

SCOPE OF WORK
REUSE ONE EXISTING 7.5 TONS GAS HEAT ROOF TOP UNIT AND REUSE THE EXISTING DUCTWORK, DIFFUSERS/GRILLES AS MUCH AS POSSIBLE. PROVIDE NEW DUCTWORK AND NECESSARY ACCESSORIES FOR COMPLETE HVAC SYSTEM.
REUSE THE EXISTING EXHAUST FAN FOR THE EXISTING RESTROOM ALONG WITH DUCTWORK, ACCESSORIES, CONTROLS AND TERMINATION.
COORDINATE WITH GC ANY ADDITIONAL REFRIGERATION WORK REQUIRED AND WITH GC AND PLUMBING CONTRACTOR PROVIDING CONDENSATE LINES FOR MECHANICAL EQUIPMENT.

MECHANICAL PLAN NOTES
A. REUSE ONE EXISTING 7.5 TONS GAS HEAT ROOF TOP UNIT AND REUSE THE EXISTING DUCTWORK, DIFFUSERS/GRILLES AS MUCH AS POSSIBLE. PROVIDE 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. EXISTING DUCTWORK MAY BE REUSED WHERE POSSIBLE. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL REQUIREMENTS.
B. FOR SYSTEM OVER 2,000 CFM CHECK FOR DUCT MOUNTED AIR SMOKE DETECTORS AND THAT 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. 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 AN ELBOW AT A TERMINAL DEVICES.
D. ALL DUCTS WILL. MINIMUM 26 GAUGE SHEET METAL 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. NO DUCT BOARD ALLOWED.
E. THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE TYPE. MOUNT THERMOSTAT 48" A.F.F. COORDINATE FINAL LOCATION WITH OWNER.
F. ALL INTERIOR AIR DUCTS WITH INSULATION SHALL HAVE A MINIMUM R-6 INSULATION AND EXTERIOR DUCTS SHALL HAVE R-6 INSULATION AS PER 2018 INTERNATIONAL ENERGY CONSERVATION CODE. 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.
G. ALL EVAPORATOR UNITS SHALL HAVE A FLOAT SWITCH TO CONTROL OVERFLOW THAT WILL AUTOMATICALLY SHUT DOWN THE A/C SYSTEM.
H. ALL CONDENSATE DRAINS WILL BE PVC FULL DIAMETER OF OUTLET AND SHALL TERMINATE IN THE NEAREST APPROVED PLACE OF DISPOSAL.
I. ALL EQUIPMENT AND MATERIALS WILL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND ACCORDING TO THE BEST PRACTICE.
J. TESTING AND BALANCING SHALL BE DONE IN ACCORDANCE INTERNATIONAL ENERGY CONSERVATION CODE 2018, SECTION 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.
K. 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.
L. ALL HVAC CONTROLS AND CONTROL WIRING SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.
M. CONTRACTOR TO FIELD VERIFY THAT THE LOCATION OF ANY EXHAUST SOURCE FROM ADJACENT TENANTS SHOULD BE AT LEAST 10' HORIZONTALLY OR 3 FEET VERTICALLY FROM OUTSIDE AIR INTAKE OPENING.
N. PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS/SLABS/ROOFS. COORDINATE WITH ARCHITECTURAL DRAWING FOR FIRE RATING OF THE WALLS/ROOFS. IF NOT FIRE RATED, FIRE DAMPERS ARE NOT REQUIRED

MECHANICAL 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 RISES 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 AND READY FOR PAINTING. ALL RECTANGULAR DUCTS OVER CEILINGS MAY BE SHEET METAL WITH EXTERNAL INSULATION. ALL SG SUPPLY GRILLS WILL BE DOUBLE DEFLECTION WITH VOLUME CONTROLS.
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 DRAWINGS FOR KITCHEN VENTILATION SYSTEM INCLUDING TYPE I 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.

PAPILLION, NE BUILDING DEP. NOTES
ALL WORK SHALL COMPLY WITH APPLICABLE SECTIONS OF 2018 INTERNATIONAL BUILDING CODE AND ALL AMENDMENTS AND RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS TO DATE.
1. THE CONTRACTOR SHALL ENGAGE THE THE SERVICES OF A PROFESSIONAL ENGINEER TO PROVIDE THE REQUIRED SPECIAL INSPECTIONS AND TESTS.
2. 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.
3. TESTS OF MECHANICAL SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF THE 2018 INTERNATIONAL MECHANICAL CODE: A. VENTILATION SYSTEM BALANCING - IMC 2018 SECTION 403.3.1.5
4. THE FOLLOWING WORK ITEMS, COMPONENTS, MATERIALS, CAPACITIES, ETC. SHALL COMPLY WITH THE REFERENCED CODE OR STANDARD: A. STANDARDS OF HEATING - IMC 2018 SECTION 309.1 B. MANUAL AND AUTOMATIC FIRE AND SMOKE CONTROLS FOR AIR DISTRIBUTION SYSTEMS - IMC 2018 - 606 C. DUCT CONSTRUCTION AND INSTALLATION- IMC 2018 SECTION 603 D. AIR INTAKES, EXHAUSTS AND RELIEFS - IMC 2018 SECTION 401.5 E. AIR FILTERS - IMC 2018 - 605 F. GAS FIRED EQUIPMENT - INTERNATIONAL FUEL GAS CODE 2018
5. MINIMUM TEMPERATURE TO BE MAINTAINED IN OCCUPIED SPACES DURING HEATING SEASON: 68 DEG. FAHRENHEIT.
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 IMC 2018 SECTION 401.3.
7. 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.
8. ALL HEATING AND COOLING LOADS CALCULATED PER ASHRAE/ACCA 183.
9. VENTILATION SYSTEMS SHALL BE BALANCED TO MAINTAIN THE MINIMUM VENTILATION AIRFLOW RATE AS SHOWN IN VENTILATION REQUIREMENT TABLE. THIS SYSTEM SHALL BE BALANCED BY APPROVED METHOD - 2018 INTERNATIONAL MECHANICAL CODE. CONTRACTOR TO SUBMIT THE AIR - BALANCE REPORT TO INSPECTOR OF RESPECTIVE BUILDING DEPARTMENT PRIOR TO FINAL INSPECTION.
10. SMOKE DETECTOR SHALL MEET UL268A.

ROOF TOP UNIT SCHEDULE	
TAG	RTU-1(E)
UNIT	GAS HEAT
MANUFACTURER	S.A.E
MODEL	S.A.E
STATUS	EXISTING
MOUNTING	ROOF
NOMINAL CAPACITY	7.5 TONS (V.I.F)
TOTAL COOLING MBH	S.A.E
SENSIBLE COOLING MBH	S.A.E
SEER/EER	S.A.E
TOTAL HEATING MBH (INPUT)	180.0 (V.I.F)
TOTAL HEATING MBH (OUTPUT)	148.0 (V.I.F)
THERMAL EFF (%)	S.A.E
SUPPLY AIR (CFM)	3000 (V.I.F)
OUTDOOR AIR (CFM)	480
E.S.P (IN W.G)	S.A.E
VOLTAGE	460/3/60 (V.I.F)
MCA (A)	18.7 (V.I.F)
MOCP (A)	30.0 (V.I.F)
WEIGHT (LBS)	S.A.E
NOTES FOR EXISTING RTU: 1. EXISTING RTU WITH ITS ALL ACCESSORIES TO REMAIN SAME AND TO BE REUSED. 2. CONTRACTOR TO BALANCE OUTSIDE AIR & RETURN AIR DAMPERS ON EXISTING RTU TO MATCH VALUES MENTIONED IN ABOVE TABLE. 3. S.A.E - SAME AS EXISTING - V.I.F - VERIFY IN FIELD. 4. CONTRACTOR TO FIELD VERIFY IF RTU IS WORKING AT 100% RATED CAPACITIES/LOADS. INFORM TO DESIGN ENGINEER IF ANY DISCREPANCIES ARE FOUND IN PERFORMANCE PRIOR TO CONSTRUCTION. 5. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND CONFIGURATION OF UNIT ON SITE. 6. IF REQUIRED, PROVIDE NEW THERMOSTAT AND TEMPERATURE SENSORS COMPATIBLE WITH EXISTING RTU. COORDINATE FINAL LOCATIONS OF T-STAT AND T-SENSORS WITH ARCHITECT/OWNER. 7. CLEAN/REPLACE RETURN AIR FILTERS. 8. CHECK FOR RETURN AIR DUCT MOUNTED SMOKE DETECTOR IN EXISTING RTU. IF EXISTING NOT FOUND/DAMAGED PROVIDE NEW ONE. 9. CONTRACTOR SHALL REFURBISH EXISTING MECHANICAL EQUIPMENT TO REMAIN AND BRING TO "LIKE NEW" CONDITION.	

OCCUPANCY CALCULATION		
RECEPTION	142 SQ. FT.	1 PEOPLE
WAITING AREA	190 SQ. FT.	4 PEOPLE
DIRECTOR'S OFFICE/ CONSULTATION OFFICE/ NAD ROOM#1	90 SQ. FT.	1 PEOPLE
CONSULTATION OFFICE/ NAD ROOM#2	100 SQ. FT.	1 PEOPLE
CONSULTATION OFFICE/ NAD ROOM#3	100 SQ. FT.	1 PEOPLE
COUPLES CONSULTATION/ NAD ROOM#4	100 SQ. FT.	1 PEOPLE
NON-MEMBER TREATMENT AREA	245 SQ. FT.	5 PEOPLE
MEMBER TREATMENT AREA	290 SQ. FT.	6 PEOPLE
COMPOUND ROOM	125 SQ. FT.	2 PEOPLE
EMPLOYEE ROOM	98 SQ. FT.	1 PEOPLE
LAUNDRY ROOM	50 SQ. FT.	1 PEOPLE
	TOTAL	25 PEOPLE
REFER TO THE OCCUPANT LOAD CALCULATIONS ON SHEET A0.0 FOR ARCHITECTURAL OCCUPANCY CALCULATION.		
VENTILATION REQUIREMENTS PER 2018 IMC - MECHANICAL CODE, TABLE 403.3.1.1		
RECEPTION	142 SQ. FT. X 0.06 CFM/SQ. FT. =	9 CFM
	1 PEOPLE X 5 CFM/PEOPLE. =	5 CFM
WAITING AREA	190 SQ. FT. X 0.06 CFM/SQ. FT. =	12 CFM
	4 PEOPLE X 5 CFM/PEOPLE. =	20 CFM
DIRECTOR'S OFFICE	90 SQ. FT. X 0.06 CFM/SQ. FT. =	6 CFM
	1 PEOPLE X 5 CFM/PEOPLE. =	5 CFM
CONSULTATION OFFICE/ NAD ROOM#1	90 SQ. FT. X 0.06 CFM/SQ. FT. =	6 CFM
	1 PEOPLE X 5 CFM/PEOPLE. =	5 CFM
CONSULTATION OFFICE/ NAD ROOM#2	100 SQ. FT. X 0.06 CFM/SQ. FT. =	6 CFM
	1 PEOPLE X 5 CFM/PEOPLE. =	5 CFM
CONSULTATION OFFICE/ NAD ROOM#3	100 SQ. FT. X 0.06 CFM/SQ. FT. =	6 CFM
	1 PEOPLE X 5 CFM/PEOPLE. =	5 CFM
COUPLES CONSULTATION/ NAD ROOM#4	100 SQ. FT. X 0.06 CFM/SQ. FT. =	6 CFM
	1 PEOPLE X 5 CFM/PEOPLE. =	5 CFM
NON-MEMBER TREATMENT AREA	245 SQ. FT. X 0.06 CFM/SQ. FT. =	15 CFM
	5 PEOPLE X 5 CFM/PEOPLE. =	25 CFM
MEMBER TREATMENT AREA	290 SQ. FT. X 0.06 CFM/SQ. FT. =	18 CFM
	6 PEOPLE X 5 CFM/PEOPLE. =	30 CFM
COMPOUND ROOM	125 SQ. FT. X 0.12 CFM/SQ. FT. =	15 CFM
	2 PEOPLE X 7.5 CFM/PEOPLE. =	15 CFM
EMPLOYEE ROOM	98 SQ. FT. X 0.06 CFM/SQ. FT. =	6 CFM
	1 PEOPLE X 5 CFM/PEOPLE. =	5 CFM
HALLWAY	98 SQ. FT. X 0.06 CFM/SQ. FT. =	7 CFM
LAUNDRY ROOM	1 PERSON. X 25 CFM/PERSON. =	25 CFM
OUTSIDE AIR REQUIRED		272 CFM
(E) SINGLE-USER ACCESSIBLE RESTROOM	70 CFM PER FIXTURE	70 CFM
EXHAUST AIR REQUIRED		70 CFM
AIR BALANCE		
O/A PROVIDED THROUGH RTU-1(E)		+280 CFM
EF-1(E)		-75 (V.I.F) CFM
BUILDING PRESSURE (BAROMETRIC RELIEF)		+205 CFM

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
	ROOF MOUNTED EXHAUST FAN OUTLET
	ROOFTOP UNIT
	SUPPLY DIFFUSER REFER TO DIFFUSER SCHEDULE FOR SPECIFICATIONS
	RETURN DIFFUSER REFER TO DIFFUSER SCHEDULE FOR SPECIFICATIONS
	EXHAUST FAN WITH LIGHT
	OPPOSED BLADE DAMPER
	DUCT SMOKE DETECTOR
	PROGRAMMABLE THERMOSTAT
	TEMPERATURE SENSOR
	ROUND DUCT DIAMETER
	CUBIC FEET/ MINUTE
	SUPPLY AIR
	BACK DRAFT DAMPER
	MOTORIZED DAMPER
	VOLUME DAMPER
	RETURN AIR
	SUPPLY GRILLE
	- CONDENSATE PIPING
	(E) EXISTING
	(N) NEW
	FIRE DAMPER
NOTE: THIS PROJECT MAY NOT USE EVERY SYMBOL OR DEVICE APPEARING ON THIS LEGEND.	

DIFFUSER SCHEDULE				
MANUFACTURER	TITUS (OR EQUIVALENT)	TITUS (OR EQUIVALENT)	TITUS (OR EQUIVALENT)	S.A.E
DESIGNATION	A	R	R1	S.A.E
USE	SUPPLY	RETURN	RETURN	SUPPLY/RETURN
MODEL	TDC-AA (OR EQUIVALENT)	56FL (OR EQUIVALENT)	56FL (OR EQUIVALENT)	S.A.E
MOUNTING	ACOUSTICAL CEILING TILE	ACOUSTICAL CEILING TILE	WALL	S.A.E
LOCATION	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN
FACE SIZE	SEE PLAN	24" X 24"	8" X 8"	S.A.E
NECK SIZE	REFER TABLE-A	-	-	S.A.E
FRAME TYPE	LAY IN / FLANGED	LAY-IN / FLANGED	FLANGED	S.A.E
NOISE CRITERIA	<30	<30	<30	S.A.E
ACCESSORIES	VOLUME DAMPER	VOLUME DAMPER	-	S.A.E

NOTES:
1. S.A.E - SAME AS EXISTING.
2. MAX. NC LEVEL 30 OR LESS.
3. PROVIDE SQUARE TO ROUND NECK ADAPTOR.
4. CO-ORDINATE WITH ARCHITECT FOR FINAL MOUNTING, FRAME TYPE, PAINT AND FINISH.
5. PROVIDE 4-WAY AIR THROW PATTERN UNLESS NOTED OR INDICATED.
6. PROVIDE INSULATED BACKS ON ALL DIFFUSERS.
7. CONTRACTOR TO FIELD VERIFY AND CONFIRM THE CONDITION OF THE EXISTING DIFFUSERS.
8. PROVIDE VOLUME DAMPER IF EXISTING NOT FOUND OR FOUND DAMAGED.
9. CONTRACTOR SHALL PROVIDE NEW SUPPLY/RETURN DIFFUSERS OR GRILLES MATCHING THE TYPE, SIZE AND APPEARANCE OF EXISTING DIFFUSERS ALONG WITH ALL THE NECESSARY ACCESSORIES INSTALLED ON SITE TO MAINTAIN CONSISTENCY IN PERFORMANCE AND AESTHETICS.

FAN SCHEDULE	
DESIGNATION	EF-1(E)
STATUS	EXISTING
MANUFACTURER	S.A.E
MODEL	S.A.E
CFM	75 @ 0.3" W.C ESP(V.I.F)
WATTS/HP	S.A.E
FLA (AMPS)	S.A.E
ACCESSORIES	S.A.E
WEIGHT (LBS)	S.A.E
V/PH/Hz	115/1/60 (V.I.F)

NOTES:
1. EF-1(E) FAN EXISTING TO REMAIN WITH ALL CONTROLS AND ACCESSORIES.
2. COORDINATE ELECTRICAL POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
3. PROVIDE BACK DRAFT DAMPER IF NOT FOUND/DAMAGED.
4. CONTRACTOR TO VERIFY THE CONDITION OF THE EXISTING FAN. IF FOUND DAMAGED, REPAIR/REPLACE WITH SAME TYPE.

