



**BOARD OF SUPERVISORS AGENDA ITEM REPORT
CONTRACTS / AWARDS / GRANTS**

Award Contract Grant

Requested Board Meeting Date: April 6, 2021

* = Mandatory, information must be provided

or Procurement Director Award

***Contractor/Vendor Name/Grantor (DBA):**

Sprint Spectrum Realty Company, LLC, a Delaware Limited Liability Company ("Sprint").

***Project Title/Description:**

Second Amendment to Tower License for Wireless Communications Facilities at 7300 N. Shannon Road LIC-0275/
LCP-0133; Supervisor District 1.

***Purpose:**

Licensee will replace and update communications equipment on the County owned tower as shown on Exhibit A-2 attached to the Second Amendment.

***Procurement Method:**

Exempt per Pima County Code Section 11.04.020

***Program Goals/Predicted Outcomes:**

To stipulate terms and conditions under which Sprint may replace and install certain new equipment at the site leased to Sprint at the County-owned Nanini Governmental Center.

***Public Benefit:**

Operation and maintenance of Sprint's wireless communications facilities for the benefit of its cell phone customers in unincorporated Pima County.

***Metrics Available to Measure Performance:**

Sprint is required to obtain all necessary permits to proceed with construction at the site and will be required to provide a satisfactory structural analysis before installation of any of the replacement equipment.

***Retroactive:**

No

TO: COB 3-17-21 @
Vers.: 3
pgs.: 13

Procure Dept 03/17/21 09:39

Contract / Award Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____

Commencement Date: _____ Termination Date: _____ Prior Contract Number (Synergen/CMS): _____

Expense Amount: \$* _____ Revenue Amount: \$ _____

***Funding Source(s) required:**

Funding from General Fund? Yes No If Yes \$ _____ % _____

Contract is fully or partially funded with Federal Funds? Yes No

If Yes, is the Contract to a vendor or subrecipient? _____

Were insurance or indemnity clauses modified? Yes No

If Yes, attach Risk's approval.

Vendor is using a Social Security Number? Yes No

If Yes, attach the required form per Administrative Procedure 22-10.

Amendment / Revised Award Information

Document Type: CTN Department Code: PW Contract Number (i.e., 15-123): 17*195

Amendment No.: Two (2) AMS Version No.: 3

Commencement Date: 04/06/2021 New Termination Date: 04/14/2027

Prior Contract No. (Synergen/CMS): _____

Expense or Revenue Increase Decrease Amount This Amendment: \$ 0

Is there revenue included? Yes No If Yes \$ _____

***Funding Source(s) required:**

Funding from General Fund? Yes No If Yes \$ _____ % _____

Grant/Amendment Information (for grants acceptance and awards) Award Amendment

Document Type: _____ Department Code: _____ Grant Number (i.e., 15-123): _____

Commencement Date: _____ Termination Date: _____ Amendment Number: _____

Match Amount: \$ _____ Revenue Amount: \$ _____

***All Funding Source(s) required:**

*Match funding from General Fund? Yes No If Yes \$ _____ % _____

*Match funding from other sources? Yes No If Yes \$ _____ % _____

*Funding Source: _____

***If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)?** _____

Contact: Tim Murphy

Department: Real Property Services Telephone: 724-6379

Department Director Signature/Date: [Signature] 3/15/2021

Deputy County Administrator Signature/Date: [Signature] 3/16/2021

County Administrator Signature/Date: [Signature] 3/16/21

(Required for Board Agenda/Addendum Items)

<p>PIMA COUNTY DEPARTMENT OF: INFORMATION TECHNOLOGY</p> <p>PROJECT: TOWER LICENSE AGREEMENT</p> <p>LICENSEE: Sprint Spectrum Realty Company, LLC</p> <p>CONTRACT NO.: CTN-PW-17-195</p> <p>CONTRACT AMENDMENT NO.: Two (2)</p>	
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SECOND AMENDMENT TO TOWER LICENSE
FOR WIRELESS COMMUNICATIONS FACILITIES
(Nanini Governmental Center, 7300 N. Shannon Road)
Licensee Site No. PH50404A

This Second Amendment to Tower License (the "Second Amendment") is entered into by and between Pima County, a political subdivision of the State of Arizona ("County"), and Sprint Spectrum Realty Company, LLC, a Delaware limited liability company ("Licensee"), and is effective upon execution by the Pima County Board of Supervisors.

RECITALS

County and Licensee entered into a Tower License for Wireless Communications Facilities (the "License") at the County-owned Nanini Governmental Center, 7300 N. Shannon Road ("Nanini"), effective as of April 15, 2017, with an expiration date of the initial term of April 14, 2027 and amended on January 2, 2018 (collectively, the "License"). The License grants non-exclusive permission to Licensee to install, maintain, operate and remove certain communications equipment (the "Equipment") on the County-owned tower at Nanini, as well as the use of approximately four-hundred (400) square feet of ground space as described on **Exhibit A-2** attached to the License, as amended. The permitted equipment consisted only of the equipment described in **Exhibit A-2** to the License, as amended, and any additions or changes to the Equipment as described therein, or any changes to **Exhibit A-2** itself, are permitted only by a modification of the License pursuant to Section 26 thereof.

With this Second Amendment, Licensee desires to remove the existing power cabinet, equipment cabinets, antenna mounts, antennas, radios, and all associated cabling. Licensee desires to install one (1) new Power cabinet, two (2) new Equipment Cabinets, two (2) new tower junction boxes, one (1) new 3-sector mount, six (6) new Radio Modules, six (6) new antennas, and associated cabling, attached hereto as Exhibit A-2. Licensee has provided a satisfactory structural analysis in accordance with the Final Antenna Plan, and shall obtain a building permit before installation of any of the aforementioned equipment.

