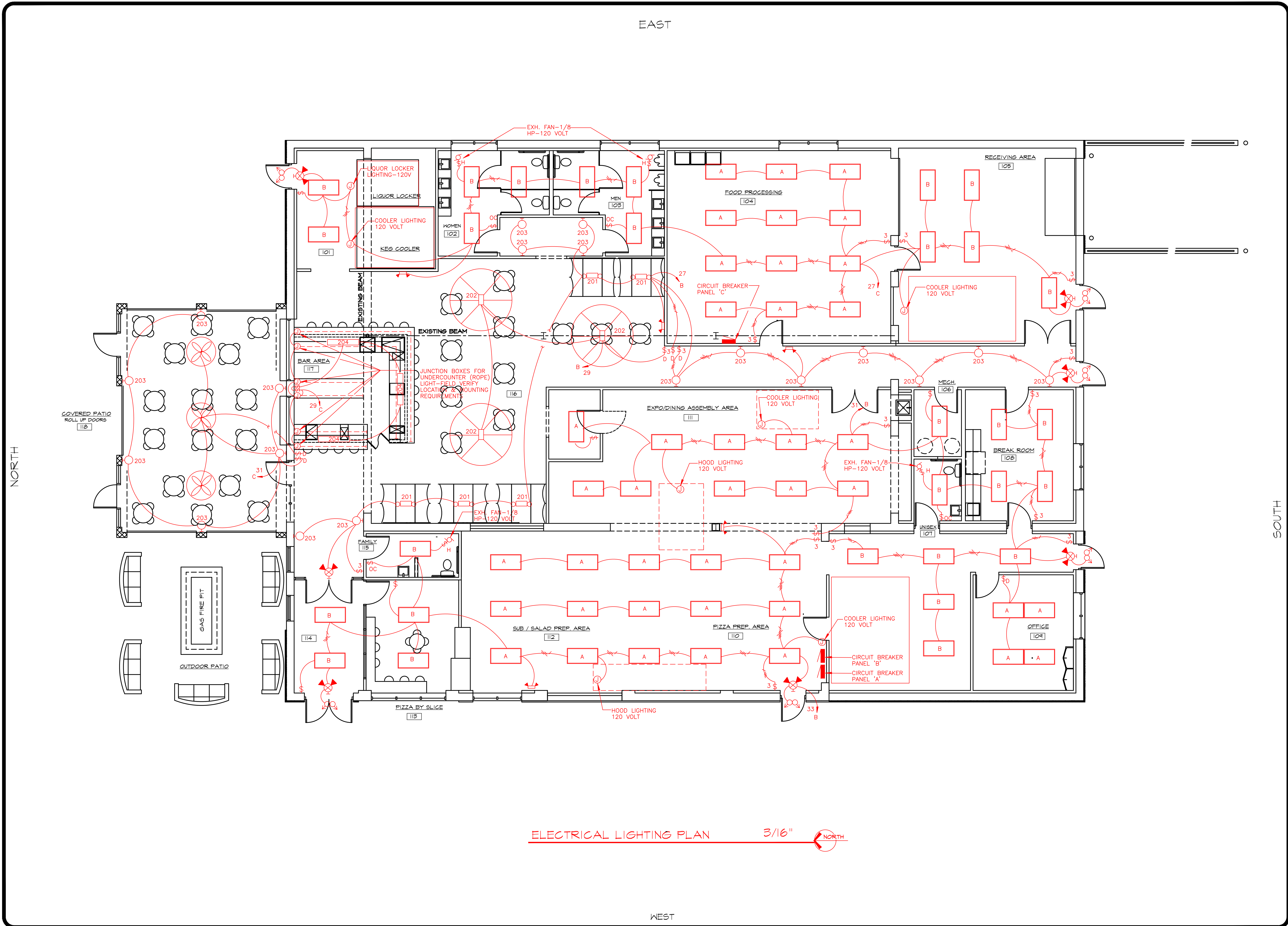




REVISIONS	BY

JOHN D. STOPP ARCHITECT

5204 GEORGEANNE CT. MENTOR, OHIO 44060
1-440-357-8554 JSTOPP14@aol.com

STATE OF OHIO
JOHN D. STOPP
A-12432
REGISTERED
EXPIRATION DATE 8/30/2023

CLEVELAND PIZZA CO. REMODELING

31222 VINE STREET
WILLOWICK, OHIO

ELECTRICAL LIGHTING PLAN

DRAWN
JOHN D. STOPP
CHECKED

DATE
JULY 19, 2022

SCALE
3/16" = 1'-0"

