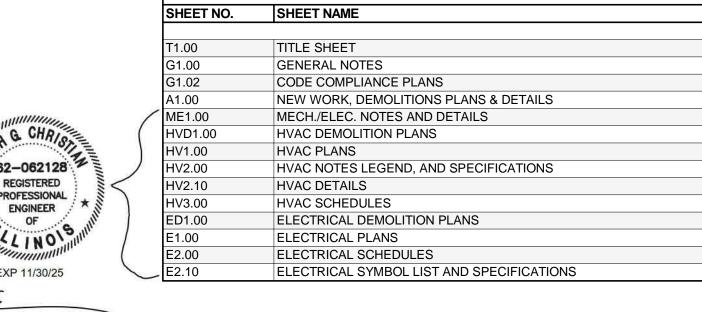
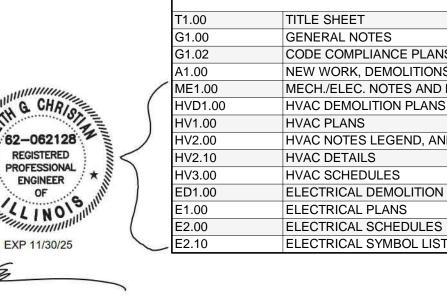
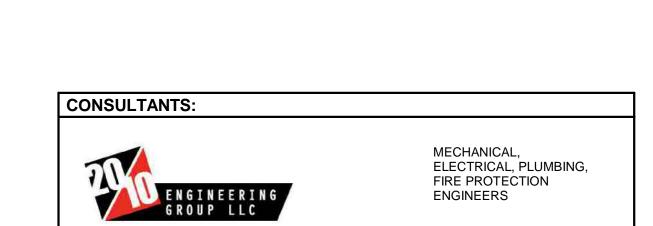
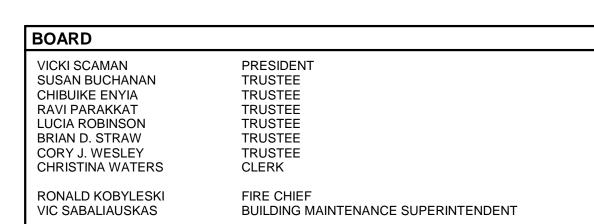
# Oak Park North Fire Station 2 Mechanical Replacement Project



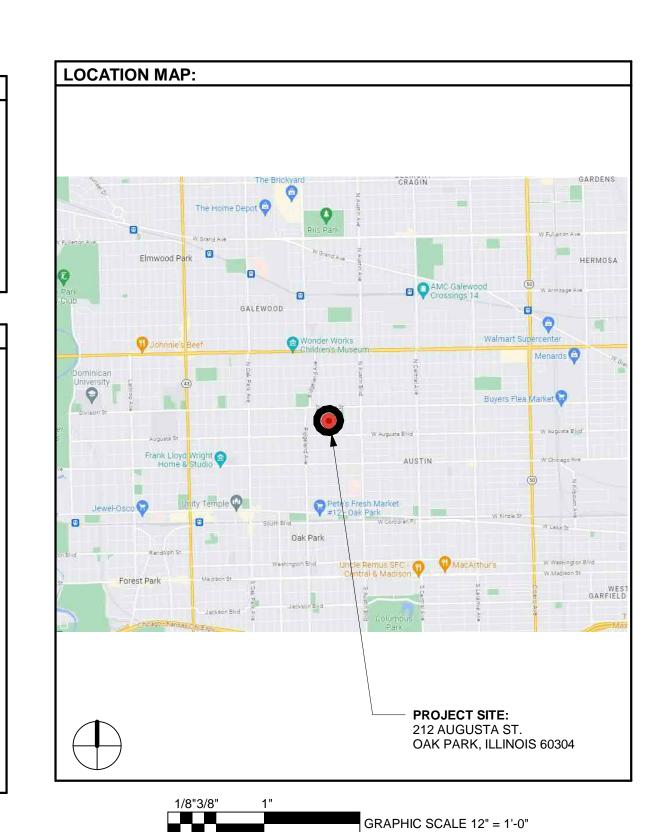


DRAWING INDEX





CERTIFICATION:	
THE OFFICES OF STUDIO	THESE PLANS AND SPECIFICATIONS WERE PREPARED IN DGC, INC. UNDER MY DIRECT SUPERVISION AND TO THE GE, COMPLY WITH THE FOLLOWING:
<ul> <li>2021 INTERNATIONAI</li> <li>2020 NATIONAL ELEC</li> <li>2021 INTERNATIONAI</li> <li>2021 ILLINOIS ENERG</li> <li>2021 INTERNATIONAI</li> <li>2021 INTERNATIONAI</li> <li>2018 ILLINOIS ACCES</li> </ul>	L BUILDING CODE (IBC) W/AMENDMENTS L EXISTING BUILDING CODE (IEBC) CTRICAL CODE (NEC) W/AMENDMENTS L FIRE CODE (IFC) W/AMENDMENTS GY CONSERVATION CODE (IECC) L MECHANICAL CODE (IMC) W/AMENDMENTS L FUEL GAS CODE (IFGC) SSIBILITY CODE (IAC) BING CODE (ILPC) NO/AMENDMENTS
MINISTER ARCHITE	CRAIG S. MEADOWS ARCHITECT
CRAIG S.	
CRAIG S. MEADOWS	ARCHITECT



STUDIO GC architecture + interiors 223 West Jackson Boulevard, Suite 1200 Chicago, Illinois 60606 (312) 253-3400

ISSUE • DATE

TITLE SHEET

C:\Users\J.wagener\Documents\\_Oak Park Fire Station 2\_v23\_Mech Equip Repl Project\_J.Wagener.rvt

#### GENERAL NOTES

- 1.) REFER TO THE PROJECT MANUAL FOR BIDDING REQUIREMENTS, CONTRACT FORMS, GENERAL CONDITIONS OF THE CONTRACT, SUPPLEMENTARY CONDITIONS OF THE CONTRACT, AND TECHNICAL SPECIFICATIONS.
- 2.) EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE PROJECT SITE AND OBSERVING THE SURROUNDING CONDITIONS PRIOR TO SUBMITTING A BID FOR THIS PROJECT. CONTRACTORS SHALL PROMPTLY CONTACT THE ARCHITECT IN WRITING IF THERE IS A CONFLICT BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, OR OTHER QUESTIONS ARISE FROM THE CONTRACTOR'S OBSERVATIONS
- 3.) SEVERAL ITEMS ON THE DRAWINGS ARE INDICATED AS AN ALTERNATE. THE SCOPE OF THESE ITEMS ARE EXPLAINED IN THE SECTION 012300 ALTERNATES WITHIN THE PROJECT MANUAL.
- 4.) ALL REQUIRED PRE-INSTALLATION MEETINGS AND MOCKUPS FOR CRITICAL WORK SHALL BE PERFORMED PRIOR TO COMMENCEMENT. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ADDITIONAL MEETINGS AND MOCKUPS WITH THE ARCHITECT AS THEY DEEM NECESSARY. SUCH WORK SHALL BE CONSIDERED PART OF THIS CONTRACT AND THE CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING SUCH WORK IN THEIR BID.
- 5.) EACH CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER
- 6.) WHERE DISCREPANCIES EXIST BETWEEN THE DRAWINGS OF THE VARIOUS TRADES, PROMPTLY REPORT THE DISCREPANCIES TO THE ARCHITECT IN WRITING FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
- 7.) WHERE ANY PROVISIONS OF THE DRAWINGS AND SPECIFICATIONS CONFLICT WITH ONE ANOTHER, THE MORE STRINGENT OR COSTLY REQUIREMENT SHALL GOVERN UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE ARCHITECT.
- 8.) EACH CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL FIELD CONDITIONS, MATERIALS, CONSTRUCTION METHODS AND DIMENSIONS PRIOR TO COMMENCING HIS WORK. CONTRACTORS SHALL PROMPTLY CONTACT THE ARCHITECT IN WRITING IF ISSUES OR QUESTIONS ARISE. COMMENCEMENT OF THE WORK BY A CONTRACTOR CONSTITUTES HIS ACCEPTANCE OF EXISTING CONDITIONS, AS WELL AS TAKING ON THE RESPONSIBILITY FOR ALL UNACCEPTABLE WORK CAUSED BY PREVIOUS CONDITIONS.
- 9.) ANY MATERIALS ORDERED, FABRICATED, OR INSTALLED PRIOR TO THE ARCHITECT'S REVIEW AND APPROVAL OF REQUIRED SUBMITTALS, AND ASSOCIATED SUBMITTALS PERTAINING TO THE WORK, IS DONE SO AT EACH CONTRACTOR'S OWN RISK. THE OWNER AND ARCHITECT ASSUME NO RESPONSIBILITY FOR DELAYS OR ADDED COSTS INCURRED BY ANY CONTRACTOR AS A RESULT OF WORK INSTALLED OR COMPLETED WITHOUT PROPER SUBMITTAL REVIEW AND APPROVAL.
- 10.) ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL CODES AND ORDINANCES AND ALL AUTHORITIES HAVING JURISDICTION. EACH CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL APPLICABLE CODES AND ORDINANCES AND THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION PRIOR TO SUBMITTING BIDS FOR THIS PROJECTS. PLEASE SEE TITLE PAGE FOR ALL LIST OF ADOPTED CODES.
- 11.) GENERAL CODE AND LIFE SAFETY INFORMATION FOR THIS PROJECT IS INDICATED ON THE G-SERIES SHEETS. INFORMATION PROVIDED IS NOT COMPREHENSIVE. CONTRACTORS SHALL BE RESPONSIBLE FOR PERFORMING WORK AS NOTED IN GENERAL NOTE 10.
- 12.) DO NOT SCALE DRAWINGS; READ DIMENSIONS ONLY. IF A REQUIRED DIMENSION IS NOT INDICATED OR ANY DIMENSIONING DISCREPANCIES EXIST ON THE DRAWINGS THE CONTRACTOR SHALL PROMPTLY WRITE TO THE ARCHITECT FOR RESOLUTION.
- 13.) CONTRACTORS SHALL NOT CUT STRUCTURAL ELEMENTS OR MEMBERS IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD DEFLECTION RATIO.
- 14.) ALL STRUCTURAL ITEMS, INCLUDING BUT NOT LIMITED TO, BEAMS, LINTELS, JOISTS, DECKS, MASONRY TIES, BOND BEAMS, COLUMNS, CONNECTIONS AND CONNECTORS, ETC., APPEARING ON ARCHITECTURAL DRAWINGS ARE ONLY SHOWN TO ILLUSTRATE RELATIONSHIPS TO OTHER BUILDING MATERIALS AND SYSTEMS AND SHALL BE CONSIDERED FOR INFORMATION ONLY. REFER TO STRUCTURAL DRAWINGS FOR DETAILED CONFIGURATIONS, TYPES, SIZES, CONNECTIONS, NOTES, AND SCHEDULES.
- 15.) ALL COLD FORMED METAL FRAMING APPEARING ON ARCHITECTURAL DRAWINGS ARE SHOWN TO ILLUSTRATE INTENT. THE CONTRACTOR, AS PART OF DELEGATED DESIGN SUBMITTAL RESPONSIBILITY UNDER HIS SCOPE, IS TO PROVIDE CONNECTIONS, ACCESSORIES, AND CONFIGURATIONS REQUIRED TO MEET THE SPECIFICATIONS.
- 16.) ALL PLUMBING, HVAC, ELECTRICAL, AND FIRE PROTECTION ITEMS APPEARING ON ARCHITECTURAL DRAWINGS ARE ONLY SHOWN TO ILLUSTRATE RELATIONSHIPS TO OTHER BUILDING MATERIALS AND SYSTEMS AND SHALL BE CONSIDERED FOR INFORMATION ONLY. REFER TO EACH DISCIPLINES DRAWINGS FOR DETAILED CONFIGURATIONS, TYPES, SIZES, CONNECTIONS, NOTES, AND SCHEDULES
- 17.) ALL PLUMBING, HVAC, ELECTRICAL AND FIRE PROTECTION ROUGH-IN WORK IN FINISHED AREAS SHALL BE CONCEALED IN AVAILABLE CEILING, WALL AND FLOOR SPACES.
- 18.) ALL PIPE PENETRATIONS THROUGH THE NEW OR EXISTING SLAB ON GRADE, WALLS BELOW GRADE, AND EXTERIOR WALLS SHALL BE WATER SEALED. WHERE PENETRATIONS ARE REQUIRED TO BE FIRE SEALED PER THE CONTRACT DOCUMENTS, THE WATER SEAL SHALL BE IN ADDITION. THE FIRE SEALANT SHALL BE INSTALLED FIRST (DEPRESSED A MINIMUM OF 3/4 INCH) AND WITH THE WATER SEAL INSTALLED OVER THE TOP. AN APPROPRIATE BOND BREAKER SHALL BE INSTALLED IN BETWEEN THE TWO TYPES OF SEALANT.
- ALL DUCT PENETRATIONS THROUGH THE NEW OR EXISTING SLAB ON GRADE, WALLS BELOW GRADE, AND EXTERIOR WALLS SHALL BE FLASHED WITH A PREFABRICATED COLLAR AND WATER SEALED. WHERE PENETRATIONS ARE REQUIRED TO BE FIRE SEALED PER THE CONTRACT DOCUMENTS, THE WATER SEAL SHALL BE IN ADDITION. THE FIRE SEALANT SHALL BE INSTALLED FIRST (DEPRESSED A MINIMUM OF 3/4 INCH) AND WITH THE WATER SEAL INSTALLED OVER THE TOP. AN APPROPRIATE BOND BREAKER SHALL BE INSTALLED IN BETWEEN THE TWO TYPES OF SEALANT.
- 19.) ALL PIPE AND DUCT PENETRATIONS THROUGH THE NEW OR EXISTING ROOF DECK SHALL BE FLASHED WITH A PREFABRICATED BOOT/COLLAR AND WATER SEALED.
- 20.) ROOF FLASHING DETAILS ARE GENERIC AND SHALL BE FINALIZED DURING SHOP DRAWING SUBMITTALS BASED ON THE ROOFING MANUFACTURER'S STANDARD DETAILS

#### **GENERAL NOTES**

- 21.) PROVIDE GROUTED CELLS IN MASONRY WALLS TO ANCHOR ALL WALL MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO; MILLWORK, CASEWORK, WALL CABINETS, HANDRAILS, COAT RACKS, WALL HOOKS, DOOR STOPS, TOILET ACCESSORIES, OWNER FURNISHED EQUIPMENT, SHELVING, LIGHT FIXTURES, LIFE SAFETY EQUIPMENT AND OTHER SIMILAR ITEMS. THE AREA OF CELLS TO BE GROUTED SHOULD MATCH THE SIZE OF THE MOUNTED COMPONENT OR AT A MINIMUM HAVE GROUTED CELLS BEHIND EACH FASTENER POINT.
- 22.) PROVIDE FIRE TREATED WOOD OR STEEL FRAME BLOCKING, AS REQUIRED, IN FRAMED WALLS AND CEILINGS TO ANCHOR ALL WALL AND CEILING MOUNTED ITEMS INCLUDING, BUT NOT LIMITED TO; MILLWORK, CASEWORK, WALL CABINETS, HANDRAILS, COAT RACKS, WALL HOOKS, DOOR STOPS, TOILET ACCESSORIES, OWNER FURNISHED EQUIPMENT, SHELVING, LIGHT FIXTURES, LIFE SAFETY EQUIPMENT AND OTHER SIMILAR ITEMS.
- 23.) WOOD BLOCKING AND METAL FRAMING IS SHOWN GENERICALLY IN DETAILS TO ACHIEVE THE DESIRED OVERALL DESIGN INTENT. ITS RELATIONSHIP TO OTHER MATERIALS CAN BE ALTERED OR REPLACED AS REQUIRED BY APPROPRIATE CONSTRUCTION PRACTICES TO ACHIEVE THE FINAL APPEARANCE INDICATED ON THE DRAWINGS.
- 24.) THE PERIMETER OF ALL OPENINGS ARE TO BE BACKED AS NECESSARY AND SEALED, INTERIOR AND EXTERIOR.
- 25.) THE PERIMETER OF ALL PENETRATIONS ARE TO BE BACKED AS NECESSARY AND SEALED, INTERIOR AND EXTERIOR.
- 26.) ALL OPENINGS, INTERIOR AND EXTERIOR, THAT HAVE A RETURN FROM THE MAIN FACE, SHALL HAVE THE RETURN FINISHED THE SAME AS THE MAIN EXPOSED FACE U.N.O. THIS APPLIES TO BOTH SIDES OF ALL OPENINGS.
- 27.) CONTROL JOINTS IN GYPSUM BOARD ARE TO BE PROVIDED AS SHOWN. IN AREAS WHERE JOINTS ARE NOT SHOWN, THE CONTRACTOR SHALL PROVIDE JOINTS AS FOLLOWS: 1. AT EVERY 30 FEET IN WALLS OR CEILINGS. 2. AT ALL CORNERS OF AN 'L, U, OR T' CONFIGURATION ON A WALL OR CEILING SURFACE, A CONTROL JOINT SHALL BE PROVIDED TO DIVIDE THE SECTIONS. THE CONTRACTOR IS TO REVIEW ALL LOCATIONS WITH THE ARCHITECT IN THE FIELD PRIOR TO COMMENCING CONTROL JOINT INSTALLATION REGARDLESS OF WHETHER JOINTS ARE SHOWN OR THE JOINTS ARE BEING PROVIDED PER THE GUIDELINES NOTED HERE.
- 27.) CONTROL JOINTS IN RATED ASSEMBLIES ARE TO BE TREATED AS NOT TO COMPROMISE THE RATED ASSEMBLY. CONTRACTORS SHALL PROVIDE APPROPRIATE BACKING MATERIAL AND FIRE STOPPING TO CLOSE THE CAVITY AND PROVIDE AN APPROPRIATELY RATED SEALANT.
- 28.) THE TYPICAL CONDITION, UNLESS DETAILED OTHERWISE, WHERE GYPSUM WALLBOARD MEETS ANY KIND OF DISSIMILAR SURFACE, INCLUDING BUT NOT LIMITED TO MASONRY, WOOD, OR METAL, IS TO HAVE WALLBOARD EDGE FINISHED WITH A PAINTED J-BEAD EDGE AND DRYWALL COMPOUND AND THE JOINT CAULKED.
- 29.) WHENEVER MASONRY REQUIRES CUTTING TO ENCLOSE A STRUCTURAL MEMBER, PROVIDE MAXIMUM THICKNESS POSSIBLE AND STILL PREVENT CONTACT WITH THE STRUCTURE, EXCEPT FOR WALL TIES. USE THE SAME UNITS AS IN WALL SO FACE TEXTURE AND APPEARANCE IS UNIFORM.
- 30.) CONTRACTORS SHALL FINISH DESIGNING AND FABRICATE ITEMS DESIGNATED AS A "DELEGATED DESIGN" WITHIN THE SPECIFICATIONS. COORDINATE WITH INDIVIDUAL SPECIFICATION SECTIONS FOR THESE ITEMS.
- 31.) CONTRACTORS SHALL CAREFULLY COORDINATE ALL WORK WITH EQUIPMENT BEING FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTORS. ALL SHOP DRAWINGS AND OTHER SUBMITTALS SHALL BE CAREFULLY COORDINATED ACCORDINGLY. CONTRACTORS SHALL PROVIDE FOR SOME ADJUSTMENT IN FINAL DESIGN AND FABRICATION TO ACCOMMODATE INSTALLATION OF EQUIPMENT.
- 32.) CONTRACTORS SHALL COORDINATE TESTING WITH OWNER'S PROVIDED TESTING SERVICE. CONTRACTOR SHALL PROVIDE TESTING SERVICES AS PART OF THEIR BID FOR THOSE TESTS SPECIFICALLY NOTED AS CONTRACTOR'S RESPONSIBILITY WITHIN THE INDIVIDUAL SPECIFICATIONS SECTIONS.