AGREEMENT

WHEREFORE, the parties to this Second Amendment agree as follows:

1. The parties acknowledge and agree that the Tower License for Wireless Communications Facilities was originally entered into with the improperly referenced Licensee, "Sprint Spectrum Realty Company, LLC" and further agree that all references in the License for Wireless Communications Facilities to "Sprint Spectrum Realty Company, LLC" are deleted and replaced with "Sprint Spectrum L.P.".
2. **Exhibit A-1** to the License shall be and hereby is replaced and superseded by **Exhibit A-2** attached to this First Amendment.

3. All other provisions of the License not expressly amended herein remain in effect and continue to be binding upon the parties thereto.

IN WITNESS WHEREOF, the parties have affixed their signatures to this Second Amendment on the dates written below.

LICENSEE:

SPRINT SPECTRUM REALTY COMPANY, LLC, a Delaware limited liability company

T-Mobile Legal Approval
3/4/21

Katharine Omansick

DocuSigned by:
By: Ana Hemmert
7C87127544D04CB...

Date: 3/9/2021



Its: Director Technology Procurement

DS
RL

DS
MTF

LICENSOR:

PIMA COUNTY

Chair
Pima County Board of Supervisors

Date: _____

Attest:

Julie Castaneda, Clerk of the Board

Date: _____

APPROVED AS TO CONTENT



Chief Information Officer

Date: March 9, 2021

APPROVED AS TO FORM:



Kell Olson, Deputy County Attorney

Date: 03/09/2021

Exhibit A-2

Follows on Next Page

T-Mobile

SITE #: PH50404A (PHXC034)

SITE NAME: TUC NORWEST
STATE: ARIZONA
COUNTY: PIMA
DESIGN TYPE: SPRINT KEEP

CLIENT

T-Mobile
1330 W. SHANNON AVE. STE. A-102
TEMPE, ARIZONA 85282
PHONE: (480) 838-2600 FAX: (480) 838-2652

CONSULTANT
COAL CREEK CONSULTING
2166 E. UNIVERSITY DR., STE. 201
TEMPE, ARIZONA 85282
PHONE: (602) 429-0333 FAX: (602) 429-2682
TERRA DYNAMIC ENGINEERING, LLC


P.O. BOX 2627 TUCSON, ARIZONA 85726
PHONE: (520) 744-4822 FAX: (520) 744-5828
EMAIL: ROBERT@TERRADYNAMIC.US
S.EAL

NO.	DATE	DESCRIPTION	BY
1	10/06/20	REVIEW	SPE
2	10/20/20	REVISION 1	SPE

PROJECT INFORMATION
JOB: 03-420-14

PH50404A
(PH04XC034)
TUC NORWEST

SHEET TITLE
7330 N. SHANNON RD.
TUCSON, ARIZONA 85741

TITLE SHEET, VICINITY
MAP & GENERAL
INFORMATION

JURISDICTIONAL APPROVAL

SHEET NUMBER
T-1

PROJECT TEAM

PROJECT MANAGER:
T-MOBILE
1330 W. SHANNON AVE., STE. A-102
TEMPE, AZ 85282

CONSTRUCTION MANAGER:
COAL CREEK CONSULTING
2166 E. UNIVERSITY DR., STE. 201
TEMPE, ARIZONA 85282
CONTACT: GREG HESSER
PHONE: (847) 915-5529

SITE/ACO CONSULTANT:
COAL CREEK CONSULTING
2166 E. UNIVERSITY DR., STE. 201
TEMPE, ARIZONA 85282
CONTACT: GREG HESSER
PHONE: (602) 363-4561

AS/E DESIGN:
COAL CREEK CONSULTING
2166 E. UNIVERSITY DR., STE. 201
TEMPE, ARIZONA 85282
CONTACT: SHAWN EVANS
PHONE: (602) 758-5829

CIVIL ENGINEER:
TERRA DYNAMIC ENGINEERING, LLC
P.O. BOX 22131, 85038
PHOENIX, ARIZONA 85024
CONTACT: ROBERT ORLANDO
PHONE: (602) 482-1603
EMAIL: ROBERT@TERRADYNAMIC.US

ELECTRICAL ENGINEER:
EXCELLENCE IN ENGINEERING
3005 ARIZONA TRAIL
PHOENIX, ARIZONA 85032
CONTACT: LOREN PRESS
PHONE: (303) 748-1189

PROJECT SUMMARY

SITE ADDRESS:
7330 N. SHANNON RD.
TUCSON, ARIZONA 85741

LAND OWNER:
TERRA DYNAMIC ENGINEERING, LLC
2166 E. UNIVERSITY DR., STE. 201
TEMPE, ARIZONA 85282
CONTACT: SHAWN EVANS
PHONE: (602) 724-6667
EMAIL: MILE.STOFF@PIMA.GOV

APN: 225-43-028A
ZONING CLASSIFICATION: OI-1
JURISDICTION: PIMA COUNTY
LAT: 32.33960000
LONG: -111.02600000

PROJECT DESCRIPTION

T-MOBILE PROPOSES TO INSTALL THE FOLLOWING ITEMS:
REMOVE EXISTING PPC AND BREAKERS
REMOVE (2) EXISTING EQUIPMENT CABINETS
REMOVE ALL EXISTING COAX AND HYBRID CABLES
REMOVE (13) RADIO MODULES PER PER SECTOR
REMOVE (13) EXISTING ANTENNA MOUNTS, (1) PER SECTOR
ADD (1) NEW 200 AMP PPC AND BREAKERS
ADD (1) 2" CONDUIT FROM PPC TO EQUIPMENT CABINET
ADD (2) NEW EQUIPMENT CABINETS PER SECTOR
ADD (2) HYBRID CABLES WITH PENDANTS ATTACHED TO ENDO
ADD (2) HYBRID CABLES WITH PENDANTS ATTACHED TO ENDO
ADD (6) RADIO MODULES, (2) PER SECTOR
ADD (6) ANTENNAS, (2) PER SECTOR

CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT INTERNATIONAL BUILDING CODE ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

ACCESSIBILITY REQUIREMENTS:

THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS DO NOT APPLY. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT INTERNATIONAL BUILDING CODE.

