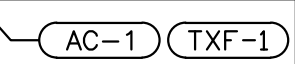




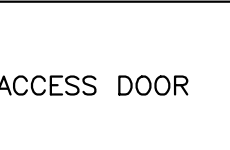

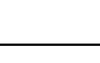
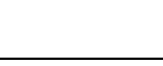
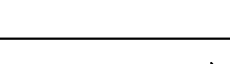
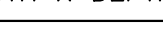
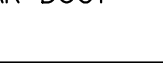





MECHANICAL SYMBOLS LIST			
	TXF-1	EQUIPMENT SYMBOL	ALACOUSTIC LINING
		POINT OF NEW CONNECTION TO EXISTING	BDBACKDRAFT DAMPER
AIR DEVICES		CDS	CEILING DIFFUSER SUPPLY
		CDR	CEILING DIFFUSER RETURN
		CFM	CUBIC FEET OF AIR PER MINUTE
		CD	CONDENSATE DRAIN PIPE
		DN	DOWN
		EER	ENERGY EFFICIENCY RATIO
DUCT ACCESSORIES		FC	FLEXIBLE CONNECTION
		IEER	INTEGRATED ENERGY EFFICIENCY RATIO
		RTU	ROOF TOP UNIT
		REF	REFRIGERANT PIPING
		RG	RETURN GRILLE
		SEER	SEASONAL ENERGY EFFICIENCY RATIO
CONTROLS AND SENSORS		VD	VOLUME DAMPER
		CEF	CEILING EXHAUST FAN
		EF	EXHAUST FAN
			THERMOSTAT
	S		TEMPERATURE SENSOR
DUCTWORK			
=====		AIR DUCT W/ 1.5" ACOUSTICAL LINING	
		FLEXIBLE DUCT	
	FC FC	FLEXIBLE CONNECTION	
	24X12	RECTANGULAR DUCT (WIDTH X DEPTH)	
		SUPPLY AIR RECTANGULAR DUCT CROSS SECTION	
		RETURN AIR RECTANGULAR DUCT CROSS SECTION	
	ø12	ROUND DUCT (DIAMETER)	
		ROUND DUCT CROSS SECTION	

MECHANICAL DRAWING LIST	
M1.0	MECHANICAL GENERAL NOTES, SYMBOLS LIST & ABBREVIATIONS
M1.1	MECHANICAL SPECIFICATIONS (1 OF 2)
M1.2	MECHANICAL SPECIFICATIONS (2 OF 2)
M2.0	MECHANICAL FLOOR & ROOF PLANS
M3.0	MECHANICAL DETAILS (1 OF 2)
M3.1	MECHANICAL DETAILS (2 OF 2)
M4.0	MECHANICAL SCHEDULES
M5.0	HOOD DETAILS (1 OF 3)
M5.1	HOOD DETAILS (2 OF 3)
M5.2	HOOD DETAILS (3 OF 3)

BETHLEHEM BUILDING DEPARTMENT NOTES

ALL WORK SHALL COMPLY WITH APPLICABLE SECTIONS OF 2018-IBC AND RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS TO DATE.

- THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL ENGINEER TO PROVIDE THE REQUIRED SPECIAL INSPECTIONS AND TESTS.
 - TESTS WILL BE CONDUCTED UNDER DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR OTHER PERSON HAVING NOT LESS THAN FIVE (5) YEARS EXPERIENCE SUPERVISING THE INSTALLATION OF SUCH MECHANICAL SYSTEMS. THE TESTS WILL SHOW COMPLIANCE WITH 2018 INTERNATIONAL BUILDING CODE REQUIREMENTS AS OUTLINES IN SECTION [BC 1704].
 - THE LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR OTHER PERSON HAVING NOT LESS THAN FIVE (5) YEARS EXPERIENCE SUPERVISING THE INSTALLATION OF SUCH MECHANICAL SYSTEMS AND CONDUCTING SUCH TESTS WILL FILE DOCUMENTATION AND REPORTS OF TESTS THAT THE SYSTEM COMPLIES WITH THE CONSTRUCTION DOCUMENTS AND APPLICABLE LAWS.
 - VENTILATION SYSTEM SERVING COMMERCIAL COOKING APPLIANCES – 2018 IMC 506.507.
 - REFRIGERATION SYSTEMS –2018 IMC 1108.
 - THE FOLLOWING WORK ITEMS, COMPONENTS, MATERIALS, CAPACITIES, ETC. SHALL COMPLY WITH THE REFERENCED CODE OR STANDARD:
 - STANDARDS OF HEATING – 2018 IMC 309.1
 - DUCT CONSTRUCTION AND INSTALLATION– 2018 IMC 603
 - AIR INTAKES, EXHAUSTS AND RELIEFS – 2018 IMC 401.5
 - AIR FILTERS – 2018 IMC 605
 - GAS FIRED EQUIPMENT – FUEL GAS CODE
 - MINIMUM TEMPERATURE TO BE MAINTAINED IN OCCUPIED SPACES DURING HEATING SEASON: 68 DEG. FAHRENHEIT.
 - VENTILATION FOR ALL AREA SHALL COMPLY WITH 2018 IMC 401.
 - A STATEMENT SHALL BE FILED BY THE OWNER OR TENANT IN POSSESSION THAT THE VENTILATION SYSTEM WILL BE KEPT IN CONTINUOUS OPERATION AT ALL TIMES DURING THE NORMAL OCCUPANCY OF THE STRUCTURE AS REQUIRED BY 2018 IMC 403.3
 - REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE-RATED WALL AND SMOKE WALL CONSTRUCTION AND LOCATION.
 - THESE PLANS ARE APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.
 - MECHANICAL SYSTEMS SHALL BE COMMISSIONED PER IECC 2018 C403.2.2, C408.2.1, C408.2.5 FINAL COMMISSIONING REPORT SHALL BE DUE WITHIN 90 DAYS OF RECEIPT OF CERTIFICATE OF OCCUPANCY.
 - A WRITTEN REPORT DESCRIBING THE ACTIVITIES AND MEASUREMENTS COMPLETED IN ACCORDANCE WITH SECTION IECC 2018, C408.2.2.
 - ALL HEATING AND COOLING LOADS CALCULATED PER ASHRAE/ACCA 183.
 - SMOKE DETECTOR SHALL MEET UL268A.
18. UNLESS OTHERWISE SPECIFICALLY SPECIFIED, INCLUDE ALL CUTTING AND PATCHING OF EXISTING FLOORS, WALLS, PARTITIONS AND OTHER MATERIALS IN THE EXISTING BUILDING. THE CONTRACTOR SHALL RESTORE THESE AREAS TO ORIGINAL CONDITION.
19. MATERIALS AND WORKMANSHIP, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.
20. ALL EQUIPMENT SHALL BE PROVIDED WITH ONE YEAR WARRANTY PARTS AND LABOR AND FIVE YEARS ON COMPRESSORS. WARRANTY PERIOD BEGINS UPON PROJECT ACCEPTANCE
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK WITH ITS COMPLETION AND FINAL ACCEPTANCE AND SHALL REPLACE ANY OF THE SAME WHICH MAY BE DAMAGED, LOST, OR STOLEN WITHOUT ADDITIONAL COST TO THE OWNER.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FAILURE OF ANY DUCTWORK SYSTEM OR EQUIPMENT TO FUNCTION PROPERLY UPON COMPLETION OF HIS WORK UPON SAID SYSTEM OR EQUIPMENT.
23. SUBMIT SHOP DRAWING OF ALL WORK WHICH MUST BE APPROVED BY THE ARCHITECT AND ENGINEER BEFORE WORK COMMENCES.
24. ALL MATERIAL AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.
25. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING BUILDING, EQUIPMENT, ETC., WHICH AFFECT THIS

REGULAR WORKING HOURS. WHEN SO DIRECTED, HOWEVER, THE CONTRACTOR SHALL INSTALL WORK IN OVERTIME AND THE ADDITIONAL COST TO BE CHARGED THEREFORE SHALL BE ONLY THE "PREMIUM" PORTION OF THE WAGES PAID.

- CONTRACTOR SHALL ASCERTAIN THE APPROPRIATE METHOD FOR BRINGING THE UNITS INTO AND THROUGH THE BUILDING TO POSITION UNIT IN LOCATION SHOWN ON THE PLANS. WHERE NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH RESTRICTIVE SPACES. COORDINATE WITH BUILDING OWNER APPROPRIATE TIMES OF DAY SUCH EQUIPMENT MAY BE MOVED THROUGH ALL AREAS.
- DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW SYSTEM.
- CONNECT NEW WORK TO EXISTING WORK IN NEAT AND APPROVED MANNER. RESTORE EXISTING WORK DISTURBED WHILE INSTALLING NEW WORK TO ACCEPTABLE CONDITION AS DETERMINED BY ARCHITECT.
- PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH BUILDING OWNER. INSTALL ISOLATION VALVES AT POINT OF CONNECTION TO THE EXISTING PIPING. PROVIDE TEMPORARY DUCT CAPS AND/OR CONNECTIONS TO MINIMIZE SHUTDOWN TIME.
- SUPPORT ALL DUCTWORK AND PIPING FROM BUILDING STRUCTURE AND/OR FRAMING IN AN APPROVED MANNER. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OR SUPPORTS FOR EQUIPMENT, FURNISH ADDITIONAL FRAMING. INSERTS SHALL BE STEEL, SLOTTED TYPE AND FACTORY PAINTED. SINGLE ROD SHALL BE SIMILAR TO GRINNELL FIG. 281. MULTI-ROD SHALL BE SIMILAR TO FEE & MASON SERIES 9000 WITH END CAPS AND CLOSURE STRIPS. MAXIMUM LOADING INCLUDING PIPES, DUCTWORK CONTENTS AND COVERING SHALL NOT EXCEED 75% OF RATED INSERT CAPABILITY. WHEN SUPPORTING FROM BUILDING USE BEAM CLAMPS IN APPROVED MANNER.
- PROVIDE ALL NECESSARY FLASHING AND COUNTER FLASHING TO MAINTAIN THE WATERPROOFING INTEGRITY OF THIS BUILDING AS REQUIRED BY THE INSTALLATION OR REMOVAL OF PIPES, DUCTS, LOUVERS, CONDUIT, AND EQUIPMENT. PROVIDE EQUIPMENT CURBS AND DUNNAGE STEEL AS REQUIRED.
- SEAL OPENINGS AROUND DUCTS AND PIPING THROUGH PARTITIONS, WALLS AND FLOORS (NOT IN SHAFTS) WITH MINERAL WOOL OR OTHER NONCOMBUSTIBLE MATERIAL (FIBERGLASS INSULATION IS NOT ACCEPTABLE).
- WHERE PENETRATIONS THROUGH FIRE RATED WALLS ARE NOT FIRE PROOFED, THIS CONTRACTOR SHALL BE RESPONSIBLE TO SEAL SAME TO MAINTAIN THE RATED INTEGRITY.
- INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.
- ACCESS DOORS ARE REQUIRED FOR ALL BUILDING SERVICE VALVES THAT RUN THROUGH THE SPACE, AND ACCESS DOOR SHALL HAVE THE EQUAL RATED CAPACITY (1HR, 2HR, ETC.) AS WALL. COORDINATE ALL LOCATIONS OF ACCESS DOORS WITH THE ARCHITECT.
- REMOVABLE ACCESS TILE AND/OR ACCESS DOOR ARE REQUIRED IN HUNG CEILINGS, SHAFTS AND WALLS FOR ALL VOLUME AND FIRE DAMPERS, AUTOMATIC DAMPERS AND ALL OTHER MECHANICAL EQUIPMENT AND DEVICES. HVAC CONTRACTOR TO FURNISH ACCESS LOCATION REQUIREMENTS TO GENERAL CONTRACTOR. ACCESS TILE IDENTIFICATION: PROVIDE BUTTONS, TABS, AND MARKERS TO IDENTIFY LOCATION OF CONCEALED VALVES, DAMPERS AND EQUIPMENT.

- THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS, AND ALL PARTS OF THE BUILDING, EXTERIOR SPACES AND ADJACENT STREETS, SIDEWALKS AND PAVEMENTS, FREE FROM MATERIAL AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR THE EXTERIOR.

- UNLESS OTHERWISE SPECIFICALLY SPECIFIED, INCLUDE ALL CUTTING AND PATCHING OF EXISTING FLOORS, WALLS, PARTITIONS AND OTHER MATERIALS IN THE EXISTING BUILDING. THE CONTRACTOR SHALL RESTORE THESE AREAS TO ORIGINAL CONDITION.

- MATERIALS AND WORKMANSHIP, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.

- ALL EQUIPMENT SHALL BE PROVIDED WITH ONE YEAR WARRANTY PARTS AND LABOR AND FIVE YEARS ON COMPRESSORS. WARRANTY PERIOD BEGINS UPON PROJECT ACCEPTANCE

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK WITH ITS COMPLETION AND FINAL ACCEPTANCE AND SHALL REPLACE ANY OF THE SAME WHICH MAY BE DAMAGED, LOST, OR STOLEN WITHOUT ADDITIONAL COST TO THE OWNER.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FAILURE OF ANY DUCTWORK SYSTEM OR EQUIPMENT TO FUNCTION PROPERLY UPON COMPLETION OF HIS WORK UPON SAID SYSTEM OR EQUIPMENT.

- SUBMIT SHOP DRAWING OF ALL WORK WHICH MUST BE APPROVED BY THE ARCHITECT AND ENGINEER BEFORE WORK COMMENCES.

- ALL MATERIAL AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.

- SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING BUILDING, EQUIPMENT, ETC., WHICH AFFECT THIS

WORK, AND THE ACCESS TO SUCH SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. THE ON-SITE INSPECTION SHALL VERIFY EXISTING DUCTWORK, PIPING (SIZES, CLEARANCES, ETC) AND CONDITIONS.

- INSURANCE: IN ACCORDANCE WITH BUILDING REQUIREMENTS THE CONTRACTOR SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR OWNER AND ENGINEER.

- THE FINAL ACCEPTANCE WILL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, BALANCED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL.

- SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE SENTENCES; WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL," "SHALL BE," "FURNISH," "PROVIDE," "A," "THE," AND "ALL" HAVE BEEN OMITTED FOR BREVITY.

- WHERE A CONFLICT EXISTS BETWEEN THE DRAWINGS, THE SPECIFICATIONS OR ANY OTHER CONSTRUCTION DOCUMENT, THE ONE WITH THE MOST STRINGENT REQUIREMENT(S) SHALL APPLY.

DEFINITIONS:

- "PROVIDE": TO SUPPLY, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION THE PARTICULAR WORK REFERRED TO UNLESS SPECIFICALLY OTHERWISE NOTED.
- "INSTALL": TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES.
- "FURNISH" OR "SUPPLY": TO PURCHASE, PROCURE, ACQUIRE AND DELIVER COMPLETE WITH RELATED ACCESSORIES.

SCOPE OF WORK

SCOPE OF WORK

- THE WORK UNDER CONTRACT INCLUDES ALL LABOR, MATERIALS AND APPLIANCES NECESSARY FOR THE FURNISHING, INSTALLING AND TESTING, COMPLETE AND READY FOR SAFE OPERATION OF THE SYSTEMS AS DESCRIBED IN THE SPECIFICATIONS, FLOOR PLAN(S) DESIGN, DETAIL DRAWINGS, NOTES, RFI'S, ETC. FOR THIS PROJECT. WORK SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER.

- THE CONTRACTOR SHALL GIVE NECESSARY NOTICE, FILE DRAWINGS AND SPECIFICATIONS WITH THE DEPARTMENT HAVING JURISDICTION, OBTAIN PERMITS OR LICENSES NECESSARY TO CARRY OUT THIS WORK AND PAY ALL FEES THEREFORE. THE CONTRACTOR SHALL ARRANGE FOR INSPECTION AND TESTS OF ANY OR ALL PARTS OF THE WORK IF SO REQUIRED BY AUTHORITIES AND PAY ALL CHARGES FOR SAME. THE CONTRACTOR SHALL PAY ALL COSTS FOR, AND FURNISH TO THE OWNER BEFORE FINAL BILLING, ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH ALL REGULATIONS WHERE THEY APPLY TO THIS WORK.

- THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF FINAL CERTIFICATE FOR PAYMENT AND/OR FROM DATE OR ACTUAL USE OF EQUIPMENT OR OCCUPANCY OF SPACES, BY OWNER, INCLUDED UNDER THE VARIOUS PARTS OF THE WORK, WHICHEVER DATE IS EARLIER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THE CONTRACTOR.

GENERAL HVAC NOTES

GENERAL:

- PROVIDE ALL MATERIAL AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.

- CONTRACT DOCUMENT DRAWINGS FOR MECHANICAL WORK (HVAC, PLUMBING, AND FIRE PROTECTION) ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY.

- THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS.

- WHEN MECHANICAL WORK (HVAC, PLUMBING, SHEET METAL, FIRE PROTECTION, ETC.) IS SUBCONTRACTED, IT SHALL BE THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE SUBCONTRACTORS AND THE ASSOCIATED CONTRACTS. WHEN DISCREPANCIES ARISE PERTAINING TO WHICH CONTRACTOR PROVIDES A PARTICULAR ITEM OF THE MECHANICAL CONTRACT OR WHICH CONTRACTOR PROVIDES FINAL CONNECTIONS FOR A PARTICULAR ITEM OF THE MECHANICAL CONTRACT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE MECHANICAL CONTRACTOR, WHOSE DECISION SHALL BE FINAL.

- COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.

- INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.

- WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.

- COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS' CERTIFIED DRAWINGS. COORDINATE AND PROVIDE ALL DUCT AND PIPING TRANSITIONS REQUIRED FOR FINAL EQUIPMENT CONNECTIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSIONS BEFORE FABRICATION.

- ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE AND ELECTRICAL DIVISION OF THE SPECIFICATION.

- PROVIDE VIBRATION ISOLATION FOR ALL MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.

- LOCATE ALL TEMPERATURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH THE STRAIGHT SECTION OF PIPE OR DUCT UP- AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER FOR GOOD ACCURACY.

- WHERE BEAMS ARE INDICATED TO BE PENETRATED WITH DUCTWORK OR PIPING, COORDINATE DUCTWORK AND PIPING LAYOUT WITH BEAM OPENING SIZE AND OPENING LOCATIONS. COORDINATION SHALL BE DONE PRIOR TO THE FABRICATION OF DUCTWORK, CUTTING OF PIPING, OR FABRICATION OF BEAMS.

- MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN THE DETAILS FOR DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

- PROVIDE ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS, WHERE REQUIRED, TO SERVICE DAMPERS, VALVES, SMOKE DETECTORS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. ACCESS PANELS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR FOR INSTALLATION. ACCESS PANELS SHALL HAVE THE EQUAL RATED CAPACITY (1HR, 2HR, ETC.) AS WALL.

- MECHANICAL EQUIPMENT, DUCTWORK, AND PIPING SHALL NOT BE SUPPORTED FROM A METAL DECK.

- ALL EQUIPMENT, PIPING, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED, SPECIFIED AND REQUIRED TO PROVIDE A VIBRATION-FREE INSTALLATION.

- ALL DUCTWORK, PIPING, AND EQUIPMENT SUPPORTED FROM STRUCTURAL STEEL SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. ALL ATTACHMENTS TO STEEL BAR JOISTS, TRUSSES, OR JOIST GIRDERS SHALL BE AT PANEL POINTS. PROVIDE BEAM CLAMPS MEETING MSS STANDARDS. WELDING TO STRUCTURAL MEMBERS SHALL NOT BE PERMITTED. THE USE OF C-CLAMPS SHALL NOT BE PERMITTED.

- LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED.

- ALL OPENINGS IN FIRE WALLS DUE TO DUCTWORK, PIPING, CONDUIT, ETC., SHALL BE FIRE STOPPED WITH A PRODUCT SIMILAR TO 3M OR APPROVED EQUAL.

- ALL CONDENSATE DRAIN LINES FROM EACH ROOF TOP UNIT SHALL BE PIPED FULL SIZE OF THE UNIT DRAIN OUTLET, WITH "P" TRAP, AND PIPED TO THE NEAREST DRAIN. SEE THE DETAILS SHOWN IN THE DRAWINGS OR THE CONTRACT SPECIFICATIONS FOR THE DEPTH OF THE AIR CONDITIONING CONDENSATE TRAP.

- REFER TO TYPICAL DETAILS FOR DUCTWORK, PIPING, AND EQUIPMENT INSTALLATION.

- ALL TESTS SHALL BE COMPLETED BEFORE ANY MECHANICAL EQUIPMENT OR PIPING INSULATION IS APPLIED.

- TESTING, ADJUSTING, AND BALANCING AGENCY SHALL BE A MEMBER OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB). TESTING, ADJUSTING, AND BALANCING SHALL BE PERFORMED IN ACCORDANCE WITH THE AABC STANDARDS.

CONSULTANTS (ENGINEER):

NY ENGINEERS

NEARBY ENGINEERS
382 NE 191ST STREET SUITE
49674, MIAMI, FL 33179
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WWW.NY-ENGINEERS.COM

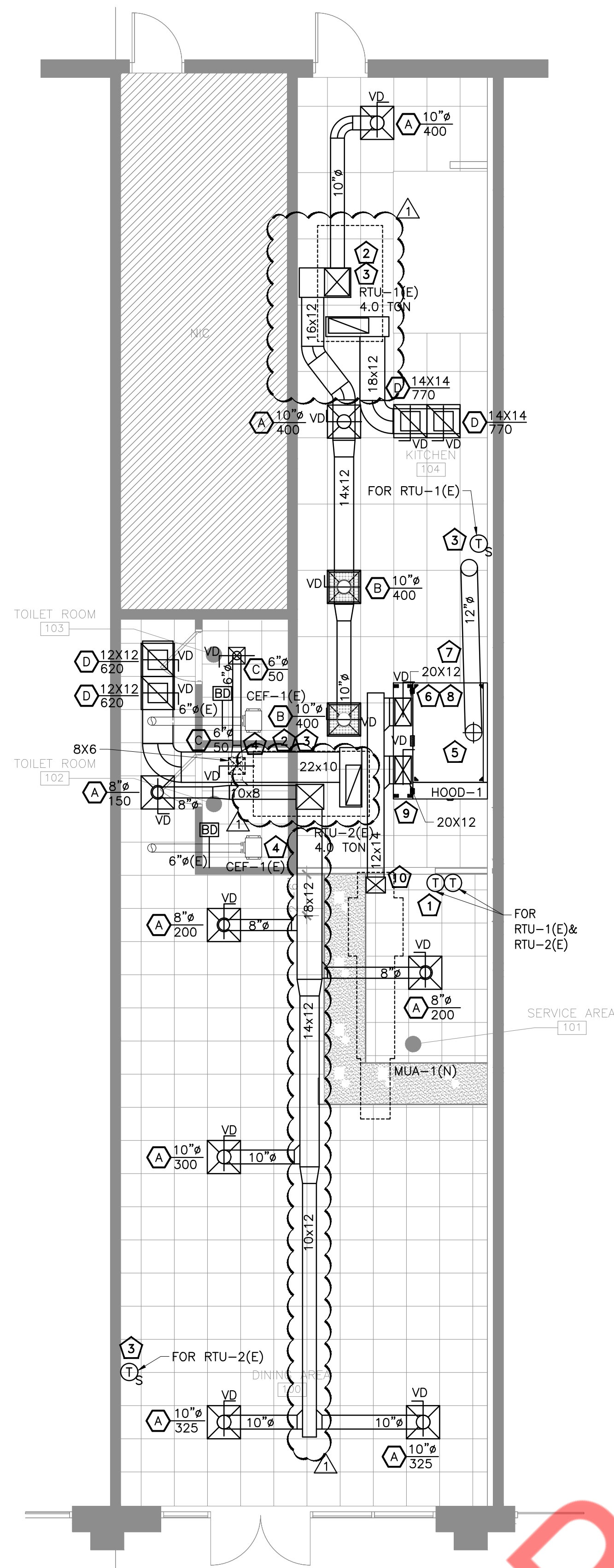
NO.	ISSUE FOR PERMIT	09/29/23
NO.	DESCRIPTION	DATE

REVISIONS

ALL FIELD CONDITIONS AND DIMENSIONS ARE TO BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF THE WORK. ALL DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. THESE DRAWINGS ARE THE PROPERTY OF JOHN WILLIAM LISTER ARCHITECT. THEY ARE NOT TO BE REPRODUCED IN PART OR IN WHOLE WITHOUT THE CONSENT OF JOHN WILLIAM LISTER ARCHITECT. THEY ARE TO BE USED ON THE PROJECT NOTED HEREON ONLY.

