BUILDING RENOVATION
MIXED USE REDEVELOPMENT

704 Illinois Avenue
Mendota, IL 61342



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ARCHITECTURAL

A001	COVER SHEET
A002	ABBREVIATIONS & GENERAL NOTES
A003	CODE MATRIX & LIFE SAFETY PLAN
A004	ARCHITECTURAL SITE PLAN
A005	SPECIFICATION SHEET
A006	SPECIFICATION SHEET
A007	SPECIFICATION SHEET
A008	SPECIFICATION SHEET
A009	SPECIFICATION SHEET
AD100	EXISTING / DEMOLITION BASEMENT AND FIRST FLOOR PLAN
AD101	EXISTING / DEMOLITION SECOND FLOOR & ROOF PLAN
AD200	EXISTING / DEMO EXTERIOR ELEVATIONS
A100	BASEMENT FLOOR PLAN
A101	FIRST FLOOR PLAN
A102	SECOND FLOOR PLAN
A200	REFLECTED CEILING PLANS
A300	ROOF PLAN
A400	EXTERIOR ELEVATIONS
A500	FINISH SCHEDULES & FLOOR PLANS
A501	FINISH SCHEDULES & FLOOR PLANS
A502	FINISH SCHEDULES & FLOOR PLANS
A600	BUILDING SECTIONS
A601	STAIRWAYS SECTIONS
A700	WALL SECTIONS

STRUCTURAL

S100	STRUCTURAL NOTES
S101	FOUNDATION PLAN
S102	FIRST FLOOR FRAMING PLAN
S103	SECOND FLOOR FRAMING PLAN
S104	ROOF FRAMING PLAN
S105	STRUCTURAL DETAILS
S106	STRUCTURAL DETAILS
S107	ELEVATOR SECTIONS

MECHANICAL

M100	MECHANICAL SPECIFICATIONS
M101	MECHANICAL NOTES, SYMBOLS, & ABBREVIATIONS
MD100	BASEMENT MECHANICAL DEMOLITION PLAN
MD101	FIRST FLOOR MECHANICAL DEMOLITION PLAN
MD102	SECOND FLOOR MECHANICAL DEMOLITION PLAN
M200	BASEMENT MECHANICAL PLAN
M201	FIRST FLOOR MECHANICAL PLAN
M202	SECOND FLOOR MECHANICAL PLAN
M300	MECHANICAL SCHEDULES
M400	MECHANICAL DETAILS
M401	MECHANICAL DETAILS

ELECTRICAL

E100	ELECTRICAL SPECIFICATIONS
E101	ELECTRICAL NOTES, SYMBOLS, & ABBREVIATIONS
E200	BASEMENT ELECTRICAL LIGHTING PLAN
E201	FIRST FLOOR ELECTRICAL LIGHTING PLAN
E202	SECOND FLOOR ELECTRICAL LIGHTING PLAN
E300	ELECTRICAL POWER PLAN
E301	FIRST FLOOR ELECTRICAL POWER PLAN
E302	SECOND FLOOR ELECTRICAL POWER PLAN
E303	ROOF ELECTRICAL POWER PLAN
E400	ELECTRICAL RISER DIAGRAM
E500	ELECTRICAL SCHEDULES

PLUMBING

P100	PLUMBING SPECIFICATIONS
P200	BASEMENT PLUMBING PLAN (WASTE & VENT)
P200U	BASEMENT PLUMBING PLAN (UNDERGROUND)
P201	FIRST FLOOR PLUMBING PLAN (WASTE & VENT)
P202	SECOND FLOOR PLUMBING PLAN (WASTE & VENT)
P300	BASEMENT PLUMBING PLAN (WATER)
P301	FIRST FLOOR PLUMBING PLAN (WATER)
P302	SECOND FLOOR PLUMBING PLAN (WATER)
P400	PLUMBING RISER DIAGRAMS
P401	PLUMBING RISER DIAGRAMS
P500	PLUMBING DETAILS
P501	PLUMBING DETAILS AND SCHEDULE
P502	PLUMBING SCHEDULES

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COVER SHEET

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	VP
CHECKED	RK

REVISIONS

A001

ABBREVIATIONS:

&	AND
@	AT
A/C	AIR CONDITIONING
AB	ANCHOR BOLT
ACT	ACOUSTICAL CEILING TILE
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BB	BASEBOARD
BBG	BLINDS BETWEEN GLASS
BF	BIFOLD
BLDG	BUILDING
BLK	BLOCK
BSMT	BASEMENT
B.U.R.	BUILT UP ROOFING
CJ	CONTROL JOINT
CLG	CEILING
CPT	CARPET
CLO	CLOSET
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
COND	CONDITION
CONT	CONTINUOUS
CONST	CONSTRUCTION
CORR	CORRIDOR
CT	CERAMIC TILE
CTR	CENTER
DBL	DOUBLE
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DO	DOOR OPENING
DS	DOWN SPOUT
DWG	DRAWING
DWR	DRAWER
E	EAST
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EXP	EXPOSED
EXT	EXTERIOR
EXIST	EXISTING
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXSTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FG	FINISH GRADE
FIN	FINISH
FLR	FLOOR
FLOUR	FLUORESCENT
FOB	FACE OF BLOCK
FOC	FACE OF CONCRETE
FOS	FACE OF STUD
FTG	FOOTING
G&P	GROUND & POLISHED
GALV	GALVANIZED
GB	GRAB BAR
GL	GLASS
GND	GROUND
GR	GRADE
GYP	GYPSUM
HB	HOSE BIB
HC	HOLLOW CORE
HCP	HANDICAPPED
HDWR	HARDWARE
HM	HOLLOW METAL
HT	HEIGHT
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HW	HOT WATER
ID	INTERIOR DIAMETER
INC	INCLUDED
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
LAM	LAMINATE
LBS	POUNDS
LDRY	LAUNDRY
LF	LINEAL FOOT
LVR	LOUVER
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MFR	MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
N	NORTH
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFF	OFFICE
OH	OVERHANG
OP	OPENING
OPP	OPPOSITE
PCONC	POLISHED CONCRETE
PL	PROPERTY LINE
PLMB	PLUMBING
PLYWD	PLYWOOD
PNT	PAINT
PT	PRESSURE TREATED
QT	QUARRY TILE
RD	ROOF DRAIN
REF	REFRIGERATOR
REINF	REINFORCEMENT
REQ'D	REQUIRED
RESIL	RESILIENT
REV	REVISED
RFG	ROOFING
RM	ROOM
RO	ROUGH OPENING
S	SOUTH
SC	SOLID CORE
SHR	SHOWER
SHT	SHEET
SIM	SIMILAR
SLB	SEALED BRICK
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
SRUCT	STRUCTURAL
SUSP	SUSPENDED
SYM	SYMMETRICAL
T&G	TONGUE & GROOVE
TEL	TELEPHONE
TEMP	TEMPERED
TER	TERRAZZO
THK	THICK, THICKNESS
THR	THRESHOLD
TOIL	TOILET
TOJ	TOP OF JOIST
TOS	TOP OF STEEL
TOW	TOP OF WALL
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LAB
UNF	UNFINISHED
VERT	VERTICAL
VEST	VESTIBULE
VOL	VOLUME
VT	VINYL TILE
W	WEST
W/	WITH
WD	WOOD
WH	WATER HEATER
WO	WITH OUT
WOCPT	WALK-OFF CARPET
WP	WATER PROOF
WWF	WELDED WIRE FABRIC

101 — ROOM NAME / ROOM NUMBER

101 — DOOR NUMBER - SEE DOOR SCHEDULE

1 — WALL TYPE - SEE WALL TYPE SCHEDULE

W1 — WINDOW TYPE - SEE WINDOW SCHEDULE

1 / A101 SIM — DETAIL REFERENCE: DETAIL NUMBER (TOP) SHEET NUMBER (BOTTOM)

1 / A101 SIM — BUILDING SECTION: DETAIL NUMBER (TOP) SHEET NUMBER (BOTTOM)

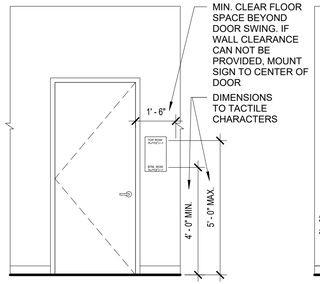
1 / A101 SIM — WALL SECTION: DETAIL NUMBER (TOP) SHEET NUMBER (BOTTOM)

A701 / 1 — BUILDING ELEVATION: DETAIL NUMBER (OUTSIDE) SHEET NUMBER (INSIDE)

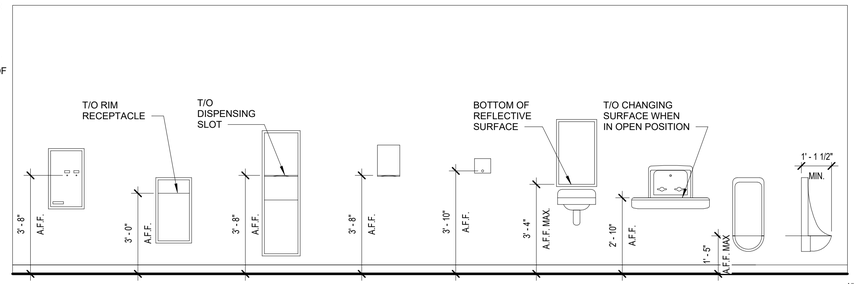
A701 / 1 — INTERIOR ELEVATION: DETAIL NUMBER (OUTSIDE) SHEET NUMBER (INSIDE)

SPOT ELEVATION

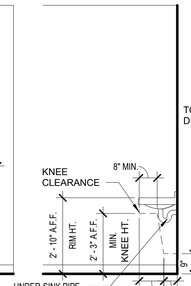
1 — KEYNOTE



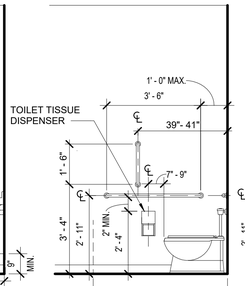
TYPICAL ROOM SIGNAGE AT ALL LOCATIONS



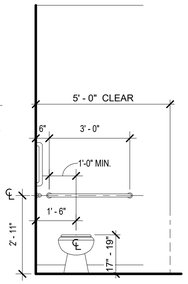
SANITARY VENDING UNIT | WASTE RECEPTACLE | PAPER TOWEL DISPENSER AND WASTE RECEPTACLE | PAPER TOWEL DISPENSER | SOAP DISPENSER | MIRROR (ABOVE SINK) | DIAPER CHANGING STATION | URINAL



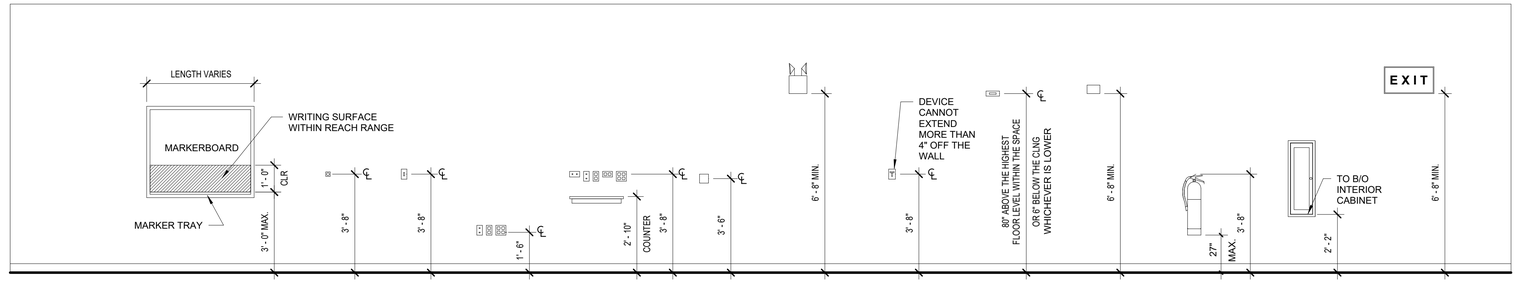
LAVATORY



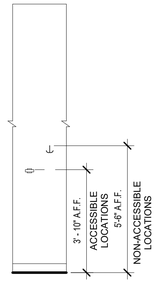
TOILET TISSUE DISPENSER AND SIDE WALL/REAR WALL GRAB BAR



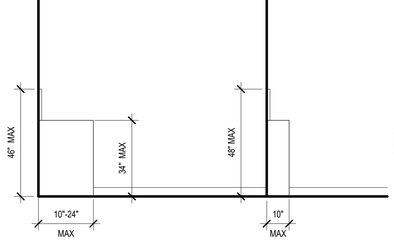
WATER CLOSET AND SIDE WALL/REAR WALL GRAB BARS



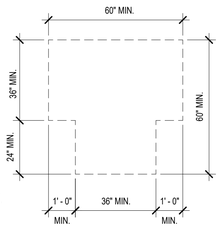
MARKERBOARD | THERMOSTAT | LIGHT SWITCH | RECEPTACLES & VOICE / DATA OUTLET | RECEPTACLES & VOICE / DATA OUTLET ABOVE COUNTERS | AUTOMATIC DOOR PUSH PADDLE | EMERGENCY LIGHTING | FIRE ALARM PULL STATION | FIRE ALARM VISUAL ALARM SIGNAL | FIRE ALARM AUDIO SIGNAL | SURFACE MOUNTED FIRE EXTINGUISHER WITH BRACKET | FIRE EXTINGUISHER CABINET | ILLUMINATED EXIT SIGN



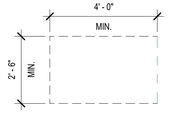
ROBE AND COAT HOOKS



OBSTRUCTED HIGH SIDE REACH



T-SHAPED TURNING SPACE



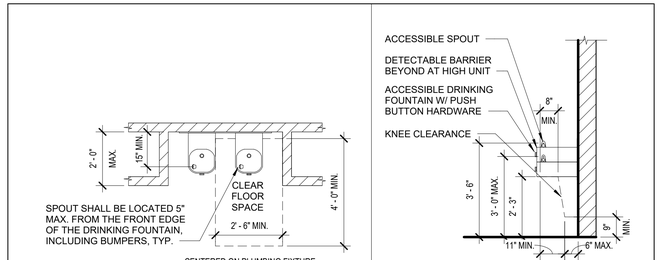
CLEAR FLOOR OR GROUND SPACE

MATERIAL LEGEND

- CONCRETE
- EARTH
- MASONRY WALL
- FINISHED WOOD
- GYPSUM BOARD
- BATT INSULATION/ ACOUSTICAL BATT
- METAL
- MORTAR/GROUT
- PEA GRAVEL/ COMPACTED STONE
- PLYWOOD
- RIGID INSULATION
- ROUGH WOOD

GENERAL NOTES:

1. ALL CONTRACTORS AND SUB CONTRACTORS ARE TO REVIEW THE DRAWINGS AND COORDINATE EACH WITH THEIR SPECIFIC FIELD. REFER ANY QUESTIONS OR CONFLICTS TO THE ARCHITECT BEFORE BEGINNING CONSTRUCTION.
2. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH CURRENT APPLICABLE CODES. THE DRAWINGS HAVE BEEN PREPARED TO MEET CURRENT CODES AND GUIDELINES. THE CONTRACTOR IS TO NOTIFY ARCHITECT IMMEDIATELY IF NON-CODE CONFORMING CONDITIONS ARE OBSERVED.
3. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD AND IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES AND INTERFERENCES.
4. CONTRACTOR SHALL PROVIDE PROPER SAFEGUARDS IN COMPLIANCE WITH CODES DURING ALL PHASES OF CONSTRUCTION.
5. CONTRACTOR TO INSTALL BARRIERS AS NECESSARY AND REQUIRED AROUND PERIMETER OF CONSTRUCTION LIMITS TO PROTECT THE PUBLIC.
6. CONTRACTOR TO REMOVE ALL DEBRIS FROM SITE AT THE END OF EACH DAY.
7. GENERAL CONTRACTOR SHALL COORDINATE AND FIELD LOCATE ALL REQUIRED SLAB RECESSES FOR TOILET FLOOR TILES, DOOR PIVOTS, MATS, OPERATORS, RAILINGS, FLOOR AND ROOF OPENINGS, SILLS ETC. PRIOR TO POURING OF CONCRETE SLAB.
8. GENERAL CONTRACTOR SHALL BE REQUIRED TO SUBMIT ALL REVIEWED SHOP DRAWINGS TO THE CITY BUILDING DEPARTMENT FOR APPROVAL AS REQUIRED.
9. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR IS TO IDENTIFY UTILITIES REQUIRED TO REMAIN ACTIVE PRIOR TO REMOVAL OF SAME. THE CONTRACTOR IS TO REMOVE ALL INACTIVE EXISTING UTILITIES UNDER NEW CONSTRUCTION.
10. CONTRACTOR IS RESPONSIBLE FOR ALL CHANGES AND DEVIATIONS FROM THESE DOCUMENTS IN THE FIELD. ALL CHANGES MUST BE APPROVED IN WRITING BY ARCHITECT PRIOR TO MODIFICATIONS.
11. PROVIDE CONSTRUCTION AND FINAL CLEANING. CONSTRUCTION CLEANING MEANS NO ACCUMULATION OF DEBRIS, TRASH, MATERIAL SCRAPS, ETC. FINAL CLEANING INCLUDES WINDOWS, FINISHES, DUSTING, VACUUMING, POLISHING METAL FINISHES, CLEANING OUT CABINETS AND DRAWERS, MOPPING FLOORS, WASHING AND DISINFECTING TOILETS AND LAVATORIES, CHANGING FILTERS, ETC.
13. THROUGH-WALL PENETRATIONS SHALL NOT COMPROMISE THE RATING OF THE WALL.



DRINKING FOUNTAIN FLOOR PLANS — HI-LOW UNIT, ACCESSIBLE — SCALE: NTS

DRINKING FOUNTAIN ELEVATION — HI-LOW UNIT, ACCESSIBLE 3'-6" A.F.F. TO SPOUT 3'-0" A.F.F. MAX. TO SPOUT

ACCESSIBILITY GENERAL NOTES:

A. ALL DIMENSIONS AND INSTALLATIONS RELATED TO ACCESSIBILITY SHALL COMPLY WITH THE CURRENT 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN. WHERE DIMENSIONS ARE SPECIFIED AS MAXIMUMS OR MINIMUMS, THE INSTALLED DIMENSION MUST NOT EXCEED THE MAXIMUM OR FALL BELOW THE MINIMUM, RESPECTIVELY. ALL ACCESSIBLE ELEMENTS MUST BE INSTALLED TO MEET THE SPECIFIED REQUIREMENTS, ALLOWING ONLY FOR CONVENTIONAL INDUSTRY TOLERANCES FOR FIELD CONDITIONS, PROVIDED THOSE TOLERANCES DO NOT RESULT IN NON-COMPLIANCE WITH THE ACCESSIBILITY STANDARD

B. "ACCESSIBLE" = HANDICAP ACCESSIBLE

C. FOR ANY ITEMS NOT SHOWN ON THIS SHEET, OR IN CASE OF CONFLICTS, NOTIFY THE ARCHITECT AS SOON AS POSSIBLE.

D. THE ACCESSIBILITY INFORMATION ON THIS SHEET COMPLIES WITH THE ADA 2010 STANDARDS AND ILLINOIS ACCESSIBILITY CODE.

E. COORDINATE MOUNTING HEIGHTS OF MEP ITEMS WITH MEP CONSTRUCTION DOCUMENTS.

F. FIXTURES SHOWN ARE FOR REFERENCE ONLY AND ARE NOT PROJECT SPECIFIC. SEE PLUMBING DRAWINGS & SCHEDULES FOR FIXTURE TYPES.

G. SEE TOILET ACCESSORY SCHEDULE AND TOILET ROOM ELEVATIONS FOR MORE INFORMATION.

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ABBREVIATIONS & GENERAL NOTES

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	VP
CHECKED	RK

REVISIONS

A002

CODE MATRIX

Project Name: Building Renovation
Project Description: Building Renovation & Change of Occupancy
Project address: 704 Illinois Street
City: Mendota, IL
County of: LaSalle County
City / County of Jurisdiction: Mendota, IL

GOVERNING CODES:

- 2021 International Building Code
- 2021 International Existing Building Code
- 2021 International Mechanical Code
- 2021 Life Safety Code (NFPA 101)
- 2021 International Fire Code
- 2020 National Electrical Code
- 2014 Illinois Plumbing Code
- 2021 Illinois Energy Conservation Code
- 2021 Illinois Accessibility Code
- City of Mendota Municipal Code

Zoning District: B-1 Local Business District

EXISTING BUILDING SUMMARY
Building Gross Area: 13,965 sq. ft. (including basement)
Existing Occupancy Classification: Mixed Used: Mercantile, Storage & Apartments
Building Construction Type: Type IIIB
Building Stories: 2
Building Height: ~29'-0"

Existing Building is not equipped with an automatic sprinkler system

PROPOSED BUILDING CODE SUMMARY:

General Description of Alteration Area:						Code Reference
Proposed Occupancy Classification	Mixed: A-3 (Assembly), B (Business), S-1 (Moderate-Hazard Storage)					Ch. 3
Type of Construction	IIIB					Sec. 602.5
Building Areas Basement: First Floor: Second Floor:	S-1: 9,000 sq. ft. (allowable), 4,655 sq. ft. (actual) A-3: 9,500 sq. ft. (allowable), 4,655 sq. ft. (actual) B: 19,000 sq. ft. (allowable), 4,655 sq. ft. (actual)					Table 506.2
Building Height	30'-0" (actual) / 55'-0" (allowable)					Table 504.3
Number of Stories	2 (actual) / 2 (allowable - most restrictive)					Table 504.4
Automatic Sprinkler System	Fire Area >12,000	Occ. Load >300	Fire Area above / below Exit Discharge	Floor Level ≥55 & Occ. Load ≥ 30	Sprinkler System Required	Ch. 9
Basement: First Floor: Second Floor:	- No -	- No -	- No -	No - No	No No No	
Fire Alarm System	A-3 Occ. Load >300	B Occ. Load >500	Storage Occ. ≥3 stories high	>100 Occ. Load above / below Exit Discharge	Fire Alarm System Required	Table 907.2 Sec. 907.2.10
Basement: First Floor: Second Floor:	- No -	- - No	No - -	- No No	No No No	
Required Separation of Occupancies Separated Occupancies = A & S-1 Separated Occupancies = A & B (buildings with no sprinkler system)	Required Separation of Occupancies: 2-Hour between A-3 (First Floor) & S-1 (Basement) 2-Hours between A-3 (First Floor) & B (Second Floor)					Table 508.4 Sec. 508.3
Occupancy Load	Function of Space	Occupant Factor	Floor Area (sf)	Occ. Load		Table 1004.5
Basement Level: • Storage / Utility (area combined)	Storage / Utility	300 gross	3,794 sf	13 occ.		
First Floor: • Multi-Purpose Room • Community Room • Storage (combined) • Warming Kitchen	Assembly Assembly Storage - Accessory Assembly - Accessory	15 net 15 net 300 gross 200 gross	1,385 sf 963 sf 247 sf 385 sf	93 occ. 65 occ. 1 occ. 2 occ.		
Second Floor: • Offices (area combined) • Conference (area combined) • Storage / Janitor (combined)	Business Assembly - Accessory Storage - Accessory	150 gross 15 net 300 gross	3,102 sf 260 sf 108 sf	21 occ. 18 occ. 1 occ.		
			Total (cumulative levels):	214 occ.		
Egress Width per Occupant per Floor	Occ. Load	Egress Width Required: Stair (in) 0.3	Egress Width Required: Door / Other (in) 0.2	Egress Width Provided: Stair (in)	Egress Width Provided: Door / Other (in)	Ch. 10 Sec. 1010.1.10
Basement Level: First Floor: Second Floor:	13 161 40	36 (clear) 44 (clear) 36 (clear)	32 min (2) 32 min (2) 32 min	44 (clear) 44 (clear) (2) 44 (clear	(1) 36 *(1) 72 + *(1) 36 (2) 36	
* Spaces with ≥ 50 occupants in Group A shall be provided with panic hardware						
Max. Travel Distance	200 ft - Max. Exit Travel Dist. - Actual Max 104'-0"					Table 1017.2
Max. Dead-end-Corridor	20 ft - Max. Dead-end-Corridor - Actual 19'-0"					Table 1020.5
Min. Number of Exits or Access to Exits per Story	Occu. load of space - (max. for single exit)	Common Path of Egress - (max. for single exit / Existing)	Number of Exits Required			Sec. 1006.3.4 - #2, T1006.3.3, T1006.2.1 IEBC: Sec. 804.2 & TB04.4.1.1(2) NFPA 101: Sec. 42.2.4.1(1)
Basement Level(S-1): First Floor (A-3): Second Floor (B):	29 occu. / 13 actual 49 occu. / 161 actual 49 occu. / 40 actual	100 max / 96 (existing) - 100 max / 145 actual	1 - existing 2 2			
Fire-Resistance Rating Requirement for Buildign Elements (hours)	Type IIIB = No fire-resistive rating for primary structural frame 2-hrs for exterior bearing walls; nonbearing exterior walls - per Table 705.5					Table 601
Fire-Resistance Rating Reqts. (hours) for Exterior Walls Based on Fire Separation Distance = X (feet)	10 ≤ X <30, Fire-Resistance Rating = 1 hr.					Table 705.5
Highest Fire-Resistance Rating Required for Exterior Walls	Highest fire-resistance rating required based on construction type and fire separation distance = 2 hr for exterior bearing walls and 1 hour for exterior nonbearing walls					Sec. 704.10
Max. Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection	Fire Separation Distance for Unprotected, Nonsprinklered building per story: • 15 to not less than 20 feet = 25% of exterior wall opening allowed. North wall opening area allowed 332.5 sq. ft.; actual at 200 sq. ft. (15%).					Table 705.8
Protected & Unprotected Openings & Vertical Separtion of Openings	Opening Fire Protection Assemblies, Ratings and Marking: • Exterior Walls with 1-hour fire-resistance rating: 1. minimum 3/4 hour for fire door and fire shutter assembly ratings 2. minimum 3/4 hour for fire window assembly ratings Vertical Separation of Openings shall not apply to buildings that are three stories or less above grade plane - Exception 1					Sec. 705.8.2, 705.8.3, 705.8.5, Table 716.1(2), 716.1(3)
Corridor Fire-Resistance Rating - Assembly and Business Occupancies without Sprinkler System	Occ. Load Served by Corridor = X > 30 First Floor Corridor - actual occ. = 80 (rated exit access corridor required) Second Floor Corridor - actual occ.= 15 (nonrated exit access corridor permitted)					Table 1020.2
Interior Exit Stairways - Exit Component Fire-Resistance Rating	Required fire-resistance rating = 2-hours					Table 1023.2

2021 INTERNATIONAL FIRE CODE NOTES:

Fire Extinguishers:
Section 906.1 - Portable Fire Extinguishers
Portable fire extinguishers shall be installed in all of the following locations:

1) In new and Existing Groups A, B & S-1

Section 906.3 - Size and distribution:
The size and distribution of portable fire extinguishers shall be in accordance with Section 906.3.1 through 906.3.4.

Table 906.3(1) Fire Extinguisher for Class A Fire Hazards
Minimum-rated single extinguisher: 2-A for Ordinary (Moderate) Hazard Occupancy
Maximum Floor Area per unit: 1,500 square feet
Maximum distance of travel to extinguisher: 75 feet

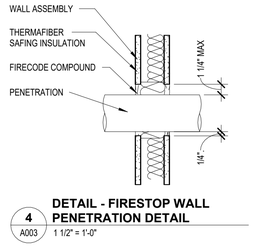
2014 ILLINOIS PLUMBING CODE - PLUMBING SYSTEMS SUMMARY:

Required Plumbing Fixtures: (890 Table B)	Occupant Load Male / Female	Min. Water Closets Req'd Male / Female	Water Closets Provided	Min. Lavatories Req'd - Male/Female	Lavatories Male/Female Provided
Basement Level and First Floor (combined)	M = 87 F = 87	M = 1 / 1-100 M = 1 / 1-150 F = 2 / 51-100	M = 1 M = 1 (Urinal) F = 2 *All Gender = 1	M = 1 / 1-100 F = 1 / 1-100	M= 1 F = 2 * All Gender = 1
Second Floor (combined)	M = 20 F = 20	M = 2 / 16-35 F = 2 / 16-35	* All Gender = 3	M = 2 / 16-35 F = 2 / 16-35	* All Gender = 3
Building - Total Fixtures Combined		8 fixtures req'd	8 fixtures provided	6 fixtures req'd	7 fixtures provided

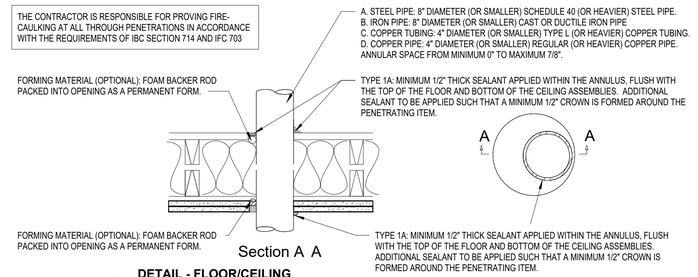
* Section 890.81 (b) (1) (A) (iv): Individual businesses within the same building may share public/employee restroom facilities, provide access on adjoining business or leased space. The restroom shall be open at all times and be located no more than 300 feet from the business it serves.

Required Drinking Fountains & Other Fixtures (Alteration Areas): 890 Table B	Occupant load	Drinking Fountain Ratio	Drinking Fountains Required / Provided	Service Sink Required / Provided	Hand-washing Sink Req'd / Provided
Cumulative Load	214	1 per 100	2 / 0 (see notes #2 & 3)	2 / 2 (see note #1)	1 / 1

2014 Illinois Plumbing Code Notes:
1. Section 890 Table B: 1 service sink per floor on which restrooms are located.
2. Section 890.720 Drinking fountains: f) Substitution. Where a drinking fountain is required by this Part, bottled drinking water or a water dispensing faucet (water station) may be substituted for a drinking fountain, provided that drinking water is accessible to the public. When bottled drinking water is provided in lieu of a drinking fountain, the bottled water used shall be commercially sealed in accordance with the Illinois Bottled Water Act and the Illinois Safe Bottled Water Act.
3. Section 890.810 (b) (2) (A) (i): Buildings other than those exceptions in subsection (b)(2)(B), with less than 5,000 square feet of gross public, or with occupancies of fewer than 100 persons, need not provide public restrooms and drinking fountains.



4 A003 DETAIL - FIRESTOP WALL PENETRATION DETAIL
1 1/2" = 1'-0"

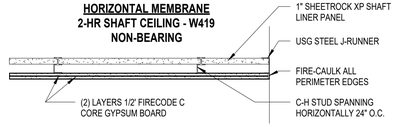


5 A003 DETAIL - FLOOR/CEILING PENETRATION DETAIL
1 1/2" = 1'-0"

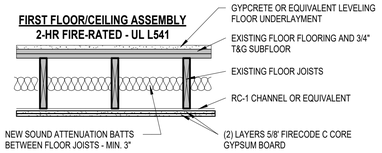
WALL LEGEND/GENERAL NOTES:

- NEW WALL
- EXISTING - MASONRY WALLS
- 1 HOUR FIRE RATED WALL ASSEMBLY
- 2 HOUR FIRE RATED WALL ASSEMBLY

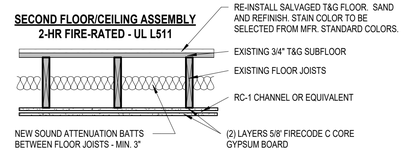
1. ALL KITCHENS SHALL HAVE MOUNTED FIRE EXTINGUISHERS LOCATED INSIDE THE CABINETS BELOW THE KITCHEN SINK.
ALL FIRE RATED WALLS ARE TO EXTEND TO THE UNDERSIDE OF THE ROOF DECK OR MAINTAIN WALL RATING HORIZONTALLY BEFORE TURNING UP TO MEET ROOF/FLOOR DECK.
ALL WALLS, STAIRS, AND CEILING TO HAVE FIRE BLOCKING WHERE REQUIRED.



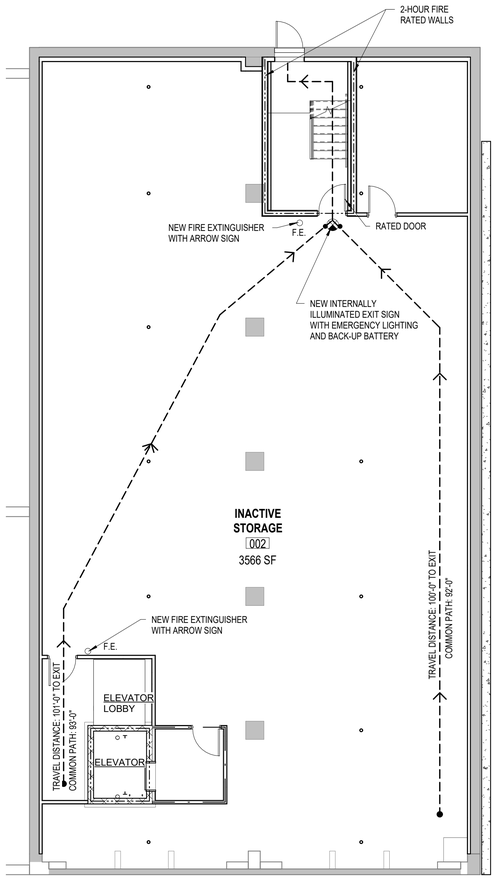
6 A003 DETAIL - CEILING ASSEMBLY UL L541
1" = 1'-0"



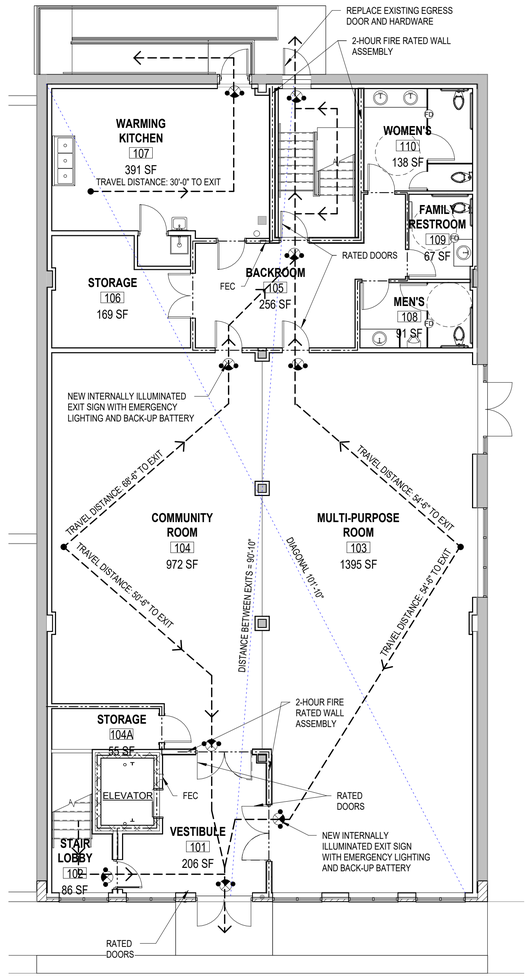
7 A003 DETAIL - FLOOR/CEILING ASSEMBLY UL L541
3/4" = 1'-0"



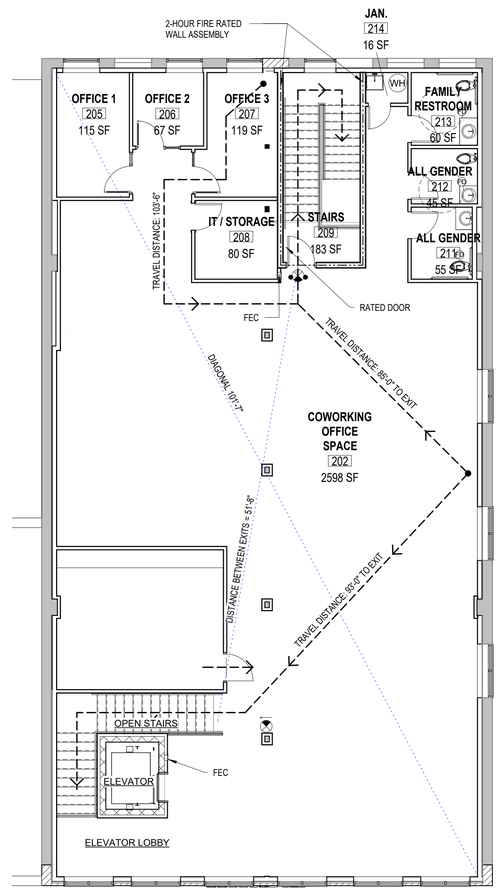
8 A003 DETAIL - FLOOR/CEILING ASSEMBLY UL L511
3/4" = 1'-0"



NORTH **1 A003** LIFE SAFETY PLAN BASEMENT
1/8" = 1'-0"



NORTH **2 A003** LIFE SAFETY PLAN FIRST FLOOR
1/8" = 1'-0"



NORTH **3 A003** LIFE SAFETY PLAN SECOND FLOOR
1/8" = 1'-0"

SYMBOL LEGEND

- PATH OF TRAVEL
- DIAGONAL / DISTANCE BETWEEN EXITS
- ORIGIN
- INTERNALLY ILLUMINATED EXIT SIGN AND BACK-UP BATTERY
- INTERNALLY ILLUMINATED EXIT SIGN WITH EMERGENCY LIGHTING AND BACK-UP BATTERY
- FE/FEC FIRE EXTINGUISHER / SEMI-RECESSED FIRE EXTINGUISHER CABINET

ISSUED FOR BID

studioK ARCHITECTURE
910 North Main St
Princeton, IL 61356
815 872 2478
COMMERCIAL + CUSTOM RESIDENTIAL

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL
230 Woodlawn Ave
Aurora, IL 60506
630 897 4651

EVENATE CONSULTING ENGINEERS PLLC
213 Grant St
Downers Grove, IL 60515
702 525 2864

CODE MATRIX & LIFE SAFETY PLAN

BUILDING RENOVATION

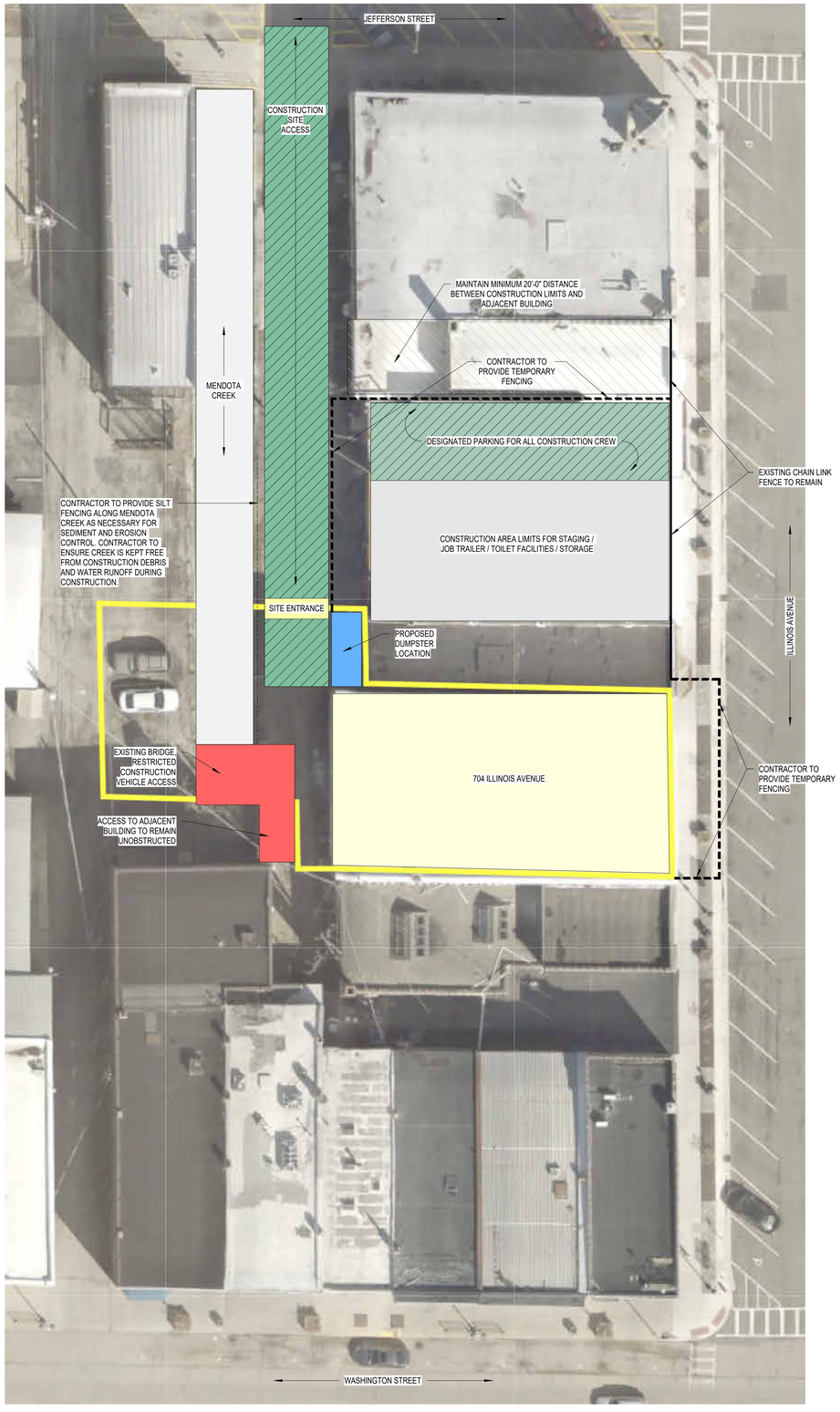
704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	VP
CHECKED	RK

REVISIONS

A003

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NORTH

1 A004 **ARCHITECTURAL SITE PLAN**

1/8" = 1'-0"

ISSUED FOR BID

studioK ARCHITECTURE
910 North Main St
Princeton, IL 61356
815 872 2478

COMMERCIAL + CUSTOM RESIDENTIAL

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL
230 Woodlawn Ave
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630 897 4651

EVEVATE CONSULTING ENGINEERS PLLC
213 Grant St
Downers Grove, IL 60515
702 525 2864

ARCHITECTURAL SITE PLAN

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	HN
CHECKED	RK

REVISIONS

A004

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DIVISION 02 - EXISTING CONDITIONS

SECTION 02 41 00
DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Building demolition .