ENGINEERS NOTES:

- IF A DISCREPANCY ARISES BETWEEN THE DIMENSIONS AND FIELD CONDITIONS, OR WHERE A HANDICAPPED ACCESS REQUIREMENT IS ENCOUNTERED, THE ENGINEER SHALL BE CALLED IMMEDIATELY FOR PROCEEDURE TO BE FOLLOWED. ALL DIMENSIONS SHALL BE CONFIRMED IN METHOD, AND DISCREPANCY TO ALL AFFECTED PARTS.
- THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, OR PROGRAMS UTILIZED IN THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS AND TO OBTAIN ALL NECESSARY APPROVALS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND/OR DOCUMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, PARTS, WORK SEQUENCES, AND THE LOCATION, ORIENTATION, RELATIONSHIPS TO EXISTING AND APPROXIMATE AND ARE FOR ILLUSTRATION PURPOSES ONLY.
- CONTRACTOR TO MAINTAIN ALL DRAINAGE PATHS FREE FROM ANY OBSTRUCTIONS (IE GRASS AND SOIL)
- CONTRACTOR TO PROVIDE POSITIVE DRAINAGE AWAY FROM EQUIPMENT
- SUBCONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS, THE CONTRACTOR AND ENGINEER OF RECORD.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL LOCATION OF CONDUIT POWER AND TT CABLES. SUBCONTRACTOR SHALL UTILIZE EXISTING TRENCH AND/OR SHALL AND NEW TRENCH AS NECESSARY. SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BUCCIAKAT AT LEAST TWO FULL WORKING DAYS (48 HOURS) PRIOR TO BEGINNING OF ANY EXCAVATION. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL LOCAL AND STATE PERMITS AND REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND/OR DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND/OR DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND/OR DOCUMENTS.
- CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL UTILITIES CONNECTIONS.

SHEET INDEX

T-1 TITLE SHEET, VICINITY MAP & GENERAL INFO.

CIVIL:
C-1 SITE PLAN
C-2 ENLARGED SITE PLAN
C-3 EXISTING/NEW EQUIPMENT AND ANTENNA PLANS
C-4 EXISTING/NEW ELEVATION

ELECTRICAL:
E-1 SPECS/GENERAL NOTES/LEGENDS/SHEET INDEX
E-2 UNLARGED EQUIPMENT PLAN
E-3 AND EXISTING/NEW PANEL SCHEDULE
E-4 EQUIPMENT/ANTENNA GROUNDING PLAN AND NOTES

