

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

2015 NFPA 70 2015 MECHANICAL CODE 2015 PLUMBING CODE 2015 FIRE CODE 2015 ENERGY CODE

THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2018 FLORIDA BUILDING CODE. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANTARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

AT&T SITE NUMBER: PM236 FA#: 10096114

WEST LAKE CITY

299 NORTHWEST BROWN RD. LAKE CITY, FL 32055 **GENERATOR PROJECT**

LOCATION MAP

LOCAL MAP

SITE INFORMATION

APPLICANT: AT&T TOWER ASSET GROUP

575 MOROSGO DR. ATLANTA, GA 30324-3300

CROWN CASTLE 6420 CONGRESS AVE., STE 2000 BOCA RATON, FL 33487 TOWER OWNER:

STRUCTURE TYPE: MONOPOLE

ASSESSORS PARCEL NUMBER: 33-3S-16-02435-001

LATITUDE: 30° 11' 25.9" N

LONGITUDE: 82° 42' 56.4" W

NAD-83 LAT/LONG TYPE:

PROPOSED PROJECT AREA: NO INCREASE IN S.F.

TYPE OF CONSTRUCTION: TYPF V-R

OCCUPANCY GROUP:

COLUMBIA COUNTY

PROJECT TEAM

CLIENT REPRESENTATIVE (NATIONAL):
MASTEC NETWORK SOLUTIONS
3443 AIRPORT RD
SACRAMENTO, CA 95834
CONTACT: CLEON MITCHELL
EMAIL: Cleon.Mitchell@mastec.com

ENGINEERING (NATIONAL):
MASTEC NETWORK SOLUTIONS
507 AIRPORT BLVD., STE. 111
MORRISVILLE, NC 27560
CONTACT: RAPHAEL MOHAMED PH: (919) 674-5895 EMAIL: Raphael.Mohamed@mastec.com

SITE ACQUISITION (NATIONAL):
MASTEC NETWORK SOLUTIONS
2189 PARKWAY LAKE DR.

CONTACT: CLEON MITCHELL

CONSTRUCTION:
MASTEC NETWORK SOLUTIONS
507 AIRPORT BLVD., STE. 111
MORRISVILLE, NC 27560
CONTACT: SEAN SHEEHAN

SCOPING ENGINEER (NATIONAL): MASTEC NETWORK SOLUTIONS 2189 PARKWAY LAKE DR.

HOOVER, AL 35244
CONTACT: DAVID ROGERS
EMAIL: David.Rogers@mastec.com

IRECTIONS FROM: JACKSONVILLE INTERNATIONAL AIRPORT . HEAD SOUTHEAST ON DIXIE CLIPPER DR

TAKE THE INTERNATIONAL AIRPORT BLVD RAMP TO SERVICE RD/I-295/I-10
TURN RIGHT ONTO INTERNATIONAL AIRPORT BLVD (SIGNS FOR I-295/I-10)

VICINITY MAP

- CONTINUE ONTO DUVAL RD
 MERGE ONTO I-295 VIA THE RAMP TO I-10
 TAKE EXIT 21B TO MERGE ONTO I-10 W TOWARD LAKE CITY

7. TAKE EXIT 301 FOR US-41 TOWARD LAKE CITY
8. TURN RIGHT ONTO US-41 S
9. TURN RIGHT ONTO NW BASCOM NORRIS DR
10. TURN RIGHT ONTO NW REAL TERRACE
11. TURN RIGHT ONTO US-90 W/W US HWY 90

12. TURN RIGHT ONTO NW BROWN RD DESTINATION WILL BE ON THE RIGHT

DRIVING DIRECTIONS

PROJECT DESCRIPTION

AT&T MOBILITY PROPOSES TO MODIFY AN EXISTING UNMANNED WIRELESS COMMUNICATIONS FACILITY. THIS MODIFICATION WILL CONSIST OF THE FOLLOWING:

- INSTALL (1) 30kW GENERAC STANDBY DIESEL GENERATOR (GENERAC SD030) WITH BASE FUEL TANK ON A CONCRETE PAD
 INSTALL (1) 200A ATS
 INSTALL ATS ALARM RELAY

DRAWING INDEX

SHEET NO.	SHELL HILL	
T-1	TITLE SHEET	
GN-1	GENERAL NOTES	
A-0	SITE PLAN	
A-1	GENERATOR PAD DETAILS	
A-1.1	GENERATOR PAD DETAILS	
E-1	ELECTRICAL PLAN	
E-2	EQUIPMENT & CONDUIT DETAILS	
E-3	ALARM DETAILS & ONE LINE DIAGRAM	
G-1	GROUNDING DETAILS	

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS & AUTHORIZE THE SUBCONTRACTOR

LOCAL BUILDING DEPARTMENT & MAY IMPOSE CHANGES OR MODIFICATIONS.				
AT&T	DATE:			
SITE ACQUISITION	DATE:			
CONCEDUCTION MANAGED	DATE			

SCALE

THE DRAWING SCALES SHOWN IN THIS SET REPRESENT THE CORRECT SCALE ONLY WHEN THESE DRAWINGS ARE PRINTED IN A 11"X17" OR 24"X36" FORMAT



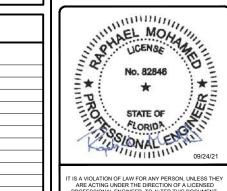




507 AIRPORT BLVD., STE. 111 MORRISVILLE, NC 27560

FA CODE:	FA # 10096114
DRAWN BY:	EL
JOB#:	12345

0	09/24/21	FOR REVIEW
REV	DATE	DESCRIPTION



ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PM236

WEST LAKE CITY

10096114

SHEET TITLE

TITLE SHEET

T-1

GENERAL NOTES:

- 1. ALL SUB-CONTRACTORS ARE TO SIGN INTO THE LL AND AT&T NOC'S ALONG WITH BEFORE THE START OF WORK
 AND END OF WORK EACH DAY. THE AT&T LOGBOOK MUST ALSO BE SIGNED EACH DAY ON SITE.
 2. ALL ORIGINAL PERMITS MUST BE POSTED ON SITE BEFORE WORK CAN COMMENCE. ALL PERMITS ARE REQUIRED TO BE IN A NOTICEABLE LOCATION
 FOR REVIEW BY THE PERMITING JURISDICTION.
 3. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
- CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION

- CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
 CARRIER: AT&T
 TOWER OWNER: CROWN CASTLE
 THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR
 CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN
 EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS
- EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANDEOUS WORK NOT EXPLICITLY SHOWN. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES, THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.

 NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS.

 WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FUTTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.

 SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIESS AND/OR CONFILICTS WITH THE CONSTRUCTION DRAWINGS THE

- MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.

 PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF MASTEC NETWORK SOLUTIONS.
- THE ATTENTION OF MASTEC NETWORK SOLUTIONS.
 ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND CORDINANCES.
 CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF
 ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK, ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL
 AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
 UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE
 ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 11. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- STATED OTHERWISE.

 12. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.

 13. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.

 14. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAYEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE
- REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC. 1. CONTRACTOR'S HALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

 16. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL (FOR CAST IN PLACE OPTION):

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
 UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (fc) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90'f AT TIME OF PLACEMENT.

 CONCRETE EXPOSED TO FREEZE—THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER—TO—CEMENT
- RATIO (W/C) OF 0.45
- ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:

#4 BARS AND SMALLER BARS AND LARGER

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS: CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.......

CONCRETE EXPOSED TO EARTH OR WEATHER:

#6 BARS AND LARGER... #5 BARS AND SMALLER....

CONCRETE NOT EXPOSED TO EARTH OR WEATHER: SLAB AND WALLS...

BEAMS AND COLUMNS. 7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

GREENFIELD GROUNDING NOTES:

- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC. THE CONTRACTOR SHALL PERFORM LEE FALL-OF-POTENTAL RESISTANCE TO EARTH TESTING (PER LEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE

- THE CUNITACION SMALL PERFORM IEEL FALL-OF LYCHING ROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.

 THE CONTRACTOR IS RESPONSIBLE FOR PROPERTY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.

 METAL CADDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

 METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO
- BTS EQUIPMENT.

 EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.

 CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.

 ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.

 ALLUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

 USE OF 90' BENDS IN THE PROTECTION GROUNDING CONNECTIONS SHALL BE LAVOIDED WHEN 45' BENDS CAN BE ADEQUATELY SUPPORTED.

 EXCHIFERING WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

 ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.

 COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.

 ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.

- 14. ICE BRIDGE BONDING CONDUCTINGS SHALL BE EXCHERMICALLY BONDLED OR BULLED OF BULLED OF BULLED AND THE IOWER GROUND CONNECTIONS.

 15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTING EGEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

 16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.

 17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

 18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.

 19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTINING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODD) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- 20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 1/2" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).

 21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/O COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY)

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL
- CODES/ORDINANCES.
 CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.

 ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL
- CODE.
 ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING
- 5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS
- SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP FIGERS
- SHARP EDGES.
 ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE
- 9. ALL FOWER AND EQUIPMENT GROUND WIRING IN TOBING OR CONDUIT SHALL BE SINGLE
 COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW,
 XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
 SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE
 COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW,
 XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

 11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE
- POWER AND CONTROL WIRING IN TEXABLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
 POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN-2, THHW, THHW-2, THHW, CR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
 ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP—STYLE, COMPRESSION WIRE
- LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75' C (90' C IF AVAILABLE).

 14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN
- ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

 15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID
- METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

 16. ELECTRICAL METALLIC TUBING (EMT) OR METAL—CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

 17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL
- ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.

 18. LIQUID—TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID—TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

 19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION—TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

- 20. CABINETS. BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN
- ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.

 21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
- 22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR
- EQUAL).
 23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e., POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLIET BODIES. CONDUIT SHALL BE INSTALLED IN A NEXT AND WORKMANLIKE MANNER. PARALLEL AND PERFENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOYER BY CALVANIZED MAINTEN HE FISHED FOR INSIDE AMD CALVANIZED.
- CONCRETE, PUSITER OR DIT FROM ENTERING. CONDOINS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.

 EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY—COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR
- EXTERIOR LOCATIONS.

 METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP
- OR BETTER) FOR EXTERIOR LOCATIONS.

 26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR
- LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
 THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE
- CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

 28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
- 29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "AT&T".
- 30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