B. Selective demolition of building elements for alteration purposes.

C. Abandonment and removal of existing utilities and utility structures.

1.02 REFERENCE STANDARDS

A. 29 CFR 1926 - Safety and Health Regulations for Construction; Current Edition.

PART 23 EXECUTION

2.01 SCOPE

A. Remove other items indicated, for salvage and relocation.

B. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as required so that required rough grade elevations do not subside within one year after completion.

2.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
1. Obtain required permits.
2. Comply with applicable requirements of NFPA 241.
3. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
4. Provide, erect, and maintain temporary barriers and security devices.
5. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
6. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
7. Do not close or obstruct roadways or sidewalks without permit.
8. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
9. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

B. Do not begin removal until receipt of notification to proceed from Owner.

C. Do not begin removal until built elements to be salvaged or relocated have been removed.

D. Protect existing structures and other elements that are not to be removed.
1. Provide bracing and shoring.
2. Prevent movement or settlement of adjacent structures.
3. Stop work immediately if adjacent structures appear to be in danger.

E. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

F. Hazardous Materials: Comply with 29 CFR 1926 and state and local regulations.

2.03 EXISTING UTILITIES

A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.

B. Protect existing utilities to remain from damage.

C. Do not disrupt public utilities without permit from authority having jurisdiction.

D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.

E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without prior written notification to Owner.

F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

H. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.

2.04 SELECTIVE DEMOLITION FOR ALTERATIONS

A. Drawings showing existing construction and utilities are based on casual field observation only.
1. Verify that construction and utility arrangements are as indicated.
2. Report discrepancies to Architect before disturbing existing installation.
3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.

B. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.

C. Remove existing work as indicated and as required to accomplish new work.
1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
2. Remove items indicated on drawings.

D. Services (Including but not limited to HVAC, Plumbing, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
3. Verify that abandoned services serve only abandoned facilities before removal.
4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.

E. Protect existing work to remain.
1. Prevent movement of structure; provide shoring and bracing if necessary.
2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
3. Repair adjacent construction and finishes damaged during removal work.
4. Patch as specified for patching new work.

2.05 DEBRIS AND WASTE REMOVAL

A. Remove debris, junk, and trash from site.

B. Leave site in clean condition, ready for subsequent work.

C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION 02 41 00

DIVISION 03 - CONCRETE

SECTION 03 54 00
CAST UNDERLAYMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Liquid-applied self-leveling floor underlayment.
1. Use gypsum-based type at first floor.

1.02 REFERENCE STANDARDS

A. ASTM C1602/C1602M - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete; 2022.

B. ASTM C472 - Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters, and Gypsum Concrete; 2020.

C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

D. ICRI 310.2R - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair; 2013.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide manufacturer's data sheets documenting physical characteristics and product limitations of underlayment materials. Include information on surface preparation, mixing instructions, environmental limitations, and installation instructions.

C. Manufacturer's Instructions.

1.04 FIELD CONDITIONS

A. Do not install underlayment until floor penetrations and peripheral work are complete.

B. Maintain minimum ambient temperatures of 50 degrees F 24 hours before, during and 72 hours after installation of underlayment.

C. During the curing process, ventilate spaces to remove excess moisture.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Gypsum Underlayment:

2.02 MATERIALS

A. Cast Underlayments, General:
1. Comply with applicable code for combustibility or flame spread requirements.

B. Gypsum-Based Underlayment: Gypsum based mix, that when mixed with water in accordance with manufacturer's directions will produce self-leveling underlayment with the following properties:
1. Compressive Strength: Minimum 2500 pounds per square inch, tested per ASTM C472.
2. Density: Maximum 115 pounds per cubic foot.
3. Final Set Time: 1 to 2 hours, maximum.
4. Thickness: 1/2 inch to maximum 3/4 inch.
5. Surface Burning Characteristics: Flame spread/Smoke developed index of 0/0 in accordance with ASTM E84.

C. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to underlayment mix materials.

D. Primer: Manufacturer's recommended type.

E. Joint and Crack Filler: Latex based filler, as recommended by manufacturer.

2.03 MIXING

A. Site mix materials in accordance with manufacturer's instructions.

B. Mix to self-leveling consistency without over-watering.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces are clean, dry, unfrozen, do not contain petroleum byproducts, or other compounds detrimental to underlayment material bond to substrate.

3.02 PREPARATION

A. Remove substrate surface irregularities. Fill voids and deck joints with filler. Finish smooth.

B. Vacuum clean surfaces.

C. Prime substrate in accordance with manufacturer's instructions. Allow to dry.

D. Close floor openings.

3.03 APPLICATION

A. Install underlayment in accordance with manufacturer's instructions.

B. Place to indicated thickness, with top surface level to 1/8 inch in 10 ft.

C. Place before partition installation.

3.04 CURING

A. Once underlayment starts to set, prohibit foot traffic until final set has been reached.

B. Air cure in accordance with manufacturer's instructions.

END OF SECTION 03 54 00

DIVISION 05 - METALS

SECTION 05 52 13
PIPE AND TUBE RAILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Wall mounted handrails.

B. Stair railings and guardrails.

C. Free-standing railings at steps and ramp.

1.02 RELATED REQUIREMENTS

A. Section 09 21 16 - Gypsum Board Assemblies: Placement of backing plates in stud wall construction.

1.03 REFERENCE STANDARDS

A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.

B. ASTM A501/A501M - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing; 2021.

C. ASTM E935 - Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings; 2021.

D. SSPC-Paint 15 - Steel Joist Shop Primer/Metal Building Primer; 2004.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.

1.05 QUALITY ASSURANCE

A. Structural Designer Qualifications: Professional Structural Engineer experienced in design of this work and licensed in Illinois, or personnel under direct supervision of such an engineer.

B. Structural Designer Qualifications: Professional Structural Engineer experienced in design of this work and licensed in the State of Illinois, or personnel under direct supervision of such an engineer.

C. Fabricator Qualifications:
1. A company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

PART 2 PRODUCTS

2.01 RAILINGS - GENERAL REQUIREMENTS

A. Design, fabricate, and test railing assemblies in accordance with the most stringent requirements of applicable local code.

B. Distributed Loads: Design railing assembly, wall rails, and attachments to resist distributed force of 75 pounds per linear foot applied to the top of the assembly and in any direction, without damage or permanent set. Test in accordance with ASTM E935

C. Concentrated Loads: Design railing assembly, wall rails, and attachments to resist a concentrated force of 200 pounds applied at any point on the top of the assembly and in any direction, without damage or permanent set. Test in accordance with ASTM E935

D. Allow for expansion and contraction of members and building movement without damage to connections or members.

E. Dimensions: See drawings for configurations and heights.
1. Top Rails and Wall Rails: 1-1/2 inches diameter, round.
2. Intermediate Rails: 1-1/2 inches diameter, round.
3. Posts: 1-1/2 inches diameter, round.
4. Posts: 1-1/2 inches square.
5. Balusters: 1/2 inch square solid bar.

F. Provide anchors and other components as required to attach to structure, made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.
1. For anchorage to stud walls, provide backing plates, for bolting anchors.
2. Posts: Provide adjustable flanged brackets.

G. Provide slip-on non-weld mechanical fittings to join lengths, seal open ends, and conceal exposed mounting bolts and nuts, including but not limited to elbows, T-shapes, splice connectors, flanges, escutcheons, and wall brackets.

2.02 STEEL RAILING SYSTEM

A. Steel Tube: ASTM A501/A501M hot-formed structural tubing, black finish.

B. Non-Weld Mechanical Fittings: Slip-on, galvanized malleable iron castings, for Schedule 40 pipe, with flush setscrews for tightening by standard hex wrench, no bolts or screw fasteners.

C. Exposed Fasteners: No exposed bolts or screws.

D. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.

2.03 FABRICATION

A. Accurately form components to suit specific project conditions and for proper connection to building structure.

B. Fit and shop assemble components in largest practical sizes for delivery to site.

C. Fabricate components with joints tightly fitted and secured. Provide spigots and sleeves to accommodate site assembly and installation.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

3.02 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.

C. Install railings in compliance with ADA Standards for accessible design at applicable locations.

D. Anchor railings securely to structure.

E. Conceal anchor bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.

3.03 TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch per floor level, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch.

C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION 05 52 13

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

SECTION 06 10 00
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Nonstructural dimension lumber framing.

B. Rough opening framing for doors, windows, and roof openings.

C. Concealed wood blocking, nailers, and supports.

D. Miscellaneous wood nailers, furring, and grounds.

1.02 REFERENCE STANDARDS

A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2023.

B. ASTM D3498 - Standard Specification for Adhesives for Field-Gluing Wood Structural Panels (Plywood or Oriented Strand Board) to Wood Based Floor System Framing; 2019a.

C. AWC (WFCM) - Wood Frame Construction Manual for One- and Two-Family Dwellings; 2024, with Errata.

D. AWPA U1 - Use Category System: User Specification for Treated Wood; 2025.

E. PS 20 - American Softwood Lumber Standard; 2025.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
1. Species: Spruce-Pine-Fir (South), unless otherwise indicated.
2. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.
3. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Sizes: Nominal sizes as indicated on drawings.

B. Moisture Content: Kiln-dry or MC15.

C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
1. Lumber: S4S, No. 2 or Standard Grade.
2. Boards: Standard or No. 3.

2.03 ACCESSORIES

A. Fasteners and Anchors:
1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
2. Drywall Screws: Bugle head, hardened steel, power driven type, length three times thickness of sheathing.

B. Sill Gasket on Top of Foundation Wall: 1/4 inch thick, plate width, closed cell plastic foam from continuous rolls.

C. Sill Flashing.

D. Subfloor Adhesives: Gap-filling construction adhesive for bonding wood structural panels to wood-based floor system framing; complying with ASTM D3498.

2.04 FACTORY WOOD TREATMENT

A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.

PART 3 EXECUTION

3.01 PREPARATION

A. Where wood framing bears on cementitious foundations, install full width sill flashing continuous over top of foundation, lap ends of flashing minimum of 4 inches and seal.

B. Install sill gasket under sill plate of framed walls bearing on foundations; puncture gasket cleanly to fit tightly around protruding anchor bolts.

C. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.03 FRAMING INSTALLATION

A. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength.

B. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.

C. Install structural members full length without splices unless otherwise specifically detailed.

D. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes and AWC (WFCM) Wood Frame Construction Manual.

E. Install horizontal spanning members with crown edge up and not less than 1-1/2 inches of bearing at each end.

F. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists; use metal joist hangers unless otherwise detailed.

G. Provide bridging at joists in excess of 8 feet span at mid-span. Fit solid blocking at ends of members.

H. Frame wall openings with two or more studs at each jamb; support headers on cripple studs.

3.04 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to authorities having jurisdiction may be used in lieu of solid wood blocking.

C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.

D. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

E. Provide the following specific nonstructural framing and blocking:
1. Cabinets and shelf supports.
2. Wall brackets.
3. Handrails.
4. Grab bars.
5. Towel and bath accessories.
6. Wall-mounted door stops.
7. Chalkboards and marker boards.
8. Wall paneling and trim.
9. Joints of rigid wall coverings that occur between studs.

3.05 ROOF-RELATED CARPENTRY

A. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.

B. Provide wood curb at each roof opening except where prefabricated curbs are specified and where specifically indicated otherwise; form corners by alternating lapping side members.

END OF SECTION 06 10 00

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

SECTION 07 14 00
FLUID-APPLIED WATERPROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fluid-Applied, Elastomeric Waterproofing membrane.

1.02 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data for membrane, surface conditioner, flexible flashings, joint cover sheet, and joint and crack sealants.

C. Shop Drawings: Indicate special joint or termination conditions and conditions of interface with other materials.

D. Manufacturer's qualification statement.

E. Installer's qualification statement.

F. Warranty Documentation:
1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.03 QUALITY ASSURANCE

1.04 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

B. Installer Warranty: Provide 5-year warranty for waterproofing failing to resist penetration of water commencing on Date of Substantial Completion. Complete forms in Owner's name and register with installer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Fluid-Applied, Elastomeric Waterproofing Membrane; color Gray.
1. TREMproof 250GC

2.02 FLUID-APPLIED WATERPROOFING APPLICATIONS

A. Fluid-Applied Elastomeric Waterproofing Membrane.
1. Location: Basement / Foundation walls.

2.03 FLUID-APPLIED WATERPROOFING MATERIALS

A. Fluid-Applied Elastomeric Waterproofing Membrane.
1. Coverage Rate: 60 wet mils.
2. Suitable for installation over concrete and masonry.

B. Flexible Flashings: Type recommended by membrane manufacturer.

2.04 ACCESSORIES

A. Surface Conditioner: provide type, compatible with membrane compound; as recommended by membrane manufacturer.

B. Sealant for Joints and Cracks in Substrate: Type compatible with waterproofing material and as recommended by waterproofing manufacturer.

C. Protection Board: Provide type capable of preventing damage to waterproofing due to backfilling and construction traffic.

D. Drainage Panel: Drainage layer with geotextile filter fabric on earth side.
1. Composition: Dimpled polystyrene core; polypropylene or polyester filter fabric.
2. Thickness: 1/4 inch.

E. Counterflashings: As recommended by membrane and protection board manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify substrate surfaces are free of frozen matter, dampness, loose particles, cracks, pits, projections, penetrations, or foreign matter detrimental to adhesion or application of waterproofing system.

C. Verify that substrate surfaces are smooth, free of honeycomb or pitting, and not detrimental to full contact bond of waterproofing materials.

D. Do not proceed with this work until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Protect adjacent surfaces from damage not designated to receive waterproofing.

B. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions.

C. Do not apply waterproofing to surfaces unacceptable to waterproofing manufacturer.

D. Fill non-moving joints and cracks with a filler compatible with waterproofing materials.

E. Seal moving cracks with sealant and non-rigid filler, using procedures recommended by sealant and waterproofing manufacturers.

3.03 INSTALLATION

A. Install waterproofing to specified minimum thickness in accordance with manufacturers instructions and NRCA (WM) applicable requirements.

B. Apply primer or surface conditioner at a rate recommended by manufacturer, and protect conditioner from rain or frost until dry.

C. At joints and cracks less than 1/2 inch in width including joints between horizontal and vertical surfaces, apply 12 inch wide strip of joint cover sheet.

D. Apply extra thickness of waterproofing material at corners, intersections, and angles.

E. Flexible Flashings: Seal items watertight that penetrate through waterproofing membrane with flexible flashings.

F. Seal membrane and flashings to adjoining surfaces.
1. Install termination bar along edges.
2. Install counterflashing over exposed edges.

3.04 INSTALLATION - DRAINAGE PANEL

A. After membrane has cooled, but before it becomes dusty, apply separation sheet and lap joints to ensure complete coverage.

B. Place drainage panel directly against membrane, butt joints, place to encourage drainage downward, and scribe and cut boards around projections, penetrations, and interruptions.

C. Place protection board directly against drainage panel; butt joints, and scribe and cut boards around projections, penetrations, and interruptions.

D. Adhere protection board to substrate with compatible adhesive.

END OF SECTION 07 14 00

SECTION 07 21 19
FOAMED-IN-PLACE INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Base Bid:
1. General/Roofing Contractor provide foamed-in-place insulation as shown and herein specified.
2. In exterior framed walls.
3. In exterior wall crevices.
4. At junctions of dissimilar wall and roof materials.
5. In underside of roofs and ceilings.

1.02 REFERENCE STANDARDS

A. ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; 2021.

B. ASTM D2842 - Standard Test Method for Water Absorption of Rigid Cellular Plastics; 2019.

C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

D. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2016.

E. ASTM E2178 - Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials; 2021a.

F. FM 4880 - Examination Standard for Class 1 Fire Rating of Building Panels or Interior Finish Materials; 2022.

G. NFPA 275 - Standard Method of Fire Tests for the Evaluation of Thermal Barriers; 2022.

H. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth; 2024.

I. UL 1040 - Standard for Safety Fire Test of Insulated Wall Construction; Current Edition, Including All Revisions.

J. UL 1715 - Standard for Safety Fire Test of Interior Finish Material; Current Edition, Including All Revisions.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide product description, insulation properties, and preparation requirements.

C. Manufacturer's Installation Instructions: Indicate special procedures, and perimeter conditions requiring special attention.

D. Manufacturer Qualification: Submit documentation of current evaluation of proposed manufacturer and materials.

E. Installer Qualification: Submit documentation of current contractor accreditation and current installer certification. Keep copies of all contractor accreditation and installer certification on site during and after installation. Present on-site documentation upon request.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section, with not less than three years of documented experience.

1.05 FIELD CONDITIONS

A. Do not apply foam when temperature is below that specified by the manufacturer for ambient air and substrate.

B. All surfaces must be free of dirt, dust, and other debris. Apply the spray foam insulation to clean dry surfaces.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Foamed-In-Place Insulation:
1. BASF Corporation: www.spf.basf.com.
2. Carlisle Spray Foam Insulation: www.carlislesfi.com.
3. Johns Manville: www.jm.com.
4. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 MATERIALS

A. Foamed-In-Place Insulation: Medium-density, rigid or semi-rigid, closed cell polyurethane foam; foamed on-site, using blowing agent of water or non-ozone-depleting gas.
1. Regulatory Requirements: Comply with applicable code for flame and smoke and concealment requirements.
   a. Fire Protection: Provide 15-minute thermal barrier of 1/2 inch gypsum board or equivalent material complying with NFPA 275 test method, or foamed-in-place insulation either exposed or with covering that complies with FM 4880, NFPA 286, UL 1040, or UL 1715.
2. Thermal Resistance: R-value of 7.0, minimum, per 1 inch thickness at 75 degrees F mean temperature when tested in accordance with ASTM C518.
3. Water Vapor Permeance: Vapor retarder; 1.0 perms, maximum, when tested at intended thickness in accordance with ASTM E96/E96M, desiccant method.
4. Water Absorption: Less than 2 percent by volume, maximum, when tested in accordance with ASTM D2842.
5. Air Permeance: 0.04 cfm per square foot, maximum, when tested at intended thickness in accordance with ASTM E2178 at 1.57 psf.
6. Closed Cell Content: At least 96 percent.

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SPECIFICATION SHEET

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	Author
CHECKED	Checker

REVISIONS

ISSUED FOR BID

A005

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7. Surface Burning Characteristics: Flame spread/smoke developed index of 25/450, maximum, when tested in accordance with ASTM E84.
8. Manufacturers:
   a. Carlisle Spray Foam Insulation; SealTite Pro HFO: www.carlislesfi.com.
   b. BASF Corporation; SPRAYTITE 178: www.spf.basf.com.
   c. Johns Manville; JM Corbond IV Closed Cell Spray Polyurethane Foam: www.jm.com.
9. Substitutions: See Section 01 60 00 - Product Requirements.

2.03 ACCESSORIES

A. Primer: As required by insulation manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify work within construction spaces or crevices is complete before insulation application.
B. Verify that surfaces are clean, dry, and free of matter that may inhibit insulation adhesion.

3.02 PREPARATION

A. Mask and protect adjacent surfaces from over spray or dusting.
B. Apply primer in accordance with manufacturer's instructions.

3.03 APPLICATION

A. Apply insulation in accordance with manufacturer's instructions.
B. Apply insulation by spray method, to a uniform monolithic density without voids.
C. Apply to achieve a thermal resistance R-value of 21.
D. Trim excess away for applied trim or remove as required for continuous sealant bead.

3.04 PROTECTION

A. Do not permit subsequent construction work to disturb applied insulation.

END OF SECTION 07 21 19

SECTION 07 21 00
THERMAL INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Board insulation at perimeter foundation wall and over roof deck.

1.02 REFERENCE STANDARDS

A. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2023.
B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Product Data: Provide data on product characteristics, performance criteria, and product limitations.

PART 2 PRODUCTS

2.01 APPLICATIONS

A. Insulation at Perimeter of Foundation: Expanded polystyrene (EPS) board.

2.02 FOAM BOARD INSULATION MATERIALS

A. Expanded Polystyrene (EPS) Board Insulation: Comply with ASTM C578.
   1. Flame Spread Index (FSI): Class A - 0 to 25, when tested in accordance with ASTM E84.
   2. Smoke Developed Index (SDI): 450 or less, when tested in accordance with ASTM E84.
   3. Board Size: 48 inch by 96 inch.
   4. Board Thickness: 2 inch.
   5. Board Edges: Square.

2.03 ACCESSORIES

A. Self-Adhered Transition Flashing: Multipurpose, self-adhered flashing with modified butyl adhesive, polyester fiber top sheet, and polypropylene interlayer.
   1. Application: Primerless adhesion for use as through-wall flashings and wall transitions to roof and below-grade systems.
   2. Thickness: 45 mil, 0.045 inch, nominal.
   3. Size: 6 inches wide, in rolls 75 feet long.
B. Flashing Tape: Special reinforced film with high performance adhesive.
   1. Application: Window and door opening flashing tape.
   2. Width: As required for application.
C. Protection Board for Below Grade Insulation: Cementitious, 1/4 inch thick.
D. Adhesive: Type recommended by insulation manufacturer for application.

PART 3 EXECUTION

3.01 BOARD INSTALLATION AT FOUNDATION PERIMETER

A. Install boards vertically on foundation perimeter.
B. Cut and fit insulation tightly to protrusions or interruptions to the insulation plane.

3.02 BOARD INSTALLATION OVER LOW SLOPE ROOF DECK

A. Board Installation Over Roof Deck, General:
   1. See applicable roofing specification section for specific board installation requirements.
   2. Fasten insulation to deck in accordance with roofing manufacturer's written instructions and applicable Factory Mutual requirements.
   3. Do not apply more insulation than can be covered with roofing on the same day.

END OF SECTION 07 21 00

SECTION 07 62 00
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fabricated sheet metal items, including flashings, counterflashings, sheet metal roofing, exterior penetrations, and other items indicated in Schedule.
B. Sealants for joints within sheet metal fabrications.

1.02 REFERENCE STANDARDS

A. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.
B. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.
C. CDA A4050 - Copper in Architecture - Handbook; Current Edition.
D. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
C. Samples: Submit two samples, 2 by 3 inches in size, illustrating metal finish color.

1.04 QUALITY ASSURANCE

A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Sheet Metal Flashing and Trim:
   1. Duro-Last; Aluminum Canted Coping, Color to be selected by Architect from Manufacturer's standard colors.
   2. Duro-Last; Aluminum 2-Piece Compression Edge with Fascia Base; Color to be selected by Architect from Manufacturer's standard colors.

2.02 SHEET MATERIALS

A. Pre-Finished Aluminum: ASTM B209/B209M, 3005 alloy, H12 or H14 temper; 18 gauge, 0.040 inch thick; plain finish shop pre-coated with PVDF coating.
   1. Polyvinylidene Fluoride (PVDF) Coating: Superior performing organic powder coating, AAMA 2605; pretreated metal with two-coat system including primer and color coat with at least 70 percent PVDF coating.
   2. Color: As selected by Architect from manufacturer's standard colors.

2.03 FABRICATION

A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
B. Form pieces in longest possible lengths.
C. Hem exposed edges on underside 1/2 inch; miter and seam corners.
D. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
E. Fabricate corners from one piece with minimum 18-inch long legs; seam for rigidity, seal with sealant.
F. Fabricate flashings to allow toe to extend 2 inches over roofing gravel. Return and brake edges.

2.04 EXTERIOR PENETRATION FLASHING PANELS

A. Flashing Panels for Exterior Wall Penetrations: Premanufactured components and accessories as required to preserve integrity of building envelope; suitable for conduits and facade materials to be installed.

2.05 ACCESSORIES

A. Fasteners: Same material and finish as flashing metal, with soft neoprene washers.
B. Primer Type: Zinc chromate.
C. Concealed Sealants: Non-curing butyl sealant.
D. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.
E. Fenestration Perimeter Flashing Attachments: Two-piece flashing receiver and clip of extruded aluminum, at least 0.045 inch thick, for attaching flashing at perimeter of exterior wall fenestration openings.
   1. Provide flashing receiver profile appropriate for flashing applications.
F. Reglets: Recessed type, galvanized steel; face and ends covered with plastic tape.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

A. Install starter and edge strips, and cleats before starting installation.
B. Install surface mounted reglets true to lines and levels, and seal top of reglets with sealant.
C. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil, 0.015 inch.

3.03 INSTALLATION

A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..
B. Apply plastic cement compound between metal flashings and felt flashings.
C. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.
D. Exterior Flashing Receivers: Install in accordance with manufacturer's recommendations, and in proper relationship with adjacent construction, and as follows:
E. Seal metal joints watertight.

END OF SECTION 07 62 00

SECTION 07 92 00
JOINT SEALANTS

PART 1 GENERAL

1.01 REFERENCE STANDARDS

A. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2025.
B. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2022.
C. SCAQMD 1168 - Adhesive and Sealant Applications; 1989 (Amended 2017).

1.02 SUBMITTALS

A. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the following:
   1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
   2. List of backing materials approved for use with the specific product.
   3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
   4. Substrates the product should not be used on.
   5. Installation instructions, including precautions, limitations, and recommended backing materials and tools.
   6. Sample product warranty.
B. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.
C. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.
D. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for verification of color of each required sealant.
E. Executed warranty.

1.03 WARRANTY

A. Manufacturer Warranty: Provide 2-year manufacturer warranty for installed sealants and accessories that fail to achieve a watertight seal, exhibit loss of adhesion or cohesion, or do not cure. Complete forms in Owner's name and register with manufacturer.

PART 2 PRODUCTS

2.01 JOINT SEALANT APPLICATIONS

A. Scope:
   1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to:
      a. Wall expansion and control joints.
      b. Joints between door, window, and other frames and adjacent construction.
      c. Joints between different exposed materials.
      d. Openings below ledge angles in masonry.
      e. Other joints indicated below.
   2. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
      a. Joints between door, window, and other frames and adjacent construction.
      b. In sound-rated wall and ceiling assemblies, gaps at electrical outlets, wiring devices, piping, and other openings; between wall/ceiling and other construction; and other flanking sound paths.
         1) Exception: Through-penetrations in sound-rated assemblies that are also fire-rated.
      c. Other joints indicated below.
B. Exterior Joints: Use nonsag nonstaining silicone sealant, unless otherwise indicated.
C. Interior Joints: Use nonsag polyurethane sealant, unless otherwise indicated.
   1. In Sound-Rated Assemblies: Acrylic emulsion latex sealant.
D. Interior Wet Areas: Bathrooms, restrooms, kitchens, food service areas, and food processing areas; fixtures in wet areas include plumbing fixtures, food service equipment, countertops, cabinets, and other similar items.
E. Sound-Rated Assemblies: Walls and ceilings identified as STC-rated, sound-rated, or acoustical.

2.02 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.
B. Colors: As indicated on drawings.

2.03 NONSAG JOINT SEALANTS

A. Nonstaining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
   1. Movement Capability: Plus and minus 25 percent, minimum.
   2. Nonstaining to Porous Stone: Nonstaining to light-colored natural stone when tested in accordance with ASTM C1248.
   3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
   4. Color: To be selected by Architect from manufacturer's standard range.
B. Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.
   1. Color: White.
C. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion or traffic.
   1. Movement Capability: Plus and minus 50 percent, minimum.
   2. Color: To be selected by Architect from manufacturer's standard range.
D. Acrylic Emulsion Latex: Water-based; ASTM C834, single component, nonstaining, nonbleeding, nonsagging; not intended for exterior use.
   1. Color: To be selected by Architect from manufacturer's standard range.

2.04 SELF-LEVELING JOINT SEALANTS

A. Self-Leveling Silicone Sealant: ASTM C920, Grade P, Uses M and A; single or multicomponent, explicitly approved by manufacturer for traffic exposure when recessed below traffic surface; not expected to withstand continuous water immersion.
   1. Movement Capability: Plus 100 percent, minus 50 percent, minimum.
   2. Color: Gray.
B. Self-Leveling Polyurethane Sealant: ASTM C920, Grade P, Uses M and A; single or multicomponent; explicitly approved by manufacturer for traffic exposure; not expected to withstand continuous water immersion .
   1. Movement Capability: Plus and minus 25 percent, minimum.
   2. Color: Gray.
C. Self-Leveling Polyurethane Sealant for Horizontal Expansion Joints: ASTM C920, Grade P, Uses T, M, and O; multicomponent; explicitly approved by manufacturer for horizontal expansion joints.
   1. Movement Capability: Plus and minus 25 percent, minimum.
   2. Hardness Range: 30 to 35, Shore A, when tested in accordance with ASTM C661.
   3. Color: To be selected by Architect from manufacturer's standard range.
D. Flexible Polyurethane Foam: Single component, gun grade, and low-expanding.
E. High Quality Latex-Based Sound Sealant: ASTM C834, Type OP an opaque sealant, and Grade 0, 32 degrees F, meets requirements for low-temperature flexibility.
   1. Color: White.
F. Semi-Rigid Self-Leveling Epoxy Joint Filler: Epoxy or epoxy/polyurethane copolymer; intended for filling cracks and control joints not subject to significant movement; rigid enough to support concrete edges under traffic.
   1. Composition: Multicomponent, 100 percent solids by weight.
   2. Durometer Hardness: Minimum of 85 for Type A or 35 for Type D, after seven days when tested in accordance with ASTM D2240.
   3. Color: To be selected by Architect from manufacturer's standard colors.
   4. Joint Width, Minimum: 1/8 inch.

2.05 ACCESSORIES

A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that joints are ready to receive work.
B. Verify that backing materials are compatible with sealants.
C. Verify that backer rods are of the correct size.

3.02 INSTALLATION

A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
B. Provide joint sealant installations complying with ASTM C1193.
C. Install acoustical sealant application work in accordance with ASTM C919.
D. Install bond breaker backing tape where backer rod cannot be used.
E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.
H. Concrete Floor Joint Filler: After full cure, shave joint filler flush with top of concrete slab.

END OF SECTION 07 92 00

DIVISION 08 - OPENINGS

SECTION 08 11 13
HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Non-fire-rated hollow metal doors and frames.
B. Hollow metal frames for wood doors.
C. Fire-rated hollow metal doors and frames.
D. Thermally insulated hollow metal doors with frames.

1.02 RELATED REQUIREMENTS

A. Section 08 71 00 - Door Hardware.

1.03 REFERENCE STANDARDS

A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
B. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100); 2023.
C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2025a.
D. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2025.
E. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete; 2026.
F. ASTM C476 - Standard Specification for Grout for Masonry; 2023.
G. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.
H. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.
I. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes; and one copy of referenced standards/guidelines.
C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion and adverse effects on factory applied painted finish.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Hollow Metal Doors and Frames:
   1. Ceco Door, an Assa Abloy Group company: www.assaabloydss.com/#sle.
   2. Steelcraft, an Allegion brand: www.allegion.com/#sle.
   3. Substitutions: approved equal..

2.02 PERFORMANCE REQUIREMENTS

A. Requirements for Hollow Metal Doors and Frames:
   1. Steel Sheet: Comply with one or more of the following requirements; galvannealed steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.
   2. Accessibility: Comply with ICC A117.1 and ADA Standards.
   3. Exterior Door Top Closures: Flush end closure channel, with top and door faces aligned.
   4. Door Edge Profile: Manufacturers standard for application indicated.
   5. Typical Door Face Sheets: Flush.
B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.03 HOLLOW METAL DOORS

A. Door Finish: Factory primed and field finished.
B. Exterior Doors: Thermally insulated.
   1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
      a. Level 2 - Heavy-duty.
      b. Physical Performance Level B, 500,000 cycles; in accordance with ANSI/SDI A250.4.
      c. Model 2 - Seamless.
      d. Door Face Metal Thickness: 18 gauge, 0.042 inch, minimum.
   2. Door Core Material: Polystyrene, 1 lbs/cu ft minimum density.
      a. Foam Plastic Insulation: Manufacturer's standard board insulation with maximum flame spread index (FSI) of 75, and maximum smoke developed index (SDI) of 450 in accordance with ASTM E84, and completely enclosed within interior of door.
   3. Door Thermal Resistance: R-Value of 6.0 minimum, for installed thickness of polystyrene.
   4. Door Thickness: 1-3/4 inches, nominal.
   5. Weatherstripping: Refer to Section 08 71 00.
C. Interior Doors, Non-Fire-Rated:
   1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
      a. Level 2 - Heavy-duty.
      b. Physical Performance Level B, 500,000 cycles; in accordance with ANSI/SDI A250.4.
      c. Model 2 - Seamless.
      d. Door Face Metal Thickness: 18 gauge, 0.042 inch, minimum.
   2. Door Core Material: Manufacturers standard core material/construction and in compliance with requirements.
   3. Door Thickness: 1-3/4 inches, nominal.
D. Fire-Rated Doors:
   1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
      a. Level 4 - Maximum-duty.
      b. Physical Performance Level A, 1,000,000 cycles; in accordance with ANSI/SDI A250.4.
      c. Model 2 - Seamless.
      d. Door Face Metal Thickness: 14 gauge, 0.067 inch, minimum.
   2. Fire Rating: As indicated on Door Schedule, tested in accordance with UL 10C and NFPA 252 ("positive pressure fire tests").
   3. Provide units listed and labeled by UL (DIR) or ITS (DIR).
      a. Attach fire rating label to each fire rated unit.
   4. Door Thickness: 1-3/4 inches, nominal.

