

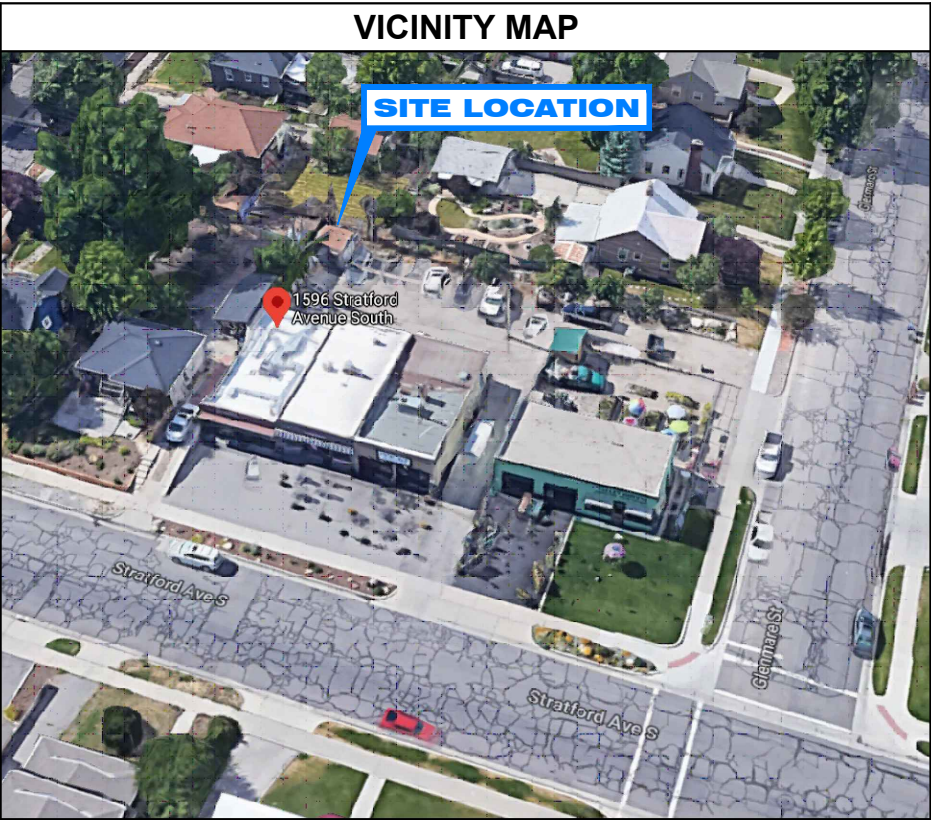
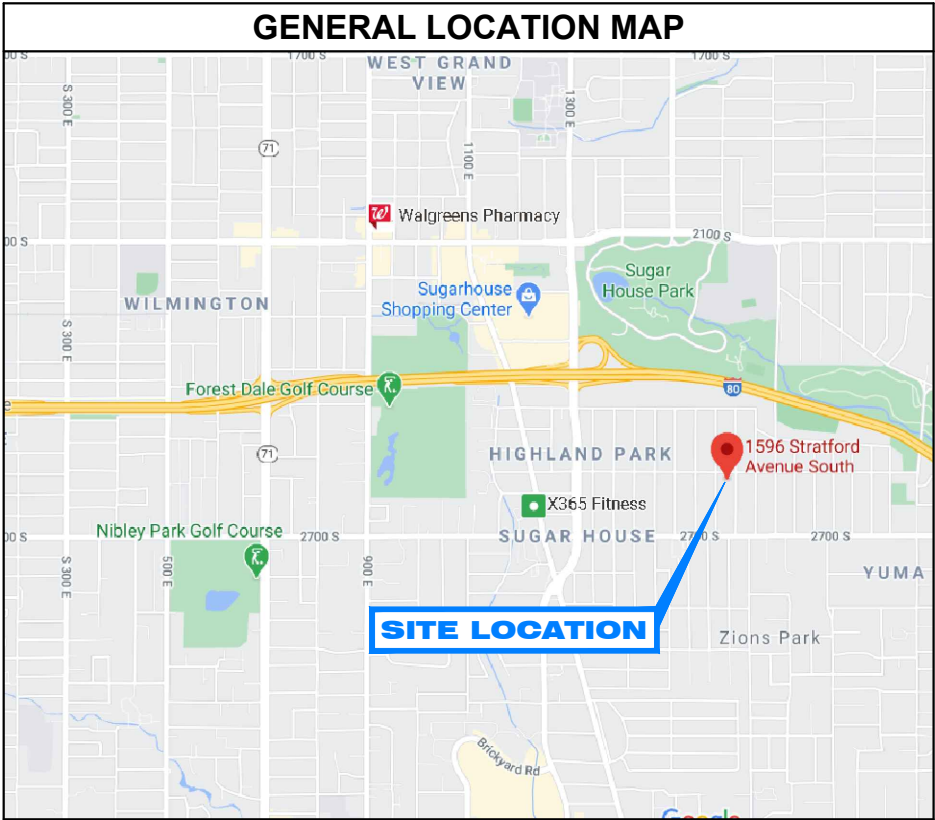


SL01322D STRATFORD & GLENMARE

1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

PROJECT: ANCHOR

LAT/LONG: 40.71502777, -111.84491700



SCOPE OF WORK

T-MOBILE IS PROPOSING TO REPLACE THREE (3) APXVAARR18 43-U-NA20 (OCTO) ANTENNAS WITH THREE (3) **APXVAA4L18 43-U-NA20 (DODECA)** ANTENNAS, ADD THREE (3) **AIR6449 B41 (ACTIVE ANTENNA - MASSIVE MIMO)** ANTENNAS, REMOVE THREE (3) TMAs (CommScope Twin Style 4 - TMA-S-DB1921-DD-A (E15S09P45)), ADD SIX (6) RRUs (**4424 B25 (x3), 4415 B66A (x3)**), ADD TWO (2) 6x12 6AWG HCS, AND REMOVE SIX (6) COAX LINES. EXISTING MOUNT TO BE REMOVED AND REPLACED PER MA.

FINAL CONFIGURATION: SIX (6) ANTENNAS, NINE (9) RRUs, SIX (6) COAX LINES AND THREE (3) HCS.

T-MOBILE IS PROPOSING TO REMOVE ONE (1) NORTEL CABINET AND REPLACE WITH ONE (1) B160 BATTERY CABINET AND ONE (1) 6160 EQUIPMENT CABINET WITH ONE (1) BB 6648 AND ONE (1) BB 6630 AND ADD ONE (1) PSU 4813 VOLTAGE BOOSTER.

PROPRIETY INFORMATION:  
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO T-MOBILE SERVICES IS STRICTLY PROHIBITED.

DISCLOSURE:  
NO SITE WALK WAS CONDUCTED FOR THESE DRAWINGS. DATA WAS PROVIDED BY T-MOBILE AND/OR OTHERS. CONTRACTOR TO VERIFY MATERIALS AND DESIGN PRIOR TO INSTALL.

APPROVALS

APPROVED BY	PRINT NAME	INITIALS	DATE
PROJECT MANAGER			
RF ENGINEER			
OPS MANAGER			
CONSTRUCTION			
LANDLORD			

CONTACT INFORMATION

STRUCTURE OWNER  
PACIFICORP  
825 N.E. MULTINOMAH ST. SUITE 1700  
PORTLAND, OR 97232

SITE ACQUISITION FIRM  
RAGE DEVELOPMENT LLC  
2181 HUGO AVENUE  
SALT LAKE CITY, UT 84117

NETWORK SYSTEMS OWNER  
T-MOBILE  
121 WEST ELECTION RD. STE. 330  
DRAPER, UT 84020

A/E FIRM  
SMITH HYATT ARCHITECTS  
845 SOUTH MAIN STREET  
BOUNTIFUL, UT 84010



DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knapfus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

SL01322D  
STRATFORD & GLENMARE  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING  
TITLE:  
TITLE SHEET

DRAWING NO.:  
**T-1**

GENERAL CONSTRUCTION NOTES

1.

DRAWINGS WERE PREPARED FROM STANDARDIZED DETAILS DEVELOPED AND PROVIDED BY T-MOBILE WEST, LLC ("T-MOBILE"). STANDARDIZED DETAILS ARE TO BE CONFIRMED AND CORRELATED AT THE SITE BY THE CONTRACTOR. STANDARDIZED DETAILS THAT REQUIRE MODIFICATIONS DUE TO ACTUAL FIELD CONDITIONS AND REQUIREMENTS MUST BE SUBMITTED TO, AND APPROVED BY, T-MOBILE PRIOR TO START OF WORK.
2.

DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE. THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGRAM PURPOSES ONLY. UNLESS OTHERWISE NOTED. THE CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS.
3.

THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE INSTALLATION AS DESCRIBED IN THE DRAWINGS AND AS DISCUSSED ON THE SITE WALK.
4.

PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF T-MOBILE VERBALLY AND IN WRITING.
5.

THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS.
6.

THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
7.

THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8.

ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. 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.
9.

GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
10.

THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
11.

CONTRACTOR TO SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.

12.

CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
13.

CONTRACTOR SHALL MEET ALL OSHA REQUIREMENTS FOR ALL INSTALLATIONS.
14.

CONTRACTOR TO VERIFY LOCATION OF ALL BURIED UTILITIES PRIOR TO EXCAVATION.
15.

CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION, UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
16.

CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION DAILY AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
17.

THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE 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 BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) T-MOBILE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
18.

THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
19.

THE CONTRACTOR SHALL PROVIDE T-MOBILE CORPORATION PROPER INSURANCE CERTIFICATES NAMING T-MOBILE WEST, LLC AS ADDITIONAL INSURED, AND T-MOBILE WEST, LLC PROOF OF LICENSE(S) AND PL & PD INSURANCE.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT CONDITIONS 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.

- A.

UTAH UNIFORM BUILDING STANDARD ACT RULES
- B.

2018 INTERNATIONAL BUILDING CODE (IBC)
- C.

2017 NATIONAL ELECTRIC CODE (NEC)
- D.

2018 INTERNATIONAL BUILDING CODE (IBC)
- E.

2018 INTERNATIONAL FIRE CODE (IFC)
- F.

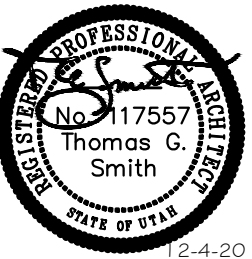
2018 INTERNATIONAL MECHANICAL CODE (IMC)
- G.

LOCAL BUILDING CODE
- H.

CITY OR COUNTY ORDINANCES

IMPORTANT NOTICE

THE EXISTING CONDITIONS REPRESENTED HEREIN ARE BASED ON VISUAL OBSERVATIONS AND INFORMATION PROVIDED BY OTHERS. A/E FIRM CANNOT GUARANTEE THE CORRECTNESS NOR THE COMPLETENESS OF THE EXISTING CONDITIONS SHOWN AND ASSUMES NO RESPONSIBILITY THEREOF. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AS REQUIRED FOR PROPER COMPLETION OF THE PROJECT.



DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knapus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

SL01322D  
STRATFORD & GLENMARE  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING TITLE:  GENERAL NOTES	DRAWING NO.:  N-1
---	-------------------------



SITE PLAN

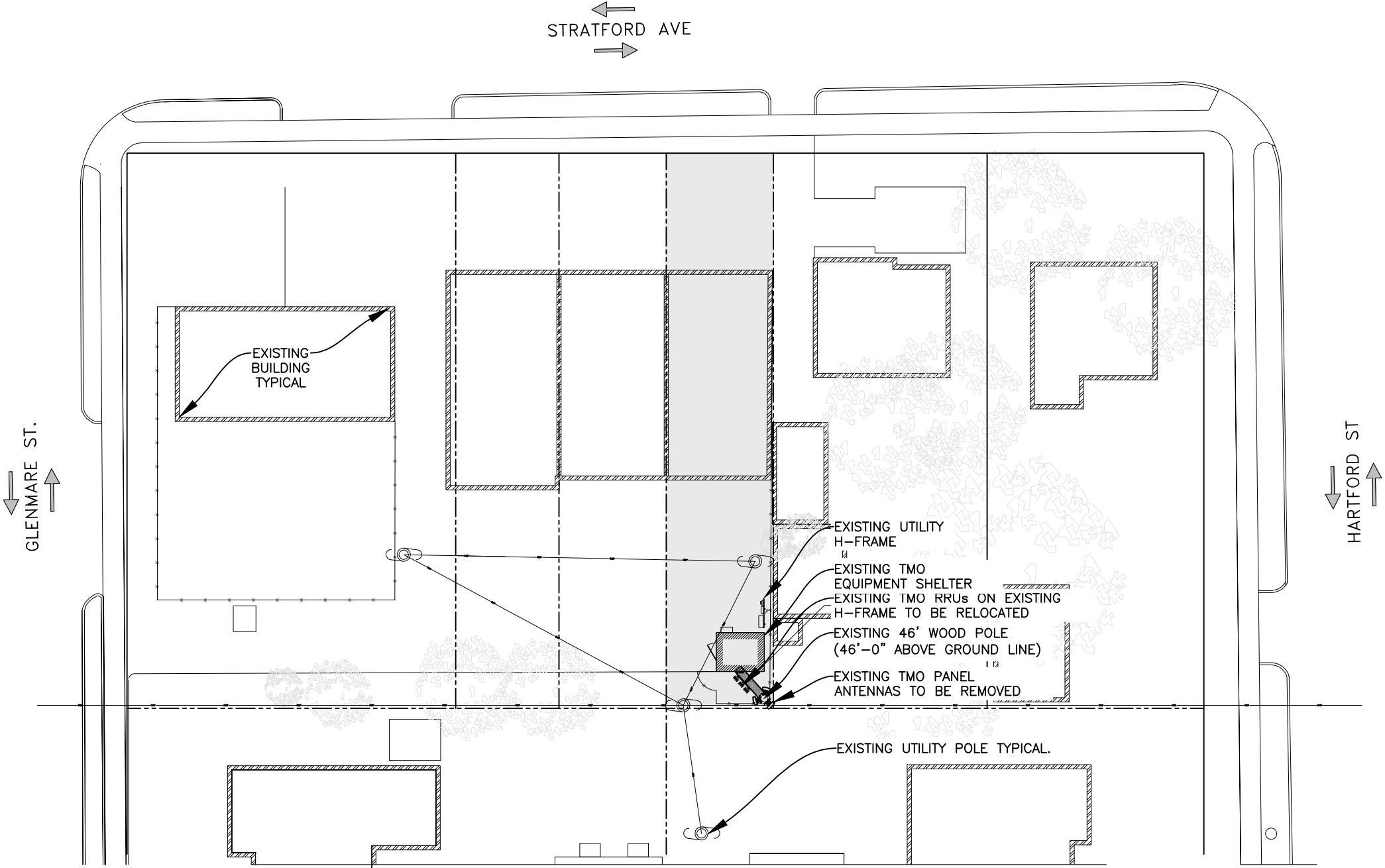
**SITE NOTE:**

1. SITE ACCESS GRANTED VIA LEASE AGREEMENT AND WILL BE VIA THE MOST REASONABLE, NON-EXCLUSIVE, AND NON-INTERFERRING ROUTE POSSIBLE TO LESSEE EQUIPMENT TO ENSURE UNINTERRUPTED USE AND ENJOYMENT OF THE UNDERLING PARCEL AND BUILDINGS.

2. INFORMATION SHOWN BELOW FROM DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS BY OTHERS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FROM SURVEYING OR OTHER RELATED PURPOSES.

