GENERATOR REPLACEMENT PERMIT DRAWINGS FOR

1999 SUTTER AVENUE

CINCINNATI, OHIO 45225

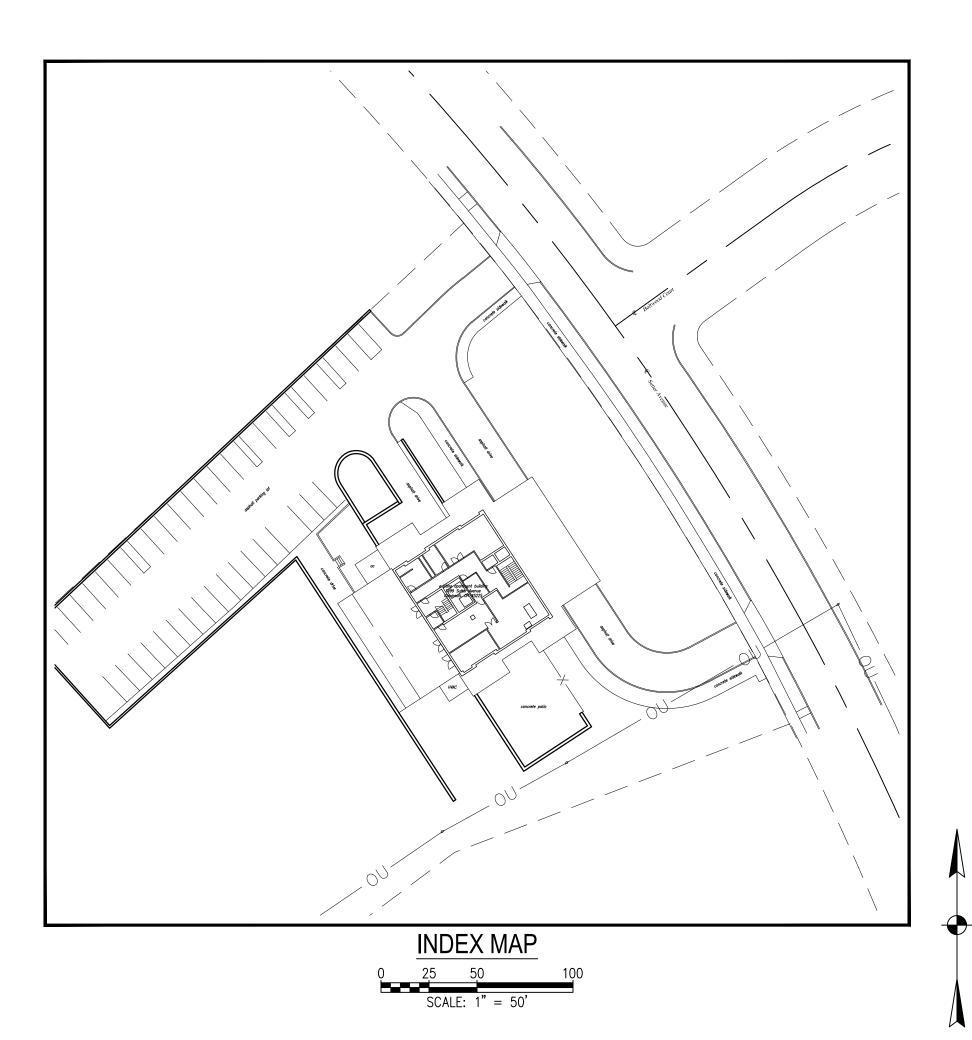
GENERAL CONSTRUCTION NOTES

- 1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS. THE CURRENT CITY OF CINCINNATI, HAMILTON COUNTY, CINCINNATI WATER WORKS AND METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI STANDARDS AND SPECIFICATIONS SHALL GOVERN THE MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS.
- 2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE OWNER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION. ANY CONFLICT BETWEEN DRAWINGS AND THE SPECIFICATIONS SHALL BE CONFIRMED WITH THE CONSTRUCTION MANAGER PRIOR TO BIDDING.
- 3. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING. IF CONDITIONS ENCOUNTERED ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 4. SHOULD ANY UNCHARTED, OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY BEFORE PROCEEDING FURTHER WITH THE WORK IN THIS AREA.
- 5. THE PRICE(S) QUOTED SHALL INCLUDE ALL ITEMS OF LABOR MATERIALS, TOOLS, EQUIPMENT, INSURANCE AND OTHER COSTS NECESSARY TO FULLY COMPLETE THE WORK PURSUANT TO THE CONTRACT DOCUMENTS. IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO PROVIDE AND REQUIRE A COMPLETED WORK PROJECT READY FOR OPERATION. ANY WORK ITEMS OMITTED FROM SUCH CONTRACT DOCUMENTS WHICH ARE CLEARLY NECESSARY FOR THE COMPLETION OF SUCH WORK AND ITS APPURTENANCES SHALL BE CONSIDERED A PART OF SUCH WORK ALTHOUGH NOT DIRECTLY SPECIFIED OR CALLED FOR IN THE CONTRACT DOCUMENTS.
- 6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SHOULD ANY DISCREPANCY REGARDING THE PROPOSED WORK OR UNFORESEEN CONDITIONS ARISE PRIOR TO PROCEEDING FURTHER WITH THE AFFECTED WORK.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS FOR THE PROJECT AND NOTIFYING THE OWNER AND ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION.
- 8. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER, LOCAL MUNICIPALITY AND/OR UTILITY COMPANY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY OR PERMANENT SERVICE HAS BEEN
- 9. CONTRACTOR TO COORDINATE TEMPORARY UTILITY OUTAGES WITH APPLICABLE UTILITY COMPANY AND CITY AND NOTIFY NEIGHBORING EFFECTED OWNERS NO LESS THAN 72 HOURS PRIOR TO PLANNED OUTAGE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO PERFORM ALL THE WORK. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
- 10. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. THE CONTRACTOR SHALL EXERCISE PRECAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.
- 11. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT THE POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS.
