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**Addendum No. 1
McCreary County Heritage Foundation, Inc.
Historic Stearns Downtown Revitalization Project – Buildings 1 & 3 Phase II
EDA Project Number: 04-79-07710
Bid Date: September 16, 2026
Addendum Issue Date: August 27, 2026**

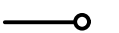
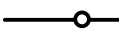
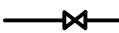
The Contractor shall conform to the following changes, as same shall become binding upon the Contract to be issued in response to this invitation.

Mechanical/Electrical Drawings

Item 1: Refer to revised set of mechanical and electrical drawings.

END OF ADDENDUM NO. 1

FIRE PROTECTION LEGEND

FP	NEW FIRE PROTECTION PIPING AND OR EQUIPMENT
	ELBOW UP, DOWN
	TEE UP, DOWN
	VALVE IN HORIZ AND VERTICAL PIPING
TS 	TAMPER SWITCH ON VALVE: HORZ/VERT
FS 	FLOW SWITCH IN PIPING: HORIZ/VERT

LINE WEIGHTS

EXISTING	DEMOLITION / NEW (SEE PLAN)

FIRE PROTECTION SPECIFICATIONS

- SUMMARY
- A. THIS SECTION COVERS THE COMPLETE INSTALLATION OF WET FIRE PROTECTION SPRINKLER SYSTEMS.
 - B. PROVIDE ALL ITEMS, MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY AND REQUIRED FOR COMPLETION.
 - C. CONTRACTOR SHALL FIELD VERIFY EXISTING FIELD CONDITIONS AND COORDINATE COMPLETE SYSTEM REQUIREMENTS AND LAYOUT WITH ARCHITECTURAL FLOOR PLANS AND REFLECTED CEILING PLANS.
 - D. DESIGN DRAWINGS FOR THIS PROJECT SHOW THE GENERAL AREA WHERE FIRE PROTECTION SYSTEM WORK IS REQUIRED. ANY ADDITIONAL SYSTEM COMPONENTS OR SPRINKLER HEADS THAT MAY BE REQUIRED TO MEET ALL NFPA 13 AND NFPA 409 REQUIREMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY AREAS NOT SHOWN TO BE SPRINKLED BUT REQUIRED TO BE SPRINKLED BY NFPA 13 OR NFPA 409 REQUIREMENTS SHALL BE SPRINKLED BY THE CONTRACTOR AND INCLUDE ANY AND ALL EQUIPMENT REQUIRED.
 - E. CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS TO ENGINEER FOR APPROVAL PRIOR TO SUBMISSION TO HBC.
- WORK INCLUDED
- A. THE WORK COVERED BY THIS SECTION OF THE SPECIFICATIONS CONSISTS OF THE FURNISHING OF ALL MATERIALS, LABOR, EQUIPMENT AND APPURTENANCES AND THE PERFORMANCE OF ALL OPERATIONS REQUIRED FOR THE INSTALLATION OF AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEMS.
 - B. WORK SHALL COMMENCE AT A POINT WHERE SHOWN AND SHALL INCLUDE ALL NECESSARY PARTS, ACCESSORIES AND ITEMS OF WORK REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION INCLUDING ALL NORMALLY CLOSED FLOW SWITCHES FOR USE BY THE FIRE ALARM SYSTEM.
 - C. ALL PIPING INCLUDING ALL VALVES, SPRINKLER HEADS, ALARM VALVE, CONTROL VALVES, ETC.
 - D. ANY APPARATUS, MACHINERY, MATERIAL SMALL ITEMS OR INCIDENTALS NOT MENTIONED HEREIN, WHICH MAY BE FOUND NECESSARY TO COMPLETE OR PERFECT ANY PORTION OF THE INSTALLATION IN A SUBSTANTIAL MANNER AND IN COMPLIANCE WITH THE REQUIREMENTS STATED, IMPLIED OR INTENDED IN THESE SPECIFICATIONS, SHALL BE FURNISHED WITHOUT EXTRA COST TO THE OWNER.
- SPECIAL REQUIREMENTS
- A. CONTRACTOR SHALL BE LOCATED WITHIN 150 MILES OF SITE.
 - B. BEFORE SUBMITTING BID, EXAMINE ALL MECHANICAL, ELECTRICAL, ARCHITECTURAL, AND STRUCTURAL DRAWINGS, VISIT THE SITE AND BECOME ACQUAINTED WITH ALL CONDITIONS THAT MAY, IN ANY WAY WHATSOEVER, AFFECT THE EXECUTION OF THIS WORK.
 - C. THE CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AND BE RESPONSIBLE FOR EXACT SIZE AND LOCATION OF ALL OPENINGS REQUIRED FOR INSTALLATION OF THIS WORK. FIGURED DIMENSIONS WHERE INDICATED ARE REASONABLY ACCURATE AND SHOULD GOVERN IN SETTING OUT WORK. DETAILED METHOD OF INSTALLATION IS NOT INDICATED. SPRINKLER CONTRACTOR SHALL COORDINATE EXACT CEILING GRID LOCATION AND INSTALL SPRINKLER HEADS CENTERED IN THE 2' X 2' AND 2' X 4' CEILING PANELS. LOCATION OF SPRINKLER HEAD MUST BE CAREFULLY COORDINATED WITH THE ARCHITECT.
 - D. IT IS NOT THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE A COMPLETE DETAILED DESCRIPTION OF THE APPARATUS, MATERIALS, EQUIPMENT, ETC., WHICH IS REQUIRED TO MAKE A COMPLETE INSTALLATION OF A FIRE PROTECTION SYSTEM. INCLUDE ALL REQUIRED SPRINKLER HEADS, TAMPER SWITCHES, MATERIAL AND EQUIPMENT AND PERFORM ALL WORK REQUIRED TO INSTALL A COMPLETE AND APPROVED INSTALLATION.
 - E. ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, REGULATIONS AND/OR ORDINANCES AND MEET APPROVAL OF LOCAL INSPECTION AUTHORITY AND INSURING AGENCY HAVING JURISDICTION. THE LATEST EDITION OF THE NATIONAL BOARD OF FIRE UNDERWRITERS BULLETINS SHALL BE THE MINIMUM REQUIREMENT FOR ALL WORK. ALL MATERIALS UNDER THIS CONTRACT SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. AS APPROVED FOR FIRE PROTECTION INSTALLATION. THE INSTALLATION SHALL COMPLY WITH THE NFPA, AND THE KENTUCKY BUILDING CODE AND LOCAL FIRE MARSHAL IN EVERY RESPECT.
 - F. PERFORM WORK UNDER THIS SECTION IN CLOSE HARMONY WITH OTHER SECTIONS SO COMPLETED WORK SHALL PRESENT A NEAT AND WORKMANLIKE INSTALLATION.
- SHOP DRAWINGS
- A. PREPARE DETAILED SHOP DRAWINGS FOR THE COMPLETE SPRINKLER SYSTEM, SHOWING THE LOCATION OF THE HEADS, PIPING AND OTHER INSTALLATION DETAILS AND SUBMIT PLANS TO THE ARCHITECT. DRAWINGS SHALL BEAR THE STAMP OF A CERTIFIED SPRINKLER TECHNICIAN AND SHALL BE COMPLETE WITH ALL CALCULATIONS AND EQUIPMENT DRAWINGS FOR APPROVAL OF ARCHITECT, ENGINEER AND THE DEPARTMENT OF HOUSING, BUILDING AND CONSTRUCTION AND/OR THE AUTHORITY HAVING JURISDICTION.
 - B. SPRINKLERS SHALL BE SHOWN ON DRAWINGS, SUBMITTALS AND PROJECT INFORMATION AND SHALL BE IDENTIFIED BY THE MANUFACTURER'S TYPE OR SERIES DESIGNATION AS PUBLISHED IN THE APPROPRIATE AGENCY LISTING OR APPROVAL. TRADE NAMES AND ABBREVIATIONS ARE NOT PERMITTED.
- PERMITS, CODES AND INSTALLATIONS
- A. ALL CONSTRUCTION PERMITS AND INSPECTIONS FOR THE FIRE PROTECTION SYSTEMS SHALL BE PAID FOR AND FURNISHED UNDER THIS SECTION. THE WORK SHALL BE INSTALLED IN A MANNER TO COMPLY WITH ALL STATE AND LOCAL CODES APPLICABLE AND WITH ALL REQUIREMENTS OF NFPA STANDARD 13 AND 409 LATEST REVISION FOR THE INSTALLATION OF SPRINKLER SYSTEMS. THE ENTIRE INSTALLATION, ALL MATERIALS, ETC., SHALL MEET THEIR REQUIREMENTS.
 - B. PAY FOR ALL FEES AND COSTS ARISING FROM THIS INSTALLATION AND FOR ANY AND ALL DESTRUCTION TO PROPERTY, BOTH PUBLIC AND PRIVATE, WHICH MAY ARISE FROM THIS SERVICE TAP ON.
 - C. NO WORK IS TO BE STARTED BY THE CONTRACTOR UNTIL CONTRACTOR'S DRAWINGS ARE APPROVED BY THE DIVISION OF HOUSING, BUILDING AND CONSTRUCTION AND THE LOCAL FIRE MARSHAL'S OFFICES, AND ONE COPY DELIVERED TO THE ARCHITECT. ENTIRE INSTALLATION IS TO BE APPROVED BY THE DIVISION OF HOUSING, BUILDING AND CONSTRUCTION, AND THE LOCAL FIRE MARSHAL AND/OR THE AUTHORITY HAVING JURISDICTION.
- RECORD DRAWINGS
- A. AFTER ALL WORK HAS BEEN COMPLETED, PROVIDE FOR THE ARCHITECTS RECORDS ONE (1) COMPLETE SET OF AS BUILT "RECORD DRAWINGS" SHOWING FINAL INSTALLATION OF THE WORK.
- EQUIPMENT AND MATERIALS
- A. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND APPROVED BY THE UL AND/OR NFPA.
 - B. ALL DEVICES SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE STATE FIRE MARSHAL'S OFFICE IN ALL CASES AND SHALL BEAR THE LABEL OF APPROVAL OF THE UNDERWRITERS LABORATORIES AND/OR NFPA.
- SPRINKLER HEADS
- A. ALL SPRINKLER HEADS SHALL BE UNDERWRITERS APPROVED AUTOMATIC SPRAY FULLY-RECESSED, SEMI-RECESSED AND/OR EXPOSED UPRIGHT SPRINKLERS OF THE CORRECT TEMPERATURE AND TYPE FOR EACH LOCATION UNLESS OTHERWISE NOTED (SEE PLANS). PROVIDE A SPARE HEAD CABINET WITH ONE SPRINKLER WRENCH LOCATED IN THE MECHANICAL ROOM ADJACENT TO THE FIRE PROTECTION RISER(S). QUANTITY OF EXTRA HEADS AS INDICATED IN NFPA #13.
 - B. STAINLESS STEEL FLEXIBLE SPRINKLER DROPS MAY BE USED TO PROPERLY LOCATE SPRINKLER HEADS. THE FLEXIBLE TUBE SHALL BE BRAIDED (FM-1637) OF UNBRAIDED/CORRUGATED (UL 2443) TYPE 304 STAINLESS STEEL. THE DROPS SHALL BE UL LISTED OR FM APPROVED WITH ONE-PIECE OPEN GATE BRACKET FOR SPRINKLER INSTALLATION BEFORE OR AFTER THE BRACKET IS SECURED TO THE CEILING GIRD. ANY FLEXIBLE DROP 36-INCHES OR LONGER MUST BE LISTED FOR A MINIMUM OF THREE 90-DEGREE BENDS TO INSURE PROPER INSTALLATION.
- HANGERS
- A. FURNISH AND INSTALL ALL HANGERS OF APPROVED PATTERN AND SIZE TO SUPPORT ALL PIPES IN A SUBSTANTIAL MANNER.
- PIPING INSTALLATION
- A. LOCATIONS AND ARRANGEMENTS: DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PIPING. INSTALL PIPING AS INDICATED ON APPROVED WORKING PLANS.

- 1. COORDINATE LAYOUT AND INSTALLATION OF SPRINKLERS WITH OTHER CONSTRUCTION THAT PENETRATES CEILINGS, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT AND DEVICES, AND PARTITION ASSEMBLIES.
 - 2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE BUILDING AND THE DRAWINGS, CONFIRMING ALL DIMENSIONS BEFORE ANY PIPE IS CUT, TO DETERMINE IF ANY OFFSETS, ETC., ARE NECESSARY, WHERE ADDITIONAL OFFSETS ARE REQUIRED, THEY SHALL BE MADE WITHOUT ANY ADDITIONAL COST.
- B. PIPING STANDARD: COMPLY WITH NFPA 13 REQUIREMENTS FOR INSTALLATION OF SPRINKLER PIPING.
- SPRINKLER INSTALLATION
- A. ALL HEADS MUST "LINE UP" AND WORK IN WITH THE LAYING PATTERN OF THE LIGHTS AND HVAC EQUIPMENT. ALL HEADS LOCATED IN LAY-IN CEILING TILE SHALL BE CENTERED ALONG THE CENTERLINE OF THE TILE. HEADS MAY BE LOCATED AT THE CENTER AND QUARTER POINTS OF THE TILE. AVOID DUCTS, LIGHTS, HANGERS, ETC. INSTALL DRY-TYPE SPRINKLERS WITH WATER SUPPLY FROM HEATED SPACE. DO NOT INSTALL PENDENT OR SIDEWALL, WET-TYPE SPRINKLERS IN AREAS SUBJECT TO FREEZING.
 - B. INSTALL SPRINKLERS INTO FLEXIBLE, SPRINKLER HOSE FITTINGS, AND INSTALL HOSE INTO BRACKET ON CEILING GRID.
- CLEANING
- A. CLEAN DIRT AND DEBRIS FROM SPRINKLERS.
 - B. ONLY SPRINKLERS WITH THEIR ORIGINAL FACTORY FINISH ARE ACCEPTABLE. REMOVE AND REPLACE ANY SPRINKLERS THAT ARE PAINTED OR HAVE ANY OTHER FINISH THAN THEIR ORIGINAL FACTORY FINISH.

HEAD TYPES

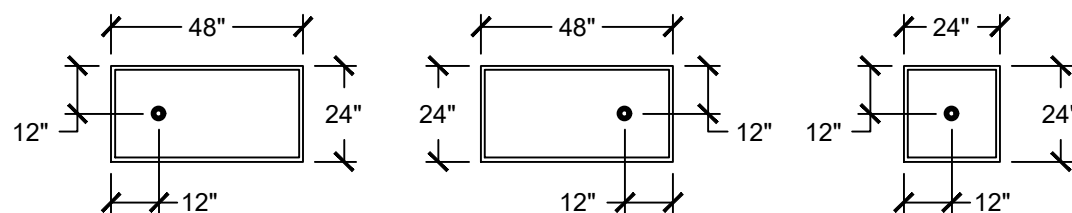
ALL FIRE SUPPRESSION AREAS TO BE QUICK RESPONSE. SEE BELOW FOR AREA SPECIFIC REQUIREMENTS:

FULLY-RECESSED TYPE SPRINKLER HEADS IN MUSEUM GALLERY AREA (BLACK IN COLOR)

SEMI-RECESSED TYPE SPRINKLER HEADS IN ALL AREAS WITH LAY-IN OR GYP CEILINGS UNLESS OTHERWISE NOTED (WHITE IN COLOR)

UPRIGHT SPRINKLER HEADS IN ALL SECOND FLOOR AREAS WITH EXPOSED CEILINGS OR WHERE GYP IS MOUNTED TO UNDERSIDE OF FLOOR JOIST ABOVE (WHITE IN COLOR)

SIDEWALL SPRINKLER HEADS IN ALL THIRD FLOOR AREAS WITH EXPOSED CEILINGS (I.E. WHERE GYP IS MOUNTED TO UNDERSIDE OF CEILING JOIST) (WHITE IN COLOR)



HEAD PLACEMENT IN ACOUSTICAL TILE

COORDINATION

REFER TO ENTIRE SET OF PLANS FOR THIS PROJECT. COORDINATE SPRINKLER PIPING WITH DUCTWORK, DIFFUSERS, LIGHTING, STRUCTURAL AND ALL OTHER TRADES PRIOR TO INSTALLATION

DURING SHOP DRAWING SUBMITTAL/REVIEW, CONTRACTOR SHALL COORDINATE ROUTING OF NEW SPRINKLER PIPING AND EXACT HEAD PLACEMENTS IN NEW CEILINGS WITH ARCHITECT/ENGINEER PRIOR TO BEGINNING WORK

FLOW TEST

THE FIRE SUPPRESSION CONTRACTOR SHALL CONDUCT/OBTAIN THEIR OWN FLOW TEST FOR USE IN SHOP DRAWING / HYDRAULIC CALCUATIONS AND PROVIDE THE NECESSARY MEANS TO ENSURE ADEQUATE WATER AMOUNT/PRESSURE IS AVAILABLE FOR FULLY FUNCTIONAL FIRE PROTECTION SYSTEMS. THE FLOW TEST SHALL BE FULLY COORDINATED WITH THE OWNER AND UTILITY COMPANY.

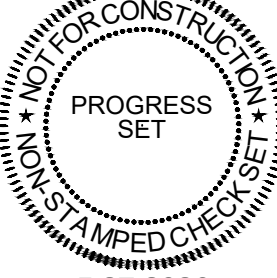
CONTACT INFORMATION

McCREARY WATER DISTRICT (606)-376-2540
(MANAGER - STEPHEN WHITAKER)



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SOMERSET, KY 42503
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Owner Review



5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

PROJECT NO. 2124-07

DESIGNED BY CE

DRAWN BY CE

CHECKED BY CE

REVIEWED BY CE

DATE AUGUST 2024

SCALE AS NOTED

DATE

REVISION

BY

Engineers
Architects
Planners



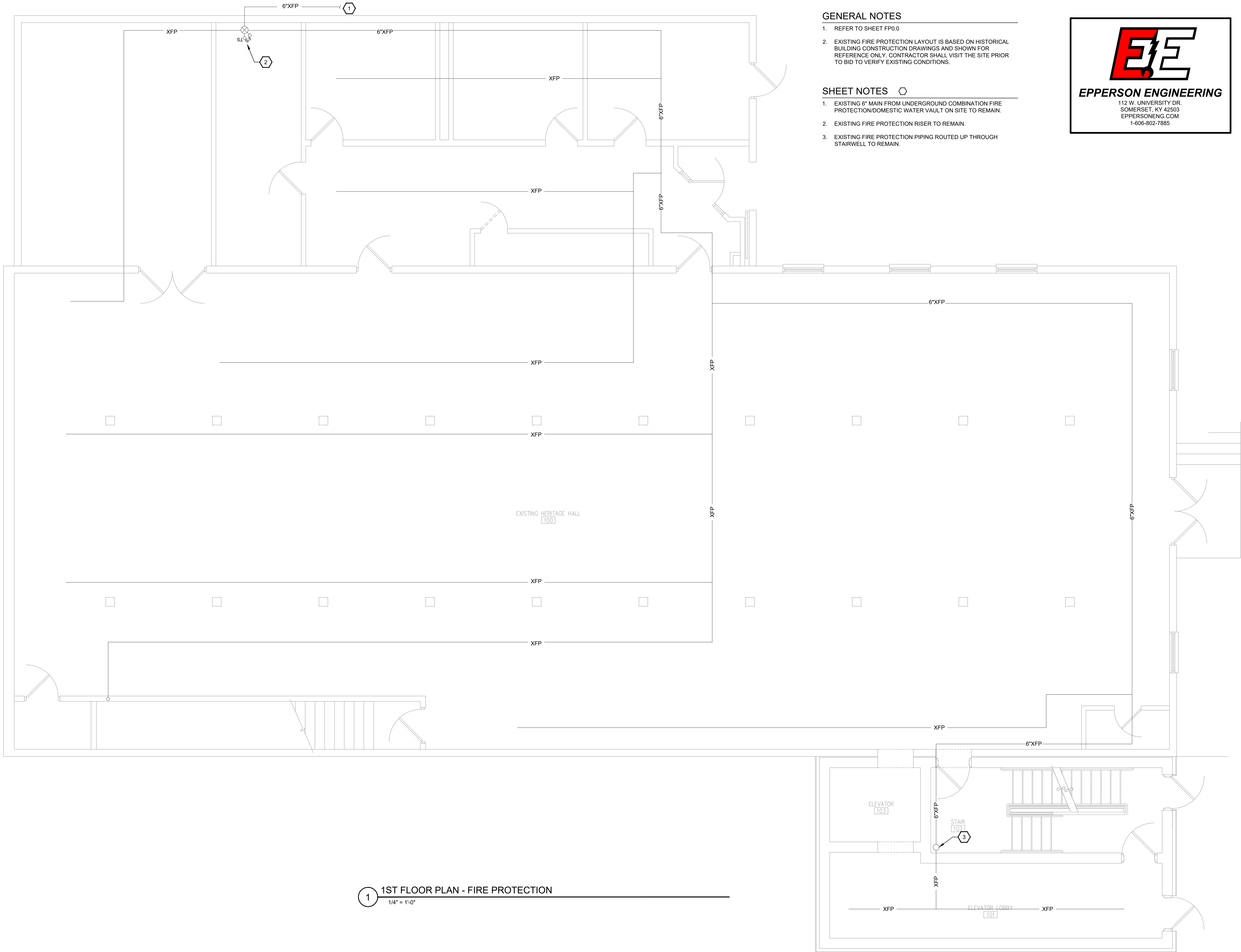
OF KENTUCKY, INC.

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DRAWING NO.

FP0.0

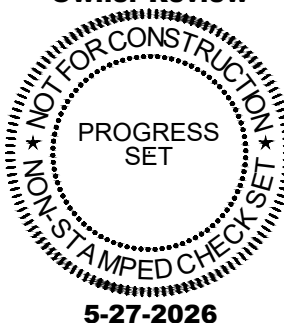


- GENERAL NOTES**
1. REFER TO SHEET FP0.0
 2. EXISTING FIRE PROTECTION LAYOUT IS BASED ON HISTORICAL BUILDING CONSTRUCTION DRAWINGS AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO VERIFY EXISTING CONDITIONS.
- SHEET NOTES** ○
1. EXISTING 6" MAIN FROM UNDERGROUND COMBINATION FIRE PROTECTION/DOMESTIC WATER VAULT ON SITE TO REMAIN.
 2. EXISTING FIRE PROTECTION RISER TO REMAIN.
 3. EXISTING FIRE PROTECTION PIPING ROUTED UP THROUGH STAIRWELL TO REMAIN.



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Owner Review



5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE	REVISION	BY

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PROJECT NO. 2124-07	
DESIGNED BY	CE
DRAWN BY	CE
CHECKED BY	CE
REVIEWED BY	CE
DATE	AUGUST 2024
SCALE	AS NOTED

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DRAWING NO.

FP1.1



1. REFER TO SHEET FP0.0
2. ALL SPRINKLER PIPING/BRANCHES SHOWN FOR REFERENCE ONLY. FIRE SPRINKLER CONTRACTOR TO DETERMINE EXACT LAYOUT AND REQUIREMENTS FOR A FULLY SPRINKLED BUILDING.
3. ALL NEW FIRE PROTECTION PIPING SHOWN SHALL BE ROUTED ABOVE ACCESSIBLE CEILING AND CONCEALED FROM VIEW, WHERE APPLICABLE.
4. ALL NEW SPRINKLER PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE AS ALLOWED PER NFPA.
5. IN AREAS WITH 12' CEILINGS ON THIS FLOOR, CONTRACTOR SHALL USE UPRIGHT SPRINKLER HEADS MOUNTED AS HIGH AS POSSIBLE IN SPACE. REFER TO ARCHITECTURAL PLANS.
6. MAINTAIN RATINGS OF ALL WALLS AND CEILINGS PENETRATED, REFER TO ARCHITECTURAL PLANS.

1. EXISTING FIRE PROTECTION PIPING ROUTED UP THROUGH STAIRWELL TO REMAIN.
2. EXTEND SPRINKLER PIPING MAIN FOR FULL COVERAGE OF BUILDING SECOND FLOOR. COORDINATE ROUTING WITH OTHER TRADES.
3. PROVIDE UPRIGHT SPRINKLER HEADS IN THIS ROOM.



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FP1.2



1. REFER TO SHEET FP0.0
2. ALL SPRINKLER PIPING/BRANCHES SHOWN FOR REFERENCE ONLY. FIRE SPRINKLER CONTRACTOR TO DETERMINE EXACT LAYOUT AND REQUIREMENTS FOR A FULLY SPRINKLED BUILDING.
3. ALL NEW FIRE PROTECTION PIPING SHOWN SHALL BE ROUTED ABOVE CEILING IN AREAS SHOWN AND CONCEALED FROM VIEW.
4. ALL NEW SPRINKLER PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE AS ALLOWED PER NFPA.
5. IN AREAS WITH 12' CEILINGS ON THIS FLOOR, CONTRACTOR SHALL USE SIDEWALL SPRINKLER HEADS. REFER TO ARCHITECTURAL PLANS.
6. MAINTAIN RATINGS OF ALL WALLS AND CEILINGS PENETRATED. REFER TO ARCHITECTURAL PLANS.

1. EXISTING FIRE PROTECTION PIPING ROUTED UP THROUGH STAIRWELL TO REMAIN.
2. EXTEND SPRINKLER PIPING MAIN FOR FULL COVERAGE OF BUILDING THIRD FLOOR. COORDINATE ROUTING WITH OTHER TRADES.
3. PROVIDE EXTENDED COVERAGE SIDEWALL SPRINKLER HEADS IN THIS AREA FOR COMPLETE ROOM COVERAGE. TYPICAL FOR ALL ROOMS ON THIS FLOOR WITH 12' CEILINGS, REFER TO ARCHITECTURAL PLANS.



HISTORIC STEARNS DOWNTOWN REVITALIZATION STEARNS, KENTUCKY

PROJECT NO. 2124-07					
DESIGNED BY	CE		REVISION	BY	
DRAWN BY	CE				
CHECKED BY	CE				
REVIEWED BY	CE				
DATE	AUGUST 2024				
SCALE	AS NOTED				

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DRAWING NO.

FP1.3

PLUMBING LEGEND

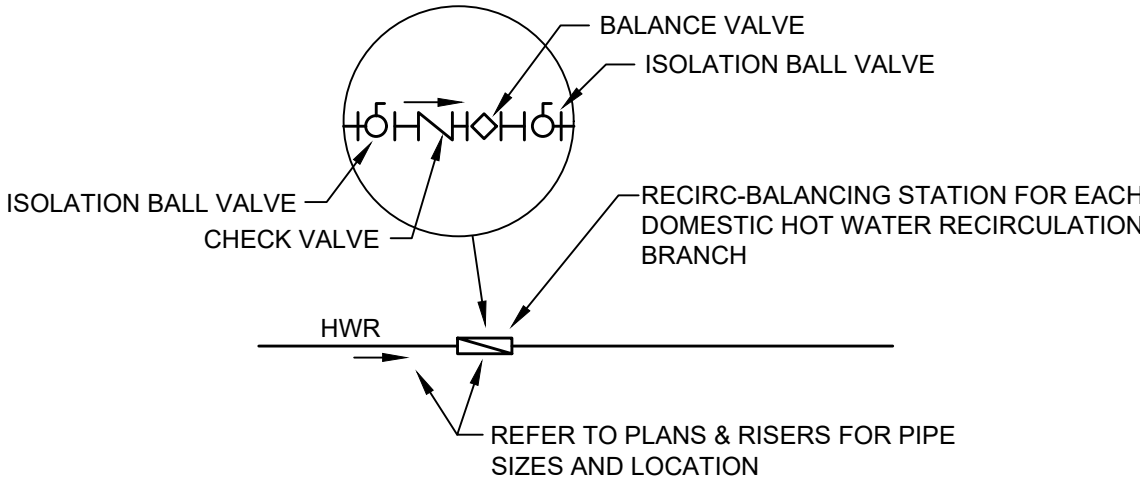
PLUMBING SYMBOLS	
SYMBOL	DESCRIPTION
	PIPE DOWN
	PIPE UP
	TEE DOWN
	TEE UP
	CONTINUATION
	CAP (CLEANOUT)
	FLOOR SINK
	FLOOR DRAIN
	P-TRAP
	FLOOR DRAIN GRATE
	SHEET NOTE
	DEMOLITION NOTE
	CONNECT NEW TO EXISTING
	EXTENT OF DEMOLITION
	EQUIPMENT TAG
	RISER IDENTIFICATION TAG

ABBREVIATIONS

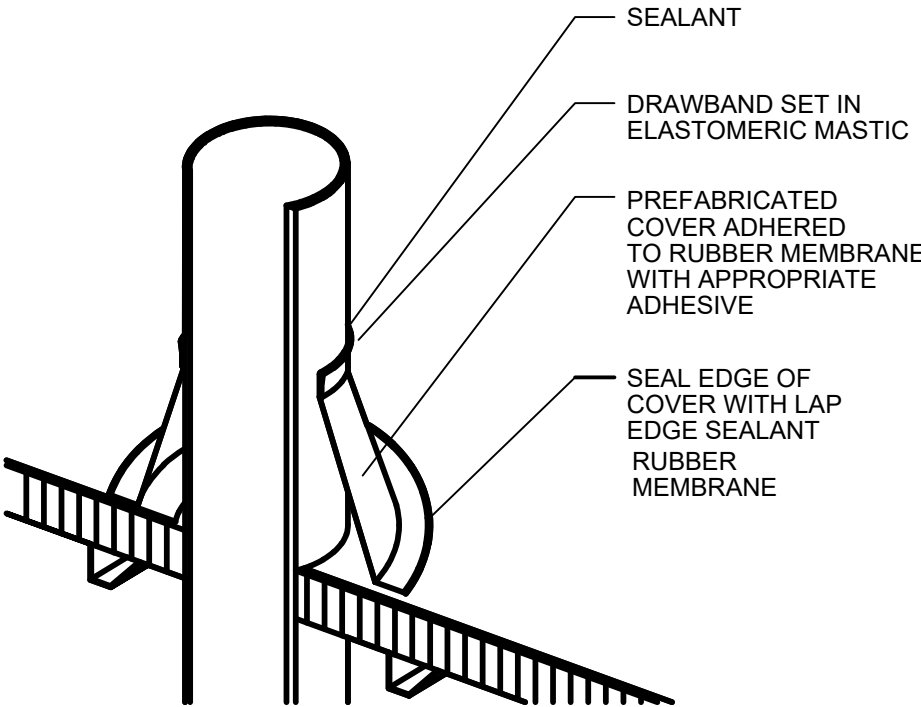
AFG	ABOVE FINISHED GRADE
AG	AIR GAP
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
CO	CLEANOUT
CON	CONDENSATE
CW	COLD WATER
D	DISPOSAL
DF	DRINKING FOUNTAIN
ECO	EXTERIOR CLEANOUT
ET	EXPANSION TANK
ETP	ELECTRONIC TRAP PRIMER
EW	ELECTRIC WATER COOLER
EW	ELECTRIC WATER HEATER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
FS	FLOW SWITCH
GPM	GALLONS PER MINUTE
GR	GREASE
GRV	GREASE VENT
GT	GREASE TRAP
HA	HAMMER ARRESTOR
HB	HOSE BIBB
HW	HOT WATER
HWR	HOT WATER RETURN
IMB	ICE MAKER BOX
LAV	LAVATORY
LT	LAUNDRY TUB
MB	MOP BASIN
MS	MOP SINK
OR	OPEN RECEPTACLE
PD	PUMP DISCHARGE
PDI	PLUMBING DRAINAGE INSTITUTE
PRV	PRESSURE REDUCING VALVE
RBS	RECIRC. BALANCE STATION
RP	RECIRCULATION PUMP
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
S	SINK
SS	SANITARY SEWER
SP	SUMP PUMP
TD	TRENCH DRAIN
TP	TRAP PRIMER
TMV	THERMOSTATIC MIXING VALVE
T&P	TEMPERATURE & PRESSURE
U	URINAL
UT	UTILITY TUB
V	VENT
VTR	VENT THROUGH ROOF
WB	WASHER BOX
WC	WATER CLOSET
W.C.	WATER COLUMN
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WS	WASH STATION
WS	WATER SOFTENER
X	EXISTING

GENERAL NOTES - PLUMBING:

1. CONSTRUCTION PHASING: ALL WORK SHALL BE COORDINATED AND SCHEDULED WITH THE GENERAL CONTRACTOR, OTHER TRADES, THE OWNER, RELATED UTILITY COMPANIES SHALL COINCIDE WITH CONSTRUCTION PHASING PER THE ARCHITECTURAL DOCUMENTS. CONTACT THE ARCHITECT/ENGINEER IN THE EVENT OF A CONFLICT.
2. NEW UTILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW UTILITY SERVICES AND COSTS UNDER THIS CONTRACT. COORDINATE AND SCHEDULE ALL RELATED WORK WITH THE UTILITY COMPANIES.
3. MAINTAIN SITE UTILITIES: THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SITE UTILITIES AT ALL TIMES. THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE ANY OUTAGE. SCHEDULED SHUT-DOWNS SHALL REQUIRE 48 HOUR PRIOR NOTIFICATION WITH OWNER. COORDINATE ALL RELATED WORK WITH THE OWNER AND THE UTILITY COMPANIES AS REQUIRED.
4. VERIFY UTILITIES: FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES WHERE REQUIRED FOR CONNECTIONS OF NEW WORK PRIOR TO CONSTRUCTION AND FABRICATION. DOCUMENT ON THE AS-BUILT DRAWINGS; THE TYPE, SIZE, MATERIAL, LOCATION AND INVERT ELEVATIONS OF ALL UTILITIES ENCOUNTERED. COORDINATE ALL RELATED WORK WITH ALL PARTIES INVOLVED. CONTACT THE ENGINEER IN THE EVENT OF A CONFLICT.
5. CONTACT B.U.D.: THE EXISTING UTILITIES, EQUIPMENT, AND PIPING SHOWN ON THESE DRAWINGS ARE FROM RECORD DRAWINGS AND VISUAL INSPECTION OF THE SITE. THE NUMBER, LOCATION, SIZE, AND TYPE OF UTILITIES SHOWN ARE APPROXIMATE, AND THERE MAY BE OTHER UTILITIES NOT SHOWN. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITY COMPANIES AND KENTUCKY B.U.D. PRIOR TO BEGINNING EXCAVATION.
6. PERMITS, TESTING, AND INSPECTIONS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, TESTING AND SCHEDULES INSPECTIONS.
7. REMOVAL OF EXISTING UTILITIES: REMOVE UNUSED/ABANDONED EQUIPMENT, PIPING, ETC. AS NECESSARY TO INSTALL THE NEW WORK. CAP THE ENDS OF ALL LINES AND ABANDON IN PLACE.
8. TEMPORARY CONSTRUCTION HEAT: PROVIDE TEMPORARY HEAT IN CONSTRUCTION AREAS AS REQUIRED TO PREVENT FREEZING OF WATER PIPING DURING CONSTRUCTION.
9. PATCHING AND REPAIRING: PATCH AND REPAIR ALL AREAS WHERE WALLS, SLABS, PAVEMENT, CURBS, VEGETATION AND MATERIALS HAVE BEEN CUT, REMOVED, DISTURBED AND OR MODIFIED. MATCH EXISTING MATERIALS, RATINGS, AND FINISHES.
10. CUTTING EXISTING MATERIALS: CUTTING OF EXISTING PAVEMENT, SLABS, CONCRETE MASONRY, WALLS, ETC. SHALL BE SAW-CUT OR CORE DRILLED. NO "HAMMER DRILLING" WILL BE ALLOWED.
11. ROOFING PENETRATIONS: ALL ROOF PENETRATIONS SHALL BE IN COMPLIANCE WITH THE ROOFING MANUFACTURER'S GUIDELINES, THE AMERICAN ROOFING COUNCIL, AND MAINTAIN ALL WARRANTIES.
12. WALL PENETRATIONS: SEAL ALL PIPING PENETRATIONS THROUGH EXTERIOR WALLS WITH SILICONE SEALANT AS REQUIRED TO MAKE WATER/WEATHER TIGHT.
13. EXISTING WALL OPENINGS: EXISTING OPENINGS IN WALLS THAT ARE NOT BEING RE-USED SHALL BE PATCHED/CLOSED BY THE GENERAL CONTRACTOR.
14. NEW OPENINGS: NEW OPENINGS FOR PLUMBING PENETRATIONS THROUGH FIRE/SMOKE RATED WALLS, ASSEMBLIES AND SLABS SHALL BE BY THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
15. FIRE AND SMOKE STOPPING: ALL PLUMBING PENETRATIONS THROUGH FIRE/SMOKE RATED WALLS, ASSEMBLIES AND SLABS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
16. INSULATION: INSULATE ALL DOMESTIC HOT/COLD WATER, RECIRCULATION PIPING, AND ROOF LEADERS.
17. HAMMER ARRESTOR: ALL HAMMER ARRESTORS SHOWN ON FLOOR PLANS, BUT NOT ON RISERS OR VICE VERSA SHALL BE PROVIDED AND INSTALLED AS SHOWN ON BOTH.
18. VALVES: ALL VALVES SHOWN ON FLOOR PLANS, BUT NOT ON RISERS OR VICE VERSA, SHALL BE PROVIDED AND INSTALLED AS IF SHOWN ON BOTH.
19. ELECTRICAL PANELS AND EQUIPMENT: PLUMBING PIPING, SYSTEMS, AND EQUIPMENT SHALL BE INSTALLED TO MAINTAIN THE DEDICATED WORKING/ELECTRICAL SPACE ABOVE, BELOW, AND IN FRONT OF ELECTRICAL PANELS AND EQUIPMENT PER THE REQUIREMENTS OF THE N.E.C. (NATIONAL ELECTRIC CODE).



RECIRCULATION BALANCING STATION (RBS) - DOMESTIC HOT WATER RECIRCULATION PIPING
NOT TO SCALE



TYPICAL VENT THROUGH ROOF DETAIL
NOT TO SCALE

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HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE: _____ BY: _____

REVISION: _____

PROJECT NO. 2124-07

DESIGNED BY: CE

DRAWN BY: CE

CHECKED BY: CE

REVIEWED BY: CE

DATE: AUGUST 2024

SCALE: AS NOTED

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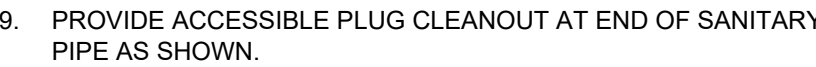
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P0.0



1. REFER TO SHEET P0.0.
2. REFER TO SANITARY SEWER RISER ON SHEET P3.1 AND PLUMBING FIXTURE SCHEDULE ON SHEET P6.1 FOR PIPE SIZES NOT SHOWN.
3. FIRST FLOOR PLUMBING FIXTURES AND ASSOCIATED DWV PIPING SHALL BE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.

1. EXISTING 4" SANITARY SEWER SERVING TO REMAIN.
2. EXISTING SANITARY SEWER PIPING IN CRAWL SPACE SERVING FIRST FLOOR PLUMBING FIXTURES TO REMAIN.
3. INDICATES NEW PLUMBING FIXTURE ABOVE, REFER TO SECOND FLOOR PLAN ON SHEET P1.2 FOR ADDITIONAL INFORMATION. TYPICAL.
4. ROUTE SANITARY PIPING SERVING FIXTURES ABOVE AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE EXACT ROUTING WITH DUCTWORK IN AREA. TYPICAL.
5. PROVIDE 4" SANITARY PIPING IN NEW CHASE DOWN TO CRAWL SPACE BELOW. COORDINATE WORK WITH CHASE CONSTRUCTION.
6. ROUTE 4" SANITARY PIPING IN CRAWL SPACE BELOW AND CONNECT TO EXISTING PIPING AS SHOWN.
7. PROVIDE GREASE TRAP MOUNTED FLUSH IN FLOOR ABOVE. COORDINATE WITH STRUCTURAL FOR GREASE TRAP SUPPORT.
8. EXISTING SUMP PUMP SERVING ELEVATOR PIT TO REMAIN.



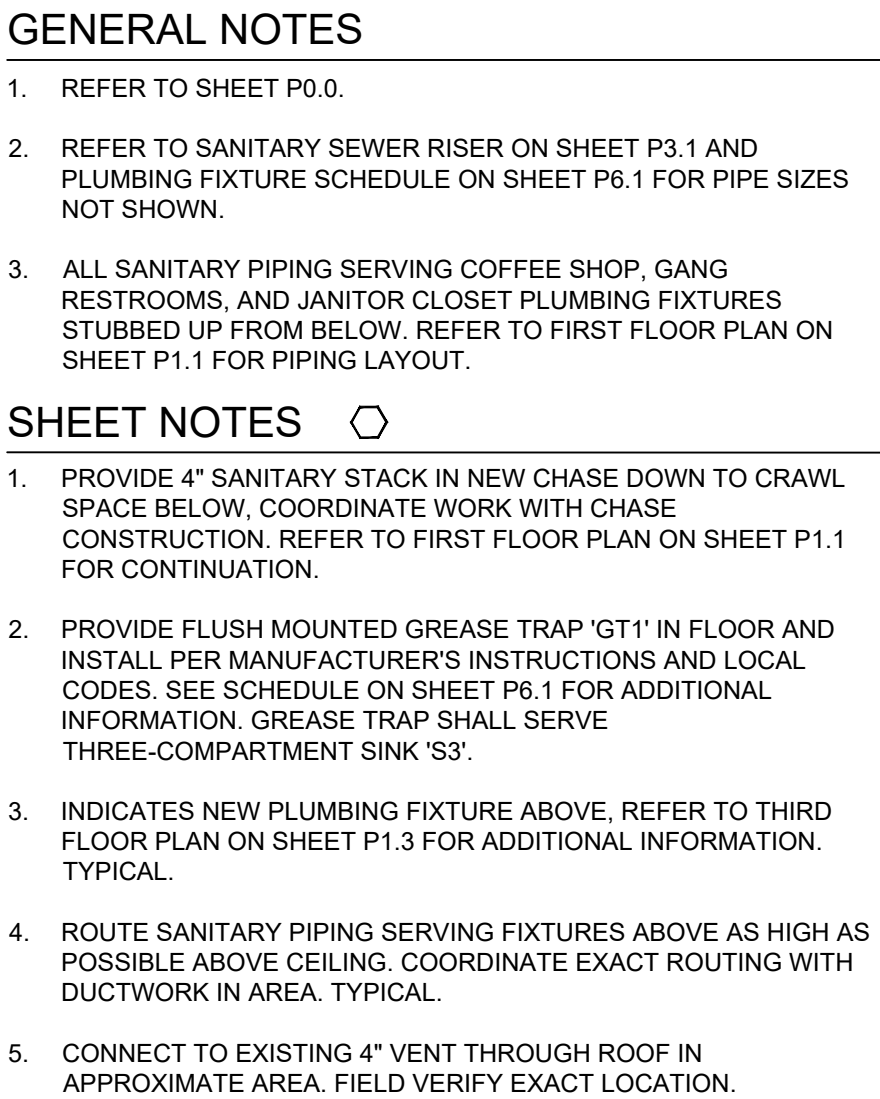
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P1.1



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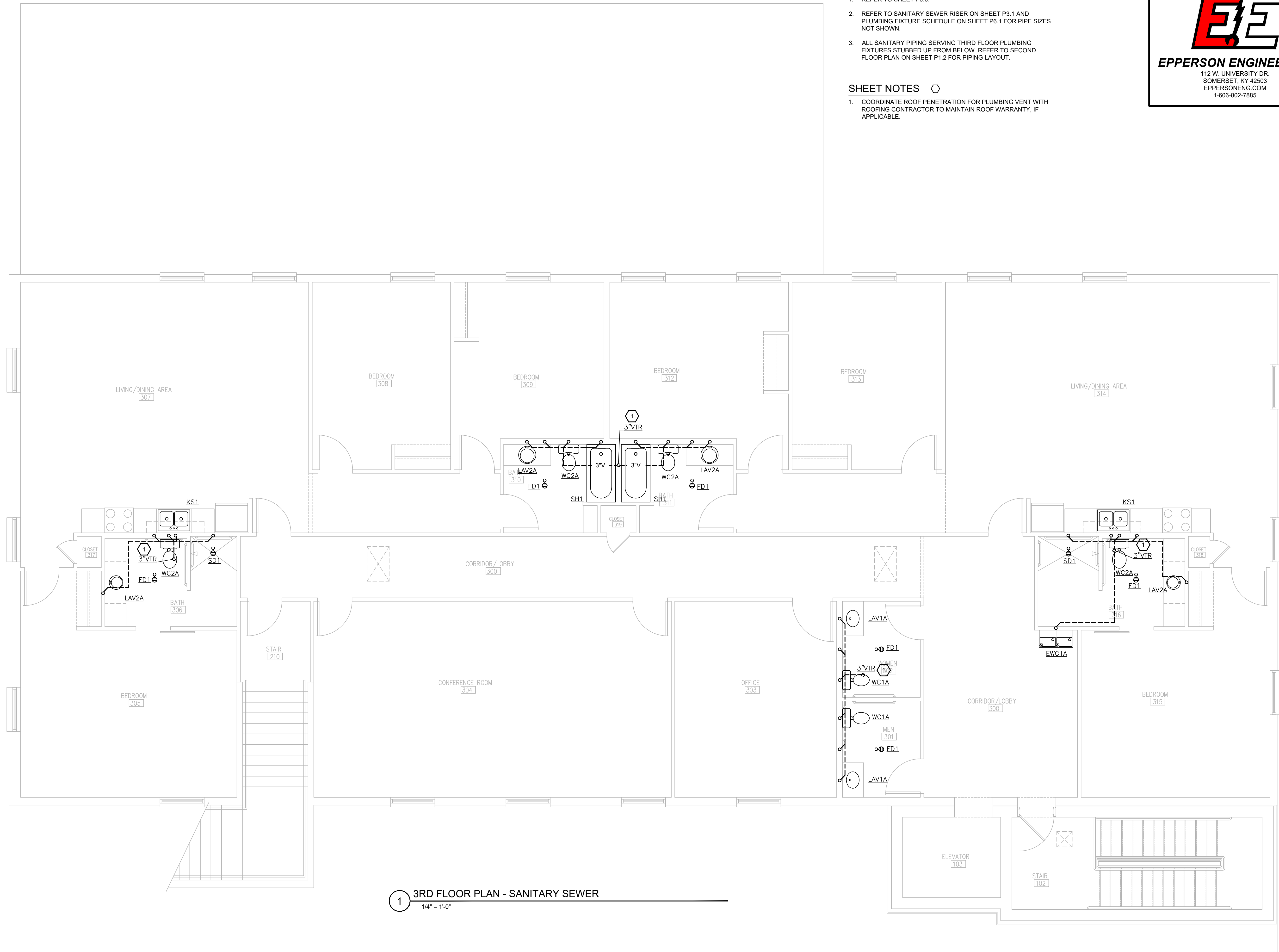
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P1.2



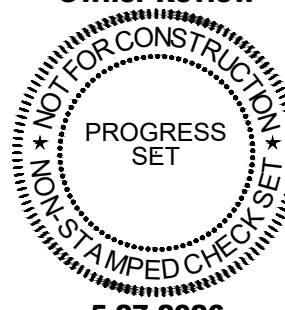
- GENERAL NOTES
1. REFER TO SHEET P0.0.
 2. REFER TO SANITARY SEWER RISER ON SHEET P3.1 AND PLUMBING FIXTURE SCHEDULE ON SHEET P6.1 FOR PIPE SIZES NOT SHOWN.
 3. ALL SANITARY PIPING SERVING THIRD FLOOR PLUMBING FIXTURES STUBBED UP FROM BELOW. REFER TO SECOND FLOOR PLAN ON SHEET P1.2 FOR PIPING LAYOUT.

