

SCOPE OF WORK

REUSE EXISTING 8.5 TON ROOF TOP UNIT. PROVIDE NEW DUCTWORK AND NECESSARY ACCESSORIES FOR COMPLETE HVAC SYSTEM.  
  
PROVIDE NEW EXHAUST FAN FOR RESTROOMS & MOP SINK.  
  
COORDINATE WITH GC ANY ADDITIONAL REFRIGERATION WORK REQUIRED AND PLUMBING CONTRACTOR PROVIDING CONDENSATE LINES FOR MECHANICAL EQUIPMENT.

MECHANICAL PLAN NOTES

A. REUSE EXISTING 8.5 TON ROOF TOP UNIT. PROVIDE COMPLETE NEW DUCTWORK AND NECESSARY ACCESSORIES FOR COMPLETE HVAC SYSTEM. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN AIR DUCT CONNECTIONS. INSTALL FIRE DAMPERS IN ANY FIRE WALLS AND BETWEEN FLOORS. TRANSITION TO DUCT SIZES SHOWN. PROVIDE DUCTWORK AND AIR DISTRIBUTION DEVICES AS INDICATED ON THE PLAN. REFER TO A/C UNIT SCHEDULE FOR ADDITIONAL REQUIREMENTS.

B. FOR SYSTEM OVER 2,000 CFM CHECK FOR DUCT MOUNTED AIR SMOKE DETECTORS AND MEET THE REQUIREMENTS OF U.L. 268A. INTERLOCKED TO SHUTDOWN A/C UNIT UPON DETECTION OF SMOKE. IF NECESSARY, PROVIDE SMOKE DETECTOR WITH AN ANNUNCIATOR, ALARM AND POWER L.E.D.'S FOR VISIBLE AND AUDIBLE ALARM SIGNAL, AND VISIBLE TROUBLE SIGNAL. MOUNT ANNUNCIATOR ON ROOM SIDE OF CEILING.

C. ALL DUCTS WILL MINIMUM 26 GAUGE SHEET METAL ALL EXPOSED DUCT WITH INTERNAL INSULATION CONCEALED DUCT MAY BE WITH EXTERNAL DUCT WRAP INSULATION. ALL DUCTS TO BE MANUFACTURED AND INSTALLED ACCORDING TO ASHRAE AND SMACNA METAL DUCT CONSTRUCTION STANDARD, LATEST EDITION. ALL MATERIALS WILL CONFORM TO NFPA 90A. DUCTWORK SHOWN IN THE PLANS ARE CLEAR INSIDE DIMENSIONS.

D. THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE TYPE. MOUNT THERMOSTAT 48" A.F.F. PROVIDE NEW THERMOSTAT WITH LOCKABLE COVER. COORDINATE LOCATION OF THERMOSTAT. PROVIDE REMOTE SENSOR LOCATED 72" ABOVE FINISHED FLOOR. ROOM LOCATION INDICATED. SEAL WALL OPENINGS WITH CAULK. COORDINATE LOCATION ON SITE WITH GENERAL CONTRACTOR AND EQUIPMENT.

E. ALL INTERIOR AIR DUCT WITH INSULATION SHALL HAVE MINIMUM OF THICKNESS OF 1.5" R-8 INSULATION. EXTERIOR AIR DUCT TO HAVE R-8 INSULATION ACCORDING TO - 2021 IECC.

F. FACTORY-MADE FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOW OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS A CONNECTOR AT A TERMINAL DEVICE.

G. ALL SEAMS, JOINTS, ETC WILL BE SEALED TO MAKE AIR DUCT AIRTIGHT. PRESSURE SENSITIVE MATERIALS AND OTHERS APPROVED BY LATEST SMACNA. SEALING MATERIALS WILL BE USED.

H. ALL EVAPORATOR UNITS SHALL HAVE A FLOAT SWITCH TO CONTROL OVERFLOW THAT WILL AUTOMATICALLY SHUT DOWN THE OUTDOOR. THE DEVICE SHALL BE ATTACHED TO THE SECONDARY DRAIN OUTLET ON THE UNIT.

I. ALL NEW UNITS CONDENSATE DRAINS WILL BE PVC FULL DIAMETER OF OUTLET AND WILL TERMINATE IN THE NEAREST APPROVED PLACE OF DISPOSAL.

J. ALL EQUIPMENT AND MATERIALS WILL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND ACCORDING TO THE BEST PRACTICE.

K. TESTING AND BALANCING SHALL BE DONE IN ACCORDANCE WITH 2021-IECC C408.2.2. BALANCING PROCEDURES SHALL BE IN ACCORDANCE WITH THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (N.E.B.B.), THE ASSOCIATED AIR BALANCE COUNCIL (A.A.B.C) NATIONAL STANDARDS OR EQUIVALENT PROCEDURES.

L. HANGER ATTACHMENTS TO THE STEEL STRUCTURE WILL BE RATED POWDER ACTUATED FASTENERS, "C" CLAMPS, WELDED STUDS, CLAMP HANGERS, JOIST CLAMPS OR OTHER METHODS RECOMMENDED BY SMACNA'S "METAL AND FLEXIBLE STANDARDS", CHAPTER 4, AND WILL HAVE A MINIMUM SAFETY MARGIN OF 4:1. SUSPENDED FROM TOP CHORD OF JOISTS, NOTHING FROM DECK OR CROSS BRACING.

M. ALL HVAC CONTROLS AND CONTROL WIRING SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.

GENERAL NOTES

A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET. PAY SPECIAL ATTENTION TO THE RESPONSIBILITY SCHEDULE WORK DESIGNATED ON SCHEDULE SHALL BE CONSIDERED INCLUDED IN YOUR SCOPE OF WORK AND CONTRACT AMOUNT.

B. CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING, OR PROCEEDING WITH WORK.

C. DRAWINGS/DETAILS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, AND CHECK/COORDINATE DRAWINGS OF ALL TRADES.

D. COORDINATE WITH THE WORK OF OTHERS SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISERS AND DRIPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.

E. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS, PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

F. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.

G. USE OF COMBUSTIBLE MATERIALS IS NOT ALLOWED IN THE RETURN AIR PLENUM. MATERIALS USED IN THE PLENUM SHALL HAVE FLAME SPREAD RATING NOT TO EXCEED 25, AND SMOKE DEVELOPED RATING NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. ALL EXPOSED WIRING IN THE PLENUM SHALL BE PLENUM RATED.

H. VERIFY LOCATION OF PERMISSIBLE NEW STRUCTURAL ROOF PENETRATIONS AND ADAPT THE REQUIRED DUCTS ACCORDINGLY. THE OPENINGS MUST BE LOCATED USING A REBAR LOCATOR, TRYING TO LEAVE A TRANSVERSE BAR WITHIN 4" FROM THE OPENING. LOCATE OPENINGS AT MID-DISTANCE BETWEEN THE STEMS OF THE DOUBLE TEE AND LONGITUDINAL REINFORCEMENT SHALL NEVER BE CUT. CALL THE ARCHITECT'S OFFICE IN CASE OF UNEXPECTED DIFFICULTIES.

I. ALL A/C AND FRESH AIR ROUND EXPOSED DUCTS WILL BE SPIRAL GALVANIZED WITH INTERNAL INSULATION AND READY FOR PAINTING. ALL RECTANGULAR DUCTS OVER CEILINGS MAY BE SHEET METAL WITH EXTERNAL INSULATION.

J. G.C. SHALL CONTRACT LANDLORD-APPROVED ROOFING CONTRACTOR TO FLASH AND SEAL ALL ROOF PENETRATIONS TO MAINTAIN ROOFING WARRANTY.

K. IF APPLICABLE CONTRACTOR TO PROVIDE SHOP DRAWING FOR KITCHEN VENTILATION SYSTEM INCLUDING TYPE 1 HOOD AND FOR THE WALK-IN COOLER & FREEZER.

L. REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.

M. CONSTRUCTION "AS BUILT" DRAWINGS AND DOCUMENTS SHALL BE PROVIDED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF ACCEPTANCE AND PROVIDE COPY TO LL.

N. OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER.

THERMOSTATIC CONTROLS

C403.4.1 THERMOSTATIC CONTROLS  
THE SUPPLY OF HEATING AND COOLING ENERGY TO EACH ZONE SHALL BE CONTROLLED BY INDIVIDUAL THERMOSTATIC CONTROLS CAPABLE OF RESPONDING TO TEMPERATURE WITHIN THE ZONE. WHERE HUMIDIFICATION OR DEHUMIDIFICATION OR BOTH IS PROVIDED, NOT FEWER THAN ONE HUMIDITY CONTROL DEVICE SHALL BE PROVIDED FOR EACH HUMIDITY CONTROL SYSTEM.  
  
EXCEPTION: INDEPENDENT PERIMETER SYSTEMS THAT ARE DESIGNED TO OFFSET ONLY BUILDING ENVELOPE HEAT LOSSES, GAINS OR BOTH SERVING ONE OR MORE PERIMETER ZONES ALSO SERVED BY AN INTERIOR SYSTEM PROVIDED THAT BOTH OF THE FOLLOWING CONDITIONS ARE MET:  
  
1. THE PERIMETER SYSTEM INCLUDES NOT FEWER THAN ONE THERMOSTATIC CONTROL ZONE FOR EACH BUILDING EXPOSURE HAVING EXTERIOR WALLS FACING ONLY ONE ORIENTATION (WITHIN ±45 DEGREES) (0.8 RAD) FOR MORE THAN 50 CONTIGUOUS FEET (15 240 MM).  
  
2. THE PERIMETER SYSTEM HEATING AND COOLING SUPPLY IS CONTROLLED BY THERMOSTATS LOCATED WITHIN THE ZONES SERVED BY THE SYSTEM.

C403.4.1.2 DEADBAND  
WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS SHALL BE CONFIGURED TO PROVIDE A TEMPERATURE RANGE OR DEADBAND OF NOT LESS THAN 5°F (2.8°C) WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS SHUT OFF OR REDUCED TO A MINIMUM.  
  
EXCEPTIONS:  
1. THERMOSTATS REQUIRING MANUAL CHANGEOVER BETWEEN HEATING AND COOLING MODES.  
2. OCCUPANCIES OR APPLICATIONS REQUIRING PRECISION IN INDOOR TEMPERATURE CONTROL AS APPROVED BY THE CODE OFFICIAL.

C403.4.1.3 SETPOINT OVERLAP RESTRICTION  
WHERE A ZONE HAS A SEPARATE HEATING AND A SEPARATE COOLING THERMOSTATIC CONTROL LOCATED WITHIN THE ZONE, A LIMIT SWITCH, MECHANICAL STOP OR DIRECT DIGITAL CONTROL SYSTEM WITH SOFTWARE PROGRAMMING SHALL BE CONFIGURED TO PREVENT THE HEATING SETPOINT FROM EXCEEDING THE COOLING SETPOINT AND TO MAINTAIN A DEADBAND IN ACCORDANCE WITH SECTION C403.4.1.2.

C403.4.2 OFF-HOUR CONTROLS  
EACH ZONE SHALL BE PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROL SYSTEM.  
  
EXCEPTIONS:  
1. ZONES THAT WILL BE OPERATED CONTINUOUSLY.  
2. ZONES WITH A FULL HVAC LOAD DEMAND NOT EXCEEDING 6,800 BTU/H (2 KW) AND HAVING A MANUAL SHUTOFF SWITCH LOCATED WITH READY ACCESS.

C403.4.2.1 THERMOSTATIC SETBACK  
THERMOSTATIC SETBACK CONTROLS SHALL BE CONFIGURED TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C).

C403.4.2.2 AUTOMATIC SETBACK AND SHUTDOWN  
AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROLS SHALL BE CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES PER WEEK AND RETAINING THEIR PROGRAMMING AND TIME SETTING DURING A LOSS OF POWER FOR NOT FEWER THAN 10 HOURS. ADDITIONALLY, THE CONTROLS SHALL HAVE A MANUAL OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO 2 HOURS; A MANUALLY OPERATED TIMER CONFIGURED TO OPERATE THE SYSTEM FOR UP TO 2 HOURS; OR AN OCCUPANCY SENSOR.

C403.4.2.3 AUTOMATIC START AND STOP  
AUTOMATIC START AND STOP CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM. THE AUTOMATIC START CONTROLS SHALL BE CONFIGURED TO AUTOMATICALLY ADJUST THE DAILY START TIME OF THE HVAC SYSTEM IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY. AUTOMATIC STOP CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM WITH DIRECT DIGITAL CONTROL OF INDIVIDUAL ZONES. THE AUTOMATIC STOP CONTROLS SHALL BE CONFIGURED TO REDUCE THE HVAC SYSTEM'S HEATING TEMPERATURE SETPOINT AND INCREASE THE COOLING TEMPERATURE SETPOINT BY NOT LESS THAN 2°F (-16.6°C) BEFORE SCHEDULED UNOCCUPIED PERIODS BASED ON THE THERMAL LAG AND ACCEPTABLE DRIFT IN SPACE TEMPERATURE THAT IS WITHIN COMFORT LIMITS

DIFFUSER SCHEDULE

MANUFACTURER	TITUS	TITUS	TITUS	TITUS	TITUS	TITUS
DESIGNATION	A	B	C	R	R1	E
USE	SUPPLY	SUPPLY	SUPPLY	RETURN	RETURN	EXHAUST
MODEL	TDC-AA	250-AA (2/3 WAY)	300FS	56FL	56FL	56FL
MOUNTING	CEILING	CEILING	DUCT	CEILING	WALL	CEILING
LOCATION	AS SHOWN	RESTROOM	AS SHOWN	AS SHOWN	AS SHOWN	AS SHOWN
FACE SIZE	24" X 24"	12"X12"	SEE PLAN	24"X24"	SEE PLAN	SEE PLAN
NECK SIZE	REFER TO TABLE A	REFER TO TABLE A	-	-	-	-
FRAME TYPE	LAY IN	FLANGED	FLANGED	FLANGED	FLANGED	LAY IN/ FLANGED
ACCESSORIES	VOLUME DAMPER	VOLUME DAMPER	VOLUME DAMPER	VOLUME DAMPER	VOLUME DAMPER	VOLUME DAMPER

NOTES :  
1. MAX. NC LEVEL 30 OR LESS.  
2. PROVIDE SQUARE TO ROUND NECK ADAPTOR.  
3. CONFIRM WITH ARCHITECT/OWNER FOR PAINT AND FINISH.  
4. PROVIDE 4 WAY AIR THROW PATTERN UNLESS NOTES OR INDICATED.

NECK SIZE TABLE - A

NECK SIZE	CFM RANGE
Ø6"	0-100
Ø8"	101-200
Ø10"	201-400
Ø12"	401-600

ROOFTOP UNIT SCHEDULE

UNIT TAG	RTU-1(E)
UNIT TYPE	GAS HEAT
MANUFACTURER	YORK
MODEL	ZXG09E2 (V.I.F)
STATUS	S.A.E
LOCATION	ROOF
TOTAL CAPACITY	8.5 TONS (V.I.F)
TOTAL COOLING MBH	S.A.E
TOTAL SENSIBLE MBH	S.A.E
EER	S.A.E
SEER	S.A.E
HEATING INPUT (MBH)	180 (V.I.F)
HEATING OUTPUT (MBH)	144 (V.I.F)
THERMAL EFF (%)	S.A.E
SUPPLY AIR (CFM)	3400
OUTDOOR AIR (CFM)	760
VOLTAGE/PHASE/HZ	208/3 (V.I.F)
MCA (A)	46.4 (V.I.F)
MOCP (A)	60 (V.I.F)
ESP (IN. OF H2O)	SAE
WEIGHT (lbs)	SAE

NOTES :  
SAE: SAME AS EXISTING  
V.I.F: VERIFY IN FIELD  
1. EXISTING RTUS WITH ALL ACCESSORIES TO REMAIN SAME AND TO BE REUSED.  
2. CONTRACTOR TO FIELD VERIFY IF RTU IS WORKING AT THEIR 100% RATED CAPACITY. INFORM TO DESIGN ENGINEER IF ANY DISCREPANCIES ARE FOUND IN PERFORMANCE PRIOR TO CONSTRUCTION.  
3. IF REQUIRED, PROVIDE NEW THERMOSTAT AND TEMPERATURE SENSOR COMPATIBLE WITH EXISTING RTU. CO-ORDINATE FINAL LOCATION OF T-SENSOR WITH ARCHITECT/OWNER.  
4. CONTRACTOR TO BALANCE OUTSIDE AIR DAMPER ON EXISTING RTU TO MATCH VALUE MENTIONED IN AIR BALANCE TABLE.  
5. REPLACE FILTERS, IF REQUIRED. PROVIDE HAIL GUARD.  
  
CONTRACTOR SHALL VERIFY EXACT ELECTRICAL CONNECTIONS, WIRE SIZES, BREAKERS, DISCONNECT ETC. PRIOR TO ORDERING AND BID.

OCCUPANCY DETAILS

DINING ROOM	760 SQ. FT. AS PER ARCH. OCCUPANCY	45 PEOPLE
KITCHEN	740 SQ. FT. AS PER ARCH. OCCUPANCY	4 PEOPLE
TOTAL		49 PEOPLE

AS PER 2021 IMC - 403.3.1.1 EXCEPTION - OCCUPANCY CONSIDERED AS PER ARCHITECTURAL CALCULATION. PLEASE REFER TO OCCUPANT LOAD CALCULATIONS ON SHEET CS-1

VENTILATION REQUIREMENTS PER 2021 IMC -TABLE 403.3.1.1

DINING ROOM	760 SQ. FT. X 0.18 CFM/SQ. FT. =	137 CFM
	45 PEOPLE. X 7.5 CFM/PEOPLE. =	338 CFM
SERVICE COUNTER	260 SQ. FT. X 0.12 CFM/SQ. FT. =	32 CFM
	4 PEOPLE. X 7.5 CFM/PEOPLE. =	30 CFM
BOH	480 SQ. FT. X 0.12 CFM/SQ. FT. =	58 CFM
CORRIDOR	120 SQ. FT. X 0.06 CFM/SQ. FT. =	8 CFM

BREATHING ZONE OUTDOOR AIRFLOW (Vbz) = 603 CFM  
ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez) = 0.8  
ZONE OUTDOOR AIRFLOW (Voz=Vbz/Ez) = 603/0.8=760 CFM  
EXHAUST AIR  
SERVICE COUNTER 260 SQ. FT. X 0.7 CFM/SQ. FT. = 182 CFM  
BACK OF HOUSE 70 CFM PER FIXTURE 70 CFM  
MEN'S RESTROOM 70 CFM PER FIXTURE X 1 70 CFM  
WOMEN'S RESTROOM 70 CFM PER FIXTURE X 1 70 CFM  
OUTSIDE AIR PROVIDED 760 CFM

AIR BALANCE

O/A PROVIDED THROUGH RTU-1(E)	+760 CFM
EF-1(E)	-500 CFM
BEF-1(E)	-70 CFM
BEF-2(E)	-70 CFM

BUILDING PRESSURE +120 CFM

FAN SCHEDULE

DESIGNATION	EF-1(E)	BEF-1(E)	BEF-2(E)
STATUS	EXISTING	EXISTING	EXISTING
QUANTITY	1	1	1
MANUFACTURER	CAPTVAIRE	S.A.E	S.A.E
MODEL	DU12HFA (V.I.F)	S.A.E	S.A.E
CFM	500 (V.I.F)	70 (V.I.F)	70 (V.I.F)
AMPS	S.A.E	S.A.E	S.A.E
ACCESSORIES	BDD,LITE KIT	BDD,LITE KIT	BDD,LITE KIT
WEIGHT (LBS)	S.A.E	S.A.E	S.A.E
VOLT./PH./HZ	115/1/60 (V.I.F)	115/1/60 (V.I.F)	115/1/60 (V.I.F)

NOTES:  
1. EXISTING FANS WITH ALL ACCESSORIES TO REMAIN SAME AND TO BE REUSED.