VICINITY MAP



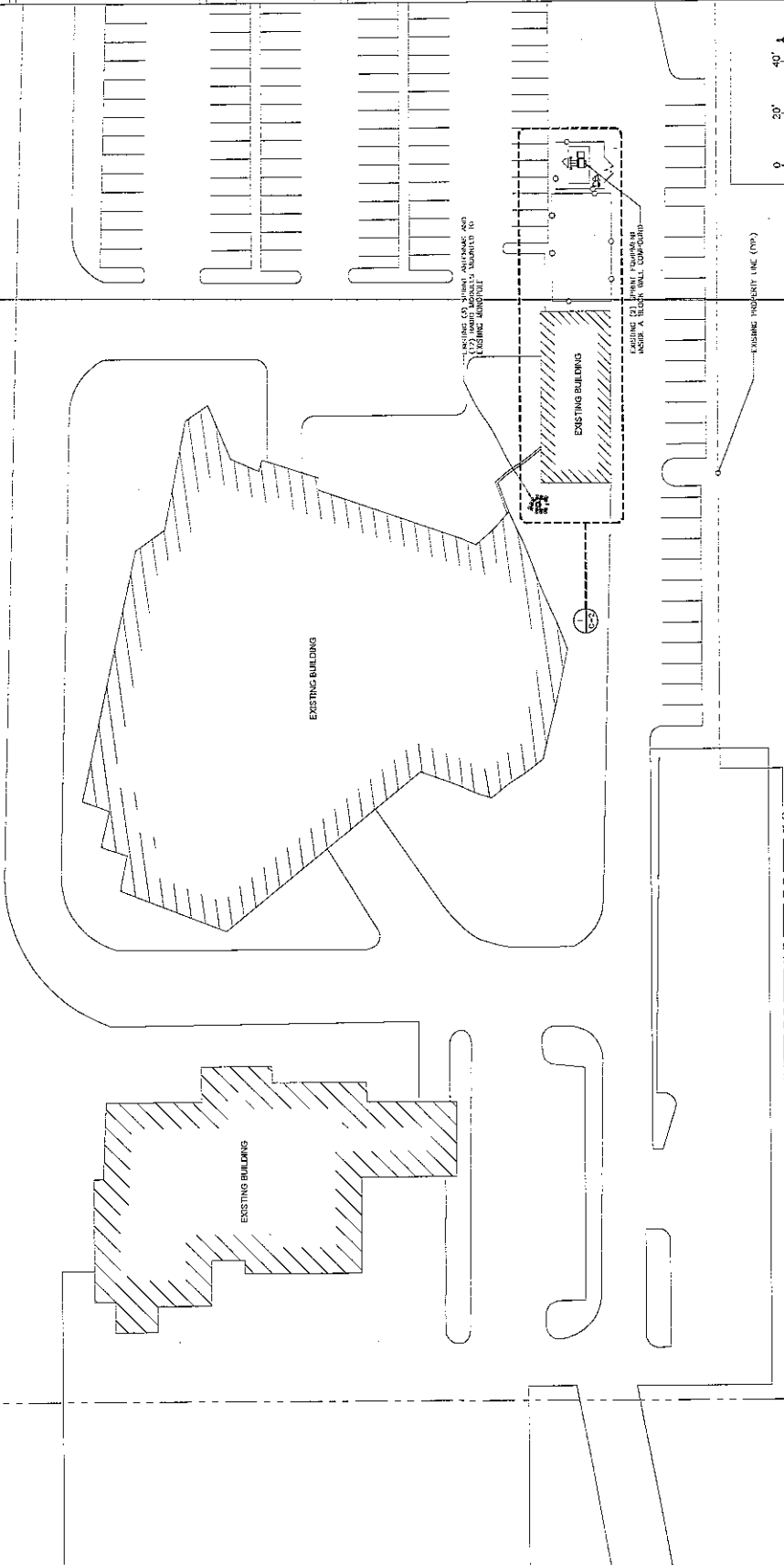
DRIVING DIRECTIONS

FROM THE T-MOBILE OFFICE: TAKE NORTH SHANNON ROAD SOUTH ON NORTH SHANNON ROAD, MAKE A RIGHT ON NORTH SHANNON ROAD, MAKE A LEFT ON TO THE EAST EXIT AT THE ROAD TURN LEFT ON THE ROAD TURN LEFT ON TO NORTH SHANNON ROAD, TAKE THIRD RIGHT.

PHOTOGRAPH TAKEN BY TUC NORTHWEST, 10/28/2020 AT 11:16:21 AM

NOTE:
REFER TO T-MOBILE
SITE PLAN FOR ADDITIONAL
INFORMATION AND DETAILS

APN: 225-43-025A
ZONING: CH1



SITE PLAN

SCALE: 1" = 20'-0"

SHEET NUMBER
C-1

CLIENT

T-Mobile
1330 W. UNIVERSITY AVE. SUITE A-102
PHOENIX, AZ 85027
PHONE: (480) 638-2500 FAX: (480) 638-2852

CONSULTANT

COAL CREEK CONSULTING
2146 E. UNIVERSITY DR. SUITE 201
TUCSON, ARIZONA 85711
PHONE: (520) 426-1234 FAX: (520) 426-3865
WWW.COALCREEKCONSULTING.COM
TERRA DYNAMIC ENGINEERING, LLC
P.O. BOX 21131, PHOENIX, AZ 85028
PHONE: (602) 997-1000 FAX: (602) 997-1005
WWW.TERRADYNAMICENGINEERING.COM

SEAL

NO.	DATE	DESCRIPTION	BY
1	10/06/20	REVIEW	SPE
2	10/26/20	REVISION 1	SPE

PROJECT INFORMATION:
APN: 225-43-04

PH50404A
(PH04XC034)
TUC NORTHWEST

SHEET TITLE:
SHEET TITLE

SITE PLAN

JURISDICTIONAL APPROVAL

RFD5 VER: 1 DATED 09/28/2020 AT 11:16:21 AM

DESIGNED BY: TUCNORTHWEST.COM/PH040044

CLIENT
T-Mobile
 1330 WEST BROADWAY, SUITE 1100
 DENVER, COLORADO 80202
 PHONE: (480) 638-2600 FAX: (480) 638-2652

CONSULTANT
COAL CREEK CONSULTING
 2166 E. UNIVERSITY DR., STE. 201
 TUCSON, ARIZONA 85718
 PHONE: (520) 883-8800 FAX: (520) 883-2893
ENGINEER OF RECORD
TERRA DYNAMIC ENGINEERING, LLC
 P.O. BOX 22131, PHOENIX, AZ 85028
 PHONE: (602) 998-8800 FAX: (602) 998-8801
 EMAIL: TUCNORTHWEST@TERRADYNAMIC.COM
 --SEAL--