2.04 HOLLOW METAL FRAMES

A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
B. Frame Finish: Factory primed and field finished.
C. Exterior Door Frames: Full profile/continuously welded type.
   1. Frame Metal Thickness: 18 gauge, 0.042 inch, minimum.
   2. Weatherstripping: Separate, see Section 08 71 00.
D. Interior Door Frames, Non-Fire Rated: Full profile/continuously welded type.
   1. Terminated Stops: Provide at interior doors; closed end stop terminated 6 inch, maximum, above floor at 45 degree angle.
   2. Frame Metal Thickness: 18 gauge, 0.042 inch, minimum.
E. Door Frames, Fire-Rated: Full profile/continuously welded type.
   1. Fire Rating: Same as door, labeled.
   2. Frame Metal Thickness: 18 gauge, 0.042 inch, minimum.
F. Frames for Wood Doors: Comply with frame requirements in accordance with corresponding door.

2.05 FINISHES

A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

2.06 ACCESSORIES

A. Grout for Frames: Mortar grout complying with ASTM C476 with maximum slump of 4 inches as measured in accordance with ASTM C143/C143M for hand troweling in place; plaster grout and thinner pumpable grout are prohibited.
B. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.
C. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.
B. Verify that opening sizes and tolerances are acceptable.
C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 PREPARATION

A. Coat inside of frames to be installed in masonry or to be grouted, with bituminous coating, prior to installation.

3.03 INSTALLATION

A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
B. Install fire rated units in accordance with NFPA 80.
C. Coordinate frame anchor placement with wall construction.
D. Grout frames in masonry construction, using hand trowel methods; brace frames so that pressure of grout before setting will not deform frames.
E. Install door hardware as specified in Section 08 71 00.
F. Coordinate installation of electrical connections to electrical hardware items.
G. Touch up damaged factory finishes.

3.04 ADJUSTING

A. Adjust for smooth and balanced door movement.

3.05 SCHEDULE

A. Refer to Door Schedule on the drawings.

END OF SECTION 08 11 13

SECTION 08 14 16
FLUSH AND MOLDED WOOD DOORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Flush and molded panel wood doors; flush and flush glazed configuration; non-rated.

1.02 RELATED REQUIREMENTS

A. Section 08 11 13 - Hollow Metal Doors and Frames.
B. Section 08 71 00 - Door Hardware.

1.03 REFERENCE STANDARDS

A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).
B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.
C. Shop Drawings: Show doors and frames, elevations, sizes, types, swings, undercuts, beveling, blocking for hardware, factory machining, factory finishing, cutouts for glazing and other details.
D. Samples: Submit two samples of door veneer, 5 by 8 inches in size illustrating wood grain and color..
E. Manufacturer's Installation Instructions: Indicate special installation instructions.
F. Warranty, executed in Owner's name.

1.05 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
B. Manufacturer Warranty: Provide manufacturer's warranty on interior doors for the life of the installation. Complete forms in Owner's name and register with manufacturer.
   1. Include coverage for delamination of veneer, warping beyond specified installation tolerances, and defective materials.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Wood Veneer Faced Doors:
   1. Forte Openings by Masonite Architectural: www.architectural.masonite.com/#sle.
   2. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 DOORS

A. Doors: See drawings for locations and additional requirements.
   1. Quality Standard: Custom Grade, Heavy Duty performance, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
   2. Wood Veneer Faced Doors: 5-ply unless otherwise indicated.
B. Interior Doors: 1-3/4 inches thick unless otherwise indicated; flush construction.
   1. Provide solid core doors at each location.
   2. Wood veneer facing with factory stain finish Driftwood.

2.03 DOOR AND PANEL CORES

A. Non-Rated Solid Core and 20 Minute Rated Doors: Type particleboard core (PC), plies and faces as indicated.

2.04 DOOR FACINGS

A. Veneer Facing for Stain Finish: White oak, veneer grade in accordance with quality standard indicated, plain sliced (flat cut), with book match between leaves of veneer, running match of spliced veneer leaves assembled on door or panel face.

2.05 DOOR CONSTRUCTION

A. Fabricate doors in accordance with door quality standard specified.
B. Cores Constructed with stiles and rails:
   1. Provide solid blocks at lock edge for hardware reinforcement.
   2. Provide solid blocking for other throughbolted hardware.
C. Glazed Openings: Non-removable stops on non-secure side; sizes and configurations as indicated on drawings.
D. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.
E. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.
F. Provide edge clearances in accordance with the quality standard specified.

2.06 FINISHES - WOOD VENEER DOORS

A. Finish work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), Section 5 - Finishing for grade specified and as follows:
   1. Opaque:
      a. Refer to drawings..
      b. Color: As selected by Architect.
      c. Sheen: as indicated on drawings.
B. Factory finish doors in accordance with approved sample.

2.07 ACCESSORIES

A. Hollow Metal Door Frames: See Section 08 11 13.
B. Glazed Openings:
   1. Laminated Safety Glass: Comply with 16 CFR 1201 test requirements for Category II.
   2. Glazing: Sealed insulating units, 1 inch thick, made of 1/4 inch glass.
   3. Tint: Clear.
C. Door Window Frames: Door window frames with glazing securely fastened within door opening.
   1. Size: As indicated on drawings.
D. Glazing Stops: Wood, of same species as door facing, mitered corners; prepared for countersink style tamper proof screws.
E. Door Hardware: See Section 08 71 00.

PART 3 EXECUTION

3.01 EXAMINATION

ISSUED FOR BID

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studioK
ARCHITECTURE
910 North Main St
Princeton, IL 61356
815 872 2478

COMMERCIAL + CUSTOM RESIDENTIAL

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
230 Woodlawn Ave
Aurora, IL 60506
630 897 4651

EVERATE
CONSULTING ENGINEERS PLLC
213 Grant St
Downers Grove, IL 60515
702 525 2864

SPECIFICATION SHEET

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	Author
CHECKED	Checker

REVISIONS

A006

A. Verify existing conditions before starting work.
B. Verify that opening sizes and tolerances are acceptable.
C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

3.02 INSTALLATION

A. Install doors in accordance with manufacturer's instructions and specified quality standard.
B. Factory-Finished Doors: Do not field cut or trim; if fit or clearance is not correct, replace door.
C. Use machine tools to cut or drill for hardware.
D. Coordinate installation of doors with installation of frames and hardware.
E. Coordinate installation of glazing.

3.03 ADJUSTING

A. Adjust doors for smooth and balanced door movement.
B. Adjust closers for full closure.

END OF SECTION 08 14 16

SECTION 08 43 13
ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Aluminum-framed storefront, with vision glass.
B. Infill panels of metal and glass.
C. Aluminum doors and frames.

1.02 RELATED REQUIREMENTS

A. Section 08 42 29 - Automatic Entrances.
B. Section 08 71 00 - Door Hardware: Hardware items other than specified in this section.
C. Section 08 80 00 - Glazing: Glass and glazing accessories.

1.03 REFERENCE STANDARDS

A. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections; 2009.
B. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
C. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2021.
D. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2021.
E. ASTM E283/E283M - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2019.
F. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2014 (Reapproved 2021).

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of other components that comprise the exterior enclosure.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, door hardware, and internal drainage details.
C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint location and details, and field welding required.
D. Design Data: Provide framing member structural and physical characteristics, engineering calculations, and dimensional limitations.
E. Hardware Schedule: Complete itemization of each item of hardware to be provided for each door, cross-referenced to door identification numbers in Contract Documents.
F. Manufacturer's qualification statement.
G. Installer's qualification statement.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience.

1.07 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
B. Correct defective Work within a five year period after Date of Substantial Completion.
C. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.
D. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.01 BASIS OF DESIGN -- FRAMING FOR INSULATING GLAZING

A. Front-Set Style, Thermally-Broken:
1. Basis of Design: Trifab VersaGlaze 451/451T Framing System by Kawneer.
2. Vertical Mullion Dimensions: 2 inches wide by 4-1/2 inches deep.

B. Substitutions: See Section 01 60 00 - Product Requirements.
1. For any product not identified as "Basis of Design", submit information as specified for substitutions.

2.02 BASIS OF DESIGN -- SWINGING DOORS

A. Entrance Doors, Various Stile Widths:
1. Basis of Design: 360 Insulclad Thermal Entrances by Kawneer.
2. Thickness: 1-3/4 inches.

B. Narrow Stile, Insulating Glazing, Thermally-Broken:
1. Basis of Design: 360 Insulclad Thermal Entrances by Kawneer.
2. Thickness: 1-3/4 inches.

2.03 ALUMINUM-FRAMED STOREFRONT

A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
1. Finish: Superior performing organic coatings.
a. Factory finish all surfaces that will be exposed in completed assemblies.
b. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.
2. Finish Color: Dark bronze.
3. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
4. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
5. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
6. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.
7. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.
8. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.
9. Maintain continuous air barrier and/or vapor retarder seal throughout assembly, primarily in line with inside pane of glazing and inner sheet of infill panel, and heel bead of glazing compound.

B. Performance Requirements
1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
a. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
2. Air Leakage: 0.06 cfm/sq ft maximum leakage of storefront wall area when tested in accordance with ASTM E283/E283M at 1.57 psf pressure difference.
3. Condensation Resistance Factor of Framing: 50, minimum, measured in accordance with AAMA 1503.

2.04 COMPONENTS

A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
1. Framing members for interior applications need not be thermally broken.
2. Glazing Stops: Flush.
3. Cross-Section: 2 by 4.5 inch nominal dimension.
4. Structurally Reinforced Members: Extruded aluminum with internal reinforcement of structural steel member.

B. Glazing:
1. For Exterior Framing: Type Double-pane, insulated, tempered.
2. For Interior Framing: Type Double-pane, insulated, tempered.

C. Swing Doors: Glazed aluminum.
1. Thickness: 1-3/4 inches.
2. Top Rail: 4 inches wide.
3. Vertical Stiles: 4-1/2 inches wide.
4. Bottom Rail: 12 inches wide.
5. Glazing Stops: Square.
6. Finish: Same as storefront.

2.05 MATERIALS

A. Extruded Aluminum: ASTM B221 (ASTM B221M).
B. Fasteners: Stainless steel.
C. Sill Flashing Sealant: Elastomeric, silicone or polyurethane, compatible with flashing material.
D. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

2.06 FINISHES

A. Superior Performing Organic Coatings System: Manufacturer's standard multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent polyvinylidene fluoride (PVDF) resin, and at least 80 percent of aluminum extrusion and panels surfaces having minimum total dry film thickness (DFT) of 1.2 mils, 0.0012 inch.
B. Color: Dark bronze.
C. Touch-Up Materials: As recommended by coating manufacturer for field application.

2.07 HARDWARE

A. For each door, include weatherstripping, sill sweep strip, and threshold.
B. Other Door Hardware: Storefront manufacturer's standard type to suit application.
1. Finish on Hand-Contacted Items: Polished chrome.
2. For each door, include butt hinges, pivots, push handle, pull handle, exit device, narrow stile handle latch, and closer.

C. Automatic Door Operators and Actuators: See Section 08 42 29.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify dimensions, tolerances, and method of attachment with other work.
B. Verify that storefront wall openings and adjoining water-resistive and/or air barrier seal materials are ready to receive work of this section.

3.02 INSTALLATION

A. Install wall system in accordance with manufacturer's instructions.
B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
C. Provide alignment attachments and shims to permanently fasten system to building structure.
D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
E. Provide thermal isolation where components penetrate or disrupt building insulation.
F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.
G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.
H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
I. Set thresholds in bed of sealant and secure.
J. Install hardware using templates provided.
1. See Section 08 71 00 for hardware installation requirements.
2. See Section 08 42 29 for operator and actuator installation requirements.
K. Install glass and infill panels using glazing method required to achieve performance criteria; see Section 08 80 00.
L. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 ADJUSTING

A. Adjust operating hardware and sash for smooth operation.

3.04 CLEANING

A. Remove protective material from pre-finished aluminum surfaces.
B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths, and take care to remove dirt from corners and to wipe surfaces clean.

3.05 PROTECTION

A. Protect installed products from damage until Date of Substantial Completion.

END OF SECTION 08 43 13

SECTION 08 71 00
DOOR HARDWARE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Hardware for wood, aluminum, and hollow metal doors.
B. Hardware for fire-rated doors.
C. Electrically operated and controlled hardware.
D. Thresholds.
E. Weatherstripping and gasketing.

1.02 RELATED REQUIREMENTS

A. Section 07 92 00 - Joint Sealants: Sealants for setting exterior door thresholds.
B. Section 08 11 13 - Hollow Metal Doors and Frames.
C. Section 08 43 13 - Aluminum-Framed Storefronts: Door hardware, except as noted in section.
D. Section 08 71 13 - Power Door Operators.

1.03 REFERENCE STANDARDS

A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
B. BHMA A156.1 - Standard for Butts and Hinges; 2025.
C. BHMA A156.2 - Bored and Preassembled Locks and Latches; 2022.
D. BHMA A156.4 - Door Closers and Pivots; 2024.
E. BHMA A156.13 - Mortise Locks and Latches; 2022.
F. BHMA A156.18 - Standard for Materials and Finishes; 2020.
G. BHMA A156.21 - Thresholds; 2025.
H. BHMA A156.22 - Standard for Gasketing; 2021.
I. BHMA A156.28 - Standard for Recommended Practices for Mechanical Keying Systems; 2023.
J. DHI (KSN) - Keying Systems and Nomenclature; 2019.
K. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.
L. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
M. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
B. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
C. Keying Requirements Meeting:
1. Schedule meeting at project site prior to Contractor occupancy.
2. Attendance Required:
a. Contractor.
b. Owner.
c. Hardware Installer.
d. Owner's Locksmith.
3. Agenda:
a. Establish keying requirements. Key to existing master key.
b. Verify locksets and locking hardware are functionally correct for project requirements.
c. Verify that keying and programming complies with project requirements.
d. Establish keying submittal schedule and update requirements.
4. Incorporate "Keying Requirements Meeting" decisions into keying submittal upon review of door hardware keying system including, but not limited to, the following:
a. Access control requirements.
b. Key control system requirements.
c. Schematic diagram of preliminary key system.
d. Flow of traffic and extent of security required.
5. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.
6. Deliver established keying requirements to manufacturers.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
C. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
1. Provide complete description for each door listed.
2. Provide manufacturer name, product names, and catalog numbers; include functions, types, styles, sizes and finishes of each item.
D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
E. Maintenance Data: Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.
F. Keying Schedule: Key to existing master key.
1. Submit three (3) copies of Keying Schedule in compliance with requirements established during Keying Requirements Meeting unless otherwise indicated.

1.06 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least three years of documented experience.

1.07 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
B. Manufacturer's Warranty: Provide warranty against defects in material and workmanship for period indicated. Complete forms in Owner's name and register with manufacturer.
1. Closers: Five years, minimum.
2. Exit Devices: Three years, minimum.
3. Locksets and Cylinders: Three years, minimum.
4. Other Hardware: Two years, minimum.

PART 2 PRODUCTS

2.01 DESIGN AND PERFORMANCE CRITERIA

A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
B. Provide individual items of single type, of same model, and by same manufacturer.
C. Provide door hardware products that comply with the following requirements:
1. Applicable provisions of federal, state, and local codes.
2. Accessibility: ADA Standards and ICC A117.1.
3. Fire-Rated Doors: NFPA 80, listed and labeled by qualified testing agency for fire protection ratings indicated, based on testing at positive pressure in accordance with NFPA 252 or UL 10C.
4. Hardware on Fire-Rated Doors: Listed and classified by UL (DIR), ITS (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for application indicated.
5. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for the purpose specified.
D. Electrically Operated and/or Controlled Hardware: Provide necessary power supplies, power transfer hinges, relays, and interfaces as required for proper operation; provide wiring between hardware and control components and to building power connection in compliance with NFPA 70.
E. Lock Function: Provide lock and latch function numbers and descriptions of manufacturer's series. See drawings for additional information..
F. Fasteners:
1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
a. Aluminum fasteners are not permitted.
b. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.
2. Fire-Rated Applications: Comply with NFPA 80.
a. Provide wood or machine screws for hinges mortised to doors or frames, strike plates to frames, and closers to doors and frames.
b. Provide steel through bolts for attachment of surface mounted closers, hinges, or exit devices to door panels unless proper door blocking is provided.

2.02 HINGES

A. Hinges: Comply with BHMA A156.1, Grade 1.
1. Provide hinges on every swinging door.
2. Provide following quantity of butt hinges for each door:
a. Doors From 60 inches High up to 90 inches High: Three hinges.
b. Doors 90 inches High up to 120 inches High: Four hinges.

2.03 FLUSH BOLTS

A. Manufacturers:
1. Basis of Design: Ives - FB32-12-MD Automatic Flush Bolttching Flush Bolt Set.
2. Substitutions: Approved equal.

B. Flush Bolts: Comply with BHMA A156.16, Grade 1.
1. Flush Bolt Throw: 3/4 inch, minimum.
2. Provides extension bolts in leading edge of door, one bolt into floor, one bolt into top of frame.
a. Pairs of Swing Doors: At inactive leaves, provide flush bolts of type as required to comply with code.
3. Provide dustproof floor strike for bolt into floor, except at metal thresholds.
4. Automatic Flush Bolts: Automatically latch upon closing of door; automatic retraction of bolts when active leaf is opened; located on inactive leaf of pair of doors.

2.04 EXIT DEVICES

A. Manufacturers:
1. Basis of Design: Hager Companies; 4500 Series Mortise.
2. Von Duprin, an Allegion brand; 88 Series Crossbar Exit Device: www.allegion.com.
3. Substitutions: See Section 01 60 00 - Product Requirements.

B. Exit Devices: Comply with BHMA A156.3, Grade 1.
1. Lever design to match lockset trim.
2. Provide cylinder with cylinder dogging or locking trim.
3. Provide exit devices properly sized for door width and height.
4. Provide strike as recommended by manufacturer for application indicated.
5. Provide less bottom rod (LBR) at scheduled locations to eliminate use of floor mounted strikes.
6. Provide UL (DIR) listed exit device assemblies for fire-rated doors and panic device assemblies for non-fire-rated doors.

2.05 LOCK CYLINDERS

A. Manufacturers:
1. Basis of Design: Pacific Doorware - Storefront Door Mortise Lock Swing Deadbolt & Cylinder Combo.
2. Substitutions: See Section 01 60 00 - Product Requirements.

B. Lock Cylinders: Provide key access on outside of each lock, unless otherwise indicated.
1. Provide cylinders from same manufacturer as locking device.
2. Provide cams and/or tailpieces as required for locking devices.

2.06 CYLINDRICAL LOCKS

A. Manufacturers:
1. Basis of Design: Schlage, ND Series Grade 1, Latitude Lever Design, 619- Satin Nickel.
2. Substitutions: See Section 01 60 00 - Product Requirements.

B. Cylindrical Locks (Bored): Comply with BHMA A156.2, Grade 1, 4000 Series.
1. Bored Hole: 2-1/8 inch diameter.
2. Latchbolt Throw: 1/2 inch, minimum.
3. Backset: 2-3/4 inch unless otherwise indicated.
4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
a. Finish: To match lock or latch.
b. Aluminum-Frame Strike Box: Provide strike box fabricated for use with aluminum framing by framing manufacturer.
5. Provide a lock for each door, unless otherwise indicated that lock is not required.
6. Provide an office lockset for swinging door where hardware set is not indicated.
7. Trim: Provide lever handle or pull trim on outside of each lock, unless otherwise indicated.

2.07 MORTISE LOCKS

A. Manufacturers:
1. Basis of Design: Schlage L Series Grade 1 Mortise Lock.
2. Substitutions: See Section 01 60 00 - Product Requirements.

B. Mortise Locks: Comply with BHMA A156.13, Grade 1, Security, 1000 Series.
1. Latchbolt Throw: 3/4 inch, minimum.
2. Deadbolt Throw: 1 inch, minimum.
3. Backset: 2-3/4 inch unless otherwise indicated.
4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
a. Aluminum-Frame Strike Box: Provide strike box fabricated for use with aluminum framing by framing manufacturer.
b. Finish: To match lock or latch.

2.08 AUXILIARY LOCKS (DEADLOCKS)

A. Manufacturers:
1. Basis of Design: Schlage B800 Series Grade 1 Deadbolts with thumbturn inside.
2. Substitutions: See Section 01 60 00 - Product Requirements.

B. Auxiliary Locks (Deadlocks): Comply with BHMA A156.36, Grade 1.
1. Type: Bored (cylindrical).
2. Application: Bored.
3. Backset: 2-3/4 inch, unless otherwise indicated.
4. Bolt Throw: 1/2 inch, with latch made of hardened steel.
5. Provide strike that matches frame.

2.09 DOUBLE DOORS

A. Manufacturers:
1. Basis of Design: Hager 4921 - 4600 Double Door Strike
2. Substitutions: See Section01 60 00 - Product Requirements.

2.10 DOOR PULLS AND PUSH PLATES

A. Manufacturers:
B. Door Pulls and Push Plates: Comply with BHMA A156.6.
1. Pull Type: Straight, unless otherwise indicated.
2. Push Plate Type: Flat, with square corners, unless otherwise indicated.
a. Edges: Beveled, unless otherwise indicated.
3. Material: Aluminum, unless otherwise indicated.
4. Provide door pulls and push plates on doors without a lockset, latchset, exit device, or auxiliary lock unless otherwise indicated.

2.11 DOOR PULLS AND PUSH BARS

A. Door Pulls and Push Bars: Comply with BHMA A156.6.
1. Bar Type: Double Bend Push Bar, unless otherwise indicated.
2. Material: Aluminum, unless otherwise indicated.

2.12 COORDINATORS

A. Manufacturers:
1. Basis of Design: Technical Glass Products (TGP) High performance fire-rated coordinators.
2. Substitutions: See Section 01 60 00 - Product Requirements.

B. Coordinators: Provide on doors having closers and self-latching or automatic flush bolts to ensure that inactive door leaf closes before active door leaf.
1. Type: Bar, unless otherwise indicated.
2. Material: Aluminum, unless otherwise indicated.
3. Ensure that coordination of other door hardware affected by placement of coordinators and carry bar is applied properly for completely operable installation.

2.13 CLOSERS

A. Manufacturers; Surface Mounted:
1. Basis of Design: Hager Companies; 5100 Series - Grade 1.
2. Substitutions: See Section 01 60 00 - Product Requirements.

B. Closers: Comply with BHMA A156.4, Grade 1.
1. Type: Surface mounted to door.
2. Provide door closer on each exterior door.
3. Provide door closer on each fire-rated and smoke-rated door.

2.14 OVERHEAD STOPS AND HOLDERS

A. Overhead Stops and Holders (Door Checks): Comply with BHMA A156.8, Grade 1.
1. Provide stop for every swinging door, unless otherwise indicated.

2.15 POWER DOOR OPERATORS

A. See Section 08 71 13.

2.16 KICK PLATES

A. Kick Plates: Provide along bottom edge of push side of every door with closer, except aluminum storefront and glass entry doors, unless otherwise indicated.
1. Size: 8 inch high by 2 inch less door width (LDW) on push side of door.

2.17 DOOR HOLDERS

A. Door Holders: Comply with BHMA A156.16, Grade 1.
1. Provide surface mounted door holders when wall or floor stop is not applicable and hold-open device is mounted on door.
2. Type: Lever, or kick down stop, with rubber bumper at bottom end.
3. Material: Aluminum.

2.18 FLOOR STOPS

A. Floor Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
1. Provide floor stops when wall surface is not available; be cautious not to create a tripping hazard.
2. Type: Manual hold-open, with pencil floor stop.
3. Material: Aluminum housing with rubber insert.

2.19 WALL STOPS

A. Wall Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
1. Provide wall stops to prevent damage to wall surface upon opening door.
2. Type: Bumper, concave, wall stop.
3. Material: Aluminum housing with rubber insert.

2.20 ASTRAGALS

A. Manufacturers:
1. Basis of Design: Technical Glass Products (TGP) High performance fire-rated astragals.
2. Substitutions: See Section 01 60 00 - Product Requirements.

B. Astragals: Comply with BHMA A156.22.
1. Type: Split, two parts, and with sealing gasket.
2. Material: Aluminum.
3. Provide non-corroding fasteners at exterior locations.

2.21 THRESHOLDS

A. Thresholds: Comply with BHMA A156.21.
1. Provide threshold at interior doors for transition between two different floor types, and over building expansion joints, unless otherwise indicated.
2. Provide threshold at each exterior door, unless otherwise indicated.
3. Type: Flat surface.
4. Material: Aluminum.
5. Threshold Surface: Fluted horizontal grooves across full width.
6. Field cut threshold to profile of frame and width of door sill for tight fit.
7. Provide non-corroding fasteners at exterior locations.

2.22 WEATHERSTRIPPING AND GASKETING

A. Weatherstripping and Gasketing: Comply with BHMA A156.22.
1. Head and Jamb Type: Adjustable.
2. Door Sweep Type: Encased in retainer.
3. Material: Aluminum, with brush weatherstripping.
4. Provide weatherstripping on each exterior door at head, jambs, and meeting stiles of door pairs, unless otherwise indicated.
5. Provide door bottom sweep on each exterior door, unless otherwise indicated.

2.23 DECALS

A. Decals: Provide to identify certain common phrases required by code and related to door operation.
1. Phrase Required: THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS.
2. Material: Plastic, adhered.
3. Letter Size and Placement: As required by local codes.

2.24 LATCH PROTECTOR

A. Latch Protector: Provide on door to protect latch from being tampered with while in locked position.
1. Type: Standard latch protector.
2. Material: Stainless steel.

2.25 SILENCERS

A. Silencers: Provide at equal locations on door frame to mute sound of door's impact upon closing.
1. Single Door: Provide three on strike jamb of frame.
2. Pair of Doors: Provide two on head of frame, one for each door at latch side.
3. Material: Rubber, gray color.

2.26 KEY CONTROL SYSTEMS

A. Key Control Systems: Comply with guidelines of BHMA A156.28.
1. Provide keying information in compliance with DHI (KSN) standards.
2. Keying: Grand master keyed.
3. Key to existing keying system.
4. Supply keys in following quantities:
a. 2 Grand Master keys.
5. Key Management System: For each keyed lock on project, provide two sets of consecutively numbered duplicate key tags with hanging hole and snap catch.
6. Security Key Tags: For each keyed lock on project, provide one set of matching key tags for permanent attachment to one key of each set.

2.27 KEY CABINET

A. Key Cabinet: Sheet steel construction, piano hinged door with key lock; BHMA A156.28.
1. Mounting: Wall-mounted.
2. Capacity: Actual quantity of keys, plus 25 percent additional capacity.
3. Size key hooks to hold 6 keys each.
4. Finish: Baked enamel, manufacturer's standard color.
5. Key cabinet lock to building keying system.

2.28 FIRE DEPARTMENT LOCK BOX

A. Fire Department Lock Box:
1. Heavy-duty, surface mounted, solid stainless-steel box with hinged door and interior gasket seal; single drill resistant lock with dust covers and tamper alarm.
2. Capacity: Holds 10 keys.
3. Finish: Manufacturer's standard dark bronze.

2.29 FINISHES

A. Finishes: Provide door hardware of same finish, unless otherwise indicated.
1. Primary Finish: 652; satin chromium plated over nickel, with steel base material (formar US equivalent US26D); BHMA A156.18.
2. Secondary Finish: 626; satin chromium plated over nickel, with brass or bronze base material (former US equivalent US26D); BHMA A156.18.
a. Use secondary finish in kitchens, bathrooms, and other spaces containing chrome or stainless steel finished appliances, fittings, and equipment; provide primary finish on one side of door and secondary finish on other side if necessary.
3. Exceptions:
a. Where base material metal is specified to be different, provide finish that is an equivalent appearance in accordance with BHMA A156.18.
b. Hinges for Fire-Rated Doors: Steel base material with painted finish, in compliance with NFPA 80.

ISSUED FOR BID

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COMMERCIAL + CUSTOM RESIDENTIAL

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CONSULTING ENGINEERS PLLC
213 Grant St
Downers Grove, IL 60515
702 525 2864

SPECIFICATION SHEET

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	Author
CHECKED	Checker

REVISIONS

A007

c. Hardware for Aluminum Entrance Doors: Finished to match door panel finish, except at hand contact surfaces provide stainless steel with satin finish, unless otherwise indicated.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.

B. Verify that electric power is available to power operated devices and of correct characteristics.

3.02 INSTALLATION

A. Install hardware in accordance with manufacturer's instructions and applicable codes.

B. Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.

C. Install hardware for smoke and draft control doors in accordance with NFPA 105.

D. Use templates provided by hardware item manufacturer.

E. Do not install surface mounted items until application of finishes to substrate are fully completed.

F. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item. As indicated in following list; unless noted otherwise in Door Hardware Schedule or on drawings.

G. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.

3.03 ADJUSTING

A. Adjust work under provisions of Section 01 70 00 - Execution and Closeout Requirements.

B. Adjust hardware for smooth operation.

C. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.04 CLEANING

A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.

B. Clean adjacent surfaces soiled by hardware installation.

3.05 PROTECTION

A. Protect finished Work under provisions of Section 01 70 00 - Execution and Closeout Requirements.

B. Do not permit adjacent work to damage hardware or finish.

END OF SECTION 08 71 00

SECTION 08 71 13
POWER DOOR OPERATORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Operators for swinging doors.

B. Controllers, actuators, and safety devices.

1.02 RELATED REQUIREMENTS

A. Section 08 71 00 - Door Hardware: Balance of door hardware.

1.03 REFERENCE STANDARDS

A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.

B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

C. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate power door operators with balance of door hardware and electrical work required for each affected door opening.
1. Electrical System Roughing-in: Coordinate layout and installation of power door operators with connections to power supplies, remote activation devices, and electric door latching hardware.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Shop Drawings:

C. Product Data: Provide data on system components, sizes, features, and finishes.

D. Manufacturer's qualification statement.

1.06 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

B. Manufacturer Warranty: Provide 2-year manufacturer warranty for components of power door operators. Complete forms in Owner's name and register with manufacturer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Operators for Swinging Doors:
1. ASSA ABLOY Entrance Solutions; Besam SW200i: www.besam-usa.com.
2. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 POWER DOOR OPERATORS - GENERAL

A. Electrically Operated or Controlled Hardware: Provide necessary power supplies, relays, and interfaces as required for proper operation; provide wiring between control components and to building power connection in compliance with NFPA 70.

B. Comply with ADA Standards for egress requirements.

C. Comply with NFPA 101 and requirements of authorities having jurisdiction; provide units selected for actual door weight and for light pedestrian traffic unless otherwise indicated.

D. Exterior and Vestibule Doors: Provide equipment suitable for ambient operating temperature range of minus 20 to plus 140 degrees F.

2.03 OPERATORS FOR SWINGING DOORS

A. Door Operator: Hydraulic.
1. Applications: Include operators for single and double doors.
2. Speed Control: Variable, field-adjustable opening and closing cycles.
3. Functionality: Full-power open, spring close operation.
a. Full-Power Operators: Comply with BHMA A156.10; safeties required.
1) Comply with UL 325; acceptable evidence of compliance includes UL (DIR) or ITS (DIR) listing or test report by testing agency acceptable to authorities having jurisdiction.
4. Mounting: Surface mounted overhead.
5. Power Supply Units: Self-contained, electrically operated, and independent of door operator.
6. Actuators: Manufacturer's standard.

2.04 CONTROLLERS, ACTUATORS, AND SAFETY DEVICES

A. Controllers: Manufacturer's standard for products specified.

B. Actuators: Manufacturer's standard for products specified.

C. Safety Devices: Manufacturer's standard units recommended for project applications and conditions.
1. Swinging Door Safety Device: Door-mounted proximity detector device arranged to prevent operation of door when persons or obstructions are in the swing zone.

2.05 FINISHES

A. Aluminum Finishes: Manufacturer's standard.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify installation conditions including, but not limited to the following: opening sizes, floor conditions, plumb and level mounting surfaces.

B. Verify that electric power is available, in the correct location, and of the correct characteristics.

3.02 INSTALLATION

A. Coordinate installation of components with related and adjacent work.

B. Install equipment in accordance with manufacturer's instructions.

3.03 ADJUSTING

A. Adjust door equipment for correct function and smooth operation.

3.04 CLEANING

A. Remove temporary protection, clean exposed surfaces.

END OF SECTION 08 71 13

SECTION 08 80 00
GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Insulating glass units.

B. Laminated glass interlayers.

1.02 RELATED REQUIREMENTS

A. Section 08 11 13 - Hollow Metal Doors and Frames: Glazed lites in doors and borrowed lites.

B. Section 08 14 16 - Flush and Molded Wood Doors: Glazed lites in doors.

C. Section 08 43 13 - Aluminum-Framed Storefronts: Glazing provided as part of storefront assembly.

1.03 REFERENCE STANDARDS

A. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2025.

B. ASTM C1376 - Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass; 2021a.

C. ASTM E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings; 2024.

D. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2019.

E. GANA (SM) - GANA Sealant Manual; 2008.

F. NFRC 100 - Procedure for Determining Fenestration Product U-factors; 2023.

G. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence; 2023.

H. NFRC 300 - Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems; 2023.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data on Insulating Glass Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.

C. Samples: Submit two samples 6 by 6 inch in size of glass units.

D. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years documented experience.

1.06 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

B. Insulating Glass Units: Provide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including providing products to replace failed units.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES

A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.
1. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
2. Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
3. Glass thicknesses listed are minimum.

B. Weather-Resistive Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure water-resistive barrier, vapor retarder, and/or air barrier.
1. In conjunction with weather barrier related materials described in other sections, as follows:
2. To utilize inner pane of multiple pane insulating glass units for continuity of vapor retarder and/or air barrier seal.
3. To maintain a continuous vapor retarder and/or air barrier throughout glazed assembly from glass pane to heel bead of glazing sealant.

C. Thermal and Optical Performance: Provide exterior glazing products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 7 computer program.
2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 7 computer program.
3. Solar Optical Properties: Comply with NFRC 300 test method.

2.02 GLASS MATERIALS

2.03 INSULATING GLASS UNITS

A. Insulating Glass Units: Types as indicated.
1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
2. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
3. Metal-Edge Spacers: Aluminum, bent and soldered corners.
4. Spacer Color: Bronze.
5. Edge Seal:
a. Color: Black.
6. Purge interpane space with dry air, hermetically sealed.

2.04 BASIS OF DESIGN - INSULATING GLASS UNITS

A. Basis of Design - Insulating Glass Units: Vision glazing.
1. Applications: Exterior insulating glass glazing unless otherwise indicated.
2. Space between lites filled with air.
3. Total Thickness: 1 inch.
4. Thermal Transmittance (U-Value), Winter - Center of Glass: 0.29, minimum.
5. Spacer Color: Bronze.
6. Edge Seal:
7. Color: Black.
8. Purge interpane space with dry air, hermetically sealed.

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS

A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.

B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.

C. Verify that sealing between joints of glass framing members has been completed effectively.

3.02 PREPARATION

A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.

B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.

C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

A. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.

3.04 PROTECTION

A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.

B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION 08 80 00

DIVISION 09 - FINISHES

SECTION 09 21 16
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Performance criteria for gypsum board assemblies.

B. Acoustic insulation.

C. Gypsum wallboard.

D. Joint treatment and accessories.

1.02 REFERENCE STANDARDS

A. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2017 (Reapproved 2022).

B. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing; 2023.

C. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2025.

D. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2022.

E. ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base; 2019.

F. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2024.

G. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2021.

H. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2023.

I. ASTM E413 - Classification for Rating Sound Insulation; 2022.

J. GA-216 - Application and Finishing of Gypsum Panel Products; 2024.

K. GA-600 - Fire Resistance and Sound Control Design Manual; 2024.

L. ICC (IBC) - International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

M. UL (FRD) - Fire Resistance Directory; Current Edition.

N. UL 2079 - Standard for Tests for Fire Resistance of Building Joint Systems; Current Edition, Including All Revisions.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data:
1. Provide data on gypsum board, accessories, and joint finishing system.
2. Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.

B. Interior Partitions: Provide completed assemblies with the following characteristics:
1. Acoustic Attenuation: STC of 50-54 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.

C. Shaft Walls at HVAC Shafts: Provide completed assemblies with the following characteristics:
1. Air Pressure Within Shaft: Sustained loads of 5 lbf/sq ft with maximum mid-span deflection of L/240.
2. Acoustic Attenuation: STC of 35-39 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.

D. Fire-Resistance-Rated Assemblies: Provide completed assemblies as indicated on the drawings
1. ICC IBC Item Numbers: Comply with applicable requirements of ICC IBC for the particular assembly.
2. Gypsum Association File Numbers: Comply with requirements of GA-600 for the particular assembly.
3. UL Assembly Numbers: Provide construction equivalent to that listed for the particular assembly in the current UL (FRD).

2.02 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
1. American Gypsum Company: www.americangypsum.com.
2. CertainTeed Corporation: www.certainteed.com.
3. USG Corporation: www.usg.com.
4. Substitutions: See Section 01 60 00 - Product Requirements.