#### PROJECT NOTES

- 1.) CONTRACTORS SHALL PROVIDE TEMPORARY BARRIERS AND CONTROLS IN THE PROXIMITY OF SITE THROUGHOUT THE WORK DAY. CONTRACTORS SHALL COORDINATE WITH THE LOCAL MUNICIPALITY AND OWNER TO LIMIT DISRUPTION AND TO PROTECT LOCAL TRAFFIC AND RESIDENTS DURING THE COURSE OF THE WORK.
- 2.) BEFORE BEGINNING WORK AT THE SITE AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE EXISTING CONDITIONS, MATERIALS, DIMENSIONS, LOCATIONS AND CONDITIONS OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES IMMEDIATELY TO THE ARCHITECT IN WRITING FOR RESOLUTION BEFORE BEGINNING THE WORK RELATED TO THAT BEING INSPECTED.
- 3.) BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE THE EXTENT OF EXISTING CONSTRUCTION, BUILDING SYSTEMS, FINISHES, SPECIALTIES, EQUIPMENT, FURNITURE AND OTHER ITEMS WHICH MUST BE REMOVED AND REINSTALLED IN ORDER TO PERFORM THE WORK UNDER THIS CONTRACT.
- 4.) THE DRAWINGS SHOW PRINCIPLE AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE CONTRACT DRAWINGS AS REQUIRED TO THE PRINCIPAL WORK DELINEATED WITHIN THIS SET. SUCH INCIDENTAL WORK SHALL BE DONE PER THE CONTRACT DOCUMENT REQUIREMENTS AND ALL APPLICABLE CODES. PLEASE SEE TITLE PAGE FOR LIST OF ADOPTED CODES. SUCH WORK SHALL BE CONSIDERED PART OF THIS CONTRACT AND THE CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING SUCH WORK IN THEIR BID.
- 5.) CONTRACTORS SHALL PROVIDE NEW UNDAMAGED MATERIALS. ANY DAMAGED MATERIALS, FIXTURES AND/OR FINISHES RECEIVED ARE NOT TO BE INSTALLED AND RETURNED TO THE MANUFACTURER/DISTRIBUTOR. INSTALLATION OF DAMAGED MATERIALS WILL BE REJECTED.
- 6.) PROTECT ALL EXISTING CONSTRUCTION, INFRASTRUCTURE, EQUIPMENT AND FURNISHINGS TO REMAIN FROM DAMAGE. VIDEOTAPE/ PHOTOGRAPH EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. TRADE CONTRACTORS WILL REPAIR/ REPLACE OR CORRECT ANY AND ALL EXISTING CONSTRUCTION, TO MATCH THAT DAMAGED BY CONSTRUCTION AND/OR INSTALLATION PROCESS UNDER THIS CONTRACT AS NECESSARY AT NO ADDITIONAL EXPENSE TO OWNER.
- 7.) REPAIR, PATCH AND REFINISH, OR REPLACE, ANY EXISTING CONSTRUCTION AND INFRASTRUCTURE THAT IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. SUCH REPAIR OR REPLACEMENT WORK IS TO MATCH EXISTING CONSTRUCTION IN QUALITY, CHARACTER AND FINISH.
- 8.) WHERE MATCH EXISTING IS INDICATED OR NEEDED, THE NEW CONSTRUCTION, INFRASTRUCTURE OR FINISHES REQUIRED TO COMPLETE THE WORK SHALL MATCH THE EXISTING IN SHAPE, CONFIGURATION,
- 9.) CONTRACTORS SHALL USE EXISTING INFRASTRUCTURE TO COMPLETE BUILDING SYSTEM INSTALLATION AS MUCH AS POSSIBLE.

CHARACTERISTIC AND PROPERTY.

- 10.) SHOULD DISCREPANCIES APPEAR AMONG THE CONTRACT DOCUMENTS OR BETWEEN THE CONTRACT DOCUMENTS AND EXISTING SITE CONDITIONS, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT BEFORE THE BIDDING PERIOD IS COMPLETE. IF THE CONTRACTORS FAIL TO MAKE SUCH REQUESTS, IT IS PRESUMED THAT BOTH PROVISIONS WERE INCLUDED IN THE BID, AND THE ARCHITECT SHALL DETERMINE WHICH OF THE CONFLICTING REQUIREMENTS SHALL GOVERN. THE CONTRACTORS SHALL PERFORM THE WORK AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH THE ARCHITECT'S DETERMINATION.
- 11.) WHERE CONFLICT EXISTS BETWEEN, OR WITHIN, THE CONTRACT DOCUMENTS, BETWEEN THE CONTRACT DOCUMENTS AND APPLICABLE STANDARDS, CODES, ORDINANCES, OR MANUFACTURERS' RECOMMENDATIONS, AND CLARIFICATION HAS NOT BEEN REQUESTED FROM THE ARCHITECT PRIOR TO THE CLOSE OF BIDDING AS PROVIDED FOR ABOVE (NOTE 10), THE MORE STRINGENT OR HIGHER QUALITY STANDARD SHALL PREVAIL. LARGE SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS, FIGURED DIMENSIONS ON THE DRAWINGS OVER SCALED DIMENSIONS, AND NOTED MATERIAL OVER GRAPHIC REPRESENTATIONS.
- 12.) THE CONTRACTORS SHALL PROVIDE ALL WORK AND MATERIALS WHICH ANY SECTION OR PART OF THE DRAWINGS, SPECIFICATIONS, OR CONDITIONS REQUIRE HIM TO PROVIDE FOR ALL SIMILAR WORK. THIS SHALL APPLY TO ALL SIMILAR WORK REGARDLESS OF WHETHER SUCH REQUIREMENT IS OR IS NOT FAITHFULLY REPEATED IN OTHER PARTS OF THE CONTRACT DOCUMENTS, THEREOF TO WHICH. THE PROVISIONS MIGHT BE APPROPRIATE.
- 13.) PERFORM WORK SO AS NOT TO ADVERSELY AFFECT THE PERFORMANCE OR OPERATION OF THE BUILDING OR CAUSE THE EXISTING STRUCTURE TO BECOME UNSAFE OR CAUSE AN INCREASE IN REQUIRED OWNER MAINTENANCE TO THE EXISTING BUILDING SYSTEMS TO REMAIN.
- 14.) PERFORM WORK TO MAINTAIN WEATHER TIGHT CONSTRUCTION OF THE EXISTING BUILDING AT ALL TIMES.
- 15.) CONFINE OPERATIONS TO AREAS WITHIN CONTRACT LIMITS INDICATED AND AS SPECIFICALLY ALLOWED BY THE OWNER PER WRITTEN APPROVAL. AREAS OF THE SITE BEYOND THE LIMITS OF THE CONTRACT OPERATIONS ARE NOT TO BE DISTURBED. CONTRACTORS SHALL BE RESPONSIBLE FOR REPAIR AND RESTORATION OF ANY EXISTING SITE CONSTRUCTION DAMAGED OUTSIDE OF THE CONTRACT LIMITS.
- 16.) KEEP CONSTRUCTION ENTRANCES AND LOCAL ACCESS ROAD SERVING THE SITE CLEAN AND CLEAR AT ALL TIMES. SCHEDULE DELIVERIES TO MINIMIZE SPACE AND TIME REQUIRED FOR STORAGE OF MATERIALS ON SITE.
- 17.) CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN CLEANUP AT THE END OF EACH WORK DAY THROUGHOUT THE COURSE OF THE PROJECT.
- 18.) CONTRACTORS SHALL PROVIDE A FINAL CLEANUP AT THE END OF THE PROJECT PRIOR TO FINAL COMPLETION. ALL SURFACES, FIXTURES AND COMPONENTS ARE TO BE CLEANED THOROUGHLY SO NO MARKS, RESIDUE, STICKERS, OR RUBBISH REMAINS. ANY ITEM THAT CAN NOT BE EFFECTIVELY CLEANED SHALL BE REPLACED
- 19.) OWNER SHALL PAY FOR THE BUILDING PERMIT PERTAINING TO THE PROJECT. CONTRACTORS SHALL BE RESPONSIBLE FOR SCHEDULING REQUIRED INSPECTIONS, AND SUBMITTING REQUIRED RECORDS, FORMS AND SUBMITTALS TO THE LOCAL AUTHORITY HAVING JURISDICTION. CONTRACTORS SHALL BE RESPONSIBLE FOR LICENSE FEES AND PERMITS

RELATED TO OPERATING AND WORKING WITHIN THE MUNICIPALITY.

#### PROJECT NOTES

- 20.) WORK SHOWN IS NEW UNLESS SPECIFICALLY NOTED OR OTHERWISE INDICATED.
- 21.) DO NOT SCALE DRAWINGS, DIMENSIONS SHALL GOVERN. LARGE SCALE DETAILS SHALL GOVERN OVER SMALL SCALE DETAILS. IF A REQUIRED DIMENSION IS NOT INDICATED OR ANY DIMENSIONING DISCREPANCIES EXIST ON THE DRAWINGS THE CONTRACTORS SHALL PROMPTLY WRITE TO THE ARCHITECT FOR RESOLUTION.
- 22.) VERIFY ALL DIMENSIONS IN FIELD PRIOR TO SHOP FABRICATION OF
- 23.) DETERMINE THE LOCATION OF PARTITIONS NOT DIMENSIONED BY THEIR RELATION TO COLUMN FACE OR CENTER, OPENING JAMB OR MULLION, EXISTING WALLS OR OTHER SIMILAR FIXED ITEMS.
- 24.) ALL HOLD DIMENSIONS ARE REQUIRED TO BE EXACT WITH 1/8" TOLERANCE ALONG FULL HEIGHT AND FULL WIDTH OF WALL, PARTITION OR BUILDING COMPONENT.
- 25.) AT LOCATIONS WHERE PERMANENT REMOVAL OF EXISTING MILLWORK, CASEWORK, DOORS AND FRAMES, ACCESSORIES, EQUIPMENT OR FURNISHINGS CAUSES PREVIOUSLY CONCEALED SURFACES TO REMAIN EXPOSED, PATCH SUCH SURFACES TO MATCH ADJACENT EXPOSED WORK. WHERE THE ADJACENT EXPOSED WORK SURFACES ARE SCHEDULED TO RECEIVE NEW FINISHES, PREPARE THE PREVIOUSLY CONCEALED SURFACES TO RECEIVE THE NEW FINISHES.
- 26.) WHERE CUTTING OF EXISTING SURFACES OR REMOVAL OF EXISTING SURFACES IS REQUIRED TO PERFORM THE WORK UNDER THIS CONTRACT, AND NEW FINISH IS NOT INDICATED, FILL RESULTING OPENINGS AND PATCH THE SURFACE AFTER DOING THE WORK, AND FINISH TO MATCH ADJACENT EXISTING SURFACES.
- 27.) WHERE CONDUITS, DUCTS, AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED IN EXISTING WALLS OR PARTITIONS, NEATLY CHASE OR CUT THE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS TO MAKE THE INSTALLATION NOT DISCERNIBLE IN THE FINISH WORK
- 28.) SEAL TIGHT AND PROTECT WITH FIRE SAFING AND CAULKING PER UL DETAILS, EXISTING AND NEW SLEEVES AND OPENINGS THROUGH
- 29.) REFER TO NEW WORK PLANS TO COORDINATE EXTENT OF DEMOLITION REQUIRED.
- 30.) WHERE NOT SPECIFICALLY NOTED, CONTRACTORS SHALL MODIFY EXISTING FLOORING AND CEILING CONSTRUCTION TO REMAIN AS REQUIRED TO ABUT NEW CONSTRUCTION AND MATCH ADJACENT EXISTING CONDITIONS (TYP.).
- 31.) VERIFY W/ OWNER ITEMS TO BE SALVAGED AND RETURNED TO OWNER. ALL ITEMS TO BE SALVAGED SHALL BE CAREFULLY REMOVED SO AS TO ALLOW FOR REUSE.
- 32.) PROVIDE WALL PREPARATION OF NEW AND EXISTING WALLS, PRIOR TO BEGINNING PAINTING WORK, INCLUDING BUT NOT LIMITED TO PATCHING HOLES, GOUGES, OR OTHER DAMAGE, SECURING LOOSE TRIM, CONDUITS AND ANY OTHER WALL OR CEILING HARDWARE ITEMS REQUIRING PAINTING.
- 33.) WALLS INDICATED TO BE PAINTED, OR REQUIRED TO BE REPAINTED DUE TO REPAIR OF DAMAGED/DISTURBED WORK SHALL HAVE THE ENTIRE WALL SURFACE FROM CORNER TO CORNER, OR OTHER NATURAL BREAK PAINTED.
- 34.) CONTRACTORS SHALL COORDINATE THE WORK WITH OWNER'S OTHER FORCES TO AVOID DELAYS IN THE WORK AND PROVIDE A COMPLETE INSTALLATION.
- 35.) CONTRACTORS ARE RESPONSIBLE FOR PROCURING TEMPORARY UTILITIES AND PAYING FOR SUCH UTILITIES UNTIL SUCH TIME THAT THE PERMANENT UTILITIES ARE OPERATIONAL AND THE OWNER HAS GRANTED, IN WRITING, THEIR USE BY THE CONTRACTORS.
- 36.) CONTRACTOR IS RESPONSIBLE FOR PREPARING AND SUBMITTING FULLY DESIGNED FIRE SPRINKLER AND FIRE ALARM DRAWINGS TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL.
- 37.) IT IS MANDATORY THAT THE EXISTING BUILDING REMAIN IN CONTINUOUS AND NON-INTERRUPTED OPERATION DURING REMODELING/ALTERING OF SAID EXISTING BUILDING, ONLY THE SPECIFIC AREAS BEING REMODELED/ALTERED AT ANY SCHEDULED TIME ARE EXCLUDED. SERVICES TO EXISTING BUILDING SHALL BE KEPT IN CONTINUOUS OPERATION INCLUDING POWER, SIGNAL SYSTEMS, LIGHTING, TELEPHONE, HEATING, COOLING, VENTILATING, TEMPERATURE CONTROLS, SEWERS AND HOT AND COLD WATER. ANY ABSOLUTELY NECESSARY INTERRUPTION OF THESE SERVICES TO ACCOMPLISH CONTRACT WORK SHALL BE ARRANGED THROUGH THE ARCHITECT WITH THE OWNER A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE. SUCH INTERRUPTIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AS FAR AS TIME INTERVAL IS INVOLVED. TEMPORARY SERVICES SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT WHEN THE LENGTH OF THE DISRUPTION IS GREATER THAN ONE WORKING DAY, TEMPORARIES SHALL BE REMOVED BY THE CONTRACTOR ONLY AFTER NEW PERMANENT SERVICES ARE INSTALLED AND FULLY OPERATIONAL.
- 38.) "AS BUILT DRAWINGS" WILL BE DEVELOPED BY THE GENERAL CONTRACTOR DURING THE COURSE OF THIS PROJECT. A COPY OF SUCH WILL ALSO BE SUBMITTED TO THE VILLAGE OF OAK PARK FOR THE PERMANENT BUILDING PERMIT FILE.



STUDIO GC

architecture + interiora

223 West Jackson Boulevard, Suite 1200

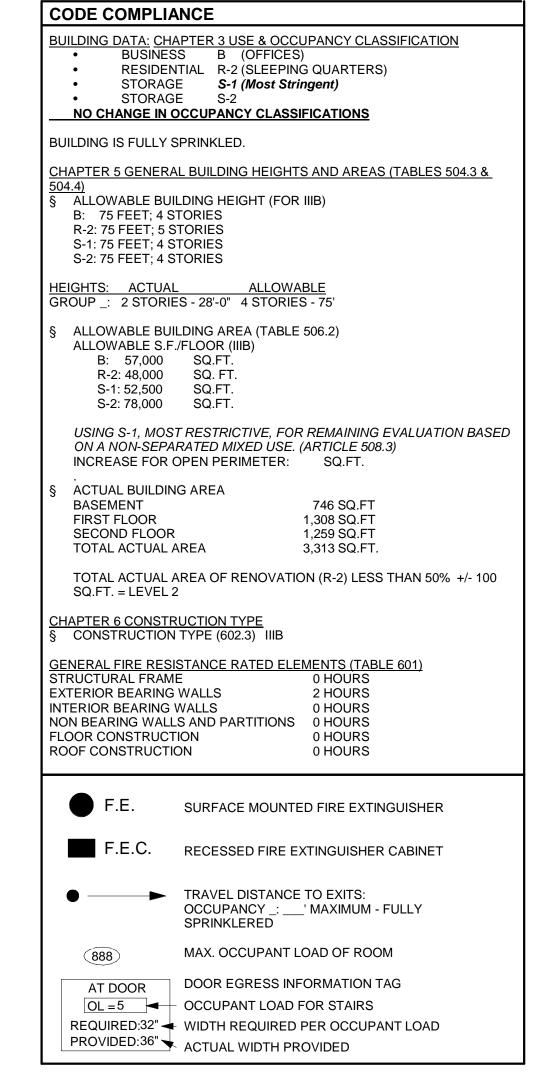
Chicago, Illinois 60606

Fire Station #2 Mechanica quipment Replacement



> GENERAL NOTES

1/8"3/8" 1"
GRAPHIC SCALE 12" = 1'-0"



	Code Complinace Notes
1	PROJECT SHALL REMAIN IN COMPLIANCE WITH ALL ASPECTS OF ALL GOVERNING CODES AND ORDINANCES DURING THE COURSE OF CONSTRUCTION. PLEASE SEE TITLE SHEET FOR ALL APPLICABLE CODES.
2	CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING ALL REQUIRED SHOP DRAWINGS AND CUTSHEETS FOR LIFE SAFETY SYSTEM COMPONENTS TO THE LOCAL AUTHORITY HAVING JURISDICTION.
3	CONTRACTOR SHALL ORGANIZE A MEETING WITH THE LOCAL AUTHORITY HAVING JURISDICTION TO REVIEW THE LOCATIONS OF ALL LIFE SAFETY DEVICES AND EQUIPMENT PRIOR TO THEIR INSTALLATION.
4	REFER TO SHEET A1.00 FOR PARTITION TYPES
5	ALL EGRESS EXITS OUT TO GRADE
6	PLUMBING FIXTURE COUNTS COMPLY (NO WORK IN THE TOILET ROOMS)

	OC	CUPANT LO	AD (IBC)					
Numb er	Name	Area	Room Occupancy Style	Room Occupancy				
100	APPARATUS BAY	1169 SF	Storage	0				
101	TOILET ROOM	25 SF	Toilets	0				
102	JOKER'S STAND	54 SF	Business	0				
203	STAIR	63 SF	Circulation	0				
_t/ First	Floor: 4	1311 SF		0				
200	KITCHEN/DAY ROOM	513 SF	Business	6				
201	TOILET ROOM	64 SF	Toilets	0				
202	BUNK ROOM / FITNESS ROOM	636 SF	Exercise rooms	13				
203	STAIR	40 SF	Circulation	0				
204	DECK	124 SF	Circulation	9				
_t/ Sec	ond Floor: 5	1378 SF		28				
Grand t	otal: 9	2688 SF		28				

UL Assemblies	EGRE	SS PATH
Assembly Type	EXIT	
BEAMS	ROUTE	DISTANCE
COLUMNS	Α	55'
EXTERIOR WALL (Load Bearing)	В	53'
EXTERIOR WALL (Non Load	С	60'
Bearing)	D	46'
FLOOR		
INTERIOR WALL - SHAFTS		
ROOF		

CONTRACTOR SHALL COORDINATE BETWEEN CODE COMPLIANCE PLANS, LEGEND AND WALL TYPES TO DETERMINE CORRESPONDING UL DESIGNATION.

ALL FIRE RATED ASSEMBLIES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH TESTED ASSEMBLIES INDICATED AND SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES. SEE TITLE PAGE FOR LIST OF ADOPTED CODES.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL COMPONENTS OF INDICATED ASSEMBLIES WHETHER SPECIFICALLY NOTED OR SHOWN IN THE DETAILS HEREIN.

CONTRACTOR SHALL FOLLOW MANUFACTURER'S DIRECTIONS TO ACHIEVE THE REQUIRED ASSEMBLY. IF THERE IS A CONLECT OR

4 CONTRACTOR SHALL FOLLOW MANUFACTURER'S DIRECTIONS TO ACHIEVE THE REQUIRED ASSEMBLY. IF THERE IS A CONLFICT OR DISCREPENCY BETWEEN THE MANUFACTURER'S INSTRUCTIONS AND THE DRAWINGS OR SPECIFICATIONS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING PRIOR TO COMMENCEMENT OF THE WORK.