JOB NO.
202044

SHEET

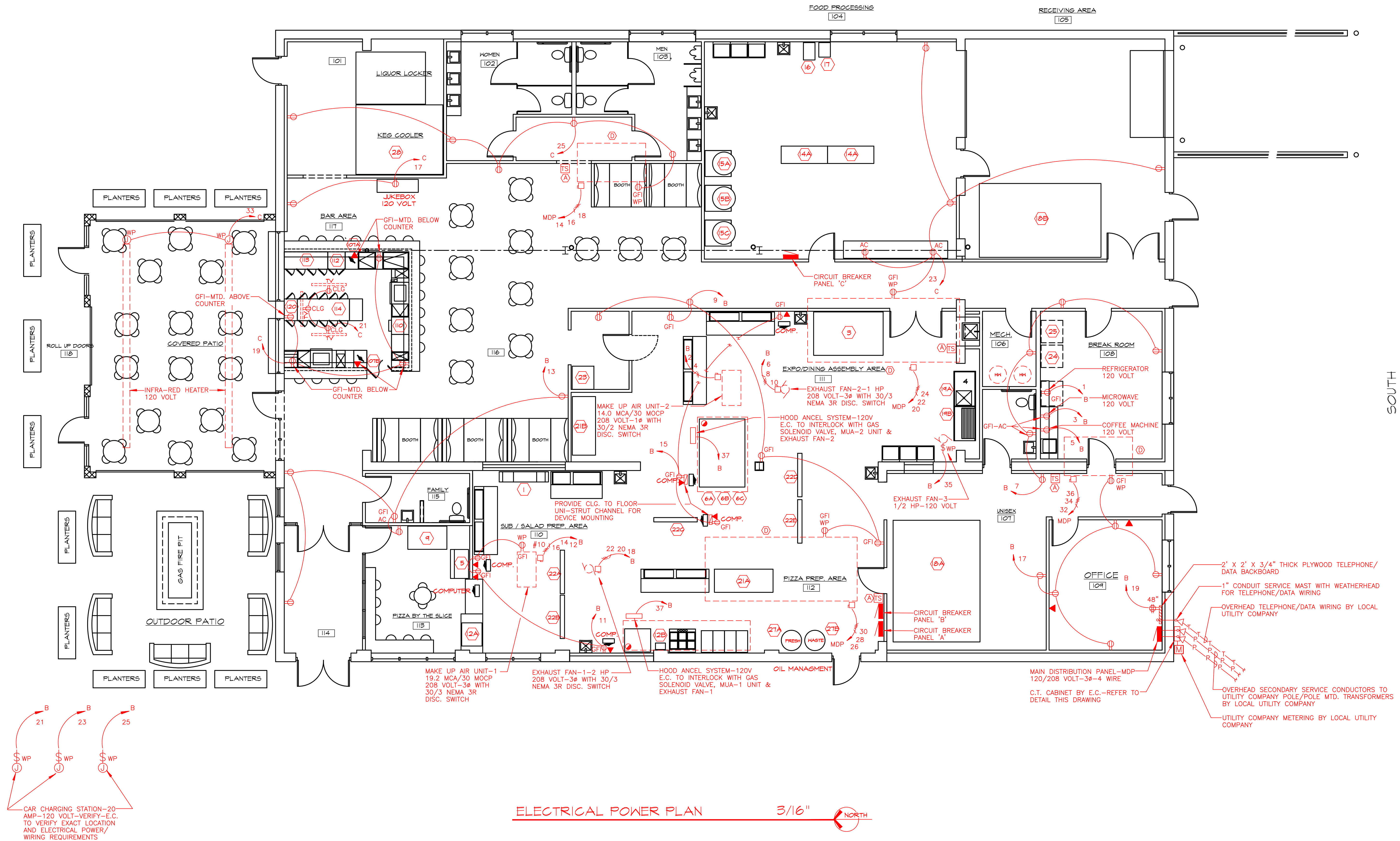
OF 5 SHEETS

NORTH

EAST

SOUTH

WEST



ELECTRICAL POWER PLAN 3/16" NORTH

REVISIONS	BY

JOHN D. STOPP ARCHITECT

5204 GEORGEANNE CT. MENTOR, OHIO 44060
1-440-357-8554 JSTOPP14@AOL.COM

OF OHIO JOINTLY ISSUED