NO.	DATE	DESCRIPTION	BY
1	10/06/20	REVIEW	SPE
2	10/20/20	REVISION 1	SPE

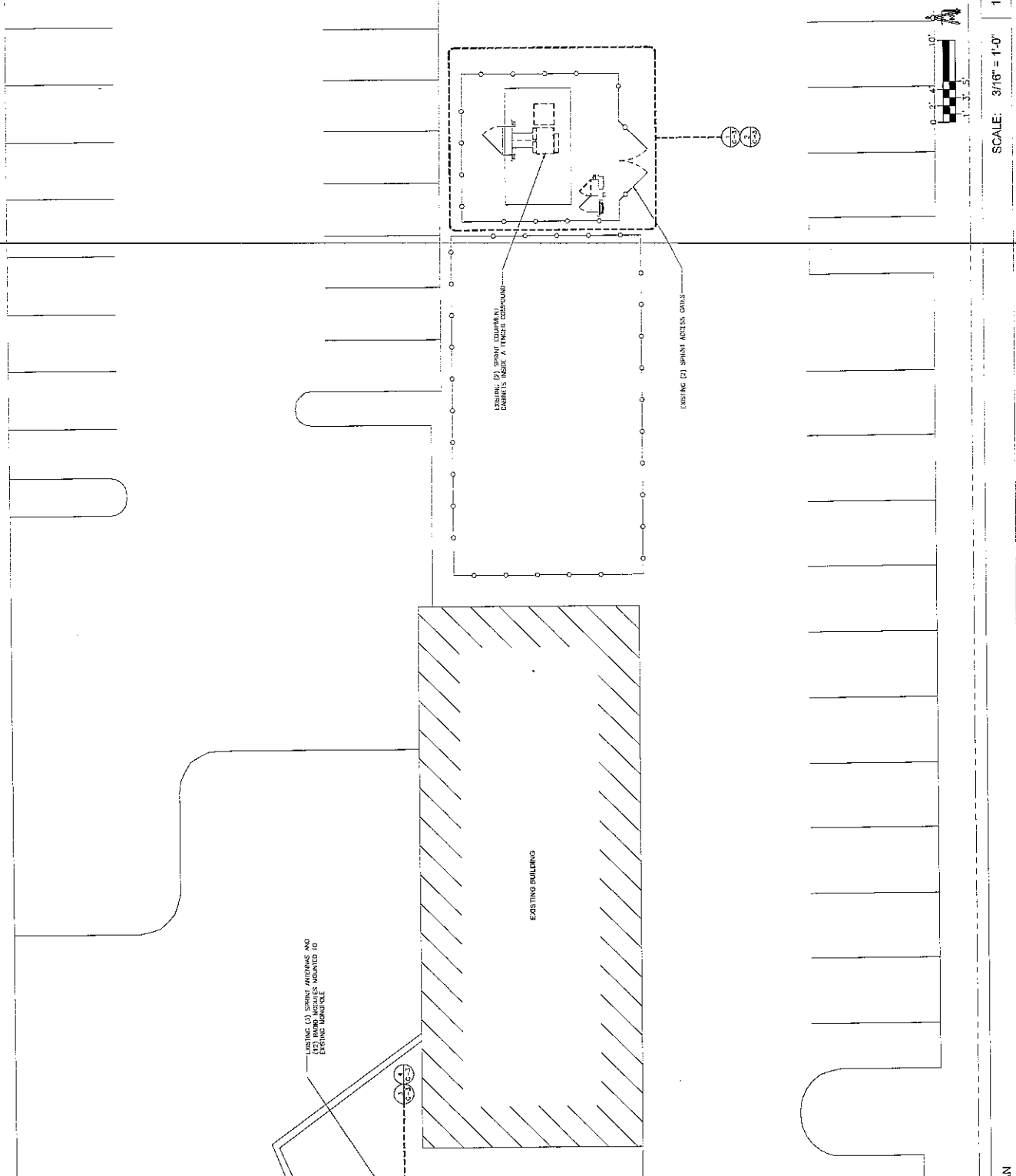
PROJECT INFORMATION
 PH: 04-00-04
PH50404A
(PH04XC034)
TUC NORTHWEST

2015 A. SCHMIDTKE
 REGISTERED ARCHITECT
 --SHEET TITLE--

ENLARGED SITE PLAN

JURISDICTIONAL APPROVAL

SHEET NUMBER: **C-2**



DESIGNED BY: TUCNORTHWEST.COM/PH040044

RFDS VER: 1 DATED 09/28/2020 AT 11:16:21 AM

NOTE:
STRUCTURAL ANALYSIS TO BE
PERFORMED BY OTHERS

CLIENT
T-Mobile
1320 N. SOUTHERN AVE. STE. 4-100
TULSA, OKLAHOMA 74103
PHONE: (918) 638-2600 FAX: (918) 638-2662

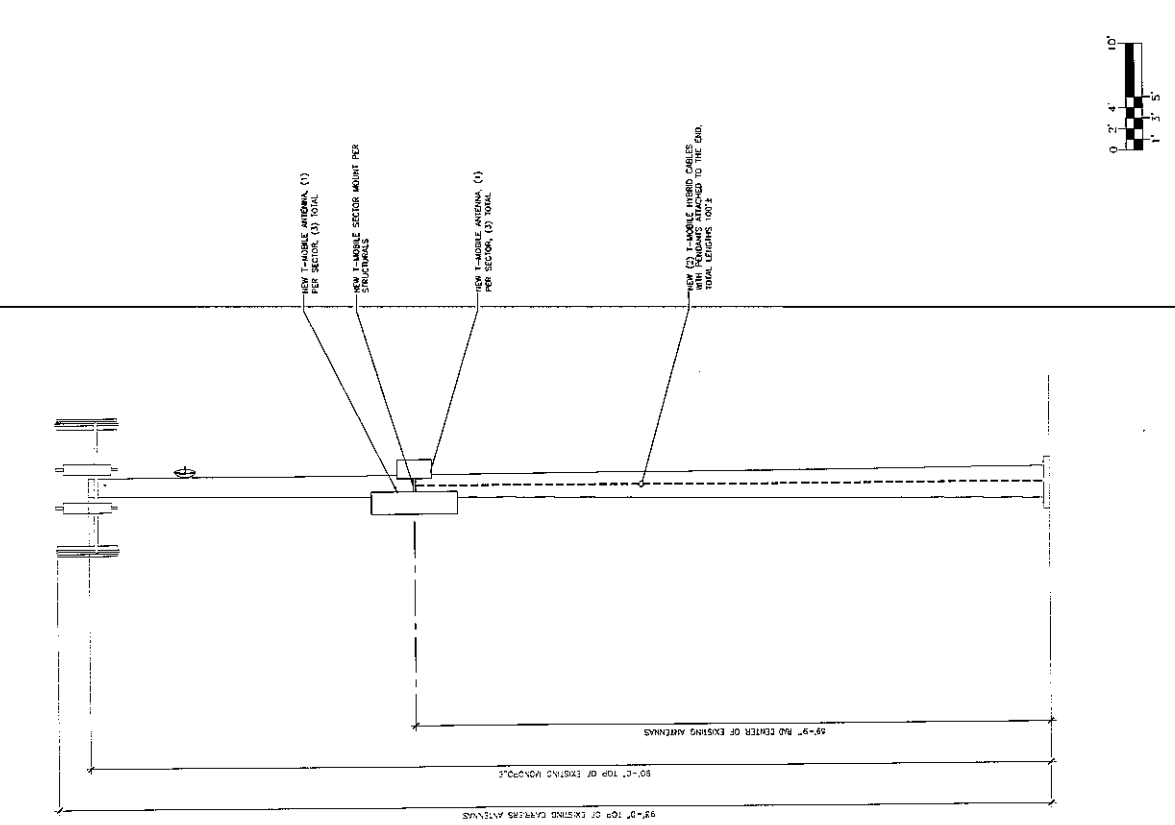
CONSULTANT
COAL CREEK CONSULTING
2164 E. UNIVERSITY DR. STE. 201
TULSA, OKLAHOMA 74103
PHONE: (918) 439-6533 FAX: (918) 638-7882
ENGINEER OF RECORD
TERRA DYNAMIC ENGINEERING, LLC
P.O. BOX 221110
TULSA, OKLAHOMA 74121
EMAIL: ROBERT@TERRADYNAMIC.COM
SEAL