- SHEET NOTES
1. COORDINATE ROOF PENETRATION FOR PLUMBING VENT WITH ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY, IF APPLICABLE.



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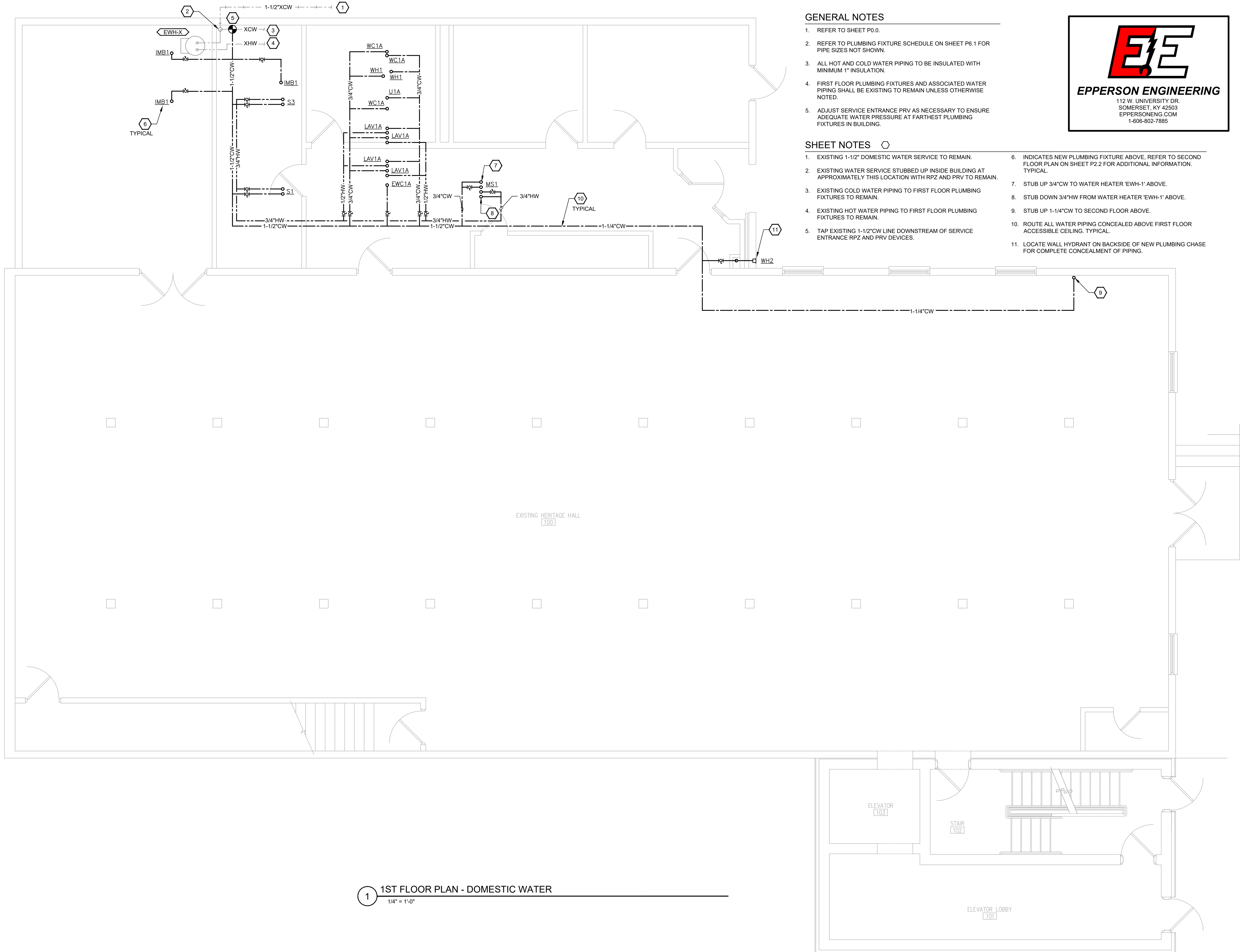
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P1.3

1 3RD FLOOR PLAN - SANITARY SEWER
1/4" = 1'-0"



GENERAL NOTES

- 1. REFER TO SHEET P0.0.
- 2. REFER TO PLUMBING FIXTURE SCHEDULE ON SHEET P6.1 FOR PIPE SIZES NOT SHOWN.
- 3. ALL HOT AND COLD WATER PIPING TO BE INSULATED WITH MINIMUM 1" INSULATION.
- 4. FIRST FLOOR PLUMBING FIXTURES AND ASSOCIATED WATER PIPING SHALL BE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
- 5. ADJUST SERVICE ENTRANCE PRV AS NECESSARY TO ENSURE ADEQUATE WATER PRESSURE AT FARTHEST PLUMBING FIXTURES IN BUILDING.

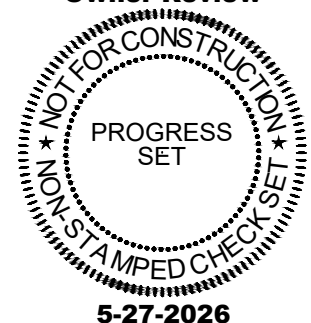
SHEET NOTES

- 1. EXISTING 1-1/2" DOMESTIC WATER SERVICE TO REMAIN.
- 2. EXISTING WATER SERVICE STUBBED UP INSIDE BUILDING AT APPROXIMATELY THIS LOCATION WITH RPZ AND PRV TO REMAIN.
- 3. EXISTING COLD WATER PIPING TO FIRST FLOOR PLUMBING FIXTURES TO REMAIN.
- 4. EXISTING HOT WATER PIPING TO FIRST FLOOR PLUMBING FIXTURES TO REMAIN.
- 5. TAP EXISTING 1-1/2" CW LINE DOWNSTREAM OF SERVICE ENTRANCE RPZ AND PRV DEVICES.
- 6. INDICATES NEW PLUMBING FIXTURE ABOVE, REFER TO SECOND FLOOR PLAN ON SHEET P2.2 FOR ADDITIONAL INFORMATION. TYPICAL.
- 7. STUB UP 3/4" CW TO WATER HEATER 'EWH-1' ABOVE.
- 8. STUB DOWN 3/4" HW FROM WATER HEATER 'EWH-1' ABOVE.
- 9. STUB UP 1-1/4" CW TO SECOND FLOOR ABOVE.
- 10. ROUTE ALL WATER PIPING CONCEALED ABOVE FIRST FLOOR ACCESSIBLE CEILING. TYPICAL.
- 11. LOCATE WALL HYDRANT ON BACKSIDE OF NEW PLUMBING CHASE FOR COMPLETE CONCEALMENT OF PIPING.



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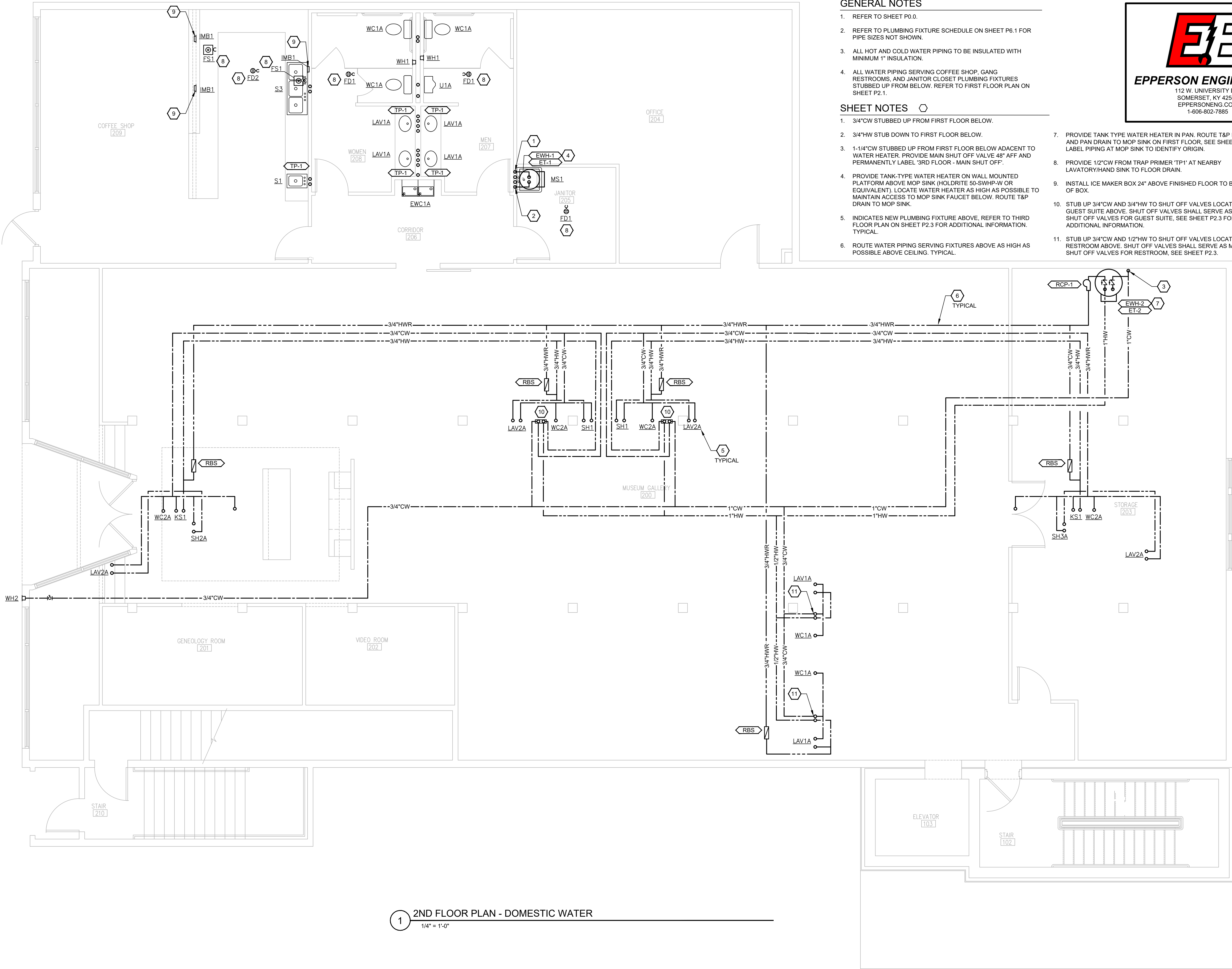
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P2.1

1 1/4" = 1'-0"

1ST FLOOR PLAN - DOMESTIC WATER



- GENERAL NOTES**
- 1. REFER TO SHEET P0.0.
 - 2. REFER TO PLUMBING FIXTURE SCHEDULE ON SHEET P6.1 FOR PIPE SIZES NOT SHOWN.
 - 3. ALL HOT AND COLD WATER PIPING TO BE INSULATED WITH MINIMUM 1" INSULATION.
 - 4. ALL WATER PIPING SERVING COFFEE SHOP, GANG RESTROOMS, AND JANITOR CLOSET PLUMBING FIXTURES STUBBED UP FROM BELOW. REFER TO FIRST FLOOR PLAN ON SHEET P2.1.

- SHEET NOTES**
- 1. 3/4"CW STUBBED UP FROM FIRST FLOOR BELOW.
 - 2. 3/4"HW STUB DOWN TO FIRST FLOOR BELOW.
 - 3. 1-1/4"CW STUBBED UP FROM FIRST FLOOR BELOW ADJACENT TO WATER HEATER. PROVIDE MAIN SHUT OFF VALVE 48" AFF AND PERMANENTLY LABEL '3RD FLOOR - MAIN SHUT OFF'.
 - 4. PROVIDE TANK-TYPE WATER HEATER ON WALL MOUNTED PLATFORM ABOVE MOP SINK (HOLDRITE 50-SWHP-W OR EQUIVALENT). LOCATE WATER HEATER AS HIGH AS POSSIBLE TO MAINTAIN ACCESS TO MOP SINK FAUCET BELOW. ROUTE T&P DRAIN TO MOP SINK.
 - 5. INDICATES NEW PLUMBING FIXTURE ABOVE. REFER TO THIRD FLOOR PLAN ON SHEET P2.3 FOR ADDITIONAL INFORMATION. TYPICAL.
 - 6. ROUTE WATER PIPING SERVING FIXTURES ABOVE AS HIGH AS POSSIBLE ABOVE CEILING. TYPICAL.
 - 7. PROVIDE TANK TYPE WATER HEATER IN PAN. ROUTE T&P DRAIN AND PAN DRAIN TO MOP SINK ON FIRST FLOOR, SEE SHEET P2.1. LABEL PIPING AT MOP SINK TO IDENTIFY ORIGIN.
 - 8. PROVIDE 1/2"CW FROM TRAP PRIMER 'TP-1' AT NEARBY LAVATORY/HAND SINK TO FLOOR DRAIN.
 - 9. INSTALL ICE MAKER BOX 24" ABOVE FINISHED FLOOR TO BOTTOM OF BOX.
 - 10. STUB UP 3/4"CW AND 3/4"HW TO SHUT OFF VALVES LOCATED IN GUEST SUITE ABOVE. SHUT OFF VALVES SHALL SERVE AS MAIN SHUT OFF VALVES FOR GUEST SUITE, SEE SHEET P2.3 FOR ADDITIONAL INFORMATION.
 - 11. STUB UP 3/4"CW AND 1/2"HW TO SHUT OFF VALVES LOCATED IN RESTROOM ABOVE. SHUT OFF VALVES SHALL SERVE AS MAIN SHUT OFF VALVES FOR RESTROOM, SEE SHEET P2.3.

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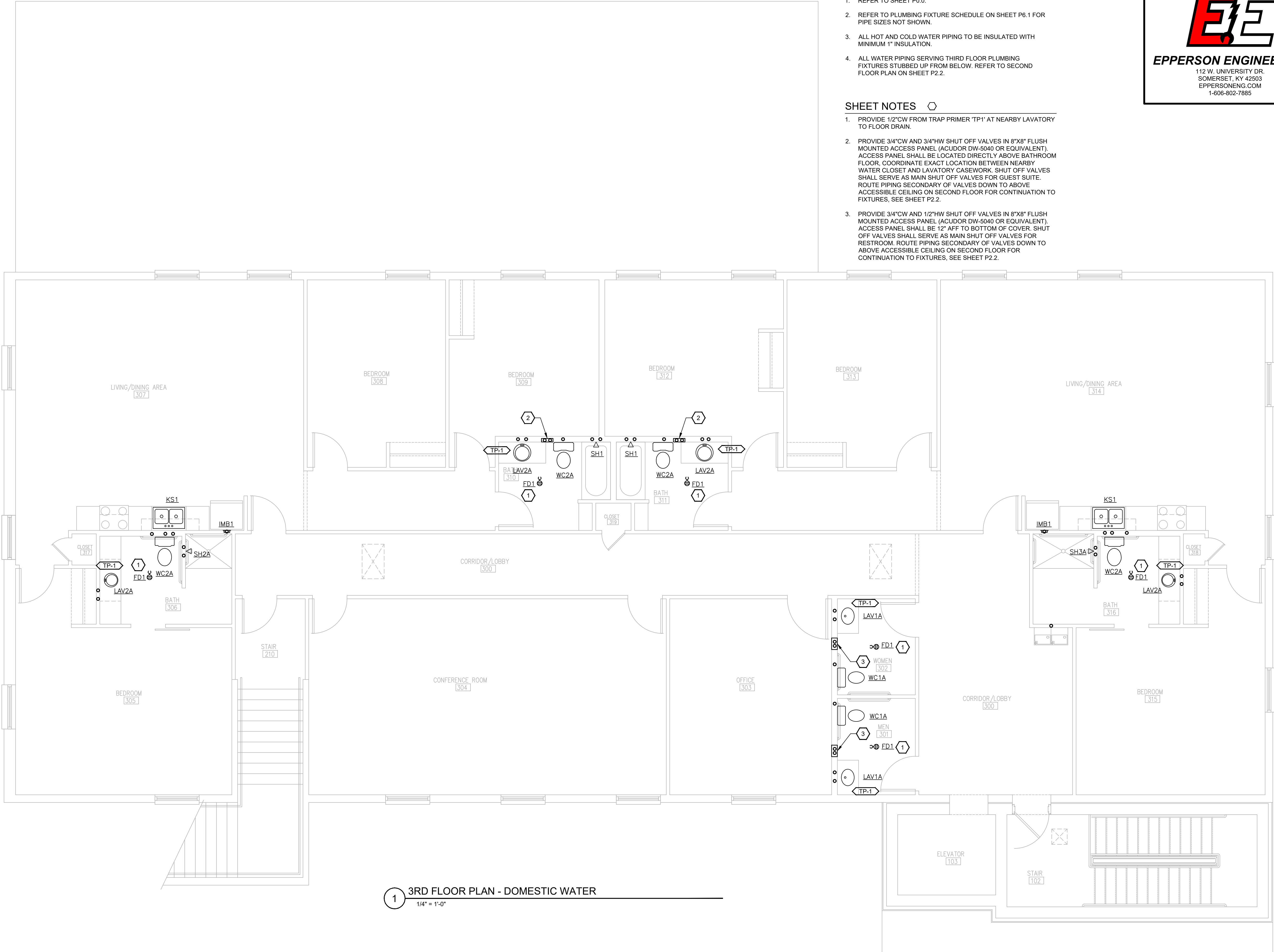
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P2.2



1 3RD FLOOR PLAN - DOMESTIC WATER
1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET P0.0.
2. REFER TO PLUMBING FIXTURE SCHEDULE ON SHEET P6.1 FOR PIPE SIZES NOT SHOWN.
3. ALL HOT AND COLD WATER PIPING TO BE INSULATED WITH MINIMUM 1" INSULATION.
4. ALL WATER PIPING SERVING THIRD FLOOR PLUMBING FIXTURES STUBBED UP FROM BELOW. REFER TO SECOND FLOOR PLAN ON SHEET P2.2.

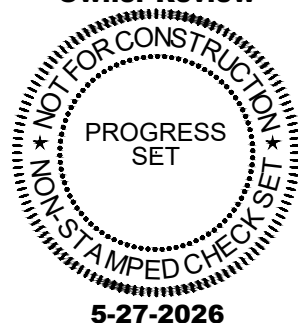
SHEET NOTES

1. PROVIDE 1/2"CW FROM TRAP PRIMER 'TP1' AT NEARBY LAVATORY TO FLOOR DRAIN.
2. PROVIDE 3/4"CW AND 3/4"HW SHUT OFF VALVES IN 8"X8" FLUSH MOUNTED ACCESS PANEL (ACUDOR DW-5040 OR EQUIVALENT). ACCESS PANEL SHALL BE LOCATED DIRECTLY ABOVE BATHROOM FLOOR. COORDINATE EXACT LOCATION BETWEEN NEARBY WATER CLOSET AND LAVATORY CASEWORK. SHUT OFF VALVES SHALL SERVE AS MAIN SHUT OFF VALVES FOR GUEST SUITE. ROUTE PIPING SECONDARY OF VALVES DOWN TO ABOVE ACCESSIBLE CEILING ON SECOND FLOOR FOR CONTINUATION TO FIXTURES, SEE SHEET P2.2.
3. PROVIDE 3/4"CW AND 1/2"HW SHUT OFF VALVES IN 8"X8" FLUSH MOUNTED ACCESS PANEL (ACUDOR DW-5040 OR EQUIVALENT). ACCESS PANEL SHALL BE 12" AFF TO BOTTOM OF COVER. SHUT OFF VALVES SHALL SERVE AS MAIN SHUT OFF VALVES FOR RESTROOM. ROUTE PIPING SECONDARY OF VALVES DOWN TO ABOVE ACCESSIBLE CEILING ON SECOND FLOOR FOR CONTINUATION TO FIXTURES, SEE SHEET P2.2.



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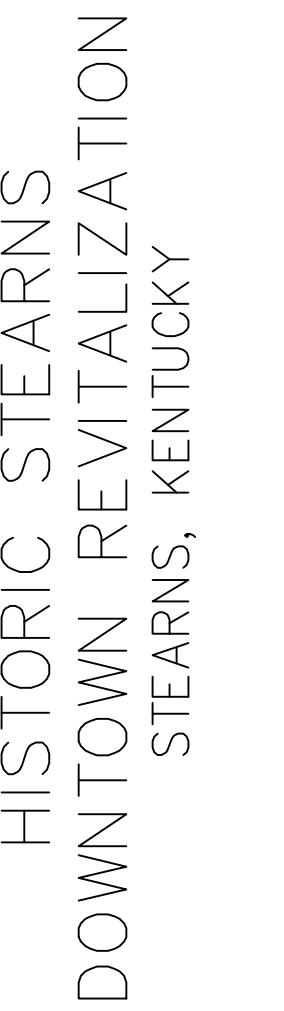
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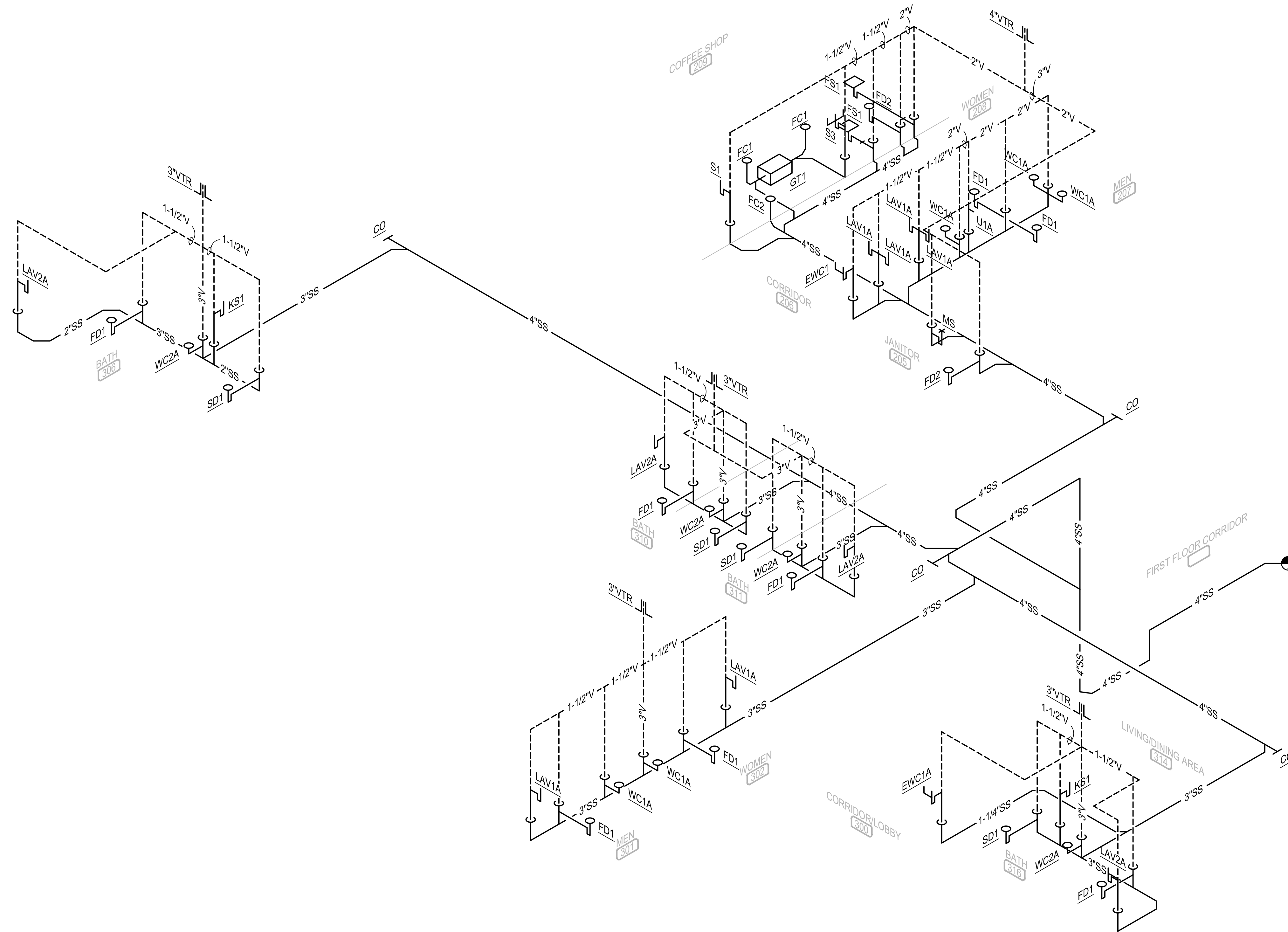
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1 PLUMBING RISER - SANITARY SEWER
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PLUMBING FIXTURE SCHEDULE												
MARK	MANUFACTURER	MODEL / TYPE	TRIM	CW	HW	TRAP	WASTE	VENT	MOUNTING TYPE / HEIGHT	REMARKS	OTHER ACCEPTABLE MANUFACTURERS	
EWCA1A	ELKAY	LZSTL8WSSK BI-LEVEL ADA ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION	TRIM: CARRIER, SUPPLY STOPS	1/2"	-	1-1/4"	1-1/4"	1-1/4"	WALL HUNG: REFER TO ARCHITECT DRAWINGS FOR MOUNTING HEIGHT	8 GPH OF CHILLED WATER; STAINLESS STEEL FINISH; FLEXIBLE SAFETY BUBBLER; FRONT AND SIDE BUBBLER PUSHBAR ACTIVATION; TOUCHLESS BOTTLER FILLER SENSOR ACTIVATION; LED FILTER STATUS	ACORN, OASIS	
FC1	JOSAM	55000-1-Y INTERIOR CLEANOUT	COATED CAST IRON BODY, WITH SATIN FINISH NIKALOY TOP	-	-	-	2"	-	FLUSH IN FLOOR	COORDINATE FLOOR TYPE WITH ARCHITECTURAL DRAWINGS, COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	WADE, ZURN	
FC2	JOSAM	55000-1-Y INTERIOR CLEANOUT	COATED CAST IRON BODY, WITH SATIN FINISH NIKALOY TOP	-	-	-	4"	-	FLUSH IN FLOOR	COORDINATE FLOOR TYPE WITH ARCHITECTURAL DRAWINGS, COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	WADE, ZURN	
FD1	JOSAM	30003-7A FLOOR DRAIN	7" SATIN FINISH, BRONZE STRAINER	1/2"	-	3"	3"	1-1/2"	FLUSH IN FLOOR	1/2" TRAP PRIMER CONNECTION; COORDINATE FLOOR TYPE WITH ARCHITECTURAL DRAWINGS; COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	ZURN, J.R. SMITH	
FD2	JOSAM	30004-7A FLOOR DRAIN	7" SATIN FINISH, BRONZE STRAINER	1/2"	-	4"	4"	1-1/2"	FLUSH IN FLOOR	1/2" TRAP PRIMER CONNECTION; COORDINATE FLOOR TYPE WITH ARCHITECTURAL DRAWINGS; COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	ZURN, J.R. SMITH	
FS1	SIOUX CHIEF	861-4P2 FLOOR SINK	OPEN-HALF TOP STRAINER AND DOME BOTTOM STRAINER	1/2"	-	4"	4"	1-1/2"	FLOOR SET	SINK SHALL BE RATED TO ACCEPT UP TO 180°F WATER; 1-1/2" LIP ABOVE FLOOR 1/2"CW TRAP PRIMER CONNECTION	ZURN, J.R. SMITH	
IMB1	SIOUX CHIEF	696-G1000	QUARTER TURN BALL VALVE	1/2"	-	-	-	-	BELOW COUNTER (FIELD VERIFY)		GUY GRAY, OATEY	
KS1	AMERICAN STANDARD	77DB30190 308 DOUBLE BOWL CAST IRON KITCHEN SINK (30" X 19") WITH SINGLE HANDLE PULL-DOWN SPRAY FAUCET "DELANCEY SERIES"	FAUCET: AMERICAN STANDARD 4279300.075 TRIM: CHROME PLATED GRID DRAINS	1/2"	1/2"	1-1/2"	1-1/2"	1-1/4"	UNDERMOUNT	8-7/8" DEEP BOWLS; COORDINATE INSTALLATION WITH CASEWORK; COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.		
LAV1A	AMERICAN STANDARD	77SB16180 308 ADA LAVATORY SINGLE BOWL CAST IRON SINK (18") WITH WIDESPREAD DUAL LEVER HANDLE FAUCET AND POP-UP DRAIN ASSEMBLY "DELANCEY SERIES"	FAUCET: AMERICAN STANDARD 7052807.GN0, 605XTMV1070 1/2" THERMOSTATIC MIXING VALVE TRIM: CHROME PLATED DRAIN, SUPPLY STOPS, ADA COMPLIANT INSULATION	1/2"	1/2"	1-1/4"	1-1/4"	1-1/4"	UNDERMOUNT	COORDINATE INSTALLATION WITH CASEWORK		
LAV2A	AMERICAN STANDARD	77SB16180 308 ADA LAVATORY SINGLE BOWL CAST IRON SINK (18") WITH WIDESPREAD DUAL CROSS HANDLE FAUCET AND POP-UP DRAIN ASSEMBLY "DELANCEY SERIES"	FAUCET: AMERICAN STANDARD 7052827.295, 605XTMV1070 1/2" THERMOSTATIC MIXING VALVE TRIM: CHROME PLATED DRAIN, SUPPLY STOPS, ADA COMPLIANT INSULATION	1/2"	1/2"	1-1/4"	1-1/4"	1-1/4"	UNDERMOUNT	COORDINATE INSTALLATION WITH CASEWORK		
MS1	FIAT	TSB100 TERRAZZO MOP SINK	FAUCET: FIAT 830AA WITH VACUUM BREAKER; THERMOSTATIC MIXING VALVE TRIM: 832AA HOSE AND HOSE BREACKET, MSG SS WALL GUARDS, 888CCSHELF STAINLESS STEEL SHELF WITH MOP HANGERS	3/4"	3/4"	3"	3"	1-1/2"	FLOOR SET	24" X 24" X 12", STAINLESS STEEL CAPS ON ALL SIDES, ACCESSIBLE CHECK VALVES ON SUPPLIES	ACORN, STERN-WILLIAMS	
S1	ADVANCE TABCO	DI-1-5 SINGLE COMPARTMENT STAINLESS STEEL SINK, OVERALL DIMENSIONS 13x19	FAUCET: DECK MOUNT GOOSENECK; THERMOSTATIC MIXING VALVE TRIM: REMOVABLE DRAIN BASKET	1/2"	1/2"	1-1/2"	1-1/2"	1-1/4"	COUNTER SET/DROP-IN	COORDINATE INSTALLATION WITH CASEWORK	T&S, REGENCY	
S3	ADVANCE TABCO	DI-3-10 - THREE COMPARTMENT STAINLESS STEEL SINK, EACH BOWL: 10" W X 14"D X 10"H, NSF LISTED, OVERALL SINK DIMENSIONS 38"W X 19"D	FAUCETS: TWO (2) K-50 DECK MOUNT 4"O.C. DUAL HANDLE FAUCETS, EACH WITH 8" SWING SPOUTS, FOR PRE-RINSE SIDE, PROVIDE 16" ADD-ON FAUCET WITH FLEXIBLE LEVER ACTION POWER SPRAYER TRIM: REMOVABLE 3.5" DRAIN BASKET STRAINERS, LEVER ACTION WASTE VALVES BELOW SINK FOR EACH SINK DRAIN	3/4"	3/4" (140")	2"	2"	1-1/2"	COUNTER SET/DROP-IN	COORDINATE INSTALLATION WITH CASEWORK IN AREA (REFER TO ARCHITECTURAL DRAWINGS/ELEVATIONS); SINK DRAIN SHALL ROUTE THROUGH NEARBY GREASE TRAP (SEE PLANS)		
SD1	OATEY	SHOWER DRAIN	ROUND, REMOVABLE GRID STRAINER	-	-	2"	2"	1-1/4"	FLUSH IN FLOOR	VERIFY FINAL LOCATION PRIOR TO ROUGH-IN; COORDINATE ROUGH-IN WITH SHOWER STALL CONSTRUCTION; COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	SIOUX CHIEF, ZURN	
SH1	AUQUATIC/ AMERICAN STANDARD	TUB/SHOWER UNIT - ONE PIECE (DIMENSIONS: 60" x 30" x 72") WITH TUB/SHOWER TRIM PACKAGE "DELANCEY SERIES"	TUB/SHOWER: AUQUATIC #AX6030TSS (LEFT OR RIGHT HAND - SEE PLANS) TRIM KIT: AMERICAN STANDARD TU052508.013 (1.8 GPM SHOWERHEAD, SINGLE LEVER HANDLE, DIVERTER TUB SPOUT, PRESSURE BALANCING CARTRIDGE)	3/4"	3/4"	-	-	-	ALCOVE (REFER TO ARCHITECTURAL)	COLOR/FINISH SHALL BE SELECTED BY ARCHITECT; DRAIN AND CHROME STRAINER		
SH2A	FREEDOM SHOWERS/ AMERICAN STANDARD	ADA EASY-STEP SHOWER STALL - FOUR PIECE (DIMENSIONS: 48" x 37" x 78") WITH SHOWER ONLY TRIM PACKAGE "DELANCEY SERIES"	SHOWER STALL: FREEDOM #APF4836SH4P3 (CENTER DRAIN) TRIM KIT: AMERICAN STANDARD TU052507.GN0 (1.8 GPM SHOWERHEAD, SINGLE LEVER HANDLE, PRESSURE BALANCING CARTRIDGE)	3/4"	3/4"	-	-	-	ALCOVE (REFER TO ARCHITECTURAL)	COLOR/FINISH SHALL BE SELECTED BY ARCHITECT; INCLUDE GRAB BARS ON TWO SIDES AND SHOWER ROD; DRAIN AND CHROME STRAINER		
SH3A	FREEDOM SHOWERS/ AMERICAN STANDARD	ADA ROLL-IN SHOWER STALL - ONE PIECE (DIMENSIONS: 63" x 38" x 81") WITH SHOWER ONLY TRIM PACKAGE "DELANCEY SERIES"	SHOWER STALL: FREEDOM #APF6437BF875L (CENTER DRAIN) TRIM KIT: AMERICAN STANDARD TU052507.GN0 (1.8 GPM SHOWERHEAD, SINGLE LEVER HANDLE, PRESSURE BALANCING CARTRIDGE)	3/4"	3/4"	-	-	-	ALCOVE (REFER TO ARCHITECTURAL)	COLOR/FINISH SHALL BE SELECTED BY ARCHITECT; INCLUDE GRAB BARS ON THREE SIDES AND SHOWER ROD; DRAIN AND CHROME STRAINER		
U1A	AMERICAN STANDARD	6590.001 URINAL	FLUSH VALVE: AMERICAN STANDARD 6045SM.101	3/4"	-	INTEGRAL	2"	1-1/2"	WALL HUNG: LIP 17"	3/4" TOP SPUD, 1GPF, BATTERY INCLUDED	ZURN, SLOAN, KOHLER, CRANE	
WC1A	AMERICAN STANDARD	215AB.004 ADA TANK-TYPE WATER CLOSET	HANDLE: CHROME LEVER (LEFT OR RIGHT HAND BASED ON LOCATION IN ROOM - SEE PLANS) SEAT: COLOR-MATCHED HEAVY DUTY OPEN FRONT SEAT LESS COVER (COMMERCIAL-TYPE)	1"	-	INTEGRAL	3"	1-1/2"	FLOOR SET: RIM 16-1/2"	ADA COMPLIANT, ELONGATED BOWL; 1.6 GPM FLUSH, 10" ROUGH-IN, PROVIDE REQUIRED GRAB BARS (WHERE SHOWN ON THE PLANS)	ZURN, SLOAN, KOHLER, CRANE	
WC2A	AMERICAN STANDARD	215AB.004 ADA TANK-TYPE WATER CLOSET	HANDLE: CHROME LEVER (LEFT OR RIGHT HAND BASED ON LOCATION IN ROOM - SEE PLANS) SEAT: COLOR-MATCHED SLOW-CLOSE SEAT	1"	-	INTEGRAL	3"	1-1/2"	FLOOR SET: RIM 16-1/2"	ADA COMPLIANT, ELONGATED BOWL; 1.6 GPM FLUSH, 10" ROUGH-IN, PROVIDE REQUIRED GRAB BARS (WHERE SHOWN ON THE PLANS)	ZURN, SLOAN, KOHLER, CRANE	
WH1	MURDOCK	M-3615T NON-FREEZE WALL HYDRANT	VARIATIONS: T HANDLE	3/4"	-	-	-	-	18" AFF	WITH INTEGRAL VACUUM BREAKER, QUARTER TURN FULL THROW, COORDINATE DEPTH WITH WALL CONSTRUCTION	WOODFORD, ZURN, MIFAB	
WH2	MURDOCK	M-3509QT NON-FREEZE BOX WALL HYDRANT	VARIATIONS: -CL CYLINDER LOCK, -W WATER COVER	3/4"	-	-	-	-				



HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

PROJECT NO. 2124-07		DATE		REVISION		BY	
DESIGNED BY	OE						
DRAWN BY	OE						
CHECKED BY	OE						
REVIEWED BY	OE						
DATE	AUGUST 2024						
SCALE	AS NOTED						

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DRAWING NO.

P6.1



HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

GREASE TRAP SCHEDULE								
MARK	MANUFACTURER	MODEL	LOCATION	WET WEIGHT (LBS)	DIMENSIONS (LxWxD)	INLET/OUTLET	CAPACITY	NOTES
GT1	SCHIER	GB1	COFFEE SHOP 209	123	27" X 23" X 12"	2" / 2"	LIQUID: 10 GAL GREASE: 7.9 GAL (57.6 LBS) AT 25 GPM SOLIDS: 1.3 GAL	ALL
NOTES: 1. POLYETHYLENE CONSTRUCTION 2. MOUNT FLUSH IN FLOOR; PROVIDE SUPPORTS AS NECESSARY; COORDINATE INSTALLATION WITH FLOOR CONSTRUCTION 3. PROVIDE WITH PEDESTRIAN RATED, NON-SLIP COVER 4. INSTALL PER MANUFACTURER'S INSTRUCTIONS 5. VENT PER LOCAL CODE AND KENTUCKY PLUMBING CODE								

RECIRCULATION PUMP SCHEDULE										
MARK	MANUFACTURER	MODEL	LOCATION	MAX FLOW (GPM)	MAX HEAD (FT)	ELECTRICAL				NOTES
						HP	V / Ø / Hz	MCA	MOCP	
RCP-1	GRUNDFOS	ALPHA 15-55	EWB-2	8.37	11.16	FRAC.	115/1/60	1	15	ALL
NOTES: 1. ECM VARIABLE SPEED MOTOR 2. BUILT-IN DIGITAL TEMPERATURE DISPLAY 3. PUMP SHALL OPERATE IN CONSTANT PRESSURE MODE TO WORK ALONGISDE ASSOCIATED BALANCING STATIONS 3. PUMP SHALL NOT OPERATE DURING BUILDING UNOCCUPIED HOURS - COORDINATE SCHEDULE WITH OWNER 4. DRY-RUN PROTECTION 5. IN-LINE MOUNT; LOCATE ADJACENT TO WATER HEATER 6. PROVIDE ISOLATION BALL VALVES ON INLET AND OUTLET 7. STAINLESS STEEL PUMP HOUSING										

TANK-TYPE WATER HEATER SCHEDULE									
MARK	MANUFACTURER	MODEL	LOCATION	TANK CAPACITY (GAL)	ELECTRICAL				NOTES
					KW	V / Ø / Hz	MCA	MOCP	
EWB-2	A.O. SMITH	LTE-120D	STORAGE 203	119	4.5	208/1/60	27	30	ALL
NOTES: 1. ASHRAE 90.1 COMPLIANT FOR STANDBY LOSS REQUIREMENTS 2. TEMPERATURE AND PRESSURE (T&P) RELIEF VALVE WITH PIPING ROUTED TO MOP SINK 3. PROVIDE EXPANSION TANK (ET-2) ON COLD WATER INLET 4. TWO ELEMENTS, NON-SIMULTANEOUS OPERATION 5. ADJUSTABLE TEMPERATURE CONTROL, SET AT 120°F 6. TOP INLET/OUTLET, 3/4" 7. PROVIDE SHUT-OFF VALVES AT INLET AND OUTLET 8. PROVIDE ASSOCIATED CONVERSION KIT FOR ELECTRICAL REQUIREMENTS NOTED 9. MOUNT ELEVATED IN OVERFLOW PAN TO ALLOW T&P PIPING TO ROUTE OUTSIDE OF PAN OTHER ACCEPTABLE MANUFACTURERS INCLUDE: BRADFORD WHITE, STATE									

TANK-TYPE LOWBOY WATER HEATER SCHEDULE									
MARK	MANUFACTURER	MODEL	LOCATION	TANK CAPACITY (GAL)	ELECTRICAL				NOTES
					KW	V / Ø / Hz	MCA	MOCP	
EWB-1	A.O. SMITH	DEL-30	JANITOR 205	30	4.5	208/1/60	27	30	ALL
NOTES: 1. ASHRAE 90.1 COMPLIANT FOR STANDBY LOSS REQUIREMENTS 2. TEMPERATURE AND PRESSURE RELIEF VALVE WITH PIPING ROUTED TO MOP SINK 3. PROVIDE EXPANSION TANK (ET-1) ON COLD WATER INLET 4. TWO ELEMENTS, NON-SIMULTANEOUS OPERATION 5. ADJUSTABLE TEMPERATURE CONTROL, SET AT 140°F 6. TOP INLET/OUTLET, 3/4" 7. PROVIDE SHUT-OFF VALVES AT INLET AND OUTLET 8. PROVIDE ASSOCIATED CONVERSION KIT FOR ELECTRICAL REQUIREMENTS NOTED 9. MOUNT ABOVE MOP SINK ON WALL MOUNTED PLATFORM (HOLDRITE 50-SWHP-W OR EQUAL) OTHER ACCEPTABLE MANUFACTURERS INCLUDE: BRADFORD WHITE, STATE									

RECIRCULATION BALANCING STATION					
MARK	MANUFACTURER	MODEL	LOCATION	PIPE SIZE (IN)	NOTES
RBS	CIRCUIT SOLVER	CSUA-3/4-115-CV1	SEE PLANS	3/4	ALL
NOTES: 1. INTEGRAL CHECK VALVE ON OUTLET 2. INTEGRAL ISOLATION BALL VALVES 3. INTEGRAL 0.2 GPM BYPASS 4. LEAD FREE					

EXPANSION TANK SCHEDULE						
MARK	MANUFACTURER	MODEL	LOCATION	TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	NOTES
ET-1	AMTROL	ST-5	EWB-1	2	0.9	ALL
ET-2	AMTROL	ST-12	EWB-2	4.4	3.2	ALL
NOTES: 1. 150 PSIG PRESSURE RATING 2. 200°F MAX OPERATING TEMPERATURE 3. 3/4" NPTM CONNECTION (IN-LINE MOUNT) 4. NON ASME						

WATER-SAVER TRAP PRIMER SCHEDULE					
MARK	MANUFACTURER	MODEL	V / Ø / Hz	LOCATION	NOTES
TP-1	ZURN	Z1021	-	SEE PLANS	1
NOTES: 1. INSTALL PER MANUFACTURER'S INSTRUCTION					

DATE	REVISION	BY	PROJECT NO. 2124-07				
			DESIGNED BY	CHECKED BY	REVIEWED BY	DATE	SCALE
			CE	CE	CE	AUGUST 2024	AS NOTED
			CE	CE	CE		
			CE	CE	CE		
			CE	CE	CE		

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PLUMBING SPECIFICATIONS

GENERAL REQUIREMENTS

SCOPE:

FURNISH ALL LABOR, MATERIALS, EQUIPMENT, APPLIANCES AND NECESSARY INCIDENTALS FOR THE COMPLETE INSTALLATION OF ALL PLUMBING SHOWN ON THE DRAWINGS AND AS SPECIFIED.

A. WORK SPECIFIED IN THIS SECTION

- SANITARY DRAIN, WASTE AND VENT SYSTEMS.
- DOMESTIC HOT AND COLD WATER SYSTEMS.
- DOMESTIC WATER HEATERS.
- FURNISH AND SET ALL SLEEVED FOR PIPE PASSING THROUGH WALLS AND FLOORS.
- PIPE COVERING, INSULATION AND WRAPPING.
- EXCAVATION AND BACKFILL.
- ALL PLUMBING FIXTURES, WATER HEATERS, VALVES, AND OTHER MISCELLANEOUS ITEMS OR EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION.
- PROVIDE COLLARS AT FIRE RATED PENETRATIONS.

B. PROVISIONS FOR THIS SECTION APPLY TO ALL WORK SPECIFIED IN ALL SECTIONS UNDER DIVISION 22. ALL ITEMS INDICATED ON SITE, ARCHITECTURAL, MECHANICAL, OR PLUMBING DRAWINGS ARE TO BE PROVIDED COMPLETE FROM POINT OF CONNECTION TO FINISHED FIXTURE IN CONFORMANCE WITH ALL GOVERNING AUTHORITY REQUIREMENTS. NOTHING IN THESE DRAWINGS OR SPECIFICATIONS SHALL BE CONSTRUED TO PERMIT WORK IN VIOLATION OF GOVERNING CODES.

C. IN ADDITION, WORK IN DIVISION 22 IS GOVERNED BY THE PROVISIONS OF THE BIDDING REQUIREMENTS, CONTRACT FORMS, GENERAL CONDITIONS AND ALL SECTIONS UNDER DIVISION 1, GENERAL REQUIREMENTS.