JOHN D. STOPP
STATE OF OHIO
A-12432
REGISTERED
EXPIRATION DATE 6/30/2023

CLEVELAND PIZZA CO. REMODELING

31222 VINE STREET
WILLOWICK, OHIO

ELECTRICAL POWER PLAN

DRAWN
JOHN D. STOPP

CHECKED

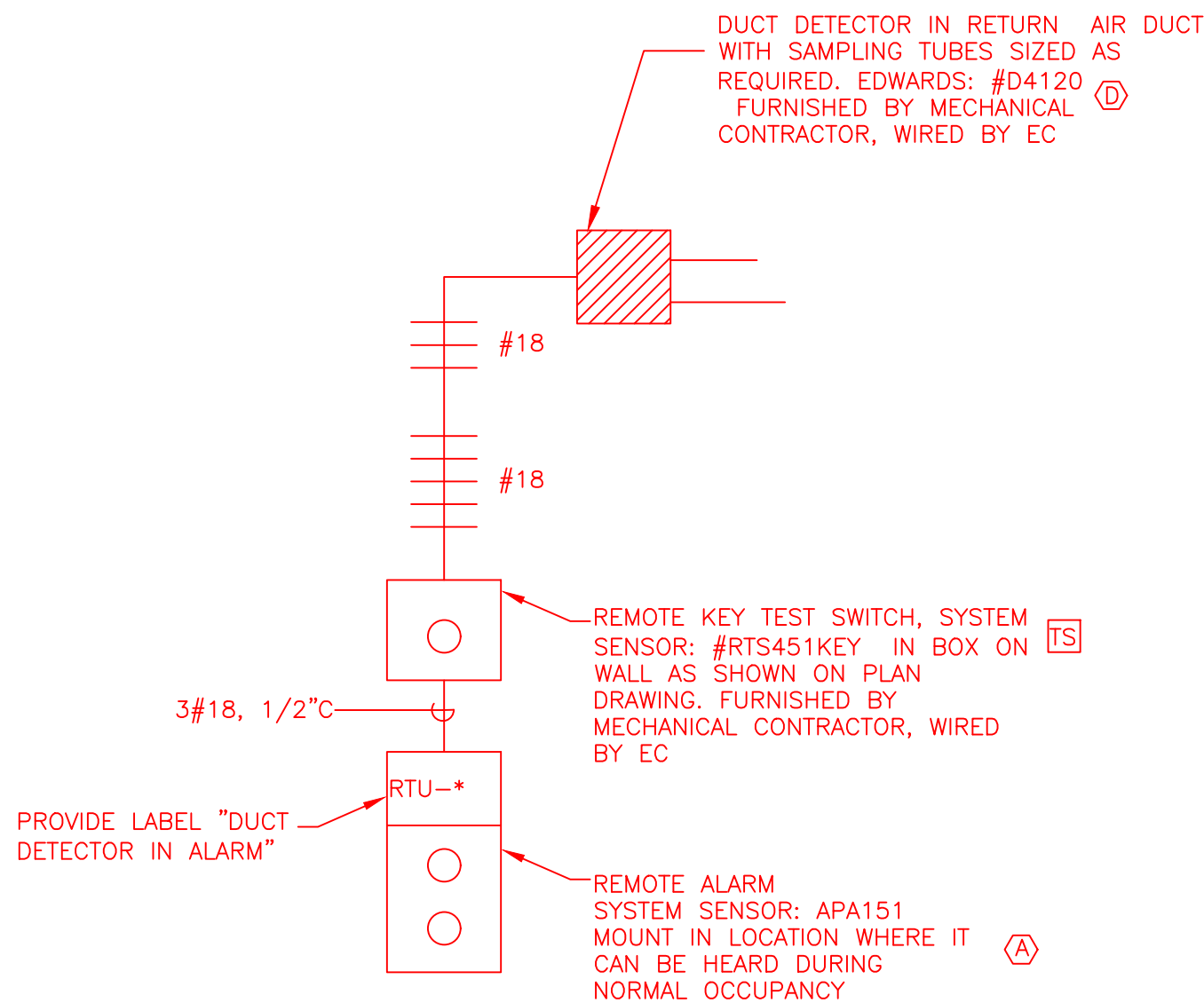
DATE
JULY 19, 2022

SCALE
3/16" = 1'-0"