SOFRESH

SHEET TITLE	
MECHANICAL GENERAL NOTES & SYMBOLS	
08/24/23	DATE
AS NOTED	SCALE
NYE	DRAWN BY
NYE	CHECKED BY
23126	PROJECT #
SHEET NUMBER	
M1.0	



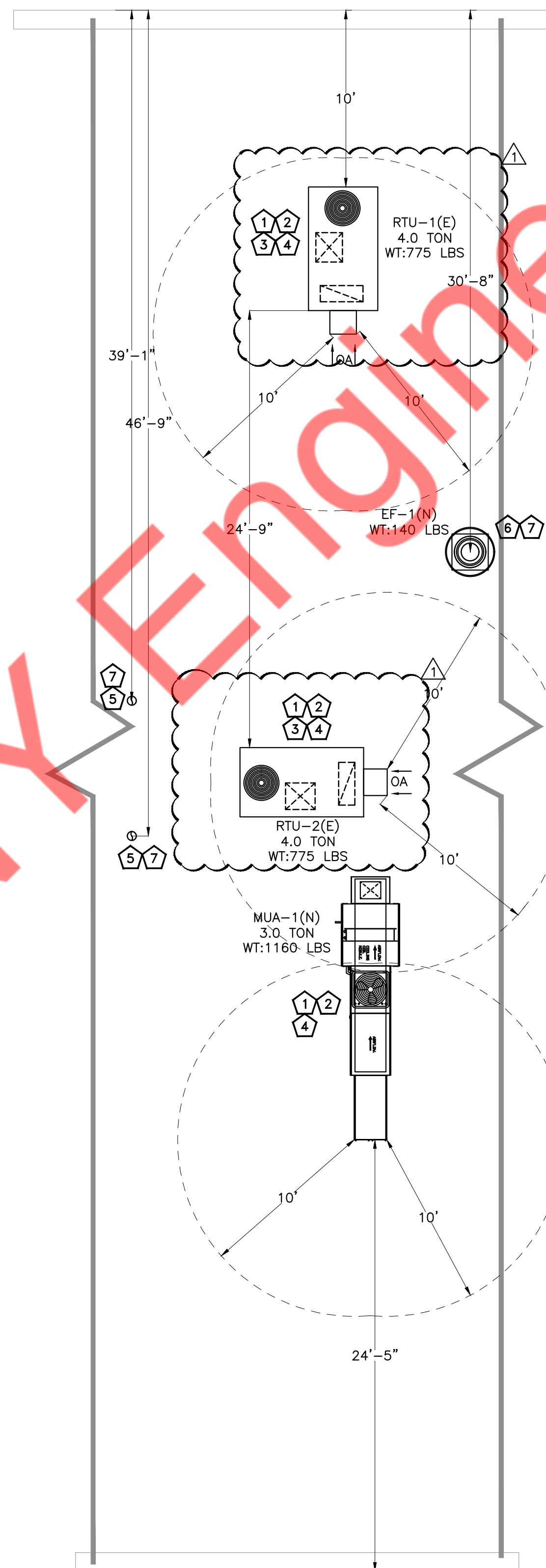
1 MECHANICAL FLOOR PLAN
SCALE: 3/16"=1'-0"

MECHANICAL GENERAL NOTES

1. CONTRACTOR SHALL BALANCE EACH DEVICE WITH THE CFM SHOWN ON PLAN.
2. NEW DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR PIPING AND DUCTWORK ROUTING, OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA PIPING, DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
3. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
4. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
5. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
6. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
7. MOUNT DUCTWORK AS HIGH AS POSSIBLE.
8. TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO G.C. AND OWNER.
9. NEW DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
10. PROVIDE R-8 INSULATION FOR SUPPLY AND RETURN DUCT.
11. PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR FIRE RATINGS OF THE WALLS COORDINATE WITH ELECTRICAL ENGINEER FOR POWER REQUIREMENT FOR FSD.
12. ALL EQUIPMENT SHALL MAINTAIN MINIMUM CLEARANCE FROM THE COMBUSTIBLE MATERIAL AS PER MANUFACTURE RECOMMENDATION.
13. PROVIDE CLEAN OUT AT ALL ELBOWS AND BOTTOM OF RISER AND EVERY 15 FEET HORIZONTAL KITCHEN EXHAUST DUCT.
14. COMMERCIAL KITCHEN GREASE DUCTS SHALL BE DESIGNED FOR THE TYPE-1 OF COOKING APPLANCE AND HOOD SERVED.
15. KITCHEN EXHAUST DUCT SHALL BE CONSTRUCTED OF 0.0575-INCH NO.16 GAUGE STEEL.
16. JOINTS, SEAMS AND PENETRATIONS OF GREASE DUCTS SHALL BE MADE WITH A CONTINUOUS LIQUID TIGHT WELD OR BRAZE MADE IN THE EXTERNAL SURFACE IF THE DUCT SYSTEMS.
17. DUCT TO EXHAUST FAN CONNECTIONS SHALL BE FLANGED, GASKETED AND BOLTED TO THE INLET OF THE FAN FOR SIDE-INLET UTILITY FANS APPROVED FLEXIBLE CONNECTIONS MAY BE PROVIDED.
18. THE CONTRACTOR FOR CONNECTING A DUCT TO A FAN SHALL CONSIST OF NON-COMBUSTIBLE PACKING IN A METAL SLEEVE JOINT OF APPROVED DESIGN OR SHALL BE A COATED-FABRIC FLEXIBLE DUCT CONNECTOR LISTED AND LABELED FOR THE APPLICATION. VIBRATION ISOLATION CONNECTORS SHALL BE INSTALLED ONLY AT THE CONNECTION OF A DUCT TO A FAN INLET OR OUTLET.
19. GREASE DUCT BRACING AND SUPPORTS SHALL BE OF NON-COMBUSTIBLE MATERIAL SECURELY ATTACHED TO THE STRUCTURE AND DESIGNED TO CARRY GRAVITY AND SEISMIC LOADS WITHIN THE STREET LIMITATIONS OF THE NEW YORK CITY BUILDING CODE. BOLTS, SCREWS, RIVETS AND OTHER MECHANICAL FASTENERS SHALL NOT PENETRATE DUCT WALL.
20. THE CLEANOUTS FOR HORIZONTAL GREASE DUCT SHALL BE LOCATED ON THE SIDE OF THE DUCT WITH THE OPENING NOT LESS THAN 1.5" ABOVE THE BOTTOM OF THE DUCT AND NOT LESS THAN 1" BELOW THE TOP OF THE DUCT.
21. EXHAUST DUCT FROM VENT MUST BE FIRE WRAPPED WITH MINIMUM 2 HOUR PROTECTION BOARD TO THE ROOF DECK AND MEET ALL APPLICABLE CITY CODES.
22. PROVIDE VIBRATION ISOLATORS TO EXHAUST FAN.
23. PROVIDE 2 LAYERS OF 1.5" THICK FIRE WRAP TO KITCHEN EXHAUST DUCTS AS PER MANUFACTURER'S RECOMMENDATIONS.

MECHANICAL FLOOR PLAN KEY NOTES:

- 1 MECHANICAL CONTRACTOR TO COORDINATE T-STAT LOCATION WITH TENANT. INSTALL AND WIRE NEW 7-DAY PROGRAMMABLE THERMOSTAT WITH RESPECTIVE RTUS.
- 2 EXTEND FULL SIZE SUPPLY & RETURN DUCTWORK FROM RTUS UNITS TO SPACE. EXTEND AS SHOWN. ACOUSTICALLY LINE THE FIRST 10'-0" OF BOTH SUPPLY AND RETURN MAIN DUCTS.
- 3 TEMPERATURE SENSOR TIED INTO DESIGNATED RTUS UNIT. COORDINATE FINAL REQUIREMENT/LOCATION WITH ARCHITECT / OWNER.
- 4 EXISTING TOILET EXHAUST SYSTEM TO REMAIN. INTERCONNECT EXHAUST FANS WITH RTU-2(E).
- 5 KITCHEN EXHAUST INSTALLATION SHALL BE ACCORDING TO SECTION 506 OF 2018 IMC.
- 6 TYPE-1 HOOD. RUN SHEET METAL DUCT FROM CONNECTION ON HOOD TO RESPECTIVE EXHAUST FAN. OFFSET AND TRANSITION AT CONNECTIONS AS NEEDED. VERIFY DIMENSIONS PRIOR TO FABRICATION OR INSTALLATION. USE FACTORY-MANUFACTURED PIPE AND FITTINGS ONLY. VERIFY LOCATION ON SITE WITH MOST RECENT KITCHEN PLANS.
- 7 DUCT SHALL BE SLOPED 1/4" UNIT VERTICAL IN 12" UNIT HORIZONTAL TOWARD HOOD.
- 8 COMMERCIAL KITCHEN GREASE DUCTS SHALL BE DESIGNED FOR THE TYPE-1 HOOD SERVED.
- 9 EXTEND MAKE-UP AIR DUCT FROM HOOD COLLAR UP TO MOUNTED MAKE-UP AIR UNIT ON ROOF MUA-1(N).
- 10 MAKEUP DUCT UP THRU ROOF TO MUA-1(N)



2 MECHANICAL ROOF PLAN
SCALE: 3/16"=1'-0"

MECHANICAL GENERAL NOTES

- A. COORDINATE LOCATIONS AND SIZES OF ROOF OPENINGS WITH OWNER AND STRUCTURAL ENGINEERS.
- B. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT. SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- C. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SIZE AND LOCATION FOR INSTALLATION.
- D. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- E. TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO GENERAL CONTRACTOR AND OWNER.
- F. ALL RTU WEIGHTS ARE INCLUDING ROOF CURBS AND/OR ADDITORS.
- G. PROVIDE NECESSARY PROTECTIVE DEVICES WHERE REQUIRED AND IN STRICT ACCORDANCE WITH OSHA AND ICRA REGULATIONS.
- H. AVOID FREE DUST MOVEMENT AND DIRT MIGRATING TO OCCUPIED AREAS OF THE BUILDING. BLANK OFF ANY RETURN AIR GRILLES/ DUCTS IN THE WORK AREA. PROVIDE TEMPORARY EXHAUST FANS, DUCTED DIRECTLY TO OUTDOORS, TO MAINTAIN NEGATIVE PRESSURE WITHIN THE WORK AREA.
- I. AVOID ALL WORKING AREAS ADJACENT TO THE WORK AREAS CLEAN AND FREE OF DEBRIS.
- J. COORDINATE CUTTING, PATCHING OF EXISTING ROOF, WALLS, CEILINGS, AND FLOORS AFFECTED BY MECHANICAL DEMOLITION WITH G.C.

MECHANICAL ROOF PLAN KEY NOTES:

1. CONTRACTOR TO CONNECT CONDENSATE DRAIN FROM ALL RTUS & MUA-1(N) TO NEAREST ROOF DRAIN OR DOWN SPOUTS.
2. COORDINATE FINAL LOCATION OF EQUIPMENT WITH STRUCTURAL DRAWINGS.
3. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN DUCT CONNECTIONS. SET OUTSIDE AIR AS INDICATED ON ROOFTOP UNIT SCHEDULES. MECHANICAL CONTRACTOR SHALL SCRIBE INTO UNIT POSITION OF OUTSIDE AIR DAMPER AND LABEL OUTSIDE AIR VOLUME AND PERCENT OF OUTSIDE AIR TRANSITION AND CONNECT SUPPLY AND RETURN DUCTWORK FROM BELOW. COORDINATE ROUTING THROUGH STRUCTURAL TRUSSES AND OFFSET AS REQUIRED IN CURB SPACE.
4. CONTRACTOR TO FIELD VERIFY THAT THE LOCATION OF ANY EXHAUST SOURCE FROM ADJACENT TENANTS SHOULD BE AT LEAST 10' AWAY FROM ALL RTUS AND MUA-1(N).
5. EXISTING TOILET EXHAUST SYSTEM TO REMAIN. CONTRACTOR TO CLEAN EXHAUST SYSTEM.
6. THE KITCHEN EXHAUST DUCT TERMINATING ABOVE THE ROOF SHALL HAVE DISCHARGE OPENING LOCATED NOT LESS THAN 40 INCHES ABOVE THE ROOF LEVEL. THE DISCHARGE FLOW SHALL BE DIRECTED AWAY FROM THE STRUCTURE OF THE ROOF.
7. CONTRACTOR TO FIELD VERIFY THAT THE LOCATION OF ANY EXHAUST TERMINATIONS SHOULD BE AT LEAST 10' AWAY FROM ADJACENT TENANTS OUTSIDE AIR INTAKES.

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△	LANDLORD COMMENTS	12/13/23
△	ISSUE FOR PERMIT	09/29/23
NO.	DESCRIPTION	DATE

REVISIONS

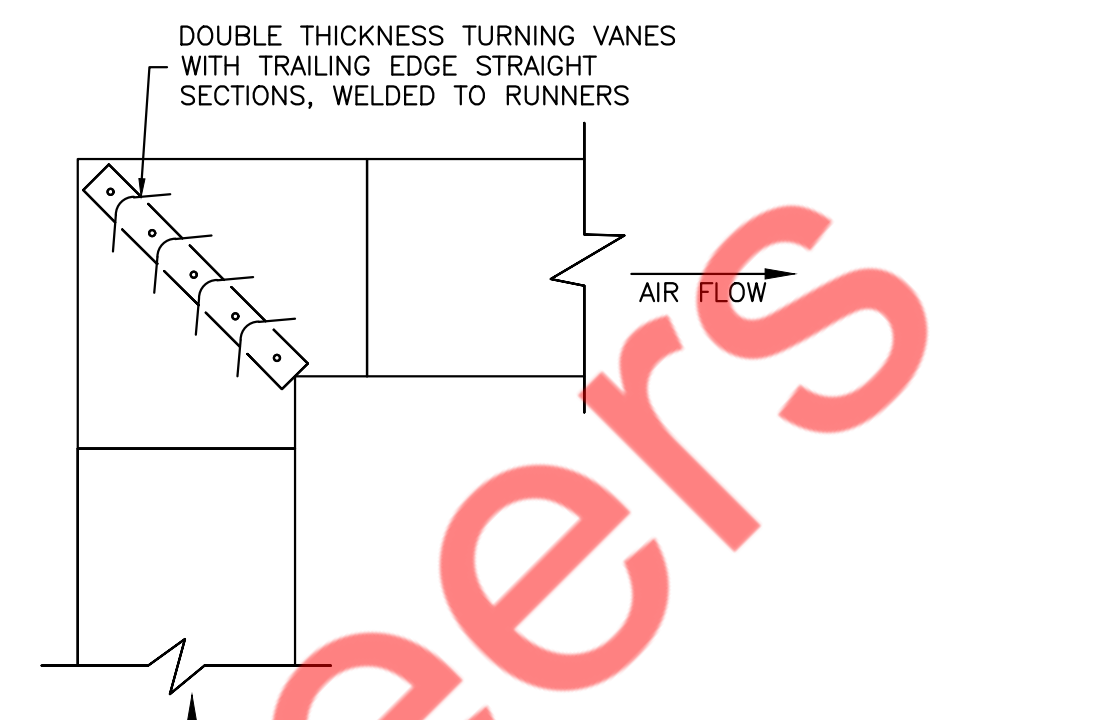
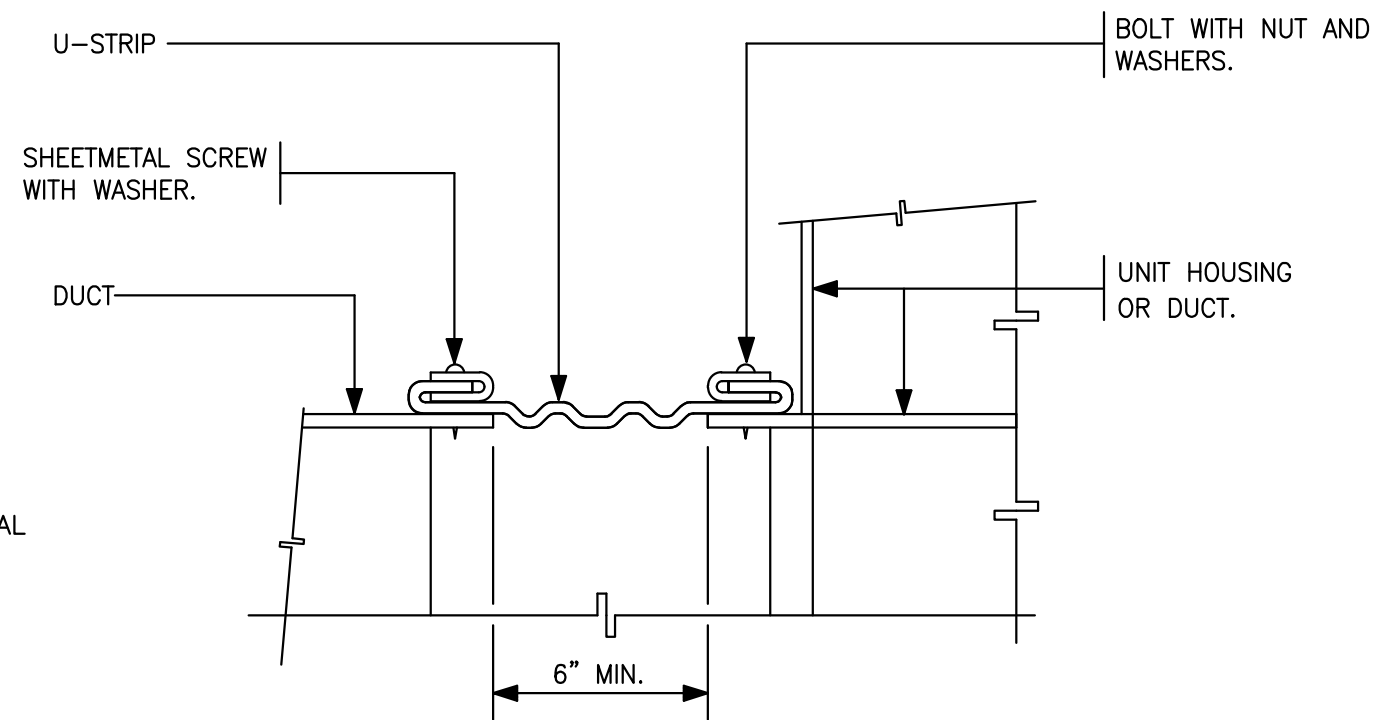
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SOFRESH

SHEET TITLE

MECHANICAL
FLOOR & ROOF
PLANS

08/24/23	DATE	SHEET NUMBER M2.0
AS NOTED	SCALE	
NYE	DRAWN BY	
NYE	CHECKED BY	
23126	PROJECT #	

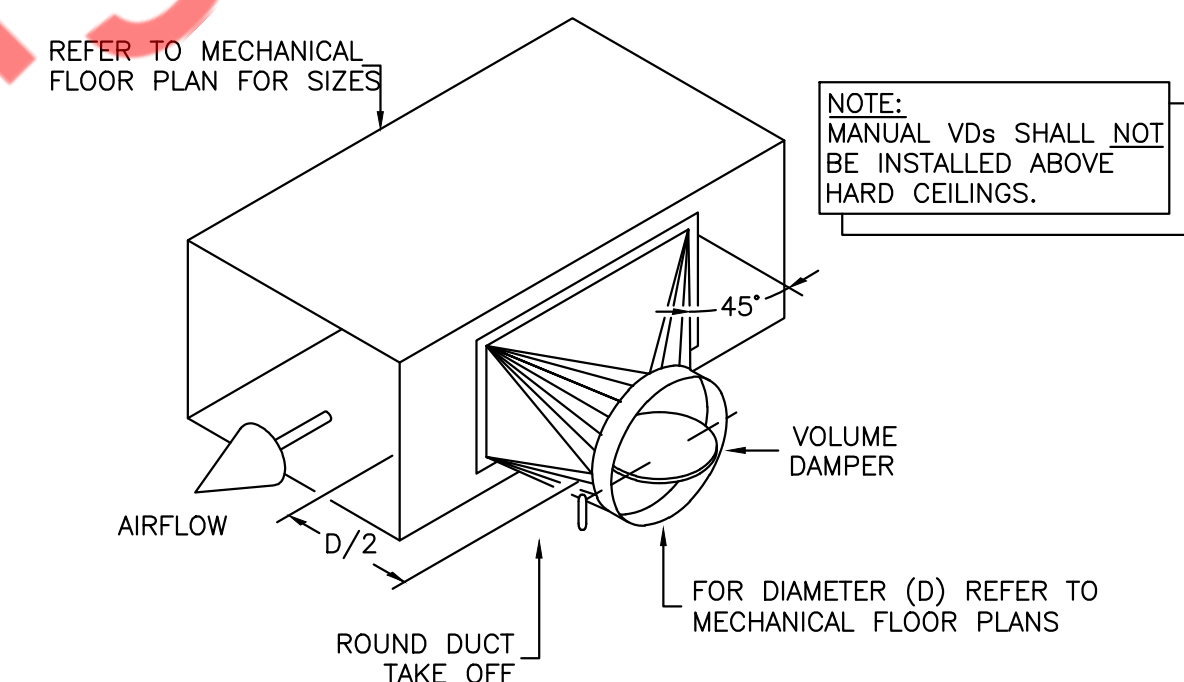
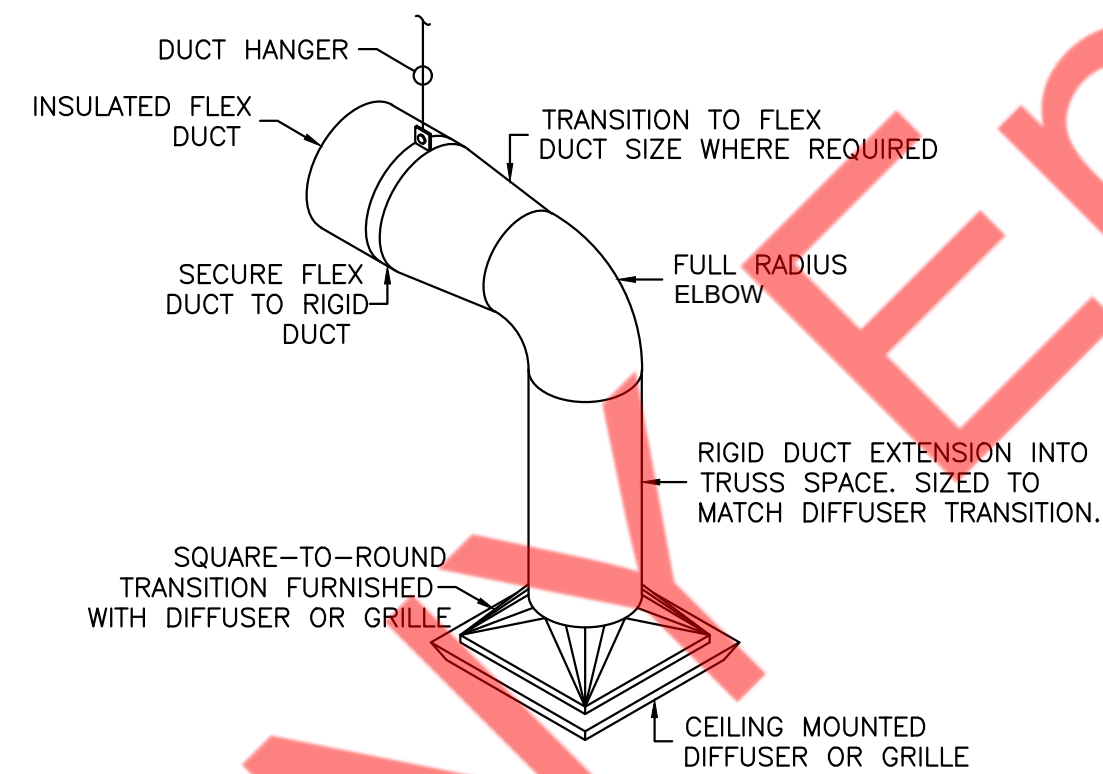


TYPICAL SQUARE ELBOW

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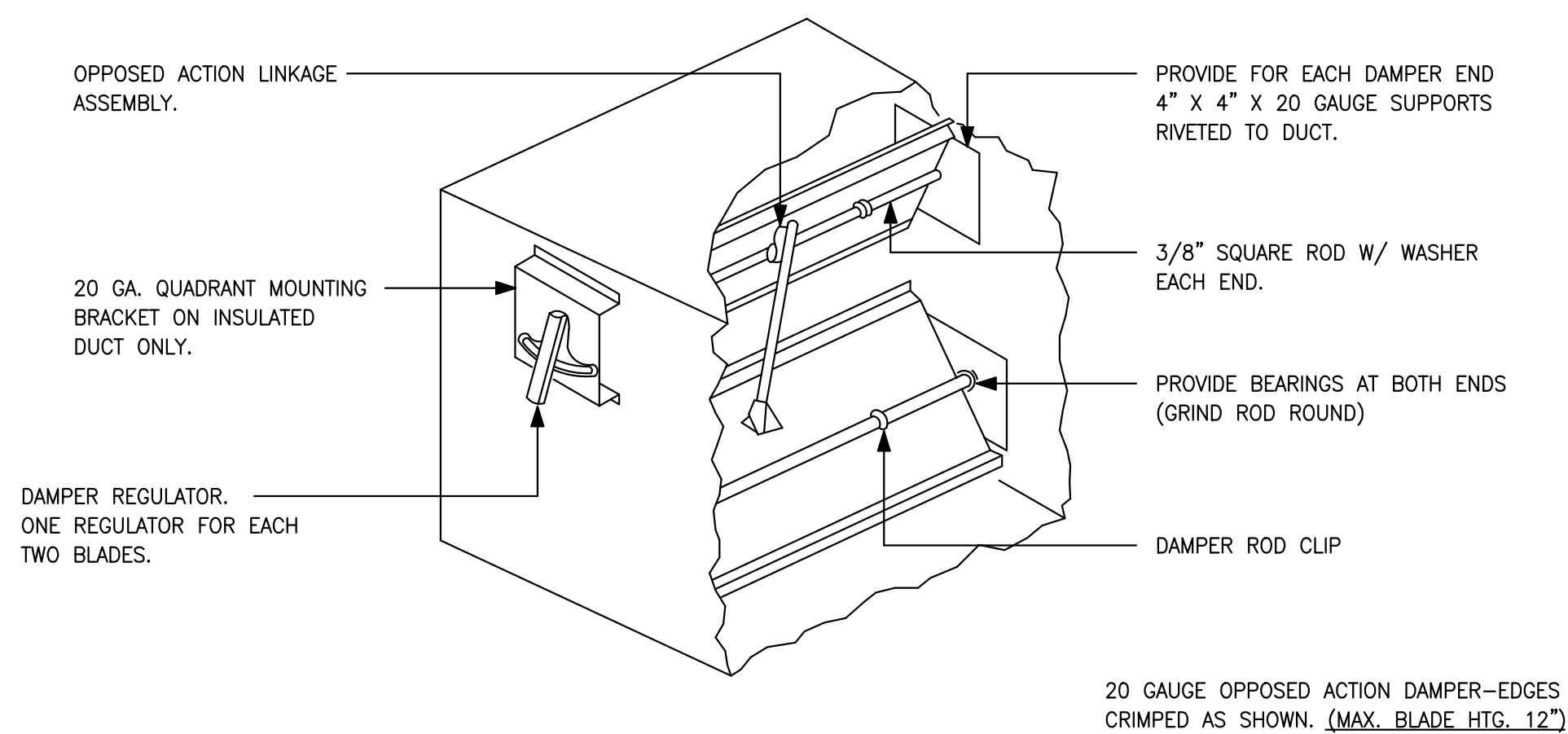
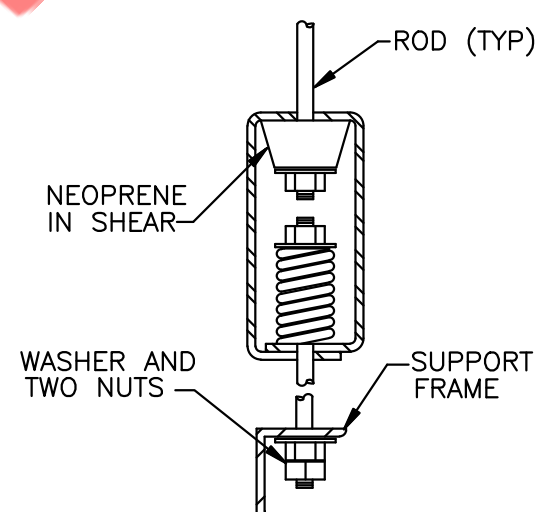


ROUND DUCT TAKE OFF DETAIL

N.T.S.

N.T.S.

N.T.S.



NOTE : 1. FOR DUCTS OVER 29" WIDE AND/OR OVER 12" HIGH.

LOW PRESSURE CONTROL DAMPER

N.T.S.


N.T.S.

N.T.S

CONSULTANTS (ENGINEER);

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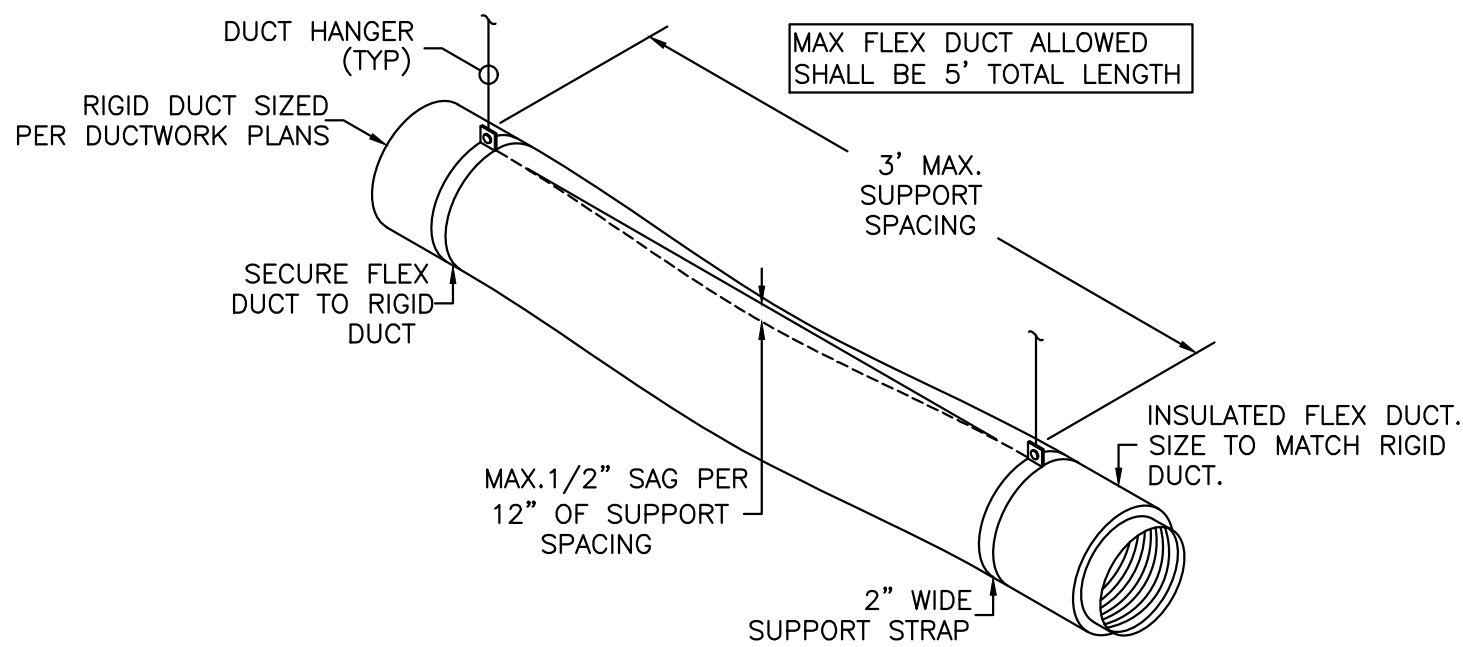
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MECHANICAL DETAILS (1 OF 2)		SHEET TITLE
08/24/23	DATE	SHEET NUMBER M3.0
AS NOTED	SCALE	
NYE	DRAWN BY	
NYE	CHECKED BY	
23126	PROJECT #	



FLEX DUCT SUPPORT DETAIL

N.T.S.