- EXAMINATION OF PREMISES: VISIT THE SITE, VERIFY ALL MEASUREMENTS AND JOB CONDITIONS, AND PAY ALL COSTS NECESSARY TO PERFORM THE WORK. COORDINATE DIVISION OF FEE RESPONSIBILITIES WITH GENERAL CONTRACTOR.
- THE PLUMBING CONTRACTOR/COMPANY SHALL BE LICENSED AND HOLD A CURRENT CONTRACTING LICENSE AS A PLUMBING CONTRACTOR THAT HAS BEEN VALID FOR A MINIMUM OF TWO YEARS IN THE STATE WHERE THE PROJECT IS LOCATED.
- THE PLUMBING CONTRACTOR/COMPANY SHALL HAVE A MINIMUM OF FIVE YEARS EXPERIENCE INSTALLING COMMERCIAL PLUMBING SYSTEMS SIMILAR TO THOSE DESCRIBED IN THESE SPECIFICATIONS AND PROVIDE A LIST OF PREVIOUS PROJECTS, INCLUDING NAME OF PROJECT AND CONTACT PERSON NAMES AND PHONE NUMBERS.
- THE PLUMBING CONTRACTOR/COMPANY SHALL BE ABLE TO BOND WORK HE IS BIDDING TO PERFORM AND SHALL PROVIDE WRITTEN STATEMENT FROM THE BONDING AGENCY PROPOSED TO BE USED FOR THIS PROJECT A SEPARATE DOCUMENT IN ADDITION TO THE PLUMBING BID SUBMITTED IF REQUIRED BY THE GENERAL CONTRACTOR. THE BONDING AGENCY SHALL BE ONE HAVING A BEST'S INSURANCE RATING OF A OR A+.

D. CONTRACTOR IS RESPONSIBLE FOR RESULTS CAUSED BY DEVIATING FROM THE PLANS.

REGULATIONS, PERMITS, FEES, CHARGES, INSPECTIONS:

- REGULATIONS: COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. ALL MATERIALS AND WORK MUST COMPLY WITH LOCAL CONSTRUCTION, MECHANICAL, PLUMBING, ELECTRICAL AND FIRE CODES. AS A MINIMUM, COMPLY WITH THE FOLLOWING: IMC, IPC, IECC, NEC, NFPA CODES AND ALL LOCAL STATE AND CITY CODES.
- IN ADDITION TO THE REQUIREMENTS OF ALL GOVERNING CODES, ORDINANCES AND AGENCIES, CONFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES AND STANDARDS:
 - 2018 KENTUCKY BUILDING CODE (BASED ON 2015 INTERNATIONAL BUILDING CODE)
 - 2015 INTERNATIONAL BUILDING CODE
 - 2015 INTERNATIONAL MECHANICAL CODE
 - 2012 INTERNATIONAL ENERGY CONSERVATION CODE OR 2010 ASHRAE 90.1 REFER TO ARCHITECTURAL COVER SHEET.
 - KENTUCKY STATE PLUMBING LAW, REGULATIONS & CODES (815 KAR CHAPTER 20)
 - KENTUCKY STATE BOILER REGULATION (KRS 236, 815 KAR 15)
- CURRENT CODES ADOPTED BY THE RESPECTIVE JURISDICTION WILL SUPERSEDE THE LISTED CODES.
- FEES AND PERMITS: PAY ALL CONNECTION, INSTALLATION, USE, DEVELOPMENT, ETC., FEES AND/OR CHARGES. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. COORDINATE DIVISION OF FEE RESPONSIBILITIES WITH THE GENERAL CONTRACTOR.
- INSPECTIONS: ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES. PRIOR TO FINAL APPROVAL, FURNISH THE ARCHITECT WITH CERTIFICATES OF INSPECTIONS AND APPROVALS BY THE LOCAL AUTHORITIES IN ACCORDANCE WITH DIVISION 1.

DRAWINGS AND SPECIFICATIONS:

- REFER TO DIVISION 1 FOR INFORMATION ON SUBMITTALS AND SHOP DRAWINGS.
- IF A CONFLICT EXISTS ON OR WITHIN THE DRAWINGS AND SPECIFICATIONS, ASSUME THE MOST EXPENSIVE FOR BIDDING PURPOSES, AND PROMPTLY NOTIFY THE ARCHITECT AND ENGINEER.

RECORD DRAWINGS: PROVIDE RECORD DRAWINGS FOR ALL WORK UNDER SECTIONS IN DIVISION 22. SEE DIVISION 1 FOR DETAILED REQUIREMENTS COVERING PREPARATION OF RECORD DRAWINGS. WORK AND MATERIALS: UNLESS OTHERWISE SPECIFIED, ALL MATERIALS MUST BE NEW AND OF THE QUALITY SPECIFIED. THE WORKMANSHIP SHALL BE OF A QUALITY THAT IS ACCEPTABLE TO THE ARCHITECT AND IS EQUAL TO THE STANDARDS OF THE TRADES. CONTRACTOR MUST STAFF THE PROJECT WITH SUFFICIENT SKILLED WORKMEN, INCLUDING A FULLY QUALIFIED CONSTRUCTION SUPERINTENDENT, TOO COMPLETE THE WORK IN THE TIME ALLOTTED. THE SUPERINTENDENT MUST BE QUALIFIED TO SUPERVISE ALL OF THE WORK IN HIS WORK CATEGORY.

APPROVAL OF MATERIALS AND EQUIPMENT: REFER TO DIVISION 1 FOR DESCRIPTION OF MATERIAL AND EQUIPMENT FOR PRIOR APPROVALS AND SUBSTITUTIONS. MUST BE RECEIVED BY ENGINEER 10 DAYS PRIOR TO DUE DATE/BID OPENING.

MAINTENANCE MANUAL:

- PRIOR TO COMPLETION OF THE PROJECT, COMPIL A COMPLETE EQUIPMENT AND MAINTENANCE MANUAL FOR ALL EQUIPMENT SUPPLIED UNDER SECTIONS OF DIVISION 22 AS DESCRIBED IN DIVISION 1.
- MANUALS SHALL BE BOUND IN A THREE-RING BINDER. A PRELIMINARY SUBMITTAL OF THE MANUAL SHALL BE MADE TO THE ARCHITECT 90 DAYS AFTER RECEIVING APPROVED SUBMITTALS. FINAL SUBMITTAL OF THE MANUAL SHALL BE MADE FOUR WEEKS PRIOR TO SUBSTANTIAL COMPLETION OF THE PROJECT.

EQUIPMENT PURCHASES: ARRANGE FOR PURCHASES AND DELIVERY OF ALL MATERIALS AND EQUIPMENT WITHIN 15 DAYS AFTER APPROVAL OF SUBMITTALS. COORDINATE WITH GENERAL CONTRACTOR.

COOPERATIVE WORK:

- CORRECT WITHOUT CHARGE ANY WORK REQUIRING ALTERATION DUE TO LACK OF PROPER SUPERVISION OR FAILURE TO MAKE PROPER PROVISIONS IN TIME. CORRECT WITHOUT CHARGE ANY DAMAGE TO ADJACENT WORK CAUSED BY THE ALTERATION. SEE DIVISION 1 FOR ADDITIONAL REQUIREMENTS.
- COOPERATIVE WORK INCLUDES:
 - GENERAL SUPERVISION AND RESPONSIBILITY FOR PROPER LOCATION, ROUGH-IN AND SIZE WORK RELATED TO DIVISION 22 BUT PROVIDED UNDER OTHER DIVISIONS OF THESE SPECIFICATIONS.
 - INSTALLATION OF SLEEVES, INSERTS AND ANCHOR BOLTS FOR WORK UNDER SECTIONS IN DIVISION 22.
 - ELECTRICAL WORK AS SPECIFIED HEREIN. REFER TO DIVISION 26 FOR REQUIREMENTS.
 - MECHANICAL WORK AS SPECIFIED HEREIN. REFER TO DIVISION 23 FOR REQUIREMENTS.

CONSTRUCTION FACILITIES:

- GENERAL: UNDER THIS DIVISION OF THE SPECIFICATIONS EXECUTE ALL WORK IN A MANNER TO PROVIDE A SAFE AND LAWFUL INGRESS AND EGRESS TO THE OWNER'S ESTABLISHMENT AND SUCH FACILITIES SHALL BE KEPT CLEAR OF MATERIAL OR EQUIPMENT AS DIRECTED BY THE ARCHITECT. REFER TO DIVISION 1 FOR ADDITIONAL REQUIREMENTS.
- FURNISH AND MAINTAIN FROM THE BEGINNING TO THE COMPLETION OF AL WORK ALL LAWFUL AND NECESSARY GUARDS, RAILINGS, FENCES, CANOPIES, LIGHTS, AND WARNING SIGNS. TAKE ALL NECESSARY PRECAUTIONS REQUIRED BY CITY AND STATE LAWS TO AVOID INJURY OR DAMAGE TO ANY AND ALL PERSONS AND PROPERTY.

GUARANTEE: GUARANTEE ALL MATERIAL, EQUIPMENT, AND WORKMANSHIP FOR ALL SECTIONS UNDER DIVISION 22. IN WRITING TO BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE AS OUTLINED IN DIVISION 1. REPLACE WITHOUT CHARGE ANY MATERIAL OR EQUIPMENT PROVING DEFECTIVE DURING THIS PERIOD. THE GUARANTEE

SHALL INCLUDE PERFORMANCE OF THE EQUIPMENT UNDER ALL CONDITIONS OF LOAD, INSTALLING ANY ADDITIONAL ITEMS OF CONTROL AND/OR PROTECTIVE DEVICES AS REQUIRED.

ELECTRICAL WORK:

A. ELECTRICAL WIRING, INCLUDING POWER WIRING AND CONTROL WIRING (EXCEPT AS OTHERWISE SPECIFIED UNDER AUTOMATIC TEMPERATURE CONTROLS), ALL RACEWAYS, WIRING, OUTLET AND JUNCTION BOXES, AND LABOR FOR INSTALLATION OF THE WIRING AND EQUIPMENT SHALL BE INCLUDED IN ELECTRICAL DIVISION 26 OF THE SPECIFICATIONS.

PRODUCT HANDLING:

- PROTECTION: TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE MATERIAL OF THIS SECTION BEFORE, DURING, AND AFTER INSTALLATION.
- REPLACEMENTS: IN THE EVENT OF DAMAGE, IMMEDIATELY REPAIR ALL DAMAGED AND DEFECTIVE WORK TO THE APPROVAL OF THE ENGINEER, AT NOT ADDITIONAL COST TO THE OWNER.

SUBMITTALS:

- MANUFACTURER'S LITERATURE: WITHIN 35 DAYS AFTER AWARD OF CONTRACT AND BEFORE ANY MATERIALS OF THIS SECTION ARE DELIVERED TO THE JOB SITE SUBMIT COMPLETE BROCHURES OF ALL MATERIALS AND EQUIPMENT, PER DIVISION 1 OF THE SPECIFICATIONS.
- OTHER SUBMITTALS:
 - SHOP DRAWINGS: HANGERS AND SUPPORTS, PIPING INSULATION, VALVES, PUMPS, WATER HEATER, AND ALL PLUMBING FIXTURES.
- SETS IN BOUND BOOKLET FORM OF WRITTEN OPERATING AND MAINTENANCE INSTRUCTIONS AND BROCHURES FOR EQUIPMENT SPECIFIED IN THIS SECTION. FULLY INSTRUCT OWNERS OPERATING PERSONNEL.
- RECORD DRAWINGS: KEEP AN ACCURATE DIMENSIONED RECORD OF AS-BUILT LOCATIONS AND ELEVATIONS, AS REFERRED TO APPROVED BASE DATUM, OF BURIED CONCEALED.
- OPERATION AND MAINTENANCE INSTRUCTIONS: DELIVER TO ARCHITECT, SHOW COMPLETE LISTS, MANHOLES, CLEANOUTS, VALVES, PLUGGED TEES, CAPPED ENDS, AND OF WORK WHICH IS INSTALLED DIFFERENT FROM SHOWN IN THE PLANS.

MISCELLANEOUS:

- EXAMINATION OF THE SITE: EXERCISE CARE IN EXAMINING THE SITE AND COORDINATE ALL WORK INDICATED ON THE DRAWINGS WITH EXISTING CONDITIONS. REPORT TO ARCHITECT IN WRITING CONDITIONS THAT WILL PREVENT PROPER PROVISIONS OF THIS WORK. VERIFY DEPTH AND LOCATIONS OF ALL SERVICE LINES WITH SERVING COMPANIES HAVING JURISDICTION BEFORE EXCAVATING, BY SUBMISSION OF THE BID. THE CONTRACTOR WARRANTS THAT HE HAS FAMILIARIZED HIMSELF WITH THE EXISTING CONDITIONS AND WILL PERFORM ALL WORK AS REQUIRED FOR HOOKUP AND AS REQUIRED BY THE CONTRACT DOCUMENTS AT NO ADDITIONAL COST.
- PERMITS AND FEES: ARRANGE AND PAY FOR ALL PERMITS, INSPECTIONS AND FEE REQUIRED BY ALL GOVERNING AGENCIES.
- SERVICE CONNECTIONS: MAKE ALL NECESSARY ARRANGEMENTS WITH APPLICABLE UTILITY COMPANY FOR CONNECTION TO SERVICE LINES. PAY ALL FEES ASSOCIATED WITH WORK INCLUDING METERS, HOOKUP CHARGE AND UTILITY ASSESSMENTS FEES.
- DRAWINGS: COORDINATE ALL SPACE REQUIREMENTS WITH OTHER TRADES, DRAWINGS INDICATE DESIRED LOCATION AND ARRANGEMENT OF PIPING, EQUIPMENT, AND OTHER ITEMS AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE.

PRODUCTS

GENERAL

- PIPE SLEEVES AND WRAPPING: PROVIDE POLISHED CHROMIUM PLATED AND BRASS SET SCREW FLANGES WHERE PLUMBING PIPING PASS THROUGH WALLS, FLOORS, CEILINGS, AND PARTITIONS IN FINISHED PORTIONS OF BUILDING INCLUDING FLANGES ON PIPES AT FIXTURES. ALL SLEEVES IN CONCRETE AND EXTERIOR WALLS SHALL BE 20 GA. GALVANIZED IRON ONE INCH O.D. LARGER THAN THE PIPE, CAULKED IF BELOW GRADE IN A MOISTURE PROOF MANNER. ALL PIPES PENETRATING THROUGH FIRE WALLS AND FLOORS SHALL BE PROPERLY SAIED WITH DOW CORNING 3-6548 SILICONE RTV FORM OR EQUAL. INSTALL PER MANUFACTURER'S DIRECTIONS.
- PIPE IDENTIFICATION:
 - PIPING IDENTIFICATION PER ANSI AND OSHA STANDARDS: EACH INDIVIDUAL PIPELINE SHALL BE MARKED FOR QUICK AND EASY IDENTIFICATION AS TO CONTENTS AND CHARACTER OF MATERIAL CARRIED IN THE PIPES BY SET ON SNA OR STR MARKER.
 - MARKERS SHALL BE INSTALLED AND SPACED AT NOT MORE THAN 20 FOOT INTERVALS AND SO LOCATED THAT MARKERS SHALL BE VISIBLE WHERE PIPING IS EXPOSED.
- ONE MARKER SHALL BE INSTALLED AT EACH SIDE OF VALVES, SPECIAL FITTINGS AND AT BRANCH TAKE-OFFS. IN FURRED SPACES INSTALL ONE BAND 2 FEET ABOVE FLOOR AND 19 INCHES BELOW CEILING LINE.
- MATERIALS: MATERIALS WHEN NOT OTHERWISE DEFINITELY SPECIFIED SHALL CONFORM TO THE APPLICABLE ASTM, ASME, AGA AND ASA STANDARDS.
- ALL GAS FIRED EQUIPMENT SHALL INCLUDE A LABEL INDICATING THAT THE APPLIANCE HAS BEEN ADJUSTED, MODIFIED OR RE-CALIBRATED FOR THE ALTITUDE WHERE IN THE PROJECT IS TO BE LOCATED (GREEN STICKER). THE APPLIANCE SHALL ALSO INCLUDE A COMPLIANCE STATEMENT INDICATING THAT THE APPLIANCE HAS BEEN ADJUSTED, MODIFIED OR RE-CALIBRATED FOR THE PROPER OPERATION AT THE ALTITUDE OF THE PROJECT AND SHALL BE LISTED CAPABLE FOR SUE WITH NATURAL GAS OR PROPANE GAS IF PROPANE IS LISTED ON THE DRAWINGS.

PIPE AND FITTING SPECEDURE:

PIPE AND FITTINGS:

- NO PIPE OF FOREIGN MANUFACTURER WILL BE ACCEPTABLE ON PROJECTS REQUIRED TO MEET THE BUY AMERICA ACT.
- ALL PIPING, FITTINGS, FLANGES, ETC. SHALL BE FREE FROM DEFECTS AND SHALL COMPLY WITH THE APPROPRIATE ASTM SPECIFICATIONS.
- BLACK STEEL PIPE: ASTM A53 ERW GRADE B, STANDARD WEIGHT (SCHEDULE 40) OR EXTRA STRONG (SCHEDULE 80) AS SPECIFIED.
- COPPER TUBING: ASTM B88, TYPE L OR K AS SPECIFIED.
- PVC PIPE AND FITTINGS: ASTM D1785 CLASS 150 WITH ATSM D 2564 SOLVENT CEMENT JOINT UNLESS OTHERWISE SPECIFIED. SCHEDULE 40. PVC PLASTIC PIPE FITTINGS: ASTM F 628, SCHEDULE 40.
- PEX-AL-HDPE DISTRIBUTION SYSTEM: ASTM F 1986 TUBING AND METAL-INSERT TYPE WITH COPPER OR STAINLESS-STEEL CRIMP RING AND MATCHING PEX-AL-HDPE TUBE DIMENSIONS. MANIFOLD: MULTIPLE-OUTLET, PLASTIC OR CORROSION-RESISTED-METAL ASSEMBLY COMPLYING WITH ASTM F 877: WITH PLASTIC OR CORROSION-RESISTANT-METAL VALVE FOR EACH OUTLET.
- PP PIPING AND FITTINGS: ASTM F 2389; CSA B137.11.
- ACRYLONITRILE BUTADIENE STYRENE (ABS) PLASTIC PIPE: ASTM D 2661, SCHEDULE 40, ASTM F 628 SCHEDULE 40. ABS PLASTIC PIPE FITTINGS: ASTM F 409, ACCESSIBLE AND REPLACEABLE, SOLVENT CEMENT AND THREADED TYPES, DRAIN PATTERN.
- CAST IRON SOIL PIPE AND FITTINGS: ASTM A74.
- WELDED BLACK STEEL FITTINGS: ASTM A234 GRADE B, 150-POUND FOR STANDARD WEIGHT PIPING, 300-POUND FOR EXTRA STRONG PIPING, OR OF WEIGHT OR SCHEDULE OF MATCHING PIPING.
- THREADED MALLEABLE IRON FITTINGS: ANSI B16.3, 150-POUND FOR STANDARD WEIGHT PIPING, 300-POUND FOR EXTRA STRONG PIPING, OR WEIGHT OR SCHEDULE OF MATCHING PIPING EITHER BLACK OR GALVANIZED TO MATCH PIPING.
- WELDED FLANGES: ASTM A181 GRADE B, 150-POUND FOR STANDARD WEIGHT, 300-POUND FOR EXTRA STRONG PIPING OR OF EQUAL WEIGHT OF CONNECTED EQUIPMENT.
- COPPER FITTINGS: WROUGHT COPPER, ANSI SPECIFICATION B16.22.
- BALL VALVES DOMESTIC WATER: BRONZE, FULLPORT, CLASS 150, THREADED. NIBCO T-585 OR EQUAL.
- PARTITION STOP VALVES: T&S B-0415, LOOSE KEY TYPE WITH WALL FLANGE.
- BALANCING COCKS 2 INCHES AND SMALLER SHALL BE ARMSTRONG, NIBCO, TACO OR WATTS.
- SOLDER: JOINTS IN COPPER PIPING ABOVE GRADE SHALL BE STAY SAFE SO SOLDER OR 95-5 SOLDER SHALL BE SILFOS OR SILVERFLOW FOR ALL REFRIGERANT PIPING JOINTS.
- CONDENSATE DRAINS SHALL BE TYPE L HARD COPPER TUBING WITH WROUGHT-COPPER FITTINGS (CAN'T BE USED FOR CONDENSING GAS-FIRED APPLICATIONS) OR PVC PIPE AND FITTINGS WHERE ALLOWED. A P-TRAP SHALL BE PROVIDED AT DRAINS.
- DOMESTIC HOT WATER, HOT WATER RETURN, AND COLD WATER PIPING SHALL BE TYPE L OR K HARD TEMPERED COPPER PIPE WITH WROUGHT-COPPER FITTINGS USING 95-5 SOLDER. WHERE PIPING IS EXPOSED OUTSIDE PARTITIONS, USE TYPE L OR K HARD COPPER TUBING AND WROUGHT COPPER FITTINGS.

ROOF FLASHING: SANITARY VENT FLASHING: SEMCO 1100-3 OR 1100-5, WITH ONE-PIECE LEAD FLASHING AND COUNTERFLASHING SLEEVE.

PIPE SLEEVE: AT CONCRETE WALLS FOR FLOORS, ADJUST-TO-CREATE, PARAMOUNT, HOLE-OUT SPERZEL, CRETESLEEVE FLOOR SLEEVES SHALL EXTEND TO TOP OF CONCRETE CURBS FOR PIPING RISING THROUGH FLOORS. WALL SLEEVES SHALL BE FLUSH WITH FINISHED SURFACE. SLEEVES SHALL BE SIZED TO ALLOW ½ INCH CLEARANCE AROUND PIPE INSULATION. INSULATION AND COVERING SHALL BE CONTINUOUS THROUGH WALL AND FLOOR SLEEVES.

CLEANOUTS:

- FULL SIZE CLEANOUTS SHALL BE INSTALLED AT THE BASE OF EACH SOIL WASTE STACK. ALL OTHER CLEANOUTS SHALL BE INSTALLED WHERE SHOWN ON THE DRAWINGS AND WHERE REQUIRED BY STATE, LOCAL, OR NATIONAL PLUMBING CODES.
- ALL CLEANOUTS SHALL BE INSTALLED IN LOCATIONS EASILY ACCESSIBLE FOR RODDING.

PIPE INSULATION:

- ALL DOMESTIC HOT WATER, HOT WATER RECIRCULATION AND COLD WATER PIPING SHALL BE COVERED WITH PIPE INSULATION. INSULATION THICKNESS SHALL BE 3/4 INCH FOR COLD WATER AND 1 INCH FOR HOT WATER, ADD ADDITIONAL INSULATION AS NECESSARY TO PREVENT FREEZING.
- INSULATE ALL PIPING UNDER LAVATORIES ACCESSIBLE TO PHYSICALLY HANDICAPPED WITH HOT WATER SUPPLY AND "P" TRAP PREFABRICATED INSULATION, HANDI LAV GUARD.

PIPE HANGERS:

- HANGERS SHALL BE SUPPLIED WITH FACTORY INSTALLED ISOLATION AND DI-CHROMATE FINISH
- PIPE 2 INCHES AND SMALLER: GRINNEL F69, PIPE 2-1/2 INCH AND LARGER: GRINNEL F65. CONCRETE INSERTS: GRINNEL 281 AND 282. RISER CLAMPS FOR COPPER PIPING: GRINNEL 261P, PLASTIC COATED. RISER CLAMPS FOR OTHER PIPING: GRINNEL 261.
- HANGER RODS SHALL CONFORM TO THE FOLLOWING: PIPE SIZE 2 INCH AND SMALLER: 3/8 INCH RODS. PIPE SIZE 2-1/2 INCH AND 3 INCH: ½ INCH RODS. PIPE SIZE 3 INCH AND LARGER: 5/8 INCH RODS.

PLUMBING FIXTURES:

- FIXTURES SHALL BE THE WATER SAVING TYPE WITH MAXIMUM USAGE OF 3.6 GALLONS PER FLUSH FOR WATER CLOSETS, 2.5 GALLONS PER MINUTE FOR SHOWERS, 3.0 GALLONS PER MINUTE FOR SERVICE SINKS, 1.0 GALLON PER FLUSH FOR URINALS, 0.5 GALLONS PER MINUTE FOR PUBLIC LAVATORIES, 2.2 GALLONS PER MINUTE FOR PRIVATE LAVATORIES AND 2.2 GALLONS PER MINUTE FOR SINKS.
- ALL FIXTURES SHALL BE CAULKED TO THE FLOOR OR WALL WITH WATER RESISTANT WHITE BUTYL RUBBER CAULKING COMPOUND. TRIM FOR SHALL MATCH IN DESIGN. SUPPLY FAUCETS SHALL HAVE RENEWABLE SEATS AND BARRELS.

PLUMBING EQUIPMENT

VALVES:

MANUFACTURER: WATTS, MILWAUKEE, CRANE, KENNEDY, STOCKHAM, MISSON, GRINNELL, KEYSTONE, OR NIBCO

PIPE HANGERS & SUPPORTS:

MANUFACTURER: GRINNELL, ELCEN, KIN-LINE, UNI-STRUT, F&S, B-LINE, MICHIGAN, OR PIPING TECHNOLOGY & PRODUCTS

INSULATION:

MANUFACTURER: /CERTAINTED, MANVILLE, PITTSBURGH, ARMSTRONG, LSP PRODUCTS, OR OWENS-CORNING

PLUMBING SUPPLY STOPS:

MANUFACTURER: EASTMAN, CRANE, KOHLER, WOLVERINE, MCGUIRE, BRASSCRAFT, EBC, ZURN

PRESSURE REDUCING VALVES:

MANUFACTURER: WATTS SERIES 223, ZURN OR WILKINS

P-TRAPS:

MANUFACTURER: AMERICAN STANDARD, KOHLER, MCGUIRE, BRASSCRAFT, DEARBORN, EBC

EXECUTION

SURFACE CONDITIONS:

- INSPECTIONS: ALL PLUMBING SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNING AUTHORITIES. THE ORIGINAL DESIGN, AND REFERENCED STANDARDS.
- DISCREPANCIES:
 - IN THE EVENT OF DISCREPANCY, IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER.
 - DO NOT PROCEED WITH INSTALLATION IN AREAS OF DISCREPANCY UNTIL ALL SUCH DISCREPANCIES HAVE BEEN FULLY RESOLVED. INTERFERENCES BETWEEN INSTALLED WORK OF VARIOUS TRADES DUE TO LACK OF COORDINATION SHALL BE RESOLVED BY THE ARCHITECT/ENGINEER WHOSE DECISION IS FINAL. RELOCATES OR OFFSET ANY WORK AS REQUIRED TO ACCOMMODATE WORK OF OTHER TRADES AT NO EXTRA COST TO THE OWNER WHEN SO DIRECTED BY THE ARCHITECT.

VERIFICATION OF DIMENSIONS:

- SCALED AND FIGURED DIMENSIONS ARE APPROXIMATE ONLY. BEFORE PROCEEDING WITH WORK, CAREFULLY CHECK AND VERIFY DIMENSIONS AT SITE, AND BE RESPONSIBLE FOR PROPERLY FITTING EQUIPMENT AND MATERIALS TOGETHER AND TO THE STRUCTURE IN SPACES PROVIDED.
- DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND MANY OFFSET, BENDS, SPECIAL FITTINGS AND EXACT LOCATIONS ARE NOT INDICATED. CAREFULLY STUDY DRAWINGS AND PREMISES IN ORDER TO DETERMINE BEST METHODS, EXACT LOCATIONS, ROUTES, BUILDING OBSTRUCTIONS, AND INSTALL APPARATUS AND EQUIPMENT IN AVAILABLE LOCATIONS. INSTALL APPARATUS AND EQUIPMENT IN MANNER AND IN LOCATIONS TO AVOID OBSTRUCTIONS, PRESERVE HEADROOM, AND KEEP OPENINGS AND PASSAGEWAY CLEAR.

LOCATION AND SPACE REQUIREMENTS:

- CONTRACTOR SHALL FULLY INFORM HIMSELF REGARDING PECULIARITIES AND LIMITATION OF SPACES AVAILABLE FOR INSTALLATION OF WORK UNDER THIS DIVISION. DRAWINGS INDICATE DESIRED LOCATION AND ARRANGEMENT OF PIPING, EQUIPMENT AND OTHER ITEMS AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE. WORK SPECIFIED AND NOT CLEARLY DEFINED BY DRAWINGS SHALL BE INSTALLED AND ARRANGED IN A SATISFACTORY MANNER. IN ANY CASE AND AT ANY TIME A CHANGE IN LOCATION REQUIRED BY OBSTACLES OR THE INSTALLATION OF OTHER TRADES NOT SHOWN ON THE PLUMBING PLANS SHALL BE MADE BY CONTRACTOR WITHOUT ADDITIONAL CHARGE PROVIDED THE CHANGE IS ORDERED BEFORE WORK IS INSTALLED AN NO EXTRA MATERIALS ARE REQUIRED.
- VERIFY ALL SPACES, DIMENSIONS FOR ALL FIXTURES, EQUIPMENT, OR OWNER-FURNISHED EQUIPMENT AND EQUIPMENT FURNISHED UNDER OTHER SECTIONS.
- OBTAIN ALL NECESSARY ROUGH IN DATA AND DIMENSIONS FOR ALL FIXTURES, EQUIPMENT, OR OWNER-FURNISHED EQUIPMENT AND EQUIPMENT FURNISHED UNDER OTHER SECTIONS.
- MAINTAIN AMPLE HEADROOM CLEARANCES AND ACCESSIBILITY. MAINTAIN CEILING HEIGHTS.
- CONSTANTLY CHECK WORK OF OTHER TRADES TO PREVENT INTERFERENCE WITH THIS INSTALLATION.

CUTTING AND PATCHING: CUT WORK AND PATCH PER DIVISION 1 AS NECESSARY TO PROPERLY INSTALL NEW WORK. AS THE WORK PROGRESSES, COORDINATE NECESSARY OPENINGS, HOLES, CHASES, ETC., IN THEIR CORRECT LOCATION. IF THE REQUIRED OPENINGS, HOLES AND CHASES ARE NOT IN THEIR CORRECT LOCATIONS, MAKE THE NECESSARY CORRECTIONS AT NO COST TO THE OWNER. AVOID EXCESSIVE CUTTING AND DO NOT CUT STRUCTURAL MEMBERS WITHOUT THE CONSENT OF THE ARCHITECT. PATCHING BY GENERAL CONTRACTOR AT MECHANICAL PLUMBING OR FIRE PROTECTION CONTRACTOR'S EXPENSE. INCLUDE AS A PART OF HE WORK UNDER THIS CONTRACT ALL STRUCTURAL FRAMING REQUIRED BY PENETRATIONS THROUGH THE ROOF AND NECESSARY STEEL TO SUPPORT DUCTS AND PIPES BETWEEN STRUCTURAL STEEL UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

CLOSING IN OF UNFINISHED WORK: COVER NO WORK UNTIL INSPECTED, TESTED, AND APPROVED. WHERE WORK IS COVERED BEFORE INSPECTION AND TESTING, UNCOVER IT, AND AFTER TESTED, INSPECTED, AND APPROVED, RESTORE ALL WORK TO ORIGINAL PROPER CONDITION.

EXCAVATION AND BACKFILL:

- PERFORM ALL NECESSARY EXCAVATION, SHORING AND BACKFILLING REQUIRED FOR THE PROPER LAYING OF ALL PIPES AND CONDUITS INSIDE THE BUILDING AND PREMISES, AND OUTSIDE AS MAY BE NECESSARY. CONFORM TO DIVISION 2 REQUIREMENTS. REMOVE ALL EXCESS EXCAVATED MATERIAL FROM THE SITE OR DISPOSE OF ON SITE AS DIRECTED BY GENERAL CONTRACTOR.
- EXCAVATE ALL TRENCHES OPEN CUT, KEEP TRENCH BANKS AS NEARLY VERTICAL AS PRACTICABLE, AND SHEET AND BRACE TRENCHES WHERE REQUIRED FOR STABILITY AND SAFETY. EXCAVATE TRENCHES TRUE TO LINE AND MAKE BOTTOMS NOT LESS THAN 18" WIDE BUT NO WIDER THAN NECESSARY. PROVIDE AMPLE WORK ROOM. GRADE TRENCH BOTTOMS ACCURATELY TO PROVIDE UNIFORM BEARING AND SUPPORT FOR EACH SECTION OF PIPE ON UNDISTURBED SOIL ALONG ITS ENTIRE LENGTH.

C. PROVIDE BACKFILLING AND COMPACTION IN ACCORDANCE WITH REQUIREMENT OF DIVISION 2 AND UNDER DIRECTION OF THE ARCHITECT AND THE OWNER'S TESTING FIRM TO THE REQUIRED DENSITY. MAKE THE FIRST 2' OF FILL IN 6" LAYERS, EACH THOROUGHLY COMPACTED AS DIRECTED, AND FREE FROM ROCKS, LARGE CLODS OF EARTH, LEAVES, BRANCHES, AND DEBRIS. COMPACT THE REST OF THE BACKFILL TO PREVENT SETTLEMENT AS DIRECTED, USING IN THE BACKFILL NO ROCKS LARGER THAN 4" IN DIAMETER, AND USING NO ROCKS AT ALL IN THE TOP 12".

ACCESSIBILITY:

- INSTALL VALVES, DAMPERS, THERMOMETERS, GAUGES, TRAPS, CLEANOUTS, CONTROL DEVICES OR OTHER SPECIALTIES REQUIRING READING, ADJUSTMENT, INSPECTION, REPAIRS, REMOVAL, OR REPLACEMENT CONVENIENTLY AND ACCESSIBLY THROUGHOUT THE FINISHED BUILDING, WHERE ANY OF THESE DEVICES ARE SHOWN ON THE CONTRACT DRAWINGS TO BE INSTALLED ABOVE ANY INACCESSIBLE CEILINGS, THE MECHANICAL CONTRACTOR SHALL FURNISH ACCESS DOORS OR PANELS AS REQUIRED.
- ALL ACCESS DOORS OR PANELS IN WALLS AND CEILINGS REQUIRED FOR ACCESS TO CONTROL DEVICES, TRAPS, VALVES AND SIMILAR DEVICES ARE TO BE FURNISHED AND INSTALLED AS PART OF THE WORK UNDER THIS SECTION. PROVIDE TYPE AS SPECIED UNDER DIVISION 8. ACCESS PANELS TO MATCH RATINGS AND FINISH OF ADJACENT SURROUNDINGS.
- PROVIDE DUCTS WHICH PIERCE A FIRE SEPARATION WITH FIRE DAMPERS OF SAME FIRE RATING AS THE SEPARATION.
- REFER TO DRAWINGS AND "FINISH SCHEDULE" FOR TYPE OF WALL AND CEILING IN EACH AREA AND FOR RATED CONSTRUCTION.
- COORDINATE WORK OF VARIOUS SECTIONS TO LOCATED VALVES, TRAPS, AND DAMPERS WITH OTHERS TO AVOID UNNECESSARY DUPLICATION OF ACCESS DOORS.

ROOF FLASHINGS: FLASH AND COUNTERFLASH ALL PIPING, CONDUITS AND DUCTWORK PENETRATING ROOFING MEMBRANE WITH FLASHING PER ROOFING MANUFACTURER'S RECOMMENDATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILING OF DUCT AND PIPE PENETRATIONS THROUGH ROOF.

EQUIPMENT ROUGH-IN:

- ROUGH IN ALL EQUIPMENT AND FIXTURES AS DESIGNATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. THE DRAWINGS INDICATE ONLY THE APPROXIMATE LOCATION OF ROUGH-IN. THE EXACT ROUGH-IN LOCATIONS MUST BE DETERMINED FROM LARGE-SCALE CERTIFIED DRAWINGS. THE CONTRACTOR SHALL OBTAIN ALL CERTIFIED ROUGH-IN INFORMATION BEFORE PROGRESSING WITH ANY WORK FOR ROUGH-IN FINAL CONNECTIONS.
- BE RESPONSIBLE FOR PROVIDING ALL OUTLETS AND SERVICES OF PROPER SIZE AT THE REQUIRED LOCATIONS.
- MINOR CHANGES IN THE CONTRACT DRAWINGS SHALL BE ANTICIPATED AND PROVIDED FOR UNDER THIS DIVISION OF THE SPECIFICATIONS.
- ROUGH-IN ONLY (UNLESS OTHERWISE DESIGNATED ON THE DRAWINGS) SHALL INCLUDE THE FOLLOWING:
 - PLUMBING: PROVIDE ALL SERVICES DESIGNATED AND REQUIRED, INCLUDING WASTE AND WATER, VALVE AND CAP STUB-OUTS FOR WATER AND GAS. CAP ALL WASTE AND VENT OUTLETS.

OWNER-FURNISHED AND OTHER EQUIPMENT:

- ROUGH-IN ONLY FOR ALL OWNER-FURNISHED EQUIPMENT (SEE DIVISION 1) AND ALL EQUIPMENT FURNISHED UNDER OTHER SECTIONS OF THE SPECIFICATIONS, EXCEPT AS OTHERWISE SPECIFIED AND/OR NOTED ON THE DRAWINGS.
- PROVIDE ALL SERVICES DESIGNATED, VALVE AND CAP ALL PIPING, CAP ALL WASTE PIPING AND LEAVE IN A CLEAN ORDERLY MANNER.
- ROUGH-IN REQUIREMENTS SHALL BE AS OUTLINED IN THE PRECEDING PARAGRAPH TITLED "EQUIPMENT ROUGH-IN".

EQUIPMENT FINAL CONNECTIONS:

- PROVIDE ALL PIPING FINAL CONNECTIONS FOR ALL EQUIPMENT UNDER DIVISION 22 AS REQUIRED HEREIN SPECIFIED AND INDICATED ON THE DRAWINGS.
- PLUMBING: PROVIDE FINAL PLUMBING CONNECTIONS COMPLETE WITH SHUTOFF VALVES, RISERS, TRAPS, VACUUM BREAKERS AND INDIRECT WASTES FOR ALL EQUIPMENT FURNISHED AND INSTALLED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS, EXCEPT AS OTHERWISE DESIGNATED. INCLUDE UNDER THE PLUMBING SECTION OF THE SPECIFICATIONS ARE THE FINAL CONNECTIONS TO THE FOLLOWING:
 - MISCELLANEOUS EQUIPMENT SPECIFIED TO BE FURNISHED AND INSTALLED UNDER OTHER DIVISIONS OF THE SPECIFICATIONS.
 - COLD WATER MAKE-UP CONNECTIONS TO HYDRONIC EQUIPMENT,
 - KITCHEN EQUIPMENT, FURNISHED UNDER OTHER SECTIONS OF THE SPECIFICATIONS.

MACHINERY ACCESSORIES:

- APPLICATION: DO NOT INSTALL ANY EQUIPMENT IN AN APPLICATION NOT RECOMMENDED BY THE MANUFACTURER.
- INSTALLATION: ALIGN, LEVEL, AND ADJUST ALL EQUIPMENT FOR PROPER OPERATION. INSTALL SO CONNECTING AND DISCONNECTING OF PIPING AND ACCESSORIES CAN READILY BE DONE AND SO ALL PARTS ARE READILY ACCESSIBLE FOR INSPECTION, SERVICE, AND REPAIR. INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

PIPE AND EQUIPMENT SUPPORTS:

- WHERE SUPPORTS, FOUNDATIONS, STANDS, SUSPENDED PLATFORMS FOR MACHINERY, TANKS, OR OTHER EQUIPMENT ARE INDICATED OR SPECIFIED, PERFORM THE FOLLOWING:
 - LOCATE SUPPORT MEMBERS TO AVOID EQUIPMENT STRAINS AND INTERFERENCE WITH PIPING CONNECTIONS, TUBE PULLING OR OTHER MAINTENANCE OPERATIONS.
 - WHERE SADDLES ARE REQUIRED, USE CAST IRON OR WELDED STEEL SADDLES WITH CURVATURE TO FIT THE TANK SHELL.
 - MOUNT POWER-DRIVEN EQUIPMENT ON COMMON BASE WITH DRIVER.
- CONCRETE INSERTS: FURNISH AND INSTALL ALL CONCRETE INSERTS REQUIRED FOR ALL MATERIAL AND EQUIPMENT SPECIFIED AND/OR SHOWN ON THE DRAWINGS FOR DIVISION 22.
- CONCRETE FOUNDATIONS: WORK UNDER THIS SECTION INCLUDES COORDINATION OF CONSTRUCTION OF ALL CONCRETE FOUNDATIONS INDICED OR REQUIRED FOR EQUIPMENT SPECIFIED HEREIN OR IN OTHER SECTIONS UNDER DIVISION 22. MATERIAL AND WORKMANSHIP SHALL BE DESCRIBED UNDER DIVISION 3.
- GROUT UNDER ALL EQUIPMENT AFTER LEVELING, FILLING COMPLETELY THE SPACE BETWEEN MACHINERY BED PLATE AND FOUNDATION SURFACE AS SPECIFIED IN DIVISION 3. FINISH EXPOSED SURFACE OF GROUT FOR A NEAT APPEARANCE.
- FLOOR STANDS: WHERE EQUIPMENT IS MOUNTED STANDARD OR ON LEGS, CONSTRUCT OF STRUCTURAL STEEL OR STEEL PIPE AND FITTINGS, CROSS-BRACE AND FASTEN WITH FLANGES OR PLATES BOLTED TO FLOOR.
- CEILING OR WALL SUPPORTS: USE SUSPENDED PLATFORM, STRAP HANGERS, BRACKET OR SHELF, WHICHEVER IS MOST SUITABLE FOR EQUIPMENT AND LOCATION. CONSTRUCT OF STRUCTURAL STEEL MEMBERS, STEEL PLATES, RODS OR PIPE AS REQUIRED. CROSS-BRACE AND FASTEN TO BUILDING STRUCTURE OR INSERTS IN AN APPROVED MANNER.
- STEEL WORK: NEATLY FABRICATE AND ERECT STEEL WORK WITH BURRS AND WELDING SPATTER GROUND OFF. PAINT AFTER FABRICATION WITH A RUST-INHIBITIVE PRIMER.

HANGER AND SUPPORTS:

- HOLD HORIZONTAL PIPE RUNS FIRMLY IN PLACE USING APPROVED STEEL AND IRON HANGERS, SUPPORTS, AND/OR PIPE REST UNLESS OTHERWISE INDICATED. SUSPEND HANGER RODS FROM CONCRETE INSERTS OR FROM APPROVED BRACKETS, CLAMPS OR CLIPS. HANG PIPES INDIVIDUALLY OR IN GROUPS IF SUPPORTING STRUCTURE IS ADEQUATE TO SUPPORT WEIGHT OF PIPING AND FLUID. EXCEPT FOR BURIED PIPING, HANG OR SUPPORT PIPE RUNS SO THAT THEY MAY EXPAND OR CONTRACT FREELY WITHOUT STRAIN TO PIPE OR EQUIPMENT.
 - HORIZONTAL STEEL PIPING: PROVIDE HANGERS OR SUPPORTS EVERY 10 FT. EXCEPT EVERY 8 FT. FOR PIPING 1-1/4 INCH AND SMALLER.
 - HORIZONTAL COPPER TUBING: FOR 2 INCH DIAMETER AND OVER, PROVIDE HANGERS EVERY 10 FEET, FOR 1-1/2 INCH DIAMETER AND SMALLER EVERY 6 FEET.
 - HORIZONTAL CAST-IRON NO-HUB PIPING: PROVIDE HANGERS OR SUPPORTS AT EACH SIDE OF NO-HUB FITTINGS. PROVIDE ANTI-SEPARATION BRACING AT EACH 90 DEGREE CHANGE IN DIRECTION.
 - HORIZONTAL CAST IRON HUB AND SPIGOT PIPING: PROVIDE HANGERS OR SUPPORTS AT EACH HUB.
 - VERTICAL PIPING: SUPPORT AT FLOOR WITH IRON PIPE CLAMPS.

TEST:

- PERFORM TEST TO ARCHITECT'S SATISFACTION. MAKE TEST IN PRESENCE OF OWNER'S REPRESENTATIVE AND AT THE TIME SUITABLE TO HIM IF REQUESTED. FURNISH NECESSARY LABOR AND EQUIPMENT AND BEAR COST FOR TESTING. COST OF REPLACING AND/OR REPAIRING

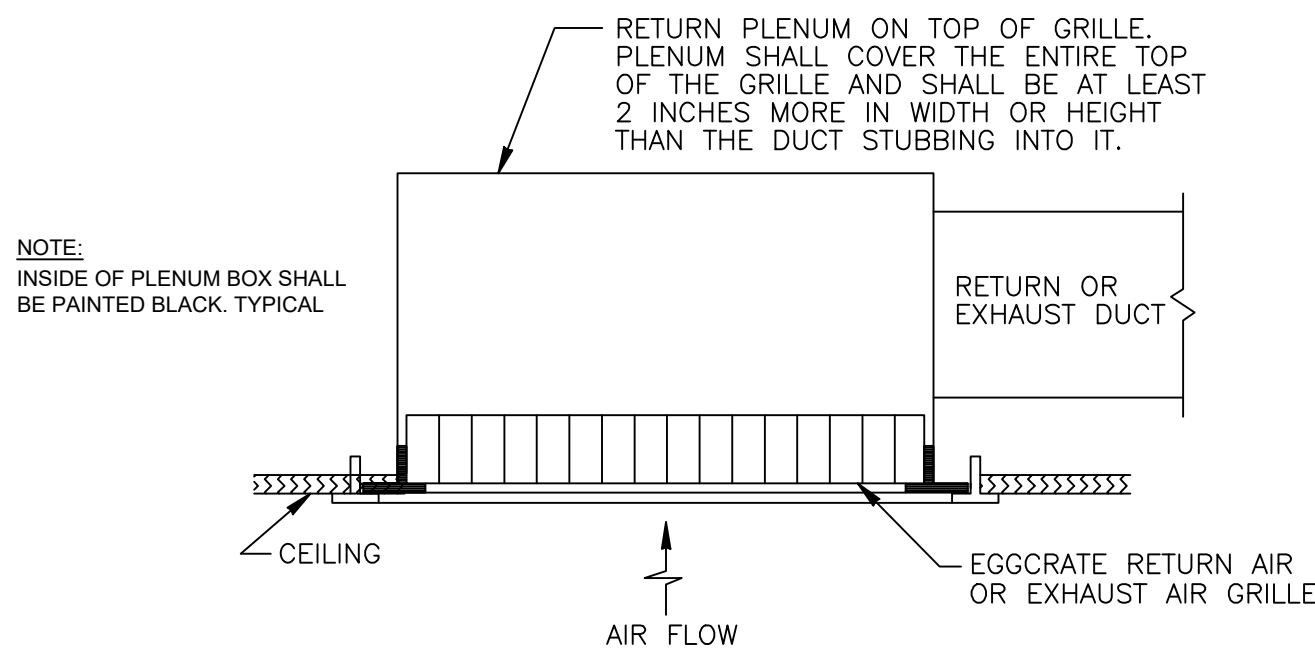
DAMAGE RESULTING THEREFORE SHALL BE BORNE BY THIS CONTRACTOR, SHOULD THE CONTRACTOR REFUSE OR NEGLECT TO MAKE TEST NECESSARY TO SATISFY THE ARCHITECT THAT REQUIREMENT OF SPECIFICATIONS AND DRAWINGS ARE MET; SUCH TESTS MAY BE MADE BY AN INDEPENDENT TESTING COMPANY AND THE CONTRACTOR CHARGED FOR ALL EXPENSES.