- 12. THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER, LOCAL MUNICIPALITY, AND STATE.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF PEDESTRIANS AND VEHICLES CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC CONTROLLERS IN ACCORDANCE WITH ODOT REGULATIONS AND/OR AS REQUIRED OR DIRECTED BY THE SITE ENGINEER OR CONSTRUCTION MANAGER OR LOCAL GOVERNING AUTHORITIES. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS AT ALL TIMES UNLESS WRITTEN APPROVAL FROM ODOT, LOCAL MUNICIPALITY, COUNTY, OR OTHER GOVERNING AUTHORITY IS
- 14. THE OWNER AT ITS DISCRETION RESERVES THE RIGHT TO MODIFY THE DETAILS AND STANDARDS OF CONSTRUCTION FOR ALL PRIVATE FACILITIES FROM THAT INDICATED ON THE APPROVED PLAN, PROVIDED THAT THE ALTERNATE STANDARD COMPLIES WITH LOCAL CODE AND/OR UTILITY COMPANY REQUIREMENTS AND THE GENERAL DESIGN INTENT OF THE PROJECT IS NOT
- 15. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS AND PLAN SPECIFICATIONS TO THE OWNER AND LOCAL UTILITY COMPANIES AS REQUIRED FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 15 WORKING DAYS FOR

- 16. INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 AT LEAST 72 HOURS BEFORE START OF WORK AND VERIFY ALL EXISTING UTILITY LOCATIONS.
- 17. ANY DEFECTS DISCOVERED IN NEW CONSTRUCTION, WORKMANSHIP, EQUIPMENT, OR MATERIALS SHALL BE REPAIRED, OR CORRECTED BY APPROVED METHODS AS DIRECTED BY AND AT NO ADDITIONAL COST TO THE OWNER.
- 18. ALL ROAD SURFACES, EASEMENTS, OR RIGHT-OF-WAY DISTURBED BY THE CONSTRUCTION OF ANY PART OF THESE IMPROVEMENTS ARE TO BE RESTORED ACCORDING TO THE CITY REQUIREMENTS.
- 19. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OR ITS REPRESENTATIVE IF SUSPECTED HAZARDOUS MATERIAL OR ANY OTHER MATERIAL THAT MAY CREATE A HEALTH RISK IS DISCOVERED ON SITE.
- 20. ANY TRAFFIC CONTROL REQUESTED OR REQUIRED BY THE CONTRACTOR WILL BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 21. IF MUD, SOIL, OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS, OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AT THE END OF EACH WORK DAY, OR AS REQUIRED DURING THE WORK DAY.
- 22. THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHT-OF-WAYS, AND CONSTRUCTION AND PERMANENT EASEMENTS, AND SHALL NOT TRESPASS UPON OTHER PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER.
- 23. WHERE CONFLICT ARISES BETWEEN ALL SPECIFICATIONS (BOOK OR PLAN BASED) INCLUDING CITY REQUIREMENTS, THE MORE STRINGENT SPECIFICATION SHALL PREVAIL.
- 24. FINAL CLEANUP: THE CONTRACTOR SHALL CLEAN-UP ALL DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION AND SHALL RESTORE ALL SURFACES, STRUCTURES, DITCHES AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER AND ALL APPLICABLE GOVERNMENTAL AND REGULATORY AGENCIES.

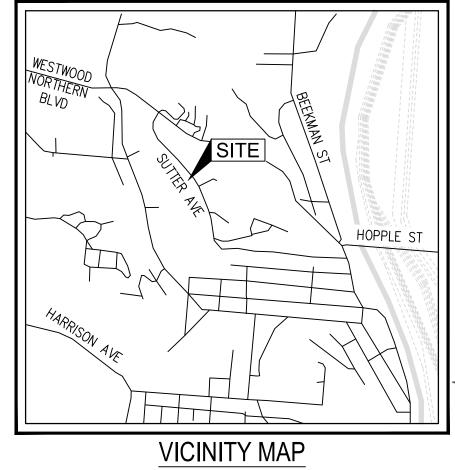
DEMOLITION NOTES:

- 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LAWFUL MANNER.
- 3. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND OWNER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL EQUIPMENT, AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- 4. ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING, AND/OR ABATEMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY LISTED ON
- 5. ALL DEMOLISHED MATERIALS SHALL BE TAKEN FROM THE SITE IMMEDIATELY (UNLESS OTHERWISE NOTED) AND DISPOSED OFF-SITE IN ACCORDANCE WITH ALL LAWS, REGULATIONS AND ORDINANCES. NO BURNING OF ANY MATERIALS WILL BE ALLOWED ON OR OFF SITE. NO CLEARED OR GRUBBED MATERIAL SHALL BE BURIED OR LEFT ON SITE.
- 6. MATERIALS NOTED ON THE PLANS TO BE SALVAGED TO OWNER SHALL BE STORED IN AREAS INDICATED ON THE PLANS, OR TO THE OWNERS SATISFACTION.
- 7. USE SUITABLE METHODS TO LIMIT DUST AND DIRT TO ADJACENT STRUCTURES OR PROPERTY. CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO EXISTING CONDITIONS PRIOR TO THE START OF THE DEMOLITION
- 8. THE CONTRACTOR SHALL PROTECT TREES, LANDSCAPING, SITE IMPROVEMENTS, AND OTHER ITEMS NOT SCHEDULED FOR CLEARING, OR THAT MIGHT BE DAMAGED BY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING ANY ITEMS THAT ARE DAMAGED.
- 9. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION, POLLUTION, AND DUST CONTROL MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PROJECT. REFERENCE THE SWPPP PLAN, NOTES AND DETAILS.
- 10. THE BUILDING PAD AREA IS DEFINED AS THE AREA TWENTY (20) FEET OUTSIDE OF THE PROPOSED BUILDING FOOTPRINT, INCLUDING ATTACHED WALKWAYS, CANOPIES, SIDEWALKS, UTILITY PADS, AND ANY OTHER SUCH APPURTENANCES.
- 11. ANY AND ALL DAMAGE TO EXISTING PAVEMENT WITHIN THE LAYDOWN AREA SHALL BE REPAIRED.
- 12. ALL UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION SHALL REMAIN INTACT. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE TO EXISTING UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION AT THEIR SOLE
- 13. CONTRACTOR SHALL PERFORM ALL CLEARING, GRUBBING, REMOVAL OF TREES, STUMPS, VEGETATION, AND DEBRIS NECESSARY TO PERFORM THE WORK INDICATED HEREIN. THAT CONTRACTOR SHALL LIMIT LAND DISTURBANCE TO ONLY THAT REQUIRED TO COMPLETE THE PROPOSED IMPROVEMENTS. NO CLEARED OR GRUBBED MATERIAL SHALL BE BURIED OR LEFT ON SITE.





COVER SHEET	C000
LOCATION SURVEY	C100
ELECTRICAL POWER PLAN	E-1
ELECTRICAL SPECIFICATIONS, SLD & SCHEDULE	E-2



NOT TO SCALE

PROJECT DESCRIPTION

PERMIT DRAWINGS RELATED TO THE REPLACEMENT OF THE EMERGENCY GENERATOR FOR THE HIGH RISE MULTI-FAMILY HOUSING BUILDING LOCATED AT 1999 SUTTER AVENUE.

UTILITY CONTACTS

CINCINNATI BELL TELEPHONE 201 E. FOURTH ST CINCINNATI, OHIO 45201 NANCY MORRIS PH. (513) 566-8039

WATER SERVICE GREATER CINCINNATI WATER WORKS 4747 SPRING GROVE AVE CINCINNATI. OH 45232 BILL MORRIS PH. (513) 591-7858

SANITARY SEWER METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI SHAWN PATTON PH. (513) 244-1390

STORM WATER & INFRASTRUCTURE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI SHAWN PATTON PH. (513) 244-1390

GAS COMPANY DUKE ENERGY MIKE FABENDER PH. (513) 287-4718

ELECTRIC COMPANY DUKE ENERGY MIKE FABENDER PH. (513) 287-4718

OWNER & DEVELOPER:

CINCINNATI METROPOLITAN HOUSING AUTHORITY

CONTACT: MICHAEL KOCH ADDRESS: 1627 WESTERN AVENUE CINCINNATI, OH 45214 PHONE: (513) 617–3840

ELECTRICAL ENGINEER

JMILLER@HERNDONENG.COM

HERNDON ENGINEERING SERVICES, INC

CONTACT: JAMES N. MILLER, PE ADDRESS: 5870 COOK ROAD, SUTIE B MILFORD, OH 45150 (513) 248–1313

SITE/CIVIL ENGINEER



TECHNICAL SKILL. CREATIVE SPIRIT.

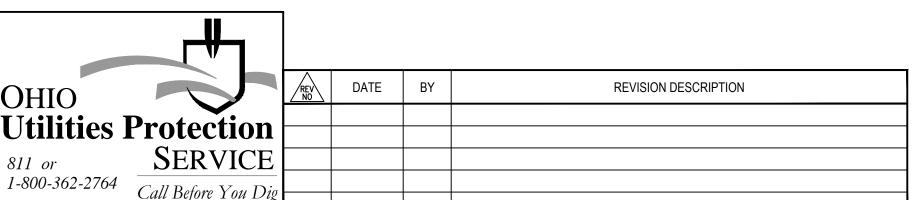
www.MannikSmithGroup.com CONTACT: MAILING ADDRESS:

PHONE: EMAIL ADDRESS:

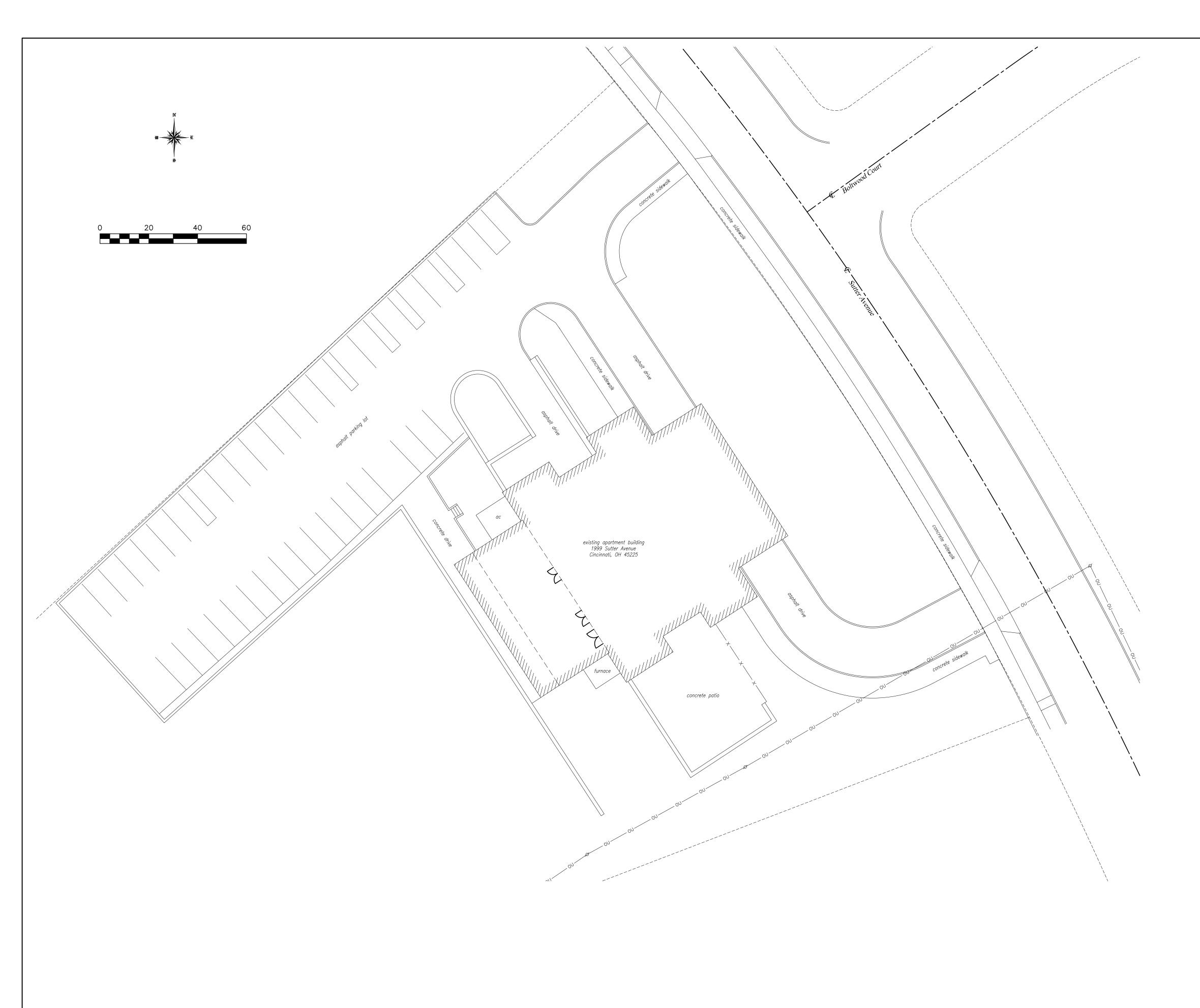
AMEEN BAKARE 10200 ALLIANCE ROAD, SUITE 135 CINCINNATI, OH 45242-4754 (513) 437-3222 X 1407 ABAKARE@MANNIKSMITHGROUP.COM



REGISTERED PROFESSIONAL ENGINEER



PROJECT DATE: 11/8/202 PROJECT NO.: C530000



MISCELLANEOUS NOTES

- North and bearing system based on Grid North.
 Horizontal Datum: NAD-83 (2011) OHSPCS-South Zone
 Vertical Datum: NAVD-88
 This drawing does not constitute a title search by the surveyor. All
 information regarding record easements and other documents that might
 affect the quality of title to the parcel shown hereon can be obtained by
 the completion of a title search.
 All underground utilities hereon are shown to the best of our knowledge
 and are based upon locations taken from observed evidence, field
 markings, prior surveys, and utility maps provided by the utility owners.
- markings, prior surveys, and utility maps provided by the utility owners.

 4. All data sources, documents, and records shown hereon are on file in the office of the Hamilton County Recorder in Cincinnati, OH unless otherwise noted.
- 5. No monumentation found or set. Boundary shown for reference only and was not verified.
 6. This is not a recordable document for transfer of title.
 7. Drawing compiled from aerial photogrammetry recorded and processed on 10/10/2022. All items shown on this drawing are subject to any
 - inaccuracies that may result from the precision of the processing software and drone hardware. This drawing should not be relied upon to make any improvements to the subject property. The purpose of this drawing was to graphically depict the existing conditions of the site at a level of accuracy that is less than that required by Chapter 4733–37 of the Ohio Administrative Code.