DUCT HANGER DETAIL

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MECHANICAL
DETAILS
(2 OF 2)

08/24/23	DATE	SHEET NUMBER
AS NOTED	SCALE	
NYE	DRAWN BY	
NYE	CHECKED BY	
23126	PROJECT #	

M3.1

EXISTING ROOF TOP UNIT SCHEDULE																						
UNIT ID	MANUFACTURER	MODEL	AREA SERVED	NOMINAL TONS	SUPPLY FAN			HEATING CAPACITY			COOLING CAPACITY			ELECTRICAL DATA				EER	SEER	THERMAL EFFICIENCY (%)	MAX OPERATING WEIGHT (LBS.)	
					SUPPLY AIR CFM	OUTSIDE AIR CFM	MAX. ESP (IN. OF W.G.)	INPUT MBH	OUTPUT MBH	STAGES	TOTAL MBH	SENSIBLE MBH	AMBIENT TEMP. DB (°F)	ENTERING TEMP. DB / WB (°F)	VOLTS	PHASE	MCA (A)					MOCP (A)
RTU-1 (E)	LENNOX	KGB048A4B	SEE PLAN	4	1600	60	0.5	150	120	2	48	34.6	95	80/67	208	3	21	30	11.5	14	80	775
RTU-2 (E)	LENNOX	KGB048A4B	SEE PLAN	4	1600	360	0.5	150	120	2	48	34.6	95	80/67	208	3	21	30	11.5	14	80	775
NOTES FOR EXISTING RTU																						
1	RTU TO BE PROVIDED AND INSTALLED BY LANDLORD.																					
2	ALL EQUIPMENT MUST BE MEETING OR EXCEEDING THE BRANDS MINIMUM REQUIREMENTS.																					
3	ELECTRICAL CONNECTION TO BE SINGLE POINT AND TO BE THROUGH THE BOTTOM OF THE UNIT.																					
4	PROVIDE DISCONNECT SWITCH AND AN POWERED GFCI RECEPTACLE.																					
5	14" ROOF CURB - CONTRACTOR SHALL FIELD INSULATE. SHIP ASAP AHEAD OF THE UNIT.																					
6	CONDENSATE DRAIN WITH 2" DEEP VENTED TRAP DISCHARGE TO SPLASH BLOCK ON ROOF.																					
7	CABINET WITH 1/2" FIBERGLASS INSULATION.																					
8	UNIT SHALL BE COMPLETE WITH GAS HEATING SECTION. GAS REGULATOR TO RECEIVE 7" GAS PRESSURE FROM MAIN.																					
10	PROVIDE 8-WIRE, 24 VAC, AUTOMATIC CHANGEOVER, 2-STAGE HEAT / COOL, REMOTELY PROGRAMMABLE THERMOSTAT.																					
11	REMOTE SENSORS SHALL BE PROVIDED IN SPACE AND WIRED BACK TO PROGRAMMABLE, 24 HOUR, 7 DAY, THERMOSTATS.																					
12	ANTI SHORT CYCLE TIMER.																					
13	PROVIDE THROWAWAY 2" FILTERS MERV 8.																					
14	WHERE REQUIRED, PROVIDE LOW AMBIENT COOLING CAPABILITY DOWN TO 0 DEGREES F.																					
15	PROVIDE ALL COMPRESSORS WITH 5 YEAR WARRANTY.																					

MAKE UP AIR UNIT SCHEDULE - GAS HEAT																				
MARK	MANUFACTURER	MODEL	SERVICE	DRIVE TYPE	MOTOR HP	COOLING DATA					HEATING DATA				FAN		ELECTRICAL DATA			MAX WEIGHT (LBS)
						ENTERING DBT DEG F	TONS	TOTAL CAPACITY MBH	SENSIBLE CAPACITY MBH	SEER	FUEL TYPE	INPUT CAPACITY MBH	OUTPUT CAPACITY MBH	EFFICIENCY	AIR (CFM)	E.S.P (IN. W.G.)	V/P	MCA (A)	MOCP (A)	
MUA-1(N)	CAPTIVEAIRE	A1-D.250-15D-MPU	HOOD-1	DIRECT	0.75	88	3	25	16.9	14	NATURAL GAS	79.49	73.73	92%	1100	0.50	208 / 3	14.50	20.00	1160
NOTES:																				
1. PROVIDE WITH MOTORIZED BACKDRAFT DAMPER.																				
2. PROVIDE WITH WEATHER HOOD AND BIRDScreen.																				
3. PROVIDE WITH DOWNFLOW DISCHARGE.																				
4. PROVIDE WITH MANUFACTURER FABRICATED 20" HIGH ROOF CURB.																				
5. PROVIDE WITH 3 TON SINGLE CIRCUIT CONDENSING UNIT. CONDENSING UNIT SHALL HAVE SEPARATE POWER CONNECTION AT 208V-3PH, 14.5A MCA, AND MOCP OF 20A.																				
6. PROVIDE WITH COOLING/HEATING INTERLOCK RELAY FOR MUA-1(N).																				
7.REFER TO CAPTIVE-AIRE DEAWINGS FOR SPECIFICATIONS AND MORE DETAILS. SCHEDULES SHOWN FOR REFERENCE ONLY.																				

HOOD SCHEDULE									
UNIT ID	MANUFACTURER	LENGTH (FT. INCH.)	TYPE	MODEL	SERVICE	COOKING	EXHAUST	CONSTRUCTION	WEIGHT
						TEMPERATURE (DEG F)	AIR (CFM)		(LBS)
HOOD-1	CAPTIVEAIRE	6'- 0"	I	5424ND-2-PSP-F	KITCHEN	450	1200	430 SS WHERE EXPOSED	723
NOTES:									
1. REFER TO CAPTIVE-AIRE DEAWINGS FOR SPECIFICATIONS AND MORE DETAILS. SCHEDULES SHOWN FOR REFERENCE ONLY.									

KITCHEN EXHAUST FAN SCHEDULE											
MARK	MANUFACTURER	MODEL	TYPE	SERVICE	DRIVE TYPE	MOTOR HP	EXHAUST AIR DATA		ELECTRICAL DATA		MAX WEIGHT
							AIR (CFM)	E.S.P (IN. W.G.)	VOLTAGE	PHASE	(LBS)
EF-1(N)	CAPTIVEAIRE	DU85HFA	UPBLAST	HOOD-1	DIRECT	0.75	1200	1.00	208	3	140
NOTES:											
1. FAN SHALL BE CONTROLLED BY HOOD CONTROLS. INTERLOCK RTU-1(E) TO OPERATE IN OCCUPIED MODE WHILE KITCHEN EXHAUST FAN IS ENERGIZED.											
2. REFER TO CAPTIVE-AIRE DEAWINGS FOR SPECIFICATIONS AND MORE DETAILS. SCHEDULES SHOWN FOR REFERENCE ONLY.											

EXHAUST FAN SCHEDULE									
TAG	QUANTITY	FLOW RATE	EXTERNAL	SPEED	ELECTRIC DATA		BASIS OF DESIGN		REMARK
			STATIC PRESSURE		V/PH/HZ	AMP			
			IN W.G.	RPM			MANUFACTURER	MODEL	
CEF-1 (E)	2	100 (VIF)	0.25 (VIF)	1050 (VIF)	120/1/60	1.1 (VIF)	GREENHECK (VIF)	SP-B150 (VIF)	EXISTING
NOTES:									
1) SAE : SAME AS EXISTING.									
2) INTERLOCK TOILET EXHAUST FANS CEF-1(E) WITH RTU-2(E). COORDINATE WITH ELECTRICAL CONTRACTOR.									

AIR BALANCE					
UNIT	AREA SERVED	SUPPLY AIR	OUTSIDE AIR	RETURN AIR	EXHAUST AIR
RTU-1 (E)	SEE PLAN	1600 CFM	60 CFM	1540 CFM	0 CFM
RTU-2 (E)	SEE PLAN	1600 CFM	360 CFM	1240 CFM	0 CFM
EF-1 (N)	SEE PLAN	-	-	-	1200 CFM
MUA-1 (N)	SEE PLAN	1100 CFM	1100 CFM	-	0 CFM
CEF-1 (E)	RESTROOM	-	-	-	100 CFM
CEF-1 (E)	RESTROOM	-	-	-	100 CFM
TOTAL:		4300 CFM	1520 CFM	2780 CFM	1400 CFM
BUILDING PRESSURE:.....				120 CFM	POSITIVE
1) CONTRACTOR TO BALANCE OUTSIDE AIR & RETURN AIR DAMPERS ON RTUS TO MATCH VALUES MENTIONED IN ABOVE TABLE.					

AIR TERMINAL DEVICES SCHEDULE									
TAG	SIZE (IN.)	DESCRIPTION	SERVICE	CONSTRUCTION	PATTERN	FRAME	NECK SIZE (IN.)	BASIS OF DESIGN	
								MANUFACTURER	MODEL
A	24X24	SQUARE CEILING DIFFUSER	SUPPLY	STEEL	4-WAY	LAY-IN	PER PLAN	TITUS (OR EQUIVALENT)	TMS
B	24X24	SQUARE CONE DIFFUSER	SUPPLY	STEEL	PERFORATED	LAY-IN	PER PLAN	TITUS (OR EQUIVALENT)	PAS
C	12X12	SQUARE CEILING DIFFUSER	SUPPLY	STEEL	4-WAY	LAY-IN	PER PLAN	TITUS (OR EQUIVALENT)	TMS
D	24X24	RETURN AIR GRILLE	RETURN	STEEL	-	LAY-IN	PER PLAN	TITUS (OR EQUIVALENT)	350 RL
NOTES:-									
1) PAINT ALL SURFACES VISIBLE THROUGH FACE OF RETURN AIR GRILLE FLAT BLACK. THIS SHALL INCLUDE PIPING, CONDUIT, DUCTWORK AND STRUCTURAL MEMBERS.									
2) PROVIDE FRAME FOR MOUNTING AIR DEVICE IN LAY-IN GRID CEILING UNLESS REFLECTED CEILING PLAN INDICATES HARD CEILING. IN AREAS WITH HARD CEILINGS, PROVIDE FRAMES									
3) UNLESS OTHERWISE NOTED, BRANCH DUCTS SERVING AIR DEVICES SHALL BE SAME SIZE AS NECK OF AIR DEVICE.									
4) COORDINATE FINAL COLOR/FINISH WITH ARCHITECT/OWNER.									
5) MAXIMUM NOISE CRITERION RATING < 35 DBA.									
FOR ROUND NECK DIFFUSERS: NECK SIZES SHALL BE:-									
15" DIA: 901-1100 CFM									
14" DIA: 601-900 CFM									
12" DIA: 401-600 CFM									
10" DIA: 201-400 CFM									
8" DIA: 101-200 CFM									
6" DIA: 0-100 CFM									

VENTILATION CALCULATION											
ROOM NAME	AREA (SQ. FT.)	NUMBER OF PEOPLE/1000 sq.ft AS PER IMC 2018	NUMBER OF PEOPLE AS PER IMC 2018	NUMBER OF CHAIR	FINAL PEOPLE NO.	MIN OUTSIDE AIR AS PER IMC 2018		REQ. OA (CFM)	PROVIDED. OA (CFM)	EXHAUST AIRFLOW RATE (CFM/FIXTURE)	TOTAL EXHAUST (CFM)
						CFM/PEOPLE	CFM/SQ.FT				
DINING	796	70	56	24	24	7.5	0.18	323	420	0	0
SALES	136	15	3	3	3	7.5	0.12	39		0	0
KITCHEN	563	0	0	0	4	0	0	50		0	1200
TOILET-102	39	0	0	0	0	0	0	0		70	100
TOILET-103	48	0	0	0	0	0	0	0		70	100
TOTAL								412			1400

[illegible][illegible]

1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE (NEC) AND THE 2017 FLORIDA ELECTRICAL CODE (FEC).

2. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE (NEC) AND THE 2017 FLORIDA ELECTRICAL CODE (FEC).

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DATE: 8/31/2023

DWG.#: 6198267

DRAWN BY: sluddyjr

SCALE: 1/2" = 1'-0"

MASTER DRAWING

SHEET NO. 5

REVISIONS

DATE: 8/31/2023

DWG.#: 6198267

DRAWN BY: sluddyjr

SCALE: 1/2" = 1'-0"

MASTER DRAWING

SHEET NO. 5

SD FRESH BETHLEHEM PA Vestgate mall

DATE: 8/31/2023

DWG.#: 6198267

DRAWN BY: sluddyjr

SCALE: 1/2" = 1'-0"

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DRAWN BY: sluddyjr

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REVISIONS

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DRAWN BY: sluddyjr

SCALE: 1/2" = 1'-0"

MASTER DRAWING

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MASTER DRAWING

SHEET NO. 7

REVISIONS

DATE: 8/31/2023

DWG.#: 6198267

DRAWN BY: sluddyjr

SCALE: 1/2" = 1'-0"

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SD FRESH BETHLEHEM PA Vestgate mall

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NO.	DESCRIPTION	DATE
1	ISSUE FOR PERMIT	09/29/23


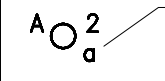

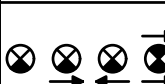
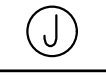


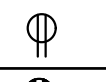

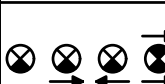

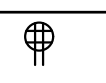

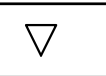
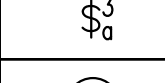

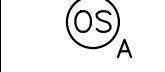
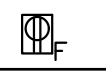
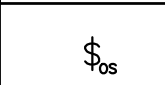

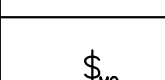
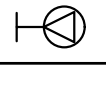
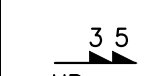



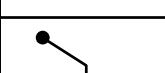

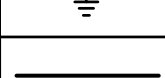


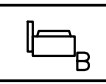
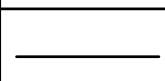
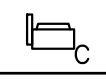
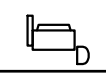

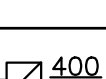

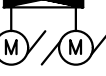
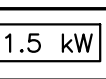
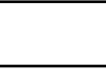
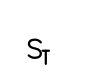
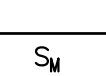

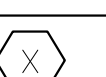
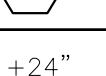
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SOFRESH

HOOD DETAILS
(2 OF 3)

08/24/23 DATE
AS NOTED SCALE
NYE DRAWN BY
NYE CHECKED BY
23126 PROJECT #

SHEET NUMBER
M5.1

ELECTRICAL SYMBOLS LIST						GENERAL NOTES	
LIGHTING		POWER AND TELECOMMUNICATION		ELECTRICAL ABBREVIATIONS			
   	LIGHTING FIXTURE AND OUTLET BOX. HALF SHADED FIXTURE OR "EM" INDICATES FIXTURES WITH INTEGRAL BATTERY PACK FOR EMERGENCY SERVICE, U.O.N.		JUNCTION BOX WITH BLANK COVER PLATE, FLUSH IN FLOOR.	A	AMPERES	EA	EACH
	LUMINAIRE TYPE : INDICATE BY LIPPERCASE LETTER SEE LIGHTING EXTURE SCHEDULE.		SIMPLEX RECEPTACLE, +18" AFF OR AS NOTED. SUFFIX DENOTES FOLLOWING: A- NEMA 5-15R B- NEMA 6-15R C- NEMA 14-30R D- NEMA 14-50R	A/C, AC	AIR CONDITIONING UNIT	EM	EMERGENCY
	CIRCUIT NUMBER : INDICATED BY NUMBER		DUPLEX GFI RECEPTACLE	AF	AMPERE FRAME/AMP FUSE	EMT	ELECTRICAL METALLIC TUBING
	SWITCHING INDICATED BY LOWER CASE LETTERS.		DUPLEX CONVENIENCE RECEPTACLE, +18" AFF OR AS NOTED.	AFF	ABOVE FINISHED FLOOR	EQUIP	EQUIPMENT
	DENOTES LUMINAIRE ON EMERGENCY CIRCUIT.		DEDICATED DUPLEX CONVENIENCE RECEPTACLE, +18" AFF OR AS NOTED.	AS	AMP SWITCH	ER	EXISTING TO BE RELOCATED
	CEILING/WALL MOUNTED SELF POWERED EXIT LIGHT FIXTURE WITH DIRECTIONALARROWS AS INDICATED. SHADED AREA DENOTES FACE(S). ISOLITE ELITE SERIES LED EXIT SIGN		TELEPHONE/DATA OUTLET, 4" SQUARE OUTLET BOX WITH SINGLE GANG COLLAR AND BLANK PLATE. PROVIDE 3/4" E.C., U.O.N., UP TO HUNG CEILING AND TERMINATE WITH 90° ELBOW, BUSHING AND DRAG WIRE.	ATS	AUTOMATIC TRANSFER SWITCH	FL	FLOOR
SWITCHES AND CONTROLS			QUAD RECEPTACLE	AWG	AMERICAN WIRE GAUGE	GFI	GROUND FAULT INTERRUPTER
	20A SPST TOGGLE SWITCH U.O.N. "a" DENOTES LIGHTING FIXTURE/SWITCHED RECEPTACLE CONTROLLED.		DATA OUTLET	C	CONDUIT	GP	GENERAL PURPOSE
	20A 3-WAY TOGGLE SWITCH U.O.N. "a" DENOTES LIGHTING FIXTURE CONTROLLED		TELEPHONE OUTLET	C/B,CB	CIRCUIT BREAKER	HP	HORSEPOWER
	CEILING OCCUPANCY SENSOR, NUMBER INDICATES TYPE; SEE OCCUPANCY SENSOR SCHEDULE. 'A' LETTER REFERES TO WIRING DIAGRAM.		FLOOR MOUNTED DUPLEX RECEPTACLE	CKT	CIRCUIT	HWH	HOW WATER HEATER
	WALL MOUNT OCCUPANCY SENSOR SWITCH		CEILING MOUNTED DUPLEX RECEPTACLE	CLG	CEILING	HZ	HERTZ
	MANUAL OVERRIDE SWITCH		SPECIAL RECEPTACLE	COMM	COMMUNICATION	IC	INTERRUPTING CAPACITY
WIRING SYSTEMS		MOTORS AND CONTROLS		CT	CURRENT TRANSFORMER	PP	POWER PANEL
	POWER OR LIGHTING CIRCUITRY HOMERUN WITH PANELBOARD DESIGNATION, NUMBER WHERE USED INDICATES CIRCUIT NUMBER. IT SHALL CONSISTS OF 2#12 Ø, 2#12 N. & 2#12 G. IN 3/4"C, UNLESS OTHERWISE NOTED.		AC INDOOR UNIT MOTOR AS NOTED WITH LIQUID TIGHT FLEXIBLE CONNECTION WITH JUNCTION BOX AND MOTOR SWITCH.	CU	COPPER	PWR	POWER
	POWER OR LIGHTING CIRCUITRY HOMERUN WITH PANELBOARD DESIGNATION, NUMBER WHERE USED INDICATES CIRCUIT NUMBER. IT SHALL CONSISTS OF 3#12 Ø, 3#12 N. & 3#12 G. IN 3/4"C, UNLESS OTHERWISE NOTED.		AC OUTDOOR UNIT MOTOR AS NOTED WITH CONTROLLER AND DISCONNECT SWITCH WITH WEATHER PROOF.	DIA	DIAMETER	R	REMOVE
	CONDUIT AND WIRE TO BUILDING GROUND.		NON FUSED DISCONNECT SWITCH AMPERAGE, AND NUMBER OF POLES AS NOTED.	DISC	DISCONNECT	RE	RELOCATED EXISTING
	UNDERGROUND		30A/240V NON FUSED DISCONNECT SWITCH	DN	DOWN	REC	RECEPTACLE
	EXISTING		60A/240V NON FUSED DISCONNECT SWITCH	DP	DISTRIBUTION PANEL	RGS	RIGID GALVANIZED STEEL
	NEW		100A/240V NON FUSED DISCONNECT SWITCH	DWG	DRAWING	RR	REMOVE & RELOCATE
ELECTRICAL DRAWING LIST			200A/240V NON FUSED DISCONNECT SWITCH	JB	JUNCTION BOX	SECT	SECTION
E0.1	ELECTRICAL SYMBOLS AND GENERAL NOTES		COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH, FURNISHED BY HVAC/CONTRACTOR, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.	KCMIL	ONE THOUSAND CIRCULAR MILS	SPDT	SINGLE POLE DOUBLE THROW
E0.2	ELECTRICAL SPECIFICATIONS SHEET 1 OF 2		FUSED DISCONNECT SWITCH AND FUSE AMPERAGE AS INDICATED. TOP NUMBER DENOTS SWITCH SIZE AND BOTTOM NUMBER DENOTES FUSE.	KV	KILOVOLT	SPST	SINGLE POLE SINGLE THROW
E0.3	ELECTRICAL SPECIFICATIONS SHEET 2 OF 2		DUPLEX PUMP. NUMBER INDICATES HP RATING OF PUMP.	KVA	KILOVOLT-AMPERES	SPEC	SPECIFICATION
E1.0	ELECTRICAL LIGHTING PLAN		ELECTRICAL HEATER, NUMBER DENOTES HEATER RATING	KW	KILOWATTS	SW	SWITCH
E2.0	ELECTRICAL POWER PLAN		THERMAL OVERLOAD SWITCH AT MOTOR. PROVIDE THERMAL ELEMENTS AS PER MOTOR RATING.	LTG	LIGHTING	SWBD	SWITCHBOARD
E2.1	ELECTRICAL ROOF PLAN		MANUAL MOTOR SWITCH	MAX	MAXIMUM	SYM	SYMMETRICAL
E3.0	ELECTRICAL RISER & PANEL SCHEDULE	ANNOTATION		MC	MOTOR CONTROLLER	SYS	SYSTEMS
E4.0	ELECTRICAL DETAILS		KEYED NOTE REFERENCE	MCB	MAIN CIRCUIT BREAKER	TELE	TELEPHONE
			INDICATES MOUNTING HEIGHT, CENTER LINE TO FINISHED FLOOR.	MLO	MAIN LUGS ONLY	TEMP	TEMPERATURE
			DETAIL REFERENCE: DETAIL NUMBER INDICATED ON TOP; DRAWING NUMBER INDICATED ON BOTTOM	MTD	MOUNTED	TXF	TOILET EXHAUST FAN
		CODES & STANDARDS		MTS	MANUAL TRANSFER SWITCH	TYP	TYPICAL
			2017 NATIONAL ELECTRICAL CODE	N	NEUTRAL	UON	UNLESS OTHERWISE NOTED
			2018 INTERNATIONAL ENERGY CONSERVATION CODE	NIC	NOT IN CONTRACT	V	VOLT/VOLTAGE
				NTS	NOT TO SCALE	VA	VOLT AMPERE
				PNL	PANEL	WP	WEATHER PROOF
				W	WATT	ø	PHASE
						1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CURRENT VERSION OF THE NEC, LOCAL JURISDICTION REQUIREMENTS, AND ALL GOVERNING LOCAL CODES, LAWS, AND REGULATIONS.	
						2. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS THAT MAY AFFECT THE WORK, NO ADDITIONAL COMPENSATION WILL BE CONSIDERED FOR FAILURE TO DO SO.	
						3. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, TEST REPORTS, AND CERTIFICATIONS FOR TEMPORARY AND FINAL CERTIFICATE OF OCCUPANCY.	
						4. FIRE STOP ALL PENETRATIONS OF FIRE RATED CONSTRUCTION IN A CODE APPROVED MANNER IN ORDER TO MAINTAIN FIRE RATING. ALL PENETRATIONS SHALL BE SLEEVED AND SEALED WATERTIGHT.	
						5. SECURE ALL SUPPORTS TO BUILDING STRUCTURE UTILIZING TOGGLE BOLTS (HOLLOW MASONRY), EXPANSION SHIELDS OR INSERTS (CONCRETE AND BRICK), MACHINE SCREWS (METAL), BEAM CLAMPS (FRAMEWORK), WOOD SCREWS (WOOD) OR PAN THRU STRAPS (METAL DECK). NAILS, RAWL PLUGS AND WOOD PLUGS ARE NOT PERMITTED. WHERE REQUIRED BY STRUCTURE, PROVIDE THRU BOLTS AND FISH PLATES. SUPPORT HORIZONTAL RUNS OF METALLIC RACEWAYS NOT MORE THAN 10 FT APART. SUPPORT RACEWAY RISERS AT EACH FLOOR LEVEL. RUN EXPOSED RACEWAYS PARALLEL WITH OR AT RIGHT ANGLES TO WALLS.	
						6. LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS. RACEWAYS OVER 10 FT LONG IN WHICH WIRING IS NOT INSTALLED: FURNISH FISH WIRE.	
						7. VERIFY LOCATIONS OF OUTLETS AND SWITCHES IN FINISHED ROOMS WITH ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISH. IN CENTERING OUTLETS AND LOCATING BOXES AND OUTLETS, ALLOW FOR OVERHEAD PIPES, DUCTS AND MECHANICAL EQUIPMENT, EQUIPMENT, VARIATIONS IN FIREPROOFING AND PLASTERING, WINDOW AND DOOR TRIM, PANELING, HUNG CEILINGS AND THE LIKE. CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT EXPENSE TO OWNER.	
						8. CONTRACTOR SHALL PROVIDE A WARRANTY ON ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.	
						9. ALL UNUSED MATERIALS AND DEBRIS SHALL BE LEGALLY REMOVED AND DISPOSED OF AWAY FROM THE PREMISES ON A DAILY BASIS.	
						10. CONTRACTOR SHALL PATCH, PAINT, AND RESTORE EXISTING SURFACES DAMAGED DURING THE COURSE OF THIS CONSTRUCTION TO PRE-EXISTING CONDITIONS OR BETTER.	
						11. MINIMUM SIZE OF CONDUIT SHALL BE ¾", AND TYPE SHALL BE ELECTRICAL METALLIC TUBING (EMT), UNLESS OTHERWISE NOTED. PROVIDE NYLON DRAG LINE AND CONDUIT CAP FOR ALL EMPTY CONDUITS.	
						12. CONNECT CONDUIT TO MOTOR CONDUIT TERMINAL BOXES WITH FLEXIBLE CONDUIT (MINIMUM 18 IN. LENGTH AND 50% SLACK). DO NOT TERMINATE IN OR FASTEN RACEWAYS TO MOTOR FOUNDATION.	
						13. PULL AND JUNCTION BOXES WHERE INDICATED ON THE DRAWINGS, SHALL BE CONSIDERED SHOWN AT THEIR APPROXIMATE LOCATION. THE CONTRACTOR SHALL LOCATE THEM AS FIELD CONDITIONS DICTATE. ADDITIONAL PULL AND JUNCTION BOXES NOT SHOWN ON DRAWINGS SHALL BE PROVIDED WHERE REQUIRED BY APPLICABLE CODE PROVISIONS OR WHERE CALLED FOR BY FIELD CONDITIONS. PULL AND JUNCTION BOXES SHALL BE SURFACE TYPE IN UNFINISHED AREAS AND INSTALLED CONCEALED IN FINISHED AREAS, AND ALL COVERS TO PULL & JUNCTION BOXES SHALL BE READILY ACCESSIBLE.	
						14. SUPPORT PANEL, JUNCTION AND PULLBOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON RACEWAYS.	
						15. FOR EXACT LOCATION AND MOUNTING HEIGHT OF LIGHTING FIXTURES AND SWITCH/RECEPTACLE OUTLETS, REFER TO ARCHITECTURAL REFLECTED CEILING AND POWER PLANS.	
						16. ALL ELECTRICAL ACCESSORIES AND EQUIPMENT INSTALLED OUTSIDE OR EXPOSED TO WEATHER SHALL HAVE NEMA 3R ENCLOSURES AND SHALL BE TIGHTLY GASKETED FOR A COMPLETE RAINIGHT INSTALLATION. ALL BUILDING EXTERIOR MOUNTED RECEPTACLES SHALL BE GFCI RATED AND MOUNTED IN WEATHERPROOF ENCLOSURE.	
						17. ALL ACCESS PANEL LOCATIONS SHALL BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION.	
						18. ELECTRICAL CONTRACTOR SHALL COORDINATE THE LOCATION AND INSTALLATION OF NEW WORK WITH THE GENERAL CONTRACTOR AND OTHER ASSOCIATED TRADES IN A TIMELY MANNER. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL, DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.	
						19. ALL CONDUITS AND EQUIPMENT TO BE CONCEAL ED IN FINISHED SPACES UNLESS OTHERWISE NOTED. CONDUITS SHALL BE ENCASED IN THE CONCRETE FLOOR SLAB.	
						20. ALL EQUIPMENT AND MATERIALS INSTALLED IN PLENUM CEILINGS SHALL BE APPROVED FOR THAT APPLICATION.	
						21. OUTLET BOXES AND JUNCTION BOXES ON OPPOSITE SIDES OF FIRE-RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES, UNLESS FIRE-RATED BOXES OR PUTTY PADS ARE UTILIZED.	
						22. COORDINATE ALL FLOOR PENETRATIONS WITH THE STRUCTURAL AND ARCHITECTURAL DRAWINGS. CONFIRM PENETRATION LOCATIONS WITH THE ENGINEER AND OWNER BEFORE INSTALLATION.	
						23. COORDINATE THE MOUNTING HEIGHT AND LOCATION OF RACEWAYS, COMMUNICATIONS OUTLETS, AND RECEPTACLES WITH THE ARCHITECTURAL CASEWORK DRAWINGS AND DETAILS. COORDINATE LOCATIONS OF LIGHT FIXTURES, SWITCHES, AND RELATED DEVICES WITH THE ARCHITECTURAL DRAWINGS AND DETAILS.	
						24. REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF ALL LUMINARIES AND SWITCHES, AND FOR ALL FINISHED CEILING HEIGHTS.	
						25. REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS OF ALL ELECTRICAL DEVICES, AND FOR FINAL CEILING AND WALL HEIGHTS AND LAYOUTS.	
						26. LIGHTING FIXTURES PROVIDED WITH EMERGENCY BATTERY PACKS AND INDICATED WITH SWITCH CONTROL SHALL BE WIRED WITH BATTERY CHARGING/SENSING CIRCUIT WIRED AHEAD OF SWITCH CONTROL.	
						27. NUMBER(S) SHOWN AT RECEPTACLES, JUNCTION BOXES AND EQUIPMENT INDICATES CIRCUIT NUMBERS IN PANELBOARD. PROVIDE WIRE AND CONDUIT TO INTERCONNECT EQUIPMENT AND DEVICES WITH SAME CIRCUIT NUMBERS AND RUN TO PANELBOARD.	