B. HYDROSTATIC TEST: MAKE BY COMPLETELY FILLING PIPING SYSTEM WITH WATER AND ELIMINATING ACCUMULATIONS OF AIR SO THAT LEAKAGE, NO MATTER HOW SMALL, WILL BE APPARENT ON TESTING GAUGE IMMEDIATELY. MAINTAIN PRESSURE UNTIL PIPE UNDER TEST HAS BEEN EXAMINED, BUT IN NO CASE LESS THAN 24 HOURS. TEST SYSTEM AT THE FOLLOWING PRESSURE:

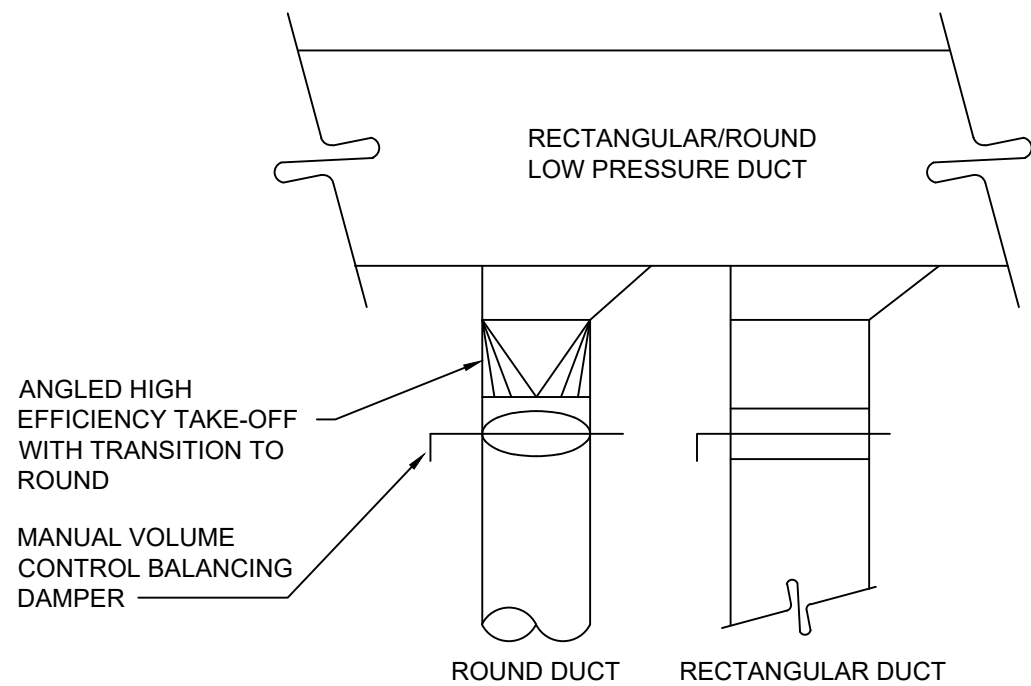
- SYSTEM:
 - DOMESTIC COLD WATER, TEST PRESSURE: 150 PSIG
 - DOMESTIC HOT WATER. TEST PRESSURE: 150 PSIG
- SANITARY DRAIN, WASTE, VENT SYSTEMS TEST: BEFORE

MECHANICAL LEGEND

HVAC	
SYMBOL	DESCRIPTION
	SUPPLY AIR DIFFUSER (4-WAY, 3-WAY, 2-WAY, 1-WAY)
	RETURN GRILLES
	EXHAUST GRILLES
	FLEXIBLE CONNECTION
	SUPPLY AIR DUCT (UP-, DOWN)
	RETURN AIR DUCT (UP-, DOWN)
	EXHAUST AIR DUCT (UP-, DOWN)
	ROUND DUCT DOWN
	ROUND DUCT UP
	DUCT TRANSITION
	DUCT CHANGE IN ELEVATION; R= RISE, D= DROP
	MANUAL VOLUME CONTROL BALANCE DAMPER
	MOTORIZED DAMPER
	ELBOW WITH TURNING VANES
	ELBOW ROUND
	INDICATES AIR FLOW DIRECTION
	SENSOR
	THERMOSTAT
	AIR DEVICE (X-1) / AIRFLOW (CFM)
	EQUIPMENT IDENTIFICATION
	INDICATED TAG OR SHEET NOTE
	DUCT SIZE BACKDRAFT DAMPER (ARROW INDICATES FLOW DIRECTION)



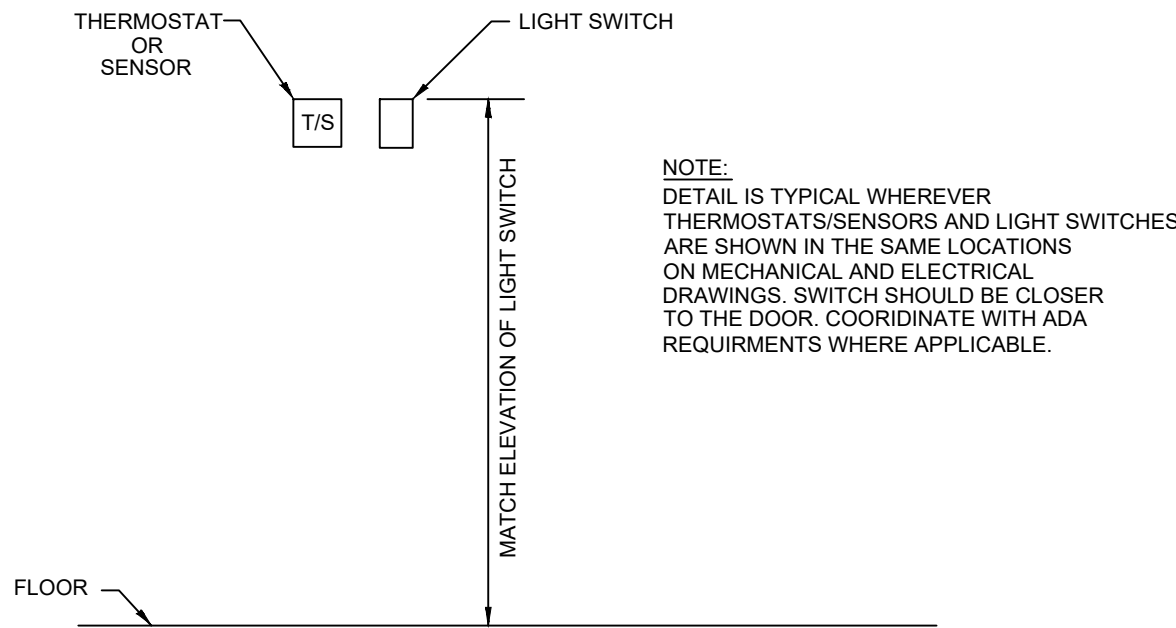
1 NON-FIRE RATED CEILING RETURN/EXHAUST GRILLE DETAIL
NOT TO SCALE



3 LOW PRESSURE BRANCH TAKEOFF DETAIL
NOT TO SCALE

ABBREVIATIONS

AHU-X	AIR HANDLING UNIT
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
CFM	CUBIC FEET PER MINUTE
EF-X	EXHAUST FAN
EG-X	EXHAUST GRILLE AIR DEVICE
EH-X	ELECTRIC HEATER
ERV-X	ENERGY RECOVERY VENTILATOR
ESP	EXTERNAL STATIC PRESSURE
GH-X	GRAVITY HOOD
HP	HORSEPOWER
HP-X	HEAT PUMP UNIT
KW	KILOWATT
L-X	LOUVER
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
OA-X	OUTSIDE AIR DEVICE
R-X	RETURN AIR DEVICE
S-X	SUPPLY AIR DEVICE
TG-X	TRANSFER GRILLE AIR DEVICE



2 THERMOSTAT/SENSOR MOUNTING DETAIL
NOT TO SCALE

HVAC CONTROL NOTES

ERV-1 & ERV-2

OCCUPIED MODE:
UNIT SHALL BE INTERLOCKED WITH ENTRY HALL/CORRIDOR LIGHTS AND SHALL OPERATE WHILE FACILITY IS OCCUPIED. INCLUDE PERCENTAGE TIMER CONTROL TO OPERATE 15 MINUTES DURING EVERY HOUR.

UNOCCUPIED MODE:
UNIT SHALL BE OFF.

ERV-3

OCCUPIED MODE:
UNIT SHALL OPERATE WHILE FACILITY IS OCCUPIED. UNIT SHALL VARY FAN SPEED BASED ON CO2 LEVELS IN SPACE (I.E. DEMAND CONTROL VENTILATION)

UNOCCUPIED MODE:
UNIT SHALL BE OFF.

SPLIT SYSTEMS

OCCUPIED MODE (COOLING):
INDOOR UNITS SHALL BE SET TO 72 DEGREES FAHRENHEIT 1 HOUR BEFORE FACILITY OPENS.

UNOCCUPIED MODE (COOLING):
INDOOR UNITS SHALL BE SET BACK TO 76 DEGREES FAHRENHEIT

OCCUPIED MODE (HEATING):
INDOOR UNITS SHALL BE SET TO 72 DEGREES FAHRENHEIT 1 HOUR BEFORE FACILITY OPENS

UNOCCUPIED MODE (HEATING):
INDOOR UNITS SHALL BE SET BACK TO 65 DEGREES FAHRENHEIT

NOTES

*COORDINATE ALL OCCUPIED/UNOCCUPIED SCHEDULES AND SET POINTS WITH OWNER.

MECHANICAL NOTES

- REFER TO THE CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- ALL MECHANICAL WORK SHALL BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR.
- ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRICAL RELATIONSHIPS OF DUCTWORK, PIPING, EQUIPMENT, AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, SEQUENCE, DEVICE, OPTION, FITTING, VALVE, OR COMPONENT. CONTRACTOR TO PROVIDE ANY ADDITIONAL DUCT OR PIPING OFFSETS AND/OR FITTINGS, INCLUDING DIVIDED DUCTS AND FLATTENED DUCTS, REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD.
- THE MECHANICAL CONTRACTOR SHALL COORDINATE ROUTING AND INSTALLATION OF MECHANICAL DUCTWORK, PIPING, AND EQUIPMENT WITH ALL OTHER DISCIPLINES AND TRADES INCLUDING BUT NOT LIMITED TO ARCHITECTURAL, PLUMBING, AND ELECTRICAL.
- REFER TO THE ENTIRE SET OF CONSTRUCTION DOCUMENTS FOR DETAILS OF INSTALLATION REQUIREMENTS. FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR COMPLETE, OPERATIONAL, AND FULLY FUNCTIONAL MECHANICAL SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO, THE KENTUCKY BUILDING CODE, ASHRAE, IMC, IECC, SMACNA, AND NFPA.
- THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTS, DIFFUSERS, ETC. SHALL BE COORDINATED WITH ALL OTHER TRADES. CEILING MOUNTED LIGHTING AND ELECTRICAL DEVICES TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL EQUIPMENT. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL DIFFUSER LOCATIONS.
- CONTRACTOR SHALL VISIT THE JOB SITE, FIELD VERIFY FIT, COORDINATE WITH OTHER TRADES, AND BECOME FAMILIAR WITH ALL PROJECT CONDITIONS PRIOR TO FABRICATING DUCTWORK, INSTALLING EQUIPMENT, ETC. NO ALLOWANCES OR CHANGE ORDERS WILL BE ALLOWED FOR LACK THEREOF.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND COSTS FOR ALL PERMITS, TESTING, AND INSPECTIONS.
- THE ENTIRE MECHANICAL INSTALLATION SHALL BE AS REQUIRED TO MAINTAIN FIRE/SMOKE RATINGS AND/OR "UL" ASSEMBLY RATINGS AS REQUIRED BY THE CONTRACT DOCUMENTS AND AS SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS. SEAL AROUND ALL PENETRATIONS THROUGH ALL FIRE/SMOKE SEPARATIONS AND/OR "UL" RATED ASSEMBLIES. COORDINATE ALL PENETRATIONS WITH THE CONSTRUCTION MANAGER AND/OR GENERAL CONTRACTOR. PROVIDE ADDITIONAL FIRE DAMPERS, SMOKE DETECTORS, AND SMOKE DAMPERS (INCLUSIVE OF WIRING) AS REQUIRED FOR A FULLY FUNCTIONAL AND CODE COMPLIANT SYSTEM.
- ALL DUCTWORK, PIPING, AND MECHANICAL EQUIPMENT SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE. NO OTHER TRADES, I.E. ELECTRICAL, CEILING, PLUMBING, ETC. SHALL BE SUSPENDED, HUNG, OR SUPPORTED FROM MECHANICAL DUCTWORK OR MECHANICAL PIPING.
- ALL EXTERIOR BUILDING PENETRATIONS MUST BE COORDINATED WITH THE ARCHITECT AND SHALL BE FLASHED AND SEALED WEATHER-TIGHT. ALL MATERIALS AND COLORS MUST BE PRE-APPROVED BY THE ARCHITECT. NEW OPENINGS AND/OR PENETRATIONS FOR MECHANICAL ITEMS SHALL BE CUT, SLEEVED, ETC. BY THE MECHANICAL CONTRACTOR.
- ROUTE DUCTWORK AS HIGH AS POSSIBLE TO FACILITATE ACCESS TO ABOVE CEILING SPACE. COORDINATE ROUTING WITH OTHER SERVICES AND TRADES. PROVIDE ADDITIONAL DUCTWORK, OFFSETS, ETC. TO ACCOMMODATE FIELD CONDITIONS AS REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM AT NO ADDITIONAL COST. ADDITIONAL OFFSETS REQUIRE APPROVAL FROM THE ENGINEER. ROUTE DUCTWORK BETWEEN JOISTS WHERE POSSIBLE.
- ALL AIR DEVICES LOCATED ABOVE GYPBOARD OR HARD CEILINGS SHALL HAVE ACCESSIBLE BALANCING DAMPERS.
- ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- PROVIDE AND INSTALL DUCT ACCESS DOORS FOR INSPECTION OF ALL INSTALLED FIRE DAMPERS AS DIRECTED BY SMACNA HVAC CONSTRUCTION STANDARDS.
- MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0". ALL FLEXIBLE DUCT SHALL CONFORM TO THE REQUIREMENTS OF UL 181 FLEXIBLE AIR DUCTS. SUPPORT TO ELIMINATE SAGGING AND KINKING. INSULATED FLEXIBLE DUCTS SHALL MEET MINIMUM R-VALUES REQUIRED BY ENERGY CODE.
- ALL HVAC EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. UTILIZE FACTORY FILTERS DURING CONSTRUCTION.
- THE MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNERS REPRESENTATIVES WITH COMPLETE NEBB/ABC BALANCE REPORT. THE MECHANICAL CONTRACTOR SHALL PROVIDE AS MANY ADDITIONAL SITE VISITS BY THE LICENSED TAB CONTRACTOR AS REQUIRED BY THE ENGINEER FOR A COMPLETE AND FUNCTIONING AND APPROVED SYSTEM IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- COMMISSIONING REPORT SHALL BE REQUIRED TO ENSURE PROPER OPERATION OF ALL HVAC SYSTEM(S) INSTALLED.
- ALL RECTANGULAR 90 DEG. AND 45 DEG. ELBOWS SHALL HAVE TURNING VANES.
- PROVIDE A MANUAL VOLUME DAMPER AT ALL BRANCH TAKE-OFFS ON SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK AT NO ADDITIONAL COST. PROVIDE A MAIN RETURN DAMPER UPSTREAM OF OUTSIDE AIR CONNECTIONS IN RETURN AIR PLENUM DESIGNS. COORDINATE ADDITIONAL MANUAL

- VOLUME DAMPER LOCATIONS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM WITH THE ENGINEER PRIOR TO ORDER, FABRICATION, OR INSTALLATION.
- ALL DUCT DIMENSIONS SHOWN ARE INTERIOR "CLEAR" DUCT DIMENSIONS.
 - MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN OUTDOOR AIR INTAKES AND EXHAUST, PLUMBING VENTS, ETC. AND/OR AS REQUIRED BY IMC, WHICHEVER IS MORE STRINGENT.
 - ALL CONTROL WIRING AND CONDUIT SHALL COMPLY WITH NEC. ANY WIRING ROUTED IN EXPOSED/OPEN CEILING AREAS, ABOVE INACCESSIBLE CEILINGS, OR THROUGH WALLS SHALL BE INSTALLED IN CONDUIT.
 - MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND DRAWINGS FOR CONNECTIONS TO ALL HVAC EQUIPMENT.
 - STRUCTURAL MEMBERS SHALL NOT BE CUT OR COMPROMISED IN ANY WAY.
 - DO NOT BLOCK ACCESS TO HVAC OR ELECTRICAL EQUIPMENT. DO NOT INSTALL PIPING, DUCTWORK, OR EQUIPMENT OVER ELECTRICAL PANELS/SWITCHGEAR OR THE 42" CLEARANCE IN FRONT OF THESE ELECTRICAL ITEMS. COORDINATE ADDITIONAL REQUIREMENTS WITH NEC.
 - MAINTAIN CLEARANCES AROUND ALL HVAC EQUIPMENT, DEVICES, CONTROLLERS, ETC. PER MANUFACTURER'S RECOMMENDATIONS.



HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE		REVISION		BY	
PROJECT NO. 2124-07					
DESIGNED BY	CE	DRAWN BY	CE	CHECKED BY	CE
REVIEWED BY	CE	DATE	AUGUST 2024	SCALE	AS NOTED

**Engineers
Architects
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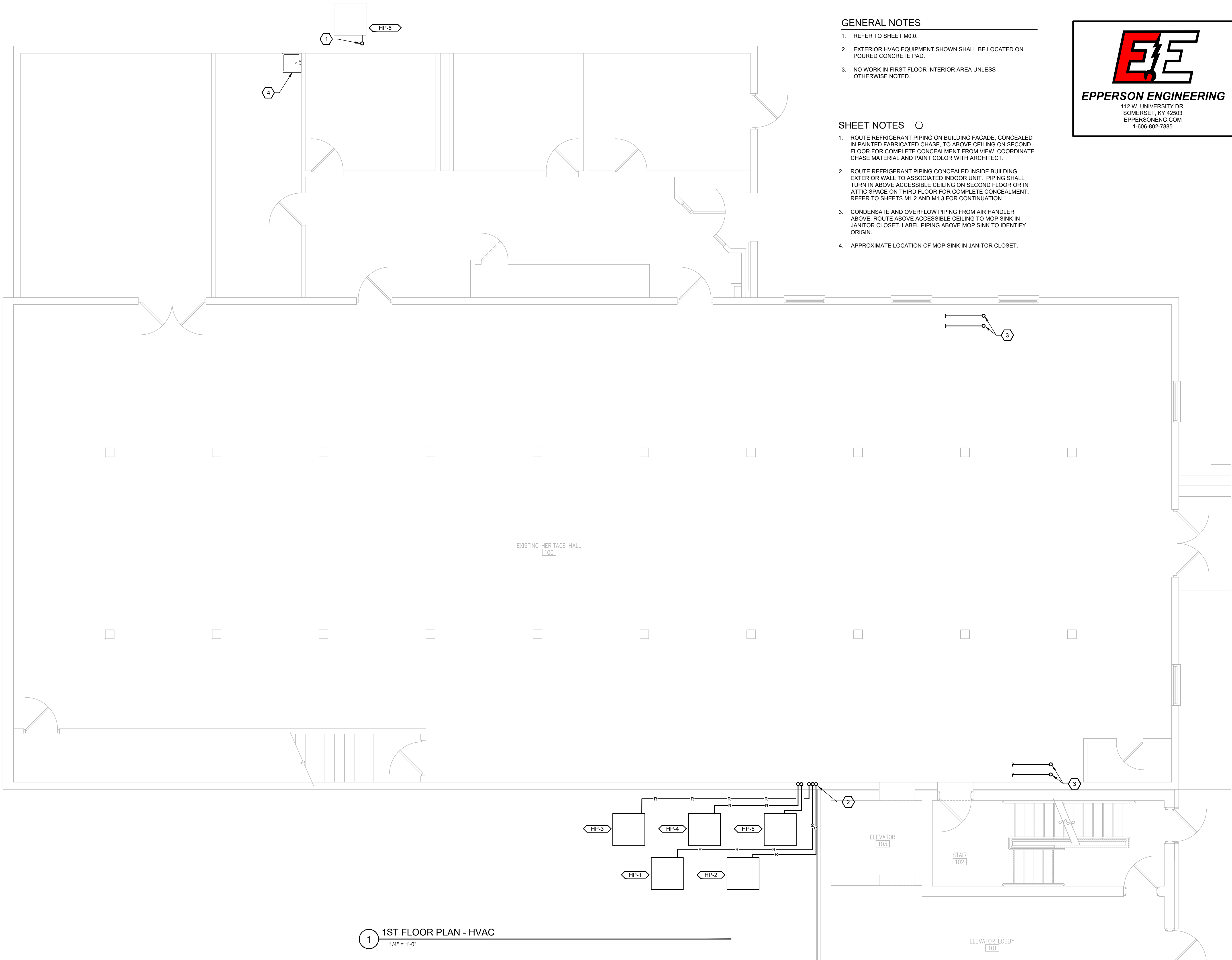
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DRAWING NO.

M0.0



GENERAL NOTES

1. REFER TO SHEET M0.0.
2. EXTERIOR HVAC EQUIPMENT SHOWN SHALL BE LOCATED ON POURED CONCRETE PAD.
3. NO WORK IN FIRST FLOOR INTERIOR AREA UNLESS OTHERWISE NOTED.

SHEET NOTES ○

1. ROUTE REFRIGERANT PIPING ON BUILDING FACADE, CONCEALED IN PAINTED FABRICATED CHASE, TO ABOVE CEILING ON SECOND FLOOR FOR COMPLETE CONCEALMENT FROM VIEW. COORDINATE CHASE MATERIAL AND PAINT COLOR WITH ARCHITECT.
2. ROUTE REFRIGERANT PIPING CONCEALED INSIDE BUILDING EXTERIOR WALL TO ASSOCIATED INDOOR UNIT. PIPING SHALL TURN IN ABOVE ACCESSIBLE CEILING ON SECOND FLOOR OR IN ATTIC SPACE ON THIRD FLOOR FOR COMPLETE CONCEALMENT, REFER TO SHEETS M1.2 AND M1.3 FOR CONTINUATION.
3. CONDENSATE AND OVERFLOW PIPING FROM AIR HANDLER ABOVE. ROUTE ABOVE ACCESSIBLE CEILING TO MOP SINK IN JANITOR CLOSET. LABEL PIPING ABOVE MOP SINK TO IDENTIFY ORIGIN.
4. APPROXIMATE LOCATION OF MOP SINK IN JANITOR CLOSET.



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DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE	REVISION	BY

USE ONLY FOR DESIGN PURPOSES. THE DESIGNER ASSUMES NO LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY.

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PROJECT NO. 2124-07	DESIGNED BY CE	DRAWN BY CE	CHECKED BY CE	REVIEWED BY CE	DATE AUGUST 2024	SCALE AS NOTED

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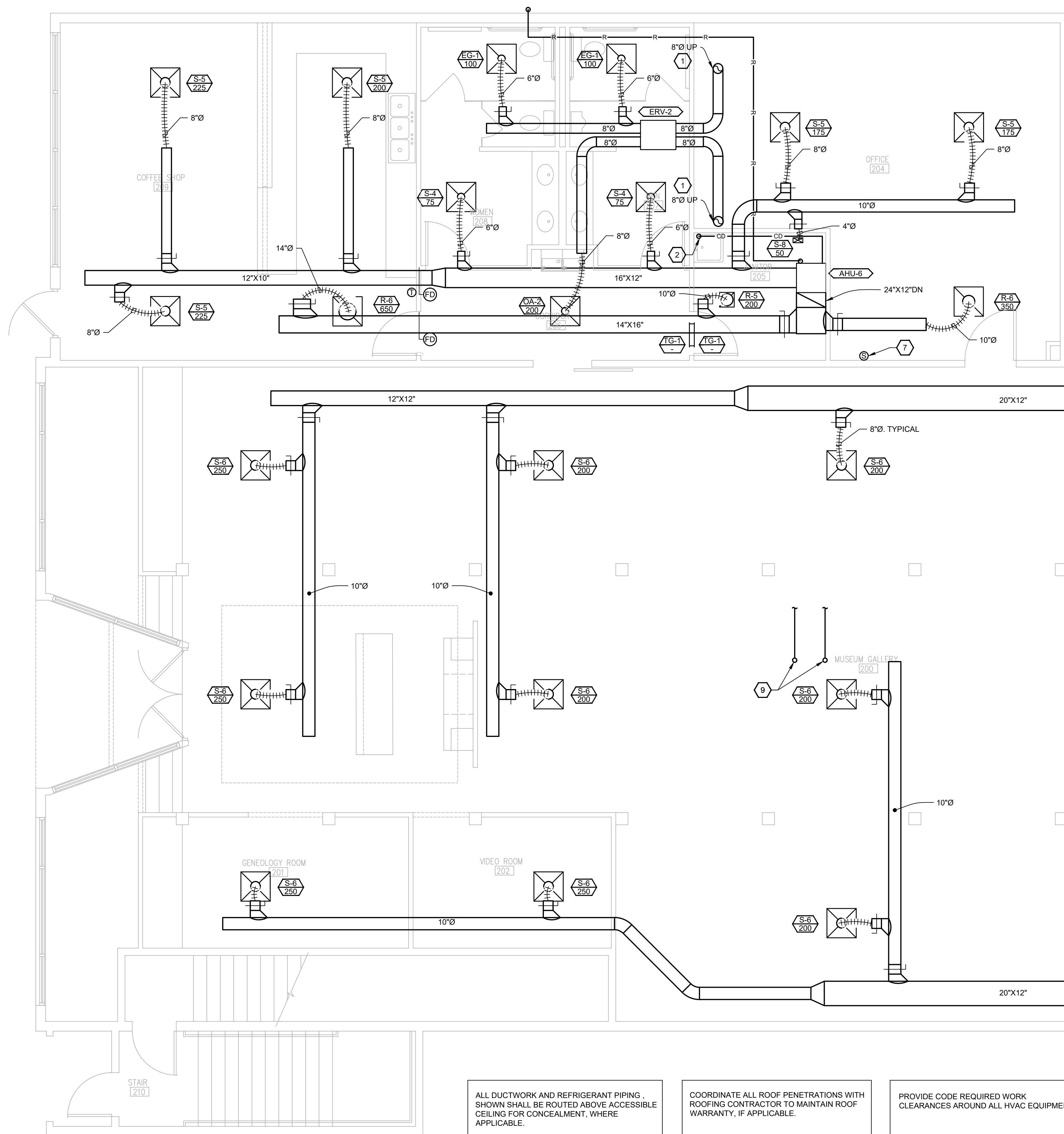
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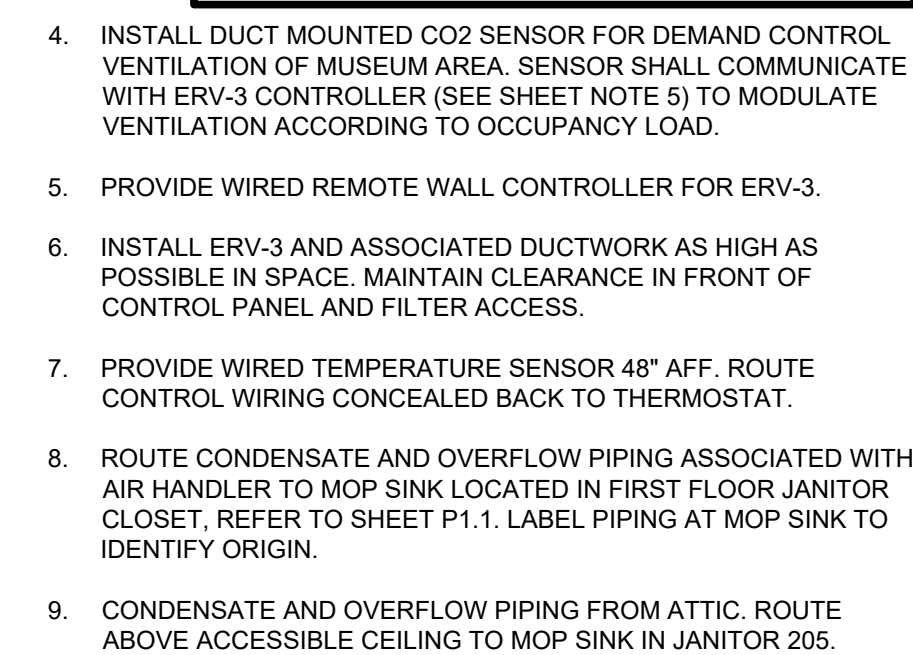
M1.1

1 1ST FLOOR PLAN - HVAC
1/4" = 1'-0"



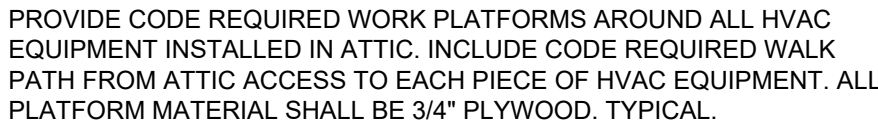
PROVIDE CODE REQUIRED WORK
CLEARANCES AROUND ALL HVAC EQUIPMENT.

- ## SHEET NOTES
-
1. ROUTE 8"Ø DUCT UP TO BLACK HOODED ROOF CAP WITH INTEGRAL INSECT SCREEN AND BACKDRAFT DAMPER. COORDINATE PENETRATION WITH ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY, IF APPLICABLE.
 2. ROUTE CONDENSATE PIPING ALONG WALL TO MOP SINK.
 3. PROVIDE AND INSTALL SIDEWALL LOUVER IN FRAMED OPENING PER MANUFACTURER'S INSTRUCTIONS. PROVIDE ALL MATERIAL AND COMPONENTS TO SEAL WATER TIGHT.



DRAWING NO.

M1.2



HEAT PUMP SPLIT SYSTEM SCHEDULE																	
MARK	MANUFACTURER	TYPE	MODEL	TONNAGE	COOLING		HEATING			EFFICIENCY				ELECTRICAL			NOTES
					COOLING STAGES	COOLING CAPACITY (MBH)	HEATING STAGES	HEATING CAPACITY (MBH)	AUXILIARY ELECTRIC HEAT (KBTU)	SEER2	EER2	HSPF2	AHRI #	V/Ø/Hz	MCA	MOCP	
OUTDOOR UNIT																	
HP-1	TRANE	HEAT PUMP	5TWV0X24A1	2	VARIABLE	21.6	VARIABLE	22.8	*	22	11.7	10	216439976	240/1/60	19	30	1
HP-2	TRANE	HEAT PUMP	5TWV0X24A1	2	VARIABLE	21.6	VARIABLE	22.8	*	22	11.7	10	216439976	240/1/60	19	30	1
HP-3	TRANE	HEAT PUMP	5TWV0X36A1	3	VARIABLE	36.2	VARIABLE	38.5	*	21.6	13	10.5	217734494	208/1/60	26	40	1
HP-4	TRANE	HEAT PUMP	5TWV0X48A1	4	VARIABLE	46	VARIABLE	47	*	20.6	12	10	216440336	208/1/60	32	50	1,2
HP-5	TRANE	HEAT PUMP	5TWV0X48A1	4	VARIABLE	46	VARIABLE	47	*	20.6	12	10	216440336	208/1/60	32	50	1,2
HP-6	TRANE	HEAT PUMP	5TWV0X36A1	3	VARIABLE	36.2	VARIABLE	38.5	*	21.6	13	10.5	217734494	208/1/60	26	40	1,2
INDOOR UNIT																	
AHU-1	TRANE	AIR HANDLER	5TEMCB03AV31	-	-	*	2	*	7.68	*	*	*	*	240/1/60	45	45	4,5,7,8,9,10,11
AHU-2	TRANE	AIR HANDLER	5TEMCB03AV31	-	-	*	2	*	7.68	*	*	*	*	240/1/60	45	45	4,5,7,8,9,10,11
AHU-3	TRANE	AIR HANDLER	5TEMCD06AV41	-	-	*	2	*	14.4	*	*	*	*	208/1/60	48 22	50 25	4,5,7,8,9,10,11,12
AHU-4	TRANE	AIR HANDLER	5TEMCD07AV51	-	-	*	2	*	14.4	*	*	*	*	208/1/60	48 22	50 25	3,4,6,7,8,9,10,11
AHU-5	TRANE	AIR HANDLER	5TEMCD07AV51	-	-	*	2	*	14.4	*	*	*	*	208/1/60	48 22	50 25	3,4,6,7,8,9,10,11
AHU-6	TRANE	AIR HANDLER	5TEMCD06AV41	-	-	*	2	*	14.4	*	*	*	*	208/1/60	48 22	50 25	3,4,6,7,8,9,10,11,12
NOTES: 1. INSTALL ON POURED CONCRETE PAD WITH PUMP-UP FEET BELOW UNIT; UNIT SHALL BE RAISED MINIMUM 4" ABOVE CONCRETE PAD 2. PROVIDE WITH LOW AMBIENT COOLING 3. MOUNT VERTICAL ON MINIMUM 18" TALL STAND 4. LOCATE IN OVERFLOW PAN MATCHING EQUIPMENT FOOTPRINT. INSTALL FLOAT SWITCH IN PAN (ACTIVATION SHALL TURN UNIT OFF) 5. MOUNT HORIZONTAL ON PANEL RAILS BETWEEN AIR HANDLER AND OVERFLOW PAN. 6. INTEGRAL 1" FILTER RACK; PROVIDE 1" DISPOSABLE MERV-8 FILTER 7. PROVIDE WITH ELECTRONIC CONDENSATE SAFETY TRAP (ACTIVATION SHALL TURN UNIT OFF). 8. PROVIDE WITH WIRED THERMOSTAT IN CLEAR, VENTED, LOCKABLE COVER BOX 9. PROVIDE WITH DUCT MOUNTED UV LIGHT (REME HALO OR EQUAL). INSTALL AT AIR HANDLER PER MANUFACTURER'S INSTRUCTIONS 10. PROVIDE WITH FACTORY MOUNTED INTEGRAL DISCONNECT SWITCH 11. HEAT KIT OPERATION SHALL HAVE 2 CONTROL STAGES - STAGED INCREMENTALLY 12. PROVIDE REMOTE SENSOR AS INDICATED ON PLANS FOR ZONE TEMPERATURE AVERAGING; ROUTE CONTROL WIRING TO ASSOCIATED THERMOSTAT																	
WARRANTY: 1-YEAR PART, 1-YEAR LABOR, 5-YEAR COMPRESSOR																	
* = SEE ASSOCIATED HEAT PUMP / AIR HANDLER FOR <u>PAIRED</u> SPLIT SYSTEM RATING																	
OTHER ACCEPTABLE MANUFACTURERS: CARRIER, DAIKIN																	

INLINE EXHAUST FAN SCHEDULE													
MARK	MANUFACTURER	MODEL	TYPE	CFM	ESP (IN H2O)	SONES	DRIVE TYPE	MAX RPM	ELECTRICAL				NOTES
									V/Ø/Hz	HP	NAMEPLATE AMPS	MOCP	
EF-1	GREENHECK	CSP-A200	INLINE	150	0.3	<1	DIRECT	825	115/1/60	FRAC.	0.5	15	ALL
EF-2	GREENHECK	CSP-A200	INLINE	150	0.3	<1	DIRECT	825	115/1/60	FRAC.	0.5	15	ALL
EF-3	GREENHECK	CSP-A200	INLINE	150	0.3	<1	DIRECT	825	115/1/60	FRAC.	0.5	15	ALL
EF-4	GREENHECK	CSP-A200	INLINE	150	0.3	<1	DIRECT	825	115/1/60	FRAC.	0.5	15	ALL
NOTES: 1. PROVIDE WITH FACTORY MOUNTED UNIT DISCONNECT 2. PROVIDE WITH FACTORY MOUNTED SPEED CONTROL. ADJUST AS NECESSARY TO OBTAIN CFM INDICATED. 3. PROVIDE WITH INTEGRAL BACKDRAFT DAMPER. 4. ROUTE EXHAUST DUCT TO ROOF CAP WITH INTEGRAL BACKDRAFT DAMPER AND INSECT SCREEN (SEE DRAWINGS) 5. SUPPORT FROM THE STRUCTURE, INCLUDE VIBRATION ISOLATORS BELOW FAN 6. INTERLOCK OPERATION WITH LIGHTING IN ROOM (FAN SHALL OPERATE WITH LIGHTS). COORDINATE WITH ELECTRICAL CONTRACTOR. 7. PROVIDE ROUND DUCT CONNECTOR.													
OTHER ACCEPTABLE MANUFACTURERS INCLUDE: COOK, PANASONIC													

HVAC INSULATION SCHEDULE			
TYPE	LOCATION	INSULATION R-VALUE	INSULATION MATERIAL
REFRIGERANT PIPING	INDOORS	3/4" THICK	ARMAFLEX
REFRIGERANT PIPING	OUTDOORS	3/4" THICK	ARMAFLEX (WITH UV PROTECTIVE COATING)
DUCTWORK	CONCEALED INDOORS	R-4.2	FOIL BACK FIBERGLASS WRAP
DUCTWORK	CONCEALED (ATTIC)	R-8	FOIL BACK FIBERGLASS WRAP
OUTSIDE AIR DUCTWORK	INDOORS	R-8	FOIL BACK FIBERGLASS WRAP
CONDENSATE PIPE	INDOORS	3/4" THICK	ARMAFLEX



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Owner Review

PROGRESS SET

5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE:

REVISION

BY

PROJECT NO. 2124-07

DESIGNED BY: CE

DRAWN BY: CE

CHECKED BY: CE

REVIEWED BY: CE

DATE: AUGUST 2024

SCALE: AS NOTED

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DRAWING NO.

M6.1

LOUVER SCHEDULE											
MARK	MANUFACTURER	MODEL	INTAKE/ EXHAUST	SIZE (INCHES)			CFM	PRESSURE DROP (IN)	FREE AREA (SQ FT)	VELOCITY (FPM)	NOTES
				WIDTH	HEIGHT	DEPTH					
L-1	GREENHECK	ESD	INTAKE	24	24	6	600	0.05	1.77	400	ALL
L-2	GREENHECK	ESD	EXHAUST	24	24	6	600	0.05	1.77	400	ALL
NOTES: 1. COLOR SELECTED BY ARCHITECT 2. ALUMINUM CONSTRUCTION 3. DRAINABLE BLADES 4. PROVIDE WITH INSECT SCREEN 5. PROVIDE WITH FACTORY FLANGE FRAME 6. PROVIDE WITH MOUNTING ANGLES AS NEEDED 7. PROVIDE PLENUM BOX BEHIND LOUVER WITH ALUMINUM BACKDRAFT DAMPER (SEE PLANS) FOR DUCT STUB DOWN FROM ABOVE OTHER ACCEPTABLE MANUFACTURERS INCLUDE: UNITED ENERTECH, RUSKIN											

ERV SCHEDULE (MEDIUM CAPACITY)											
MARK	MANUFACTURER	MODEL	DIMENSIONS (L X W X H)	WEIGHT (LBS)	INTAKE/EXHAUST CFM		ENTHALPY EXCHANGE EFFECTIVENESS @ MAX CFM	ELECTRICAL			NOTES
					MIN	MAX		V/Ø/Hz	MCA	MOCP	
ERV-3	MITSUBISHI ELECTRIC	LGH-F600RVX2-E	50.5" X 51.5" X 16"	123	150	600	65%	208/1/60	4.15	15	ALL

NOTES:

1. TWO ECM BLOWERS; EACH WITH FOUR FAN SPEEDS (150, 300, 450, 600)

2. PROVIDE WITH WIRED STAND-ALONE REMOTE CONTROLLER (PZ-62DR-EA) MOUNTED IN CLEAR KEYED LOCKBOX

3. PROVIDE WITH DUCT MOUNTED CO2 SENSOR (PZ-70CSB-E) FOR DEMAND CONTROL VENTILATION CONTROL (SENSOR POWERED FROM ERV). PROGRAM ASSOCIATED REMOTE CONTROLLER TO VARY OPERATING CFM BASED ON LOWER/UPPER LIMITS OF CO2 CONCENTRATION IN SPACE (400PPM - 1100PPM)

4. PROVIDE WITH MERV 14 FILTERS (PZ-100RF-E)

5. MOUNT/SUSPEND HORIZONTALLY FROM STRUCTURE ABOVE (AS HIGH AS POSSIBLE IN SPACE), INCLUDE VIBRATION ISOLATORS BELOW EQUIPMENT

6. AUTOMATIC DEFROST CONTROL

7. ERV SHALL NOT OPERATE WHEN FACILITY IS UNOCCUPIED. PROGRAM ASSOCIATED REMOTE CONTROLLER - COORDINATE SCHEDULE WITH OWNER

OTHER ACCEPTABLE MANUFACTURERS INCLUDE: GREENHECK, DAIKIN



HISTORIC STEARNS DOWNTOWN REVITALIZATION STEARNS, KENTUCKY

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M6.2

MECHANICAL SPECIFICATIONS

1. GENERAL REQUIREMENTS:
- 1.1. PROVISIONS OF THIS SECTION APPLY TO ALL WORK SPECIFIED IN ALL SECTIONS UNDER DIVISION 23.

1.2. IN ADDITION, WORK IN DIVISION 23 IS GOVERNED BY THE PROVISIONS OF THE BIDDING REQUIREMENTS, CONTRACT FORMS, GENERAL CONDITIONS, AND ALL SECTIONS UNDER DIVISION 1, GENERAL REQUIREMENTS.

1.3. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK EQUIPMENT, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.

1.4. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH CURRENT INTERNATIONAL MECHANICAL CODE, ALL LOCAL CODES, AND ALL OTHER REGULATION GOVERNING THE SCOPE OF WORK IN THIS PROJECT.

1.5. UNLESS OTHERWISE SPECIFIED, ALL EQUIPMENT AND MATERIALS MUST BE NEW AND OF THE QUALITY SPECIFIED. THE WORKMANSHIP SHALL BE OF A QUALITY AND NEATNESS THAT IS ACCEPTABLE TO THE ARCHITECT, ENGINEER, AND OWNER, AND IS GREATER THAN OR EQUAL TO STANDARDS OF THE TRADES. WORK NOT INSTALLED IN THIS MANNER SHALL BE REPAIRED, REMOVED, REPLACED, OR OTHERWISE REMEDIED AS DIRECTED BY THE ARCHITECT / ENGINEER AT THE CONTRACTOR'S EXPENSE.

1.6. THE MECHANICAL CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE WORK OF ALL OTHER TRADES, GENERAL TYPE CONSTRUCTION, AND THE RELATIONSHIP OF THE CONTRACTOR'S WORK TO OTHER SECTIONS AND TRADES.
2. EXAMINATION OF PREMISES:
- 2.1. MECHANICAL CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE THE CONDITIONS THAT MAY AFFECT THE WORK.

2.2. NO ALLOWANCE SHALL BE MADE DUE TO CONTRACTOR'S FAILURE TO MAKE SUCH EXAMINATION.

2.3. DO NOT SCALE DRAWINGS. FIELD VERIFY EXACT DIMENSIONS AND MEASUREMENTS
3. MECHANICAL CONTRACTOR
- 3.1. THE MECHANICAL CONTRACTOR/COMPANY SHALL BE LICENSED AND CERTIFIED IN THE STATE / LOCATION OF THE PROJECT FOR A MINIMUM OF TWO YEARS.

3.2. THE MECHANICAL CONTRACTOR/COMPANY SHALL HAVE A MINIMUM OF FIVE YEARS EXPERIENCE INSTALLING COMMERCIAL MECHANICAL SYSTEMS SIMILAR TO THOSE DESCRIBED IN THESE SPECIFICATIONS AND PROVIDE A LIST OF PREVIOUS COMPANY PROJECTS, INCLUDING NAME OF PROJECT AND CONTACT NAMES AND PHONE NUMBERS FOR REFERENCE.
4. PERMITS, INSPECTIONS, AND FEES
- 4.1. MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY ALL FEES ASSOCIATED WITH OBTAINING ALL PERMITS, INSPECTIONS, AND APPROVALS AS REQUIRED TO COMPLETE THIS PROJECT.

4.2. PROVIDE COPIES OF PERMITS TO THE GENERAL CONTRACTOR

4.3. SUBMIT COPIES OF INSPECTION RESULTS TO THE ENGINEER AND INCLUDE COPIES OF PASSED INSPECTIONS IN THE OPERATION AND MAINTENANCE MANUALS SUBMITTED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT.
5. WARRANTY AND GUARANTEE
- 5.1. MECHANICAL CONTRACTOR SHALL WARRANTY AND GUARANTEE FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION ALL EQUIPMENT AND MATERIAL INSTALLED AND/OR FURNISHED BY THE MECHANICAL CONTRACTOR. DEFECTS WHICH APPEAR DURING THAT ONE YEAR PERIOD SHALL BE CORRECTED AT THE EXPENSE OF MECHANICAL CONTRACTOR.

5.2. EQUIPMENT STANDARD WARRANTIES SHALL BE: 5 YEAR COMPRESSOR WARRANTY AND 1 YEAR PARTS WARRANTY, UNLESS OTHERWISE SPECIFIED.
6. DRAWINGS AND SPECIFICATIONS
- 6.1. CONTRACTOR SHALL REVIEW THE COMPLETE SET OF DRAWINGS, AS WORK PERTAINING TO THE MECHANICAL CONTRACTOR AND THAT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR MAY BE SHOWN ON OTHER DRAWING SHEETS OR IN OTHER SPECIFICATION SECTIONS.