**PROPERTY INFORMATION**

Parcel Record: 16213780040000  
Owner: JLO PROPERTIES, LLC.  
Address: 1596 E Stratford Avenue  
Municipal Zone: CN  
Legal Description:  
LOT 1910, HIGHLAND PARK PLAT A, TOGETHER WITH 1/2 VACATED ALLEY ABUTTING ON S 4545-1102 6454-2710 9869-1714



**T-Mobile**

**RAGE**  
DEVELOPMENT LLC

**SMITH HYATT**  
ARCHITECTS

845 SOUTH MAIN, BOUNTIFUL, UTAH 84010  
801-298-5777 FAX 801-298-1677

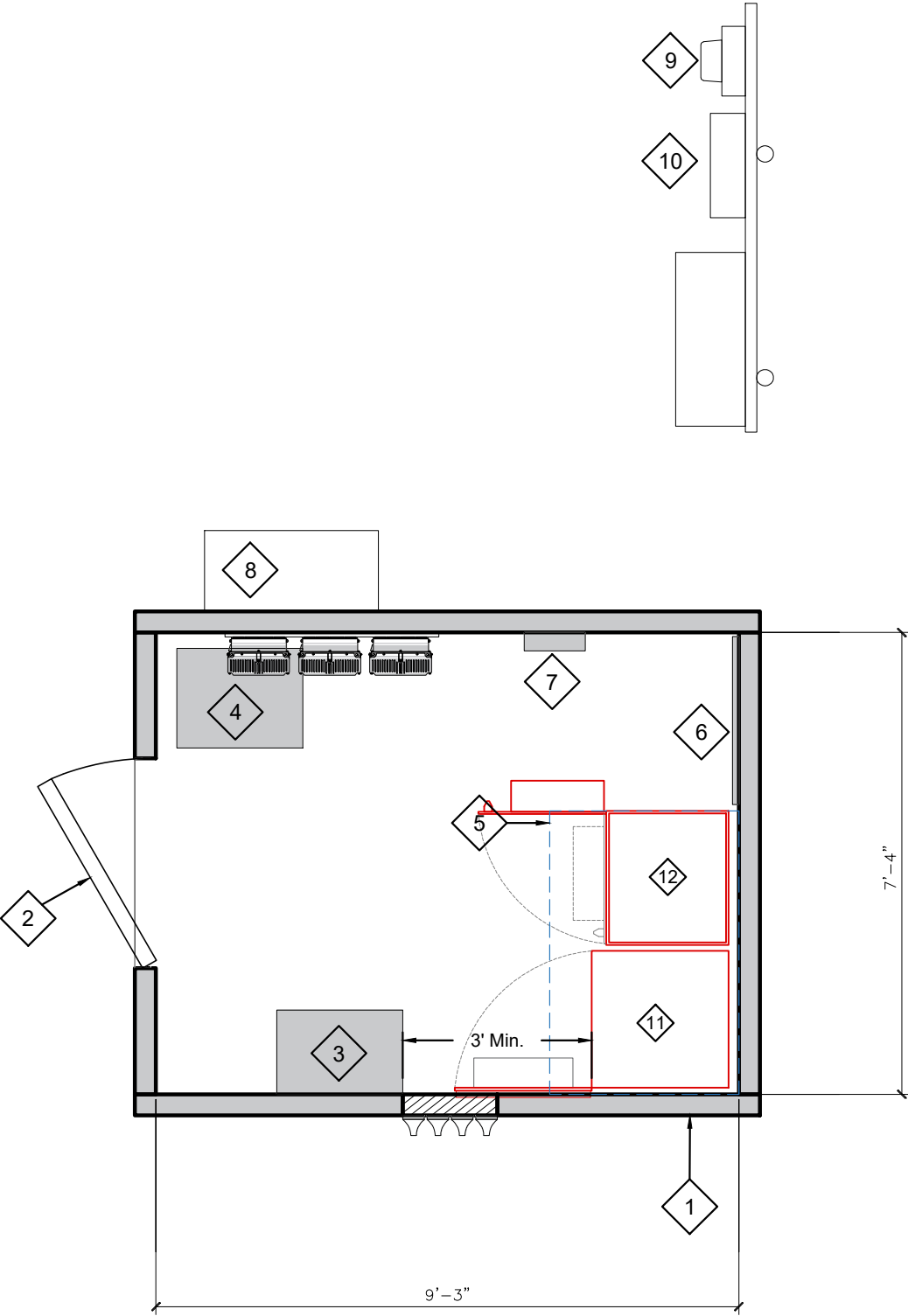
**REGISTERED PROFESSIONAL ARCHITECT**  
No. 117557  
Thomas G. Smith  
STATE OF UTAH  
12-4-20

DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knaphus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

**SL01322D**  
**STRATFORD & GLENMARE**  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING TITLE:  EQUIPMENT SITE PLAN	DRAWING NO.:  <b>A-0</b>
---	--------------------------------

PROPOSED EQUIPMENT SITE PLAN

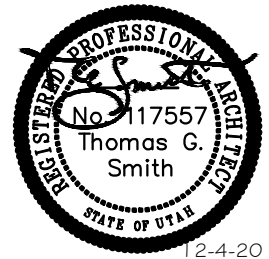


KEY NOTES

- 1 EXISTING T-MOBILE EQUIPMENT BUILDING - 8'x10'
- 2 EXISTING ACCESS DOOR
- 3 EXISTING PBC 6200 CABINET TO REMAIN
- 4 EXISTING RBS 6201 TO REMAIN
- 5 EXISTING NORTEL CABINET TO BE REMOVED
- 6 EXISTING TELCO BOARD MOUNTED ON WALL
- 7 EXISTING A/C PANEL MOUNTED ON WALL
- 8 EXISTING HVAC UNIT
- 9 EXISTING POWER METER MOUNTED ON EXISTING UTILITY FRAME
- 10 EXISTING DISCONNECT MOUNTED ON EXISTING UTILITY FRAME
- 11 PROPOSED 6160 CABINET
- 12 PROPOSED B160 BATTERY CABINET

SITE NOTES

1. TMO IS PROPOSING TO ADD 6160 WITH ONE (1) BB6648, ONE (1) BB6630 UNITS, AND ONE (1) PSU 4813 VOLTAGE BOOSTER TO GROUND CABINET LAYOUT.
2. TMO IS PROPOSING TO ADD ONE (1) B160 BATTERY CABINET.

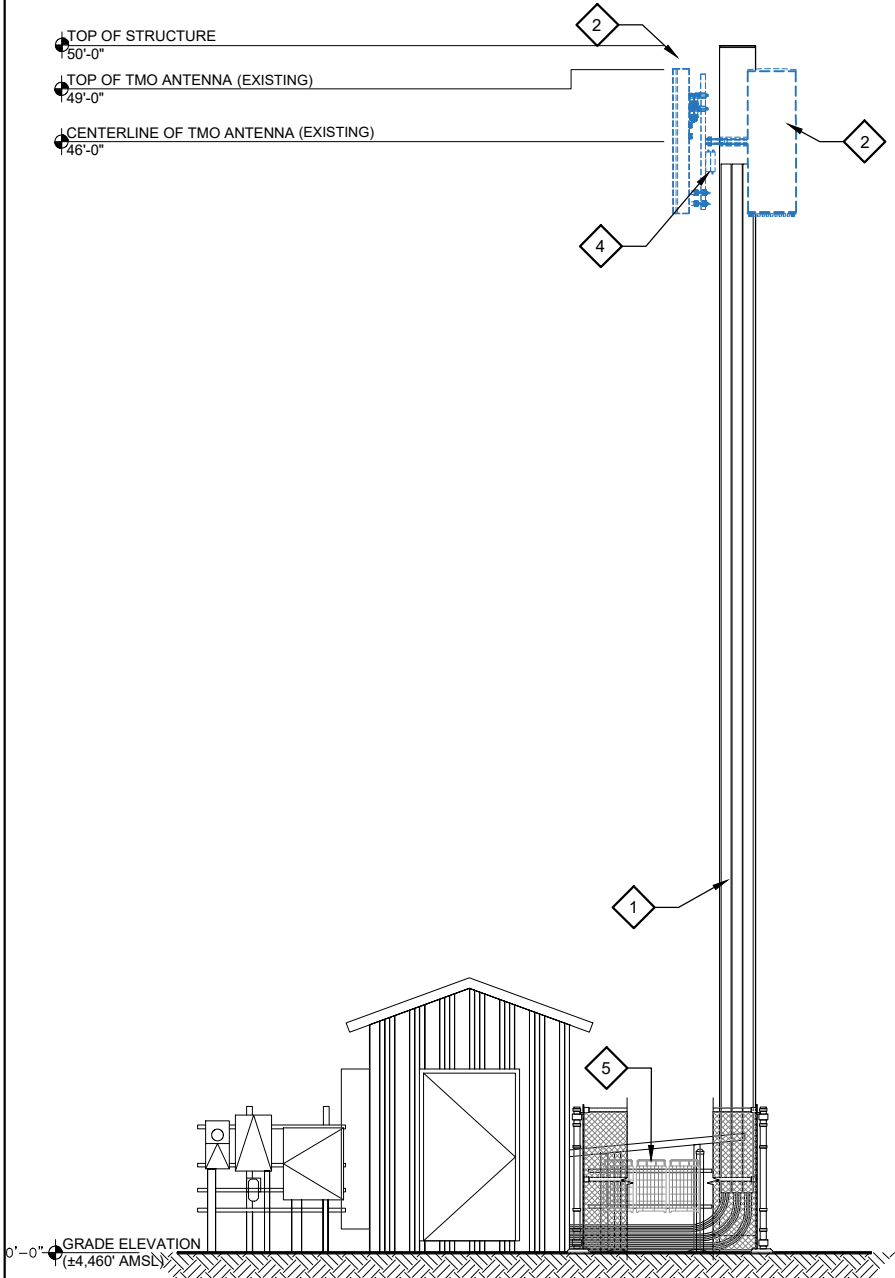


DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knaphus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