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

NY ENGINEERS

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REVISIONS DATES:
07/18/25 BD COMMENTS

ISSUE DATE: 06.26.25
PROJECT #: 2510.01
DRAWN BY: NYE
CHECKED BY: NYE

MECHANICAL NOTES & SCHEDULES

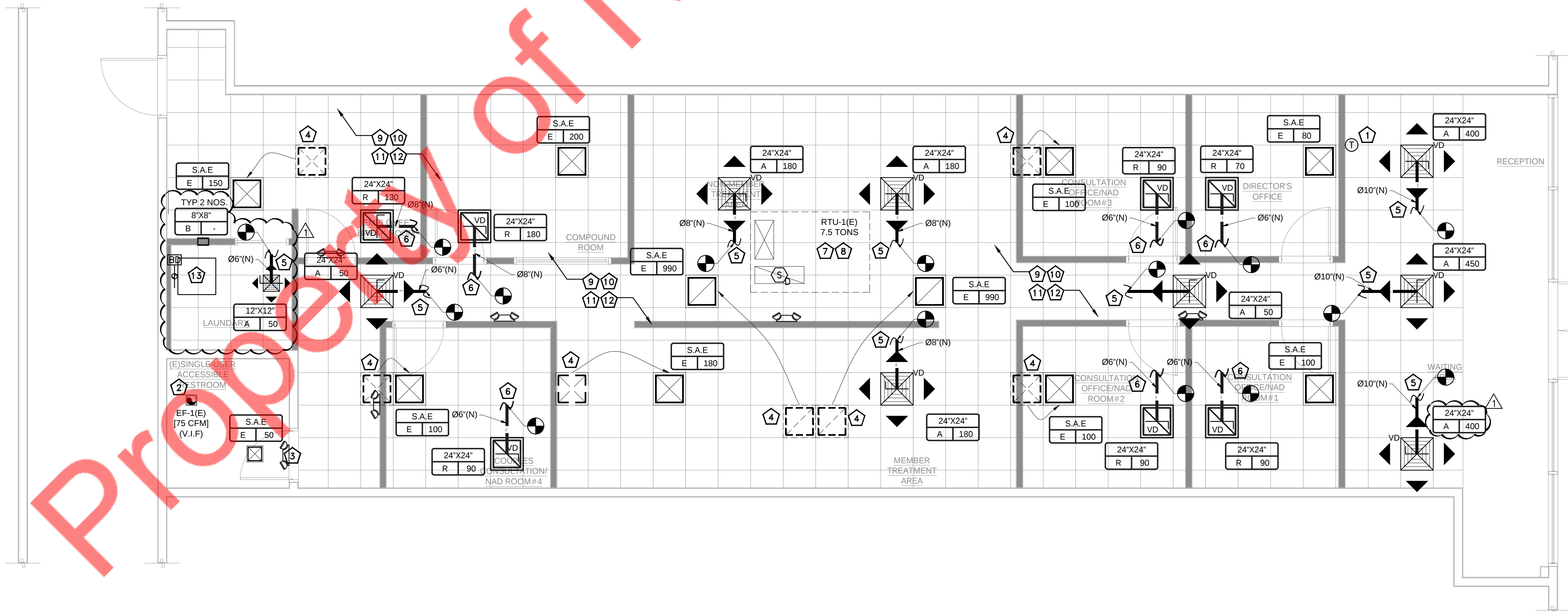
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MECHANICAL FLOOR PLAN GENERAL NOTES

- A. CONTRACTOR TO VISIT SITE TO VERIFY ON FIELD CONDITION ALONG WITH THE DRAWINGS & INFORM THE ENGINEER FOR ANY DISCREPANCIES FOUND BEFORE COMMENCING BIDS.
- B. CONTRACTOR SHALL BALANCE EACH AIR DIFFUSER WITH THE CFM SHOWN PLAN.
- C. DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR DUCTWORK ROUTING, OFFSET AND RUN DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
- D. COORDINATE LOCATIONS AND SIZES OF ROOF OPENINGS WITH OWNER AND STRUCTURE ENGINEERS.
- E. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- F. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- G. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- H. ALL EXPOSED ROUND DUCTWORK SHALL BE INTERNALLY INSULATED. ALL CONCEALED DUCTWORK SHALL BE EXTERNALLY INSULATED.
- I. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- J. 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.
- K. COORDINATE FINAL LOCATION OF EQUIPMENT WITH STRUCTURAL DRAWINGS.
- L. TAKE NECESSARY PRECAUTIONS TO PREVENT DUST AND DIRT MIGRATING TO OCCUPIED AREAS OF THE BUILDING. THIS INCLUDES BLANKING 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.
- M. KEEP ALL ADJOINING AREAS ADJACENT TO THE WORK AREAS CLEAN AND FREE OF DEBRIS.
- N. MECHANICAL CONTRACTOR TO COORDINATE ALL DUCT WORK, CROSSINGS, OVERLAPPING AND PENETRATIONS WITH SITE CONDITIONS AND AS PER EXISTING JOIST LAYOUT, SKYLIGHT AND BEAM IN FIELD. MODIFY DUCT WORK WHEREVER REQUIRED.
- O. CONTRACTOR TO VERIFY ON SITE ALL OUTSIDE AIR & EXHAUST AIR WALL PENETRATION/TERMINATION. INFORM ENGINEER IF ANY DISCREPANCY FOUND.
- P. PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS/SLABS/ROOFS. COORDINATE WITH ARCHITECTURAL DRAWING FOR FIRE RATING OF THE WALLS/ROOFS. IF NOT FIRE RATED, FIRE DAMPERS NOT REQUIRED.
- Q. CONTRACTOR TO COORDINATE WITH JOIST BASED ON SITE CONDITIONS AND RUN THE DUCTWORK AS HIGH AS POSSIBLE THROUGH THE JOIST.
- R. CONTRACTOR SHALL REUSE THE EXISTING DUCTWORK OF EQUIVALENT SIZES AND PROVIDE NEW DUCTOWRK PER SMACNA STANDARDS DUCT SIZES ACCORDING TO THE AIRFLOW MENTIONED IN THE AIR QUANTITY TABLE.
- S. ALL EXISTING DUCTWORK WITH AIR DIFFUSERS, THERMOSTATS, SENSORS & ALL HVAC SERVICES TO REMAIN AND TO BE REUSED. CONTRACTOR TO REPAIR/REPLACE ANY INSULATION OR DUCTWORK DAMAGE WITH NEW ONE OF SAME TYPE. INSULATION R-VALUE SHALL BE MINIMUM PER THE LOCAL CODE. CONTRACTOR TO REPORT BACK TO THE DESIGN ENGINEER INCASE IF ANY DISCREPANCY FOUND.
- T. CONTRACTOR TO CLEAN ALL THE EXISTING DIFFUSERS TO BRING LIKE NEW AND REUSE IT. PROVIDE VOLUME DAMPER IF NOT FOUND OR EXISTING FOUND DAMAGE.

MECHANICAL FLOOR PLAN KEY NOTES

1. CONTRACTOR TO REUSE EXISTING THERMOSTAT AND RELOCATE TO LOCATION AS SHOWN ON PLAN. IF THERMOSTAT IS NOT REUSABLE OR DAMAGED, PROVIDE NEW 7-DAY PROGRAMMABLE THERMOSTAT COMPATIBLE WITH EXISTING RTU. MOUNT ON WALL AT 48" A.F.F. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN. PROVIDE LOCKABLE COVER.
2. EXISTING EXHAUST FAN TO REMAIN AND REUSED ALONG WITH THE ACCESSORIES INCLUDING BACK DRAFT DAMPER, CONTROLS AND EXISTING DUCTWORK, PENETRATIONS AND TERMINATIONS. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND WORKING CONDITION OF EXISTING FAN. IF FOUND DAMAGED, REPLACE WITH SIMILAR MODEL.
3. PROVIDE 3/4" DOOR UNDERCUT.
4. CONTRACTOR TO RELOCATE EXISTING DIFFUSER AS SHOWN IN PLAN.
5. CONNECT TO THE EXISTING SUPPLY AIR MAIN DUCT.
6. CONNECT TO THE EXISTING RETURN AIR MAIN DUCT.
7. EXISTING SMOKE DETECTOR TO REMAIN AND REUSED, IF NOT FOUND OR NOT REUSABLE, PROVIDE SMOKE DETECTOR IN RETURN DUCT TO SHUT DOWN CORRESPONDING UNIT UNDER ALARM CONDITIONS. ALL WIRING SHALL BE IN CONDUIT PER NEC SMOKE DETECTOR SHALL BE SYSTEM SENSOR MODEL DH100ACDCLP.
8. PROVIDE REMOTE TEMPERATURE SENSOR MOUNTED IN THE RETURN DUCT AND WIRE BACK TO T-STAT OF RTU-1(E). CONTRACTOR TO CONFIRM FINAL REQUIREMENT WITH OWNER/ARCHITECT PRIOR INSTALLING.
9. EXISTING DUCTWORK WITH AIR DIFFUSERS, SENSORS & ALL HVAC SERVICES TO REMAIN AND TO BE REUSED. CONTRACTOR TO REPAIR/REPLACE ANY INSULATION OR DUCTWORK DAMAGE WITH NEW ONE OF SAME TYPE. INSULATION R-VALUE SHALL BE MINIMUM PER THE LOCAL CODE. CONTRACTOR TO REPORT BACK TO THE DESIGN ENGINEER INCASE IF ANY DISCREPANCY FOUND. CONTRACTOR TO VERIFY THE LOCATION OF THE EXISTING DIFFUSERS.
10. CONTRACTOR SHALL FIELD VERIFY THAT THE SIZES OF THE EXISTING DUCTWORK AND NECK SIZES OF EXISTING DIFFUSERS ARE COMPATIBLE WITH THE SUPPLY AIRFLOW REQUIREMENTS AS MENTIONED IN THE PLANS AND COMPLY WITH SMACNA STANDARDS. IF ANY SECTION IS FOUND TO BE INCOMPATIBLE, IT SHALL BE REPLACED WITH NEW DUCTWORK OF THE SAME TYPE AND PROPERLY INSULATED IN ACCORDANCE WITH LOCAL CODE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN CHARGE.
11. CONTRACTOR TO BALANCE THE EXISTING DIFFUSERS TO MATCH THE AIR QUANTITIES AS SHOWN IN THE PLAN.
12. CONTRACTOR TO FIELD VERIFY THE LOCATION AND CONFIRM IF EXISTING DIFFUSERS ARE PROVIDED WITH VOLUME DAMPER. IF NOT, PROVIDE NEW ONE. IF EXISTING VOLUME DAMPER FOUND DAMAGED, REPAIR OR REPLACE WITH SAME TYPE.
13. Ø4" DRYER EXHAUST VENT UP THROUGH THE ROOF AS PER MANUFACTURER'S RECOMMENDATION. COORDINATE FINAL REQUIREMENT AND LOCATION WITH THE OWNER/ARCHITECT. DRYER/WASHER PROVIDED BY OTHERS. EQUIPMENT SHALL BE PLACED AT LEAST 6" FROM THE WALL FOR DRYER VENTING. CONTRACTOR TO FILED VERIFY AT SITE. CONTRACTOR TO ROUTE DUCTWORK AS PER SITE CONDITION WITH MINIMUM BENDS AND VENT LENGTH AS PER DRYER MANUFACTURER'S RECOMMENDATIONS.



MECHANICAL FLOOR PLAN

SCALE
1/4" = 1'-0"

1

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MECHANICAL
FLOOR PLAN

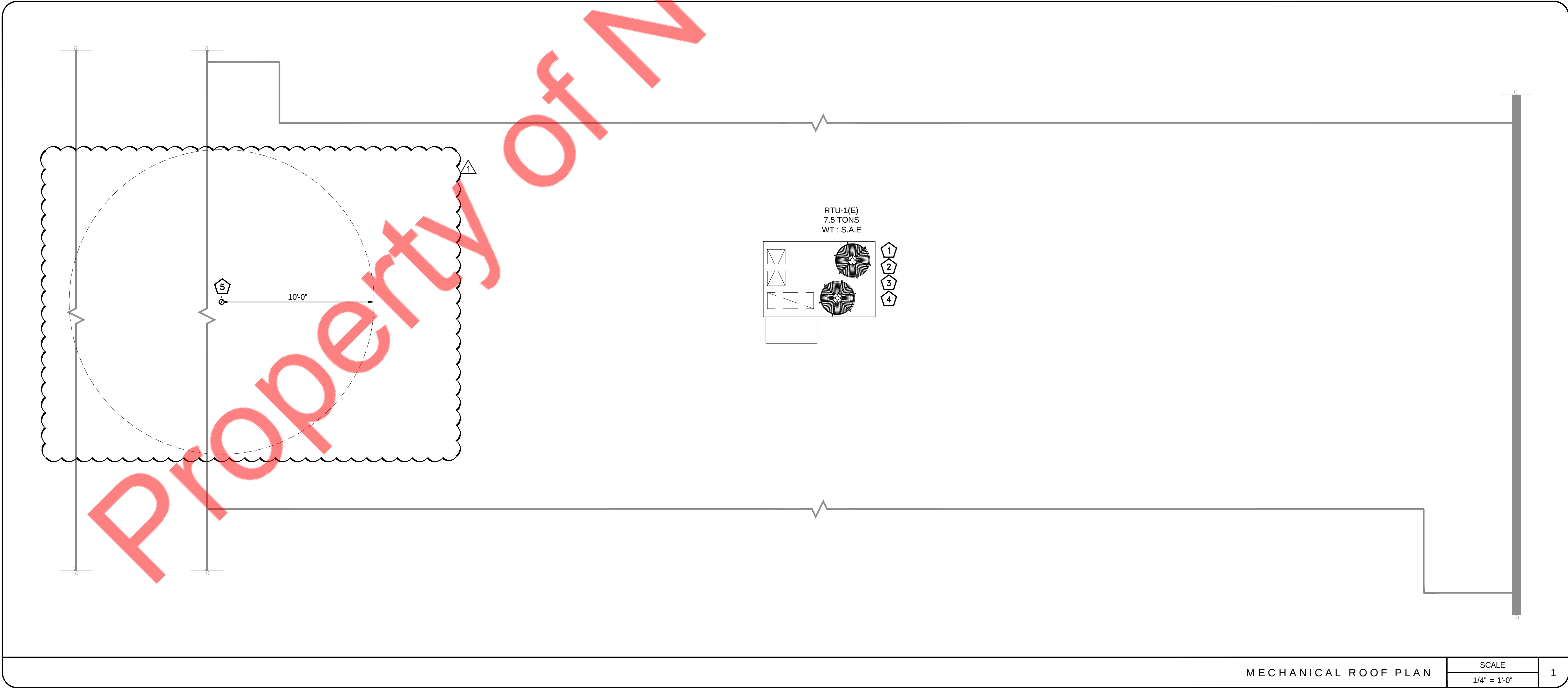
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NY ENGINEERS

- MECHANICAL ROOF PLAN GENERAL NOTES
- A. COORDINATE LOCATIONS AND SIZES OF ROOF OPENINGS WITH OWNER AND STRUCTURE 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 SELECTED PRIOR TO INSTALLATION.
 - D. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
 - E. KEEP ALL ADJOINING AREAS ADJACENT TO THE WORK AREAS CLEAN AND FREE OF DEBRIS.
 - F. G.C. TO VERIFY THE CAPACITY AND CONDITION OF THE EXISTING HVAC UNIT BEFORE TO STARTING ANY NEW WORK.
 - G. CONTRACTOR SHALL COORDINATE WITH LANDLORD ROOFING CONTRACTOR FOR ANY ROOF PENETRATIONS, MODIFICATIONS AND REPAIRS.

- MECHANICAL ROOF PLAN KEY NOTES
- 1. EXISTING ROOF TOP UNIT TO REMAIN AND TO BE REUSED. PROVIDE DUCT MODIFICATIONS IF REQUIRED. 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.
 - 2. CONDENSATE DRAIN LINES FROM EXISTING RTU TO REMAIN AS IT IS. IF PIPING IS DAMAGED OR BLOCKED, REPAIR OR REPLACE AS/IF DAMAGED. USE PVC, CPVC, ABS OR SIMILAR MATERIAL. APPROVED AS PER LOCAL CODE.
 - 3. CONTRACTOR TO REFURBISH EXISTING MECHANICAL EQUIPMENT TO REMAIN AND BRING TO "LIKE NEW" CONDITIONS. CONTRACTOR SHALL VERIFY SPECIFICATIONS OF THE EXISTING MECHANICAL EQUIPMENT TO BE REUSED AND NOTIFY THE ENGINEER IF ANY CONFLICT OR DISCREPANCY IS FOUND PRIOR TO CONSTRUCTION.
 - 4. CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION OF UNIT ON THE MAIN ROOF PRIOR BASE BID/ COMMENCING CONSTRUCTION.
 - 5. TERMINATE Ø4" DRYER EXHAUST VENT WITH GOOSENECK, WEATHER SKIRT. MAINTAIN A MINIMUM OF 10'-0" FROM ALL OUTSIDE AIR INTAKES.