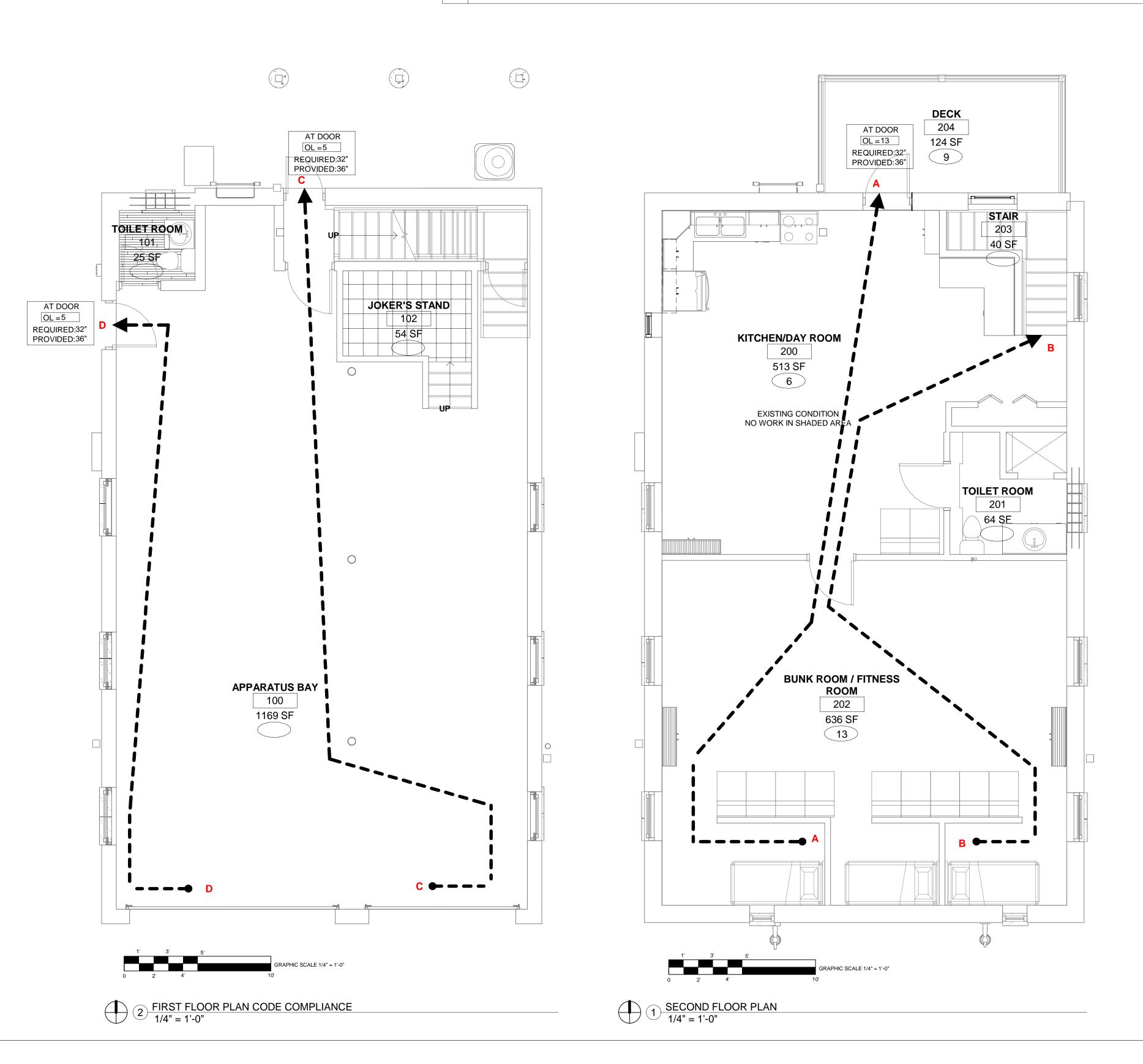
ALL PENETRATIONS THROUGH ALL FIRE RATED WALL, FLOOR AND ROOF ASSEMBLIES SHALL BE FIRE SEALED IN ACCORDANCE WITH THE FIRE RESISTANT JOINT MANUFACTURER'S DETAILS. INSTALLATION SHALL BE APPROPRIATE FOR LOCATION, TYPE OF CONSTRUCTION AND PENETRATING ITEM. ALL PENETRATIONS ARE TO MEET OR EXCEED THE REQUIRED ASSEMBLY RATING.

6 TERMINATIONS OF FIRE RATED WALLS TO THE ROOF DECK, FLOOR DECK OR DIFFERING WALL TYPE SHALL BE FIRE SEALED ALONG THE ENTIRE EDGE TO CLOSE ALL GAPS.

ALL DUCTWORK, DIFFUSERS AND GRILLES PENETRATING FIRE RATED ASSEMBLIES SHALL BE INSTALLED WITH AN APPROPRIATE FIRE DAMPER. DAMPER SHALL BE APPROPRIATE FOR LOCATION AND TYPE OF CONSTRUCTION. DAMPERS ARE TO MEET OR EXCEED THE REQUIRED RATING.

8 ALL FIXTURES, EQUIPMENT AND DEVICES PENETRATING FIRE RATED ASSEMBLIES SHALL BE UL LISTED FOR INSTALLATION IN THE ASSEMBLY.

9 NO FIXTURES, EQUIPMENT OR DEVICES ARE TO BE INSTALLED IF ITS INSTALLATION WILL COMPROMISE A REQUIRED FIRE RATED ASSEMBLY.







North Fire Station #2 Mechanical Equipment Replacement

O ¥



OUT FOR BID 04/19/202

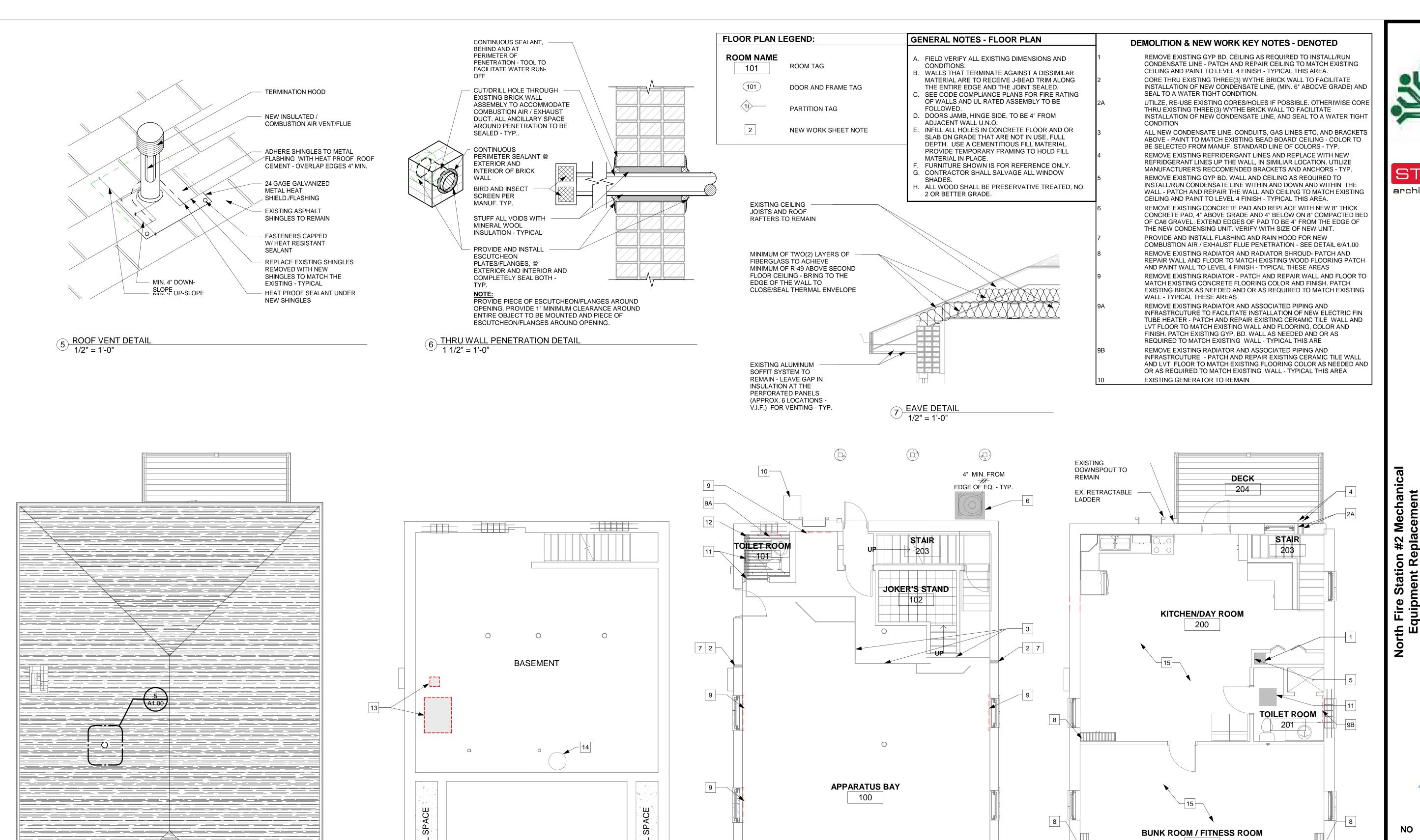
OUT FOR BID 04/19/202

OUT FOR BID 04/19/202

OUT FOR BID 04/19/202

CODE COMPLIANCE PLANS

G1.036



**UN-EXCAVATED** 

CRAWL SPACE

BASEMENT FLOOR PLAN
3/16" = 1'-0"

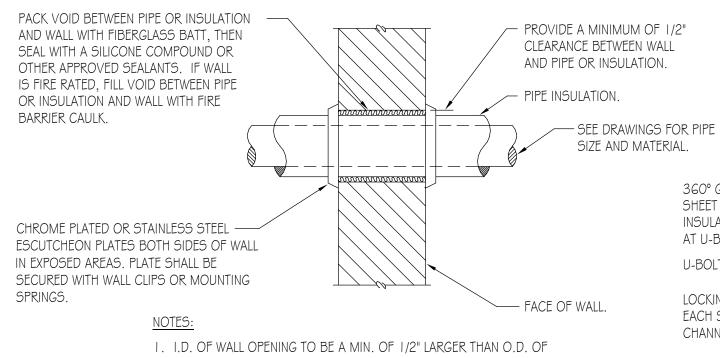
architecture + interiors 223 West Jackson Boulevard, Suite 1200 Chicago, Illinois 60606 (312) 253-3400

**NEW WORK, DEMOLITIONS** PLANS & **DETAILS** 

- I. CONTRACTOR SHALL ISOLATE ALL PIPES WHICH VIBRATE FROM CONSTRUCTION IN ORDER TO AVOID TRANSMISSION TO STRUCTURE.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THEIR WALL OPENINGS WITH OTHER TRADES AND/OR CONTRACTORS.

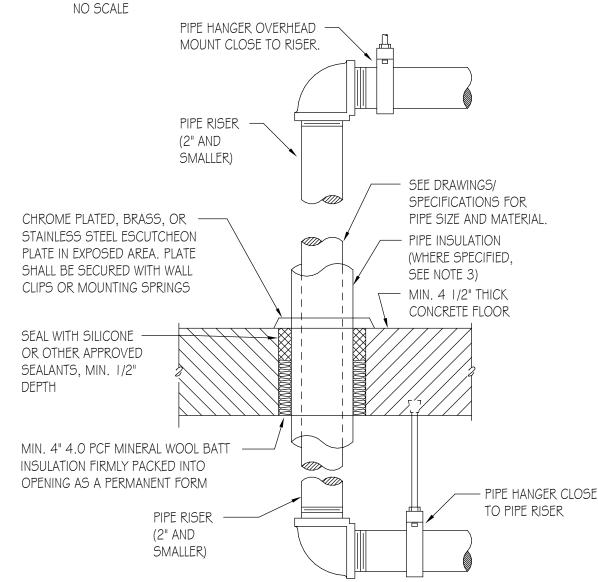
# PIPE PENETRATION OF EXTERIOR WALL ABOVE GRADE

NO SCALE



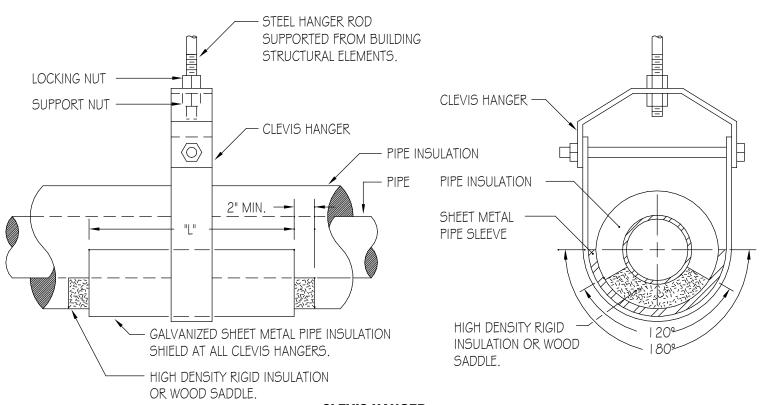
- PIPE OR INSULATION PASSING THROUGH WALL.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THEIR WALL OPENINGS WITH OTHER TRADES AND/OR CONTRACTORS.
- 3. PIPE PENETRATIONS OF SMOKE OR FIRE WALLS SHALL BE IN COMPLIANCE WITH NFPA-90A.

# PIPE PENETRATION OF INTERIOR WALL DETAIL



- . CONTRACTOR SHALL ISOLATE ALL PIPES WHICH VIBRATE FROM CONSTRUCTION IN ORDER TO AVOID TRANSMISSION TO STRUCTURE.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THEIR WALL OPENINGS WITH OTHER TRADES AND/OR CONTRACTORS.
- 3. WHERE INSULATED: I"THICK 3.5 PCF GLASS FIBER INSULATION WITH ALL SERVICE JACKET SHALL BE UTILIZED AND SEALED WITH METAL FASTENERS OR SELF SEALING LAP TAPE. TRANSVERSE JOINTS SECURED WITH METAL FASTENERS OR WITH BUTT TAPE SUPPLIED WITH PRODUCT.

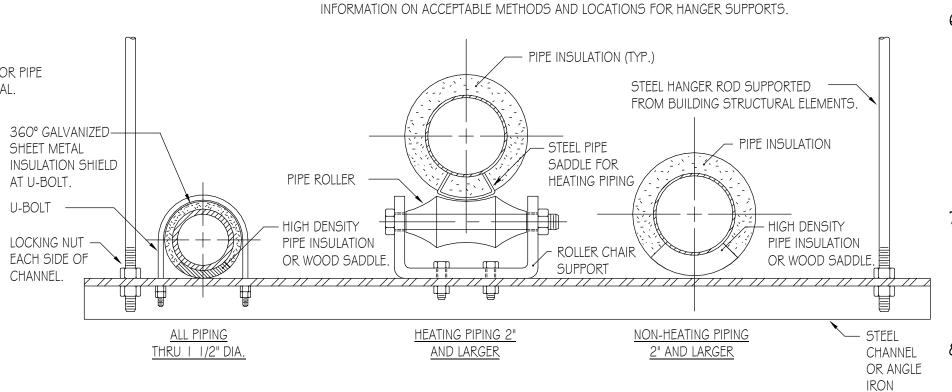
#### PIPE PENETRATION OF FLOOR ASSEMBLY (DIA. 2" AND BELOW) NO SCALE

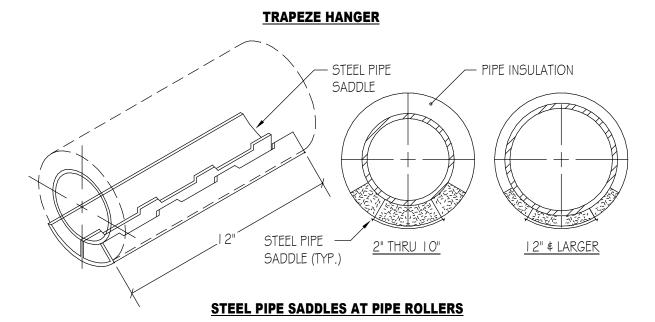


#### **CLEVIS HANGER**

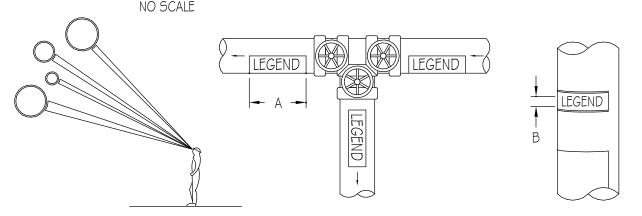
PIPE INSULATION SHIELD SCHEDULE											
PIPE SIZE	LENGTH	GAUGE									
UP TO 3/4"	8"	20 GA.									
l" - 2"	12"	18 GA.									
2 1/2" - 4"	12"	16 GA.									
5" \$ 6"	18"	16 GA.									
8" \$ UP	24"	I 4 GA									

I . CONFER WITH ARCHITECT AND REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL





#### TYPICAL PIPE HANGER DETAILS



IDENTIFICATION MARKERS OR STRIPS TO BE PLACED ON ALL EXPOSED COVERED AND UNCOVERED PIPES AT 50'-0" INTERVALS, ADJACENT TO ALL VALVES OR BRANCHES, AND AT BOTH SIDES OF WALL/FLOOR PENETRATIONS. ARROWS OF SAME COLOR AS IDENTIFICATION MARKERS SHALL ALSO BE PLACED ON PIPES POINTING AWAY FROM MARKER INDICATING DIRECTION OF FLOW.

SIZE	OF LEGENE	OF LEGEND LETTERS									
OUTSIDE DIAMETER OF PIPE OR COVERING	C	SIZE OF LETTERS B									
3/4" TO   1/4"   1/2" TO 2" 2" 1/2" TO 6" 8" TO   0" OVER   0"		8" 8" 12" 24" 32"	1/2" 3/4" 1 1/4" 2 1/2" 3 1/2"								
SERVICE		BACKGROUND OR COLOR BAND	LETTER COLOR								