EL PASO, BUILDING DEPARTMENT NOTES

ALL WORK SHALL COMPLY WITH APPLICABLE SECTIONS OF 2021-IBC AND RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS TO DATE.

1. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL ENGINEER TO PROVIDE THE REQUIRED SPECIAL INSPECTIONS AND TESTS.

2. 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 2021 INTERNATIONAL BUILDING CODE REQUIREMENTS AS OUTLINES IN SECTION [BC 1704].

3. THE FOLLOWING WORK ITEMS, COMPONENTS, MATERIALS, CAPACITIES, ETC. SHALL COMPLY WITH THE REFERENCED CODE OR STANDARD:  
A. STANDARDS OF HEATING - 2021 IMC 309.1  
B. DUCT CONSTRUCTION AND INSTALLATION- 2021 IMC 603  
C. AIR INTAKES, EXHAUSTS AND RELIEFS - 2021 IMC 401.5  
D. AIR FILTERS - 2021 IMC 605  
E. GAS FIRED EQUIPMENT - 2021 FUEL GAS CODE

4. MINIMUM TEMPERATURE TO BE MAINTAINED IN OCCUPIED SPACES DURING HEATING SEASON: 68 DEG. FAHRENHEIT.

5. VENTILATION FOR ALL AREA SHALL COMPLY WITH 2021 IMC 401.

6. 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 2021 IMC 403.3

7. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE-RATED WALL AND SMOKE WALL CONSTRUCTION AND LOCATION.

8. 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.


9. ALL HEATING AND COOLING LOADS CALCULATED PER ASHRAE/ACCA 183.


10. SMOKE DETECTOR SHALL MEET UL268A.


11. AS PER 408.3.2 OF INTERNATIONAL ENERGY CONSERVATION CODE 2021, CONSTRUCTION DOCUMENT SHALL REQUIRE THAT, WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER.


12. AS PER 408.2.5 OF INTERNATIONAL ENERGY CONSERVATION CODE 2021, CONSTRUCTION DOCUMENT SHALL REQUIRE THAT AN OPERATING MANUAL AND A MAINTAINED MANUAL BE PROVIDED TO THE BUILDING OWNER WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL ENGINEER TO PROVIDE THE REQUIRED SPECIAL INSPECTIONS AND TESTS


MECHANICAL SYMBOLS


 EXHAUST FAN


 SUPPLY OR OUTSIDE AIR DUCT


 RETURN OR EXHAUST AIR DUCT


 INSULATED RIGID DUCTWORK


 DUCT TRANSITION


 MANUAL VOLUME DAMPER


 FLEXIBLE DUCTWORK R-6.0


 SUPPLY DIFFUSER  
REFER TO DIFFUSER  
SCHEDULE  
FOR SPECIFICATIONS


 RETURN DIFFUSER  
REFER TO DIFFUSER  
SCHEDULE  
FOR SPECIFICATIONS


 CEILING MOUNTED  
EXHAUST FAN


 ROOF MOUNTED  
EXHAUST FAN OUTLET


 ROOFTOP UNIT


 EXHAUST FAN  
WITH LIGHT


 OPPOSED BLADE DAMPER


 DUCT SMOKE DETECTOR


 PROGRAMMABLE THERMOSTAT  
REMOTE SENSOR


 TEMPERATURE SENSOR


 ROUND DUCT DIAMETER

 CFM  
CUBIC FEET/ MINUTE

 S/A  
SUPPLY AIR

 R/A  
RETURN AIR

 SG  
SUPPLY GRILLE

 CONDENSATE PIPING

NOTE: THIS PROJECT MAY NOT USE EVERY SYMBOL OR DEVICE APPEARING ON THIS LEGEND.

NY ENGINEERS

TOASTIQUE

THIS DOCUMENT IS THE PROPERTY OF NY ENGINEERS AND SHALL NOT BE REPRODUCED WITHOUT THE WRITTEN CONSENT OF NY ENGINEERS.

PROJECT

PROFESSIONAL SEAL

ISSUE DATE: 06.21.24  
PROJECT #: 400J.1386P  
DRAWN BY: NYE  
CHECKED BY: NYE

MECHANICAL NOTES & SCHEDULES

M-1



1. EXISTING RTU-1 WITH ALL ITS ACCESSORIES TO REMAIN AND TO BE REUSED. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND CONFIGURATION ON SITE.
2. CONTRACTOR TO CLEAN REPAIR AND REUSED EXISTING CONDENSATE DRAIN LINE. IF FOUND DAMAGED REPLACED WITH SAME KIND.
3. EXHAUST SHALL TERMINATE 3 FEET FROM THE PROPERTY LINE, 3 FEET FROM THE EXTERIOR WALL AND ROOFS, 3 FEET FROM THE OPERABLE OPENING INTO THE BUILDING AND MAINTAIN 10 FEET HORIZONTAL OR 3 FEET VERTICAL DISTANCE FROM THE OUTSIDE AIR INTAKE.
4. APPROXIMATE LOCATION OF EXISTING DUCTWORKS DROP FOR RTU-1(E). CONTRACTOR TO VERIFY THE EXACT SIZE AND LOCATION IN FIELD.
5. RELOCATE AND REUSE EXISTING THERMOSTAT, IF EXISTING THERMOSTAT IS NOT IN CONDITION TO REUSE THEN INSTALL NEW THERMOSTAT WITH LOCKABLE VENTED BOX TO BE MOUNTED AT 48" CENTER LINE A.F.F. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
6. RELOCATE AND REUSE REMOTE TEMPERATURE SENSOR. WIRE BACK TO T-STAT. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
7. EXISTING EF-1 WITH ALL ITS ACCESSORIES TO REMAIN AND REUSED. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND CONFIGURATION ON SITE.
8. EXISTING CEILING MOUNTED EXHAUST FAN AND DUCTWORK TO REMAIN. CONTRACTOR TO VERIFY IF DUCTWORK AND FAN ARE IN PROPER WORKING CONDITION. CLEAN/REPAIR/REPLACE ANY PART OF DUCTWORK AND/OR FAN IF IT IS IN DAMAGED CONDITION.
9. 4"Ø COMBUSTION AIR INTAKE / FLUE VENT FROM WATER HEATER. ROUTE PIPING WITH MINIMAL AMOUNT OF BENT AND LENGTH AS RECOMMENDED BY MANUFACTURER. TERMINATE AS PER MANUFACTURER RECOMMENDATION.
10. EXISTING TOILET EXHAUST DUCT FROM FIRST FLOOR TO REMAIN AS IT IS.
11. EXISTING WATER HEATER COMBUSTION AIR/FLUE VENT TO REMAIN AS IT IS.

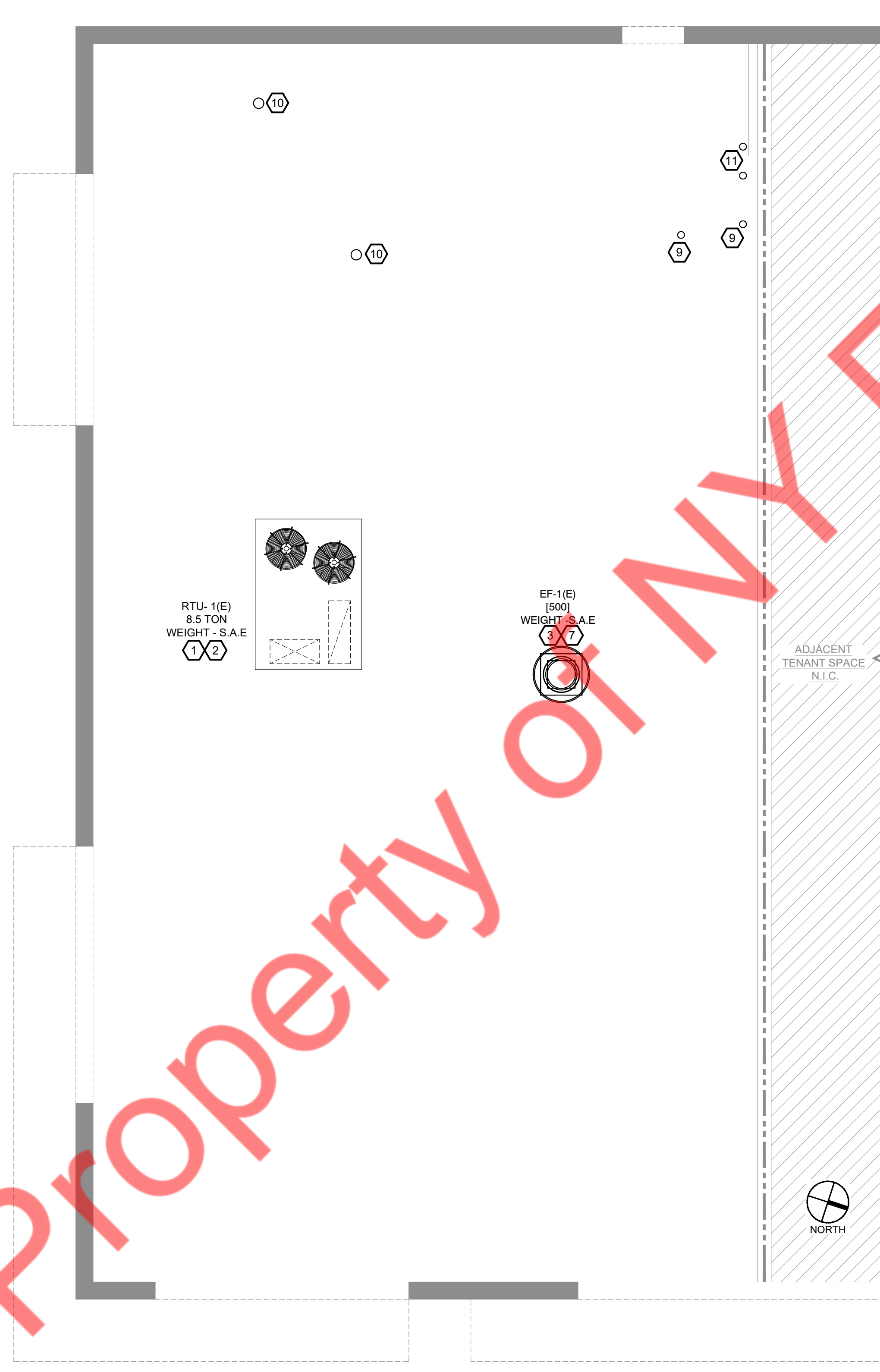
SCALE  
1/4" = 1'-0"

4

- A. CONTRACTOR SHALL BALANCE EACH DEVICE WITH THE CFM SHOWN ON PLAN.
- B. 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.
- C. COORDINATE LOCATIONS AND SIZES OF INTAKE & EXHAUST OPENINGS WITH OWNER AND RESPECTIVE ENGINEER.
- D. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- E. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- F. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- G. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
- H. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- I. 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.
- J. MOUNT DUCTWORK AS HIGH AS POSSIBLE.
- K. TEST AND BALANCE AIR SYSTEMS, PROVIDE REPORT TO G.C AND OWNER.
- L. ALL EXPOSED ROUND DUCTWORK SHALL BE INTERNALLY LINED. ALL DUCTWORK DIMENSIONS ARE INSIDE CLEAR.
- M. NEW DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
- N. 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. APPROVAL LAYOUT AND DIMENSIONS FOR EQUIPMENT TO TAKE PRECEDENCE OVER MEP.
- O. PROVIDE CORP OPERATED DAMPER IN INACCESSIBLE CEILING.
- P. COORDINATE LOCATIONS AND SIZES OF ROOF OPENINGS WITH OWNER AND STRUCTURAL ENGINEERS.
- R. COORDINATE ALL EQUIPMENT WITH STRUCTURAL.
- S. MAINTAIN ALL CODE AND MANUFACTURERS RECOMMENDED CLEARANCE AROUND ALL ROOF EQUIPMENT.
- T. PROVIDE WEATHER PROOF COATING FOR ALL EXTERIOR DUCTING AND PIPING.
- U. PROVIDE R-8 INSULATION FOR OAI DUCT.
- V. CONTRACTOR TO PROVIDE INSTALLATION AND START-UP FORMS FOR ALL THE GAS-FIRED EQUIPMENT AT THE TIME OF MECHANICAL FINAL INSPECTION.

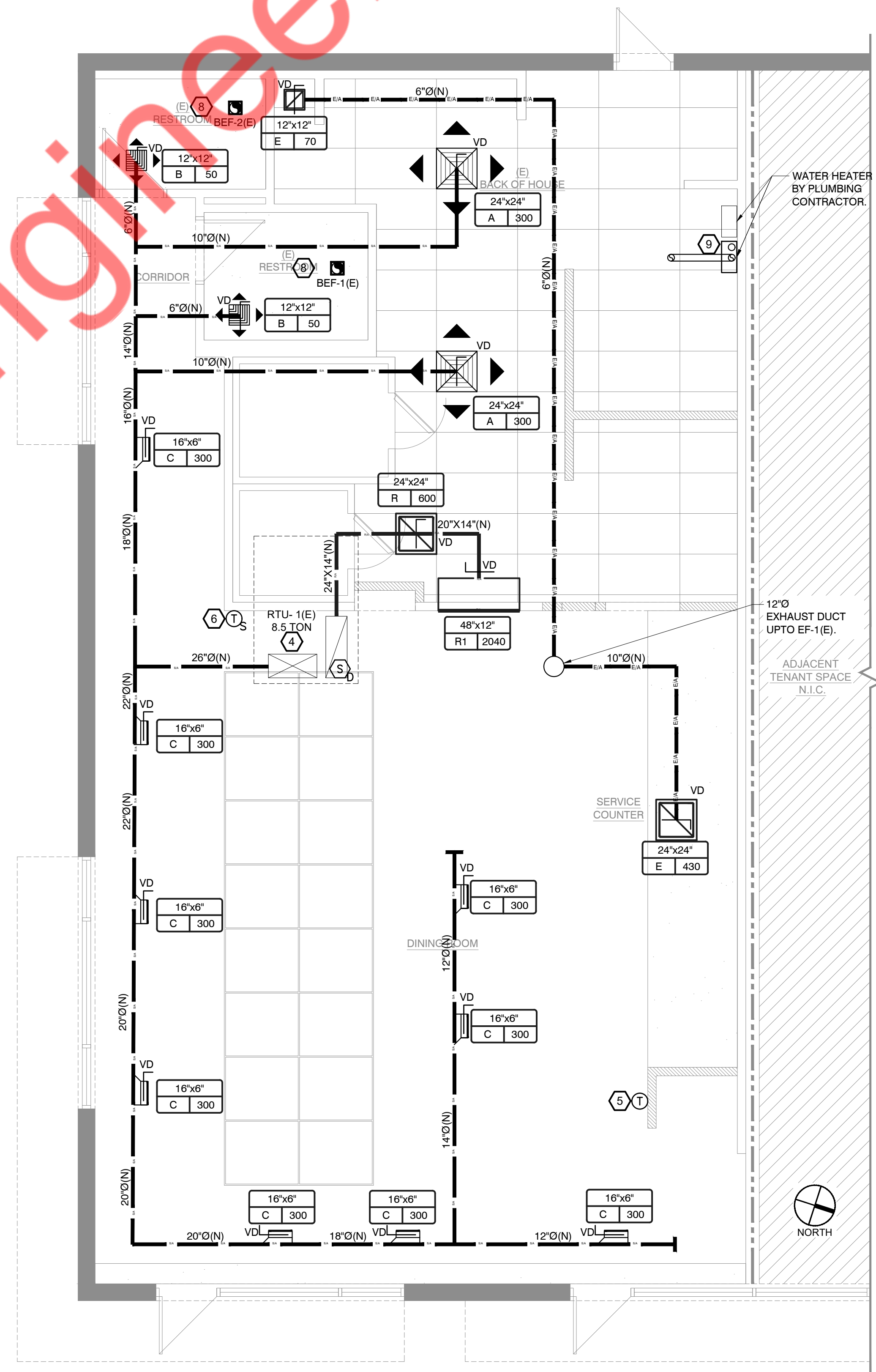
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3



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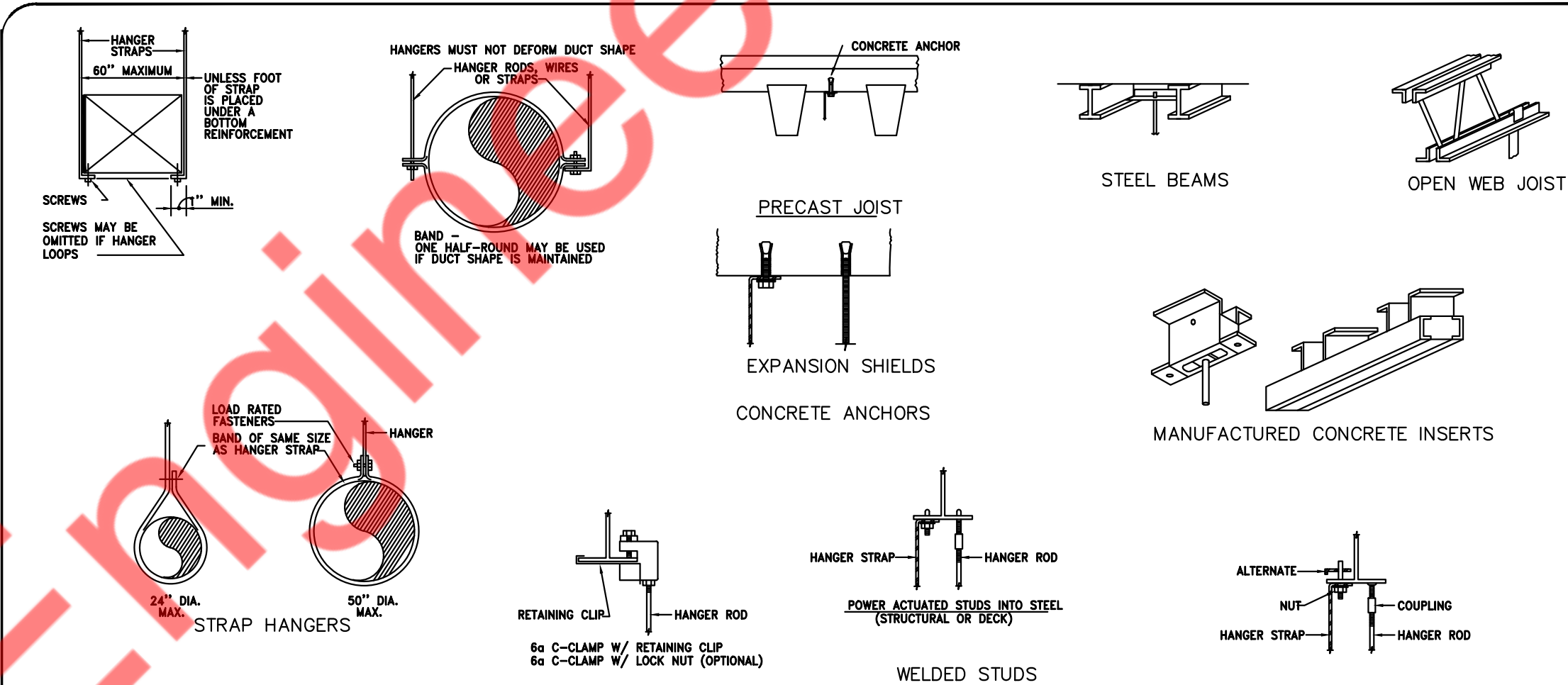
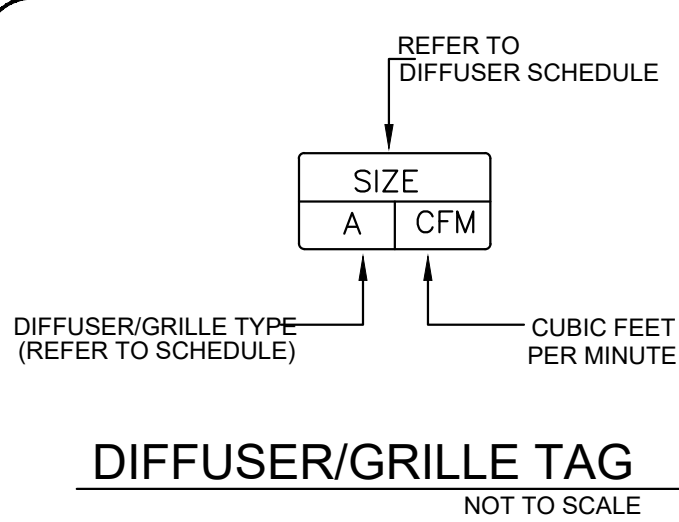