6.2. IF ANY DISCREPANCIES OCCUR BETWEEN THE ACCOMPANYING DRAWINGS AND THE ASSOCIATED SPECIFICATIONS ASSUME THE MOST EXPENSIVE FOR BIDDING PURPOSES AND REPORT SUCH DISCREPANCIES TO THE ARCHITECT / ENGINEER IN A TIMELY MANNER TO ALLOW A WORKABLE SOLUTION TO BE FOUND.

6.3. NO ALLOWANCE OR EXTRA PAYMENT SHALL BE GIVEN FOR RELOCATION OF PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT NOT INSTALLED PER THESE SPECIFICATIONS AND INSTRUCTIONS OR INSTALLED IN A MANNER NOT CONFORMING TO THE MANUFACTURER'S REQUIREMENTS OR SUGGESTIONS.
7. SUBMITTALS AND SHOP DRAWINGS:
- 7.1. SUBMITTALS AND SHOP DRAWINGS SHALL BE SUBMITTED BY THE MECHANICAL CONTRACTOR WITHIN 15 DAYS AFTER AWARDED THE PROJECT FOR ENGINEER REVIEW.

7.2. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR ALL HVAC EQUIPMENT, FANS, CONTROLS, HANGERS, INSULATION, GRDs, DUCTWORK, AND OTHER STANDARD ITEMS AS REQUIRED TO COMPILE A COMPLETE SUBMITTAL ON THIS PROJECT.

7.3. ALL EQUIPMENT AND MATERIAL SUBMITTED SHALL BE AS SPECIFIED ON THE DRAWINGS OR EQUAL AS APPROVED BY THE ENGINEER.
8. OPERATION AND MAINTENANCE MANUALS
- 8.1. UPON COMPLETION OF THE PROJECT, SUBMIT PHYSICAL SETS IN BOUND BOOKLET FORM OF ALL WRITTEN OPERATING INSTRUCTIONS AND MAINTENANCE REQUIREMENTS FOR ALL HVAC EQUIPMENT AND MATERIAL USED AND/OR INSTALLED ON THE PROJECT.

8.2. PROVIDE A LISTING OF ALL HVAC EQUIPMENT ON THE PROJECT WITH THE FOLLOWING INFORMATION: EQUIPMENT IDENTIFICATION NUMBER FROM DRAWINGS, AREA SERVED, MODEL NUMBER, SERIAL NUMBER, AND FILTER SIZES.

8.3. INCLUDE AIR BALANCE REPORT IN O&M MANUALS, WHEN APPLICABLE.

8.4. COPIES OF INSPECTION RESULTS SHALL BE SUBMITTED WITH O&M MANUALS

8.5. INCLUDE A LETTER OF GUARANTEE STARTING AT THE DATE OF SUBSTANTIAL COMPLETION.
9. INSTALLATION OF HVAC EQUIPMENT, MATERIALS, AND SYSTEMS:
- 9.1. COORDINATE HVAC EQUIPMENT AND MATERIALS INSTALLATION WITH ALL OTHER BUILDING COMPONENTS.

9.2. FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS.

9.3. COORDINATE LOCATION AND REQUIREMENTS OF CHASES, SLOTS, AND OPENINGS IN OTHER BUILDING COMPONENTS IN TIME FOR PREPARATION FOR SUCH WORK TO OCCUR WITHOUT HINDERING OR DELAYING THE WORK OF OTHER TRADES.

9.4. COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES, SLEEVES, AND OPENINGS

- THAT ARE TO BE INSTALLED IN POURED IN PLACE CONCRETE, WALL OPENINGS, ROOF OPENINGS, AND OTHER STRUCTURAL COMPONENTS AS THEY ARE CONSTRUCTED.
- 9.5. WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL HVAC EQUIPMENT AND MATERIAL AS HIGH AS POSSIBLE.
- 9.6. INSTALL HVAC EQUIPMENT, PIPING, AND DUCTWORK IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PROVIDE EQUIPMENT ACCESSORIES AS NECESSARY FOR PROPER OPERATION OR RECOMMENDED BY THE MANUFACTURER, EVEN IF SUCH ACCESSORIES ARE NOT SHOWN ON THE DRAWINGS OR MENTIONED IN THE SPECIFICATIONS.
- 9.7. MECHANICAL CONTRACTOR TO PROVIDE NO LESS THAN THE MANUFACTURER'S MINIMUM RECOMMENDED CLEARANCES ON ALL EQUIPMENT. ALL ISSUES PERTAINING TO CLEARANCES SHALL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION. INSTALLATION WITHOUT APPROVAL SHALL BE CORRECTED AT THE MECHANICAL CONTRACTOR'S EXPENSE.
- 9.8. MECHANICAL CONTRACTOR SHALL INSTALL NEOPRENE ISOLATION BLOCKS OR SPRING VIBRATION ISOLATORS AS APPROVED BY EQUIPMENT MANUFACTURER ON ALL HVAC EQUIPMENT TO MINIMIZE NOISE AND VIBRATIONS.
10. PROTECTION OF EQUIPMENT AND MATERIALS:
- 10.1. UNLESS SPECIFIED OR REQUESTED BY OWNER IN WRITING, PERMANENT HVAC SYSTEMS SHALL NOT BE OPERATED DURING CONSTRUCTION.

10.2. DURING CONSTRUCTION, ALL DUCTWORK AND PIPING SHALL BE CAPPED AND SEALED AT ALL TIMES AS TO PREVENT DIRT, DUST, AND DEBRIS FROM ENTERING DUCTWORK AND PIPING SYSTEM.
11. MECHANICAL PIPING:
- 11.1. REFRIGERANT PIPING

11.1.1. DURING INSTALLATION OF REFRIGERANT PIPING, MECHANICAL CONTRACTOR SHALL FLOW NITROGEN THROUGH PIPING AT ALL TIMES WHEN BRAZING THE REFRIGERANT PIPING.

11.1.2. REFRIGERANT PIPING SHALL BE LEAK TESTED WITH NITROGEN TO A PRESSURE OF NO LESS THAN 350 PSI OR AS DIRECTED BY THE EQUIPMENT MANUFACTURER, AND PERFORM A TRIPLE EVACUATION.

11.1.3. REFRIGERANT PIPING SHALL BE INSULATED WITH A MINIMUM $\frac{3}{4}$ " THICK ARMAFLEX INSULATION.

11.1.4. REFRIGERANT PIPING INSULATION INSTALLED OUTDOORS SHALL HAVE A UV PROTECTANT COATING.

11.1.5. REFRIGERANT PIPING TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. ROUTE IN A LINEAR FASHION FOLLOWING BUILDING STRUCTURAL CONTOURS.

11.1.6. INSTALL ESCUTCHEONS AROUND ALL REFRIGERANT PIPING WHEN VISIBLY PENETRATING A WALL, FLOOR, OR PARTITION.
- 11.2. CONDENSATE PIPING
- 11.2.1. ALL CONDENSATE PIPING SHALL BE CONSTRUCTED OF SCHEDULE 40 PVC OR AS SPECIFIED OTHERWISE.

11.2.2. CONDENSATE PIPING SHALL BE INSTALLED AS TO HAVE A SLOPE OF NO LESS THAN $\frac{1}{8}$ " PER FOOT.

11.2.3. UNLESS SPECIFIED OTHERWISE, ALL CONDENSATE PIPING SHALL BE EXTERNALLY INSULATED WITH A MINIMUM $\frac{3}{4}$ " THICK ARMAFLEX INSULATION.

11.2.4. MECHANICAL CONTRACTOR SHALL INSTALL CONDENSATE SAFETY DEVICES IN ALL CONDENSATE DRAINS OF HVAC EQUIPMENT AS TO REDUCE RISK OF DAMAGE FROM CLOGGED CONDENSATE DRAINS.

11.2.5. CONDENSATE PIPING TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER.

11.2.6. INSTALL ESCUTCHEONS AROUND ALL CONDENSATE PIPING WHEN VISIBLY PENETRATING A WALL, FLOOR, OR PARTION.

11.2.7. WHEN A CONDENSATE PUMP IS USED, INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
12. IDENTIFICATION OF HVAC EQUIPMENT
- 12.1. ALL HVAC EQUIPMENT AND ASSOCIATED THERMOSTATS/SENSORS SHALL BE CLEARLY IDENTIFIED AND LABELED.

12.2. EQUIPMENT NAMEPLATES SHALL BE BLACK FACED FORMICA WITH WHITE ENGRAVED LETTERING. NAMEPLATE TEXT TO BE A MINIMUM OF $\frac{1}{2}$ " IN HEIGHT.

12.3. VALVE TAGS SHALL BE EMBOSSED BRASS OR ALUMINUM WITH A MINIMUM TEXT HEIGHT OF $\frac{1}{2}$ ".

12.4. VALVE TAGS SHALL IDENTIFY AREA SERVED AND NORMAL VALVE POSITION.

12.5. PIPING LABELS SHALL INCLUDE PIPE SIZE, ARROW INDICATING FLOW DIRECTION, AND REFRIGERANT CIRCUIT LOCATION. PIPING LABELS SHALL HAVE TEXT SIZE AND INSTALLED IN ACCORDANCE WITH ASME A13.1 FOR PIPING.

12.6. ALL DUCTWORK SHALL BE CLEARLY LABELED AND IDENTIFIED: SUPPLY, RETURN, EXHAUST, OUTSIDE AIR
13. MECHANICAL WIRING AND ELECTRICAL REQUIREMENTS
- 13.1. ALL TEMPERATURE CONTROL WIRING, INTERLOCK WIRING, AND EQUIPMENT CONTROL WIRING FOR HVAC EQUIPMENT SHALL BE INCLUDED BY THE MECHANICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.

13.2. MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR REGARDING ALL EQUIPMENT HAVING ELECTRICAL REQUIREMENTS OF 120 VOLTS OR GREATER.

13.3. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, WIRING, JUNCTION BOXES, AND DISCONNECTS ASSOCIATED WITH HVAC EQUIPMENT WITH ELECTRICAL REQUIREMENTS OF 120 VOLTS OR GREATER UNLESS PROVIDED AS AN INTEGRAL PART OF THE EQUIPMENT.

13.4. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL THERMOSTAT JUNCTION BOX, AND STUB-UP CONDUIT ABOVE CEILING WITH PULL STRING FOR ALL THERMOSTATS AND WALL MOUNTED CONTROL DEVICES. MECHANICAL CONTRACTOR TO COORDINATE LOCATION WITH ELECTRICAL CONTRACTOR.

13.5. MECHANICAL CONTRACTOR SHALL FURNISH, MOUNT, AND INSTALL ALL HVAC CONTROLS AS INDICATED ON PLANS UNLESS OTHERWISE NOTED.

13.6. ALL CONTROL WIRING INSTALLED IN AN EXPOSED LOCATION OR OUTDOORS SHALL BE INSTALLED IN NON-FLEXIBLE CONDUIT. CONDUIT TYPE PER NEC BASED ON LOCATION.

13.7. ALL LOW VOLTAGE CONTROL WIRING SHALL BE CONSTRUCTED PER MANUFACTURER'S

REQUIREMENTS OR RECOMMENDATIONS.

14. DUCTWORK

- 14.1. DUCTWORK CONSTRUCTION
- 14.1.1. UNLESS OTHERWISE SPECIFIED, ALL DUCTWORK SHALL BE OF SHEET METAL CONSTRUCTION.

14.1.2. DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA SPECIFICATIONS.

14.1.3. ALL DUCTWORK SIZES SHOWN ON DRAWINGS ARE INTERNAL DIMENSIONS AND DO NOT TAKE INTO ACCOUNT ANY INTERNAL LINERS OR INSULATION.

14.1.4. ALL DUCT JOINTS ARE TO BE SEALED WITH A SUITABLE COMMERCIAL GRADE DUCT SEALER.

14.1.5. ALL OUTSIDE AIR DUCTS SHALL BE INSTALLED WITH A MOTORIZED LOW-LEAK DAMPER THAT IS INTERLOCKED WITH UNIT FAN. DAMPER SHALL BE CLOSED AT ALL TIMES FAN IS NOT OPERATING.
- 14.2. DUCTWORK INSULATION
- 14.2.1. ALL DUCTWORK INSULATION SHALL HAVE A COMPOSITE FIRE AND SMOKE RATING AS TESTED UNDER ASTM E-84, NFPA 255, AND UL 723 NOT EXCEEDING FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50.

14.2.2. DUCTS INSTALLED IN AN UNCONDITIONED SPACE INTERNAL TO THE BUILDING ENVELOPE SHALL BE EXTERNALLY INSULATED WITH MINIMUM R-6.0 INSULATION VALUE.

14.2.3. DUCTS INSTALLED WITHIN THE BUILDING ENVELOPE AND IN A CONCEALED SPACE, SHALL BE EXTERNALLY INSULATED WITH 1" INSULATION WITH A MINIMUM OF R-4.2 INSULATION VALUE.

14.2.4. DUCTS INSTALLED IN OUTDOOR LOCATIONS SHALL BE EXTERNALLY INSULATED WITH 2" RIGID FOAM BOARD INSULATION WITH A MINIMUM INSULATION VALUE OF R-8.0 AND SHALL BE WRAPPED WITH A WEATHER RESISTANT ALUMINUM METAL CLAD JACKETING.

14.2.5. UNLESS SPECIFIED OTHERWISE, DUCTS INSTALLED IN EXPOSED AREAS ARE NOT REQUIRED TO BE INSULATED.

14.2.6. ALL OUTSIDE AIR DUCTWORK SHALL BE INSULATED WITH MINIMUM R-8.0 INSULATION VALUE.

14.2.7. ALL RECTANGULAR DUCT INSULATION SHALL MEET MINIMUM R-VALUES REQUIRED BY THE IECC.

14.2.8. ALL SHEET METAL DUCT SHALL BE EXTERNALLY INSULATED ONLY, NO INTERNAL/DUCT LINER INSULATION PERMITTED.
- 14.3. FLEXIBLE DUCTWORK
- 14.3.1. FLEXIBLE DUCTWORK SHALL HAVE A COMPOSITE FIRE AND SMOKE RATING AS TESTED UNDER ASTM E-84, NFPA 255, AND UL 723 NOT EXCEEDING FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50.

14.3.2. FLEXIBLE DUCTWORK SHALL BE INSTALLED IN LENGTHS NOT TO EXCEED 5 FEET UNLESS SPECIFIED OTHERWISE.

14.3.3. FLEXIBLE DUCTWORK SHALL BE SUPPORTED PER MANUFACTURER'S INSTRUCTIONS NOT TO EXCEED EVERY 4 FEET TO ELIMINATE SAGGING.

14.3.4. INSTALLED FLEXIBLE DUCTS SHALL MEET MINIMUM R-VALUES REQUIRED BY THE IECC.
15. HANGERS AND SUPPORTS
- 15.1. COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" CHAPTER 5, "HANGERS AND SUPPORTS".

15.2. HANGER SPACING SHALL COMPLY WITH SMACNA'S SPECIFICATIONS

15.3. SUPPORT ALL HVAC EQUIPMENT, DUCTWORK, AND PIPING FROM BUILDING STRUCTURE.

15.4. ALL HANGERS EXPOSED TO VIEW SHALL BE CONSTRUCTED OF THREADED ROD AND ANGLE OR CHANNEL SUPPORTS.

15.5. HANG ITEMS FROM TOP MEMBER OF JOISTS OR PROVIDE ADDITIONAL STRUCTURE TO SPAN BETWEEN TOP MEMBERS IF NEEDED.

15.6. DO NOT USE METAL DECKING FOR SUSPENSION OF PIPING, DUCTWORK, OR EQUIPMENT.
16. FIRESTOPPING:
- 16.1. PROVIDE SEALS FOR ANY OPENING THROUGH WALLS, FLOORS, OR CEILINGS USED AS PASSAGE FOR MECHANICAL COMPONENTS SUCH AS PIPING OR DUCTWORK.

16.2. PROVIDE FIRE STOPPING SEALING TO MATCH OR EXCEED FIRE RESISTANT RATING OF PENETRATED WALLS, PARTITIONS, CEILINGS, OR FLOORS.

16.3. FIRE STOPPING SEALANT SHALL BE INSTALLED TO FILL OPENINGS AROUND MECHANICAL SERVICES PENETRATING FLOORS AND WALLS TO PROVIDE FIRE-STOPPS WITH FIRE RESISTANT RATINGS INDICATED FOR FLOOR, WALL, CEILING, OR PARTITION ASSEMBLY IN WHICH PENETRATION OCCURS. COMPLY WITH INSTALLATION REQUIREMENTS ESTABLISHED BY THE MANUFACTURER AND THE TESTING AGENCY.
17. COORDINATION BETWEEN TRADES
- 17.1. EXAMINE ALL DRAWINGS AND SPECIFICATIONS PERTAINING TO THE PROJECT BEFORE SUBMITTING ANY PROPOSAL OR PERFORMING ANY WORK.

17.2. COOPERATE WITH ALL OTHER CONTRACTORS IN LOCATING PIPING, DUCTWORK, CONDUIT, OPENINGS, CHASES, AND EQUIPMENT IN ORDER TO AVOID CONFLICT WITH ANY OTHER CONTRACTOR'S WORK.

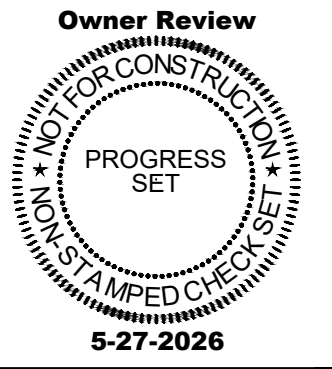
17.3. GIVE SPECIAL ATTENTION TO POINTS WHERE DUCTS OR PIPING MUST CROSS OTHER DUCTS OR PIPING, AND WHERE DUCTS, PIPING, AND CONDUIT MUST FUR INTO WALLS AND COLUMNS.

17.4. MAKE KNOWN TO OTHER TRADES THE INTENDED POSITIONING OF MATERIALS AND EQUIPMENT, AND INTENDED ORDER OF THE WORK.
18. TESTING AND BALANCING
- 18.1. UPON THE COMPLETION OF THE HVAC EQUIPMENT AND DUCTWORK. AIR BALANCE SHALL BE PERFORMED BY A NEBBIAABC CERTIFIED TESTING AND BALANCING AGENCY.

18.2. SYSTEM TO BE BALANCED TO THE SPECIFIED CFM VALUES ON DRAWINGS.

18.3. AABC TESTING AND BALANCING CONTRACTOR TO VERIFY ALL UNIT INFORMATION AND CORRECT CONTROL OPERATION.

18.4. SUBMIT COMPLETE TESTING AND BALANCE REPORT TO ENGINEER UPON COMPLETION. INCLUDE REPORT IN CLOSEOUT DOCUMENTS.



HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE		REVISION		BY	

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DRAWING NO.

M7.1

ELECTRICAL LEGEND

LIGHTING	
SYMBOL	DESCRIPTION
	RECESSED LUMINAIRE (NORMAL & EMERGENCY)
	SURFACE MOUNTED LUMINAIRE (NORMAL & EMERGENCY)
	WALL BRACKET LUMINAIRE (NORMAL & EMERGENCY)
	INDUSTRIAL STRIP LUMINAIRE (NORMAL & EMERGENCY)
	LINEAR SURFACE LUMINAIRE (NORMAL & EMERGENCY)
	ROUND SURFACE OR PENDANT LUMINAIRE (NORMAL & EMERGENCY)
	CEILING FAN
	DOWNLIGHT LUMINAIRE (NORMAL & EMERGENCY)
	SURFACE MOUNTED LUMINAIRE (NORMAL & EMERGENCY)
	TRACK LUMINAIRE
	WALL MOUNTED LUMINAIRE (NORMAL & EMERGENCY)
	TWIN-HEAD EMERGENCY LUMINAIRE
	TWIN-HEAD EMERGENCY LUMINAIRE, RECESSED MOUNTED
	REMOTE HEAD EMERGENCY LUMINAIRE (SINGLE & TWIN)
	COMBINATION EXIT SIGN EMERGENCY LUMINAIRE (WALL & CEILING)
	EXIT SIGN - SINGLE FACE (WALL & CEILING)
	EXIT SIGN - DOUBLE FACE (WALL & CEILING)
	LIGHTING CONTROL TAG - 'X' INDICATES LIGHTING CONTROL RISER NUMBER ASSOCIATED WITH ROOM/AREA
	LIGHT SWITCH - 'X' INDICATES THE FOLLOWING TYPES: 3 - 3 WAY, 4 - 4 WAY, K - KEY OPERATED, D - DIMMER, OS - LINE VOLTAGE OCCUPANCY SENSOR, L - LOW VOLTAGE, M - MANUAL MOTOR STARTER W/ HANDLE GUARD KIT AND PADLOCK. SEE LIGHTING CONTROL RISER SHEETS FOR ADDITIONAL TYPES
	LIGHTING CONTROL POWER PACK - NORMAL POWER
	BATTERY PACK
	OCCUPANCY/VACANCY SENSOR (CEILING)
	DAYLIGHT SENSOR (CEILING)

POWER	
SYMBOL	DESCRIPTION
	TAMPER RESISTANT DUPLEX RECEPTACLE - 'X' INDICATES THE FOLLOWING: C - ABOVE COUNTER, CM - CEILING MOUNTED, E - EMERGENCY, G - GROUND FAULT CIRCUIT INTERRUPTER, GB - BLANK FACE GROUND FAULT CIRCUIT INTERRUPTER, IG - ISOLATED GROUND, P - PLUG LOAD CONTROL, S - CONTAINS INTEGRAL SURGE PROTECTION WP - WEATHER PROOF, USB - CONTAINS USB PORT(S). (NOTE: 'X' NOTATION DESCRIPTIONS TYPICAL FOR ALL RECEPTACLE TYPES)
	CIRCUIT CONTINUATION
	CIRCUIT HOMERUN TO ELECTRICAL DISTRIBUTION BOARD (SWITCHBOARD, PANELBOARD, ETC.). THE NUMBER OF TICK MARKS INDICATE QUANTITY OF PHASE AND NEUTRAL CONDUCTORS. LONG TICK MARKS REPRESENT PHASE (UNGROUND)ED CONDUCTORS. SHORT TICK MARKS REPRESENT NEUTRAL (GROUND)ED CONDUCTORS. A GROUNDING CONDUCTOR IS NOT SHOWN AS A TICK MARK HOWEVER SHALL BE INSTALLED WITH ALL CIRCUITS. TICK MARKS AND CONDUCTOR SIZES ARE ONLY SHOWN ON THE HOMERUN. INSTALL THE REQUIRED QUANTITY AND SIZE OF CONDUCTORS TO EACH DEVICE ON THE SAME CIRCUIT AS INDICATED ON THE DRAWINGS. IF CONDUCTOR SIZES NOT SHOWN ON HOMERUN, THE FOLLOWING IS REQUIRED: MINIMUM CONDUCTOR SIZE = #12 MINIMUM CONDUIT SIZE = 3/4 INCH CIRCUIT NOTATION EXAMPLE: 4#10 = (3) #10 PHASE CONDUCTORS AND (1) #10 NEUTRAL CONDUCTOR 1#10G = (1) #10 GROUNDING CONDUCTOR 3/4"C = CONDUIT SIZE P-1 = DISTRIBUTION BOARD "P" - STARTING POLE POSITION IN BOARD
	EXISTING SURFACE MOUNTED PANELBOARD (DISTRIBUTION & BRANCH CIRCUIT); 'X' INDICATES PANELBOARD IDENTIFICATION
	EXISTING FLUSH MOUNTED PANELBOARD (BRANCH CIRCUIT); 'X' INDICATES IDENTIFICATION
	SURFACE MOUNTED PANELBOARD (DISTRIBUTION & BRANCH CIRCUIT); 'X' INDICATES IDENTIFICATION
	FLUSH MOUNTED PANELBOARD (BRANCH CIRCUIT); 'X' INDICATES IDENTIFICATION
	JUNCTION BOX
	HAND DRYER
	DISCONNECT SWITCH (SIZE/POLES/NEMA - INDICATED ON DRAWINGS)
	DISCONNECT SWITCH WITH ENCLOSED FUSE(S) OR CIRCUIT BREAKER (SIZE/POLES/FUSING/NEMA - INDICATED ON DRAWINGS)
	UTP LIGHTING CONTROL CABLE
	LOW VOLTAGE CIRCUIT WITH CONDUCTOR TYPES AS REQUIRED BY THE MANUFACTURER OF THE PARTICULAR SYSTEM

SYSTEMS	
SYMBOL	DESCRIPTION
	EXISTING COMMUNICATION OUTLET
	VOICE/DATA OUTLET WITH QUANTITY OF RJ45 JACK(S) AND UTP CABLE(S) AS INDICATED - #V REPRESENTS THE NUMBER OF VOICE JACKS AND CABLES, #D REPRESENTS THE NUMBER OF DATA JACKS AND CABLES (NOTE: #V/#D NOTATION DESCRIBED ABOVE TYPICAL FOR ALL COMMUNICATION OUTLETS); C - ABOVE COUNTER, CG - CEILING MOUNTED
	TWO-POST, 84 INCHES TALL, FLOOR MOUNTED DATA RACK WITH VERTICAL CABLE MANAGEMENT
	DATA OUTLET FOR WIRELESS ACCESS POINT WITH TWO RJ45 DATA JACKS AND TWO UTP CABLES (WALL & CEILING)
	INTERCOM SPEAKER (WALL & CEILING)
	INTERCOM SPEAKER - HORN TYPE (WALL)
	INTERCOM CALL BUTTON
	CLOCK (SINGLE & DOUBLE-SIDED); 'X' INDICATES THE FOLLOWING: A - ANALOG, D - DIGITAL
	DOORBELL PUSH BUTTON
	DOORBELL PUSH BUTTON AUDIO/VISUAL NOTIFICATION DEVICE
	SECURITY CARD READER
	ACCESS POINT WITH ELECTRIFIED DOOR HARDWARE
	SECURITY CAMERA (WALL & CEILING)

FIRE ALARM	
SYMBOL	DESCRIPTION
	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM NOTIFICATION DEVICE (WALL & CEILING); 'X' INDICATES THE FOLLOWING: S - STROBE, SS - SPEAKER/STROBE, HS - HORN/STROBE, SP - SPEAKER
	FIRE ALARM INITIATION DEVICE (WALL & CEILING); 'X' INDICATES THE FOLLOWING: S - SMOKE, H - HEAT, CO - CARBON MONOXIDE, CS - COMBINATION CARBON MONOXIDE/SMOKE, CH - COMBINATION CARBON MONOXIDE/HEAT
	FIRE ALARM INITIATION DEVICE WITH INTEGRAL LOW FREQUENCY SOUNDER BASE (WALL & CEILING); 'X' INDICATES THE FOLLOWING: S - SMOKE, H - HEAT, CO - CARBON MONOXIDE, CS - COMBINATION CARBON MONOXIDE/SMOKE, CH - COMBINATION CARBON MONOXIDE/HEAT (SEE DRAWINGS FOR INSTANCES WHERE ADDITIONAL STROBE NOTIFICATION IS REQUIRED FOR ADA COMPLIANCE)
	FIRE ALARM DUCT TYPE SMOKE DETECTOR; 'X' INDICATES ASSOCIATED HVAC EQUIPMENT IDENTIFICATION
	FIRE ALARM MAGNETIC DOOR HOLDER (WALL & CEILING)
	FIRE ALARM TAMPER SWITCH
	FIRE ALARM FLOW SWITCH
	FIRE ALARM ADDRESSABLE MODULE
	FIRE ALARM ANNUNCIATOR PANEL (SURFACE & FLUSH)
	FIRE ALARM CONTROL PANEL (SURFACE & FLUSH)

ELECTRICAL DEVICE MOUNTING HEIGHTS	
INTERIOR RECEPTACLES	16 INCHES TO BOTTOM
SWITCHES	48 INCHES TO TOP
INTERCOM CALL STATIONS	48 INCHES TO TOP
CLOCKS (NEW LOCATIONS)	96 INCHES TO TOP
NOTE: MOUNTING HEIGHTS UNLESS OTHERWISE NOTED ON DRAWINGS	

EXISTING VS DEMOLITION LINE WEIGHTS	
EXISTING	DEMOLITION

ELECTRICAL NOTES

GENERAL

- WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER, PER INDUSTRY STANDARD, AND TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.
- ALL ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR WITH A MINIMUM OF FIVE YEARS EXPERIENCE.
- WORK, MATERIALS, AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE AND NATIONAL CODES, STANDARDS AND ORDINANCES.
- ALL MATERIALS USED IN THE INSTALLATION SHALL BE U.L. APPROVED AND NEW.
- DO NOT PENETRATE STRUCTURAL ELEMENTS OF FLOORS, WALLS, CEILINGS, ROOF, ETC.
- DETAILS ARE SHOWN ON DIFFERENT SHEETS. THE CONTRACTOR SHALL REFER TO THOSE DETAILS WHETHER OR NOT CALLED IN REFERENCE NOTES.
- CONTRACTOR SHALL NOTIFY AND COOPERATE WITH OTHER TRADES SUCH THAT NO DUCTS, PIPING, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER, OR PASS THOROUGH ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
- NO WIRING SHALL RUN IN DUCT WORK.
- THE MINIMUM SIZE OF THE CONDUCTORS ARE TO BE #12 AWG THIN COPPER, UNLESS INDICATED OTHERWISE ON THE DRAWINGS. STRANDED CONDUCTORS ARE NOT ALLOWED IN THE CONDUCTORS SMALLER THAN #10 AWG.
- USE EPOXY ANCHORS TO SUPPORT THE ELECTRICAL EQUIPMENT. EXPANSION ANCHOR BOLTS ARE NOT ACCEPTED.
- THE CONTRACTOR SHALL REVIEW AND COORDINATE WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND OTHER DRAWINGS PRIOR TO BID.
- CONTRACTOR SHALL REVIEW ALL ARCHITECT'S ELEVATIONS, SECTIONS AND FLOOR PLANS PRIOR TO ROUGH-IN OF ELECTRICAL JUNCTION BOXES.
- ALL JUNCTION BOXES SHALL HAVE MINIMUM DEPTH OF 2-1/8" UNLESS OTHERWISE SPECIFIED. SECURE ALL JUNCTION BOXES AS SHOWN IN THE DETAILS. FURNISH AND INSTALL PROPER PLASTER RINGS.
- REFER TO ARCHITECTURAL CABINET CASEWORK ELEVATION DRAWINGS FOR CLARIFICATION ON MOUNTING AND PLACEMENT OF ALL RACEWAY, RECEPTACLES, AND SWITCHES.
- MANY DEVICE MOUNTING LOCATIONS ARE DEPENDENT ON MILLWORK LOCATIONS. COORDINATE ALL APPLICABLE LOCATIONS WITH MILLWORK INSTALLER PRIOR TO BEGINNING WORK.
- LIGHT SWITCHES INSTALLED ADJACENT TO EACH OTHER, SHALL BE GANGED TOGETHER WITH ONE PIECE COVER PLATE.
- CONSULT ARCHITECTS REFLECTED CEILING PLANS FOR COORDINATION.
- CONTRACTOR SHALL MEET WITH THE CEILING AND MECHANICAL CONTRACTORS TO COORDINATE LOCATIONS, CLEARANCES, CELING TYPES, AND ROUGH-IN REQUIREMENTS OF ALL LIGHTING FIXTURES PRIOR TO DUCT, PIPING, AND CEILING INSTALLATIONS.
- CONNECT ALL EMERGENCY LIGHT FIXTURES, NIGHT LIGHTS, EGRESS LIGHTS, AND EXIT SIGNS TO UNSWITCHED CONDUCTOR(S).
- THE CONTRACTOR SHALL TERMINATE THE ELECTRICAL CONNECTIONS TO ALL THE EQUIPMENT BY PROVIDING THE NECESSARY MALE/FEMALE CONNECTOR, RECEPTACLE, PLUG, ETC.
- FINAL CONNECTIONS TO EQUIPMENT SHALL BE MADE AS PER MANUFACTURERS WRITTEN INSTRUCTIONS AND APPROVED WIRING DIAGRAMS AND DETAILS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL THE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED. THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC.) OF EQUIPMENT FURNISHED UNDER OTHER DIVISIONS WITH APPROVED SHOP DRAWINGS PRIOR TO BEGINNING ROUGH-IN.
- VERIFY EXACT LOCATION(S) OF ALL EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
- AT THE END OF THE JOB, PROVIDE BLANK COVER PLATES TO MATCH THE OTHER COVER PLATES FOR ALL JUNCTION BOXES WHERE DEVICES HAVE NOT YET BEEN INSTALLED.

- THE CONTRACTOR SHALL REVIEW AND COOPERATE WITH OTHER TRADES SUCH THAT NO DUCTS, PIPING, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER, OR PASS THOROUGH ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
- USE EPOXY ANCHORS TO SUPPORT THE ELECTRICAL EQUIPMENT. EXPANSION ANCHOR BOLTS ARE NOT ACCEPTED.
- THE CONTRACTOR SHALL REVIEW AND COORDINATE WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND OTHER DRAWINGS PRIOR TO BID.
- CONTRACTOR SHALL REVIEW ALL ARCHITECT'S ELEVATIONS, SECTIONS AND FLOOR PLANS PRIOR TO ROUGH-IN OF ELECTRICAL JUNCTION BOXES.
- ALL JUNCTION BOXES SHALL HAVE MINIMUM DEPTH OF 2-1/8" UNLESS OTHERWISE SPECIFIED. SECURE ALL JUNCTION BOXES AS SHOWN IN THE DETAILS. FURNISH AND INSTALL PROPER PLASTER RINGS.
- REFER TO ARCHITECTURAL CABINET CASEWORK ELEVATION DRAWINGS FOR CLARIFICATION ON MOUNTING AND PLACEMENT OF ALL RACEWAY, RECEPTACLES, AND SWITCHES.
- MANY DEVICE MOUNTING LOCATIONS ARE DEPENDENT ON MILLWORK LOCATIONS. COORDINATE ALL APPLICABLE LOCATIONS WITH MILLWORK INSTALLER PRIOR TO BEGINNING WORK.
- LIGHT SWITCHES INSTALLED ADJACENT TO EACH OTHER, SHALL BE GANGED TOGETHER WITH ONE PIECE COVER PLATE.
- CONSULT ARCHITECTS REFLECTED CEILING PLANS FOR COORDINATION.
- CONTRACTOR SHALL MEET WITH THE CEILING AND MECHANICAL CONTRACTORS TO COORDINATE LOCATIONS, CLEARANCES, CELING TYPES, AND ROUGH-IN REQUIREMENTS OF ALL LIGHTING FIXTURES PRIOR TO DUCT, PIPING, AND CEILING INSTALLATIONS.
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- FINAL CONNECTIONS TO EQUIPMENT SHALL BE MADE AS PER MANUFACTURERS WRITTEN INSTRUCTIONS AND APPROVED WIRING DIAGRAMS AND DETAILS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL THE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED. THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC.) OF EQUIPMENT FURNISHED UNDER OTHER DIVISIONS WITH APPROVED SHOP DRAWINGS PRIOR TO BEGINNING ROUGH-IN.
- VERIFY EXACT LOCATION(S) OF ALL EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
- AT THE END OF THE JOB, PROVIDE BLANK COVER PLATES TO MATCH THE OTHER COVER PLATES FOR ALL JUNCTION BOXES WHERE DEVICES HAVE NOT YET BEEN INSTALLED.

DEMOLITION

- ALL ELECTRICAL ITEMS SHOWN AS LIGHTER WEIGHT ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
- ALL ELECTRICAL ITEMS SHOWN IN HEAVIER WEIGHT SHALL BE REMOVED UNLESS OTHERWISE NOTED.
- THE CONDUIT AND CONDUCTORS ASSOCIATED WITH ITEMS SHOWN TO BE REMOVED SHALL ALSO BE REMOVED UNLESS OTHERWISE NOTED. ALL CONDUCTORS SHALL BE REMOVED BACK TO THE SOURCE. ALL ACCESSIBLE CONDUITS SHALL BE REMOVED. EXISTING UNDERGROUND CONDUITS MAY BE ABANDONED IN PLACE AFTER THEIR ENDS HAVE BEEN REMOVED TO A MINIMUM OF 30 INCHES BELOW GRADE AND CAPPED.
- WHERE ANY EXISTING ELECTRICAL ITEMS ARE SHOWN TO BE REMOVED, THE ELECTRICAL CONTRACTOR SHALL RECONNECT WIRING AS REQUIRED TO ENSURE ALL DOWNSTREAM DEVICES REMAIN OPERATIONAL.
- REMOVE ALL EXISTING AND ACCESSIBLE ABANDONED LOW VOLTAGE CABLING. ACCESSIBLE AREAS INCLUDE, BUT NOT LIMITED TO, ABOVE LAY-IN CEILINGS, BELOW RAISED FLOORS AND EXPOSED LOCATIONS.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHERE WALLS, SLABS AND MATERIALS HAVE BEEN CUT, REMOVED OR MODIFIED AS A RESULT OF DEMOLITION. PATCHING AND REPAIRS SHALL MATCH THE ADJACENT EXISTING MATERIALS, RATINGS AND FINISHES.
- REFER TO THE MECHANICAL, PLUMBING, AND FIRE PROTECTION PLANS FOR LOCATION OF EQUIPMENT REQUIRING ELECTRICAL DEMOLITION. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISCONNECTING EQUIPMENT AND DEMOLISHING THE ASSOCIATED CONDUIT, CONDUCTORS, DISCONNECTS, STARTERS, ETC.
- ALL EXISTING ITEMS SHOWN HAVE BEEN COMPILED FROM SITE SURVEYS, RECORD DRAWINGS AND VISUAL SITE INSPECTIONS. ALL ITEMS TO BE REMOVED MAY NOT BE SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO BECOME FAMILIAR WITH THE EXTENT OF THE DEMOLITION WORK REQUIRED.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL EXISTING SYSTEMS ACTIVE UNTIL THEY ARE DEMOLISHED IN THEIR RESPECTIVE PHASES. PROVIDE ALL TEMPORARY CONNECTIONS AS REQUIRED. COORDINATE ALL DEMOLITION WORK WITH THE TIMING/SEQUENCE OF NEW WORK.
- WHERE THE CONTRACT DOCUMENTS INCLUDE THE REMOVAL OF THE EXISTING CEILINGS, EXISTING CEILING MOUNTED DEVICES NOT SHOWN TO BE REMOVED SHALL BE PROTECTED, SUPPORTED IN-PLACE AND REINSTALLED IN THE NEW CEILING.

SYSTEMS

- ALL FIRE ALARM CABLING SERVING PERMANENT DEVICES SHALL BE INSTALLED WITHIN A MINIMUM OF 3/4 INCH CONDUIT. FOR TEMPORARY DEVICES, CABLING MAY BE INSTALLED AND SUPPORTED IN J-HOOKS.

CABLING

- ALL LOW VOLTAGE CABLING SHALL BE PLENUM RATED.

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LIGHTING

- THE CONTRACTOR SHALL INSTALL THE REQUIRED NUMBER OF CONDUCTORS BETWEEN SWITCHES, LIGHT FIXTURES AND ASSOCIATED DEVICES FOR A COMPLETE AND WORKING SYSTEM. PROVIDE SINGLE-LEVEL OR DUAL-LEVEL SWITCHING. THREE-WAY SWITCHING OR OTHER SWITCHING METHOD AS INDICATED ON THE DRAWINGS.
- INSTALL AN UNSWITCHED CONDUCTOR TO ALL EXIT LIGHTS, EMERGENCY LIGHTS AND ALL OTHER FIXTURES USED FOR EMERGENCY ILLUMINATION AND SUPPLIED WITH INTEGRAL OR EXTERNAL BATTERIES. INSTALL A NORMAL UNSWITCHED CONDUCTOR TO ALL EMERGENCY RELAYS WHEN EMERGENCY POWER IS PROVIDED BY A GENERATOR OR MEANS OTHER THAN BATTERY POWER. THE UNSWITCHED CONDUCTOR SHALL BE FED FROM THE SAME CIRCUIT AS THE SWITCHED CONDUCTOR(S).
- CABLING ASSOCIATED WITH THE LOW VOLTAGE LIGHTING CONTROLS, INCLUDING DIMMING, NETWORK AND CONTROL CABLES, SHALL BE INSTALLED AND SUPPORTED IN A SIMILAR MANNER AS THE TELECOMMUNICATIONS CABLING. CABLING SHALL BE INSTALLED IN CONDUIT WHEN LOCATED IN AREAS WITH EXPOSED CEILINGS OR STRUCTURES. ABOVE INACCESSIBLE CEILINGS AND WHERE LOCATED WITHIN WALLS. CABLING INSTALLED ABOVE ACCESSIBLE, CONCEALED CEILINGS SHALL BE INSTALLED IN CONDUIT OR SHALL BE SUPPORTED BY J-HOOKS. THE CABLING SHALL BE INSTALLED SEPARATE FROM LINE VOLTAGE CONDUCTORS AND TELECOMMUNICATIONS CABLING. J-HOOKS MAY BE ATTACHED TO THE OUTSIDE OF THE TELECOMMUNICATIONS CABLE TRAY. IF AVAILABLE, PROVIDING THE MAXIMUM RATED WEIGHT CAPACITY OF THE CABLE TRAY IS NOT EXCEEDED.

SURFACE RACEWAY

- ALL SURFACE RACEWAYS SHALL BE WIREMOLD 700, AND 2400 SERIES OR APPROVED EQUAL UNLESS NOTED OTHERWISE.
- 700 SERIES SHALL BE USED FOR RECEPTACLES, SWITCHES AND FIRE ALARM DEVICES. 2400 SERIES SHALL BE INSTALLED FOR VOICE AND DATA CABLING.
- ALL SURFACE RACEWAY IS TO BE MOUNTED ON EXISTING WALLS ONLY. USE SUPPORTING CLIPS AND NOT MOUNTING STRAPS. THE CONTRACTOR HAS THE OPTION TO FISH FLEXIBLE CONDUIT DOWN EXISTING WALLS IN LIEU OF USING SURFACE RACEWAY.
- COORDINATE THE ROUTING OF ALL RACEWAY WITH WALL MOUNTED FURNISHINGS (I.E. JACKBOARDS, MARKERBOARDS, INTERACTIVE WHITEBOARDS, ETC.).

Owner Review

5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE

REVISION

BY

PROJECT NO. 2124-07

DESIGNED BY JE

DRAWN BY JE

CHECKED BY JE

REVIEWED BY JE

DATE AUGUST 2024

SCALE AS NOTED

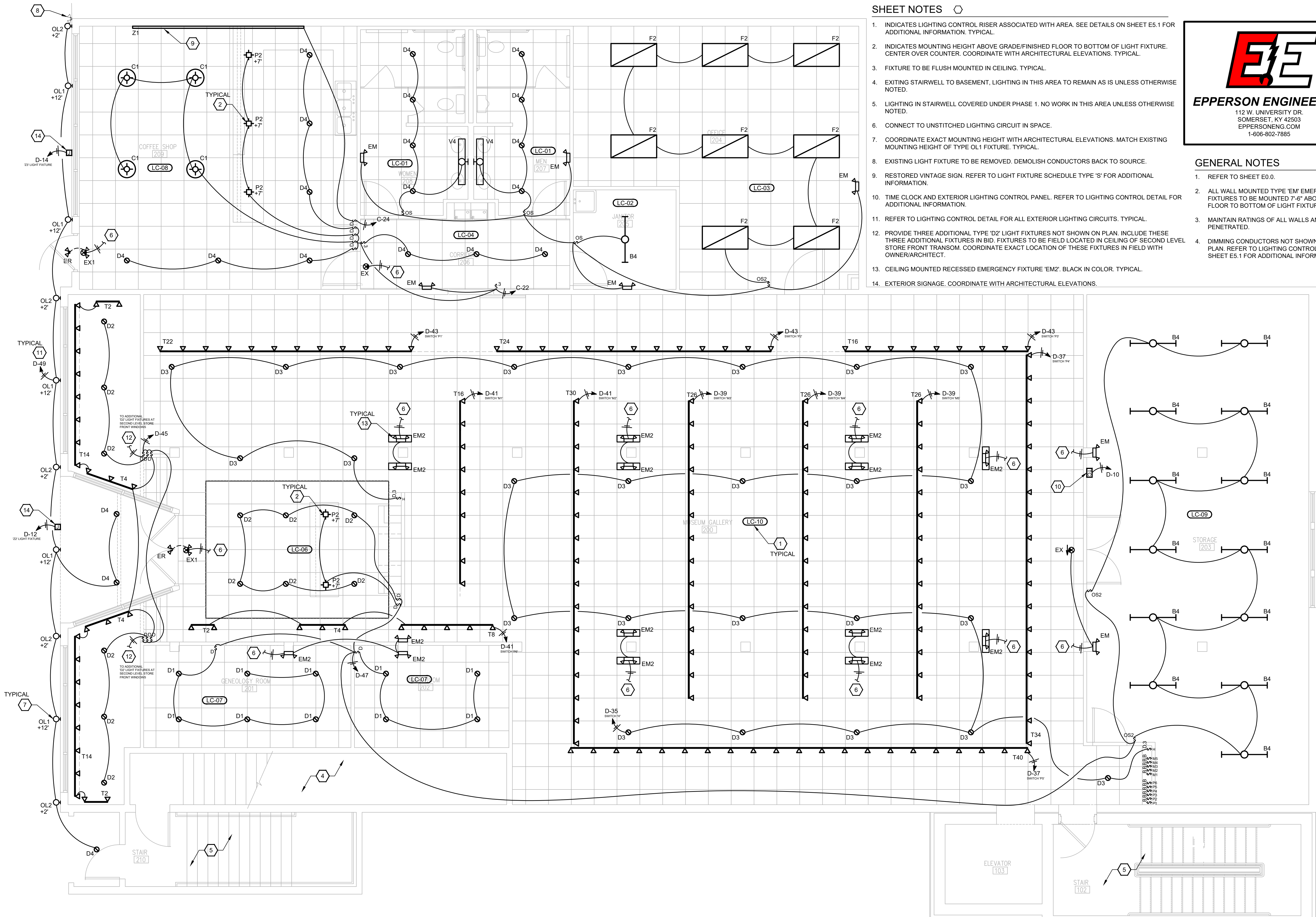
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DRAWING NO.