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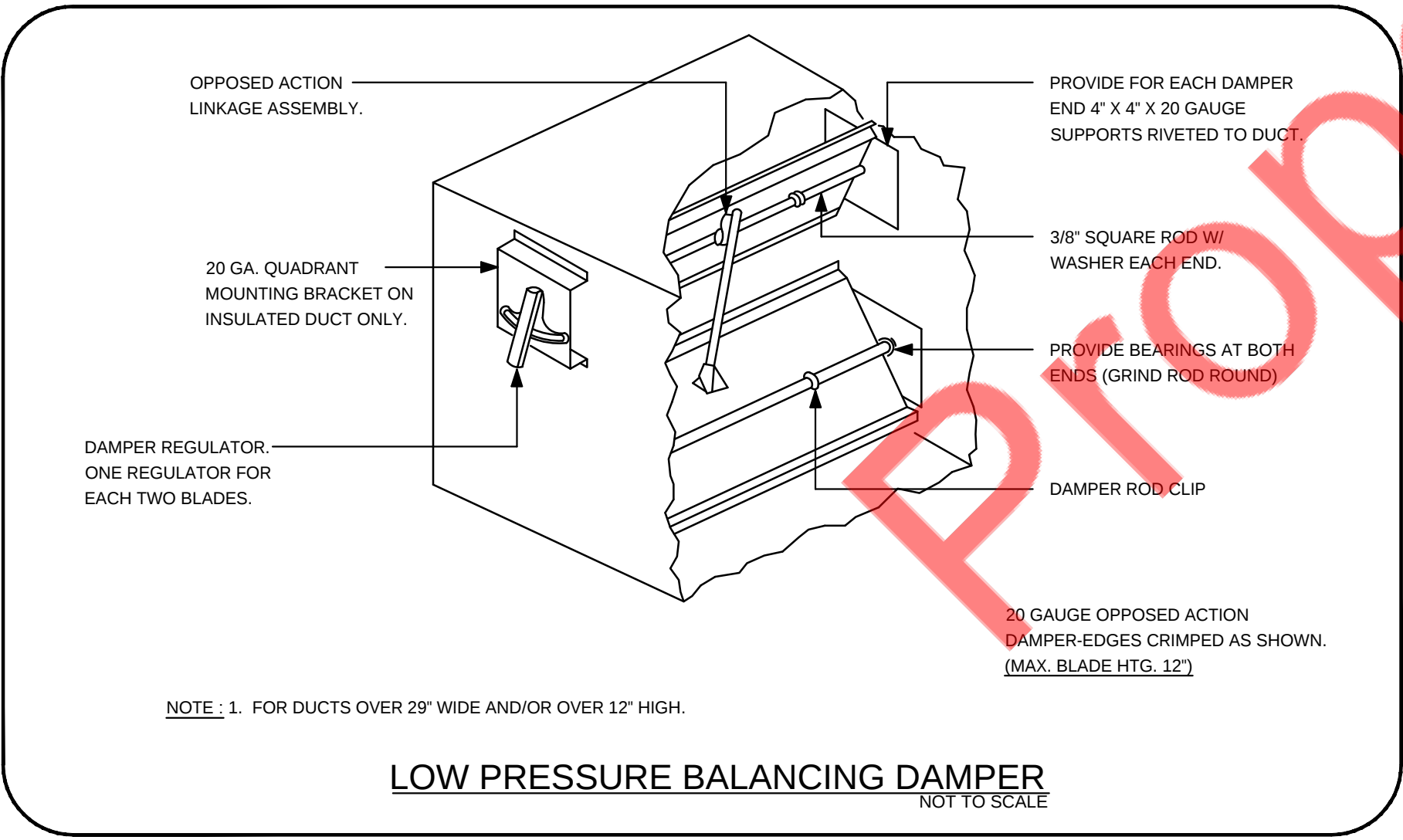
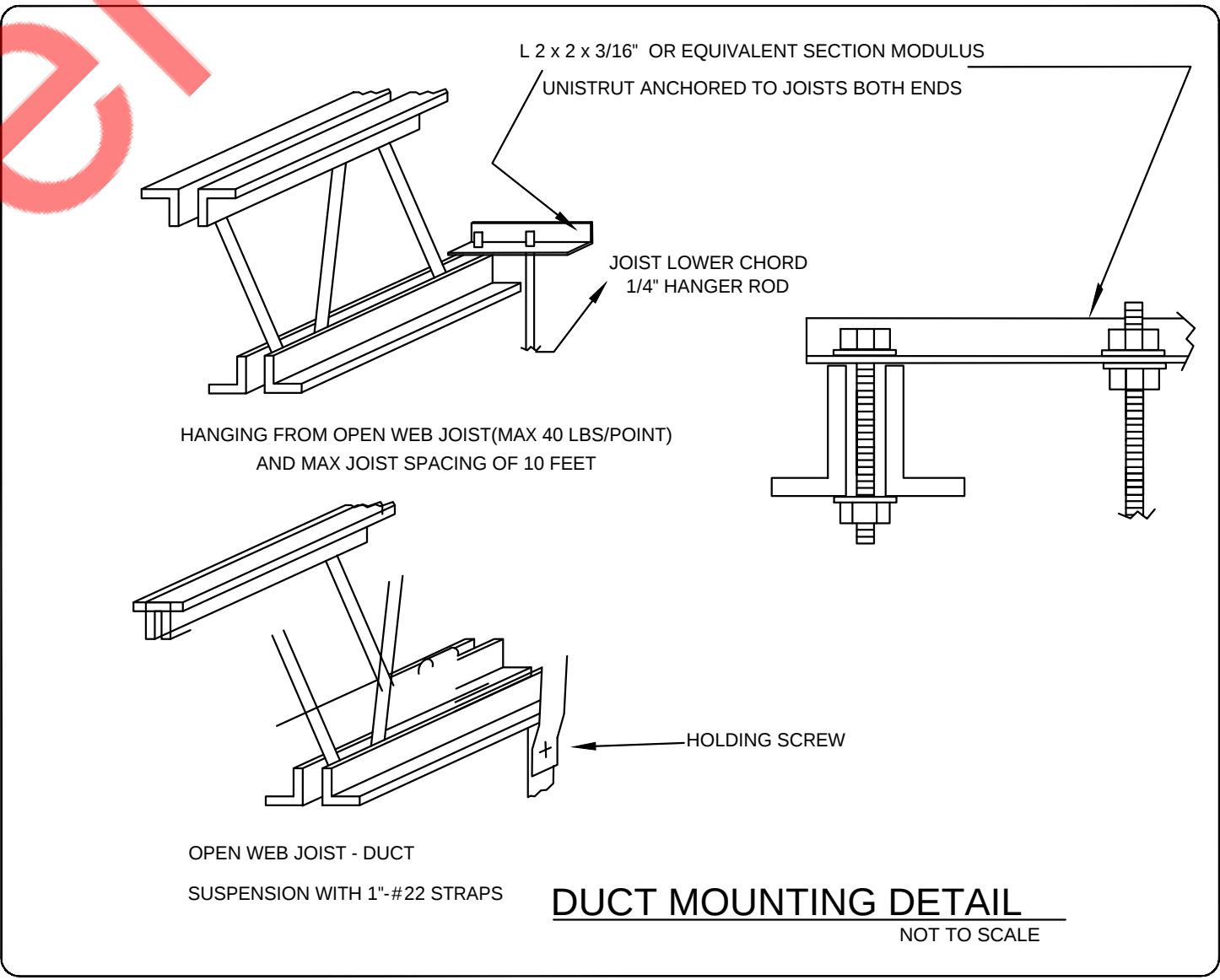
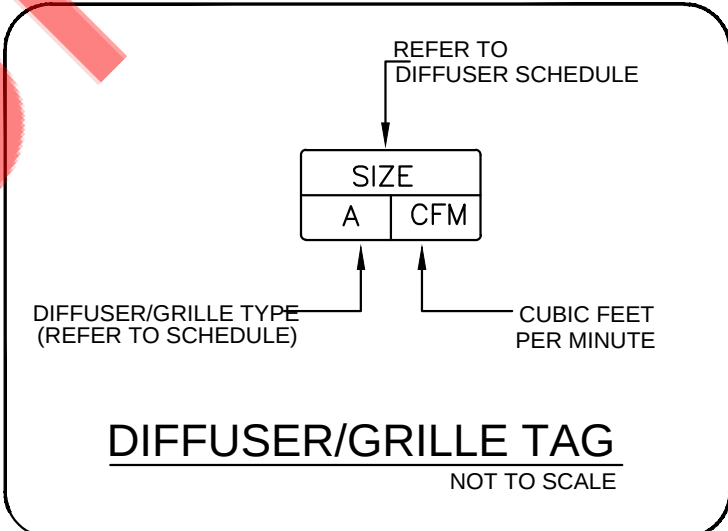
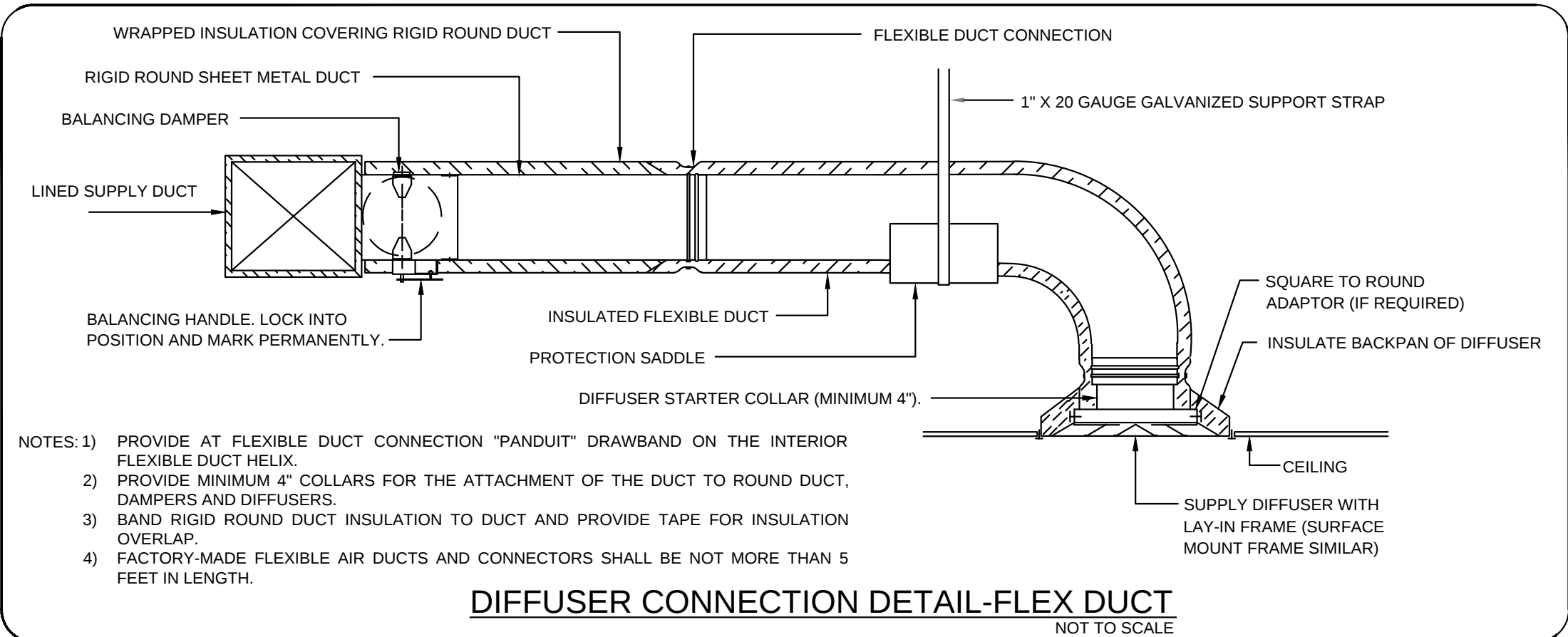
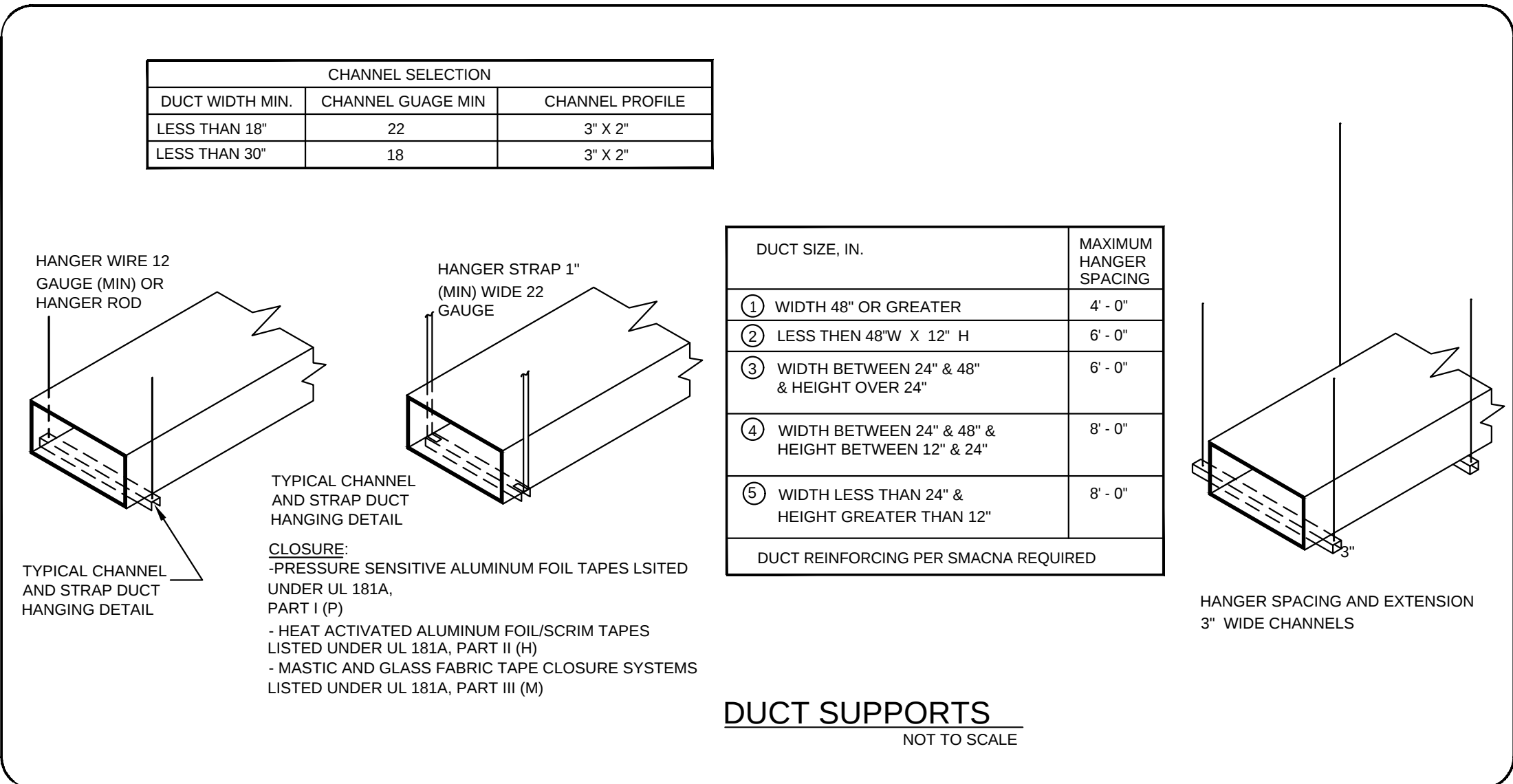
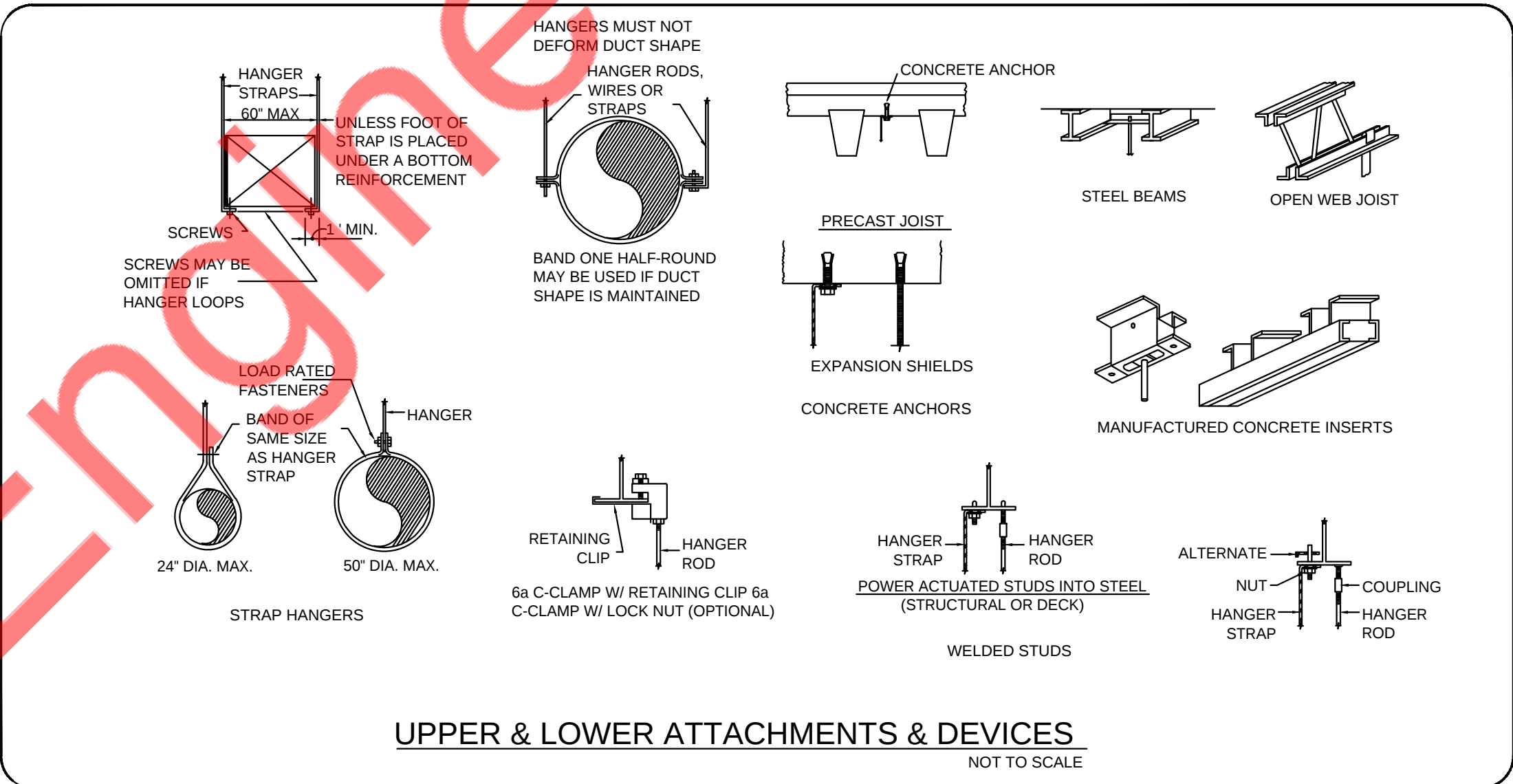
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MECHANICAL ROOF PLAN