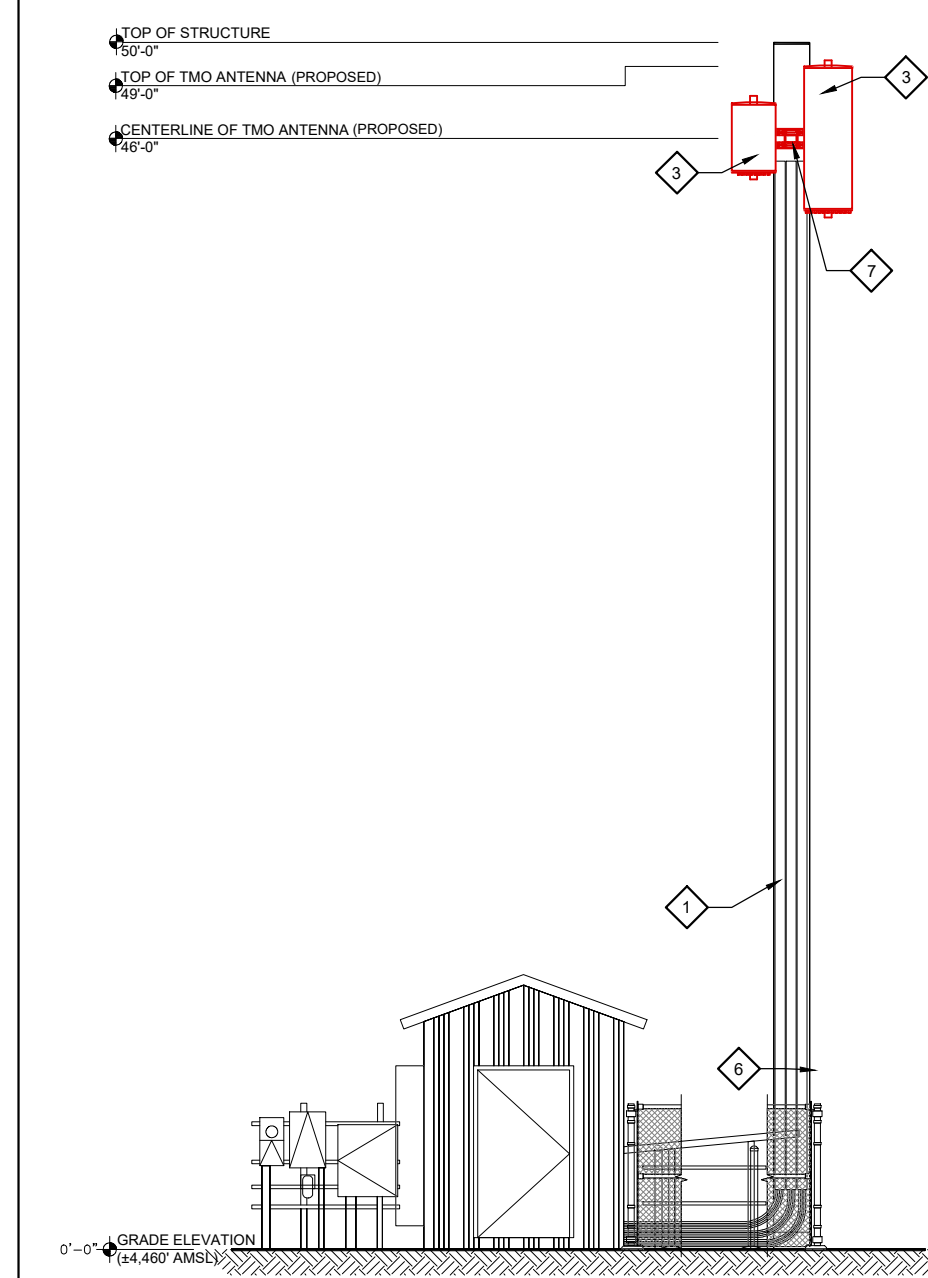
SL01322D  
STRATFORD & GLENMARE  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING TITLE:  EQUIPMENT SITE PLAN	DRAWING NO.:  A-1
---	-------------------------