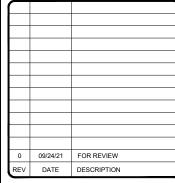


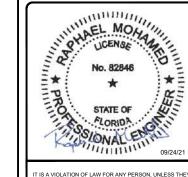


507 AIRPORT BLVD., STE. 111

MORRISVILLE, NC 27560

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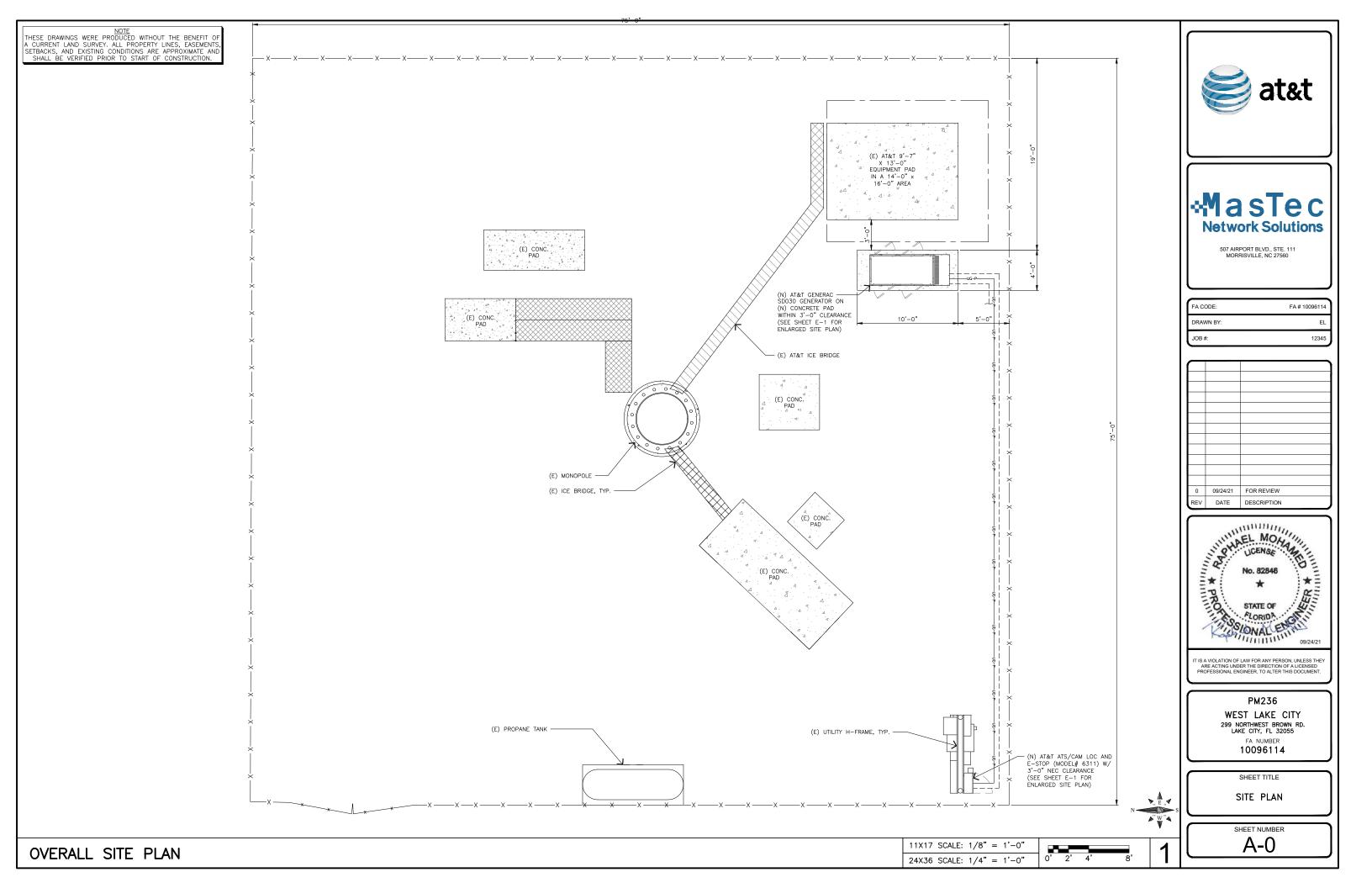
WEST LAKE CITY 299 NORTHWEST BROWN RD. LAKE CITY, FL 32055

> FA NUMBER 10096114

SHEET TITLE

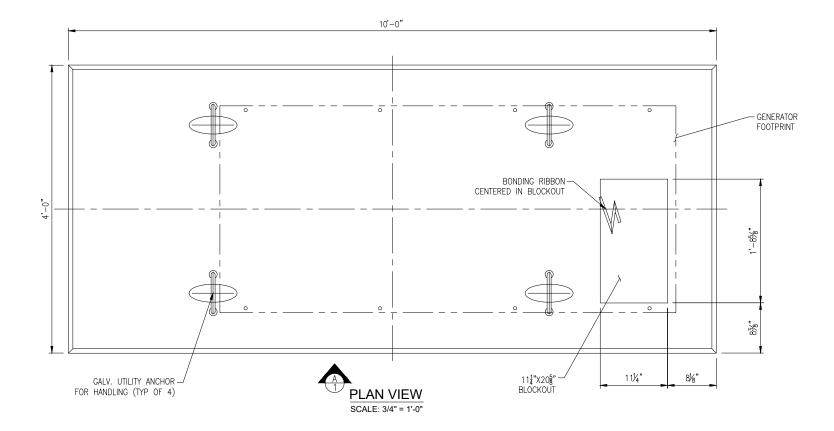
GENERAL NOTES

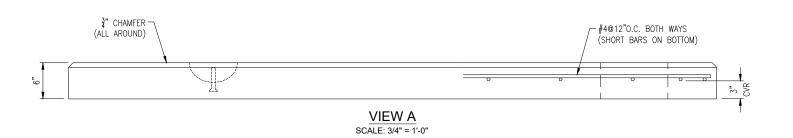
GN-1



GENERAL NOTES

- 1. CONCRETE: 28 DAY COMPRESSIVE STRENGTH F'c = 5,000 PSI (MIN).
- 2. REINFORCING: ASTM A-615, GRADE 60.
- 3. SLAB DESIGNED BY OTHERS PER CONTRACT DRAWING #C-2.
- 4. SLAB SHALL BE SUPPORTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS (I.E. LEVEL AND COMPACTED BEARING SURFACE).
- 5. ELECTRICAL STUB-UP COORDINATE SIZE & PLACEMENT W/ MANUFACTURER DRAWINGS.