JOB NO.
202044

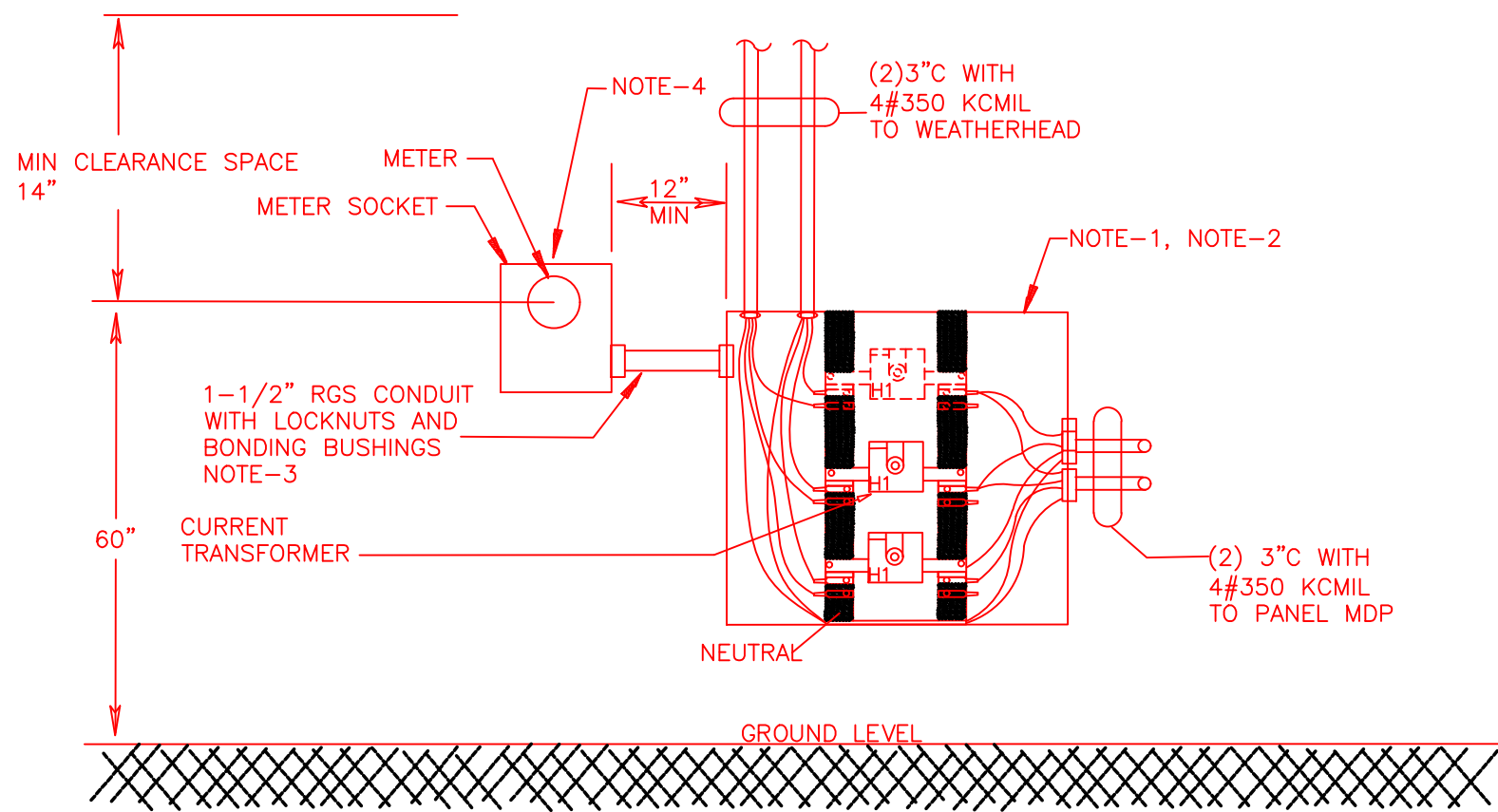
SHEET
E2

OF 5 SHEETS



DUCT SMOKE DETECTOR DETAIL

1. ALL WIRING TO BE PER MANUFACTURER'S WIRING DIAGRAMS.
2. LOCATION OF DUCT DETECTOR TO BE VERIFIED WITH LOCAL FIRE MARSHALL DETECTOR IS TO BE INSTALLED IN AN ACCESSIBLE LOCATION.



CT CABINET/METER DETAILS:

CT CABINET/METER NOTES:

1. 600 AMP CT CABINET F&I BY THIS CONTRACTOR,, 36"X36"X10"--VERIFY, NEMA-3R 50,000 AMPS RMS RATING. EAST COAST PANELBOARD #CTJ-600R-A OR UTILITY COMPANY APPROVED EQUAL
2. CT'S FURNISHED BY UTILITY COMPANY, INSTALLED BY THIS CONTRACTOR, WIRED BY UTILITY COMPANY.
3. METERING CONDUCTORS F&I BY UTILITY COMPANY.
4. TRANSFER RATED METER SOCKET FURNISHED BY UTILITY COMPANY INSTALLED BY THIS CONTRACTOR. METER F&I BY UTILITY COMPANY.
5. PHASE ROTATION IS 1-2-3 TOP TO BOTTOM.

MAIN BUS RATING: 600 AMP

MAIN BREAKER: 600/3

LUGS:

PANEL NO. MDP

FEEDER CABLE SIZE: 8-#350 KCML IN 2-3" C.

VOLTS: 208/120 PHASE: 3ø

FED FROM: METER/C.T. CABINET

DESCRIPTION	W PER PHASE			NO.	A B C			NO.	W PER PHASE			DESCRIPTION
	A	B	C		A	B	C		A	B	C	
CIRCUIT BREAKER PANEL-A	9467			1	200			60	2	7013		WARE WASHER-19A
		9467		3					4	7013		
			9467	5					6	7013		
CIRCUIT BREAKER PANEL-B	9733			7	200			100	8	10000		BOOSTER HEATER-19B
		9733		9					10	10000		
			9733	11					12	10000		
CIRCUIT BREAKER PANEL-C	5967			13	100			30	14	2402		ROOF TOP HVAC UNIT-1
		5967		15					16	2402		
			5967	17					18	2402		
SPARE				19	20			90	20	7686		ROOF TOP HVAC UNIT-2
SPARE				21	20				22	7686		
SPARE				23	20				24	7686		
SPARE				25	20			90	26	7686		ROOF TOP HVAC UNIT-3
SPARE				27	20				28	7686		
SPARE				29	20				30	7686		
SPACE				31				30	32	2402		ROOF TOP HVAC UNIT-4
SPACE				33					34	2402		
SPACE				35					36	2402		
SPACE				37					38			SPACE
SPACE				39					40			SPACE
SPACE				41					42			SPACE

DEMAND LOAD:

KVA: 187.1

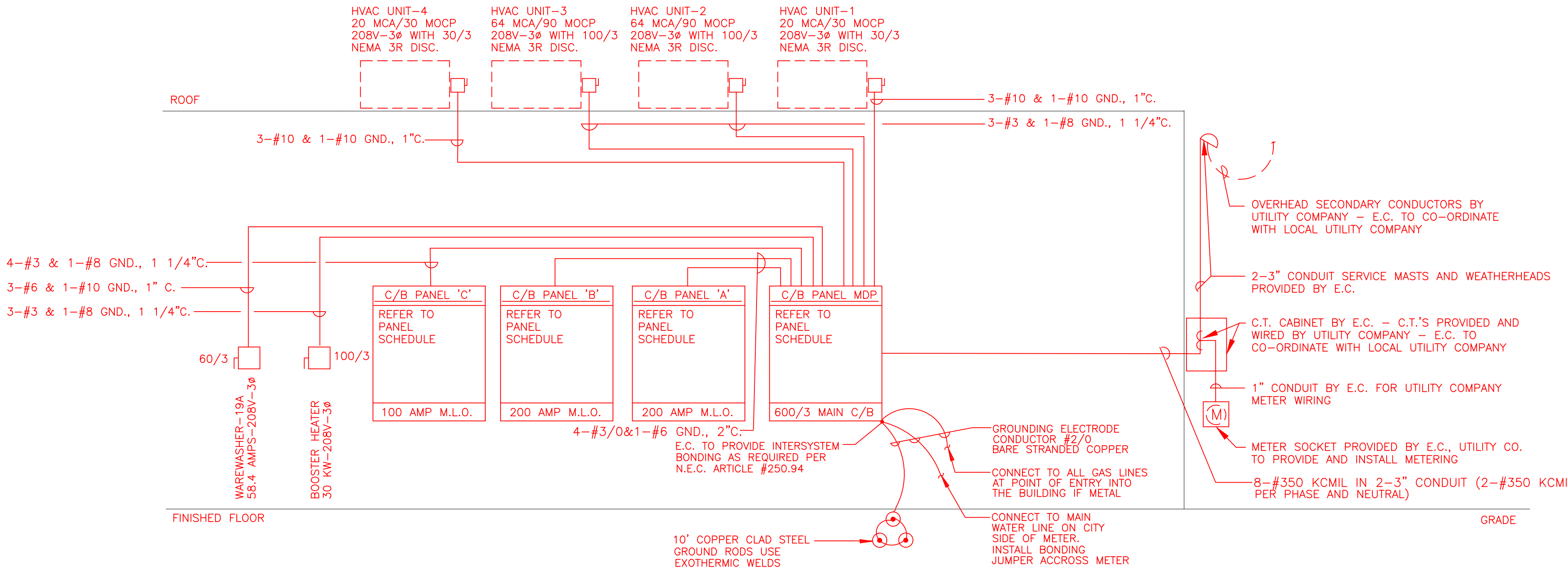
AMPS: 519.2

LOCATION: REAR OFFICE

MOUNTING: SURFACE MTD.

PANEL LEGEND

H - HACR TYPE CIRCUIT BREAKER

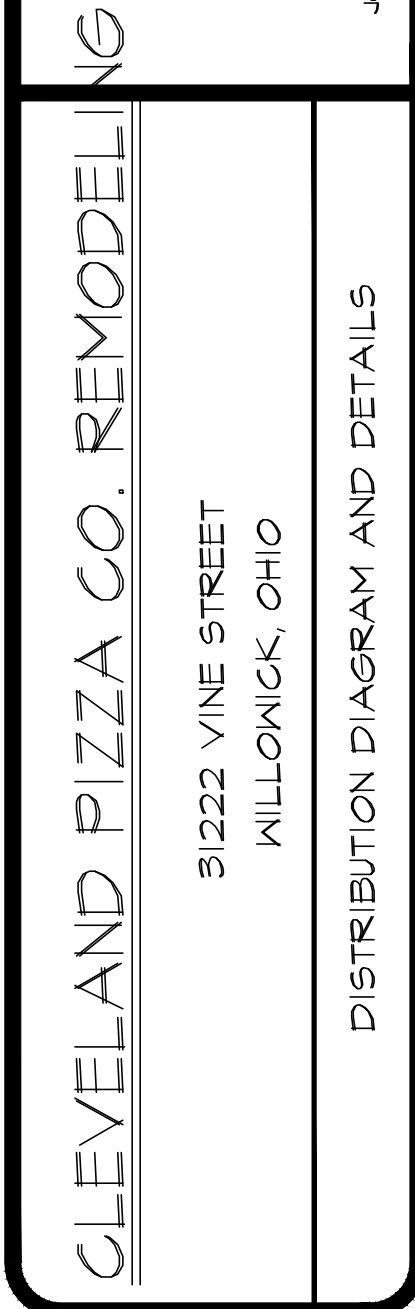
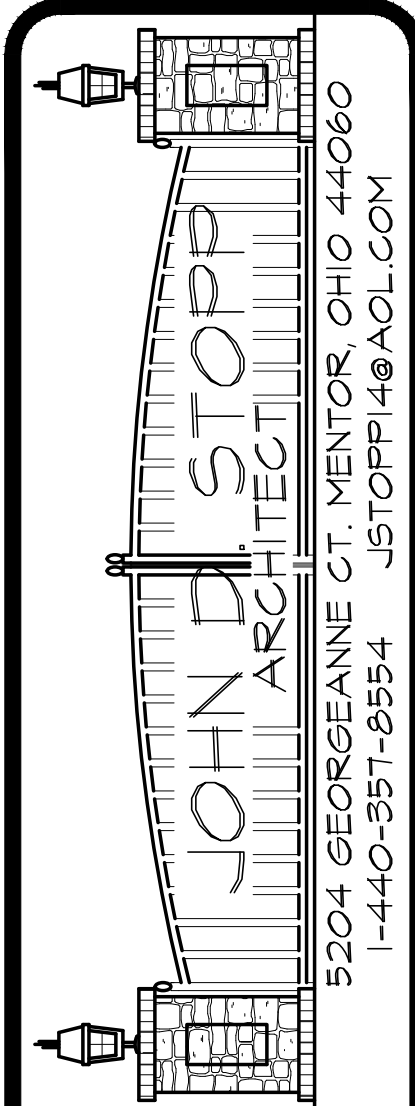


DISTRIBUTION DIAGRAM 120/208 VOLT-3ø-4 WIRE

DRAWING NOTES

1. ELECTRICAL CONTRACTOR SHALL CONNECT ALL EXIT AND EMERGENCY LIGHTING TO THE SAME BRANCH CIRCUIT AS THAT SERVING THE NORMAL LIGHTING IN THE AREA AND CONNECTED AHEAD OF ANY LOCAL SWITCHES, THE BRANCH CIRCUIT THAT FEEDS EMERGENCY EQUIPMENT SHALL BE CLEARLY IDENTIFIED AT THE CIRCUIT BREAKER PANEL PER N.E.C. ARTICLE #700.12 (F)
2. ELECTRICAL CONTRACTOR SHALL CONTACT LOCAL UTILITY CO. TO VERIFY AVAILABLE FAULT CURRENT AT UTILITY TRANSFORMER AND VERIFY THAT FAULT CURRENT OF DEVICES DOWN STREAM MEET OR EXCEED AVAILABLE FAULT CURRENT.