M-3



SCOPE OF WORK

1. REUSE EXISTING 100A, 277/480V, 3-PHASE, 4-WIRE, ELECTRICAL SERVICE.
2. REUSE EXISTING (1) 100A, 277/480V, 3-PHASE, 4-WIRE ELECTRICAL METER AND DISCONNECT SWITCH FOR THE PROJECT SPACE.
3. REUSE EXISTING (1) 100A (M.L.O.), 277/480V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "H3" FOR THE PROJECT SPACE.
4. REUSE EXISTING (1) 30KVA, 3-PHASE CEILING MOUNTED TRANSFORMER-T1 WITH PRIMARY 480V AND SECONDARY 120/208V FOR THE PROJECT SPACE.
5. PROVIDE NEW (1) 15KVA, 3-PHASE WALL/CEILING MOUNTED TRANSFORMER-T2 WITH PRIMARY 480V AND SECONDARY 120/208V FOR THE PROJECT SPACE.
6. REUSE EXISTING (1) 100A(M.L.O.), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "L1"(NAME TO BE VERIFIED AT FIELD) FOR THE PROJECT SPACE.
7. PROVIDE NEW (1) 125A WITH 60A (M.C.B), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "L2" FOR THE PROJECT SPACE.
8. PROVIDE ALL NECESSARY EQUIPMENT, WIRING AND LIGHTING FOR THE PRIME IV SPACE INCLUDING WIRING FOR VENTILATION EQUIPMENT. COORDINATE WITH G.C FOR LOW VOLTAGE WIRING.
9. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE MECHANICAL AND PLUMBING CONTRACTOR FOR THE POWER REQUIREMENTS OF THE RESPECTIVE DEVICES/EQUIPMENT.

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 2023 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 OWNERS 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 PLUG 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. ALL LOW VOLTAGE MUST BE IN CONDUIT TO ABOVE THE DROP CEILING. BRIDAL RINGS OR "J" HOOKS REQUIRED.
13. SEPARATE PERMITS ARE REQUIRED FOR ALL LOW VOLTAGE SUCH AS TELEPHONE, DATA, THERMOSTAT, MUSIC, ALARMS ETC.
14. SEPARATE PERMIT REQUIRED FOR SIGNAGE.
15. PRIOR TO ANY CONSTRUCTION WORK BEGINNING AN ON-SITE MEETING WITH GENERAL CONTRACTORS IS REQUIRED.
16. ELECTRICIAN MUST BE ON SITE FOR ALL INSPECTIONS.
17. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. EXCLUDING CONTROL WIRING. ALL CONDUCTORS SHALL BE COPPER AND UNLESS OTHERWISE NOTED THIN INSULATION.
18. 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.
19. 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.
20. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE N.E.C. OR LOCAL CODES.
21. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
22. 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.
23. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
24. 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.
25. 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.
26. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
27. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT.
28. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
29. CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL WIRING.
30. ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE CIRCUIT BREAKERS.
31. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, DEVICES, ETC. FOR ALL OUTLETS AS INDICATED.
32. 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 IEC.
33. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR CUT SHEETS OF LIGHTING FIXTURES, SWITCHES, AND OTHER ELECTRICAL ITEMS FOR APPROVAL BY ENGINEER/ARCHITECT.
34. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING AND FIRED CAULKING REQUIRED OF HIS WORK.
35. ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS W/TYPE WRITTEN DIRECTORIES.
36. ALL ELECTRICAL AND COMMUNICATIONS OUTLETS TO BE AT 18" A.F.F. UNLESS NOTED OTHERWISE, AND VERTICALLY MOUNTED.
37. ALL LIGHT SWITCHES TO BE AT 42" A.F.F.
38. 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.
39. 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 OR SHALL BE COORDINATED ON SITE.
40. DISCONNECT SWITCHES SHALL BE H.P. RATED, GENERAL DUTY, QUICK-MAKE, QUICK-BREAK ENCLOSURES AS REQUIRED BY EXPOSURE.
41. MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC, WITH OVERLOAD RELAYS IN EACH HOT LEG.
42. THE TERM "PROVIDE" USED IN THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS INDICATES THE CONTRACT SHALL FURNISH AND INSTALL.
43. 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.
44. VOLTAGE DROP FOR ALL BRANCH CONDUCTORS SHALL NOT EXCEED 3%. WHERE VOLTAGE DROP EXCEEDS 3%, CONTRACTOR SHALL INCREASE SIZE OF CONDUCTORS.
45. CONTRACTOR SHALL PROVIDE GFI TYPE BREAKER FOR ALL EXTERIOR 120V CIRCUITS OR GFI PROTECTION -- FOR THE WHOLE CIRCUIT.
46. GAS PIPING SHALL BE BONDED.
47. ALL OUTDOOR EQUIPMENT SHALL BE WEATHERPROOF.
48. 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.
49. OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER.
50. ABSOLUTELY NO FLEXIBLE CONDUIT IS PERMITTED IN DEMISING WALLS. FLEXIBLE CONDUIT IS PERMITTED FOR SHORT FINAL CONNECTIONS ONLY (6'-0" OR LESS).
51. 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.
52. CABLE TYPES AC AND NM CABLES ARE NOT ACCEPTABLE. TYPE MC CABLE, ELECTRIC METALLIC TUBING (EMT) AND RIGID GALVANIZED CONDUIT ARE PERMITTED.
53. ALL EQUIPMENT, DEVICES AND FIXTURES SHALL BE GROUNDED IN COMPLIANCE WITH NEC AND UL REQUIREMENTS.
54. ALL PANELS TO BE UL LABELED.
55. 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.
56. 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. ANYALL MODIFICATIONS OR UPGRADES NEEDED ARE SUBJECT TO LANDLORD'S PRIOR APPROVAL AND WILL BE COMPLETED BY TENANT/TENANTS GC AT TENANT'S SOLE EXPENSE.
57. ALL ELECTRICAL PANELS TO BE MOUNTED ON PLYWOOD BACKER BOARD.
58. PANEL PHASE LOADS TO BE BALANCED WITHIN 10%.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	EXHAUST FAN
	JUNCTION BOX
	BATTERY BACK UP EXIT LIGHT
	BATTERY BACK UP EMERGENCY LIGHT
	WALL SWITCH (SINGLE)
	WALL SWITCH (DIMMER)
	OCCUPANCY SENSOR WALL
	DUPLEX RECEPTACLE WITH USB PROVISION.
	DUPLEX RECEPTACLE, 46\" data-bbox="224 444 684 474"/>
	QUADRUPLER RECEPTACLE
	CEILING MOUNTED DUPLEX RECEPTACLE
	230V RECEPTACLE
	ELECTRICAL PANEL
	DISCONNECT SWITCH
	TELEVISION OUTLET
	TELEPHONE/DATA OUTLET
	TELEPHONE OUTLET
	DATA OUTLET
	CEILING MOUNTED DATA OUTLET
	60A/240V NON FUSED DISCONNECT SWITCH
	100A/240V NON FUSED DISCONNECT SWITCH
	MOTOR SWITCH

ABBREVIATIONS:
ABOVE FINISH FLOOR= A.F.F.
COUNTER TOP LEVEL= C
GROUND FAULT INTERRUPTER= GFC
VERIFY PRIOR TO INSTALL= VH
WEATHER PROOF= WP
BATHROOM EXHAUST FAN = BEF
ROOF TOP UNIT = RTU
RECIRCULATION PUMP= RCP
BELOW COUNTER= BC
PUSH BUTTON= PB
UNDER CABINET= UC
VAPOR PROOF= VP
ELECTRICAL CONTRACTOR=E.C.
WATER HEATER= WH
AUTHORITY HAVING JURISDICTION= A.H.J.

GENERAL LIGHTING NOTES

- A. UPPER CASE LETTER NEXT TO LIGHT FIXTURE DENOTES FIXTURE TYPE.
- B. ALL EMERGENCY FIXTURES SHALL BE CONNECTED TO AN UNSWITCHED HOT CONDUCTOR

EXISTING CONDITIONS NOTES

STOP AND READ
THE CONTRACTOR AND SUB-CONTRACTORS **SHALL NOT INITIATE ANY WORK UNTIL EXISTING FIELD CONDITIONS ARE PROPERLY VERIFIED.** THIS SHALL HOLD TRUE FOR FIRST GENERATION AND 2ND GENERATION SPACES. WHEN DEMOLITION IS REQUIRED, THAT WILL BE PERMITTED TO EXPOSE CONDITIONS. THESE VERIFICATIONS SHALL INCLUDE BUT NOT LIMITED TO: DIMENSIONS BOTH HORIZONTALLY AND VERTICAL, ELECTRICAL SERVICE /PANELS LOCATION AND VOLT/SPHASE, LOCATION/QTY OF ROOF MOUNTED HVAC EQUIPMENT, CONFIRM THAT INTERIOR HVAC HUNG UNITS HAVE PROPER SUPPORT CONNECTIONS FOR EXISTING STRUCTURE, FIRE SPRINKLER MAIN RUNS, TOILET ROOM DIMENSIONS, DOOR SWING FOR DOORS TO REMAIN AND ETC. IF NOT VERIFIED AND DISCOVERED AT A LATER TIME, THE CONTRACTOR SHALL REIMBURSE THE ARCHITECT FOR THE REDESIGN FEE. THIS DOES NOT INCLUDE HIDDEN WORK I.E. PITCH OF SANITARY LINES, ACTUAL CONDITIONS OF EXISTING HVAC EQUIPMENT, STRUCTURAL COLUMNS/BEARING WALLS OR CONDITIONS OF GREASE INTERCEPTORS AND ETC.

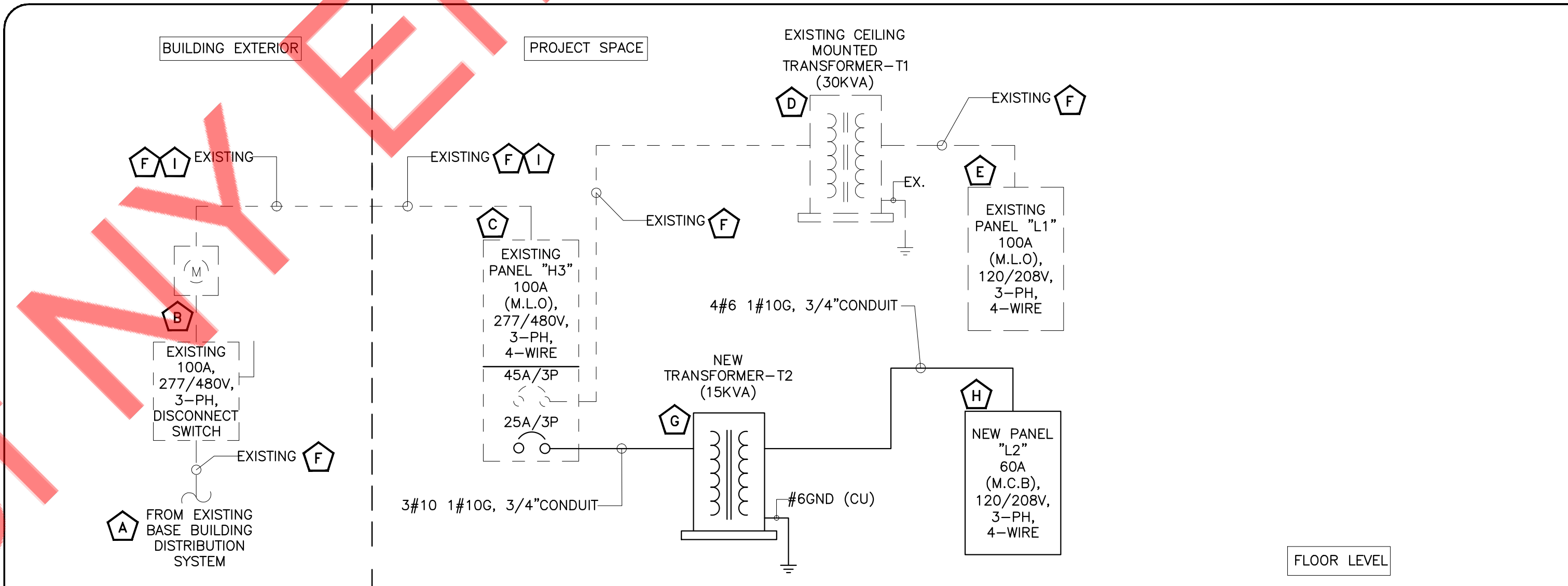
ELECTRICAL DRAWING LIST

- | | |
|-----|---------------------------------------|
| E-1 | ELECTRICAL PLAN NOTES & RISER DIAGRAM |
| E-2 | ELECTRICAL LIGHTING PLAN |
| E-3 | ELECTRICAL POWER PLAN |
| E-4 | ELECTRICAL ROOF PLAN |
| E-5 | PANEL SCHEDULES EQUIPMENT LIST |
| E-6 | ENERGY ANALYSIS |

LIGHTING FIXTURE SCHEDULE

SYMBOL	TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLT	NUMBER OF FIXTURES	LAMP TYPE	TOTAL WATTS	MOUNTING
	A	6" RECESSED CAN LIGHT W/DIMMING	PHILIPS OR HALO W/COLOR OPTIONS	L6RAE1VA / L6RA15830WVA OR HL86099WZRG8BMMWR	120	44	LED	572 WATTS	RECESSED
	B	2x2' LAY-IN LED LIGHT FIXTURE	LITHONIA	2FFG38L835-2-D-UNV-DIM	120	15	LED	480 WATTS	CEILING
	C	MINI PENDANT LIGHT	TBD	TBD	120	3	LED	13 WATTS (MAX) / FIXTURE	PENDANT
	D	MINI PENDANT LIGHT	TBD	TBD	120	11	LED	13 WATTS (MAX) / FIXTURE	PENDANT
	E	LARGE PENDANT LIGHT	TBD	TBD	120	-	LED	25 WATTS (MAX) / FIXTURE	PENDANT
	-	EXIT SIGN	TBD	TBD	120	-	-	-	CEILING/WALL
	D	DIMMER WALL SWITCH	LUTRON/ EQUIVALENT	DVTV-WH/ EQUIVALENT	120	-	-	-	WALL
	OS	OCCUPANCY WALL SWITCH	LEVITON	ODS10	120	-	-	-	WALL
	T	TIMER WALL SWITCH	LEVITON	VPT24-1PZ	120	-	-	-	WALL
	OS	CEILING OCCUPANCY SENSOR	LUTRON	LOS-CD-12000	120	-	-	-	CEILING
(E)		EXISTING LIGHT TO REMAIN	-	-	120	-	-	-	-

NOTE:
1. ALL LIGHT FIXTURES SHOULD BE INSTALLED BASED ON THE MANUFACTURER/ VENDOR INSTALLATION MANUAL. PROVIDE ALL NECESSARY ACCESSORIES REQUIRED.
2. EQUIVALENT LIGHT FIXTURES ARE ACCEPTABLE. FOR DECORATIVE LIGHTS, EQUIVALENT TO BE SUBMITTED TO CORPORATE FOR APPROVAL.
3. E.C SHALL COORDINATE WITH LIGHT FIXTURE VENDOR FOR EXACT COMPATIBILITY OF THE DIMMER REQUIRED FOR RESPECTIVE LIGHT FIXTURE PRIOR BIDDING. BASE BID ACCORDINGLY.
4. E.C SHALL VERIFY EXACT MAKE MODEL WITH ARCHITECT/ OWNER PRIOR PURCHASE, INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY PRIOR TO BID.
5. E.C SHALL COORDINATE WITH OWNER/ ARCHITECT FOR EXACT LIGHTING CONTROL REQUIREMENT, INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY PRIOR TO BID.



