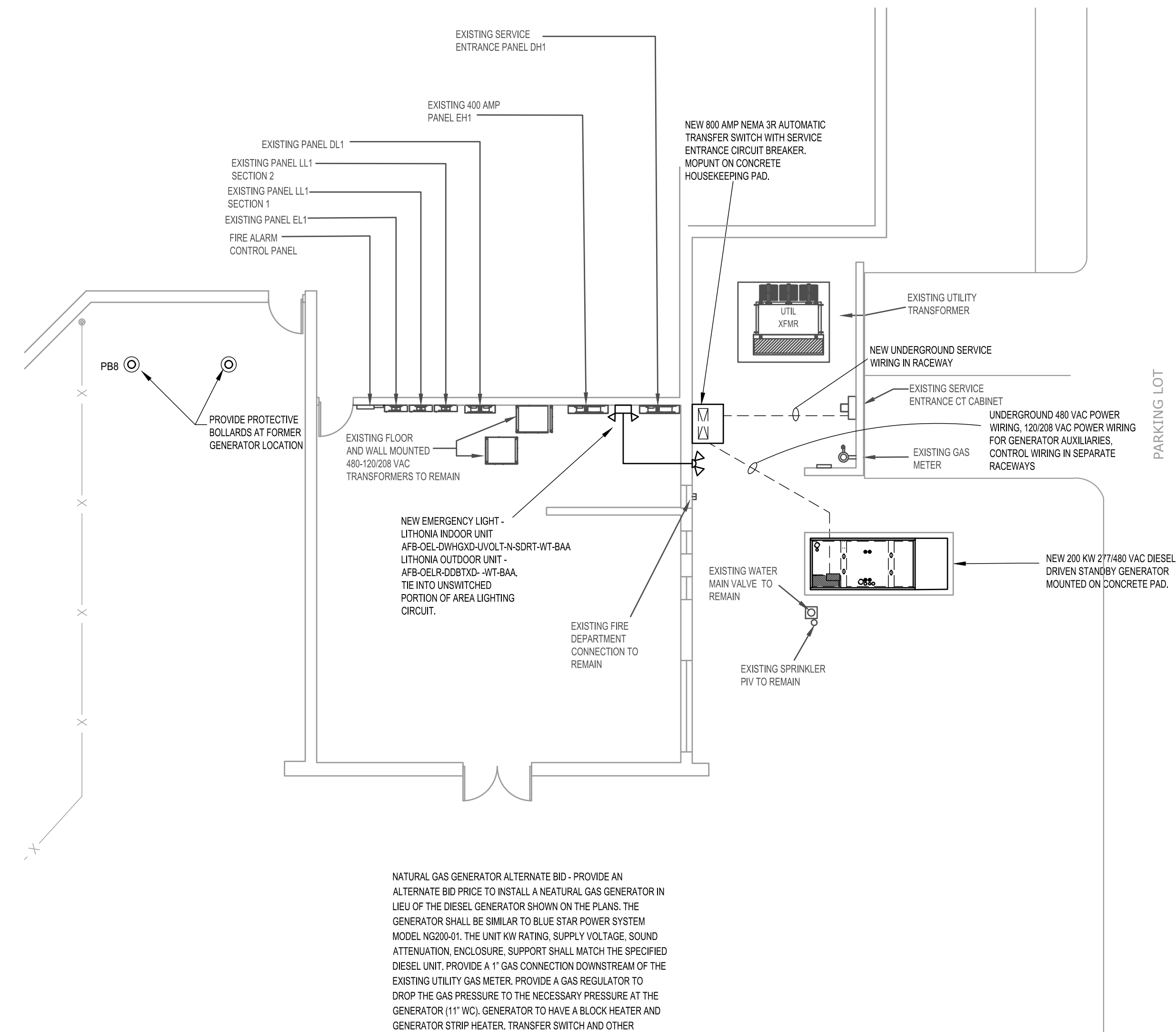


1 ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

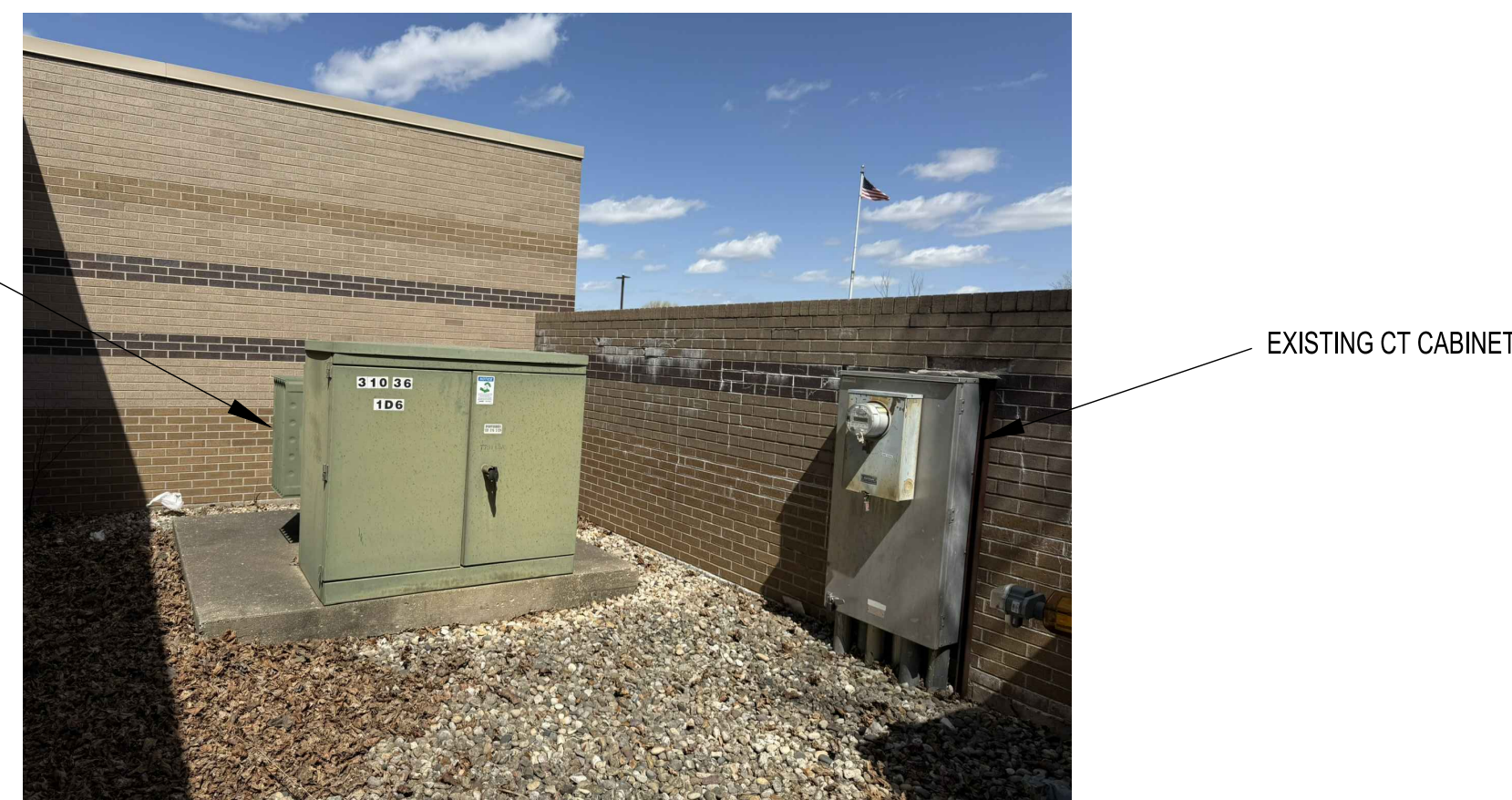


NATURAL GAS GENERATOR ALTERNATE BID - PROVIDE AN ALTERNATE BID PRICE TO INSTALL A NEATURAL GAS GENERATOR IN LIEU OF THE DIESEL GENERATOR SHOWN ON THE PLANS. THE GENERATOR SHALL BE SIMILAR TO BLUE STAR POWER SYSTEM MODEL NG200401. THE UNIT KW RATING, SUPPLY VOLTAGE, SOUND ATTENUATION, ENCLOSURE, SUPPORT SHALL MATCH THE SPECIFIED DIESEL UNIT. PROVIDE A 1" GAS CONNECTION DOWNSTREAM OF THE EXISTING UTILITY GAS METER, PROVIDE A GAS REGULATOR TO DROP THE GAS PRESSURE TO THE NECESSARY PRESSURE AT THE GENERATOR (11" WC). GENERATOR TO HAVE A BLOCK HEATER AND GENERATOR STRIP HEATER, TRANSFER SWITCH AND OTHER ELECTRICAL WORK SHALL REMAIN AS SHOWN FOR THE DIESEL GENERATOR BASE BID. DEMOLITION SHALL BE THE SAME AS FOR THE DIESEL GENERATOR BASE BID.