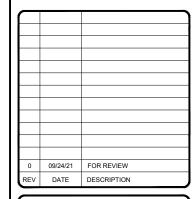
WEIGHT				
SECTION	WEIGHT (lbs.)	CONCRETE (CY)		
6" THK PAD	2,600	0.64		

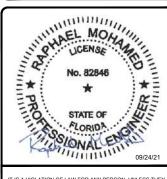




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LAKE CITY, FL 32055
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SHEET TITLE

GENERATOR PAD

DETAILS

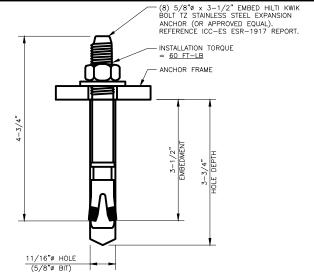
SHEET NUMBER

A-1

GENERAL NOTES

- CONCRETE SHALL REACH A MINIMUM COMPRESSIVE STRENGTH OF 3,0000 PSI IN 28 DAYS FOR FOUNDATIONS, SLABS, AND CONDUIT ENCASEMENTS. CONCRETE SHALL HAVE A 4" NOMINAL SLUMP AND 4.5-6.5% AIR CONTENT. COMPRESSIVE STRENGTH TEST TO BE PERFORMED ON CONCRETE USED FOR FOUNDATION ONLY.
- ALL REINFORCING STEEL SHALL BE ASTM A-615, GRADE 60 DEFORMED BARS.
- 3. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 318).

 4. ALL BAR SPLICES SHALL BE CLASS "B" TENSION SPLICES.
- CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH A 3/4" X 45° CHAMFER.
- 6. FINISHED SLAB TO BE LEVEL ±1/4".
- 7. FLEXIBLE UTILITY CONNECTIONS SHOULD BE USED AT UNDERGROUND TO GENERATOR INTERACTIONS.
- EQUIPMENT PAD DESIGN BASED ON AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF. EQUIPMENT FOUNDATIONS BEARING ON CLAY SOILS SHALL HAVE A MAXIMUM SOIL PLASTICITY INDEX OF 27.
- 9. INSTALL EQUIPMENT ANCHORAGE PER MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- 10. THE ATTACHMENT OF THE GENERATOR TO THE FOUNDATION SLAB AND THE FOUNDATION ITSELF ARE DESIGNED TO RESIST A 3 SEC. GUST WIND SPEED OF 143 MPH (ULTIMATE WIND SPEED).
- 11. ELECTRICAL STUB-UP AREA WILL BE DETERMINED BY GENERATOR ORIENTATION.



MasTec **Network Solutions**

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	RFV	DATE	DESCRIPTION



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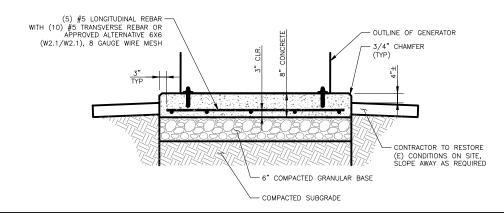
SHEET TITLE

GENERATOR PAD DETAILS

A-1.1

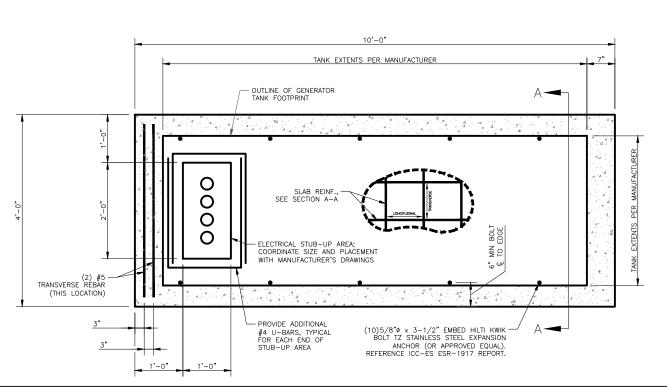
TYPICAL ANCHOR DETAIL

INSTALLER NOTE:
BASE FLOOD ELEVATION (BFE) NOT
PROVIDED. CONTRACTOR TO ENSURE
TOC OF GENERATOR PAD MATCHES OR
EXCEEDS TOC OF EXISTING AT&T EQUIPMENT PAD/FOUNDATION.



GENERATOR PAD DETAIL - SECTION A-A

INSTALLER NOTE: CONDUIT STUB-UP LOCATIONS SHALL BE COORDINATED ON SITE WITH CONSTRUCTION MANAGER, PRIOR TO INSTALLING CONCRETE PAD



CAST-IN-PLACE GENERATOR PAD DETAIL

SCALE: NONE

SCALE:

NONE

SCALE:

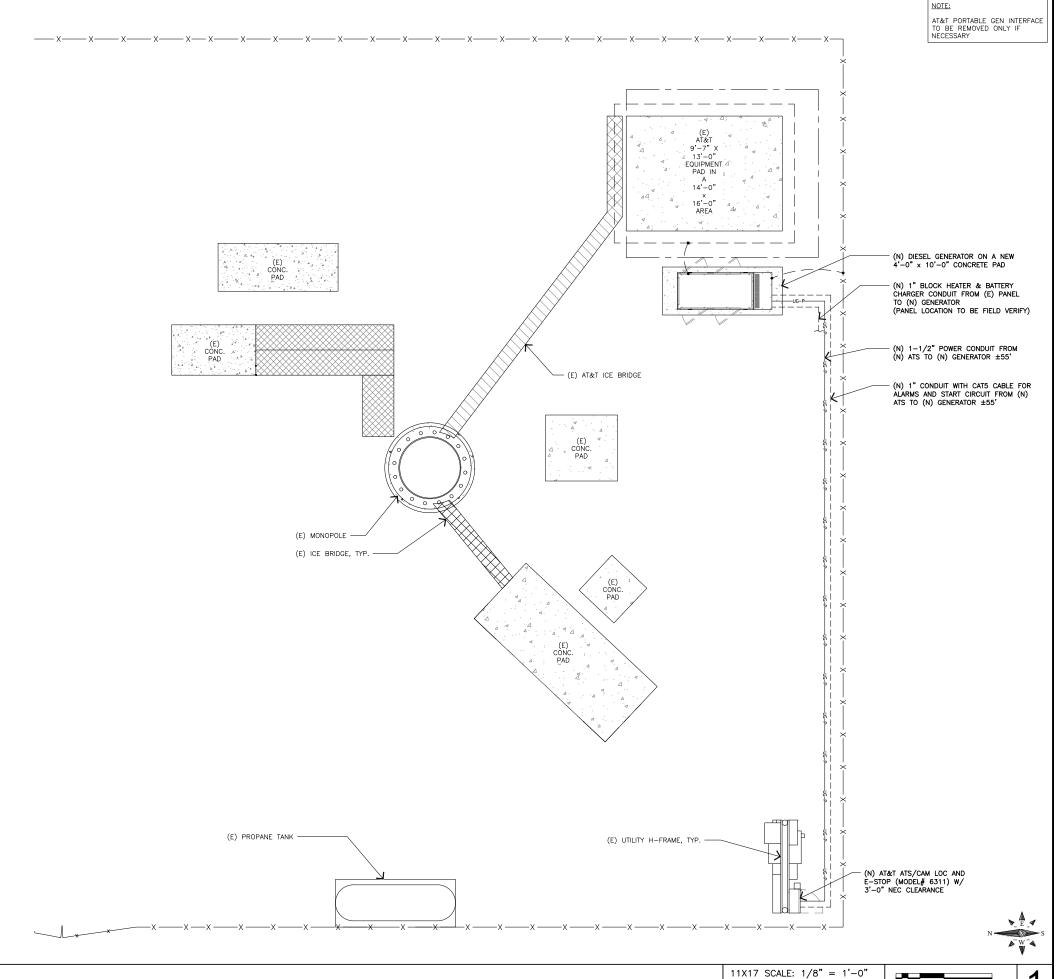
NONE

NOTES AND SPECIFICATIONS

- 1. ALL ELECTRICAL WORK SHALL COMPLY WITH NEC, STATE, AND LOCAL CODES.
- 2. CONTRACTOR SHALL OBTAIN OWNER/TENANT SPECIFICATIONS AND REVIEW FOR ADDITIONAL DETAILS AND REQUIREMENTS THAT MAY NOT BE SHOWN IN THESE DRAWINGS. CONTRACTOR SHALL COMPLY WITH ANY ADDITIONAL OWNER/TENANT SPECIFICATIONS AND REQUIREMENTS.
- 3. CONTRACTOR SHALL COORDINATE WITH THE ELECTRIC UTILITY FOR THE EXACT TRANSFORMER LOCATION, METERING REQUIREMENTS, AND SERVICE ROUTING. CONTRACTOR SHALL COORDINATE WITH THE TELEPHONE UTILITY FOR THE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING.
- 4. PRIOR TO PURCHASING EQUIPMENT, THE CONTRACTOR SHALL CONTACT THE ELECTRIC COMPANY AND OBTAIN IN WRITING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE UTILITY SERVICE POINT. THE CONTRACTOR SHALL ENSURE ALL ELECTRICAL EQUIPMENT, CIRCUIT BREAKERS, DISCONNECTS, FUSES, AND PANELBOARDS HAVE A FAULT CURRENT INTERRUPTING RATING GREATER THAN THE AVAILABLE FAULT CURRENT. IN NO CASE SHALL THE FAULT CURRENT INTERRUPTING RATING BE LESS THAN 10,000 AMPS.
- 5. CONTRACTOR TO PROVIDE 2-200 LB TEST POLYETHYLENE PULL CORDS SECURELY FASTENED AT EACH END OF POWER AND TELCO CONDUIT. PROVIDE CAPS ON END OF UNUSED CONDUIT.
- 6. CONTRACTOR TO PROVIDE A REBAR MARKER WITH AT LEAST 2 FEET EXPOSED ABOVE GRADE AND PAINTED BRIGHT ORANGE TO INDICATE LOCATION OF CONDUIT CAPPED BELOW GRADE.
- 7. PRIOR TO TRENCHING CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR AT CONTRACTOR'S EXPENSE ANY DAMAGE TO EXISTING UTILITIES.
- CONTRACTOR TO VERIFY EXACT ROUTING OF POWER AND TELCO CONDUIT WITH LOCAL UTILITIES AND OWNER/TENANT. ENSURE ALL CONDUIT STUB-UPS ACCOMMODATE EQUIPMENT REQUIREMENTS.
- 9. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC UNLESS NOTED OTHERWISE. USE SCHEDULE 80 PVC UNDER ROADS.
- 10. CONDUIT RUNS SHALL HAVE A CONTINUOUS SLOPE DOWNWARDS AND AWAY FROM THE EQUIPMENT TO ALLOW WATER TO FLOW AWAY FROM THE EQUIPMENT AND SHELITER. EXCAVATE TRENCHES ALONG STRAIGHT LINES PRIOR TO INSTALLING CONDUIT TO ACCOMMODATE ADJUSTING THE ELEVATION, AS NEEDED.
- 11. CONDUIT ENTERING EQUIPMENT SHALL BE SEALED WITH A SEALANT THAT IS IDENTIFIED FOR USE WITH THE CABLE/CONDUCTOR INSULATION, SHIELDING, ETC.
- 12. THE OWNER SHALL FURNISH AND THE CONTRACTOR SHALL INSTALL ADDITIONAL SIGNAGE TO BE LOCATED AT THE COMPOUND FENCE. CONTRACTOR SHALL COORDINATE WITH OWNER/TENANT CONSTRUCTION MANAGER FOR PLACEMENT OF SIGNAGE.
- 13. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO THE LANDSCAPING AREA.
- 14. CONTRACTOR TO ENSURE A MIN. 3' CLEARANCE IN FRONT OF ELECTRICAL PANELS PER NEC.
- 15. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL TESTED BY AN APPROVED THIRD PARTY TESTING AGENCY.