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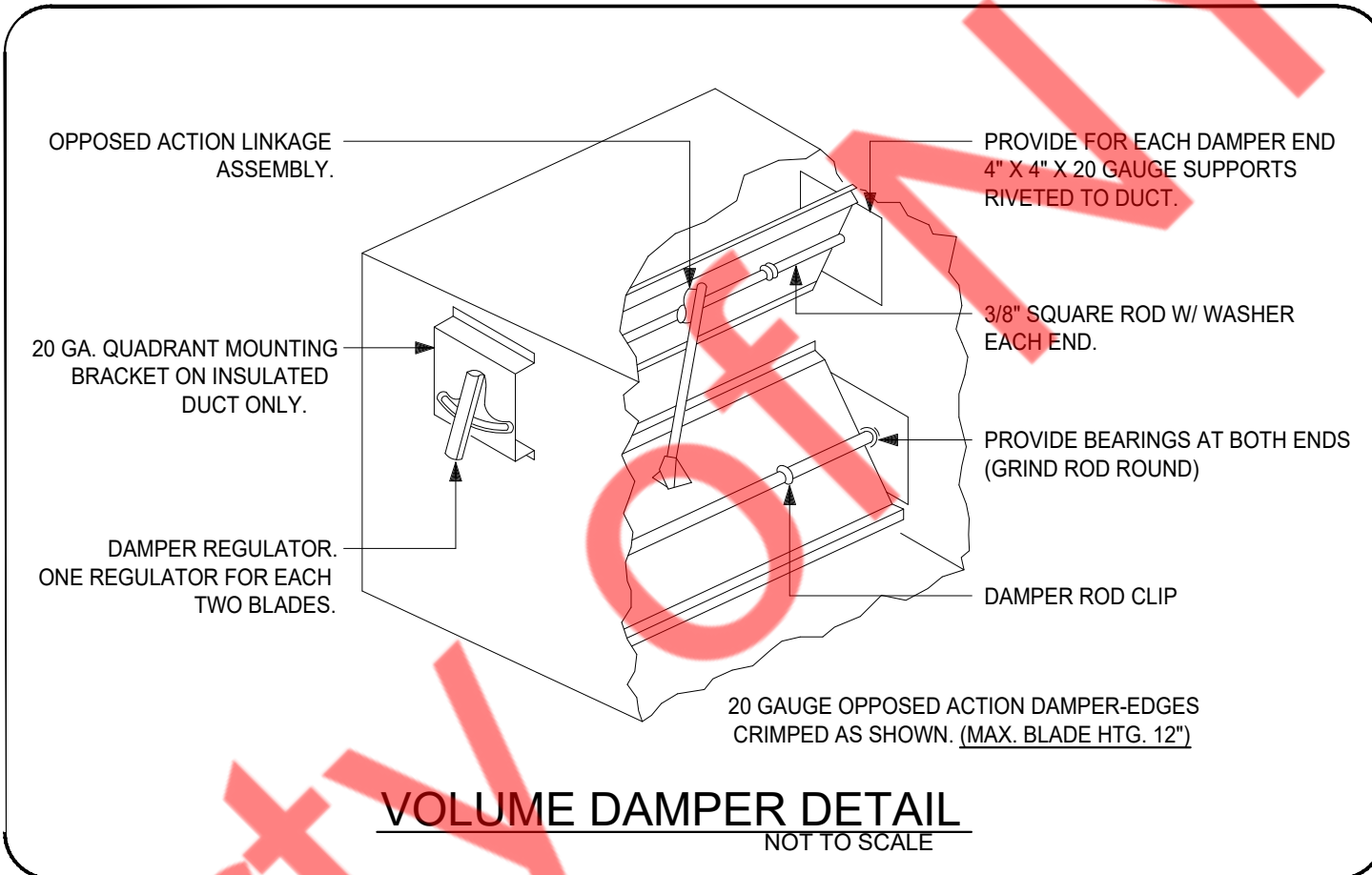
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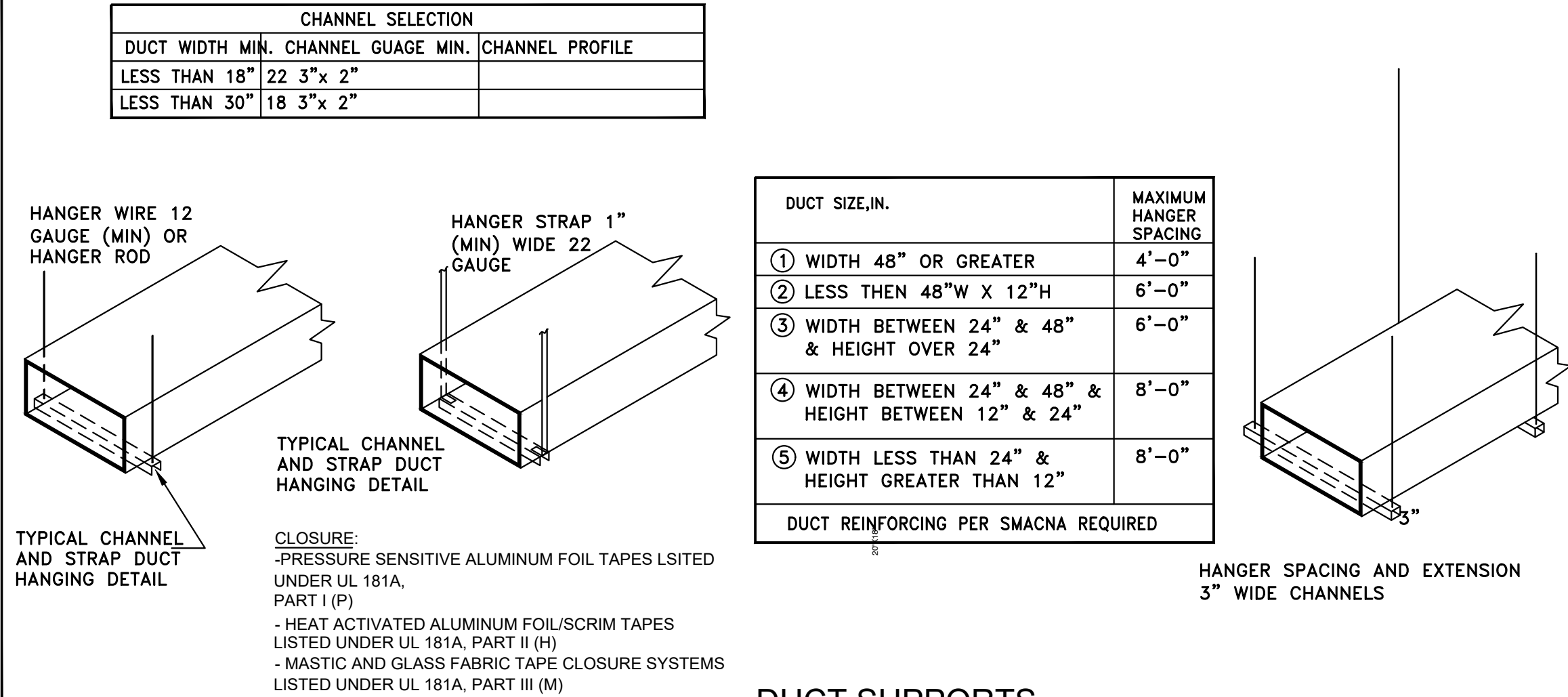




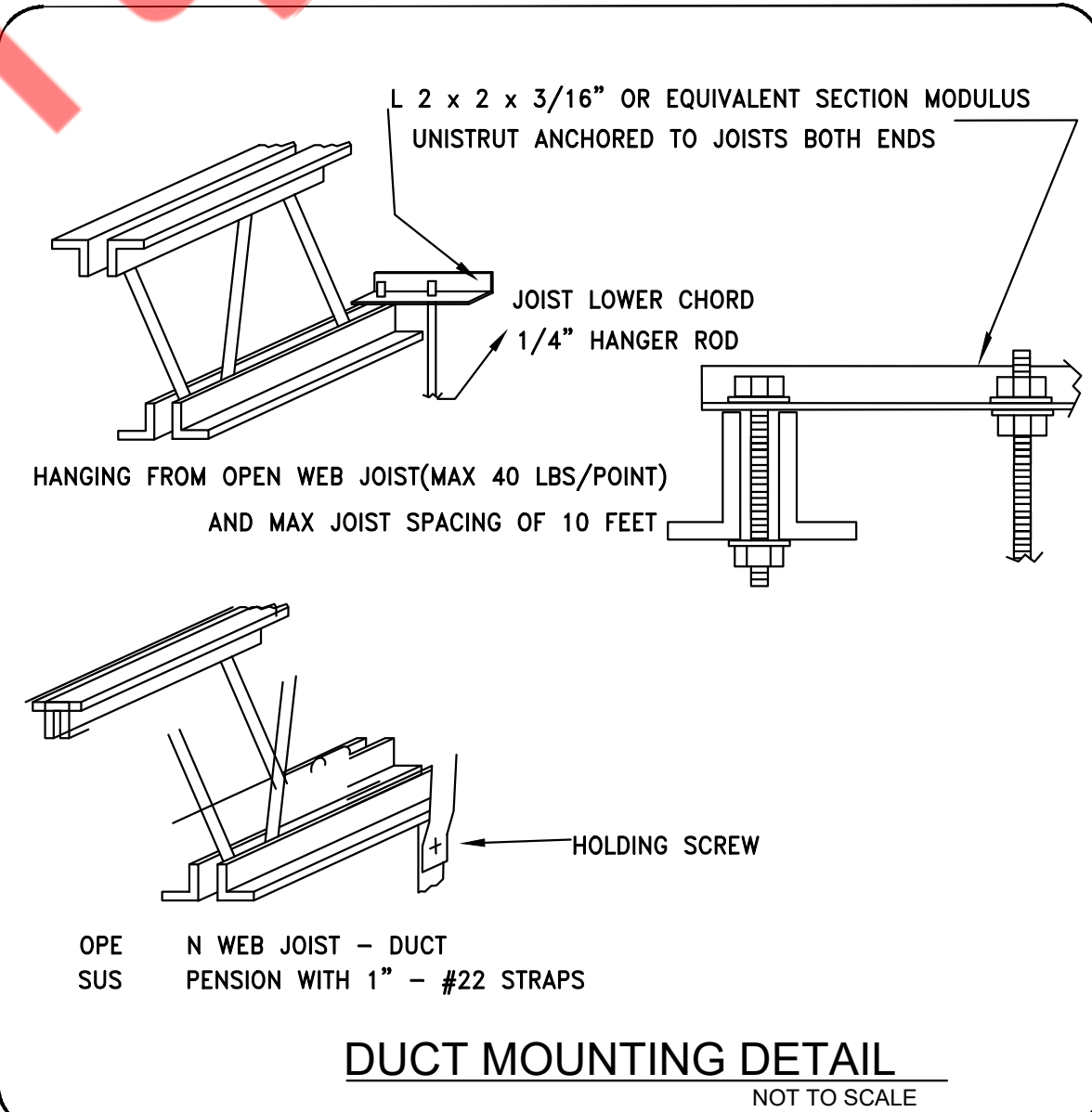
UPPER & LOWER ATTACHMENTS & DEVICES  
NOT TO SCALE



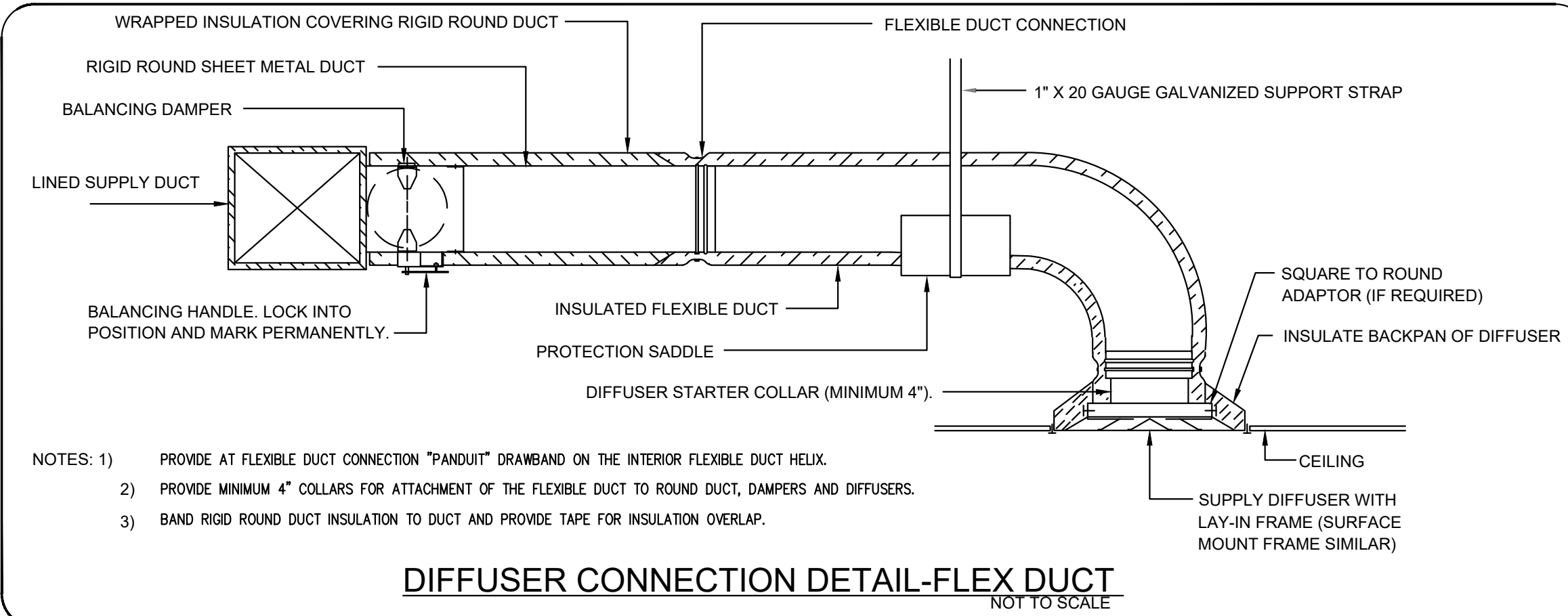
VOLUME DAMPER DETAIL  
NOT TO SCALE



DUCT SUPPORTS  
NOT TO SCALE



DUCT MOUNTING DETAIL  
NOT TO SCALE



DIFFUSER CONNECTION DETAIL-FLEX DUCT  
NOT TO SCALE



SCOPE OF WORK	
1.	REUSE EXISTING 400A, 120/208V, 3 PHASE, 4 WIRE ELECTRICAL SERVICE FROM UTILITY.
2.	REUSE EXISTING 400A, 120/208V, 3 PHASE, 4 WIRE ELECTRICAL METER, CT CABINET & FUSED DISCONNECT SWITCH.
3.	REUSE EXISTING 400A (MLO), 120/208V, 3 PHASE, 4 WIRE ELECTRICAL PANEL "A".
4.	REUSE EXISTING 225A(MLO), 120/208V, 3 PHASE, 4 WIRE ELECTRICAL PANEL "A2".
5.	ALL NECESSARY EQUIPMENT, WIRING AND LIGHTING FOR THE NEW RESTAURANT INCLUDING WIRING FOR VENTILATION EQUIPMENT. COORDINATE WITH G.C FOR LOW VOLTAGE WIRING.