NO.	DATE	DESCRIPTION	BY
1	10/06/20	REVIEW	SPE
2	10/20/20	REVISION 1	SPE

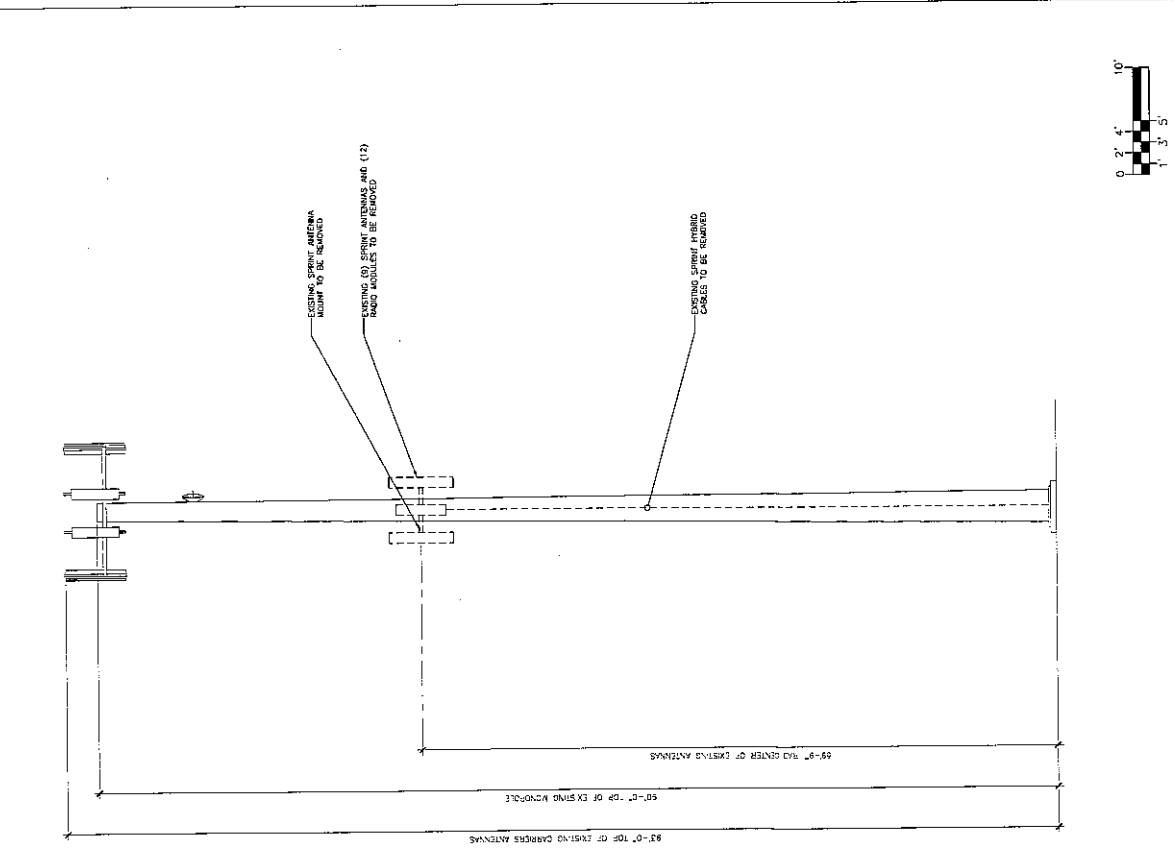
PROJECT INFORMATION
PH504044
(PH04XC034)
TUC NORTHEWEST
2210 N. SIMMONS ST.
TULSA, OKLAHOMA 74104
SHEET TITLE
EXISTING/NEW
ELEVATION
JURISDICTIONAL APPROVAL