ELECTRICAL RISER KEYED WORK NOTES:

- A EXISTING 100A, 277/480V, 3-PHASE, 4-WIRE INCOMING ELECTRICAL SERVICE FOR THE PROJECT SPACE SHALL REMAIN. E.C SHALL VERIFY EXACT ELECTRICAL DISTRIBUTION OF EXISTING ELECTRICAL SERVICE/OPERABLE CONDITION OF SERVICE FEEDING THE PROJECT SPACE AND PROVIDE NEW IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- B EXISTING 100A, 277/480V, 3-PHASE, 4-WIRE ELECTRICAL METER AND DISCONNECT SWITCH SHALL REMAIN FOR THE PROJECT SPACE. E.C SHALL COORDINATE WITH OWNER/ BASE BUILDING FOR EXACT RATING, LOCATION OF THE ELECTRICAL METER AND DISCONNECT SWITCH IN THE FIELD. E.C TO FIELD VERIFY OPERABLE CONDITION OF THE METER AND DISCONNECT SWITCH, PROVIDE NEW IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- C EXISTING 100A(M.L.O.), 277/480V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "H3" SHALL BE REMAIN. E.C SHALL VERIFY EXACT SIZE, LOCATION & OPERABLE CONDITION OF THE PANEL. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- D EXISTING 30KVA, 3-PHASE CEILING MOUNTED TRANSFORMER-T1 WITH PRIMARY 480V AND SECONDARY 120/208V. E.C. TO FIELD VERIFY AND COORDINATE WITH PROPERTY MANAGER FOR THE EXACT RATING, SIZE, LOCATION, MOUNTING HEIGHT & OPERABLE CONDITION OF THE TRANSFORMER, REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.
- E EXISTING 100A(M.L.O.), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "L1" SHALL BE REMAIN. E.C SHALL VERIFY EXACT SIZE, LOCATION & OPERABLE CONDITION OF THE PANEL. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- F EXISTING INCOMING FEEDERS SHALL REMAIN AND REUSED. E.C TO VERIFY OPERABLE CONDITION OF ALL THE FEEDERS IN FIELD AND PROVIDE NEW IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- G NEW 15KVA, 3-PHASE WALL/CEILING MOUNTED TRANSFORMER-T2 WITH PRIMARY 480V AND SECONDARY 120/208V(MAKE = SQUARE D, MODEL NUMBER =EXN15T3HCU. PROVIDE WALL - MOUNT BRACKET/SHELF OR EQUAL. E.C TO PROVIDE SUBMITTAL FOR ENGINEER'S REVIEW.) E.C SHALL COORDINATE WITH ARCHITECT/OWNER/PROPERTY MANAGER FOR EXACT LOCATION AND MATCH EXISTING TRANSFORMER MOUNTING HEIGHT. BASE BID ACCORDINGLY.
- H NEW 125A PANEL WITH 60A(M.C.B), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "L2" FOR PROJECT SPACE. E.C TO COORDINATE WITH LANDLORD/OWNER FOR EXACT LOCATION OF PANEL IN FIELD.
- I E.C TO FIELD VERIFY THE EXACT LENGTH OF THE CABLE AND CHECK THE VOLTAGE DROP IS UNDER LIMIT PER NEC BEFORE INSTALLATION. INFORM ENGINEER ON RECORD IF ANY DISCREPANCIES/ISSUE PRIOR TO BID. BASE BID ACCORDINGLY.

ELECTRICAL RISER DIAGRAM GENERAL NOTES:

1. ABOVE RISER DIAGRAM IS FOR REFERENCE PURPOSES ONLY. E.C SHALL VERIFY EXACT POWER DISTRIBUTION IN FIELD AND INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY.
2. E.C. SHALL VERIFY INCOMING SERVICE AMPERAGE, WIRE SIZING AND DISTRIBUTION.
3. E.C SHALL COORDINATE FAULT CURRENT (Isc) RATING WITH UTILITY COMPANY AND AHJ PRIOR TO COMMENCING ANY WORK.
4. E.C SHALL COORDINATE WITH OWNER/LANDLORD/BASE BUILDING FOR THE EXACT SCOPE OF WORK/LIABILITIES.
5. E.C SHALL VERIFY OPERABLE CONDITIONS OF EXISTING EQUIPMENTS IN FIELD. REPLACE/ RECTIFY IF FOUND INOPERABLE. BASE BID ACCORDINGLY.

ELECTRICAL RISER

SCALE
1/4" = 1'-0"

1

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PROJECT #: 2510.01
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ELECTRICAL PLAN
NOTES AND RISER
DIAGRAM

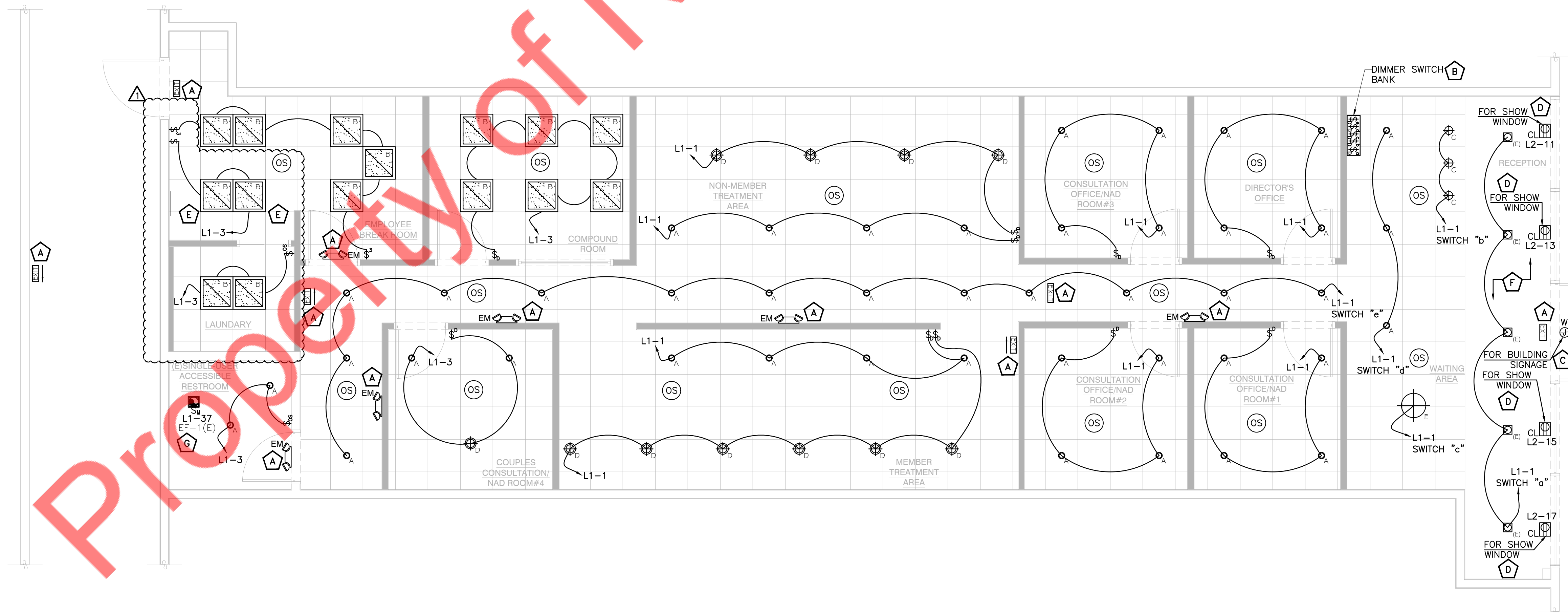
E-1

ELECTRICAL LIGHTING PLAN KEY NOTES:

- A** CONNECT ALL EXISTING/NEW EMERGENCY EGRESS LIGHTING FIXTURES TO THE NEAREST LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS PER STATE AND LOCAL CODES.
- B** E.C. SHALL COORDINATE EXACT LOCATION OF DIMMER SWITCH BANK WITH OWNER/ARCHITECT.
- C** PROVIDE A DISCONNECT SWITCH AT FEEDER OR BRANCH CIRCUIT ENTERS THE SIGN PER NEC. VERIFY EXACT MOUNTING HEIGHT AND LOCATION FOR SIGNAGE POWER WITH ARCHITECTURAL ELEVATIONS, SIGN VENDOR, AND LANDLORD. ROUTE CIRCUIT TO PANEL VIA TIME CLOCK.
- D** PROVIDE SHOW WINDOW RECEPTACLE AS PER N.E.C. 210.62. VERIFY EXACT LOCATION WITH ARCHITECT.
- E** LIGHTING NEAR ELECTRICAL PANELS SHALL NOT BE CONTROLLED BY ANY AUTOMATIC MEANS AND SHALL BE COMPLIED AS PER NEC 110.26(D).
- F** EXISTING LIGHT FIXTURE IN THIS AREA DENOTED BY (E) SHALL REMAIN PROVIDE NEW CONTROLS PER SPECIFIED IN PLAN. E.C. SHALL VERIFY THE OPERABLE CONDITIONS OF THE LIGHTS IN FIELD AND REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- G** EXISTING EXHAUST FAN EF-1(E) ALONG WITH ITS ELECTRICAL CONNECTIONS SHALL REMAIN CONNECTED TO THE EXISTING ELECTRICAL PANEL. VERIFY THE OPERABLE CONDITION OF EXISTING ELECTRICAL CONNECTION. REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.

ELECTRICAL LIGHTING PLAN GENERAL NOTES:

- 1. COORDINATE FINAL FIXTURE MAKE & MODEL WITH ARCHITECT/ OWNER.
- 2. ALL LIGHT FIXTURES CONSIDERED TO BE AS 120V FIXTURE. E.C. SHALL INFORM ENGINEER ON RECORD OTHERWISE.
- 3. UPPERCASE LETTER NEXT TO LIGHT FIXTURE DENOTES FIXTURE TYPE.
- 4. ALL EMERGENCY FIXTURES SHALL BE CONNECTED TO AN UN-SWITCHED HOT CONDUCTOR.
- 5. CONTRACTOR ARE ADVISED TO UPDATE THE EMERGENCY LIGHT FIXTURES LOCATIONS/QUANTITY PER SITE REQUIREMENT UP ON FINAL INSPECTION OR PER LOCAL AHJ REQUIREMENT.

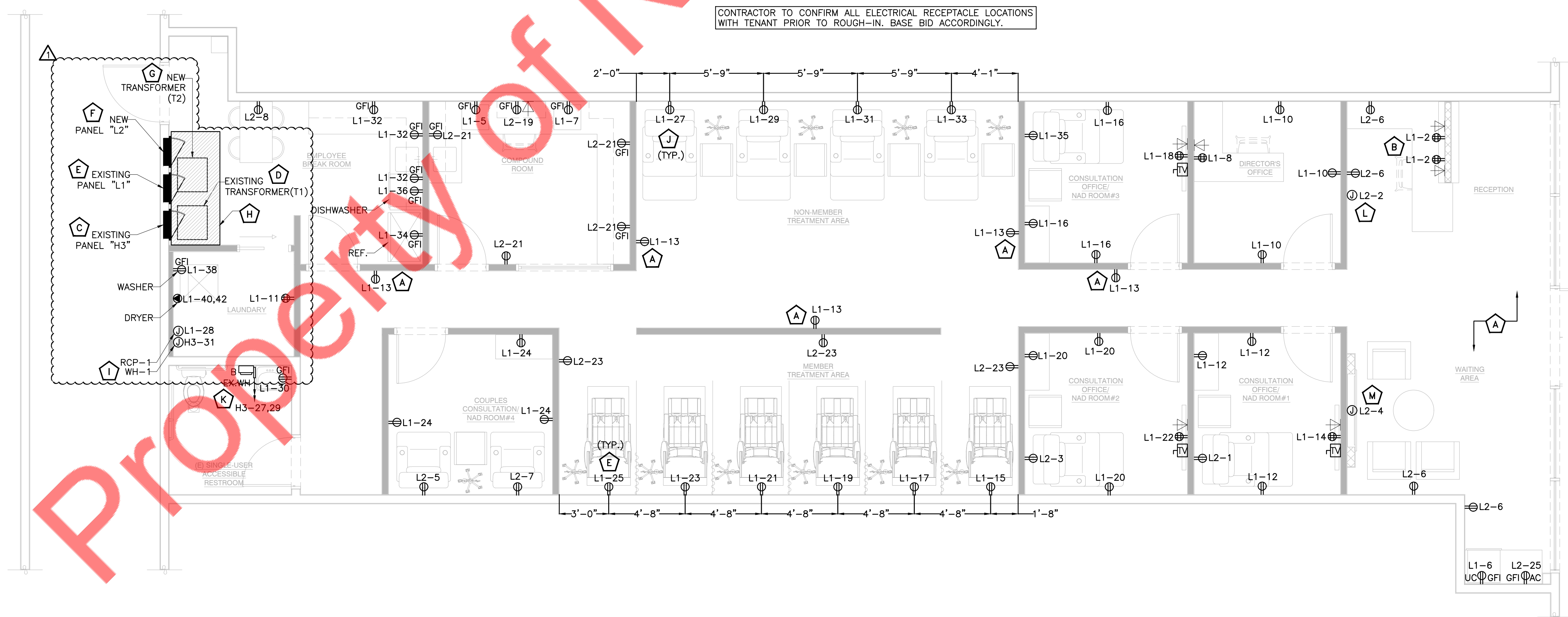


ELECTRICAL FLOOR POWER PLAN KEY NOTES:

- A** ALL 15/20A, 125V AND 250V NON LOCKING TYPE RECEPTACLES IN LOBBY/ RECEPTION/HALLWAY SHALL BE LISTED TAMPER RESISTANCE AS PER NEC 406.12.
- B** E.C. SHALL PROVIDE TWO CAT 6 CABLING FOR DESK. PROVIDE AN ADDITIONAL 6 FEET OF CABLING AT EITHER END OF CONNECTION. E.C. SHALL COORDINATE WITH IT DRAWINGS/SPECIALIST FOR EXACT LOCATION, POWER REQUIREMENTS AND MAKE PROVISIONS ACCORDINGLY. BASE BID ACCORDINGLY.
- C** EXISTING 125A(M.L.O), 480/277V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "H3" TO REMAIN. E.C. SHALL VERIFY EXACT SIZE, LOCATION & OPERABLE CONDITION OF THE PANEL IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- D** EXISTING 30KVA, 3-PHASE CEILING MOUNTED TRANSFORMER-T1 WITH PRIMARY 480V AND SECONDARY 120/208V. E.C. TO FIELD VERIFY AND COORDINATE WITH PROPERTY MANAGER FOR THE EXACT RATING, SIZE, LOCATION, MOUNTING HEIGHT & OPERABLE CONDITION OF THE TRANSFORMER, REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.
- E** EXISTING 100A(M.L.O), 208/120V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "L1" TO REMAIN. E.C. SHALL VERIFY EXACT SIZE, LOCATION & OPERABLE CONDITION OF THE PANEL IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- F** NEW 125A WITH 60A(M.C.B), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "L2". E.C. SHALL COORDINATE EXACT LOCATION WITH ARCHITECT/ OWNER. BASE BID ACCORDINGLY.
- G** NEW 15KVA, 3-PHASE WALL/CEILING MOUNTED TRANSFORMER-T2 WITH PRIMARY 480V AND SECONDARY 120/208V(MAKE = SQUARE D, MODEL NUMBER =EXN15T3HCU. PROVIDE WALL - MOUNT BRACKET/SHELF OR EQUAL. E.C. TO PROVIDE SUBMITTAL FOR ENGINEER'S REVIEW.) E.C. SHALL COORDINATE WITH ARCHITECT/OWNER/PROPERTY MANAGER FOR EXACT LOCATION AND MATCH EXISTING TRANSFORMER MOUNTING HEIGHT. BASE BID ACCORDINGLY.
- H** ELECTRICAL CONTRACTOR SHALL VERIFY THE INSTALLATION OF ELECTRICAL PANELS IN COMPLIANCE WITH N.E.C. ARTICLE 110.26(A) AND (B). E.C. SHALL FIELD VERIFY THAT THE PANELS ARE UNOBSTRUCTED AND THE AREA WHERE THE PANELS ARE PLACED SHALL NOT BE USED AS A STORAGE SPACE.
- I** ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE PLUMBING CONTRACTOR FOR EXACT LOCATION AND POWER REQUIREMENT OF THE PLUMBING EQUIPMENT IN THE FIELD. PROVIDE CIRCUIT AND CONTROL AS REQUIRED.
- J** E.C. SHALL COORDINATE FOR CHAIRS EQUIPMENT WITH OWNER FOR EXACT LOCATION, MOUNTING HEIGHT & POWER REQUIREMENT BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.
- K** EXISTING WATER HEATER (E) ALONG WITH ITS ELECTRICAL CONNECTIONS SHALL REMAIN CONNECTED TO THE EXISTING ELECTRICAL PANEL. VERIFY THE OPERABLE CONDITION OF EXISTING ELECTRICAL CONNECTION. REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.
- L** E.C. SHALL COORDINATE FOR BACKLIT SIGNAGE WITH OWNER FOR EXACT LOCATION, MOUNTING HEIGHT & POWER REQUIREMENT BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.
- M** E.C. SHALL COORDINATE FOR ELECTRIC FIREPLACE WITH OWNER/ARCHITECT FOR EXACT LOCATION, MOUNTING HEIGHT & POWER REQUIREMENT BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.