ELECTRICAL PLAN NOTES	
1.	ELECTRICAL CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THIS SET.
2.	CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT, NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING, OR PROCEEDING WITH WORK.
3.	ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL OWNER HAS DIRECTED CORRECTIVE ACTION TO BE TAKEN.
4.	ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATIONS INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. EXISTING CONDITIONS OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING HIS BID.
5.	ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE AND ORDINANCES OF THE AUTHORITY HAVING JURISDICTION.
6.	DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION FOR ALL EQUIPMENT. CONFIRM WITH OWNER'S REPRESENTATIVE.
7.	ALL ELECTRICAL NOT BEING REUSED MUST BE REMOVED IN ITS ENTIRETY.
8.	ALL CONDUIT IN OR UNDERGROUND OR IN CONCRETE MUST BE RIGID GALVANIZED STEEL.
9.	CIRCUIT BREAKERS AND PANELS TO BE BOLT ON TYPE
10.	ALL EQUIPMENT SHALL BE APPROVED BY UL OR OTHER NATIONALLY RECOGNIZED TESTING COMPANY.
11.	ALL RECEPTACLES SHALL BE GROUNDED AS REQUIRED BY NEC 250.146
12.	SUBMIT SERVICE ENTRANCE EQUIPMENT FOR SEPARATE APPROVAL.
13.	ALL LOW VOLTAGE MUST BE IN CONDUIT TO ABOVE THE DROP CEILING. BRIDAL RINGS OR "J" HOOKS REQUIRED.
14.	SEPARATE PERMITS ARE REQUIRED FOR ALL LOW VOLTAGE SUCH AS TELEPHONE, DATA, THERMOSTAT, MUSIC, ALARMS ETC.
15.	SEPARATE PERMIT REQUIRED FOR SIGNAGE.
16.	PRIOR TO ANY CONSTRUCTION WORK BEGINNING AN ON-SITE MEETING WITH GENERAL CONTRACTORS IS REQUIRED.
17.	ELECTRICIAN MUST BE ON SITE FOR ALL INSPECTIONS.
18.	MINIMUM WIRE SIZE SHALL BE #12 A.W.G. EXCLUDING CONTROL WIRING. ALL CONDUCTORS SHALL BE COPPER AND UNLESS OTHERWISE NOTED THIN INSULATION.
19.	OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, PLASTIC AND CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS, AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
20.	IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
21.	ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE N.E.C. OR LOCAL CODES.
22.	ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
23.	ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/ARCHITECT.
24.	ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
25.	ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE THAT CERTIFICATE OF OCCUPANCY IS ISSUED. WARRANTY SHALL BE PROVIDED IN WRITING. PROVIDE COPY TO LL.
26.	CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
27.	ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
28.	CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT.
29.	THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
30.	CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL WIRING.
31.	ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE CIRCUIT BREAKERS.
32.	PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, DEVICES, ETC. FOR ALL OUTLETS AS INDICATED.
33.	MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UL LIST OF APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF N.E.C. NEMA, AND ICE.
34.	CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR CUT SHEETS OF LIGHTING FIXTURES, SWITCHES, AND OTHER ELECTRICAL ITEMS FOR APPROVAL BY ENGINEER/ARCHITECT.
35.	ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING AND FIRED CAULKING REQUIRED OF HIS WORK.
36.	ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS W/TYPED WRITTEN DIRECTORIES.
37.	ALL ELECTRICAL AND COMMUNICATIONS OUTLETS TO BE AT 24" A.F.F. UNLESS NOTED OTHERWISE, AND VERTICALLY MOUNTED.
38.	ALL LIGHT SWITCHES TO BE AT 42" A.F.F.
39.	ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL ELECTRICAL WIRING FOR HVAC SYSTEM INCLUDING CONTROLS, THERMOSTATS, POWER, ETC. SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
40.	BREAKER AND PANELS -- ALL CURRENT CARRYING BUSSES SHALL BE COPPER. ALL GROUND BUS BARS SHALL BE COPPER. PANEL BOARD ENCLOSURES SHALL BE FURNISHED WITHOUT PRE-PUNCHED CONCENTRIC HOLES. A.I.C. RATINGS SHALL BE AS INDICATED ON PANEL BOARD SCHEDULES.
41.	DISCONNECT SWITCHES SHALL BE H.P. RATED, GENERAL DUTY, QUICK-MAKE, QUICK-BREAK ENCLOSURES AS REQUIRED BY EXPOSURE.
42.	MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC, WITH OVERLOAD RELAYS IN EACH HOT LEG.
43.	THE TERM "PROVIDE" USED IN THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS INDICATES THE CONTRACTOR SHALL FURNISH AND INSTALL.
44.	CONTRACTOR SHALL CONFIRM WITH ANY AND ALL REQUIREMENTS SUCH AS: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, TRANSFORMER SIZE, SCHEDULED DOWN TIME FOR OWNERS CONFIRMATION, ETC.. ANY CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK.
45.	VOLTAGE DROP FOR ALL BRANCH CONDUCTORS SHALL NOT EXCEED 3%, WHERE VOLTAGE DROP EXCEEDS 3%, CONTRACTOR SHALL INCREASE SIZE OF CONDUCTORS.
46.	CONTRACTOR SHALL PROVIDE GFI TYPE BREAKER FOR ALL EXTERIOR 120V CIRCUITS OR GFI PROTECTION -- FOR THE WHOLE CIRCUIT.
47.	GAS PIPING SHALL BE BONDED.
48.	ELECTRICAL CONTRACTOR SHALL COORDINATE SERVICE ENTRY WITH SERVICE PROVIDER PRIOR TO DETERMINING EXACT LOCATION OF THE METER BOX IN ORDER TO AVOID DISCREPANCIES BETWEEN DRAWINGS AND JOB CONDITIONS.
49.	ALL OUTDOOR EQUIPMENT SHALL BE WEATHERPROOF.
50.	CONSTRUCTION "AS BUILT" DRAWINGS AND DOCUMENTS SHALL BE PROVIDED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF ACCEPTANCE. PROVIDE A COPY TO LL.
51.	OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER.
52.	ABSOLUTELY NO FLEXIBLE CONDUIT IS PERMITTED IN DEMISING WALLS. FLEXIBLE CONDUIT IS PERMITTED FOR SHORT FINAL CONNECTIONS ONLY (6" OR LESS).
53.	EXPOSED CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES, PARALLEL OR IN RIGHT ANGLES TO THE BUILDING STRUCTURE. DO NOT LOOP EXCESS FLEXIBLE CONDUIT IN CEILING SPACE OR WALL CAVITY. NO CONDUIT TO BE SUPPORTED FROM THE ROOF DECK.
54.	CABLE TYPES AC AND NM CABLES ARE NOT ACCEPTABLE. TYPE MC CABLE, ELECTRIC METALLIC TUBING (EMT) AND RIGID GALVANIZED CONDUIT ARE PERMITTED.
55.	ALL EQUIPMENT, DEVICES AND FIXTURES SHALL BE GROUNDED IN COMPLIANCE WITH NEC AND UL REQUIREMENTS.
56.	ALL PANELS TO BE UL LABELED WITH BOLT-ON TYPE CIRCUIT BREAKERS.
57.	7-DAY 24-HOUR TIME CLOCK IS REQUIRED TO CONTROL STOREFRONT ENTRY LIGHTS, SHOW WINDOW LIGHTS, SHOW WINDOW RECEPTACLES AND STOREFRONT SIGNAGE. ILLUMINATED STOREFRONT SIGNS MUST REMAIN LIT DURING ALL MALL BUSINESS HOURS.
58.	TENANT IS REQUIRED TO MAKE A FIELD SURVEY OF THE EXISTING ELECTRICAL SERVICE TO ENSURE THAT THE TOTAL CONNECTED LOAD DOES NOT EXCEED THE ELECTRIC SERVICE. ANY/ALL MODIFICATIONS OR UPGRADES NEEDED ARE SUBJECT TO LANDLORD'S PRIOR APPROVAL AND WILL BE COMPLETED BY TENANT/TENANT'S GC AT TENANT'S SOLE EXPENSE.
59.	ALL ELECTRICAL PANELS TO BE MOUNTED ON PLYWOOD BACKER BOARD.
60.	PANEL PHASE LOADS TO BE BALANCED WITHIN 10%.

GENERAL LIGHTING NOTES	
A.	WHERE LIGHT FIXTURE IS FOLLOWED BY "NL", THIS FIXTURE IS DESIGNATED AS A NIGHT LIGHT AND SHALL BE CONNECTED TO AN UNSWITCHED HOT CONDUCTOR.
B.	UPPER CASE LETTER NEXT TO LIGHT FIXTURE DENOTES FIXTURE TYPE.
C.	ALL EMERGENCY FIXTURES SHALL BE CONNECTED TO AN UNSWITCHED HOT CONDUCTOR.

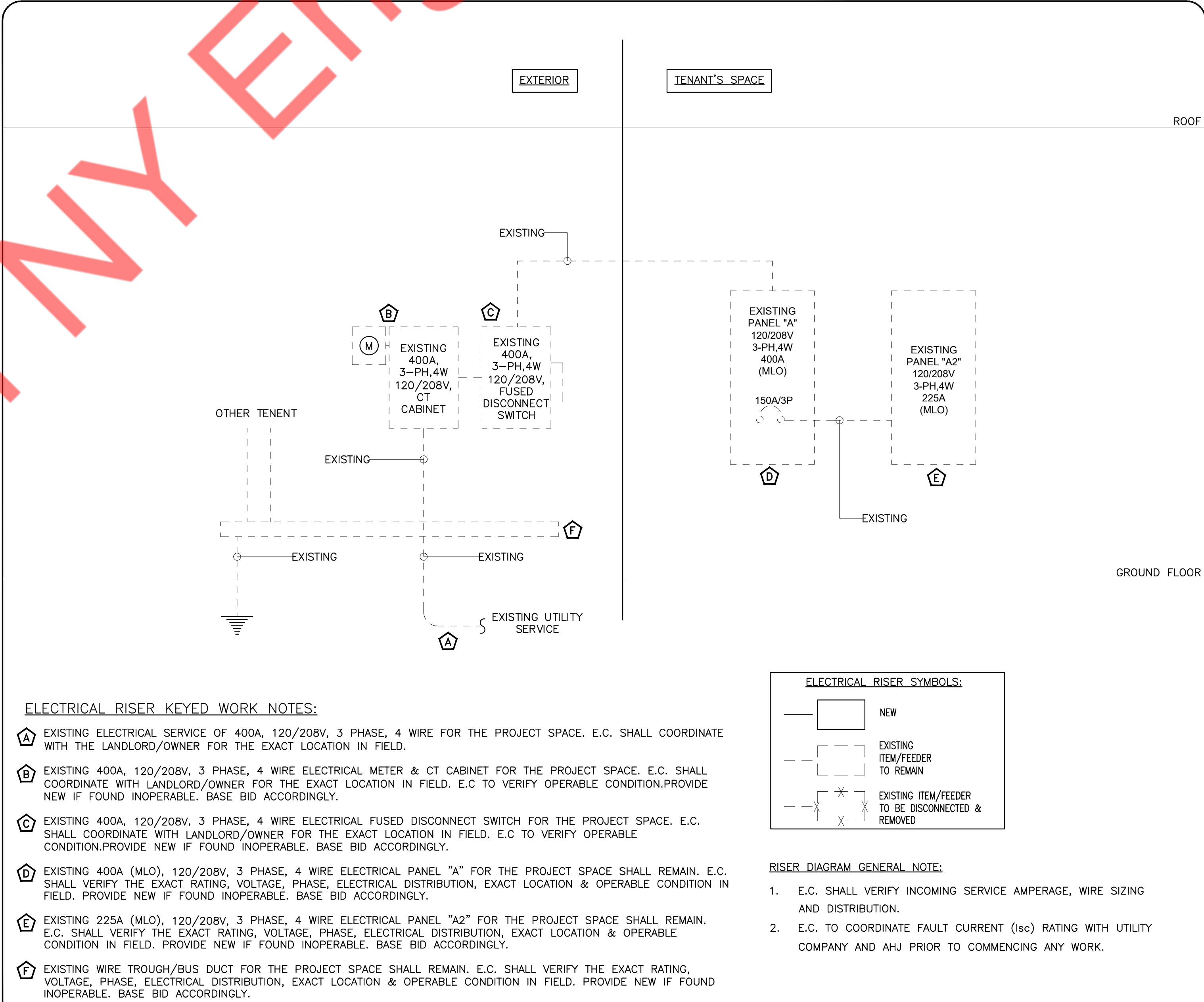
ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
	EXHAUST FAN
	JUNCTION BOX
	BATTERY BACK UP EXIT LIGHT
	BATTERY BACK UP EXIT LIGHT + EMERGENCY LIGHT
	BATTERY BACK UP EMERGENCY LIGHT
	WALL SWITCH (SINGLE, DOUBLE, )
	WALL SWITCH (TIMER)
	DIMMER WALL SWITCH
	OCCUPANCY SENSOR WALL SWITCH
	VARIABLE SPEED SWITCH
	MANUAL MOTOR SWITCH
	SINGLE RECEPTACLE
	DUPLEX RECEPTACLE
	HALF SWITCHED DUPLEX RECEPTACLE
	230 VOLT RECEPTACLE
	QUADRUPLX RECEPTACLE
	FLOOR MOUNTED, FLUSH DUPLEX RECEPTACLE
	FLOOR MOUNTED, FLUSH QUAD. RECEPTACLE
	FLOOR MOUNTED, FLUSH 230 VOLT RECEPTACLE
	CEILING MOUNTED DUPLEX RECEPTACLE
	ELECTRICAL PANEL
	DISCONNECT SWITCH
	USB CHARGER RECEPTACLE
	TELEVISION OUTLET
	DATA OUTLET
	TELEPHONE/DATA OUTLET
	TELEPHONE OUTLET
	FLOOR MTD. FLUSH TELEPHONE/DATA OUTLET
	QUAD. DATA OUTLET RJ45
ABBREVIATIONS:	
ABOVE FINISH FLOOR= A.F.F. COUNTER TOP LEVEL= C GROUND FAULT INTERRUPTER= GFCI VERIFY PRIOR TO INSTALL= VH WEATHER PROOF= WP EXHAUST FAN= EF WATER HEATER= WH AUTHORITY HAVING JURISDICTION= A.H.J. AIR COOLED CONDENSING UNIT= ACCU ELECTRIC DUCT HEATER = EDH ROOF TOP UNIT= RTU	
BELOW COUNTER= BC PUSH BUTTON= PB UNDER CABINET= UC VAPOR PROOF= VP ELECTRICAL CONTRACTOR=E.C. BATHROOM EXHAUST FAN=BEF OUTSIDE AIR FAN= OAF NIGHT LIGHT=NL AIR HANDLING UNIT= AHU RECIRCULATION PUMP= RCP	

LIGHTING FIXTURE SCHEDULE							
	TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLT	LAMP WATTAGE	MOUNTING
	L1	RECESSED 4" LED DOWNLIGHT	COMMERCIAL ELECTRIC	53827101	120	11 WATTS	RECESSED
	L2	PENDANTS LIGHTS	WAC LIGHTING	PD-W36610	120	11 WATTS	PENDANT
	L3	TRACK LIGHTS	WAC LIGHTING	H-8010-30-850-1196-BK	120	11 WATTS PER HEAD	TRACK
	L4	WALL SCONCE	KIZCO LIGHTING	WS10336 VEGA	120	23	WALL MOUNTED
	L5	2X4 BACKLIT LED FLAT PANEL	VERIFY IN FIELD	VERIFY IN FIELD	--	--	RECESSED
	X1	EXIT SIGN	THE EXIT LIGHT CO.	LEDRBB-JR (OR EQUAL)	120	3 WATTS	-
	X2	EXIT/EMERGENCY COMBO SIGNS	THE EXIT LIGHT CO.	TBD	120	3 WATTS	-
	Y1	WALL MOUNTED EMERGENCY LIGHTS	LITHONIA LIGHTING	ELM4L	120	3 WATTS	-
	D	DIMMER SWITCH	-	-	120	-	-
	OS	OCCUPANCY WALL SWITCH	-	-	120	-	-
NOTES:							
1. E.C. SHALL COORDINATE WITH ARCHITECT FOR FINAL FIXTURE COUNT, EXACT MANUFACTURER/MODEL NUMBER, MOUNTING HEIGHTS, LOCATIONS AND TYPE. COORDINATE PRIOR TO PURCHASE							
2. COORDINATE EXACT CONTROL REQUIREMENTS WITH OWNER.							
3. E.C SHALL PROVIDE REQUIRED POWER PACKS AND RELAYS SUITABLE FOR THE ABOVE LIGHT FIXTURES IN COORDINATION WITH THE LIGHTING VENDOR. BASE BID ACCORDINGLY.							
4. PROVIDE MANUFACTURER'S 90 MINUTE EMERGENCY BATTERY FOR LIGHT FIXTURES WHERE INDICATED ON LIGHTING PLAN E-2.							
5. E.C TO VERIFY OPERABLE CONDITIONS OF EXISTING LIGHTS AND PROVIDE NEW LIGHTS IF FOUND INOPERABLE.							

REFER TO SHEET A-2 - REFLECTED CEILING PLAN IN ARCHITECTURAL DRAWINGS FOR MORE INFORMATION ON COLORS AND TRIMS REQUIRED

SUBSTITUTIONS TO THE ABOVE FIXTURE SCHEDULE MUST BE SUBMITTED 14 DAYS PRIOR TO BID & REVIEWED BY THE ARCHITECT, ENGINEER & OWNER. SUBSTITUTIONS WILL NOT BE REVIEWED AFTER THIS TIME. SUBMITTAL PACKAGES MUST INCLUDE COLOR, CUT SHEETS, ALL PHOTOMETRICS & FIXTURE SAMPLES FOR ALL DECORATIVE FIXTURES, LANDSCAPE FIXTURES & OUTDOOR FIXTURES. WITHOUT THIS INFORMATION NO REVIEW WILL BE PROVIDED.

FINAL FIXTURE MAKE AND MANUFACTURER OF THE LIGHT FIXTURE TO BE COORDINATED WITH ARCHITECT/OWNER.



NY ENGINEERS

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PROJECT

TOASTIQUE

REVISIONS DATES:

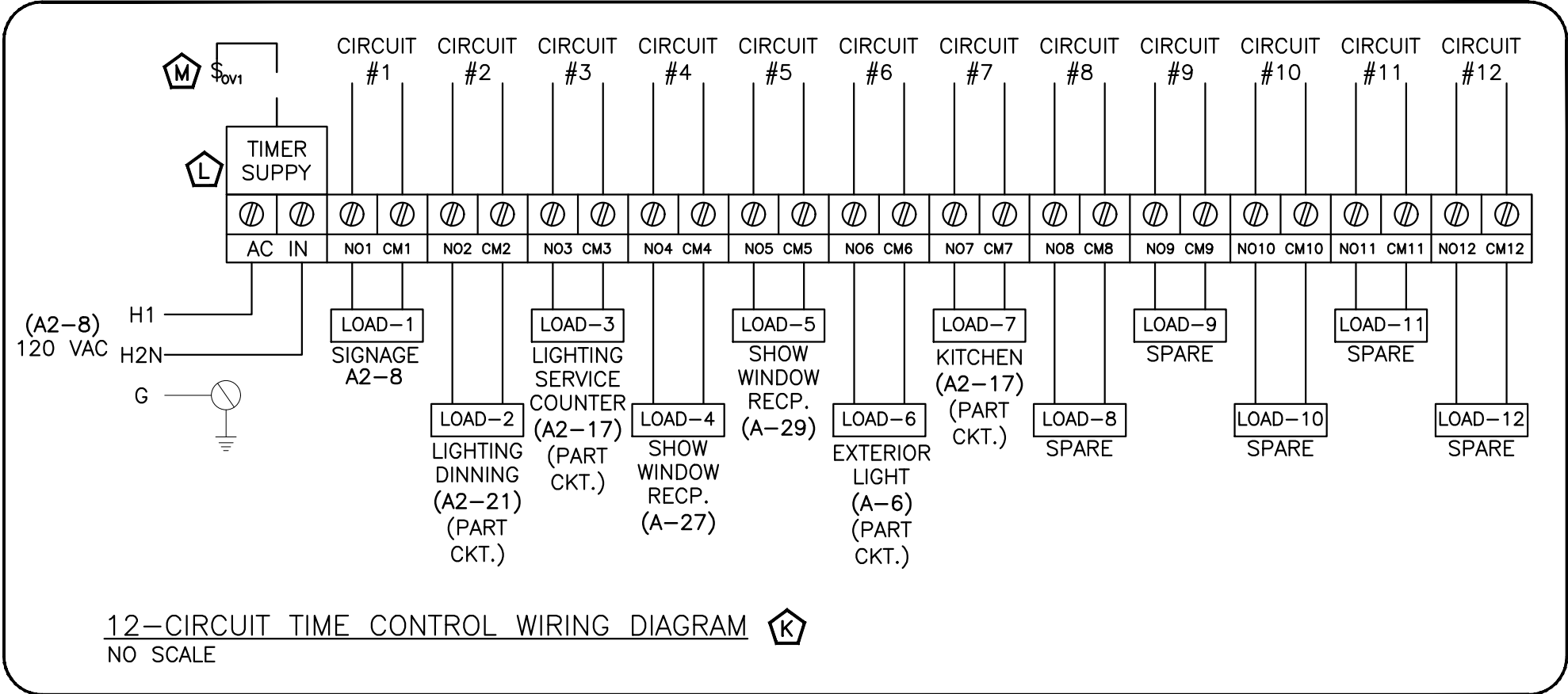
PROFESSIONAL SEAL

ISSUE DATE: 06.21.24  
PROJECT #: 400J.1386P  
DRAWN BY: NYE  
CHECKED BY: NYE

ELECTRICAL PLAN NOTES AND RISER DIAGRAM

E-1



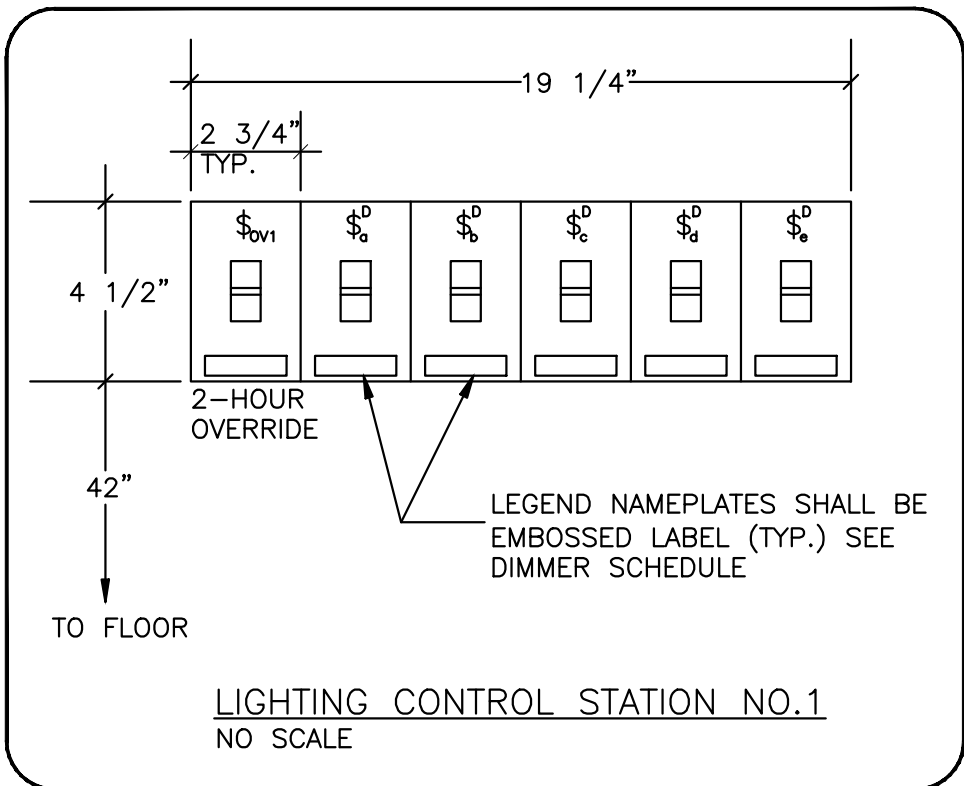


12-CIRCUIT TIME CONTROL WIRING DIAGRAM  
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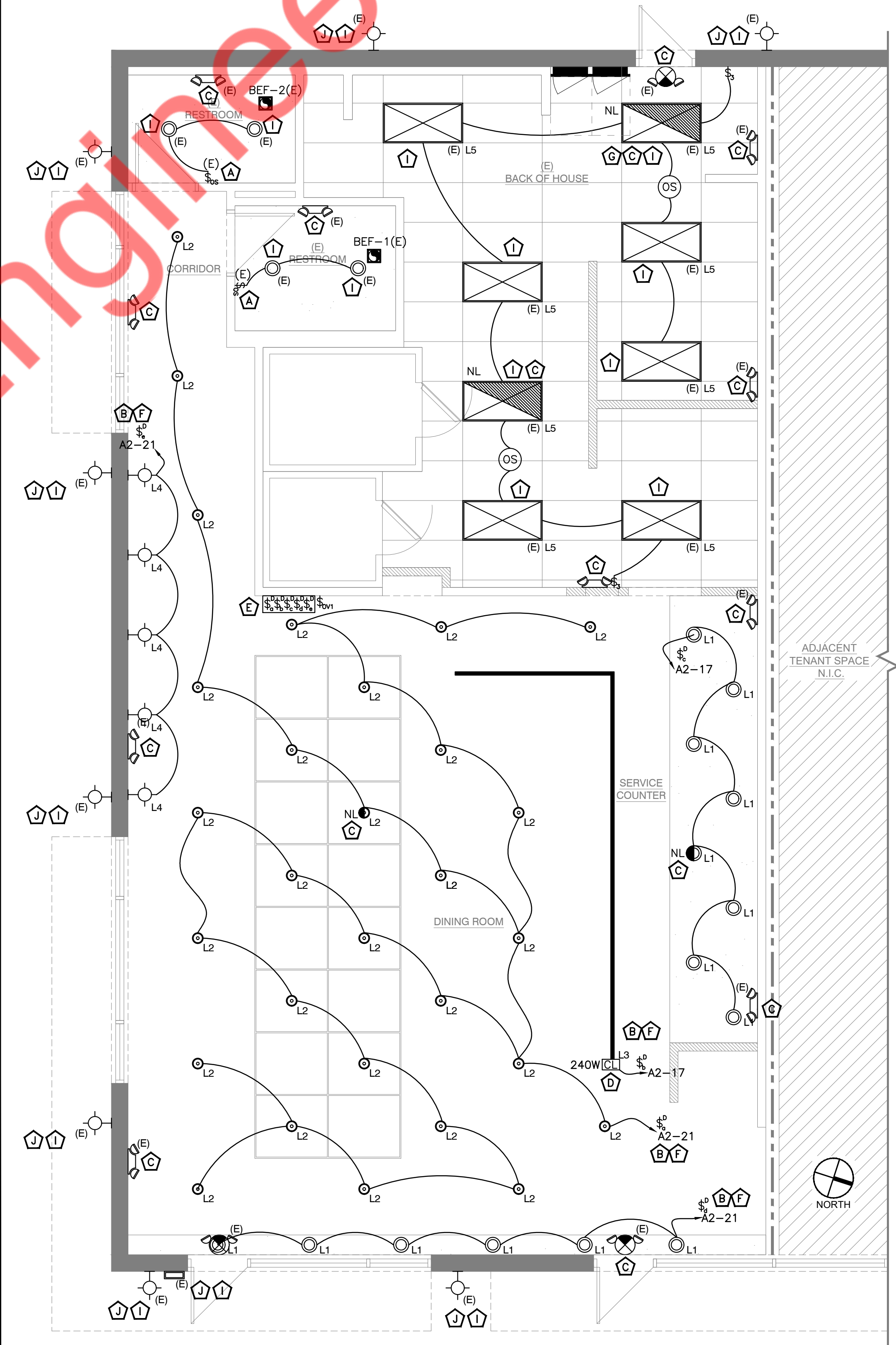
- ELECTRICAL LIGHTING PLAN KEYED WORK NOTES:**
- A PROGRAM SENSOR FOR 'MANUAL-ON' OPERATION. EXISTING CONTROL SHALL PROGRAM ACCORDINGLY. VERIFY OPERABLE CONDITION OF EXISTING CONTROL, REPLACE WITH NEW IF FOUND INOPERABLE.
  - B CONNECT THIS CIRCUIT OR PORTION OF CIRCUIT INDICATED THRU AUTOMATIC TIME CONTROLLER. REFER TO TIME CONTROL & CONTACTOR DETAIL IN SHEET E-2.
  - C CONNECT ALL EMERGENCY, EXIT LIGHT AND NIGHT LIGHTING FIXTURES TO THE NEAREST LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS PER STATE AND LOCAL CODES.
  - D PROVIDE MANUFACTURER'S 300VA/2.5A CURRENT LIMITER DEVICE WITH INTEGRAL OVERCURRENT PROTECTION DEVICE.
  - E E.C. SHALL COORDINATE EXACT LOCATION OF LIGHTING CONTROL STATION WITH ARCHITECT/OWNER.
  - F TO REMOTE DIMMER SWITCH. PROVIDE LABEL AT DIMMER CONTROL STATING AREA SERVED. DIMMER CONTROL DEVICE SHALL HAVE AN INDICATOR LIGHT INDICATING WHEN LIGHTS ARE 'ON'.
  - G LIGHTING CONTROL NEAR ELECTRICAL PANELS SHALL NOT BE WITH AUTOMATIC MEANS AS PER NEC 110.26(D).
  - H INTERCONNECTION OF EXISTING EXHAUST FAN TO BE COORDINATED WITH MECHANICAL DRAWINGS. E.C. SHALL VERIFY OPERABLE CONDITION OF EQUIPMENTS AND THEIR CONTROL. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
  - I EXISTING LIGHT FIXTURE IN THIS AREA IS DENOTED BY (E) SHALL REMAIN CONNECTED TO THE EXISTING CIRCUIT AND PROVIDE CONTROLS AS SHOWN ON THE PLAN. E.C. SHALL VERIFY THE OPERABLE CONDITION OF EXISTING LIGHTING IN FIELD AND REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
  - J EXTERIOR LIGHT SHALL CONTROL VIA TIME CLOCK/PHOTOCELL. EXTERIOR LIGHT IS FEED FROM HOUSE PANEL.
  - K 12-CIRCUIT WIRING DIAGRAM, MULTI VOLTAGE OPERATION.
  - L E.C SHOULD VERIFY OPERABLE CONDITION & CIRCUIT OF EXISTING TIME CLOCK & PROVIDE NEW ELECTRICAL ACCESSORIES/DEVICE IF THE EXISTING CIRCUITS ARE INSUFFICIENT TO ACCOMODATE ALL LOADS AS INDICATED ON E-2 TIME CONTROL WIRING DIAGRAM. REPLACE WITH NEW ONE IF FOUND INOPERABLE. SELECTION OF NEW TIME CLOCK SHOULD BE AS TOASTIQUE FRANCHISE STANDARD. E.C SHALL COORDINATE WITH ARCHITECT/OWNER FOR THE SAME.
  - M REMOTE MASTER SWITCH FOR AFTER HOURS OVERRIDE OF TIME CONTROL. OVERRIDE SHALL HAVE THE ABILITY TO MAINTAIN OVERRIDE FOR A MINIMUM OF 2 HOURS.

- ELECTRICAL LIGHTING PLAN GENERAL NOTES:**
- LIGHTS IN RESTROOM TO BE CONTROLLED BY AREA OCCUPANCY SENSOR (MANUAL-ON).
  - LIGHTS IN BACK OF HOUSE TO BE CONTROLLED BY AREA OCCUPANCY SENSOR (MANUAL-ON).
  - AREA OCCUPANCY SENSOR CONTROL SHALL AUTOMATICALLY TURN 'OFF' LIGHTS WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.
  - LOCAL CONTROLS TO BE LOCATED AT SPACE ENTRY U.O.N.
  - LOCAL CONTROLS SHALL IDENTIFY AREA SERVED AND LIGHTS FIXTURES STATUS WHERE LOCATED IN AREA NOT VISIBLE TO LIGHTS BEING CONTROLLED.
  - LIGHTS IN DINNING AND AT SERVICE COUNTER TO BE CONTROLLED BY AUTOMATIC TIME CONTROLLER. REFER TO TIME CONTROL WIRING DIAGRAM.
  - PROVIDE ALL CLASS-II LOW VOLTAGE WIRING TO 0-10V LIGHT FIXTURE AND DIMMING CONTROL PER MANUFACTURER'S RECOMMENDATION.
  - COORDINATE WITH LIGHT FIXTURE MANUFACTURER AND PROVIDE ALL LIGHTS CONTROLS (DIMMER) TYPE PER MANUFACTURER'S RECOMMENDATIONS.
  - CONTACT LIGHT FIXTURE MANUFACTURER AND COORDINATE/PROVIDE ALL LOW VOLTAGE DRIVERS, TRANSFORMERS, ACCESSORIES, CLASS-II WIRING AND CONNECTIONS AS PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH ARCHITECT AND LOCATE ALL REMOTE EQUIPMENT AS DIRECTED IN CONCEALED, BUT ACCESSIBLE LOCATION.

ALL LUMINAIRE(S) SHALL BE SECURELY FASTENED TO THE CEILING FRAMING MEMBER BY MECHANICAL MEANS SUCH AS BOLTS, SCREWS, RIVETS OR LISTED CLIPS IDENTIFIED FOR USE WITH TYPE OF CEILING FRAMING MEMBERS AND LUMINAIRE(S) AS PER NEC 410.36(B).



LIGHTING CONTROL STATION NO.1  
NO SCALE



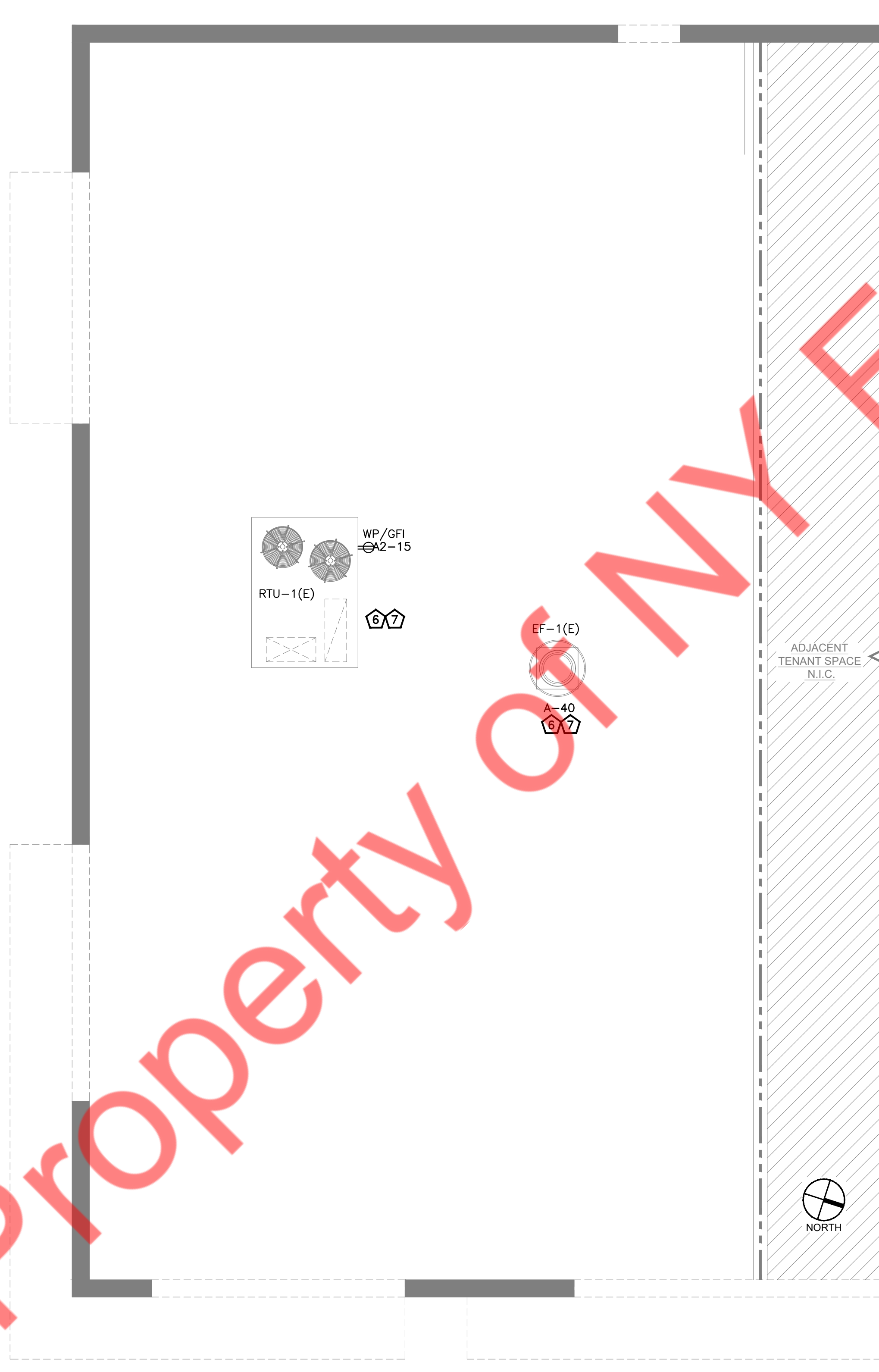


ELECTRICAL POWER PLAN KEYED WORK NOTES:

- EXISTING 400A(MLO), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A". E.C. SHALL VERIFY THE EXACT RATING, PHASE, VOLTAGE & OPERABLE CONDITION IN FIELD. PROVIDE NEW IF FOUND INOPERABLE. E.C. SHALL COORDINATE LOCATION WITH ARCHITECT/OWNER. BASE BID ACCORDINGLY.
- EXISTING 225A(MLO), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A2". E.C. SHALL COORDINATE LOCATION WITH ARCHITECT/OWNER. E.C. SHALL VERIFY OPERABLE CONDITIONS FOR ELECTRICAL PANELS. PROVIDE NEW IF FOUND INOPERABLE. E.C. SHALL COORDINATE LOCATION WITH ARCHITECT/OWNER. BASE BID ACCORDINGLY.
- PROVIDE CEILING MOUNTED RECEPTACLE FOR SHOW WINDOW AS REQUIRED BY CODE. MOUNT WITHIN 18" HORIZONTALLY OF TOP OF WINDOW. VERIFY EXACT LOCATION WITH ARCHITECT.
- CEILING MOUNTED JUNCTION BOX WITH TOGGLE DISCONNECT PER NEC FOR CONNECTION TO BUILDING MOUNTED SIGNAGE. VERIFY EXACT LOCATION AND CONNECT TO SIGN PER MANUFACTURE'S INSTRUCTION. ROUTE CIRCUIT TO PANEL VIA TIME CLOCK AS INDICATED ON PLAN.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE WATER HEATER MANUFACTURER FOR THE EXACT POWER REQUIREMENTS PRIOR TO ROUGH-IN. BASE BID ACCORDINGLY.
- ELECTRICAL CONTRACTOR SHALL COORDINATE FOR EXACT LOCATION OF EXISTING MECHANICAL EQUIPMENTS WITH MECHANICAL DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT ELECTRICAL REQUIREMENT INCLUDING DISCONNECT/FEEDER/CONDUIT/SWITCH/FUSE/JUNCTION BOX FOR MECHANICAL UNIT WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES. E.C SHOULD VERIFY EXISTING SUPPLY AND CONTROL FOR MECHANICAL EQUIPMENTS, VERIFY OPERABLE CONDITIONS FOR EXISTING EQUIPMENTS. REPLACE IN FOUND INOPERABLE AND BASE BID ACCORDINGLY.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE PLUMBING CONTRACTOR/MANUFACTURER'S FOR EXACT LOCATION AND POWER REQUIREMENT OF THE PLUMBING UNITS IN THE FIELD. PROVIDE CIRCUIT AND CONTROL AS REQUIRED.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GARBAGE DISPOSAL MANUFACTURE FOR THE EXACT POWER REQUIREMENTS BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.
- 120V CONNECTION FOR OWNER FURNISHED SECURITY/AV EQUIPMENT.
- EC SHALL MAINTAIN CLEARANCE FOR ELECTRICAL PANELS PER NEC. 110.26 (A) (1).
- CONNECT THIS CIRCUIT OR PORTION OF CIRCUIT INDICATED THRU AUTOMATIC TIME CONTROLLER. REFER TO TIME CONTROL & CONTACTOR DETAIL IN THIS DRAWING. E.C SHOULD VERIFY EXISTING SUPPLY AND CONTROL FOR MECHANICAL EQUIPMENTS, VERIFY OPERABLE CONDITIONS FOR EXISTING EQUIPMENTS. REPLACE IN FOUND INOPERABLE AND BASE BID ACCORDINGLY.
- EXISTING CIRCUIT FOR EXISTING WALK IN FREEZER SHALL REMAIN. E.C. VERIFY OPERABLE CONDITION OF EXISTING CIRCUIT INCLUDING J-BOX/DISCONNECTING MEANS/WIRE/CONDUIT/BREAKER IN FIELD. REPLACE WITH NEW IF FOUND INOPERABLE. BASE BID ACCORDINGLY.

