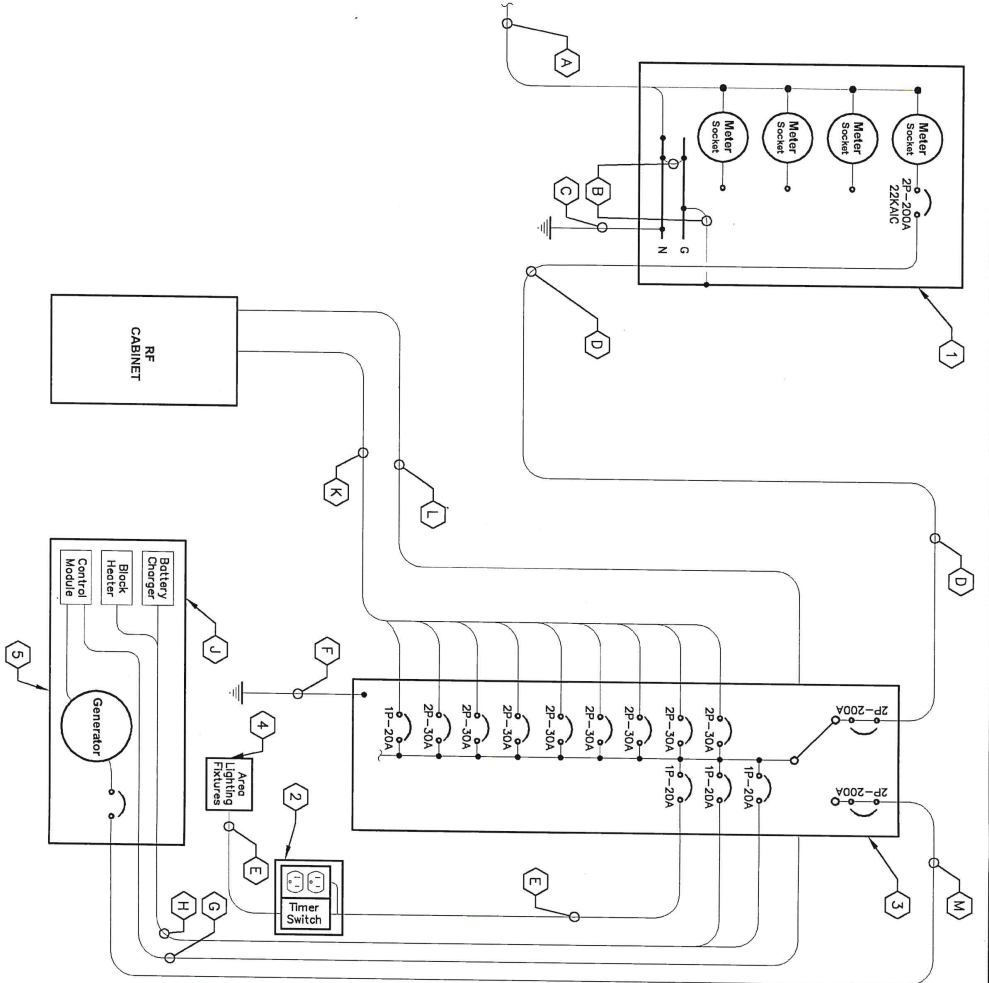


This document, together with the concepts and designs presented herein, is an instrument of service. It is intended only for the specific project and client for which it was prepared. Review of said drawings indicates on this document without authorization and adaptation by design and construction, Inc. shall be without liability to design and construction, Inc.



**REQUIRED SIGNAGE PER NEC 702 AT SERVICE DISCONNECT**  
 "WARNING: Shock hazard exists if grounding electrode conductor or bonding jumper connection in this equipment is removed while alternate source(s) is energized. Opening the equipment disconnect will cause the stand-by generator to start. To remove power entirely from the equipment, the generator must be turned Off and the generator circuit breaker must be open."

**REQUIRED SIGNAGE PER NEC 702 AT SERVICE DISCONNECT & INTEGRATED LOAD CENTER**  
 "NOTE: Emergency power is supplied by a stand-by generator located behind Verizon equipment rack."

