106A, N/A |
| Site Location | 22 Titicus Mountain Road New Fairfield, CT 06812-2565, Fairfield County 41.450664 N / -73.515989 W |
| Tower Description | 187.5 ft Self Supported Tower |
| Basic Wind Speed | 95 mph (3-Second Gust) |
| Basic Wind Speed w/ Ice Code | 50 mph (3-Second Gust) w/ 3/4" ice ANSI/TIA-222-G / 2003 IBC / 2005 Connecticut Supplemental / 2009 Connecticut Amendments |

Existing and Reserved Equipment

| Elevation ¹ (ft) | | Qty | Antenna | Mount Type | Lines | Carrier |
|-----------------------------|--------------------------|-------|--|----------------------|---|---------------------------------|
| Mount | RAD | | | | | |
| 187.5 | 193.0 | 3 | Ericsson AIR 21, 1.3 M, B2A B4P | T-Arm | (12) 1 5/8" Coax (1) 1 5/8" (1.63") Fiber | T-Mobile |
| | | 3 | Ericsson AIR 21, 1.3M, B4A B2P | | | |
| | | 3 | Ericsson KRY 112 144/1 | | | |
| 185.0 | 185.0 | 2 | Horizon Compact | T-Arm | (2) 1/2" Coax (6) 5/16" (0.31") Coax (1) 2" conduit | Clearwire |
| | | 3 | NextNet BTS-2500 | | | |
| | | 3 | Argus LLPX310R | Stand-Off | | |
| | | 1 | DragonWave A-ANT-23G-2.5-C | | | |
| 1 | DragonWave A-ANT-11G-4-C | T-Arm | | | | |
| 164.0 | 167.0 | 3 | Alcatel-Lucent 2X50W RRH w/o Filter | Leg | (3) 1 1/4" Hybriflex (1) 1 1/4" (1.25") Fiber | Sprint Nextel |
| | | 3 | Alcatel-Lucent 4x40W RRH | | | |
| | | 3 | Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield | | | |
| | | 6 | RFS RFS APXV9TM14-ALU-I20 | Low Profile Platform | | |
| | | 3 | RFS APXVSP18-C-A20 | | | |
| 160.0 | 160.0 | 6 | Ericsson RRUS 11 (Band 12) (55 lb) | Sector Frame | (12) 1 5/8" Coax (4) 0.74" 8 AWG 7 (1) 3" conduit (1) 0.28" RG-6 | AT&T Mobility |
| | | 3 | Powerwave 7770.00 | | | |
| | | 3 | Allgon 7770.00 | | | |
| | | 3 | Powerwave P65-16-XLH-RR | | | |
| | | 6 | Powerwave LGP21401 | Flush | | |
| | | 1 | Raycap DC6-48-60-18-8F. | | | |
| 142.0 | 146.0 | 6 | RFS FD9R6004/2C-3L | Low Profile Platform | (12) 1 5/8" Coax | Verizon |
| | | 3 | Antel BXA-171085-8BF-EDIN-X | | | |
| | | 2 | Antel LPA-80080/4CF | | | |
| | | 4 | Antel LPA-80063/4CF | | | |
| | | 3 | Antel BXA-70063/6CF | | | |
| 106.0 | 121.0 | 1 | Dielectric TLP-16A-1E | Stand-Off | (1) 3 1/8" HL | Qualcomm |
| 70.0 | 80.0 | 1 | Andrew DB616E-BC | Side Arm | (2) 7/8" Coax | US Dept Of Homeland Security |
| | | 1 | 4' Omni | Stand-Off | | US Treasury |

Equipment to be Removed

| Elevation ¹ (ft) | | Qty | Antenna | Mount Type | Lines | Carrier |
|--|-----|-----|---------|------------|-------|---------|
| Mount | RAD | | | | | |
| No loading considered as to be removed | | | | | | |

Proposed Equipment

| Elevation ¹ (ft) | | Qty | Antenna | Mount Type | Lines | Carrier |
|-----------------------------|-------|-----|--------------------------|------------|-------|----------|
| Mount | RAD | | | | | |
| 193.0 | 193.0 | 3 | Ericsson RRUS 11 B12 | T-Arm | - | T-Mobile |
| 187.5 | 191.0 | 3 | Commscope LNX-6515DS-VTM | T-Arm | - | |

¹Mount elevation is defined as height above bottom of steel structure to bottom of mount, RAD elevation is defined as center of antenna above grade level (AGL).

The existing and proposed loads listed in the tables above are compared to the tower's current design capacity or previous structural analysis. The tower should be re-evaluated as future loads are added or if actual loads are found different from those listed in the tables. The subject tower and foundation **are adequate** to support the above stated loads in conformance with specified requirements.

Reviewed by:
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Chief Engineer