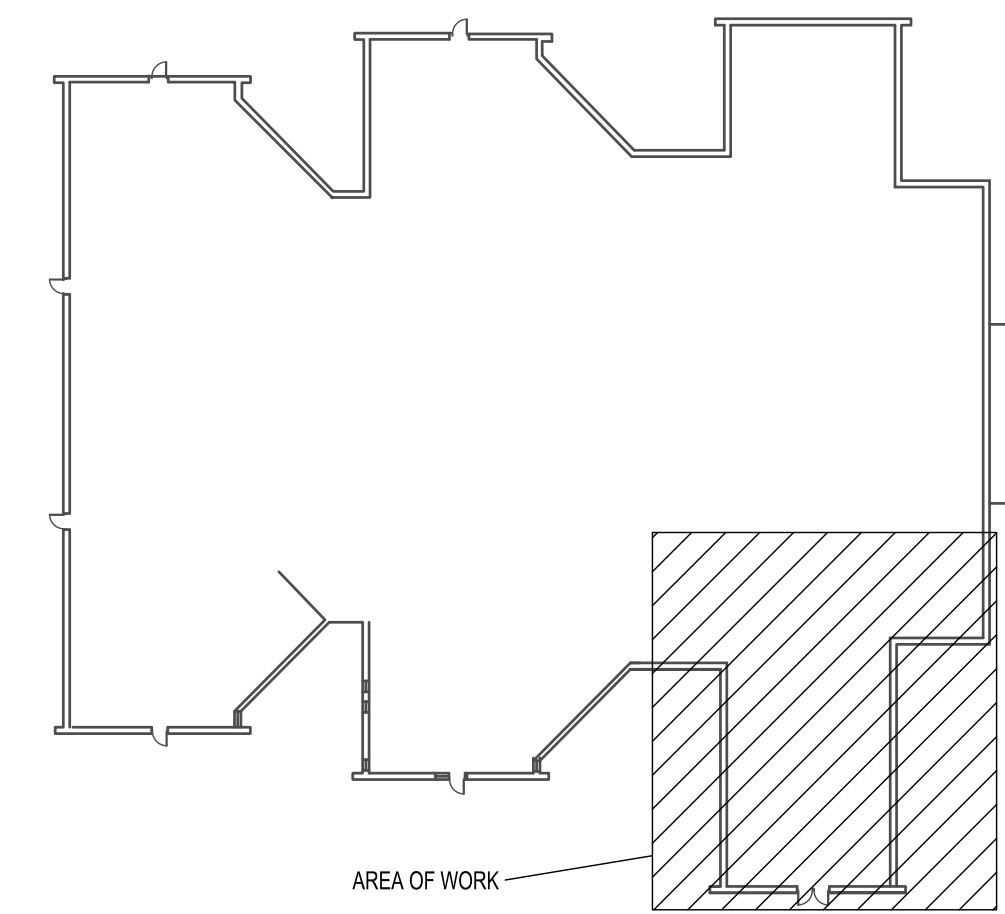
2 ELECTRICAL NEW WORK PLAN
SCALE: 1/8" = 1'-0"