SAFETY GREEN

SAFETY ORANGE

SAFETY ORANGE

SAFETY YELLOW

WHITE

BLACK

BLACK

BLACK

TYPICAL PIPE IDENTIFICATION MARKERS NO SCALE

CONDENSATE

NATURAL GAS

REFRIGERANT SUCTION

REFRIGERANT LIQUID

#### **GENERAL REMODELING NOTES - ALL CONTRACTORS**

- ALL WORK SHOWN ON DRAWINGS SHALL BE CONSIDERED NEW AND IN CONTRACT UNLESS SPECIFICALLY INDICATED OTHERWISE.
- DRAWINGS ARE GENERALLY DIAGRAMMATIC. ROUTING OF PIPING, DUCTWORK, CONDUITS, RACEWAYS, ETC. AS SHOWN ON DRAWINGS, DOES NOT INTEND TO SHOW EVERY RISE, DROP, OFFSET. FITTING NOR EVERY STRUCTURAL ELEMENT THAT MAY BE ENCOUNTERED DURING THE INSTALLATION OF THIS WORK. EACH CONTRACTOR SHALL MAKE ANY REQUIRED CHANGES FROM THE GENERAL ROUTING SHOWN ON THESE DRAWINGS, SUCH AS OFFSETS, BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF OTHER TRADES AND BUILDING CONSTRUCTION. ALL CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR DELAY IN COMPLETION DATE OF THE PROJECT.
- 3. IT IS INTENDED THAT EQUIPMENT SHALL BE LOCATED SYMMETRICALLY WITH THE ARCHITECTURAL ELEMENTS OF THE BUILDING, NOTWITHSTANDING THE FACT THAT LOCATIONS INDICATED BY THESE DRAWINGS MAY BE DISTORTED FOR CLEARNESS OF PRESENTATION
- 4. CONTRACTOR SHALL CHECK DRAWINGS OF OTHER TRADES TO VERIFY THAT SPACES IN WHICH THEIR WORK WILL BE INSTALLED ARE CLEAR OF OBSTRUCTIONS. WORK SHALL BE INSTALLED TO MAINTAIN MAXIMUM HEADROOM AND SPACE CONDITIONS AT ALL POINTS IN THE BUILDING. WHERE HEADROOM OR SPACE CONDITIONS APPEAR INADEQUATE, CONTRACTOR SHALL NOTIFY OWNER/ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE INSTALLATION OF THEIR WORK.
- CONTRACTOR SHALL FURNISH OTHER TRADES ADVANCE INFORMATION AND/OR SHOP DRAWINGS ON LOCATIONS AND SIZES OF PIPING, DUCTWORK, CONDUIT, RACEWAYS, EQUIPMENT, FRAMES, BOXES, SLEEVES AND OPENINGS, ETC. NEEDED FOR THEIR WORK TO PERMIT OTHER TRADES AFFECTED TO INSTALL THEIR WORK PROPERLY AND WITHOUT DELAY
- 6. WHERE THERE IS EVIDENCE THAT WORK OF ONE TRADE WILL INTERFERE WITH WORK OF OTHER TRADES, ALL TRADES SHALL MEET ON JOB SITE TO WORK OUT SPACE CONDITIONS AND MAKE SATISFACTORY ADJUSTMENTS TO INSTALLATION OF THE NEW WORK. CONTRACTORS SHALL VERIFY EXACT LOCATIONS OF ALL DEVICES AND EQUIPMENT WITH FIELD CONDITIONS, SHOP DRAWINGS, AND WORK OF OTHER TRADES PRIOR TO ROUGH-IN. EACH CONTRACTOR SHALL BE RESPONSIBLE AT THEIR OWN EXPENSE, FOR THE REMOVAL AND REINSTALLATION OF ANY PART OF THEIR WORK IF SAME WAS INSTALLED WITHOUT CONSULTING WITH OTHER TRADES BEFORE INSTALLING THEIR WORK.
- CONTRACTOR SHALL PROVIDE SLEEVES IN BEAMS, FLOORS, COLUMNS AND WALLS AS SHOWN ON THE DRAWINGS, AS REQUIRED BY JOB SITE CONDITIONS, AND/OR AS SPECIFIED, WHEN INSTALLING THEIR WORK. ALL BEAMS AND COLUMNS WHICH ARE REQUIRED TO BE SLEEVED SHALL BE CUT AND REINFORCED AS REQUIRED BY FIELD CONDITIONS AND LOCATIONS AND SIZES SHALL BE CHECKED AND APPROVED BY ARCHITECT BEFORE CONTRACTOR CUTS ANY STRUCTURAL BUILDING MEMBER.
- THE SEQUENCE FOR THE INSTALLATION OF ALL WORK SHALL BE COORDINATED BETWEEN ALL CONTRACTORS ON THE PROJECT AND IN STRICT ACCORDANCE WITH ARCHITECT/ENGINEER AND OWNERS STIPULATION AS DIRECTED
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL AND STRUCTURAL CONTRACT DRAWINGS (BEFORE SUBMITTING THEIR BIDS) TO FAMILIARIZE THEMSELVES WITH THE EXTENT OF THE GENERAL CONTRACTOR'S WORK, CEILING HEIGHTS AND CLEARANCE FOR INSTALLING THEIR WORK.
- 10. CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL CORING, CUTTING, PATCHING, REPAIRING, REFINISHING AND REMOVAL/REPLACEMENT OF NEW OR EXISTING BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. ALL PATCHING, REPAIRING AND REFINISHING WORK SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION AS CLOSELY AS POSSIBLE, CARE SHALL BE TAKEN SO AS NOT TO DAMAGE ANY EXISTING BUILDING CONSTRUCTION OR ITEMS THAT ARE TO REMAIN. ANY EXISTING FINISHES THAT ARE DAMAGED DURING THE INSTALLATION OF NEW WORK OR REMOVAL OF EXISTING WORK SHALL BE REPAIRED, REPLACED AND PAID FOR BY THE INSTALLING CONTRACTOR, TO THE SATISFACTION OF THE ARCHITECT AND OWNER. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING CONSTRUCTION THAT IS TO REMAIN AND, THEREFORE, SUBJECT TO PATCHING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT. (NOTE: CONTRACTOR SHALL VERIFY EXISTING BUILDING'S ROOF WARRANTY AND EMPLOY OTHER SUBCONTRACTOR(S) AS REQUIRED BY ROOF MANUFACTURER'S REPRESENTATIVE SO AS NOT TO VOID OWNER'S ROOF WARRANTY.)
- II. SOME OF THE EXISTING ITEMS AND EQUIPMENT SCHEDULED TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER. ANY ITEMS THAT THE OWNER WANTS TO RETAIN SHALL BE REMOVED CAREFULLY SO AS NOT TO DAMAGE THEM. ALL OTHER ITEMS TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE SITE.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN CLEAN-UP DURING CONSTRUCTION. IF CONTRACTOR FAILS TO PROVIDE SUCH CLEAN-UP, THE ARCHITECT/ENGINEER WILL DIRECT ANOTHER CONTRACTOR TO PERFORM THE CLEAN-UP AND THE NEGLIGENT CONTRACTOR SHALL PAY THE ASSOCIATED BACK-CHARGES AS DEEMED APPROPRIATE BY THE ARCHITECT/ENGINEER.
- 13. CONTRACTOR SHALL INSTALL ALL AUXILIARY SUPPORTING STEEL AS REQUIRED FOR THE SUPPORTING OF THEIR PIPING, DUCTWORK, CONDUIT, TANKS, EQUIPMENT, ETC. ALL SUPPORTING STEEL FOR ITEMS ABOVE A SUSPENDED CEILING SHALL BE FROM BUILDING STRUCTURAL MEMBERS ONLY.
- 14. IT IS MANDATORY THAT THE COMPLETE EXISTING BUILDING REMAIN IN CONTINUOUS AND NON-INTERRUPTED OPERATION DURING REMODELING/ALTERING OF SAID EXISTING BUILDING. THE SPECIFIC AREA(S) BEING REMODELED/ALTERED AT ANY SCHEDULED TIME ARE OBVIOUSLY EXCLUSIVE OF THIS STATEMENT. SERVICES TO EXISTING BUILDING SHALL BE KEPT IN CONTINUOUS OPERATION INCLUDING POWER, SIGNAL SYSTEMS, LIGHTING, TELEPHONE, HEATING, COOLING, VENTILATING, TEMPERATURE CONTROL, SEWERS AND HOT AND COLD WATER. ANY ABSOLUTELY NECESSARY INTERRUPTION OF THESE SERVICES TO ACCOMPLISH CONTRACT WORK SHALL BE ARRANGED WITH THE OWNER A MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE. SUCH INTERRUPTIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AS FAR AS TIME INTERVAL IS INVOLVED AND TEMPORARY SERVICES SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT WHERE NECESSARY TO ACCOMPLISH THIS PURPOSE. TEMPORARIES SHALL BE REMOVED BY THE CONTRACTOR ONLY AFTER NEW PERMANENT SERVICES ARE INSTALLED AND FULLY OPERATIONAL

- 15. UNLESS INDICATED OTHERWISE, THE ARCHITECT/ENGINEER MAKES NO REPRESENTATION AS TO WHETHER OR NOT ANY HAZARDOUS OR CONTAMINATED MATERIALS (INCLUDING BUT NOT LIMITED TO ASBESTOS, PCB'S, CONTAMINATED SOILS, ETC.) ARE PRESENT WITHIN THE EXISTING BUILDING OR ON THE SITE. WORK SHOWN ON THE DRAWINGS AND/OR INDICATED IN THE SPECIFICATIONS SHALL NOT B CONSTRUED TO CALL FOR CONTACT WITH ANY OF THESE MATERIALS. IF THESE MATERIALS ARE ENCOUNTERED OR SUSPECTED, THE CONTRACTOR SHALL NOT DISTURB THEM AND SHALL CONTACT THE ARCHITECT/ENGINEER IMMEDIATELY.
- 16. WHERE WORK CALLED FOR ON THE DRAWINGS OR IN THE SPECIFICATIONS INVOLVES THE REMOVAL OR RELOCATION OF PIPING OR EQUIPMENT CONTAINING REFRIGERANT ALL REFRIGERANT SHALL BE RECOVERED BY APPROVED METHODS PER EPA REGULATIONS.
- 17. CONTRACTOR SHALL STORE ALL MATERIALS AND EQUIPMENT SHIPPED TO THE SITE IN A PROTECTED AREA. IF MATERIAL IS STORED OUTSIDE OF THE BUILDING, IT MUST BE STORED OFF THE GROUND A MINIMUM OF SIX INCHES (6") SET ON 6 X 6 PLANKS AND/OR WOOD PALLETS. ALL MATERIAL AND EQUIPMENT MUST BE COMPLETELY COVERED WITH WATERPROOF TARPS OR VISQUIN. ALL PIPING AND DUCTWORK WILL HAVE THE ENDS CLOSED TO KEEP OUT DIRT AND OTHER DEBRIS. NO EQUIPMENT WILI BE ALLOWED TO BE STORED OUTSIDE THE BUILDING ON THE SITE UNLESS IT IS SUPPORTED OFF THE GROUND AND COMPLETELY PROTECTED WITH WEATHERPROOF COVERS.
- 18. THE DRAWINGS, SCHEDULES AND SPECIFICATIONS HAVE BEEN PREPARED USING ONE MANUFACTURER FOR EACH PIECE OF EQUIPMENT AS THE BASIS FOR DIMENSIONAL DESIGN. IF THE CONTRACTOR PURCHASES EQUIPMENT FROM A SPECIFIED ACCEPTABLE MANUFACTURER, BUT NOT THE SCHEDULED MANUFACTURER USED FOR THE BASE DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL THE DIMENSIONS OF THE EQUIPMENT TO VERIFY THAT IT WILL FIT IN THE SPACE SHOWN ON THE DRAWINGS. MINOR DEVIATIONS IN DIMENSIONS WILL BE PERMITTED PROVIDED THE RATINGS MEET THOSE SHOWN ON THE DRAWINGS AND EQUIPMENT WILL PHYSICALLY FIT INTO THE SPACE ALLOCATED WITH SUITABLE ACCESS AROUND EQUIPMENT FOR OPERATION AND MAINTENANCE OF THE EQUIPMENT. WHEN EQUIPMENT SUBMITTED FOR REVIEW DOES NOT MEET THE PHYSICAL SIZE OR ARRANGEMENT OF THAT SCHEDULED AND SPECIFIED, CONTRACTOR SHALL PAY FOR ALL ALTERATIONS REQUIRED TO ACCOMMODATE SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR WILL ALSO PAY ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER CONTRACTORS, OWNER, ARCHITECT OR ENGINEER TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT TO FIT IN THE SPACE AND FUNCTION AS INTENDED.
- 19. CONTRACTOR AND/OR MANUFACTURER SHALL VERIFY THAT THE CHARACTERISTICS OF THE EQUIPMENT SUBMITTED FOR REVIEW MEETS THE CAPACITY AND DUTY SPECIFIED. WHEN EQUIPMENT SUBMITTED FOR REVIEW REQUIRES MODIFICATIONS TO THE WORK OF OTHER CONTRACTORS, SUBMITTING CONTRACTOR SHALL PAY FOR ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER CONTRACTORS, OWNER, ARCHITECT OR ENGINEER TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT FUNCTION SAFELY AND PROPERLY.
- 20. CONTRACTOR SHALL FIELD VERIFY THE SIZE OF EXISTING OPENINGS, WINDOWS, DOORS, CORRIDORS, ROOMS, ETC. FOR ACCESS OF THE NEW EQUIPMENT INTO OR REMOVAL OF EXISTING EQUIPMENT FROM THE BUILDING. IF OPENINGS ARE TOO SMALL FOR ACCESS THEN CONTRACTOR SHALL, AT THEIR OWN EXPENSE, PROVIDE NEW OR ENLARGED OPENINGS AND RESTORE SAME TO ORIGINAL SIZE AND CONDITION. CONTRACTOR MAY ELECT TO ORDER THE EQUIPMENT DISASSEMBLED AND/OR WITH SPLIT HOUSING FOR ENTRANCE INTO THE EXISTING SPACE OR BUILDING. CONTRACTOR SHALL REASSEMBLE EQUIPMENT AFTER IT IS IN THE SPACE AT THEIR OWN EXPENSE.
- 21. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND THEIR ASSOCIATED FEES.
- 22. CONTRACTOR SHALL SUBMIT DIGITAL COPIES OF SHOP DRAWINGS OF ALL EQUIPMENT, DIFFUSERS, REGISTERS, TEMPERATURE CONTROL SYSTEM, AND ELECTRICAL DEVICES TO ENGINEER FOR APPROVAL PRIOR TO ORDERING ANY ITEMS OR FABRICATING ANY DUCTWORK.
- 23. CONTRACTOR SHALL PROVIDE OWNER TRAINING ON ALL EQUIPMENT AND BUILDING SYSTEMS PROVIDED/ALTERED BY THEIR WORK. TRAINING SHALL BE ACCOMPLISHED DURING TIME DEDICATED FOR THAT PURPOSE, NOT IN CONJUNCTION WITH SERVICE WORK. SEE SPECIAL TEMPERATURE CONTROL TRAINING INSTRUCTIONS ELSEWHERE.
- 24. AT COMPLETION OF PROJECT, CONTRACTOR SHALL SUBMIT ONE PHYSICAL AND DIGITAL COPIES OF OPERATION AND MAINTENANCE MANUALS FOR ALL WORK PROVIDED BY THEM ON PROJECT. MANUALS SHALL BE CLEARLY ORGANIZED AND CONTAIN COPIES OF APPROVED EQUIPMENT, SHOP DRAWINGS, EQUIPMENT PARTS LISTS, SERVICE CONTACTS, CONTRACTOR AND MANUFACTURER WARRANTEES, AND "AS BUILT" FLOOR PLANS.
- 25. CONTRACTOR SHALL PROVIDE WARRANTY FOR ALL MATERIAL AND GUARANTEE ALL WORKMANSHIP PROVIDED BY THEM FOR I (ONE) YEAR FROM SUBSTANTIAL COMPLETION OF WORK INVOLVED.
- 26. CONTRACTOR SHALL MAINTAIN A CURRENT CITY OF OAK PARKLICENSE THROUGHOUT ALL PHASES OF CONSTRUCTION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE ALL INSPECTIONS WITH THE VILLAGE OF OAK PARK OFFICIALS.
- 27. IDENTIFY ALL PIPING AND DUCTWORK WITH PLASTIC LABELS INDICATING CONTENTS AND FLOW DIRECTION. MARKERS TO BE PLACED AT A MAXIMUM OF 50 FT. INTERVALS AT BRANCH CONNECTIONS, AND AT BOTH SIDES OF WALL/FLOOR PENETRATIONS. IDENTIFY VALVES, EQUIPMENT, AND PANELS WITH ENGRAVED 3-LAYER PLASTIC LAMINATED TAGS OR SIGNS.

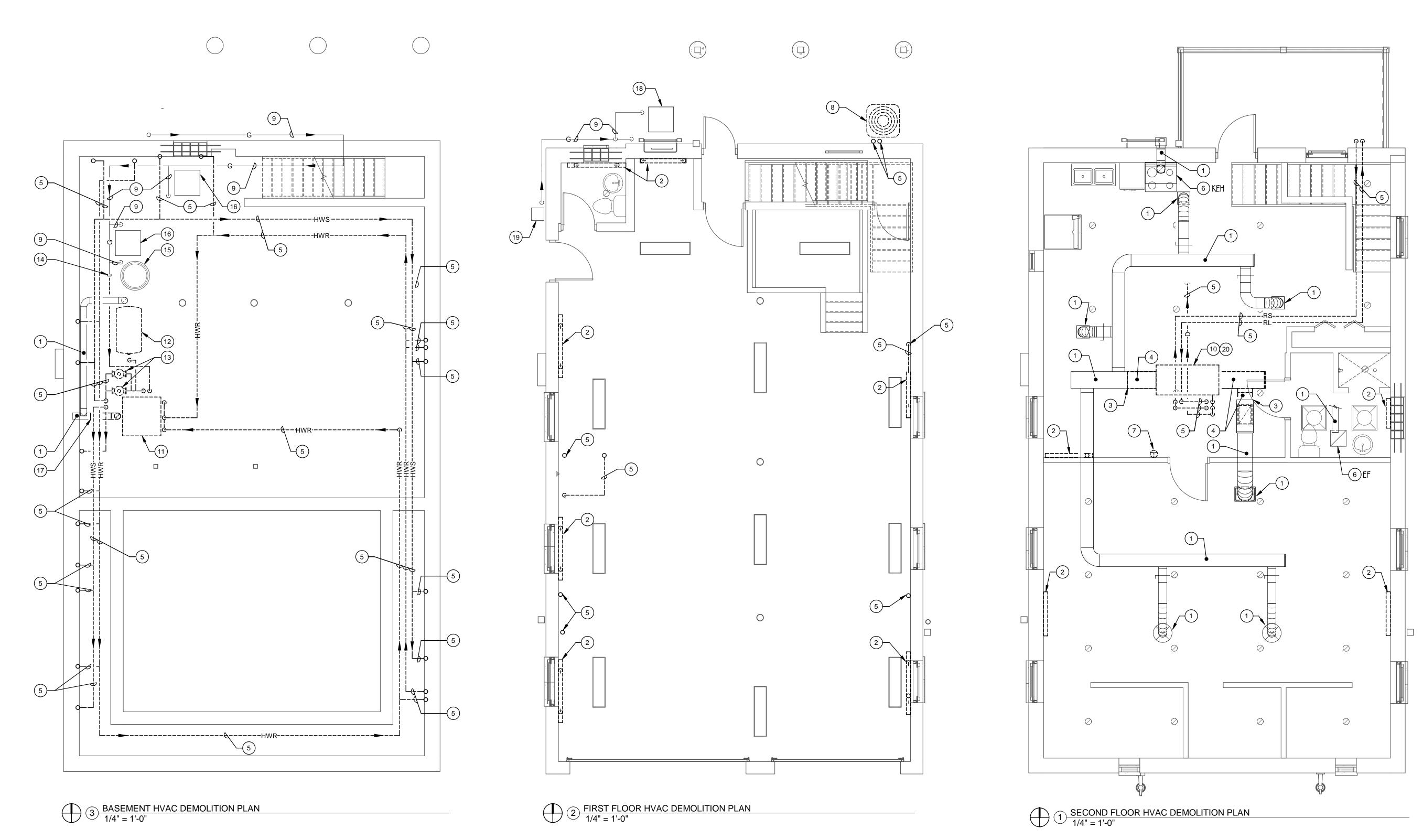






ISSUE • DATE OUT FOR BID
 4/03/2024

Mech./Elec. **Notes and Details** 



- I EXISTING DUCTWORK, DIFFUSERS, REGISTERS, AND GRILLES TO REMAIN.
- 2 REMOVE CONVECTOR AND ALL ASSOCIATED PIPING, VALVING AND CONTROLS.
- REGISTERS, HANGERS, INSULATION, ETC. SHOWN DASHED BEYOND THIS POINT.

3 NEW CONNECTION TO BE MADE AT THIS LOCATION. REMOVE ALL DUCTWORK, DIFFUSERS,

- 4 REMOVE ALL DUCTWORK, DIFFUSERS, REGISTERS, HANGERS, INSULATION, ETC. SHOWN DASHED.
- 5 REMOVE ALL PIPING, VALVING, HANGERS, INSULATION, ETC. SHOWN DASHED.
- 6 EXISTING HVAC EQUIPMENT TO REMAIN.
- 7 REMOVE EXISTING THERMOSTAT INCLUDING ALL ASSOCIATED CONDUIT, WIRING, PNEUMATIC TUBING, ETC. LOCATED ABOVE ANY ACCESSIBLE CEILING BETWEEN THERMOSTAT AND THE UNIT IT CONTROLS. PROVIDE BLANK COVER PLATE OVER ALL ABANDONED JUNCTION BOXES IN WALLS THAT ARE TO REMAIN.
- 8 REMOVE AIR COOLED CONDENSING UNIT, CONCRETE PAD, AND ALL ASSOCIATED PIPING, VALVING, AND CONTROLS.
- 9 EXISTING PIPING AND VALVING TO REMAIN.
- 10 REMOVE SUSPENDED FAN COIL UNIT AND ALL ASSOCIATED DUCTWORK, PIPING, VALVING, CONTROLS, ETC.
- I I REMOVE BOILER, CONCRETE PAD, AND ALL ASSOCIATED PIPING, VALVING, FLUE, BREECHING, AND CONTROLS.