CONDUCTOR COLOR CODE				
SYSTEM	CONDUCTOR	COLOR		
	A PHASE	BLACK		
100 (010) 11	B PHASE	RED		
120/240V, 1ø	NEUTRAL	WHITE		
	GROUND	GREEN		
	A PHASE	BLACK		
	B PHASE	RED		
120/208V, 3ø	C PHASE	BLUE		
	NEUTRAL	WHITE		
	GROUND	GREEN		
	A PHASE	BROWN		
	B PHASE	ORANGE OR PURPLE		
277/480V, 3ø	C PHASE	YELLOW		
	NEUTRAL	GREY		
	GROUND	GREEN		
DC VOLTAGE	POS (+)	RED**		
DC VOLIAGE	NEG (-)	BLACK**		
	* SEE NEC 210.5(C)(1) AND (2) ** POLARITY MARKED AT TERMINATION			

OVERALL SITE PLAN







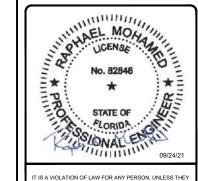
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299 NORTHWEST BROWN RD.
LAKE CITY, FL 32055

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SHEET TITLE

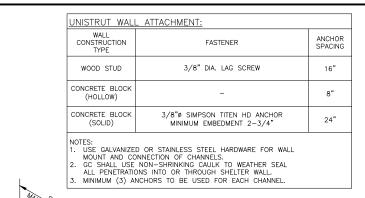
ELECTRICAL & LTE SCHEMATIC DIAGRAM

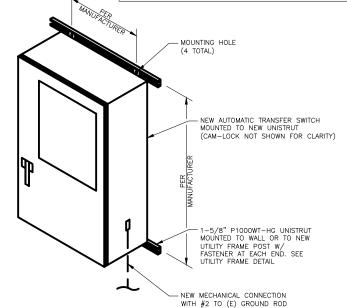
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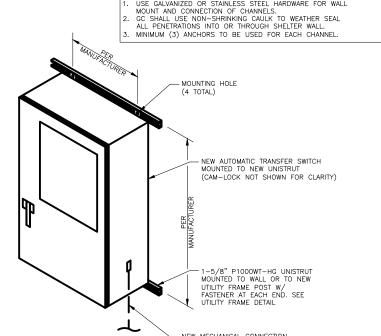
E-1

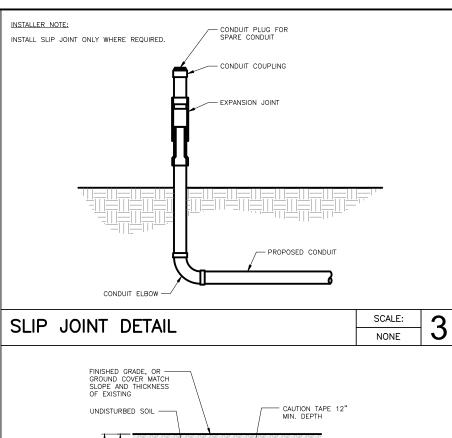
24X36 SCALE: 1/4" = 1'-0"

#'





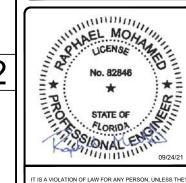






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WEST LAKE CITY 299 NORTHWEST BROWN RD. LAKE CITY, FL 32055 FA NUMBER

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SHEET TITLE

EQUIPMENT & CONDUIT DETAILS

> SHEET NUMBER E-2

U.L. SYSTEM NO. C-AJ-1150

CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902

F RATING = 3 HR

T RATING = 0 HR

- A. FLOOR OR WALL ASSEMBLY: MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF)
 CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAMETER OF OPENING
 IS 4". (SEE CONCRETE BLOCKS CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- B. THROUGH PENETRATIONS: ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 0". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:

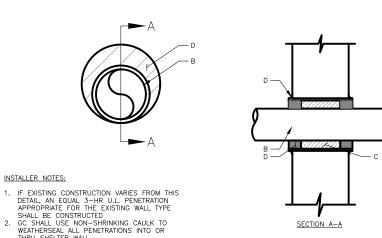
 - a. STEEL PIPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE
 b. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
 c. CONDUIT NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3-1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- C. PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- D. FILL, VOID, OR CAVITY MATERIAL*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W-RATING APPLIES ONLY WHEN CP601S OR CP604 SEALANT IS USED.

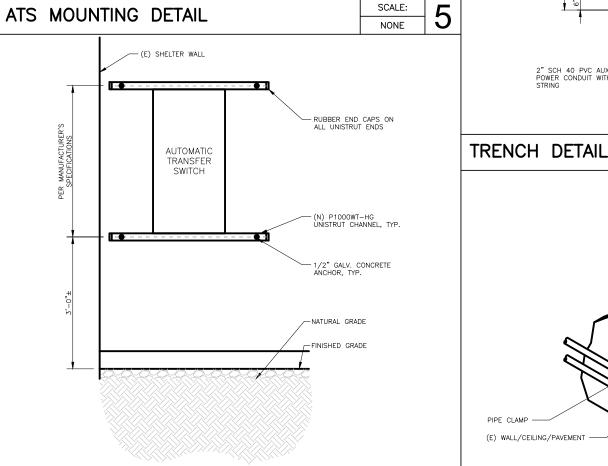
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR FS-ONE SEALANT.

* BEARING THE UL CLASSIFICATION MARK

INSTALLER NOTES:

NOT USED





SECTION A-A

OUTER WALL PENETRATION DETAIL

NONE

SCALE:

NONE

UTILITY FRAME ELEVATION

NONE

CONDUIT WALL MOUNT DETAIL

2" SCH 40 PVC AUXILIARY -POWER CONDUIT WITH PULL

CONDUIT (TYP)

PIPE CLAMP

SCALE: NONE

COMPACTED BACKFILL WITH SATISFACTORY NATIVE OR IMPORTED SOIL TO 95% PROCTOR

COMPACTED SAND

" SCH 40 POWER CONDUITS WITH PULL STRING

CONDUIT WITH PULL STRING

" SCH 40 PVC ALARM

SCALE:

NONE

(E) WALL/CEILING/PAVEMENT

VERTICAL UNISTRUT P1000WT-HG.