B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
3. Thickness:
a. Vertical Surfaces: 5/8 inch.
b. Ceilings: 5/8 inch.
c. Multi-Layer Assemblies: Thicknesses as indicated on drawings.

C. Ceiling Board: Special sag resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Ceilings, unless otherwise indicated.
2. Thickness: 5/8" inch.
3. Edges: Tapered.

D. Shaftwall and Coreboard: Type X; 1 inch thick by 24 inches wide, beveled long edges, ends square cut.

2.03 GYPSUM BOARD ACCESSORIES

A. Acoustic Insulation: ASTM C665; preformed mineral-fiber, friction fit type, unfaced; thickness as required for STC.

B. Sound Isolation Tape: Elastomeric foam tape for sound decoupling.
1. Surface Burning Characteristics: Provide assemblies with flame spread index of 75 or less and smoke developed index of 450 or less, when tested in accordance with ASTM E84.
2. Tape Thickness: 1/4 inch.

C. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.

D. Beads, Joint Accessories, and Other Trim: ASTM C1047, galvanized steel, unless noted otherwise.
1. Corner Beads: Low profile, for 90 degree outside corners.
2. L-Trim with Tear-Away Strip: Sized to fit 1/2-inch thick gypsum wallboard.

E. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.

F. Finishing Compound: Surface coat and primer, takes the place of skim coating.

G. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inches in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion-resistant.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 SHAFT WALL INSTALLATION

A. Shaft Wall Framing: Install in accordance with manufacturer's installation instructions.
1. Install studs at spacing required to meet performance requirements.

B. Shaft Wall Liner: Cut panels to accurate dimensions and install sequentially between special friction studs.

3.03 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

B. Sound Isolation Tape: Apply to vertical studs and top and bottom tracks/runners in accordance with manufacturer's instructions.

C. Acoustic Sealant: Install in accordance with manufacturer's instructions.

3.04 BOARD INSTALLATION

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.

C. Fire-Resistance-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.

D. Installation on Wood Framing: For rated assemblies, comply with requirements of listing authority. For nonrated assemblies, install as follows:
1. Single-Layer Applications: Screw attachment.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
1. Not more than 30 feet apart on walls and ceilings over 50 feet long.

B. Corner Beads: Install at external corners, using longest practical lengths.

C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.

3.06 JOINT TREATMENT

A. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
1. Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated.
2. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
3. Level 3: Walls to receive textured wall finish.
4. Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.
5. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction.

B. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
1. Feather coats of joint compound so that camber is maximum 1/32 inch.

C. Where Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.

3.07 PROTECTION

A. Protect installed gypsum board assemblies from subsequent construction operations.

END OF SECTION 09 21 16

SECTION 09 91 13
EXTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
1. Exposed surfaces of steel lintels and ledge angles.

D. Do Not Paint or Finish the Following Items:
1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
2. Items indicated to receive other finishes.
3. Items indicated to remain unfinished.
4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
5. Floors, unless specifically indicated.
6. Glass.
7. Concealed pipes, ducts, and conduits.

1.02 REFERENCE STANDARDS

A. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:
1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
2. MPI product number (e.g. MPI #47).
3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.

C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
1. Where sheen is specified, submit samples in only that sheen.
2. Where sheen is not specified, submit each color in each sheen available.

1.04 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the paint product manufacturer's temperature ranges.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. Paints:
1. Base Manufacturer: Sherwin-Williams Company.
C. Primer Sealers: Same manufacturer as top coats.
D. Substitutions: approved equal.

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready-mixed, unless required to be a field-catalyzed paint.
1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
3. Supply each paint material in quantity required to complete entire project's work from a single production run.
4. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is described explicitly in manufacturer's product instructions.

B. Colors: As indicated on drawings.
1. Allow for minimum of three colors for each system, unless otherwise indicated, without additional cost to Owner.
2. Extend colors to surface edges; colors may change at any edge as directed by Architect.

2.03 PAINT SYSTEMS - EXTERIOR

A. Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including hollow metal doors, metal frames, C-channels and historic banding..
1. Two top coats and one coat primer, unless otherwise indicated.
2. Primer: As recommended by top coat manufacturer for specific substrate.

2.04 PRIMERS

A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
1. Anti-Corrosive Alkyd Primer for Metal.
2. Alkyd Primer for Galvanized Metal.
3. Rust-Inhibitive Water Based Primer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Test shop-applied primer for compatibility with subsequent cover materials.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

F. Galvanized Surfaces:

G. Ferrous Metal:
1. Solvent clean according to SSPC-SP 1.

H. Exterior Wood Surfaces to Receive Opaque Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior caulking compound after prime coat has been applied. Back prime concealed surfaces before installation.

I. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

A. Apply products in accordance with manufacturer's written instructions.

B. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.

C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

D. Apply each coat to uniform appearance.

E. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply additional coats until complete hide is achieved.

F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

G. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 PAINT AND COLOR SCHEDULE

A. Reference drawings for paint and color selections.

END OF SECTION 09 91 13

SECTION 09 91 23
INTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
1. Both sides and edges of plywood backboards for electrical and telecom equipment before installing equipment.
2. Elevator pit ladders.
3. Mechanical and Electrical:
a. In finished areas, paint insulated and exposed pipes, conduit, boxes, mechanical equipment, and electrical equipment, unless otherwise indicated.
b. In finished areas, paint shop-primed items.

D. Do Not Paint or Finish the Following Items:
1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
2. Items indicated to receive other finishes.
3. Items indicated to remain unfinished.
4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
5. Floors, unless specifically indicated.
6. Glass.
7. Acoustical materials, unless specifically indicated.
8. Concealed pipes, ducts, and conduits.

1.02 REFERENCE STANDARDS

A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.

B. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:
1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
2. MPI product number (e.g., MPI #47).
3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
4. Manufacturer's installation instructions.

ISSUED FOR BID

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studioK
ARCHITECTURE
910 North Main St
Princeton, IL 61356
815 872 2478

COMMERCIAL + CUSTOM RESIDENTIAL

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
230 Woodlawn Ave
Aurora, IL 60506
630 897 4651

EVERATE
CONSULTING ENGINEERS PLLC
213 Grant St
Downers Grove, IL 60515
702 525 2864

SPECIFICATION SHEET

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	Author
CHECKED	Checker

REVISIONS

A008

C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
1. Where sheen is specified, submit samples in only that sheen.
2. Where sheen is not specified, submit each color in each sheen available.

D. Manufacturer's Instructions: Indicate special surface preparation procedures.

1.04 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. Paints:
1. Base Manufacturer: Sherwin-Williams Company.

C. Primer Sealers: Same manufacturer as top coats.

D. Substitutions: approved equal..

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
2. Supply each paint material in quantity required to complete entire project's work from a single production run.
3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Colors: As indicated on drawings.
1. Allow for minimum of three colors for each system, unless otherwise indicated, without additional cost to Owner.
2. Extend colors to surface edges; colors may change at any edge as directed by Architect.
3. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling under which they are mounted.

2.03 PAINT SYSTEMS - INTERIOR

A. Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete, and shop primed steel.
1. Two top coats and one coat primer.
2. Primer: As recommended by top coat manufacturer for specific substrate.

B. Concrete Floors to be Painted.
1. Two top coats and one coat primer.
2. Primer: As recommended by top coat manufacturer for specific substrate.

C. Paint GI-OP-3L - Gypsum Board/Plaster, Latex, 3 Coat:
1. One coat of alkyd primer sealer.
2. Eggshell: Two coats of latex enamel.

D. Paint GI-OP-3LA - Gypsum Board/Plaster, Latex-Acrylic, 3 Coat:
1. One coat of alkyd primer sealer.
2. Eggshell: Two coats of latex-acrylic enamel.

2.04 PRIMERS

A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
1. Concrete Floor Primer, Waterborne.

2.05 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been adequately prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

D. Test shop-applied primer for compatibility with subsequent cover materials.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Concrete:
1. Clean concrete according to ASTM D4258. Allow to dry.
2. Prepare surface as recommended by top coat manufacturer and according to SSPC-SP 13.

F. Concrete Floors and Traffic Surfaces: Remove contamination, acid etch and rinse floors with clear water. Verify required acid-alkali balance is achieved. Allow to dry.

G. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

H. Ferrous Metal:
1. Solvent clean according to SSPC-SP 1.

I. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

D. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

E. Sand metal surfaces lightly between coats to achieve required finish.

F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

G. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

3.06 SCHEDULE - PAINT SYSTEMS

3.07 PAINT AND COLOR SCHEDULE

A. Reference drawings for paint and color schedule

END OF SECTION 09 91 23

SECTION 09 93 00
STAINING AND TRANSPARENT FINISHING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Field application of stains.

B. Field application of transparent finishes.

1.02 REFERENCE STANDARDS

A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:
1. Manufacturer's name, product name and catalog number, and general product category.
2. Manufacturer's installation instructions.
3. If proposal of substitutions is allowed under submittal procedures, explanation of substitutions proposed.

C. Manufacturer's Instructions: Indicate special surface preparation procedures.

1.04 QUALITY ASSURANCE

A. Applicator Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.

1.05 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by manufacturer of stains and transparent finishes.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide finishes used in any individual system from the same manufacturer; no exceptions.

B. Transparent Finishes:
1. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
2. Substitutions: See Section 01 60 00 - Product Requirements.

C. Stains:
1. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
2. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 STAINS AND TRANSPARENT FINISHES - GENERAL

A. Finishes:
1. Provide finishes capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
2. Provide materials compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
3. Supply each finish material in quantity required to complete entire project's work from a single production run.
4. Do not reduce, thin, or dilute finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.

C. Colors: To be selected from manufacturer's full range of available colors.
1. Selection to be made by Architect after award of contract.

2.03 INTERIOR STAIN AND TRANSPARENT FINISH SYSTEMS

A. Finish on Wood - Floors:
1. 2-coat finish over 1-coat stain.

2.04 ACCESSORY MATERIALS

A. Accessory Materials: Cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of finished surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of stains and finishes until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or repair existing finishes that exhibit surface defects.

D. Remove surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

E. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

F. Wood Surfaces to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats. Prime concealed surfaces with gloss varnish reduced 25 percent with thinner.

3.03 APPLICATION

A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

D. Sand wood surfaces lightly between coats to achieve required finish.

E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

F. Wood to Receive Transparent Finishes: Tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.

G. Reinstall items removed prior to finishing.

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION 09 93 00

SECTION 09 96 00
HIGH-PERFORMANCE COATINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. High performance coatings for concrete and metal surfaces.

B. Surface preparation.

1.02 REFERENCE STANDARDS

A. ASTM D4258 - Standard Practice for Surface Cleaning Concrete for Coating; 2023.

B. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; Current Edition.

C. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.

D. SSPC-SP 13 - Surface Preparation of Concrete; 2018.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide complete list of all products to be used, with the following information for each:
1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
2. MPI product number (e.g. MPI #47).
3. Cross-reference to specified coating system(s) product is to be used in; include description of each system.
4. Manufacturer's installation instructions.

C. Samples: Submit two samples 8 by 8 inch in size illustrating colors available for selection.

D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

1.05 FIELD CONDITIONS

A. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

B. Do not apply exterior coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the coating product manufacturer.

C. Do not install materials when temperature is below 55 degrees F or above 90 degrees F.

D. Maintain this temperature range, 24 hours before, during, and 72 hours after installation of coating.

E. Restrict traffic from area where coating is being applied or is curing.

1.06 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

C. Warranty: Include coverage for bond to substrate.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide high performance coating products from the same manufacturer to the greatest extent possible.

B. High-Performance Coatings:
1. Sherwin-Williams Company: www.protective.sherwin-williams.com/industries/#sle.
2. Substitutions: approved equal.

2.02 HIGH-PERFORMANCE COATINGS

A. MPI Standards: Provide products that comply with MPI standards indicated and are listed in MPI Approved Products List.

2.03 TOP COAT MATERIALS

A. Coatings - General: Provide complete multi-coat systems formulated and recommended by manufacturer for the applications indicated, in the thicknesses indicated; number of coats specified does not include primer or filler coat.
1. Colors: Selected from manufacturer's standard colors.

B. Elastomeric Coating for concrete and masonry:
1. Number of Coats: Two.
2. Top Coat(s): Exterior Pigmented Elastomeric, Water Based.
a. Products:
1) Sherwin Williams; ConFlex SherLastic Elastomeric Coating.
2) Substitutions: Section 01 60 00 - Product Requirements.

2.04 PRIMERS

A. Primers: Provide the following unless other primer is required or recommended by coating manufacturer.
1. Pimer-Sealer, Acrylic Coating, Exterior.
a. Products:
1) Sherwin-Williams; Loxon Concrete and Masonry Primer-Sealer
2) Substitutions: Section 01 60 00 - Product Requirements.

2.05 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of coated surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Do not begin application of coatings until substrates have been properly prepared.

C. Verify that substrate surfaces are ready to receive work as instructed by the coating manufacturer. Obtain and follow manufacturer's instructions for examination and testing of substrates.

D. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

E. Masonry: Verify masonry joints are struck flush.

F. Proceed with coating application only after unacceptable conditions have been corrected.
1. Commencing coating application constitutes Contractor's acceptance of substrates and conditions.

3.02 PREPARATION

A. Protect adjacent surfaces and materials not receiving coating from spatter and overspray; mask if necessary to provide adequate protection. Repair damage.

B. Clean surfaces of loose foreign matter.

C. Remove finish hardware, fixture covers, and accessories and store.

D. Existing Painted and Sealed Surfaces:
1. Strip existing paint and coatings from surface.
2. Clean with mixture of trisodium phosphate and water to remove surface grease and foreign matter.

E. Concrete:
1. Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
2. Clean surfaces with pressurized water. Use pressure range of 1,500 to 4,000 psi at 6 to 12 inches. Allow to dry.
3. Clean concrete according to ASTM D4258. Allow to dry.
4. Prepare surface as recommended by coating manufacturer and according to SSPC-SP 13.

F. Masonry:
1. Remove efflorescence and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces or if alkalinity of mortar joints exceed that permitted in manufacturer's written instructions. Allow to dry.
2. Prepare surface as recommended by coating manufacturer.
3. Clean surfaces with pressurized water. Use pressure range of 600 to 1,500 psi at 6 to 12 inches. Allow to dry.

3.03 PRIMING

A. Apply primer to all surfaces, unless specifically not required by coating manufacturer. Apply in accordance with coating manufacturer's instructions.

B. Concrete: Prior to priming, patch with masonry filler to produce smooth surface.

C. Concrete Masonry: Apply masonry filler to thickness required to fill holes and produce smooth surface; minimum thickness of 30 mils.

3.04 COATING APPLICATION

A. Apply coatings in accordance with manufacturer's written instructions, to thicknesses specified and recommendations in MPI - Architectural Painting and Specification Manual.

B. Apply in uniform thickness coats, without runs, drips, pinholes, brush marks, or variations in color, texture, or finish. Finish edges, crevices, corners, and other changes in dimension with full coating thickness.

3.05 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

B. Clean surfaces immediately of overspray, splatter, and excess material.

C. After coating has cured, clean and replace finish hardware, fixtures, and fittings previously removed.

3.06 SCHEDULE

A. Colors: To be selected by Architect from manufacturer's stardad colors.

END OF SECTION 09 96 00

DIVISION 10 - SPECIALTIES

SECTION 10 44 00
FIRE PROTECTION SPECIALTIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fire extinguishers.

B. Fire extinguisher cabinets.

C. Accessories.

1.02 REFERENCE STANDARDS

A. ASTM E814 - Standard Test Method for Fire Tests of Penetration Firestop Systems; 2023a.

B. FM (AG) - FM Approval Guide; Current Edition.

C. NFPA 10 - Standard for Portable Fire Extinguishers; 2026.

D. UL (DIR) - Online Certifications Directory; Current Edition.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide extinguisher operational features.

C. Shop Drawings: Indicate locations of cabinets and cabinet physical dimensions.

D. Manufacturer's Installation Instructions: Indicate special criteria and wall opening coordination requirements.

E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

F. Maintenance Data: Include test, refill or recharge schedules and re-certification requirements.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Fire Extinguishers:
1. Activar Construction Products Group, Inc. - JL Industries; Cosmic Extinguisher - Multipurpose Chemical: www.activarcpg.com.
2. Kidde, a unit of United Technologies Corp: www.kidde.com.

B. Fire Extinguisher Cabinets and Accessories:
1. Activar Construction Products Group, Inc. - JL Industries; Ambassador Series: www.activarcpg.com.
2. Kidde, a unit of United Technologies Corp: www.kidde.com.
3. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 FIRE EXTINGUISHERS

A. Fire Extinguishers - General: Comply with product requirements of NFPA 10 and applicable codes, whichever is more stringent.
1. Provide extinguishers labeled by UL (DIR) or FM (AG) for purpose specified and as indicated.

B. Multipurpose Dry Chemical Type Fire Extinguishers: Carbon steel tank, with pressure gauge.
1. Class: A:B:C type.
2. Size: 10 pound.
3. Finish: Baked polyester powder coat, color as selected.
4. Temperature range: Minus 40 degrees F to 120 degrees F.

2.03 FIRE EXTINGUISHER CABINETS

A. Fire Rating: Listed and labeled in accordance with ASTM E814 requirements for fire resistance rating of walls where being installed.

B. Cabinet Construction: Non-fire rated.
1. Formed primed steel sheet; 0.036 inch thick base metal.

C. Fire Rated Cabinet Construction: One-hour fire rated.

D. Cabinet Configuration: Semi-recessed and surface mounted type.

E. Door: 0.036 inch metal thickness, reinforced for flatness and rigidity with nylon catch. Hinge doors for 180 degree opening with two butt hinges.

F. Door Glazing: Tempered glass, clear, 1/8 inch thick, and set in resilient channel glazing gasket.

G. Cabinet Mounting Hardware: Appropriate to cabinet, with pre-drilled holes for placement of anchors.

H. Finish of Cabinet Exterior Trim and Door: Red baked enamel.

I. Finish of Cabinet Interior: White colored enamel.

2.04 ACCESSORIES

A. Extinguisher Brackets: Formed steel, chrome-plated.

B. Lettering: FIRE EXTINGUISHER decal, or vinyl self-adhering, pre-spaced black lettering in accordance with authorities having jurisdiction (AHJ).

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify rough openings for cabinet are correctly sized and located.

3.02 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install cabinets plumb and level in wall openings, 48 inches from finished floor to inside bottom of cabinet.

C. Secure rigidly in place.

D. Place extinguishers in cabinets and on wall brackets.

END OF SECTION 10 44 00

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702 525 2864

SPECIFICATION SHEET

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

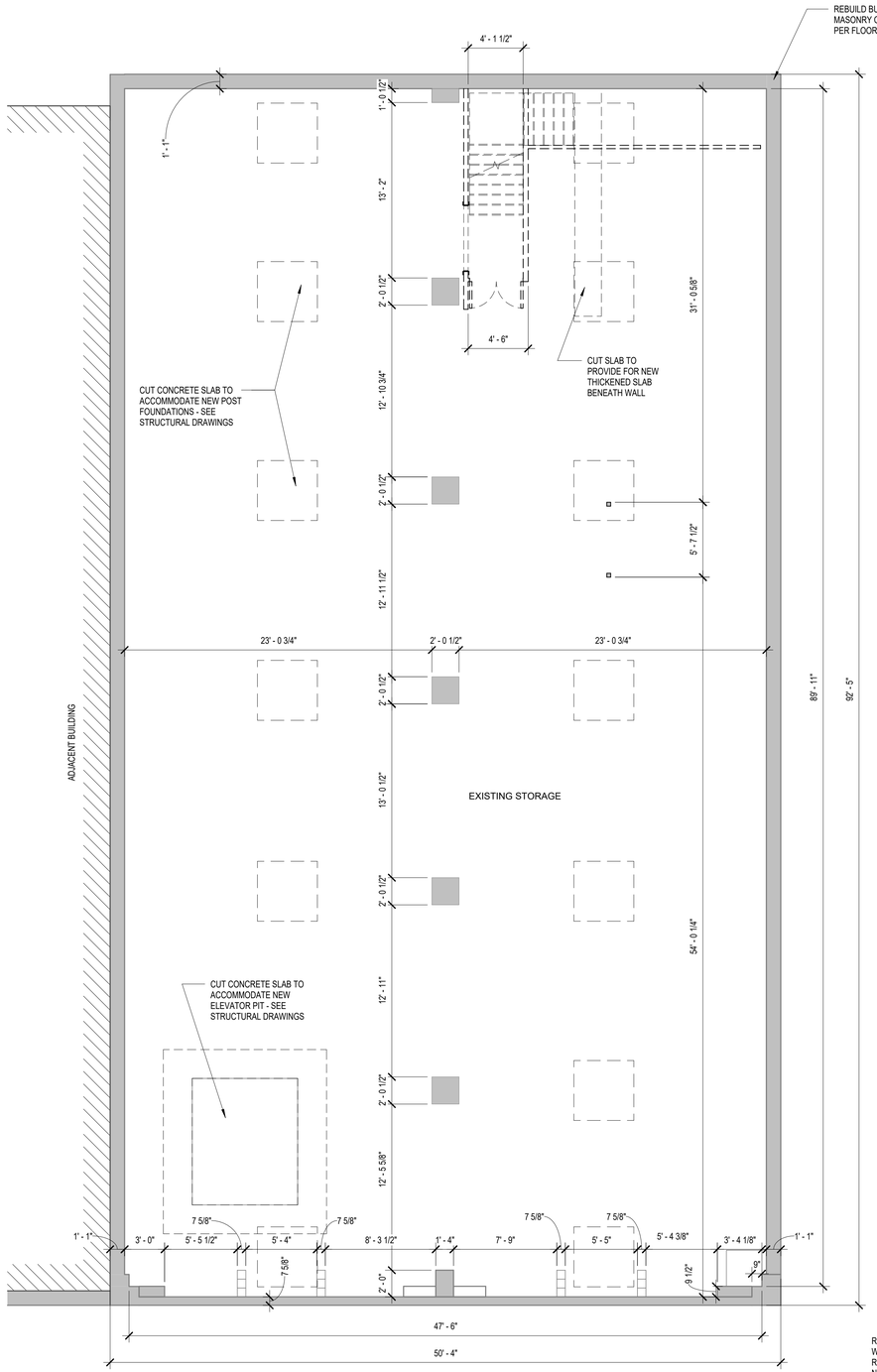
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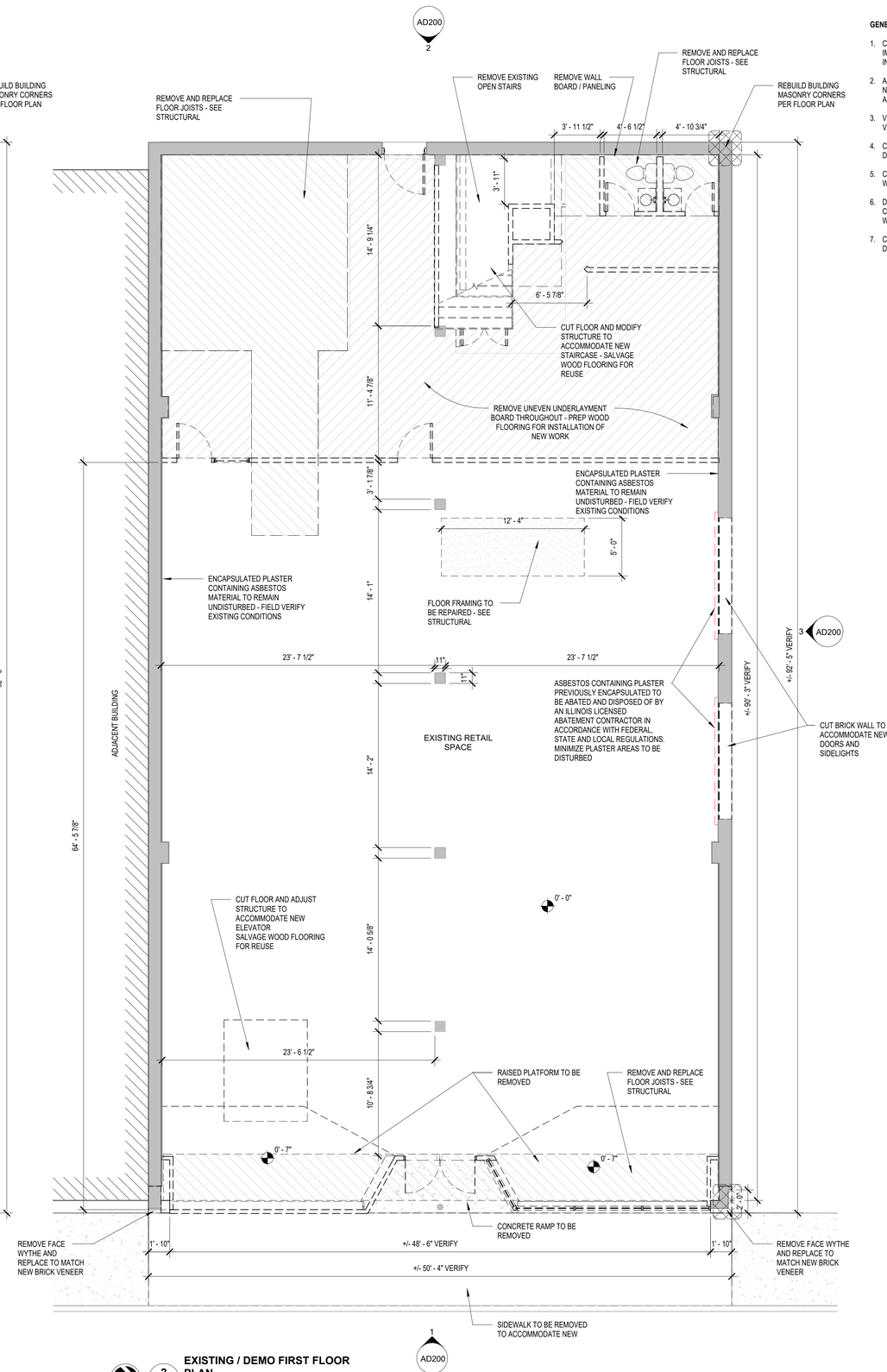
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GENERAL DEMOLITION NOTES:

1. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD AND IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES AND INTERFERENCES.
2. ALL WORK MUST BE COORDINATED AND SCHEDULED WITH THE OWNER SO AS NOT TO INTERRUPT OR DISRUPT THE NORMAL FUNCTION AND OPERATION OF ANY EQUIPMENT OR SYSTEM.
3. VERIFY WITH OWNER THE REMOVAL OF ANY COMPONENT OF SALVAGEABLE VALUE TO INCLUDE WOOD FLOORING.
4. CONTRACTOR TO MINIMIZE AS MUCH AS POSSIBLE THE AMOUNT OF WORK TO BE DEMOLISHED AND REDONE.
5. CONTRACTOR SHALL REPAIR, PATCH OR REPLACE ALL DAMAGED FLOOR AND WALL SURFACES DAMAGED BY REMOVAL OF EXISTING CONSTRUCTION.
6. DEMOLITION OF STRUCTURAL COMPONENTS OR WALL BEARING WALLS MUST BE COORDINATED WITH STRUCTURAL ENGINEER PRIOR TO BEGINNING DEMOLITION WORK.
7. CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL FROM SITE OF ALL REMOVED DEMOLITION CONSTRUCTION MATERIALS AND DEBRIS.

DEMOLITION LEGEND

ITEMS TO BE DEMOLISHED

ITEMS TO REMAIN

NORTH

1 AD100 **EXISTING / DEMO BASEMENT PLAN**

3/16" = 1'-0"

NORTH

2 AD100 **EXISTING / DEMO FIRST FLOOR PLAN**

3/16" = 1'-0"

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EXISTING / DEMOLITION BASEMENT AND FIRST FLOOR PLAN

BUILDING RENOVATION

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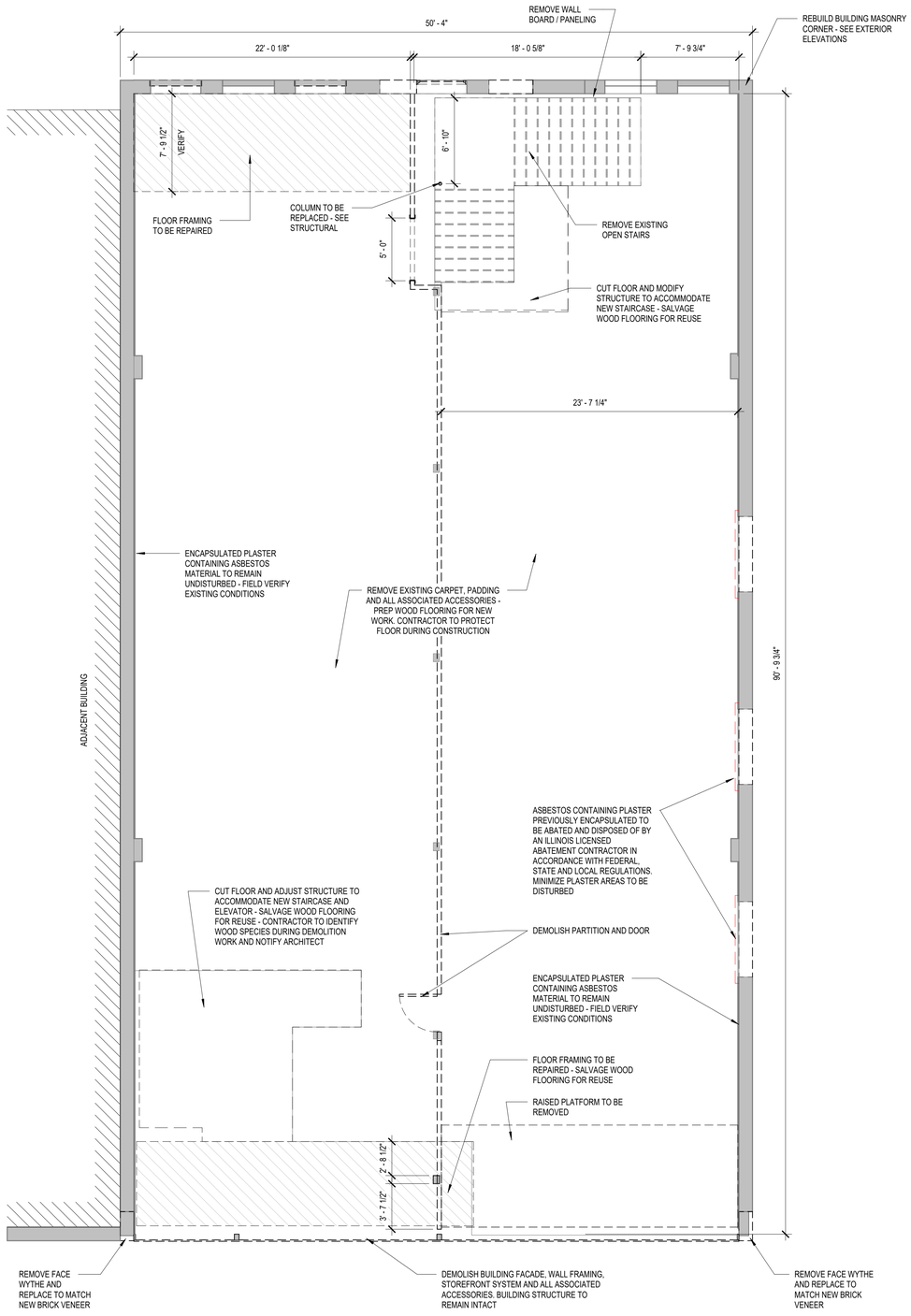
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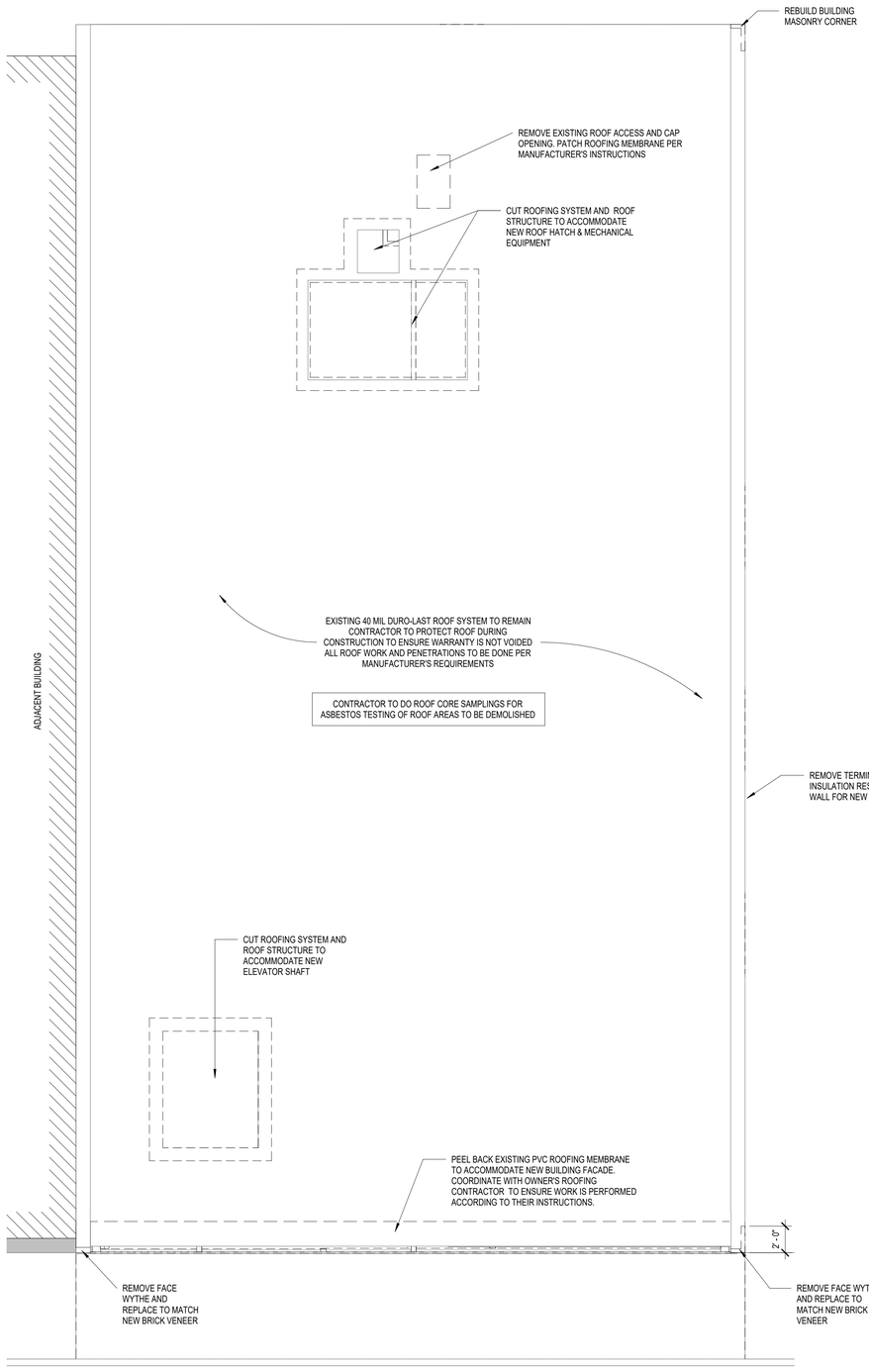
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AD100

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2 AD101 **EXISTING / DEMO SECOND FLOOR PLAN**
3/16" = 1'-0"
NORTH



1 AD101 **EXISTING / DEMOLITION ROOF PLAN**
3/16" = 1'-0"
NORTH

GENERAL DEMOLITION NOTES:

1. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD AND IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES AND INTERFERENCES.
2. ALL WORK MUST BE COORDINATED AND SCHEDULED WITH THE OWNER SO AS NOT TO INTERRUPT OR DISRUPT THE NORMAL FUNCTION AND OPERATION OF ANY EQUIPMENT OR SYSTEM.
3. VERIFY WITH OWNER THE REMOVAL OF ANY COMPONENT OF SALVAGEABLE VALUE TO INCLUDE WOOD FLOORING.
4. CONTRACTOR TO MINIMIZE AS MUCH AS POSSIBLE THE AMOUNT OF WORK TO BE DEMOLISHED AND REDONE.
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6. DEMOLITION OF STRUCTURAL COMPONENTS OR WALL BEARING WALLS MUST BE COORDINATED WITH STRUCTURAL ENGINEER PRIOR TO BEGINNING DEMOLITION WORK.
7. CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL FROM SITE OF ALL REMOVED DEMOLITION CONSTRUCTION MATERIALS AND DEBRIS.