# **DRAWING NOTES**

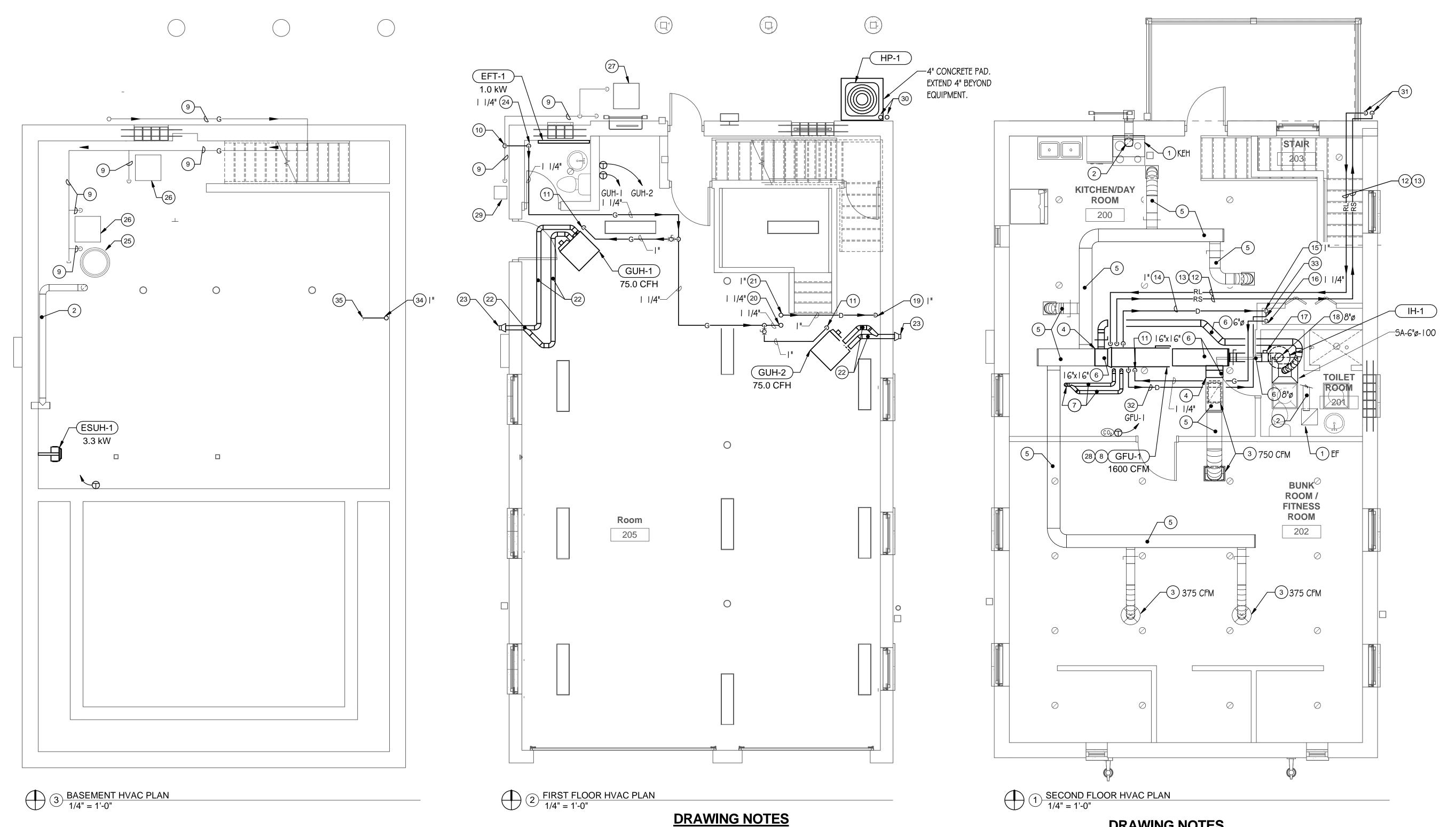
- 12 REMOVE EXPANSION TANK AND ALL ASSOCIATED PIPING, VALVING, INSULATION, HANGERS, SUPPORTS, ETC.
- 13 REMOVE INLINE PUMP AND ALL ASSOCIATED PIPING, VALVING, INSULATION, HANGERS, SUPPORTS, ETC.
- 14 CAP EXISTING PIPE AT LOCATION SHOWN AND REMOVE ALL PIPING, VALVING, HANGERS, INSULATION, ETC. SHOWN DASHED BEYOND THIS POINT.
- 15 EXISTING DOMESTIC WATER HEATER TO REMAIN.
- 16 EXISTING WASHER/DRYER TO REMAIN.
- 17 CAP EXISTING DUCT AT LOCATION SHOWN AND REMOVE ALL DUCTWORK, REGISTERS, DIFFUSERS, HANGERS, INSULATION, ETC. SHOWN DASHED BEYOND THIS POINT.
- 18 EXISTING GENERATOR TO REMAIN.
- 19 EXISTING GAS METER TO REMAIN.
- 20 CAREFULLY REMOVE EXISTING BIPOLAR IONIZATION DEVICE FROM EXISTING FAN COIL UNIT AND REINSTALL IN NEW GAS FURNACE UNIT.

architecture + interiors 223 West Jackson Boulevard, Suite 1200 Chicago, Illinois 60606 (312) 253-3400



NO • ISSUE • DATE • OUT FOR BID • 4/03/2024

> **HVAC Demolition Plans**



- I EXISTING HVAC EQUIPMENT TO REMAIN.
- 2 EXISTING DUCTWORK, DIFFUSERS, REGISTERS, AND GRILLES TO REMAIN.
- 3 BALANCE EXISTING DIFFUSER/GRILLE TO AIRFLOW RATE INDICATED.
- 4 MAKE NEW CONNECTION TO EXISTING DUCTWORK AT THIS LOCATION.
- 5 EXISTING DUCTWORK ROUTED WITHIN ATTIC SPACE TO REMAIN. WRAP EXISTING DUCTWORK WITH MINIMUM R-12 FLEXIBLE FIBERGLASS DUCT INSULATION WITH FOILED FACE.
- 6 DUCTWORK OF SIZE INDICATED TO BE ROUTED WITHIN ATTIC SPACE. WRAP DUCTWORK WITH MINIMUM R-12 FLEXIBLE FIBERGLASS DUCT INSULATION WITH FOILED FACE.
- 7 3"Ø FLUE AND COMBUSTION AIR DUCTWORK SIZED, INSULATED, AND INSTALLED PER MANUFACTURER'S REQUIREMENTS. TERMINATE THRU ROOF WITH MANUFACTURER'S CONCENTRIC TERMINATION KIT.
- 8 STEEL ROD SUSPEND FROM STRUCTURE ABOVE WITH NEOPRENE VIBRATION ISOLATORS.
- 9 EXISTING PIPING AND VALVING TO REMAIN.
- IO MAKE NEW CONNECTION TO EXISTING PIPING AT THIS LOCATION.
- I I MAKE FINAL FULL SIZE CONNECTION TO GAS FIRED EQUIPMENT WITH MIN. 6" DIRT LEG.
- 12 REFRIGERANT PIPING SIZED, INSULATED, SUPPORTED, AND INSTALLED IN STRICT ACCORDANCE WITH EQUIPMENT MANUFACTURER'S INSTRUCTION.
- 13 REFRIGERANT PIPING TO BE ROUTED WITHIN ATTIC SPACE.
- 14 CONDENSATE DRAIN PIPING OF SIZE INDICATED TO BE ROUTED WITHIN ATTIC SPACE.
- 15 CONDENSATE DRAIN PIPING OF SIZE INDICATED DOWN IN WALL. COORDINATE EXACT DIMENSIONS AND WALL FURRING WITH ARCHITECT.
- 16 GAS PIPING OF SIZE INDICATED DOWN IN WALL. COORDINATE EXACT DIMENSIONS AND WALL FURRING WITH ARCHITECT.
- 17 INTERLOCK OPERATION OF MOTORIZED DAMPER WITH WALL MOUNTED CO2 SENSOR.

- 18 DUCTWORK OF SIZE INDICATED UP THRU ROOF.
- 19 CONDENSATE DRAIN PIPING OF SIZE INDICATED DOWN THRU FLOOR.
- 20 GAS PIPING OF SIZE INDICATED UP THRU FLOOR.
- 21 CONDENSATE DRAIN PIPING OF SIZE INDICATED UP THRU FLOOR.
- 22 4"Ø FLUE AND COMBUSTION AIR DUCTWORK SIZED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS. TERMINATE THRU WALL WITH MANUFACTURER'S CONCENTRIC TERMINATION KIT.
- 23 MANUFACTURER'S CONCENTRIC VENT KIT ASSEMBLY.
- 24 GAS PIPING OF SIZE INDICATED DOWN ALONG WALL WITHIN PRE-FINISHED SHEET METAL PIPE CHASE OF COLOR TO BE SELECTED BY ARCHITECT. SEE DETAIL ELSEWHERE.
- 25 EXISTING DOMESTIC WATER HEATER TO REMAIN.
- 26 EXISTING WASHER/DRYER TO REMAIN.
- 27 EXISTING GENERATOR TO REMAIN.
- 28 REINSTALL EXISTING BIPOLAR IONIZATION DEVICE ON NEW GAS FURNACE UNIT IN ACCORDANCE WITH IONIZATION DEVICE MANUFACTURER'S INSTRUCTIONS.
- 29 MODIFY EXISTING GAS METER TO REMAIN TO PROVIDE 453.0 CFH AT 7" W.C. COORDINATE WITH GAS COMPANY.
- 30 REFRIGERANT PIPING UP ALONG EXTERIOR WALL.
- 3 I REFRIGERANT PIPING DOWN ALONG EXTERIOR WALL.
- 32 I" FLUE STACK DRAIN ROUTED WITHIN ATTIC SPACE.
- 33 PROVIDE CONDENSATE TRAP PRIOR TO COMBINING WITH FLUE STACK DRAIN. PROVIDE CONDENSATE NEUTRALIZING KIT.
- 34 CONDENSATE DRAIN PIPING OF SIZE INDICATED UP THRU FLOOR.
- 35 TERMINATE I "CONDENSATE DRAIN PIPING WITH DOWN TURNED ELBOW TO NEAREST FLOOR DRAIN.

STUDIO GC architecture + interiors 223 West Jackson Boulevard, Suite 1200 Chicago, Illinois 60606 (312) 253-3400 Mechanical - Electrical Engineers 1216 Tower Road Schaumburg, Illinois 60173 Fax 847.882.220

NO	•	ISSUE	<ul> <li>DATE</li> </ul>
	•	OUT FOR BID	• 4/03/202
	•		•
	•		•
	•		•
	•		•
	•		•
	•		•
	•		•
	•		•
	•		•

**HVAC Plans** 

#### **GENERAL NOTES - HVAC WORK:**

- I. ALL NEW WORK AND MATERIALS SHALL CONFORM TO VILLAGE OF OAK PARK CODE AND BUILDING STANDARDS.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND INSPECTIONS AND PAYING THEIR ASSOCIATED FEES.
- 3. CONTRACTORS SHALL SUBMIT COMPLETE COORDINATED FLOOR PLAN SHOP DRAWINGS OF HIS PROPOSED WORK INSTALLATION (1/4 INCH MINIMUM SCALE) FOR REVIEW BY ARCHITECT/ ENGINEER/OWNER. "COORDINATED" MEANS WITH WORK OF ALL OTHER TRADES INCLUDING EXISTING AND PROPOSED FEATURES OF THE GENERAL BUILDING CONSTRUCTION AND OTHER TRADE'S WORK.
- 4. NOISE AND VIBRATION WILL NOT BE TOLERATED. CONTRACTOR SHALL BID ON FURNISHING EVERY DETAIL TO ASSURE THIS END.
- 5. PATCH AND REFINISH ALL DAMAGED INSULATED SURFACES OF ALL EXISTING DUCTWORK, PIPING AND ASSOCIATED FITTINGS TO MATCH EXISTING WHERE NEW CONNECTIONS ARE BEING MADE.
- 6. CONTRACTORS SHALL PROVIDE A ONE YEAR WARRANTY ON ALL MATERIALS, EQUIPMENT AND LABOR FROM DATE OF SUBSTANTIAL COMPLETION OF WORK EXCEPT AS FOLLOWS: PROVIDE A 5 YEAR PARTS AND LABOR WARRANTY FOR ROOFTOP UNIT COMPRESSOR; PROVIDE A 10 YEAR PARTS AND LABOR WARRANTY FOR ROOFTOP UNIT HEAT EXCHANGER.
- 7. CONTRACTORS SHALL PROVIDE IN WARRANTY LABOR AND MANUFACTURER WILL PROVIDE IN WARRANTY PARTS FOR EQUIPMENTWHICH HAS BEEN PRE-PURCHASED BY THE OWNER. CONTRACTOR SHALL RECEIVE THIS EQUIPMENT FROM THE OWNER AT THE PROJECT SITE, THEN COMPLETE REQUIRED ASSEMBLY WORK AND PROVIDE LABOR AND PROPER INSTALLATION.
- 8. THE LOCATIONS SHOWN FOR ALL DIFFUSERS, REGISTERS AND GRILLES, ETC. ARE DIAGRAMMATIC. EXACT LOCATION SHALL BE DETERMINED FROM THE REFLECTED CEILING PLANS AND/OR ON THE JOB SITE BY THE ARCHITECT/ENGINEER REPRESENTATIVES.
- 9. EXCEPT AS NOTED OTHERWISE, ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE GALVANIZED SHEET METAL WITH SEALED JOINTS CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH CURRENT SMACNA MANUAL. SIZES SHOWN ARE INSIDE FACE TO INSIDE FACE.
- IO. THE GAUGES OF IRON FOR DUCTS AND CASINGS AND SIZE OF STRUCTURAL REINFORCING ANGLES FOR DUCTS AND CASING SHALL BE SUCH AS TO PROVIDE ABSOLUTELY AIR TIGHT CONSTRUCTION FREE FROM PULSATION, DEFORMATION, OR VIBRATION AT NORMAL OPERATING PRESSURES.
- II. ALL SUPPLY AND RETURN DUCTWORK IN THE MECHANICAL OR BOILER ROOM, OUTSIDE, MIXED, OR COMBUSTION AIR DUCTWORK, OR EXHAUST DUCTWORK BETWEEN THE LOUVER AND THE DAMPER SHALL BE EXTERNALLY INSULATED WITH 3 LB. DENSITY RIGID BOARD FIBERGLASS DUCT INSULATION WITH ALL SERVICE JACKET. OUTSIDE AIR AND MIXED AIR DUCTWORK TO BE INSULATED 2" THICK, SUPPLY DUCTWORK TO BE INSULATED 1 1/2" THICK.
- 12. ALL ROUND CONCEALED FLEXIBLE DUCT SHALL BE WIREMOLD OR THERMOFLEX FACTORY INSULATED 1" THICK MAXIMUM OF 5'-O" LONG TO DIFFUSERS/REGISTERS. FLEXIBLE DUCT MAY BE UTILIZED ONLY WHERE CONCEALED ABOVE ACCESSIBLE CEILINGS.
- 13. ALL NEW RECTANGULAR SUPPLY AND RETURN DUCTWORK SHALL BE INTERNALLY LINED I "THICK WITH MATT FACED FIBERGLASS DUCT LINER.
- 14. ALL SUPPLY AND RETURN DUCTWORK LOCATED IN UNHEATED ATTICS OR CRAWL SPACES AND DRYER EXHAUST DUCTS SHALL BE WRAPPED WITH MINIMUM R-12, 4 3/8" THICK FLEXIBLE FIBERGLASS DUCT INSULATION WITH FOILED FACE.
- 15. PROVIDE MANUAL VOLUME DAMPERS AT EACH BRANCH DUCT TAKEOFF IN SUPPLY DUCTWORK AND IN RETURN/EXHAUST DUCTWORK. PROVIDE TURNING VANES IN ALL SQUARE DUCT ELBOWS.
- 16. PAINT ALL INTERIOR DUCTWORK VISIBLE THROUGH AIR INLETS OR OUTLETS FLAT BLACK.
- 17. BALANCE DUCT SYSTEMS TO ACCOMPLISH AIR QUANTITIES SHOWN AT ALL INLETS/OUTLETS (NEW AND EXISTING) AS SHOWN ON DRAWING AND SUBMIT TEST REPORT FOR REVIEW BY OWNER AND ENGINEER.
- 18. ALL REFRIGERANT PIPING SHALL BE TYPE "K" COPPER WITH WROUGHT COPPER SOLDER FITTINGS AND BE SIZED PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. INSULATE REFRIGERANT SUCTION AND HOT GAS LINES WITH 3/4" THICK AP/ARMAFLEX. PROVIDE EXTERIOR INSULATION WITH 2 COATS UV RESISTANT FINISH.
- 19. DRIP PAN DRAIN PIPING SHALL BE TYPE "M" COPPER WITH 1/2" INSULATION.
- 20. NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK AND CONFORM WITH ASTM STANDARDS WELDED FOR PIPE SIZES 2 1/2" AND OVER AND SCREWED FOR PIPE SIZES 2" AND UNDER. WIRE BRUSH CLEAN AND PAINT ALL PIPING AND FITTINGS WITH 2 COATS OF RUST RESISTANT PAINT.
- 21. ALL PIPING SHALL BE SUSPENDED WITH CLEVIS AND/OR TRAPEZE PIPE HANGERS. INSULATED PIPING SHALL REST ON SHEET METAL INSULATION SHIELDS. (ANCHORS SHALL BE DRILLED INTO EXISTING FLOOR CONSTRUCTION).
- 22. BALL VALVES SHALL BE STOCKHAM, MILWAUKEE, OR NIBCO MSS SP 110, 400 PSI WOG, ONE PIECE BRONZE BODY, CHROME PLATED BRASS BALL, FULL PORT, TEFLON SEATS, BLOW-OUT PROOF STEM, SOLDER ENDS, LEVER HANDLE.
- 23. PROVIDE GAS SHUT-OFF VALVE AT EACH PIECE OF EQUIPMENT AND PRESSURE REGULATORS WHERE REQUIRED. VENT ALL PRESSURE REGULATORS WITHIN THE BUILDING FULL SIZE TO BUILDING EXTERIOR.
- 24. GAS FURNACE UNIT SHALL HAVE A WEB-BASED 7-DAY PROGRAMMABLE COLOR TOUCH THERMOSTAT WITH DEMAND CONTROL VENTILATION SEQUENCE AND HEATING/COOLING STAGES TO MATCH INSTALLATION.
- 25. ELECTRIC SUSPENDED UNIT HEATER SHALL HAVE STAND-ALONE ELECTRIC THERMOSTAT.
- 26. LOW VOLTAGE WIRING SHALL BE U/L LISTED AND PLENUM RATED (LOW SMOKE PRODUCING). WIRING SHALL BE CONCEALED IN WALLS AND MAY BE INSTALLED WITHOUT CONDUIT ABOVE ACCESSIBLE LAY-IN CEILING SPACES ONLY.