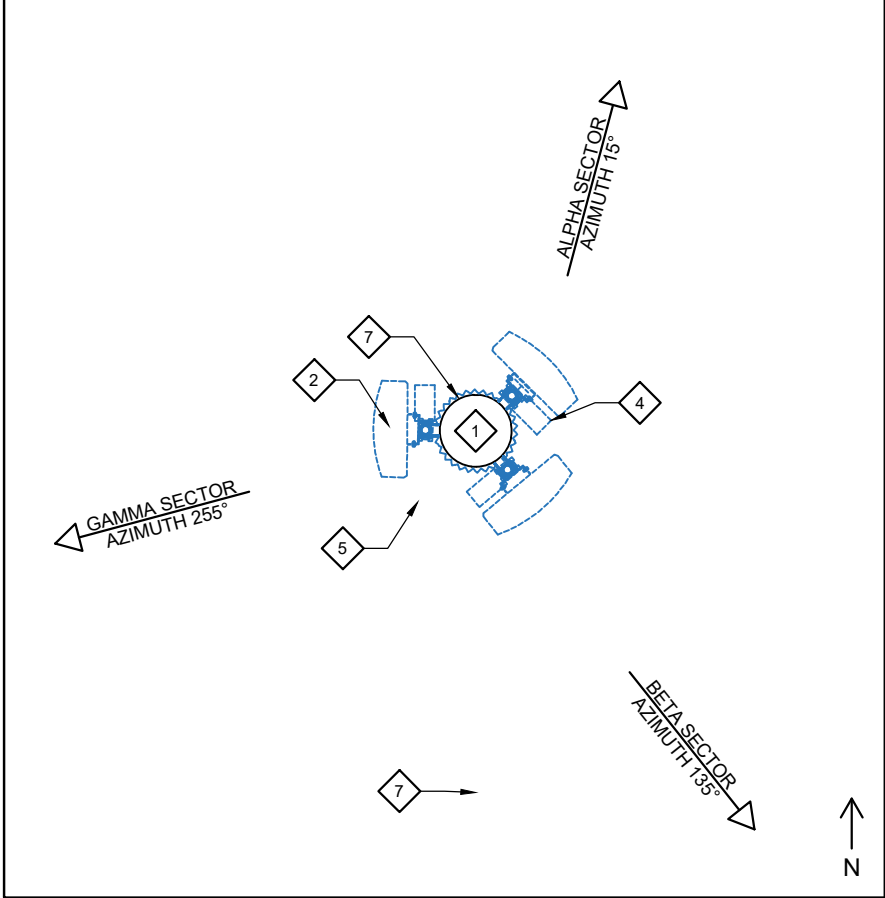
EXISTING TOWER ELEVATION



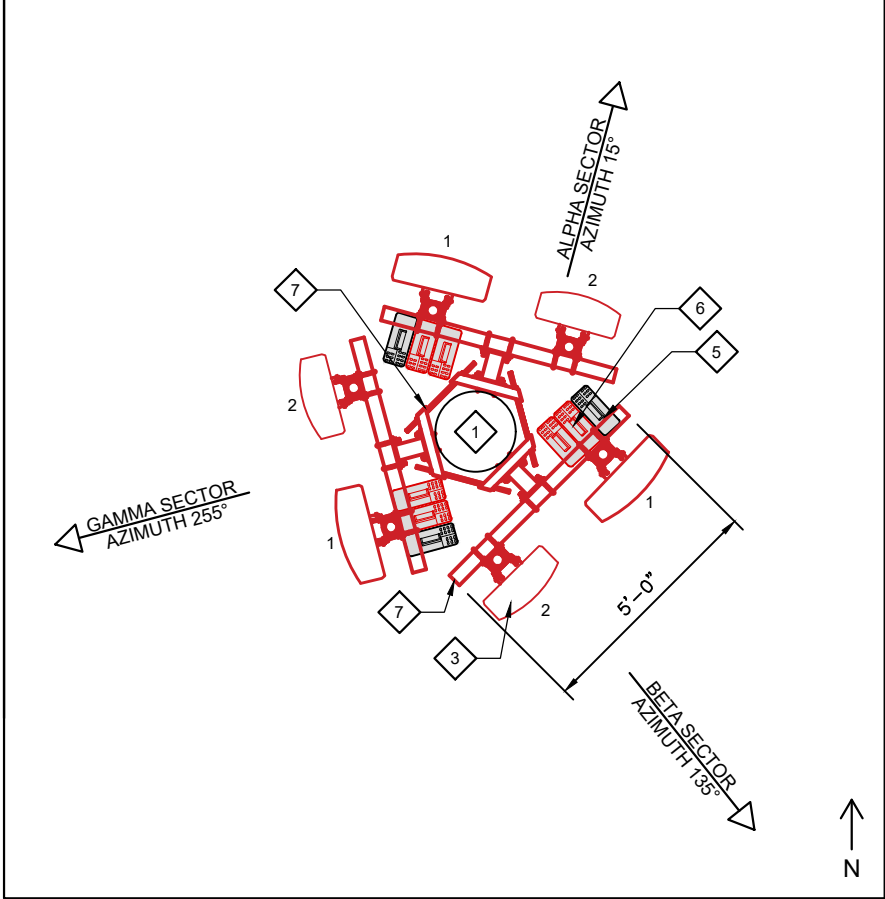
PROPOSED TOWER ELEVATION



EXISTING ANTENNA LAYOUT



PROPOSED ANTENNA LAYOUT



KEY NOTES

- 1 EXISTING 50'± WOODEN UTILITY POLE

2 EXISTING T-MOBILE ANTENNAS TO BE REPLACED, TYPICAL OF ONE (1) PER SECTOR: ANTENNA 1 - APXVAARR18 43-U-NA20

3 PROPOSED T-MOBILE NEW/REPLACEMENT ANTENNAS, TYP (1) PER SECTOR

ANTENNA 1 - APXVAA4L18 43-U-NA20

ANTENNA 2 - AIR6449 B41
- 4 EXISTING TMA's TO BE REMOVED, TYPICAL OF ONE (1) PER SECTOR

5 EXISTING RRUs TO BE RELOCATED FROM GROUND MOUNT LOCATION TO NEW MOUNT BEHIND ANTENNA, TYPICAL OF ONE (1) PER SECTOR - 4449 B71+B85

6 PROPOSED NEW RRUs, TYPICAL OF TWO (2) PER SECTOR (RRUs MOUNTED BEHIND ANTENNAS) - 4424 B25 AND 4415 B66A
- 7 EXISTING MOUNTING SYSTEM TO BE REPLACED WITH NEW SitePro1 UDS-NP - SEE STRUCTURAL MOUNT ANALYSIS FOR REPLACEMENT MOUNT DETAIL

845 SOUTH MAIN, BOUNTIFUL, UTAH 84010  
801-298-5777 FAX 801-298-1677

DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knaphus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

SL01322D  
STRATFORD & GLENMARE  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING TITLE:  
TOWER ELEVATION AND PLAN

DRAWING NO.:  
**A-2**

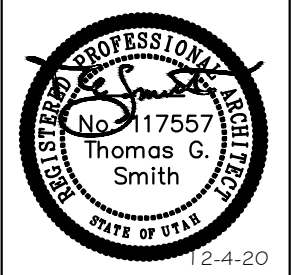
EXISTING ANTENNA SCHEDULE			
	ALPHA SECTOR	BETA SECTOR	GAMMA SECTOR
AZIMUTH ANTENNA MODEL ANTENNA POSITION ANTENNA RAD CENTER ANTENNA FACE Sq. Ft.	15° APXVAARR18 43-U-NA20 (OCTO) 1 46'-0" 12 Sq. Ft.	135° APXVAARR18 43-U-NA20 (OCTO) 1 46'-0" 12 Sq. Ft.	255° APXVAARR18 43-U-NA20 (OCTO) 1 46'-0" 12 Sq. Ft.
HYBRID CABLE SYSTEM	ERICSSON 6x12 HCS 6AWG 30m		
COAX CABLE	7/8" COAX - 60' (x12)		
TMA's	CommScope Twin Style 4 - TMA-S-DB1921-DD-A (E15S09P45) (x3)		
RRUs	4449 B71+B85 (x3)		
FIBER JUMPER CABLE	FIBER JUMPER - 9' (x6)		
JUMPER SUREFLEX	JUMPER 10' SUREFLEX 4.3-10 TO 4.3-10 (x12)		

NEW/PROPOSED ANTENNA SCHEDULE			
	ALPHA SECTOR	BETA SECTOR	GAMMA SECTOR
AZIMUTH ANTENNA MODEL ANTENNA POSITION ANTENNA RAD CENTER MECH. TILT - ELEC. TILT ANTENNA FACE Sq. Ft.	15° <b>APXVAA4L18 43-U-NA20 (DODECA)</b> 1 46'-0" 0 - 7/7/5/5/5/5 12 Sq. Ft.	135° <b>APXVAA4L18 43-U-NA20 (DODECA)</b> 1 46'-0" 0 - 7/7/5/5/5/5 12 Sq. Ft.	255° <b>APXVAA4L18 43-U-NA20 (DODECA)</b> 1 46'-0" 0 - 7/7/5/5/5/5 12 Sq. Ft.
AZIMUTH ANTENNA MODEL ANTENNA POSITION ANTENNA RAD CENTER MECH. TILT - ELEC. TILT ANTENNA FACE Sq. Ft.	15° <b>AIR6449 B41 (ACTIVE ANTENNA - MASSIVE MIMO)</b> 2 46'-0" 0 - 5/5 4.6 Sq. Ft.	135° <b>AIR6449 B41 (ACTIVE ANTENNA - MASSIVE MIMO)</b> 2 46'-0" 0 - 5/5 4.6 Sq. Ft.	255° <b>AIR6449 B41 (ACTIVE ANTENNA - MASSIVE MIMO)</b> 2 46'-0" 0 - 5/5 4.6 Sq. Ft.
HYBRID CABLE SYSTEM	ERICSSON 6x12 HCS 6AWG 30m (x3), PSU 4813 VOLTAGE BOOSTER		
COAX CABLE	7/8" COAX - 60' (x6)		
RRUs	4449 B71+B85 (x3), <b>4424 B25 (x3), 4415 B66A (x3)</b>		
FIBER JUMPER CABLE	FIBER JUMPER - 10' (x12)		
JUMPER SUREFLEX	JUMPER 10' SUREFLEX 4.3-10 TO 4.3-10 (x48)		









12-4-20

DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knaphus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

