



January 18, 2023

Attorney Melanie Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06501

EM-T-MOBILE-151-220624

T-Mobile Site ID CT11269B

150 Mattatuck Heights Waterbury, CT

Notice of Compliance with Conditions and Construction Completion

Dear Attorney Bachman:

The T-Mobile site referenced above was approved by The Connecticut Siting Council (Council) on July 25, 2022 as an Exempt Modification. T-Mobile is now requesting the close out of the approval and hereby acknowledges the following conditions were met:

1. Prior to T-Mobile's antenna installation, antenna mount modifications shall be installed in accordance with the Mount Analysis prepared by Tower Engineering Solutions, dated May 3, 2022 and stamped and signed by Aaron Thomas Rucker;
2. Within 45 days following completion of equipment installation, T-Mobile shall provide documentation certified by a Professional Engineer that its installation complied with the recommendations of the Mount Analysis;
3. Any deviation from the proposed modification as specified in this notice and supporting materials submitted to the Council shall render this acknowledgement invalid;
4. Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
5. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities;



NSS **NORTHEAST**
SITE SOLUTIONS
Turnkey Wireless Development

6. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
7. Deployment of any 5G services must comply with FCC and FAA guidance relative to air navigation, as applicable;
8. Any nonfunctioning antenna and associated antenna mounting equipment, or other equipment at this facility owned and operated by T-Mobile shall be removed within 60 days of the date the antenna or equipment ceased to function;
9. The validity of this action shall expire one year from the date of this letter; and
10. The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The attached PE Closeout Letter dated January 13, 2022 provides evidence of compliance with the conditions outlined by the Council. In addition, T-Mobile hereby notifies the Council that construction of the acknowledged modifications was completed as of August 31, 2022.

Sincerely,

Victoria Masse

Victoria Masse
Zoning and Permitting
Northeast Site Solutions

January 13, 2023

Victoria Masse
Northeast Site Solutions
420 Main Street Unit 1 Box 2
Sturbridge, MA 01566
(231) 409-5439



Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351

Subject: Post Construction Inspection Report

T-Mobile Designation: **Site Number:** CT11269B
Site Name: Waterbury/I-84/Mattatuck

NE Site Solutions Designation: **Site Name:** CT11269B

Engineering Firm Designation: **TEP Project Number:** 25631.794683

Site Data: **150 Mattatuck Heights, Waterbury, New Haven Co, CT 06705**
Latitude 41° 32' 16.44", Longitude -72° 59' 6.00"
143 Foot – Monopole Tower

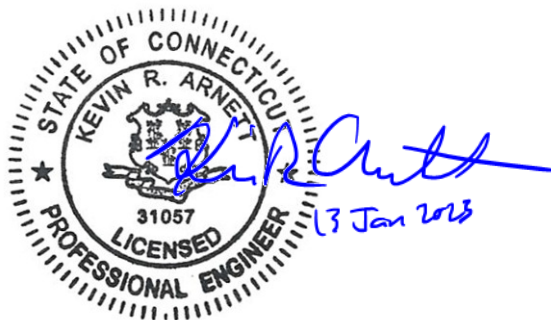
Dear Victoria Masse,

Tower Engineering Professionals, Inc. (TEP) is pleased to submit this “**Post Construction Inspection Report**” (PCI Report) to Northeast Site Solutions for the equipment upgrades to the subject structure. The purpose of this PCI report is to confirm that T-Mobile’s proposed upgrades were installed in conformance with the approved construction drawings by B+T Group, dated June 17, 2022 (Appendix A) and the workmanship conforms with industry standards.

All observations were performed after the construction was complete. TEP was not present during the construction phase. The onsite PCI was performed on January 12, 2023 by Matthew Leusink and Ronald Prado of TEP.

We at TEP appreciate the opportunity to provide our professional services to you and Northeast Site Solutions. If you have any questions or need further assistance on this or any other projects, please give us a call.

Sincerely,



Kevin R. Arnett, PE, CWI
Tower Engineering Professionals, Inc.


EXECUTIVE SUMMARY

PROPOSED LOADING SUMMARY				
Alpha Sector				
Antenna Position	Antenna (Qty.) Make/Model	RRU (Qty.) Make/Model	Surge Protector (Qty.) Make/Model	Coax
A1	(1) Ericsson AIR 6419 B41	-	-	(1) 6x24 Hybrid Trunk
A2	(1) RFS APXVAARR24_43-U- NA20	(1) Ericsson Radio 4449 B71 + B85 (1) Ericsson Radio B25 + B66		
A3	(1) Ericsson AIR 32 KRD901146-1_B66A B2A	-		
Beta Sector				
B1	(1) Ericsson AIR 6419 B41	-	-	(1) 6x12 HCS
B2	(1) RFS APXVAARR24_43-U- NA20	(1) Ericsson Radio 4449 B71 + B85 (1) Ericsson Radio B25 + B66		
B3	(1) Ericsson AIR 32 KRD901146-1_B66A B2A	-		
Gamma Sector				
G1	(1) Ericsson AIR 6419 B41	-	-	(1) 6x12 HCS
G2	(1) RFS APXVAARR24_43-U- NA20	(1) Ericsson Radio 4449 B71 + B85 (1) Ericsson Radio B25 + B66		
G3	(1) Ericsson AIR 32 KRD901146-1_B66A B2A	-		

INSTALLED LOADING SUMMARY				
Alpha Sector				
Antenna Position	Antenna (Qty.) Make/Model	RRU (Qty.) Make/Model	Surge Protector (Qty.) Make/Model	Coax
A1	(1) Ericsson AIR 6419 B41	-		(1) 6x24 Hybrid Trunk
A2	(1) RFS APXVAARR24_43-U- NA20	(1) Ericsson Radio 4449 B71 + B85 (1) Ericsson Radio B25 + B66	-	
A3	(1) Ericsson AIR 32 KRD901146-1_B66A_B2A	-		
Beta Sector				
B1	(1) Ericsson AIR 6419 B41	-		(1) 6x12 HCS
B2	(1) RFS APXVAARR24_43-U- NA20	(1) Ericsson Radio 4449 B71 + B85 (1) Ericsson Radio B25 + B66	-	
B3	(1) Ericsson AIR 32 KRD901146-1_B66A_B2A	-		
Gamma Sector				
G1	(1) Ericsson AIR 6419 B41	-		(1) 6x12 HCS
G2	(1) RFS APXVAARR24_43-U- NA20	(1) Ericsson Radio 4449 B71 + B85 (1) Ericsson Radio B25 + B66	-	
G3	(1) Ericsson AIR 32 KRD901146-1_B66A_B2A	-		

- Loading discrepancies are highlighted

EXECUTIVE SUMMARY

Photograph	Observations and Recommendations
 The 'Photograph' column contains three vertically stacked images. The top image shows a close-up of a white antenna array mounted on a metal structure, with various cables and components visible. The middle image shows a different angle of the same equipment, highlighting the mounting hardware and the surrounding metal framework. The bottom image shows a wider view of the antenna array and its supporting structure, with a glimpse of the ground and trees in the background.	<p>Item 1:</p> <p>Observation: Proposed upgrades were installed properly and the workmanship is in accordance with T-Mobile and industry standards.</p> <p>Recommendation: No action required.</p>



Signage



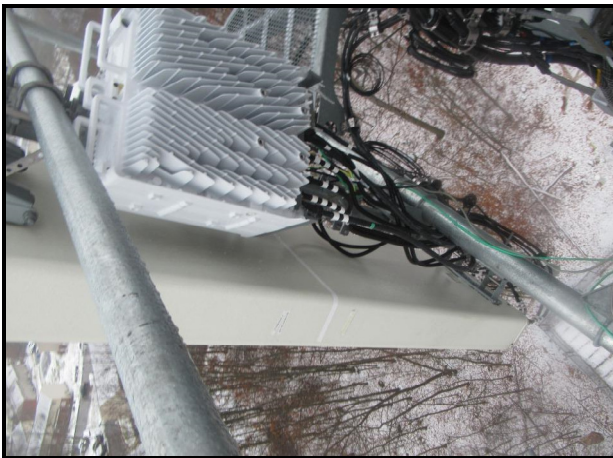
View Up at Sector



Position 1



Position 1 Tag



Position 2



Position 2 Tag



Position 3



Position 3 Tag



Radios



Radio Tag



Radio Tag



Mount Modifications

APPENDIX A
CONSTRUCTION DRAWINGS

T-Mobile

T-MOBILE SITE NUMBER: CT11269B
T-MOBILE SITE NAME: WATERBURY/I-84/MATTATUCK
SITE TYPE: MONOPOLE
TOWER HEIGHT: 143'-0"

BUSINESS UNIT #: 876317
SITE ADDRESS: 150 MATTATUCK HEIGHTS
WATERBURY, CT 06705
COUNTY: NEW HAVEN
JURISDICTION: CONNECTICUT
SITING COUNCIL

T-MOBILE ANCHOR SITE CONFIGURATION: 67D5A997DB HYBRID

T-Mobile
 35 GRIFFIN ROAD
 BLOOMFIELD, CT 06002

CROWN CASTLE
 3 CORPORATE PARK DRIVE, SUITE 101
 CLIFTON PARK, NY 12065

B+T GRP
 1717 S. BOULDER
 SUITE 300
 TULSA, OK 74119
 PH: (918) 587-4630
 www.btgrp.com

T-MOBILE SITE NUMBER: CT11269B
BU #: 876317
WATERBURY
 150 MATTATUCK HEIGHTS
 WATERBURY, CT 06705
 EXISTING
 143'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	6/2/22	GAC	PRELIMINARY REVIEW	LR
0	6/17/22	GAC	CONSTRUCTION	LR

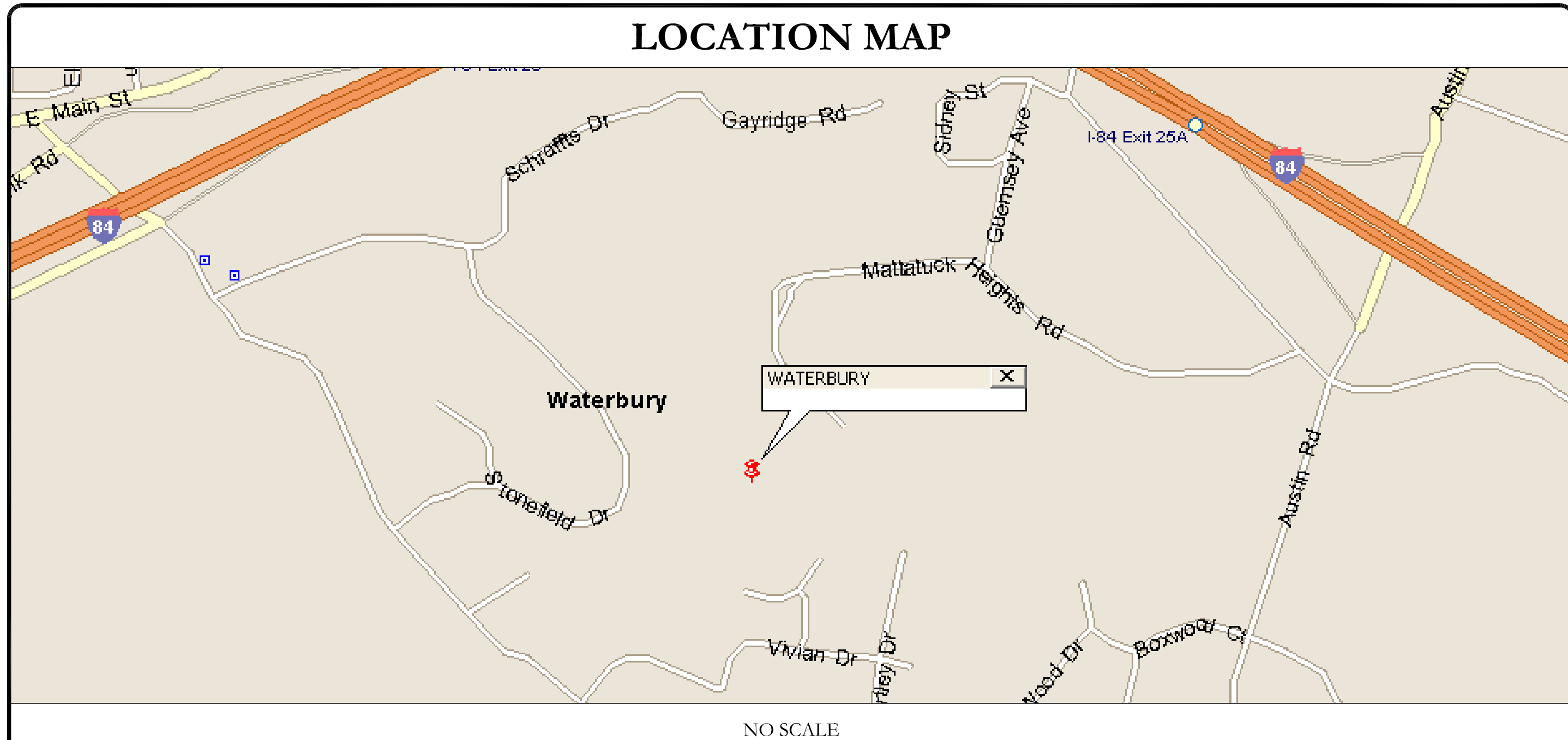
SITE INFORMATION	
CROWN CASTLE USA INC. SITE NAME:	WATERBURY
SITE ADDRESS:	150 MATTATUCK HEIGHTS WATERBURY, CT 06705
COUNTY:	NEW HAVEN
MAP/PARCEL #:	0424-0141-0001
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.537861°
LONGITUDE:	-72.985028°
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	661 FT
CURRENT ZONING:	IP - INDUSTRIAL PARK DISTRICT
JURISDICTION:	CONNECTICUT SITING COUNCIL
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	WATERBURY TWIN LLC & 150 MH LLC 12 ISELIN TERRACE LARCHMONT, NY 10538
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	T-MOBILE 35 GRIFFIN ROAD BLOOMFIELD, CT 06002
ELECTRIC PROVIDER:	CONNECTICUT LIGHT & POWER CO 1-800-286-2000
TELCO PROVIDER:	LIGHTOWER 855-91-FIBER

PROJECT TEAM	
A&E FIRM:	B+T GROUP 1717 S. BOULDER AVE. TULSA, OK 74119 MARVIN PHILLIPS MARVIN.PHILLIPS@BTGRP.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3 CORPORATE PARK DRIVE, SUITE 101 CLIFTON PARK, NY 12065 TRICIA PELON - PROJECT MANAGER TRICIA.PELON@CROWNCastle.COM JASON DAMICO - CONSTRUCTION MANAGER JASON.DAMICO@CROWNCastle.COM
NOTE:	PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER.

DRAWING INDEX	
SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	CODE SUMMARY
T-3	CODE SUMMARY
T-4	GENERAL NOTES
C-1.1	OVERALL SITE PLAN
C-1.2	SITE PLAN & ENLARGED SITE PLAN
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	ANTENNA & CABLE SCHEDULE
C-4	PLUMBING DIAGRAM
C-5	EQUIPMENT SPECS
G-1	ANTENNA GROUNDING DIAGRAM
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
ATTACHED	HANDRAIL SPECIFICATIONS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR FULL SIZE. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

PROJECT DESCRIPTION	
THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.	
TOWER SCOPE OF WORK:	
<ul style="list-style-type: none"> REMOVE (3) ANTENNAS REMOVE (3) TMAs REMOVE (6) 7/8" COAX CABLES REMOVE (1) 9X18 HCS CABLE RELOCATE (6) ANTENNAS RELOCATE (3) RRHs INSTALL NEW T-MOBILE MOUNT MODIFICATION AS PER MOUNT DOCUMENT BY TOWER ENGINEERING PROFESSIONALS DATED 5/3/22 INSTALL (3) ANTENNAS INSTALL (3) RRHs INSTALL (1) HYBRID TRUNK 6/24 4AWG 	
GROUND SCOPE OF WORK:	
<ul style="list-style-type: none"> REMOVE (1) RBS 2106 CABINET REMOVE (1) DUW30 REMOVE (6) RUS01 B4 INSTALL NEW PAD EXTENSION INSTALL (1) 6160 CABINET INSTALL (1) B160 BATTERY CABINET INSTALL (1) RP 6651 INSTALL (1) PSU 4813 vR2A (Kit) INSTALL (1) CSR IXRe V2 (Gen2) 	
NOTE: THE POWER DESIGN FOR ANY AC ELECTRICAL POWER CHANGES IS TO BE PERFORMED BY OTHERS AND IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. T-MOBILE IS SOLELY RESPONSIBLE FOR THE ELECTRICAL POWER DESIGN.	



APPLICABLE CODES/REFERENCE DOCUMENTS	
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:	
CODE TYPE	CODE
BUILDING	2018 CONNECTICUT SBC/2015 IBC
MECHANICAL	2018 CONNECTICUT SBC/2015 IMC
ELECTRICAL	2018 CONNECTICUT SBC/2017 NEC
REFERENCE DOCUMENTS:	
STRUCTURAL ANALYSIS:	B+T GROUP
DATED:	5/9/22
MOUNT ANALYSIS:	TOWER ENGINEERING PROFESSIONALS
DATED:	5/3/22
AC ELECTRICAL POWER DESIGN:	BY OTHERS
DATED:	
RFDS REVISION:	5
DATED:	4/11/22
ORDER ID:	614658
REVISION:	0

CALL CONNECTICUT ONE CALL (800) 922-4455 CBYD.COM CALL 2 WORKING DAYS BEFORE YOU DIG!