DEMOLITION LEGEND

ITEMS TO BE DEMOLISHED

ITEMS TO REMAIN

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EXISTING / DEMOLITION SECOND FLOOR & ROOF PLAN

BUILDING RENOVATION

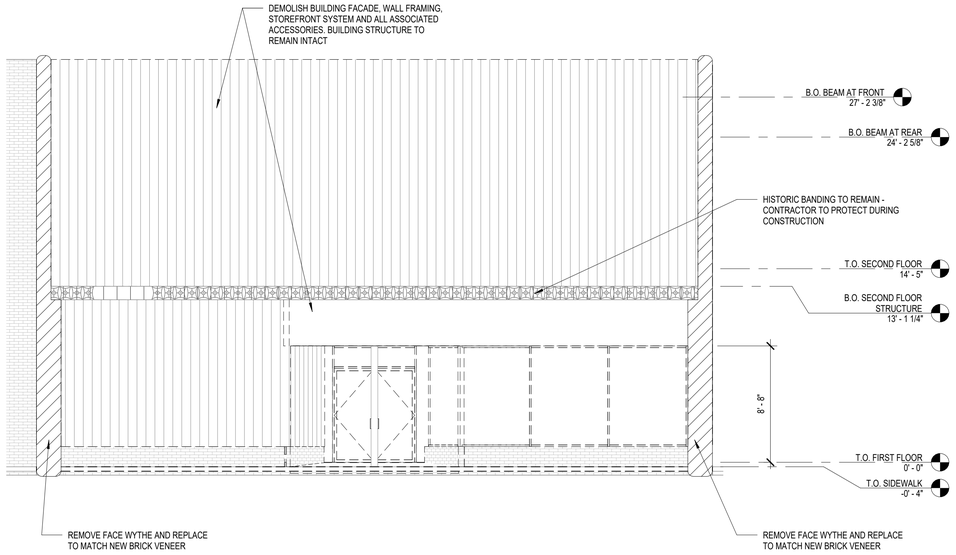
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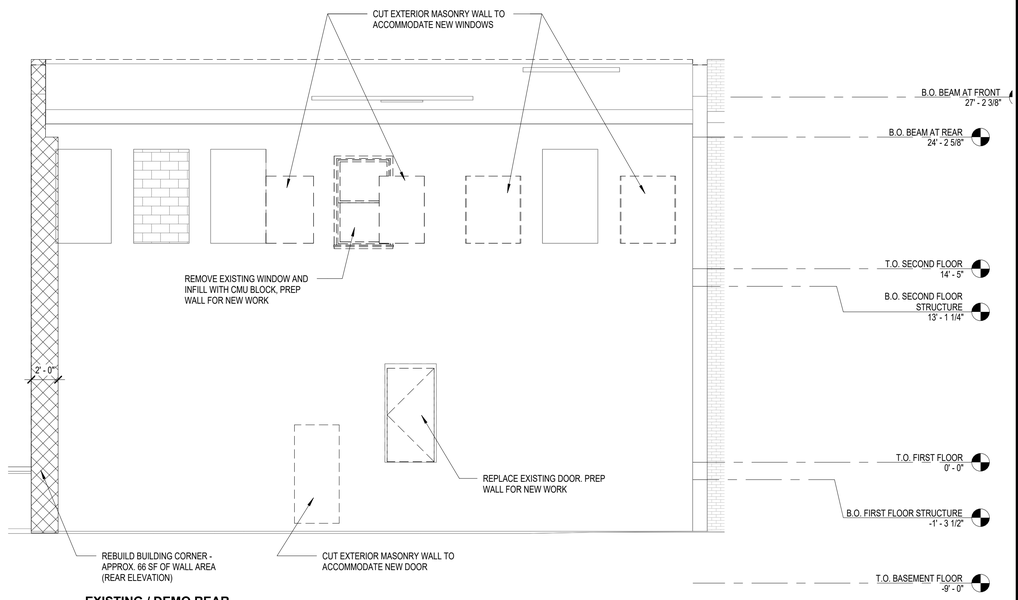
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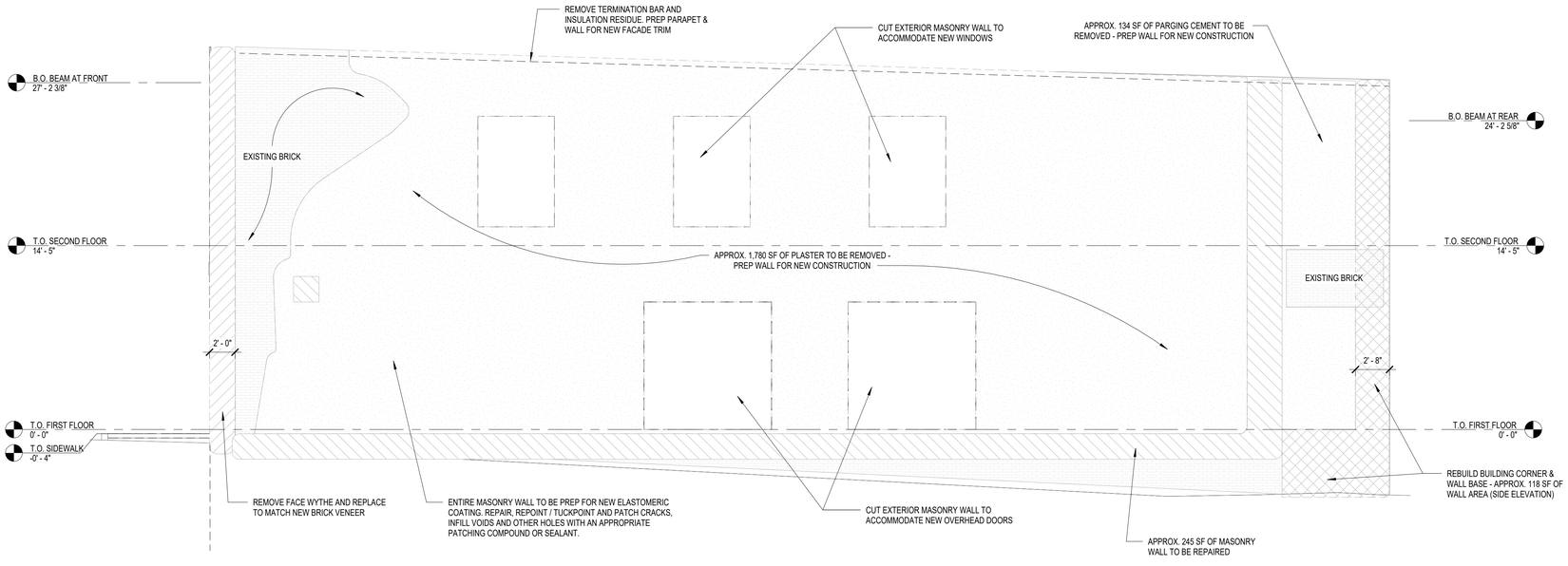
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1 AD200 EXISTING / DEMO FRONT ELEVATION
3/16" = 1'-0"



2 AD200 EXISTING / DEMO REAR ELEVATION
3/16" = 1'-0"



3 AD200 EXISTING / DEMO SIDE ELEVATION
3/16" = 1'-0"



EXISTING SIDE ELEVATION FOR REFERENCE

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EXISTING / DEMO EXTERIOR ELEVATIONS

BUILDING RENOVATION

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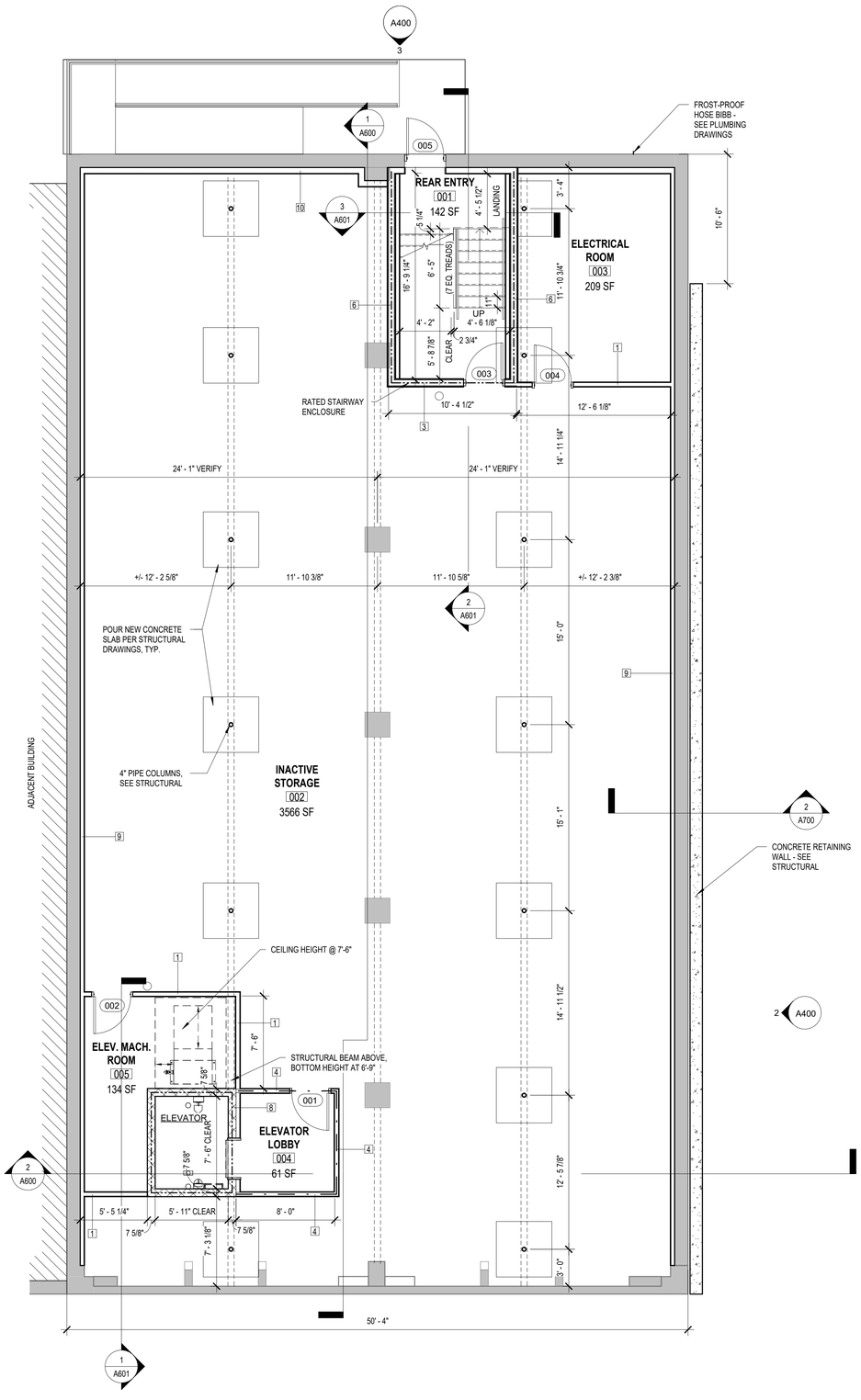
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1 A100 **BASEMENT PLAN**
3/16" = 1'-0"

NORTH

WALL TYPES

1 — 4 3/4" — TYPICAL NON-RATED WALLS
- 5/8" GYPSUM BOARD PANEL
- MINERAL WOOL SOUND BATT @ ALL TOILET WALLS
- 2X4 WOOD STUDS @ 16" O.C.
- 5/8" GYPSUM BOARD PANEL

2 — 6 3/4" — NON-RATED BEARING & PLUMBING WALLS
- 5/8" GYP BOARD (CEMENT BOARD BEHIND TILE / WET WALLS)
- MINERAL WOOL SOUND BATT @ ALL TOILET WALLS
- 2X6 WOOD STUDS @ 16" O.C.
- 5/8" GYP BOARD

3 — 8" — 2-HR RATED WALL - UL 301 EXTEND WALL TO UNDERSIDE OF FLOOR / CEILING ASSEMBLY - ROOF DECK ABOVE
- (2) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANELS
- MINERAL WOOL SOUND BATT @ ALL TOILET WALLS
- 2X6 WOOD STUDS @ 16" O.C.
- (2) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANELS

4 — 4 3/4" — 1-HR RATED WALL - UL 305 EXTEND WALL TO UNDERSIDE OF FLOOR / CEILING ASSEMBLY - ROOF DECK ABOVE
- (1) LAYER OF 5/8" FIRECODE CORE GYPSUM PANEL
- MINERAL WOOL SOUND BATT
- 2X4 WOOD STUDS @ 16" O.C.
- (1) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANEL

5 — 6 3/4" — 1-HR RATED WALL - UL 305 EXTEND WALL TO UNDERSIDE OF FLOOR / CEILING ASSEMBLY - ROOF DECK ABOVE
- (1) LAYER OF 5/8" FIRECODE CORE GYPSUM PANEL
- MINERAL WOOL SOUND BATT
- 2X6 WOOD STUDS @ 16" O.C.
- (1) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANEL

6 — 1' - 0 1/8" — BEARING STAIRWAY WALLS — 2-HR RATED WALL - UL 301 EXTEND WALL TO UNDERSIDE OF FLOOR / CEILING ASSEMBLY - ROOF DECK ABOVE
- 5/8" GYPSUM BOARD PANEL
- 2X4 WOOD STUDS @ 16" O.C.
- (2) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANELS
- MINERAL WOOL SOUND BATT @ ALL TOILET WALLS
- 2X6 WOOD STUDS @ 16" O.C.
- (2) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANELS

7 — 1' - 2 1/8" — BEARING WALL — 2-HR RATED WALL - UL 301 EXTEND WALL TO UNDERSIDE OF FLOOR / CEILING ASSEMBLY - ROOF DECK ABOVE
- 5/8" GYPSUM BOARD PANEL
- 2X6 WOOD STUDS @ 16" O.C.
- (2) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANELS
- MINERAL WOOL SOUND BATT @ ALL TOILET WALLS
- 2X6 WOOD STUDS @ 16" O.C.
- (2) LAYERS OF 5/8" FIRECODE CORE GYPSUM PANELS

8 — 4 1/8" — ELEVATOR SHAFT WALL
- 5/8" GYP BOARD
- 2 x 4 WOOD STUDS @ 16" O.C.
- CMU WALL (2-HR RATED)

9 — 4 1/8" — EXTERIOR / BASEMENT WALL
- 5/8" GYP BOARD
- 2 x 4 WOOD STUDS @ 16" O.C.
- CLOSED-CELL SPRAY FOAM INSULATION (MIN. R-15)
- EXISTING 3-WYTHE CLAY MASONRY EXTERIOR WALL CONSTRUCTION

10 — EXTERIOR WALL
- 5/8" GYP BOARD
- 2 x 6 WOOD STUDS @ 16" O.C.
- CLOSED-CELL SPRAY FOAM INSULATION (MIN. R-27)
- EXISTING ENCAPSULATED ASBESTOS CONTAINING PLASTER TO REMAIN UNDISTURBED - FIELD VERIFY EXTENT OF PLASTER
- EXISTING 3-WYTHE CLAY MASONRY EXTERIOR WALL CONSTRUCTION

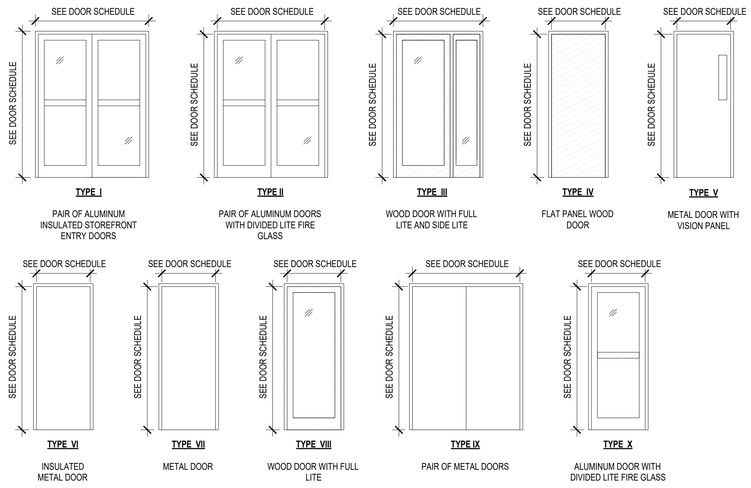
GENERAL SAFETY GLASS NOTES:
1. PROVIDE SAFETY GLASS AS REQUIRED BY CODE, INCLUDING THE FOLLOWING LOCATIONS:
   A. ALL DOOR AND PANELS CONTAINING GLAZING
   B. WITHIN 24" ARC OF DOOR EDGES
   C. ONE OR MORE WALKING SURFACES WITHIN 36" OF GLAZING
   D. BOTTOM EDGE OF GLAZING IS LESS THAN 18" ABOVE FLOOR
   E. TOP EDGE OF GLAZING IS GREATER THAN 36" ABOVE FLOOR
   F. INDIVIDUAL PANELS OVER 9 SQUARE FEET IN AREA
2. WINDOWS TO OMPLY WITH THE BUILDING ENVELOPE REQUIREMENTS OF THE IECC

GENERAL FLOOR PLAN NOTES:
1. THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTION BEGINS. AFTER EXISTING CONDITIONS HAVE BEEN CHECKED AND VERIFIED, NOTIFY ARCHITECT'S OFFICE IN WRITING OF ANY DISCREPANCIES. ALL SHOP DRAWINGS ARE TO BE SUBMITTED AS PER VERIFIED DIMENSIONS.
2. THROUGH-WALL PENETRATIONS FOR UTILITIES SHALL NOT COMPROMISE THE RATINGS OF THE WALL/FLOORS.
3. ALL FIRE RATED WALLS ARE TO EXTEND TO THE UNDERSIDE OF THE ROOF/FLOOR DECK OR MAINTAIN WALL RATING HORIZONTALLY BEFORE TURNING UP TO MEET ROOF/FLOOR DECK.
4. ALL WALLS, STAIRS, AND CEILING TO HAVE FIRE BLOCKING WHERE REQUIRED.

SCHEDULE - DOORS

NUMBER	DOOR WIDTH	DOOR HEIGHT	TYPE COMMENTS	COMMENT	HARDWARE
001	3' - 0"	7' - 0"	TYPE V	60 MIN. FIRE RATED	PASSAGE, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
002	3' - 0"	7' - 0"	TYPE VII		STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
003	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
004	3' - 0"	7' - 0"	TYPE VII		STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
005	3' - 0"	7' - 0"	TYPE VI	EXTERIOR DOOR	LOCKSET, LEVER HANDLE, DEADBOLT, CLOSER, EGRESS PUSH BAR, KICK PLATE - INSIDE, THRESHOLD, WEATHERSTRIPPING
100	6' - 0"	7' - 10"	TYPE I	EXTERIOR DOOR	ADA PUSH BUTTON, PUSH BAR, LEVER HANDLE, CYLINDER LOCKSET, CLOSER, DEADBOLT W/THUMB TURN AND KEY, THRESHOLD, WEATHERSTRIPPING
101	3' - 0"	7' - 0"	TYPE X	90 MIN. FIRE RATED	LEVER HANDLE, LOCKSET, CLOSER, EGRESS PUSH BAR
102	6' - 0"	7' - 0"	TYPE II	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, SURFACE MOUNTED VERTICAL ROD EXIT DEVIDE W/PULL HANDLES
103	6' - 0"	7' - 0"	TYPE II	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, SURFACE MOUNTED VERTICAL ROD EXIT DEVIDE W/PULL HANDLES
104	3' - 0"	7' - 0"	TYPE VII	90 MIN. FIRE RATED	LEVER HANDLE, STOREROOM LOCKSET, CLOSER
105	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
106	5' - 0"	7' - 0"	TYPE IX	60 MIN. FIRE RATED	STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
107	3' - 0"	7' - 0"	TYPE VII		PASSAGE, LEVER HANDLE, CLOSER, DOOR STOP
108	3' - 0"	7' - 0"	TYPE VI		ENTRANCE LOCKSET, LEVER HANDLE, DEADBOLT, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE, THRESHOLD, WEATHERSTRIPPING
109	3' - 0"	7' - 0"	TYPE V	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
110	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE
111	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
112	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PRIVACY LOCK, PUSH PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
113	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
114	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
115	6' - 0"	7' - 0"	TYPE I		ENTRANCE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, THRESHOLD, WEATHERSTRIPPING
201	3' - 0"	7' - 0"	TYPE VIII		LOCKSET, LEVER HANDLE
202	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
203	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
204	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
205	3' - 0"	7' - 0"	TYPE VII		STORAGE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
206	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE
207	2' - 6"	7' - 0"	TYPE IV		STORAGE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
208	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
209	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
210	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE

NOTES:
1. DOOR HARDWARE TO MEET MINIMUM ACCESSIBILITY STANDARDS.
2. FURNISH AND INSTALL HEAVY-DUTY COMMERCIAL DOOR CLOSERS ON ALL EGRESS AND RATED DOORS.
3. FURNISH AND INSTALL ADA COMPLIANT SIGNS WITH BRAILLE ON ALL PERMANENT ROOM DOORS; REFERENCE SHEET A002 FOR MOUNTING HEIGHTS.
4. COORDINATE KEY CARD ACCESS INSTALLATION AND DOOR KEYING WITH OWNER.



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BASEMENT FLOOR PLAN

BUILDING RENOVATION

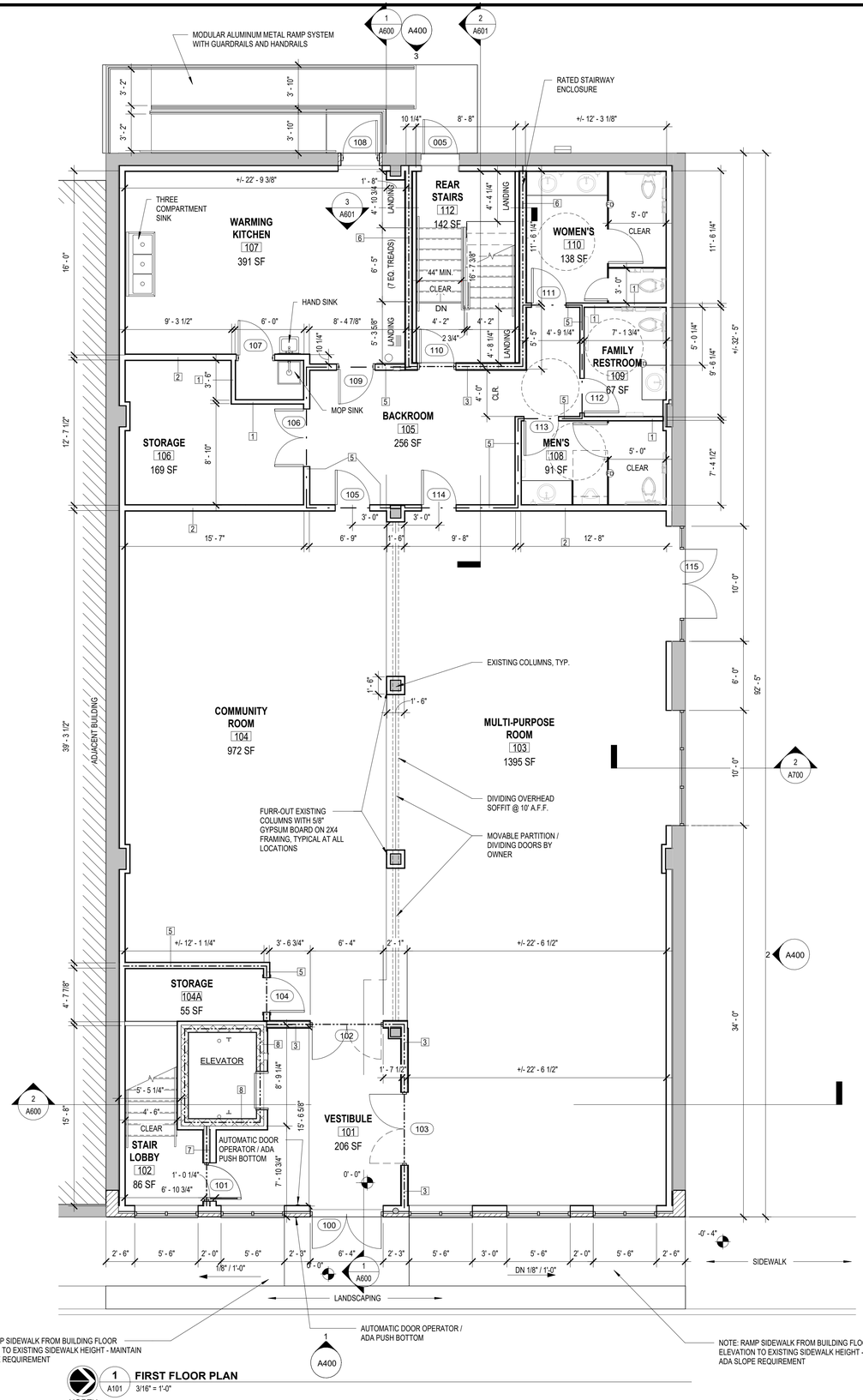
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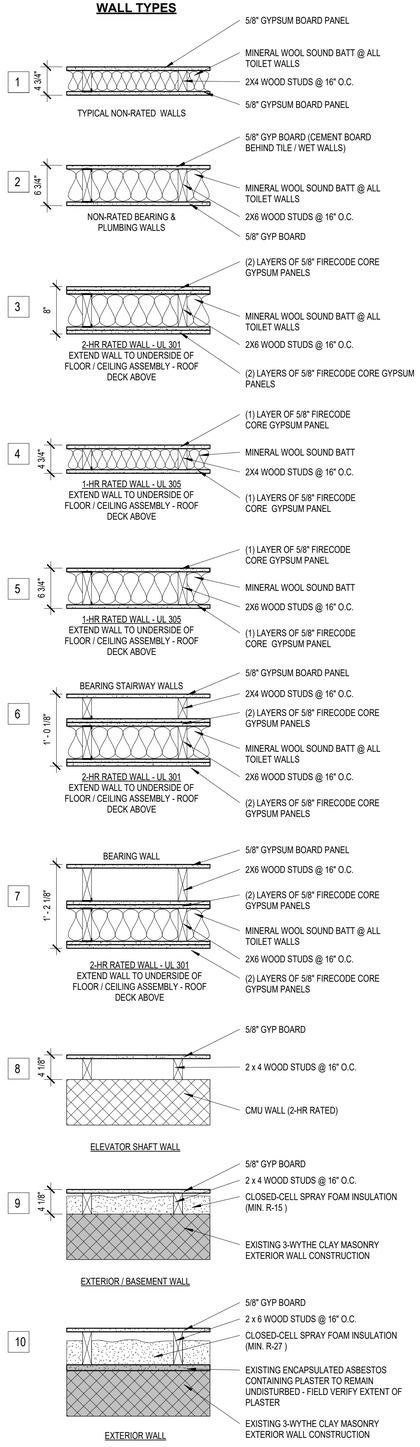
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1 A101 **FIRST FLOOR PLAN**
3/16" = 1'-0"

WALL TYPES



GENERAL SAFETY GLASS NOTES:
1. PROVIDE SAFETY GLASS AS REQUIRED BY CODE, INCLUDING THE FOLLOWING LOCATIONS:
   A. ALL DOOR AND PANELS CONTAINING GLAZING
   B. WITHIN 24" ARC OF DOOR EDGES
   C. ONE OR MORE WALKING SURFACES WITHIN 36" OF GLAZING
   D. BOTTOM EDGE OF GLAZING IS LESS THAN 18" ABOVE FLOOR
   E. TOP EDGE OF GLAZING IS GREATER THAN 36" ABOVE FLOOR
   F. INDIVIDUAL PANELS OVER 9 SQUARE FEET IN AREA
2. WINDOWS TO OMPLY WITH THE BUILDING ENVELOPE REQUIREMENTS OF THE IECC

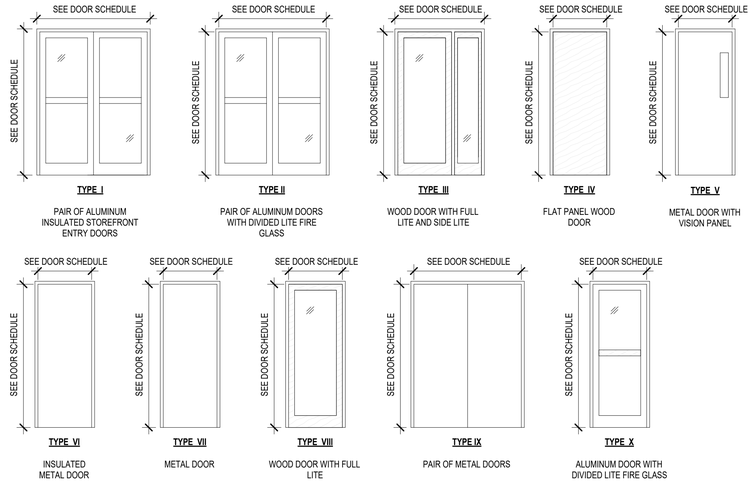
GENERAL FLOOR PLAN NOTES:

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2. THROUGH-WALL PENETRATIONS FOR UTILITIES SHALL NOT COMPROMISE THE RATINGS OF THE WALL/FLOORS.
3. ALL FIRE RATED WALLS ARE TO EXTEND TO THE UNDERSIDE OF THE ROOF/FLOOR DECK OR MAINTAIN WALL RATING HORIZONTALLY BEFORE TURNING UP TO MEET ROOF/FLOOR DECK.
4. ALL WALLS, STAIRS, AND CEILING TO HAVE FIRE BLOCKING WHERE REQUIRED.

SCHEDULE - DOORS

NUMBER	DOOR WIDTH	DOOR HEIGHT	TYPE COMMENTS	COMMENT	HARDWARE
001	3' - 0"	7' - 0"	TYPE V	60 MIN. FIRE RATED	PASSAGE, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
002	3' - 0"	7' - 0"	TYPE VII		STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
003	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
004	3' - 0"	7' - 0"	TYPE VII		STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
005	3' - 0"	7' - 0"	TYPE VI	EXTERIOR DOOR	LOCKSET, LEVER HANDLE, DEADBOLT, CLOSER, EGRESS PUSH BAR, KICK PLATE - INSIDE, THRESHOLD, WEATHERSTRIPPING
100	6' - 0"	7' - 10"	TYPE I	EXTERIOR DOOR	ADA PUSH BUTTON, PUSH BAR, LEVER HANDLE, CYLINDER LOCKSET, CLOSER, DEADBOLT W/THUMB TURN AND KEY, THRESHOLD, WEATHERSTRIPPING
101	3' - 0"	7' - 0"	TYPE X	90 MIN. FIRE RATED	LEVER HANDLE, LOCKSET, CLOSER, EGRESS PUSH BAR
102	6' - 0"	7' - 0"	TYPE II	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, SURFACE MOUNTED VERTICAL ROD EXIT DEVIDE W/PULL HANDLES
103	6' - 0"	7' - 0"	TYPE II	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, SURFACE MOUNTED VERTICAL ROD EXIT DEVIDE W/PULL HANDLES
104	3' - 0"	7' - 0"	TYPE VII	90 MIN. FIRE RATED	LEVER HANDLE, STOREROOM LOCKSET, CLOSER
105	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
106	5' - 0"	7' - 0"	TYPE IX	60 MIN. FIRE RATED	STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
107	3' - 0"	7' - 0"	TYPE VII		PASSAGE, LEVER HANDLE, CLOSER, DOOR STOP
108	3' - 0"	7' - 0"	TYPE VI		ENTRANCE LOCKSET, LEVER HANDLE, DEADBOLT, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE, THRESHOLD, WEATHERSTRIPPING
109	3' - 0"	7' - 0"	TYPE V	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
110	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE
111	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
112	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PRIVACY LOCK, PUSH PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
113	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
114	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
115	6' - 0"	7' - 0"	TYPE I		ENTRANCE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, THRESHOLD, WEATHERSTRIPPING
201	3' - 0"	7' - 0"	TYPE VIII		LOCKSET, LEVER HANDLE
202	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
203	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
204	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
205	3' - 0"	7' - 0"	TYPE VII		STORAGE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
206	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE
207	2' - 6"	7' - 0"	TYPE IV		STORAGE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
208	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
209	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
210	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE

NOTES:
1. REFERENCE SPECIFICATION SHEET FOR ADDITIONAL HARDWARE INFORMATION.
2. DOOR HARDWARE TO MEET MINIMUM ACCESSIBILITY STANDARDS.
3. FURNISH AND INSTALL HEAVY-DUTY COMMERCIAL DOOR CLOSERS ON ALL EGRESS AND RATED DOORS.
4. FURNISH AND INSTALL ADA COMPLIANT SIGNS WITH BRAILLE ON ALL PERMANENT ROOM DOORS; REFERENCE SHEET A002 FOR MOUNTING HEIGHTS.
5. COORDINATE KEY CARD ACCESS INSTALLATION AND DOOR KEYING WITH OWNER.
6. ALL EMERGENCY EGRESS DOORS MUST NOT HAVE LOCKING HARDWARE ON EVACUATION SIDE.



INTERIOR PRODUCTS & MATERIALS - BASIS OF DESIGN

COMPONENT	MANUFACTURER	PRODUCT	COMMENTS
SELF LEVELING UNDERLAYMENT	MAXXON CORPORATION	GYP-CRETE 2000	3/4" THICK
HYDRAULIC ELEVATOR	OTIS ELEVATOR	2100LB HYDROFIT - MACHINE ROOM OPTION	CEILING TO BE METAL W/INCORPORATED EMERGENCY LIGHTING, STANDARD LAMINATE WALL PANELS AND METAL HANDRAILS ON SIDES AND REAR, CARD READER ACCESS CONTROL
METAL GUARDRAIL SYSTEM	AGS STAINLESS	OLYMPUS ROD RAILING W/WOOD CAP	42"H
FIRE GLASS SYSTEM	TGP FIREFRAMES	ALUMINUM SERIES PILKINGSTON PYROSTOP GLASS	120 MINUTE RATING
FIRE GLASS DOOR	TGP FIREFRAMES	DESIGNER SERIES TEMPERATURE RISE DOORS WITH CLEAR PILKINGSTON PYROSTOP GLASS	90 MINUTE RATING
ADA STANDARD ROOM SIGN	INPRO	ASPEN STANDARD SIGN	6" X 6" RIGID VINYL IN GRAYSTONE 0151
ROOF ACCESS LADDER	O'KEEFE'S INC OR EQUAL	FIXED ACCESS LADDER MODEL 500	ALUMINUM

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FIRST FLOOR PLAN

BUILDING RENOVATION

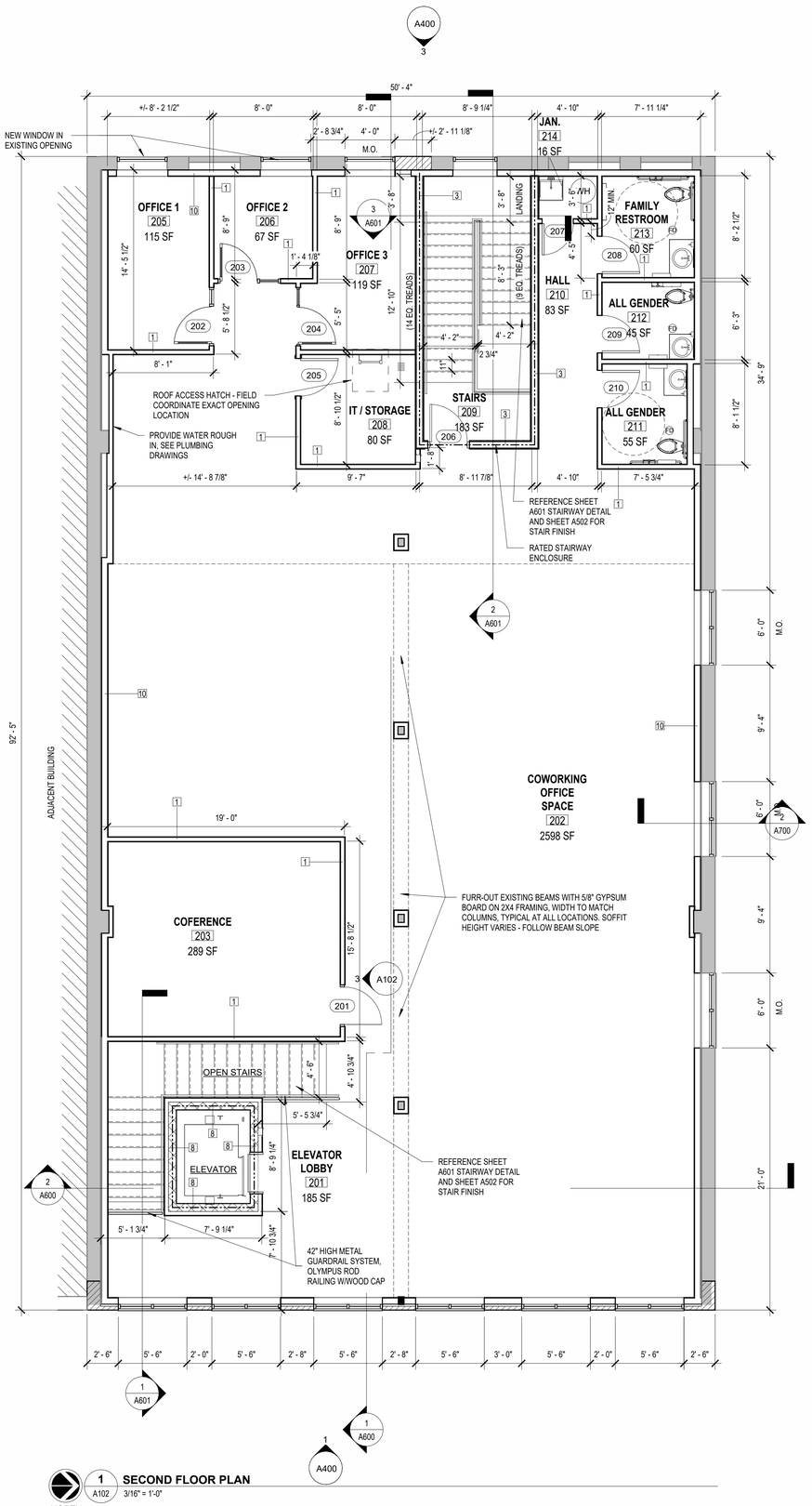
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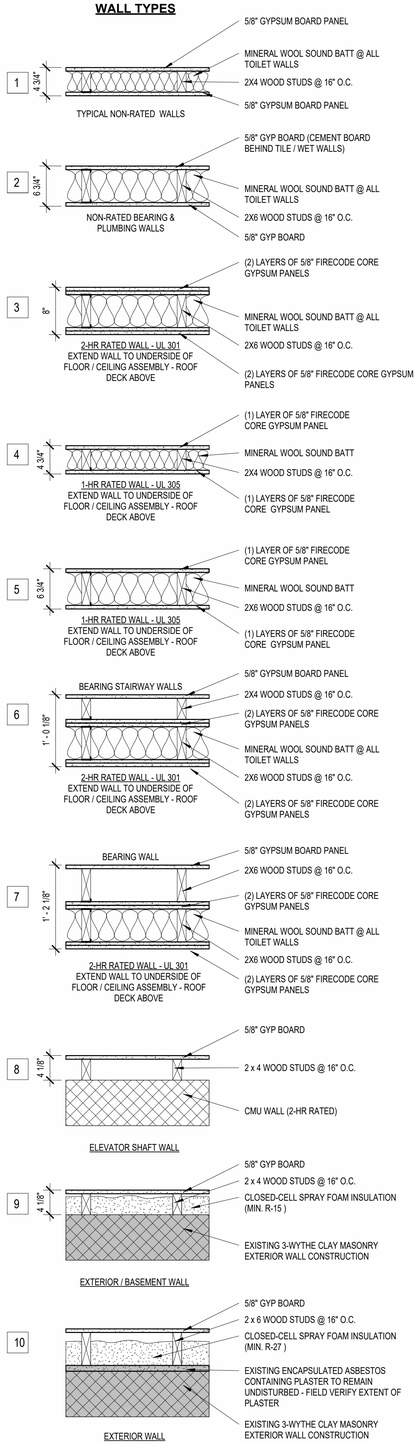
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1 **SECOND FLOOR PLAN** (A102) 3/16" = 1'-0"

NORTH

WALL TYPES



GENERAL SAFETY GLASS NOTES:

1. PROVIDE SAFETY GLASS AS REQUIRED BY CODE, INCLUDING THE FOLLOWING LOCATIONS:
   A. ALL DOOR AND PANELS CONTAINING GLAZING
   B. WITHIN 24" ARC OF DOOR EDGES
   C. ONE OR MORE WALKING SURFACES WITHIN 36" OF GLAZING
   D. BOTTOM EDGE OF GLAZING IS LESS THAN 18" ABOVE FLOOR
   E. TOP EDGE OF GLAZING IS GREATER THAN 36" ABOVE FLOOR
   F. INDIVIDUAL PANELS OVER 9 SQUARE FEET IN AREA
2. WINDOWS TO OMPLY WITH THE BUILDING ENVELOPE REQUIREMENTS OF THE IECC

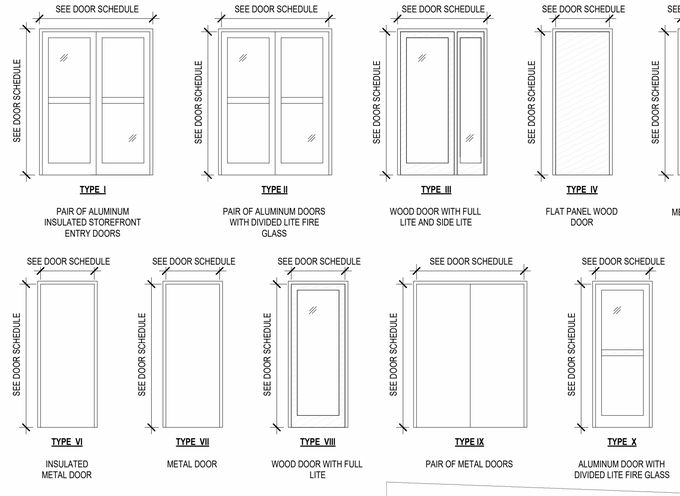
GENERAL FLOOR PLAN NOTES:

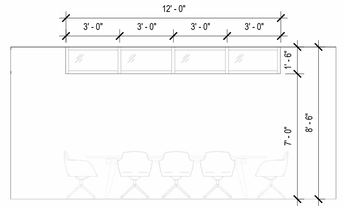
1. THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTION BEGINS. AFTER EXISTING CONDITIONS HAVE BEEN CHECKED AND VERIFIED, NOTIFY ARCHITECT'S OFFICE IN WRITING OF ANY DISCREPANCIES. ALL SHOP DRAWINGS ARE TO BE SUBMITTED AS PER VERIFIED DIMENSIONS.
2. THROUGH-WALL PENETRATIONS FOR UTILITIES SHALL NOT COMPROMISE THE RATINGS OF THE WALL/FLOORS.
3. ALL FIRE RATED WALLS ARE TO EXTEND TO THE UNDERSIDE OF THE ROOF/FLOOR DECK OR MAINTAIN WALL RATING HORIZONTALLY BEFORE TURNING UP TO MEET ROOF/FLOOR DECK.
4. ALL WALLS, STAIRS, AND CEILING TO HAVE FIRE BLOCKING WHERE REQUIRED.