REVISIONS	BY



DRAWN JOHN D. STOPP
CHECKED
DATE JULY 19, 2022
SCALE 3/16" = 1'-0"
JOB NO. 202044
SHEET
OF 5
SHEETS

ELECTRICAL SPECIFICATION

SCOPE OF WORK

In general, the work consists of furnishing and installing the equipment, service and all other materials necessary to provide the complete electrical systems and all work in connections with such systems including labor, transportation, etc., complete in every respect as shown on the plans, herein specified, or reasonably implied as ready for use unless otherwise noted or otherwise specified.

The Contractor also is referred to architectural, structural, mechanical and other drawings pertaining to the project. The above mentioned drawings, as well as their respective specifications, are part of the complete contract documents.

It shall be the Contractor's responsibility to provide all work as herein described and/or as indicated on the drawings. Work includes, but is not limited to the following:

- Complete lighting and power distribution systems, including panels and all wiring to all equipment, as shown or implied on the drawings.
- All lighting fixtures, hangers, supports, lamps and control devices installed and connected in complete working order.
- Receptacles, appliance outlets and telephone outlets.
- Motor starters and/or safety switches and all wiring to motors and their control devices.
- Complete emergency lighting, and exit sign lighting.
- Empty conduits and outlet boxes for telephone system complete with pull wires in all conduits and mounting boards.
- Grounding system

Materials not provided by this Contractor, but subject to his wiring:

Motors and motor controls provided by other contractors under other sections or specifications.

GENERAL REQUIREMENTS

The Electrical Contractor shall secure and pay for all permits, construction fees and other miscellaneous fees and costs associated with and required for the completion of his work. The Electrical Contractor shall arrange in a timely manner for all inspection of his work by local or state inspection department(s). Copies of all inspection reports shall be made available to the owner on request. The Electrical Contractor shall furnish to the owner 3 copies of the approved final inspection report before request for final payment.

All work shall be performed in strict accordance with the latest National Electrical Code, the State of Ohio building code and all provisions of any local electrical codes and ordinances in effect in the city, township or county where this work takes place.

All conditions and requirements of the Occupational Safety and Health Act (OSHA) shall be followed throughout the construction of this project. This project, when complete, shall meet or exceed the conditions and requirements for safety as established by the Occupational Safety and Health Act.

All materials, equipment and devices furnished by the contractor shall be new, U.L. listed or labeled, and shall conform to NEMA and ANSI standards where applicable.

Wherever the word "provide" is used, it shall mean: Furnished and installed by the Electrical Contractor.

Wherever the word "install" is used, it shall mean: Furnished by other trades, installed and wired by the Electrical Contractor.

The Contractor shall guarantee the materials and workmanship provided by him in this project for a period of one year from the date of owner's effective use. The Contractor shall repair or replace any materials or equipment which proves defective within one year no additional cost to the owner.

The Contractor must visit the site of the work and shall be aware of all conditions and provisions at the site affecting his work. The Contractor shall repair or replace any existing equipment or property of the owner which is damaged by him or by his workmen. Any damaged work shall be repaired or replaced by workmen totally skilled in the work to be performed. Any such work must be performed with the owner's prior approval and when completed shall be considered acceptable only by the owner.

The Contractor shall be aware of all work being performed by other trades and shall schedule and arrange his work so as not to duplicate or interfere with any work by other trades. Scheduling of the Contractor's work shall be done so as not to interfere with the owner's use of the building or create hazards for the owner's personnel, which may occupy the building.

The Contractor shall conduct tests of the system in the presence of the owner or his agent. All materials and installation shall be guaranteed to be free of defects in material and workmanship for 1 year. The Contractor shall turn over the owner system wiring diagrams and maintenance data.

The Electrical Contractor shall submit manufacturer's certified drawings to the owner for approval before purchasing equipment. Failure to gain prior approval by the owner shall not relieve the Contractor from supplying the equipment as specified herein.

The submittals will be reviewed only for general compliance and not for dimensions, quantities, etc. The submittals that are returned shall be used for procurement. The responsibility of correct procurement remains solely with the Contractor. The submittal review shall not relieve the Contractor of responsibility for errors or omissions and deviations from the contract requirements.

The Contractor shall schedule his work in order to meet the owner's schedule for effective use of the building. The contractor shall arrange for all materials and items of labor to be available and/or completed to avoid any delays in the schedule for completion of his work or work of other trades.

All panels, safety switches, and circuits from panels shall be identified with plastic lamicoid nameplates denoting panel number or letter code, voltage, phase and its use, i.e., lighting, power, AC equipment, etc.

Electrical Contractor shall be responsible to connect all single phase loads to the three phase bus system in order to balance the loading on the phase distribution.

It is the intent of the electrical drawings to describe as accurately as possible, the work required and locations of all equipment. The owner reserves the right to make minor changes in location of the installation of equipment shown on the drawings. Such changes shall not be justification in any way for additional compensation to the Contractor.

The entire length and power system shall be permanently and effectively grounded in accordance with the latest issue of the National Electrical Code, including all exposed, non-current carrying electrical parts of the electrical equipment. All ground conductors shall be insulated copper.

All bare metal parts and supporting steel shall be painted by the Contractor with one ship coat, color as selected by the owner. All equipment enclosures finished surfaces damaged shall be restored to original quality.