ELECTRICAL POWER PLAN GENERAL WORK NOTES:

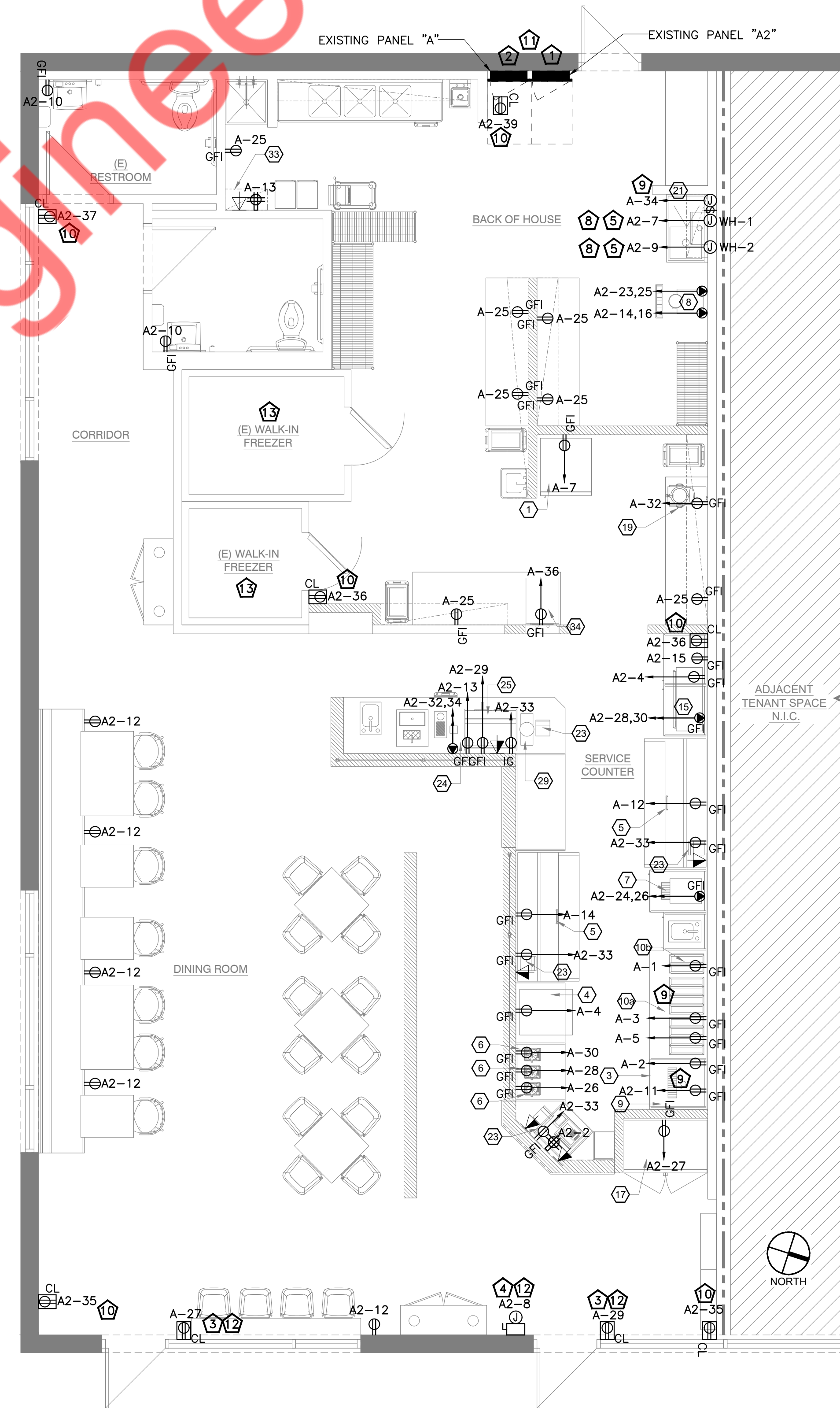
- ARRANGE LOAD TO MAINTAIN A BALANCE BETWEEN PHASES OF 10% OR LESS.
- ELECTRICAL DEVICES, PANELS, CABINETS ETC. SHALL BE MOUNTED ON A FIRE-TREATED PLYWOOD BACKER BOARD.
- ELECTRICAL CONTRACTOR SHALL REFER TO FOOD SERVICE AND ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND CHARACTERISTICS OF ALL FOOD SERVICE EQUIPMENT. CONFIRM NEMA CONFIGURATIONS - ADJUST CIRCUIT BREAKER AS REQUIRED.
- CONFIRM MOUNTING HEIGHT AND EXACT LOCATIONS OF ALL DEVICES WITH FOOD SERVICE AND ARCHITECTURAL PLANS PRIOR TO ROUGH INS. COORDINATE WITH ARCHITECT FOR ANY CLARITY REQUIRED.
- PROVIDE 3/4" RIGID CONDUIT FROM ALL PRINTERS/P.O.S STATION (ETC.) USING HOFFMAN BOXES, AS REQUIRED. FROM CENTRAL POINT OF DISTRIBUTION. TERMINATE AS DIRECTED BY OWNER/ARCHITECT.
- ELECTRICAL CONTRACTOR SHALL REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL WORK, SODA/BEER LINES, ETC.
- ALL 125 VOLT, 15A AND 20A RECEPTACLES IN KITCHEN /FOOD PREP AREAS SHALL BE GFCI TYPE OR PROTECTED BY A GFCI TYPE BREAKER. ALL RECEPTACLES WITHIN 6 FEET OF A WET AREA FOR AREAS OUTSIDE KITCHEN/FOOD PREP AREAS SHALL BE A GFCI TYPE OR PROTECTED BY A GFCI TYPE BREAKER. PROVIDE GFCI TYPE BREAKER FOR ALL OVERCURRENT PROTECTION DEVICES SERVING 250 VOLT, 1-PHASE AND 3-PHASE RECEPTACLES.
- PROVIDE SAFETY SWITCH FOR ALL FOOD SERVICE EQUIPMENT, AS REQUIRED, IF NOT PROVIDED INTEGRAL WITH EQUIPMENT.
- SEE FOOD SERVICE PLANS FOR ALL HORIZONTAL MOUNTED RECEPTACLES.
- E.C. SHALL REFER INTERIOR DESIGNER ID103 SHEET FOR EXACT MOUNTING DETAILS OF ELECTRICAL/DATA OUTLETS.



ROOF FLOOR POWER PLAN

SCALE  
1/4" = 1'-0"

1



GROUND FLOOR POWER PLAN

SCALE  
1/4" = 1'-0"

1

NY ENGINEERS

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PROJECT

TOASTIQUE

REVISIONS DATES:


PROFESSIONAL SEAL

ISSUE DATE: 06.21.24  
PROJECT #: 400J.1386P  
DRAWN BY: NYE  
CHECKED BY: NYE

POWER AND ROOF  
PLAN

E-3



PANEL: A(EXISTING)													MOUNTING: SURFACE					
208Y/120 VOLTS,			3 PHASE,			4 WIRE			LOCATION: BOH AREA									
MAIN CB: NA			MLO: 400 A			BUS: 400A			MIN,			FED FROM: EXISTING 400AMP DISCONNECT						
NOTE: L - LIGHTING, R - RECEPTACLE, H - HVAC, E - KITCHEN EQUIPMENTS, O - OTHER/MISCELLANEOUS																		
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*	JUICE DISPENSER (2 GROUP) _#10b	E	0.48	2#12, #12G, 3/4"C	1.17			2#12, #12G, 3/4"C	0.69	E	UNDER COUNTER FREEZER _#3	20	2				
3	20*	JUICE DISPENSER (4 GROUP) _#10a	E	0.72	2#12, #12G, 3/4"C		2.45		EXISTING	1.73	E	UNDER COUNTER ICE MAKER _#4	20*	4				
5	20*	JUICE DISPENSER (4 GROUP) _#10a	E	0.72	2#12, #12G, 3/4"C			1.22	EXISTING	0.50	R	EXTERIOR LIGHTING	20*	6				
7	20*	SINGLE DOOR REACH IN FREEZER _#1	E	0.82	2#12, #12G, 3/4"C	0.82												
9	40/2P	SPARE						0.00				SPARE	40/2P	8				
11								0.32	2#12, #12G, 3/4"C	0.32	E	REFRIG. PREP TABLE _#5	20*	12				
13	20*	ROUTER CABINET _#33	E	0.45	2#12, #12G, 3/4"C	0.77			2#12, #12G, 3/4"C	0.32	E	REFRIG. PREP TABLE _#5	20*	14				
15	20	SERVICE COUNTER AREA RECEPTACLE	R	0.18	2#12, #12G, 3/4"C		0.36		EXISTING	0.18	M	WALK IN COOLER	20*	16				
17	20/2P	SPARE						0.92		0.92	E		20/2P*	18				
19								0.92	EXISTING	0.92	E	FREEZER		20				
21	20/2P	SPARE					1.60			1.60	E		20/2P*	22				
23								1.60	EXISTING	1.60	E	COOLER		24				
25	20	BOH AREA RECEPTACLE	R	1.26	2#12, #12G, 3/4"C	3.06			EXISTING	1.80	E	BLENDER _#6	20*	26				
27	20*	SHOW WINDOW RECEPTACLES	R	1.80	2#12, #12G, 3/4"C		3.60		EXISTING	1.80	E	BLENDER _#6	20*	28				
29	20*	SHOW WINDOW RECEPTACLES	R	1.80	2#12, #12G, 3/4"C			3.60	EXISTING	1.80	E	BLENDER _#6	20*	30				
31	150/3P*	PANEL A2 (EX.)	O	10.47	EXISTING	12.83			2#12, #12G, 3/4"C	2.36	E	COFFEE/TEA BREWER _#19	20*	32				
33								0.67			2#12, #12G, 3/4"C	0.67	E	COMMERCIAL DISPOSAL _#21	20	34		
35									11.33	2#12, #12G, 3/4"C	0.64	E		20/2P	36			
37			O	10.69		0.64			2#12, #12G, 3/4"C	0.64	E	FROZEN BEVERAGE MACHINE _#34		38				
39								11.89		EXISTING	0.13	M	EF-1(E)	20*	40			
41									0.00				SPACE		42			
TOTAL LOAD (KVA)						20.21	20.56	18.99										
LOAD CLASSIFICATION				CONNECTED LOAD (KVA)		DEMAND FACTOR		DEMAND LOAD (KVA)		PANEL TOTAL LOAD								
TOTAL LIGHTING			L	0.00		125%		0.00										
TOTAL RECEPTACLE			R	5.54		100%		5.54		TOTAL CONNECTED LOAD								
TOTAL HVAC			H	0.00		100%		0.00		45.28 KVA								
TOTAL MOTOR			M	0.32		100%		0.32		TOTAL DEMAND CURRENT								
TOTAL KITCHEN/EQUIPMENTS			E	21.00		65%		13.65		125.83 AMP								
TOTAL OTHER/MISCELLANEOUS			O	0.00		100%		0.00		TOTAL DEMAND CURRENT								
													120/208 Wye					

PANEL: A2 (EXISTING)													MOUNTING: SURFACE			
208Y/120 VOLTS,			3 PHASE,			4 WIRE			LOCATION: BOH AREA							
MAIN CB: NA			MLO: 150 A			BUS: 225A			MIN,			FED FROM: EXISTING PANEL A				
NOTE: L - LIGHTING, R - RECEPTACLE, H - HVAC, E - KITCHEN EQUIPMENTS, O - OTHER/MISCELLANEOUS																
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	60/3P*	RTU	H	2.57	EXISTING	2.93			2#12, #12G, 3/4"C	0.36	R	RECEPTACLE: POS SERVER COUNTER	20*	2		
3			H	2.57			2.75		2#12, #12G, 3/4"C	0.18	R	RECEPTACLE: SERVICE COUNTER & BOH	20*	4		
5			H	2.57				2.57				SPACE		6		
7	20*	WATER HEATER 1 (EXISTING)	O	0.18	EXISTING	0.54			2#12, #12G, 3/4"C	0.36	R	EXTERIOR SIGNAGE	20	8		
9	20*	WATER HEATER 2	O	0.18	2#12, #12G, 3/4"C		0.54		2#12, #12G, 3/4"C	0.36	R	RECEPTACLE: RESTROOM	20*	10		
11	20	KEGERATOR _#9	E	0.23	2#12, #12G, 3/4"C			1.13	2#12, #12G, 3/4"C	0.90	R	RECEPTACLE: DINING ROOM	20*	12		
13	20	DUAL TEMP. UNDERCOUNTER UNIT _#24	E	0.29	2#12, #12G, 3/4"C	1.85			2#12, #12G, 3/4"C	1.56	E	JUICER _#8	20/2P	14		
15	20*	ROOF RECEPTACLE	E	0.36	EXISTING		1.92			1.56	E			16		
17	20*	KITCHEN LIGHTING	E	0.48	EXISTING			1.68	2#12, #12G, 3/4"C	1.20	O	TIMER CONTROL (TIMECLOCK)	20*	18		
19		SPACE				0.00						SPACE		20		
21	20*	DINNING/RESTROOM LIGHTING	E	0.40	EXISTING		0.40					SPACE		22		
23	20/2P	JUICER _#8	E	1.56	2#12, #12G, 3/4"C			3.22	2#12, #12G, 3/4"C	1.66	E	CONVEYOR TOASTER _#7	20/2P	24		
25			E	1.56		3.22				1.66	E			26		
27	20	MERCHANDISER _#17	E	0.72	2#12, #12G, 3/4"C		2.55		2#10, #10G, 3/4"C	1.83	E	CHEESEMELTER _#15	30/2P	28		
29	20	GRINDER _#29	E	0.60	2#12, #12G, 3/4"C			2.43		1.83	E			30		
31		SPACE				1.75			2#12, #12G, 3/4"C	1.75	E	ESPRESSO MACHINE _#25	20/2P	32		
33	20	PRINTER	E	0.60	2#12, #12G, 3/4"C		2.35			1.75	E			34		
35	20	RECEPTACLE: AV EQUIPMENTS	R	0.36	2#12, #12G, 3/4"C			0.72	2#12, #12G, 3/4"C	0.36	R	RECEPTACLE: AV EQUIPMENTS	20	36		
37	20	RECEPTACLE: AV EQUIPMENTS	R	0.18	2#12, #12G, 3/4"C	0.18						SPACE		38		
39	20	RECEPTACLE: AV EQUIPMENTS	R	0.18	2#12, #12G, 3/4"C		0.18					SPACE		40		
41		SPACE						0.00				SPACE		42		
TOTAL LOAD (KVA)						10.47	10.69	11.75								
LOAD CLASSIFICATION			CONNECTED LOAD (KVA)			DEMAND FACTOR			DEMAND LOAD (KVA)			PANEL TOTAL LOAD				
TOTAL LIGHTING			L	0.00			125%			0.00						
TOTAL RECEPTACLE			R	3.24			100%			3.24			TOTAL CONNECTED LOAD			
TOTAL HVAC			H	7.71			100%			7.71			TOTAL DEMAND LOAD			
TOTAL MOTOR			M	0.00			100%			0.00			TOTAL CONNECTED CURRENT			
TOTAL KITCHEN/EQUIPMENTS			E	20.40			65%			13.26			TOTAL DEMAND CURRENT			
TOTAL OTHER/MISCELLANEOUS			O	1.56			100%			1.56			SYSTEM VOLTAGE			
													120/208 Wye			

NOTE:

- A. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MANUFACTURER FOR THE EXACT POWER PROVISION AND REQUIREMENTS PRIOR TO COMMENCING ANY WORK. INFORM ENGINEER ON RECORD FOR ANY DISCREPANCIES. BASE BID ACCORDINGLY.
- B. "\*" INDICATES EXISTING BREAKER TO REMAIN. PROVIDE NEW IF FOUND INOPERABLE. INFORM ENGINEER IF ANY DISCREPANCY FOUND. BASE BID ACCORDINGLY.

EQUIPMENT SCHEDULE							
ITEM NO.	DESCRIPTION	QUANTITY	VOLTAGE	PHASE	AMPS	kW	Mounting Height
EQ-1	SINGLE DOOR REACH IN FREEZER	1	115	1	7.1	0.82	@18" AFF
EQ-3	UNDER COUNTER FREEZER	1	115	1	5	0.58	@18" AFF
EQ-4	UNDER COUNTER ICEMAKER	1	115	1	5.1	0.59	@18" AFF
EQ-5	SANDWICH PREP TABLE	2	115	1	2.8	0.32	@18" AFF
EQ-6	BLENDER	3	120	1	15	1.80	@42" AFF
EQ-7	CONVEYOR TOASTER	1	208	1	16	3.33	@42" AFF
EQ-8	JUICER	1	208	1	15	3.12	@72" AFF
EQ-9	KEGERATOR	1	115	1	0.86	0.10	@18" AFF
EQ-10a	JUICE DISPENSER (4 GROUP)	2	120	1	6	0.72	@42" AFF
EQ-10b	JUICE DISPENSER (2 GROUP)	1	120	1	4	0.48	@42" AFF
EQ-15	CHEESEMELTER	1	208	1	17.6	3.66	@42" AFF
EQ-17	MERCHANDISER	1	115	1	6.5	0.75	@18" AFF
EQ-19	COFFEE/TEA BREWER	1	120	1	13	1.56	@42" AFF
EQ-21	COMMERCIAL DISPOSAL	1	120	1	5.8	0.70	@42" AFF
EQ-23	PRINTER	4	115	1	0.285	0.03	@18" AFF
EQ-24	DUAL TEMP. UNDERCOUNTER UNIT	1	115	1	2.5	0.29	@18" AFF
EQ-25	ESPRESSO MACHINE	1	208	1	30	6.24	@42" AFF
EQ-29	GRINDER	1	120	1	3	0.36	@42" AFF
EQ-33	ROUTER CABINET	1	120	1	3	0.36	@96" AFF
EQ-34	FROZEN BEVERAGE MACHINE	1	208	1	6.2	1.29	@18" AFF



PLUMBING SPECIFICATIONS

GENERAL: THE CONTRACTOR SHALL PROVIDE ALL ITEMS, MATERIALS, OPERATIONS OR METHODS LISTED, MENTIONED OR SCHEDULED ON THE DRAWINGS AND/OR SPECIFIED HEREIN, INCLUDING ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY AND REQUIRED FOR THEIR COMPLETION. THE COMPLETE INSTALLATION AS A WHOLE SHALL BE LEFT READY FOR SATISFACTORY OPERATION.

THE CONTRACTOR SHALL LAYOUT HIS OWN WORK AND SHALL ASSUME RESPONSIBILITY FOR ALL LINES, ELEVATIONS, INVERTS AND MEASUREMENTS OF WORK EXECUTED BY HIM. CONTRACTOR SHALL EXERCISE EVERY PRECAUTION TO VERIFY FIGURES SHOWN ON THE DRAWINGS BEFORE LAYING OUT WORK AND SHALL BE RESPONSIBLE FOR ANY ERROR RESULTING FROM FAILURE TO EXERCISE SUCH PRECAUTIONS.

ELECTRICAL FOR PLUMBING WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ELECTRICAL DRAWINGS.

PAINTING OF PLUMBING EQUIPMENT AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE PAINTING SECTIONS OF THE ARCHITECTURAL SPECIFICATIONS. ALL ROOF MOUNTED EQUIPMENT SHALL BE LABELED WITH A STENCIL DESIGNATING THE TENANT SPACE NUMBER AND NAME.

SHOP DRAWINGS: SHALL BE SUBMITTED ON ALL PLUMBING EQUIPMENT ITEMS LISTED BUT NOT LIMITED TO:

PIPING, DRAINS, VALVES, PLUMBING FIXTURES, WATER HEATERS & PUMP, GREASE INTERCEPTOR, BACKFLOW PREVENTERS.

OPERATION AND MAINTENANCE INSTRUCTIONS: SHALL BE PROVIDED IN TWO (2) BOUND COPIES FOR THE FOLLOWING EQUIPMENT:

BACKFLOW PREVENTERS, WATER HEATERS, GREASE INTERCEPTOR, PLUMBING FIXTURES, & EQUIPMENT.