SL01322D

STRATFORD & GLENMARE

1596 E. STRATFORD AVENUE

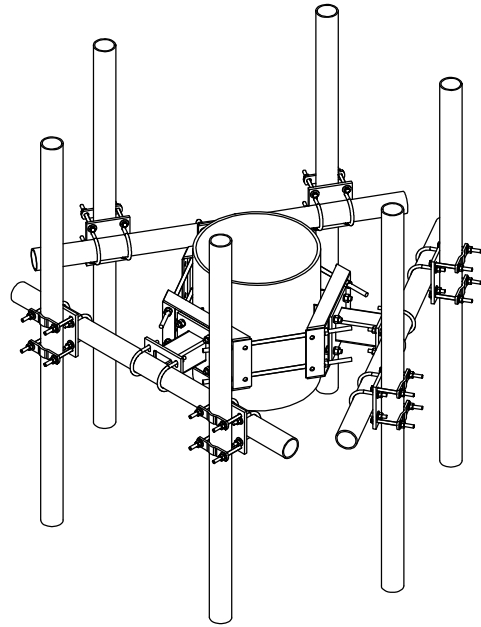
SALT LAKE CITY, UT 84106

DRAWING TITLE:  
EQUIPMENT SCHEDULE

DRAWING NO.:  
A-3

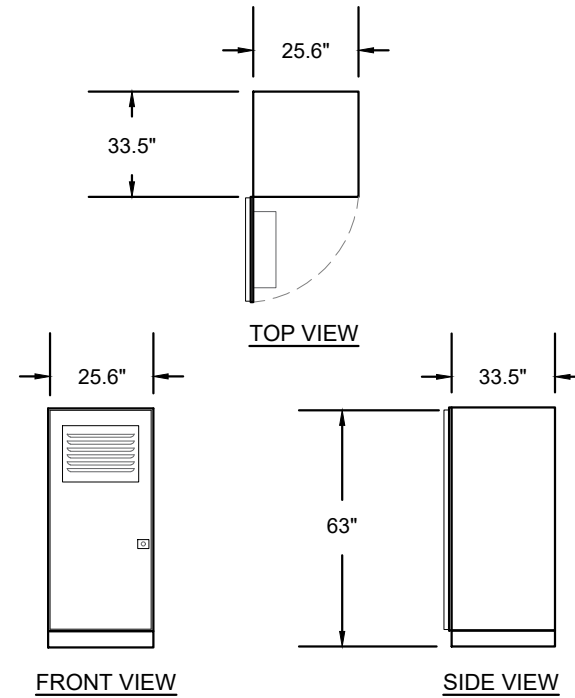
ANTENNA MOUNT DETAIL

SitePro1 UDS-NP  
5' TRIPLE T-ARM, DUAL ANTENNA  
POLE MOUNT KIT



CABINET DETAIL 1

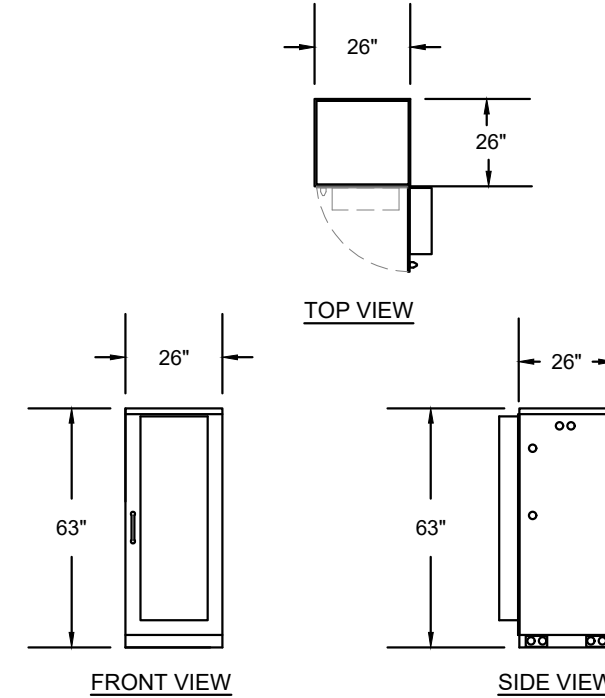
ERICSSON 6160



PROPOSED NEW CABINET

CABINET DETAIL 2

ERICSSON B160



PROPOSED NEW BATTERY CABINET

VOLTAGE BOOSTER DETAIL

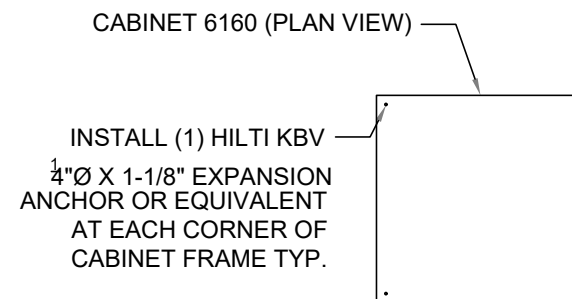
ERICSSON  
PSU 4813 VOLTAGE BOOSTER



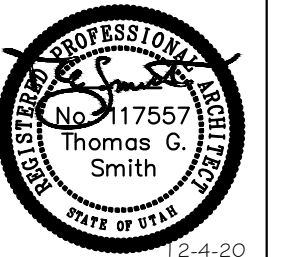
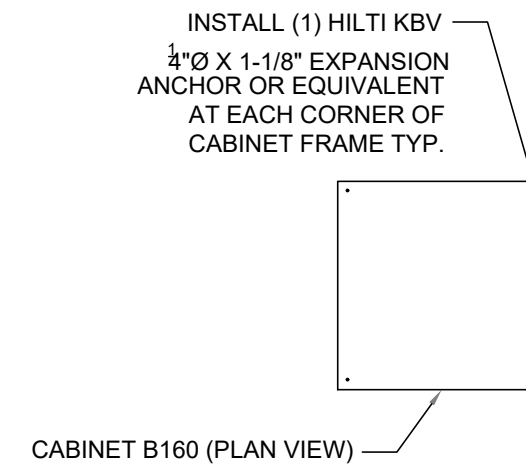
TO BE INSTALLED INTO 6160 CABINET

WEIGHT: 17.2 lbs  
DIMENSIONS (H x W x D): 1.7" x 19" x 14.3"

CABINET ANCHORING DETAIL 1



CABINET ANCHORING DETAIL 2



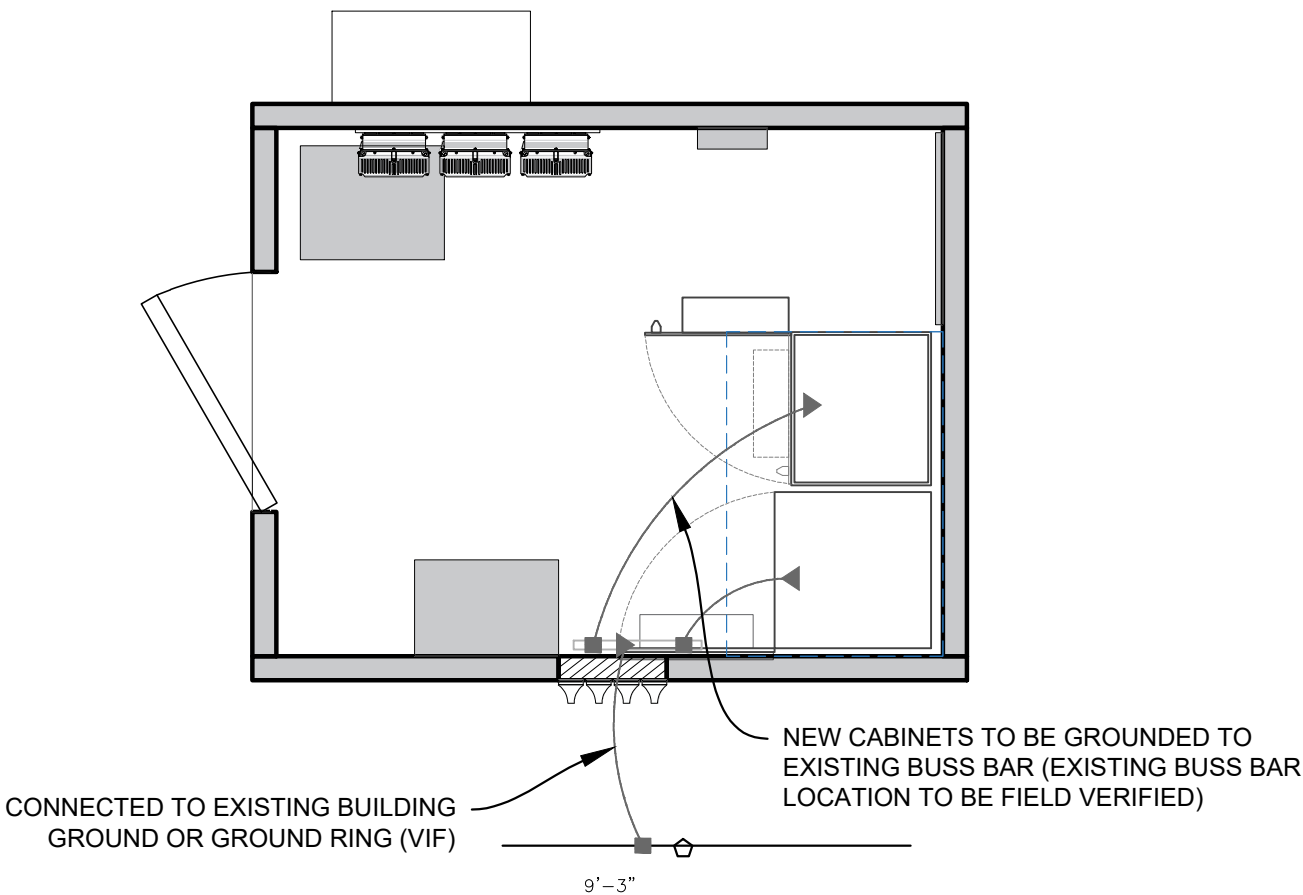
DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knaphus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

SL01322D  
STRATFORD & GLENMARE  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING TITLE: EQUIPMENT DETAIL	DRAWING NO.: <b>A-4</b>
--	----------------------------