APPROVALS		
APPROVAL	SIGNATURE	DATE
PROPERTY OWNER OR REP.	_____	_____
LAND USE PLANNER	_____	_____
T-MOBILE	_____	_____
OPERATIONS	_____	_____
RF	_____	_____
NETWORK	_____	_____
BACKHAUL	_____	_____
CONSTRUCTION MANAGER	_____	_____

THE PARTIES ABOVE HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES AND MODIFICATIONS THEY MAY IMPOSE.

MTS ENGINEERING P.L.L.C.
 BER:2386985
 Expires 3/31/23

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

SHEET NUMBER: T-1	REVISION: 0
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79982.011.01_876317_Waterbury_Crown_T-Mobile_CD.dwg - User: liso.rider - Jun 17, 2022 - 7:34pm

SITE PLAN DISCLAIMER:
 PROPERTY LINES AND STRUCTURES HAVE BEEN DIGITIZED FROM PREVIOUS PLAN SETS. CROWN CASTLE USA INC. HAS NOT COMPLETED A SITE SURVEY AND THEREFORE MAKES NO CLAIMS AS TO THE ACCURACY OF INFORMATION DEPICTED ON THIS SHEET.



T-Mobile

35 GRIFFIN ROAD
 BLOOMFIELD, CT 06002

CROWN CASTLE

3 CORPORATE PARK DRIVE, SUITE 101
 CLIFTON PARK, NY 12065

B+T GRP

1717 S. BOULDER
 SUITE 300
 TULSA, OK 74119
 PH: (918) 587-4630
 www.btgrp.com

T-MOBILE SITE NUMBER:
CT11269B

BU #: 876317
WATERBURY

150 MATTATUCK HEIGHTS
 WATERBURY, CT 06705

EXISTING
143'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	6/2/22	GAC	PRELIMINARY REVIEW	LR
0	6/17/22	GAC	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
 BER:2386985
 Expires 3/31/23

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1 OVERALL SITE PLAN

SCALE:

1" = 50'-0" (FULL SIZE)
 1" = 100'-0" (11x17)

SHEET NUMBER:
C-1.1

REVISION:
0

NOTES:
 THE POWER DESIGN FOR ANY AC ELECTRICAL POWER CHANGES IS TO BE PERFORMED BY OTHERS AND IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. T-MOBILE IS SOLELY RESPONSIBLE FOR THE ELECTRICAL POWER DESIGN.

T-Mobile
 35 GRIFFIN ROAD
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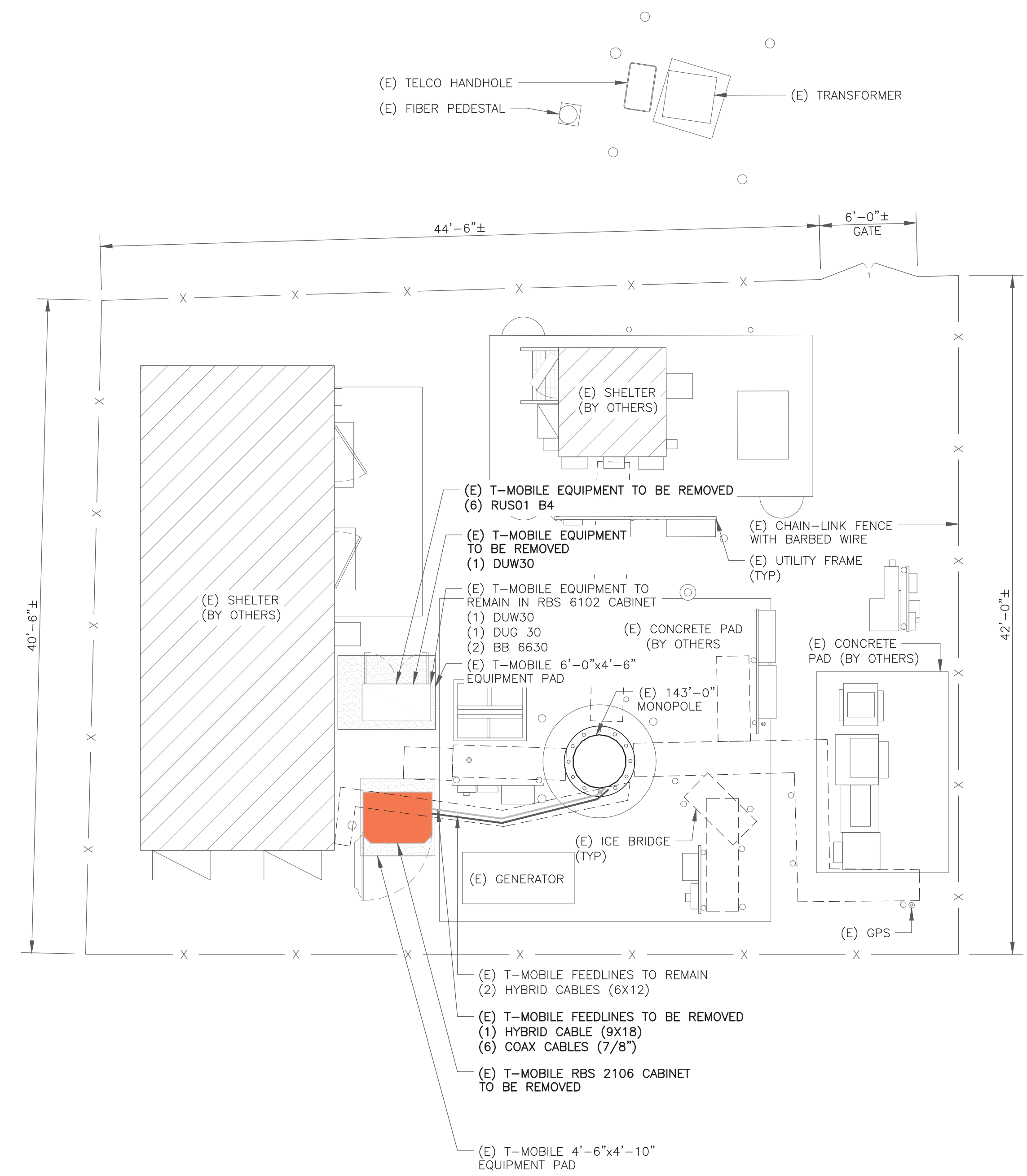
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ISSUED FOR:

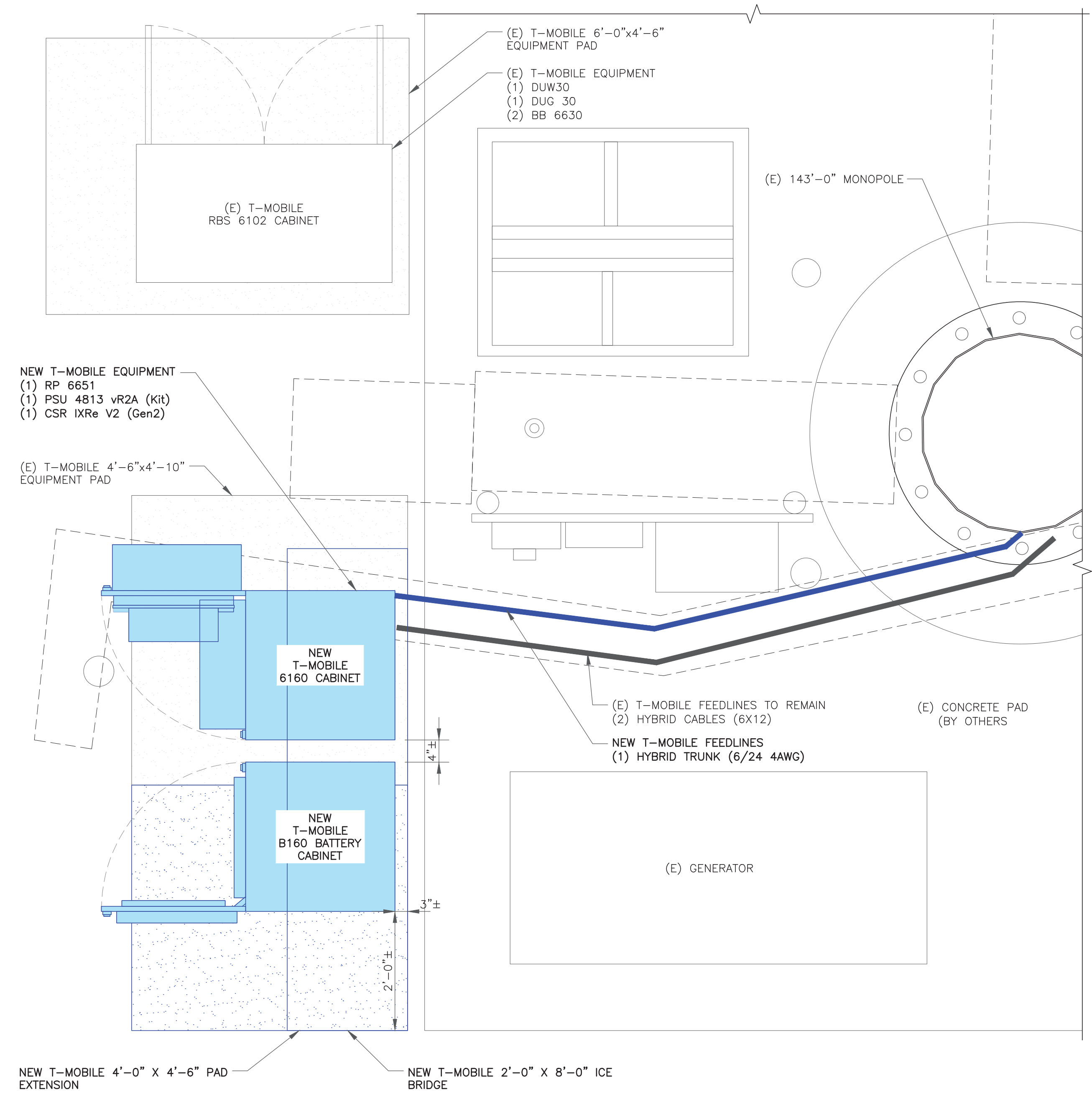
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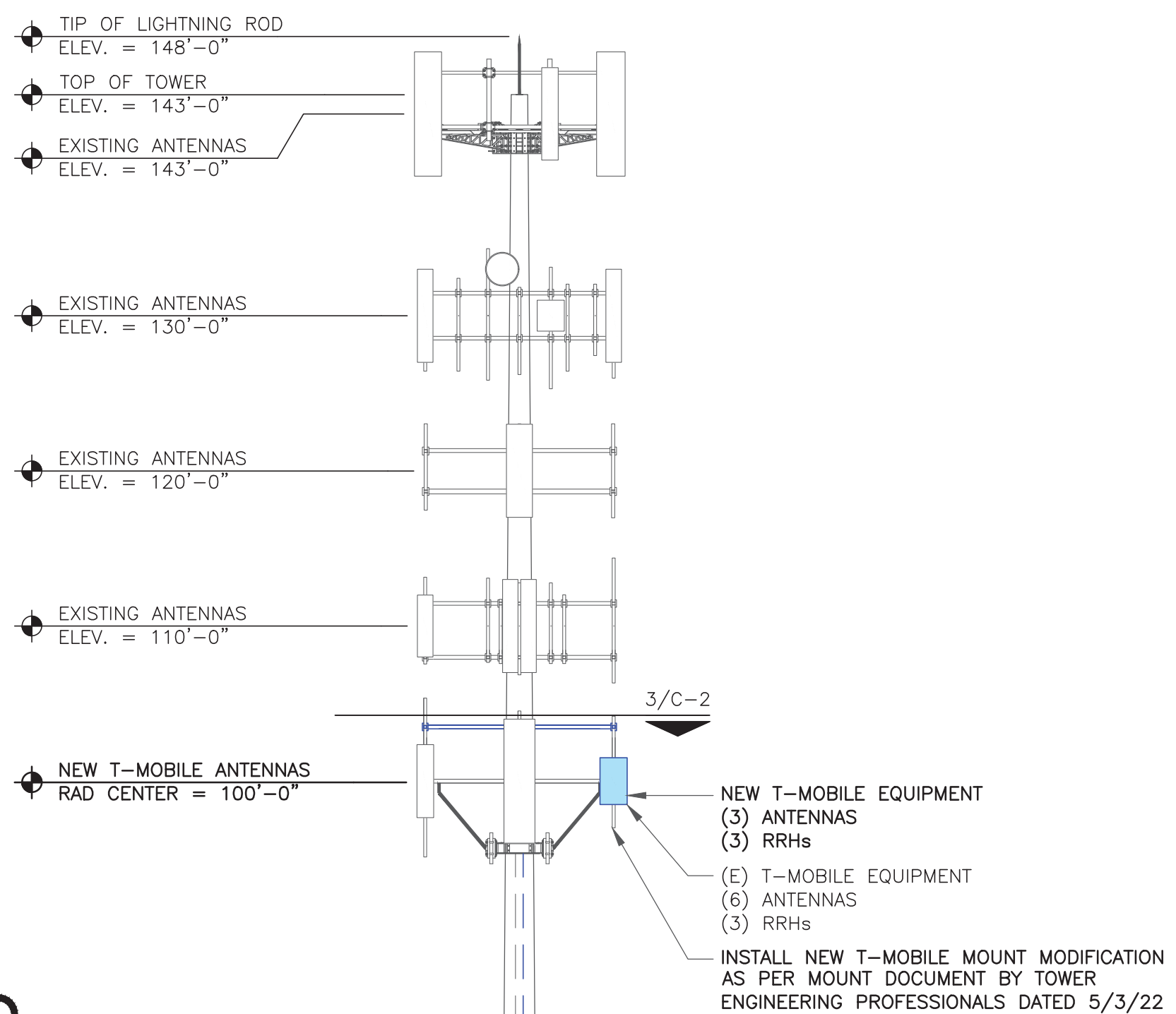
SHEET NUMBER: **C-1.2** REVISION: **0**