ELECTRICAL AND TELEPHONE SERVICES

The Electrical Contractor shall coordinate his work with the local utility company serving this area for installation of equipment furnished and/or installed by him. All work shall meet the utility company's requirements when completed.

Telephone service shall consist of necessary conduit and cabinets, as shown on plans and all necessary backboards, and the entire system shall be coordinated directly with the telephone company and Architect prior to rough-in.

CONDUIT AND WIRE

All feeders shall be installed in intermediate metal conduit (IMC), or rigid conduit. Thin-wall conduit or type "MC" cable may be used in commercial areas where not subject to physical damage. All conduits that run in or under concrete or in grade shall be IMC or rigid nonmetallic plastic conduit schedule 40. All conduits shall be of the proper size in accordance with the National Electrical Code, 3/4" inch as a minimum.

All pull boxes, junction boxes or device boxes shall be metal and shall be properly sized for the required number of conductors. All boxes shall be rigidly and securely fastened to the building structure, building finish or building members. Boxes used for surface conduit work shall be "FS" series cast boxes.

Minimum branch circuit wire size for power and lighting shall be size 12 AWG, solid copper all branch circuit homeruns in excess of 100 feet shall be #10 AWG. Size 14 AWG, stranded copper may be used for control and communication circuits or in portable cords. Unless otherwise noted, wire shall be as follows:

- No. 14 AWG and larger; copper, stranded or solid, type THWN-THHW, 75 degrees Centigrade, 600 volt.
- No. 8 AWG and larger; copper, stranded, type XHHW, 90 degrees Centigrade, 600 volt.

Wherever flexibility is required, such as at motors, transformers and adjustable equipment, liquidtight flexible metal conduits shall be used. Liquidtight flexible conduit may be used in lengths not to exceed 3 feet and not less than 2 feet. Flexible conduit shall not be used as a substitute for conduit raceways where they can be installed with no mechanical difficulty. All flexible raceways shall include an equipment grounding conductor regardless of length of circuit protection devices. Liquidtight flexible conduit shall be used in damp or wet locations.

Seal all openings around electrical penetrations through fire resistant-rated walls, exterior walls, partitions, floors or ceilings using an approved method to maintain the fire resistance rating as required by article #300.21 & 300.7 of the national electrical code.

If the ceiling cavity is used as a return air plenum, All low voltage wiring not installed in conduit shall be suitable for installation in an air handling plenum as required by article #300-22 of the national electrical code.

MATERIALS

Unless otherwise noted, all safety switches shall be NEMA 1 or NEMA 3R, fused or unfused, rated 600 volt and shall be U.L. listed. Switches shall have a short circuit with stand rating or not less than 100,000 amperes, RMS symmetrical-heavy duty type, switches shall be Square 'D' Company, I.T.E. or Westinghouse.

Fuses shall not be installed until equipment is ready to be energized. All fuses shall be of the same manufacturer to assure selective coordination.

The Electrical Contractor shall furnish and install a complete set of fuses for all fusible equipment on the job. Unless otherwise noted, all fuses shall be U.L. listed, current limiting and have an interrupting rating of 200,000 RMS amperes symmetrical.

All fuses rated 600 amperes or less shall be time-delay current-limiting U.L. class RK1, unless otherwise noted. They shall be:

- 1. Gould Shawmut amp tram II A2D R (250V), A6D R (600V).
- 2. Bussman low peak; LPN-RK (250V), LPS-RK (600V).
- 3. Reliance; LEN-RK (250V), LES-RK (600V).

Distribution panels shall be dead front, safety type, general purpose enclosures containing dead front fusible switch type units, number and size as indicated, balanced on 208 volt, 3 phase, 4 WSH mains, as indicated. The individual switch and fuse units shall be of the quick-make, quick-break type and shall have hinged fuse compartments with interlocked fuse doors so that access for replacement of fuses can be made only when the externally operated handle is in the "off" position. These units shall be removable and accessible from the front position so that the cabinet may be mounted on the wall. Equip each unit with car holder, switch rating nameplate and fuses similar to Bussman fusetron. Panels shall be similar to Square 'D' type QMB, equipped with front door and lock. I.T.E. or General Electric shall be considered equal.

Provide all panelboards where shown. All panels shall have a hinged door with panel legend type written indicating all circuits supplied, including spares along with main breaker or main lugs only. All panels shall have a minimum of 10,000 A.E.C. rated breakers, provide a separate ground bus. Refer to drawings for the number and size of branch breakers to be main lugs, (plug in type circuit breakers shall not be acceptable), panels shall be U.L. listed or labeled, conform to NEMA standards and shall be as manufactured by I.T.E., Square 'D' Company or General Electric.

All wall switches shall be of the toggle type for single pole, and three-way or four-way switches, specification grade, 20-ampere, 120/277 volt, quiet type, Hubbell #1221 for single pole, #1223 for three-way, and #1224 for four-way. Mtg. height and locations shall be subject to approval of the Architect.

Receptacle outlets shall be duplex type, specification grade 15 ampere, 125 volt, grounding type, Hubbell #5252. GFCI receptacles shall be 15 ampere, duplex, 3 wire grounding type, Hubbell #GF-5262, feed-thru type, capable of protection connected downstream receptacles on a single circuit. Mounting height and locations of all receptacles shall be subject to approval of the Architect.

Wall plates for switches, receptacles, telephone and other outlets shall be designed for the device with which used. All wall and cover plates shall be Hubbell P series, smooth finish, thermoplastic. Cover plates for exposed outlets shall be cadmium plated steel.