WARRANTY FOR ALL EQUIPMENT FURNISHED UNDER THESE SPECIFICATIONS SHALL BE ONE (1) YEAR FROM DATE OF OCCUPANCY, UNLESS A LONGER PERIOD IS SPECIFIED HEREINAFTER OR LONGER PERIOD IS STANDARD WITH MANUFACTURER.

PIPES AND FITTINGS:

PIPING SHALL BE STORED AND INSTALLED IN SUCH A MANNER THAT DIRT AND RAINWATER CANNOT ENTER THE PIPING. WHERE PIPING IS INDICATED TO BE REMOVED, PATCH OPENINGS IN FLOORS AND WALLS TO MATCH ADJACENT STRUCTURE(S) AND SURFACE(S) TO PROVIDE A STRUCTURALLY SOUND FLUSH SURFACE. FLUSH WASTE AND DOMESTIC WATER PIPING BEFORE TESTING. DISINFECT DOMESTIC WATER PIPE IN ACCORDANCE WITH AWWA C601 OR LOCAL CODES, WHICHEVER IS MORE STRINGENT. CONTRACTOR IS TO CONFIRM ALL EXISTING PIPE SIZES INDICATED ON DRAWINGS. REMOVE ALL ABANDONED PIPING.

UNDERGROUND SANITARY WASTE AND VENT SHALL BE CAST IRON WITH PUSH-ON JOINTS. SCHEDULE 40 DWV PVC WITH SOLVENT JOINTS MAY BE SUBMITTED FOR OWNER APPROVAL AS A DEDUCTIVE ALTERNATE. (DRAINS AND ASSOCIATED PIPING RECEIVING INDIRECT DRAINAGE FROM A PASTA COOKER, STEAMER, TILTING KETTLE, DISHWASHER, GLASS WASHER AND / OR SIMILAR EQUIPMENT SHALL BE CAST IRON).

ABOVE GROUND WASTE AND VENT SHALL BE CAST-IRON HUBLESS WITH NEOPRENE GASKETS AND STAINLESS STEEL CLAMP AND SHIELD ASSEMBLIES. SCHEDULE 40 DWV PVC WITH SOLVENT JOINTS MAY BE SUBMITTED FOR OWNER APPROVAL AS A DEDUCTIVE ALTERNATE. (PVC NOT TO BE USED IN RETURN AIR PLENUM) (DRAINS AND ASSOCIATED PIPING RECEIVING INDIRECT DRAINAGE FROM A PASTA COOKER, STEAMER, TILTING KETTLE, DISHWASHER, GLASS WASHER AND / OR SIMILAR EQUIPMENT SHALL BE CAST IRON).

ABOVE GROUND DOMESTIC WATER SHALL BE COPPER TUBE, HARD-DRAWN TEMPER, TYPE L, WROUGHT COPPER FITTINGS, TIN-ANTIMONY SOLDER.

BELOW GRADE DOMESTIC WATER SHALL BE TYPE "K" COPPER TUBING SOFT/ANNEALED.

CONDENSATE DRAINS - COPPER TUBE, HARD-DRAWN TEMPER.

PIPE INSULATION ALL DOMESTIC HOT, COLD & CIRCULATION WATER PIPING SHALL BE INSULATED AND COMPLY WITH 2021 IECC TABLE C403.12.3.

PIPE HEAT TRACE PROVIDE HEAT TRACE AND INSULATION ON COLD WATER, HOT WATER AND CIRCULATING HOT WATER PIPING, AND SANITARY WASTE TRAPS LOCATED IN UNHEATED AREAS. HEAT TRACE SHALL BE RAYCHEM XL. PROVIDE AT FIVE WATTS PER LINEAR FOOT OF PIPING.

ESCUTCHEONS SHALL BE PROVIDED WHERE PIPING ENTERS WALLS OR PARTITIONS IN EXPOSED AREAS. THEY ARE TO BE CHROME PLATED.

PIPE SUPPORTS SHALL BE SELECTED AND INSTALLED IN ACCORDANCE WITH THE MSS SP-69 OR LOCAL CODES, WHICHEVER IS MORE STRINGENT. UTILIZE TRAPEZE HANGERS FOR PARALLEL RUNS OR PIPING, OTHER THAN WASTE PIPING. COPPER PIPING SYSTEMS SHALL BE SUPPORTED ON COPPER OR COPPER-PLATED SUPPORTS. HANG PIPE FROM SUBSTANTIAL BUILDING STRUCTURE. PIPING SHALL NOT BE HUNG FROM OTHER PIPING. ALL RIGID HANGERS SHALL PROVIDE A MEANS OF VERTICAL ADJUSTMENT AFTER ERECTION. SHIELD SHALL BE PROVIDED BETWEEN HANGERS AND INSULATION.

SUPPORT OF EQUIPMENT, INCLUDING PLUMBING FIXTURES, FROM PARTITIONS SHALL REQUIRE THAT THE PARTITIONS BE REINFORCED BY P-TO-BACK STUDS OR A WOOD STUD WITHIN THE METAL STUD AT EACH SUPPORT POINT. THE REINFORCEMENT SHALL EXTEND FROM THE FLOOR TO THE TOP OF THE PARTITION.

VALVES:

DOMESTIC WATER - SOLDER END, CLASS 125, BRONZE BODY, FULL PORT BRASS BALL 1/4 TURN BALL VALVE. ALL VALVES SHALL REMAIN ACCESSIBLE.

PLUMBING TESTS: THE FOLLOWING PLUMBING SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH THE PLUMBING CODES AND LOCAL JURISDICTION REQUIREMENTS:

DRAINAGE AND VENT, DOMESTIC WATER SUPPLY SYSTEM, BUILDING SEWER, BACKFLOW PREVENTION ASSEMBLIES.

REPORTS OF EACH TEST SHALL BE PROVIDED, INCLUDE THE NAMES OF THE PERSONS PERFORMING THE TEST AND WITNESSING THE TEST, DESCRIBING THE METHOD OF TEST, THE EXTENT OF EACH TEST (IF ACCOMPLISHED IN SECTIONS OF THE SYSTEM), PRESSURES UNDER WHICH THE SYSTEM WAS TESTED, ANY FAILURE IN A TEST, AND THE SUCCESSFUL COMPLETION OF THE TEST.

TEST RESULTS SHALL BE LOGGED-IN WITH COPIES KEPT ON THE JOB SITE AND TURNED OVER TO THE OWNER UPON ACCEPTANCE.

IDENTIFICATION SHALL BE PROVIDED FOR ALL PIPING AND EQUIPMENT. USE STENCILS OR PRESSURE SENSITIVE LABELS TO CLEARLY IDENTIFY MATERIALS WITHIN PIPE AND DIRECTION OF FLOW. PRESSURE SENSITIVE LABELS SHALL ALSO BE FASTENED TO PIPES WITH TAPE AROUND THE PIPE. USE STENCILS TO LABEL EQUIPMENT WITH THE NAME OF THE EQUIPMENT INDICATED ON THE PLANS. LETTER SIZE, COLOR, AND LOCATION SHALL BE SUCH THAT MARKER IS CLEARLY VISIBLE FROM THE FLOOR.

OWNER FURNISHED EQUIPMENT SHALL BE INSTALLED BY OTHERS AND CONNECTED TO PIPING SYSTEMS BY THIS CONTRACTOR FOLLOWING THE RECOMMENDATIONS OF THE EQUIPMENT MANUFACTURER AND LOCAL CODES.

DISINFECTION OF POTABLE WATER SYSTEM: THE NEW POTABLE WATER SYSTEMS SHALL BE PURGED OF DELETERIOUS MATTER AND DISINFECTED PRIOR TO UTILIZATION. THE METHOD TO BE FOLLOWED SHALL BE THAT PRESCRIBED BY THE HEALTH AUTHORITY OR WATER PURVEYOR HAVING JURISDICTION.

BACKFLOW PREVENTERS: REFER TO RISER DIAGRAM FOR LOCATION / TYPE.

FLOOR DRAINS: REFER TO SCHEDULE FOR SPECIFICATION.

FLOOR SINK: REFER TO SCHEDULE FOR SPECIFICATION.

WATER HEATER: REFER TO WATER HEATER SCHEDULE FOR SPECIFICATION.

PLUMBING FIXTURES: REFER TO SCHEDULE FOR SPECIFICATION.

THERMOSTATIC MIXING VALVES: REFER TO SCHEDULE FOR LOCATION / TYPE.

CLEANOUTS FOR SANITARY WASTES:

FLOOR - CAST-IRON BODY AND FRAME. CLEANOUT PLUG, NICKEL-BRONZE TOP OF EXPOSED FLUSH TYPE PATTERN AND STANDARD NON-SLIP SCORED OR ABRASIVE FINISH.

WALL - CAST-IRON BODY ADAPTABLE TO PIPE WITH CAST-BRONZE OR BRASS CLEANOUT PLUG. STAINLESS STEEL COVER INCLUDING SCREWS.

PLUMBING GENERAL NOTES:

- THE PLUMBING CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND ACCESSORIES REQUIRED FOR PROVIDING, INSTALLING, CONNECTING AND TESTING ALL PLUMBING SYSTEMS AND ASSOCIATED EQUIPMENT FOR A COMPLETED PROJECT READY FOR OCCUPANCY. WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL JURISDICTIONAL CODES, RULES, REGULATIONS AND ORDINANCES.
- NO WORK SHALL BE EXECUTED FROM DIMENSIONS OBTAINED BY SCALING OF DRAWINGS. THE DRAWINGS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS OF THE BUILDING AND EXACT LOCATIONS OF PLUMBING FIXTURES AND EQUIPMENT. THE CONTRACTOR SHALL VISIT THE SITE AND CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS TO DETERMINE THE COMPLETE SCOPE OF WORK AND BE INFORMED OF EXISTING CONDITIONS PRIOR TO START OF WORK. THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES TO AVOID CONFLICTS PRIOR TO INSTALLATION OF ANY WORK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER WHERE DISCREPANCIES OCCUR, SO ITEMS MAY BE RESOLVED.
- CONTRACTOR SHALL LOCATE ALL EQUIPMENT WHICH MUST BE SERVICED AND OPERATED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO VALVES, CLEANOUTS, MOTORS, CONTROLLERS, DRAIN POINTS, ETC. THE CONTRACTOR SHALL PROVIDE ACCESS PANELS WHERE REQUIRED FOR ACCESS TO VALVES, MIXING VALVES, CLEANOUTS, ETC. ACCESS PANELS SHALL BE INSTALLED BY THE APPROPRIATE SUBCONTRACTOR. REFER TO ARCHITECTURAL SPECIFICATIONS FOR SPECIFIC ACCESS PANEL TYPES.
- ALL WASTE PIPE SLOPES AND INVERT ELEVATIONS SHALL BE CHECKED PRIOR TO ANY PIPING BEING INSTALLED IN ORDER THAT THE PROPER SLOPES WILL BE MAINTAINED. MAKE PROPER WASTE, VENT, HOT AND COLD WATER CONNECTIONS TO ALL FIXTURES AND EQUIPMENT, EVEN THOUGH ALL BRANCH MAINS, ELBOWS AND CONNECTIONS ARE NOT SHOWN. ALL WATER PIPING SHALL BE INSULATED AND SHALL BE INSTALLED ON THE INSIDE OF THE BUILDING INSULATION ENVELOPE. ALL PLUMBING WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER AND PER CURRENT SUGGESTED TRADE PRACTICES. TESTING AND FLUSHING OF PIPING SYSTEMS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF THE LANDLORD'S MEMBRANE ON THE FLOOR. ALL DISRUPTIONS TO LANDLORD'S WATERPROOF MEMBRANE MUST BE INSPECTED BY THE LANDLORD BEFORE THE FLOORING IS INSTALLED OR AREA OF DISRUPTION IS OTHERWISE CONCEALED.

KITCHEN AND FOOD SERVICE EQUIPMENT GENERAL NOTES:

CONTRACTOR SHALL CONNECT ALL KITCHEN AND FOOD SERVICE EQUIPMENT COMPLETE, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

- ALLOW FOR, FURNISH AND INSTALL ALL REQUIRED TRAPS.
- STOPS SHALL BE FURNISHED AND INSTALLED ON ALL HOT AND COLD WATER LINES AT EQUIPMENT IN AN ACCESSIBLE POSITION.
- FOOD SERVICE EQUIPMENT CONTRACTOR SHALL FURNISH EQUIPMENT COMPLETE WITH FAUCETS AND SIMILAR FITTINGS. PLUMBING CONTRACTOR SHALL FURNISH TRAPS, SHOCK ABSORBERS AND SHUTOFF VALVES AND MAKE FINAL CONNECTIONS.
- GENERAL WATER PRESSURE SERVING FOOD SERVICE EQUIPMENT SHALL NOT EXCEED 50 PSI. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL REDUCING VALVES AS REQUIRED.
- EXPOSED PIPES TO ALL KITCHEN EQUIPMENT WITHIN SIGHT OF SEATING AREAS SHALL BE CHROME-PLATED OR STAINLESS STEEL.
- P-TRAPS SHALL BE ADJUSTABLE CAST BRASS, COMPLETE WITH CLEANOUT.
- ALL FLOOR OPENINGS FOR PIPING ARE TO BE SEALED WATERTIGHT BY MEANS OF SLEEVES.
- FOOD SERVICE EQUIPMENT CONTRACTOR SHALL PROVIDE ALL EQUIPMENT TRIM, INCLUDING FAUCETS AND SINK WASTES AND SWING FAUCETS AT FURNISHED EQUIPMENT, AND SHALL BE INSTALLED BY THE PLUMBING CONTRACTOR.
- ALL HORIZONTAL PIPING LINES EXTENDING AND CONNECTED TO EQUIPMENT SHALL BE RUN AT THE HIGHEST POSSIBLE ELEVATION AND NOT LESS THAN 6" ABOVE FLOOR TO PROVIDE CLEARANCE FOR CLEANING. AT WALL COLUMN OR WALL LOCATIONS, PIPING ROUGH-IN SHALL BE STUBBED IN WALLS WHEREVER POSSIBLE.
- PLUMBING CONTRACTOR SHALL COORDINATE WITH KITCHEN EQUIPMENT CONTRACTOR FOR EXACT LOCATIONS OF FLOOR DRAINS AND STUBOUTS FOR KITCHEN EQUIPMENT FROM ROUGH-IN. ROUGH-IN SHALL TERMINATE WITH SERVICE VALVE WHERE APPLICABLE.
- DRAINS FROM THE 3 COMPARTMENT SINK, PREP SINKS, ICE MAKER/BIN (IF NEEDED), SODA DISPENSERS, SOUP STATION/FOOD WARMERS MAY NOT DISCHARGE IN A MANNER THAT WILL PERMIT THE FLOODING OF FLOORS. DRAIN TAILPIECES WILL BE REQUIRED TO BE REDUCED IN SIZE AS NECESSITATED TO ALLOW DRAINAGE WITHOUT FLOODING. ANY FLOODING DURING THE PRE-OPENING INSPECTION WOULD REQUIRE CORRECTION BEFORE LICENSING. CONTRACTOR TO CONFIRM PROPER INSTALLATION.
- EXISTING AND / OR NEW EXPOSED SOIL OR WASTE PIPING INSTALLED ABOVE ANY WORKING, STORAGE OR EATING SURFACES SHALL BE PROVIDED WITH NECESSARY PROTECTION TO MAINTAIN HEALTH, SAFETY AND SANITATION OF FOOD SERVICE AREAS. PROVIDE SECONDARY CONTAINMENT, DRIP PANS AND / OR CEILING TO COMPLY WITH CODE REQUIREMENTS.

SCOPE OF WORK

PROVIDE ALL PLUMBING FOR NEW FOOD SHOP WITHIN AN EXISTING BUILDING SHELL, INCLUDING ALL WATER, GREASE SANITARY & SANITARY LINES AND CONNECT TO EXISTING UTILITIES. PROVIDE NEW GAS TANKLESS TYPE WATER HEATER.

COORDINATE WITH GC AND MECHANICAL CONTRACTOR FOR ANY REQUIRED CONDENSATE LINES.

PLUMBING LEGENDS

	SAN	SANITARY SEWER PIPING
	EX.SAN	EXISTING SANITARY SEWER PIPING
	GSAN	GREASE SANITARY SEWER PIPING
	EX.GSAN	EXISTING GREASE SANITARY SEWER PIPING
	V	VENT PIPING
	CW	DOMESTIC COLD WATER PIPING
	EX.CW	EXISTING COLD WATER PIPING
	HW	HOT WATER PIPING
	HWR	HOT WATER RETURN PIPING
		PIPE RISE
		PIPE DROP
	S.O.V.	SHUT - OFF VALVE
	CW	DOMESTIC COLD WATER
	HW	DOMESTIC HOT WATER
	HWR	DOMESTIC HOT WATER RETURN
	WCO	WALL CLEAN OUT
	I.W.	INDIRECT WASTE
		CAPPED END OF PIPE
	FCO	FLOOR CLEAN OUT
		P-TRAP
		GATE VALVE
		WATER HAMMER ARRESTER
	FD	FLOOR DRAIN
		SECONDARY BACKFLOW PREVENTER
		BALANCING VALVE
		FLOOR SINK
		POINT OF CONNECTION
		THERMOSTATIC MIXING VALVE

ENERGY CONSERVATION NOTES

- AS PER 2021 INTERNATIONAL ENERGY CONSERVATION CODE C404.4, PIPING FROM A WATER HEATER TO THE TERMINATION OF HEATED WATER FIXTURE SUPPLY PIPE SHALL BE INSULATED IN ACCORDANCE WITH TABLE C403.12.3 OF MINIMUM PIPE INSULATION THICKNESS.

MINIMUM PIPE INSULATION THICKNESS (IN INCHES)					
FLUID OPERATING TEMPERATURE RANGE AND USAGE (°F)	INSULATION CONDUCTIVITY		NOMINAL PIPE OR TUBE SIZE (INCHES)		
	CONDUCTIVITY BTU x IN./ (H x FT² x °F)	MEAN RATING TEMPERATURE, °F	≤1	1 to < 1½	1½ to < 4
141-200	0.25-0.29	125	1.5	1.5	2.0
105-140	0.21-0.28	100	1.0	1.0	1.5
40-60	0.21-0.27	75	0.5	0.5	1.0

- HOT WATER SYSTEM PIPING IS DESIGNED AS PER MAXIMUM ALLOWED PIPE LENGTH METHOD AS PER 2021 INTERNATIONAL ENERGY CONSERVATION CODE C404.5.1. THE HOT WATER VOLUME FROM THE NEAREST SOURCE OF HEATED WATER TO THE TERMINATION OF THE FIXTURE SUPPLY PIPE SHALL BE AS PER MAXIMUM PIPING LENGTH TABLE.

NOMINAL PIPE SIZE (INCHES)	MAXIMUM PIPING LENGTH (FEET)	
	PUBLIC LAV	OTHER FIXTURES
¾"	3'	50'
½"	2'	43'
¾"	0.5'	21'
1"	0.5'	13'
1½"	0.5'	8'
1½"	0.5'	6'
2" OR LARGER	0.5'	4'

- AS PER 2021 INTERNATIONAL ENERGY CONSERVATION CODE C404.6.1, AUTOMATIC CONTROLS SHALL BE INSTALLED THAT LIMITS THE OPERATION OF A RECIRCULATING PUMP AND THE SYSTEM RETURN PIPE SHALL BE A DEDICATED RETURN PIPE OR A COLD WATER SUPPLY PIPE.
- AS PER 2021 INTERNATIONAL ENERGY CONSERVATION CODE C404.7, PUMPS SHALL HAVE CONTROLS THAT COMPLY WITH BOTH OF THE FOLLOWING:

A. THE CONTROL SHALL START THE PUMP UPON RECEIVING A SIGNAL FROM THE ACTION OF A USER OF A FIXTURE OR APPLIANCE, SENSING THE PRESENCE OF A USER OF A FIXTURE OR SENSING THE FLOW OF HOT OR TEMPERED WATER TO A FIXTURE FITTING OR APPLIANCE.