ELECTRICAL FLOOR POWER PLAN GENERAL NOTES:

- GENERAL USE CABLING SHALL BE OF #12 AWG MINIMUM AT 120V FOR CABLE UP TO 80 FEET. FOR CABLE ABOVE 80 FEET US #10 AWG CABLES. ADJUST WIRE SIZE FOR A MAXIMUM VOLTAGE DROP OF 3%.
- E.C. SHALL COORDINATE WITH ARCHITECT FOR EXACT HEIGHT OF OUTLETS.
- E.C. SHALL VERIFY ANY THIRD PARTY INSPECTION REQUIRED BY THE LOCAL JURISDICTION PRIOR TO BIDDING THIS PROJECT.
- ALL LOW VOLTAGE WIRING TO BE IN CONDUIT U.N.O BY A.H.J.
- E.C. SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR MECHANICAL EQUIPMENT SENSOR AND THERMOSTAT LOCATION.
- NO EXPOSED WIRING.
- ALL WIRING MUST MEET LOCAL ELECTRICAL CODES AS WELL AS NATIONAL ELECTRICAL CODE REQUIREMENTS.
- PROVIDE GFCI PROTECTION FOR PERSONNEL FOR ALL SINGLE PHASE RECEPTACLES RATED 50AMP OR LESS & THREE PHASE RECEPTACLES RATED 100AMP OR LESS INSTALLED IN KITCHEN AREA PER NEC 210.8(B)2. GFI PROTECTION SHALL BE PROVIDED AT BREAKER WHERE RECEPTACLES ARE NOT READILY ACCESSIBLE PER NEC 210.8 DUE TO STATIONARY KITCHEN EQUIPMENT



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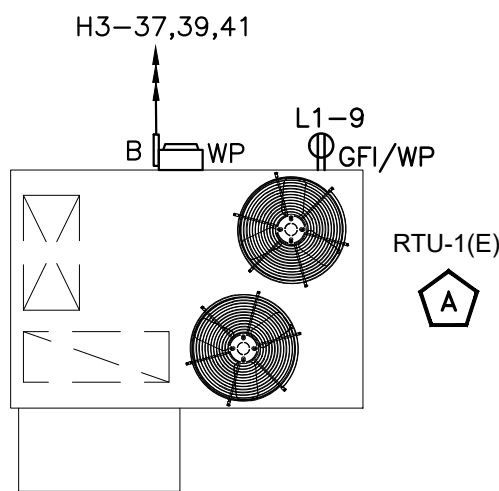
REVISIONS DATES:
07/18/25 BD COMMENTS

ISSUE DATE: 06.26.25
PROJECT #: 2510.01
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ELECTRICAL
ROOF POWER
PLAN

ELECTRICAL ROOF POWER PLAN KEY NOTES:

EXISTING MECHANICAL UNITS RTU-1(E) ALONG WITH ELECTRICAL FIXTURE AND ELECTRICAL CONNECTIONS SHALL REMAIN CONNECTED TO THE EXISTING ELECTRICAL PANEL "H3" AS SHOWN IN PANEL SCHEDULE. E.C. TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ANY REQUIREMENT BASED ON FIELD CONDITION. E.C SHALL VERIFY THE OPERABLE CONDITION OF EXISTING ELECTRICAL CONNECTION. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.



PANEL SCHEDULE:

PANEL: H3 (E)										MOUNTING:		REFER TO SHEET(E-3)					
480Y/277	VOLTS,		3	PHASE,		4	WIRE			LOCATION:		REFER TO SHEET(E-3)					
MAIN CB		NA		M.L.O.		100A		BUS:		EXISTING		MIN,		FED FROM:		REFER TO RISER SHEET (E-1)	
NOTE: L : LIGHTING, H : HVAC LOAD, M : MOTOR LOAD, R : RECEPTACLES, E : EQUIPMENT LOAD, O : OTHER/MISC. (TYPICAL)																	
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		SPACE				0.00						SPACE		2			
3		SPACE					0.00					SPACE		4			
5		SPACE						0.00				SPACE		6			
7		SPACE				0.00						SPACE		8			
9		SPACE					0.00					SPACE		10			
11		SPACE						0.00				SPACE		12			
13		SPACE				0.00						SPACE		14			
15		SPACE					0.00					SPACE		16			
17		SPACE						0.00				SPACE		18			
19		SPACE				0.00						SPACE		20			
21		SPACE					0.00					SPACE		22			
23		SPACE						0.00				SPACE		24			
25		SPACE				0.00						SPACE		26			
27	20/2P	EXISTING WATER HEATER	O	2.00	EXISTING		6.68		4#10, #10G, 3/4"C	4.68	O	PANEL - L2 (FEED BY TRANSFORMER T2)	25/3P	28			
29			O	2.00			6.68	4.68		O	30						
31	30	WH-1	O	6.00	2#10, #10G, 3/4"C	10.68				4.68	O			32			
33	20	SPARE					0.00					SPARE	20	34			
35	20	SPARE						0.00				SPARE	20	36			
37	30/3P	RTU-1(E)	H	5.18	EXISTING	15.12			EXISTING	9.94	O	PANEL - L1 (FEED BY TRANSFORMER T1)	45/3P	38			
39			H	5.18			15.12			9.94	O			40			
41			H	5.18				15.12		9.94	O			42			
TOTAL CONNECTED LOAD (KVA)						25.81	21.81	21.81									

PANEL: L1 (E)										MOUNTING:		REFER TO SHEET(E-3)		
208Y/120		VOLTS,	3	PHASE,	4	WIRE				LOCATION:		REFER TO SHEET(E-3)		
MAIN CB		NA	M.L.O.	100A	BUS:	EXISTING		MIN,	FED FROM:		REFER TO RISER SHEET (E-1)			
NOTE: L : LIGHTING, H : HVAC LOAD, M : MOTOR LOAD, R : RECEPTACLES, E : EQUIPMENT LOAD, O : OTHER/MISC. (TYPICAL)														
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	0.98	2#12, #12G, 3/4"C	1.70			2#12, #12G, 3/4"C	0.72	R	RECEPTACLE - RECEPTION DESK	20	2
3	20	LIGHTING	L	0.31	2#12, #12G, 3/4"C		0.31					SPARE		4
5	20	LAMINAR FLOW HOOD	O	0.04	2#12, #12G, 3/4"C			0.54	2#12, #12G, 3/4"C	0.50	E	RECEPTACLE - UNDERCOUNTER REFRIGERATOR	20	6
7	20	LAMINAR FLOW HOOD	O	0.04	2#12, #12G, 3/4"C	0.22			2#12, #12G, 3/4"C	0.18	R	RECEPTACLE - DIRECTOR'S OFFICE DESK	20	8
9	20	RECEPTACLE - ROOF	R	0.18	2#12, #12G, 3/4"C		0.72		2#12, #12G, 3/4"C	0.54	R	RECEPTACLE - DIRECTOR'S OFFICE	20	10
11	20	RECEPTACLE - LAUNDRY	R	0.36	2#12, #12G, 3/4"C			0.90	2#12, #12G, 3/4"C	0.54	R	RECEPTACLE - CONSULTATION OFFICE / NAD RM #1	20	12
13	20	RECEPTACLE - LOBBY	R	0.90	2#12, #12G, 3/4"C	1.26			2#12, #12G, 3/4"C	0.36	R	RECEPTACLE - TV	20	14
15	20	MEMBER CHAIR	R	1.44	2#12, #12G, 3/4"C		1.98		2#12, #12G, 3/4"C	0.54	R	RECEPTACLE - CONSULTATION OFFICE / NAD RM #2	20	16
17	20	MEMBER CHAIR	R	1.44	2#12, #12G, 3/4"C			1.80	2#12, #12G, 3/4"C	0.36	R	RECEPTACLE - TV	20	18
19	20	MEMBER CHAIR	R	1.44	2#12, #12G, 3/4"C	1.98			2#12, #12G, 3/4"C	0.54	R	RECEPTACLE - CONSULTATION OFFICE / NAD RM #3	20	20
21	20	MEMBER CHAIR	R	1.44	2#12, #12G, 3/4"C		1.80		2#12, #12G, 3/4"C	0.36	R	RECEPTACLE - TV	20	22
23	20	MEMBER CHAIR	R	1.44	2#12, #12G, 3/4"C			1.98	2#12, #12G, 3/4"C	0.54	R	RECEPTACLE - COUPLES CONSULTATION / NAD RM #4	20	24
25	20	MEMBER CHAIR	R	1.44	2#12, #12G, 3/4"C	1.94			2#12, #12G, 3/4"C	0.50	R	COUPLES MEMBER CHAIRS	20	26
27	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C		0.81		2#12, #12G, 3/4"C	0.09	O	RCP-1	20	28
29	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C			0.90	2#12, #12G, 3/4"C	0.18	R	RECEPTACLE - RESTROOM	20	30
31	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C	1.26			2#12, #12G, 3/4"C	0.54	R	RECEPTACLE - EMPLOYEE RM & LAUNDRY	20	32
33	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C		1.92		2#12, #12G, 3/4"C	1.20	E	REFRIGERATOR	20	34
35	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C			1.92	2#12, #12G, 3/4"C	1.20	E	DISHWASHER	20	36
37	20	EF-1(E)	M	0.09	2#12, #12G, 3/4"C	1.59			2#12, #12G, 3/4"C	1.50	O	WASHER	20	38
39	20	SPARE					2.50			2.50	O	DRYER	30/2P*	40
41	20	SPARE							2#10, #10G, 3/4"C	2.50	O			42
TOTAL CONNECTED LOAD (KVA)						9.95	10.04	10.54						

PANEL: L2 (N)										MOUNTING:		REFER TO SHEET(E-3)					
208Y/120		VOLTS,		3		PHASE,		4		WIRE		LOCATION:		REFER TO SHEET(E-3)			
MAIN CB		60A		M.L.O.		NA		BUS:		125A		MIN,		FED FROM:		REFER TO RISER SHEET (E-1)	
NOTE: L : LIGHTING, H : HVAC LOAD, M : MOTOR LOAD, R : RECEPTACLES, E : EQUIPMENT LOAD, O : OTHER/MISC. (TYPICAL)																	
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	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C	1.22			2#12, #12G, 3/4"C	0.50	L	PRIME IV SIGNAGE RECEPTION	20	2			
3	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C		2.22		2#12, #12G, 3/4"C	1.50	R	ELECTRICAL FIRE PLACE	20	4			
5	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C			1.44	2#12, #12G, 3/4"C	0.72	R	RECEPTACLE - RECEPTION AREA	20	6			
7	20	NON MEMBER CHAIRS	R	0.72	2#12, #12G, 3/4"C	0.90			2#12, #12G, 3/4"C	0.18	R	RECEPTACLE - BREAK ROOM	20	8			
9	20	EXTERIOR SIGNAGE	L	1.20	2#12, #12G, 3/4"C		1.20					SPACE		10			
11	20	RECEPTACLE - SHOW WINDOW	R	1.20	2#12, #12G, 3/4"C			1.20				SPACE		12			
13	20	RECEPTACLE - SHOW WINDOW	R	1.20	2#12, #12G, 3/4"C	1.20						SPACE		14			
15	20	RECEPTACLE - SHOW WINDOW	R	0.60	2#12, #12G, 3/4"C		0.60					SPACE		16			
17	20	RECEPTACLE - SHOW WINDOW	R	1.20	2#12, #12G, 3/4"C			1.20				SPACE		18			
19	20	RECEPTACLE - COMPOUND ROOM	R	0.18	2#12, #12G, 3/4"C	0.18						SPACE		20			
21	20	RECEPTACLE - COMPOUND ROOM	R	0.72	2#12, #12G, 3/4"C		0.72					SPACE		22			
23	20	RECEPTACLE MEMBERS TREATMENTS AREA	R	0.54	2#12, #12G, 3/4"C			0.54				SPACE		24			
25	20	RECEPTACLE WATING AREA	R	1.00	2#12, #12G, 3/4"C	1.00						SPACE		26			
27	20	SPARE					0.00					SPACE		28			
29	20	SPARE						0.00				SPACE		30			
TOTAL CONNECTED LOAD (KVA)						4.50	4.74	4.38									

PANEL SCHEDULE KEY NOTES:

- A E.C SHALL CROSS VERIFY THE EXACT BRANCH BREAKER FEEDING EXISTING WATER HEATER. ADJUST THE CIRCUIT NAMES/ BRANCH BREAKERS AS PER SITE CONDITION. BASE BID ACCORDINGLY.
- B PROVIDE (1) 30A/1P BREAKER IN PLACE OF (1) SPACES.
- C PROVIDE (1) 25A/3P BREAKER IN PLACE OF (3) SPACES.
- D PROVIDE (29) 20A/1P BREAKER IN PLACE OF (29) SPACES.
- E PROVIDE (1) 30A/2P BREAKER IN PLACE OF (2) SPACES.
- F E.C SHALL CROSS VERIFY THE EXACT BRANCH BREAKER FEEDING EXISTING EXHAUST FAN. ADJUST THE CIRCUIT NAMES/ BRANCH BREAKERS AS PER SITE CONDITION. BASE BID ACCORDINGLY.

PANEL SCHEDULE GENERAL NOTES:

1. ALL THE CIRCUITING SHOWN FOR THE EXISTING PANEL "H3" AND "L1" ARE FOR REFERENCE PURPOSE ONLY. E.C SHALL VERIFY CIRCUITING & BREAKER SIZE OF THE EXISTING DEVICES IN FIELD AND INFORM ENGINEER FOR DISCREPANCIES.
2. ELECTRICAL CONTRACTOR TO VERIFY THE EXACT PANEL SIZES AND INCOMING FEEDER SIZE.
3. E.C SHALL VERIFY THE EXISTING EQUIPMENT LOAD & RATING IN FIELD AND ACCORDINGLY CONSIDER THE ELECTRICAL LOAD IN PANEL SCHEDULE
4. E.C SHALL PROVIDE NEW BREAKER IN PLACE OF EXISTING CIRCUIT BREAKER WHEREVER NECESSARY TO BE IN LINE WITH THE PANEL SCHEDULE. CHECK COMPATIBILITY OF NEWLY ADDED BREAKER WITH THE EXISTING PANEL BEFORE PURCHASING. BASE BID ACCORDINGLY.
5. '*' INDICATES GFCI CIRCUIT BREAKERS.



COMcheck Software Version COMcheckWeb Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: PRIME IV
Project Type: Alteration

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts
1-Health Care-Clinic	2116	0.82	1735
Total Allowed Watts =			1735

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture (C X D) Watt.	E
Health Care-Clinic (2116 sq.ft.)				
LED: A: 6" LED RECESSED CAN LIGHT: Other:	1	44	13	572
LED: B: 2'x2' LAY-IN LED LIGHT FIXTURE: Other:	1	15	32	480
LED: C: MINI PENDANT LIGHT: Other:	1	3	13	39
LED: D: MINI PENDANT LIGHT: Other:	1	11	13	143
LED: E: LARGE PENDANT LIGHT: Other:	1	1	25	25
Total Proposed Watts =			1259	

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the inspection Checklist.