Mannik Smith Group 0200 Alliance Rd., Suite 135 Blue Ash, OH 45242 1999 Sutter Avenue Cincinnati, OH 45225 Revisions

the Tri-State SURVEYING, LAND

WEBSTER

2940 Hebi



SURVEYOR'S CERTIFICATE

I hereby certify that, at the request of the owner, I have graphically depicted the parcel of land shown hereon, but the level of accuracy is not in accordance with the provisions of Chapter 4733–37 of the Ohio Administrative Code. The drawing shown hereon is not a boundary survey and should not be relied upon for any improvements to the property. The purpose of the drawing for any improvements to the property. The purpose of the drawing was solely to graphically depict the current conditions to an acceptable accuracy of the client that was less than that required by Chapter 4733—37 of the Ohio Administrative Code. Field work completed on 10/10/2022. This plat is not valid unless stamped and signed.

10/10/2022 Date

WEBSTER

Brent M. Webster, P.S.
Professional Surveyor #8482 in the State of Óhio



RISER DIAGRAM -KEY NOTES

- EXISTING 50HP FIRE PUMP
- EXISTING FIRE PUMP CONTROLLER TO REMAIN.
- EXISTING FIRE PUMP AUTO TRANSFER SWITCH TO REMAIN.
- EXISTING NORMAL POWER FEED TO FIRE PUMP TO REMAIN.
- NEW EMERGENCY "CRITICAL" FEEDER TO EXISTING FIRE PUMP ATS. NEW EMERGENCY FEEDER TO NEW "EMERGENCY" AUTO TRANSFER SWITCH.
- EXISTING 480V 200A-3P FUSED SWITCH FOR NORMAL POWER FOR FIRE PUMP CONTROLLER AUTO-TRANSFER SWITCH.
- EXISTING UTILITY C/T CABINET AND METER FOR FIRE PUMP TO REMAIN. EXISTING FIRE PUMP NORMAL POWER FEED FROM UTILITY VAULT TO
- 10 EXISTING EMERGENCY "CRITICAL" FEEDER TO FIRE PUMP FROM EXISTING
- 11 EXISTING EMERGENCY POWER FEED FROM EXISTING EMERGENCY TO BE
- 12 EXISTING 480V 30 DISCONNECT AND 15KVA 480V TO 120/240V 10 FOR PANEL "EM1".
- 13 EXISTING EMERGENCY PANEL "EM1". TO REMAIN. PROVIDE TWO (20A 120V 1P CIRCUIT BREAKERS AS REQUIRED FOR NEW GENERATOR CIRCUITS.
- 14 NEW 100A 480V "EMERGENCY" ATS. 15 NEW 200A 480V EMERGENCY "STANDBY"ATS SWITCH. ATS TO HAVE
- GENERATOR EXERCISER INSTALLED. 16 EXISTING ATS, FEEDER TO EXISTING "STANDBY EMERGENCY PANEL AND FEEDER BACK TO EXISTING GENERATOR TO BE REMOVED.
- 17 PROVIDE WATERTIGHT SEAL WHERE NEW EMERGENCY FEEDER PASSES THROUGH BUILDING, TRANSITION FROM TO AND FROM GENERATION TO STANDARD (THWN-2) WIRE TO DRAKATA (ELECTRIC CIRCUIT PROTECTIVE SYSTEM) ON INTERIOR OF BUILDING.
- 18 NEW 200KVA 480/277V-3Ø-4W PAD MOUNTED DIESEL GENERATOR WITH WEATHERPROOF HOUSING AND DAY TANK RESERVE AND CONCRETE PAD. SEE DETAIL FOR MOUNTING.
- 19 EXISTING 200A "STANDBY" PANEL TO REMAIN. DISCONNECT FEEDER TO PANEL "EM1" AND REMOVE EXISTING FEEDER BACK TO SOURCE.
- 20. REROUTE EXISTING NORMAL POWER FEEDER FROM ATS BEING REMOVED TO NEW 200A "STANDBY" ATS.
- 21. REMOVE EMERGENCY FEEDER FROM EXISTING ATS TO EXISTING "STANDBY" MAIN DISTRIBUTION PANEL.
- 23 6'-0" HIGH CHAIN LINK GALVANIZED FENCE.
- 24 EXTEND (2) 20A-120V BRANCH CIRCUITS FROM EXISTING PANEL "EM1" TO GENERATOR FOR BATTERY CHARGER AND OIL HEATER. TERMINATE AT GENERATOR PER MANUFACTURERS REQUIREMENTS.
- 25 CRITICAL SILENCER SIZED PER MANUFACTURERS REQUIREMENTS.
- 26 DISCONNECT AND REMOVE EXISTING 125KW GENERATOR, GENERATOR BASE, RESERVE FUEL OIL TANK, AUTOMATIC TRANSFER SWITCH, ALL ASSOCIATED PIPING AND WIRING.
- 27 REMOVE EXISTING DAMPERS, DAMPER MOTORS. POWER AND CONTROL WIRING. CONTRACTOR TO PROVIDE 2" RIGID INSULATION AND SEAL WEATHER TIGHT INTERIOR OF LOUVER.
- 28 MINIMUM 6'-0" DOOR OPENING IN FENCE.
- 29 APPROXIMATE LOCATION OF CONDUIT ENTRY INTO GENERATOR HOUSING REFER TO MANUFACTURERS REQUIREMENTS.
- ALL RIGID CONDUITS TO BE ENCASED IN CONCRETE. SEE ONE LINE
- DIAGRAM FOR REQUIREMENTS. 31 TAP EXISTING 150A CIRCUIT BREAKER PRESENTLY SERVING EXISTING JOCKEY PUMP. EXTEND 4#6+#6G-1"EMT CONDUIT TO 480V-30 60A/60
- FUSED SWITCH FOR EMERGENCY ATS. 32 EXISTING 30A/20A 600V JOCKEY PUMP AND JOCKEY PUMP CONTROLLER TO REMAIN.
- 33 EXISTING 3/4 HP 480V JOCKEY PUMP.
- 34 EXISTING JOCKEY PUMP FEEDER TO REMAIN AS IS.
- 1 3" CONTROL CONDUIT TO GENERATOR FROM NEW PULL BOX. ROUTE AS
- HIGH AS POSSIBLE.
- 36 EMERGENCY FEEDERS AND BRANCH CIRCUIT CONDUITS RUN UP BUILDING AND TIGHT TO STRUCTURE.
- 37 1" CONTROL CONDUIT TO ALL ATS'S FROM NEW PULL BOX. CONDUIT AND WIRING TO BE 2 HR. RATED.