SCHEDULE - DOORS

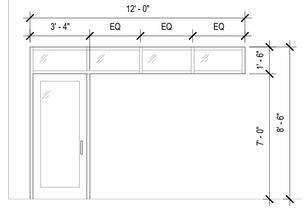
NUMBER	DOOR WIDTH	DOOR HEIGHT	TYPE COMMENTS	COMMENT	HARDWARE
001	3' - 0"	7' - 0"	TYPE V	60 MIN. FIRE RATED	PASSAGE, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
002	3' - 0"	7' - 0"	TYPE VII		STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
003	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
004	3' - 0"	7' - 0"	TYPE VII		STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
005	3' - 0"	7' - 0"	TYPE VI	EXTERIOR DOOR	LOCKSET, LEVER HANDLE, DEADBOLT, CLOSER, EGRESS PUSH BAR, KICK PLATE - INSIDE, THRESHOLD, WEATHERSTRIPPING
100	6' - 0"	7' - 10"	TYPE I	EXTERIOR DOOR	ADA PUSH BUTTON, PUSH BAR, LEVER HANDLE, CYLINDER LOCKSET, CLOSER, DEADBOLT W/THUMB TURN AND KEY, THRESHOLD, WEATHERSTRIPPING
101	3' - 0"	7' - 0"	TYPE X	90 MIN. FIRE RATED	LEVER HANDLE, LOCKSET, CLOSER, EGRESS PUSH BAR
102	6' - 0"	7' - 0"	TYPE II	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, SURFACE MOUNTED VERTICAL ROD EXIT DEVIDE W/PULL HANDLES
103	6' - 0"	7' - 0"	TYPE II	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, SURFACE MOUNTED VERTICAL ROD EXIT DEVIDE W/PULL HANDLES
104	3' - 0"	7' - 0"	TYPE VII	90 MIN. FIRE RATED	LEVER HANDLE, STOREROOM LOCKSET, CLOSER
105	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
106	5' - 0"	7' - 0"	TYPE IX	60 MIN. FIRE RATED	STOREROOM LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
107	3' - 0"	7' - 0"	TYPE VII		PASSAGE, LEVER HANDLE, CLOSER, DOOR STOP
108	3' - 0"	7' - 0"	TYPE VI		ENTRANCE LOCKSET, LEVER HANDLE, DEADBOLT, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE, THRESHOLD, WEATHERSTRIPPING
109	3' - 0"	7' - 0"	TYPE V	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
110	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE
111	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
112	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PRIVACY LOCK, PUSH PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
113	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH PULL PLATE, CLOSER, DOOR STOP, KICK PLATE - BOTH SIDES
114	3' - 0"	7' - 0"	TYPE IV	60 MIN. FIRE RATED	PASSAGE, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
115	6' - 0"	7' - 0"	TYPE I		ENTRANCE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, THRESHOLD, WEATHERSTRIPPING
201	3' - 0"	7' - 0"	TYPE VIII		LOCKSET, LEVER HANDLE
202	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
203	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
204	3' - 0"	7' - 0"	TYPE III	18" WIDE SIDELIGHT	OFFICE LOCKSET, LEVER HANDLE
205	3' - 0"	7' - 0"	TYPE VII		STORAGE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
206	3' - 0"	7' - 0"	TYPE V	90 MIN. FIRE RATED	LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, EGRESS PUSH BAR, KICK PLATE - PUSH SIDE
207	2' - 6"	7' - 0"	TYPE IV		STORAGE LOCKSET, LEVER HANDLE, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
208	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
209	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE
210	3' - 0"	7' - 0"	TYPE IV		PRIVACY LOCK, PUSH/PULL HANDLES, CLOSER, DOOR STOP, KICK PLATE - PUSH SIDE

NOTES:
1. DOOR HARDWARE TO MEET MINIMUM ACCESSIBILITY STANDARDS.
2. FURNISH AND INSTALL HEAVY-DUTY COMMERCIAL DOOR CLOSERS ON ALL EGRESS AND RATED DOORS.
3. FURNISH AND INSTALL ADA COMPLIANT SIGNS WITH BRAILLE ON ALL PERMANENT ROOM DOORS; REFERENCE SHEET A002 FOR MOUNTING HEIGHTS.
4. COORDINATE KEY CARD ACCESS INSTALLATION AND DOOR KEYING WITH OWNER.





2 **EAST CONFERENCE ROOM STOREFRONT WINDOWS** (A102) 1/4" = 1'-0"



3 **NORTH CONFERENCE ROOM STOREFRONT** (A102) 1/4" = 1'-0"

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SECOND FLOOR PLAN

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
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CHECKED	RK

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CEILING TILE TYPES

TYPE 1: ARMSTRONG CEILINGS
SINGLE RAISED PANEL 1210 (8013)
24" X 24" X 3/4", TEGULAR
SUPRAFINE 9/16" SUSPENDED GRID SYSTEM

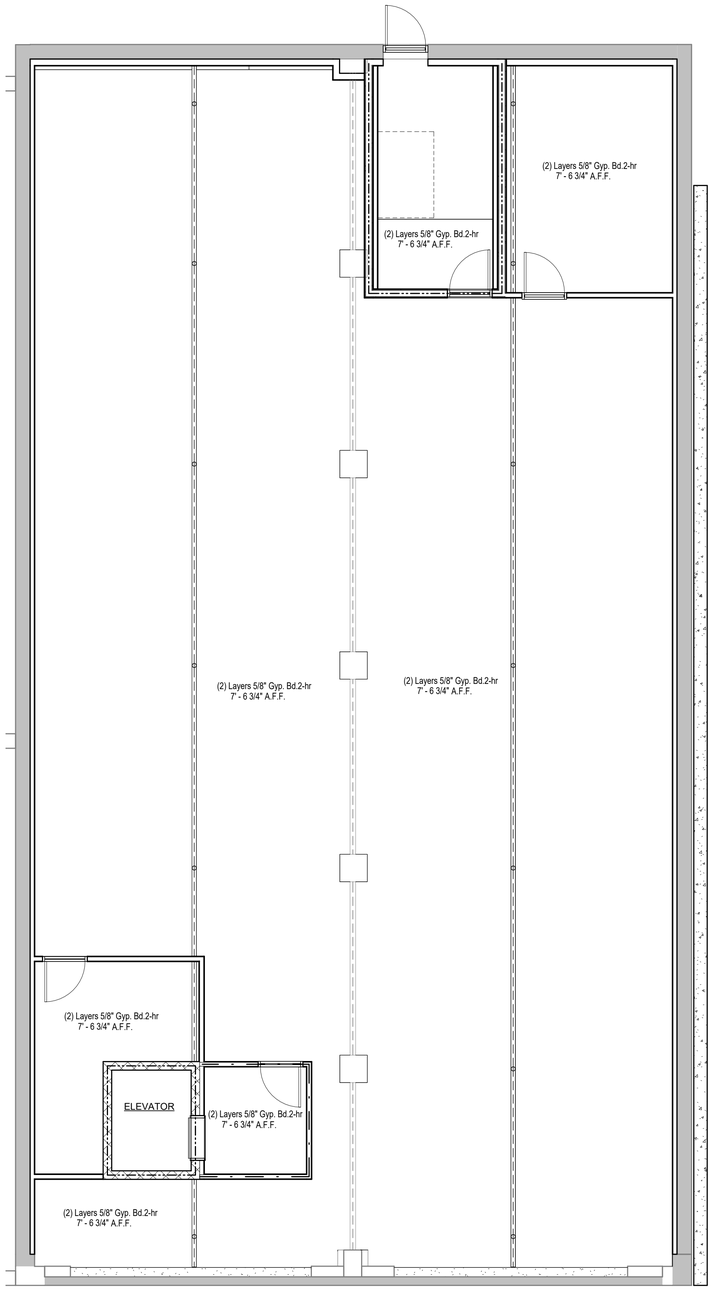
TYPE 2: ARMSTRONG CEILINGS
CANYON 1494
24" X 24" X 5/8", TEGULAR
SUPRAFINE 9/16" SUSPENDED GRID SYSTEM

GENERAL NOTES:

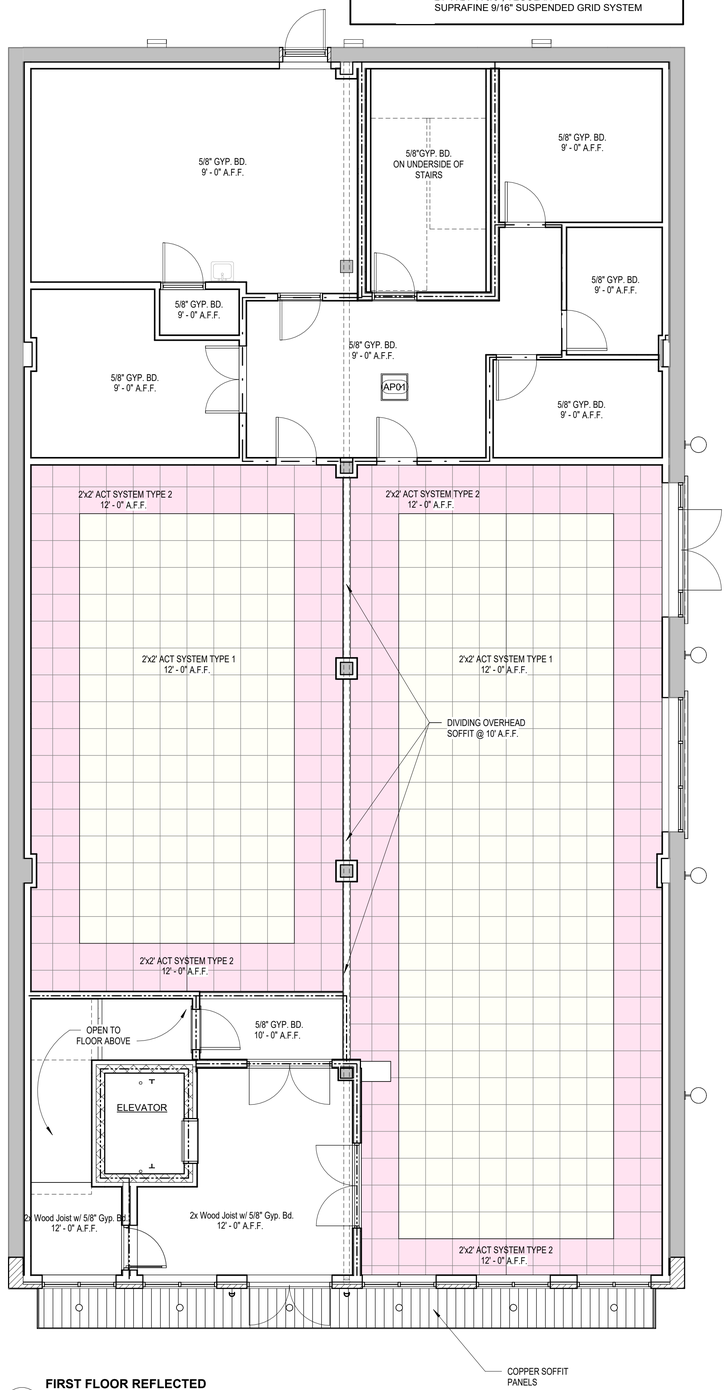
1. REFLECTED CEILING PLANS SHOW FINISHED CEILINGS BELOW 2-HOUR FLOOR / CEILING ASSEMBLY

SCHEDULE - ACCESS PANELS

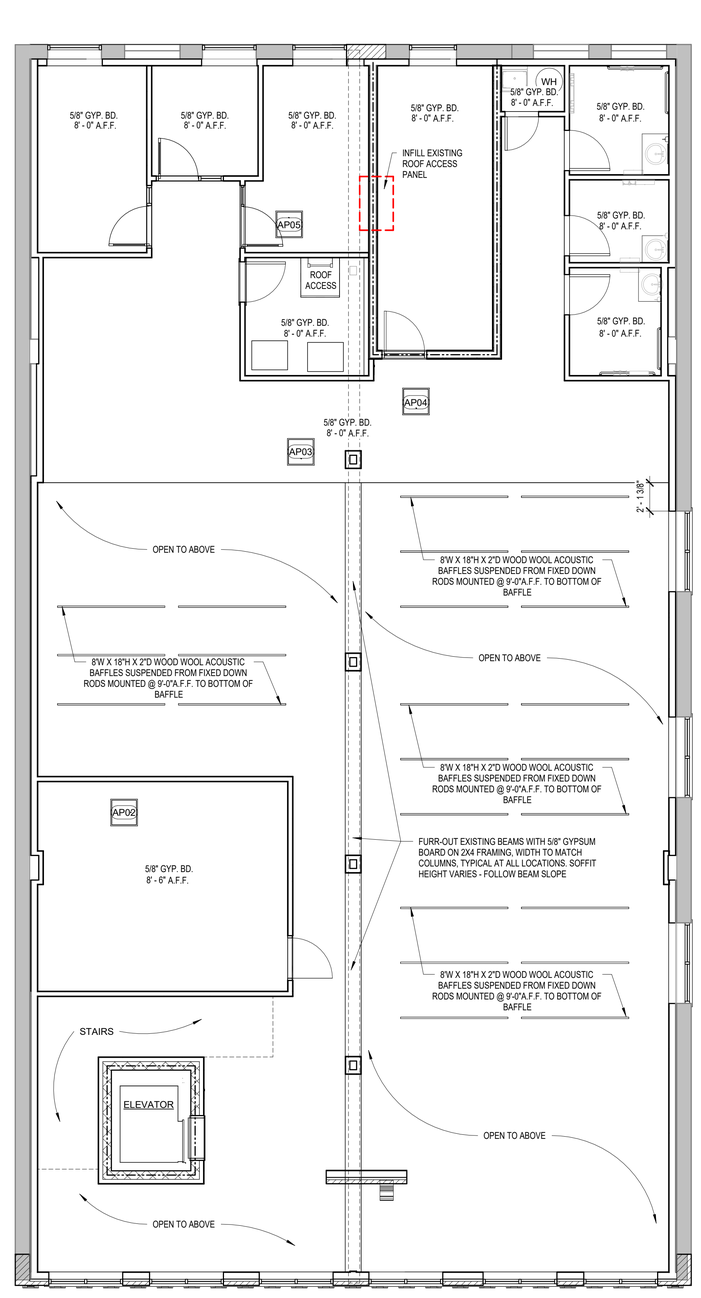
NUMBER	COMMENT
AP01	ACCESS PANEL TO MECHANICAL
AP02	ACCESS PANEL TO MECHANICAL
AP03	ACCESS PANEL TO MECHANICAL
AP04	ACCESS PANEL TO MECHANICAL
AP05	ACCESS PANEL TO MECHANICAL



1 A200 **BASEMENT REFLECTED CEILING PLAN**
3/16" = 1'-0"



2 A200 **FIRST FLOOR REFLECTED CEILING PLAN**
3/16" = 1'-0"



3 A200 **SECOND FLOOR REFLECTED CEILING PLAN**
3/16" = 1'-0"

NORTH

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REFLECTED CEILING PLANS

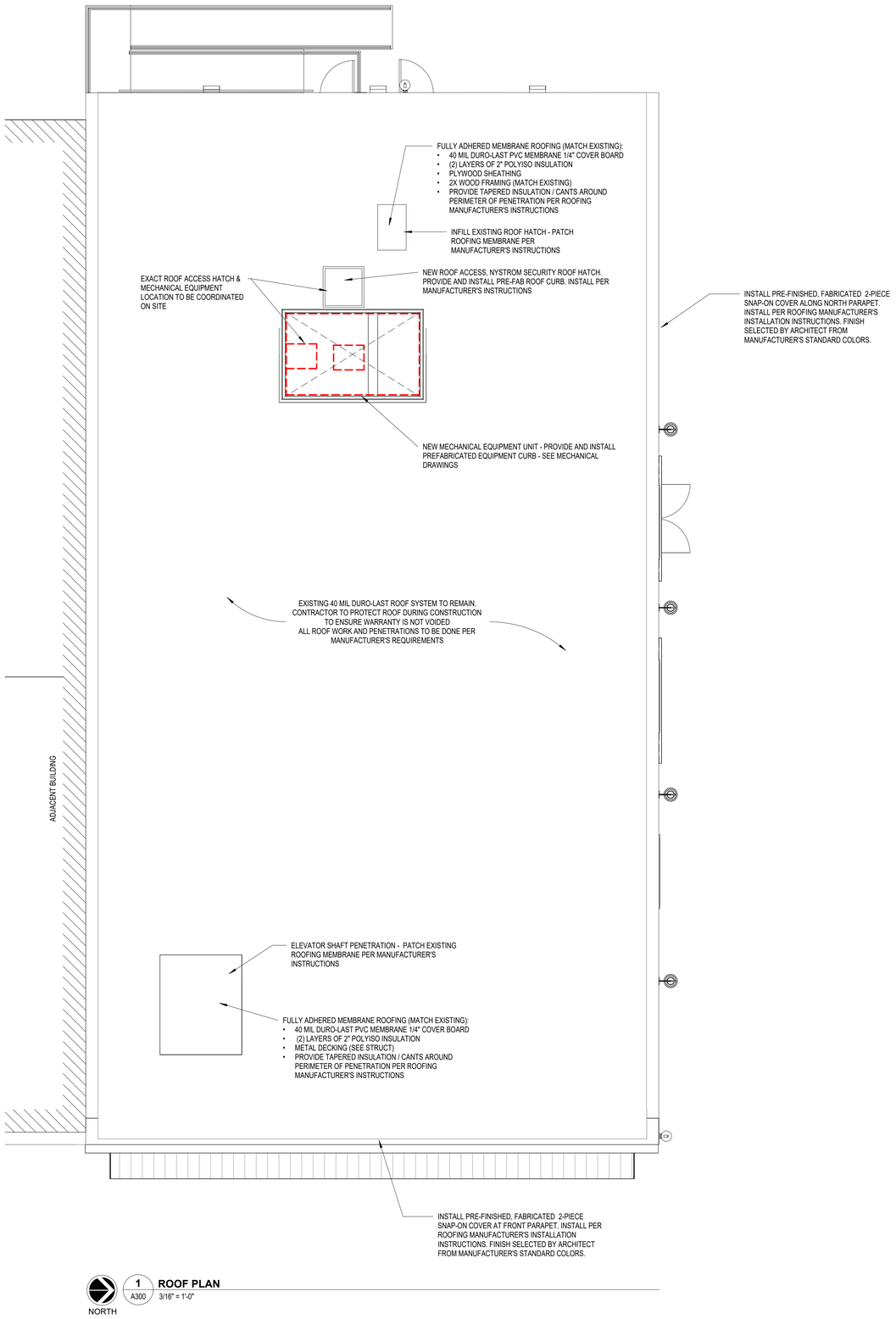
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A200



1 A300 **ROOF PLAN**
3/16" = 1'-0"

GENERAL ROOF PLAN NOTES:

1. CONTRACTOR TO COORDINATE ALL ROOFING WORK WITH OWNER'S ROOFING CONTRACTOR TO ENSURE ROOFING WARRANTY IS NOT VOIDED.

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ROOF PLAN

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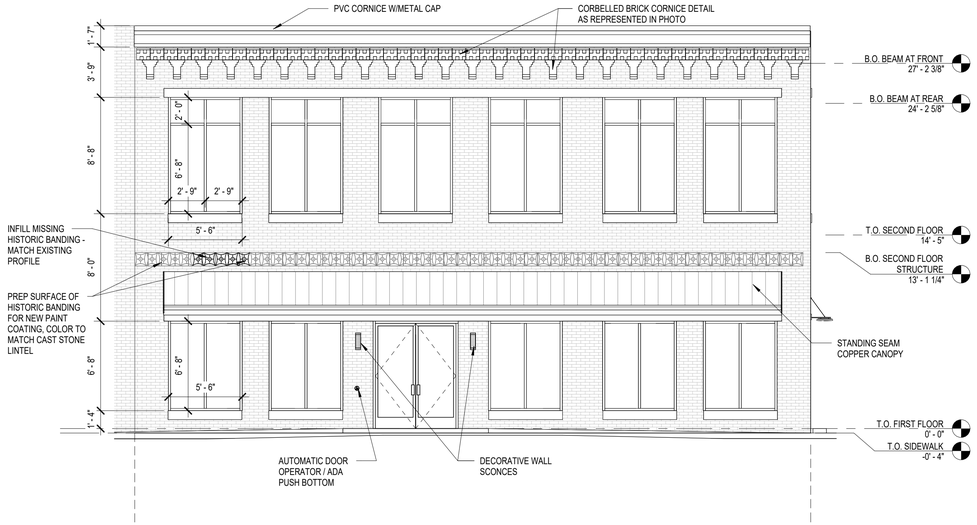
CORBELLED BRICK CORNICE DETAIL



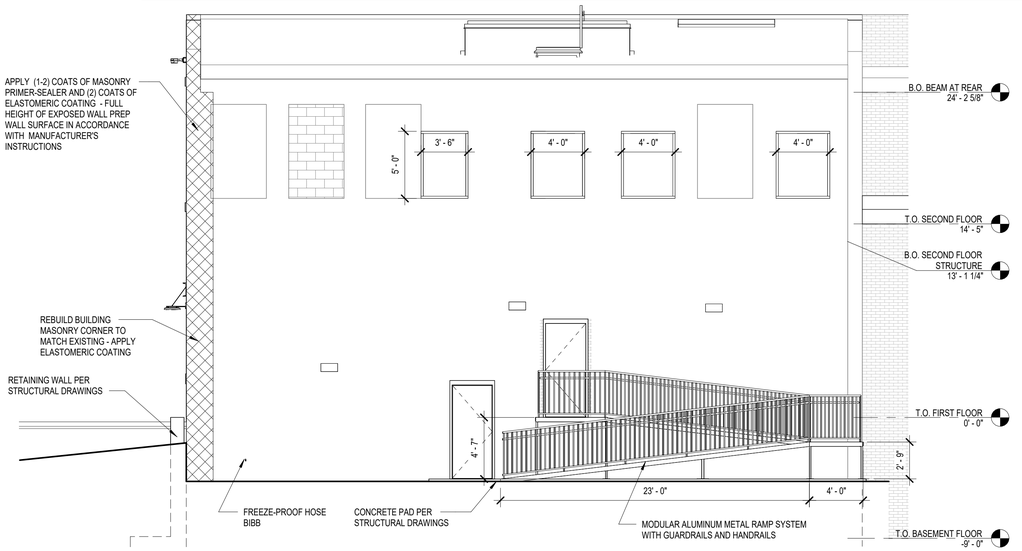
ACME - MODULAR BRICK QUORUM HERITAGE

EXTERIOR MATERIALS AND FINISHES - BASIS OF DESIGN

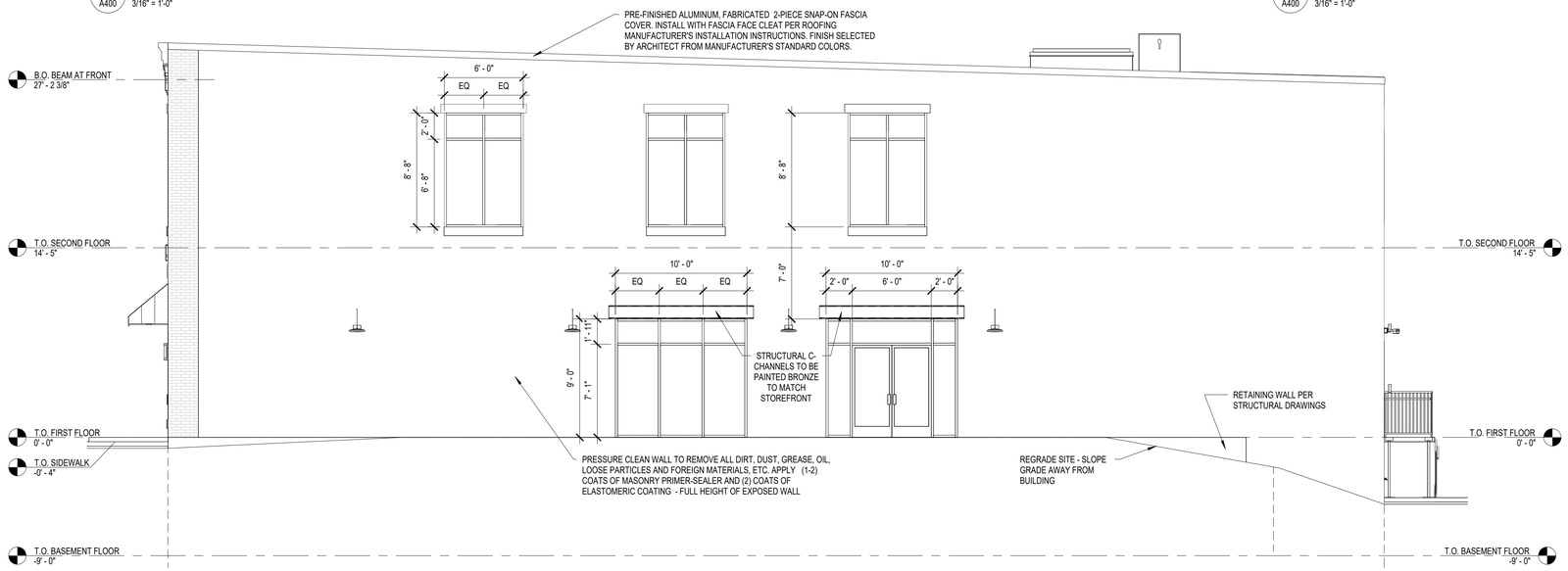
MATERIAL	MANUFACTURER	PRODUCT	COLOR / FINISH	COMMENTS
BRICK	ACME	QUORUM MODULAR	HERITAGE	
CAST STONE LINTELS AND SILLS	READING ROCK OR APPROVED EQUAL	SILL: SL-375-L; LINTEL: HD-2257	COLOR: MONOTONE TBD; TEXTURE: SMOOTH	FULL BED DEPTH
STANDING SEAM COPPER CANOPY & END WALLS WITH VERTICAL END PANELS	CHRIS INDUSTRIES, INC OR APPROVED EQUAL	16OZ COPPER ROOF PANELS; 1.5" SNAP-LOCK PROFILE; 12" WIDE ON CENTER	COLOR: NATURAL; COPPER SHEET - ALLOY 110	COPPER FLASHING / COUNTER FLASHING, PANEL STARTER FLASHING, Z-CLOSURE. FASTENERS, POP RIVETS, ROOF PANEL CLIPS & CLEATS AND J-TRIM
COPPER SOFFIT PANELS & FASCIA TRIM	CHRIS INDUSTRIES, INC OR APPROVED EQUAL	COPPER SOFFIT PANELS; COPPER TRIM	COLOR: NATURAL; COPPER SHEET - ALLOY 110	FASTENERS, PANEL SCREWS, J-TRIM
FLUID-APPLIED AIR/VAPOR BARRIER	MASTER BUILDERS OR APPROVED EQUAL	MASTERSEAL AWB 665	MFR. STANDARD COLOR	MASTERSEAL NP LIQUID FLASHING MEMBRANE
PARAPET METAL CAP (FRONT PARAPET)	DURO-LAST	FABRICATED 0.040 ALUMINUM, 2-PIECE COMPRESSION EDGE	70% PVDF, COLOR TO MATCH CORNICE	INSTALL PER DURO-LAST ROOFING MANUFACTURER'S INSTALLATION INSTRUCTIONS
METAL FASCIA TRIM COVER (NORTH WALL)	DURO-LAST	FABRICATED 0.040 ALUMINUM, 2-PIECE SNAP-ON COVER 6" HIGH & FASCIA BASE CLEAT	70% PVDF, COLOR TO MATCH WALL COATING	INSTALL PER DURO-LAST ROOFING MANUFACTURER'S INSTALLATION INSTRUCTIONS
ALUMINUM STOREFRONT SYSTEM	KAWNEER OR APPROVED EQUAL	TRIFAB VERSAGLAZE - 451T	BRONZE - ANODIZED	DOUBLE-PANE, 1" INSUL. TINTED GLASS, FRONT GLAZED
ELASTOMERIC COATING AND CONCRETE AND MASONRY PRIMER-SEALER	SHERWIN WILLIAMS OR APPROVED EQUAL	CONFLEX SHERLASTIC ELASTOMERIC COATING AND LAYON CONCRETE AND MASONRY PRIMER-SEALER	AS SELECTED FROM MFR. STANDARD COLORS BY ARCHITECT	(1-2) COATS OF MASONRY PRIMER-SEALER AND (2) COATS OF ELASTOMERIC COATING - FULL HEIGHT OF EXPOSED WALL
SWITCHBACK MODULAR ALUM. METAL RAMP SYSTEM	EZ-ACCESS OR APPROVED EQUAL	PATHWAY HD MODULAR RAMP	INDUSTRIAL-GRADE WEATHER-RESISTANT ALUMINUM	SLIP-RESISTANT DECKING, COMPLETE SYSTEM TO INCLUDE ALL RAMP AND LANDING COMPONENTS, SUPPORTS, GUARD RAILS, HANDRAILS
ROOF HATCH	NYSTROM OR APPROVED EQUAL	RHSA36X36S1T - SINGLE DOOR	MILL ALUMINUM	COORDINATE INSTALLATION WITH OWNER'SROOFING CONTRACTOR



1 FRONT ELEVATION A400 — 3/16" = 1'-0"



3 REAR ELEVATION A400 — 3/16" = 1'-0"



2 SIDE ELEVATION A400 — 3/16" = 1'-0"

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EXTERIOR ELEVATIONS

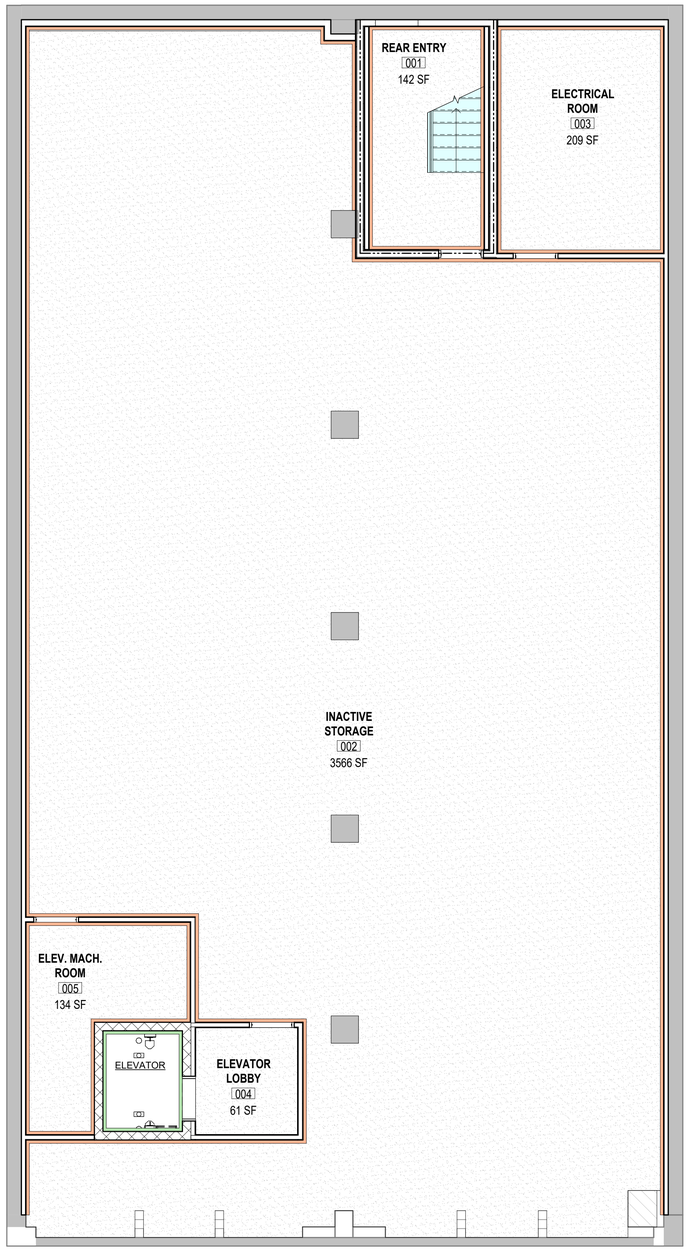
BUILDING RENOVATION

704 Illinois Ave
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DATE	03-24-2026
PROJECT #	24-1200
DRAWN	VP
CHECKED	RK

REVISIONS

A400



1 A500 **BASEMENT FINISH PLAN**
3/16" = 1'-0"

NORTH

MATERIAL LEGEND

LVT	SHEET VINYL	WALK-OFF CARPET	RUBBER STAIR TREAD & RISER
CARPET TILE	WOOD STAIR TREAD & RISER	POLYMER FLAKE	EXISTING WOOD FLOOR