Michael Tobias
Name - Title
Signature
Date: 06/20/25

Project Title: PRIME IV
Report date: 06/20/25
Page 1 of 5

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2, [EL23] ²	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.2.4 [EL26] ¹	Separate lighting control devices for specific uses installed per approved lighting plans.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C405.2.4 [EL27] ¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C405.3 [EL6] ¹	Exit signs do not exceed 5 watts per face.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C405.6 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.8.2, C405.8.2.1 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.9 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: PRIME IV
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Page 4 of 5



COMcheck Software Version COMcheckWeb Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: PRIME IV
Report date: 06/20/25
Page 2 of 5

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [F117] ³	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C405.4.1 [F118] ¹	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	See the Interior Lighting fixture schedule for values.
C408.1.1 [F157] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C408.2.5.1 [F116] ³	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C408.3 [F133] ¹	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: PRIME IV
Report date: 06/20/25
Page 5 of 5

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2, C405.2.2.1 [EL22] ¹	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18] ¹	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.2 [EL19] ¹	Occupancy sensors control function in warehouses: In warehouses, the lighting in aiseways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Exception: Requirement does not apply.
C405.2.1, C405.2.1.3 [EL20] ¹	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls: 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21] ²	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐ Complies ☐ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: PRIME IV
Report date: 06/20/25
Page 3 of 5

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PROJECT

REVISIONS DATES:

07/18/25 BD COMMENTS

ISSUE DATE: 06.26.25
PROJECT #: 2510.01
DRAWN BY: NYE
CHECKED BY: NYE

ENERGY ANALYSIS
SHEET 01 OF 01

E-6

PLUMBING NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
- PLUMBING CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THIS SET. 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 PRECEDING WITH WORK.
- ALL EQUIPMENT WHICH IS TO REMAIN MUST BE REFURBISHED TO A LIKE NEW CONDITION.
- PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.
- ALL MATERIALS SHALL BE NEW.
- ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
- REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTION AND TESTS. PLUMBING CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR MUST BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.
- DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING, EQUIPMENT, ETC.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ENGINEER/ARCHITECT PRIOR TO BEGINNING CONSTRUCTION.
- VERIFY LOCATION, SIZE, DIRECTION OF FLOW AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVISE ENGINEER OF ANY DISCREPANCIES.
- EXPPOSED WATER PIPING SHALL BE TYPE "L" COPPER FOR 2" AND UNDER. WATER PIPING IN WALLS AND UNDERGROUND MAY BE "PEX" TYPE PIPING THAT MEETS ANSIS/ NSF STANDARD 61.
- SOIL, WASTE AND VENT PIPING SHALL BE PVC BUT MAY NOT RUN THRU RATED ASSEMBLIES OR IN PLENUMS.
- ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
- FURNISH AND INSTALL APPROVED AIR CHAMBERS AT EACH PLUMBING FIXTURE GROUP AS PER CODE AND WITH GOOD ENGINEERING PRACTICE.
- DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL IN PIPING AND EQUIPMENT CONNECTIONS; EXCEPT AT WATER HEATER AS PER CODE.
- ISOLATE COPPER PIPE FROM HANGER OR SUPPORTS WITH ISOLATOR PAD.
- ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING VOIDS BETWEEN PIPE AND WALL/FLOOR SLEEVES WITH FIRE RATED FOAM, TO ACHIEVE THE SAME RATING AS WALLS OR FLOORS AS PART OF THE PLUMBER'S WORK.
- PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE WITHIN 72 HOURS OF NOTIFICATION AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED. PROVIDE COPY TO LL.
- STUDOR MINIMAXI AIR ADMITTANCE VALVES MAY NOT BE USED AS AN ALTERNATE TO VENT PIPING THRU ROOF.
- PROVIDE CHROME PLATED COMBINATION COVER PLATE AND CLEAN OUT PLUG OR ACCESS PANEL FOR ALL CLEANOUTS.
- NO COMBUSTIBLE MATERIAL TO BE USED IN MECHANICAL ROOMS OR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.
- NO WATER, SANITARY OR DRAINAGE PIPING PERMITTED IN ELECTRICAL OR ELEVATOR EQUIPMENT ROOMS.
- WATER PIPING INSULATION SHALL BE 1" THICK ARMAFLEX INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS FOR ALL HOT WATER PIPING. WHERE DOMESTIC WATER TEMPERATURES CAN CAUSE SWEATING, ALL COLD WATER PIPING SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX INSULATION.
- CONDENSATE DRAIN LINES TO BE RUN UNDER SLAB IN PVC SCH40 PIPE AND STUBBED OUT OF WALL TO UNIT. TIE-IN OF A/C TO BE BY OTHERS. PVC PIPING WITH 1/2" THICK ARMAFLEX INSULATION MAY BE USED IN LOCATIONS WHERE ALLOWED BY LOCAL CODES. SEE PLUMBING DRAWINGS FOR SIZE AND LOCATION OF PIPING. PVC WILL BE MIN. SCHEDULE 40 FOR SIZE AND LOCATION OF PIPING. PVC WILL BE MIN. SCHEDULE 40.
- PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUT-OFF.
- NO JOINTS UNDERGROUND FOR COPPER.
- PLUMBING FIXTURES SHALL COMPLY WITH 2018 INTERNATIONAL PLUMBING CODE.
- WATER HAMMER ARRESTORS AS PER 2018 INTERNATIONAL PLUMBING CODE.
- PLUMBING CONTRACTOR SHALL REVIEW ALL BID DOCUMENTATION.
- PLUMBING CONTRACTOR SHALL REVIEW WALL FINISHES @ LOCATION REQUIRING BARRIER-FREE COMPLIANCE (EXAMPLE: CENTER LINE TO TOILET).
- 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.
- OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER. PROVIDE A COPY TO LL.

EXISTING CONTIDITONS NOTES

STOP AND READ

THE CONTRACTOR AND SUB-CONTRACTORS SHALL NOT INITIATE ANY WORK UNTIL EXISTING FIELD CONDITIONS ARE PROPERLY VERIFIED. THIS SHALL HOLD TRUE FOR FIRST GENERATION AND 2ND GENERATION SPACES. WHEN DEMOLITION IS REQUIRED, THAT WILL BE PERMITTED TO EXPOSE CONDITIONS. THESE VERIFICATIONS SHALL INCLUDE BUT NOT LIMITED TO: DIMENSIONS BOTH HORIZONTALLY AND VERTICAL, ELECTRICAL SERVICE /PANELS LOCATION AND VOLTS/PHASE, LOCATION/ITY OF ROOF MOUNTED HVAC EQUIPMENT. CONFIRM THAT INTERIOR HVAC HUNG UNITS HAVE PROPER SUPPORT CONNECTIONS FOR EXISTING STRUCTURE. FIRE SPRINKLER MAIN RUNS, TOILET ROOM DIMENSIONS, DOOR SWING FOR DOORS TO REMAIN AND ETC. IF NOT VERIFIED AND DISCOVERED AT A LATER TIME, THE CONTRACTOR SHALL REIMBURSE THE ARCHITECT FOR THE REDESIGN FEE. THIS DOES NOT INCLUDE HIDDEN WORK I.E. PITCH OF SANITARY LINES, ACTUAL CONDITIONS OF EXISTING HVAC EQUIPMENT, STRUCTURAL COLUMNS/BEARING WALLS AND ETC.

PLUMBING LEGEND

	SANITARY SEWER PIPING
	VENT PIPING
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER RETURN PIPING
	PIPE RISE
	PIPE DROP
	WALL CLEANOUT
	P-TRAP
	BALANCING VALVE
	COLD WATER
	HOT WATER
	HOT WATER RETURN
	WALL CLEAN OUT
	GATE VALVE
	FLOOR DRAIN
	INDIRECT WASTE
	THERMOSTATIC MIXING VALVE

FIXTURE BRANCH SCHEDULES

FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
WATER CLOSET (E)	E	--	E	E
LAVATORY (E)	E	E	E	E
HAND SINK	1/2"	1/2"	2"	1-1/2"
DISH WASHER	-	3/4"	I.W.	-
WASHER/DRYER	1/2"	1/2"	3"	2"
FLOOR DRAIN	-	-	3"	2"

ENERGY CONSERVATION NOTES

1. AS PER 2018 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 C403.2.10 OF MINIMUM PIPE INSULATION THICKNESS.

MINIMUM PIPE INSULATION THICKNESS				
FLUID OPERATING TEMPERATURE RANGE AND USAGE (°F)	INSULATION CONDUCTIVITY		NOMINAL PIPE OR TUBE SIZE (INCHES)	
	CONDUCTIVITY BTU · IN./ (H· FT² · °F)	MEAN RATING TEMPERATURE °F	<1 TO <1 1/2	1 1/2 TO <4 TO >8
141-200	0.25-0.29	125	1.5	1.5 2 2 2 2
105-140	0.21-0.28	100	1.0	1.0 1.0 1.5 1.5 1.5
40-60	0.21-0.27	75	0.5	0.5 1.0 1.0 1.0 1.0

2. HOT WATER SYSTEM PIPING IS DESIGNED AS PER MAXIMUM ALLOWED PIPE LENGTH METHOD AS PER 2018 INTERNATIONAL ENERGY CONSERVATION CODE C404.5.1. THE MAXIMUM ALLOWABLE PIPE LENGTH 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)	MIXIMUM PIPING LENGTH (FEET)	
	PUBLIC LAV	OTHER FIXTURES
3/8"	3'	50'
1/2"	2'	43'
3/4"	0.5'	21'
1"	0.5'	13'
1 1/4"	0.5'	8'
1 1/2"	0.5'	6'
2" OR LARGER	0.5'	4'

3. AS PER 2018 INTERNATIONAL ENERGY CONSERVATION CODE C404.6.1, AUTOMATIC CONTROLS SHALL BE INSTALLED THAT LIMITS THE OPERATION OF A RE-CIRCULATING PUMP AND THE SYSTEM RETURN PIPE SHALL BE A DEDICATED RETURN PIPE OR A COLD WATER SUPPLY PIPE.

4. AS PER 2018 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 NOT GREATER THAN 104°F (40°C).

SCOPE OF WORK

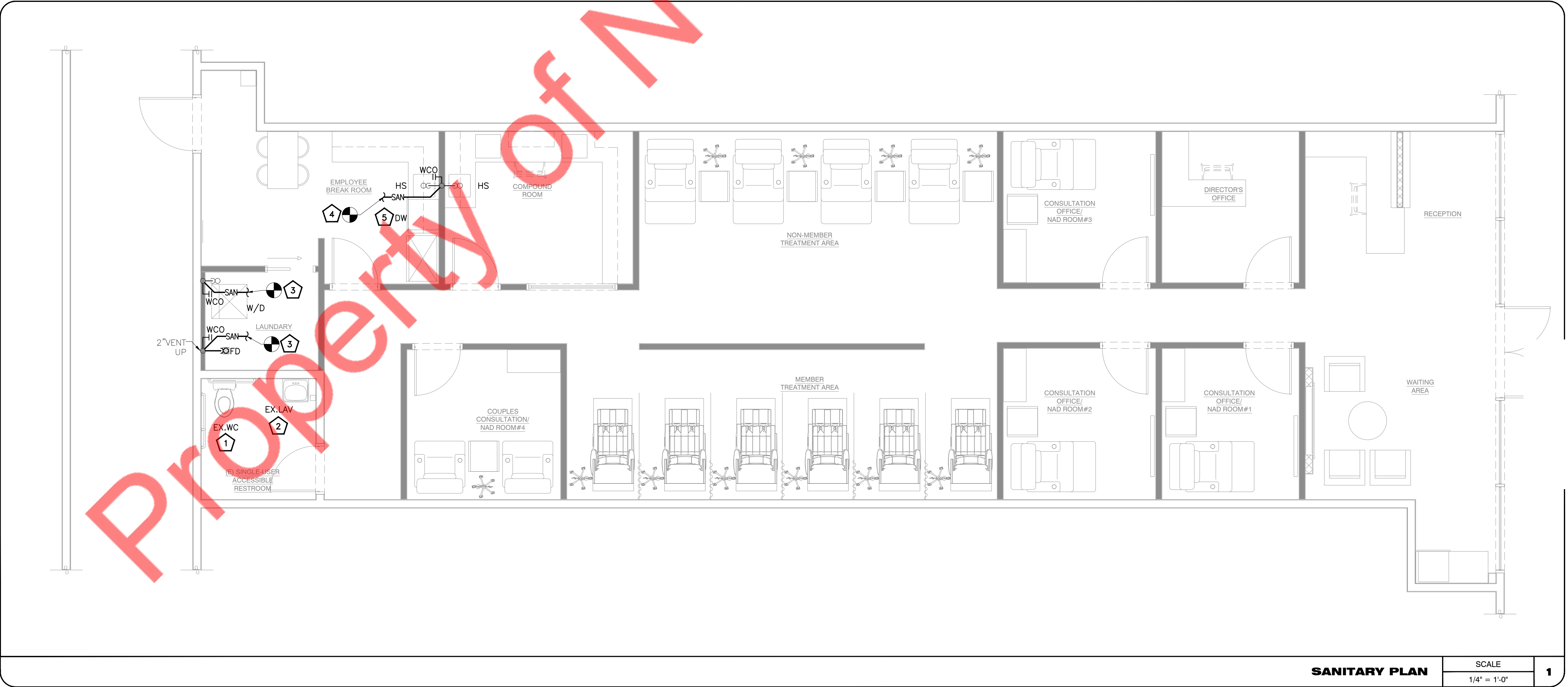
PROVIDE ALL PLUMBING FOR NEW VITAMIN FACILITY INCLUDING ALL WATER, GAS, VENT AND SANITARY LINES AND CONNECT TO EXISTING UTILITIES. REUSE EXISTING ELECTRIC POINT OF USE WATER HEATER FOR LAVATORY AND PROVIDE ONE NEW ELECTRIC STORAGE WATER HEATER. COORDINATE WITH GC AND MECHANICAL CONTRACTOR FOR ANY REQUIRED CONDENSATE LINES.

SANITARY PLAN & RISER KEY NOTES

- EXISTING WATER CLOSET TO REMAIN WITH EXISTING SANITARY AND VENT CONNECTIONS, ASSOCIATED ACCESSORIES AND FITTINGS. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND REPLACE IF REQUIRED.
- EXISTING LAVATORY TO REMAIN WITH EXISTING SANITARY AND VENT CONNECTIONS, ASSOCIATED ACCESSORIES AND FITTINGS. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND REPLACE IF REQUIRED.
- CONNECT NEW 3" SANITARY LINE TO EXISTING SANITARY LINE OF ADEQUATE SIZE IN SPACE. CONTRACTOR TO FIELD VERIFY THE SIZE, LOCATION & INVERT OF EXISTING SANITARY LINE AND MAKE NECESSARY CHANGES IF REQUIRED.
- CONNECT NEW 2" SANITARY LINE TO EXISTING SANITARY LINE OF ADEQUATE SIZE IN SPACE. CONTRACTOR TO FIELD VERIFY THE SIZE, LOCATION & INVERT OF EXISTING SANITARY LINE AND MAKE NECESSARY CHANGES IF REQUIRED.
- DRAIN WASTE LINE FROM DISHWASHER INTO THE HAND SINK P TRAP.
- CONNECT NEW 1 1/2" VENT PIPE TO EXISTING VENT PIPE OF ADEQUATE SIZE IN SPACE. CONTRACTOR TO FIELD FOR EXACT LOCATION AND SIZE ON SITE OF EXISTING VENT PIPE AND MAKE NECESSARY CHANGES IF REQUIRED.
- CONNECT NEW 2" VENT PIPE TO EXISTING VENT PIPE OF ADEQUATE SIZE IN SPACE. CONTRACTOR TO FIELD FOR EXACT LOCATION AND SIZE ON SITE OF EXISTING VENT PIPE AND MAKE NECESSARY CHANGES IF REQUIRED.

SANITARY RISER

SCALE	2
N.T.S.	