E0.0



1 2ND FLOOR PLAN - LIGHTING
1/4" = 1'-0"

SHEET NOTES

1. INDICATES LIGHTING CONTROL RISER ASSOCIATED WITH AREA. SEE DETAILS ON SHEET E5.1 FOR ADDITIONAL INFORMATION. TYPICAL.
2. INDICATES MOUNTING HEIGHT ABOVE GRADE/FINISHED FLOOR TO BOTTOM OF LIGHT FIXTURE. CENTER OVER COUNTER. COORDINATE WITH ARCHITECTURAL ELEVATIONS. TYPICAL.
3. FIXTURE TO BE FLUSH MOUNTED IN CEILING. TYPICAL.
4. EXITING STAIRWELL TO BASEMENT, LIGHTING IN THIS AREA TO REMAIN AS IS UNLESS OTHERWISE NOTED.
5. LIGHTING IN STAIRWELL COVERED UNDER PHASE 1. NO WORK IN THIS AREA UNLESS OTHERWISE NOTED.
6. CONNECT TO UNSTITCHED LIGHTING CIRCUIT IN SPACE.
7. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS. MATCH EXISTING MOUNTING HEIGHT OF TYPE OL1 FIXTURE. TYPICAL.
8. EXISTING LIGHT FIXTURE TO BE REMOVED. DEMOLISH CONDUCTORS BACK TO SOURCE.
9. RESTORED VINTAGE SIGN. REFER TO LIGHT FIXTURE SCHEDULE TYPE 'S' FOR ADDITIONAL INFORMATION.
10. TIME CLOCK AND EXTERIOR LIGHTING CONTROL PANEL. REFER TO LIGHTING CONTROL DETAIL FOR ADDITIONAL INFORMATION.
11. REFER TO LIGHTING CONTROL DETAIL FOR ALL EXTERIOR LIGHTING CIRCUITS. TYPICAL.
12. PROVIDE THREE ADDITIONAL TYPE 'D2' LIGHT FIXTURES NOT SHOWN ON PLAN. INCLUDE THESE THREE ADDITIONAL FIXTURES IN BID. FIXTURES TO BE FIELD LOCATED IN CEILING OF SECOND LEVEL STORE FRONT TRANSOM. COORDINATE EXACT LOCATION OF THESE FIXTURES IN FIELD WITH OWNER/ARCHITECT.
13. CEILING MOUNTED RECESSED EMERGENCY FIXTURE 'EM2'. BLACK IN COLOR. TYPICAL.
14. EXTERIOR SIGNAGE. COORDINATE WITH ARCHITECTURAL ELEVATIONS.

GENERAL NOTES

1. REFER TO SHEET E0.0.
2. ALL WALL MOUNTED TYPE 'EM' EMERGENCY LIGHT FIXTURES TO BE MOUNTED 7'-6" ABOVE FINISHED FLOOR TO BOTTOM OF LIGHT FIXTURE.
3. MAINTAIN RATINGS OF ALL WALLS AND CEILINGS PENETRATED.
4. DIMMING CONDUCTORS NOT SHOWN ON FLOOR PLAN. REFER TO LIGHTING CONTROL RISERS ON SHEET E5.1 FOR ADDITIONAL INFORMATION.

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5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE

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PROJECT NO. 2124-07

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REVIEWED BY JE

DATE AUGUST 2024

SCALE AS NOTED

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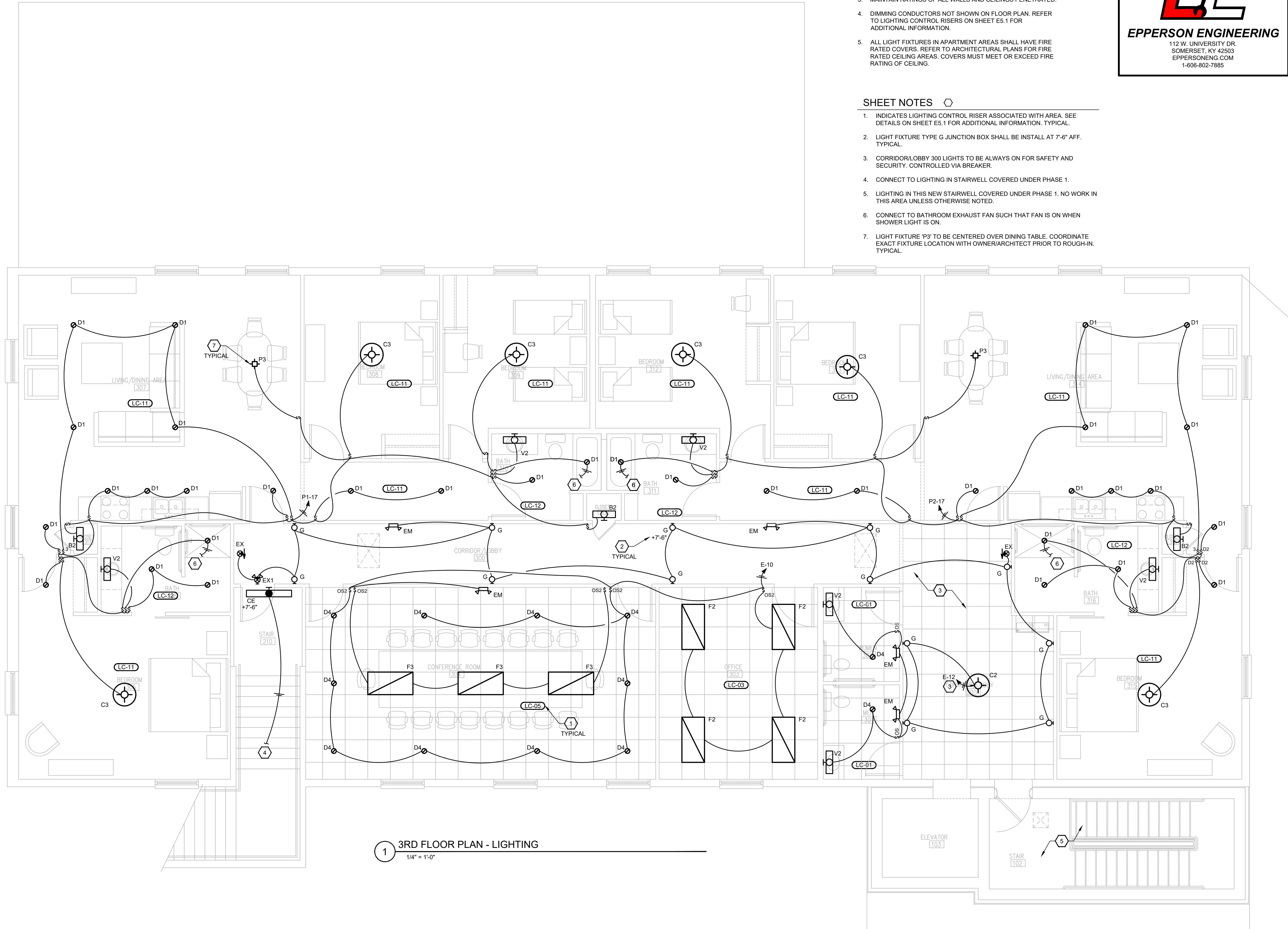
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DRAWING NO.

E1.1



1 3RD FLOOR PLAN - LIGHTING
1/4" = 1'-0"

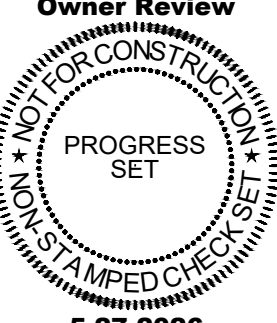
- GENERAL NOTES**
1. REFER TO SHEET E0.0.
 2. ALL TYPE 'EM' EMERGENCY LIGHT FIXTURES TO BE MOUNTED 7'-6" ABOVE FINISHED FLOOR TO BOTTOM OF LIGHT FIXTURE.
 3. MAINTAIN RATINGS OF ALL WALLS AND CEILINGS PENETRATED.
 4. DIMMING CONDUCTORS NOT SHOWN ON FLOOR PLAN. REFER TO LIGHTING CONTROL RISERS ON SHEET E5.1 FOR ADDITIONAL INFORMATION.
 5. ALL LIGHT FIXTURES IN APARTMENT AREAS SHALL HAVE FIRE RATED COVERS. REFER TO ARCHITECTURAL PLANS FOR FIRE RATED CEILING AREAS. COVERS MUST MEET OR EXCEED FIRE RATING OF CEILING.

- SHEET NOTES** ○
1. INDICATES LIGHTING CONTROL RISER ASSOCIATED WITH AREA. SEE DETAILS ON SHEET E5.1 FOR ADDITIONAL INFORMATION. TYPICAL.
 2. LIGHT FIXTURE TYPE G JUNCTION BOX SHALL BE INSTALL AT 7'-6" AFF. TYPICAL.
 3. CORRIDOR/LOBBY 300 LIGHTS TO BE ALWAYS ON FOR SAFETY AND SECURITY. CONTROLLED VIA BREAKER.
 4. CONNECT TO LIGHTING IN STAIRWELL COVERED UNDER PHASE 1.
 5. LIGHTING IN THIS NEW STAIRWELL COVERED UNDER PHASE 1. NO WORK IN THIS AREA UNLESS OTHERWISE NOTED.
 6. CONNECT TO BATHROOM EXHAUST FAN SUCH THAT FAN IS ON WHEN SHOWER LIGHT IS ON.
 7. LIGHT FIXTURE 'P3' TO BE CENTERED OVER DINING TABLE. COORDINATE EXACT FIXTURE LOCATION WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN. TYPICAL.



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PROJECT NO. 2124-07

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E1.2



1. REFER TO SHEET E0.0.
2. MAINTAIN RATINGS OF ALL WALLS AND CEILINGS PENETRATED.



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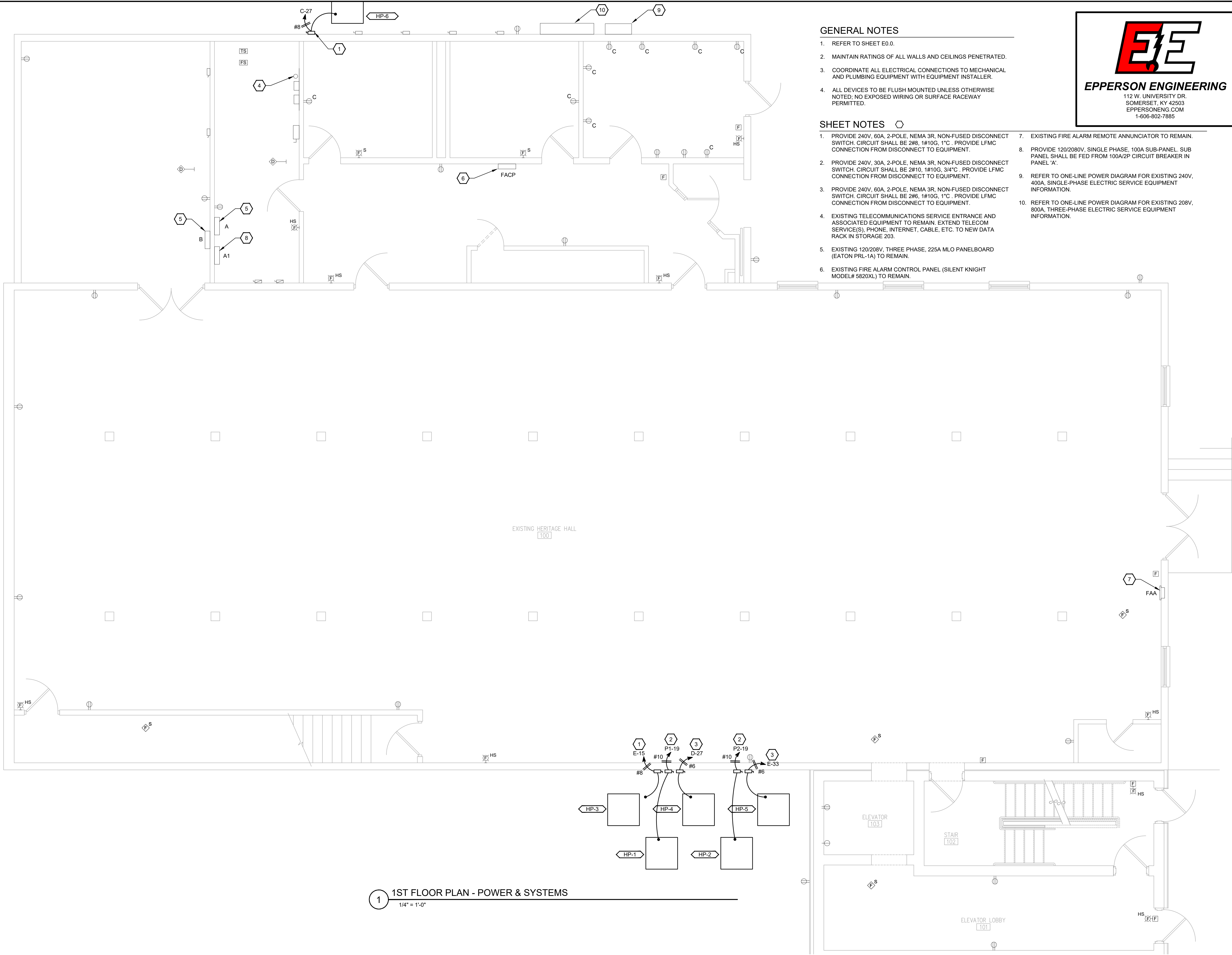
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E1.3



GENERAL NOTES

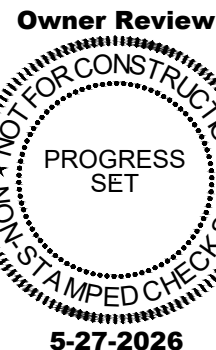
1. REFER TO SHEET E0.0.
2. MAINTAIN RATINGS OF ALL WALLS AND CEILINGS PENETRATED.
3. COORDINATE ALL ELECTRICAL CONNECTIONS TO MECHANICAL AND PLUMBING EQUIPMENT WITH EQUIPMENT INSTALLER.
4. ALL DEVICES TO BE FLUSH MOUNTED UNLESS OTHERWISE NOTED; NO EXPOSED WIRING OR SURFACE RACEWAY PERMITTED.

SHEET NOTES

1. PROVIDE 240V, 60A, 2-POLE, NEMA 3R, NON-FUSED DISCONNECT SWITCH. CIRCUIT SHALL BE 2#8, 1#10G, 1" C. PROVIDE LFMC CONNECTION FROM DISCONNECT TO EQUIPMENT.
2. PROVIDE 240V, 30A, 2-POLE, NEMA 3R, NON-FUSED DISCONNECT SWITCH. CIRCUIT SHALL BE 2#10, 1#10G, 3/4" C. PROVIDE LFMC CONNECTION FROM DISCONNECT TO EQUIPMENT.
3. PROVIDE 240V, 60A, 2-POLE, NEMA 3R, NON-FUSED DISCONNECT SWITCH. CIRCUIT SHALL BE 2#6, 1#10G, 1" C. PROVIDE LFMC CONNECTION FROM DISCONNECT TO EQUIPMENT.
4. EXISTING TELECOMMUNICATIONS SERVICE ENTRANCE AND ASSOCIATED EQUIPMENT TO REMAIN. EXTEND TELECOM SERVICE(S), PHONE, INTERNET, CABLE, ETC. TO NEW DATA RACK IN STORAGE 203.
5. EXISTING 120/208V, THREE PHASE, 225A MLO PANELBOARD (EATON PRL-1A) TO REMAIN.
6. EXISTING FIRE ALARM CONTROL PANEL (SILENT KNIGHT MODEL# 5820XL) TO REMAIN.
7. EXISTING FIRE ALARM REMOTE ANNUNCIATOR TO REMAIN.
8. PROVIDE 120/208V, SINGLE PHASE, 100A SUB-PANEL. SUB PANEL SHALL BE FED FROM 100A/2P CIRCUIT BREAKER IN PANEL 'A'.
9. REFER TO ONE-LINE POWER DIAGRAM FOR EXISTING 240V, 400A, SINGLE-PHASE ELECTRIC SERVICE EQUIPMENT INFORMATION.
10. REFER TO ONE-LINE POWER DIAGRAM FOR EXISTING 208V, 800A, THREE-PHASE ELECTRIC SERVICE EQUIPMENT INFORMATION.



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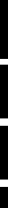
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E2.1



A circular stamp with a dashed border. The text "NOT FOR CONSTRUCTION" is curved along the top inner edge, and "NON-STAMPED CHECK" is curved along the bottom inner edge. In the center, the words "PROGRESS SET" are printed in a bold, sans-serif font. At the bottom of the stamp, the date "5-27-2026" is printed in a bold, sans-serif font.

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DOWNTOWN REVITALIZATION
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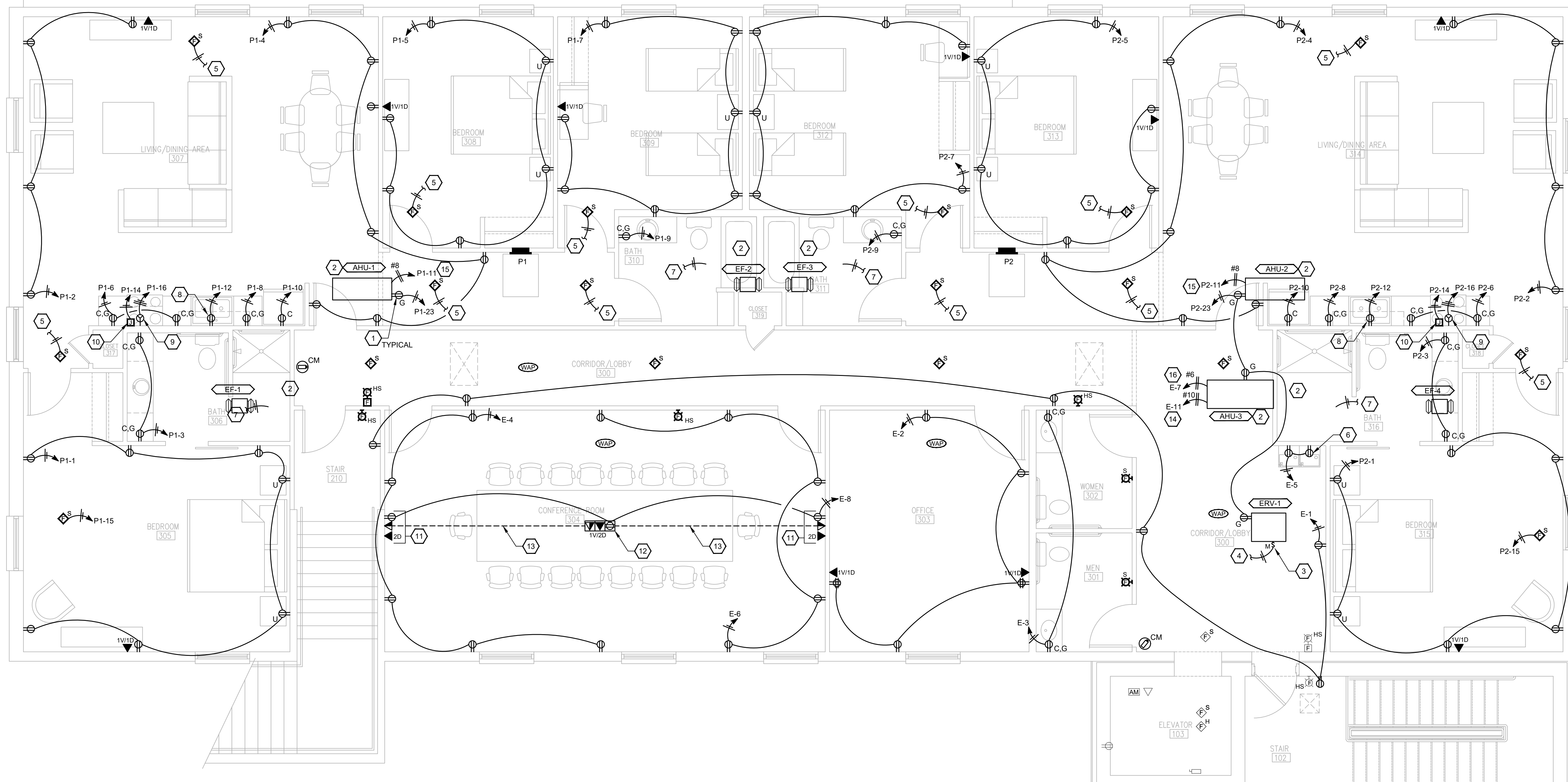
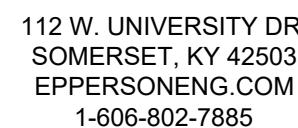
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E2.2

1. REFER TO SHEET E0.0.
2. MAINTAIN RATINGS OF ALL WALLS AND CEILINGS PENETRATED.
3. COORDINATE ALL ELECTRICAL CONNECTIONS TO MECHANICAL AND PLUMBING EQUIPMENT WITH EQUIPMENT INSTALLER.
4. ALL DEVICES TO BE FLUSH MOUNTED UNLESS OTHERWISE NOTED; NO EXPOSED WIRING OR SURFACE RACEWAY PERMITTED.

1. RECEPTACLE TO BE LOCATED IN ATTIC AREA AND INSTALLED ACCESSIBLE, ADJACENT TO HVAC EQUIPMENT. HVAC EQUIPMENT TO BE LOCATED IN ATTIC, OUTLINE SHOWN FOR REFERENCE ONLY. COORDINATE EXACT HVAC EQUIPMENT LOCATION WITH INSTALLER. TYPICAL.
2. EQUIPMENT HAS INTEGRAL DISCONNECT SWITCH.
3. PROVIDE 120V, 20A, MOTOR RATED TOGGLE SWITCH.
4. TO BE CONTROLLED VIA CORRIDOR LIGHTING CIRCUIT.
5. CONNECT TO SMOKE DETECTOR CIRCUIT IN APARTMENT.
6. RECEPTACLE TO BE CONCEALED IN CABINET SPACE OF DRINKING FOUNTAIN. COORDINATE ROUGH-IN WITH INSTALLING CONTRACTOR.
7. CONNECT TO SWITCHED SHOWER LIGHT CIRCUIT IN SPACE.
8. RECEPTACLE TO BE LOCATED IN CABINET SPACE BELOW SINK.
9. OVEN/RANGE RECEPTACLE SHALL BE 240V, 50A, NEMA 14-50R CONFIGURATION. CIRCUIT TO EQUIPMENT SHALL BE #26, 1#10G 1" C.
10. PROVIDE CIRCUIT AND CONNECTION TO RANGE HOOD. COORDINATE EXACT ROUGH-IN LOCATION WITH INSTALLER AND ARCHITECTURAL ELEVATIONS.

11. DUPLEX RECEPTACLE, DATA OUTLET, AND MULTIMEDIA OUTLET TO ALL BE INSTALLED IN RECESSED 4-GANG "TV BOX" (LEGRAND EVOLUTION SERIES MODEL#FSF82 OR EQUAL) AND SHALL BE CONCEALED BEHIND WALL MOUNTED DISPLAY. MOUNT RECESSED BOX AT 4"±. COORDINATE EXACT MOUNTING WITH OWNER FURNISHED DISPLAY, MOUNTING BRACKET, AND ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN. PROVIDE ALL REQUIRED TV BOX ACCESSORIES TO ACCOMMODATE DEVICES AND CONNECTIONS INDICATED.
12. PROVIDE 4-COMPARTMENT COMBINATION FLOOR BOX (LEGRAND EVOLUTION SERIES MODEL#EFB45 OR EQUAL WITH CONCEALED SERVICE TRIM) FLOOR BOX SHALL HAVE TWO DUPLEX RECEPTACLES, ONE LOW VOLTAGE OUTLET FOR TWO DATA DROPS, AND ONE LOW VOLTAGE OUTLET FOR MULTIMEDIA. COORDINATE TRIM REQUIREMENTS WITH FLOOR FINISHES, COLOR SELECTED BY ARCHITECT. CONTRACTOR SHALL VERIFY FLOOR LOCATION AND FLOOR FINISHES WITH OWNER'S CONSTRUCTION TABLE PRIOR TO ROUGH-IN.
13. PROVIDE REQUIRED PATHWAYS BETWEEN WALL MOUNTED RECESSED TV BOX AND FLOOR MOUNTED RECESSED CONFERENCE TABLE FLOOR BOX. FOR POWER PROVIDE 3/4" CONDUIT PATHWAY. FOR DATA PROVIDE 1/2" CONDUIT PATHWAY. FOR MULTI-MEDIA PROVIDE 1/2" CONDUIT PATHWAY. ALL CONDUITS SHALL EXTEND FROM FLOOR BOX TO TV BOX AND STUB OUT ABOVE ACCESSIBLE CEILING.
14. CIRCUIT TO EQUIPMENT SHALL BE 2#10, 1#10G, 3/4" C.
15. CIRCUIT TO EQUIPMENT SHALL BE 2#6, 1#10G, 1" C.
16. CIRCUIT TO EQUIPMENT SHALL BE 2#6, 1#10G, 1" C.



1 3RD FLOOR PLAN - POWER & SYSTEMS
1/4" = 1'-0"

NOT FOR CONSTRUCTION
★ ★ ★
PROGRESS
SET
NON-STAMPED CHECK SET
5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

PROJECT NO. 2124-07		DESIGNED BY JE		DATE		REVISION		BY	
DRAWN BY JE		CHECKED BY JE							
REVIEWED BY JE		DATE		AUGUST 2024		SCALE		AS NOTED	

DESIGN DOCUMENTS

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OF KENTUCKY, INC.

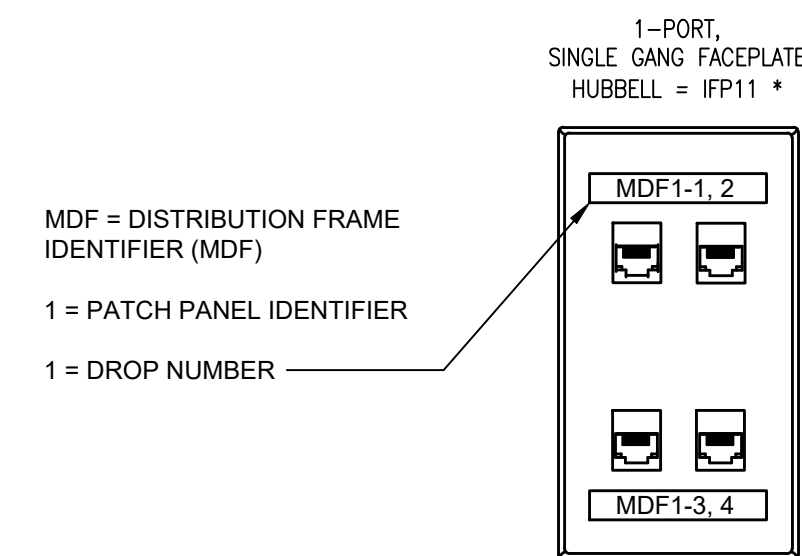
Engineers
Architects
Planners

Phone: (859)223-5694
Fax: (859)223-2607

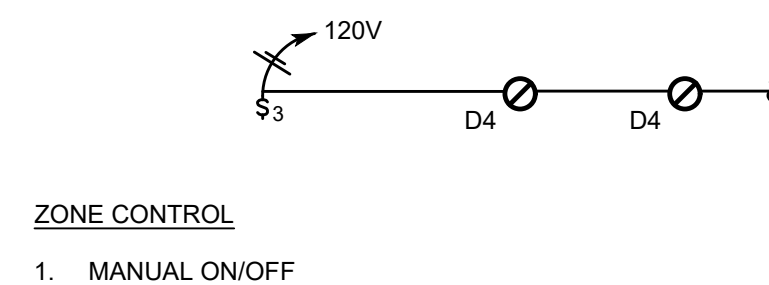
324 Wellington Way
Lexington, KY 40503
www.nselex.com

DRAWING NO.

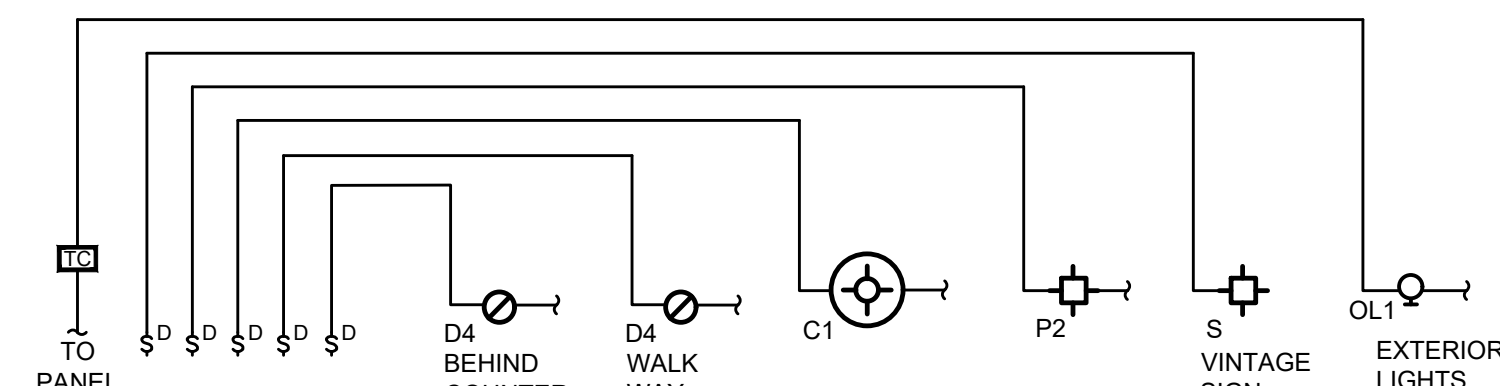
E2.3



1. THIS LABEL INDICATES THAT THIS CABLE ORIGINATES FROM PATCH PANEL 1 IN THE MAIN DISTRIBUTION FRAME.
2. QUANTITY OF CATEGORY 6 JACKS AND CABLES PER OUTLET AS INDICATED ON DRAWINGS.
3. EACH PATCH PANEL SHALL BE LABELED IN ASCENDING ORDER STARTING AT THE TOP OF THE RACK.
4. PATCH PANEL TERMINATIONS SHALL BE LABELED WITH THE SAME LABELING SCHEME.
5. LABEL THE CABLE ONE INCH BEHIND THE CONNECTORS ON BOTH THE ROOM AND RACK SIDES. LABELS SHALL BE MACHINE GENERATED AND SELF LAMINATING. PATCH CORDS OVER 2 FEET IN LENGTH SHALL BE LABELED AT EACH END.
6. ALL PATCH CABLES AND WORK STATION CABLES SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. WORK STATION CABLES SHALL BE MINIMUM 5' LONG.
7. ALL PATCHING AND/OR CROSS CONNECTION SHALL BE PERFORMED BY THE CONTRACTOR.



LC-04 CORRIDOR- LIGHTING CONTROL RISER



ZONE CONTROL

1. MANUAL ON/OFF (EACH ZONE INDEPENDENTLY)
2. MANUAL RAISE/LOWER (EACH ZONE INDEPENDENTLY)
3. OWNER MAY CHOOSE TO LEAVE SWITCH TO LIGHT FIXTURE TYPE P2 ON ALWAYS FOR SECURITY
4. EXTERIOR LIGHTING CIRCUIT TO ROUTE THROUGH TIME CLOCK FOR DUSK TIL DAWN OPERATION

LC-08 COFFEE SHOP - LIGHTING CONTROL RISER
NOT TO SCALE

ZONE CONTROL

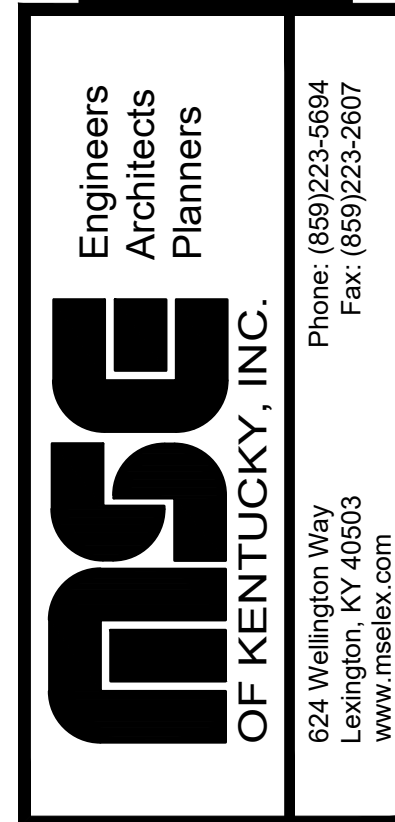
1. MANUAL ON/OFF
2. (EXHAUST FAN TO OPERATE WITH SHOWER LIGHT)

LIGHT CONTROL RISER LEGEND	
SYMBOL	DESCRIPTION
$\OS	ON/OFF WITH INTEGRAL OCCUPANCY SENSOR
$\OS2	ON/OFF, RAISE/LOWER, 3-WAY, WITH INTEGRAL OCCUPANCY SENSOR
$\D	ON/OFF, RAISE/LOWER (PROVIDE FIXTURE COMPATIBLE DIMMER SWITCH 0-10V)
$\D3	ON/OFF, RAISE/LOWER, 3-WAY (PROVIDE FIXTURE COMPATIBLE DIMMER SWITCH 0-10V)
$\$$	ON/OFF
$\3	ON/OFF (3-WAY)
-----	2#18 DIMMING CONDUCTOR CABLE (0-10V)
—————	LINE VOLTAGE
	PHOTOCELL
	TIME CLOCK (SET SCHEDULE FOR DUSK TO DAWN OPERATION)

1. REFER TO PLAN FOR EXACT DEVICE AND FIXTURE QUANTITIES.
2. REFER TO PLAN FOR 3-WAY OR MULTI-WAY SWITCH CONFIGURATIONS.
3. MUSEUM GALLERY LIGHT SWITCHES SHALL BE LABELED WITH FIXTURE/AREA SERVED.
4. WHEN GROUPED TOGETHER, LIGHT SWITCH STYLE (ROCKER, TOGGLE, SLIDE, ETC.) SHALL MATCH AS CLOSE AS POSSIBLE.
5. ARCHITECT TO SELECT DEVICE/FACEPLATE COLOR.
6. FOR ALL INSTANCES THE CONTRACTOR SHALL COORDINATE DIMMER COMPATIBILITY WITH LIGHT FIXTURE MANUFACTURER RECOMMENDATIONS.
4. FOR ALL INSTANCES THE CONTRACTOR SHALL COORDINATE DIMMER WATTAGE/POWER CAPABILITY WITH LIGHT FIXTURE(S) SERVED.



PROJECT NO. 2124-07		DATE	REVISION	BY
DESIGNED BY	JE			
DRAWN BY	JE			
CHECKED BY	JE			
REVIEWED BY	JE			
DATE	AUGUST 2024			
SCALE	AS NOTED			



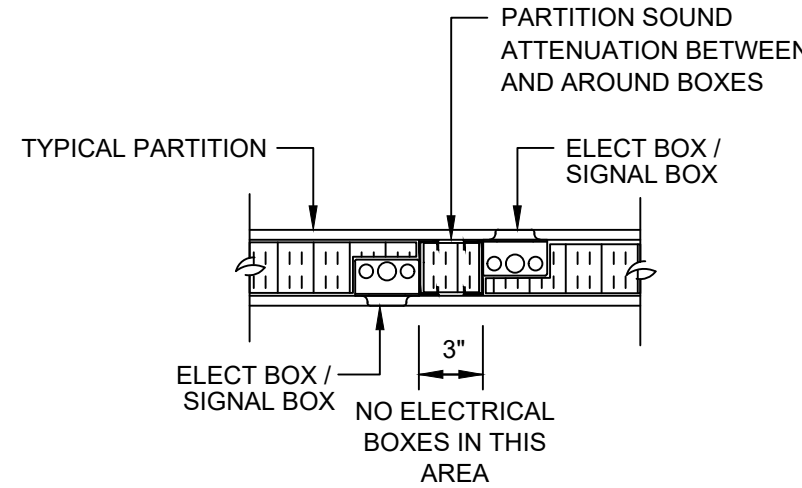
DRAWING NO.

E5.1

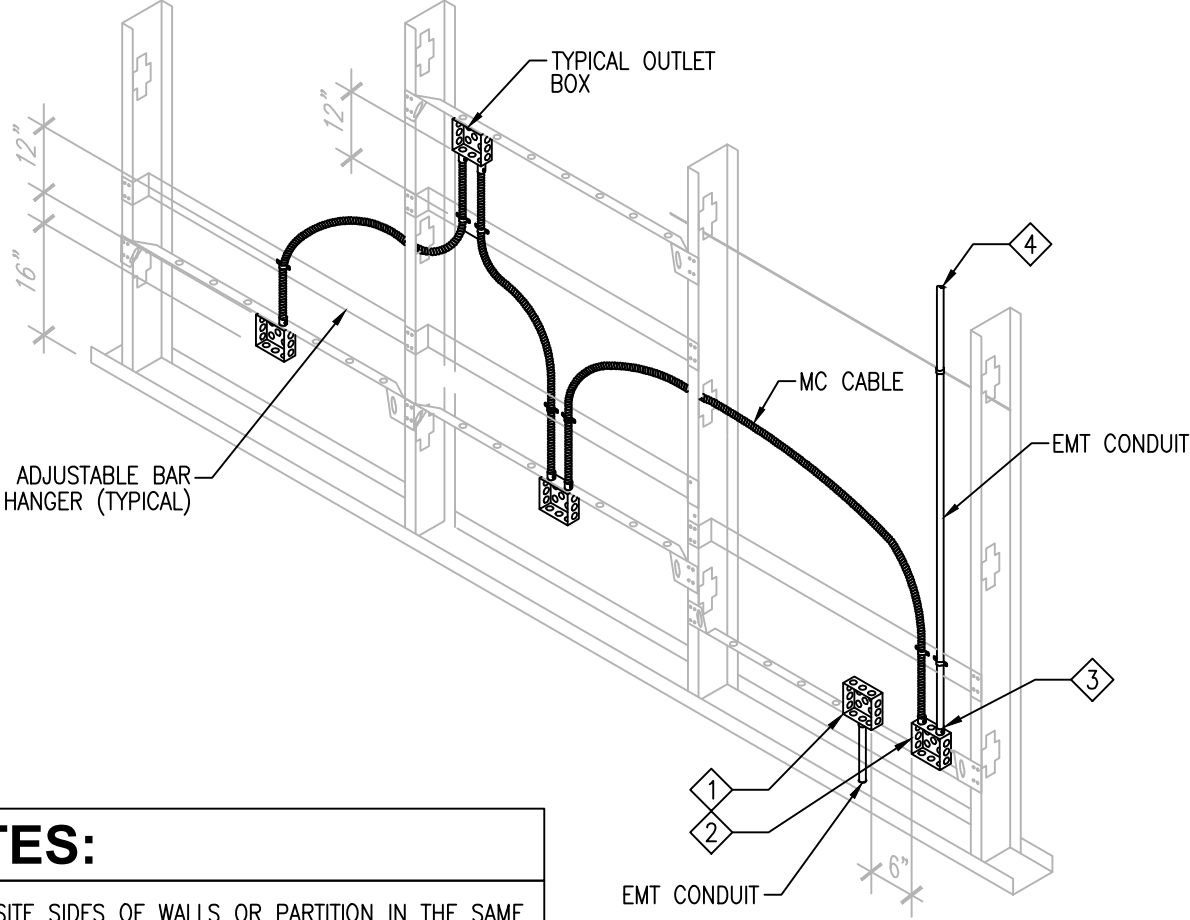


NOTES:

- ROUGH-IN BOXES MAY BE MOUNTED IN ADJACENT STUD SPACE ONLY IF THE BOXES FACE THE SAME DIRECTION. BACK-TO-BACK BOXES MUST BE SEPARATED PER THIS DETAIL.
- DO NOT PLACE BOXES BACK-TO-BACK EVEN IF SHOWN GRAPHICALLY ON DRAWINGS AS BACK-TO-BACK. BOXES SHALL BE INSTALLED SEPARATED PER THIS DETAIL. PROVIDE ADDITIONAL METAL FRAMING AS NECESSARY TO INSTALL BOXES SEPARATED AS INDICATED.
- ELEC/SIGNAL BOXES WITH OPENING AREAS NOT EXCEEDING 16 SQUARE INCHES PLACED IN RATED WALLS FACING IN OPPOSITE DIRECTIONS SHALL BE SEPARATED A MINIMUM OF 24 INCHES. INSTALLATION SHALL BE IN ACCORDANCE WITH KENTUCKY BUILDING CODE SECTION 711.3.2 "MEMBRANE PENETRATIONS".



1 BACK-TO-BACK BOX MOUNTING DETAIL
NOT TO SCALE



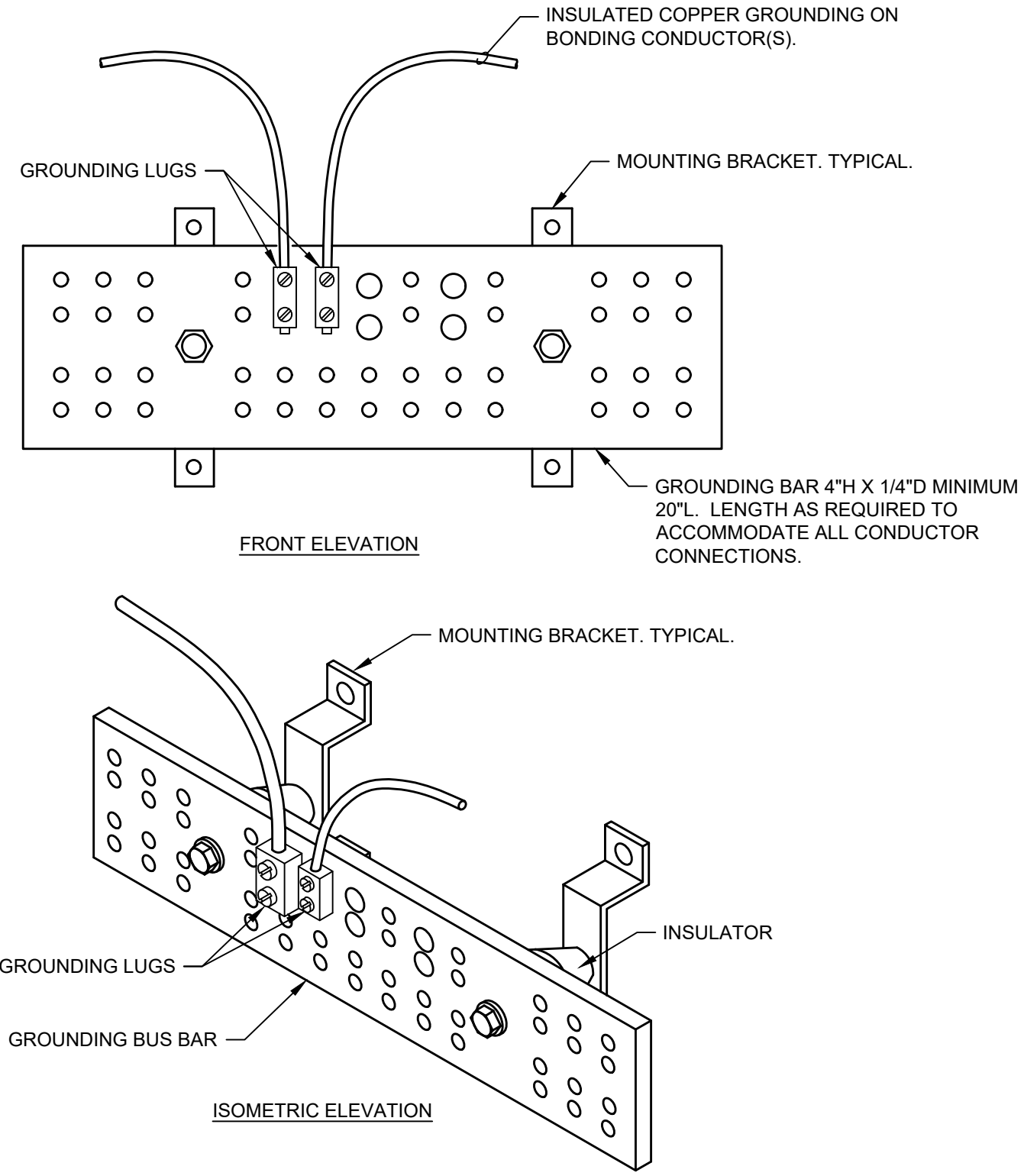
KEYED NOTES:

- OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITION IN THE SAME STUD SPACE MUST BE SEPARATED BY A MIN. OF 6" HORIZONTAL DISTANCE.
- ELECTRICAL BOXES INSTALLED IN FIRE RESISTANT WALLS OR PARTITIONS SHALL COMPLY WITH IBC 714.3.2 (24" SEPARATION ON OPPOSITE SIDES.)
- INSULATED THROAT EMT CONNECTOR.
- HOME RUN TO PANEL MUST BE IN RACEWAY.