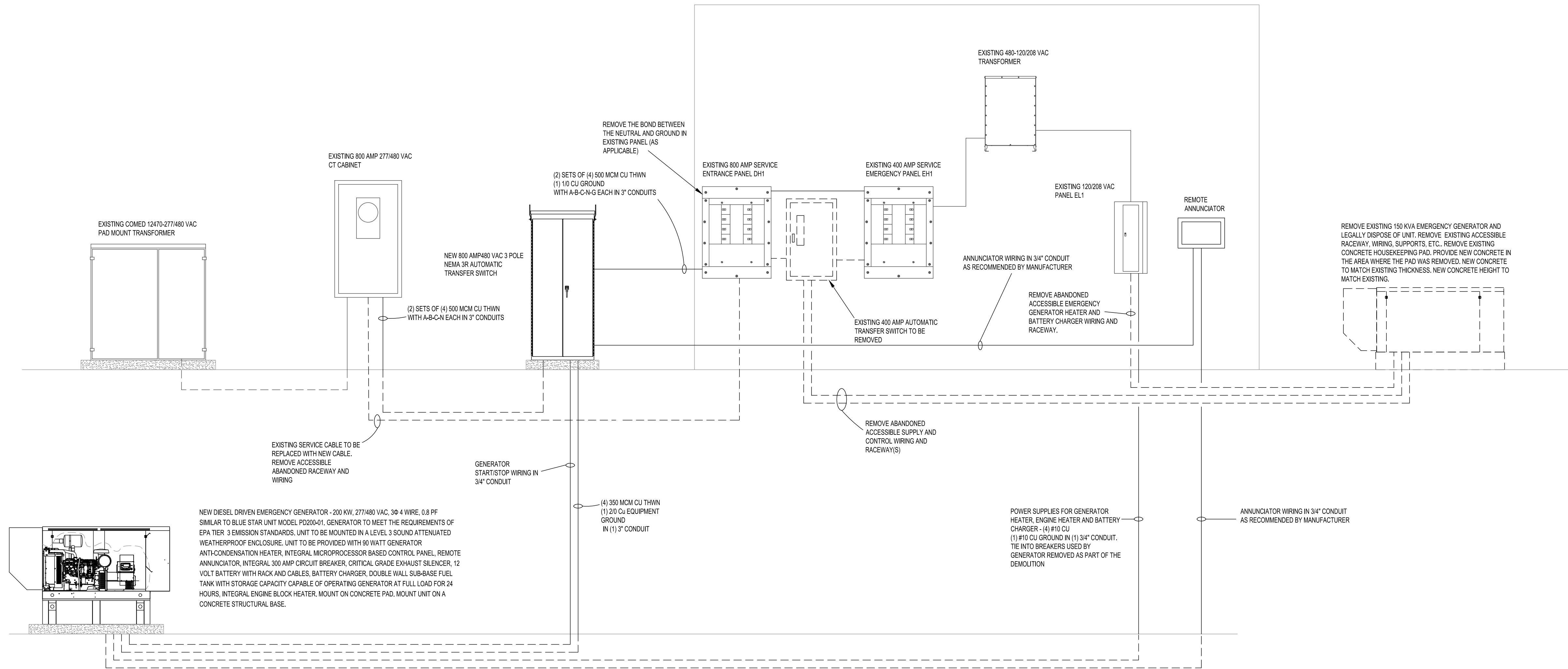
3 PHOTO 1



4 PHOTO 2

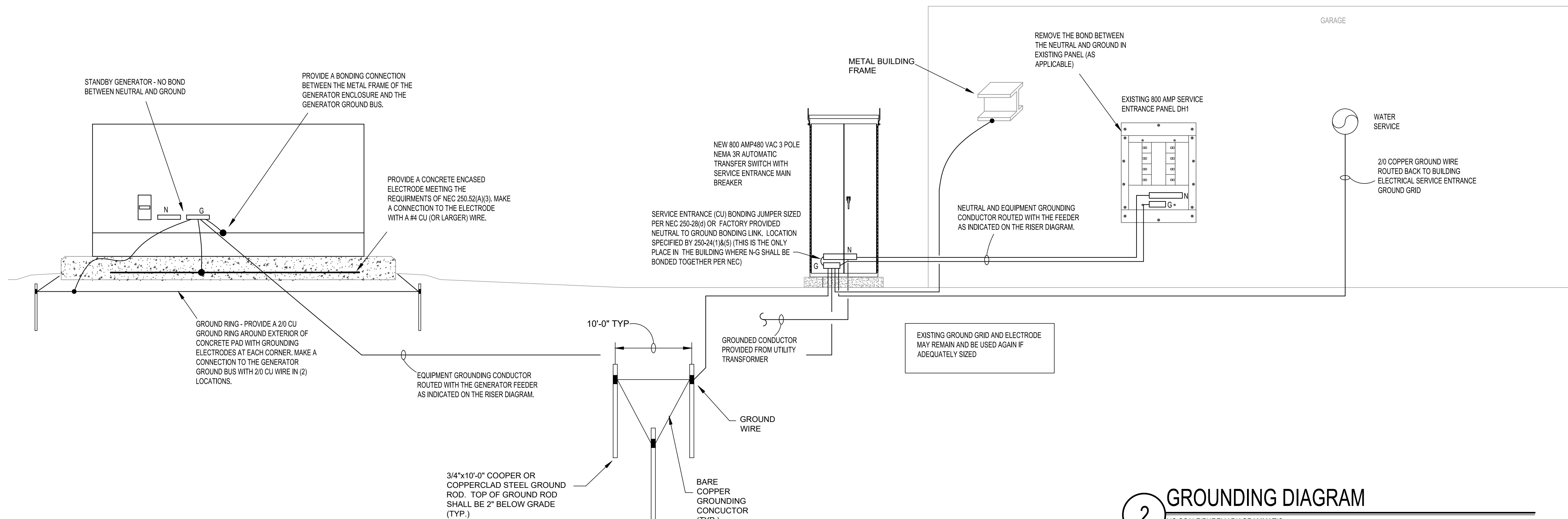


KEY PLAN



1 RISER DIAGRAM

NO SCALE/PURELY DIAGRAMMATIC



2 GROUNDING DIAGRAM

NO SCALE/PURELY DIAGRAMMATIC

ALL MAY NOT BE USED



CONDUIT RUN CONCEALED, ABOVE CEILINGS
OR IN WALLS

CONDUIT RUN CONCEALED IN OR UNDER
OR UNDERGROUND

CONDUIT RUN EXPOSED, IN STRAIGHT LINES

P- PRESENT TO REMAIN.
 PX- PRESENT TO BE REMOVED.
 PXN- PRESENT TO BE REMOVED, CLEANED, BROUGHT TO
 OPERATING CONDITIONING AND RELOCATED.
 PN- FINAL LOCATION OF DEVICE ASSOCIATED WITH PXN.
 PX-DO- PRESENT TO BE REMOVED & DELIVERED TO OWNER.
 AC - ABOVE COUNTER LEVEL
 BC - BELOW COUNTER LEVEL
 WP - WEATHERPROOF
 GFI - GROUND FAULT CURRENT INTERRUPTER
 ASC - ABOVE SUSPENDED CEILING
 CTC - CLOSE TO CEILING



1. PROVIDE CONDUIT SPACERS EVERY 6 FEET.



NO SCALE/PURELY DIAGRAMMATIC

NO SCALE/PURELY DIAGRAMMATIC

CONCRETE / FOUNDATION NOTES

ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE.

REFER TO OTHER SHEETS FOR TYPICAL DETAILS WHICH MAY HAVE NOT BEEN REFERENCED FROM THIS SHEET OR OTHER SHEETS BUT YET STILL APPLY TO TYPICAL CONDITIONS.

THE FOUNDATION DESIGN IS BASED ON THE CODE MIN. SOIL BEARING CAPACITY OF 1500 PSF.

NO CONCRETE SHALL BE POURED IN EXCAVATIONS CONTAINING WATER

CONCRETE CONTRACTOR SHALL NOT POUR ANY CONCRETE IN ADVERSE WEATHER CONDITIONS OR WHEN SUCH CONDITIONS ARE FORECASTED FOR THE TIME PERIOD FOLLOWING THE POUR, UNLESS PROPER CURING AND PROTECTION IS PROVIDED CONTINUOUSLY UNTIL CONCRETE DEVELOPS ITS DESIGN STRENGTH.