# **HVAC SYMBOLS AND ABBREVIATIONS**

	HVAC SYMBOLS	AND ABBREVIATIONS	
ACCU	AIR COOLED CONDENSING UNIT	HWS	HOT WATER SUPPLY
A.F.F.	ABOVE FINSHED FLOOR	HWR	HOT WATER RETURN
AP	ACCESS PANEL	——— G ———	NATURAL GAS
BHP	BRAKE HORSEPOWER	RS	REFRIGERANT SUCTION
ВОР	BOTTOM OF PIPE	——— RL ———	REFRIGERANT LIQUID
BTU	BRITISH THERMAL UNIT	D	DRAIN LINE
	BRITISH THERMAL UNIT PER HOUR	——————	BALL VALVE (2" \$ SMALLER) BUTTERFLY VALVE (2 1/2" \$ LARGER)
BTUH		—————————————————————————————————————	DRAIN VALVE WITH HOSE THREADED OUTLET
CFM	CUBIC FEET PER MINUTE		PIPE UNION (OR FLANGES IF 2 1/2" OR LARGER PIPE)
CV	CONVECTOR		DIRECTION OF FLOW
D	DRAIN LINE	PITCH	PITCH OF PIPE (DOWN)
DB	DRY BULB		PIPE ELBOW (TURNED UP)
DN.	DOWN	———	PIPE ELBOW (TURNED DOWN)
EAT	ENTERING AIR TEMPERATURE		PIPE TEE DOWN (DROP)
EF	EXHAUST FAN		PIPE TEE UP
ESP	EXTERNAL STATIC PRESSURE		PIPE TEE UP OR ANGLE
ET	EXPANSION TANK	$\bigcap_{NC_{1.}}$	PIPE TEE DOWN OR ANGLE
ESUH	ELECTRIC SUSPENDED UNIT HEATER		NEW CONNECTION
F	FAHRENHEIT	R	GAS PRESSURE REGULATOR
FCU	FAN COIL UNIT		FLEXIBLE DUCT CONNECTION
		<u> </u>	
FD	FLOOR DRAIN		MANUAL SINGLE BLADE OR OPPOSED BLADE DAMPER
FPM	FEET PER MINUTE		
G	GAS PIPING	<b>T</b>	MOTOR OPERATED DAMPER
GC	GENERAL CONTRACTOR		
GFU	GAS FURNACE UNIT	<del>- (\) -</del>	AIR FLOW
GUH	GAS UNIT HEATER		
HP	HORSEPOWER	Z 12x24 Z	DUCT SIZE FREE AREA (IST FIGURE, SIDE OF DUCT SHOWN)
HWB	HOT WATER BOILER		CROSS SECTION OF SUPPLY OF OUTSIDE AIR INTAKE DUCT
HWP	HOT WATER CIRCULATING PUMP		CROSS-SECTION OF SUPPLY OR OUTSIDE AIR INTAKE DUCT
HWR	HOT WATER RETURN		CROSS-SECTION OF RETURN OR EXHAUST DUCT
HWS	HOT WATER SUPPLY		CROSS SECTION OF RETORN ON EXTINOST BOOT
IH	INTAKE HOOD	$\frac{R}{D}$	INCLINED RISE (R) OR DROP (D)
LAT	LEAVING AIR TEMPERATURE	\	
MCA	MINIMUM CIRCUIT AMPS		90° ELBOW WITH TURNING VANES
MOCP	MAXIMUM OVERCURRENT PROTECTION		90° BRANCH TAKE-OFF W/45 DEGREE ENTRY
MOD	MOTOR OPERATED DAMPER		
NC	NEW CONNECTION	8))))))))))	ROUND FLEXIBLE DUCT
NK	NECK		
PD	PRESSURE DROP		SQUARE OR RECTANGLE DUCT TRANSITION
PE	PIPE ENCLOSURE		
PH	PHASE		SQUARE OR RECTANGLE TO ROUND DUCT TRANSITION
PSI	POUNDS PER SQUARE INCH		
RPM	REVOLUTIONS PER MINUTE		DUCT UP TO ROOF MOUNTED EXHAUST FAN OR VENTILATOR
SP	STATIC PRESSURE	(NOV.)	EOLIIDMENT TAC
TSP	TOTAL STATIC PRESSURE	(XXX-1)	EQUIPMENT TAG
TYP.	TYPICAL	$\cup$	WALL THERMOSTAT OR TEMPERATURE SENSOR WITH CHARD
WB	WET BULB	G	WALL THERMOSTAT OR TEMPERATURE SENSOR WITH GUARD
W.C.	WATER COLUMN	$\bigcirc$ CO <sub>2</sub> )	WALL CARBON DIOXIDE SENSOR
vv.C.	WATER COLUMN	Ø	ROUND

-----

PIPING, DUCTWORK, OR EQUIPMENT TO BE REMOVED







HVAC Notes, Legend, and

**Specifications** 

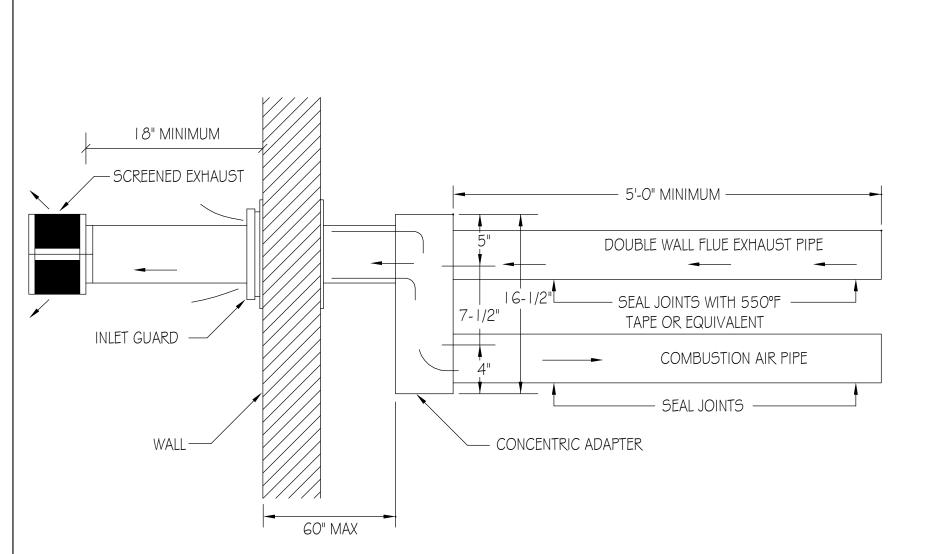
NO • ISSUE • DATE

• OUT FOR BID • 4/03/2024

HV2.00

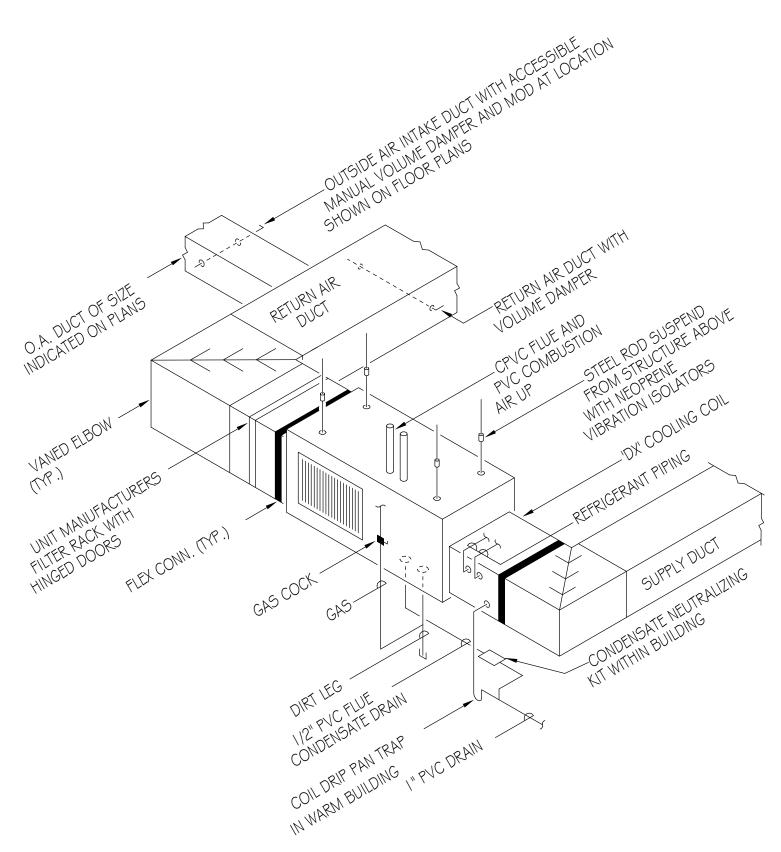
#### BIDDING NOTE:

SEE DRAWINGS ME I .OO FOR GENERAL NOTES AND ADDITIONAL DETAILS APPLICABLE TO THIS TRADE'S WORK.

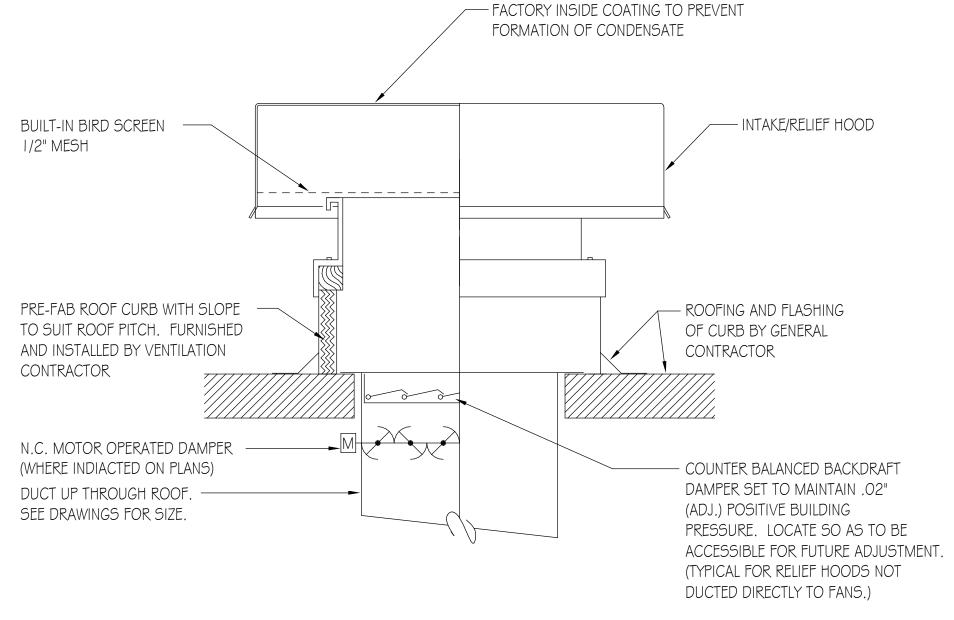


# **GAS FIRED UNIT HEATER STANDARD HORIZONTAL VENT** TERMINAL/COMBUSTION AIR INLET ASSEMBLY

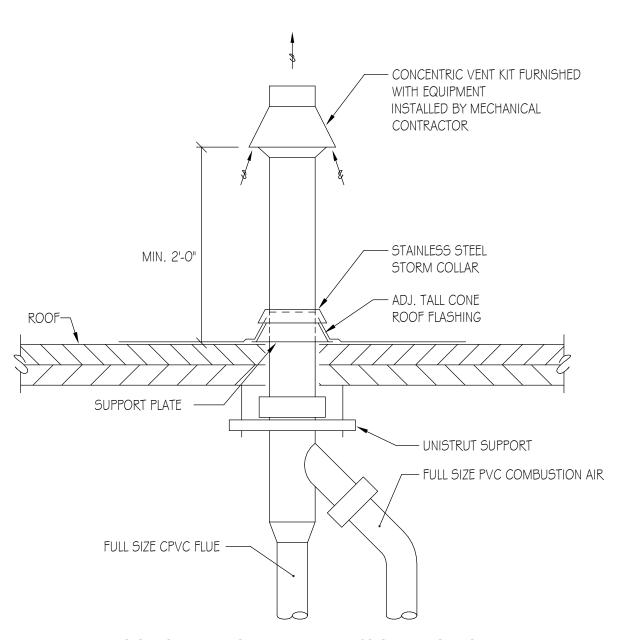
NO SCALE



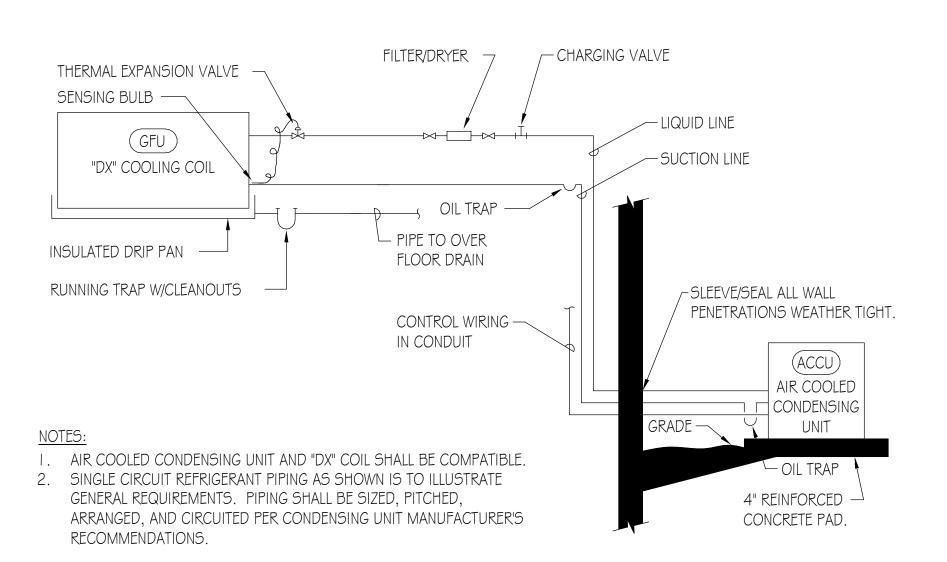
HORIZONTAL FLOW FURNACE INSTALLATION DETAIL NO SCALE



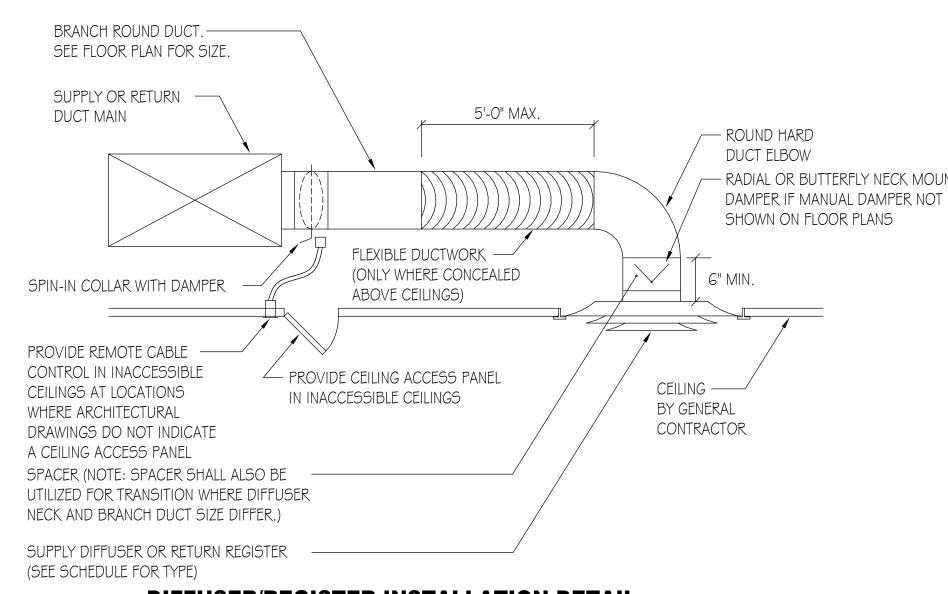
## INTAKE/RELIEF HOOD INSTALLATION DETAIL NO SCALE



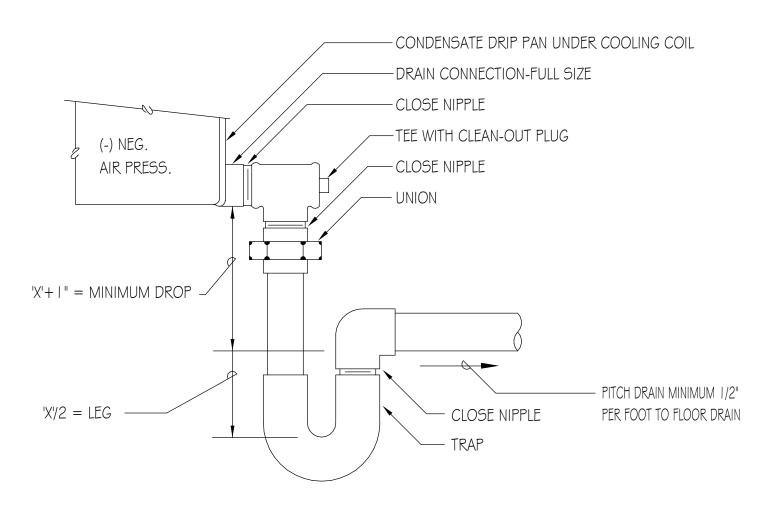
#### **CONCENTRIC FLUE VENT/COMBUSTION AIR STACK THRU ROOF DETAIL**



# REFRIGERANT PIPING DETAIL



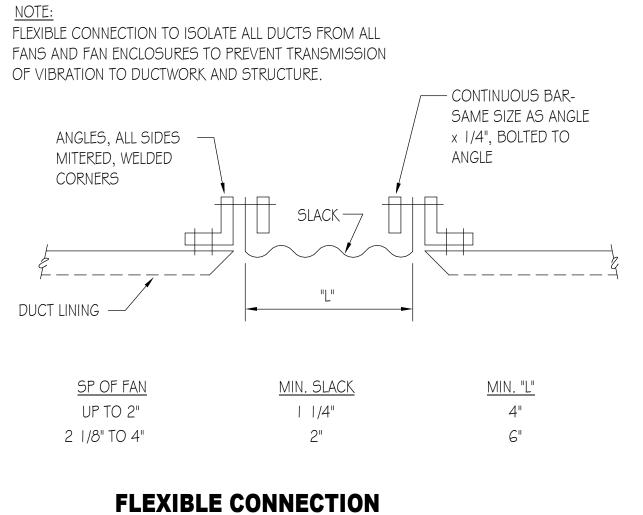
# **DIFFUSER/REGISTER INSTALLATION DETAIL**



I. X' = SUCTION PRESSURE AT FAN INLET (NEGATIVE INTERNAL S.P.)

# DRAW-THRU COOLING COIL DRIP PAN DRAIN DETAIL

NO SCALE



NO SCALE

ISSUE • DATE OUT FOR BID • 4/03/2024 **HVAC Details** 

STUDIO GC

architecture + interiors

223 West Jackson Boulevard, Suite 1200 Chicago, Illinois 60606 (312) 253-3400

Mechanical - Electrical Engineers 1216 Tower Road

Schaumburg, Illinois 60173

Fax 847.882.220

														GAS	S FUR	RNACE	JNIT SCH	IEDULE																
EQUIP	EQUIPMENT	AREA	MANUF.	MODEL	TYPE		PROXIM OVERAL INSIONS	L	AIRFLOW			FAI	٧				HEATI	NG SECTION	N					CO	OOLING S	SECTION			- FILTERS	E	LECTRIC	AL DATA		- NOTES
TAG	LOCATION	SERVED	WANOF.	WIODEL	ITPL	L	W	Н	(CFM)	MIN. OA (CFM)	ESP (IN.)	TYPE		MOTOR PHASE		INPUT (BTUH)	OUTPUT (BTUH)		EAT (°F)	LAT (°F)	Γ EAT ) (DB °		T LA °F) (DB			SENSIBLE CAPACITY (MBH)	TOTAL CAPACITY (MBH)	COOLING STAGES	FILTERS	MCA	МОСР	PHASE	VOLT	
GFU-I	ATTIC	SECOND FLOOR	CARRIER	59TP6C080	VERTICAL UPFLOW	29.5	17.5	35.0	1600	100	0.50	FC	1050	1	120	80000	78000	2	65.0	110.	1 80.0	0 67	0 60.	.1 !	58.3	34.5	44.8	2	I IN. THICK THROWAWAY	13.1	20	1	120	1,2,3,4,5

I. OTHER ACCEPTABLE MANUFACTURERS: DAIKIN, TRANE.

2. PROVIDE COMPATIBLE MULTI-POISE A-COIL EVAPORATOR COIL AND HEAT PUMP OUTDOOR UNIT.

3. PROVIDE MANUFACTURER'S CONCENTRIC VENT KIT.

4. PROVIDE WEB-BASED 7-DAY PROGRAMMABLE COLOR TOUCH THERMOSTAT WITH DEMAND CONTROL VENTILATION SEQUENCE AND HEATING/COOLING STAGES TO MATCH INSTALLATION. 5. PROVIDE CONDENSATE NEUTRALIZING KIT.