GROUNDING PLAN



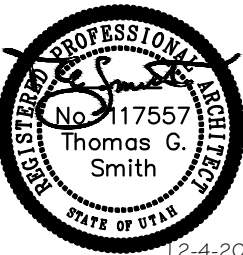
NOTE: TYPICAL GROUNDING PLAN SHOWN. CONTRACTOR TO TIE ANY NEW EQUIPMENT INTO EXISTING GROUNDING PLAN AT A MINIMUM OF TWO CONNECTIONS

GROUNDING NOTES

1. ALL SAFETY GROUNDING OF THE ELECTRICAL EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REVISION OF NEC.
2. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND SITE CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS. IF SITE SOIL CONDITIONS ARE CORROSIVE, USE OF A LARGER MAIN GROUND RING CONDUCTOR MAY BE NECESSARY.
3. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR MONOPOLE USING MANUFACTURERS PRACTICES.
4. ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE SOLID COPPER WITH GREEN INSULATED WIRE ABOVE GROUND.
5. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE TO A MAXIMUM OF 5 OHMS. IF GROUND TEST DID NOT ACHIEVE THE MAXIMUM 5 OHMS, CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL GROUNDING TO OHM MAX REQUIREMENT. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY A T-MOBILE REPRESENTATIVE.
6. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AN AUTHORIZED T-MOBILE REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM.
7. NOTIFY T-MOBILE IF THERE ARE ANY DIFFICULTIES INSTALLING GROUND SYSTEM DUE TO SITE SOIL CONDITIONS.
8. IF SURGE SUPPRESSER IS AN EXTERIOR MOUNT, RUN A #2 THHN GROUND WIRE IN A 1" SCHED. 40 PVC CONDUIT TO SIDE SPLICE CADWELD AT GROUND RING. HEAT RADIUS CONDUIT TO PRODUCE LARGE RADIUS BENDS. STRAP TO SLAB AT A MINIMUM OF TWO POINTS.
9. ALL GROUNDING WIRE RUNS AND CONNECTIONS, BOTH ABOVE AND BELOW GRADE, SHALL BE LOCATED INSIDE OF THE LEASE AREA.
10. TIE NEW GROUNDING INTO EXISTING GROUND GRID IN AT LEAST TWO LOCATIONS.
11. THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO T-MOBILE SERVICES IS STRICTLY PROHIBITED.

SYMBOL KEY

- MECHANICAL CONNECTION
- COPPER GROUND ROD
- CADWELD CONNECTION
- GROUND BAR
- INSPECTION WELL



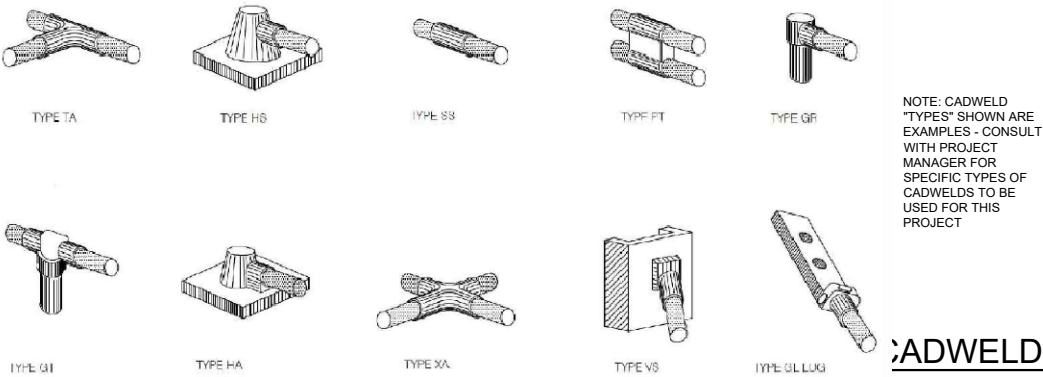
DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knaphus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

SL01322D  
STRATFORD & GLENMARE  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING TITLE:  GROUNDING PLAN	DRAWING NO.:  E-1
--	-------------------------

