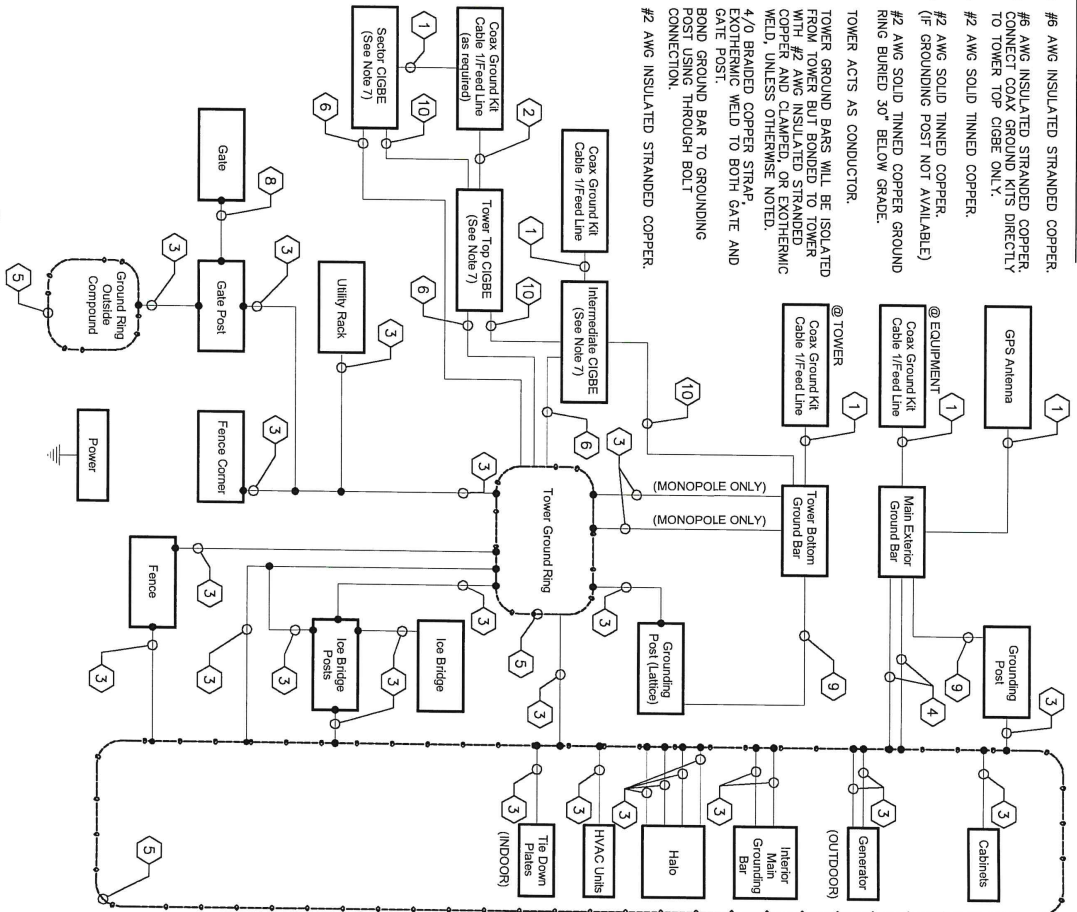


KEY NOTES - ELECTRICAL EQUIPMENT

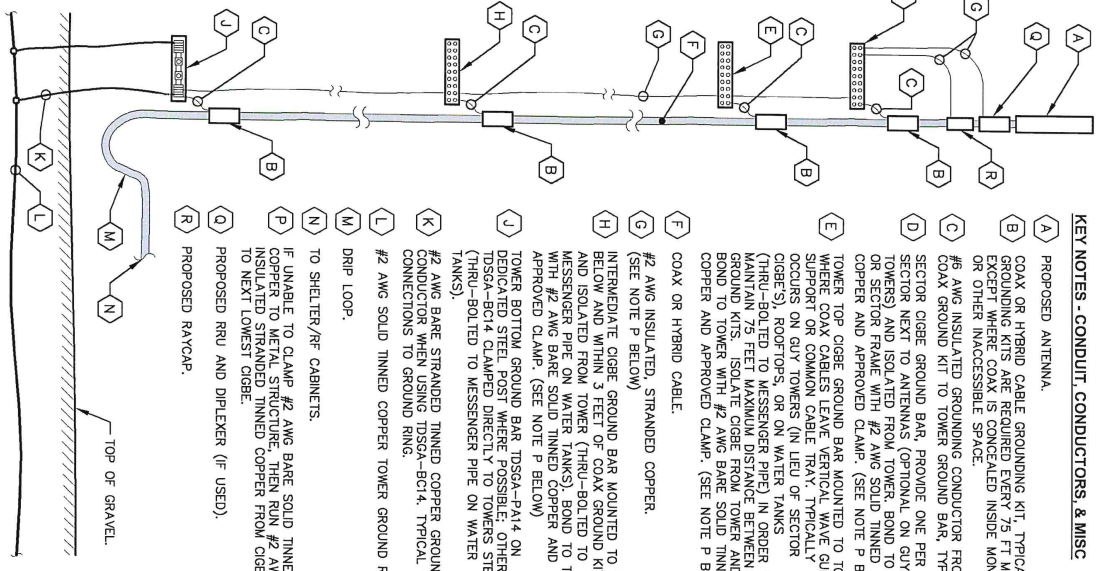
- 1 #6 AWG INSULATED STRANDED COPPER.
- 2 #6 AWG INSULATED STRANDED COPPER. CONNECT COAX GROUND KITS DIRECTLY TO TOWER TOP CIGBE ONLY.
- 3 #2 AWG SOLID TINNED COPPER.
- 4 #2 AWG SOLID TINNED COPPER. (IF GROUNDING POST NOT AVAILABLE)
- 5 #2 AWG SOLID TINNED COPPER GROUND RING BURIED 30" BELOW GRADE.
- 6 TOWER ACTS AS CONDUCTOR.
- 7 TOWER GROUND BARS WILL BE ISOLATED FROM TOWER BUT BOUNDED TO TOWER WITH #2 AWG INSULATED STRANDED COPPER AND CLAMPED, OR EXOTHERMIC WELD, UNLESS OTHERWISE NOTED.
- 8 4/0 BRAIDED COPPER STRAP. EXOTHERMIC WELD TO BOTH GATE AND GATE POST.
- 9 BOND GROUND BAR TO GROUNDING CONNECTION.
- 10 #2 AWG INSULATED STRANDED COPPER.