NO ALUMINUM OF ANY TYPE SHALL BE ALLOWED IN THE CONCRETE WORK UNLESS COATED TO PREVENT ALUMINUM-CONCRETE REACTION. THIS INCLUDES PUMPING THRU ALUMINUM PIPE.

ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED AND CERTIFIED BY A QUALIFIED SOILS ENGINEER.

MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318.

CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 POUNDS PER SQUARE INCH AT 28 DAYS.

AIR-ENTRAINING ADMIXTURE SHALL BE USED FOR ALL CONCRETE EXPOSED TO WEATHER. ALL CONCRETE EXPOSED TO THE WEATHER SHALL HAVE MINIMUM FIVE PERCENT (5%) TO A MAXIMUM SEVEN PERCENT (7%) AIR ENTRAINED.

UNLESS OTHERWISE NOTED, PRINCIPAL REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE PROTECTION:

- a. SURFACES NOT FORMED.....3 inch
b. FORMED SURFACES IN CONTACT WITH SOIL OR WATER OR EXPOSED TO WEATHER.....2 inch
c. SLABS, WALLS, JOISTS.....3/4 inch

BAR BENDING AND PLACEMENT DETAILS SHALL BE IN ACCORDANCE WITH THE "ACI DETAILING MANUAL, SP-66", ACI 315, UNLESS OTHERWISE SHOWN OR NOTED.

ALL REINFORCING STEEL SHALL BE "DEFORMED NEW BILLET STEEL BARS", ASTM A615 PLUS ASTM A615 (S1), GRADE 60

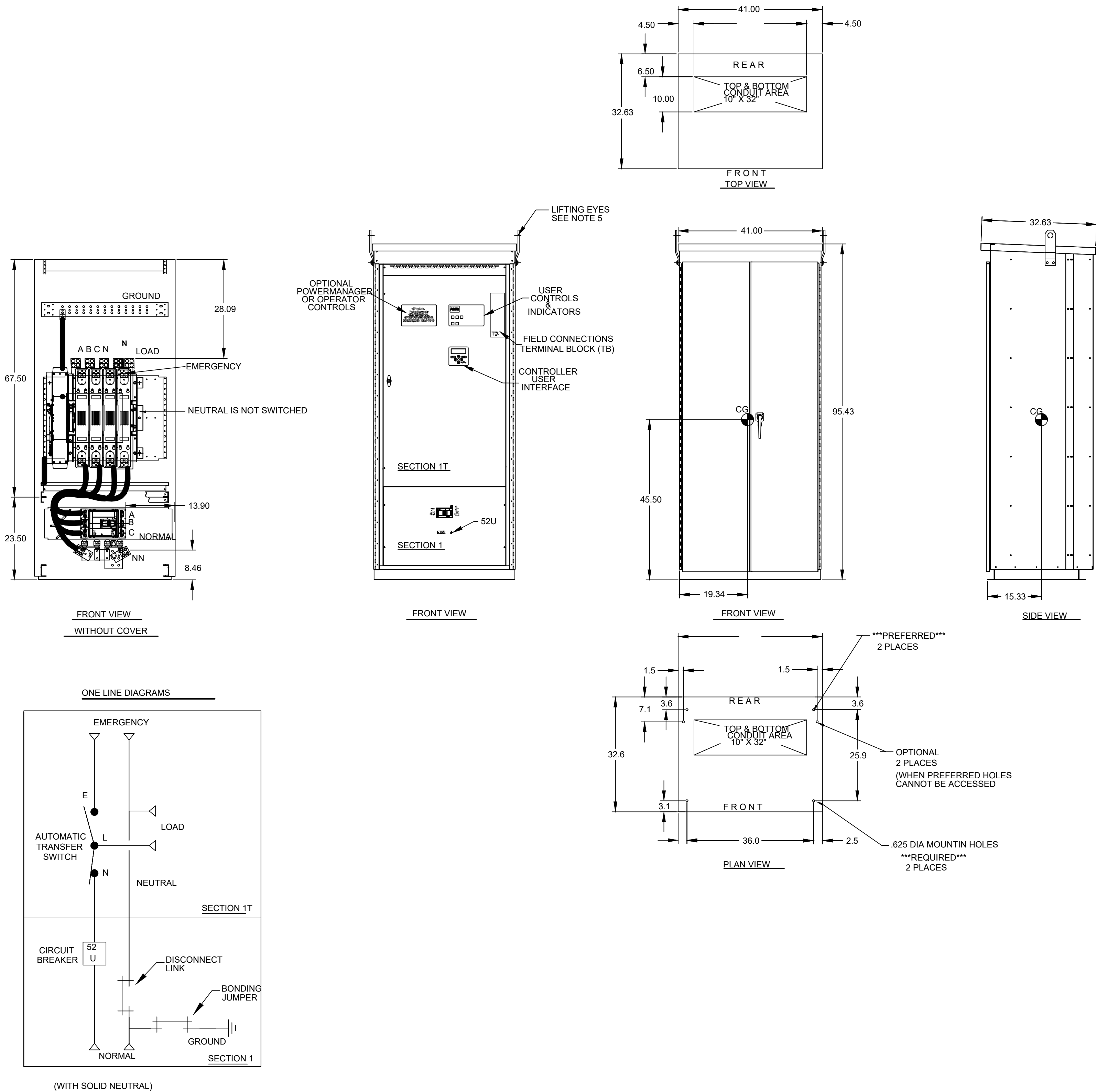
ANCHOR BOLTS/ ANCHORS SHALL BE SIZED AS PER GENERATOR MANUFACTURER. IF DEPTH OF ANCHORAGE IS REQUIRED TO BE PROVIDED BY OTHER THAN GENERATOR MANUFACTURER, CONTACT ENGINEER.