CONSULTANTS (ENGINEER):

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<div> <div>SHEET TITLE</div> <div>ELECTRICAL SYMBOLS & GENERAL NOTES</div> </div>	
<div> <div>08/24/23</div> <div>DATE</div> </div>	<div> <div>SHEET NUMBER</div> <div>E0.1</div> </div>
<div> <div>AS NOTED</div> <div>SCALE</div> </div>	<div> <div>NYE</div> <div>DRAWN BY</div> </div>
<div> <div>NYE</div> <div>CHECKED BY</div> </div>	<div> <div>23126</div> <div>PROJECT #</div> </div>

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ELECTRICAL SPECIFICATIONS (CONT.)

3) BOXES:

a. OUTLET BOXES: EXCEPT AS OTHERWISE REQUIRED BY CONSTRUCTION, DEVICES OR WIRING, BOXES SHALL BE STAMPED STEEL, 4 IN. SQUARE OR OCTAGON FOR FIXTURES. BOXES ABOVE CEILING SHALL BE 1-1/2 IN. DEEP. BOXES IN CEILING OR SLAB SHALL BE 3 IN. DEEP. BOXES IN WALL FOR FIXTURES SHALL BE 2-3/4 IN. DEEP. BOXES IN WALL FOR RECEPTACLES AND SWITCHES SHALL BE 1-1/2 IN. DEEP. FURNISH WITH RAISED COVERS AND FIXTURE STUDS WHERE REQUIRED. WITHOUT FIXTURE OR DEVICE: FURNISH BLANK COVER. OFFSET BACK-TO-BACK OUTLETS WITH MINIMUM 6 IN. SEPARATION.

b. JUNCTION AND PULL BOXES: GALVANIZED SHEET STEEL WITH SCREW-ON COVERS, EXCEPT AS NOTED. FURNISH WITH INSULATED SUPPORTS FOR CABLES. LOCATIONS SHALL BE AS NOTED OR REQUIRED AND ACCESSIBLE. PROVIDE BARRIERS IN NEW AND RENOVATED BOXES BETWEEN 120/208 VOLT AND 265/460 VOLT WIRING AND BETWEEN EMERGENCY AND NORMAL WIRING. FLOOR BOXES SHALL BE SUITABLE FOR CONDUIT AND DEVICES NOTED. RAISED OUTLETS SHALL BE HUBBELL #B2414 SERIES WITH ABOVE FLOOR FITTING. TELEPHONE, BUSHED HOLE. POWER: DUPLEX RECEPTACLE OR OTHER AS NOTED. INCREASE SIZE TO SUIT AS NECESSARY. FLUSH OUTLETS SHALL BE HUBBELL #B2414 SERIES WITH FLUSH FLOOR FITTING FOR TELEPHONE AND FLUSH DUAL FLAP COVER WITH DUPLEX RECEPTACLE FOR POWER AS NOTED. INCREASE SIZE TO SUIT AS NECESSARY.

c. PROVIDE RACEWAYS ONLY AS HEREIN SPECIFIED, EXCEPT AS NOTED. RACEWAYS SHALL BE RUN CONCEALED, EXCEPT AS NOTED.

PROVIDE RACEWAY SUPPORT UTILIZING CEILING TRAPEZE, STRAP HANGERS, OR WALL BRACKETS. PROVIDE U-BOLTS AT EACH FLOOR LEVEL OF RISER RACEWAYS AND CONNECTED TO ACCEPTABLE SUPPORTS. PROVIDE RISER CLAMPS AT EACH FLOOR LEVEL OF RISER RACEWAYS AND RESTING ON SLAB. FOR THROUGH-THE-FLOOR SYSTEMS, UTILIZE AN ASSEMBLY SIMILAR TO HUBBELL FIRE RATED POKE-THROUGH-FLOOR BOX SYSTEM. FOR ABOVE FLOOR FITTINGS TELEPHONE SHALL BE BUSHED HOLE AND POWER SHALL BE DUPLEX RECEPTACLE OR OTHER AS NOTED. PROVIDE SEPARATION BARRIER BETWEEN POWER AND TELEPHONE COMPARTMENTS. PROVIDE JUNCTION BOX ON UNDERSIDE OF FLOOR. PACK FITTING TO RESTORE FIRE RATING OF FLOOR.

SECURE ALL RACEWAYS TO SUPPORTS WITH PIPE STRAPS OR U-BOLTS. SPACING OF SUPPORTS SHALL BE A MINIMUM OF 10 FT ON CENTER FOR METALLIC RACEWAY AND AS REQUIRED FOR NONMETALLIC RACEWAY. SPACING SHALL BE 5 FT ON CENTER FOR WIREWAYS AND PER CODE AND AS NOTED FOR OTHERS. MOUNT SUPPORTS TO STRUCTURE MASONRY WITH TOGGLE BOLTS ON HOLLOW MASONRY, EXPANSION SHIELDS OR INSERTS IN CONCRETE AND BRICK. MACHINE SCREWS OR METAL BEAM CLAMPS ON FRAMEWORK, WOOD SCREWS ON WOOD, AND PAN THROUGH STRAPS IN METAL DECK. NAILS, RAWL PLUGS OR WOOD PLUGS SHALL NOT BE PERMITTED. WHERE REQUIRED BY STRUCTURE, FURNISH THROUGH BOLTS AND FISHPLATES.

EXPOSED RACEWAYS SHALL BE RUN PARALLEL WITH OR AT RIGHT ANGLES TO WALLS. PROVIDE CLEARANCE WITH WATER, STEAM OR OTHER PIPING (MINIMUM 3 IN. SEPARATION FROM STEAM AND HOT WATER PIPES, EXCEPT 1 IN. FROM PIPE COVER AT CROSSINGS AND 18 IN. FOR PARALLEL RUNS). FOR HUNG CEILING OUTLETS, RUN IN HUNG CEILING AND CONNECT TO CEILING SUPPORT CHANNELS. IN MASONRY AND POURED CONCRETE, RUN VERTICALLY ONLY.

MAINTAIN GROUNDING CONTINUITY OF INTERRUPTED METALLIC RACEWAYS WITH GROUND CONDUCTOR, AND IN FLEXIBLE CONDUIT FOR FEEDERS AND MOTOR TERMINAL CONNECTIONS.

EMPTY RACEWAYS OVER 10 FT LONG: PROVIDE FISH OR PULL WIRE, GALVANIZED OR NYLON ROPE.

RIGID STEEL CONDUIT SHALL BE PERMITTED FOR FEEDERS AND BRANCH CIRCUITS. PAINT MALE THREADS OF FIELD-THREADED CONDUIT WITH GRAPHITE-BASE PIPE COMPOUND AND BUTT CONDUIT ENDS. TOUCH UP MARKED SURFACES AND FIELD-CUT THREADS. CRC-COLD GALVANIZED. EMT SHALL BE PERMITTED FOR BRANCH CIRCUITS ONLY, IN DRY LOCATIONS, DRY WALLS, HUNG CEILINGS, HOLLOW BLOCK WALLS AND FURRED SPACES. EMT SHALL NOT BE PERMITTED IN RAISED FLOORS. FLEXIBLE STEEL CONDUIT SHALL BE UTILIZED FOR SHORT CONNECTIONS WHERE RIGID CONDUIT IS IMPRACTICAL. FROM OUTLET BOX TO RECESSED LIGHTING FIXTURE: PROVIDE MINIMUM 4 FT AND MAXIMUM 6 FT LENGTHS. FOR FINAL CONNECTION TO MOTOR TERMINAL BOX, TRANSFORMER AND OTHER VIBRATING EQUIPMENT: PROVIDE WITH POLYVINYL SHEATHING AND GROUND CONDUCTOR. MINIMUM LENGTH: 18 IN. WITH SLACK. CONNECT GROUND CONDUCTOR TO ENCLOSURE OR RACEWAY AT EACH END. FOR EXPANSION JOINT CROSSINGS, CROSS AT RIGHT ANGLES AND ANCHOR ENDS.

CUT CONDUIT ENDS SQUARE. REAM SMOOTH. PAINT MALE THREADS OF FIELD THREADED RACEWAYS WITH GRAPHITE BASE PIPE COMPOUND. DRAW UP TIGHT WITH RACEWAY COUPLING.

ALL COUPLINGS SHALL BE COMPRESSION TYPE. NO SET SCREW FITTINGS.

EXPANSION FITTINGS SHALL BE INSTALLED AT RIGHT ANGLES WITH CLIP JOINT CENTERED IN EXPANSION JOINT. PROVIDE A LENGTH OF RUN IN ACCORDANCE MANUFACTURER'S RECOMMENDATIONS. PRESET FITTINGS SHALL ALLOW FOR TEMPERATURE VARIATION.

RACEWAYS PASSING THROUGH FIRE-RATED CONSTRUCTION: SEAL OPENING WITH FIRE SEALANT.

d. PROVIDE CABLE SUPPORTS IN ACCORDANCE WITH NATIONAL ELECTRIC CODE ARTICLE 300.19. CABLE SUPPORTS SHALL UTILIZE A ONE-PIECE PLUG WITH POZI--GRIP WEDGING PLUG AS MANUFACTURED BY OZ--GEDNEY. TYPE SF SHALL BE USED FOR ARMORED CABLE.

INSTALL CABLE SUPPORTS AT THE TOP OF A VERTICAL RISE AND PROVIDE INTERMEDIATE ADDITIONAL SUPPORTS AS REQUIRED TO LIMIT SUPPORTED CONDUCTOR LENGTHS TO NOT GREATER THAN THOSE SPECIFIED IN TABLE 300.19(A).

a. ERECT WALL AND SWITCH OUTLETS IN ADVANCE OF FURRING AND FIREPROOFING. OUTLET BOXES SHALL BE SET SQUARE AND TRUE WITH BUILDING FINISH. SECURE TO BUILDING STRUCTURE BY ADJUSTABLE STRAP IRON OR GROUT IN WITH MASONRY. VERIFY OUTLET LOCATIONS IN FINISHED SPACES WITH ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISHES. PROVIDE BARRIERS BETWEEN SWITCHES CONNECTED TO DIFFERENT PHASES FOR VOLTAGES EXCEEDING 150 VOLTS TO GROUND.

d. PANEL, JUNCTION AND PULL BOXES SHALL BE LOCATED CLEAR OF OTHER TRADES. CONCEAL JUNCTION AND PULL BOXES IN FINISHED SPACES. WHERE NECESSARY, REROUTE RACEWAYS OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. BOXES SHALL BE ACCESSIBLE. SUPPORT BOXES FROM BUILDING STRUCTURE, INDEPENDENT OF CONDUIT. PROVIDE FLOOR-TO-CEILING CHANNELS FOR MOUNTING ON DRYWALL AND LIGHTWEIGHT CONSTRUCTION. OUTLET BOXES FOR FIXTURES RECESSED IN HUNG CEILINGS SHALL BE ACCESSIBLE THROUGH OPENING CREATED BY REMOVAL OF FIXTURE. SECURE TO BLACK IRON SUPPORT. MOTOR TERMINAL BOXES: COORDINATE WITH MOTOR BRANCH CIRCUIT CONDUIT AND WIRING; ADD BOX VOLUME WHERE REQUIRED.

e. FIRE SEALANTS: PROVIDE FOR RACEWAYS AND WIRE PASSING THROUGH FLOOR SLOTS, SLEEVES OR OPENINGS IN FIRE--PARTITIONS ROOMS.

f. PERFORM CONTINUITY TESTS OF RESISTANCE OF FEEDER CONDUITS FROM SERVICE TO POINT OF FINAL DISTRIBUTION USING 1 CONDUCTOR RETURN. MAXIMUM RESISTANCE SHALL BE 25 OHMS.

9. WIRE AND CABLE:

a. PROVIDE WIRE AND CABLE COMPLETE WITH ACCESSORIES. SIZE REFERENCE SHALL BE AWG EXCEPT AS NOTED.

b. CONDUCTORS SHALL BE COPPER, ASTM STANDARD SOLID (NO. 10 AND SMALLER) OR STRANDED (NO. 8 AND LARGER). GENERAL USE CABLING SHALL BE NO. 12 MINIMUM. AT 120 VOLTS AND OVER 100 FT CIRCUIT LENGTH PROVIDE NO. 10 MINIMUM. AT 265 VOLTS AND OVER 200 FT CIRCUIT LENGTH PROVIDE NO. 10 MINIMUM.

c. CONTROL AND ALARM CABLING, EXCEPT AS NOTED, SHALL BE NO. 14 MINIMUM. AT 120 VOLTS AND OVER 200 FT CIRCUIT LENGTH PROVIDE NO. 12 MINIMUM. OTHER VOLTAGES AND PHASES: ADJUST CABLE SIZING AS REQUIRED TO MAINTAIN VOLTAGE DROP. INCREASE RACEWAY SIZES FOR LARGER WIRE AS REQUIRED.

d. INSULATION SHALL BE RUBBER AND THERMOPLASTIC MEETING ASTM AND IPCOA STANDARDS. TYPE THW OR THWN SHALL BE UTILIZED FOR FEEDERS AND BRANCH CIRCUITS EXCEPT AS NOTED. TYPE SFF-2 SHALL BE UTILIZED FOR BRANCH CIRCUITS LOCATED IN WIRING CHANNELS OF CONTINUOUS FLUORESCENT FIXTURES AND IN AMBIENT TEMPERATURES OVER 90 DEG C. FOR UNGROUNDED ISOLATED BRANCH CIRCUITS PROVIDE CROSS-LINKED POLYETHYLENE INSULATION (TYPE XHHW).

e. ARMORED CABLE (BX) SHALL BE UTILIZED FOR BRANCH CIRCUITS IN DRY HOLLOW LOCATIONS, HUNG CEILINGS, AND BLOCK WALLS. WHEN USED IN LIEU OF WIRING IN CONDUIT, STATE IN PROPOSAL THAT PRICE IS BASED UPON THE USE OF HOSPITAL GRADE 'BX'.

f. COLOR CODING SHALL BE AS FOLLOWS:

120/208 VOLT SYSTEM:
BLACK FOR A PHASE
RED FOR B PHASE
BLUE FOR C PHASE

1) NEUTRAL WIRE SHALL UTILIZE WHITE OUTER COVERING THROUGHOUT. EQUIPMENT GROUND WIRE SHALL UTILIZE GREEN OUTER COVERING THROUGHOUT.

WHERE COLOR-CODED CABLE IS NOT AVAILABLE, CERTIFY IN WRITING AND REQUEST PERMISSION TO OVERLAP CONDUCTORS WITH 6 IN. OF COLOR TAPING IN ACCESSIBLE LOCATIONS.

g. PROVIDE FLAMEPROOF LINEN OR FIBER TAGS IN ACCESSIBLE LOCATIONS. FOR FEEDERS INDICATE FEEDER NUMBER, SIZE, PHASE AND POINTS OF ORIGIN AND TERMINATIONS. FOR CONTROL AND ALARM WIRING INDICATE TYPE (CONTROL OR ALARM), SIZE OF WIRE, AND POINTS OF ORIGIN AND TERMINATIONS.

h. TERMINATIONS, SPLICES AND TAPS UNDER 600 VOLTS: COPPER CONDUCTORS NO. 10 AND SMALLER SHALL UTILIZE COMPRESSION--TYPE OF TWIST-ON SPRING-LOADED CONNECTORS AND CLEAR NYLON-INSULATED COVERING. COPPER CONDUCTORS NO. 8 AND LARGER SHALL UTILIZE MECHANICAL BOLTED PRESSURE OR HYDRAULIC COMPRESSION TYPE USING MANUFACTURER'S RECOMMENDED TOOLING. CABLE LUGS AND CONNECTORS SHALL UTILIZE COMPRESSION TYPE OF SAME METAL AS CONDUCTOR. PROVIDE TO MATCH CABLE, WITH MARKING INDICATING SIZE AND TYPE. COPPER LUG CONNECTIONS TO BUS BARS: USE ANTISEIZE COMPOUND ON TANG.

i. NOT MORE THAN 3 LIGHTING OR CONVENIENCE OUTLET CIRCUITS SHALL BE INSTALLED IN ONE CONDUIT UNLESS OTHERWISE INDICATED. PULL NO THERMOPLASTIC WIRES AT TEMPERATURES LOWER THAN 32 DEG F. PROVIDE SEPARATE RACEWAYS FOR CONDUCTORS OF 120/208 AND 265/460 VOLT SYSTEMS, EXCEPT 460 VOLT MOTOR BRANCH CIRCUIT WIRING AND RELATED 120 VOLT CONTROL WIRING. THERMOPLASTIC WIRES SHALL NOT BE INSTALLED IN COMPUTER AREA RAISED FLOORS.

j. LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS.

k. PERFORM CONTINUITY AND INSULATION TESTS. MEGGER TEST 100 PERCENT OF FEEDERS, 10 PERCENT OF BRANCH CIRCUITS AND ALL MOTOR BRANCH CIRCUITS OVER 25 HP.

PERFORM TESTS PRIOR TO CONNECTING EQUIPMENT AND IN PRESENCE OF AUTHORIZED REPRESENTATIVES. SUBMIT WRITTEN REPORT OF RESULTS. CORRECT OR REPLACE CABLE TESTING BELOW MANUFACTURER'S STANDARDS.

11. WIRING DEVICES:

a. WIRING DEVICES SHALL BE SPECIFICATION GRADE UNLESS OTHERWISE SPECIFIED. ALL DEVICES SHALL BE FLUSH MOUNTED, UNLESS OTHERWISE NOTED. PROVIDE COMPLETE MATERIAL AND ACCESSORIES AS NOTED.

b. LOCAL WALL SWITCHES SHALL BE ROCKER TYPE, QUIET OPERATING, RATED 20 AMP, 120/208 VOLT, AC, SIMILAR TO LEVITON DECORA SERIES A5621 (SINGLE POLE), A5623 (3-WAY) AND A5624 (4-WAY).

c. STRAIGHT BLADE RECEPTACLES SHALL BE COMMERCIAL SPECIFICATION GRADE, DUPLEX CONVENIENCE 125 VOLTS, 2 POLE, 3 WIRE, U GROUND SLOT, DECORA SERIES BY LEVITON. GROUNDED, EXCEPT AS NOTED.

1) SINGLE GANG, RECESSED, DUPLEX RECEPTACLE: TAMPER RESISTANT, 2-POLE, 3-WIRE GROUNDING, 15A, 125V, NEMA 5-20R, LEVITON 689 SERIES (COLOR AS SPECIFIED BY ARCHITECT)
2) USB CHARGER/ DUPLEX TAMPER-RESISTANT RECEPTACLE: TAMPER RESISTANT,

e. DEVICE PLATES: SEE ARCHITECT FOR TYPE. FOR RECEPTACLES WITH OTHER THAN 120 VOLT, INSCRIBED VOLTAGE AVAILABLE.

f. COLORS: COORDINATE COLORS WITH ARCHITECT.

g. MOUNTING ORIENTATION OF RECEPTACLES (HORIZONTAL OR VERTICAL): COORDINATE WITH ARCHITECT.

12. LIGHTING FIXTURES:

a. FIXTURES TO BE AS SPECIFIED BY ARCHITECT AND SHALL BE COMPLETELY FACTORY ASSEMBLED, WIRED AND EQUIPPED WITH ALL NECESSARY SOCKETS, BALLASTS, SUPPORTING HARDWARE AND ACCESSORIES. REFER TO DRAWINGS FOR INDIVIDUAL FIXTURE DESCRIPTIONS.

b. FIXTURE CATALOG NUMBERS USED TO ILLUSTRATE EQUIPMENT TYPE DO NOT NECESSARILY DENOTE REQUIRED MOUNTING EQUIPMENT OR ACCESSORIES. PROVIDE ACCESSORIES TO SUIT.

c. BALLAST: CLASS P, HIGH POWER FACTOR, LOWEST AVAILABLE NEMA RATED NOISE LEVEL, E11 AND CBM APPROVED. ENERGY SAVING TYPE. TRIGGER START FOR 24-INCH LAMPS AND RAPID START FOR 48-INCH. TWO LAMP BALLASTS; NO THREE LAMP BALLASTS. BALLASTS SHALL BE ADVANCE MAGNETEK, UNIVERSAL OR EQUAL.

d. LED DRIVERS SHALL BE ELECTRONIC TYPE, LABELED AS COMPLIANT WITH RADIO FREQUENCY INTERFERENCE (RFI) REQUIREMENTS OF FCC TITLE 47, PART 15 AND COMPLY WITH NEMA SSL 1 "ELECTRONIC DRIVERS FOR LED DEVICES, ARRAYS OR SYSTEMS". LED DRIVERS SHALL HAVE A SOUND RATING OF "A", HAVE A MINIMUM EFFICIENCY OF 85% AND BE RATED FOR A THD OF LESS THAN 20% AT ALL INPUT VOLTAGES.

e. DIMMABLE LED DRIVERS SHALL BE CAPABLE OF DIMMING WITHOUT LED STROBING OR FLICKER ACROSS THEIR FULL DIMMING RANGE. PROVIDE TYPE OF LED DRIVER AS PER LIGHTING FIXTURE SCHEDULE. DIMMABLE LED DRIVERS SHALL BE 0-10V WHERE NOT INDICATED.

f. CONTINUOUS ROW, TWO LAMP STRIP FIXTURES SHALL BE STAGGERED TYPE.

g. FLUORESCENT LIGHTING FIXTURES, INCLUDING GENERAL PURPOSE, CONSTRUCTION, LAMPS AND BALLASTS SHALL CONFORM TO THE ENERGY EFFICIENCY REQUIREMENTS OF CONSOLIDATED EDISON CO. AND QUALITY FOR A UTILITY REBATE TO OWNER UNDER CON EDISON'S ENLIGHTENED ENERGY LIGHTING REBATE PROGRAM. CONTRACTOR SHALL COORDINATE REBATE PROGRAM WITH CON EDISON AND ARRANGE FOR CON EDISON TO PERFORM A SURVEY TO INVENTORY ALL EXISTING FIXTURES PRIOR TO DEMOLITION.

h. EXIT SIGNS SHALL BE PRECISION DIE-CAST ALUMINUM HOUSING WITH LASER-FORMED ACRYLIC LEGEND. EXIT SIGNS SHALL COMPLY WITH UL 924 AND BE MEA APPROVED. AC POWERED WITH PREMIUM LONG-LIFE NICKEL CADMIUM BATTERY WITH STANDARD UL LISTED 3-HOUR RUN TIME. PROVIDE WITH INTEGRAL AUTOMATIC CHARGER IN A SELF CONTAINED POWER PACK. LED INDICATOR WITH PUSH TO TEST SWITCH.

13. TELEPHONE CONDUIT SYSTEM:

a. PROVIDE COMPLETE SYSTEM OF: RACEWAYS AND ACCESSORIES, OUTLET BOXES, SLEEVES AND FISHWIRES.

b. EQUIPMENT SHALL CONFORM TO REQUIREMENTS OF TELEPHONE COMPANY.

c. OUTLETS SHALL BE:

1) WALL: 4 IN. SQUARE WITH BUSHED COVER PLATE.

d. PROVIDE FISHWIRES, IN RACEWAYS OVER 10 FT LONG.

e. CONDUIT SHALL BE 3/4 IN. MINIMUM. FURNISH EMPTY CONDUIT FROM OUTLET BOX TO BUSHED END THRU WALL 6" BELOW THE PLASTER CEILING.

f. FACE RACEWAYS IN ROOMS SHALL HUBBELL HBL500, HBL750 OR HBL2000 SERIES OR AS ACCEPTABLE.

14. GROUNDING AND BONDING:

a. PROVIDE GROUNDING SYSTEM IN ACCORDANCE WITH (2017) NATIONAL ELECTRICAL CODE), AND THESE SPECIFICATIONS. THE WIRING SYSTEM SHALL BE INSTALLED AS REQUIRED TO PROVIDE A CONTINUOUSLY GROUNDED SYSTEM. WHERE FLEXIBLE CONDUIT IS USED FOR PART OF A CONDUIT RUN, EXCEPT LIGHTING BRANCH CIRCUITS, AN INSULATED GROUNDING CONDUCTOR SHALL BE PROVIDED IN THE CONDUIT AND CONNECTED TO GROUNDING BUSHINGS AT EACH END OF THE RUN.

b. USE EXOTHERMIC WELDING PROCESS FOR INACCESSIBLE CONNECTIONS.

c. EXTEND EXISTING SYSTEM GROUND TO INCLUDE ALL THE ELECTRICAL EQUIPMENT IN THE SCOPE OF WORK.

d. WHERE FLEXIBLE METALLIC CONDUIT IS USED AN INTERNAL BONDING CONDUCTOR SHALL BE INSTALLED.

e. IN ADDITION, FURNISH A SEPARATE INSULATED GREEN EQUIPMENT GROUND CONDUCTOR WHERE INDICATED ON DRAWINGS AND FOR THE FOLLOWING BRANCH CIRCUITS:

1) CIRCUITS SERVING ANY WALL BOX DIMMER.