1 SITE PLAN
 SCALE: 3/16"=1'-0" (FULL SIZE)
 3/32"=1'-0" (11x17)

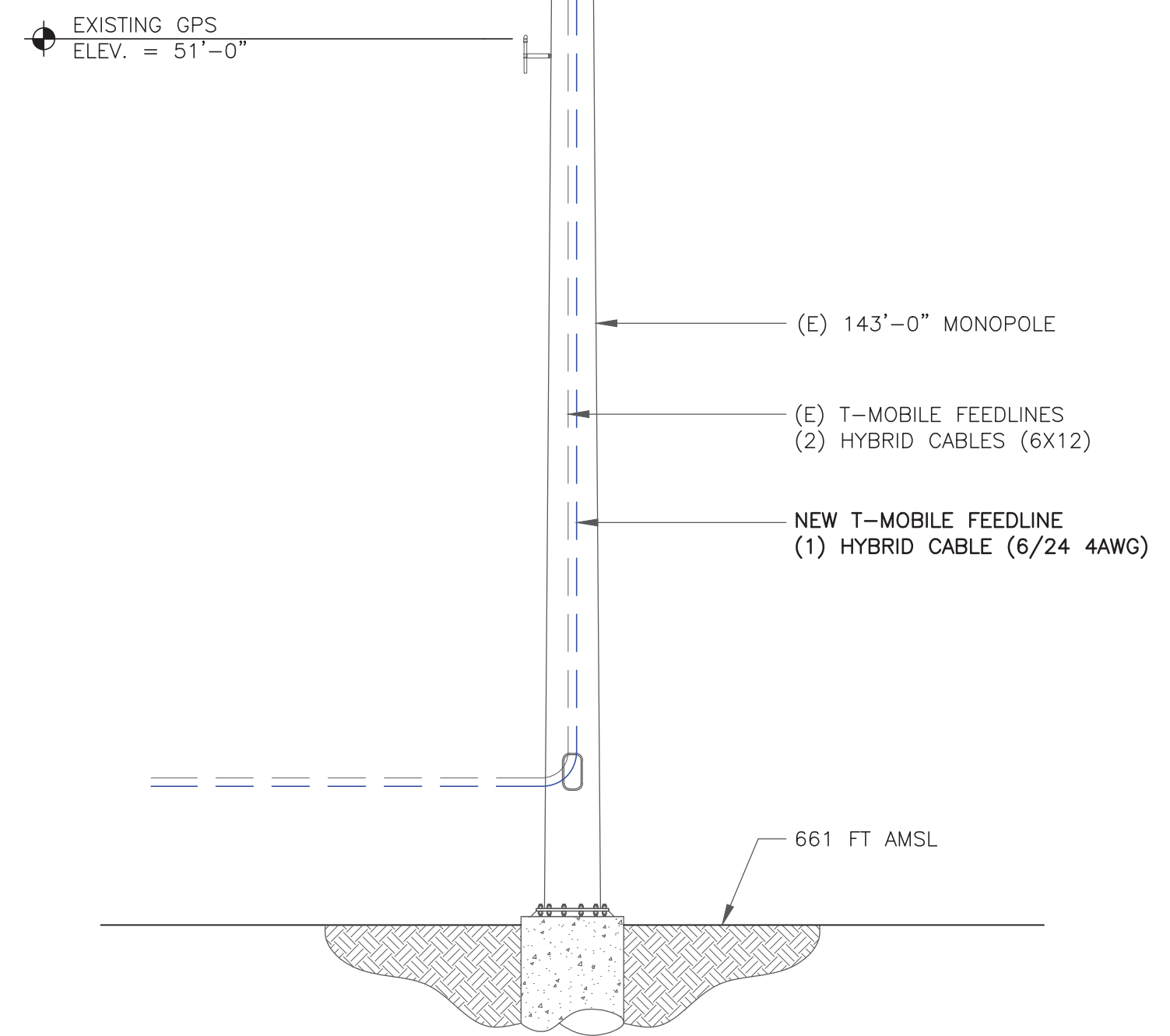


2 ENLARGED SITE PLAN
 SCALE: 3/4"=1'-0" (FULL SIZE)
 3/8"=1'-0" (11x17)

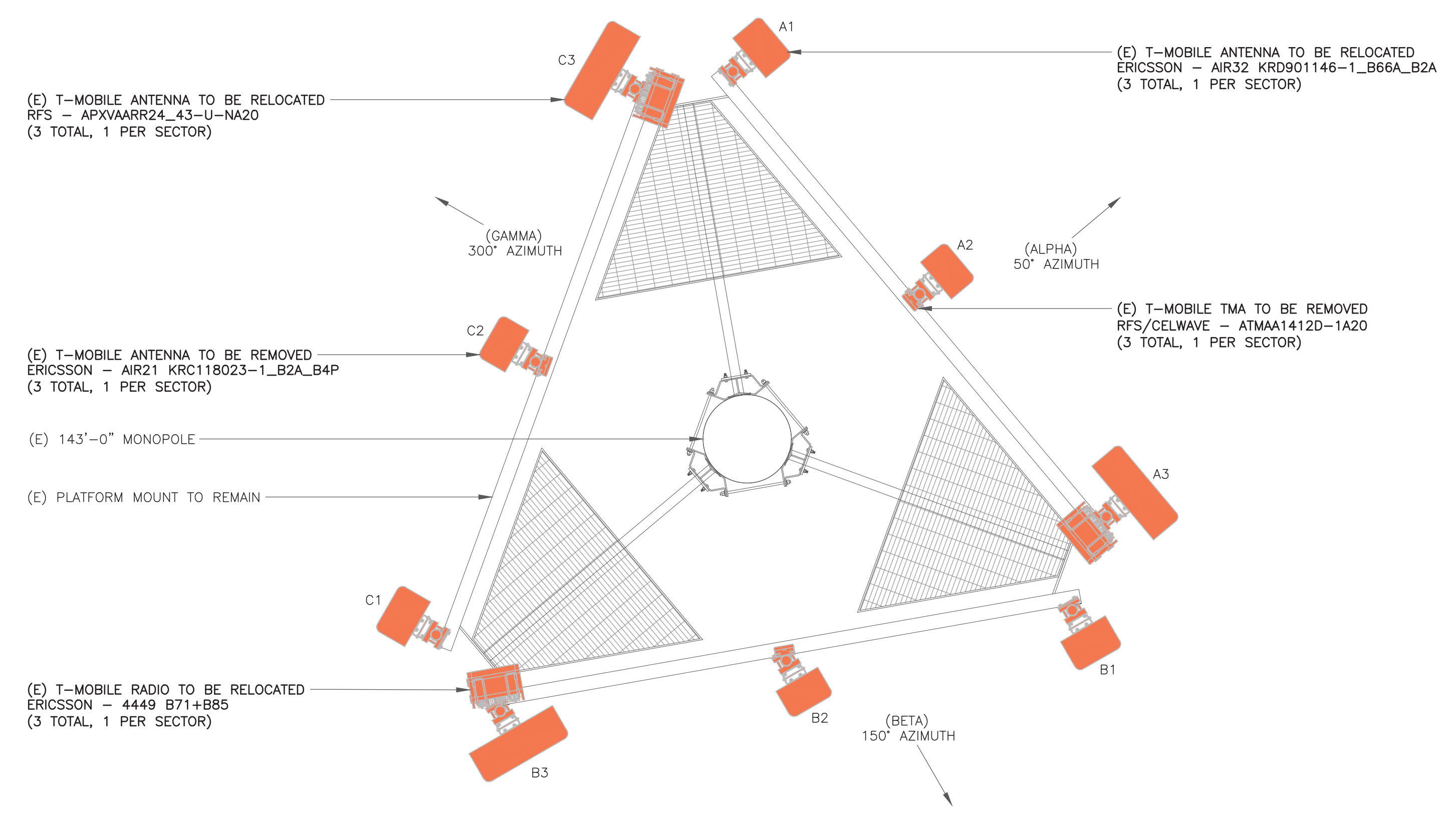


T-MOBILE EQUIPMENT
ANTENNA CL: 100'-0"
MOUNT CL: 100'-0"

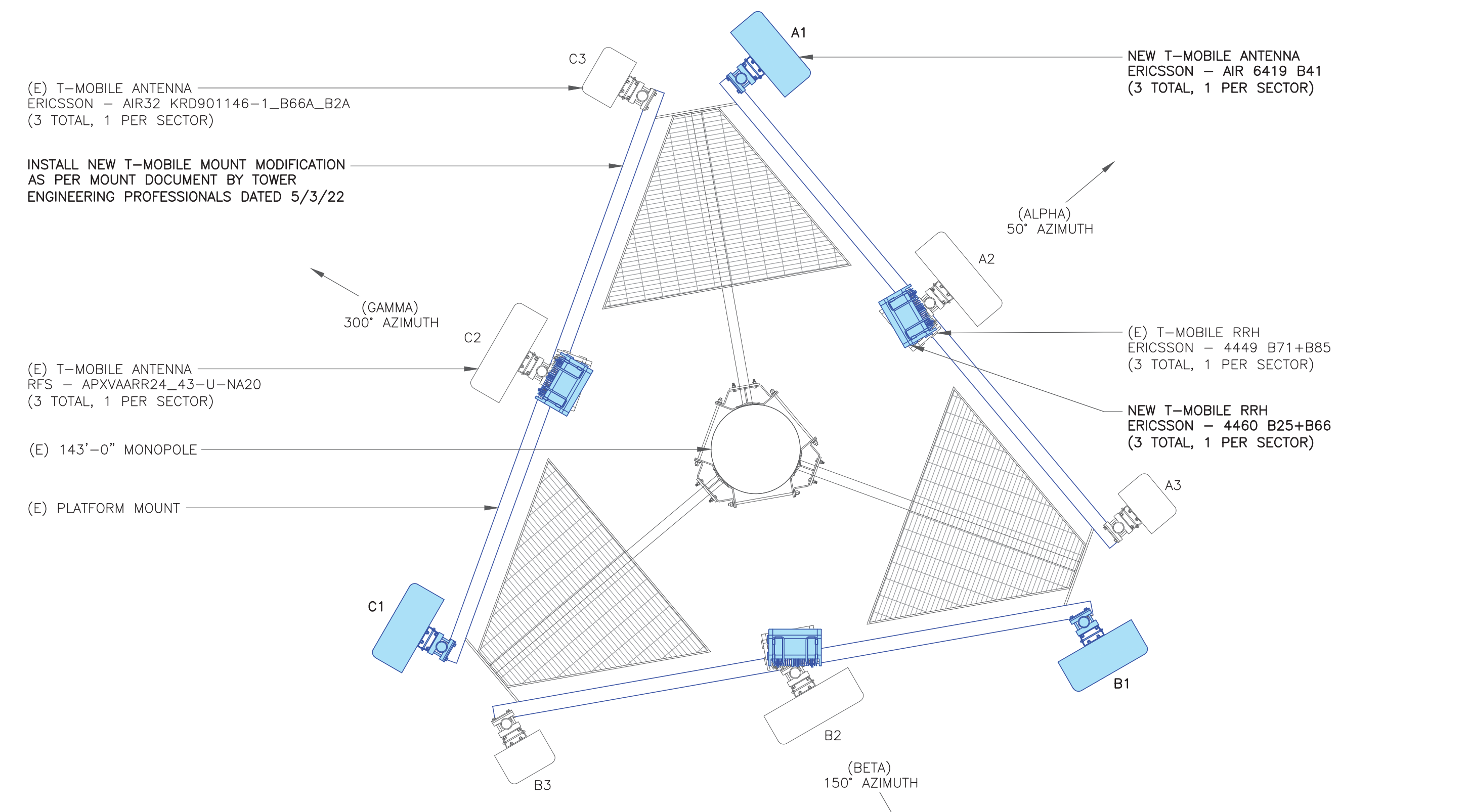
ANY AND ALL TOWER MOUNTED EQUIPMENT MUST NOT TRAP OR INTERFERE W/ EXISTING SAFETY CLIMB



1 FINAL ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA LAYOUT
SCALE: 1/2" = 1'-0"



3 FINAL ANTENNA LAYOUT
SCALE: NOT TO SCALE

T-Mobile

35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

CROWN CASTLE

3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP

1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
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T-MOBILE SITE NUMBER:
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BU #: 876317
WATERBURY

150 MATTATUCK HEIGHTS
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EXISTING
143'-0" MONOPOLE

ISSUED FOR:

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0	6/17/22	GAC	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
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SHEET NUMBER: **C-2**

REVISION: **0**

T-Mobile

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BLOOMFIELD, CT 06002

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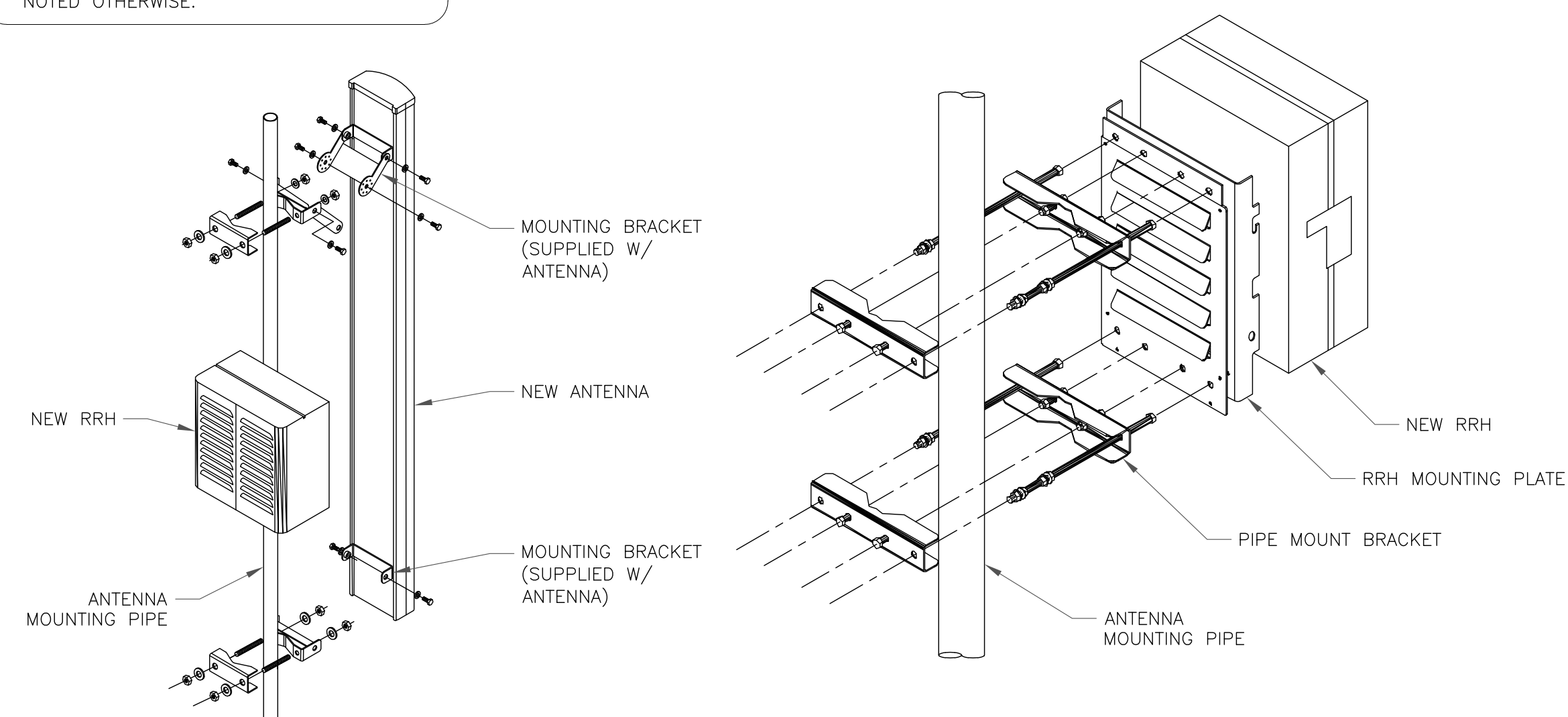
EXISTING
143'-0" MONOPOLE

RF SYSTEM SCHEDULE										
SECTOR	ANTENNA	TECH	MANUFACTURER	ANTENNA MODEL	AZIMUTH	M-TILT	E-TILT	RAD CENTER	TMA/RRU	FEEDLINE TYPE
ALPHA	A1	N2500/L2500	ERICSSON	AIR 6419 B41	50°	0°	2°/2°	100'-0"	-	(1) HYBRID TRUNK 6/24 4AWG (2) 6x12 HCS
	A2	L700/L600/N600; L1900/U1900	RFS	APXVAARR24_43-U-NA20	50°	0°	2°/2°/2°/ 2°	100'-0"	ERICSSON - 4449 B71+B85 ERICSSON - 4460 B25+B66	
	A3	L2100; L1900/ G1900	ERICSSON	AIR32 KRD901146-1_B66A_B2A	50°	0°	2°/2°/2°/ 2°	100'-0"	-	
BETA	B1	N2500/L2500	ERICSSON	AIR 6419 B41	150°	0°	2°/2°	100'-0"	-	
	B2	L700/L600/N600; L1900/U1900	RFS	APXVAARR24_43-U-NA20	150°	0°	2°/2°/2°/ 2°	100'-0"	ERICSSON - 4449 B71+B85 ERICSSON - 4460 B25+B66	
	B3	L2100; L1900/ G1900	ERICSSON	AIR32 KRD901146-1_B66A_B2A	150°	0°	2°/2°/2°/ 2°	100'-0"	-	
GAMMA	C1	N2500/L2500	ERICSSON	AIR 6419 B41	300°	0°	2°/2°	100'-0"	-	
	C2	L700/L600/N600; L1900/U1900	RFS	APXVAARR24_43-U-NA20	300°	0°	2°/2°/2°/ 2°	100'-0"	ERICSSON - 4449 B71+B85 ERICSSON - 4460 B25+B66	
	C3	L2100; L1900/ G1900	ERICSSON	AIR32 KRD901146-1_B66A_B2A	300°	0°	2°/2°/2°/ 2°	100'-0"	-	

1 ANTENNA AND CABLE SCHEDULE
SCALE: NOT TO SCALE

INSTALLER NOTES:

1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.