GENERAL DRAWING NOTES

- ALL WORK TO BE COORDINATED WITH OTHER TRADES AND BUILDING OWNER PRIOR TO COMMENCING THAT WORK.
 - COORDINATE ALL SHUT DOWNS REQUIRED FOR INSTALLATION OF NEW GENERATOR WITH BUILDING OWNER TWO WEEKS PRIOR TO COMMENCING WORK REQUIRING SHUT DOWN.
- SEE ONE LINE DIAGRAM DRAWING E2 FOR FEEDER SIZING. ALL INTERIOR EMERGENCY LIFE SAFETY, AND FIRE PUMP WIRING TO BE TYPE RHW-2 FIRE RESISTIVE CABLES (ELECTRIC CIRCUIT PROTECTIVE SYSTEM) IN EMT CONDUIT. SYSTEM TO BE BE UL 2196 CERTIFIED.



enovations for:
REPLACEMENT
or, 1999 Sutter Ave
ti, OH 45225

Electrical Renc GENERATOR RE Marquette Manor, '

HERNDON

ENGINEERING

SERVICES, Inc.

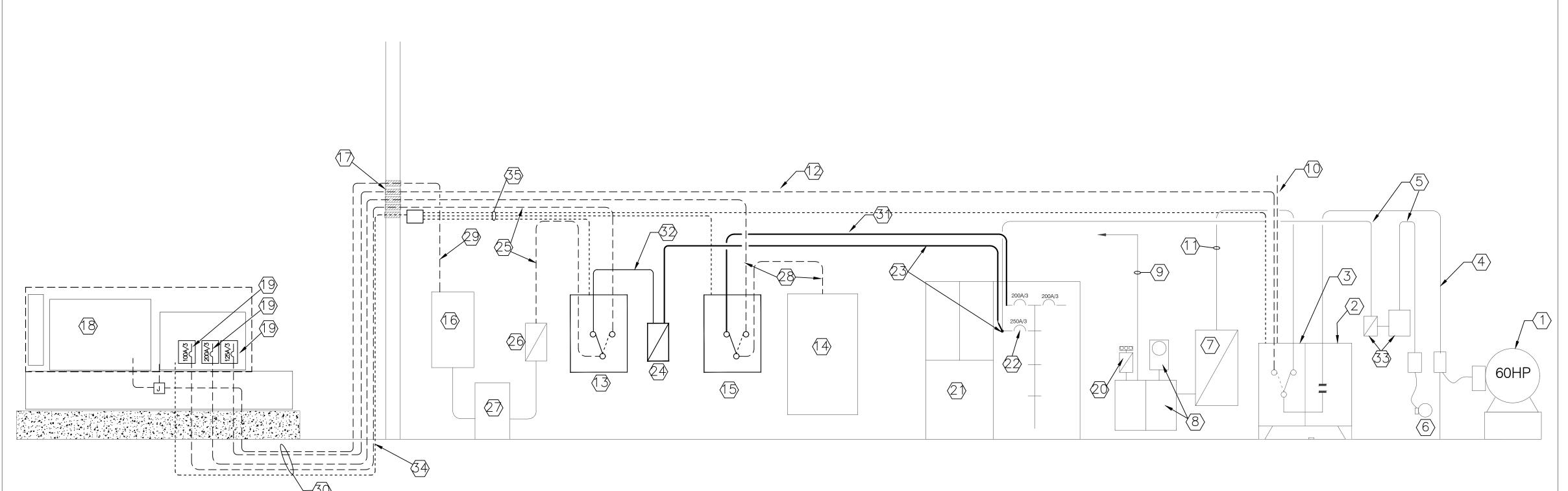
5870 Cook Road Suite B

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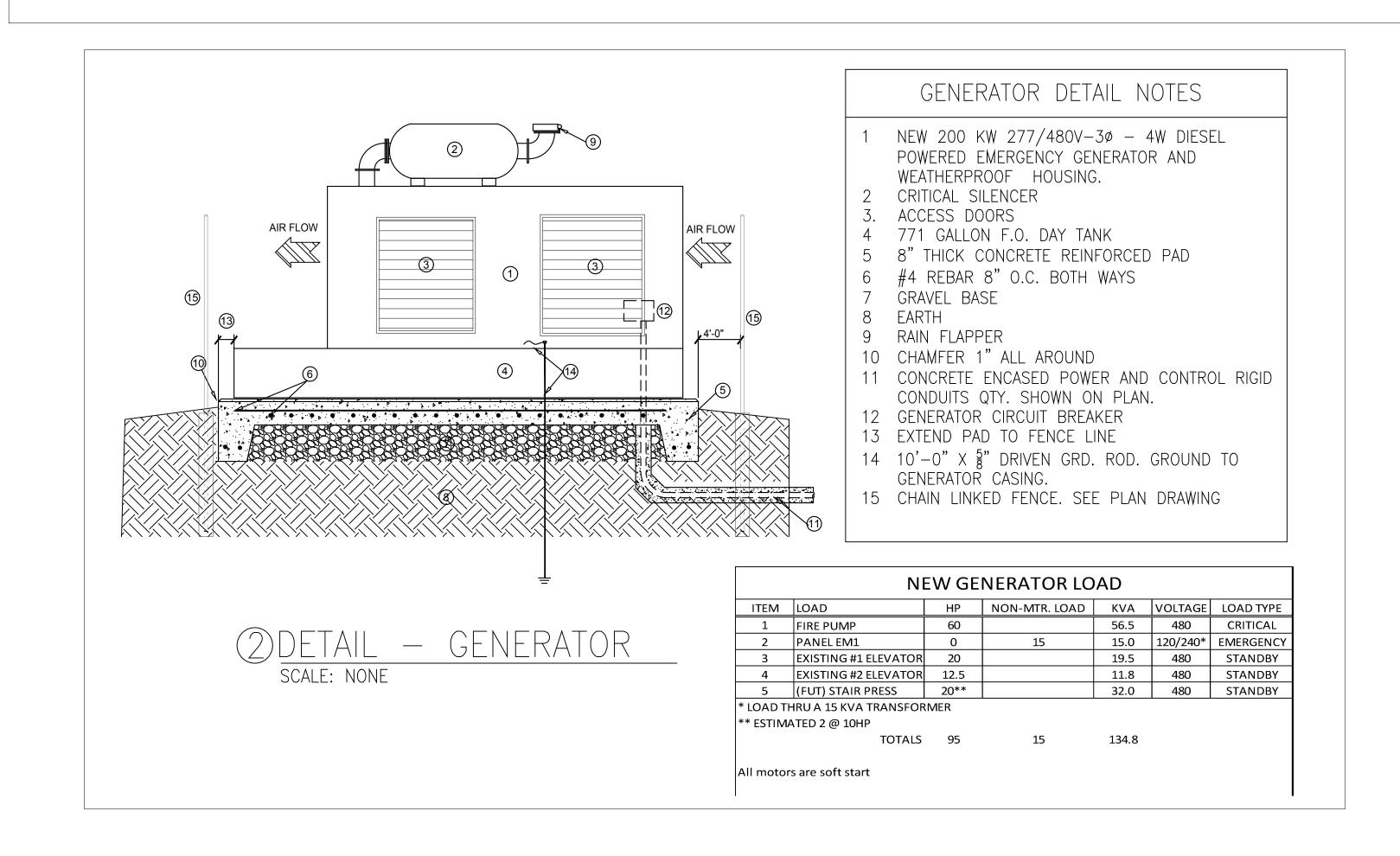