ELECTRIC SUSPENDED UNIT HEATER SCHEDULE														
	GENERAL FAN DATA ELECTRICAL DATA													
EQUIP TAG	LOCATION	TYPE	MANUF.	MODEL	TYPE	CFM	HEATER kW	AMP	PH	VOLT	NOTES			
ESUH-I	BASEMENT	SUSPENDED HORIZONTAL	MARKEL	5100 SERIES	PROP.	400	3.3	13.8	ı	240	1,2,3,4,5			

I. OTHER ACCEPTABLE MANUFACTURERS: APPROVED EQUAL.

2. DISCONNECT SWITCH.

3. WALL BRACKET.

4. PROVIDE CONTROL RELAY AND TRANSFORMER.

5. PROVIDE WALL MOUNTED THERMOSTAT WITH LOCKING COVER.

	DIFFU	SER, REG	SISTER, AND	GRILLE S	SCHEDUL	E			
TAG	MANUFACTURER	MODEL	TYPE	NOMINAL FACE SIZE	MATERIAL	MAX. N.C.	NOTES		
Α	TITUS	OMNI	SQUARE PANEL FACE	24"x24"	STEEL	30	1,2		
NOTES:	HER ACCEPTABLE MANUI	FA/TURFRS.	FLOOR PLAN TAG	G LEGEND:		_			
	PROVED EQUAL.	TACTURENCE:		_	<del> </del> <del> </del>	<u> </u>			
2. FIN	ISH AS SELECTED BY AR	CHITECT.	'S'=SUPPLY			L—AII	R FLOW (CFM)		
			'R'=RETURN/RELI	EF					
			'E'=EXHAUST EQUIPMENT TAG	,		——NEC	CK SIZE (IN.)		
Eddi WENT INC									

	AIR COOLED HEAT PUMP UNIT SCHEDULE																				
EOLIID				COOLING	HEATING	WEIGHT		COMP	RESSORS				F	FANS			EL	ECTRICA	L DA	ГА	
EQUIP TAG	MANUF.	MODEL	LOCATION	CAPACITY (MBH)	CAPACITY (MBH)	(LBS)	QUANTITY	SIZE (TONS)	STEPS	SST (°F)	REF. TYPE	EAT (°F)	QUANTITY	TYPE	HP	RPM	MCA	MOCP	PH	VOLT	NOTES
HP-I	CARRIER	25TPA748A003	ON GRADE	45	47.6	295.0		4	2	45	R-410A	95		PROP	0.25	1100	33.5	50	ı	240	1,2,3

I. OTHER ACCEPTABLE MANUFACTURERS: SAME AS INDOOR UNIT.

2. PROVIDE ANTI-CYLE KIT.

3. PROVIDE 5 YEAR COMPRESSOR PARTS WARRANTY.

	GAS FIRED UNIT HEATER SCHEDULE																
				DIMENSIONS (IN.)			HEATER				FAN DATA		MOTOR				
EQUIP TAG	TYPE	MANUFACTURER	MODEL	LENGTH	WIDTH	HEIGHT	INPUT (MBH)	OUTPUT (MBH)	STAGES	FLUE DIA. (IN.)	FAN TYPE	CFM	RPM	HP	PHASE	VOLT	NOTES
GUH- I	SEPARATED COMBUSTION	REZNOR	UDXC-75	31 29/32"	27"	16 3/4"	75	62.25	I	4	PROP	960	1550	0.06	I	120	1,2,3
GUH-2	SEPARATED COMBUSTION	REZNOR	UDXC-75	31 29/32"	27"	16 3/4"	75	62.25	I	4	PROP	960	1550	0.06	I	120	1,2,3

INCLUDE OPTIONAL 409 STAINLESS STEEL HEAT EXCHANGER, SINGLE STAGE GAS VALVE AND THERMOSTAT WITH LOCKING COVER. I. OTHER ACCEPTABLE MANUFACTURERS: APPROVED EQUAL.

3. MANUFACTURERS CONCENTRIC VENT KIT.

				IN	NTAKE AN	ID RELI	IEF HO	OD SCH	IEDULE				
EQUIP TAG	LOCATION	EQUIPMENT SERVED	MANUF.	MODEL	TYPE	THROAT SIZE  DIA H W		CFM	STATIC PRESSURE (IN. W.G.)	HOOD FREE AREA (SQFT)	MAX. THROAT VELOCITY (FPM)	NOTES	
IH-I	ROOF	GFU-1	GREENHECK	GRSI-08	INTAKE	8"			100	0.01	0.3	287	1,2

I. OTHER ACCEPTABLE MANUFACTURERS: APPROVED EQUAL.

2. MANUFACTURERS STANDARD SLOPED ROOF CURB, VERIFY

SLOPE OF ROOF PRIOR TO PLACING ORDER.

ELECTRIC FINNED TUBE SCHEDULE															
GENERAL				ENCLOSURE						ELEMENT					
EQUIP TAG	LOCATION	MANUF.	MODEL	TYPE/ MATERIAL	LENGTH	HEIGHT	WIDTH	MOUNTING HEIGHT (MIN. AFF)	WATTS	CAPACITY (BTUH)	AMP	PH	VOLT	NOTES	
EFT-1	FIRST FLOOR TOILET	MARKEL	3700 SERIES	ALUMINUM BASEBOARD	48"	9"	3"	6"	1,000	3,412	8.3	ı	120	1,2,3,4	

I. OTHER ACCEPTABLE MANUFACTURERS: APPROVED EQUAL.

2. FIELD MEASURE ALL LENGHTS PRIOR TO FABRICATION. COLOR FINISH TO BE SELECTED BY ARCHITECT.

3. PROVIDE 6" CONTROL SECTION, END TRIMS, AND END CLOSURES.

4. TAMPER-PROOF BUILD-IN DISCONNECT SWITCH AND INTEGRAL THERMOSTAT.

C:\Users\mjg\Documents\1475E2\_Oak Park Fire Station 2\_MEP Central\_V23\_markDQ8S2.rvt

- I ELECTRICALLY DISCONNECT EXISTING EQUIPMENT FOR REMOVAL. REMOVE ANY ASSOCIATED FIRE ALARM DEVICES, DISCONNECT SWITCHES, STARTERS, AND ALL CONDUITS AND CONDUCTORS BETWEEN UNIT AND PANEL. LEAVE CIRCUIT BREAKER AT 'OFF' POSITION AND INDICATE CIRCUIT AS "SPARE" IN PANELBOARD DIRECTORY.
- 2 CAREFULLY DISCONNECT EXISTING IONIZER DEVICE TO ACCOMMODATE REMOVAL OF EXISTING EQUIPMENT. PROTECT DEVICE FOR REUSE AND REINSTALLATION.







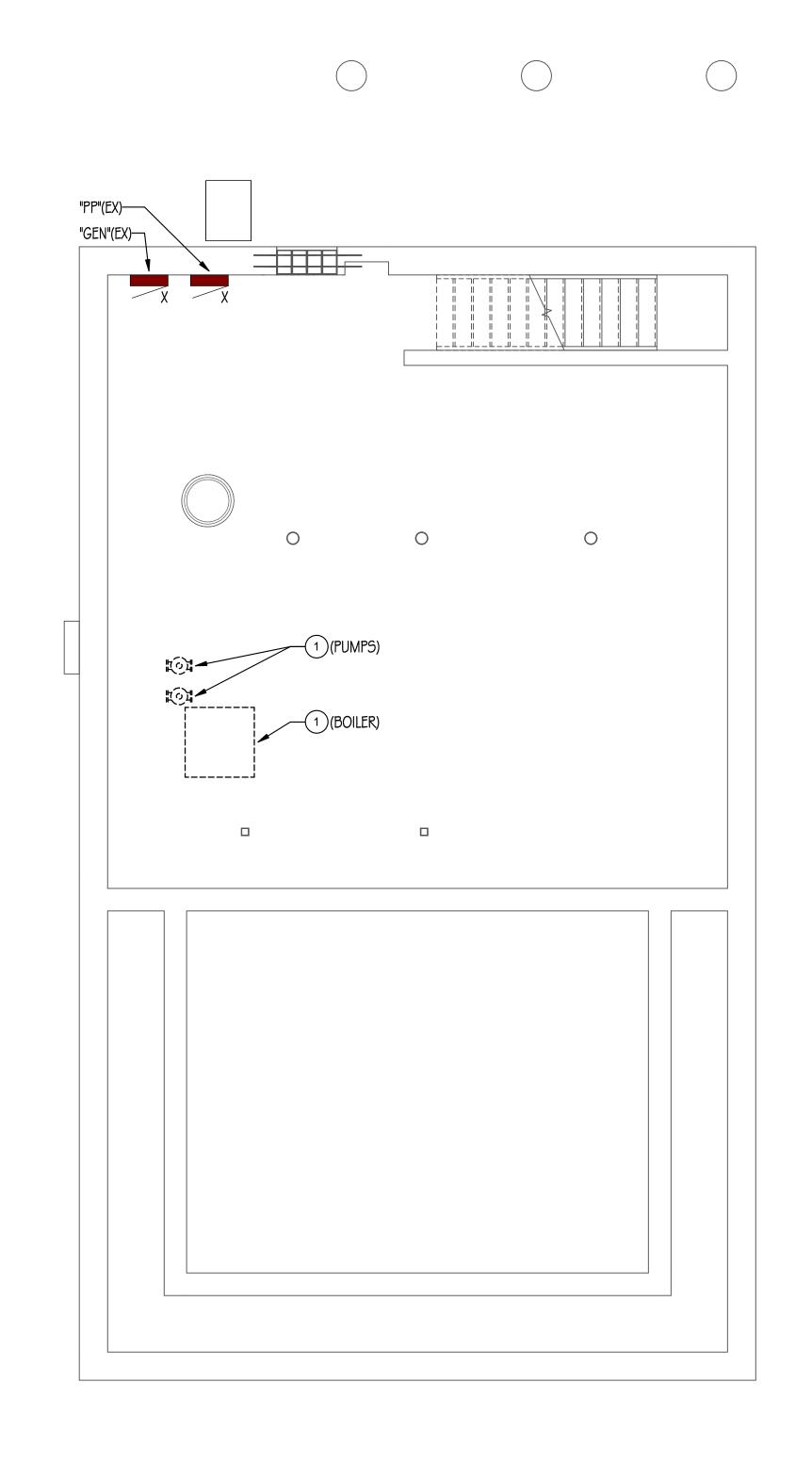


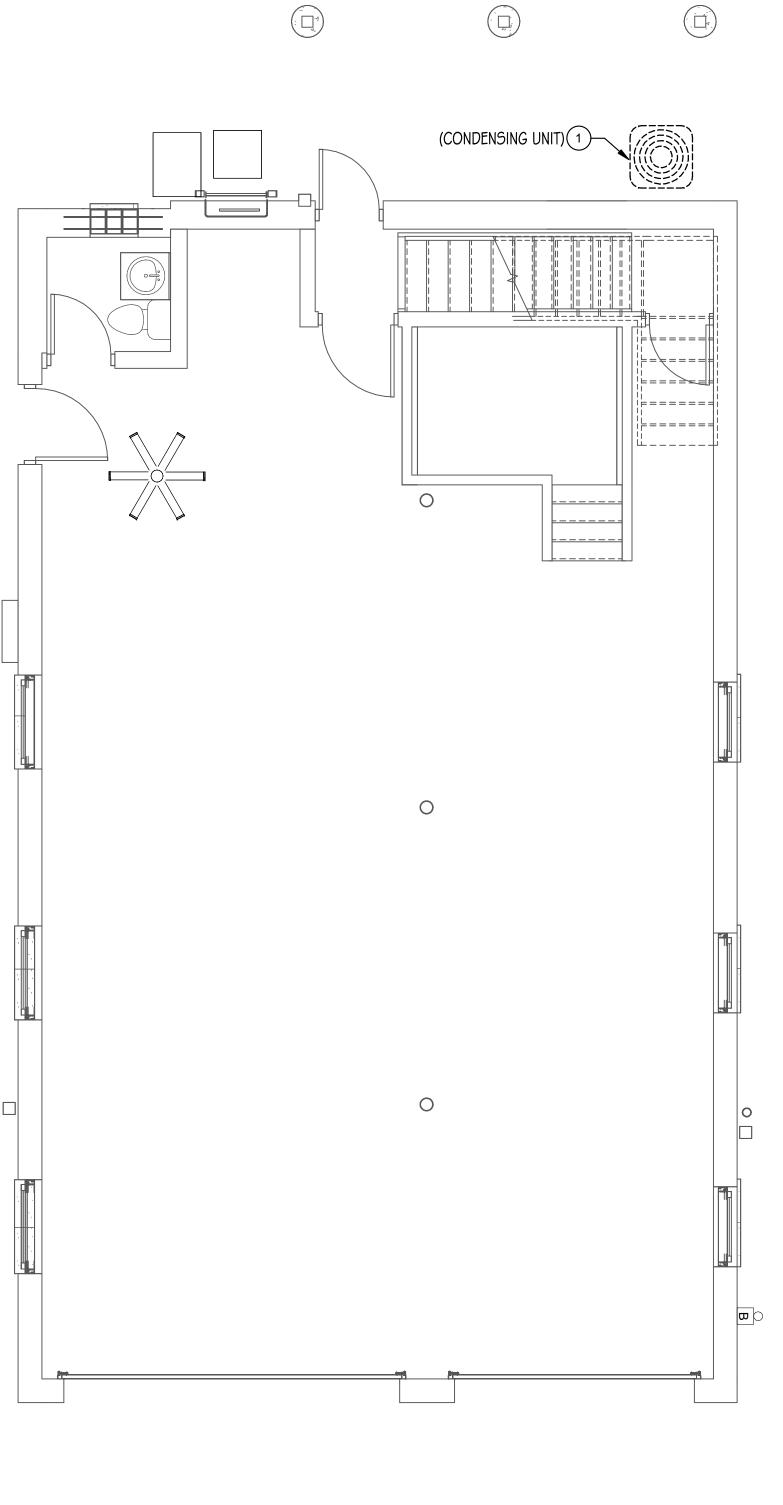
Replacemo

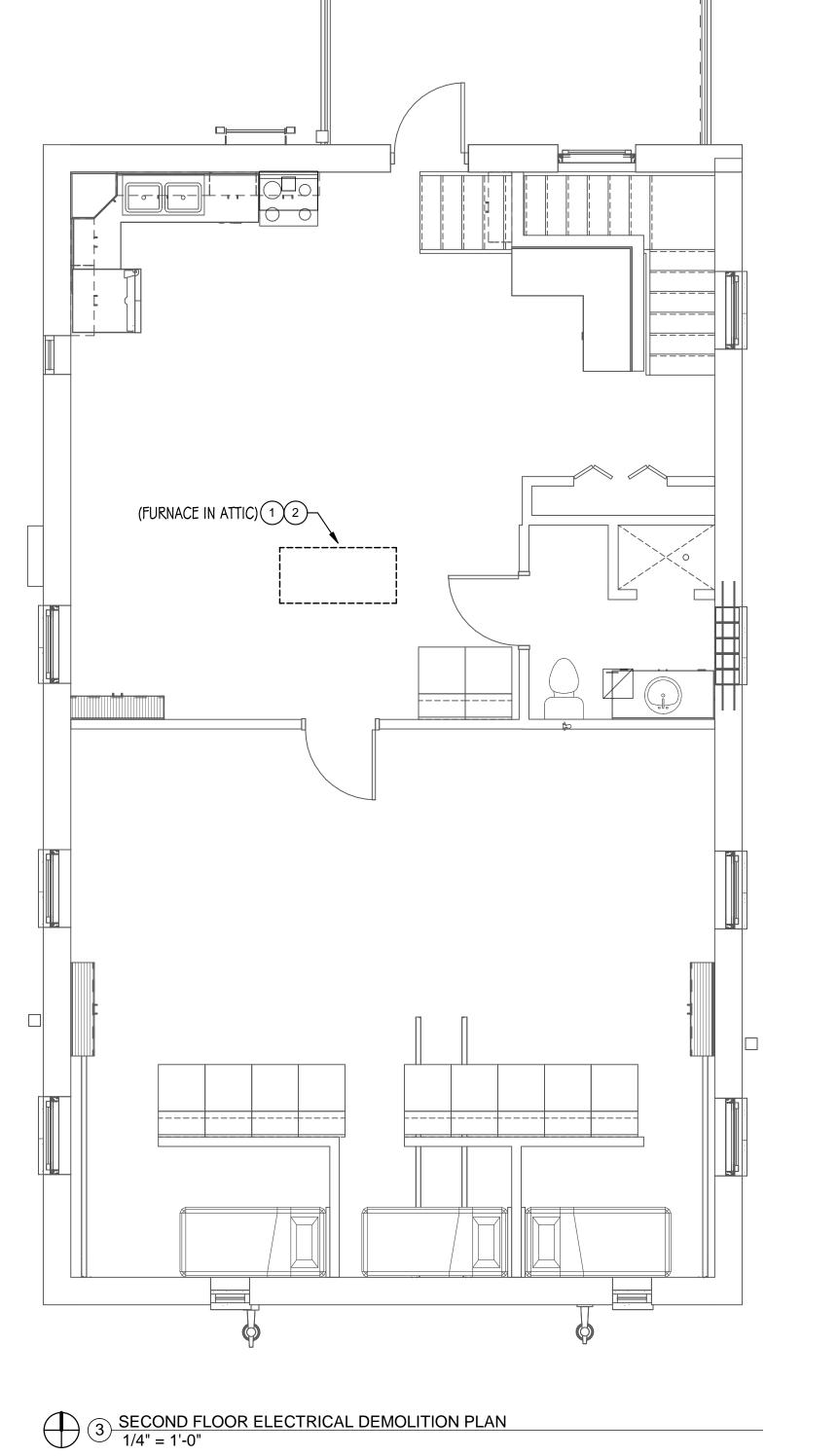
NO • ISSUE • DATE
• OUT FOR BID • 4/03/2024
• • •

Electrical Demolition Plans

ED1.0







1 BASEMENT ELECTRICAL DEMOLITION PLAN 1/4" = 1'-0"

2 4 GFU-1 (IN ATTIC)

- I DISCONNECT SWITCH FURNISHED WITH EQUIPMENT, WIRED BY ELECTRICAL CONTRACTOR. 2 PROVIDE I 20VAC. 20AMP. MOTOR RATED TOGGLE DISCONNECT SWITCH FOR MECHANICAL EQUIPMENT. COORDINATE EXACT LOCATION WITH OTHERS.
- 3 PROVIDE 240VAC, 2-POLE, 60AMP RATED NON-FUSIBLE DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT WITH OTHERS TO MAINTAIN 3-FOOT WORKING SPACE IN FRONT OF ELECTRICAL EQUIPMENT.
- 4 REUSE AND REINSTALL EXISTING IONIZER DEVICE ON NEW EQUIPMENT. EXTEND EXISTING CONDUITS AND CONDUCTORS TO NEW DEVICE LOCATION AS REQUIRED. COORDINATE INSTALLATION WITH OTHERS FOR A COMPLETE AND OPERABLE SYSTEM.
- 5 PROVIDE SINGLE GANG BACKBOX AND CONDUIT WITH PULL STRING ROUTED TO ASSOCIATED EQUIPMENT FOR THERMOSTAT/CARBON DIOXIDE DETECTOR, MOUNTED 48" A.F.F. UNLESS NOTED OTHERWISE. COORDINATE EXACT LOCATION WITH OTHER TRADES PRIOR TO ROUGH-IN.