FLOORING FINISH TYPES

LVT	J+J FLOORING, 9" X 48" RECHARGE V5054, 1173 MINIMALIST, 1/3 DROP INSTALLATION
CARPET TILE	J+J FLOORING, 24" X 24" COMPOSITION 7507 MODULAR, 3689 DRIFTWOOD, BRICK INSTALLATION
SHEET VINYL	ROPPE, OBSIDIAN VINYL SHEET, 963 CITYSCAPE
WOOD STAIR TREAD & RISER	STAIN AND FINISH TO MATCH SECOND FLOOR EXISTING WOOD FLOOR
WALK-OFF CARPET	J+J FLOORING, 24" X 24" CATWALK II 7268 MODULAR, 1427 SPOTLIGHT, QUARTER TURN INSTALLATION
POLYMER FLAKE	TORGINOL POLYMER FLAKE, 1/4" PROFILE, SOAPSTONE F9320, W/PRIMER/SEALER, PIGMENTED BASECOAT, AND A CLEAR TOPCOAT
RUBBER STAIR TREAD & RISER	ROPPE STAIR TREAD & RISER, 92 LOW-PROFILE, SYMMETRY S638 CADET
EXISTING WOOD FLOOR	PATCH TO MATCH EXISTING SPECIES AND PLANK WIDTH WHERE NECESSARY. NOTIFY ARCHITECT WHEN EXISTING SPECIES IS IDENTIFIED. SAND, STAIN AND FINISH EXISTING WOOD FLOOR. STAIN AND FINISH TO BE DETERMINED BASED ON EXISTING WOOD SPECIES TO BE IDENTIFIED.
VINYL WALL BASE	ROPPE, 178 PEWTER WALL BASE, STANDARD 1/8" GAUGE, 4"H W/TOE BASE

PAINT TYPES

PT-1	SHERWIN WILLIAMS, SW 7029 AGREEABLE GRAY, EGG-SHELL FINISH
PT-2	SHERWIN WILLIAMS, SW 7029 AGREEABLE GRAY, SEMI-GLOSS FINISH
PT-3	SHERWIN WILLIAMS, SW 7007 CEILING BRIGHT WHITE, FLAT FINISH, TO BE USED ON ALL GYP. BD. CEILINGS. COLOR NOT DEPICTED ON FINISH PLAN.
PT-4	SHERWIN WILLIAMS, SW 7031 MEGA GREIGE, SEMI-GLOSS FINISH, TO BE USED ON ALL HOLLOW METAL DOORS AND FRAMES. COLOR NOT DEPICTED ON FINISH PLAN.
ELP:	ELEVATOR PANEL FINISH, STANDARD MANUFACTURER'S OPTION

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FINISH SCHEDULES & FLOOR PLANS

BUILDING RENOVATION

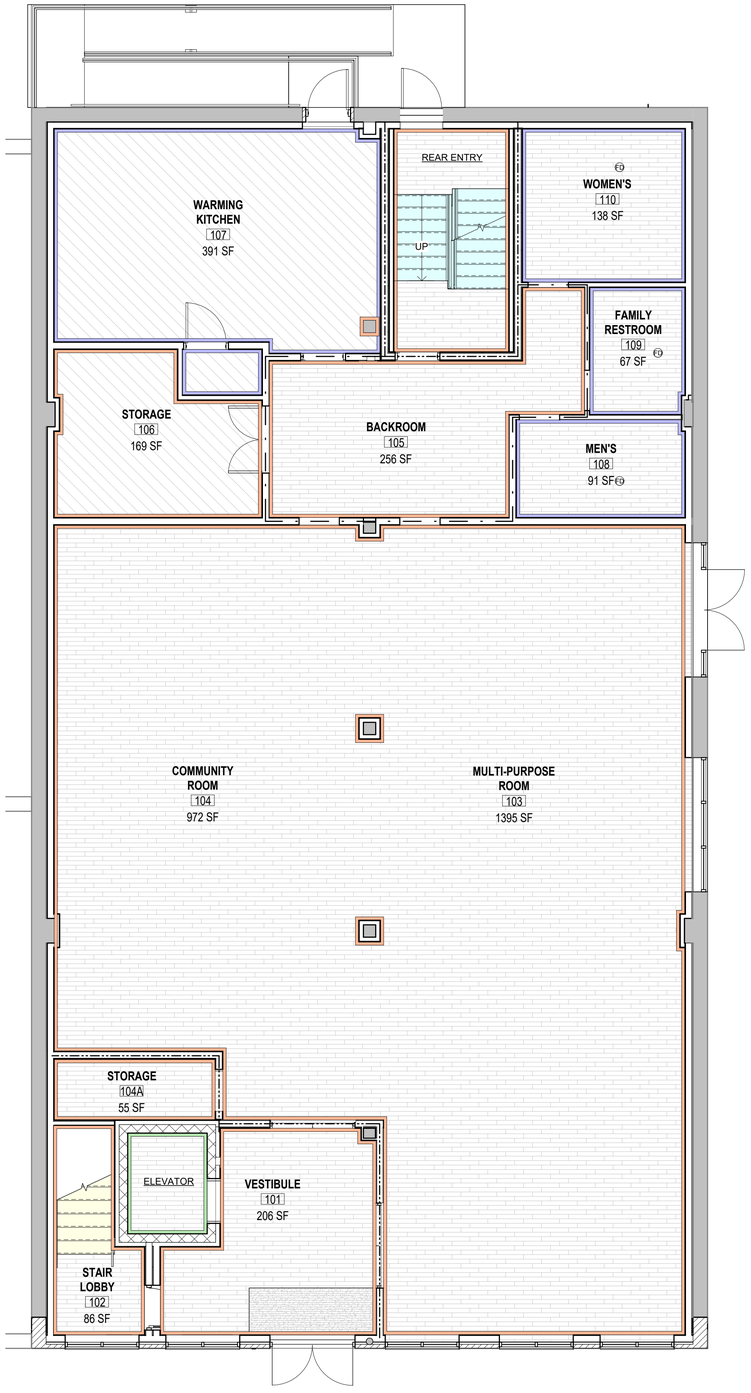
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DATE	03-24-2026
PROJECT #	24-1200
DRAWN	HN
CHECKED	RK

REVISIONS

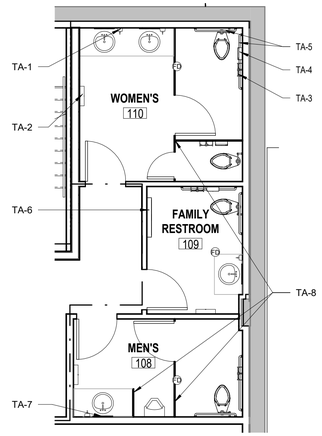
A500

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1 A501 **FIRST FLOOR FINISH PLAN**
3/16" = 1'-0"

NORTH



2 A501 **FIRST FLOOR TOILET ACCESSORY PLAN**
3/16" = 1'-0"

TOILET ACCESSORY SCHEDULE

MARK	ITEM	MANUFACTURER	MODEL NO.	COLOR / MATERIAL	COUNT
TA-1	SURFACE MOUNTED AUTOMATIC FOAM SOAP DISPENSER	BOBRICK	B-2013	SATIN FINISH	4
TA-2	SURFACE MOUNTED PAPER TOWEL DISPENSER / WASTE RECEPTACLE	BOBRICK	B-3949	SATIN FINISH	3
TA-3	SURFACE MOUNTED TOILET TISSUE DISPENSER	BOBRICK	B-2740	CAST ALUMINUM	4
TA-4	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL	BOBRICK	B-335139	SATIN FINISH	3
TA-5	HORIZONTAL MOUNTED, STRAIGHT GRAB BARS, 1 1/4" DIAMETER	BOBRICK	B-5806X36, B-5806X48	SATIN FINISH	3 OF EACH
TA-6	HORIZONTAL SURFACE MOUNTED BABY CHANGING STATION	KOALA KARE	KB300-01	GREY 01 / PLASTIC	1
TA-7	WALL HUNG MIRROR, OVER EACH SINK	--	--	--	4
TA-8	BUDGET HPL SERIES BATHROOM AND URINAL PARTITIONS, FLOOR ANCHORED	BOBRICK	1551	CLASSIC LINEN 4943-38 / HPL	--

MATERIAL LEGEND

LVT · SHEET VINYL · WALK-OFF CARPET · RUBBER STAIR TREAD & RISER
CARPET TILE · WOOD STAIR TREAD & RISER · POLYMER FLAKE · EXISTING WOOD FLOOR

FLOORING FINISH TYPES

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CARPET TILE	J+J FLOORING, 24" X 24" COMPOSITION 7507 MODULAR, 3689 DRIFTWOOD, BRICK INSTALLATION
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WOOD STAIR TREAD & RISER	STAIN AND FINISH TO MATCH SECOND FLOOR EXISTING WOOD FLOOR
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VINYL WALL BASE	ROPPE, 178 PEWTER WALL BASE, STANDARD 1/8" GAUGE, 4"H W/TOE BASE

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ELP:	ELEVATOR PANEL FINISH, STANDARD MANUFACTURER'S OPTION

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FINISH SCHEDULES & FLOOR PLANS

BUILDING RENOVATION

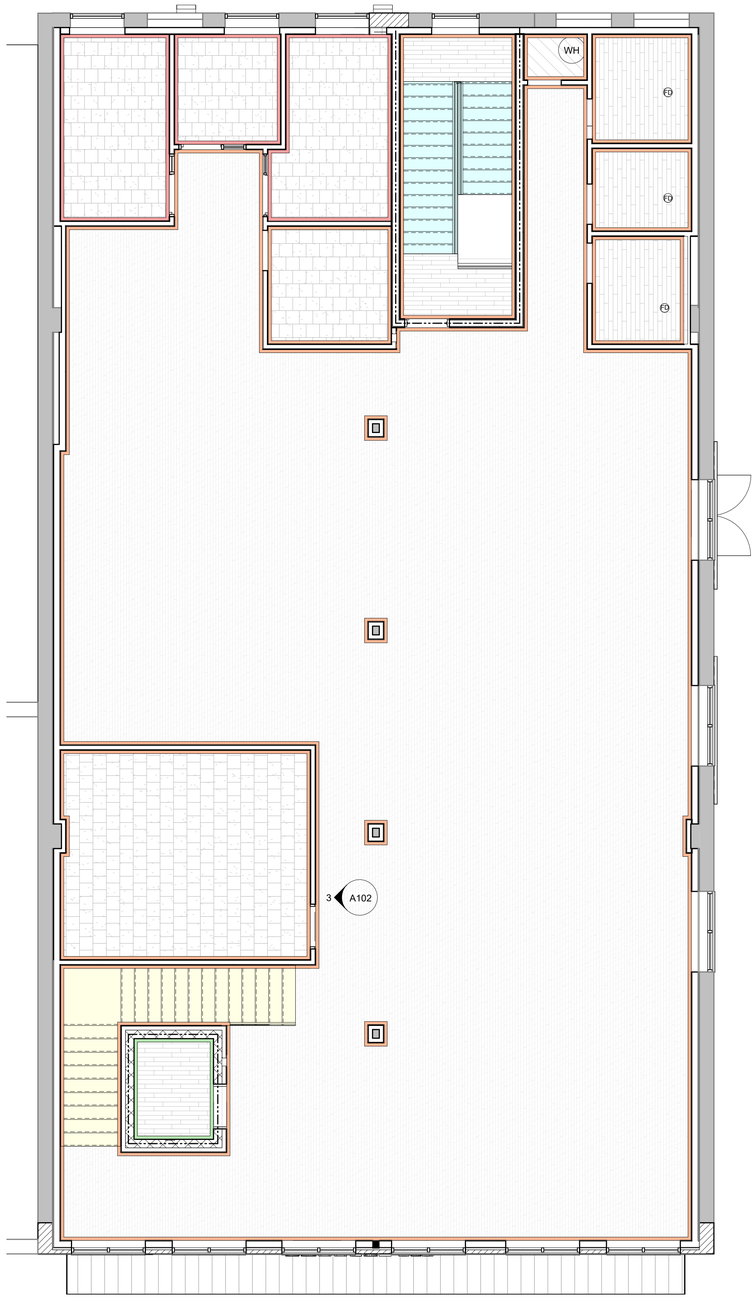
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DATE 03-24-2026
PROJECT # 24-1200
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CHECKED RK

REVISIONS

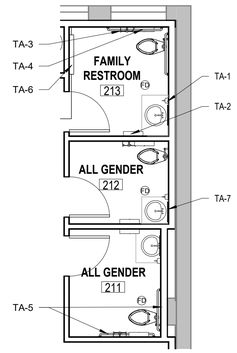
A501

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1 A502 **SECOND FLOOR FINISH PLAN**
3/16" = 1'-0"

NORTH



2 A502 **SECOND FLOOR TOILET ACCESSORY PLAN**
3/16" = 1'-0"

TOILET ACCESSORY SCHEDULE

MARK	ITEM	MANUFACTURER	MODEL NO.	COLOR / MATERIAL	COUNT
TA-1	SURFACE MOUNTED AUTOMATIC FOAM SOAP DISPENSER	BOBRICK	B-2013	SATIN FINISH	4
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TA-7	WALL HUNG MIRROR, OVER EACH SINK	--	--	--	4

MATERIAL LEGEND

LVT · SHEET VINYL · WALK-OFF CARPET · RUBBER STAIR TREAD & RISER
CARPET TILE · WOOD STAIR TREAD & RISER · POLYMER FLAKE · EXISTING WOOD FLOOR

FLOORING FINISH TYPES

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VINYL WALL BASE	ROPPE, 178 PEWTER WALL BASE, STANDARD 1/8" GAUGE, 4"H W/TOE BASE

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ELP:	ELEVATOR PANEL FINISH, STANDARD MANUFACTURER'S OPTION

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FINISH SCHEDULES & FLOOR PLANS

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

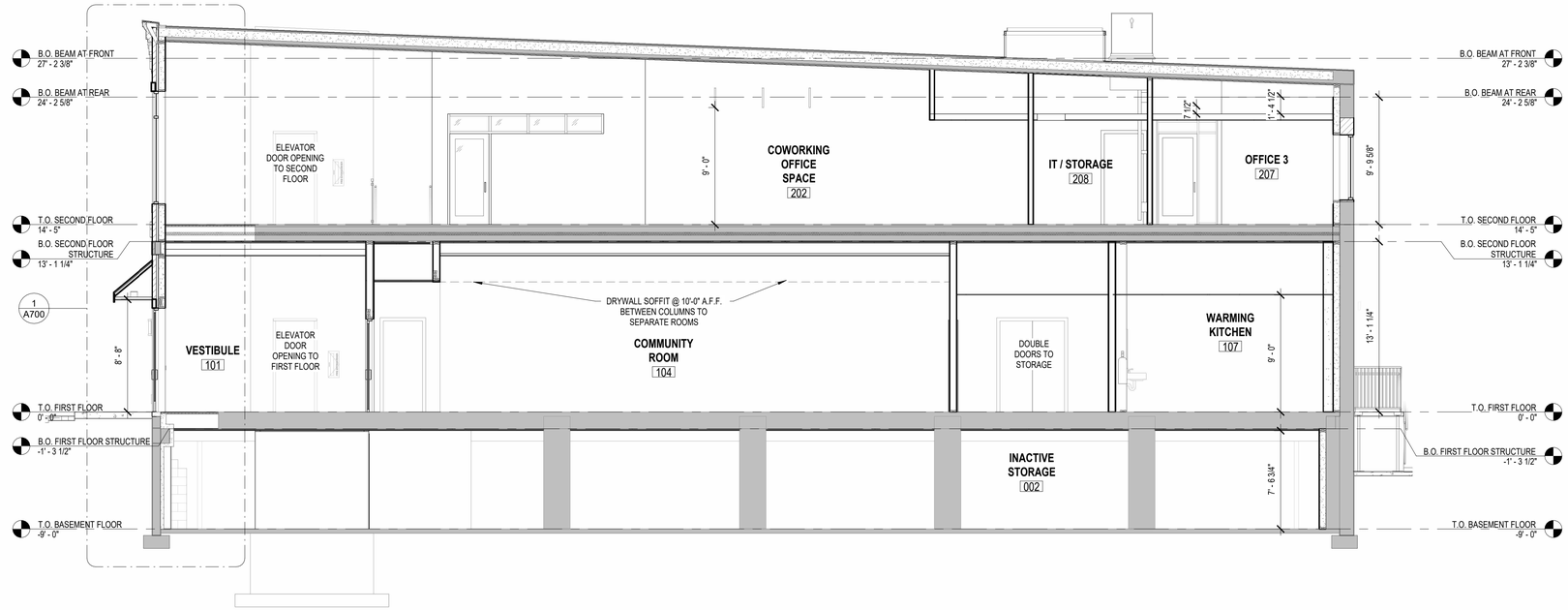
DATE 03-24-2026
PROJECT # 24-1200
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REVISIONS

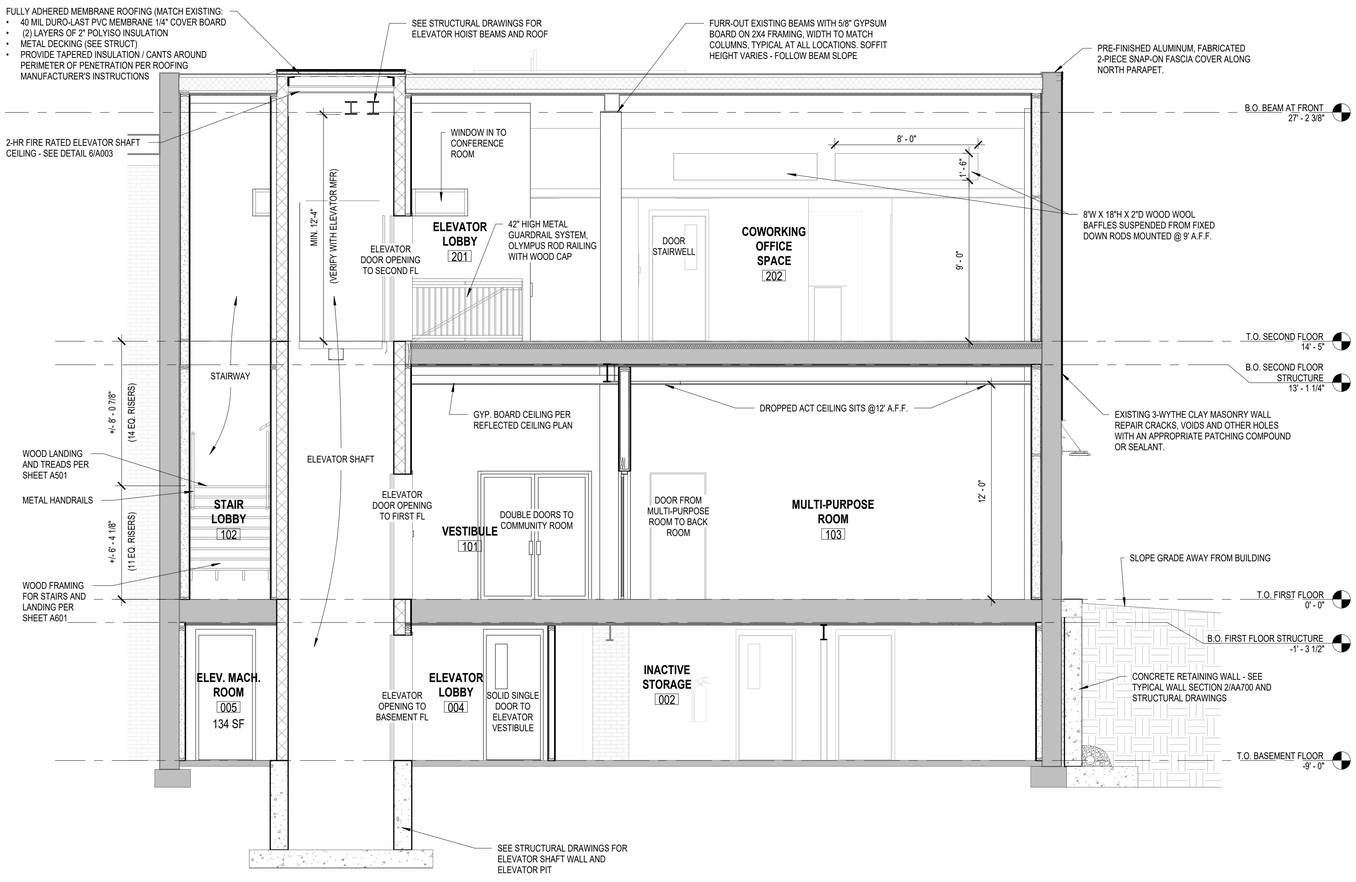
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A502



1 A600 **BUILDING SECTION A-A** 3/16" = 1'-0"



2 A600 **BUILDING SECTION B-B** 1/4" = 1'-0"

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BUILDING SECTIONS

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

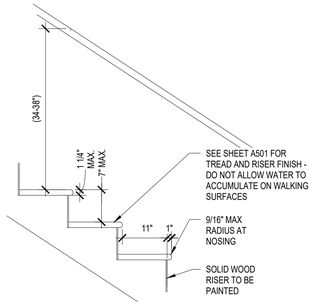
DATE	03-24-2026
PROJECT #	24-1200
DRAWN	HN / VP
CHECKED	RK

REVISIONS

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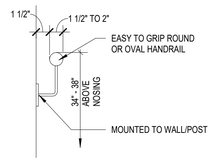
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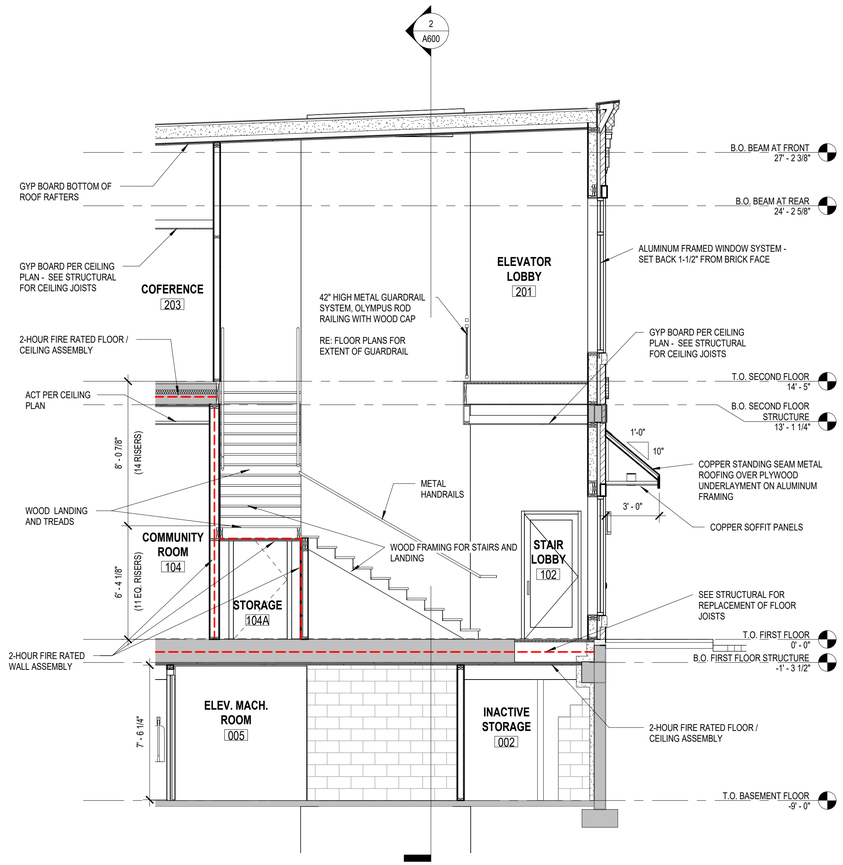
2021 IBC STAIRS REQUIREMENTS:

- STAIR WIDTH: MINIMUM 44" CLEAR - BETWEEN HANDRAILS (1011.2)
- SOLID RISER: MAXIMUM HEIGHT @ 7", MINIMUM HEIGHT @ 4" (1011.5.2 & 1011.5.5.3)
- TREAD: MINIMUM DEPTH @ 11" (1011.5.2)
- NOSING PROJECTION: MAXIMUM 1-1/4" (1011.5.5.1)
- STAIRS VERTICAL RISE: MAXIMUM @ 12'-0" (1011.8)
- HANDRAILS HEIGHT: MINIMUM @ 34", MAXIMUM @ 38" (1014.2)
- HANDRAIL EXTENSION: NOT LESS THAN 12" - TOP AND BOTTOM (1014.6)
- GUARDRAILS: MINIMUM HEIGHT @ 42" (1015.3)
- GUARDRAILS: TRIANGULAR OPENING FORMED BY RISER, TREAD & RAIL SHALL NOT ALLOW PASSAGE OF 6" SPHERE - EXCEPTION 2 (1015.4)
- GUARDRAIL SHALL NOT ALLOW PASSAGE OF 4" SPHERE. FROM HEIGHT OF 36"-42", GUARDRAIL SHALL NOT ALLOW PASSAGE OF 4-3/8" SPHERE - EXCEPTION 1 (1015.4)
- HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A LINEAR LOAD OF 50 POUNDS PER LINEAR FOOT (1607.9.1)

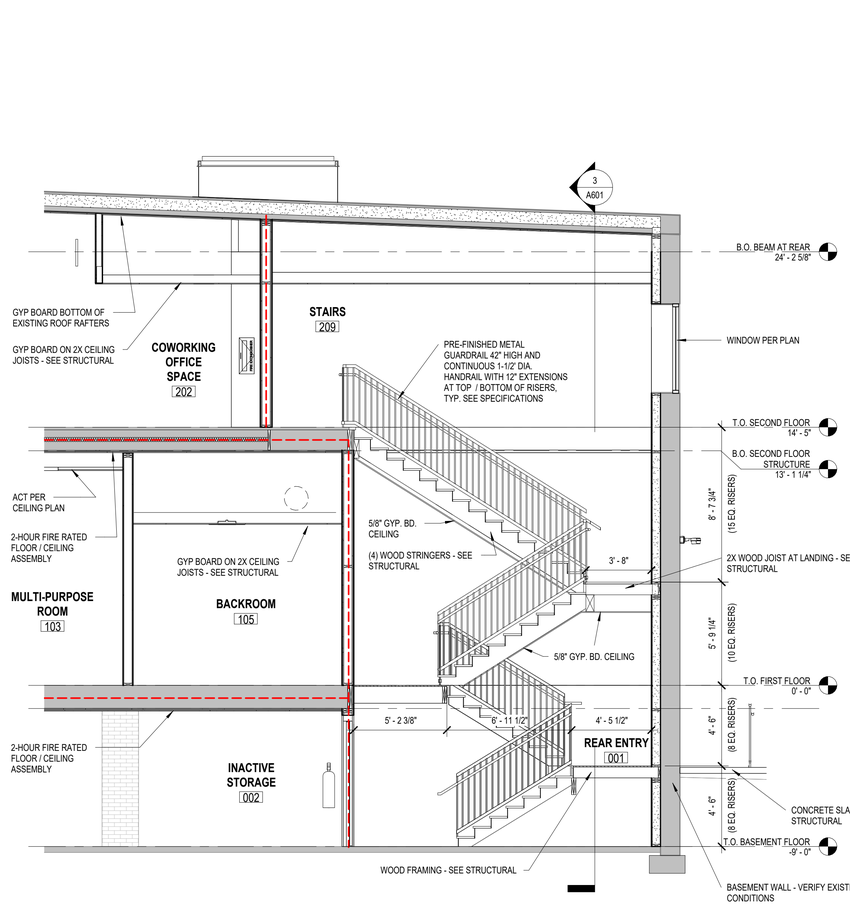


4 A601 **DETAIL - STANDARD STAIRWAY**
3/4" = 1'-0"

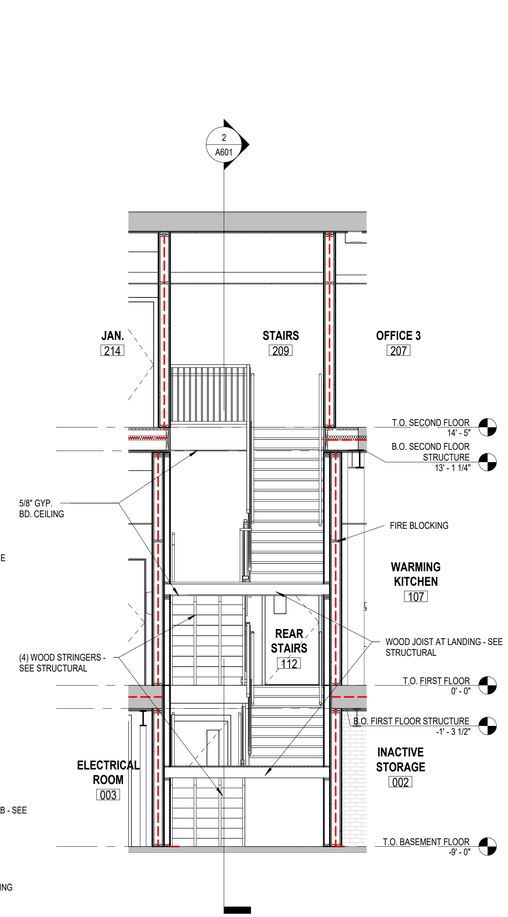
5 A601 **DETAIL - HANDRAIL DETAIL**
1 1/2" = 1'-0"



1 A601 **FRONT STAIRWAY SECTION**
1/4" = 1'-0"



2 A601 **REAR STAIRWAY SECTION A-A**
1/4" = 1'-0"



3 A601 **REAR STAIRWAY SECTION B-B**
1/4" = 1'-0"

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STAIRWAYS SECTIONS

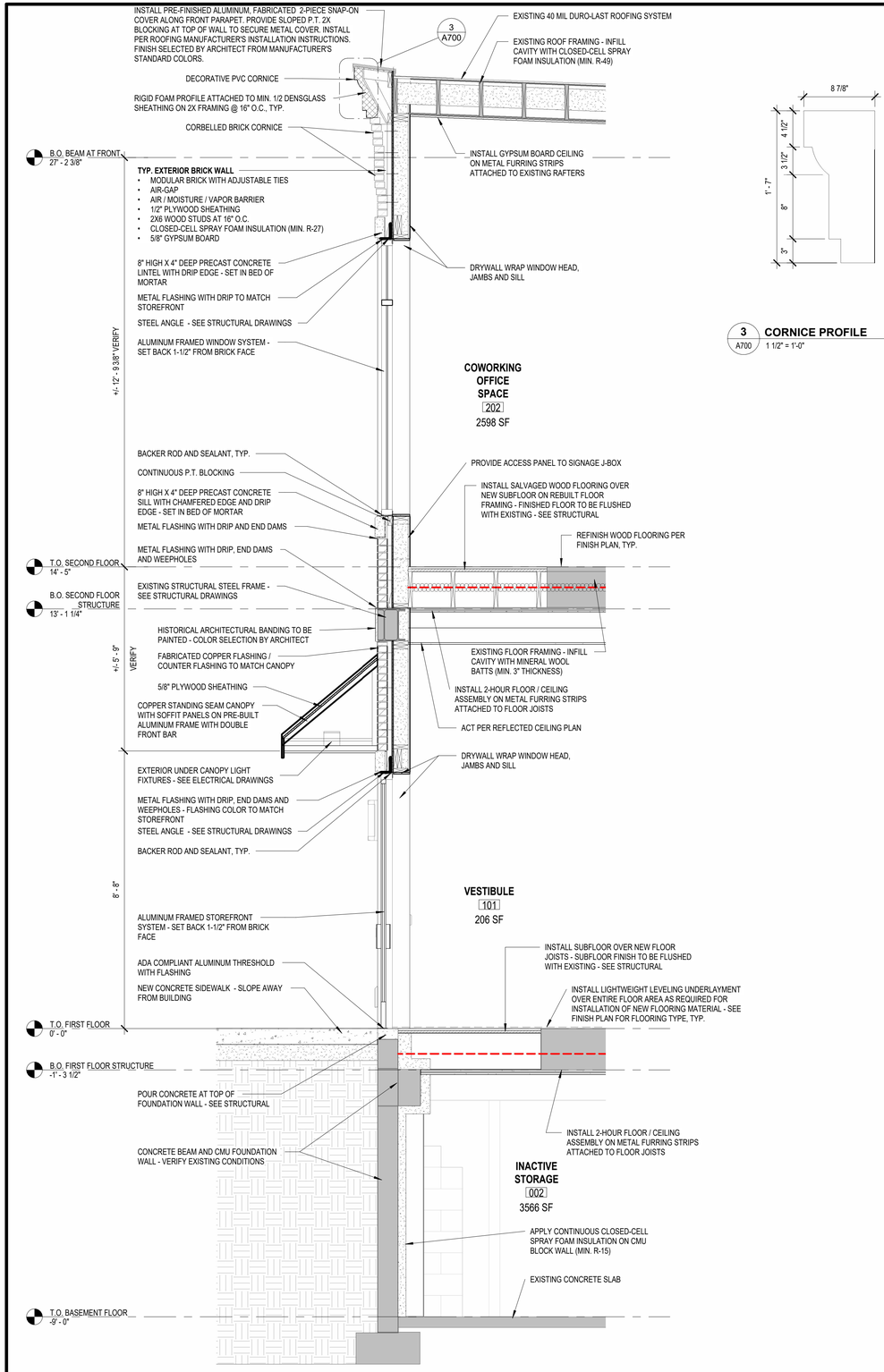
BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
PROJECT #	24-1200
DRAWN	VP
CHECKED	RK

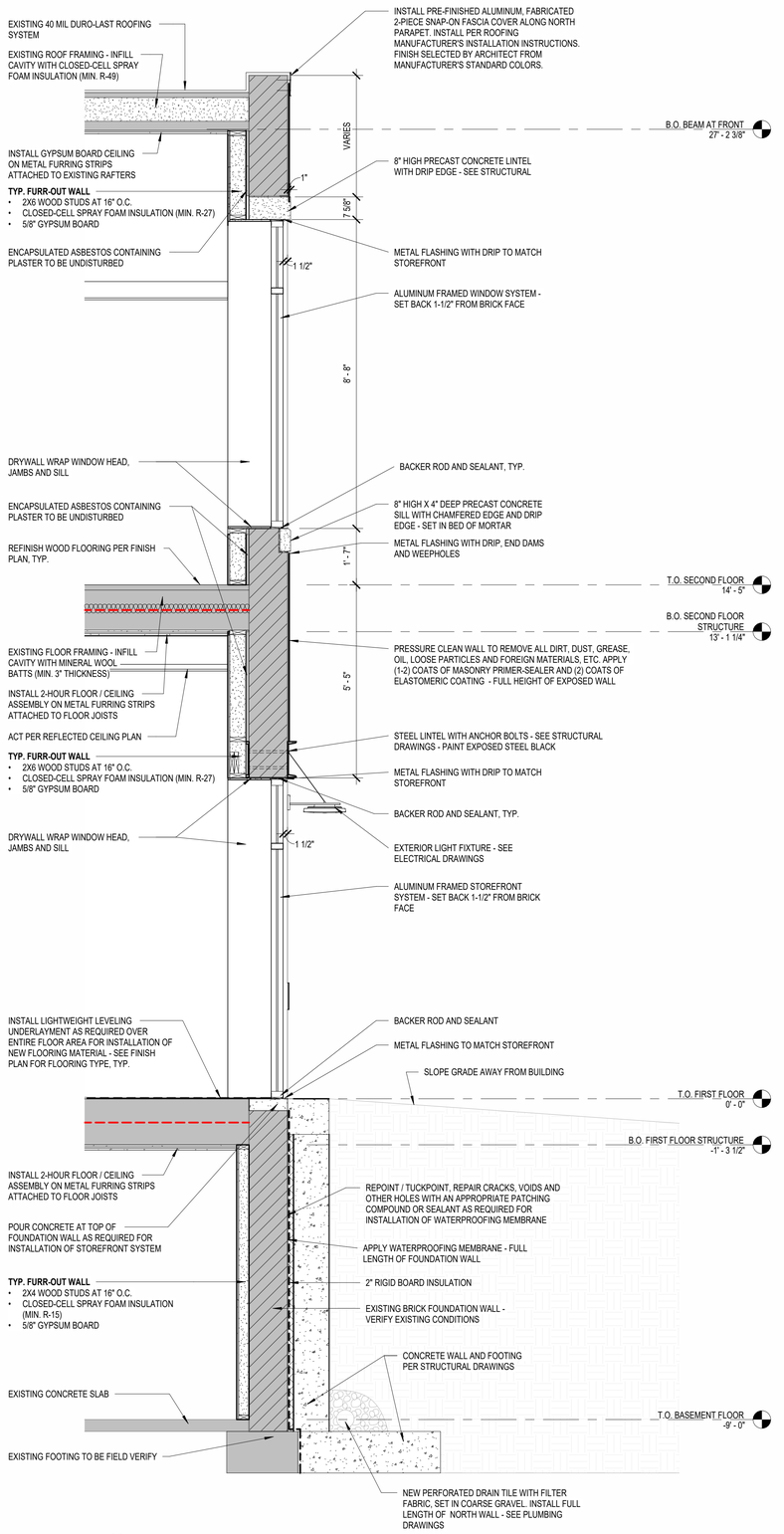
REVISIONS

A601



1 A700 **WALL SECTION** 1/2" = 1'-0"

3 A700 **CORNICE PROFILE** 1 1/2" = 1'-0"



2 A700 **TYP. NORTH WALL SECTION** 1/2" = 1'-0"

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WALL SECTIONS

BUILDING RENOVATION

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DRAWN	HN / VP
CHECKED	RK

REVISIONS

A700

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DESIGN REQUIREMENTS

1. THE STRUCTURAL ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS ARE BASED ON AND IN CONFORMANCE WITH THE FOLLOWING CODE(S) AND STANDARDS:
   A. INTERNATIONAL BUILDING CODE 2021
   B. INTERNATIONAL EXISTING BUILDING CODE 2021

2. ADDITIONAL REFERENCED CODES AND STANDARDS USED IN THE STRUCTURAL DESIGN OF SPECIFIC MATERIALS OR SYSTEMS ARE LISTED IN THE APPLICABLE SECTIONS OF THE STRUCTURAL NOTES.