2) CIRCUITS SERVING ANY ISOLATED GROUND RECEPTACLES. TERMINATE GROUND DIRECTLY AT AN EQUIPMENT GROUNDING CONDUCTOR TERMINAL OF THE SOURCE AT THE SOURCE , OR AS OTHER WISE NOTED ON DRAWINGS.

3) CIRCUITS SERVING ANY DUPLEX OR SIMPLEX COMPUTER RECEPTACLES

4) ANY CIRCUIT SERVED VIA AN ISOLATION TRANSFORMER OR COMPUTER POWER DISTRIBUTION UNIT.

15. PANELBOARDS:

a. PANELBOARDS SHALL BE OF THE DEAD FRONT TYPE, MANUFACTURED IN CODE GAUGE AND SIZE BOXES FOR MOUNTING AS INDICATED ON PLANS COMPLETE, WITH TRIM, DOORS AND LOCKS. ALL LOCKS SHALL BE KEYED ALIKE.

b. CIRCUIT BREAKERS SHALL BE OF THE BOLT-ON THERMAL MAGNETIC MOLDED CASE TYPE, AND SHALL HAVE THE TRIP RATINGS AND NUMBER OF POLES SHOWN IN SCHEDULES ON THE CONTRACT DRAWINGS. FOR BLANK (SPACE) COMPARTMENTS, PROVIDE FULL RATED BUS. MINIMUM GUTTER SPACES SHALL BE 5-3/4". SIDES, TOP AND BOTTOM, INCREASE FOR THROUGH FEEDERS. PROVIDE 25% COPPER GROUND BUS AND 100% COPPER NEUTRAL BUS AND INCREASE NEUTRAL BUS INDICATED.

c. LOCKING TABS SHALL BE PROVIDED ON ALL CIRCUIT BREAKERS SERVING EMERGENCY LIGHTING, FIRE ALARM SYSTEM, SECURITY SYSTEMS AND OTHER EMERGENCY OR CRITICAL EQUIPMENT AND AS NOTED ON THE CONTRACT DRAWINGS. A TOTAL OF 5 SPARE LOCKING TABS SHALL BE FURNISHED TO THE OWNER.

d. BUSES SHALL BE HARD DRAWN COPPER OF 98 PERCENT CONDUCTIVITY AND SHALL HAVE CROSS SECTIONAL AREAS LARGE ENOUGH TO LIMIT THE TEMPERATURE RISE, WHEN CARRYING FULL LOAD, TO 35 DEGREES C. ABOVE AN AMBIENT INSIDE THE ENCLOSURE OF 55 DEGREES C. AS DEFINED IN IEEE STANDARD RULES. MAIN BUS CAPACITY SHALL BE AS SHOWN ON THE CONTRACT DRAWINGS.

e. ENCLOSURES SHALL BE SURFACE OR FLUSH AS INDICATED. TRIMS SHALL BE SECURED TO PANEL WITH MACHINE SCREWS. COVERS SHALL BE HINGED DOOR-IN-DOOR CONSTRUCTION WITH CYLINDER LOCKS AND CATCHES. LOCKS MUST BE COMPATIBLE WITH BUILDER STANDARD KEY SYSTEM AND WHEN NONE EXISTS, THEY SHALL BE SIMILAR TO A YALE NO. 911 KEY.

f. DISTRIBUTION AND SUB-DISTRIBUTION PANELBOARD SHALL BE A MINIMUM OF 30" WIDE AND 10" DEEP.

g. ALL STANDARD PANELBOARDS SHALL BE A MINIMUM OF 20" WIDE AND 5 3/4" DEEP.

h. FURNISH ALL PANELBOARDS WITH FEED--THRU LUGS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

i. ALL NEW PANELBOARDS SHALL BE PROVIDED WITH AN ENGRAVED WHITE CORE LAMACOID NAMEPLATE, WITH 3/4 IN. WHITE LETTERING ON A BLACK BACKGROUND, WITH DESIGNATION LISTED (PANELBOARD NAME), FASTENED WITH EPOXY CEMENT OR OVAL HEAD CHROME PLATED MACHINE SCREWS.

j. THE CIRCUIT DIRECTORY SHALL BE TYPEWRITTEN AND PROVIDED INSIDE EACH PANEL DOOR TO INDICATE EQUIPMENT AND/OR AREA SERVED. DIRECTORY HOLDER SHALL BE METAL FRAME WITH CLEAR PLASTIC, TRANSPARENT COVER. THE TYPEWRITTEN LIST INDICATING CIRCUIT NUMBERS, OUTLETS SUPPLIED AND THEIR LOCATIONS SHALL BE PROVIDED.

k. TIE-BARS SHALL NOT BE USED TO CREATE MULTI-POLE CIRCUITS. MAXIMUM 42 CIRCUITS ALLOWED.

l. ONLY ONE WIRE SHALL BE INSTALLED UNDER EACH CIRCUIT BREAKER LUG.

m. SHORT CIRCUIT RATING OF PANELBOARDS SHALL NOT BE LESS THAN AS INDICATED ON THE CONTRACT DRAWINGS OR SPECIFIED HEREIN. WHERE NOT INDICATED OR SPECIFIED THE MINIMUM SHORT CIRCUIT RATING SHALL BE EQUAL TO THE INTERRUPTING CAPACITY OF THE LOWEST RATED CIRCUIT BREAKER IN THE PANELBOARD, BUT IN NO CASE LESS THAN 10,000 AMPERES R.M.S. SYMMETRICAL FOR 208Y/120 VOLT SYSTEM. SERIES RATED PANELBOARDS SHALL BE USED TO ACHIEVE REQUIRED SHORT CIRCUIT RATINGS.

n. FOR ALL EXISTING PANELBOARDS, CONTRACTOR SHALL PROVIDE NEW CIRCUIT BREAKERS TO REPLACE EXISTING AS REQUIRED AS INDICATED ON DRAWINGS.

CONSULTANTS (ENGINEER):

NY ENGINEERS

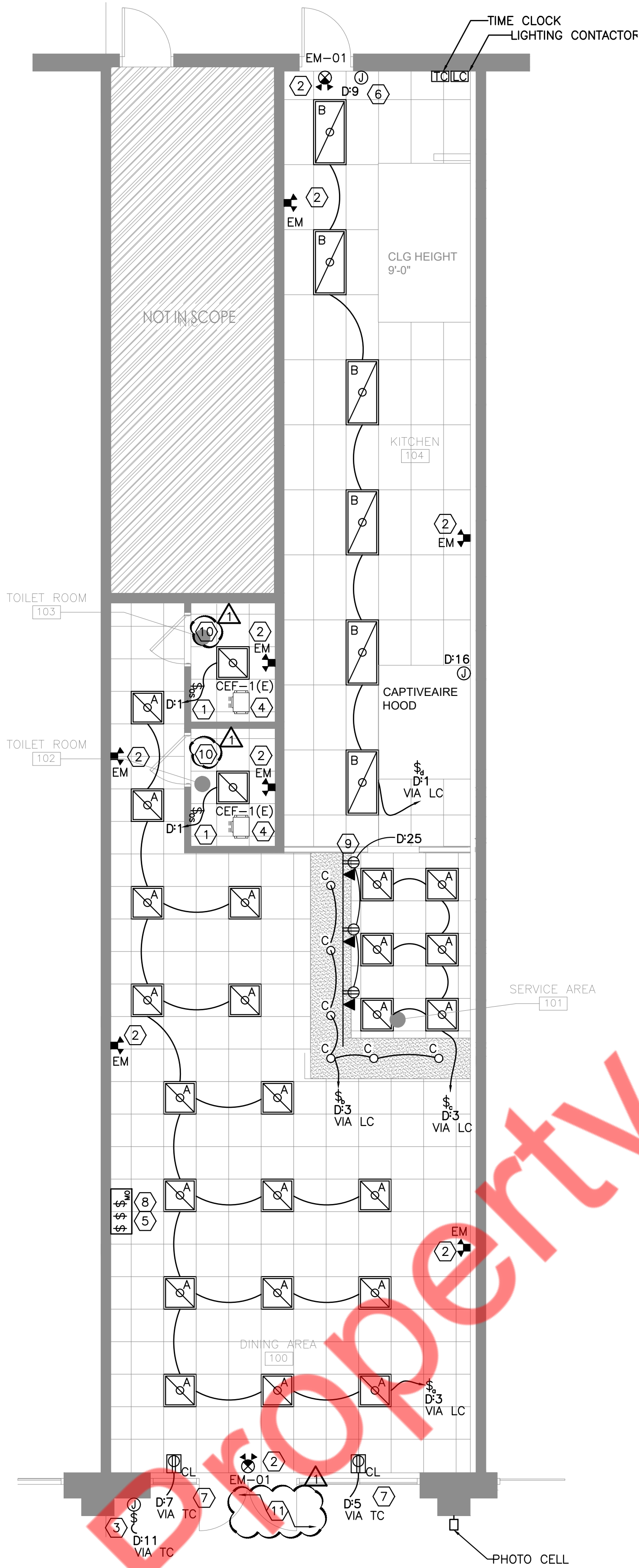
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Δ	ISSUE FOR PERMIT	09/29/23
NO.	DESCRIPTION	DATE
REVISIONS		

ALL FIELD CONDITIONS AND DIMENSIONS ARE TO BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF THE WORK. ALL DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. THESE DRAWINGS ARE THE PROPERTY OF JOHN WILLIAM LISTER ARCHITECT. THEY ARE NOT TO BE REPRODUCED IN PART OR IN WHOLE WITHOUT THE CONSENT OF JOHN WILLIAM LISTER ARCHITECT. THEY ARE TO BE USED ON THE PROJECT NOTED HEREON ONLY.

SOFRESH

SHEET TITLE	
ELECTRICAL SPECIFICATION SHEET 2 OF 2	
08/24/23 DATE AS NOTED SCALE N/E DRAWN BY N/E CHECKED BY 23126 PROJECT #	SHEET NUMBER E0.3



LIGHTING FIXTURE SCHEDULE					
TYPE	DESCRIPTION	MANUFACTURER	MODEL	TYPE	WATTAGE
A	2X2 LED DT SERIES	LITHONIA	EPANL-2X2-4000LM-ZT-MVOLT-EM	LED	46 W
B	2X4 LED DT SERIES	LITHONIA	EPANL-2X2-4000LM-ZT-MVOLT-EM	LED	46 W
C	6" RECESSED LIGHT FIXTURE	LITHONIA	LDN6-35/20-L06-AR-LSS-MVOLT-GZ10	LED	-
EM-01	EXIT SIGN WITH EM LIGHT	-	NEL-12PMR2-LD9	LED	-
EM	2-HEAD EMERGENCY HEADS (WHITE)	EXITRONIX	EBU-W-LED-51-52	LED	-

- GENERAL NOTES:**
- VERIFY ALL LUMINAIRE COLORS, TRIMS, LENGTHS, ETC. WITH THE ARCHITECT PRIOR TO PLACING FINAL PURCHASE ORDERS. SUBMISSION PF SHOP DRAWINGS WILL BE INTERPRETED AS HAVING BEEN COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
 - PROVIDE ALL LENGTHS, FEEDS, ACCESSORIES, CONNECTORS, WIRING, POWER SUPPLIES, DRIVERS ETC. FOR A COMPLETE INSTALLATION. THE E.C. SHALL VERIFY THE COMPLETE BILL OF MATERIAL WITH MANUFACTURER'S REPRESENTATIVE AND ENSURE ALL EQUIPMENT ARE INCLUDED IN BID PRICE. COORDINATE INSTALLATION WITH ARCHITECTURAL DETAILS.
 - VERIFY FINAL LUMINAIRE LOCATIONS WITH OTHER CEILING MOUNTED EQUIPMENTS SUCH AS DIFFUSER WITH ARCHITECTURAL REFLECTED CEILING PLANS.
 - VERIFY EXACT MOUNTING HEIGHT AND LOCATIONS OF ALL WALL MOUNTED LUMINAIRE WITH ARCHITECTURAL PLANS AND ELEVATIONS PRIOR TO ROUGH-IN.
 - ANY PROPOSED ALTERNATE LUMINAIRES SHALL BE APPROVED BY THE ARCHITECT PRIOR TO FINAL BID PRICING.
 - SHOULD THE CONTRACTOR PROPOSE TO FURNISH MATERIALS, EQUIPMENT AND DEVICES OTHER THAN THOSE SPECIFIED AND LISTED, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR SUBSTITUTIONS, TO THE ENGINEERS AT LEAST TEN (10) BUSINESS DAYS PRIOR TO BID OPENING. THE REQUEST SHALL BE AN ALTERNATE TO THE ORIGINAL BID AND SHALL INCLUDE A COMPLETE SPECIFICATIONS CUTSHEET SUBMITTAL AS OUTLINED IN THE SPECIFICATIONS, COMPLETE WITH DESCRIPTIVE (MANUFACTURER, BRAND NAME, CATALOG NUMBER, ETC.) AND TECHNICAL DATA FOR ALL ITEMS. INDICATE ANY ADDITIONS OR DEDUCTIONS TO THE CONTRACT PRICE WITH THE SUBSTITUTION SUBMITTAL AND ON THE BID FORM.
 - VERIFY FINAL SELECTION OF LIGHT FIXTURE WITH ARCHITECT.
 - ALL LIGHT FIXTURES ARE THROUGH A NATIONAL ACCOUNT WITH SPECIALTY LIGHTING GROUP. FOR MORE DETAILS CONTACT: JEANNETTE ALVARADO, PROJECT MANAGER, (860)767-0110 x235. Jeannette.Alvarado@sslighting.com

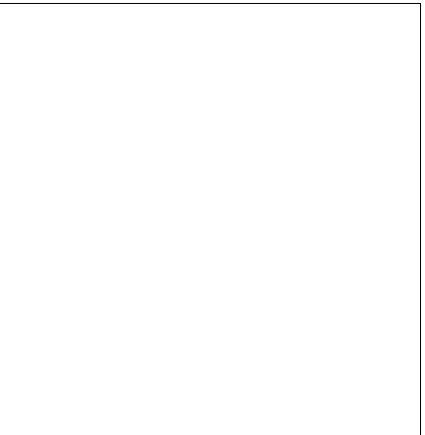
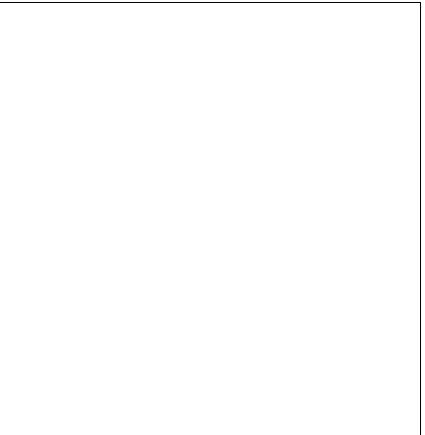
- LIGHTING PLAN GENERAL NOTES:**
- CONTRACTOR IS ADVISED THAT ADJUSTMENTS TO EMERGENCY AND EXIT LIGHT FIXTURE LOCATIONS/QUANTITIES MAY BE REQUIRED BY AHJ UPON FINAL INSPECTION.
 - ALL NIGHT LIGHT, EMERGENCY AND EXIT LIGHT FIXTURES SHALL BE CONNECTED AHEAD OF SWITCHED LIGHTING CIRCUIT.
 - UNLESS OTHERWISE NOTED, LIGHT SWITCHES SHALL BE GANGED TOGETHER UNDER A COMMON FACEPLATE.

- LIGHTING KEYED NOTES:**
- WALL MOUNTED OCCUPANCY SENSOR. SET OFF TIME TO 15 MINUTES FOR RESTROOM, SET DIP SWITCH TO AUTOMATIC ON.
 - ALL THE EMERGENCY LIGHTS, EXIT SIGNS SHALL BE CONNECTED TO THE NEAREST LIGHTING CIRCUIT AHEAD OF SWITCHING FOR CONTINUOUS OPERATIONS.
 - E.C. SHALL COORDINATE EXACT LOCATION OF THE SIGNAGE, AND PROVIDE JUNCTION BOX AND TOGGLE SWITCH FOR EXTERIOR SIGNAGE. CONNECT TO THE INDICATED CIRCUIT VIA TIME CLOCK. COORDINATE WITH THE OWNER FOR TIME SETTING.
 - EXHAUST FAN FURNISHED AND INSTALL BY MECHANICAL CONTRACTOR. E.C. TO COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION AND POWER REQUIREMENT. PROVIDE ACCORDINGLY..
 - COORDINATE EXACT LOCATION OF SWITCH BANK WITH ARCHITECT/OWNER.
 - COORDINATE EXACT LOCATION OF TIME CLOCK WITH ARCHITECT/OWNER.
 - E.C. TO PROVIDE SHOW WINDOW RECEPTACLES AS PER 210.62.
 - MANUAL OVERRIDE SWITCH.
 - DUPLEX RECEPTACLE AND DATA OUTLET FOR TVs. COORDINATE EXACT MOUNTING IN FIELD.
 - CEILING LIGHTING FIXTURE UNDER SEPARATE PERMIT BY OTHERS.
 - TENANT E.C. TO INSTALL JUNCTION AND ELECTRICAL IN CANOPY RATHER THAN ON EXTERIOR FACADE. COORDINATE WITH THE LANDLORD/OWNER PRIOR TO ROUGH-IN.

CONSULTANTS (ENGINEER):

NY ENGINEERS

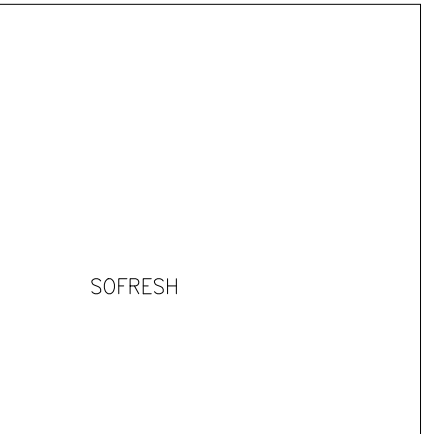
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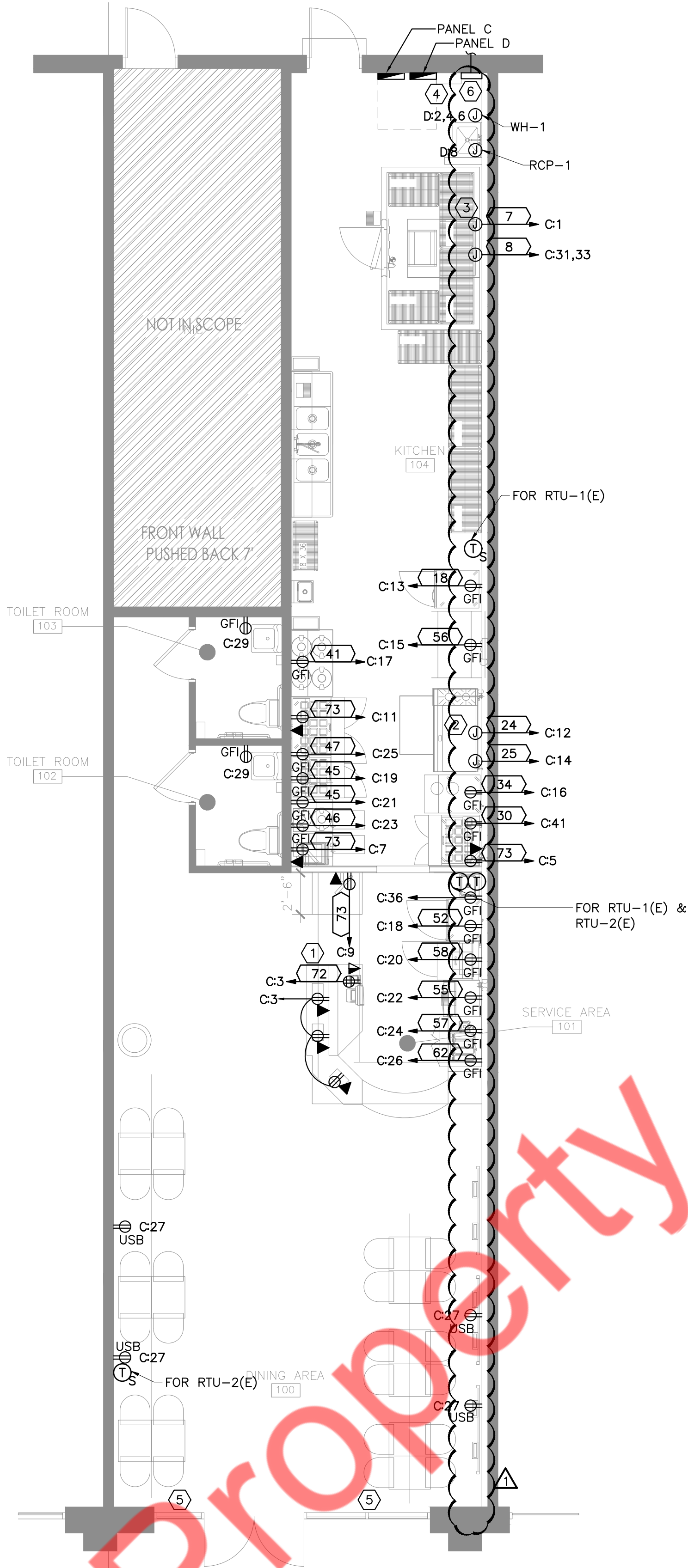
NO.	DESCRIPTION	DATE
1	LANDLORD COMMENTS	12/13/23
2	ISSUE FOR PERMIT	09/29/23
REVISIONS		

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SHEET TITLE			
ELECTRICAL LIGHTING PLAN			
08/24/23	DATE	SHEET NUMBER	
AS NOTED	SCALE	E1.0	
NYE	DRAWN BY		
NYE	CHECKED BY		
23126	PROJECT #		



1 ELECTRICAL POWER PLAN
SCALE: 3/16" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE					
ITME NO.	EQUIPMENT DESCRIPTION	VOLTAGE	PHASE	AMPERE	DISCONNECTING MEANS
7	WALK-IN COOLER	120	1	20	FOR CONNECTIONS DETAILS COORDINATE WITH THE EQUIPMENT MANUFACTURER AND MAKE PROVISIONS ACCORDINGLY.
8	MEDIUM TEMPERATURE BLOWER COIL & COMPRESSOR	208	1	9.3	
18	REACH-IN FREEZER	115	1	6.3	
24	HOOD SYSTEM	120	1	20	
25	FIRE SUPPRESSION SYSTEM	120	1	20	
26	EXHAUST FAN - EF - 1	208	3	2.6	
27	SUPPLY FAN - MUA-1	208	3	2.5	
28	CONDENSER - PART OF THE SUPPLY FAN	208	3	11.9	
30	MEGA TOP SANDWICH / SALAD PREPARATION REFRIGERATOR	115	1	2.3	
34	UNDERCOUNTER REFRIGERATOR WITH DRAWERS	115	1	2.3	
41	RICE COOKER (2 EA) FUTURE	120	1	18	
45	FREE STANDING DRAWER WARMER WITH CASTER KIT	120	1	12	
46	SANDWICH PANNI GRILL	120	1	15	
47	MEGA TOP REFRIGERATED SANDWICH / SALAD PREP UNIT	115	1	2.8	
52	REACH-IN MERCHANDISER - NIKEC - BY VENDOR	115	1	7	
55	UNDER COUNTER ICE MAKER	115	1	5	
56	WATER FILTER				
57	BAR BLENDER	120	1	15	
58	MEGA TOP SANDWICH / SALAD PREP REFRIGERATOR	115	1	2.3	
62	ICE MAKER	120	1	8.5	
69	AIR CURTAIN - FUTURE	120	1	7.5	
72	POS SYSTEM WITH PRINTER - BY OWNER - VERIFY ALL REQUIREMENTS - DATA LINES BY GC	120	1	20	
73	POS SCREENS - BY OWNER - VERIFY ALL UTILITY REQUIREMENTS - DATA LINES BY GC	120	1	15	

DRAWING NOTES:

- ALL BRANCH CIRCUITS HOMERUNS ASSIGN INDICATED ON THIS PLAN SHALL BE CIRCUITED TO THERE RESPECTIVE PANELS, CIRCUIT NUMBER INDICATED, U.O.N.
- REFER TO DWG. E-0.1 FOR ELECTRICAL GENERAL NOTES, SYMBOL LIST & ABBREVIATIONS.
- REFER TO DWG. E-0.2 & E-0.3 FOR ADDITIONAL ELECTRICAL SPECIFICATIONS.
- CONTRACTOR TO COORDINATE WITH ARCHITECT FOR EXACT HEIGHT OF OUTLETS.

KITCHEN EQUIPMENT CONNECTION SCHEDULE GENERAL NOTES

- THIS SCHEDULE SHOWS ALL CIRCUITING INFORMATION FOR KITCHEN / FOOD SERVICE EQUIPMENT. REFER TO KITCHEN DESIGNER'S / FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION SUCH AS ROUGH-IN INFORMATION AND OTHER REQUIREMENTS.
- NEMA X-XX DESIGNATES NEMA PLUG TYPE AND AMPERAGE, 'HPRS' DESIGNATES HORSEPOWER-RATED SWITCH, 'FD' DESIGNATES A FUSED DISCONNECT, 'NF' DESIGNATES A NON-FUSED DISCONNECT, 'L' DESIGNATES LOCKABLE CIRCUIT BREAKER.
- VERIFY ALL INSTALLATION REQUIREMENTS WITH FOOD SERVICE CONSULTANT AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN.
- VERIFY ALL MCA AND MOCB REQUIREMENTS WITH SUBMITTED AND APPROVED EQUIPMENT PRIOR TO ELECTRICAL ROUGH-IN.
- VERIFY NEMA RECEPTACLE CONFIGURATIONS WITH EQUIPMENT VENDOR PRIOR TO ELECTRICAL ROUGH-IN.
- WHERE A CONFLICT OCCURS BETWEEN FOOD SERVICE / KITCHEN DESIGNER'S DRAWINGS AND THESE DRAWINGS, THE FOOD SERVICE / KITCHEN DESIGNER'S DRAWINGS SHALL GOVERN.
- CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL CONDUIT, WIRE, SUPPORT SYSTEM, DISCONNECTS, AND OUTLETS TO ALLOW FOR A COMPLETE CODE COMPLIANT KITCHEN INSTALLATION AS INDICATED BY ALL ELECTRICAL AND FOOD SERVICE / KITCHEN DESIGNER'S DRAWINGS AND SPECIFICATIONS UNLESS NOTED OTHERWISE.
- ALL ELECTRICAL EQUIPMENT LOCATED ON WALLS OF PRODUCTION KITCHEN AREAS SHALL BE A MINIMUM OF 48" AFF UNLESS NOTED OTHERWISE. ALL ELECTRICAL EQUIPMENT LOCATED ABOVE COUNTERS OF KITCHEN AREAS SHALL BE 6" ABOVE COUNTER UNLESS NOTED OTHERWISE. ALL ELECTRICAL EQUIPMENT LOCATED BELOW COUNTERS AND WITHIN CASEWORK OF KITCHEN AREAS SHALL BE 6" BELOW THE TOP OF COUNTERS UNLESS NOTED OTHERWISE.
- REFER TO KITCHEN DESIGNER'S / FOOD SERVICE DRAWINGS FOR ADDITIONAL ROUGH-IN INFORMATION INCLUDING EXACT ROUGH-IN LOCATION AND MOUNTING HEIGHTS OF ELECTRICAL ROUGH-INS AND DEVICES. ANY DIMENSIONS NOTED ON THE KITCHEN DESIGNER'S / FOOD SERVICE DRAWINGS TAKE PRECEDENCE.
- CONTRACTOR SHALL INSURE THAT ALL CONDUIT ROUTED THROUGH OR NEAR CASEWORK SHALL NOT INTERFERE IN ANY WAY WITH INTENDED USE OR SERVICING OF EQUIPMENT OR COUNTERS.
- ALL RECEPTACLES IN KITCHEN AREA SHALL BE GFCI PROTECTED. E.C. SHALL PROVIDE AND INSTALL GFCI CIRCUIT BREAKERS FOR ALL CIRCUITS FEEDING KITCHEN EQUIPMENT REQUIRING GFCI PROTECTION THAT ARE INACCESSIBLE, BEFORE OR AFTER APPLIANCE HAS BEEN INSTALLED, IF RECEPTACLE DOESNT PROVIDE GFCI PROTECTION. NEC 210.8 AND 422.5(A).
- LOCATIONS OF DISCONNECTS FOR EACH PIECE OF EQUIPMENT MAY NOT BE SHOWN ON PLANS. IF DISCONNECT FOR EQUIPMENT IS NOT SHOWN, CONTRACTOR TO FIELD COORDINATE LOCATION IN ACCORDANCE WITH CODE.
- CONTRACTOR SHALL LIMIT THE AMOUNT OF EXPOSED CONDUIT. ANY EXPOSED CONDUIT SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT OR RIGID GALVANIZED STEEL CONDUIT.
- COORDINATE EXACT LOCATION OF ALL REMOTE CONDENSING UNITS WITH HVAC AND FOOD SERVICE DRAWINGS.
- ALL ENERGIZED EQUIPMENT AND ALL WIRING DEVICES LOCATED UNDER A HOOD SHALL SHUNT TRIP UNPON ACTIVATION OF HOOD FIRE SUPPRESSION SYSTEM.
- FUSED DISCONNECTS SHALL HAVE FUSES SIZED AS LISTED ON EQUIPMENT NAMEPLATE, OTHERWISE MATCH UPSTREAM OVERCURRENT DEVICE IF NO MAXIMUM OVER CURRENT SIZE LISTED ON EQUIPMENT, UNLESS NOTED OTHERWISE.
- REFER TO FEEDER SCHEDULES FOR FEEDER WIRE SIZES FOR ALL 3 PHASE EQUIPMENT.