All hardware, supports, hangers, angle iron, channels, rods and clamps necessary to install electrical equipment, shall be supplied to suit conditions and application. The use of perforated straps will not be permitted.

Supporting devices shall be galvanized or aluminum material. All steel work erected for the support of electrical equipment shall be painted with one coat of iron-oxide black paint after cutting, drilling, welding, etc.

All equipment mounted on exterior walls shall be attached to 3/4" painted fire-proofed plywood boards furred out 1" from wall.

LIGHTING SYSTEMS

Provide and install in all lighting fixtures and lamps as shown in the fixture schedule and/or described in these specifications. Coordinate with all other trades in the locating of lighting outlets.

All lamps shall be of the same manufacturer throughout the project and shall be as manufactured by General Electric or Philips.

- All surface mounted fixtures, fluorescent and L.E.D. shall be mounted securely to the fixture stands in the lighting.
- Exterior fixtures or site luminaires shall be provided with ballast suitable for outdoor use (-20 degrees Fahrenheit).
- Egress emergency lighting shall be provided by self-contained battery operated 12 volt unit equipment. Battery and charger may be remote mounted from the lighting units. Battery units shall contain a long-life, self- charging battery transfer switch. Units shall include remote lighting heads or where indicated, remote heads for wall or ceiling recessed mounting. Units shall be 120 volt 60 HZ. All exit and egress emergency lighting shall provide a minimum of 90 minutes of operation on power failure. Locate as shown on plans and/or required by national, state and local codes.

MOTORS AND CONTROLS

This Contractor shall thoroughly acquaint himself with the specifications and drawings of the heating, air conditioning, and ventilating sections of the work to determine phases of the electrical installations which come under those headings. Should there be a discrepancy between the heating, air conditioning, and ventilating specifications and the electrical specifications, the specifications of the heating, air conditioning, and ventilating sections shall take preference.

In general, motors up to and including 1/3 HP shall be 120 volt, 1 phase, 60 cycle.

Wiring, starters, push-button and other operation and control wiring and devices necessary to provide automatic operation of heating and ventilating equipment (other than thermostats for unit ventilations and cabinet heaters) shall be furnished and installed as described in mechanical systems by the Electrical Contractor.

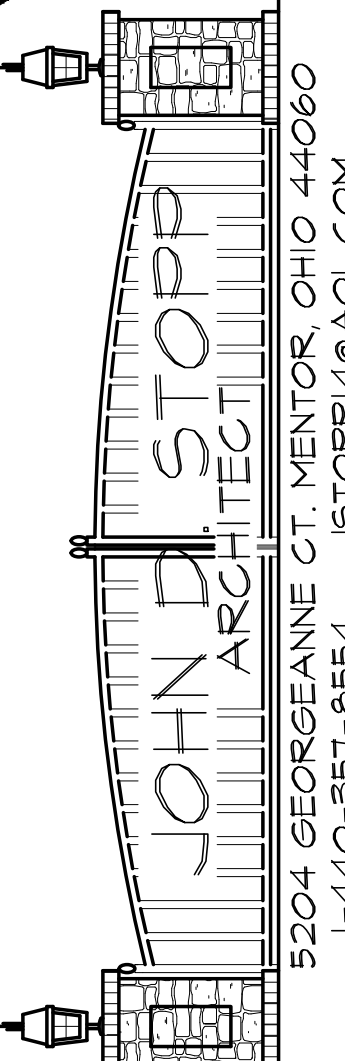
Furnish and install all power wiring including starters furnished by others, disconnect switches (where not furnished with combination starters) and provide all necessary mounting brackets and supports for the installation of his equipment and that furnished to him by others.

All conduit and wire for HVAC system controls, equipment and panels shown on the electrical drawing shall be furnished and installed by this contractor for use by temperature control installer for HVAC systems. Confirm exact locations and number of wires required. All final connections of line voltage power wiring to equipment and panels to be by the Electrical Contractor.

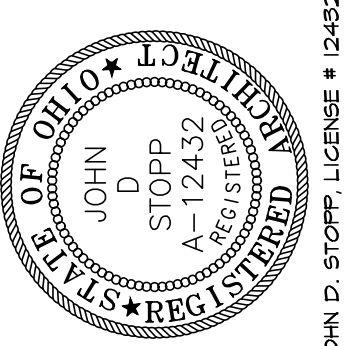
Starters for three-phase motors will be combination fused disconnect/magnetic full voltage starting type with 120 volt coils, 3 overloads, control transformer, fused control circuit, (2) N.O. and (2) N.C. auxiliary contacts and running pilot light. In addition, manually controlled motors shall have a "start- stop" push-button station in the cover, automatically controlled motors shall have "hand-off-auto" selector switches in the cover.

Manual starters (thermal overload switches) shall be Allen Bradley, Bulletin 600, with indicating lights.

REVISIONS	BY



5204 GEORGEANNE CT. MENTOR, OHIO 44060
1-440-3571-8534 JSTOPP14@AOL.COM



JOHN D. STOPP LICENSE # 12432
EXPIRATION DATE 6/30/2023

CLEVELAND PIZZA CO. REMODELING

31222 VINE STREET
WILLOWICK, OHIO

ELECTRICAL SPECIFICATIONS

DRAWN
JOHN D. STOPP

CHECKED

DATE
JULY 19, 2022

SCALE
3/16" = 1'-0"

JOB NO.
202044

SHEET

ES

OF 5 SHEETS