2 ANTENNA WITH RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

ISSUED FOR:

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0	6/17/22	GAC	CONSTRUCTION	LR



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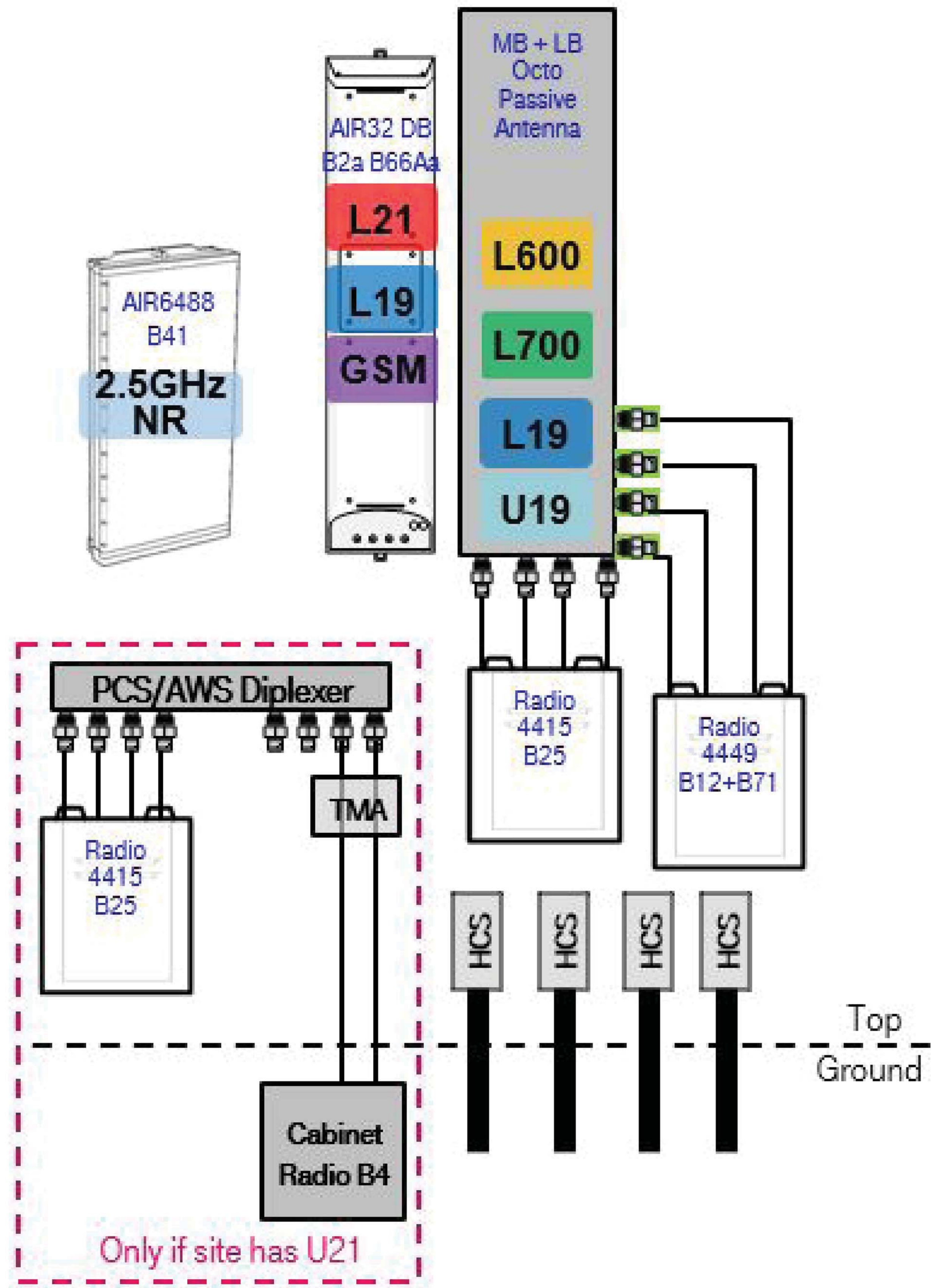
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SHEET NUMBER:

C-3

REVISION:

0



1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

T-Mobile

35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

CROWN CASTLE

3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

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BER:2386985
Expires 3/31/23

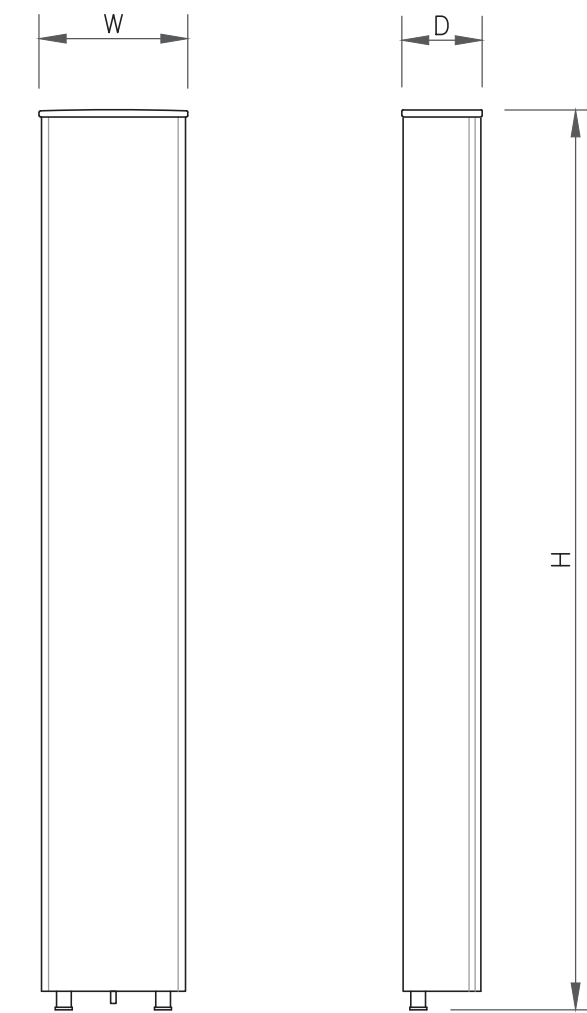
IT IS A VIOLATION OF LAW FOR ANY PERSON,
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OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER:

C-4

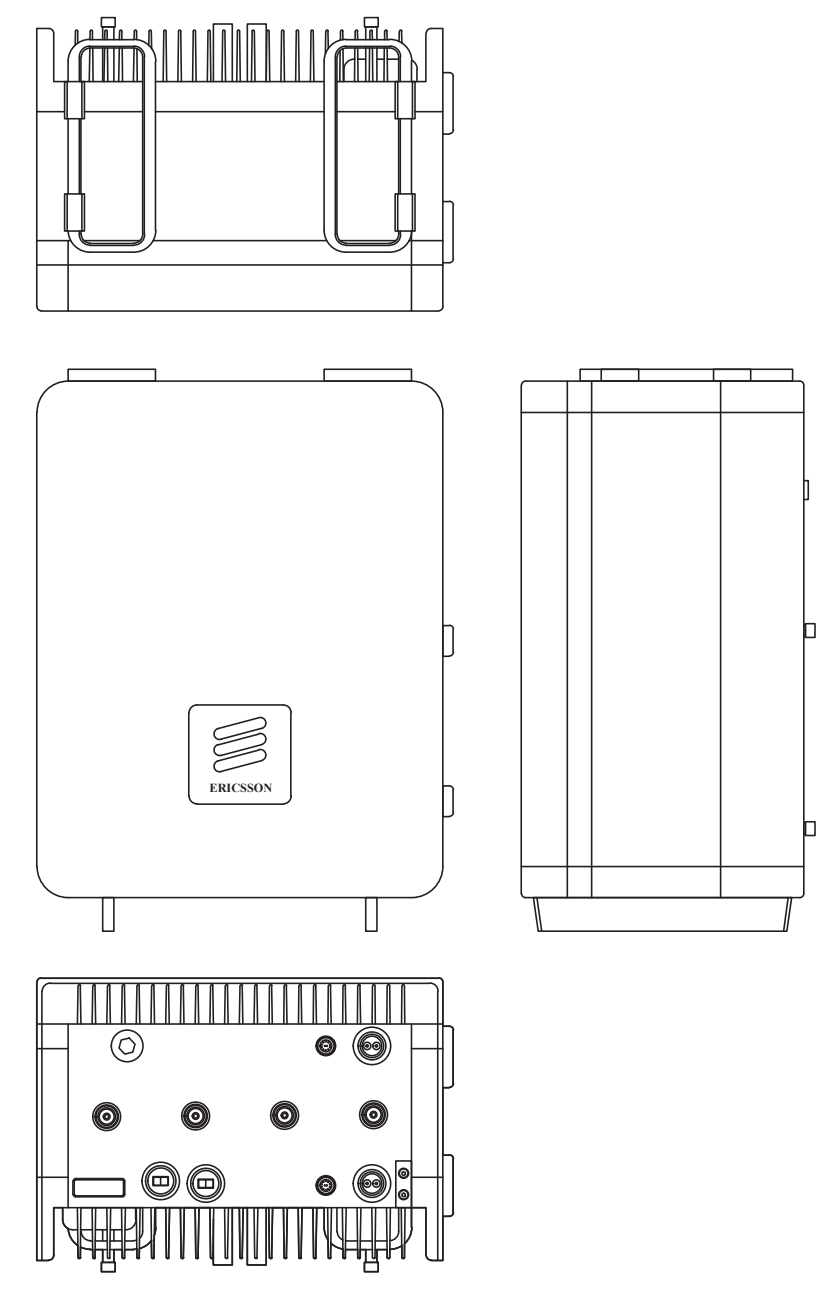
REVISION:

0



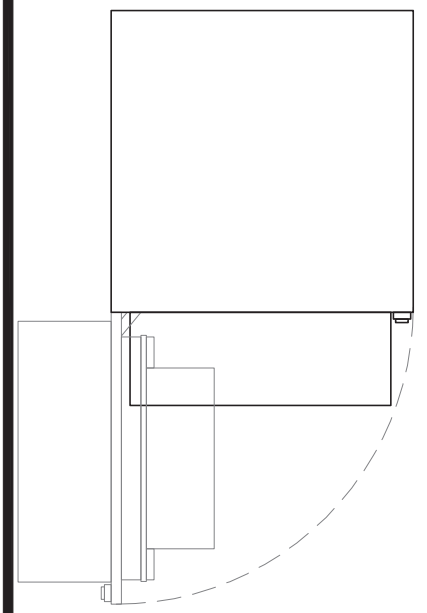
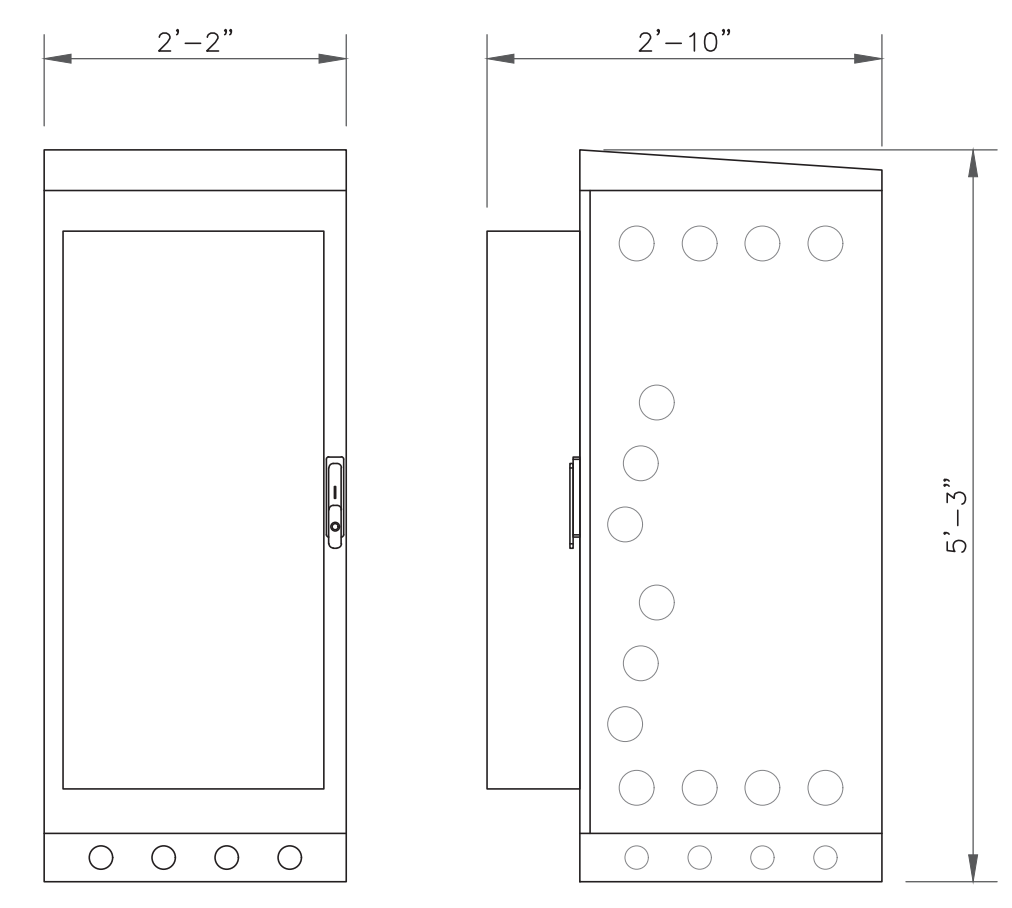
ANTENNA SPECS	
MANUFACTURER	ERICSSON
MODEL #	AIR 6419 B41
WIDTH	20.91"
DEPTH	9.02"
HEIGHT	36.25"
WEIGHT	96.5 LBS

1 ANTENNA SPECS
SCALE: NOT TO SCALE



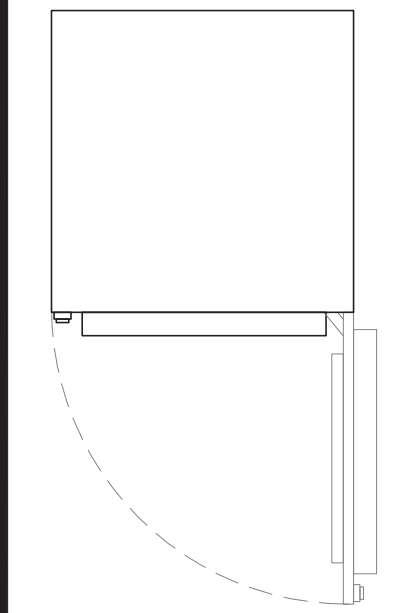
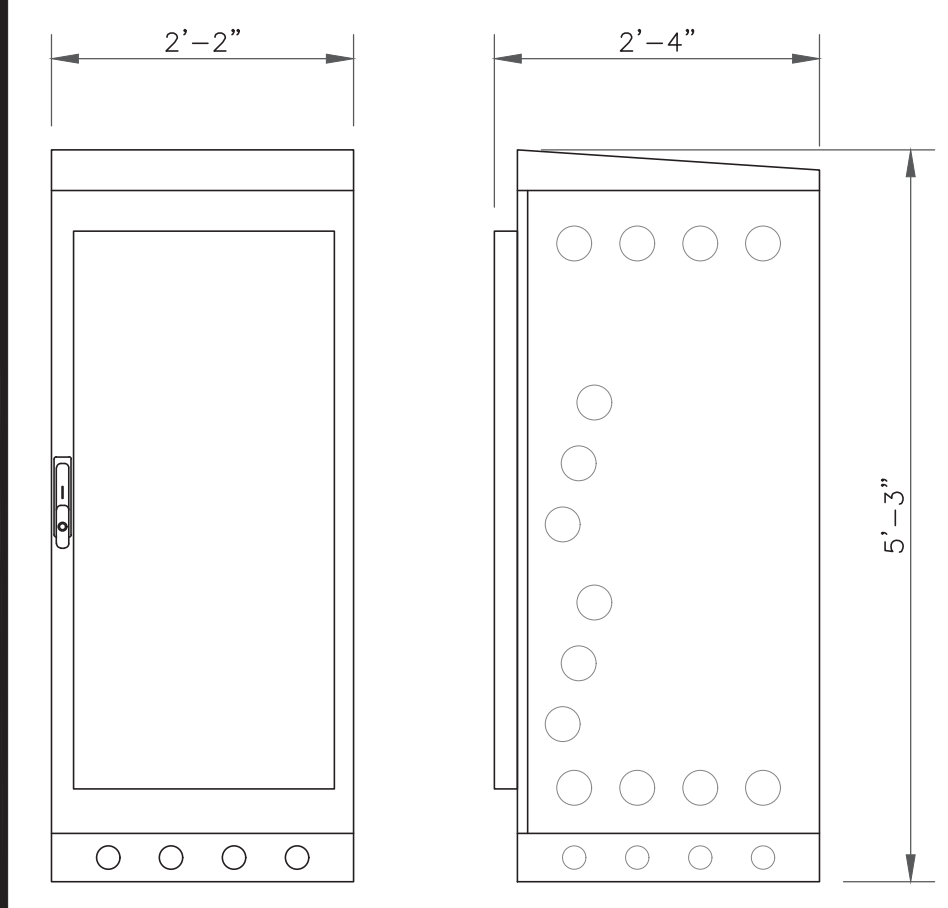
RRU SPECIFICATIONS	
MANUFACTURER	ERICSSON
MODEL #	4460 B25+B66
WIDTH	15.1"
DEPTH	11.9"
HEIGHT	17"
WEIGHT	109 LBS

2 RRU SPECS
SCALE: NOT TO SCALE



EQUIPMENT NOTES:	
HEIGHTxWIDTHxDEPTH:	63.0" x 26.0" x 34.0" (1600.0mm x 660.0mm x 864.0mm)
WEIGHT (EMPTY):	320 LBS (145 kg)
WEIGHT (FULLY LOADED):	1000 LBS (454 kg)

3 ERICSSON - 6160
SCALE: NOT TO SCALE



EQUIPMENT NOTES:	
HEIGHTxWIDTHxDEPTH:	63.0" x 26.0" x 28.0" (1600.0mm x 660.0mm x 711.0mm)
WEIGHT (EMPTY):	295 LBS (134 kg)
WEIGHT (FULLY LOADED):	2000 LBS (908 kg)