RFPD VER: 1 DATED 09/28/2020 AT 11:16:21 AM

SHEET NUMBER
C-5



SCALE: 3/16" = 1'-0"
1



SCALE: 3/16" = 1'-0"
2

NEW SOUTH ELEVATION

EXISTING SOUTH ELEVATION

CLIENT

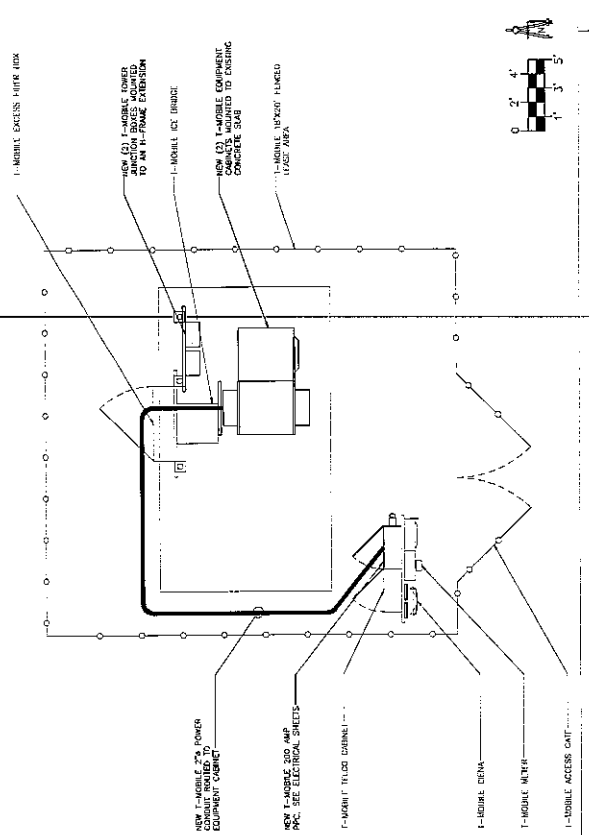
Mobile-
1330 W. UNIVERSITY BLVD., SUITE A-102
MESA, ARIZONA 85201-3627
PHONE: (480) 638-3600 FAX: (480) 638-3622

COAL CREEK CONSULTING
2168 E. UNIVERSITY, OK, STE. 201
TAMPA, ARIZONA 85310 (480) 638-3833
ENGINEER OF RECORD
ee
EXCELLENCE IN ENGINEERING
12025 Ardshear Link
Phoenix, AZ 85021
info@coalcreek.com

PROJECT INFORMATION
PH504044A
(PH04XC034)
TUC NORTHWEST
1330 W. UNIVERSITY BLVD., SUITE A-102, MESA, AZ 85201-3627
SHEET TITLE:
ENLARGED POWER PLAN
JURISDICTIONAL APPROVAL

SEAL

NO.	DATE	DESCRIPTION	BY
1	10/06/20	REVIEW	SPE
2	10/20/20	REVISION 1	SPE



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

ENLARGED POWER PLAN

SCALE: N.T.S. 3

NOT USED

SCALE: N.T.S. 2

NOT USED

SCALE: N.T.S. 4

NOT USED

SHEET NUMBER
E-2

1530 UNIVERSITY BLVD, STE A-102
 PHOENIX, ARIZONA 85004
 PHONE: (480) 638-5000 FAX: (480) 638-2852

COAL CREEK CONSULTING
 2166 E. UNIVERSITY DR., STE 201
 PHOENIX, ARIZONA 85004
 PHONE: (602) 957-4533 FAX: (480) 638-2852
 ENGINEER OF RECORD



EXPELLER IN ENGINEERING
 12000 Avenue 11th
 Phoenix, AZ 85021
 info@expeller.com

PROJECT INFORMATION
 PH5 04-03-04

NO.	DATE	DESCRIPTION	BY
1	10/06/20	REVIEW	SPE
2	10/20/20	REVISION 1	SPE

PH504004A
 (PH04XC034)
 TUC NORTHEWEST
 ONE-LINE AND
 EXISTING/NEW PANEL
 SCHEDULE
 JURISDICTIONAL APPROVAL

SHEET NUMBER
 E-3

RFDS VER: 1 DATED 09/28/2020 AT 11:16:21 AM

DC-48V FEEDER CABLING CHART

CONDUCTORS ARE SHOWN IN RED. ALL CONDUCTORS ARE TO BE INSTALLED IN CONDUIT. CONDUIT SHALL BE INSTALLED IN RED. CONDUIT SHALL BE INSTALLED IN RED. CONDUIT SHALL BE INSTALLED IN RED.

CONDUIT SIZE	CONDUIT TYPE	CONDUIT COLOR	CONDUIT WALL THICKNESS	CONDUIT WEIGHT	CONDUIT LENGTH	CONDUIT VOLUME	CONDUIT WEIGHT
1-1/2"	1-1/2" CU	RED	0.045	1.1	100	110	121
1-1/4"	1-1/4" CU	RED	0.040	1.0	100	100	110
1-1/8"	1-1/8" CU	RED	0.035	0.9	100	90	100
1-1/2"	1-1/2" CU	RED	0.045	1.1	100	110	121
1-1/4"	1-1/4" CU	RED	0.040	1.0	100	100	110
1-1/8"	1-1/8" CU	RED	0.035	0.9	100	90	100

ELECTRICAL PANEL SCHEDULE
 65-10KAC SERIES RATED

NO.	DESCRIPTION	TYPE	SIZE	TERMINALS	TERMINAL TYPE	TERMINAL SIZE	TERMINAL WEIGHT	TERMINAL LENGTH	TERMINAL VOLUME	TERMINAL WEIGHT
1	1-1/2" CU	RED	0.045	1.1	100	110	121	100	110	121
2	1-1/4" CU	RED	0.040	1.0	100	100	110	100	100	110
3	1-1/8" CU	RED	0.035	0.9	100	90	100	90	90	100
4	1-1/2" CU	RED	0.045	1.1	100	110	121	100	110	121
5	1-1/4" CU	RED	0.040	1.0	100	100	110	100	100	110
6	1-1/8" CU	RED	0.035	0.9	100	90	100	90	90	100