NO SCALE/PURELY DIAGRAMMATIC

AUTOMATIC TRANSFER SWITCH PLAN

BASIS OF DESIGN ASCO HAUS 800 AMP SERVICE ENTRANCE BREAKER TYPE 3R
SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH, 3 POLE WITH
OVERLAPPING NEUTRAL, 65 KAIC 480 VOLT CIRCUIT BREAKER.



GENERAL NOTES

- FLOOR MOUNTED ENCLOSURE
TYPE 3R CONSTRUCTED FROM CODE GAUGE STEEL.
FINISH: TYPE 3R, ANSI 61 GRAY POLYESTER SEMI GLOSS ELECTROSTATIC POWDER.
- EXTERIOR DOORS HAVE PADLOCKABLE HANDLES WITH 3-POINT LATCH
- DESIGNED FOR FRONT ACCESS.
- RECOMMENDED CLEARANCES: FRONT: 36" REAR: NONE
- LIFTING PLATES: SECTIONS ARE SUPPLIED WITH LIFTING PLATES. INSPECT PLATES FOR DAMAGE AND TORQUE BOLTS TO 45 FT LBS BEFORE USE. REFER TO ANSI/NEMA PB 2.1 FOR PROPER HANDLING OF EQUIPMENT. AFTER INSTALLATION OF SECTION, REMOVE LIFTING PLATES. REINSTALL BOLTS INTO EXTERIOR HOLES AND TORQUE TO APPROXIMATELY 20 FT LBS.
- SECTION 1 & 1T SHIP AS ONE UNIT
- APPROXIMATE WEIGHT: 1350 LBS
- CENTER OF GRAVITY

SYSTEM NOTES

- SYSTEM RATING: 800 AMPS.
SHORT CIRCUIT RATING: 65,000 RMS SYM @ 480V.
THE EMERGENCY SOURCE INPUT MUST BE PROTECTED BY A REMOTE OVERCURRENT PROTECTION DEVICE AS LISTED ON THE MARKINGS ON THE TRANSFER SWITCH.
- ALL BUS IS SILVER-PLATED COPPER, BASED ON 1000A PER SQ. IN. DENSITY.
- GROUND: 20% RATED.
- NEUTRAL: 100% RATED.
- APPLICABLE LABEL(S): U.L. 891, SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT.

TRANSFER SWITCH

- H FRAME AUTOMATIC TRANSFER SWITCH 800A.
- TRANSFER SWITCH RATING: 800 AMPS.
SHORT CIRCUIT RATING WHEN PROTECTED BY A CIRCUIT BREAKER
TIME RESPONSE, MAXIMUM 0.05 SECONDS: 50,000 RMS SYM @ 480V.
SPECIFIC BREAKER RATING: 65,000 RMS SYM @ 480V.
- A FULL RATED NEUTRAL CONNECTION FOR EACH SOURCE AND THE LOAD IS OPTIONAL. WHEN PROVIDED IT IS IN ONE OF THE FOLLOWING FORMATS.
A. SOLID NEUTRAL
B. SWITCHED NEUTRAL POLE
C. OVERLAPPING NEUTRAL POLE
- UL 1008

TERMINATIONS 800A

- SUPPLIED WITH MECHANICAL (SCREW TYPE) LUGS FOR CU/AL CABLE.
NORMAL(52U): (3) 3/0 - 500MCM CU/AL CABLE PER PHASE & NEUTRAL
LOAD: (4) 1/0 - 600MCM PER PHASE & NEUTRAL
EMERGENCY: (4) 1/0 - 600MCM PER PHASE & NEUTRAL
GROUND: (12) 1/0 - 600MCM
A. SUITABLE WIRE BENDING SPACE IS PROVIDED AS PER NEC.
- OPTIONAL LUGS MAY BE SUPPLIED.

CIRCUIT BREAKER: ITEM 52U

- SQUARE "D" 80% RATED TYPE 'MJL' MOLDED CASE CIRCUIT BREAKER 800AF/800AT.
ELECTRONIC TRIP UNIT WITH A FIXED LONG TIME AND AN ADJUSTABLE INSTANTANEOUS SETTING.
SHORT CIRCUIT RATING: AIC 65,000 RMS SYM @ 480V.
- U.L. 489

WIRING/CABLING

- USE 90°C MINIMUM CU/AL WIRE FOR POWER CABLES.
- WIRE SIZE TO BE BASED ON AMPACITY OF 75°C WIRE.
- USE 60°C MINIMUM CU WIRE FOR CONTROLS.