4 ERICSSON - B160
SCALE: NOT TO SCALE

T-Mobile
35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

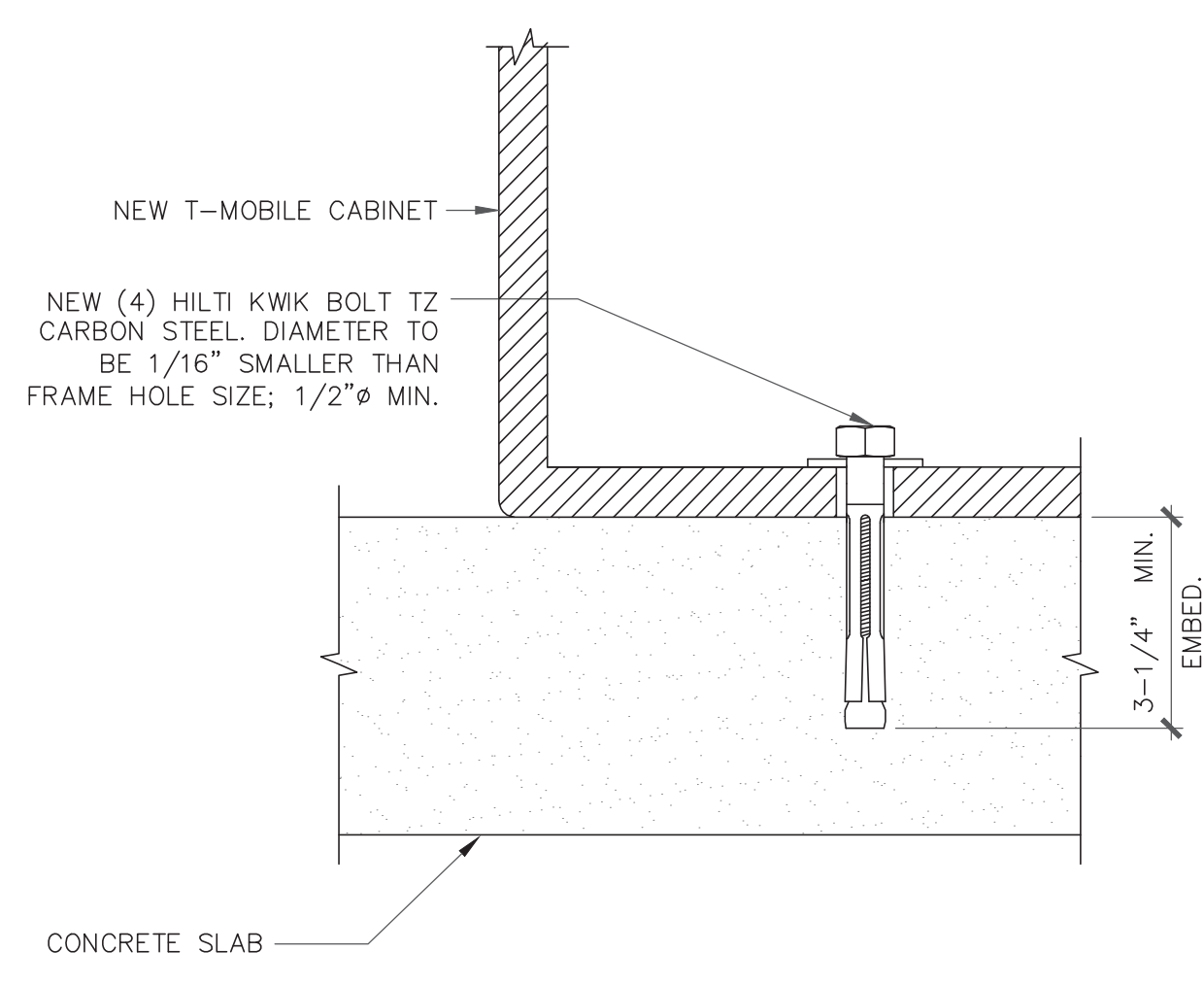
T-MOBILE SITE NUMBER:
CT11269B

BU #: **876317**
WATERBURY

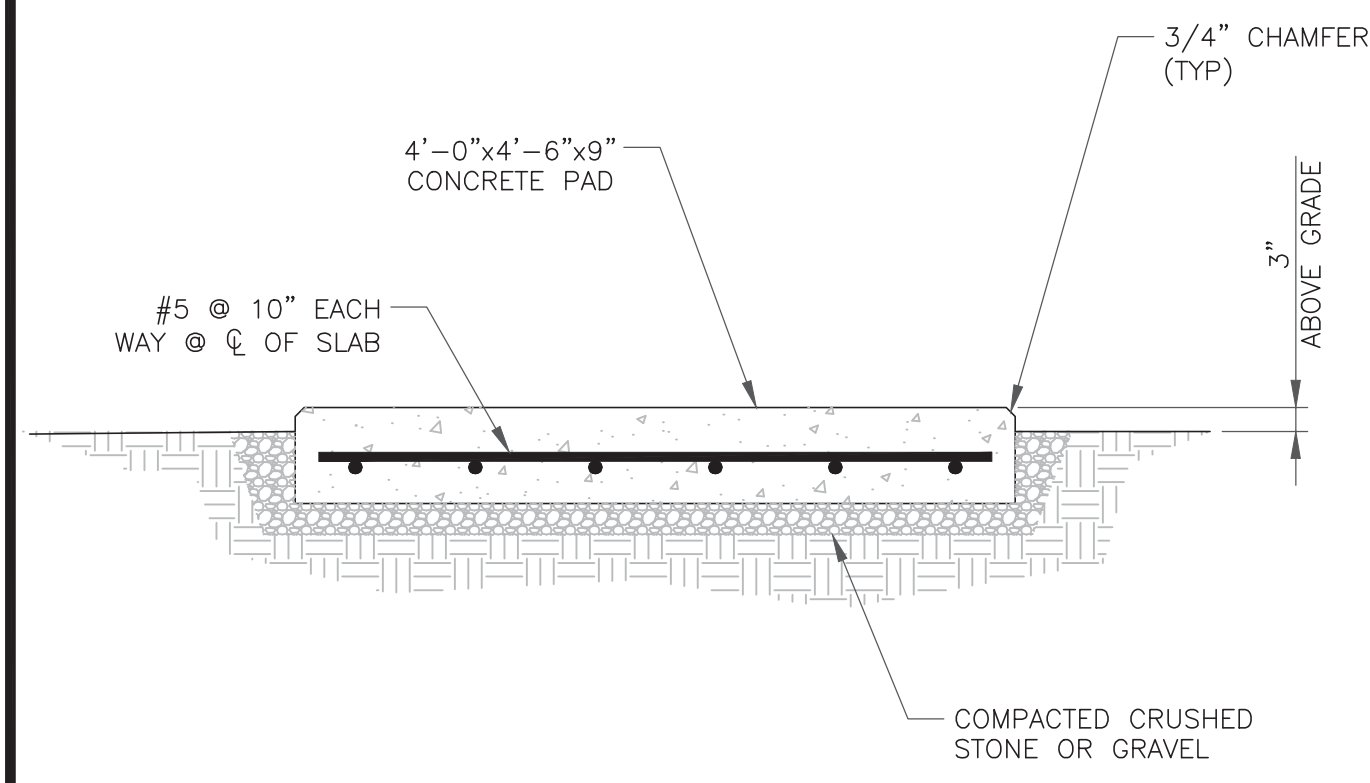
150 MATTATUCK HEIGHTS
WATERBURY, CT 06705

EXISTING
143'-0" MONOPOLE

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	6/2/22	GAC	PRELIMINARY REVIEW	LR
0	6/17/22	GAC	CONSTRUCTION	LR



5 CABINET ANCHOR DETAIL
SCALE: NOT TO SCALE



- NOTES:
- FOR CONCRETE NOTES SEE T-2.
 - GRAVEL SHALL BE NATURAL OR CRUSHED STONE WITH 100 PERCENT PASSING 1 INCH SIEVE.
 - ALL REINFORCING TO MAINTAIN 3" COVER WHEN CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.

6 CAST IN PLACE CONCRETE PAD
SCALE: NOT TO SCALE

7 NOT USED
SCALE: NOT TO SCALE

8 NOT USED
SCALE: NOT TO SCALE



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BER:2386985
Expires 3/31/23

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SHEET NUMBER: C-5	REVISION: 0
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T-Mobile

35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

CROWN CASTLE

3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP

1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
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T-MOBILE SITE NUMBER:
CT11269B

BU #: **876317**
WATERBURY

150 MATTATUCK HEIGHTS
WATERBURY, CT 06705

EXISTING
143'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
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0	6/17/22	GAC	CONSTRUCTION	LR

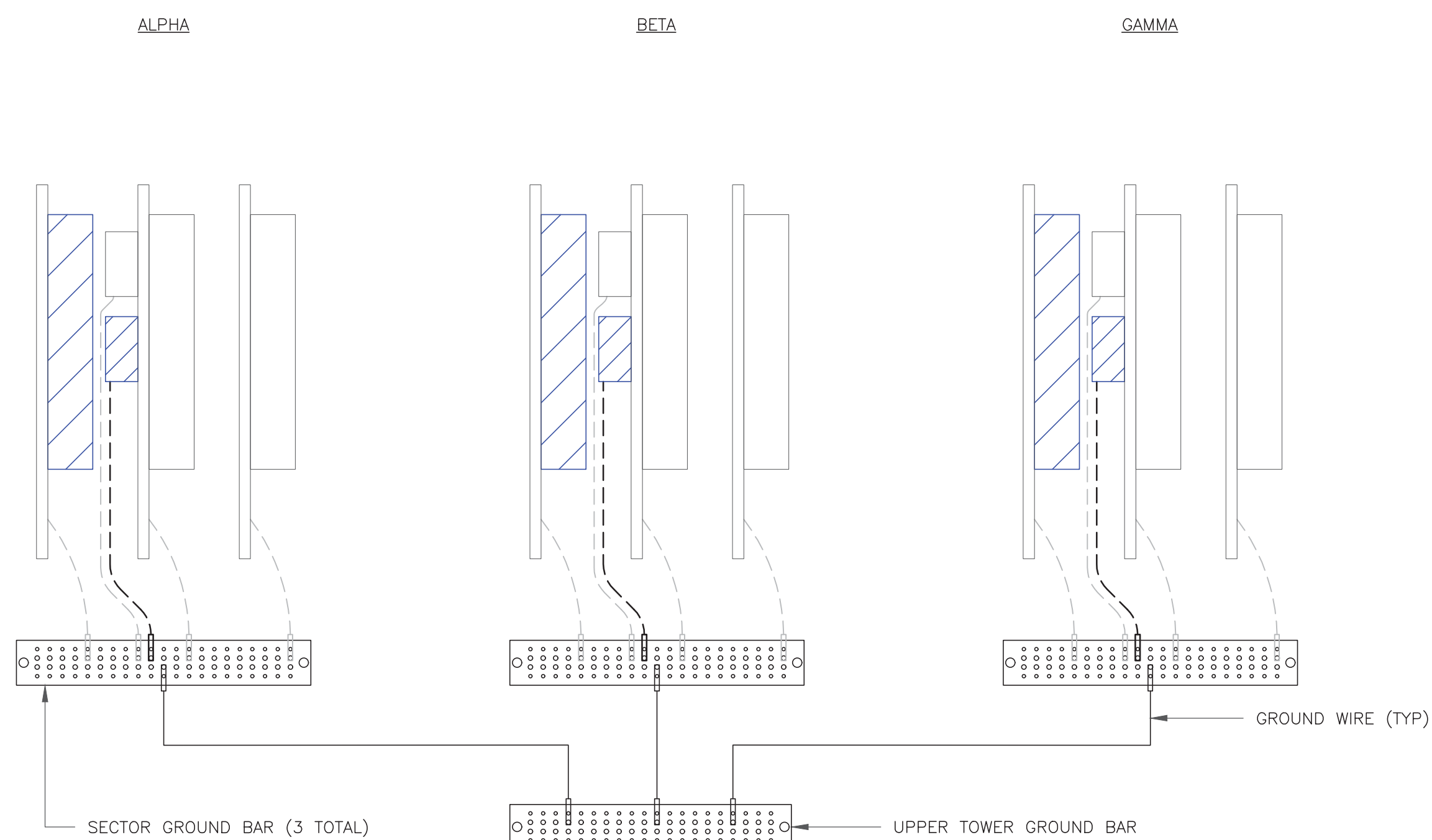


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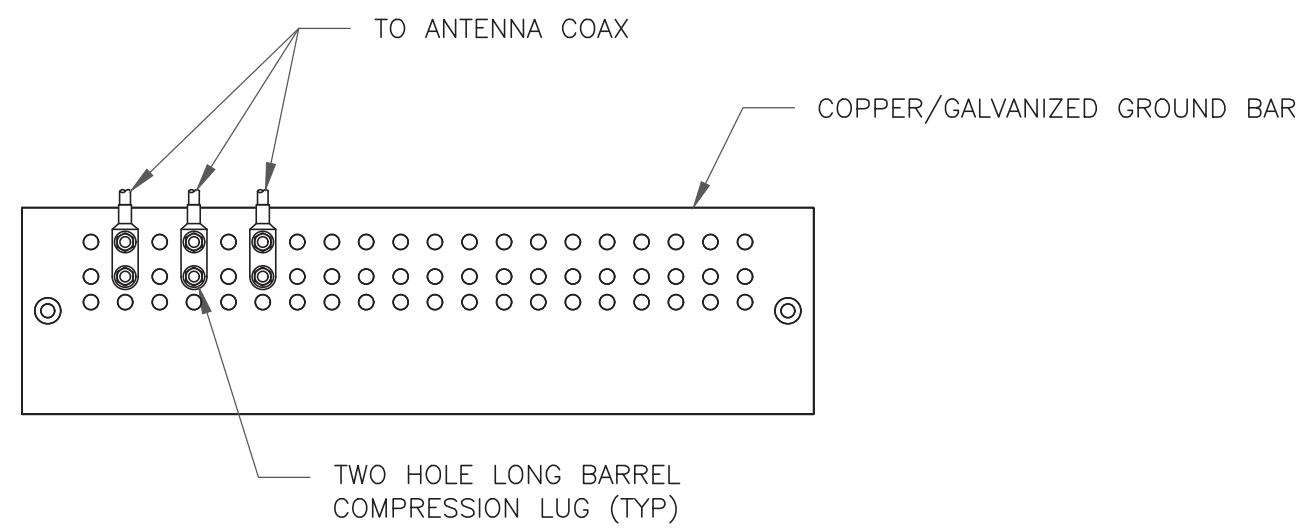
SHEET NUMBER: REVISION:

G-1 0



NOTE:
ALL NEW GROUNDS TO BE #6 STRANDED
COPPER WITH GREEN INSULATION UNLESS
NOTED OTHERWISE.

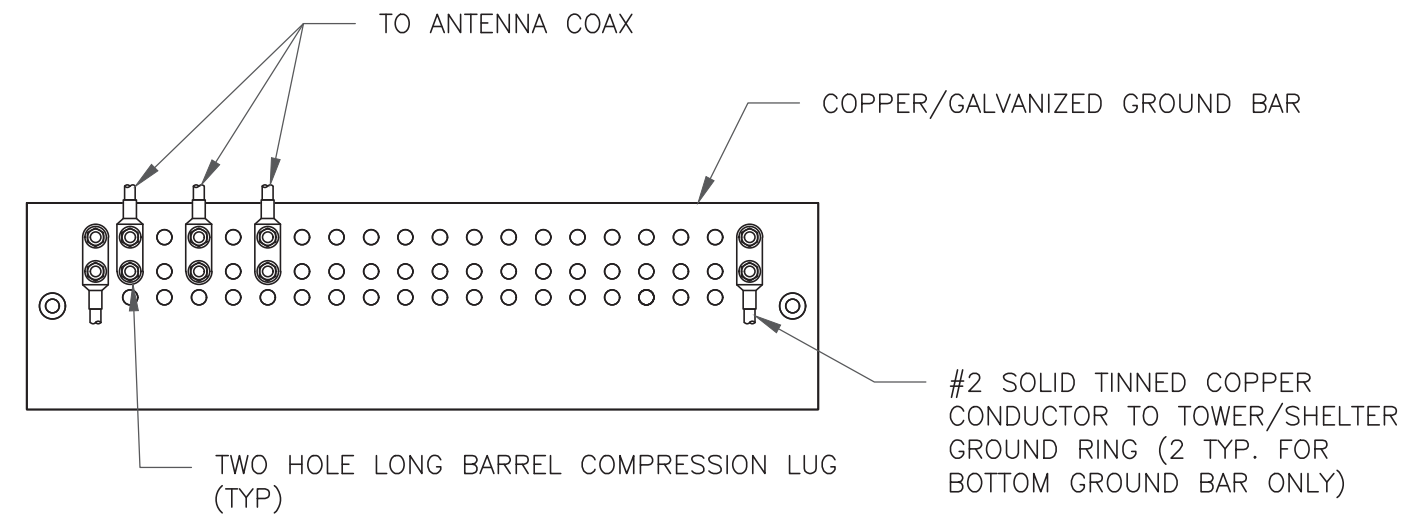
1 ANTENNA GROUNDING DIAGRAM
SCALE: NOT TO SCALE



NOTES:

- DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

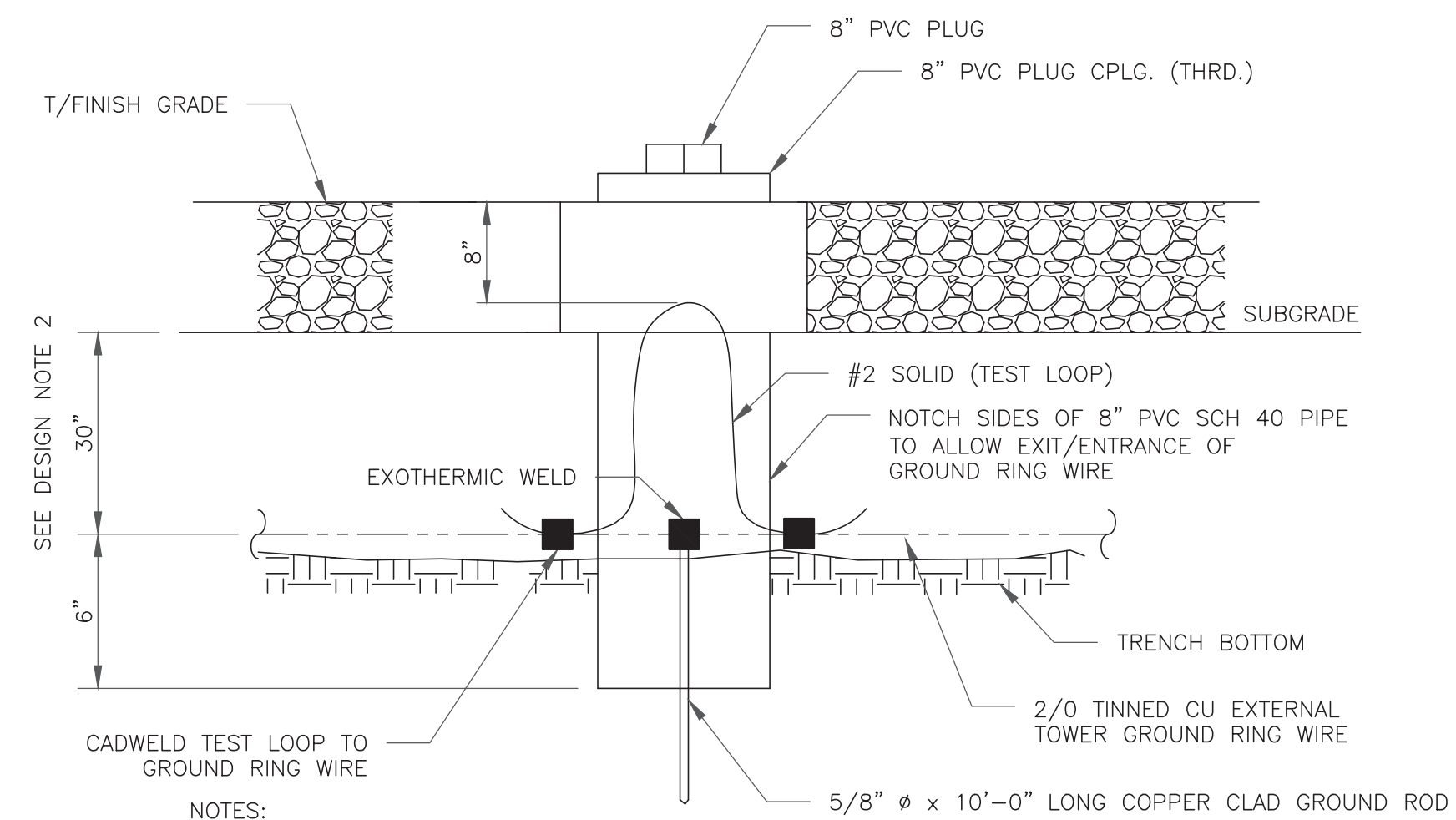
1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
- GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

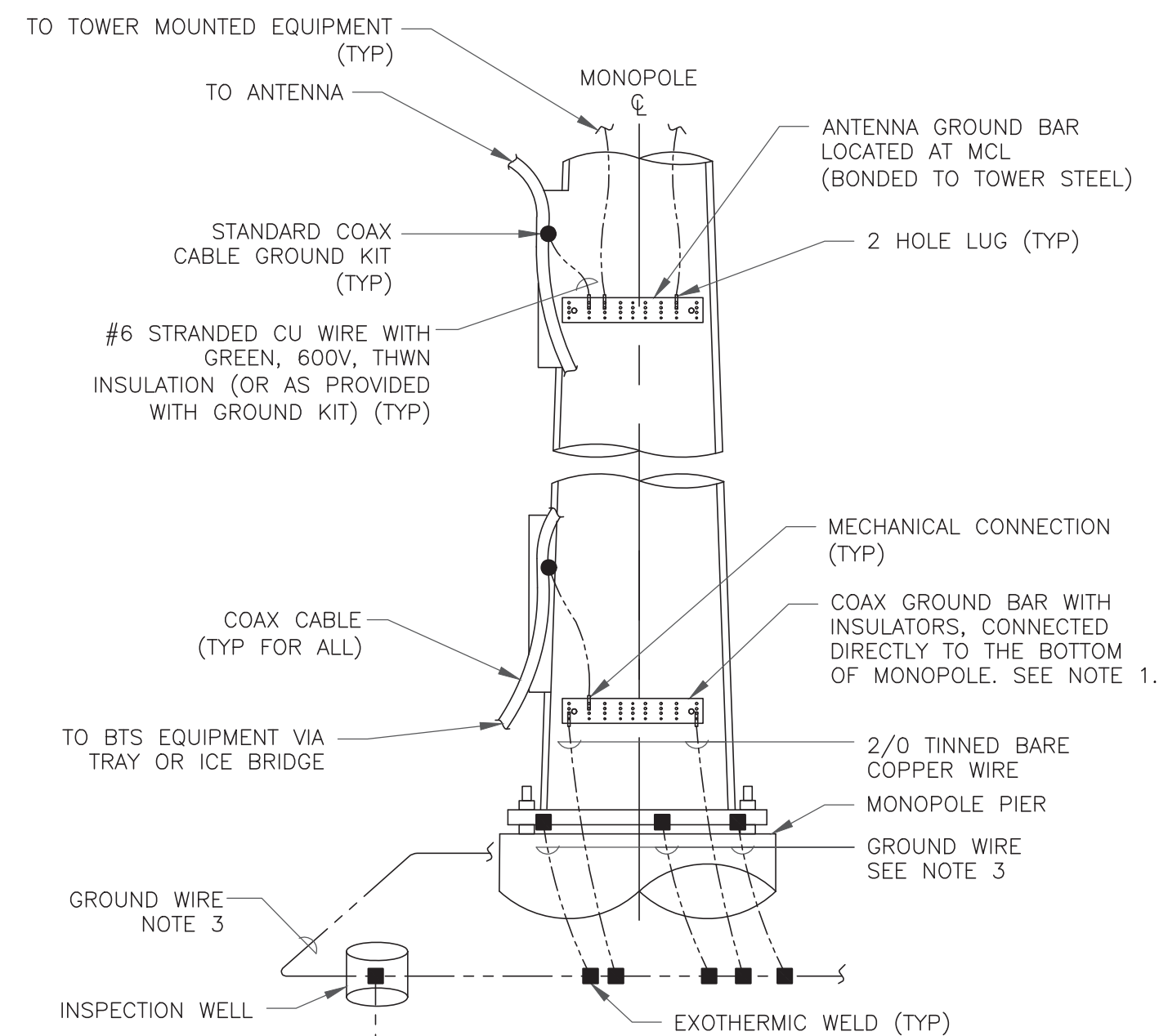
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

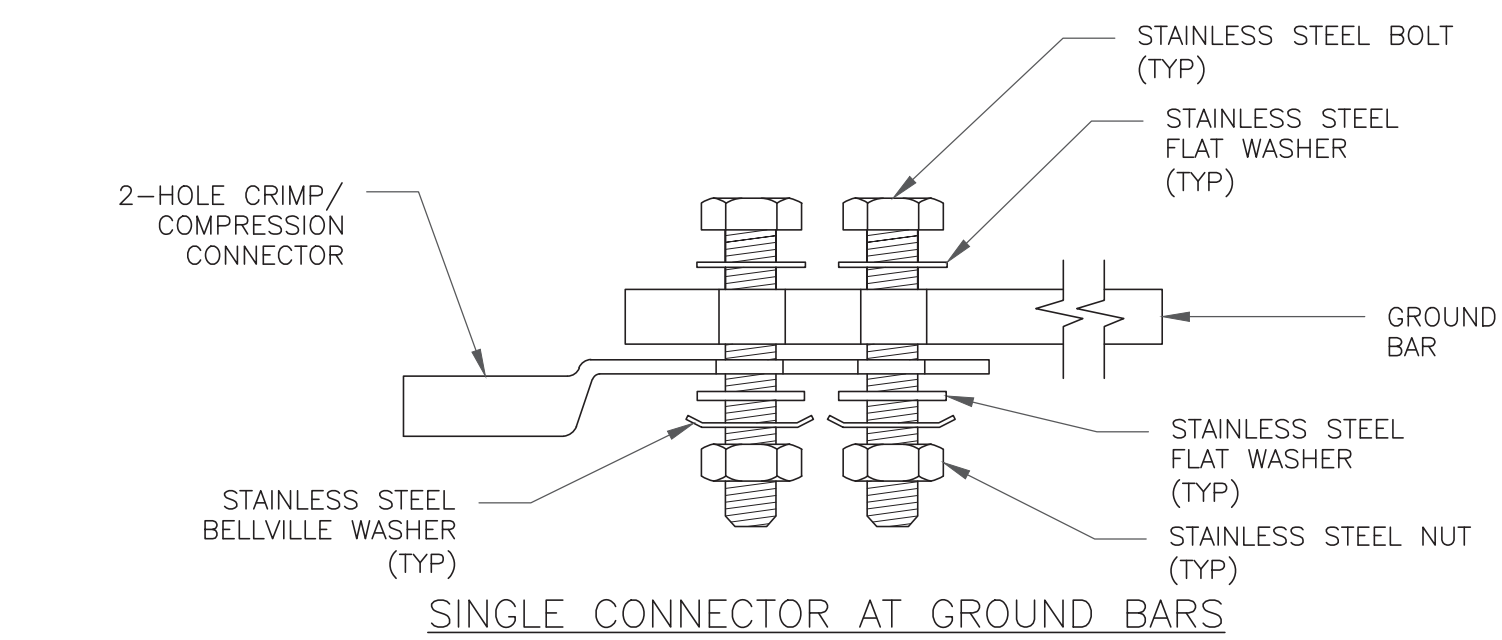
3 INSPECTION WELL DETAIL
SCALE: NOT TO SCALE



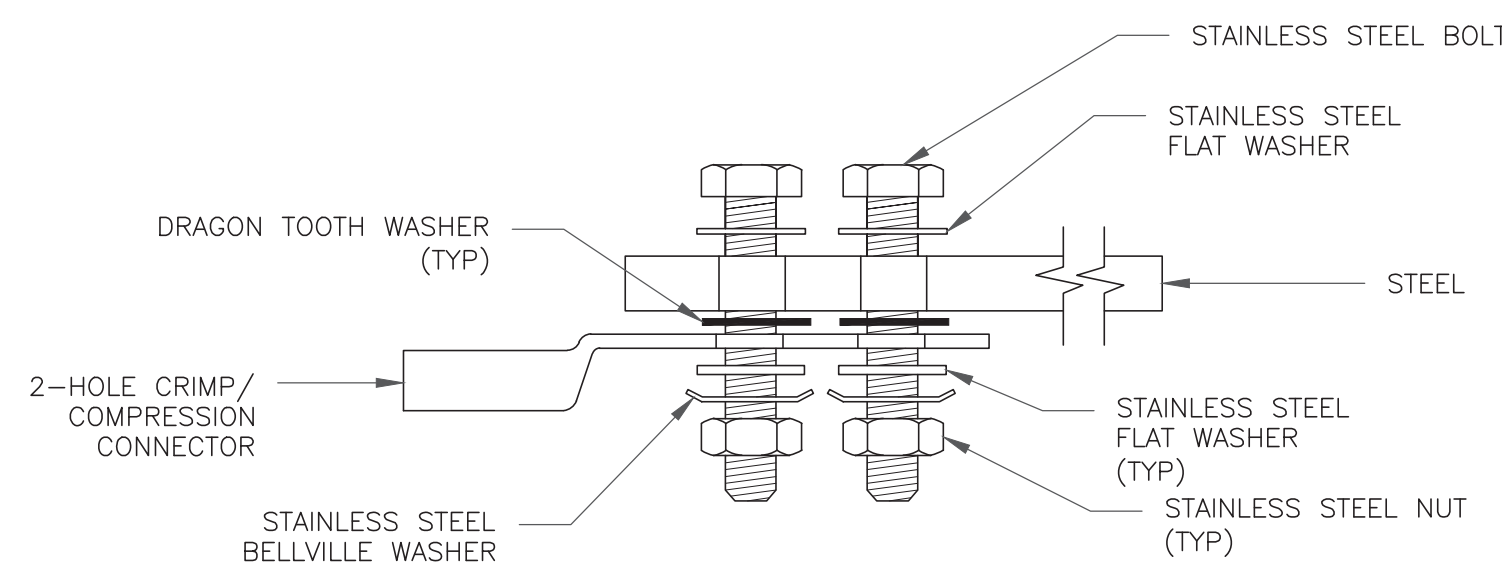
NOTES:

- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
- ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA INC. TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
- ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE RECOGNIZED EDITION OF ANSI/TIA 222 AND NFPA 780.

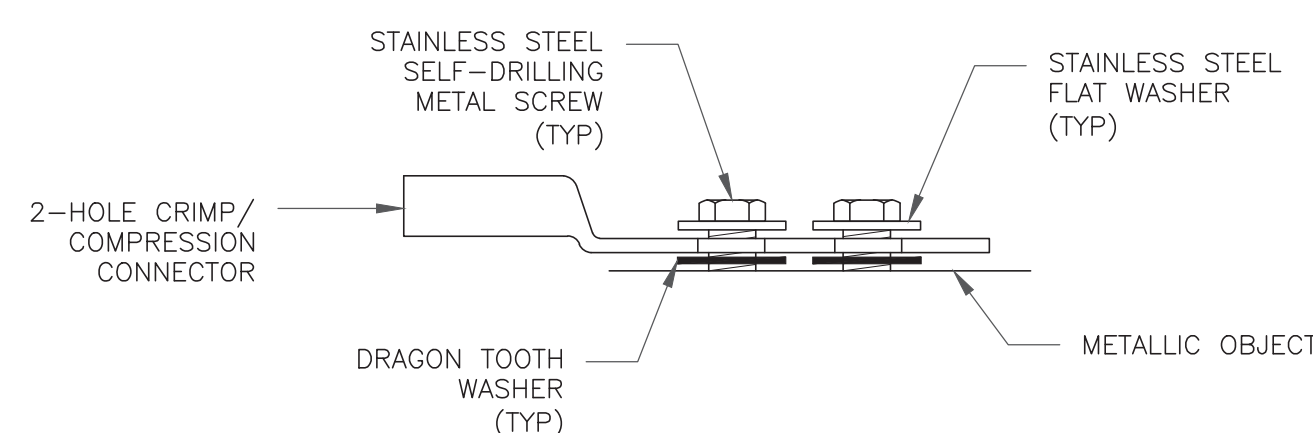
4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