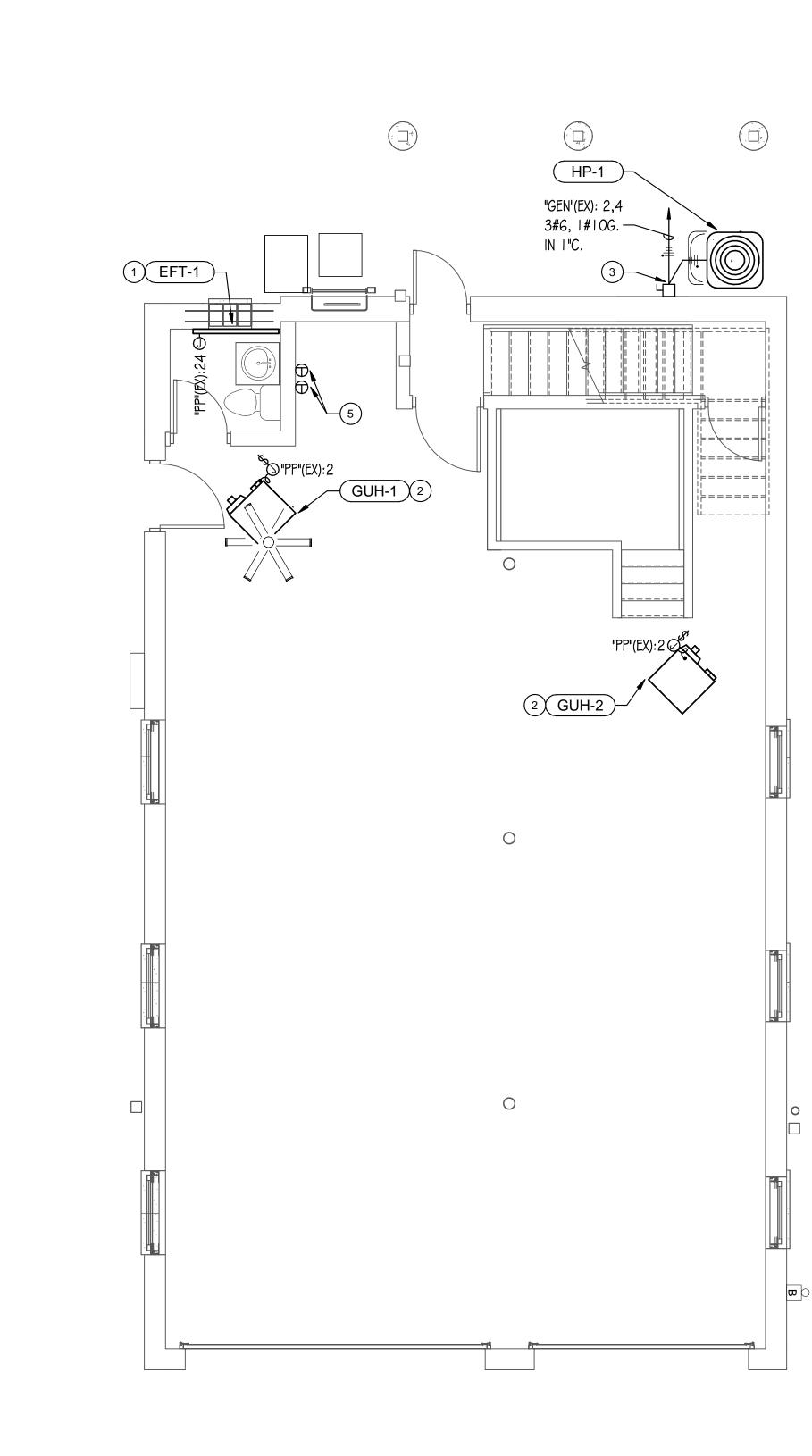






NO	•	ISSUE	• DATE
	•	OUT FOR BID	• 4/03/2024
	•		•
	•		•
	•		•
	•		•
	•		•

**Electrical Plans** 





"GEN"(EX)—

	_	
ELECTRICAL SERVICE LOAD C	ALCULATION	<u> </u>
EXISTING ELECTRICAL SERVICE SIZE	200	AMP
EXISTING LOADS		
PEAK DEMAND LOAD IN 08/2023		
PER COMMONWEALTH EDISON	9.52	KW
ASSUME 0.85 POWER FACTOR	11200	
AUSUME 0.03 TOWER TACTOR	X 1.25	٧٨
	X 1.25	
TOTAL EXISTING LOAD	14000	VA
AMPERES @ 240V-1PH.	58.3 AMF	25
· ·		
REMOVED HVAC LOADS		
(I) CONDENSING UNIT	5832	VA
(1) FURNACE	3240	
TOTAL REMOVED LOAD	9072	
NEW HVAC LOADS		
'GFU-1'	1572	VA
'HP-1'	8040	
'ESUH-1'	3300	VA
'GUH-1' / 'GUH-2'	500	VA
25% OF LARGEST MOTOR	2010	VA
TOTAL NEW LOAD	15422	VA
TOTAL COMBINED EXISTING, REMOVED,	20350	VA
AND NEW LOADS	20000	***
AMPERES @ 240V-1PH.	84.8	AMPS

PANEL SCHEULE: "G	EN"(E	EX)			LOCATION:					C.B. RATING: VIF KAIC		
VOLT: 240/120V, 1Ø, 3W	MAINS:	100	) A M	LO	MOUNTING: SURFACE					TYPE:	BOLT-ON	
REMARKS: EXISTING PANEL M	ANUFAC	CUTR	ED B	Y 'SIEMEN	S'.							
				V	.A.							
USE AND/OR AREA SERVED	C/E	C/B CIR. NO.		Α	В	CIR. NO.		C/B	USE AND	USE AND/OR AREA SERVED		
			ı									
				4020		2						
			3				2P	50 A	△ M: HP-	1		
					4020	4						
			5									
				1772		6	IP	20 A	ΔM: GFL	J- I		
			7									
						8						
			9									
						10						
			11									
			1.0			12						
			13			1.4						
			1.5			14						
			15			1.0						
			17			16						
			1 /			18						
			19			10						
			10			20						
							LL DTAL	_	9,517 V	Δ		
TOTAL CONNECTED LOAD	PER PH	ASE:		5541	4020	<b></b>	39.6		3,317 V/ AMPS	<u> </u>		

△ - PROVIDE NEW CIRCUIT BREAKER OF TYPE AND AIC RATING TO MATCH EXISTING PANEL. UTILIZE AVAILABLE BUSSED SPACE FOR INSTALLATION OF	
NEW CIRCUIT BREAKER.	

PANEL SCHEULE: "PI	P"(EX	<u>()</u>			LOCATION	<b>1</b> :		C.B. RATING: VIF KAI		
VOLT: 240/120V, 1Ø, 3W	MAINS:	200	ОАМ	СВ	MOUNTIN	G: 5	TYPE: BOLT-ON			
REMARKS: EXISTING PANEL M	ANUFAC	CTUR	RED B	Y 'GENERA	AL ELECTRIC	C'.				
				V	′.A.		1		i	
USE AND/OR AREA SERVED	C/I	В	CIR. NO.	Α	В	CIR. NO.	(	C/B	USE AND	OR AREA SERVED
			1							
			3	500		2	IP	20 A	Δ M: GUF	1-1 / GUH-2
			J			4				
			5							
						6				
			7							
						8				
			9			10				
			1 1			10				
			' '			12				
			13							
						14				
			15							
			17			16				
			17			18				
			19			10				
					1650	20				
			21				2P	20 A	Δ M: ESU	JH- I
				1650		22				
			23		1000	24	 IP	20.4	Δ M: EFT-	1
			25		1000	24		20 A	\( \text{IVI} : LI I \cdot \	- 1
			23			26				
			27							
						28				
			29							
			31			30				
			31			32				
			33							
						34				
			35							
						36				
			37			20				
			39			38				
						40				
	1		1				DTAL	_ =	4,639 V	4
TOTAL CONNECTED LOAD	PER PH	ASE:	:	2150	2522		19.3		AMPS	

 $<sup>\</sup>triangle$  - Provide New Circuit Breaker of type and Aic rating to match existing panel. Utilize available bussed space for installation of New Circuit Breaker.

PANEL SCHEDULE NOTE:

SCHEDULES FOR EXISTING PANELS ARE SHOWN FOR REFERENCE TO INDICATE SIZE AND QUANTITY OF NEW CIRCUIT BREAKERS REQUIRED. CONTRACTOR TO FIELD VERIFY EXISTING PANEL CHARACTERISTICS AND BRANCH CIRCUIT BREAKER LAYOUT.

Oak Park

STUDIO GC

architecture + interiors

223 West Jackson Boulevard, Suite 1200
Chicago, Illinois 60606
(312) 253-3400



Electrical Schedules

E2.00

	<u>DEMOLITION SYMBOLS</u>										
SYMBOL	DESCRIPTION										
Х	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO REMAIN.										
R	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE REMOVED.										
XRR	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE REMOVED, RELOCATED AND JUNCTION BOX REMOVED OR CAPPED AS REQUIRED. STORE AND PROTECT EXISTING DEVICE FOR RE-USE AND RE-INSTALLATION.										
XR	EXISTING ELECTRICAL EQUIPMENT OR OUTLET RELOCATED (NEW LOCATION). EXTEND EXISTING FEED AS REQUIRED TO MAINTAIN DEVICE/EQUIPMENT OPERATION. PROVIDE NEW FEED OF MATCHING SPECIFICATIONS IN SITUATIONS WHERE THEY CANNOT BE SPLICED OR ARE NOT OF SUFFICIENT LENGTH TO REACH NEW LOCATION.										
XC	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE REMOVED AND JUNCTION BOX CAPPED OR REUSED AS REQUIRED.										
XO	NEW ELECTRICAL EQUIPMENT INSTALLED OVER EXISTING OUTLET.										
XA	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE ABANDONED.										
XM	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE MODIFIED.										
XW	EXISTING ELECTRICAL EQUIPMENT TO BE REWIRED.										
XRT	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE TEMPORARILY REMOVED AND REINSTALLED IN SAME LOCATION.										

NOTE: NOT ALL SYMBOLS ARE USED ON THIS PROJECT.

#### **GENERAL NOTES:**

- I. CONTRACTOR SHALL MAINTAIN FIRE RATING OF ALL PARTITIONS FOR NEW PENETRATIONS. ANY PENETRATIONS THROUGH WALLS AND FLOORS SHALL BE PROPERLY SEALED AND TREATED TO MAINTAIN THE FIRE STOPPING RATING OF THE WALL. CABLING SHALL NOT PENETRATE WALLS UNLESS ROUTED THROUGH RACEWAY SYSTEM OR ROUTED ABOVE ACCESSIBLE CEILINGS THROUGH METALLIC CONDUIT SLEEVES, EXTENDING A MINIMUM OF 6" EACH SIDE OF THE WALL WITH PROTECTIVE END BUSHINGS TO PREVENT DAMAGE TO CABLES. VOIDS AROUND SLEEVES SHALL BE SEALED WITH APPROPRIATE MATERIALS AS TO MAINTAIN THE ACOUSTIC OR FIRE RATING OF WALLS ABOVE AND BELOW CEILINGS. CABLES RAN THROUGH VOIDS WITHOUT SLEEVES OR RACEWAYS WILL NOT BE ACCEPTABLE. CONTRACTOR SHALL VERIFY EXISTING FIRE PARTITIONS IN THE FIELD.
- 2. INCIDENTAL WORK MAY ALSO BE NECESSARY DUE TO CHANGES AFFECTING, FIRE ALARM, ELECTRICAL, OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS, ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORD WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST. THE REMOVAL & REINSTALLATION OF EXISTING WORK TO ACCOMMODATE CHANGES TO EXISTING, OR INSTALLATION OF, ELECTRICAL, OTHER SYSTEMS IS ALSO PART OF THIS CONTRACT.
- . EXISTING CONDITIONS WERE OBTAINED FROM EXISTING AS-BUILT DRAWINGS AND CURSORY FIELD OBSERVATION. THIS CONTRACTOR SHALL IDENTIFY ANY DISCREPANCIES IN THE FIELD AND REPORT THEM TO THE ENGINEER.

#### **BIDDING NOTE:**

SEE DRAWINGS ME I .OO FOR GENERAL NOTES AND ADDITIONAL DETAILS APPLICABLE TO THIS TRADE'S WORK.

## ELECTRICAL SYMBOL LIST (NOTE: NOT ALL SYMBOLS ARE USED IN THE PROJECT.)

- (GFI,USB,WP) 20A. 2P, 3 WIRE, GROUNDING TYPE, 125V. SPECIFICATION-GRADE, TAMPER-RESISTANT TYPE DUPLEX RECEPTACLE  $\Phi$  NEMA 5-20R INSTALLED +16" A.F.F. UNLESS NOTED OTHERWISE.
  - "GFI" DENOTES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.
  - "USB" DENOTES RECEPTACLE EQUIPPED WITH (2) USB PORTS.
     "WP" DENOTES WEATHER-RESISTANT RECEPTACLE WITH LOW-PROFILE WHILE-IN-USE WEATHERPROOF COVER.
  - FI,USB)

    20A. 2P, 3 WIRE, GROUNDING TYPE, 125V. SPECIFICATION-GRADE, TAMPER-RESISTANT TYPE DUPLEX RECEPTACLE
- NEMA 5-20R INSTALLED 6" ABOVE COUNTER TOP OR +42" A.F.F. UNLESS NOTED OTHERWISE.

   "GFI" DENOTES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.

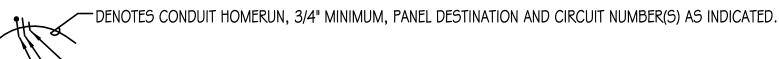
   "USB" DENOTES RECEPTACLE EQUIPPED WITH (2) USB PORTS.
- TWO 20A. 2P, 3 WIRE, GROUNDING TYPE, SPECIFICATION-GRADE, TAMPER-RESISTANT TYPE DUPLEX RECEPTACLES NEMA 5-20R INSTALLED + I 6" A.F.F. UNLESS NOTED OTHERWISE.
  - "GFI" DENOTES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.
     "USB" DENOTES RECEPTACLE EQUIPPED WITH (2) USB PORTS.
- CIRCUIT BREAKER PANELBOARD.
  - NON-FUSED SAFETY DISCONNECT SWITCH, AMPERE RATING AND NUMBER OF POLES AS NOTED.
- FUSED DISCONNECT SWITCH, AMPERE RATING, NUMBER OF POLES AND FUSE SIZE AS NOTED.
- MANUAL MOTOR STARTER. THERMAL OVERLOAD TOGGLE SWITCH.
- D CEILING JUNCTION BOX.
- WALL MOUNTED JUNCTION BOX.
- JUNCTION BOX WITH FLEXIBLE CONDUIT FOR FINAL CONNECTION TO EQUIPMENT.
- THERMOSTAT, PROVIDE RECESSED JUNCTION BOX AND CONDUIT STUB-UP, REFER TO MECHANICAL FOR EXACT QUANTITY AND LOCATION.
- CO2 SENSOR, PROVIDE RECESSED JUNCTION BOX AND CONDUIT STUB-UP, REFER TO MECHANICAL FOR EXACT QUANTITY AND LOCATION.



CONDUCTORS OR AS NOTED.

CONDUIT ROUTED CONCEALED IN WALLS AND CEILING. HASH MARKS DENOTE QUANTITY OF #12 MINIMUM AWG

CONDUIT ROUTED EXPOSED. INSTALL PARALLEL TO WALLS AND CEILINGS. HASH MARKS DENOTE QUANTITY OF #12 MINIMUM AWG CONDUCTORS OR AS NOTED.



 $\longrightarrow$  SHORT TICK MARK DENOTES LINE (HOT) OR SWITCH LEG CONDUCTOR, #12 MINIMUM AWG.

— LONG TICK MARK DENOTES NEUTRAL CONDUCTOR, #10 AWG MINIMUM.

- DENOTES INSULATED GROUND WIRE. #12 AWG MINIMUM.

### **ELECTRICAL SPECIFICATIONS**

- I. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE WITH VILLAGE OF OAK PARK AMENDMENTS.
- 2. PROVIDE ALL PERMITS AND INSPECTION FEES.
- 3. ALL MATERIAL AND LABOR SHALL BE GUARANTEED FOR ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER.
- 4. CONTRACTOR SHALL PROVIDE ALL THEIR OWN RIGGING, SCAFFOLDING, RUBBISH REMOVAL, AND LEAVE SPACE BROOM CLEAN.
- 5. MINIMUM SIZE CONDUIT SHALL BE 3/4" EMT, PROVIDE IMC FOR CONDUITS 2" AND LARGER OR WHERE EXPOSED TO WET OR DAMP LOCATIONS. EMT FITTINGS SHALL BE COMPRESSION TYPE. IMC SHALL HAVE THREADED CONNECTIONS. TRANSITION TO LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR FINAL CONNECTION (MAXIMUM LAST 6 FEET) OF CONDUCTORS SERVING EQUIPMENT SUBJECT TO VIBRATION.
- 6. MINIMUM SIZE CONDUCTOR SHALL BE #12 THHN, OR THWN WHERE REQUIRED, WITH #14 USED FOR CONTROL WIRING. CONDUCTOR MATERIAL SHALL BE COPPER ONLY.
- 7. PROVIDE SEPARATE, INSULATED EQUIPMENT GROUNDING CONDUCTOR WITHIN EACH FEEDER AND BRANCH CIRCUIT RACEWAY. TERMINATE EACH END ON SUITABLE LUG, BUS, OR BUSHING.
- 8. BRANCH CIRCUIT CONDUCTORS FOR 20 AMP RECEPTACLES AND LIGHTING CIRCUITS SHALL BE ADJUSTED FOR VOLTAGE DROP:
  A. I 20/208V: 0-75' #I 2AWG MINIMUM

75'-150' - #10AWG MINIMUM

B. 277/480V: 0-100' - #12AWG MINIMUM 100'-200' - #10AWG MINIMUM 200'-300' - #8AWG MINIMUM

- 9. CONDUCTOR SIZES #14 AWG, #12 AWG, AND #10 AWG SHALL BE SOLID. CONDUCTOR SIZES #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS SHALL BE COLOR CODED.
- 10. CONTRACTOR SHALL PROVIDE ALL NECESSARY CUTTING AND PATCHING INCLUDING SLEEVES AND INSERTS.
- II. THE COLOR AND FINISH OF ALL MATERIALS SHALL BE SUBJECT TO REVIEW AND APPROVAL OF OWNER OR ENGINEER. PROVIDE SHOP DRAWINGS REQUIRED FOR FINISH AND COLOR SELECTION.
- 12. ALL NEW CIRCUIT BREAKERS SHALL BE BOLT-ON BREAKERS COMPATIBLE WITH EXISTING PANELBOARD. PROVIDE TYPEWRITTEN DIRECTORIES IN ALL PANELS.
- 13. BEFORE SUBMITTING THEIR BID, CONTRACTOR SHALL VISIT THE SITE TO ASCERTAIN ALL WORK INVOLVED IN THE PROJECT.
- 14. CONTRACTOR SHALL COORDINATE THEIR WORK WITH OTHER CONTRACTORS ON THE PROJECT.
- 15. CONTRACTOR SHALL MAKE NECESSARY MODIFICATIONS AND ADJUSTMENTS TO ALL ELECTRICAL ITEMS AND EQUIPMENT AS MAY BE REQUIRED BY THIS WORK.
- 16. ALL ELECTRICAL EQUIPMENT MUST MAINTAIN WORKING CLEARANCES AS REQUIRED BY CEC.
- 17. FLEXIBLE RACEWAY SYSTEMS SHALL NOT BE USED TO PENETRATE ROOFS, FLOORS, OR AIR/MOISTURE BARRIERS.
- 18. RACEWAY SYSTEMS SHALL NOT BE ROUTED THROUGH OR IN HVAC DUCTS.
- 19. CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL CORING, CUTTING, PATCHING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT OF NEW OR EXISTING BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. REMOVE, STORE, AND REINSTALL CEILING TILES AS REQUIRED TO INSTALL WORK ABOVE EXISTING REMOVABLE CEILINGS WHICH REMAIN; REPLACE TILES BROKEN OR DAMAGED DURING CONSTRUCTION. ALL PATCHING, REPAIRING, AND REFINISHING WORK TO OTHER FINISHES AND STRUCTURAL ELEMENTS SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION AS CLOSELY AS POSSIBLE WHILE MAINTAINING EXISTING FIRE RATINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXISTING FIRE RATINGS OF CEILINGS AND PARTITIONS SYSTEMS. CARE SHALL BE TAKEN SO AS NOT TO DAMAGE ANY EXISTING BUILDING CONSTRUCTION OR ITEMS THAT ARE TO REMAIN. ANY EXISTING FINISHES THAT ARE DAMAGED DURING THE INSTALLATION OF NEW WORK OR REMOVAL OF EXISTING WORK SHALL BE REPAIRED, REPLACED, AND PAID FOR BY THE INSTALLING CONTRACTOR TO THE SATISFACTION OF THE ARCHITECT AND OWNER. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING CONSTRUCTION THAT IS TO REMAIN AND, THEREFORE, SUBJECT TO PATCHING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT.
- 20. ALL PENETRATIONS THROUGH EXTERIOR WALL SHALL BE SEALED WATER TIGHT PER ARCHITECT'S REQUIREMENTS.
- 21. DISCONNECTS

ACCEPTABLE MANUFACTURERS: EATON, SQUARE D, OR SIEMENS

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL FUSIBLE OR NON-FUSIBLE DISCONNECT SWITCHES AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.

PROVIDE HEAVY DUTY, KNIFE SWITCH TYPE DISCONNECT SWITCHES FOR ALL ELECTRICALLY OPERATED EQUIPMENT NEMA RATED FOR SIZE AND LOCATION. DISCONNECT SWITCHES SHALL BE PLENUM RATED OR WEATHERPROOF WHERE REQUIRED. HANDLE SHALL BE LOCKABLE IN THE 'OFF' POSITION. PROVIDE A PLASTIC LAMINATE INSCRIPTION PLATE WITH RIVETS FOR IDENTIFICATION. (PULLOUT SWITCHES ARE NOT APPROVED.)

FOR FUSIBLE DISCONNECT SWITCHES, PROVIDE FUSE CLIPS DESIGNED TO ACCOMMODATE NEMA FUI, CLASS R FUSES.

CONTRACTOR TO SUBMIT SHOP DRAWINGS ON THIS ITEM.

Oak Park





ation #2 Mechanical Equipi Replacement

• ISSUE • DATE
• OUT FOR BID • 4/03/2024
•

Electrical
Symbol List,
and
Specifications

E2.10