FLOOR POWER KEYED NOTES:

- (1) QUAD & (1) DATA OUTLET POS DESK & PRINTER. E.C. TO VERIFY FINAL LOCATION AND MOUNTING HEIGHT OF OUTLETS WITH ARCHITECT PRIOR TO ROUGH-IN.
- JUNCTION BOX FOR KITCHEN HOOD CONTROL PANEL. E.C. TO COORDINATE EXACT LOCATION AND DETAILS OF KITCHEN HOOD CONTROL PANEL WITH KITCHEN HOOD SUPPLIER PRIOR TO BID.
- E.C. TO COORDINATE EXACT POWER REQUIREMENT WITH WALK-IN COOLER MANUFACTURER AND MAKE POWER PROVISION ACCORDINGLY.
- LOCATION FOR THE TIME CLOCK AND LIGHTING CONTACTORS. REFER LIGHTING PLAN FOR MORE DETAILS.
- REFER TO THE LIGHTING PLAN FOR SHOW WINDOW RECEPTACLES.
- TENANT E.C. TO COORDINATE WITH TELECOM CONDUITS TO SPACE PER LANDLORD PLANS.

CONSULTANTS (ENGINEER):

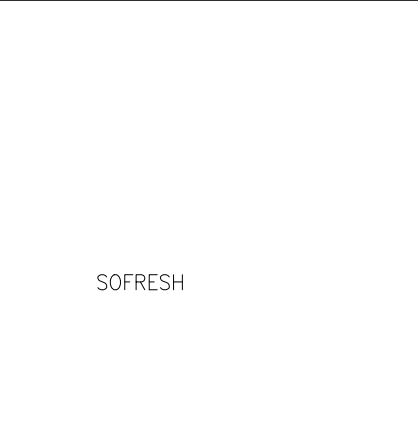
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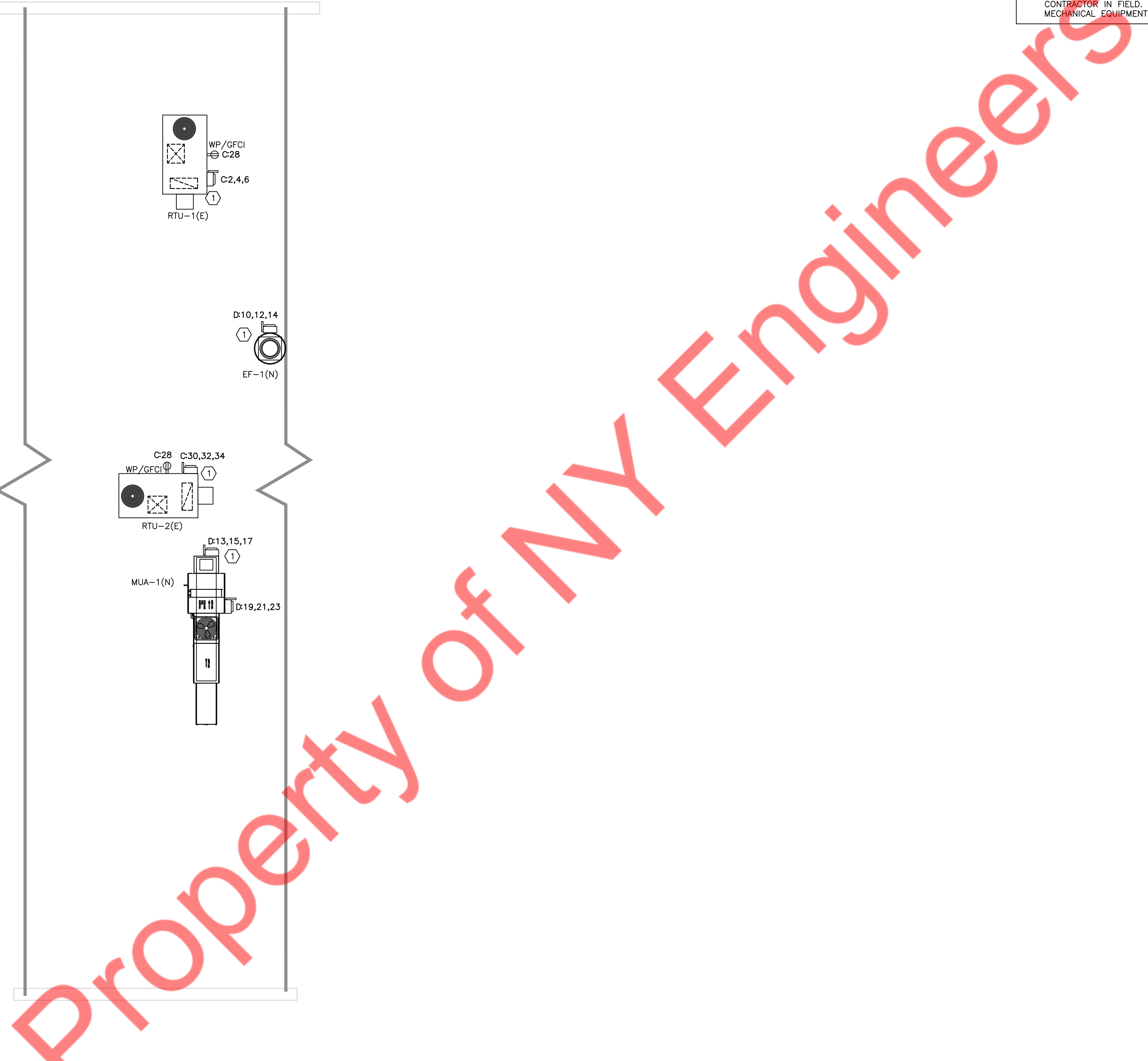


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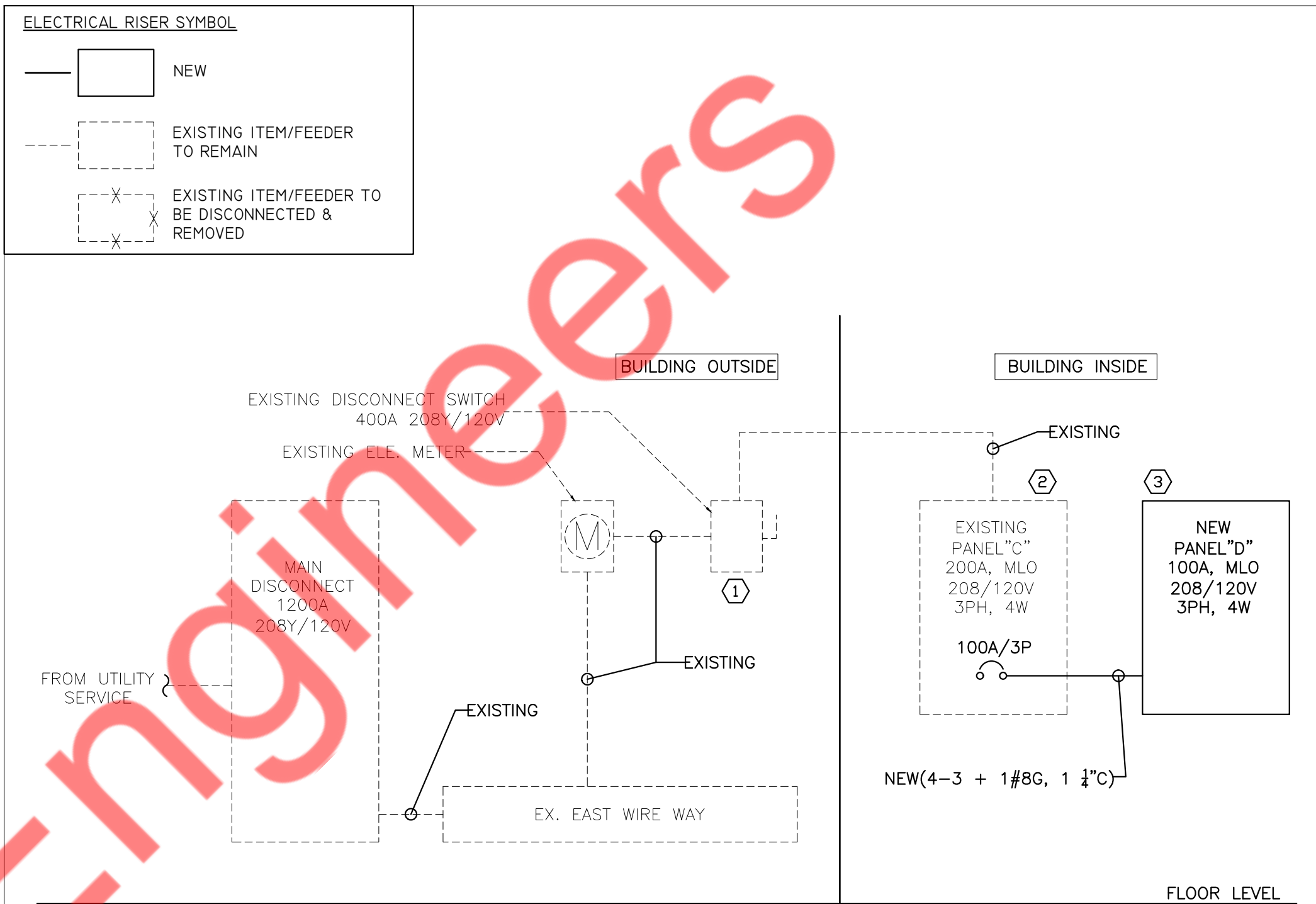
SHEET TITLE			
ELECTRICAL POWER PLAN			
08/24/23	DATE	SHEET NUMBER	
AS NOTED	SCALE	E2.0	
NYE	DRAWN BY		
NYE	CHECKED BY		
23126	PROJECT #		



1

8/24/23	DATE	SHEET NUMBER E2.1
NOTED	SCALE	
BY	DRAWN BY	
BY	CHECKED BY	
3126	PROJECT #	

PANEL:		C	(EXISTING)						MOUNTING: SURFACE						
208Y/120	VOLTS			3	PHASE	4	WIRE			PANEL LOCATION: BOH					
MLO	200A	AIC - 25kA	BUS:		EXISTING	MINIMUM				FED FROM: DISCONNECT SWITCH					
NOTE:															
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)			MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.	
1	30**	7-WALK-IN COOLER	E	2.40	2-12 + 1#10G, 3/4"C	A	B	C	3-10 + 1#10G, 3/4"C	2.52	H	RTU-1 (E)	30/3P**	2	
3	20	72-POS SYSTEM	R	1.50	2-12 + 1#12G, 3/4"C	2.04				2.52	H		4		
5	20	73-POS SCREEN	R	1.80	2-12 + 1#12G, 3/4"C	4.32				2.52	H		6		
7	20**	73-POS SCREEN	R	1.80	2-12 + 1#12G, 3/4"C	4.20				EXISTING	2.40	O	EX. VH	30	8
9	20	73-POS SCREEN	R	1.80	2-12 + 1#12G, 3/4"C	4.20			EXISTING	2.40	O	EX. VH	30	10	
11	20**	73-POS SCREEN	R	1.80	2-12 + 1#12G, 3/4"C	4.20			2-12 + 1#10G, 3/4"C	2.40	E	24-HOOD SYSTEM	30**	12	
13	20**	18-REACH IN FREEZER	E	0.72	2-12 + 1#12G, 3/4"C	3.12				2-12 + 1#10G, 3/4"C	2.40	E	25-FIRE SUPPRESSION SYSTEM	30**	14
15	20**	56-WATER FILTER	E	0.18	2-12 + 1#12G, 3/4"C	0.48			2-12 + 1#12G, 3/4"C	0.30	E	34-UNDERCOUNTER REFRIGIRATOR WITH DRAWER	20**	16	
17	20**	41-RICE COOKER (2EA) FUTURE	E	2.16	2-12 + 1#12G, 3/4"C	2.60			2-12 + 1#12G, 3/4"C	0.80	E	52-REACH IN MERCHANDISER	20**	18	
19	20**	45-FREE STANDING DRAWER WARMER WITH CASTER KIT	E	1.44	2-12 + 1#12G, 3/4"C	1.74				2-12 + 1#12G, 3/4"C	0.30	E	58-MEGA TOP SANDWICH / SALAD PREP REFRIGIRATOR	20**	20
21	20**	45-FREE STANDING DRAWER WARMER WITH CASTER KIT	E	1.44	2-12 + 1#12G, 3/4"C				2-12 + 1#12G, 3/4"C	0.60	E	55-UNDERGROUND ICE MAKER	20**	22	
23	20**	46-SANDWICH PANNI GRILL	E	1.80	2-12 + 1#12G, 3/4"C	3.60			2-12 + 1#12G, 3/4"C	1.80	E	57-BAR BLENDER	20**	24	
25	20**	47-MEGA TOP REFRIGIRATED SANDWICH / SALAD PREP UNIT	E	0.40	2-12 + 1#12G, 3/4"C	1.50				2-12 + 1#12G, 3/4"C	1.10	E	62-FROZEN BEVERAGE DISPENSER	20**	26
27	20**	GENERAL RECEPTACLE	R	0.72	2-12 + 1#12G, 3/4"C	1.08			2-12 + 1#12G, 3/4"C	0.36	R	SERVICE RECEPTACLE	20**	28	
29	20**	RESTROOM RECEPTACLE	R	0.36	2-12 + 1#12G, 3/4"C	2.88			3-10 + 1#10G, 3/4"C	2.52	H	RTU-2 (E)	30/3P**	30	
31	20/2P**	8-MEDIUM TEMPERATURE REMOTE	E	0.96	2-12 + 1#12G, 3/4"C	4.02				2.52	H		32		
33		CONDENSER	E	0.96		4.32				2.52	H		34		
35	100/3P**	PANEL D	O	9.67		4-3 + 1#8G, 1-1/4"C	9.85			2-12 + 1#12G, 3/4"C	0.18	R	GENERAL RECEPTACLE	20**	36
37			O	9.67							SPARE	20**	38		
39			O	9.67								SPARE	20**	40	
41	20**	30-MEGA TOP SANDWICH / SALAD PREPARATION REFRIGIRATOR	E	0.28	2-12 + 1#12G, 3/4"C	0.28						SPARE	20**	42	
						29.17	21.79	27.73							



PANEL: D		(NEW)									MOUNTING: SURFACE			
208Y/120		VOLTS		3		PHASE		4		WIRE		PANEL LOCATION: BOH		
MLO		100A		BUS:		125A		MINIMUM				FED FROM: EX. PANEL C		
NOTE:														
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)			MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
						A	B	C						
1	20	LIGHTING	L	0.37	2-12 + 1#12G, 3/4"C	3.04			3-10 + 1#10G, 3/4"C	2.67	O	WH-1	30/3P	2
3	20	LIGHTING	L	1.09	2-12 + 1#12G, 3/4"C		3.76			2.67	O			4
5	20	SHOW WINDOW RECEPTACLE	R	1.00	2-12 + 1#12G, 3/4"C			3.67		2.67	O			6
7	20	SHOW WINDOW RECEPTACLE	R	1.00	2-12 + 1#12G, 3/4"C	1.50			2-12 + 1#12G, 3/4"C	0.50	M	RCP-1	20	8
9	20	TIME CLOCK	L	0.50	2-12 + 1#12G, 3/4"C		1.35			0.85	H			10
11	20	EXTERIOR SIGNAGE	L	1.00	2-12 + 1#12G, 3/4"C			1.85	3-12 + 1#12G, 3/4"C	0.85	H	EF-1 (N)	20/3P	12
13	20/3P	MUA-1 (N)	H	1.74	3-12 + 1#12G, 3/4"C	2.59				0.85	H			14
15			H	1.74		2.24					0.50			L
17			H	1.74			1.74					SPARE	20	18
19	20/3P	MUA-1 (N)	H	1.74	3-12 + 1#12G, 3/4"C	1.74						SPARE	20	20
21			H	1.74		1.74					SPARE	20	22	
23			H	1.74		1.74					SPARE	20	24	
25	20	SERVICE AREA TV RECEPTACLES	R	1.20	2-12 + 1#12G, 3/4"C	1.20						SPARE	20	26
27	20	SPARE					0.00					SPARE	20	28
29	20	SPARE						0.00				SPARE	20	30
31	20	SPARE				0.00						SPARE	20	32
33	20	SPARE					0.00					SPARE	20	34
35	20	SPARE						1.00				SPARE	20	36
37	20	SPARE				1.00						SPARE	20	38
39	20	SPARE					1.00					SPARE	20	40
41	20	SPARE						0.00				SPARE	20	42
						11.07	10.09	10.00						

ELECTRICAL RISER DIAGRAM GENERAL NOTES:

- A. ELECTRICAL CONTRACTOR (E.C.) SHALL PROVIDE AND INSTALL ALL THE DEVICES IN FIELD IN COORDINATION WITH THE OWNER AND UTILITY. ALL THE INSTALLATIONS SHALL BE IN COMPLIANCE WITH THE NEC AND LOCAL CODES.
- B. E.C. SHALL COORDINATE WITH THE UTILITY COMPANY AND AHJ FOR EXACT FAULT CURRENT (Isc) RATING AVAILABLE IN THE FIELD. PRIOR TO BID.
- C. E.C. SHALL COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL THE DEVICES SHOWN, WITH THE ARCHITECT/OWNER AND UTILITY.
- D.
- E. PROVIDE SEPARATE GROUND CONDUCTOR IN ALL CONDUITS.
- F. E.C. SHALL COORDINATE WITH THE ARCHITECT / OWNER / FOR EXACT SCOPE OF WORK PRIOR TO BID.
- G. E.C. SHALL COORDINATE WITH THE ARCHITECT / OWNER / LANDLORD FOR ANY TYPE OF ADDITION / ALTERATION TO THE EXISTING SYSTEM PRIOR TO BID. NO WORK SHALL BE PERFORMED WITHOUT THEIR CONSENT.
- H. ALL THE FEEDERS SHALL BE NEW (U.N.O.). SIZE SHALL BE AS PER RISER.
- I. E.C. SHALL VERIFY OPERABLE CONDITION OF ALL THE EXISTING & RELOCATED EXISTING EQUIPMENT PRIOR TO BID. REPLACE EQUIPMENT WITH NEW ONE. KEEPING ALL THE PARAMETERS SAME.

ELECTRICAL RISER DIAGRAM KEY NOTES: 

1. PER EXISTING DRAWINGS EXISTING 400A, 3PH DISCONNECT SWITCH TO REMAIN. E.C. TO VERIFY OPERABLE CONDITION, RATING AND EXACT LOCATION IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
2. EXISTING PANEL TO REMAIN. E.C. TO FIELD VERIFY OPERABLE CONDITION, RATING AND EXACT LOCATION OF THE EXISTING PANEL IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
3. NEW PANEL FOR THE PROJECT SPACE. E.C. TO COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION.

PANEL SCHEDULE GENERAL NOTES:

- A. ELECTRICAL CONTRACTOR SHALL VERIFY THE BREAKER AND CABLE RATING WITH EQUIPMENT SUPPLIER/OWNER AND ACCORDINGLY UPDATE THE BREAKER RATING CABLE SIZE IN FIELD.
- B. GFI MARKED ON THE POWER PLAN INDICATES THAT THE CIRCUIT SHALL BE GFCI PROTECTED. E.C. SHALL PROVIDE GFCI BREAKER FOR THE GFI MARKED RECEPTABLES, IF EITHER RECEPTACLE IS NOT ACCESSIBLE OR NOT AVAILABLE.
- C. PROVIDE HACR BREAKER FOR HAVC UNITS. COORDINATE WITH HVAC DRAWINGS.
- D. PROVIDE LOCKING DEVICES ON CIRCUIT BREAKER WHERE EVER REQUIRED.
- E. E.C. TO VERIFY SCOPE OF WORK WITH OWNER/ARCHITECT. PRIOR TO BID.
- F. VERIFY EXACT POWER DISTRIBUTION IN FIELD.

PANEL SCHEDULE ABBREVIATIONS:

L=LIGHTING
R=RECEPTACLE
H=HVAC
M=MOTOR
O=OTHER

(*) GFCI BREAKER
(**) NEW BREAKER IN EXISTING PANEL
(***) PROVIDE HACR BREAKER

CONSULTANTS (ENGINEER):

NY ENGINEERS

NEARBY ENGINEERS

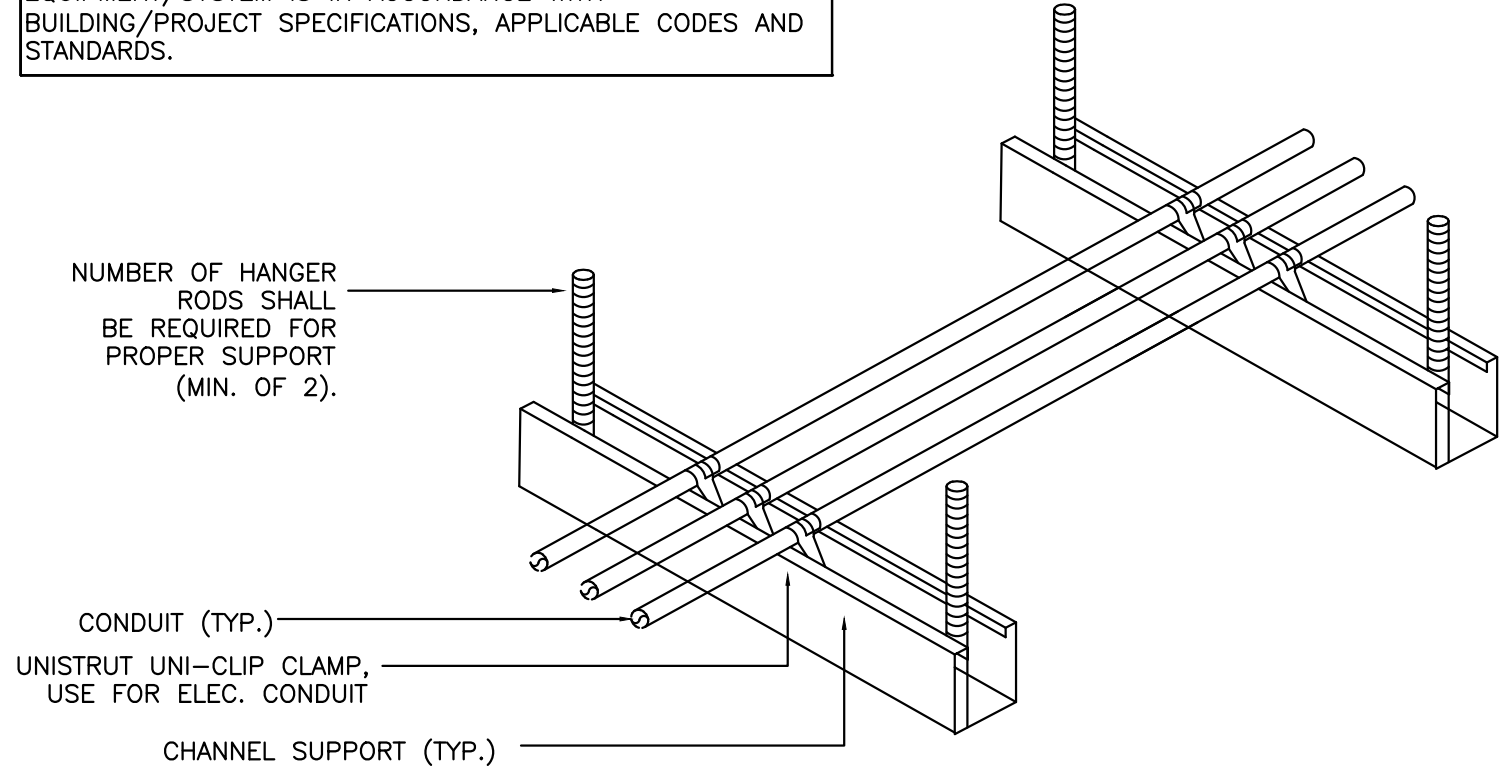
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<div style="text-align: right;">SHEET TITLE</div> <h1 style="text-align: center;">ELECTRICAL RISER & PANEL SCHEDULE</h1>	
08/24/23 DATE AS NOTED SCALE NYE DRAWN BY NYE CHECKED BY 23126 PROJECT #	SHEET NUMBER <div style="font-size: 2em; font-weight: bold; text-align: center;">E3.0</div>

NOTE:
THIS INFORMATION MAY NOT CONTAIN ALL DETAILS REQUIRED FOR CONSTRUCTION. APPROPRIATE MODIFICATION MAY BE REQUIRED TO ENSURE SUITABILITY OF THESE DRAWINGS FOR THE SPECIFIC APPLICATION. IT IS THE USER'S RESPONSIBILITY TO ENSURE INSTALLATION OF THE EQUIPMENT/SYSTEM IS IN ACCORDANCE WITH BUILDING/PROJECT SPECIFICATIONS, APPLICABLE CODES AND STANDARDS.



- NOTES:
1. ALL CONDUIT MAY BE COMBINED ON SAME SUPPORT CHANNEL WHERE PRACTICAL.
 2. SUPPORT CHANNEL LENGTH SHALL NOT BE DETERMINED UNTIL ALL PIPING, CONDUIT, ETC. TO BE SUPPORTED IS COORDINATED.
 3. SUPPORT CHANNEL SPACING SHALL BE NO MORE THAN 10'-0".
 4. UNISTRUT AND CONDUIT INSTALLATION MAY BE REVERSED.