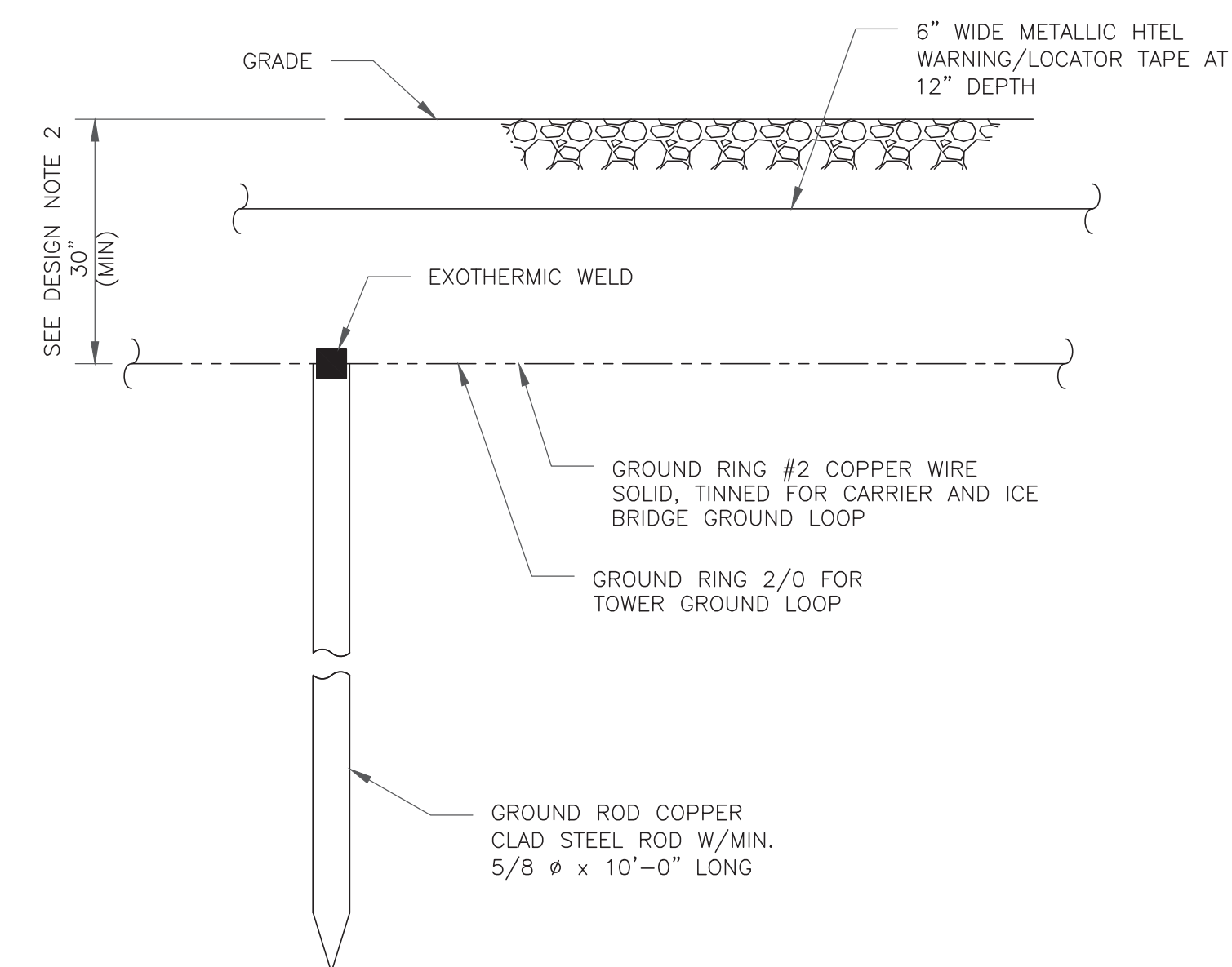


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

T-Mobile

35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

CROWN CASTLE

3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP

1717 S. BOULDER
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T-MOBILE SITE NUMBER:
CT11269B

BU #: 876317
WATERBURY

150 MATTATUCK HEIGHTS
WATERBURY, CT 06705

EXISTING
143'-0" MONOPOLE

ISSUED FOR:

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0	6/17/22	GAC	CONSTRUCTION	LR



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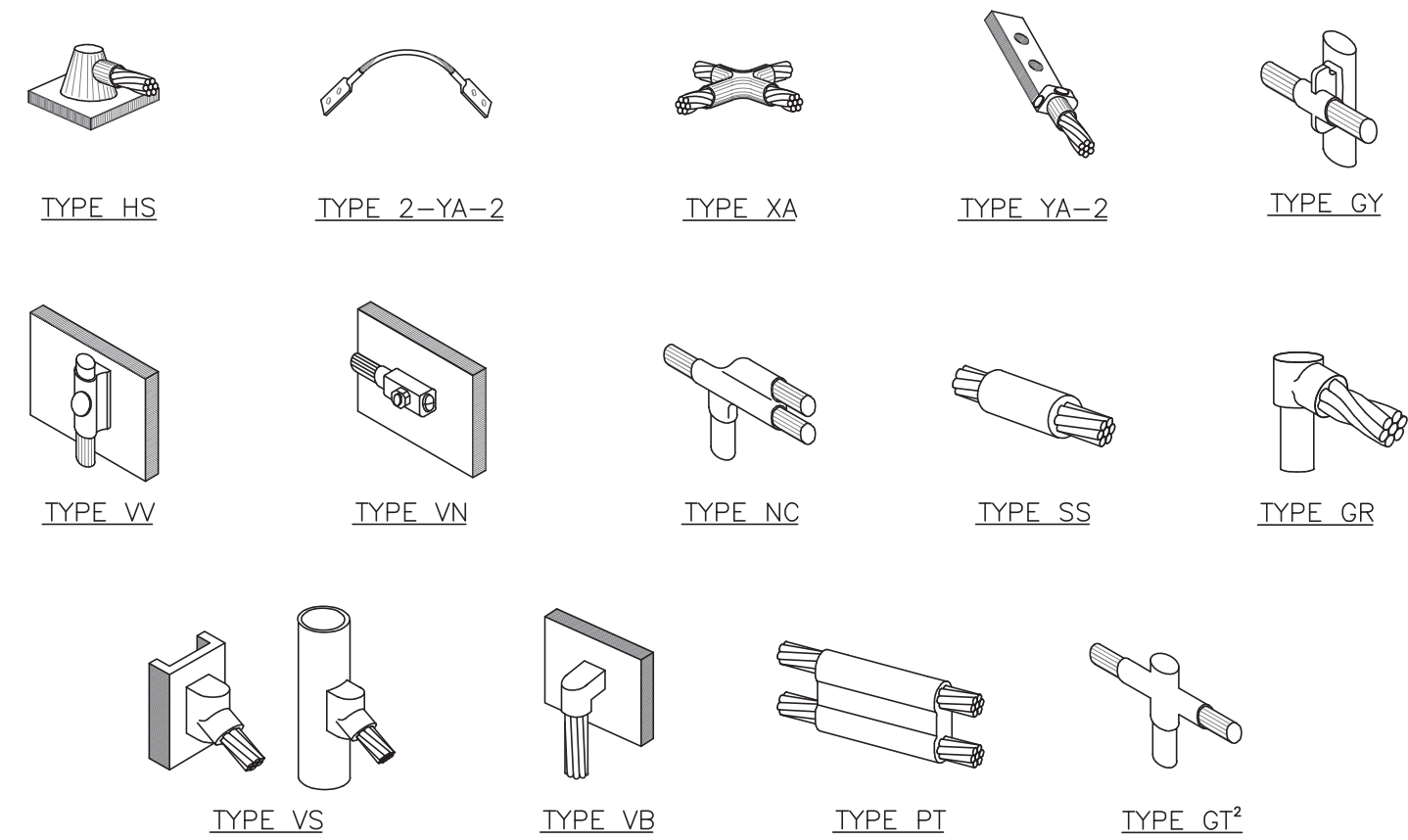
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SHEET NUMBER:

G-2

REVISION:

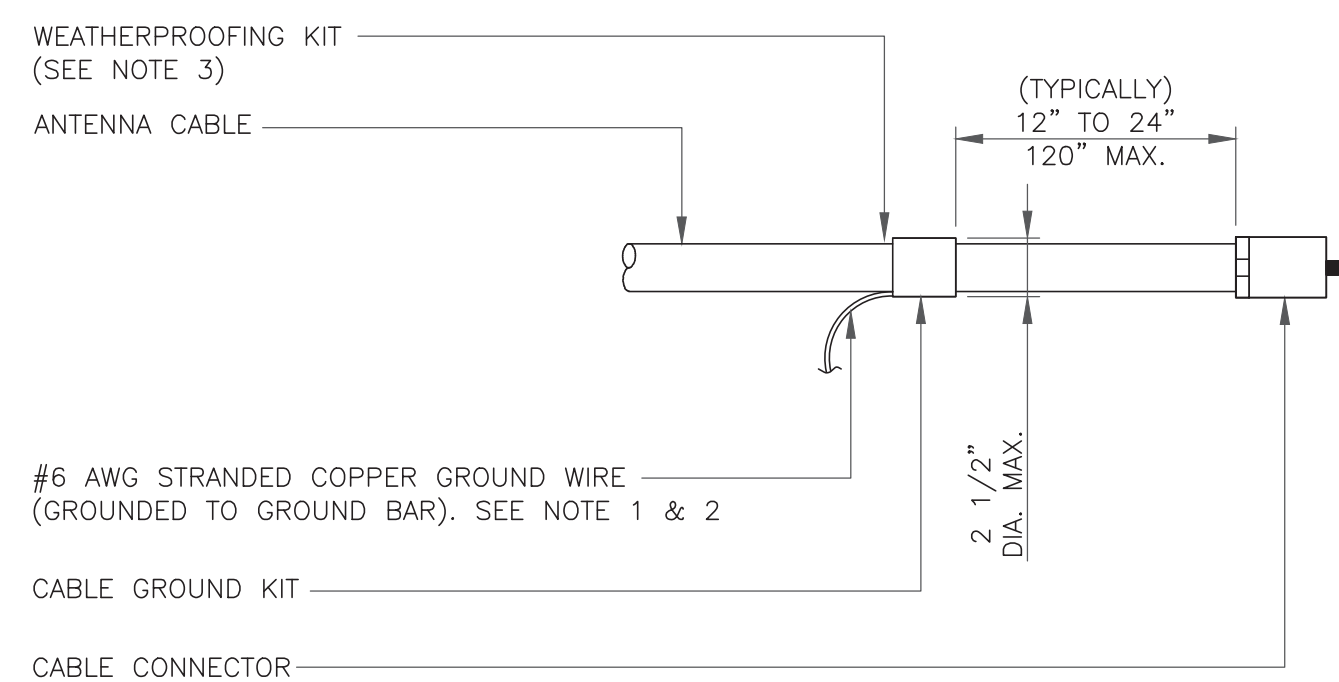
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NOTE:

1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

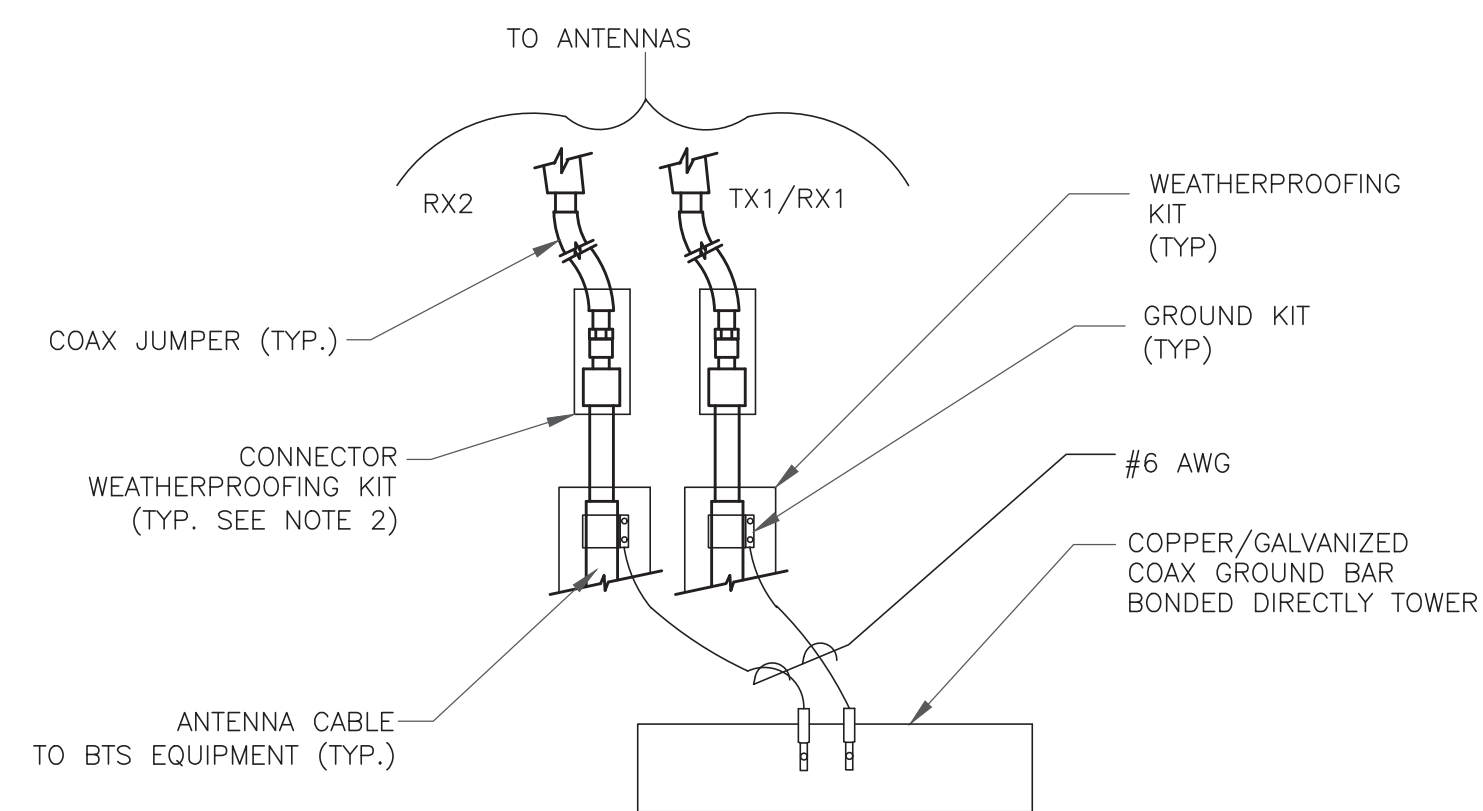
1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

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

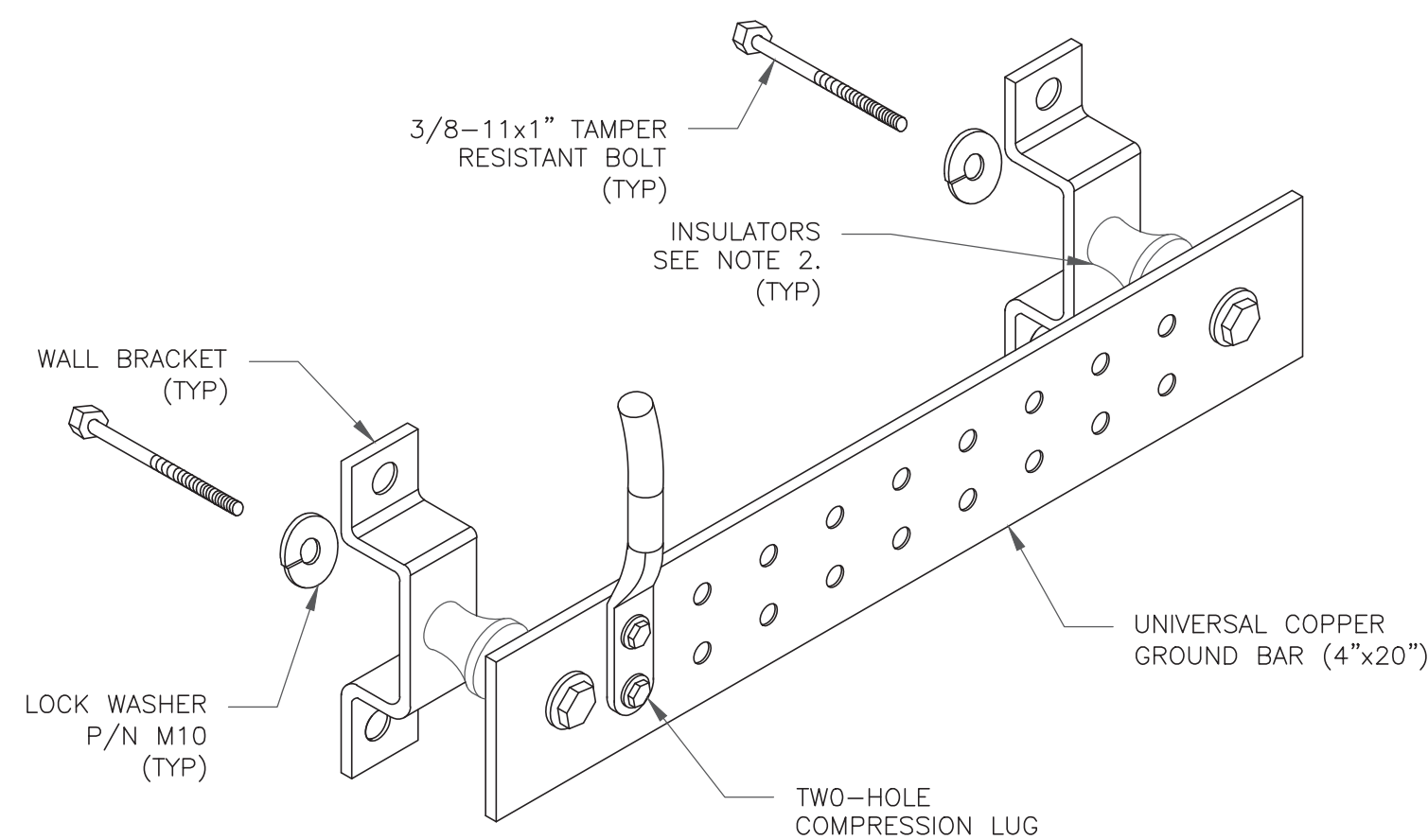
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