REQUIRED LENGTH BASED ON QUANTITY OF CONDUIT TO BE MOUNTED. INSTALL AT 5'-0" O.C. MAX W/ FASTENER AT EACH END.

CONDUIT (TYP)

(SEE NOTE 1)

PIPE CLAMP

(E) WALL/CEILING/PAVEMENT

GENERATOR ALARM IDENTIFICATION CHART			
NAME	DESCRIPTION		
CF	CRITICAL FAILURE		
FL	FUEL LEAK OVERFILL		
GR	GENERATOR RUNNING		
FL	LOW FUEL		
MAF	MAJOR FAULT		
MF	MINOR FAULT		
FL	GEN FUEL LEAK TANK WHT/SLATE		
NOTE: CONTRACTOR TO LABEL WIRES W/ P-TOUCH OR SIMILAR			

LABELS ONLY. ABSOLUTELY NO HANDWRITTEN LABELS.

ALARM REQUIREMENTS
AT&T REQUIRES FOUR ALARMS CONFIRMED WORKING: NORMALLY
CLOSED VOLT—FREE CONTACT FOR:

1. GENERATOR RUN
2. GENERATOR FAIL
3. LOW FUEL
4. FUEL LEAK
COLOR_CODE
GENERATOR:
A CABLE _ FOUR 12—PAIR DIFFCT BURIAL

- A. CABLE FOUR 12—PAIR DIRECT BURIAL
 B. COLOR CODE
- COLOR CODE

 1. GENERATOR RUN ALARM PORT #14 (ORANGE & WHITE)

 2. GENERATOR FAIL ALARM PORT #15 (BLUE & WHITE)

 3. LOW FUEL ALARM (PORT P32) ON I/O BOARD (GREEN & WHITE)

 4. FUEL LEAD P32 ON I/O BOARD) (BROWN & WHITE)
- AUTOMATIC TRANSFER SWITCH (IF APPLICABLE)
 A. CABLE cat5e
 B. COLOR CODE
- 1. COMMERCIAL POWER FAIL IF REQUIRED (BLUE WHITE)
- 2. TRANSFER SWITCH POSITION (BROWN WHITE)
 CAM LOCK ALARM
 A. CABLE cat5e
 B. COLOR CODE

- 1. PORTABLE GENERATOR RUNNING (ORANGE WHITE) (IF

NOTES:

- ALL NEW CONDUCTORS TO BE INSTALLED SHALL BE COPPER. ALL CONDUCTORS SHALL BE THHW, THWN, THWN-2, XHHW, OR XHHW-2 UNLESS NOTED OTHERWISE.
- CONTRACTOR IS TO FIELD VERIFY ALL EXISTING ITEMS SHOWN ON THE ELECTRICAL ONE—LINE DIAGRAM AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 3. ALL GROUNDING AND BONDING PER THE NEC.
- 4. INSTALL ATS ALARM RELAY

INSTALLER NOTE:

CONTRACTOR TO VERIFY EXISTING LOAD PANEL AND INSTALL NEW 20A BREAKER FOR BLOCK HEATER AND NEW 20A BREAKER FOR BATTERY CHARGER (IF REQUIRED).

INSTALLER NOTES:

- 1. THE GENERATOR SIZE HAS BEEN DETERMINED BY AT&T BASED ON AN INTERNAL LOAD ANALYSIS OF THEIR EQUIPMENT. THE GENERATOR SIZE WAS PROVIDED AS PART OF THE SCOPING ANALYSIS. AT&T SHALL BE RESPONSIBL-FOR ENSURING THAT THEIR SYSTEM CONFIGURATION DOES NOT EXCEED THE MANUFACTURER POWER RATING OF THE SPECIFIED GENERATOR.

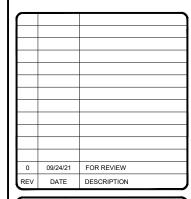
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING A SPOT READING OF THE PANEL AT PEAK OPERATING HOURS TO VERIFY THE AT&T PANEL SCHEDULE CALCULATIONS ARE NOT EXCEEDED. IN THE EVENT THE READING EXCEEDS THE CALCULATED PANEL SCHEDULE LOADS, RECORD THE READING AND CONSULT AT&T ENGINEERING MANAGER PRIOR TO PROCEEDING WITH GENERATOR INSTALLATION.





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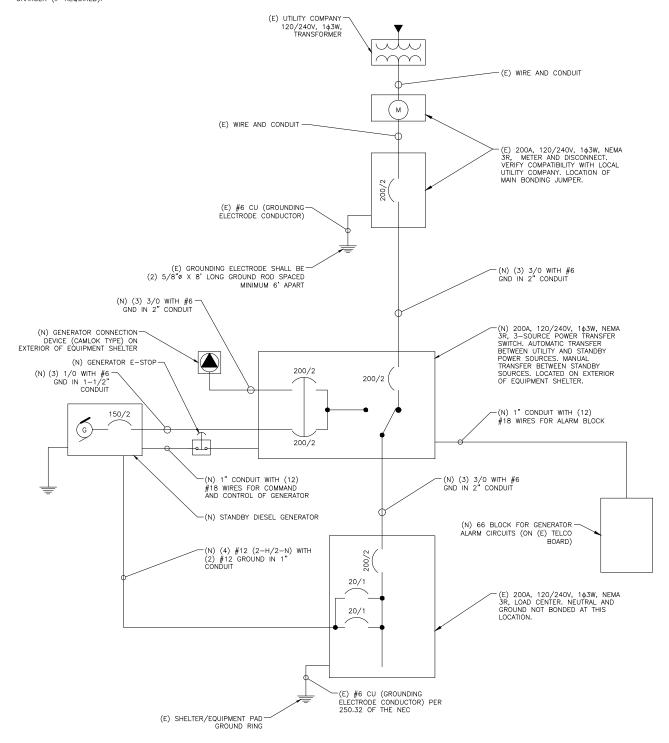
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10096114