B. THE CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER ENTERING THE COLD-WATER PIPING TO 104°F (40°C).

FIXTURE BRANCH SCHEDULES

FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
WATER CLOSET (FLUSH TANK)	¾"	--	4"	2"
LAVATORY	1/2"	1/2"	2"	1 1/2"
MOP SINK	1/2"	1/2"	3"	2"
FLOOR DRAIN / SINK	--	--	3"	2"
HAND SINK	1/2"	1/2"	2"	2"
PREP SINK	1/2"	1/2"	2"	2"
3-COMP SINK	¾"	¾"	(3/2)"	2"

RESTROOM FIXTURE SCHEDULE

Item No.	Qty.	Description	Manufacturer	Model	WATER		WASTE		Spec
					Hot	Cold	Waste	Usage	
A	2	LAVATORY	KOHLER	SOHO K-2084			2"		
	2	TRAP COVER	PROFLO	PF202WH					
B	2	WATER CLOSET	KOHLER	KINGSTON K-25077		¾"	4"	1.28	GPF
	2	WATER CLOSET SEAT	PROFLO	PFTSCOF2000WH					
J	2	LAVATORY FAUCET	DELTA	567LF-HGM-PP	1/2"	1/2"		1.2	GPF
	5	THERMOSTATIC MIXING VALVE	WATTS	LFMMV	1/2"	1/2"			

KITCHEN EQUIPMENT PLUMBING SCHEDULE

Item No.	Qty.	Description	Manufacturer	Model	WATER		WASTE	
					Hot	Cold	Direct	Indirect
4	1	UNDER COUNTER ICE MAKER	AVANTCO	194UCH160A		1/2"		¾"
12	1	HAND SINK W / SPLASH	BK RESOURCES	BKHS-W-1410-SS-P-G	1/2"	1/2"	1-1/2"	
13	2	HAND SINK - DROP IN	ADVANCE TABCO	DI-1-SSP-EC	1/2"	1/2"		1-1/2"
14	1	3 COMPARTMENT SINK	GSW USA	SH18243D				2"(3)
14a	3	SINK FAUCET	BK RESOURCES	BKF-VSMRP-WB-AF12-G	1/2"	1/2"		
19	1	COFFEE / TEA BREWER	FETCO	CBS-2131XTS		1/2"		¾"
221	1	MOP SINK	ADVANCE TABCO	9-OP-20-EC-X				
22/22a	1	MOP SINK & FAUCET	T&S BRASS AND BRONZE WORKS	B-0665-BSTR	¾"	¾"	3"	
25	1	ESPRESSO MACHINE	EVERSYS	CAMEO		1/2"		1"
28	1	PREP SINK	GSW USA	SEE18181L				1-1/2"
30	1	DROP IN ICE BIN WITH WATER	BK RESOURCES	BK-DIWSBL-2118X-P-G	1/4"			1"
31	1	PITCHER RINSER	ESPRESSO PARTS	EPPT7 15	¾"			1/2"
38	1	WATER FILTRATION SYSTEM	PENTAIR EVERPURE	HIGH FLOW CSR TWIN 7FC		¾"		
TMV	3	THERMAL MIXING VALVE	WATTS	LFMMV	1/2"	1/2"		
FS	4	FLOOR SINKS	ZURN	Z1900-23-31 (ZS1900 IF IN EXPOSED AREAS)			3"	
FD	3	FLOOR DRAINS	ZURN	KITCHEN: ZN-415N-8B; RESTROOM: ZN-415N-6B-P			¾"	
+ HOT WATER 140°F, *PROVIDE TMV AS PER SCHEDULE								

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PROJECT

TOASTIQUE

REVISIONS DATES:

PROFESSIONAL SEAL

ISSUE DATE: 06.21.24  
PROJECT #: 400J.1386P  
DRAWN BY: NYE  
CHECKED BY: NYE

PLUMBING  
LEGENDS &  
SPECIFICATIONS



# SANITARY PLAN & RISER KEY NOTE

- EXTEND AND CONNECT NEW 4" SANITARY WASTE PIPING TO EXISTING SANITARY MAIN LINE IN THE RESTROOM AREA. CONTRACTOR TO FIELD VERIFY EXACT SIZE, LOCATION, ROUTING, FLOW DIRECTION AND INVERT OF EXISTING SANITARY MAIN AND MAKE NECESSARY CHANGES IF REQUIRED. DO NOT CONNECT TO GREASE WASTE LINE.
- EXTEND & CONNECT NEW 3" VENT LINE TO EXISTING VENT LINE OF ADEQUATE SIZE IN SPACE. CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION & SIZE OF EXISTING VENT LINE AND UPGRADE IF REQUIRED.
- EXISTING RESTROOM PLUMBING FIXTURE TO BE REPLACE IN KIND WITH NEW FIXTURE AT SAME LOCATION. RECONNECT EXISTING SANITARY PIPING FROM NEW PLUMBING FIXTURE TO UNDERGROUND SANITARY PIPING. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND UPGRADE IF REQUIRED.
- EXISTING PLUMBING FIXTURE TO BE REPLACE IN KIND WITH NEW FIXTURE AT SAME LOCATION. RECONNECT EXISTING SANITARY PIPING FROM NEW PLUMBING FIXTURE TO UNDERGROUND SANITARY PIPING. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND UPGRADE IF REQUIRED.
- CONTRACTOR TO VERIFY WHETHER EXISTING PLUMBING FIXTURE DRAINS TO GREASE LINE. IF NOT, CAP-OFF EXISTING SANITARY LINE AND PROVIDE NEW GREASE LINE TO THE EXISTING FIXTURE.
- ROUTE INDIRECT WASTE FROM BOTH EXISTING WATER HEATER (WH-E) & NEW WATER HEATER (WH-1) TO FLOOR SINK UNDER PREP SINK.
- ROUTE INDIRECT WASTE FROM RPZ BACKFLOW PREVENTER TO FLOOR DRAIN. COORDINATE LOCATION & PLACE FLOOR DRAIN DIRECTLY UNDERNEATH RPZ.

## GENERAL NOTES

- SLOPE OF DRAINAGE PIPING SHALL BE 1/8" PER FOOT OF RUN FOR PIPE 3" TO 6" AND 1/4" PER FOOT OF RUN FOR PIPE 2-1/2" AND SMALLER. VENT PIPING SHALL BE PITCHED TO DRAIN.
- CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT.
- ALL MATERIAL INDICATED AND IMPLIED ON THESE DRAWINGS SHALL BE NEW UNLESS OTHERWISE NOTED.
- ALL CLEANOUTS TO BE ACCESSIBLE.
- PROVIDE AIR GAP PER CODE REQUIREMENTS FOR ALL INDIRECT WASTE DRAINAGE.
- PROVIDE RECTOR SEAL 'SURE SEAL' ON EACH FLOOR DRAIN NOT RECEIVING INDIRECT DRAINAGE.
- EXISTING GREASE SANITARY LINE IS CONNECTED TO EXISTING GREASE INTERCEPTORS. VERIFY THAT IT IS NOT BEING USED BY OTHER TENANTS.

SANITARY RISER

SCALE  
N.T.S.

2

SANITARY PLAN

SCALE  
1/4" = 1'-0"

1



MANUFACTURER	NAVLEN
MODEL	NPE-240S
EQUIPMENT TAG	WH-E
STATUS	EXISTING
QUANTITY	1
CAPACITY	TANKLESS
FUEL	NATURAL GAS
BTU/HR	199,000
TOTAL FLOW RATE	5.1 GPM*
UNIFORM ENERGY FACTOR	0.93
AIR INTAKE / EXHAUST VENT	2"Ø / 2"Ø
VOLTAGE	120V/160
AMPERAGE	4
WEIGHT (EMPTY)	75 LBS.

MANUFACTURER	NAVIENT
MODEL	NPE-240S
EQUIPMENT TAG	WH-1
STATUS	NEW
QUANTITY	1
CAPACITY	TANKLESS
FUEL	NATURAL GAS
BTU/HR	199,000
TOTAL FLOW RATE	5.1 GPM*
UNIFORM ENERGY FACTOR	0.93
AIR INTAKE / EXHAUSTVENT	2"Ø / 2"Ø
VOLTAGE	120V/160
AMPERAGE	4
WEIGHT (EMPTY)	75 LBS.

1. \*77°F TEMPERATURE RISE.
2. INSTALL NEW EXPANSION TANK (ET-1) AMTROL MODEL THERM-X-TROL ST-5C-DD, 2 GAL PER LOCAL CODE REQUIREMENTS.
3. INBUILT RECIRCULATION PUMP WITH THE HEATER.

EQUIVALENT LENGTH OF PIPE =  
102 + FITTINGS (+40%) = 142.00 FEET

PROVIDE A COMPLETE GAS PIPING SYSTEM TO SERVE GAS EQUIPMENT FURNISHED BY OTHERS, AS NOTED ON THE DRAWINGS. PROVIDE EITHER THREADED STEEL OR MALLEABLE IRON PIPE WITH MALLEABLE FITTINGS OR WELDED STEEL. PROVIDE ALL UNIONS, SHUT-OFF VALVES AND DIRT LEGS REQUIRED BY NFPA-54 AND GOVERNING LOCAL CODES AND AT EACH GAS APPLIANCE CONNECTION. PROVIDE ALL TESTS, METERS, INSPECTIONS, HANGERS AND EQUIPMENT CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.

1. GAS PIPING TO BE SCHEDULE 40 STEEL PIPE W/125 CAST IRON SCREWED FITTINGS.
2. GAS SYSTEM TO BE INSTALLED BY QUALIFIED LICENSED CONTRACTOR.
3. VERIFY ALL EQUIPMENT BTU'S PRIOR TO INSTALLATION. ADJUST PIPE SIZE ACCORDING TABLE 402.4(2) 2021 INTERNATIONAL FUEL GAS CODE.

## 3

RPZ: WATTS SERIES LF009 (ASSE 1013)  
BFP-1: WATTS SD-3 (ASSE 1022)

2 LAVATORY @ 2 (EX)	=	4
2 WATER CLOSET (TANK) @ 5 (EX) @	=	10
1 HAND SINK @ 0.7	=	0.7
1 HAND SINK @ 0.7	=	0.7
2 DROP-IN SINK @ 0.7	=	1.4
13-COMP SINK @ 4	=	4
1 PREP SINK @ 1.4	=	1.4
1 MOP SINK @ 3	=	3
4 **MISC @ 0.25	=	1
TOTAL	=	25.5

\* TABLE E103.3(2) OF 2021 INTERNATIONAL PLUMBING CODE

\*\* ICE MAKER, COFFEE/TEA BREWER, ESPRESSO MACHINE, ICE BIN

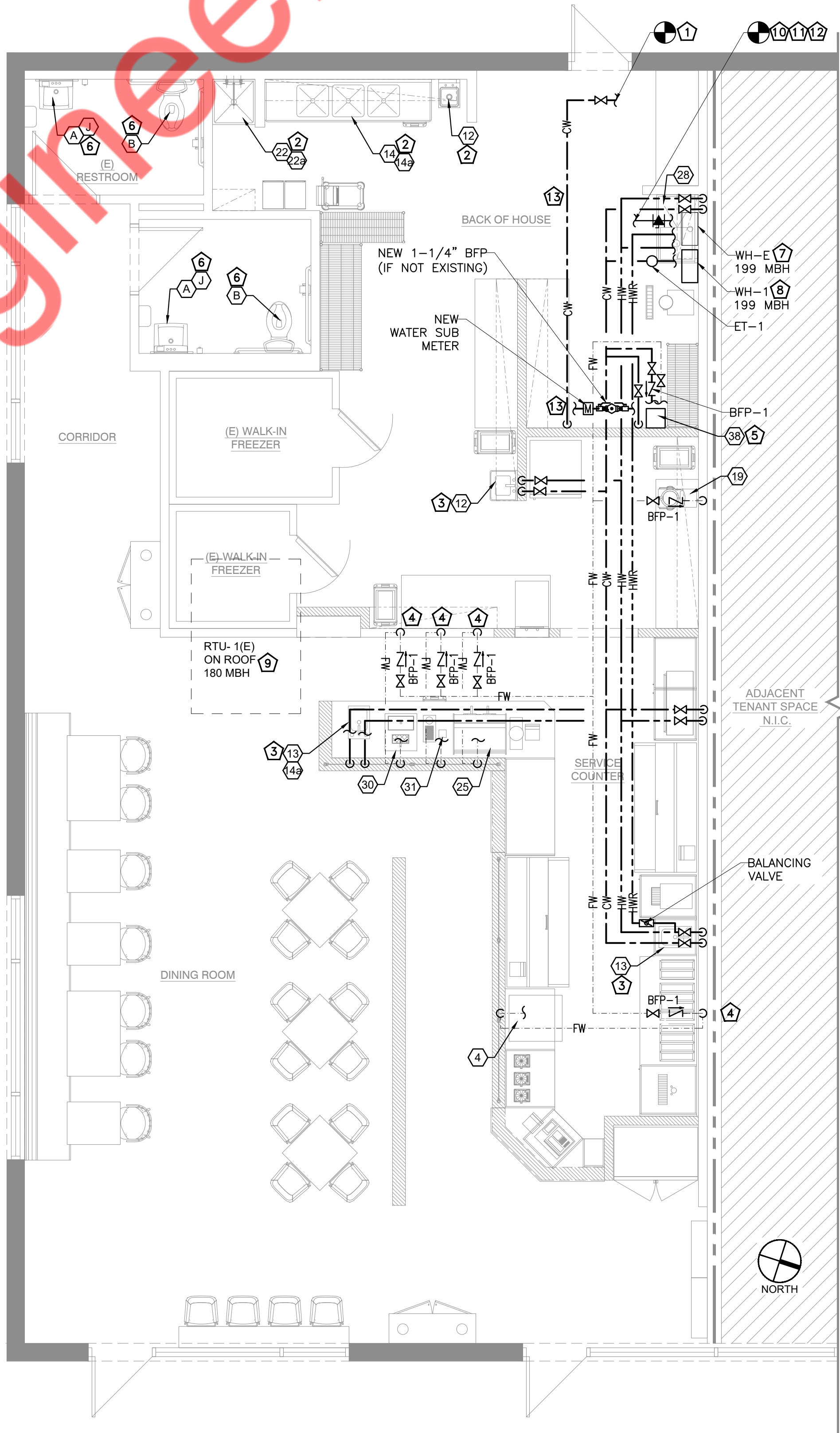
1-1/4" WATER METER AND 1-1/4" WATER SERVICE SIZE REQUIRED.

- 1 CONNECT NEW 1-1/4" COLD WATER LINE TO EXISTING WATER MAIN LINE. VERIFY EXACT LOCATION, SIZE, CONNECTION POINT IN FIELD AND CONNECT ACCORDINGLY. PROVIDE NEW WATER METER, EXISTING NEW BPF. IF NO EXISTING, PROVIDE CLEARANCE OF 30" FRONT, 8" BACK & BOTTOM (MINIMUM) FOR MAINTENANCE. PROVIDE LADDER TO MOUNTING HEIGHT EXCEEDS 6'. IF EXISTING PIPING IS NOT LARGE ENOUGH CONTRACTOR TO UPGRADE WATER SERVICE AS REQUIRED TO ACCOMMODATE NEW LOAD.
- 2 EXISTING PLUMBING FIXTURE TO BE REPLACE IN KIND WITH NEW FIXTURE AT SAME LOCATION. RECONNECT THE EXISTING CWH/W PIPING TO NEW CWH/W PIPING. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND UPGRADE IF REQUIRED.
- 3 PROVIDE ALL HAND SINKS WITH THERMOSTATIC MIXING VALVES. LIMIT HOT WATER TEMPERATURE TO 110 DEGS F.
- 4 FILTER WATER PIPE TO DROP DOWN IN WALL TO SLAB, THEN IN FLOOR SLAB & RISE UP JUST BEHIND KITCHEN EQUIPMENT.
- 5 PROVIDE WATER FILTRATION SYSTEM, PROVIDE CLEARANCE OF 30" FRONT, 8" BACK & 12" TOP & 6" BOTTOM (MINIMUM) FOR MAINTENANCE. PROVIDE LADDER FOR MAINTENANCE.
- 6 EXISTING RESTROOM PLUMBING FIXTURE TO BE REPLACE IN KIND WITH NEW FIXTURE AT SAME LOCATION. RECONNECT THE EXISTING CWH/W PIPING TO NEW CWH/W PIPING. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND UPGRADE IF REQUIRED.
- 7 EXISTING WATER HEATER (WH-E), ALONG WITH EXISTING ACCESSORIES TO REMAIN. REFER SHEET P-4 FOR INSTALLATION DETAILS. ROUTE PIPING ACCORDINGLY.
- 8 PROVIDE NEW WATER HEATER (WH-1) ADJACENT TO THE EXISTING WATER HEATER. CONNECT HEATER TO HOT WATER NETWORK. REFER SHEET P-4 FOR INSTALLATION DETAILS. ROUTE PIPING ACCORDINGLY.
- 9 EXISTING RTU UNIT WITH EXISTING GAS CONNECTION TO REMAIN. CONTRACTOR TO FIELD VERIFY EXISTING GAS NETWORK, VERIFY THAT GAS NETWORK DOES NOT HAVE LEAKS & IS IN OPERABLE CONDITION.
- 10 CONNECT NEW 1-1/4" GAS LINE TO EXISTING GAS LINE IN SPACE. CONTRACTOR TO FIELD VERIFY SIZE, PRESSURE AND LOCATION OF GAS LINE AND UPGRADE IF REQUIRED.
- 11 CONTRACTOR TO FIELD VERIFY EXISTING AVAILABLE PRESSURE AND MAKE SURE TO PROVIDE ADEQUATE INLET PRESSURE REQUIRED FOR ALL MECHANICAL EQUIPMENTS AND GAS FIRED WATER HEATERS. PROVIDE PRESSURE REGULATOR IF REQUIRED.
- 12 MINIMUM GAS METER CAPACITY 578 MBH REQUIRED AND GAS LINE WITH ASSOCIATED ACCESSORIES TO BE PROVIDED BY LANDLORD. CONTRACTOR TO COORDINATE WITH LANDLORD FOR THE REQUIRED CAPACITY OF GAS METER AND GAS PRESSURE.
- 13 NO TAP OFF TO BE TAKEN BEFORE THE WATER METER AND RPZ.

1. CWWH/HWR PIPING TO BE PROVIDED WITH INSULATION AS PER 2021 INTERNATIONAL ENERGY CONSERVATION CODE (REFER NOTES ON SHEET P-1).
2. PROVIDE BRANCH PRV IF PRESSURE EXCEEDS 80 PSI.
3. PROVIDE ACCESS PANELS FOR WATER HAMMER ARRESTOR & SHUT-OFF VALVES AS REQUIRED.
4. EXISTING & NEW WATER HEATER DRAIN SPILLS TO FLOOR SINK.
5. NO GAS EQUIPMENT REMOVED FROM PROJECT. CONTRACTOR TO CHECK CONDITION OF EXISTING GAS NETWORK AND BASE BID ACCORDINGLY.

## 2

## 1



P-3

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