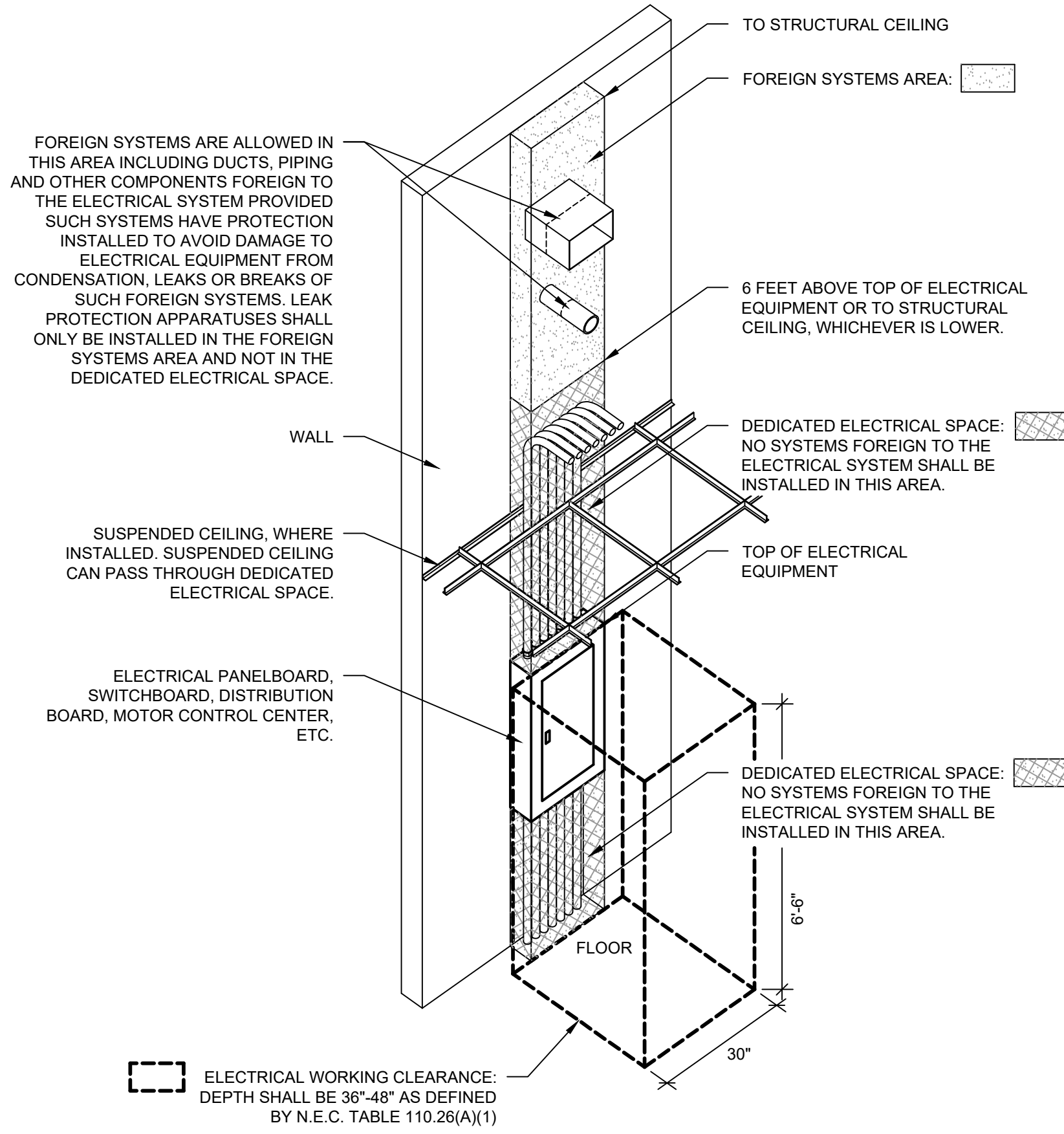
GENERAL NOTES:

- TYPICAL FOR WOOD AND METAL STUD ROUGH IN.
- PLASTER RINGS NOT SHOWN. COORDINATE RING DEPTH TO BE FLUSH WITH FINAL FINISH SURFACE.
- LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.

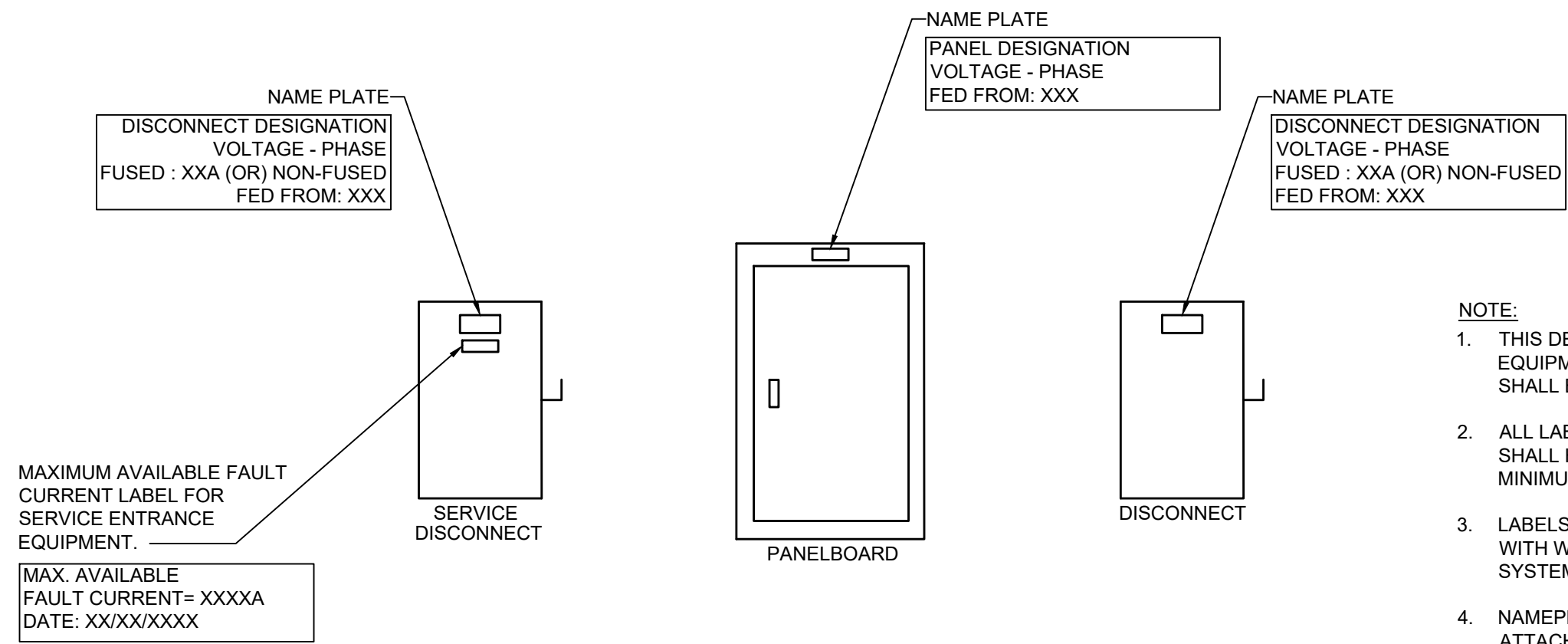
3 ROUGH-IN DETAIL FOR MC CABLE
NOT TO SCALE



1 GROUNDING BUS BAR DETAIL
NOT TO SCALE



2 DEDICTAED ELECTRICAL SPACE / WORKING CLEARANCE DETAIL
NOT TO SCALE



NOTE:

- THIS DETAIL IS A REPRESENTATION OF THE LABELING REQUIREMENTS FOR ELECTRICAL EQUIPMENT. ALL ELECTRICAL EQUIPMENT, WHETHER IT IS EXPLICIT SHOWN OR NOT, SHALL BE LABELED IN A SIMILAR MANNER.
- ALL LABELS SHALL BE ENGRAVED LAMINATED ACRYLIC. THE EQUIPMENT DESIGNATION SHALL HAVE A MINIMUM TEXT HEIGHT OF 3/8". THE REMAINING TEXT SHALL HAVE A MINIMUM HEIGHT OF 1/8".
- LABELS FOR EQUIPMENT CONNECTED TO THE NORMAL POWER SYSTEM SHALL BE BLACK WITH WHITE TEXT. LABELS FOR EQUIPMENT CONNECTED TO THE EMERGENCY POWER SYSTEM SHALL BE RED WITH WHITE TEXT.
- NAMEPLATES FOR EQUIPMENT LOCATED IN THE INTERIOR OF THE BUILDING SHALL BE ATTACHED WITH 3M SELF-ADHESIVES. EQUIPMENT INSTALLED AT EXTERIOR OF THE BUILDING SHALL BE ATTACHED WITH SCREWS AND THE LABEL SHALL HAVE PRE-PUNCHED OR PREDRILLED HOLES.

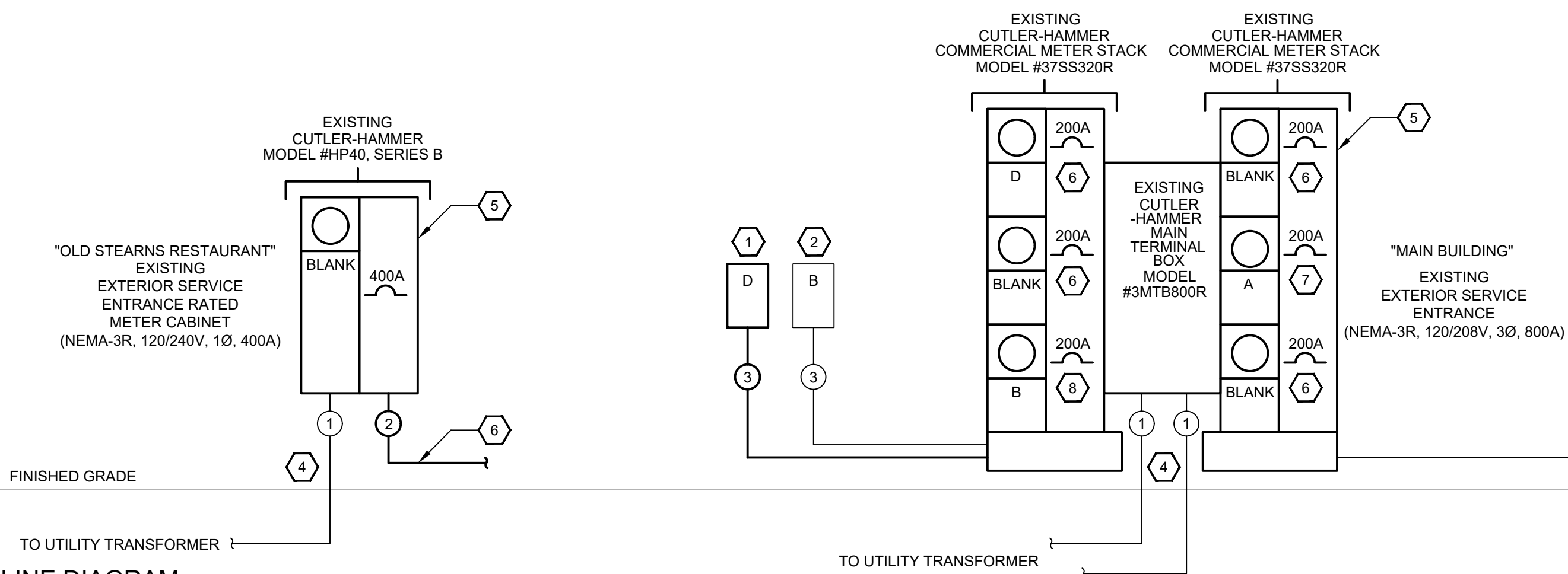
5 ELECTRICAL EQUIPMENT IDENTIFICATION
NOT TO SCALE

GENERAL NOTES

- ANY INTERRUPTION OF BUILDING ELECTRIC SERVICE(S) SHALL BE COORDINATED WITH BUILDING OWNER WITH EXPECTED DOWN TIME IN ADVANCE.
- COORDINATE DISCONNECTION OF BUILDING ELECTRIC SERVICE(S) WITH UTILITY COMPANY.
- ANY COST ASSOCIATED WITH UTILITY WORK SHALL BE COVERED BY THE CONTRACTOR.
- ALL NECESSARY INSPECTIONS RELATED TO WORK SHALL BE COVERED BY THE CONTRACTOR.
- ONE-LINE DIAGRAM IS DIAGRAMMATICAL. USE FOR INFORMATION ONLY. FIELD VERIFY EXISTING INSTALLATION.
- ALL WORK RELATED TO SERVICE ENTRANCE EQUIPMENT AND METERING SHALL BE COORDINATED WITH LOCAL UTILITY COMPANY.
- EXISTING LINE-SIDE FEEDERS AND PATHWAYS SHALL BE PRESERVED FOR RECONNECTION AS PART OF FUTURE WORK.

#	ONE LINE SCHEDULE
1	EXISTING SERVICE
2	EXISTING FEEDER
3	3#3/0, 1#6G, 2-1/2"C
4	4#3/0, 1#6G, 2-1/2"C

4 DEMOLITION - POWER ONE-LINE DIAGRAM
NOT TO SCALE



ONE-LINE NOTES:

- SECOND LEVEL PANEL 'D' TO BE DEMOLISHED. REFER TO SHEET E2.2, DEMOLITION NOTE 1, FOR PANEL LOCATION INSIDE EXISTING BUILDING. DEMOLISH FEEDER FROM PANEL TO SOURCE.
- FIRST LEVEL PANEL 'B' TO REMAIN. REFER TO SHEET E2.1 FOR PANEL LOCATION INSIDE EXISTING BUILDING. EXISTING FEEDER TO REMAIN.
- FIRST LEVEL PANEL 'A' TO REMAIN. REFER TO SHEET E2.1 FOR PANEL LOCATION INSIDE EXISTING BUILDING. EXISTING FEEDER TO REMAIN.
- EXISTING LINE-SIDE SERVICE CONDUCTORS AND PATHWAY TO BUILDING TO REMAIN. SHALL BE RECONNECTED AS PART OF NEW WORK.
- EXISTING SERVICE ENTRANCE EQUIPMENT TO BE REMOVED. COORDINATE DISCONNECTION OF SERVICE WITH UTILITY COMPANY.
- EXISTING FEEDER TO BE DEMOLISHED.
- EXISTING FEEDER TO PANEL 'A' TO REMAIN.
- EXISTING FEEDER TO PANEL 'B' TO REMAIN.

PANEL 'P1'													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		1 PHASE	POLES	MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING			
120/240		3 WIRE	30	200		MCB		22,000		FLUSH			
POLE NO.	BREAKER	LOAD SERVED		PHASE LOADS		LOAD SERVED		BREAKER		POLE			
NO.	TRIP	P		KVA	A	B	KVA	TRIP	P	NO.	TRIP	P	NO.
1	20A	1	REC. BEDROOM 305	1.3	2.0		0.7	REC. LIVING 307	20A	1	2		
3	20	1	REC. BATH 306	0.4		1.3	0.9	REC. DINING 307	20A	1	4		
5	20A	1	REC. BEDROOM 308	1.1	2.6		1.5	REC. KITCHEN COUNTER	20A	1	6		
7	20A	1	REC. BEDROOM 309	1.3		2.8	1.5	REC. KITCHEN COUNTER	20A	1	8		
9	20	1	REC. BATH 310	0.2	1.2		1.0	REC. REFRIGERATOR	20C	1	10		
11	45	2	AHU-1 (APT #307)	3.8		4.8	1.0	REC. (FUTURE)	20C	1	12		
13	-	-	-	3.8	4.1		0.3	RANGE HOOD	20	1	14		
15	20A	1	SMOKE DETECTORS	0.3		4.3	4.0	OVEN/RANGE	50G	2	16		
17	20A	1	LIGHTING	1.0	5.0		4.0	-	-	-	18		
19	25	2	HP-1 (APT #307)	1.8		1.8	0.0	SPACE	-	-	20		
21	-	-	-	1.8	1.8		0.0	SPACE	-	-	22		
23	20	1	ATTIC LIGHT, REC.	0.2		0.2	0.0	SPACE	-	-	24		
25	20	1	SPARE	0.2	0.2		0.0	SPACE	-	-	26		
27	20A	1	SPARE	0.2		0.2	0.0	PANEL SPD DEVICE	-	-	28		
29	20C	1	SPARE	0.2		0.2	0.0	-	-	-	30		
PHASE TOTALS:				17.0	15.3	TOTAL:		32.218	KVA				

NOTES:
1. PANEL TO HAVE BREAKER STYLE SURGE PROTECTION DEVICE
2. PANEL TO BE SERVICE ENTRANCE RATED

ABBREVIATIONS:
G - GFCI BREAKER
A - AFCI BREAKER
L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER
C - COMBINATION GFCI/AFCI BREAKER
MCB - MAIN CIRCUIT BREAKER
MLO - MAIN LUG ONLY

PANEL 'P2'													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		1 PHASE	POLES	MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING			
120/240		3 WIRE	30	200		MCB		22,000		FLUSH			
POLE NO.	BREAKER	LOAD SERVED		PHASE LOADS		LOAD SERVED		BREAKER		POLE			
NO.	TRIP	P		KVA	A	B	KVA	TRIP	P	NO.	TRIP	P	NO.
1	20A	1	REC. BEDROOM 315	1.3	2.0		0.7	REC. LIVING 314	20A	1	2		
3	20	1	REC. BATH 316	0.4		1.3	0.9	REC. DINING 314	20A	1	4		
5	20A	1	REC. BEDROOM 313	1.1	2.6		1.5	REC. KITCHEN COUNTER	20A	1	6		
7	20A	1	REC. BEDROOM 312	1.3		2.8	1.5	REC. KITCHEN COUNTER	20A	1	8		
9	20	1	REC. BATH 311	0.2	1.2		1.0	REC. REFRIGERATOR	20C	1	10		
11	45	2	AHU-2 (APT #314)	3.8		4.8	1.0	REC. (FUTURE)	20C	1	12		
13	-	-	-	3.8	4.1		0.3	RANGE HOOD	20	1	14		
15	20A	1	SMOKE DETECTORS	0.3		4.3	4.0	OVEN/RANGE	50G	2	16		
17	20A	1	LIGHTING	1.0	5.0		4.0	-	-	-	18		
19	25	2	HP-2 (APT #314)	1.8		1.8	0.0	SPACE	-	-	20		
21	-	-	-	1.8	1.8		0.0	SPACE	-	-	22		
23	20	1	ATTIC LIGHT, REC.	0.2		0.2	0.0	SPACE	-	-	24		
25	20	1	SPARE	0.5	0.5		0.0	SPACE	-	-	26		
27	20A	1	SPARE	0.5		0.5	0.0	PANEL SPD DEVICE	-	-	28		
29	20C	1	SPARE	0.5	0.5		0.0	-	-	-	30		
PHASE TOTALS:				17.7	15.6	TOTAL:		33.268	KVA				

NOTES:
1. PANEL TO HAVE BREAKER STYLE SURGE PROTECTION DEVICE
2. PANEL TO BE SERVICE ENTRANCE RATED

ABBREVIATIONS:
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MCB - MAIN CIRCUIT BREAKER
MLO - MAIN LUG ONLY



PANEL 'C'													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		3 PHASE	POLES	MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING			
120/208		4 WIRE	42	200		MCB		22,000		SURFACE			
POLE NO.	BREAKER	LOAD SERVED		PHASE LOADS		LOAD SERVED		BREAKER		POLE			
NO.	TRIP	P		KVA	A	B	C	KVA	TRIP	P	NO.	TRIP	P
1	20	1	REC. COFFEE SHOP 209	0.9	2.4			1.5	REC. CNTR. COFFEE SHOP 209	20	1	2	
3	20	1	REC. COFFEE SHOP 209	0.4		1.9		1.5	REC. CNTR. COFFEE SHOP 209	20	1	4	
5	20G	1	REC. ICE MAKER	0.5			2.0	1.5	REC. CNTR. COFFEE SHOP 209	20	1	6	
7	20G	1	REC. REFRIGERATOR	0.5	2.0			1.5	REC. CNTR. COFFEE SHOP 209	20	1	8	
9	20	1	REC. COFFEE SHOP 209	0.5		2.0		1.5	REC. CNTR. COFFEE SHOP 209	20	1	10	
11	20	1	REC. WOMEN 208, MEN 207	0.4			0.7	0.4	REC. CORR. 206, JAN. 205	20	1	12	
13	30	2	EW-H-1 (JANITOR 205)	2.3	2.8			0.5	REC. OFFICE 204	20	1	14	
15	-	-	-	2.3		2.8		0.5	REC. OFFICE 204	20	1	16	
17	50	2	AHU-6 (2ND FLOOR)	4.8			5.3	0.5	REC. OFFICE 204	20	1	18	
19	-	-	-	4.8	5.2			0.4	REC. OFFICE 204	20	1	20	
21	25	2	AHU-6 (2ND FLOOR)	2.4		3.2		0.8	LTS. COFFEE, BATHS, CORR. JAN. OFFICE	20	1	22	
23	-	-	-	2.4			3.4	1.0	COFFEE SIGN INSIDE	20	1	24	
25	15	1	ERV-1 (2ND FLOOR)	0.4	1.1			0.7	REC. OFFICE 204 FLOOR	20	1	26	
27	40	2	HP-6 (2ND FLOOR)	2.2		2.7		0.5	SPARE	20	1	28	
29	-	-	-	2.2			2.7	0.5	SPARE	20	1	30	
31	20G	1	REC. DRINKING FOUNTAIN	0.8	1.3			0.5	SPARE	20	1	32	
33	20G	2	REC. CNTR. ESPRESSO MACHINE	1.5		1.5		0.0	SPACE	-	-	34	
35	-	-	-	1.5			1.5	0.0	SPACE	-	-	36	
37	20G	2	REC. CNTR. ESPRESSO MACHINE	1.5	1.5			0.0	PANEL SPD DEVICE	30	3	38	
39	-	-	-	1.5		1.5		0.0	-	-	-	40	
41	20G	1	SPARE	0.5			0.5	0.0	-	-	-	42	
PHASE TOTALS:				16.2	15.6	16.1			TOTAL: 47.929 KVA				

NOTES:
1. PANEL TO HAVE BREAKER STYLE SURGE PROTECTION DEVICE
2. PANEL TO BE SERVICE ENTRANCE RATED

ABBREVIATIONS:
G - GFCI BREAKER
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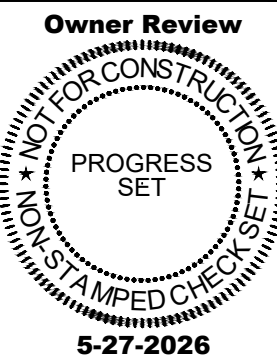
PANEL 'E'													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		3 PHASE	POLES	MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING			
120/208		4 WIRE	42	200		MCB		22,000		SURFACE			
POLE NO.	BREAKER	LOAD SERVED		PHASE LOADS		LOAD SERVED		BREAKER		POLE			
NO.	TRIP	P		KVA	A	B	C	KVA	TRIP	P	NO.	TRIP	P
1	20	1	REC. CORR. LOBBY 300, STAIR 102 & 210	1.1	2.3			1.3	REC. OFFICE 303	20	1	2	
3	20	1	REC. MEN 301, WOMEN 302	0.4		1.3		0.9	REC. CONF. 304	20	1	4	
5	20G	1	EW-C (3RD FLOOR)	0.5			1.4	0.9	REC. CONF. 304	20	1	6	
7	50	2	AHU-3 (3RD FLOOR)	4.8	5.5			0.7	REC. DISPLAYS FLOOR, CONF. 304	20	1	8	
9	-	-	-	4.8		5.3		0.5	LTS. CONF. 304, OFFICE 305	20	1	10	
11	25	2	AHU-3 (3RD FLOOR)	2.4			3.4	1.0	LTS. CORR. LOBBY 300, BATHS, ERV-1	20	1	12	
13	-	-	-	2.4	2.9			0.5	SPARE	20	1	14	
15	40	2	HP-3 (3RD FLOOR)	2.2		2.7		0.5	SPARE	20	1	16	
17	-	-	-	2.2			2.7	0.5	SPARE	20	1	18	
19	30	2	EW-H-2 (STORAGE 203)	2.3	2.3			0.0	SPACE	-	-	20	
21	-	-	-	2.3		2.3		0.0	SPACE	-	-	22	
23	15	1	RCP-1 (STORAGE 203)	0.1			0.1	0.0	SPACE	-	-	24	
25	50	2	AHU-5 (2ND FLOOR)	4.8	4.8			0.0	SPACE	-	-	26	
27	-	-	-	4.8		4.8		0.0	SPACE	-	-	28	
29	25	2	AHU-5 (2ND FLOOR)	2.4			2.4	0.0	SPACE	-	-	30	
31	-	-	-	2.4	2.4			0.0	SPACE	-	-	32	
33	50	2	HP-5 (2ND FLOOR)	2.7		2.7		0.0	SPACE	-	-	34	
35	-	-	-	2.7			2.7	0.0	SPACE	-	-	36	
37	-	-	SPACE	0.0	0.0			0.0	PANEL SPD DEVICE	30	3	38	
39	-	-	SPACE	0.0				0.0	-	-	-	40	
41	-	-	SPACE	0.0				0.0	-	-	-	42	
PHASE TOTALS:				20.3	19.0	12.6			TOTAL: 51.83 KVA				

NOTES:
1. PANEL TO HAVE BREAKER STYLE SURGE PROTECTION DEVICE
2. PANEL TO BE SERVICE ENTRANCE RATED

ABBREVIATIONS:
G - GFCI BREAKER
A - AFCI BREAKER
L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER
C - COMBINATION GFCI/AFCI BREAKER
MCB - MAIN CIRCUIT BREAKER
MLO - MAIN LUG ONLY

- ONE-LINE NOTES:
- RECONNECT TO EXISTING LINE-SIDE SERVICE CONDUCTORS.
 - RECONNECT TO EXISTING FEEDER TO PANEL 'A'.
 - RECONNECT TO EXISTING FEEDER TO PANEL 'B'.

- NOTES**
- LIGHTING CONTACTOR PANEL AND H.O.A. SWITCH SHALL BE INSTALLED IN A NEMA 1 ENCLOSURE. A SINGLE ENCLOSURE MAY BE USED FOR BOTH DEVICES.
 - LIGHTING CONTACTOR SHALL HAVE A 120 VOLT, 20 AMP RATED PER CIRCUIT, WITH POLES AS INDICATED.
 - LIGHTING CONTACTOR SHALL HAVE A 120 VOLT COIL OPERATED BY A TIME CLOCK.
 - LIGHTING CONTACTOR SHALL BE MECHANICALLY HELD.
 - LIGHTING CONTACTOR PANEL SHALL



HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

LIGHT FIXTURE SCHEDULE												
FIXTURE TYPE	DESCRIPTION	MOUNTING	VOLTAGE	LAMPS						MANUFACTURER/MODEL NUMBER	NOTES	
				TYPE	LUMENS	WATTS	DIMMING	CRI	COLOR TEMP			
B2	2" LINEAR WITH CRESCENT-SHAPE REFRACTOR AND DECORATIVE DIE-CAST END CAPS; OPTIONAL WALL OR CEILING MOUNTING, SELECTABLE CCT AND LUMEN OUTPUT.	SURFACE	MVOLT	LED	2795	19.4	0-10V DIM TO 10%	≥80	4000K	NICOR: LSC2 225S U S 8	1,5	
B4	4" LINEAR WITH CRESCENT-SHAPE REFRACTOR AND DECORATIVE DIE-CAST END CAPS; OPTIONAL WALL OR CEILING MOUNTING, SELECTABLE CCT AND LUMEN OUTPUT.	SURFACE	MVOLT	LED	5530	39.4	0-10V DIM TO 10%	≥80	4000K	NICOR: LSC2 440S U S 8	1,5	
C1	DECORATIVE DRUM STYLE FABRIC SHADE PENDANT FIXTURE, ROUND FORM FACTOR, 20" DIAMETER, 8" HEIGHT SHADE, COLOR OF SHADE FABRIC SHALL BE BUTCHER LINEN RED 115-95, OIL RUBBED BRONZE BASE AND STEM. PROVIDE WITH REQUIRED LED LAMPS.	PENDANT	120	LED	-	100 (MAX) X3	N/A	≥80	3000K	LITE TOPS: SF-K177-115-95-503OB	1,6	
C2	DECORATIVE DRUM STYLE FABRIC SHADE PENDANT FIXTURE, ROUND FORM FACTOR, 30"W X 12"H SHADE, 36" OVERALL FIXTURE HEIGHT, COLOR OF SHADE FABRIC: 117-01, OIL RUBBED BRONZE BASE, PROVIDE WITH REQUIRED LAMPS.	PENDANT	120	LED	-	100 (MAX) X3	N/A	≥80	3000K	LITE TOPS: PD-6667-160-04-30DR-OB	1,6	
C3	ROUND BOWL PENDANT FIXTURE, ROUND FORM FACTOR, 24" DIAMETER, 24" HEIGHT SHADE, BOWL SHALL BE FAUX ALABASTER, OIL RUBBED BRONZE FINISH. PROVIDE WITH REQUIRED LAMPS.	PENDANT	120	LED	-	100 (MAX) X3	N/A	≥80	3000K	LITE TOPS: PD-K6184-OPACR-24BWL-ORBZ	1,6	
CE	4" LINEAR WITH CRESCENT-SHAPE REFRACTOR AND DECORATIVE DIE-CAST END CAPS; INTEGRATED OCCUPANCY SENSOR, OPTIONAL WALL OR CEILING MOUNTING, SELECTABLE CCT AND LUMEN OUTPUT. INTEGRAL 8W EMERGENCY BATTERY PACK	SURFACE	MVOLT	LED	4175	28.9	0-10V DIM TO 10%	≥80	3500K	NICOR: LSC2 440S U S 8 E2	1	
D1	4" LED MODULAR DOWNLIGHT, ROUND FORM FACTOR, WHITE FLANGE, FIELD ADJUSTABLE OPTIC, SET TO 60 DEGREES, FIELD SELECTABLE CCT AND LUMEN OUTPUT. WET LOCATION RATED.	RECESSED	MVOLT	LED	1,158	11.5	0-10V	≥90	3500K	NICOR: CDG4-38S-U-S-9-CL-WH-MD LITHONIA EQUAL COOPER EQUAL	1,5	
D2	6" LED MODULAR DOWNLIGHT, ROUND FORM FACTOR, WHITE FLANGE, FIELD ADJUSTABLE OPTIC, SET TO 60 DEGREES, FIELD SELECTABLE CCT AND LUMEN OUTPUT. WET LOCATION RATED.	RECESSED	MVOLT	LED	2,578	24.2	0-10V	≥90	3500K	NICOR: CDG6-38S-U-S-9-CL-WH-MD LITHONIA EQUAL COOPER EQUAL	1,5	
D3	6" LED MODULAR DOWNLIGHT, ROUND FORM FACTOR, WHITE FLANGE, FIELD ADJUSTABLE OPTIC, SET TO 60 DEGREES, FIELD SELECTABLE CCT AND LUMEN OUTPUT. WET LOCATION RATED.	RECESSED	MVOLT	LED	3,246	37.1	0-10V	≥90	3500K	NICOR: CDG6-38S-U-S-9-CL-WH-MD LITHONIA EQUAL COOPER EQUAL	1,5	
D4	6" LED MODULAR DOWNLIGHT, ROUND FORM FACTOR, WHITE FLANGE, FIELD ADJUSTABLE OPTIC, SET TO 60 DEGREES, FIELD SELECTABLE CCT AND LUMEN OUTPUT. WET LOCATION RATED.	RECESSED	MVOLT	LED	1,284	11.5	0-10V	≥90	3500K	NICOR: CDG6-38S-U-S-9-CL-WH-MD LITHONIA EQUAL COOPER EQUAL	1,5	
EX1	EXIT SIGN WITH TWIN EMERGENCY LAMPS; 6" LETTERS, BATTERY BACKUP FOR 90 MINUTES; LED INDICATOR WITH INTEGRAL TEST SWITCH; REMOTE HEAD CAPACITY, RED/GREEN AND DIRECTIONAL ARROWS FIELD SELECTABLE, UNIVERSAL MOUNTING PLATE, SINGLE OR DOUBLE SIDED.	VARIABLES (SEE PLANS)	MVOLT	LED	386	4	N/A	N/A	N/A	NICOR: ECL1-20-UNV-WH-S-2-R SURE-LITES EQUAL MAXLITE EQUAL	1,3	
EX	EXIT SIGN, 6" LETTERS, BATTERY BACKUP FOR 90 MINUTES, INTEGRAL TEST SWITCH, LED INDICATOR, RED/GREEN AND DIRECTIONAL ARROWS FIELD SELECTABLE, SINGLE OR DOUBLE FACE, WHITE HOUSING, UNIVERSAL MOUNTING.	VARIABLES (SEE PLANS)	MVOLT	LED	N/A	1	N/A	N/A	N/A	NICOR: EXL1-20-UNV-WH-S-2 SURE-LITES EQUAL MAXLITE EQUAL	1,3	
EM	TWO-HEAD EMERGENCY EGRESS LIGHT WITH BATTERY BACKUP FOR 90 MINUTES, INTEGRAL TEST SWITCH, LED INDICATOR, AIMABLE OPTICS, WHITE HOUSING.	WALL	MVOLT	LED	203	2.5	N/A	N/A	N/A	NICOR: EML3-10-UNV-WH-SD SURE-LITES EQUAL MAXLITE EQUAL	1	
EM2	TWO-HEAD EMERGENCY EGRESS LIGHT WITH BATTERY BACKUP FOR 90 MINUTES, INTEGRAL TEST SWITCH, LED INDICATOR, AIMABLE OPTICS, BLACK HOUSING/FIXTURE COLOR REQUIRED. RECESSED FLUSH CEILING MOUNTED.	WALL	MVOLT	LED	203	2	N/A	N/A	N/A	BEST LIGHTING: REMBSDT SURE-LITES EQUAL MAXLITE EQUAL	1	
ER	TWIN REMOTE HEAD FOR EMERGENCY EGRESS, POWERED VIA ADJACENT EXIT SIGN FIXTURE TYPE 'E'; WET LOCATION LISTED, POWDER COATED DIE-CAST ALUMINUM BASE, AIMABLE HEADS.	WALL	N/A	LED	202	1.5/HEAD	N/A	N/A	N/A	NICOR: ECL1 20 RH W P2	1,3	
F2	2'x4' LED FLAT PANEL TROFFER, ALUMINUM FRAME, SEALED MAINTENANCE FREE CHAMBER, POLYCARBONATE FROSTED DIFFUSER, FIELD SELECTABLE CCT AND LUMEN OUTPUT.	RECESSED	MVOLT	LED	4,553	40	0-10V DIM TO 10%	≥80	3500K	NICOR: TGL-4-24-U-S-8 LITHONIA EQUAL COOPER EQUAL	1,5	
F3	2'x4' LED FLAT PANEL TROFFER, ALUMINUM FRAME, SEALED MAINTENANCE FREE CHAMBER, POLYCARBONATE FROSTED DIFFUSER, FIELD SELECTABLE CCT AND LUMEN OUTPUT.	RECESSED	MVOLT	LED	6,070	52.1	0-10V DIM TO 10%	≥80	3500K	NICOR: TGL-4-24-U-S-8 LITHONIA EQUAL COOPER EQUAL	1,5	
G	WALL SCONCE, JELLY JAR STYLE WITH TOP SHADE, 11.5"W X 8.1"H X 9.5"D, DIE FORMED COLD ROLLED STEEL HOUSING, HIGH TRANSMISSION GLASS SHADE, SUITABLE FOR DAMP LOCATIONS, MUST BE INSTALLED MINIMUM 6'-6" AFF TO BOTTOM OF FIXTURE.	WALL	120V	LED	1148	12	N/A	≥80	3000K	NICOR: 3280-LED-BK-30K	1	
J	JELLY JAR WITH CAST ALUMINUM HOUSING AND CLEAR GLASS DIFFUSER, POWDER COAT FINISH, WALL OR CEILING MOUNT WITH HINGED BASE, SELECTABLE CCT, WET LOCATION LISTED	WALL	MVOLT	LED	2585	20.6	N/A	≥80	4000K	NICOR: VTJ 1 21 U S 8 GR	1, 4	
OL1	EXTERIOR GOOSENECK FIXTURE WITH INDUSTRIAL SHADE AND ALUMINUM CONSTRUCTION; WET LOCATION LISTED	WALL	120	-	-	200 (MAX)	N/A	-	-	BARN LIGHT ELECTRIC: BLE-G-WHS18-350-G6-NA-350-NA-NA-NA-E26	1,3	
OL2	EXTERIOR ARCHITETCURAL FLOOD WITH ADJUSTABLE LOCKING KNUCLE, MOUNT FOR UPLIGHT ONLY APPLICATION; DIE CAST ALUMINUM CONSTRUCTION WITH POWDER COAT FINISH, 3.6" DIAMETER HOUSING, IP66 RATED	WALL	MVOLT	LED	1487	21	0-10V DIM TO 10%	≥80	4000K	HYDREL: SAFI LED P3 80CRI 40K 15DEG CWL KM AWM/C ZT C3	1,10	
OL3	EXTERIOR HIGH-DENSITY LED TAP LIGHT WITH MOUTING CLIPS, 22' LONG SECTIONS, IP65 RATED, REMOTE DIMMABLE 200W DRIVER	SURFACE	MVOLT	LED	10560	102	0-10V DIM TO 10%	≥80	4000K	DIODE LED: DI-24V-VLX5-40-264		
P2	CUSTOM VINTAGE RESTORED GLOBE PENDANT LIGHT FIXTURE, CONTRACTOR SHALL INCLUDE A LUMP SUM ALLOWANCE OF \$7,000 FOR QTY.5 TYPE P2 LIGHT FIXTURES. QTY: 2 SHOWN ON PLAN, QTY:3 EXTRA. ANY AMOUNT NOT USED WILL BE DEDUCT CHANGE ORDERED BACK TO OWNER.	PENDANT	120V	LED	-	100 (MAX)	N/A	≥80	3000K	TBD BY OWNER, CONTRACTOR TO INSTALL	1	
P3	CUSTOM TIMBER BEAM PENDANT FIXTURE, MATTE BLACK HARDWARE FINISH AND CHAIN, 52" LENGTH, 17-1/4" HEIGHT, 30" OAH, QTY:2 CANOPY SHADED PENDANTS 16" DIAMETER HANGING FROM BOTTOM OF TIMBER BEAM. PROVIDE WITH REQUIRED LAMPS.	PENDANT	120V	LED	-	100 (MAX) X2	LINE VOLTAGE	≥80	3000K	LITE TOPS: CUSTOM 2 LIGHT METAL WOOD PENDANT OR EQUAL	1, 6	
T2	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINUOUS TRACK SYSTEM IS 2', TRACK HEAD QUANTITY 2, BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY:1 - LR43800 (2' LENGTH TRACK BLACK) QTY:2 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY:1 - LR43812 (END CAP) QTY:1 - LR43815 (POWER END CONNECTOR)	1, 5, 7	
T4	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINUOUS TRACK SYSTEM IS 4', TRACK HEAD QUANTITY 3, BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY:1 - LR43803 (4' LENGTH TRACK BLACK) QTY:3 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY:1 - LR43812 (END CAP) QTY:1 - LR43815 (POWER END CONNECTOR)	1, 5, 7	
T6	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINUOUS TRACK SYSTEM IS 6', TRACK HEAD QUANTITY 4, BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY:1 - LR43806 (6' LENGTH TRACK BLACK) QTY:4 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY:1 - LR43812 (END CAP) QTY:1 - LR43815 (POWER END CONNECTOR)	1, 5, 7	

PROJECT NO. 2124-07	DESIGNED BY	JE				
	DRAWN BY	JE				
	CHECKED BY	JE				
	REVIEWED BY	JE				
DATE	AUGUST 2024					
SCALE	AS NOTED					
				REVISION	DATE	BY
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E6.2

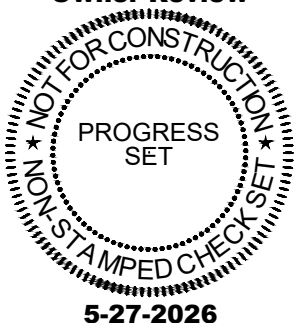


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T8	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 8', TRACK HEAD QUANTITY 5. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.1 - LR43809 (8' LENGTH TRACK BLACK) QTY.5 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T14	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 14', TRACK HEAD QUANTITY 8. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.1 - LR43806 (6' LENGTH TRACK BLACK) QTY.1 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.1 - LR43809 (8' LENGTH TRACK BLACK) QTY.8 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T16	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 16', TRACK HEAD QUANTITY 9. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.2 - LR43809 (8' LENGTH TRACK BLACK) QTY.1 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.9 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T22	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 22', TRACK HEAD QUANTITY 12. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.2 - LR43809 (8' LENGTH TRACK BLACK) QTY.2 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.1 - LR43806 (6' LENGTH TRACK BLACK) QTY.12 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T24	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 24', TRACK HEAD QUANTITY 13. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.3 - LR43809 (8' LENGTH TRACK BLACK) QTY.2 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.13 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T26	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 26', TRACK HEAD QUANTITY 14. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.3 - LR43809 (8' LENGTH TRACK BLACK) QTY.3 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.1 - LR43800 (2' LENGTH TRACK BLACK) QTY.14 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T30	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 30', TRACK HEAD QUANTITY 16. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.3 - LR43809 (8' LENGTH TRACK BLACK) QTY.3 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.1 - LR43806 (6' LENGTH TRACK BLACK) QTY.16 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T34	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 34', TRACK HEAD QUANTITY 18. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.4 - LR43809 (8' LENGTH TRACK BLACK) QTY.4 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.1 - LR43800 (2' LENGTH TRACK BLACK) QTY.18 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
T40	LED TRACK LIGHT SYSTEM, 20-50 DEGREE ZOOMABLE LED HEADS, 3" APERTURE, FIVE CCT SELECTABLE, 90 DEGREE TILT, 358 DEGREE ROTATION. PROVIDE ALL COMPONENTS/ACCESSORIES AS NEEDED TO MEET LAYOUT SHOWN ON PLANS. LENGTH OF CONTINOUS TRACK SYSTEM IS 40', TRACK HEAD QUANTITY 21. BLACK IN COLOR.	SURFACE	120V	LED	2100/HEAD	30/HEAD	TRIAC	≥90	3500K	LUXRITE: H-TRACK SYSTEM QTY.5 - LR43809 (8' LENGTH TRACK BLACK) QTY.4 - LR43830 (MINI-STRAIGHT CONNECTOR) QTY.21 - LR43874 (3" TRACK HEAD FIXTURE BLACK) QTY.1 - LR43812 (END CAP) QTY.1 - LR43815 (POWER END CONNECTOR)	1, 5, 7
V2	2' LENGTH VANITY WALL SCONCE, ROUND TUBULAR FORM FACTOR, BLACK FINISH WITH FROSTED LENS. SELECTABLE CCT	WALL	120V	LED	1,700	24	N/A	≥90	3500K	LUXRITE: LR32171 OR EQUAL	1,2,5
V4	4' LENGTH VANITY WALL SCONCE, ROUND TUBULAR FORM FACTOR, BLACK FINISH WITH FROSTED LENS. SELECTABLE CCT	WALL	120V	LED	3,000	38	N/A	≥90	3500K	LUXRITE: LR32175 OR EQUAL	1,2,5
Z1	CUSTOM VINTAGE RESTORED NEON SIGN. "COFFEE". 16L X 2H	SURFACE	120V	LED	-	-	-	-	-	BY OWNER SIGN AND SIGN INSTALLATION BY OWNER	1
Z2	CUSTOM VINTAGE RESTORED NEON SIGN. "STORE 1". 16L X 2H	SURFACE	120V	LED	-	-	-	-	-	BY OWNER SIGN AND SIGN INSTALLATION BY OWNER	1
Z3	CUSTOM VINTAGE RESTORED NEON SIGN. "STORE 3". 16L X 2H	SURFACE	120V	LED	-	-	-	-	-	BY OWNER SIGN AND SIGN INSTALLATION BY OWNER	1
Z4	CUSTOM VINTAGE RESTORED NEON SIGN. "STEARNS COAL & LUMBER CO.". COMES IN FOUR PARTS: 20L X 11.5H X 7W 20L X 11.5H X 7W 31L X 11.5H X 7W 35L X 11.5H X 7W	SURFACE	120V	LED	-	-	-	-	-	BY OWNER SIGN AND SIGN INSTALLATION BY OWNER	1
GENERAL -OWNER PREFERRED LIGHT FIXTURES SHOWN AS BASIS OF DESIGN -ALL LIGHT FIXTURES TO MEET THE FOLLOWING CRITERIA UNLESS OTHERWISE NOTED: MINIMUM 5 YEAR WARRANTY: UL LISTED -ANY LIGHT FIXTURE COLOR/FINISH NOTED IN SCHEDULE ARE FOR DESIGN INTENT ONLY, ARCHITECT SHALL SELECT FINAL COLOR/FINISH PRIOR TO ORDERING NOTES 1. ARCHITECT TO VERIFY COLOR/FINISH 2. CENTER ABOVE VANITY MIRROR, COORDINATE WITH ARCHITECTURAL ELEVATIONS 3. CENTER OVER DOOR/OPENING 4. VERTICAL MOUNT, ADA COMPLIANT 5. FIXTURE HAS ADJUSTABLE LUMEN OUTPUT AND/OR CCT, SELECT OUTPUT WATTAGE AND/OR CCT INDICATED ON SCHEDULE TO MEET LUMENS 6. PROVIDE MEDIUM BASE E26 LAMP WITH COLOR TEMPERATURE SPECIFIED, TOPAZ MODEL #LA19-12W-930-D-33 (EACH LAMP, 12W, 1,100 LUMENS), WHERE LAMP IS EXPOSED TO VIEW PROVIDE EDISON STYLE LED HIGH OUTPUT LAMP 7. COORDINATE EACH TRACK HEAD AIMING AND ZOOM IN FIELD WITH OWNER AFTER INSTALLATION IS COMPLETE PER INDIVIDUAL MUSEUM DISPLAY REQUIREMENTS. 8. FIELD VERIFY SHADE WIDTH AND COLOR OF EXISTING EXTERIOR GOOSENECK LIGHT FIXTURES PRIOR TO ORDERING. NEW EXTERIOR LIGHT FIXTURES SHALL MATCH EXISTING AS CLOSE AS POSSIBLE. 9. FIELD VERIFY WATTAGE AND COLOR TEMPERATURE OF EXISTING LAMPS IN EXISTING EXTERIOR GOOSENECK LIGHT FIXTURES; LAMPS IN NEW EXTERIOR LIGHT FIXTURES SHALL MATCH EXISTING AS CLOSE AS POSSIBLE. 10. CENTER ON PILASTER CONCEALED BEHIND PERMANENT LANDSCAPE PLANTER											

Owner Review



PROGRESS SET

5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE

REVISION

BY

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PROJECT NO. 2124-07

DESIGNED BY JE

DRAWN BY JE

CHECKED BY JE

REVIEWED BY JE

DATE AUGUST 2024

SCALE AS NOTED

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DRAWING NO.