HES: #4525

Drawing Title POWER PLAN

> Drawing No. E1



1) SINGLE LINE DIAGRAM SCALE: NONE



RISER DIAGRAM -KEY NOTES

- 1 EXISTING 480V 3Ø FIRE PUMP
- 2 EXISTING 480V 3Ø 600A FIRE PUMP CONTROLLER TO REMAIN.
 3 EXISTING 480V 3Ø 600A FIRE PUMP AUTO TRANSFER SWITCH TO
- 4 EXISTING (3) #3 RHW-2 DRAKA(2 HR. RATED) 1 $\frac{1}{2}$ "EMT NORMAL
- POWER FEED TO FIRE PUMP TO REMAIN.

 | 5 EXISTING (3) 3#10 RHW-2 DRAKA(2 HR. RATED)-1"EMT FEED TO
- FIRE JOCKEY PUMP.

 EXISTING FIRE JOCKEY PUMP.
- 7 EXISTING 600A/500a 600V FUSED SWITCH FOR NORMAL POWER TO
- FIRE PUMP CONTROLLER ATS.

 8 EXISTING UTILITY C/T CABINET AND METER TO REMAIN.
- 9 EXISTING SERVICE FEED (3) 3#3 THWN-2, $1\frac{1}{4}$ "EMT FROM UTILITY
- VAULT TO CT CABINET TO REMAIN.