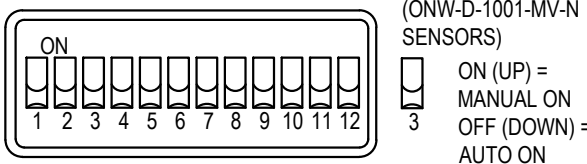
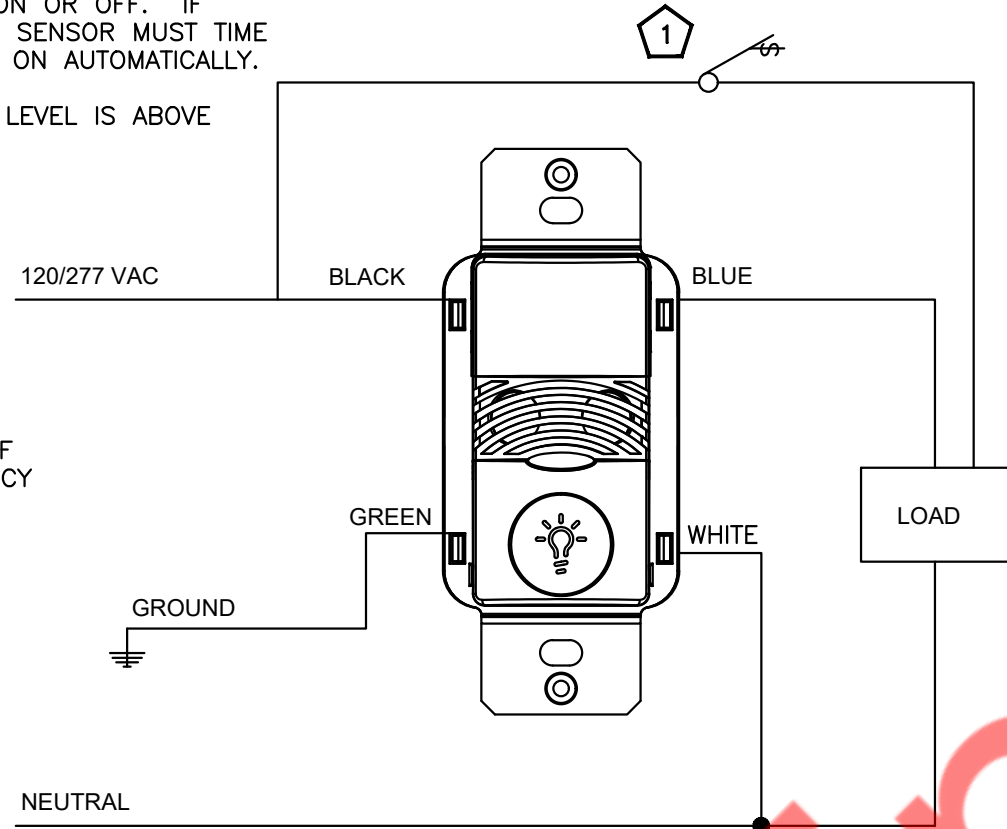
1 CONDUIT SUPPORT DETAIL
E-4.0 N.T.S

- MANUAL MODE OPERATION:
1. PUSHBUTTON PRESS IS REQUIRED TO TURN LOAD ON.
 2. LOAD TURNS OFF WHEN SENSOR TIMES OUT OR BY PRESSING PUSH BUTTON.
 3. IF DAYLIGHT SENSOR IS ENABLED AND LIGHT LEVEL IS ABOVE SETPOINT, LOAD WILL NOT TURN ON.

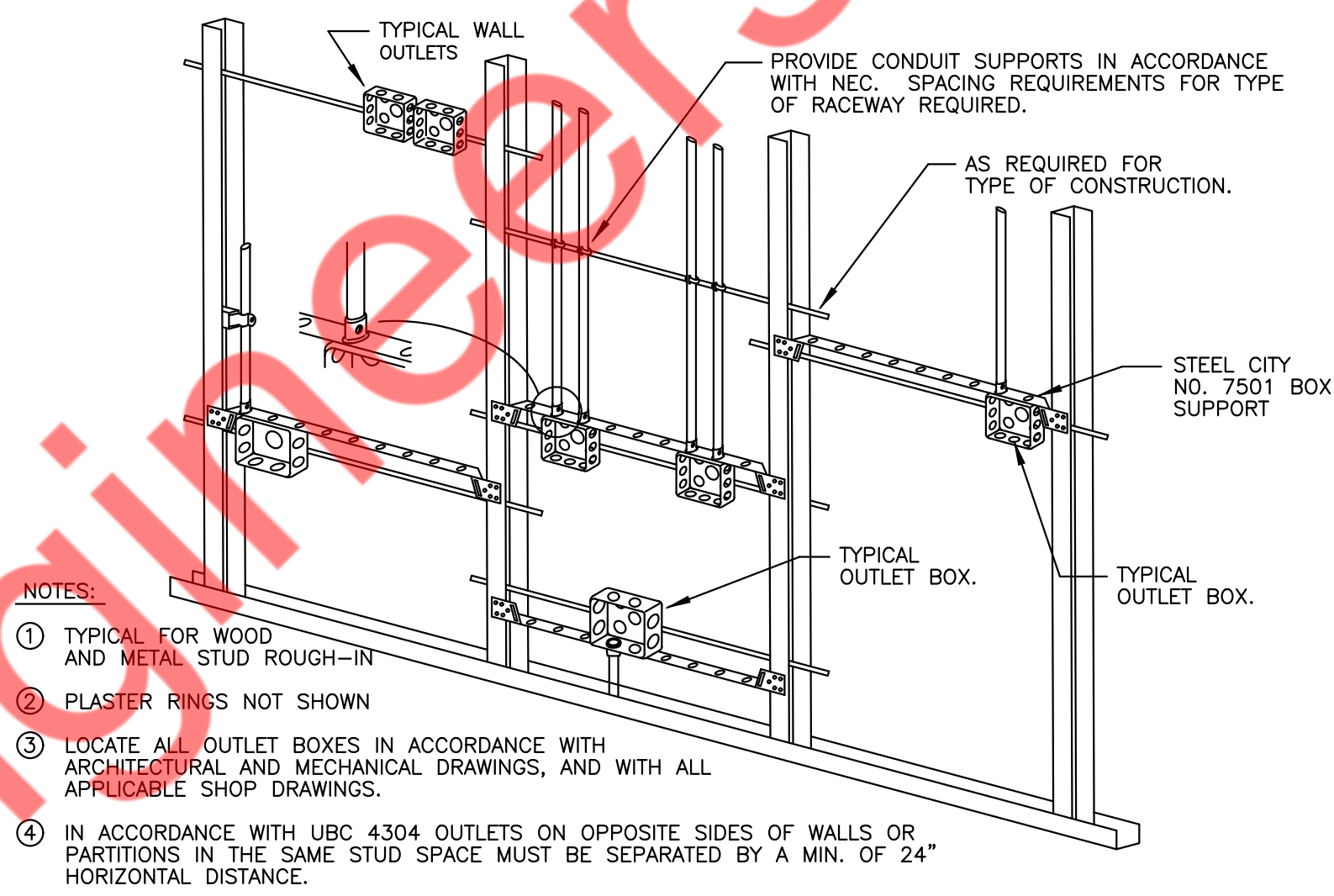
- AUTOMATIC MODE OPERATION:
1. WHEN SENSOR ACTIVATES LOAD TURNS ON.
 2. PUSHBUTTON CAN BE USED TO TURN LOAD ON OR OFF. IF PUSHBUTTON IS USED TO TURN LOAD OFF, SENSOR MUST TIME OUT FIRST, BEFORE LOAD CAN TURN BACK ON AUTOMATICALLY.
 3. IF DAYLIGHT SENSOR IS ENABLED AND LIGHT LEVEL IS ABOVE SETPOINT, LOAD WILL NOT TURN ON.

SENSOR TYPES INCLUDE:
ONW-D-1001-MV-N

- 1 PROVIDE SENSING CONDUCTOR TAPPED AHEAD OF ANY SWITCHES WHERE SWITCH SERVES EMERGENCY FIXTURES.

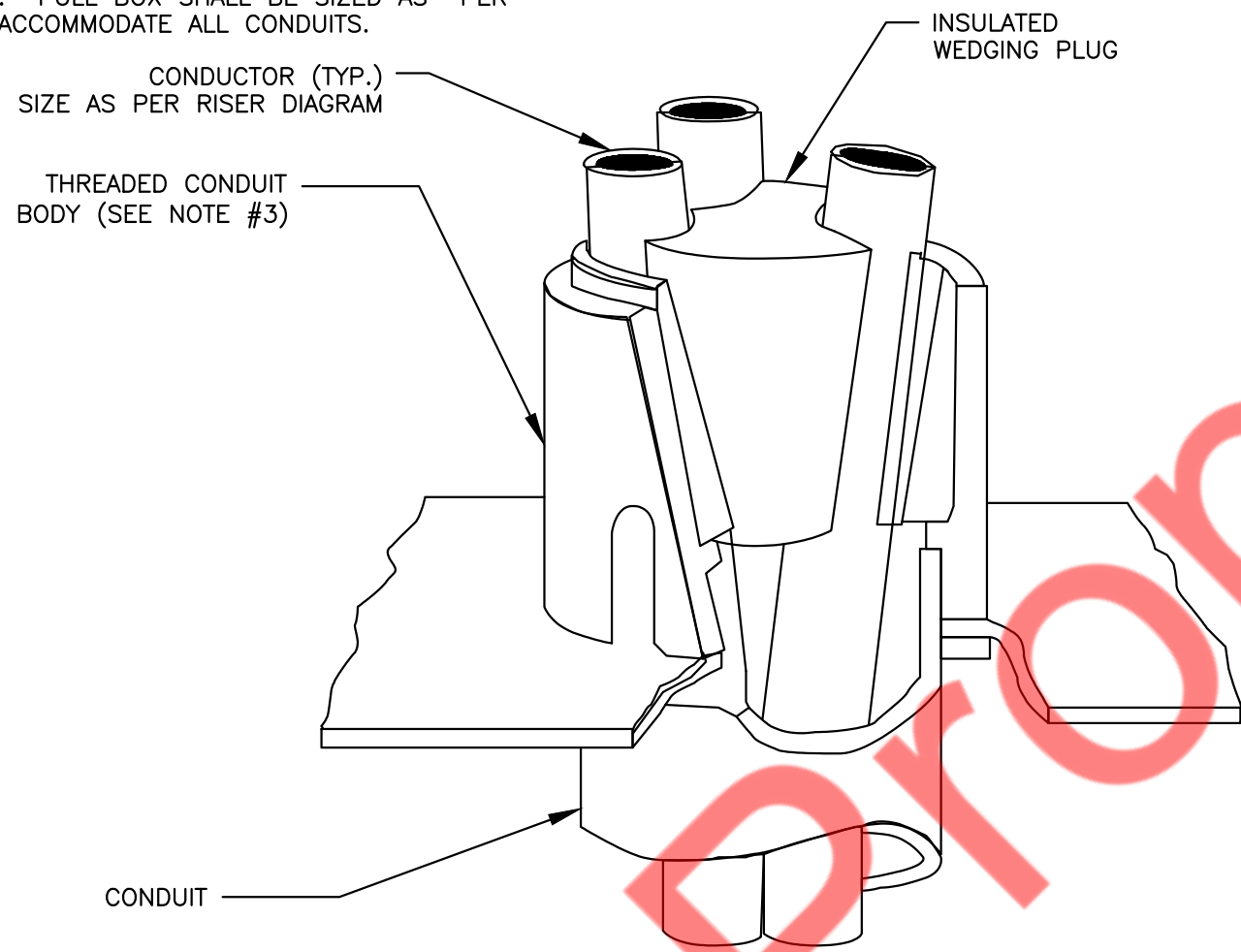


2 CONNECTION) OCCUPANCY/VACANCY-SINGLE LEVEL
WIRING DIAGRAM-LOW VOLTAGE WALL SWITCH SENSOR(NEUTRAL
E-4.0 N.T.S

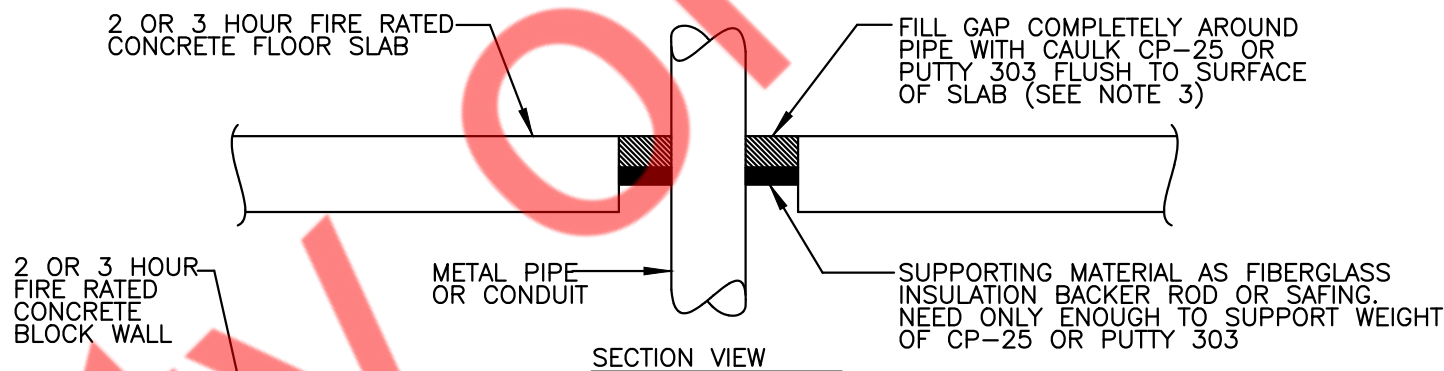


3 DETAIL TYPICAL ROUGH-IN REQUIREMENTS
E-4.0 N.T.S

- NOTES:
1. ALL CONDUCTORS IN VERTICAL RACEWAYS SHALL BE SUPPORTED IN ACCORDANCE WITH ARTICLE 300.19 OF NEC. CABLE SUPPORTS SHALL BE LOCATED AT THE INTERVALS REQUIRED BY THE NEC.
 2. CABLE SUPPORT SYSTEM SHALL BE AS MANUFACTURED BY O-Z GEDNEY WITH pozi-GRIP "S-STYLE" WEDGING PLUG OR APPROVED EQUAL.
 3. FOR THREADLESS CONDUIT (RIGID, IMC OR EMT), ATTACH CONDUIT BODY TO MALE THREADS OF A SET SCREW OR COMPRESSION CONNECT, AS PERMITTED BY SPECIFICATIONS.
 4. PROVIDE PULL BOX AT EACH LOCATION OF CABLE SUPPORTS. PULL BOX SHALL BE SIZED AS PER CODE TO ACCOMMODATE ALL CONDUITS.



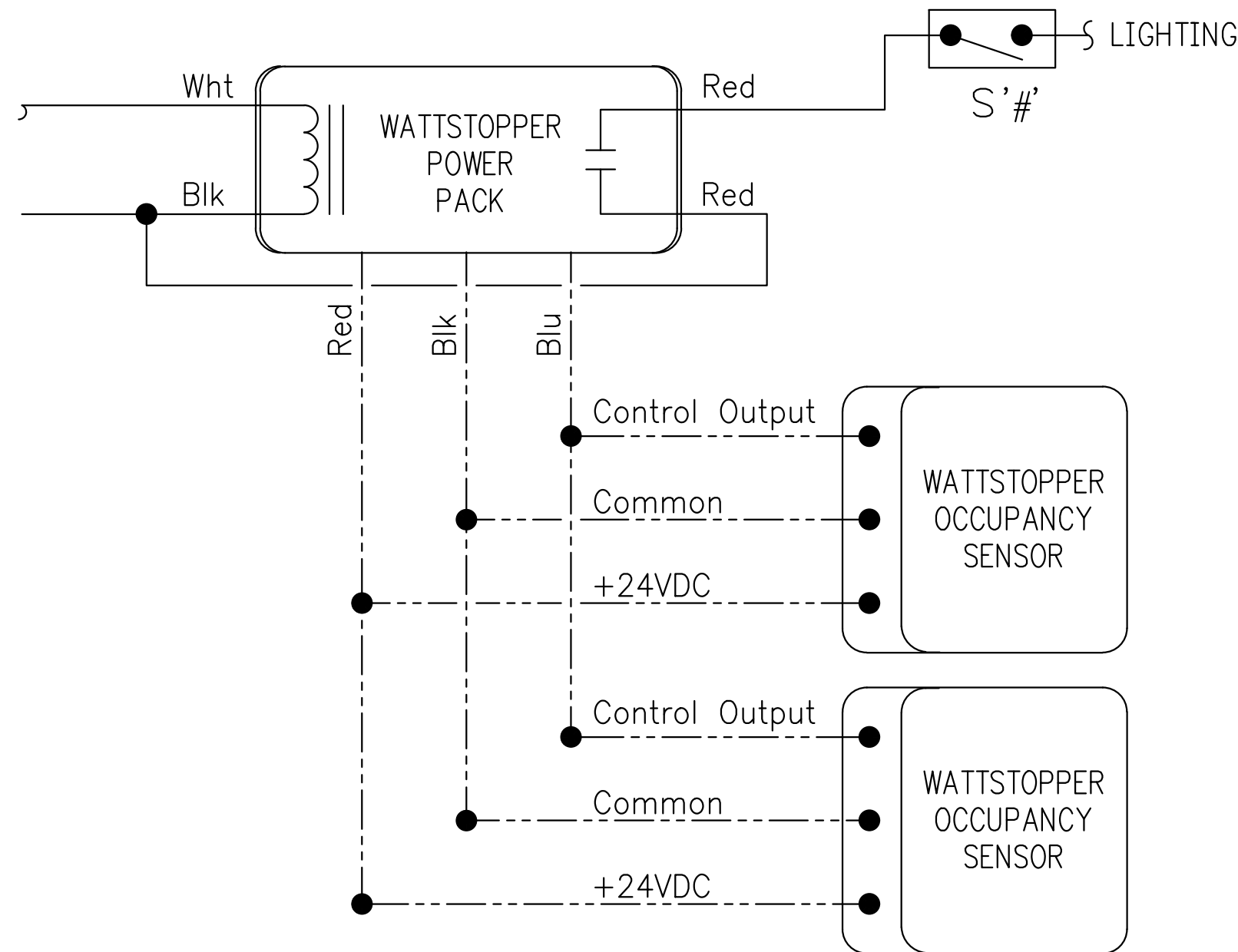
4 VERTICAL CABLE SUPPORT DETAIL
E-4.0 N.T.S



- NOTES:
1. FOR CONCRETE BLOCK WALLS, CENTER CAULK CP-25 OR PUTTY 303 WITHIN WALL WITH DAMMING ON BOTH SIDES.
 2. RECOMMENDATIONS BASED ON PRODUCT PERFORMANCE PER ASTM E-814 (UL 1479) FIRE TEST AND UL CLASSIFICATION FIRE STOP SYSTEMS 49, 33 AND 91.
 3. WET-INSTALLED DEPTH OF CAULK CP-25 OR PUTTY 303 DEPENDS ON TYPE AND SIZE OF PIPE:

WET DEPTH	PIPE SIZE	FIRE RATING
1 1/2" (13mm)	MAX. 8" (203mm)	2 HRS.
2" (25mm)	MAX. 6" (152mm)	3 HRS.
 4. UP TO 40% SHRINKAGE OF CP-25 OR PUTTY 303 IS ACCEPTABLE AFTER WET DEPTH INSTALLATION.
 5. OPTIONS TO MASKING TAPE TO PREVENT SAGGING:
A. INSTALL ADDITIONAL DAMMING MATERIAL OVER PRODUCT TO HOLD WITHIN OPENING.
B. REMOVE PRODUCT FROM CONTAINER AND ALLOW TO AIR CURE IN SMALL BATCHES FOR 12 HRS. THEN HAND FORM INTO OPENING.
 6. WHEN ANNULAR SPACE EXCEEDS 3/4" (19mm), A 28 AWG METAL COVER PLATE MUST BE MECHANICALLY SECURED ATOP THE 3M FIRE BARRIER APPLICATION, OR TIGHTLY PACK A NON-COMBUSTIBLE DAMMING MATERIAL ATOP INSTALLED CAULK OR PUTTY.

5 FIRE STOP DETAIL
E-4.0 N.T.S



6 OCCUPANCY SENSOR DETAIL
E-4.0 N.T.S

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NO.	DESCRIPTION	DATE
1	ISSUE FOR PERMIT	09/29/23

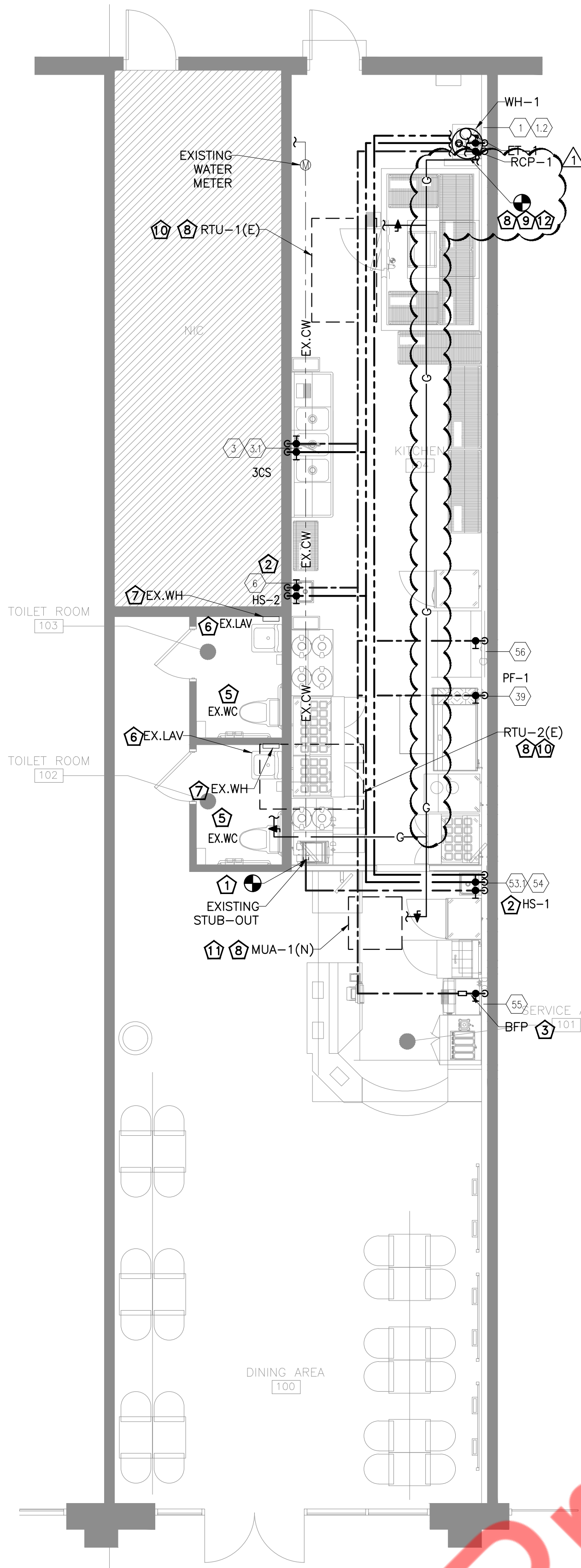
REVISIONS

ALL FIELD CONDITIONS AND DIMENSIONS ARE TO BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF THE WORK. ALL DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. THESE DRAWINGS ARE THE PROPERTY OF JOHN WILLIAM LISTER ARCHITECT. THEY ARE NOT TO BE REPRODUCED IN PART OR IN WHOLE WITHOUT THE CONSENT OF JOHN WILLIAM LISTER ARCHITECT. THEY ARE TO BE USED ON THE PROJECT NOTED HEREON ONLY.

SOFRESH

SHEET TITLE
ELECTRICAL
DETAILS

08/24/23	DATE	SHEET NUMBER
AS NOTED	SCALE	E4.0
NYE	DRAWN BY	
NYE	CHECKED BY	
23126	PROJECT #	



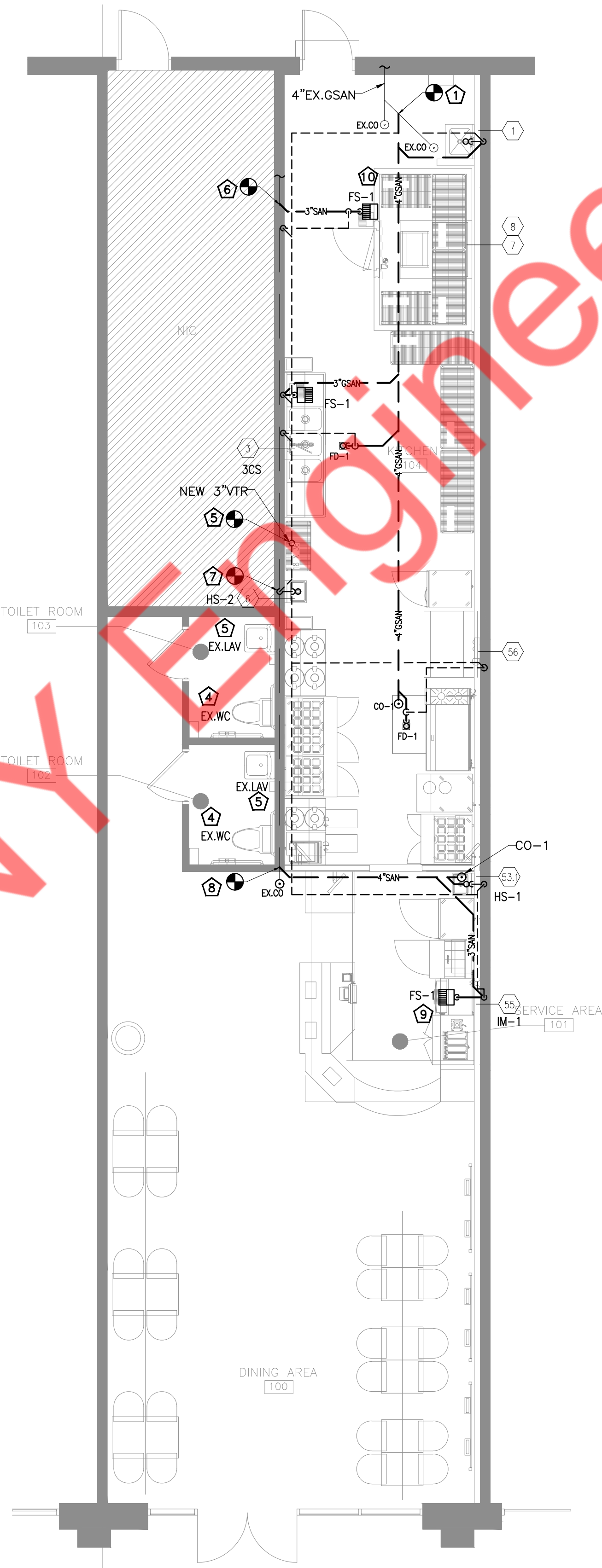
GENERAL NOTES:

1. CW/HW PIPING TO BE PROVIDED WITH INSULATION AS PER IECC 2018 (REFER SHEET P0.1)
2. PROVIDE BRANCH PRV IF PRESSURE EXCEEDS 80 PSI.
3. CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT.
4. PROVIDE ACCESS PANELS FOR WATER HAMMER ARRESTOR, CLEANOUTS & SHUT-OFF VALVES AS REQUIRED.
5. REFER RISER DIAGRAMS FOR ALL PIPE SIZES.
6. PROVIDE TRAP PRIMER FOR FLOOR DRAIN AS PER LOCAL JURISDICTION.
7. ANY PENETRATIONS TO EXISTING DEMISING WALL MUST BE SEALED WITH FIRE CAULK TO MAINTAIN FIRE RATING.