SHEET TITLE

ALARM DETAILS & ONE LINE DIAGRAM

> SHEET NUMBER E-3

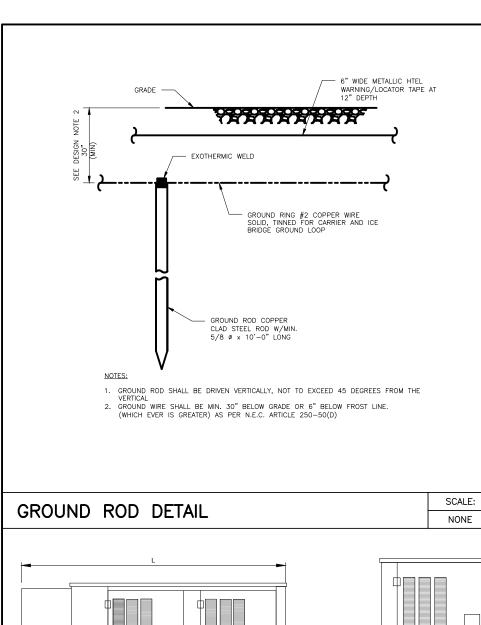


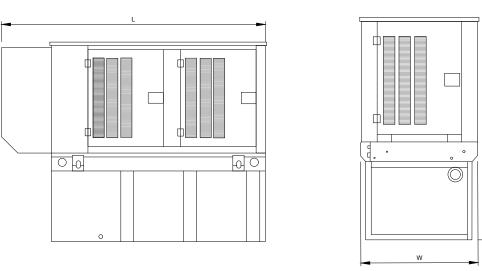
SCALE: NONE

ONE LINE DIAGRAM

ALARM DETAILS

SCALE: NONE





WEATHER PROTECTED ENCLOSURE

Run Time	Usable Capacity - Gal (L)	L x W x H - in (mm)	Steel Weight	Steel Weight Maximum		Aluminum Weight Maximum
- Hours	- Gai (L)		- lbs (kg)	- lbs (kg)	- lbs (kg)	- lbs (kg)

94.8 (2,409) x 38.0 (965) x 49.5 (1,258) 2,158 (979) 2,286 (1,037) 1,935 (878) 2,965 (1,345) 12 54 (204) 94.8 (2,409) x 38.0 (965) x 62.5 (1,588) 2,638 (1,197) 2,766 (1,255) 2,415 (1,096) 3,445 (1,563)

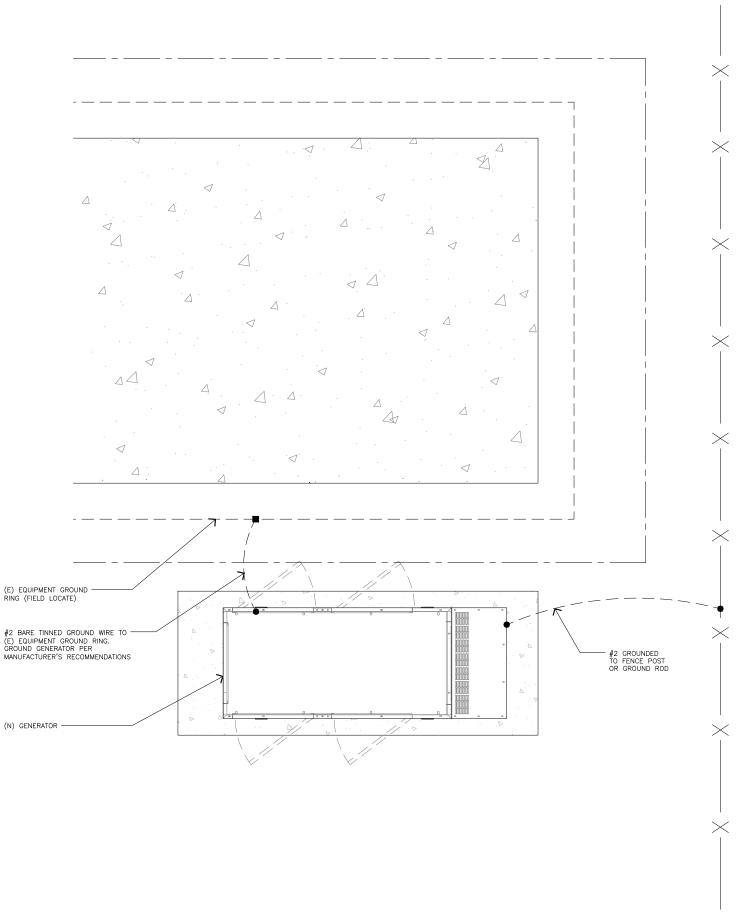
30 132 (499) 94.8 (2,409) x 38.0 (965) x 74.5 (1,893) 2,868 (1,301) 2,996 (1,359) 2,645 (1,200) 3,675 (1,667)

44 190 (719) 94.8 (2,409) x 38.0 (965) x 86.5 (2,198) 3,077 (1,396) 3,205 (1,454) 2,854 (1,295) 3,884 (1,762)

49 211 (799) 106.0 (2,692) x 38.0 (965) x 99.0 (2,516) 4,316 (1,958) 4,572 (2,074) 3,870 (1,755) 5,930 (2,690)

69 300 (1,136) 94.8 (2,409) x 38.0 (965) x 90.0 (2,287) 3,140 (1,424) 3,268 (1,482) 2,917 (1,323) 3,947 (1,790)









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JOB #:	12345





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10096114

SHEET TITLE

GROUNDING DETAILS

G-1

GENERATOR SPECIFICATION DETAIL

NONE