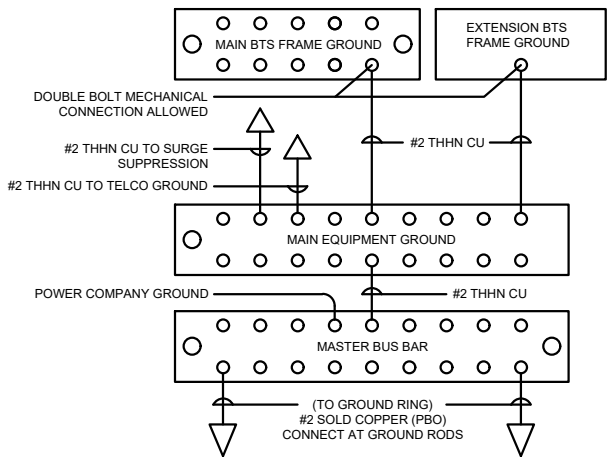


1



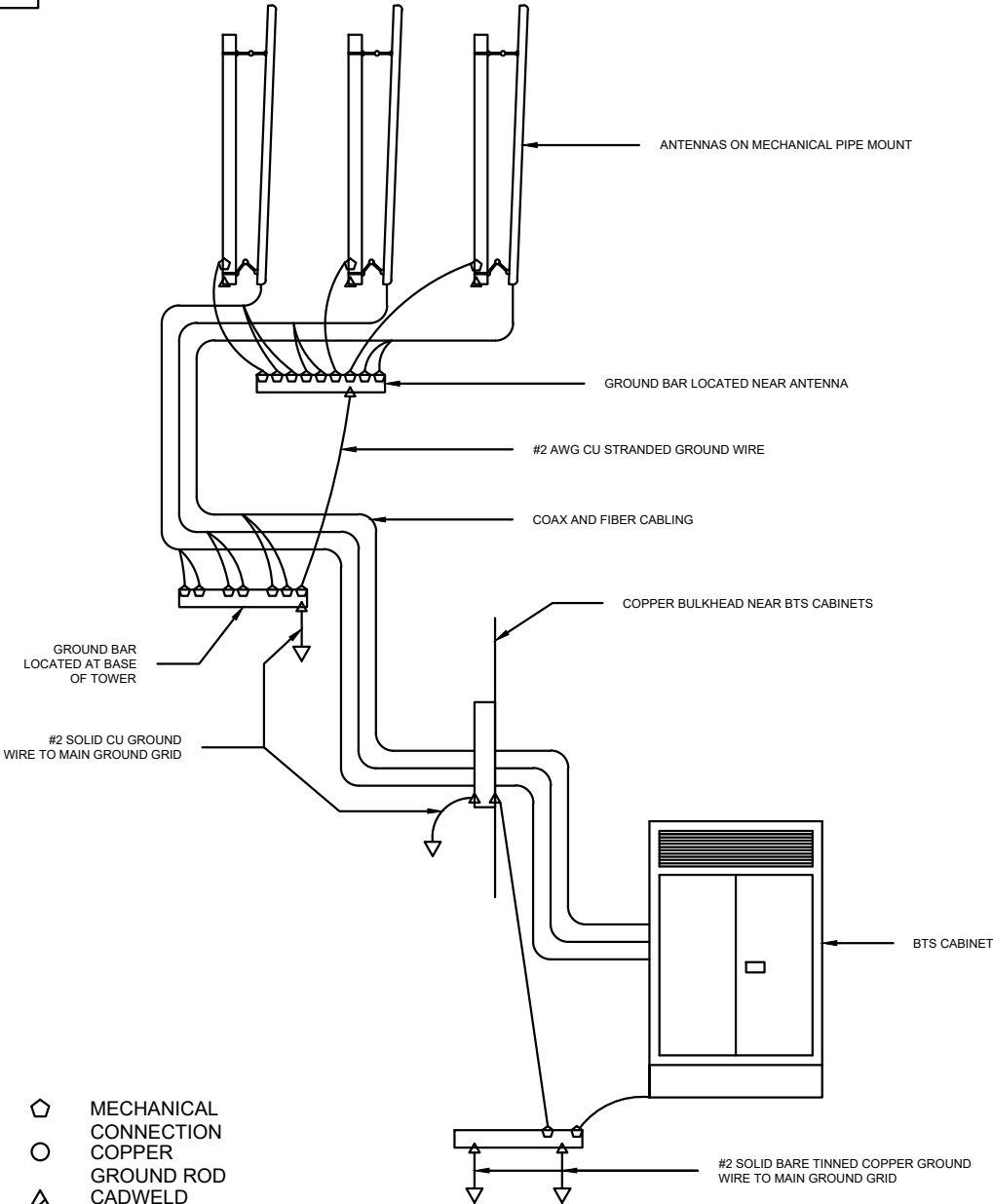
### CADWELD DETAILS

3



### GROUNDING SCHEMATIC

2



- MECHANICAL CONNECTION
- COPPER
- GROUND ROD
- CADWELD CONNECTION
- GROUND BAR

### ANTENNA GROUNDING DIAGRAM

### TYPICAL GROUNDING SYSTEM NOTES

- TOWER RADIAL GROUND:**  
#2 SOLID COPPER WIRE CADWELDED (OR FASTENER APPROVED BY PROJECT MANAGER) TO TOWER BASE. EXTEND WIRE 30' MINIMUM IN SWEEPING CONFIGURATION AT A MINIMUM DEPTH OF 24". ALL GROUND RODS TO BE 8' COPPER OR COPPER CLAD. FIRST GROUND RODS FROM TOWER ARE TO BE PLACED 10' EQUAL DISTANCE (BETWEEN ROD CENTERS) AND A MINIMUM OF EVERY 10' ALONG TOTAL LENGTH. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS.
- TOWER EQUIPMENT RING GROUND INTERCONNECT:**  
ONLY ONE CONNECTION OF THIS TYPE FOR EACH TOWER. SAME CONSTRUCTION AS NOTE 1 ABOVE EXCEPT THE TERMINATION AT THE GROUNDING RING MUST BE THREE-WAY CONNECTED. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS.
- EQUIPMENT BUILDING RING GROUND:**  
ALWAYS OBSERVE THE TURN DIRECTIONS SHOWN WHEN PLACING BENDS OR CONNECTIONS. USE #2 SOLID COPPER WIRE PLACED WITHIN 3' (+/- 6") FROM EDGE OF BUILDING CONCRETE FOUNDATION AT A MINIMUM DEPTH OF 24". ALL CONNECTIONS TO GROUND RING ARE TO BE CADWELDED. ALL GROUND RODS TO BE 10" COPPER OR COPPER CLAD AND PLACED 10' EQUAL DISTANCE (BETWEEN ROD CENTERS) AND A MINIMUM OF EVERY 10' ALONG TOTAL LENGTH. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS.
- SINGLE POINT GROUND BAR (COAX BULKHEAD):**  
ALWAYS OBSERVE THE DIRECTIONS SHOWN WHEN PLACING BENDS OR CONNECTIONS TO GROUND RING. USE TWO #2 SOLID COPPER WIRE OR TWO 3" COPPER RIBBONS ATTACHED ON OPPOSITE ENDS OF BAR OR BULKHEAD EXTENDING DIRECTLY TO GROUND. ALL WIRE CONNECTIONS TO GROUND RING ARE TO BE CADWELDED, RIBBONS MAY BE ATTACHED TO GROUND RING WITH A "LISTED" PRESSURE CONNECTION WITH APPROVAL OF CONSTRUCTION MANAGER. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS.
- EQUIPMENT SHELTER INNER BONDING RING:**  
#2 SOLID COPPER WIRE CADWELDED (TO INNER BONDING RING AT A LOCATION EITHER ABOVE THE SOIL LINE OR JUST INSIDE INTERIOR OF BUILDING. ALWAYS USE PVC (NONMETALLIC) SLEEVES WHEN ENTERING THE STRUCTURE. THIS TYPE OF BOND IS REQUIRED AT EACH OUTSIDE CORNER AND AT DISTANCES NOT TO EXCEED 50' ALONG ANY STRAIGHT WALL. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS.
- FENCE EQUALIZATION BOND:**  
#2 SOLID COPPER WIRE CADWELDED TO BUILDING RING GROUND AND ATTACHED TO EACH INSIDE OR OUTSIDE CORNER FENCE POST AND/OR GATE POST WITH A "LISTED" WIRE CLAMP. PLACE AT A MINIMUM 12" DEPTH (SEE NOTE 11 BELOW FOR CROSSING CLEARANCES). IF METALLIC POST IS NOT SET IN CEMENT, PLACE AN ADDITIONAL 8' GROUND ROD AT POST LOCATION.
- GATE EQUALIZATION BOND:**  
#2 SOLID COPPER WIRE CADWELDED TO FENCE EQUALIZATION WIRE AND ATTACHED TO EACH GATE POST WITH A "LISTED" WIRE CLAMP. IF METALLIC POST IS NOT SET IN CEMENT, PLACE AN ADDITIONAL 10' GROUND ROD AT EACH POST LOCATION.
- POWER / TELEPHONE TRENCH:**  
UTILITIES CAN EITHER BE PLACED IN SAME TRENCH (NESC RANDOM SEPARATION) OR IN SEPARATE TRENCH AT A 36" DEPTH. ALWAYS PLACE THESE FACILITIES BELOW WHILE MAINTAINING A 36" HORIZONTAL SEPARATION AND A 12" VERTICAL SEPARATION FROM ANY RADIAL OR RING GROUND SYSTEMS IN, ON, OR ADJACENT TO THE RADIO SITE.
- POWER / TELEPHONE ENTRANCE:**  
THE BUILDING RING GROUND MEETS OR EXCEEDS THE NEC ARTICLE 250 UTILITY PROTECTION GROUND. THEREFORE, INFORM LOCAL INSPECTOR THAT ADDITIONAL GROUND RODS ARE NOT REQUIRED. ALL UTILITY GROUNDS MAY BE ATTACHED TO THE #2 SOLID COPPER WIRE DETAILED IN NOTE 10 BELOW. IF LOCAL POWER COMPANY CODES REQUIRE AN ADDITIONAL GROUND ROD, BOND THE TWO FACILITIES TOGETHER AT THIS LOCATION.
- UTILITY GROUNDING ELECTRODE BOND:**  
USE #2 SOLID COPPER WIRE PLACED WITHIN 3' OF UTILITY ENTRANCE AT DEMARCATION CABINET ENTRY PORT. ALL CONNECTIONS TO GROUND RING ARE TO BE CADWELDED. CONNECTION TO DEMARCATION CABINET ENTRY PORT TO BE WITH A "LISTED" CONNECTION. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS.
- RADIAL GROUND / FENCE BOND CROSSINGS:**  
WHEREVER PRACTICAL, TO REDUCE MAGNETIC COUPLING, THESE FACILITIES MUST CROSS AT A 90 DEGREE ANGLE WHILE MAINTAINING 18" VERTICAL SEPARATION.
- COAX GROUNDING KITS:**  
USE INDIVIDUAL "LISTED" GROUNDING KITS FOR EACH COAX CABLE. BOND TO TOWER BONDING BUSS BAR WITH #2 THHN SOLID COPPER WIRE WITH 2 HOLE CRIMPED CONNECTIONS.
- GROUNDING BUSS BAR KIT:**  
THE GROUNDING BUSS BAR AND ATTACHMENT KIT MUST BE DIRECTLY BOLTED TO THE TOWER STRUCTURE WITHOUT ELECTRICAL INSULATORS.
- ICE BRIDE BONDING:**  
THE ICE BRIDGE SHOULD NOT BE BONDED TO THE TOWER STRUCTURE. IT SHOULD ONLY BE BONDED AT ONE END TO THE ENTRANCE BULKHEAD (SINGLE POINT GROUND BAR). USE #2 THHN SOLID COPPER WIRE WITH 2 HOLE CRIMPED CONNECTIONS.
- RADIO BAY TO COAX BULKHEAD BOND:**  
THIS IS THE ONLY CABINET TO GROUND BOND WIRE ATTACHED TO THE RADIO BAY. USE #2 THHN SOLID COPPER WIRE WITH 2 HOLE CRIMPED CONNECTIONS OR A 3" COPPER STRAP.
- RADIO BAY ISOLATION KIT:**  
CONTACT RADIO EQUIPMENT SUPPLIER FOR SPECIFICATION AND INSTALLATION PROCEDURES.

T-Mobile



DATE: 10.9.20		
DRAWN BY: JRC (20108)		
CHECKED BY: Britton Knaphus		
REVISIONS		
DATE	DESCRIPTION	INT.
10.09.20	CD's (Prelim)	JRC
10.19.20	CD's (Final)	JRC
11.30.20	CD's (Final-R1)	JRC
12.4.20	CD's (Final R2)	JRC

SL01322D  
STRATFORD & GLENMARE  
1596 E. STRATFORD AVENUE  
SALT LAKE CITY, UT 84106

DRAWING TITLE: ELECTRIAL GROUNDING DETAILS / NOTES	DRAWING NO.: <b>E-2</b>
---	----------------------------