**1 ELECTRICAL SINGLE LINE DIAGRAM**  
**E5 NOT TO SCALE**

**KEY NOTES - CONDUIT, CONDUCTORS, & MISC**

- A TWO (2) #4 CONDUITS BY CONTRACTOR FOR INCOMING SERVICE LATERALS BY LOCAL UTILITY FOR 800 AMP, 120/240 VOLT SINGLE PHASE SERVICE.
- B BOND GROUND BUS TO NEUTRAL BUS AND GROUND BUS TO ENCLOSURE WITH 2/0 BONDING JUMPERS.
- C ONE (1) 2/0 AWG BARE TINNED COPPER GROUNDING ELECTRODE CONDUCTOR (GEC) TO GROUND ROD, EXOTHERMIC WELD GEC TO GROUND ROD.
- D THREE (3) 3/0 CONDUCTORS AND ONE (1) #6 AWG GROUND IN 2" CONDUIT.
- E TWO (2) #12 AWG CONDUCTORS AND ONE (1) #12 AWG GROUND IN 1" CONDUIT.
- F ONE (1) #2 AWG BARE TINNED COPPER GROUND LEAD FROM GROUNDING LUG IN ILC TO GROUND ROD, EXOTHERMIC WELD TO GROUND ROD.
- G AUTOMATIC TRANSFER SWITCH ALARM AND GENERATOR CONTROL CABLES IN 1" CONDUIT.
- H FOUR (4) #12 CONDUCTORS AND ONE (1) #12 AWG GROUND IN 1" CONDUIT.
- J THE GENERATOR, WHEN UTILIZING A TWO POLE ATS WITH A SOLID NEUTRAL, IS NOT A SEPARATELY DERIVED SYSTEM, THEREFORE, DO NOT BOND THE NEUTRAL TO THE GROUND AT THE GENERATOR.
- K SIXTEEN (16) #6 AWG CONDUCTORS AND FOUR (4) #6 EG FOR 30 AMP CIRCUITS, TWO (2) #8 AWG CONDUCTORS AND ONE (1) #8 EG FOR 20 AMP CIRCUIT, ALL IN 2" PVC CONDUIT.
- L ALARM CABLES IN 1" PVC CONDUIT.
- M THREE (3) 2/0 AWG CONDUCTORS AND ONE (1) #6 AWG EG IN 2" CONDUIT. VERIFY GENERATOR BREAKER DOES NOT EXCEED 175 AMPS.

**KEY NOTES - ELECTRICAL EQUIPMENT**

- 1 FURNISH AND INSTALL 800 AMP, 3-WIRE, SINGLE PHASE, 120/240 VOLT, 22KVAIC, FOUR-SPACE MULTI-GANG METER CENTER WITH 200 AMP RATED METER SOCKETS IN NEMA 3R ENCLOSURE. SE RATED. CONTRACTOR SHALL FURNISH AND INSTALL 200 AMP CIRCUIT BREAKER AT METER BASE IF NOT ALREADY EXISTING.
- 2 20 AMP GFCI DUPLEX OUTLET RECEPTACLE AND TIMER SWITCH, ENERLITES HERO SERIES (OR APPROVED EQUIVALENT) IN LOCKABLE NEMA 3R ENCLOSURE.
- 3 200 AMP, 120/240 VOLT, ILC WITH 42 SPACE PANEL AND AUTOMATIC TRANSFER SWITCH. ALL CIRCUIT BREAKERS SHALL BE RATED 10KVAIC MINIMUM. ILC IS FURNISHED BY VERIZON AND INSTALLED BY GENERAL CONTRACTOR.
- 4 FURNISH AND INSTALL TWO (2) AREA LIGHTS (LITHONIA HFR-250W-1A120-DNA-LP1), (OR APPROVED EQUIVALENT).
- 5 35 KW PROPANE GENERATOR, CONTRACTOR SHALL COORDINATE SPECIFIC GENERATOR CONFIGURATION WITH OWNER AND INSTALL THE GENERATOR IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. GENERATOR BREAKER SIZED AND PROVIDED BY GENERATOR MANUFACTURER.

**verizon**  
 1000 OLD ALABAMA ROAD CONDUCTOR  
 ALABAMA, STATES 35008

**PROJECT INFORMATION:**  
 SITE NAME: OLD STATE ROAD  
 SITE NO.: 502891  
 FLUZE PROJECT#: 15525785  
 GOOD HOME CIRCLE  
 NATION, GA 31841  
 LOMBARD COUNTY

PLANS PREPARED BY:

**Kimley-Horn**  
 11720 AMERS PARK, BLDG. SUITE 600  
 ALPHARETTA, GA 30009  
 WWW.KIMLEY-HORN.COM

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

LICENSER:

**GOVERNMENT ENGINEER**  
 NO. PEDURST  
 PROFESSIONAL  
 CORBIN C HARDY

GHA PROJECT NUMBER:  
 013509094

DRAWN BY: WCE  
 CHECKED BY: WCE

SHEET TITLE:  
**ELECTRICAL SINGLE LINE DIAGRAM**

SHEET NUMBER:  
**E5**