EXISTING/NEW PANEL SCHEDULE
 GEORGIAN SERIES RATED

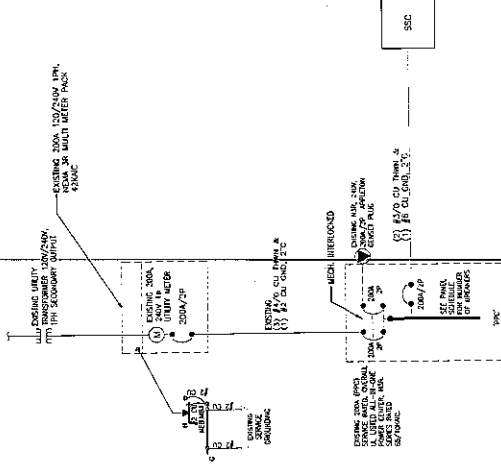
NO.	DESCRIPTION	TYPE	SIZE	TERMINALS	TERMINAL TYPE	TERMINAL SIZE	TERMINAL WEIGHT	TERMINAL LENGTH	TERMINAL VOLUME	TERMINAL WEIGHT
1	1-1/2" CU	RED	0.045	1.1	100	110	121	100	110	121
2	1-1/4" CU	RED	0.040	1.0	100	100	110	100	100	110
3	1-1/8" CU	RED	0.035	0.9	100	90	100	90	90	100
4	1-1/2" CU	RED	0.045	1.1	100	110	121	100	110	121
5	1-1/4" CU	RED	0.040	1.0	100	100	110	100	100	110
6	1-1/8" CU	RED	0.035	0.9	100	90	100	90	90	100

CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA

CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA

CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA

CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA



NOTES:
 1. ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT.
 2. CONDUIT SHALL BE INSTALLED IN RED.
 3. CONDUIT SHALL BE INSTALLED IN RED.

FAULT CALCULATIONS

FAULT CALCULATIONS AT THE SERVICE
 SERVICE VOLTAGE: 480V
 CONDUCTOR TYPE: CU
 CONDUCTOR SIZE: 1-1/2"

CALL 480-777-7777 FOR MORE DATA
 BEFORE YOU BUY
 263-1100
 1-800-STAKE-IT
 OUTSIDE METROPOLITAN COUNTY

CONSTRUCTION METHOD AND
 TECHNICAL DOCUMENT REQUIRED

CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA
 CONDUCTOR WEIGHT AND LENGTH DATA

ONE-LINE / PANEL SCHEDULE

1

T-Mobile

1300 N. MILITARY AVENUE, SUITE 1102
PHOENIX, ARIZONA 85029
PHONE: (480) 338-2500 FAX: (480) 538-3552

CONSULTANT
**COAL CREEK
CONSULTING**
ENGINEERING AND SURVEYING
2186 E. UNIVERSITY DR., STE. 201
TAMPA, ARIZONA 85281
PHONE: (602) 690-1100 FAX: 694-3952
ENGINEER OF RECORD

ee
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PHOENIX, ARIZONA 85016
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SEAL

CLIENT

NO.	DATE	DESCRIPTION	BY
1	10/06/20	REVIEW	SFE
2	10/20/20	REVISION 1	SFE

PROJECT INFORMATION
JOB: 19-0334

PH50404A
(PH04XC034)
TUC NORTHEWEST

2100 N. UNIVERSITY DR.
PHOENIX, ARIZONA 85021
SHEET TITLE

EQUIPMENT/ANTENNA
GROUNDING PLAN
AND NOTES

JURISDICTIONAL APPROVAL

SHEET NUMBER

E-4

GROUNDING KEY NOTES

- ① PT. FROM THE EXISTING GROUND AND TO ALL EQUIPMENT, TOWER.
- ② CONNECT TO EXISTING GROUND AND TO ALL EQUIPMENT.

GENERAL GROUNDING NOTES

1. ALL EQUIPMENT SHALL BE GROUNDING TO THE SAME POINT TO DISPERSE ENERGY AWAY FROM THE POINT OF IMPACT.

2. ALL EQUIPMENT SHALL BE GROUNDING TO THE SAME POINT TO DISPERSE ENERGY AWAY FROM THE POINT OF IMPACT.

3. ALL EQUIPMENT SHALL BE GROUNDING TO THE SAME POINT TO DISPERSE ENERGY AWAY FROM THE POINT OF IMPACT.

4. ALL EQUIPMENT SHALL BE GROUNDING TO THE SAME POINT TO DISPERSE ENERGY AWAY FROM THE POINT OF IMPACT.

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9. ALL EQUIPMENT SHALL BE GROUNDING TO THE SAME POINT TO DISPERSE ENERGY AWAY FROM THE POINT OF IMPACT.

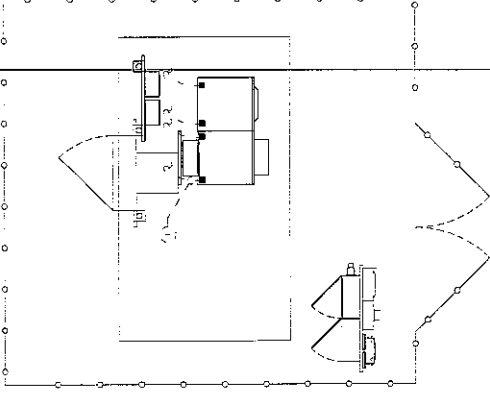
10. ALL EQUIPMENT SHALL BE GROUNDING TO THE SAME POINT TO DISPERSE ENERGY AWAY FROM THE POINT OF IMPACT.

GROUNDING NOTES

EQUIPMENT GROUNDING PLAN

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

1



NOT USED

ANTENNA GROUNDING PLAN

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

2