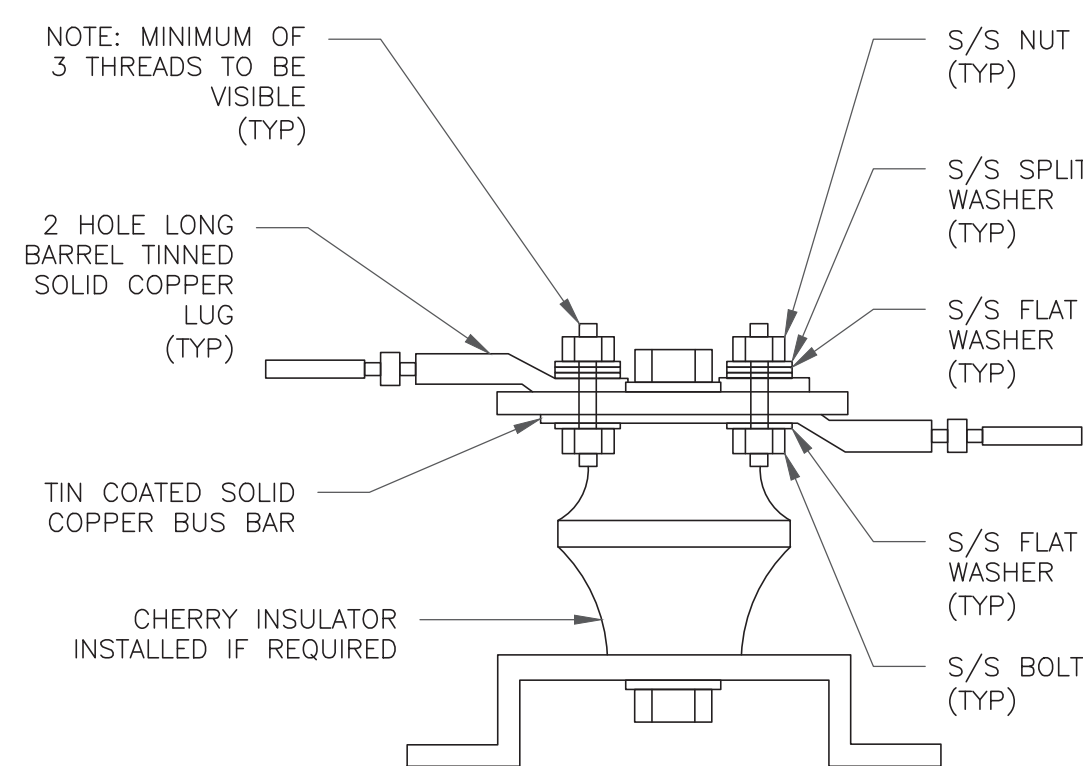
4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



NOTES:

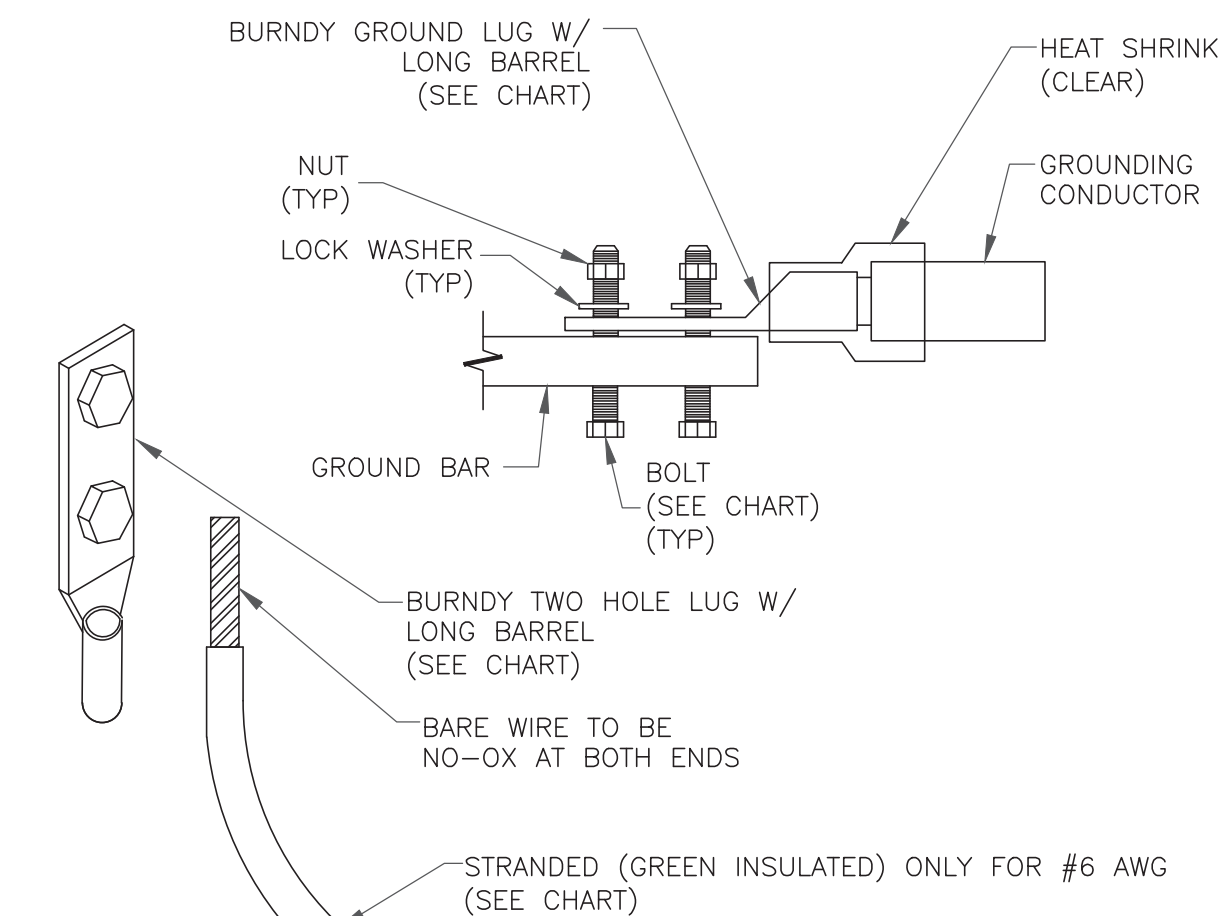
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION. CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL. USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

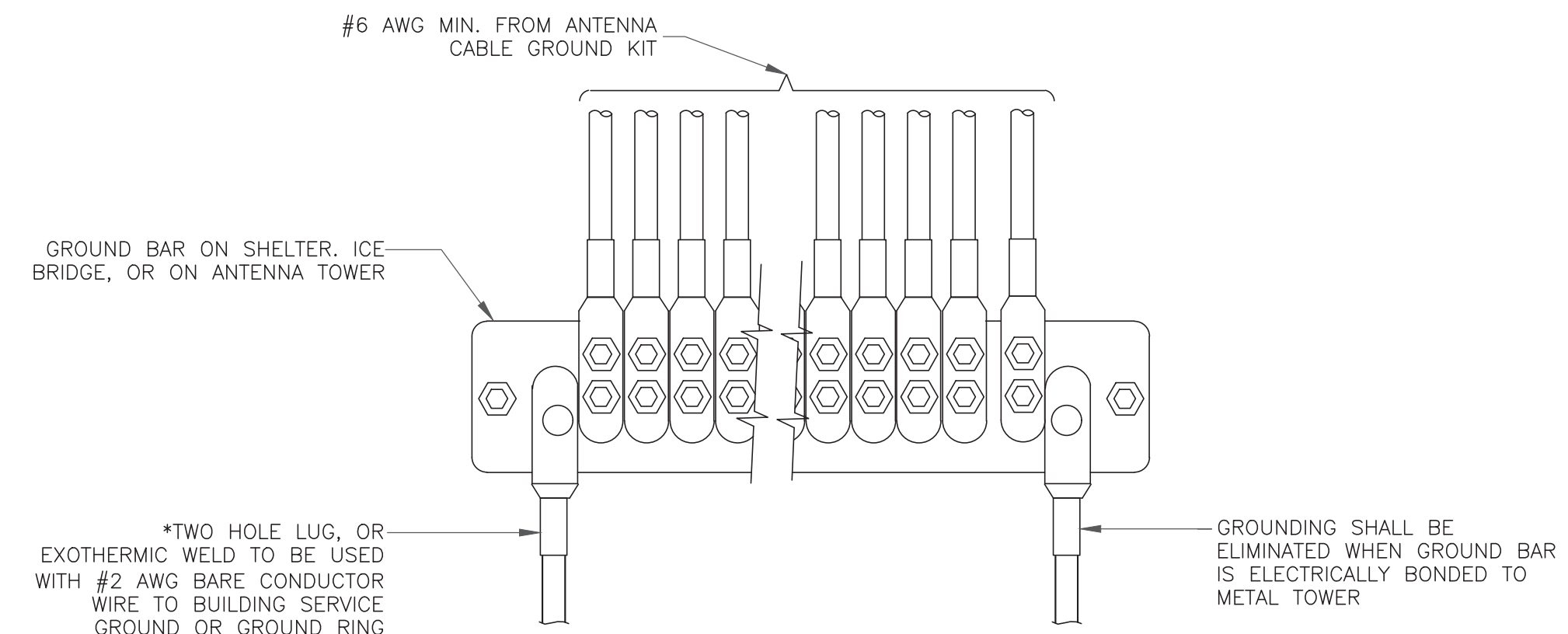
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



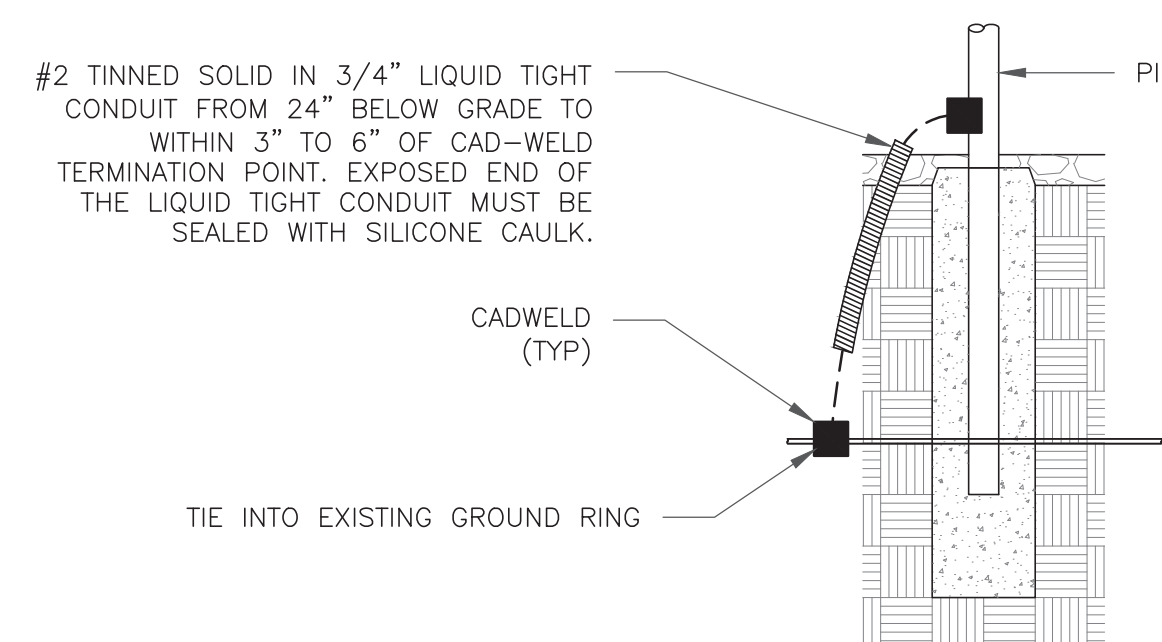
NOTES:

1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

T-Mobile
35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
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T-MOBILE SITE NUMBER:
CT11269B

BU #: **876317**
WATERBURY

150 MATTATUCK HEIGHTS
WATERBURY, CT 06705

EXISTING
143'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	6/2/22	GAC	PRELIMINARY REVIEW	LR
0	6/17/22	GAC	CONSTRUCTION	LR



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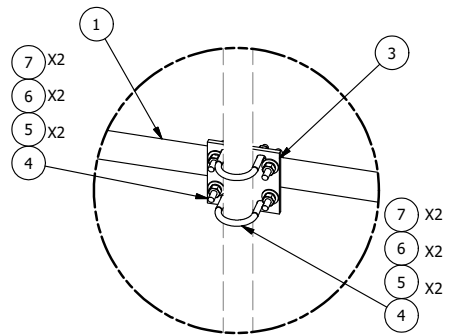
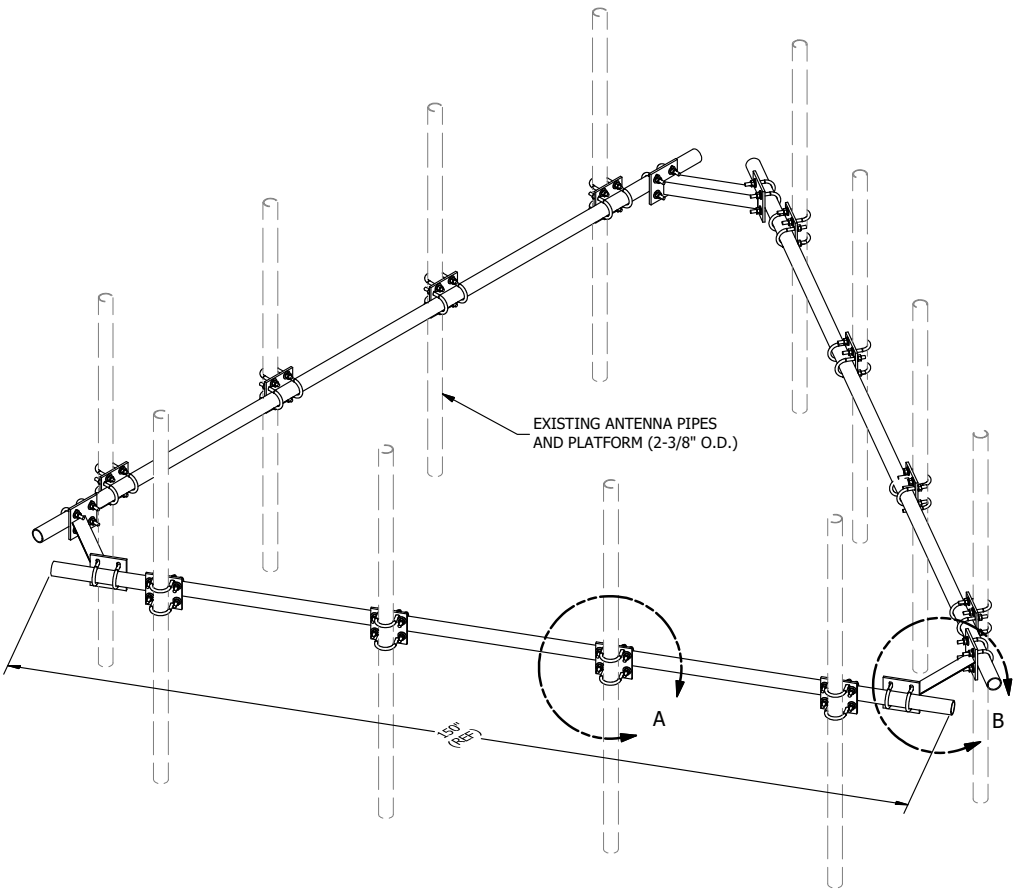
SHEET NUMBER:

G-3

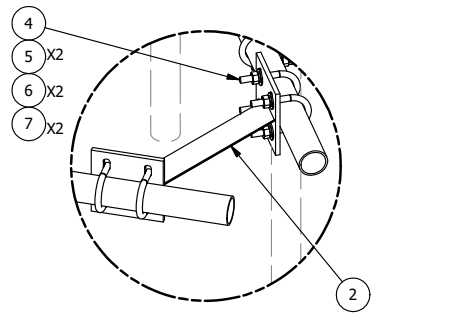
REVISION:

0

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	P2150	2-3/8" O.D. X 150" SCH 40 GALVANIZED PIPE	150 in	45.77	137.31
2	3	X-AHCP	ANGLE HANDRAIL CORNER PLATE		12.92	38.76
3	12	SCX1	CROSSOVER PLATE 2-3/8" X 2-3/8"	6 in	3.71	44.50
4	60	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	37.51
5	120	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	4.09
6	120	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	1.67
7	120	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	8.60
TOTAL WT. #						272.43



DETAIL A



DETAIL B

TOLERANCE NOTES

**TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
 SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030"$)
 DRILLED AND GAS CUT HOLES ($\pm 0.030"$) - NO CONING OF HOLES
 LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
 BENDS ARE $\pm 1/2$ DEGREE
 ALL OTHER MACHINING ($\pm 0.030"$)
 ALL OTHER ASSEMBLY ($\pm 0.060"$)**

PROPRIETARY NOTE:
 THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION
**HANDRAIL KIT
 FOR 12'-6" FACE**

SITE PRO 1
 A valmont COMPANY
 Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX
 Engineering Support Team:
 1-888-753-7446

CPD NO.	DRAWN BY	ENG. APPROVAL
	KC8 5/30/2012	
CLASS	SUB	DRAWING USAGE
81	01	CUSTOMER
		CHECKED BY
		BMC 7/13/2014

PART NO.	HRK12
DWG. NO.	HRK12

A	REPLACED HCP WITH X-AHCP	CPD	CEK	7/10/2014
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
REVISION HISTORY				