1 GROUNDING SINGLE LINE DIAGRAM
E10 NOT TO SCALE

KEY NOTES - CONDUIT, CONDUCTORS, & MISC

- A PROPOSED ANTENNA.
- B COAX OR HYBRID CABLE GROUNDING KIT. TYPICAL GROUNDING KITS ARE REQUIRED EVERY 75 FT MAXIMUM EXCEPT WHERE COAX IS CONCEALED INSIDE MONOPOLE OR OTHER INACCESSIBLE SPACE.
- C #6 AWG INSULATED GROUNDING CONDUCTOR FROM COAX GROUND KIT TO TOWER GROUND BAR.
- D SECTOR CIGBE GROUND BAR, PROVIDE ONE PER TOWER NEXT TO ANTENNAS (OPTIONAL ON GATED TOWERS). BARE WELD FROM CENTER BOUND TO TOWER OR VERTICAL FROM ANTENNA TO TOWER.
- E TOWER TOP CIGBE GROUND BAR MOUNTED TO TOWER WHERE COAX CABLES LEAVE VERTICAL WAVE GUIDE OCCURS ON GATED TOWERS (IN LEFT OF SECTOR CIGBE'S). ROOF TOPS, OR ON WATER TANKS (THRU-BOLTED TO MESSANGER PIPE) IN ORDER TO MAINTAIN 75 FEET MAXIMUM DISTANCE BETWEEN COAX GROUND KITS. ISOLATE CIGBE FROM TOWER AND BOND TO TOWER WITH #2 AWG BARE SOLID TINNED COPPER AND APPROVED CLAMP. (SEE NOTE P BELOW)
- F COAX OR HYBRID CABLE.
- G #2 AWG INSULATED, STRANDED COPPER. (SEE NOTE P BELOW)
- H INTERMEDIATE CIGBE GROUND BAR MOUNTED TO TOWER BELOW AND WITHIN 3 FEET OF COAX GROUND KITS AND ISOLATED FROM WATER TANKS. BOND TO MESSANGER PIPE ON WATER TANKS. BOND TO TOWER WITH #2 AWG BARE SOLID TINNED COPPER AND APPROVED CLAMP. (SEE NOTE P BELOW)
- J TOWER BOTTOM GROUND BAR TDSGA-P14 ON DEDICATED STEEL POST WHERE POSSIBLE. OTHERWISE TDSGA-BC14 CLAMPED DIRECTLY TO TOWERS STEEL (THRU-BOLTED TO MESSANGER PIPE ON WATER TANKS).
- K #2 AWG BARE STRANDED TINNED COPPER GROUNDING CONDUCTOR WHEN USING TDSGA-BC14. TYPICAL TWO CONNECTIONS TO GROUND RING.
- L #2 AWG SOLID TINNED COPPER TOWER GROUND RING.
- M DRIP LOOP.
- N TO SHELTER/RF CABINETS.
- P IF UNABLE TO CLAMP #2 AWG BARE SOLID TINNED COPPER TO METAL STRUCTURE, THEN RUN #2 AWG INSULATED STRANDED TINNED COPPER FROM CIGBE TO NEXT LOWEST CIGBE.
- Q PROPOSED RRU AND DIPLEXER (IF USED).
- R PROPOSED RAYCAP.



2 COAX-TOWER GROUNDING SCHEMATIC
E10 NOT TO SCALE

verizon
1000 3D ALUMINUM TOWER CONSTRUCTION
SHEETS 11/15/2018

PROJECT INFORMATION:
SITE NAME: OLD STATE ROAD
SITE NO.: 50291
FUZE PROJECT#: 15525785
6000 HOPE CIRCLE
NAYLOR, GA 31641
LOWMEYER COUNTY

Kimley-Horn
11720 AMERS PARK DRIVE, SUITE 600
ALPHARETTA, GA 30009
WWW.KH-CORP.COM

PLANS PREPARED BY:

NEW DATE:	ISSUED FOR:	BY:
0	06/16/20	CONSTRUCTION COH
1	05/12/20	PRELIMINARY COH
2		
3		
4		
5		
6		
7		

LICENSERS:

CHA PROJECT NUMBER: 013569094
DRAWN BY: WCE
CHECKED BY: WCE
SHEET TITLE: GROUNDING SINGLE LINE DIAGRAM
SHEET NUMBER: E10

Kimley-Horn
NORTHWEST PROFESSIONAL ENGINEERS
CORBIN C HAROLD
11/21/20