E6.3

ELECTRICAL SPECIFICATIONS

GENERAL PROVISIONS	
1. REFERENCE	a. THE INSTRUCTION TO BIDDERS, GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, ALTERNATES, ADDENDA, CONTRACT DRAWINGS AND SPECIFICATIONS SET FORTH IN THE FORTHGOING PAGES ARE HEREBY INCORPORATED INTO AND BECOME A PART OF THE SPECIFICATIONS FOR WORK UNDER THIS TITLE. b. ALL SPECIFICATIONS UNDER THIS DIVISION TITLE ARE DIRECTED TO AND ARE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS OTHER TRADES OR PERSONS ARE SPECIFICALLY MENTIONED. "ELECTRICAL CONTRACTOR" IS INFERRED AND INTENDED.
2. EXISTING SITE CONDITIONS	a. THE CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND BECOME FAMILIAR WITH THE CONDITIONS AFFECTING THE INSTALLATION. SUBMISSION OF BID SHALL PURPOSE KNOWLEDGE OF SUCH CONDITIONS AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED WHERE EXTRA LABOR OR MATERIALS ARE REQUIRED BECAUSE OF IGNORANCE OF THESE CONDITIONS.
3. ELECTRICAL CONTRACTOR	a. THE ELECTRICAL CONTRACTOR/COMPANY SHALL BE LICENSED AND CERTIFIED IN THE STATE / LOCATION OF THE PROJECT FOR A MINIMUM OF TWO YEARS. b. THE ELECTRICAL CONTRACTOR/COMPANY SHALL HAVE A MINIMUM OF FIVE YEARS EXPERIENCE INSTALLING COMMERCIAL ELECTRICAL SYSTEMS SIMILAR TO THOSE DESCRIBED IN THESE SPECIFICATIONS AND PROVIDE A LIST OF PREVIOUS COMPANY PROJECTS, INCLUDING NAME OF PROJECT AND CONTACT NAMES AND PHONE NUMBERS FOR REFERENCE.
4. CONTRACT DRAWINGS	a. THE DRAWINGS ACCOMPANYING THESE SPECIFICATIONS ARE COMPLEMENTARY TO EACH OTHER AND WHAT IS CALLED FOR BY ONE SHALL BE AS IF CALLED FOR BY BOTH. IF IN ANY INSTANCE CONFLICTING STATEMENTS OCCUR, THE CONTRACTOR SHALL INCLUDE THE MORE EXPENSIVE OF THE TWO. b. CONSULT ALL CONTRACT DRAWINGS (ARCHITECTURAL, MECHANICAL AND ALL OTHERS) WHICH MAY AFFECT THE LOCATION OF EQUIPMENT, CONDUIT AND WIRING AND MAKE MINOR ADJUSTMENTS IN LOCATIONS TO SECURE COORDINATION. c. IT IS THE PURPOSE OF THE ELECTRICAL DRAWINGS TO INDICATE THE APPROXIMATE LOCATION OF ALL EQUIPMENT, OUTLETS, ETC. ASCERTAIN EXACT LOCATIONS AND ARRANGE WORK ACCORDINGLY. d. WIRING LAYOUT IS SCHEMATIC AND EXACT LOCATIONS SHALL BE DETERMINED BY FIELD CONDITIONS. e. INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, SERVICES AND PERMITS NECESSARY FOR THE PROPER COMPLETION OF ALL ELECTRIC WORK SHOWN. ITEMS OMITTED, BUT NECESSARY, TO MAKE THE ELECTRICAL SYSTEM COMPLETE AND WORKABLE SHALL BE UNDERSTOOD TO FORM PART OF THE WORK.
5. PERMITS AND INSPECTIONS	a. SECURE AND PAY PERMITS AND INSPECTIONS REQUIRED FOR THE ELECTRICAL WORK.
6. JOB-SITE COPY OF DOCUMENTS	a. MAINTAIN AT THE SITE ONE-COPY OF ALL DRAWINGS, SPECIFICATIONS, ADDENDA, APPROVED SHOP DRAWINGS, CHANGE ORDERS AND OTHER MODIFICATIONS, IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES AS A PERMANENT RECORD OF THE INSTALLATION AS CONSTRUCTED. THE DRAWINGS MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION SHALL BE DELIVERED TO THE OWNER'S REPRESENTATIVE FOR THE OWNER UPON COMPLETION OF THE WORK.
7. MANUFACTURER'S DRAWINGS	7.1. SUBMITTALS AND SHOP DRAWINGS SHALL BE SUBMITTED BY THE ELECTRICAL CONTRACTOR WITHIN 15 DAYS AFTER AWARDED THE PROJECT FOR ENGINEER REVIEW. 7.2. ALL EQUIPMENT AND MATERIAL SUBMITTED SHALL BE AS SPECIFIED ON THE DRAWINGS OR EQUAL AS APPROVED BY THE ENGINEER. 7.3. THE ITEMS, TYPES OF SUBMITTALS AND RELATED MATERIAL (IF ANY) CALLED FOR ARE INDICATED BELOW: SHOP DRAWING LOG ITEMS - SUBMITTALS REQUESTED: HANGERS AND SUPPORTS ELECTRICAL POWER CONDUCTORS AND CABLES RACEWAY AND BOXES LIGHTING CONTROLS WIRING DEVICES ENCLOSED SWITCHES AND CIRCUIT BREAKERS LIGHT FIXTURES PANELBOARDS
8. OPERATION AND MAINTENANCE MANUALS	8.1. UPON COMPLETION OF THE PROJECT, SUBMIT PHYSICAL SETS IN BOUND BOOKLET FORM OF ALL WRITTEN OPERATING INSTRUCTIONS AND MAINTENANCE REQUIREMENTS FOR ALL ELECTRICAL EQUIPMENT AND MATERIAL USED AND/OR INSTALLED ON THE PROJECT. 8.2. COPIES OF INSPECTION RESULTS SHALL BE SUBMITTED WITH O&M MANUALS 8.3. INCLUDE A LETTER OF GUARANTEE STARTING AT THE DATE OF SUBSTANTIAL COMPLETION.
9. GUARANTEES	a. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEFECTS, REPAIRS AND REPLACEMENTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF SUBSTANTIAL COMPLETION AS DETERMINED BY THE OWNER'S REPRESENTATIVE. PRODUCT GUARANTEES GREATER THAN ONE (1) YEAR SHALL BE REGISTERED AND OR TRANSFERRED TO THE OWNER FOR THE FULL BENEFIT/EXTENT OF THE MANUFACTURER'S WARRANTY. b. OPERATION PRIOR TO COMPLETION: WHEN ANY MECHANICAL OR ELECTRICAL EQUIPMENT IS OPERATED DURING CONSTRUCTION THE WARRANTY PERIOD SHALL NOT COMMENCE UNTIL THE EQUIPMENT IS OPERATED BY THE OWNER. PROPERLY CLEAN AND ADJUST THE EQUIPMENT AND COMPLETE ALL PUNCH LIST ITEMS BEFORE FINAL ACCEPTANCE BY THE OWNER. THE DATE OF ACCEPTANCE AND THE START OF THE WARRANTY MAY NOT BE THE SAME DATE.
10. SHUTDOWNS AND INTERRUPTIONS	a. THE EXISTING ELECTRICAL AND TELEPHONE/INTERNET SERVICE, AND ALL EXISTING COMMUNICATION, FIRE ALARM, SECURITY SYSTEMS, ORIGINATING WITHIN THE SPACE OR PASSING THROUGH THE SPACE, SERVING OTHER AREAS OF THE BUILDING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD. ANY SERVICE SHUTDOWNS THAT MAY BE REQUIRED SHALL BE SCHEDULED THROUGH THE OWNER AND SHALL BE DONE AT A TIME DIRECTED BY THE OWNER. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE SHUTDOWN PERIODS EVEN THOUGH PREMIUM-TIME WORK MAY BE REQUIRED. PROVIDE TEMPORARY SERVICE TO EQUIPMENT OR SYSTEMS THAT CANNOT BE SHUTDOWN, AS DETERMINED BY THE OWNER. b. PROVIDE A MINIMUM OF ONE WEEK'S NOTICE TO THE OWNER BEFORE ANY SERVICE SHUTDOWN IS SCHEDULED. c. CONTRACTOR SHALL PROVIDE TEMPORARY ELECTRIC SERVICE AND TEMPORARY LIGHTING THROUGHOUT BUILDING DURING CONSTRUCTION PERIOD.
11. LISTINGS	a. EQUIPMENT AND MATERIALS USED ON THIS PROJECT SHALL BE NEW AND U.L. LABELED FOR THE APPLICATION.
WORK INCLUDED	
1. INSTALLATION, MATERIALS, AND WORKMANSHIP	a. FURNISH AND INSTALL ALL NECESSARY ANCHORS, SUPPORTS, STRAPS, BOXES, FITTINGS, AND OTHER SIMILAR APPARATUSSES NOT INDICATED ON THE DRAWINGS BUT WHICH ARE REQUIRED FOR A COMPLETE AND PROPERLY INSTALLED SYSTEM CONSISTENT WITH THE ARCHITECTURAL TREATMENT OF THE BUILDING. b. THE ELECTRICAL CONTRACTOR, IN SO FAR AS THE WORK IS CONCERNED, SHALL AT ALL TIMES KEEP THE PREMISES IN A NEAT AND ORDERLY CONDITION, AND AT THE COMPLETION OF THE WORK, SHALL PROPERLY CLEAN UP AND CART AWAY DEBRIS AND EXCESS MATERIALS. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF DUMPSTER & REFUSED DISPOSAL, AS REQUIRED FOR ELECTRICAL WORK. c. ALL MATERIALS SHALL BE NEW AND UNDETERIORATED AND OF QUALITY NOT LESS THAN THE MINIMUM SPECIFIED.
2. COORDINATION OF PLANS AND SPECIFICATIONS	a. CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY IF THERE IS ANY QUESTION REGARDING THE MEANING OR INTENT OF EITHER PLANS OR SPECIFICATIONS, OR UPON NOTICING ANY DISCREPANCIES OR OMISSIONS IN EITHER PLANS OR

SPECIFICATIONS.	
3. CUTTING AND PATCHING	a. DO ALL CUTTING AND PATCHING IN EXISTING CONSTRUCTION AS NECESSARY FOR INSTALLATION OF THIS WORK. HAVE CUTTING DONE BY SKILLED MECHANICS AS CAREFULLY AS POSSIBLE AND WITH AS LITTLE DAMAGE AS POSSIBLE. b. DETERMINE IF ANY STRUCTURAL ELEMENTS SUCH AS REBAR OR POST TENSION CABLES, EXIST IN FLOORS, WALLS OR ROOFS BY INSPECTION COORDINATED WITH THE LANDLORDS TENANT COORDINATOR OR STRUCTURAL ENGINEER AND BY USE OF X-RAY WHEN REQUIRED PRIOR TO ANY CUTTING OR CORE DRILLING. IF SUCH ELEMENTS EXIST, REPORT THIS IMMEDIATELY TO THE ARCHITECT AND LANDLORD'S TENANT COORDINATOR FOR RESOLUTION PRIOR TO CUTTING OR DRILLING. c. ALL ELECTRICAL EQUIPMENT SHALL BE KEPT DRY AND CLEAN DURING THE CONSTRUCTION PERIOD. INTERIOR OF ALL ENCLOSURES SHALL BE CLEANED OF DIRT AND DEBRIS BEFORE INSTALLING TRIM OR COVERS. d. ALL FINISHED SURFACES OF EQUIPMENT FURNISHED UNDER THIS CONTRACT SHALL BE THOROUGHLY CLEANED OF DIRT AND ALL SCRATCHED OR DAMAGED SURFACES SHALL BE TOUCHED UP WITH MATCHING MATERIAL BEFORE FINAL ACCEPTANCE OF THE WORK. e. WHEN ALL WORK IS COMPLETED AND ALL WORK HAS BEEN SATISFACTORILY TESTED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE, ALL CONDUIT AND OTHER EXPOSED SURFACES SHALL BE THOROUGHLY CLEANED.
CODES AND FEES	
1. CODES:	a. WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE PROVISIONS OF LOCAL AND STATE CODES. AS WELL AS THE LATEST STATE ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, AS INTERPRETED BY THE LOCAL AUTHORITY HAVING JURISDICTION. b. BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORKS INSTALLED IN STRICT ACCORDANCE WITH GOVERNING CODES, THE PLANS AND SPECIFICATIONS NOT WITHSTANDING. THE CONTRACTOR SHALL ALERT ARCHITECT, ENGINEER OR OWNER OF ANY APPARENT DISCREPANCIES BETWEEN GOVERNING CODES AND DESIGN INTENT.
2. FEES:	a. OBTAIN AND PAY FOR ANY AND ALL PERMITS AND INSPECTIONS REQUIRED BY ALL LAWS AND REGULATIONS AND PUBLIC AUTHORITY HAVING JURISDICTION.
TEST AND INSPECTIONS	
1.	OBTAIN ALL INSPECTIONS REQUIRED BY ALL LAWS, ORDINANCES, RULES, REGULATIONS, OR PUBLIC AUTHORITY HAVING JURISDICTION AND OBTAIN CERTIFICATES OF SUCH INSPECTIONS AND SUBMIT SAME TO THE OWNER'S REPRESENTATIVE. PAY ALL FEES, CHARGES, AND OTHER EXPENSES IN CONNECTION THEREIN. OBTAIN OCCUPANCY PERMIT AS REQUIRED BY OWNER. FINAL PAYMENT SHALL NOT BE MADE UNTIL OCCUPANCY PERMIT IS OBTAINED.
2.	WORK SHALL BE UNACCEPTABLE WHEN FOUND TO BE DEFECTIVE OR CONTRARY TO THE PLANS SPECIFICATIONS, CODES SPECIFIED OR ACCEPTED STANDARDS OF GOOD WORKMANSHIP.
3.	THE CONTRACTOR SHALL PROMPTLY CORRECT ALL WORK FOUND UNACCEPTABLE BY THE OWNER'S REPRESENTATIVE WHETHER OBSERVED BEFORE OR AFTER SUBSTANTIAL COMPLETION AND WHETHER OR NOT FABRICATED, INSTALLED OR COMPLETED. THE CONTRACTOR SHALL BEAR ALL COSTS OF CORRECTING SUCH UNACCEPTABLE WORK, INCLUDING COMPENSATION FOR THE OWNER'S REPRESENTATIVE ADDITIONAL SERVICES MADE NECESSARY THEREBY.
CONDUIT	
1.	FURNISH AND INSTALL ALL CONDUITS, BOXES, FITTINGS, ETC., FOR A COMPLETE RACEWAY SYSTEM.
2.	RIGID OR INTERMEDIATE GRADE GALVANIZED STEEL CONDUIT IN WET LOCATIONS, CONCRETE, EXTERIOR MASONRY WALLS AND EXPOSED LOCATIONS SUBJECT TO DAMAGE.
3.	GALVANIZED STEEL ELECTRICAL METALLIC TUBING IN DRY LOCATIONS, INTERIOR PARTITIONS, AND CEILING SPACE.
4.	FLEXIBLE METAL CONDUIT FOR FINAL CONNECTIONS TO TRANSFORMERS, MOTORS AND EQUIPMENT. LIQUID TIGHT FLEXIBLE METAL CONDUIT IN WET AND DAMP LOCATIONS.
5.	FLEXIBLE METALLIC TUBING FROM OUTLET BOX TO RECESSED LIGHT FIXTURES IN SUSPENDED CEILINGS, SIX FOOT MAXIMUM LENGTH.
6.	SCHEDULE 40 PVC RIGID NON-METALLIC CONDUIT BURIED BELOW GROUND FLOOR SLAB AND FOR EXTERIOR UNDERGROUND.
7.	RACEWAYS SHALL BE SIZED IN ACCORDANCE WITH N.E.C.. MINIMUM CONDUIT SIZE SHALL BE 3/4 INCH.
8.	CONDUIT FITTINGS FOR RIGID CONDUIT SHALL BE THREADED CAST FERROUS ALLOY WITH GASKETS AND COVERS WHERE REQUIRED CONDUIT FITTINGS FOR EMT TO BE SET SCREW TYPE. LOCKNUTS SHALL BE OF THE BONDING TYPE WHICH BITE INTO THE METAL OF THE BOX. BUSHINGS SHALL BE OF THE INSULATING TYPE.
9.	METAL CONDUITS SHALL BE COUPLED AND SECURED TO ALL BOXES IN A MANNER THAT PROVIDES AN ELECTRICALLY CONTINUOUS GROUND PATH FROM POINT OF SERVICE TO ALL OUTLETS.
10.	RIGID CONDUITS SHALL BE TERMINATED IN SHEET STEEL WITH DOUBLE LOCKNUTS AND AN INSULATING BUSHING. EMPTY CONDUITS STUBBED SHALL BE THREADED AND CAPPED.
11.	NYLON PULL STRING SHALL BE INSTALLED IN ALL EMPTY CONDUITS.
12.	CONDUIT ROUTING INDICATED ON THE DRAWINGS IS DIAGRAMMATIC ONLY AND IS NOT NECESSARILY THE INTENDED ACTUAL CONDUIT RUN. CONTRACTOR SHALL CHECK AND BE RESPONSIBLE FOR THE ACTUAL INSTALLATION WITH REGARD TO AVAILABLE SPACE AND SHALL COOPERATE WITH OTHER TRADES.
13.	ALL CONDUITS SHALL BE SIZED AND INSTALLED SO THAT THE REQUIRED NUMBER OF CONDUCTORS MAY BE PULLED IN WITHOUT INJURY OR STRAIN.
14.	CONDUIT RUNS SHALL BE LOCATED TO AVOID EQUIPMENT AND ACCESS TO EQUIPMENT OF OTHER TRADES.
15.	CONDUITS SHALL BE CONTINUOUS AND SECURED TO ALL BOXES IN SUCH A MANNER THAT EACH CONDUIT SYSTEM SHALL BE ELECTRICALLY CONTINUOUS FROM THE POINT OF SERVICE TO ALL OUTLET BOXES. RUN CONDUITS CONCEALED UNLESS OTHERWISE INDICATED. WHERE IT IS NOT POSSIBLE TO INSTALL CONCEALED CONDUIT, PERMISSION MUST BE OBTAINED FROM THE ARCHITECT TO RUN SURFACE WIREMOLD OR CONDUIT. THE ROUTING AND ELEVATION OF SUCH SURFACE MOUNTED RACEWAYS MUST BE COORDINATED WITH THE ARCHITECT BEFORE INSTALLATION. EXPOSED RACEWAYS SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES TO STRUCTURAL MEMBERS AND SHALL BE PAINTED TO MATCH ADJACENT FINISHES.
16.	ENDS OF EACH CONDUIT SHALL BE CAPPED WITH AN APPROVED CAP OR DISC TO PREVENT THE ENTRANCE OF FOREIGN MATERIALS DURING CONSTRUCTION.
17.	CONDUITS THAT PASS-THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS, OR DECKS SHALL BE INSTALLED SO AS TO MAINTAIN THE FIRE OR SMOKE RATING.
18.	EXPANSION FITTINGS SHALL BE INSTALLED AT ALL POINTS WHERE CONDUITS CROSS BUILDING EXPANSION JOINTS.
19.	CONDUIT ENTRIES INTO BUILDING SHALL BE MADE WATERTIGHT. ALL UNDERGROUND JOINTS SHALL BE SEALED.
20.	EXTERIOR UNDERGROUND CONDUITS SHALL BE INSTALLED 36 INCHES MINIMUM BELOW FINISHED GRADE.
BUSHINGS AND CONNECTORS	
1.	WHERE RIGID OR INTERMEDIATE METAL CONDUIT ENTERS A BOX, SECURE THE CONDUIT TO THE BOX WITH A LOCKNUT ON THE OUTSIDE AND INSIDE. PROVIDE BUSHINGS FOR CONDUIT TERMINALS AT BOXES. FOR CONDUCTORS THRU #8 AWG BUSHINGS SHALL BE GALVANIZED, NON-INSULATING TYPE, AND FOR CONDUCTORS LARGER THAN #8 AWG BUSHINGS ARE TO BE INSULATING TYPE. IF THE CONDUIT FITTING PROVIDES EQUIVALENT PROTECTION OF THE CONDUCTORS, THE BUSHING MAY BE ELIMINATED.
HANGERS AND SUPPORTS	
1.	CONDUIT SUPPORTS SHALL BE ATTACHED TO BUILDING STRUCTURAL MEMBERS ONLY BY ONE AND TWO-WHOLE STRAPS AND/OR SUITABLE CLAMPS OR HANGERS, AND NOT TO ANY BUILDING SUB SYSTEMS SUCH AS SUSPENDED CEILINGS, MECHANICAL DUCTS OR PIPES. DO NOT USE PERFORATED STRAP-TYPE HANGER, WIRE TIES, OR PLUMBERS STRAP.
2.	IN NO CASE SHALL CONDUIT BE ATTACHED OR SUPPORTED FROM ADJOINING PIPE OR INSTALLED IN SUCH A MANNER AS TO PREVENT THE READY REMOVAL OF OTHER PIPE FOR REPAIRS.
3.	PROVIDE ANGLE IRON FRAMES AND SUPPORTS FOR JUNCTION BOXES AND CABINETS TO PREVENT STRAIN ON ENTERING CONDUITS. GROUP EXPOSED CONDUITS TOGETHER. CONDUIT PENETRATIONS IN CEILINGS SHALL BE TIGHT TO THE CONDUIT AND SEALED.

4.	SUPPORT RIGID STEEL, IMC, AND EMT RACEWAYS AT MAX TEEN FEET INTERVALS AND WITHIN THREE FEET OF OUTLET AND JUNCTION BOXES, CABINETS, OR FITTINGS. SUPPORT WITHIN 12" OF EACH CHANGE IN DIRECTION. USE ONE-HOLE MALLEABLE IRON CLAMPS. SUPPORT MULTIPLE RUNS ON GALVANIZED UNISTRUT.
WIRE AND CABLE	
1.	FEEDER AND BRANCH CIRCUIT CONDUCTORS SHALL BE U.L. LABELED, 98% CONDUCTIVITY COPPER-STAMPED AT 2 FT. INTERVALS WITH CONDUCTOR SIZE AND INSULATION TYPE.
2.	FEEDER CIRCUIT CONDUCTORS SHALL BE TYPE "XHHW-2" OR "THHN", 600 VOLT. STRANDED COPPER, 90 DEGREE C RATED.
3.	BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN/THHN-2", 600 VOLT, 90 DEGREE C, COPPER. WIRE SIZES #8 AWG AND LARGER SHALL BE STRANDED. BRANCH CIRCUIT CONDUCTORS SMALLER THAN SIZE #8 AWG SHALL BE SOLID. BRANCH CIRCUIT CONDUCTORS SHALL ALSO BE PERMISSIBLE TO BE TYPE "MC THHN-2, 600 VOLT, 90 DEGREE C, COPPER WITH INSULATED GREEN GROUND WIRE ENCLOSED IN AN ALUMINUM OR GALVANIZED STEEL ARMOR "CONDUIT" THAT IS APPROVED FOR EXPOSED OR CONCEALED APPLICATIONS.
4.	MINIMUM WIRE SIZE SHALL BE #12 AWG OR LARGER AS REQUIRED TO LIMIT VOLTAGE DROP AT FURTHEST OUTLET TO 3%.
5.	CONNECTIONS ARE TO BE MADE USING PRESSURE TYPE TERMINALS.
6.	THE FOLLOWING COLOR CODE SHALL BE USED: 120/208V, 3-PHASE: BLACK, RED, BLUE, NEUTRAL WHITE, GROUND GREEN 277/480V, 3-PHASE: BROWN, ORANGE, YELLOW, NEUTRAL GREY, GROUND GREEN
7.	CONDUCTORS NO. 10 AWG OR SMALLER SHALL HAVE INSULATION COLORED AS NOTED ABOVE
8.	CONDUCTORS NO. 8 AWG OR LARGER SHALL HAVE INSULATION COLORED AS NOTED ABOVE OR COLORED TAPE, MINIMUM SIZE 1/2". WRAPPED TWICE AROUND AT THE FOLLOWING POINTS: a. AT EACH TERMINAL b. AT EACH CONDUIT ENTRANCE c. AT INTERVALS NOT MORE THAN 12 INCHES APART IN ALL BOXES, PANEL TUBS, SWITCHBOARDS, ETC.
9.	ALL BRANCH CIRCUITS SHALL BE MARKED IN THE PANEL BOARDS GUTTERS. MARKERS SHALL INDICATE CORRESPONDING BRANCH-CIRCUIT NUMBERS.
10.	EACH BRANCH CIRCUIT REQUIRING A NEUTRAL SHALL BE FURNISHED WITH A SEPARATE INDIVIDUAL NEUTRAL CONDUCTOR
11.	INSULATION RESISTANCE TESTS SHALL BE MADE ON THE ELECTRICAL SYSTEM WITH AN APPROVED MEGOHMMETER.
12.	AFTER INSTALLATION, TEST FOR GROUNDS, SHORT CIRCUITS AND PROPER FUNCTION OF EACH SYSTEM RELATED WIRING. FAULTS IN THE INSTALLATION SHALL BE CORRECTED.
13.	INSTALLATION: a. PULL WIRE AND CABLES USING WIRE PULLING LUBRICANT RATED FOR USE WITH WIRE AND CABLES. b. COLOR CODE WIRE AND CABLE FOR CIRCUITS AS CALLED FOR IN THE NATIONAL ELECTRICAL CODE. COLOR CODING OF FEEDERS SHALL BE BY MEANS OF COLORED TAPE AT TERMINALS. c. INDIVIDUAL BRANCH CIRCUITS ARE SHOWN ON THE DRAWINGS FOR CLARITY. LIGHTING AND RECEPTACLE CIRCUITS MAY BE GROUPED FOR HOMERUNS, SO LONG AS CONDUCTOR AMPACITIES ARE DERATED PER N.E.C. REQUIREMENTS. NEUTRAL CONDUCTORS IN RECEPTACLE CIRCUITS SERVING DATA EQUIPMENT LOADS SHALL NOT BE SHARED.
14.	WIRING FROM LEGALLY REQUIRED EMERGENCY AND STANDBY POWER GENERATION SOURCES SHALL BE KEPT INDEPENDENT OF EACH OTHER AND INDEPENDENT OF ALL OTHER BRANCH CIRCUITS WIRING, AND SHALL NOT ENTER THE SAME RACEWAY, CABLE, BOX, OR CABINET WITH OTHER WIRING, UNLESS SPECIFICALLY ALLOWED BY THE N.E.C.
BOXES AND PLATES	
1.	FURNISH AND INSTALL ALL OUTLET, JUNCTION, AND PULL BOXES AS INDICATED ON THE DRAWINGS AND AS NECESSARY TO INSTALL THE REQUIRED CONDUIT AND WIRING IN A NEAT AND WORKMANLIKE MANNER.
2.	PULL BOXES AND JUNCTION BOXES SHALL BE GALVANIZED AND OF THE CORRECT SIZE AND GAUGE, SIZED IN ACCORDANCE WITH CODE REQUIREMENTS AND SHALL BE U.L. LABELED.
3.	BOXES AT EXTERIOR AREAS TO BE WATERTIGHT AND DUST-TIGHT WITH GASKETED COVERS.
4.	ALL BOXES FOR EXPOSED WORK IN FINISHED SPACES SHALL BE "FS" TYPE WITH THREADED HUBS WITH RIGID CONDUIT RISER (DEEP WIRE MOLD BOXES).
5.	ALL BOXES SHALL BE RIGIDLY SUPPORTED INDEPENDENT OF THE CONDUIT SYSTEM. ALL BOXES SHALL BE 4" SQUARE BOXES MINIMUM WITH RAISED COVERS SUITABLE FOR THE WALL MATERIAL. BOXES CAST INTO MASONRY OR CONCRETE ARE CONSIDERED TO BE RIGIDLY SUPPORTED.
6.	FLOOR BOXES: a. DESCRIPTION: FLOOR BOXES COMPATIBLE WITH FLOOR BOX SERVICE FITTINGS PROVIDED IN ACCORDANCE WITH THE WIRING DEVICES SECTION OF THIS SPECIFICATION; WITH PARTITIONS TO SEPARATE MULTIPLE SERVICES; FURNISHED WITH ALL COMPONENTS, ADAPTERS, AND TRIMS REQUIRED FOR COMPLETE INSTALLATION. b. USE CAST IRON OR NONMETALLIC FLOOR BOXES WITHIN SLAB ON GRADE. c. USE SHEET-STEEL, CAST-IRON, OR NONMETALLIC FLOOR BOXES WITHIN SLAB ABOVE GRADE. d. METALLIC FLOOR BOXES; FULLY ADJUSTABLE (WITH INTEGRAL MEANS FOR LEVELING ADJUSTMENT PRIOR TO AND AFTER CONCRETE POUR). e. MANUFACTURER; SAME AS MANUFACTURER OF FLOOR BOX SERVICE FITTINGS.
7.	UNDERGROUND BOXES/ENCLOSURES: a. DESCRIPTION: IN-GROUND, OPEN BOTTOM BOXES FURNISHED WITH FLUSH, NON-SKID COVERS WITH TEXT INDICATING TYPE OF SERVICE AND STAINLESS-STEEL TAMPER RESISTANT COVER BOLTS. b. COVER TEXT: AS INDICATED ON DRAWINGS. c. SIZE: AS INDICATED ON DRAWINGS. d. DEPTH: AS REQUIRED TO EXTEND BELOW FROST LINE TO PREVENT FROST UPHEAVAL, BUT NOT LESS THAN 12 INCHES. e. APPLICATION: e.a. SIDEWALKS AND LANDSCAPED AREAS (SUBJECT ONLY TO OCCASIONAL NON-DELIBERATE VEHICULAR TRAFFIC): USE POLYMER CONCRETE OR COMPOSITE ENCLOSURE WITH MINIMUM SCTE 77, TIER 8 LOADING RATING. e.b. PARKING LOTS (SUBJECT ONLY TO OCCASIONAL NON-DELIBERATE VEHICULAR TRAFFIC): USE POLYMER CONCRETE OR COMPOSITE ENCLOSURE WITH MINIMUM SCTE 77, TIER 15 LOAD RATING. e.c. DO NOT USE POLYMER CONCRETE ENCLOSURES IN AREAS SUBJECT TO DELIBERATE VEHICULAR TRAFFIC SUCH AS STREETS AND HIGHWAYS. f. COMPOSITE UNDERGROUND BOXES/ENCLOSURES: COMPLY WITH SCTE 77
WIRING DEVICES	
1.	WIRING DEVICES SHALL BE SIMILAR TO THOSE LISTED BELOW AND OF SPECIFIED AMPERAGE. OTHER SPECIAL PURPOSE DEVICES SHALL BE AS SPECIFIED ON THE DRAWINGS.
2.	DUPLEX GROUNDING TYPE RECEPTACLE - 20 AMP, 125 VOLTS a. HUBBELL 5352 b. ARROW HART 5352
3.	SINGLE POLE SWITCHES - 20 AMP, 120 VOLT
4.	WEATHERPROOF RECEPTACLES - 20 AMP, 125 VOLT - NEMA 5-20R a. HUBBELL 5352 WITH 5205 COVER INTERMATIC GUARDIAN b. I SERIES, NEMA 3R COVER c. ARROW HART 5352 WITH 4500 COVER
5.	GFCI RECEPTACLE - 20 AMP, 125 VOLT - NEMA 5-20R a. HUBBELL GF 5262 WITH MATCHING NYLON COVER PLATE OR WO-26 W.P. COVER.
6.	GROUND ALL RECEPTACLES IN ACCORDANCE WITH ARTICLE 250.146 OF NEC AND AS INDICED IN THE GROUNDING SECTION OF THIS SPECIFICATION.
DISCONNECT SWITCHES	
1.	PROVIDE MOTOR DRIVEN EQUIPMENT WITH PROPERLY SIZED AND RATED DISCONNECT SWITCHES TO COMPLY WITH N.E.C. REQUIREMENTS, WHETHER OR NOT INDICATED ON THE

DRAWINGS.	
2.	DISCONNECT SWITCHES SHALL BE MANUFACTURED BY SQUARE D OR BY APPROVED ALTERNATE MANUFACTURERS: GENERAL ELECTRIC, WESTINGHOUSE OR SIEMENS.
IDENTIFICATION	
1.	PROVIDE NAMEPLATES ON PANELBOARDS, DISTRIBUTION EQUIPMENT, SAFETY SWITCHES, MOTOR STARTERS, JUNCTION BOXES, AND CONTROL DEVICES. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, LETTERING SHALL INCLUDE THE NAME OR DESIGNATION OF THE EQUIPMENT, HORSEPOWER, VOLTAGE RATING AND SERVICE DESIGNATION.
2.	IDENTIFICATION NAMEPLATES SHALL BE PLASTIC, BLACK IN COLOR, WITH THE ENGRAVED WHITE LETTERS. LETTERS SHALL BE A MINIMUM OF 1/8" HIGH. PLATES SHALL BE DRILLED ON EACH END FOR SHEET METAL SCREW ATTACHMENT. NO "DYMO" OR SIMILAR TYPE PAPER LABELS WILL BE ALLOWED.
3.	PANEL BOARD DIRECTORY: A TYPED CIRCUIT DIRECTORY SHALL BE PROVIDED INDICATING LOCAL AREA SERVED AND LOCATION FOR EACH BRANCH CIRCUIT.
GROUNDING	
1.	ALL FEEDERS AND BRANCH CIRCUITS OVER 100 VOLTS SHALL INCLUDE A GROUNDING CONDUCTORS SIZED IN ACCORDANCE WITH NEC TABLE 250-122, EXCEPT NOT BE SMALLER THAN #12 FOR POWER AND LIGHTING CIRCUITS AND #14 FOR CONTROL CIRCUITS. ALL GROUND CONDUCTORS SHALL BE GREEN, OR AS SPECIFIED UNDER THE WIRE AND CABLE SECTION OF THIS SPECIFICATION.
2.	ALL GROUND CLAMPS SHALL BE PENN-UNION "GPI" TYPE OR SIMILAR BY Q.Z. OR BURNDY.
3.	CONDUIT FOR SOLITARY GROUND CONDUCTORS SHALL BE RIGID SCHEDULE 40 PVC NON-METALLIC ELECTRICAL CONDUIT WITH U.L. LABEL. SOLITARY GROUND CONDUCTORS SHALL NOT BE PLACED THROUGH METALLIC SLEEVES OR CONDUITS AND SHALL NOT BE COMPLETELY ENCRIBED BY METALLIC HANGERS OR SUPPORTS.
4.	THE GROUND CONDUCTOR SHALL BE CONNECTED TO THE NEUTRAL IN ONLY TWO LOCATIONS - ON THE SUPPLY SIDE OF THE SERVICE DISCONNECT MEANS PER NEC-250-24 AND ON SEPARATELY DERIVED SYSTEMS PER NEC 250-30.
5.	AT EACH RECEPTACLE BOX, THE GROUND CONDUCTOR SHALL ENTER AND CONNECT, WITH NORMAL WIRING CONNECTOR, TO: 1) THE GROUND PIGTAIL TO RECEPTACLE; 2) THE GROUND PIGTAIL TO THE BOX GROUND SCREW; AND 3) THE OUTGOING GROUND CONDUCTOR TO NEXT DEVICE, IF NOT AT END OF RUN. METAL TO METAL CONTACT BETWEEN THE DEVICE YOKE AND THE OUTLET BOX IS NOT ACCEPTABLE AS A BOND FOR EITHER SURFACE MOUNTED BOXES OR FLUSH TYPE BOXES.
6.	CONDUIT SYSTEM SHALL BE ELECTRICALLY CONTINUOUS. ALL LOCK NUTS SHALL CUT THROUGH ENAMELED OR PAINTED SURFACES ON ENCLOSURES. WHERE ENCLOSURES AND NON-CURRENT CARRYING METALS ARE ISOLATED FROM THE CONDUIT SYSTEM, USE BONDING JUMPERS WITH APPROVED CLAMPS. WHERE REDUCING WASHERS ARE USED AND WHERE CONCENTRIC OR ECCENTRIC KNOCKOUTS ARE NOT COMPLETELY REMOVED BONDING BUSHINGS SHALL BE REQUIRED.
7.	THE GROUNDING CONDUCTOR FOR BRANCH CIRCUITS FEEDING ISOLATED GROUND RECEPTACLES SHALL BE CONNECTED ONLY AT THE ISOLATED GROUND RECEPTACLE GROUND TERMINALS, AND AT THE GROUND BUS OF THE SERVING PANEL.
8.	A GROUND CONTINUITY TEST SHALL BE MADE ON THE ENTIRE GROUNDING SYSTEM FROM THE SERVICE TO EVERY OUTLET.
LIGHTING FIXTURES	
1.	CONTRACTOR SHALL FURNISH AND INSTALL LIGHTING FIXTURES AS INDICATED IN FIXTURE SCHEDULE SHOWN ON DRAWINGS, AND SPECIFIED HEREIN.
2.	NEUTRAL ASSEMBLY SHALL HAVE INDIVIDUAL ANTI-TURN SOLDERLESS TERMINALS, SIMILAR TO SQUARE-D TYPE PK, FOR CONNECTION OF ULTIMATE NUMBER OF NEUTRAL WIRES. SHEET METAL TERMINAL STRIPS AND CONNECTIONS WILL BE REJECTED.
3.	ALL LIGHTING FIXTURES INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE FURNISHED COMPLETE WITH ALL NECESSARY COMPONENTS: PARTS, WIRING, GANGLER KITS, DRIVERS, ADAPTERS, STEMs, CABLES AND ACCESSORIES REQUIRED FOR INSTALLATION AS SHOWN ON DRAWINGS.
4.	ANY LIGHTING FIXTURES SCRATCHED, BENT, CRACKED, OR IN ANY WAY DAMAGED BEFORE ACCEPTANCE BY OWNER SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
5.	ALL LIGHTING FIXTURES SHALL BE IN WORKING ORDER AT THE TIME OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER.
6.	ALL LIGHTING FIXTURES ARE TO BE GROUNDED ON THE INTERIOR OF THE FIXTURE HOUSING, ON CLEAN BARE METAL (FREE OF PAINT), BY USE OF PIGTAIL AND FASTENED BY A SCREW USED FOR NO OTHER PURPOSE.
TELEPHONE/DATA SYSTEMS	
1.	SUMMARY a. INCLUDES BUT NOT LIMITED TO aa. FURNISH AND INSTALL BUILDING TELEPHONE AND COMPUTER NETWORK RACEWAY AND CABLE SYSTEM AS DESCRIBED IN CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, RACEWAY, OUTLETS, MODULAR JACKS, DEVICE PLATES, CABLES, PUNCH DOWN BLOCKS, PATCH PANELS, EQUIPMENT CABINETS, CABLE TRAY, GROUNDING AND OTHER MISCELLANEOUS ITEMS REQUIRED FOR A COMPLETE WORKING SYSTEM.
2.	COMPONENTS a. TELEPHONE/DATA OUTLETS SHALL BE PROVIDED WITH SINGLE OR DOUBLE DEVICE BOX, AS REQUIRED FOR OUTLET INDICATED. b. BUILDING TELEPHONE AND COMPUTER NETWORK SYSTEM CABLE: b.a. 23 GAUGE, SOLID TINNED COPPER, FOUR TWISTED PAIRS, CATEGORY 6 b.b. USE PLENUM-RATED CABLE IN CEILINGS AND AREAS USED FOR PLENUM AIR RETURN c. TELEPHONE TERMINATION BLOCKS c.a. UL VERIFIED CATEGORY 6110 TERMINATION WITH TIN LEAN PLATED IDC d. TELEPHONE/NETWORK JACKS d.a. WALL JACKS d.a.a. CAT6 - HUBBELL HXU6 OR ALTERNATE MANUFACTURER WITH EQUIVALENT PERFORMANCE STANDARD. d.b. PLATES d.b.a. HUBBELL - I/P SERIES (PORT QUANTITY AS REQUIRED, COLOR BY ARCHITECT FROM MANUFACTURERS FULL LINE) d.c. CONNECTOR BLOCKS FOR CATEGORY 6 AND UTP CABLING: TYPE 110 INSULATION DISPLACEMENT CONNECTORS; CAPACITY SUFFICIENT FOR CABLES TO BE TERMINATED PLUS 25 PERCENT SPARE CAPACITY.
3.	INSTALLATION a. TERMINATE CABLES AT EACH OUTLET WITH SPECIFIED MODULAR JACK ASSEMBLY. b. TERMINATE CABLES ON PUNCH DOWN BLOCKS OR PATCH PANELS AT TERMINAL BOARD. c. PROVIDE TYPED LABELS AT ALL JACKS CORRESPONDING TO TYPED NUMBERING SYSTEM AT TERMINAL STRIP. d. ALL EQUIPMENT MOUNTED ON EQUIPMENT ROOM WALLS SHALL BE ATTACHED TO 1/4" PLYWOOD BOARDS, PAINTED WITH FIRE RESISTANT PAINT.
4.	QUALITY ASSURANCE a. COMPLY WITH APPLICABLE PORTIONS OF NEC, ANSI/EIA/TIA 568 AS TO TYPE PRODUCTS USED AND INSTALLATION OF COMPONENTS. PROVIDE PRODUCTS AND MATERIAL WHICH HAVE BEEN UL-LISTED AND LABELED.
FIRE AND SMOKE INTEGRITY	
1.	SEAL BUILDING OPENINGS THROUGHOUT, CAUSED BY INSTALLATION OF ALL TYPES OF ELECTRICAL EQUIPMENT (CONDUIT, CABLE/WIRE, PANELS, ETC.) WHERE OPENINGS ARE IN FLOORS OR FIRE RATED WALLS CONFIGURE THE PENETRATION IN CONFORMANCE WITH UL LISTED CRITERIA, INSURE FIRE AND SMOKE BARRIER INTEGRITY THROUGHOUT. WHERE INTUMESCENT SEALER/CAULKING IS REQUIRED USE MATERIALS OF 3M OR DOW CORNING.
POWER AND LIGHTING PANELS	
1.	FURNISH AND INSTALL, AS SCHEDULED AND SHOWN ON THE DRAWINGS, POWER PANELS FOR OPERATION ON VOLTAGES INDICATED.
2.	BRANCH CIRCUIT PANEL BOARDS SHALL BE DEAD-FRONT CIRCUIT BREAKER TYPE, WITH VOLTAGE, AMPERAGE, MAIN CIRCUIT BREAKER OR MAIN LUGS ONLY, AS NOTED ON DRAWINGS. ALL PANEL BOARDS SHALL BE PROVIDED WITH SOLID NEUTRALS AND GROUNDING BUS WITH LUGS.
3.	CIRCUIT BREAKERS SHALL BE THERMAL, MAGNETIC, MOLDED CASE, BOLT-ON TYPE, WITH QUANTITY, AMPERAGE, AND POLES AS NOTED ON THE PANEL SCHEDULES. SHORT CIRCUIT INTERRUPTING CAPACITY SHALL BE AS NOTED ON THE DRAWINGS. TWO AND THREE POLE BREAKERS SHALL BE COMMON TRIP. AUTOMATIC TRIPPING SHALL BE INDICATED BY THE OPERATING HANDLE ASSUMING A MID-POSITION BETWEEN ON AND OFF. PROVIDE HACR BREAKERS AS REQUIRED BY ALL HVAC EQUIPMENT AND MANUFACTURERS.

4.	PANEL BOARD ENCLOSURES SHALL BE GENERAL PURPOSE, SURFACE OR FLUSH-MOUNTED AS NOTED ON DRAWINGS, WITH GALVANIZED BACKBOX AND PAINTED FRONT WITH LOCKABLE DOOR. A GLAZED DIRECTORY FRAME SHALL BE PROVIDED INSIDE THE DOOR AND SHALL BE OF SUFFICIENT SIZE TO GIVE DESCRIPTION OF EACH CIRCUIT. ALL SECTIONS OF MULTI-SECTION PANELS SHALL BE SAME SIZE.
5.	TWO KEYS SHALL BE PROVIDED WITH EACH PANEL, AND ALL PANELS SHALL BE KEYED ALIKE.
6.	SCREW FASTENED HANDLE LOCK-ON DEVICES SHALL BE PROVIDED ON BRANCH CIRCUIT BREAKERS FOR EMERGENCY, EXIT, SECURITY AND NIGHT LIGHTS.
7.	BRANCH CIRCUIT PANELBOARDS SHALL BE SQUARE-D, TYPE "NQ, 120/208 VOLT 3-PHASE, 4-WIRE OR TYPE "NF, 277/480V, 3-PHASE, 4-WIRE. DISTRIBUTION PANELBOARDS SHALL BE SQUARE-D, TYPE I-LINE. REFER TO PANEL SCHEDULES FOR PANEL SPECIFICS. EQUIVALENT ALTERNATE MANUFACTURERS: CUTLER HAMMER, GENERAL ELECTRIC, OR SIEMENS.
8.	ALL LIGHTING AND APPLIANCE PANELBOARDS SHALL HAVE A LAMINATED TYPE-WRITTEN CIRCUIT DIRECTORY THAT SHALL SHOW LOADING AS CONNECTED DURING CONSTRUCTION.
9.	THE BRANCH CIRCUIT NUMBERS USED ON THE DRAWINGS SHALL BE APPLIED FOR THE CONSTRUCTION. HOWEVER, AT THE COMPLETION OF THE WORK, CIRCUIT NUMBER ADJUSTMENTS SHALL BE MADE AS REQUIRED TO PROVIDE BALANCED PHASE LOADING ON EACH PANELBOARD.
10.	FLUSH/RECESSED MOUNTED PANELBOARDS SHALL BE INSTALLED WITH A MINIMUM OF THREE EMPTY 1/2" CONDUITS STUBBED UP TO THE NEAREST ACCESSIBLE CEILING SPACE FOR CONVENIENT FUTURE EXPANSION.
FUSES	
1.	FURNISH AND INSTALL A COMPLETE SET OF FUSES THROUGHOUT FOR FUSIBLE EQUIPMENT IN THE PROJECT. FUSES SHALL BE AS MANUFACTURED BY BUSMAN, GOULO OR LITTELFUSE.
2.	PROVIDE FUSES OF THE SAME MANUFACTURER THROUGHOUT. FUSES SHALL BE U.L. LISTED, CURRENT LIMITING AND HAVE AN INTERRUPTING RATING OF 100,000 RMS AMPERES SYMMETRICAL. a. FUSES RATED 601 TO 6000 AMPERES SHALL BE TIME-DELAY, CURRENT-LIMITING, U.L. LISTED, NEMA CLASS L. b. FUSES RATED 60 AMPERES AND LESS SERVING PANEL BOARDS SHALL BE UL CLASS C. RK-1 DUAL ELEMENT (UNLESS NOTED OTHERWISE). c. FUSES RATED 600 AMPERES AND LESS SERVING MOTOR CIRCUITS SHALL BE UL CLASS RK-5 DUAL-ELEMENT TIME DELAY.

Owner Review

PROGRESS SET

5-27-2026

HISTORIC STEARNS
DOWNTOWN REVITALIZATION
STEARNS, KENTUCKY

DATE	REVISION	BY

PROJECT NO. 2124-07

DESIGNED BY JE

DRAWN BY JE

CHECKED BY JE

REVIEWED BY JE

DATE AUGUST 2024

SCALE AS NOTED

Engineers
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DRAWING NO.
E7.1