© 2025	STANDBY GENERATOR REPLACEMENT: WINNEBAGO COUNTY JUVENILE DETENTION CENTER Rockford, IL	
OLLMAN ERNEST MARTIN Architects Engineers Designers 200 South State Street Belvidere, Illinois 61008 815-544-7790 Phone		
ELECTRICAL SCHEDULES	Date: 08-04-2025 Revision:	
2025-046	E-401	



Sales Quote

Quote Date: 4/18/2025 9:28:22 AM
Quote Number: 0121443-0
Project Title: Winnebago Juvenile Detention Center
Prepared for: Blue Star Power Systems, Inc.

Distributed by:

Unit Model	PD200-01	Standby / Prime	Emergency Stationary Standby
kWe Rating	200 kWe	UL 2200 Listed	Yes
Fuel	Diesel	CSA Approved	Yes
EPA	Tier 3	Paint Color	White

Engine Model: Perkins 1106D-E70TAG5 200kW Standby Power Rating at 1800 RPM Governor - Electronic Isochronous
Voltage: 480/277V 3 Phase 60 Hz 0.8 PF
Gen Model: Stamford UCI274H 12 Lead Wired 480V 3 Phase High Wye 125°C Rise Over 40°C Ambient
Voltage Regulator: Stamford MX321 Automatic Voltage Regulator with PMG Excitation
Generator Space Heater: Generator Anti-Condensation Heater 90W 120VAC Wired to Terminal
Control Panel: Blue Star DCP7310 Microprocessor Based Gen-Set Controller Mounted Facing Left from Generator End (Unless Specified Otherwise)
Standard Features: Low Oil Pressure, High Coolant Temp, Overspeed, Overcrank Shutdowns
Emergency Stop Pushbutton, Audible Alarm Buzzer with Silencing Switch
Control Panel Options: Low Water Level Sensor with Shutdown
Remote Annunciator: Deep Sea DSE2548 (2x) Remote Annunciator with Enclosure (Surface Mounted)
Unit Color: White
Enclosure: Level 3 (Sound Attenuated Enclosure) Powder Coated 14 Gauge Steel Rugged and Durable 200 MPH Wind Rated Enclosure with Exhaust Hood Pitched Roof for Increased Structural Integrity and Improved Watershed Punched Intake with Baffle and Punched Exhaust Openings
Keyed Alike Lockable Doors with Draw Down Latches and Stainless Steel Component Hinges
Additional 1.5" Thick Polydamp Type D Acoustical Foam (PAF)
Formed Steel Base with Mounting and Lifting Holes
Includes Vibration Mounts to Isolate Unit from Base Rail
Sound Attenuation Foam: Sound Attenuation Installed in Enclosure and Exhaust Hood
Cooling: Unit Mounted Radiator (50°C Ambient)
Oil Drain Extension: Plumbed to Bulkhead Fitting in Base
Mainline Breaker: 300 Amp 3 Pole 600 Volt Breaker Mounted & Wired in a NEMA 1 Enclosure
Jacket Water Heater: Engine Block Heater 2000W 240VAC Rated for -20°F Heater Installed with Isolation Valves and Wired to Terminal
Air Cleaner: Dry Single Stage
Air Restrictor Indicator: Installed in Air Filtration System
Silencer: Critical Grade Compact (CPJ Series) Silencer Mounted to Engine
Battery: 12 Volt System with Rack and Cables
Battery Charger: DSE 12 Volt 10 Amp Mounted and Wired to Terminal

Fuel Tank: 24 Hour / 375 Gallon UL 142 Listed Sub-Base Fuel Tank with Stub-up Area Double Wall Construction with Secondary Containment Standard
Includes: Supply & Return Connections, Fuel Level Gauge, Fuel Leak Switch and Fill & Vent Plumbing
Factory Test: Standard Commercial Testing Includes:
Verification of Alarm Shutdowns, Voltage Settings, Block Loading to Rated kWe and PF
Owner's Manual: Print Copy (Qty 1) Standard, Electronic Copy
Warranty: 2 Year / 2000 Hour Limited

Notes:

Additional Options
(Not Included in Price):

ATS 1

Series	300	Volts	480/277V 3 PH
Service Entrance Rated	Yes	Poles	3
Amps	800	Enclosure	Nema 3R Secure

Warranty: Two (2) Year Basic ATS Limited Warranty Standard
Optional Accessories: 44G Strip Heater with Thermostat, Wired to Load Terminals (208-600V)
11BE Feature Bundle Includes Engine Exerciser/Event Log/RS-485 Enabled/Common AI

ATS Notes:

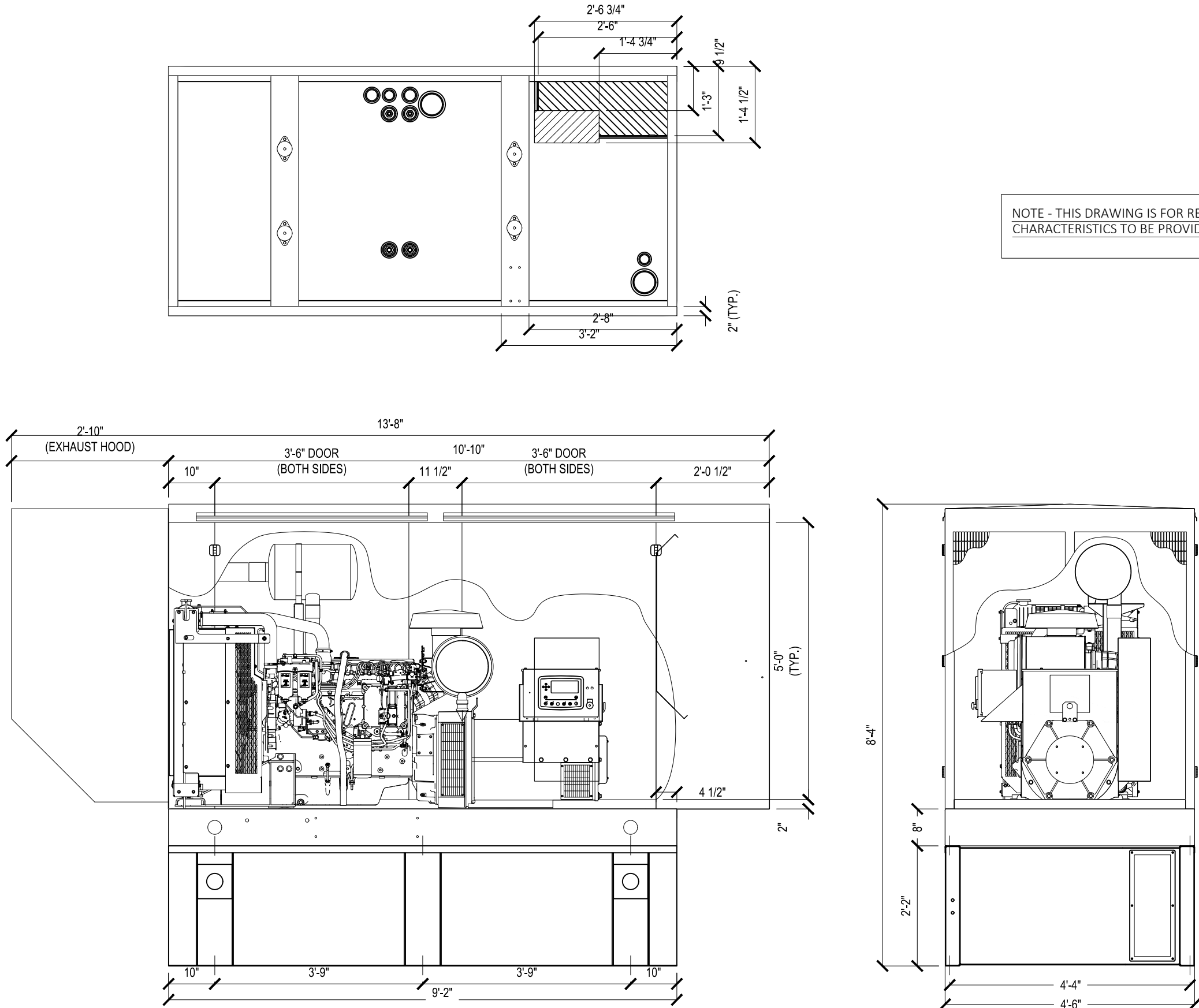
Payment Terms: Net 30
Lead Time: 40 + Weeks

Payment Terms: Net 30
Delivery Schedule: 36 Weeks (Contingent on component availability)

Terms & Conditions

- This quote is valid for a period of 30 days.
- This proposal is our interpretation of your requirement. It includes only the items listed on this quotation. Should there be other requirements or specifications, we will re-quote accordingly.
- Units are shipped wet to include lube oil and 50/50 water and antifreeze mix unless otherwise noted in this quotation.
- All extended piping, wiring, or other than listed above is performed by "others".
- Seller is not quoting, offloading, job site startup, personnel instructions, field testing, or unit installation.
- Quoted prices include normal testing, packaging, and instructional literature.
- It is the distributor/purchaser and end user's responsibility to ensure that this equipment is operated in accordance with all applicable local, state, and federal laws and regulations governing the use and operation of this equipment.

Distributor Terms & Conditions



- NOTES:
- FUEL SUPPLY: 5/8" FUEL RETURN: 3/8"
 - RADIATOR CORE WIDTH: 27.38"
 - APPROXIMATE BREAKER LOCATION SHOWN
 - (OPTIONAL) EXHAUST HOOD INCLUDED LEVEL 3 ONLY
 - (OPTIONAL) EXHAUST ROUTED THROUGH EXHAUST HOOD LEVEL 3 ENCLOSURE ONLY
 - (OPTIONAL) SOUND ATTENUATION FOAM INCLUDED LEVEL 2 & 3 ENCLOSURES ONLY
 - (XX.XX) DIMENSIONS ARE FOR REFERENCE ONLY

NOTE - THIS DRAWING IS FOR REFERENCE PURPOSES ONLY. ACTUAL UNIT CHARACTERISTICS TO BE PROVIDED DURING CONSTRUCTION PHASE OF WORK.

DRAWN BY: SS		
DATE: 11/02/25		
ENGINE: 1106D-E70TAG5	BASE: 27545	TANK: 18019
GENERATOR: UCI274H	HSG: WPE-104	