SANITARY PLAN

SCALE	1
1/4" = 1'-0"	

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REVISIONS DATES:

07/18/25 BD COMMENTS

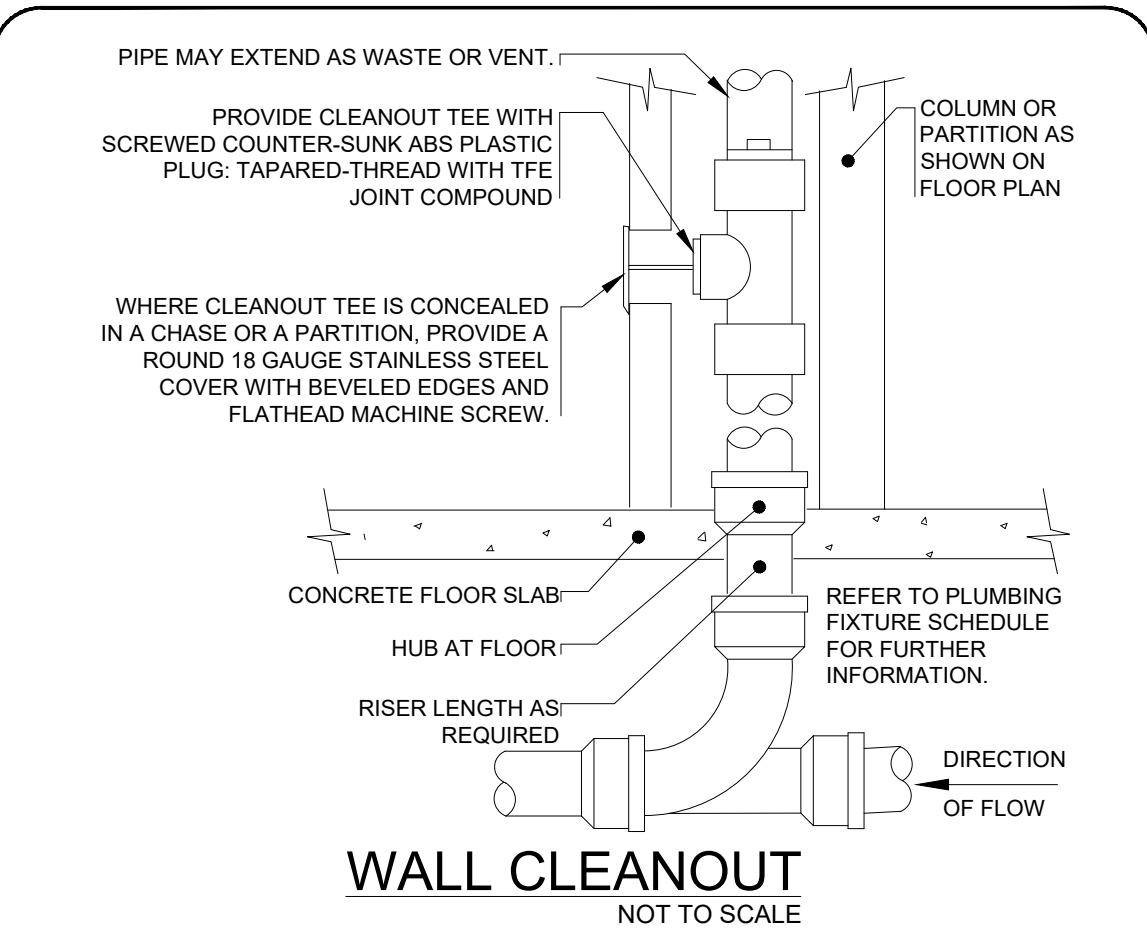
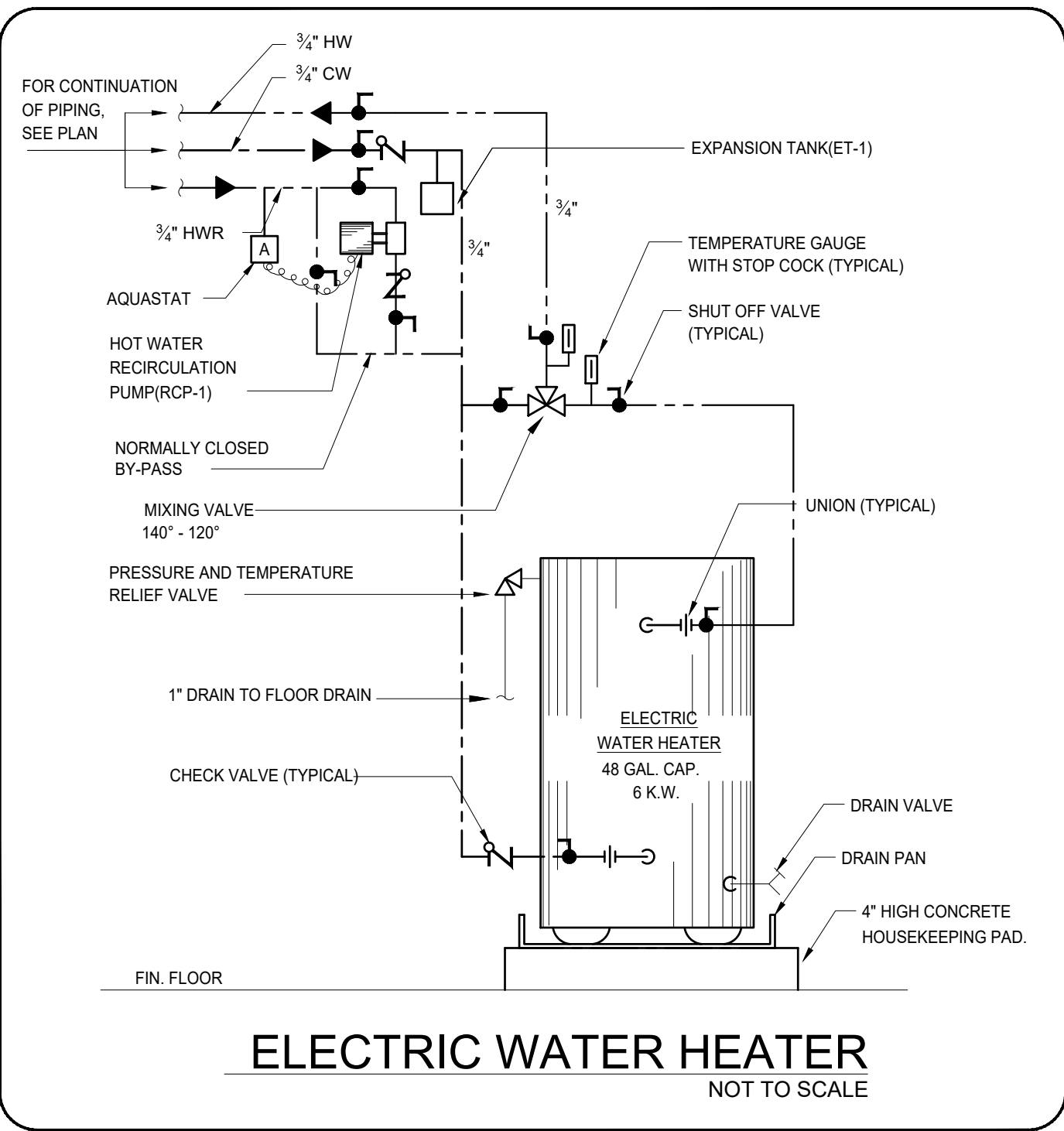
ISSUE DATE: 06.26.25

PROJECT #: 2510.01

DRAWN BY: NYE

CHECKED BY: NYE

PLUMBING NOTES,
LEGEND,
SANITARY PLAN &
RISER



WALL CLEANOUT DETAIL NOTES

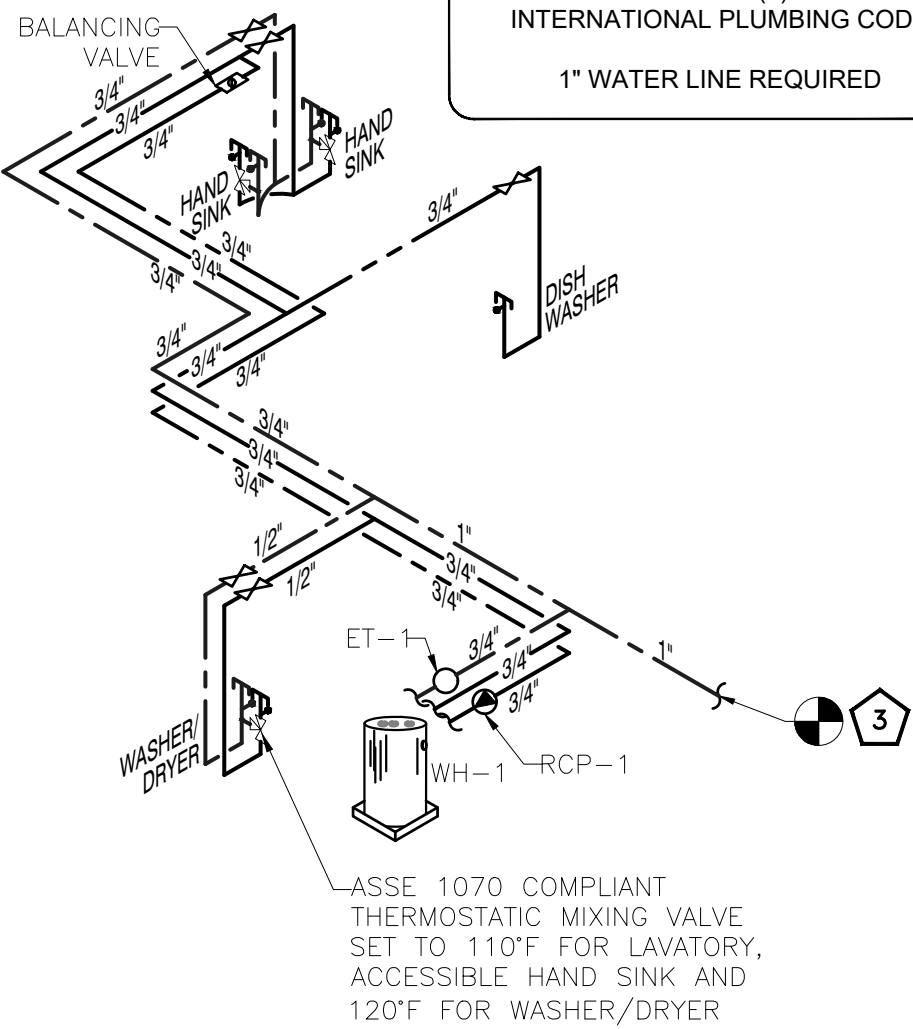
- 1) PROVIDE WCO WHERE SHOWN ON PLANE, AND ON SANITARY WASTE BRANCHES NOT SERVED WITH A FLOOR CLEANOUT
- 2) LOCATE ABOVE FUTURE FLOOR RIM WITHIN 4" OF FLOOR.
- 3) CONSULT LOCAL CODES FOR OTHER WCO REQUIREMENTS.
- 4) LONG SWEEP AT END OF LINE OR COMBINATION WYE AND EIGHT BEND IN RUN OF LINE
- 5) CLEAN OUT FACE SHALL BE WITHIN 4" OF WALL SURFACE. PROVIDE A PIPE EXTENSION IF REQUIRED

FIXTURE FACTOR VALUE *

- 1 WATER CLOSET(TANK) (E) @ 5 = 5
- 1 LAVATORY (E) @ 2 = 2
- 2 HAND SINKS @ 2 = 4
- 1 WASHER & DRYER @ 4 = 4
- 1 DISH WASHER @ 1.4 = 1.4
- TOTAL = 16.4

* TABLE E103.3(2) - 2018 INTERNATIONAL PLUMBING CODE

1" WATER LINE REQUIRED



WATER RISER

SCALE
N.T.S.

2

PLUMBING FIXTURE SCHEDULE

Item No.	Qty.	Description	Manufacturer	Model	Water	Waste
EX.LAV	1	LAVATORY	EXISTING TO REMAIN	EXISTING TO REMAIN		E
	1	LAVATORY FAUCET***	EXISTING TO REMAIN	EXISTING TO REMAIN	E	E
EX.WC	1	WATER CLOSET	EXISTING TO REMAIN	EXISTING TO REMAIN		E
	1	ELONGATED SEAT	EXISTING TO REMAIN	EXISTING TO REMAIN		
HS	2	HAND SINK	ELKAY	LRADQ1919401		2"
	2	HAND SINK FAUCET***	ELKAY	LKD208513LC	1/2" 1/2"	
W/D	1	WASHER/ DRYER***	-	-	1/2" 1/2"	3"
DW	1	DISH WASHER	-	-	3/4" -	1"W
	3	THERMAL MIXING VALVE	WATTS	LFMMV	1/2" 1/2"	

***MIXING VALVE REQUIRED.

EXISTING POINT OF USE WATER HEATER SCHEDULE

EQUIPMENT TAG	EX.WH
MANUFACTURER	EEMAX
MODEL	V.I.F
STATUS	EXISTING
QUANTITY	1
WATTS	V.I.F
FLOW RATE	V.I.F
EFFICIENCY	V.I.F
VOLTAGE	V.I.F
AMPERAGE	V.I.F
WEIGHT	V.I.F

RECIRCULATION PUMP SCHEDULE

MANUFACTURER & MODEL	GRUNDFOS UP-15-18 B5
EQUIPMENT TAG	RCP-1
STATUS	NEW
GPM	2
WATER TEMP.(°F)	140
PUMP TYPE	INLINE
MHP	85 WATTS
V/PH/Hz	115/1/60
RPM	2280
SERVICE FACTOR	1.0

NOTE:
PROVIDE AQUA STAT WITH AUTOMATIC TIMER KIT FOR THE TEMPERATURE CONTROL OF HOT WATER SYSTEM. COORDINATE ELECTRICAL REQUIREMENTS FOR TIMER WITH ELECTRICAL CONTRACTOR.

NEW STORAGE WATER HEATER SCHEDULE

MANUFACTURER	AO SMITH
MODEL	DEL-50
EQUIPMENT TAG	WH-1
STATUS	NEW
CAPACITY	48 GALLONS
QUANTITY	1
KW	6
FLOW RATE	27 GPH*
VOLTAGE	277/1/60
AMPERAGE	21.66
WEIGHT	172 LBS

1. *NON-SIMULTANEOUS ELEMENT OPERATION @ 90° F TEMPERATURE RISE.
2. INSTALL NEW EXPANSION TANK AMITROL MODEL THERM-X-TROL ST-5C-DD, 2.0 (ET-1) GAL PER LOCAL CODE REQUIREMENTS.

GENERAL WATER NOTES

1. CW/HW/HWR PIPING TO BE PROVIDED WITH INSULATION AS PER 2018 INTERNATIONAL ENERGY CONSERVATION CODE NOTES (REFER 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.

WATER, GAS PLAN & RISER KEY NOTES

1. EXISTING WATER CLOSET TO REMAIN WITH EXISTING CW CONNECTION, ASSOCIATED ACCESSORIES & FITTINGS. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING & REPLACE IF REQUIRED.
2. EXISTING LAVATORY TO REMAIN WITH EXISTING POINT OF USE WATER HEATER, CW/HW PIPING, ASSOCIATED ACCESSORIES AND FITTINGS. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND REPLACE IF REQUIRED.
3. CONNECT NEW 1" CW LINE TO EXISTING CW PIPING OF ADEQUATE SIZE IN SPACE. CONTRACTOR TO FIELD VERIFY THE SIZE AND LOCATION OF THE EXISTING CW LINE AND MAKE NECESSARY CHANGES IF REQUIRED. CONTRACTOR TO COORDINATE WITH LANDLORD FOR EXACT LOCATION OF EXISTING BACKFLOW PREVENTER. PROVIDE NEW BACKFLOW PREVENTER PER LOCAL CODE REQUIREMENT IF EXISTING IS NOT IN GOOD CONDITION OR NOT AVAILABLE.
4. EXISTING POINT OF USE WATER HEATER (EX.WH) TO REMAIN WITH EXISTING CW/HW PIPING AND ASSOCIATED ACCESSORIES AND FITTINGS. CONTRACTOR TO NOTIFY THE ENGINEER IF WATER HEATER IS NOT IN WORKING OR GOOD CONDITION.
5. EXISTING RTU-1(E) TO REMAIN WITH EXISTING GAS PIPING, GAS METER, RELATED ACCESSORIES AND FITTINGS. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND REPLACE IF REQUIRED.



REVISIONS DATES.

07/18/25 BD COMMENTS

ISSUE DATE: 06.26.25

PROJECT #: 2510.01

DRAWN BY: NYE

CHECKED BY: NYE

PLUMBING
SCHEDULE, WATER,
GAS PLAN, WATER
RISER & DETAILS

P-2

WATER & GAS PLAN

SCALE
1/4" = 1'-0"

1

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COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code:2018 IECC

Project Title:

Location:

Climate Zone:

Project Type:Alteration

Owner/Agent:

Mechanical Systems List

QuantitySystem Type & Description

1

WH-1:
Electric Storage Water Heater, Capacity: 48 gallons w/ Circulation Pump
No minimum efficiency requirement applies

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

ERIC ENGELL



06/20/25

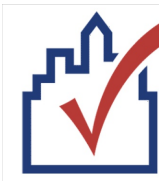
Name - TitleSignatureDate

Project Title:PRIME IV

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Data filename:

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COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code:2018 IECC

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PK3] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1)

2 Medium Impact (Tier 2)

3 Low Impact (Tier 3)

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Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6] ¹	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.1, C404.6.2 [PL3] ¹	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7] ¹	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] ¹	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1)

2 Medium Impact (Tier 2)

3 Low Impact (Tier 3)

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Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41] ¹	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-5.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C403.7.2 [ME115] ¹	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C403.7.5 [ME116] ¹	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C403.4.1.4 [ME63] ²	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45°F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60°F and cooling setpoint >= 80°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C408.2.2.1 [ME53] ¹	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME123] ¹	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C405.8.2.1 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C405.9 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C404.3 [FI11] ¹	Heat traps installed on supply and discharge piping of non-circulating systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C404.4 [FI25] ²	All piping insulated in accordance with section details and Table C403.11.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.1 [FI12] ¹	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.1.1 [FI57] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

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ENERGY ANALYSIS

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