WATER PIPING PLAN NOTES:

1. ROUTE NEW 1" CW PIPING WITH SHUT OFF VALVE AND TIE-INTO THE EXISTING WATER STUB-OUT. CONTRACTOR TO FIELD VERIFY SIZE, ROUTING AND BACKFLOW PREVENTER REQUIREMENTS WITH LANDLORD.
2. PROVIDE ASSE 1070 HYDROGUARD SERIES LFLM495 OR SIMILAR APPROVED TEMPERING VALVE FOR LAVATORIES AND HAND SINK. SET AT TEMPERATURE TO A MAXIMUM 110 °F
3. PROVIDE ASSE 1012 APPROVED BACKFLOW PREVENTER TO EQUIPMENT FOR BACKFLOW PREVENTION. INSTALL BFP AN ACCESSIBLE LOCATION.
4. ROUTE T&P RELIEF TO DRAIN IN MOP SINK.
5. EXISTING WATER CLOSET WITH EXISTING WATER PIPING WITH ASSOCIATED ACCESSORIES AND FITTINGS TO REMAIN. CONTRACTOR TO FIELD VERIFY CONDITION OF EXISTING PIPING AND FIXTURE REPLACED IF REQUIRED.
6. EXISTING LAVATORY WITH EXISTING WATER PIPING WITH ASSOCIATED ACCESSORIES AND FITTINGS TO REMAIN. CONTRACTOR TO FIELD VERIFY CONDITION OF EXISTING PIPING AND WATER HEATER REPLACED IF REQUIRED.
7. EXISTING WATER HEATER WITH EXISTING WATER PIPING WITH ASSOCIATED ACCESSORIES AND FITTINGS TO REMAIN. CONTRACTOR TO FIELD VERIFY CONDITION OF EXISTING PIPING AND WATER HEATER REPLACED IF REQUIRED.
8. CONTRACTOR TO FIELD VERIFY EXISTING AVAILABLE GAS PRESSURE AND MAKE SURE TO PROVIDE ADEQUATE INLET PRESSURE REQUIRED FOR MECHANICAL EQUIPMENT.
9. UPGRADE EXISTING 1-1/4" GAS LINE TO NEW 1-1/2" GAS LINE AND CONNECT NEW 1-1/2" GAS LINE TO EXISTING GAS METER.
10. EXTEND NEW 1" GAS LINE TO RTU-1(E) AND RTU-2(E). PROVIDE SHUTOFF VALVE, UNION AND DIRTLEG.
11. EXTEND NEW 3/4" GAS LINE TO MUA-1(N). PROVIDE SHUTOFF VALVE, UNION AND DIRTLEG.
12. CONTRACTOR TO FIELD VERIFY EXISTING GAS METER CAPACITY IS EQUAL TO OR GREATER THAN 380 CFH UPGRADE GAS METER IF REQUIRED. COORDINATE ALL WORK WITH UTILITY COMPANY AND LANDLORD.

1 WATER AND GAS PIPING PLAN
SCALE: 3/16"=1'-0"



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT.
2. REFER RISER DIAGRAMS FOR ALL PIPE SIZES.
3. ANY PENETRATIONS TO EXISTING DEMISING WALL MUST BE SEALED WITH FIRE CAULK TO MAINTAIN FIRE RATING.

SANITARY KEYED NOTES:

1. CONNECT NEW 4" GREASE SANITARY LINE TO EXISTING GREASE SANITARY WASTE LINE IN SPACE. CONTRACTOR TO FIELD VERIFY EXISTING SANITARY SIZE, ROUTING AND INVERT.
2. EXISTING 2" VTR REPLACE WITH NEW 3" VTR. CONTRACTOR TO FIELD VERIFY EXISTING VTR LOCATION AND SIZE.
3. INDIRECT WASTE FROM 3-COMP SINK TO FLOOR SINK WITH APPROVED AIR GAP.
4. EXISTING WATER CLOSET WITH EXISTING SANITARY, VENT AND ASSOCIATED ACCESSORIES AND FITTINGS TO REMAIN. CONTRACTOR TO FIELD VERIFY CONDITION OF PIPING AND FIXTURE, REPLACED IF REQUIRED.
5. EXISTING LAVATORY WITH EXISTING SANITARY, VENT AND ASSOCIATED ACCESSORIES AND FITTINGS TO REMAIN. CONTRACTOR TO FIELD VERIFY EXISTING CONDITION OF PIPING REPLACED IF REQUIRED.
6. CONNECT NEW 3" SANITARY LINE TO EXISTING 4" SANITARY WASTE LINE IN SPACE. CONTRACTOR TO FIELD VERIFY EXISTING SANITARY SIZE, ROUTING AND INVERT.
7. CONNECT NEW 2" SANITARY LINE TO EXISTING 4" SANITARY WASTE LINE IN SPACE. CONTRACTOR TO FIELD VERIFY EXISTING SANITARY SIZE, ROUTING AND INVERT.
8. CONNECT NEW 4" SANITARY LINE TO EXISTING 4" SANITARY WASTE LINE IN SPACE. CONTRACTOR TO FIELD VERIFY EXISTING SANITARY SIZE, ROUTING AND INVERT.
9. INDIRECT WASTE FROM ICE MAKER TO FLOOR SINK WITH APPROVED AIR GAP.
10. CONDENSATE DRAIN PIPE FROM WALK IN COOLER EVAPORATOR DISCHARGE TO FLOOR SINK WITH APPROVED AIR GAP.

2 SANITARY PIPING PLAN
SCALE: 3/16"=1'-0"

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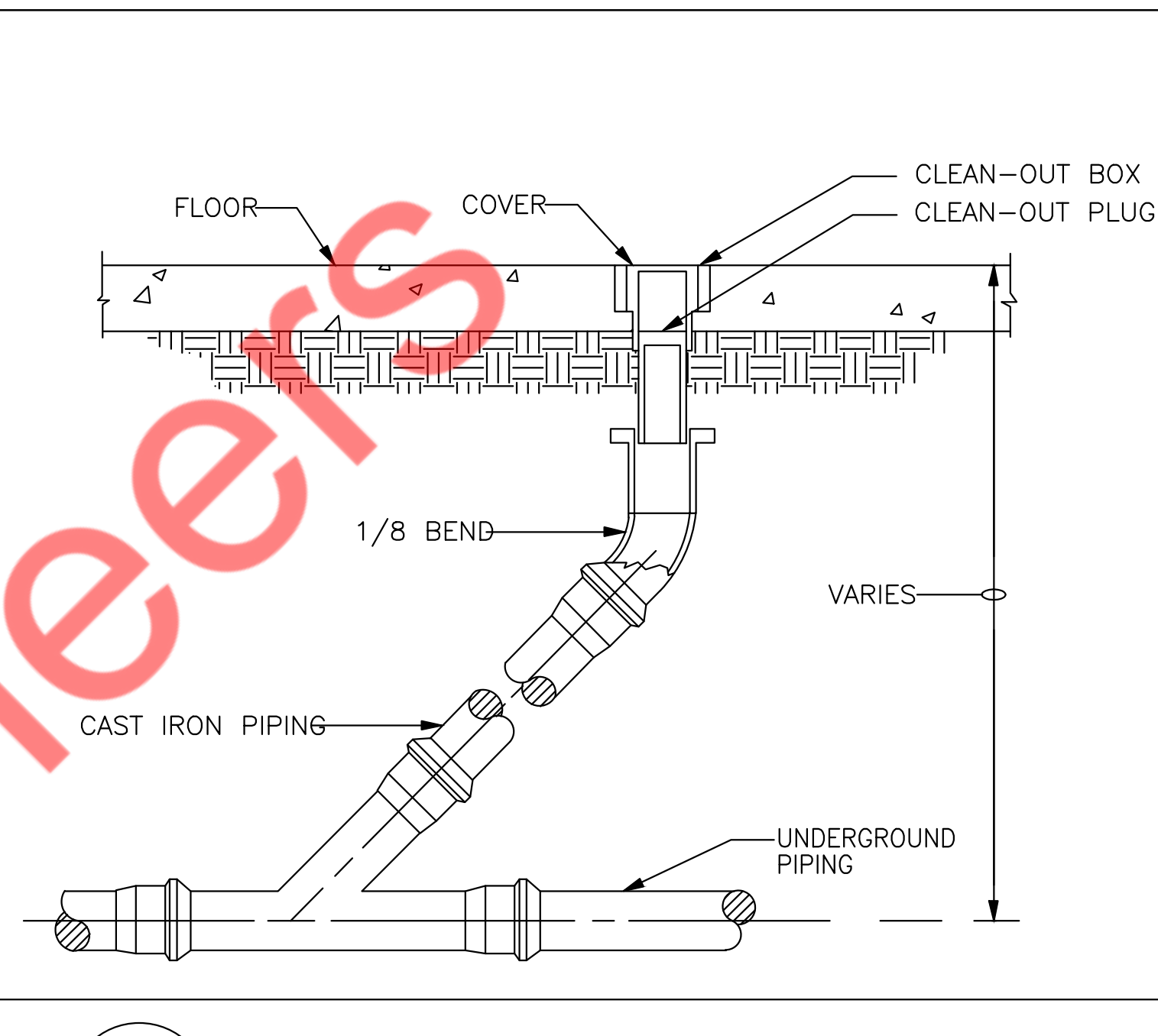
NO.	DESCRIPTION	DATE
1	LANDLORD COMMENTS	12/13/23
2	ISSUE FOR PERMIT	09/29/23
3	REVISIONS	

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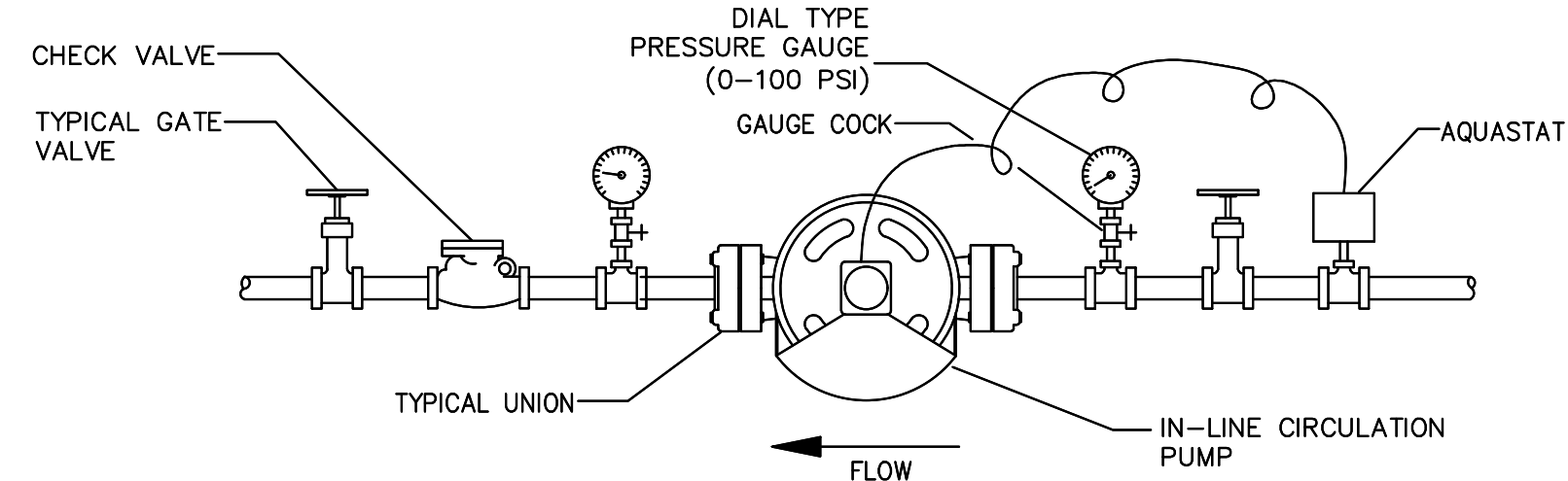
SOFRESH

SHEET TITLE
PLUMBING
FLOOR PLAN

08/24/23	DATE	SHEET NUMBER
AS NOTED	SCALE	
NYE	DRAWN BY	P1.0
NYE	CHECKED BY	
23126	PROJECT #	

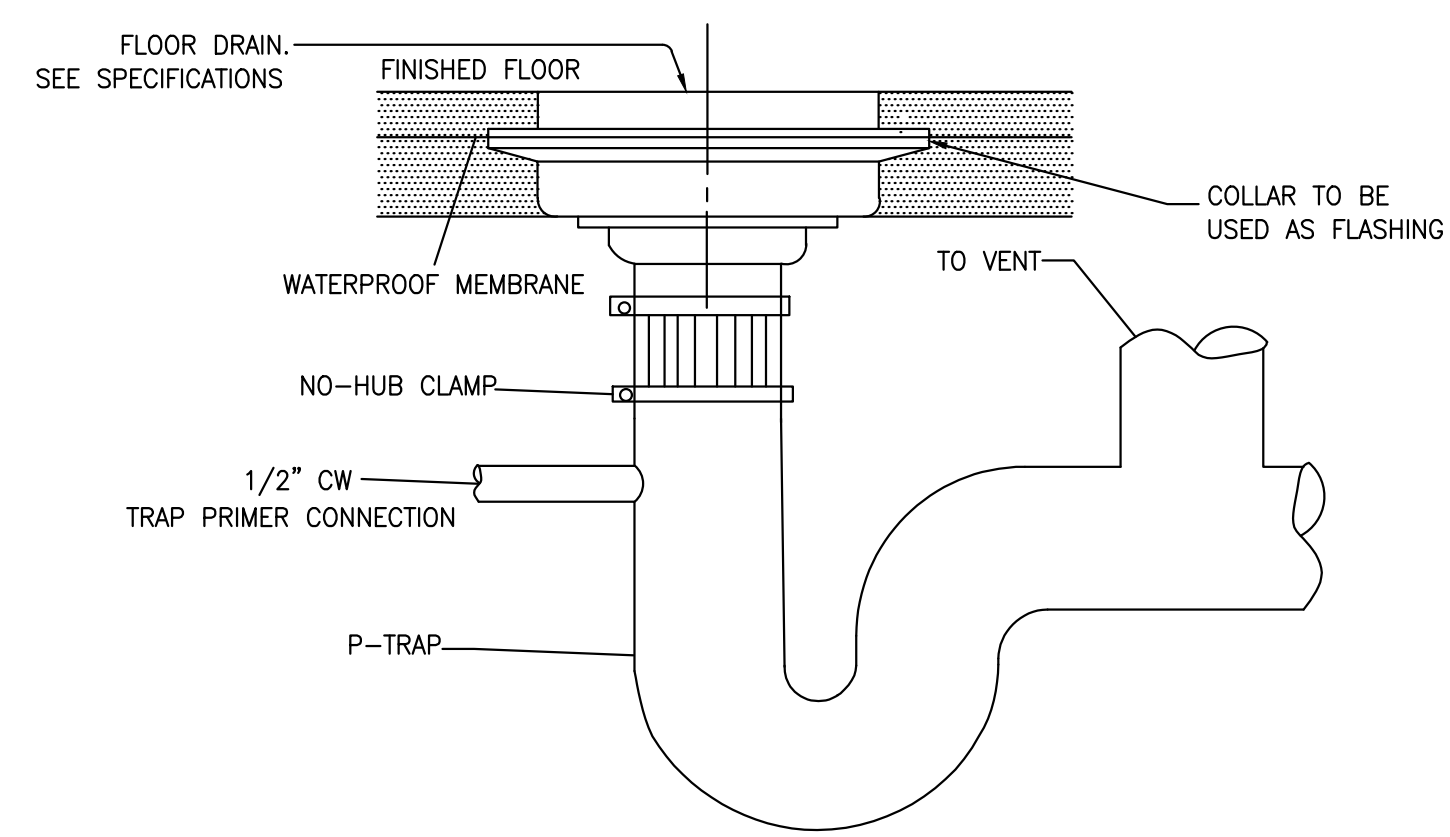


3 FLOOR CLEANOUT DETAIL
P2.0 N.T.S



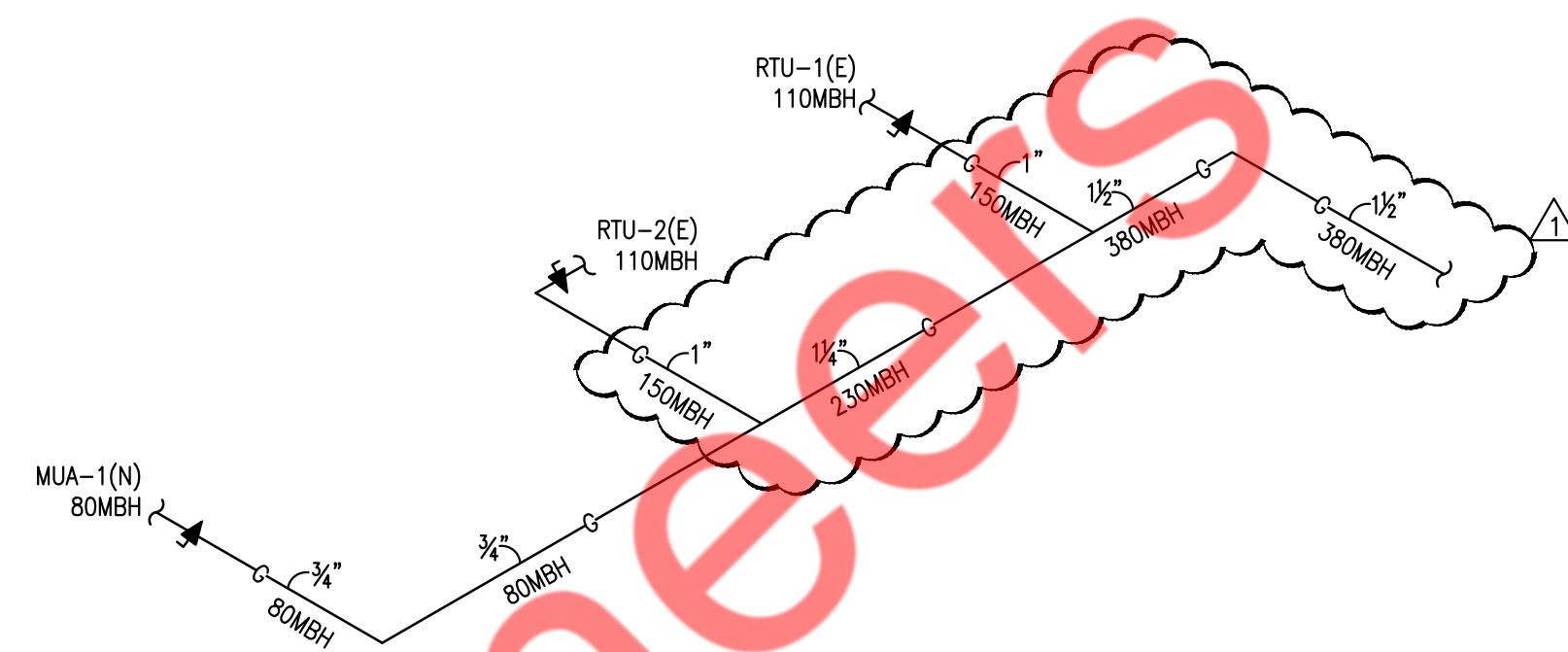
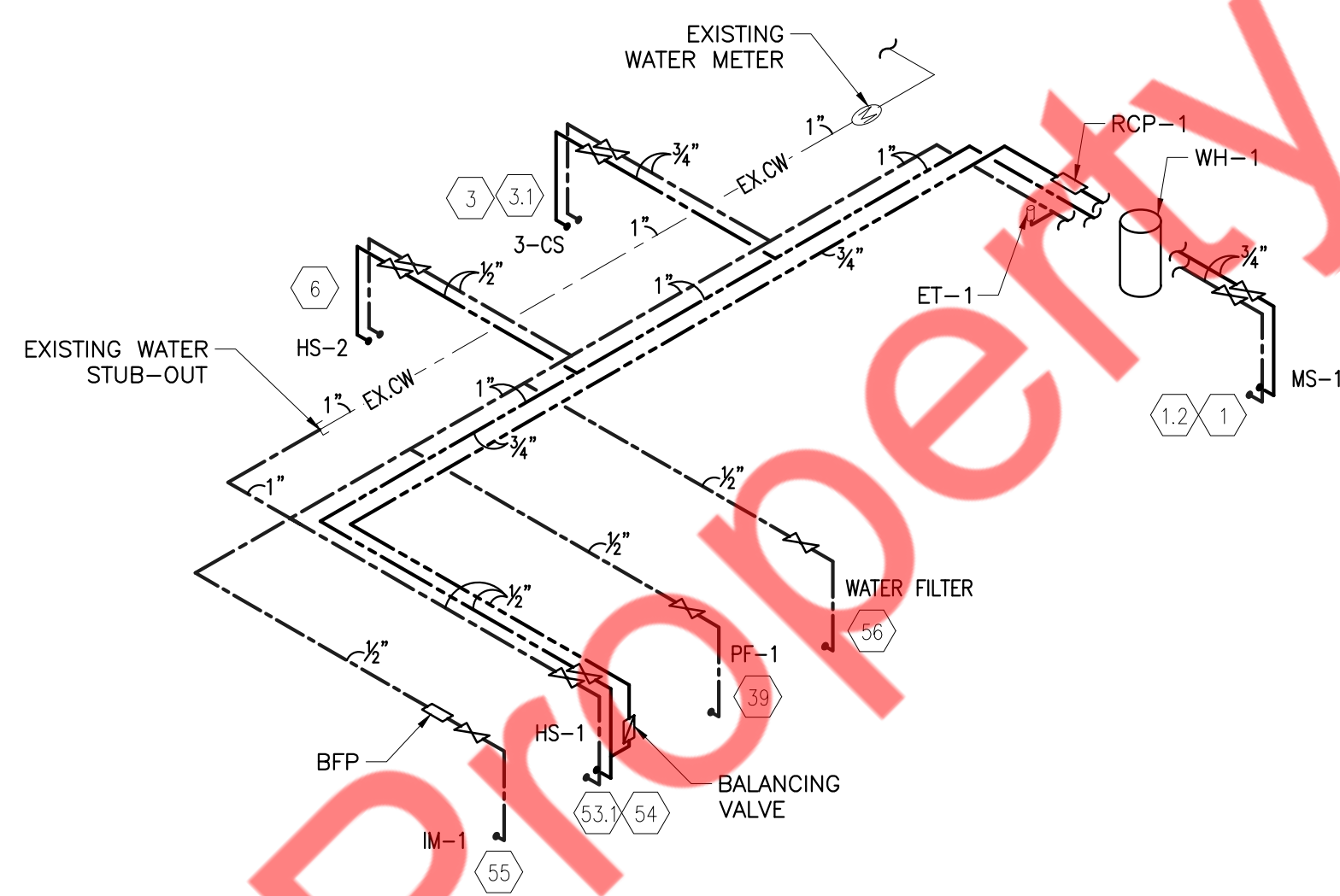
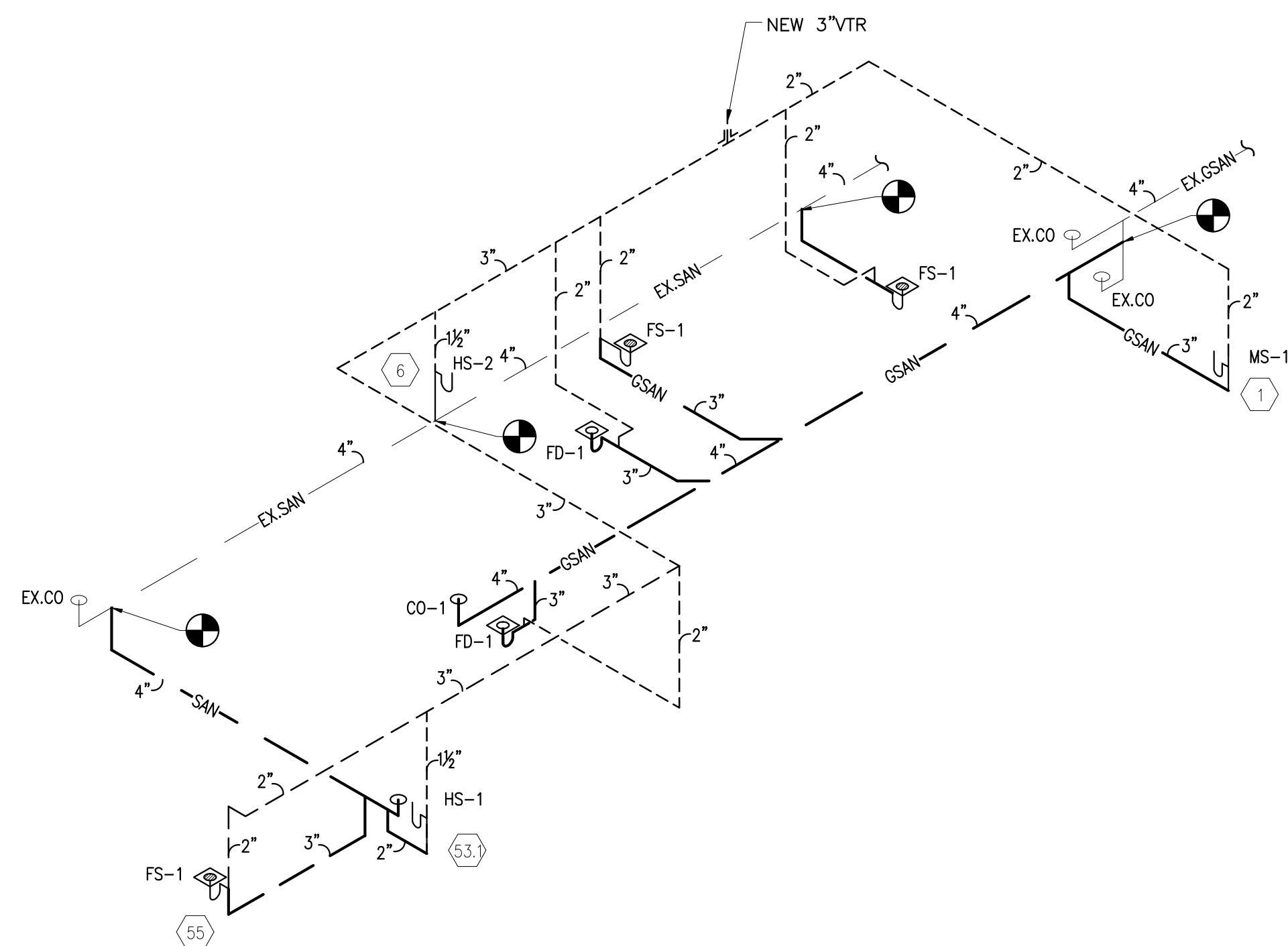
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P2.0

INLINE RECIRCULATING PUMP DETAIL
N.T.S



8 FLOOR DRAIN DETAIL
P2.0 N.T.S

08/24/23	DATE	SHEET NUMBER P2.0
AS NOTED	SCALE	
NYE	DRAWN BY	
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23126	PROJECT #	



GAS DEMAND LOAD SUMMARY					
MARK	FIXTURE/EQUIPMENT	QUANTITY	UNIT DEMAND BTU/H	TOTAL DEMAND BTU/H	TOTAL CFH
RTU-1(E)	ROOFTOP UNIT	1	150,000	150,000	150
RTU-2(E)	ROOFTOP UNIT	1	150,000	150,000	150
MUA-1(N)	MAKE UP AIR UNIT	1	80,000	80,000	80
TOTAL				380,000	380

GAS PIPE SIZING PER INTERNATIONAL FUEL GAS CODE 2018
INLET PRESSURE- LESS THAN 2 PSI SPECIFIC GRAVITY- 0.6 PRESSURE DROP 0.5" WC
<u>EQUIVALENT LENGTH OF PIPE =</u> 105 + FITTINGS (+40%) = 150 FEET

<p>GAS NOTE:</p> <ol style="list-style-type: none"> 1. PROVIDE SHUT-OFF VALVE AN ACCESSIBLE LOCATION. PROVIDE GAS PRESSURE REGULATOR FOR ALL GAS EQUIPMENT IF REQUIRED. 2. CONTRACTOR SHALL VERIFY ACTUAL GAS PRESSURE AND LONGEST LENGTH OF RUN TO FARTHEST APPLIANCE PRIOR TO INSTALLATION AND NOTIFY ENGINEER IF CONDITION DIFFER THAN SHOWN ON THIS PLAN.

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PLUMBING RISERS	
08/24/23	DATE
AS NOTED	SCALE
NYE	DRAWN BY
NYE	CHECKED BY
23126	PROJECT #
SHEET NUMBER	
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