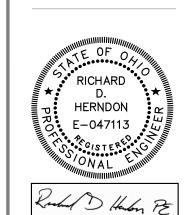
 10 EXISTING EMERGENCY FEED TO FIRE PUMP ATS SWITCH TO BE
- REMOVED BACK TO SOURCE.
- 11 EXISTING (3) #3 RHW-2 DRAKA(2 HR. RATED) 1 $\frac{1}{2}$ "EMT TO EXISTING FIRE CONTROLLER ATS SWITCH TO REMAIN.
- 12 NEW (3) #3 RHW-2 DRAKA(2 HR. RATED) 1 $\frac{1}{2}$ "EMT EMERGENCY FEEDER FROM NEW GENERATOR TO FIRE PUMP CONTROLLER ATS SWITCH. EXTEND TO ---A CIRCUIT BREAKER IN NEW GENERATOR.
- 13 NEW 100A-480V "<u>LIFE SAFETY</u>" ATS SWITCH.

 14 EXISTING <u>"STANDBY"</u> MAIN DISTRIBUTION PANEL"EMDP". SEE PANEL SCHEDULE
- 15 NEW 200A 480V "STANDBY" ATS SWITCH.
- 16 EXISTING "LIFE SAFETY" PANEL " EM-1" TO REMAIN. LOAD ON PANEL IS 13.4KVA ADDED LOAD IS 1.6KVA TOTAL OF 15.0KVA. ADD TWO (2)20A-1P CIRCUITS FOR BATTERY CHARGER AND ENGINE
- 17 PROVIDE WATERTIGHT SEAL WHERE NEW EMERGENCY FEEDER PASSES THROUGH BUILDING.. TRANSITION FROM TO AND FROM GENERATION TO STANDARD (THWN-2) WIRE TO DRAKATA (ELECTRIC CIRCUIT PROTECTIVE SYSTEM) ON INTERIOR OF BUILDING.
- 18 NEW 200KVA 480/277V-3Ø-4W PAD MOUNTED GENERATOR WITH TANK RESERVOIR. SEE DETAIL FOR MOUNTING AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 19 CIRCUIT BREAKERS MOUNTED ON NEW GENERATOR. (1) 100A-3P FOR "LIFE SAFETY", (1) 200A-3P FOR "STANDBY", (1) 125A-3P "CRITICAL" (FIRE PUMP). FURNISHED FROM MANUFACTURER.
- 20 EXISTING 30A-3P FUSED SWITCH FOR PHASE LOSS LIGHTS.
 21 EXISTING 480/277V 3Ø 4W MAIN SERVICE DISTRIBUTION PANEL.
 22 EXISTING 150A-3P CIRCUIT BREAKER PRESENTLY FEEDING JOCKEY PUMP (20A) TO BE TAP TO FEED NEW 100A "EMERGENCY" ATS
- SWITCH.

 23 TAP EXISTING 150A CIRCUIT BREAKER WITH 3#3 THWN-2 1 ½"EMT
- AND EXTEND TO NEW "EMERGENCY" DISCONNECT SWITCH AND ATS SWITCH. TOTAL WIRING LENGTH NOT TO EXCEED 25'.
- 24 NEW 100A/100A FUSED DISCONNECT SWITCH.
- 25 NEW (3)#3 RHW-2 DRAKA(2 HR. RATED) 1 $\frac{1}{2}$ "EMT
- 26 EXISTING 100A/100A FUSED SWITCH TO REMAIN.
- 27 EXISTING 15KVA TRANSFORMER 480V-1ø >120/240V 1ø. TO REMAIN.
- 28 NEW (3)#3/0 RHW-2, DRAKA(2 HR. RATED) $2\frac{1}{2}$ "EMT
- 29 EXTEND (4)#12+(1)#12-THWN-2 1" EMT FROM EMERGENCY PANEL TO BLOCK HEATER AND BATTERY CHARGER AT GENERATOR.
- 30 UNDERGROUND WIRING TO BE IN RIGID CONDUITS AND ENCASED IN CONCRETE.
- 31 NEW (3)#3/0 THWN-2 1 $\frac{1}{2}$ "EMT
- 32 NEW (3)#3 THWN-2 1 $\frac{1}{4}$ "EMT
- 33 EXISTING JOCKEY PUMP 30/20 FUSED DISCONNECT SWITCH AND CONTROLLER TO REMAIN.
- 34 EXTEND 1 ½" RIGID CONDUIT FROM GENERATOR CONTROL PANEL TO NEMA 1 PULL BOX INSIDE BASEMENT OF BUILDING. REFER TO GENERATOR MANUFACTURERS WIRING DIAGRAMS FOR NUMBER AND SIZE OF CONDUCTORS.
- 35 EXTEND 2 HR RATED CONDUCTORS IN 1" EMT CONDUIT FROM PULL BOX TO EACH ATS SWITCH. REFER TO GENERATOR MANUFACTURERS WIRING DIAGRAMS FOR NUMBER AND SIZE OF CONDUCTORS.

GENERAL DRAWING NOTES

A) ALL INTERIOR EMERGENCY LIFE SAFETY, AND FIRE PUMP WIRING TO BE TYPE RHW—2 FIRE RESISTIVE CABLES (ELECTRIC CIRCUIT PROTECTIVE SYSTEM) IN EMT CONDUIT. SYSTEM TO BE BE UL 2196 CERTIFIED.



Electrical Renovations for:
GENERATOR REPLACEMENT
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Project No.

HES: #4525

Drawing Title

ELECTRICAL

SPECIFICATION,

SLD, AND

SCHEDULE

E2

Issue