3. STRUCTURAL DESIGN CRITERIA PER 2021 IBC:

   RISK CATEGORY: II

   LIVE LOADS:

2ND FLOOR, OFFICE	65 PSF
2ND FLOOR, OTHER AREAS	100 PSF
1ST FLOOR	100 PSF
STAIRS AND RAMPS	100 PSF
ROOF LIVE LOAD:	20 PSF

   (ESTIMATED) DEAD LOADS:

EXISTING ROOF	20 PSF
2ND FLOOR	20 PSF
1ST FLOOR	20 PSF

   SNOW LOAD DESIGN DATA:

P_g	(GROUND SNOW LOAD)	25 PSF
C_e	(SNOW EXPOSURE FACTOR)	1.2
C_t	(THERMAL FACTOR)	1.0
I_s	(SNOW IMPORTANCE FACTOR)	1.0
P_f	(BALANCED SNOW LOAD)	21 PSF

4. WIND AND SEISMIC LATERAL FORCE RESISTING SYSTEMS HAVE NOT BEEN MODIFIED.

GENERAL CONSTRUCTION

1. THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTION BEGINS. AFTER EXISTING CONDITIONS HAVE BEEN CHECKED AND VERIFIED, NOTIFY ARCHITECT'S OFFICE IN WRITING OF ANY DISCREPANCIES. ALL SHOP DRAWINGS ARE SUBMITTED AS PER VERIFIED DIMENSIONS. DIMENSIONS DENOTED WITH AN ASTERISK (*) SHALL BE FIELD VERIFIED.
2. INFORMATION ON THE STRUCTURAL DOCUMENTS INCLUDING PLAN NOTES, MARKERS, DETAILS, AND SECTIONS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO SIMILAR CONDITIONS ELSEWHERE.
3. THE STRUCTURE HAS BEEN DESIGNED FOR "IN-SERVICE" LOADS ONLY. METHODS AND PROCEDURES INCLUDING SEQUENCING ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
4. CONTRACTOR SHALL PROVIDE TEMPORARY LATERAL BRACING AS REQUIRED FOR STRUCTURAL ELEMENTS UNTIL ALL PERMANENT DIAPHRAGMS, SHEAR WALLS, BRACING, AND/OR FRAMES ARE CONSTRUCTED.
5. CONTRACTOR SHALL COORDINATE STRUCTURAL DOCUMENTS WITH OTHER CONSTRUCTION DOCUMENTS TO COORDINATE LOCATION AND SIZES OF ELEMENTS AFFECTING DESIGN, FABRICATION, AND CONSTRUCTION OF STRUCTURAL ELEMENTS. THESE MAY INCLUDE BUT NOT BE LIMITED TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL DOCUMENTS.
6. CONTRACTOR SHALL REVIEW THE STRUCTURAL AND ALL OTHER COORDINATING DOCUMENTS INCLUDING A REVIEW OF EXISTING SITE CONDITIONS AND PROMPTLY REPORT ANY DISCREPANCIES TO THE APPROPRIATE REPRESENTATIVE BEFORE PROCEEDING WITH THE DESIGN, FABRICATION, AND CONSTRUCTION OF THE STRUCTURAL ELEMENTS.
7. THE DRAWINGS INCLUDE GRAPHIC REPRESENTATIONS OF CONDITIONS BASED ON INFORMATION PROVIDED BY THE OWNER. DIMENSIONS, ELEVATIONS, SIZES, DETAILS, AND EXISTING CONSTRUCTION SHALL BE VERIFIED BY THE CONTRACTOR. ALL DIMENSIONS SHOWN ON DRAWINGS ARE PLUS OR MINUS.
8. CONTRACTOR SHALL VISIT SITE PRIOR TO BID TO BECOME FAMILIAR WITH CONDITIONS THAT WILL EFFECT WORK.
9. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONDITIONS IN EXISTING MATERIALS AND/OR STRUCTURE WHICH ADVERSELY EFFECT THE EXECUTION AND/OR QUALITY OF THE COMPLETED WORK.
10. REPAIR/REPLACE/RESTORE ALL DAMAGE RESULTING FROM THE WORK TO MATCH PRIOR EXISTING OR NEW CONSTRUCTION RESPECTIVELY.
11. COORDINATE WITH THE OWNER REGARDING ACCESS, SECURITY, STORAGE, EQUIPMENT STORAGE, AND USE OF PARKING FACILITIES.
12. PROTECT PEDESTRIANS, OCCUPANTS, AND VEHICLES FROM THE HAZARDS OF CONSTRUCTION. MAINTAIN PEDESTRIAN, VEHICLE, AND REQUIRED FIRE EXIT ACCESS DURING CONSTRUCTION.
13. ALL DESIGN AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE MOST STRINGENT OF THE GOVERNING CODE, THE LATEST EDITION OF THE STATE AND LOCAL CODES AND ALL OTHER PERTINENT CODES, REGULATIONS, AND ORDINANCES.
14. THE DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGARS, INSERTS, ANCHORS, HOLES, AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON, NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
16. ALL ASTM AND OTHER REFERENCES ARE PER THE LATEST EDITIONS OF THESE STANDARDS, UNLESS OTHERWISE INDICATED.
17. SHOP DRAWINGS, PRODUCT DATA, AND OTHER ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL. THE ENGINEER REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR THE ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSIONS, ETC.
18. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT STRUCTURES, UTILITIES, EQUIPMENT, AND FIXTURES DURING CONSTRUCTION.
19. BUILDING ELEVATIONS ARE GIVEN RELATIVE TO FINISHED GROUND FLOOR ELEVATION 0'-0".
20. NO OPENING OTHER THAN THOSE SHOWN ON DESIGN DRAWINGS AND APPROVED SHOP DRAWINGS, SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
21. NO FIELD REVISIONS TO ANY STRUCTURAL COMPONENTS (SIZE, DIMENSIONS, MATERIALS, ETC.) SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO REVISIONS DUE TO MISLOCATION, MISFIT, OR ANY OTHER CONSTRUCTION ERRORS.
22. DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS SHOWN ON THE DRAWINGS.
23. THE CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK SO AS TO MAINTAIN SOLE RESPONSIBILITY FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.

WOOD FRAMING

1. LUMBER SHALL COMPLY WITH DOC PS 20, "AMERICAN SOFTWOOD LUMBER STANDARD," AND WITH APPLICABLE GRADING RULES OF INSPECTION AGENCIES CERTIFIED BY AMERICAN LUMBER STANDARDS COMMITTEE'S (ALSC) BOARD OF REVIEW. LUMBER SHALL BE GRADE STAMPED. LUMBER SHALL BE DRESSED S4S WITH 19% MAXIMUM MOISTURE CONTENT.
2. ALL DIMENSIONAL LUMBER SHALL BE GRADE #2 OR BETTER SPRUCE-PINE-FIR OR SOUTHERN PINE.
3. PLYWOOD SHALL BE DOC PS 2, APA GRADED, CDX
4. CONTRACTOR SHALL FASTEN WOOD FRAMING PER IBC 2021 TABLE 2304.10.2 FASTENING SCHEDULE, UNLESS OTHERWISE SPECIFIED.
5. PROVIDE HEADERS AT ALL OPENINGS AS SHOWN ON DRAWINGS. ADDITIONAL HEADERS MAY BE REQUIRED FOR MECHANICAL, PLUMBING, ELECTRICAL, AND ARCHITECTURAL OPENINGS. CONTRACTOR SHALL PROVIDE ADDITIONAL UNSCHEDULED HEADERS AT NO ADDITIONAL COST.
6. JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS AND AT EACH SUPPORT BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF THE JOISTS ARE NAILED TO A HEADER, BAND OR RIM JOIST OR TO AN ADJOINING STUD OR BY OTHER MEANS. SOLID BLOCKING SHALL BE NOT LESS THAN 2 INCHES IN THICKNESS AND THE FULL DEPTH OF THE JOIST PER IBC 2021 2308.4.2.3.
7. LOCATIONS OF EXISTING JOISTS SHOWN ON PLANS ARE APPROXIMATE. FIELD VERIFY EXISTING MEMBER LOCATIONS AND DIMENSIONS PRIOR TO CONSTRUCTION.
8. IN AREAS WHERE EXISTING WOOD JOISTS ARE BEING DOUBLED, NEW 2X MEMBERS SHALL BE GLUED AND NAIL LAMINATED TO EXISTING JOISTS WITH SETS OF NAILS AT 16" O.C. EXISTING BRIDGING SHALL BE TEMPORARILY REMOVED AND REPLACED AFTER SISTERING.
9. PLACE DOUBLE JOIST UNDER INTERIOR NON-LOAD BEARING PARTITIONS PARALLEL TO JOISTS. PLACE BLOCKING AT 16" OC BETWEEN JOISTS BENEATH INTERIOR PARTITION WALLS PERPENDICULAR TO JOISTS.
10. CONTRACTOR SHALL PROVIDE FRAMING FOR GYPSUM CEILINGS PER THE CEILING JOIST SPAN TABLE BELOW. CONTRACTOR SHALL PROVIDE HANGERS AND BLOCKING AS REQUIRED TO SUPPORT SUBFRAMING. SUBFRAMING SHALL SPAN BETWEEN AND ATTACH TO NON-LOAD BEARING INTERIOR PARTITION WALLS.

CEILING JOIST SPAN TABLE, #2 OR BETTER	
MAXIMUM JOIST SPAN	JOIST SIZE AND SPACING
UP TO 10'	2X6 @ 16" OC
10' TO 20'	2X8 @ 16" OC

MASONRY

1. CONCRETE MASONRY UNIT (CMU) NET AREA COMPRESSIVE STRENGTH SHALL BE 2500 PSI.
   CONCRETE MASONRY UNIT SHALL BE ASTM C90; MEDIUM WEIGHT, INSTALLED IN RUNNING BOND.
   A. CMU SHALL HAVE HORIZONTAL JOINT REINFORCEMENT AT EVERY OTHER COURSE.
   B. MORTAR SHALL BE ASTM C270, TYPE M OR S.
   C. GROUT SHALL BE 3000 PSI, ASTM C476 FINE GROUT.
   D. REBAR SHALL BE ASTM A615.
2. CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL CONCRETE MASONRY MATERIALS AND ACCESSORIES.
3. PERFORM WORK IN ACCORDANCE WITH ACI 530 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES AND ACI 530.1 SPECIFICATION FOR MASONRY STRUCTURES.
4. FACING BRICK SHALL BE ASTM C216, TYPE FBX, GRADE SW. BRICK COLOR AND TEXTURE AS SPECIFIED BY ARCHITECT. CONTRACTOR SHALL PROVIDE SAMPLES FOR ARCHITECT REVIEW. BRICK SHALL BE ATTACHED BACK TO STRUCTURE WITH ADJUSTABLE TIES, HOHMANN & BERNARD HB-213, 12 GA, SS, FASTEN DIRECTLY TO STUDS AT 24" VERTICALLY & 16" HORIZONTALLY.
5. EXISTING BRICK SHALL BE REPOINTED PER THE FOLLOWING SEQUENCE:
   A. REMOVE/CUT OUT OLD MORTAR. DEPTH OF CUT SHOULD NOT EXCEED 3/4", OR UNTIL SOUND MORTAR IS REACHED. REMOVE ALL LOOSE DEBRIS.
   B. SELECT THE PROPER MORTAR TYPE. AS MUCH AS POSSIBLE, CLOSELY MATCH THE MORTAR USED IN THE ORIGINAL CONSTRUCTION.
   C. PRE-HYDRATE THE MORTAR. MIX THE MORTAR USING AS LITTLE WATER AS POSSIBLE AND ALLOW THE MIX TO HYDRATE FOR ONE TO TWO HOURS PRIOR TO REPOINTING. USING A STIFF MORTAR WILL REDUCE THE PLASTIC SHRINKAGE.
   D. PLACE NEW MORTAR. FORCE NEW MORTAR INTO THE JOINT IN LAYERS NOT EXCEEDING 1/4". EACH LATER SHOULD BE THUMB PRINT HARD BEFORE SUBSEQUENT LAYERS ARE APPLIED.
   E. FINISH TOOLING. ONCE THE MORTAR HAS SUFFICIENTLY SET, TOOL THE MORTAR TO MATCH THE ORIGINAL MORTAR.
6.
7. ALL STEEL LINTELS SHALL BE HOT DIPPED GALVANIZED AND EXPOSED SURFACES SHALL BE COATED TO MATCH ADJACENT CONSTRUCTION. CONTRACTOR SHALL PROVIDE STEEL LINTELS OR BOND BEAMS AS SHOWN ON DRAWINGS. ADDITIONAL LINTELS OR BOND BEAMS MAY BE REQUIRED FOR MECHANICAL, ELECTRICAL, PLUMBING, OR ARCHITECTURAL PENETRATIONS GREATER THAN 1'-0" WIDE. ADDITIONAL LINTELS SHALL BE PROVIDED AT NO ADDITIONAL COST.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING:
   AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", FIFTEENTH EDITION
2. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:
   A. STRUCTURAL W SHAPES - A992 (Fy = 50 KSI)
   B. STRUCTURAL C, MC, & L SHAPES - A36 (Fy = 36 KSI)
   C. STRUCTURAL PLATE AND BARS - A36 (Fy = 36 KSI)
   D. STEEL PIPE - A53 GRADE B (Fy = 35 KSI)
   E. STEEL TUBING - A500 GRADE B (Fy = 46 KSI)
3. SHOP CONNECTIONS MAY BE WELDED OR HIGH STRENGTH BOLTED AT FABRICATOR'S OPTION, SUBJECT TO ENGINEER'S APPROVAL
4. ALL BOLTED CONNECTIONS FOR STRUCTURAL STEEL SHALL CONFORM TO AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," CURRENT EDITION.
5. UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWINGS, ALL BOLTED CONNECTIONS SHALL BE MADE WITH THE FOLLOWING:
   A. 3/4" DIA. HIGH STRENGTH BOLTS, BEARING TYPE WITH THREADS IN THE SHEAR PLANE, CONFORMING TO ASTM A325-N INSTALLED TO A SNUG TIGHTENED CONDITION.
6. ALL WELDED CONNECTIONS FOR STRUCTURAL STEEL SHALL CONFORM TO AWS "STRUCTURAL WELDING CODE," CURRENT EDITION.
7. UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWINGS, ALL WELDED CONNECTIONS SHALL BE MADE WITH E70-XX ELECTRODES.
8. PROVIDE ALL BOLT HOLES, STUDS, ANCHORS, AND CLIP ANGLES REQUIRED TO ATTACH OTHER MATERIALS AS SHOWN ON THE DRAWINGS.
9. ANCHOR RODS SHALL CONFORM TO ASTM F1554 GR 36.
10. ALL GROUT BELOW ALL COLUMN BASE PLATES AND BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC GROUT UNLESS OTHERWISE SHOWN OR NOTED.
11. ALL STRUCTURAL STEEL MEMBERS EXPOSED TO WEATHER OR VIEW SHALL BE GALVANIZED, COATED, OR BOTH PER ARCHITECT SCHEDULES.

GEOTECHNICAL: FOUNDATIONS AND SOIL

1. SPREAD FOOTING, MAT FOUNDATION, AND STRIP FOOTING FOUNDATION DESIGN IS BASED UPON A PRESUMPTIVE ALLOWABLE SOIL BEARING CAPACITY OF 1500 PSI. CONTRACTOR SHALL HIRE GEOTECHNICAL ENGINEER TO FIELD VERIFY IN-SITU BEARING CAPACITY. GEOTECHNICAL REPORT SHALL BE SUBMITTED TO ENGINEER FOR INFORMATION.
2. FOOTING ELEVATIONS INDICATED ON THE DOCUMENTS ARE DESIGNED TO MEET ANTICIPATED DEPTHS FOR ALLOWABLE BEARING CAPACITY AND/OR DEPTHS REQUIRED FOR FROST PROTECTION. ACTUAL FIELD CONDITIONS ENCOUNTERING UNSUITABLE SOILS MAY REQUIRE ADDITIONAL EXCAVATION TO LOWER FOOTING ELEVATIONS OR REPLACE WITH STRUCTURAL FILL. CONTRACTOR SHALL PROMPTLY REPORT THESE CONDITIONS BEFORE PROCEEDING WITH ADDITIONAL WORK.
3. ALL SPREAD FOOTINGS SHALL BE CENTERED ON COLUMN CENTER LINES UNLESS OTHERWISE INDICATED BY AN OFFSET DIMENSION.

CONCRETE

1. REINFORCED CONCRETE SHALL BE DESIGNED, FABRICATED, AND CONSTRUCTED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-19) BY THE AMERICAN CONCRETE INSTITUTE.
2. REINFORCING BAR DETAILING, FABRICATING, AND PLACING SHALL CONFORM TO THE FOLLOWING ACI STANDARDS:
   A. "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315)
   B. "GUIDE TO PRESENTING REINFORCING STEEL DESIGN DETAILS" (ACI 315R-18)
3. MINIMUM CONCRETE COMPRESSIVE STRENGTH (f'c) AT 28 DAYS:
   A. FOOTINGS 4500 PSI
   B. FOUNDATION WALLS AND GRADE BEAMS 4500 PSI
   C. RETAINING WALLS 4500 PSI
   D. SLABS ON GRADE 4500 PSI
   E. ALL OTHER CONCRETE 4500 PSI
4. CONCRETE REINFORCEMENT:
   A. DEFORMED BARS - ASTM A615-GRADE 60.
   B. WELDED WIRE FABRIC (WWF) - ASTM A185-SHEETS ONLY
5. CONCRETE PROTECTION FOR REINFORCEMENT:
   A. CONCRETE CAST AGAINST EARTH OR WATER (EXCLUDING SLABS POURED ON GRADE) . 3"
   B. CONCRETE CAST TO FORMS - EXPOSED TO EARTH, WATER, OR WEATHER:
      #6 BARS OR LARGER 2"
      #5 BARS AND SMALLER 1 1/2"
   C. CONCRETE CAST TO FORMS - NOT EXPOSED TO EARTH, WATER, OR WEATHER:
      a. SLAB, WALL, JOISTS:
         #14 AND #18 BARS 1 1/2"
         #11 BARS AND SMALLER 3/4"
      b. BEAMS, COLUMNS:
         PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS 1 1/2"
      c. SHELLS, FOLDED PLATE MEMBERS:
         #6 BAR AND LARGER 3/4"
         #5 BAR, W31 OR D31 WIRE, AND SMALLER 1"
      d. SLABS POURED ON GRADE:
         FROM BOTTOM SURFACE 2"
         TROWELED SURFACE (INCREASE BY 1/2" IF SURFACE IS TO BE IN PERMANENT CONTACT WITH GROUND OR WATER) 1"
         SCREEDED SURFACE FOR APPLIED TOPPING 3/4"
6. SPLICING OF REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-19 BUILDING CODE, SECTION 25.5
7. UNLESS OTHERWISE SHOWN OR NOTED, TOP AND BOTTOM BARS FOR CONTINUOUS BEAMS SHALL BE A MAXIMUM LENGTH WITH SPLICES LOCATED AT MIDSPAN FOR TOP BARS AND AT SUPPORTS FOR BOTTOM BARS.
8. ALL HORIZONTAL BARS IN WALLS OR GRADE BEAMS SHALL BE BENT AT CORNERS AND INTERSECTIONS IN SUCH A WAY THAT CONTINUITY IS PROVIDED THROUGH THE JOINT. SEPARATE CORNER BARS OF THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCING MAY BE SUBSTITUTED FOR THE BENT PORTION OF THE CONTINUOUS BARS.
9. ALL CONSTRUCTION JOINTS SHOWN ON THE DRAWINGS SHALL BE INCORPORATED IN THE STRUCTURE UNLESS THEIR ELIMINATION IS APPROVED BY THE ENGINEER. ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION SHALL BE LOCATED AND DETAILED ON SHOP DRAWINGS. WHEN CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THE DRAWINGS ARE REQUIRED, THE REINFORCEMENT SHALL PASS CONTINUOUSLY THROUGH THE JOINT AND A KEY SHALL BE PROVIDED FOR ADEQUATE SHEAR TRANSFER.
10. USE OF CONSTRUCTION JOINTS AT LOCATIONS OTHER THAN THOSE INDICATED ON THE DRAWINGS SHALL REQUIRE PRIOR APPROVAL OF THE ENGINEER.
11. ALL KEYS FOR CONSTRUCTION JOINTS SHALL BE 2" X 4" (NOMINAL) UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWINGS.

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STRUCTURAL NOTES

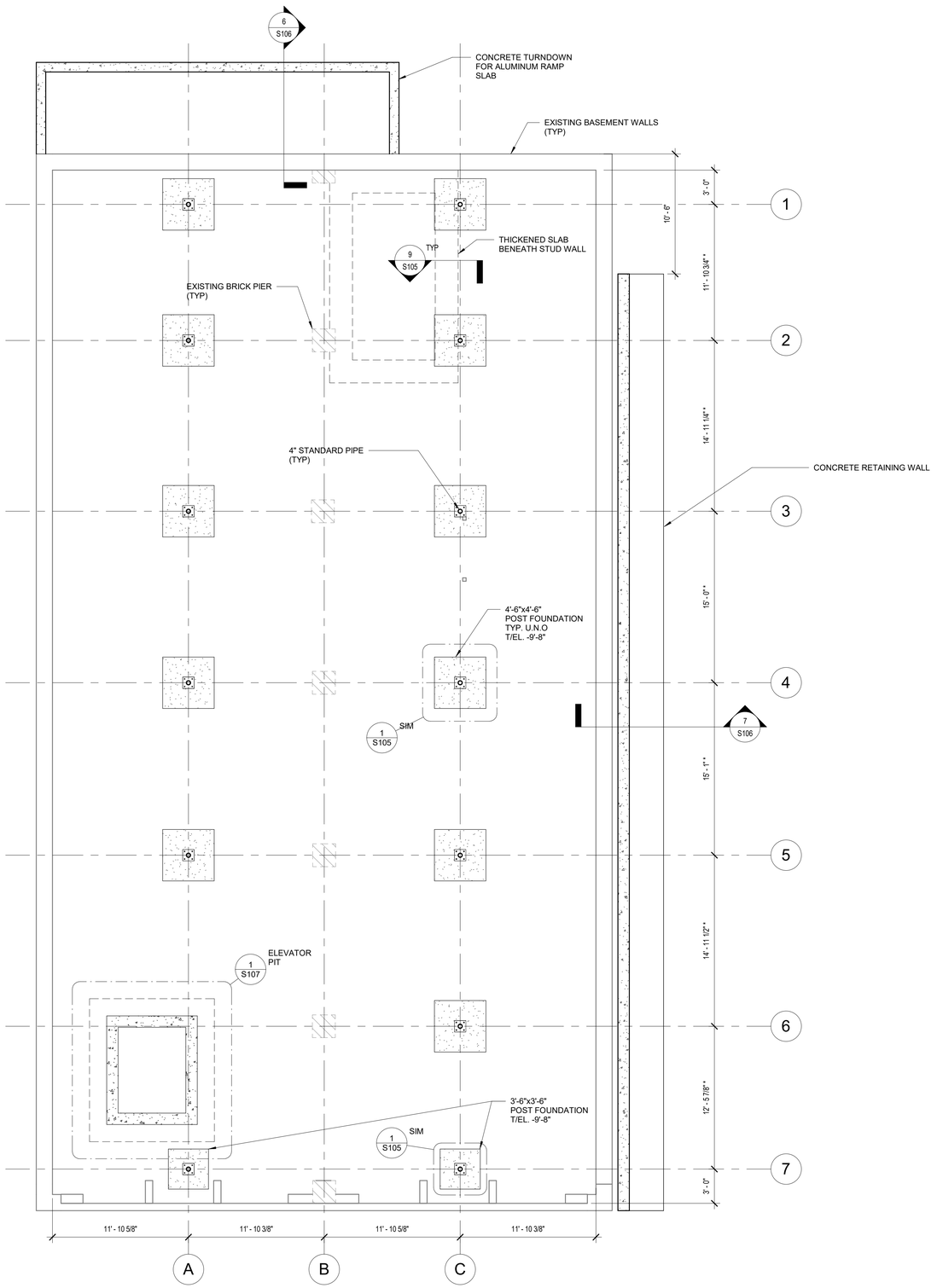
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NOTES:

1. THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTION BEGINS. AFTER EXISTING CONDITIONS HAVE BEEN CHECKED AND VERIFIED, NOTIFY ARCHITECT'S OFFICE IN WRITING OF ANY DISCREPANCIES. ALL SHOP DRAWINGS ARE SUBMITTED AS PER VERIFIED DIMENSIONS.

NORTH

1 S101 **FOUNDATION PLAN**
3/16" = 1'-0"

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FOUNDATION PLAN

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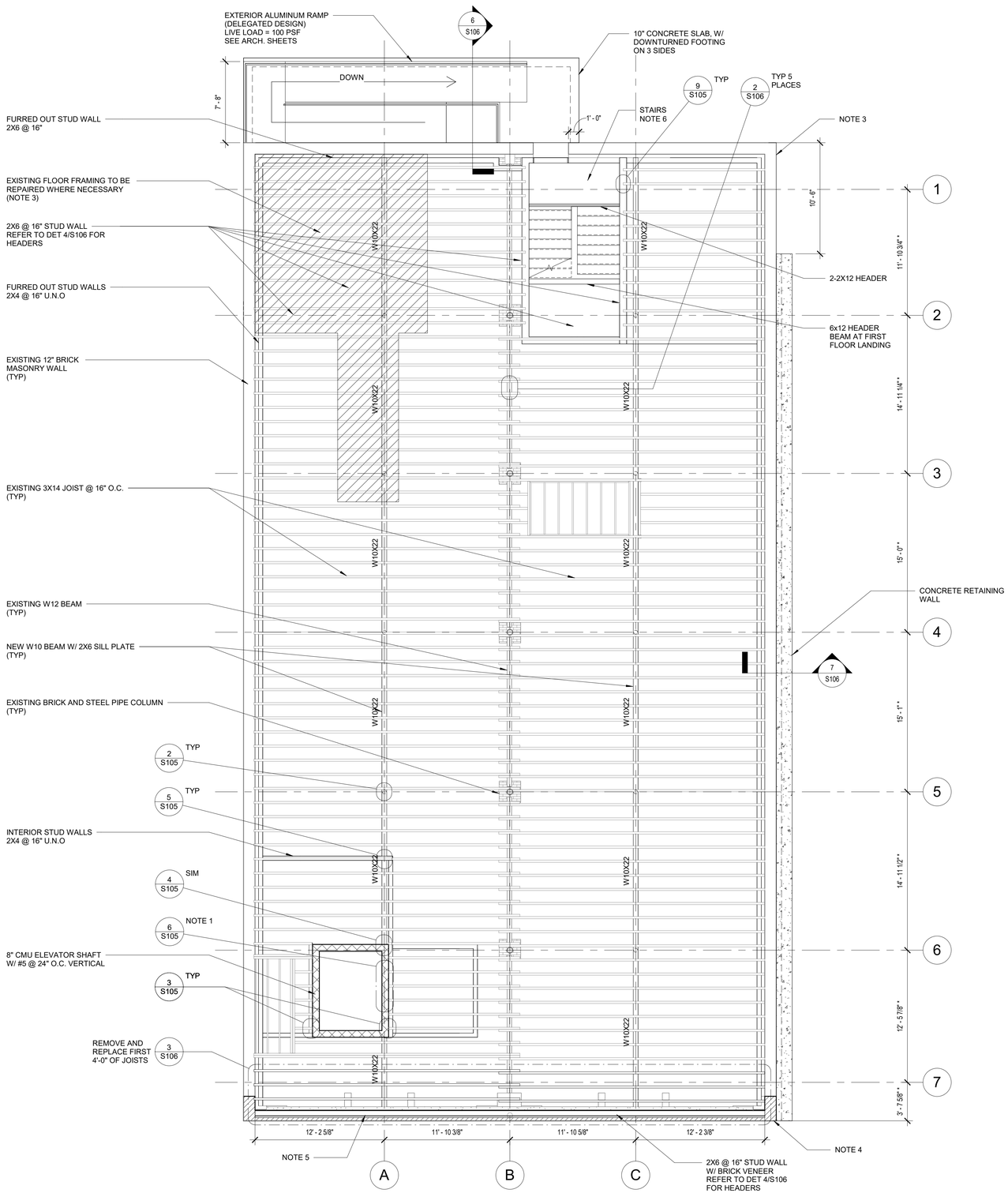
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NOTES:

1. PROVIDE OPENINGS IN ELEVATOR SHAFT AT EACH LEVEL PER MANUFACTURER REQUIREMENTS. PROVIDE BOND BEAM LINTEL OVER EACH OPENING PER DET 6/S105. PROVIDE FULLY GROUTED JAMB W/ #5 AT EACH SIDE. PROVIDE BOND BEAM AT EACH ELEVATOR SUPPORT LOCATION.
2. REPLACE DAMAGED BOARDS IN KIND WITH TONGUE AND GROVE DECKING.
3. EXISTING SOLID BRICK EXTERIOR WALL REQUIRES REPAIR. REFER TO ARCHITECTURAL SHEETS FOR EXTENT OF REPAIR. CONTRACTOR SHALL REPOINT AND PATCH EXISTING WALL IN WORKMAN LIKE MANNER AS REQUIRED TO BRING WALL BACK INTO GOOD REPAIR.
4. CONTRACTOR SHALL REMOVE AND REPLACE FACE WYTHE BRICK AROUND CORNER AS SHOWN ON ARCHITECTURAL SHEETS. BRICK SHALL BE PLACED IN A FULL BED OF MORTAR TO MATCH ADJACENT CONSTRUCTION. CONTRACTOR SHALL PROVIDE ROW-LOCK HEADERS BACK INTO EXISTING WALL TO TIE BRICK BACK INTO EXISTING WALL. ROW-LOCK HEADERS SHALL BE PLACED AT VERTICAL SPACING TO MATCH EXISTING BUILDING.
5. CONTRACTOR SHALL PROVIDE LOOSE LINTELS OVER WINDOW AND DOOR OPENINGS, L6X3-1/2X3/8 LLV WITH 8" BEARING ON EACH END.
6. STAIRS SHALL BE WOOD FRAMED CONSTRUCTION. EACH RUN SHALL BE SUPPORTED WITH (4)- 1-3/4"X16" 2.1E RIGIDLAM LVL STRINGERS. LANDINGS SHALL BE SUPPORTED WITH 2X8 JOISTS AT 16" OC SPANNING PARALLEL TO STAIR RUN. CONTRACTOR SHALL PROVIDE FRAMING AND CONNECTIONS AS SHOWN TO SUPPORT A LIVE LOAD OF 100 PSF. CONTRACTOR IS REQUIRED TO PROVIDE ADDITIONAL FRAMING AND CONNECTIONS AS REQUIRED FOR A COMPLETE INSTALLATION OF THE STAIRS. STAIR SYSTEM SHALL BE SUPPORTED BY POSTS OR STUD WALLS AS REQUIRED. ALL CONNECTIONS SHALL FASTENED WITH SIMPSON STRONG TIE CONNECTION BRACKETS. CONNECTIONS SHALL BE AS SUCH TO NOT PENETRATE FIRE RATED WALLS WITHOUT PROTECTION.

1 S102 **FIRST FLOOR FRAMING PLAN**
3/16" = 1'-0"
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FIRST FLOOR FRAMING PLAN

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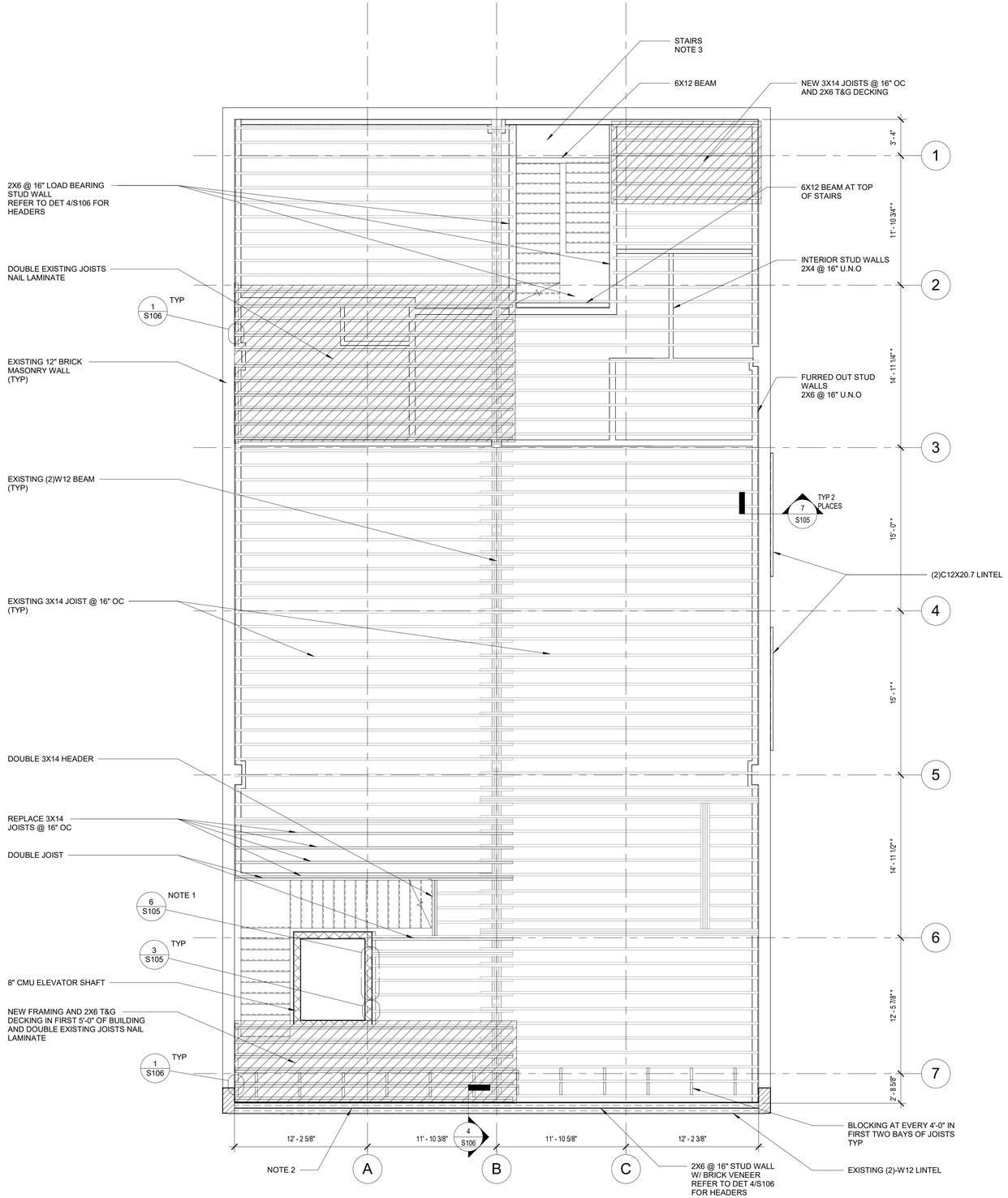
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NOTES:

1. PROVIDE OPENINGS IN ELEVATOR SHAFT AT EACH LEVEL PER MANUFACTURER REQUIREMENTS. PROVIDE BOND BEAM LINTEL OVER EACH OPENING PER DET 6/S105. PROVIDE FULLY GROUTED JAMB W/ #5 AT EACH SIDE. PROVIDE BOND BEAM AT EACH ELEVATOR SUPPORT LOCATION.
2. CONTRACTOR SHALL PROVIDE LOOSE LINTELS OVER WINDOW AND DOOR OPENINGS, L6X3-1/2X3/8 WITH 8" BEARING ON EACH END.
3. STAIRS SHALL BE WOOD FRAMED CONSTRUCTION. EACH RUN SHALL BE SUPPORTED WITH (4) - 1-3/4"X16" 2.1E RIGIDLAM LVL STRINGERS. LANDINGS SHALL BE SUPPORTED WITH 2X8 JOISTS AT 16" OC SPANNING PARALLEL TO STAIR RUN. CONTRACTOR SHALL PROVIDE FRAMING AND CONNECTIONS AS SHOWN TO SUPPORT A LIVE LOAD OF 100 PSF. CONTRACTOR IS REQUIRED TO PROVIDE ADDITIONAL FRAMING AND CONNECTIONS AS REQUIRED FOR A COMPLETE INSTALLATION OF THE STAIRS. STAIR SYSTEM SHALL BE SUPPORTED BY POSTS OR STUD WALLS AS REQUIRED. ALL CONNECTIONS SHALL FASTENED WITH SIMPSON STRONG TIE CONNECTION BRACKETS. CONNECTIONS SHALL BE AS SUCH TO NOT PENETRATE FIRE RATED WALLS WITHOUT PROTECTION.

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1 S103 SECOND FLOOR FRAMING PLAN
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SECOND FLOOR
FRAMING PLAN

BUILDING
RENOVATION

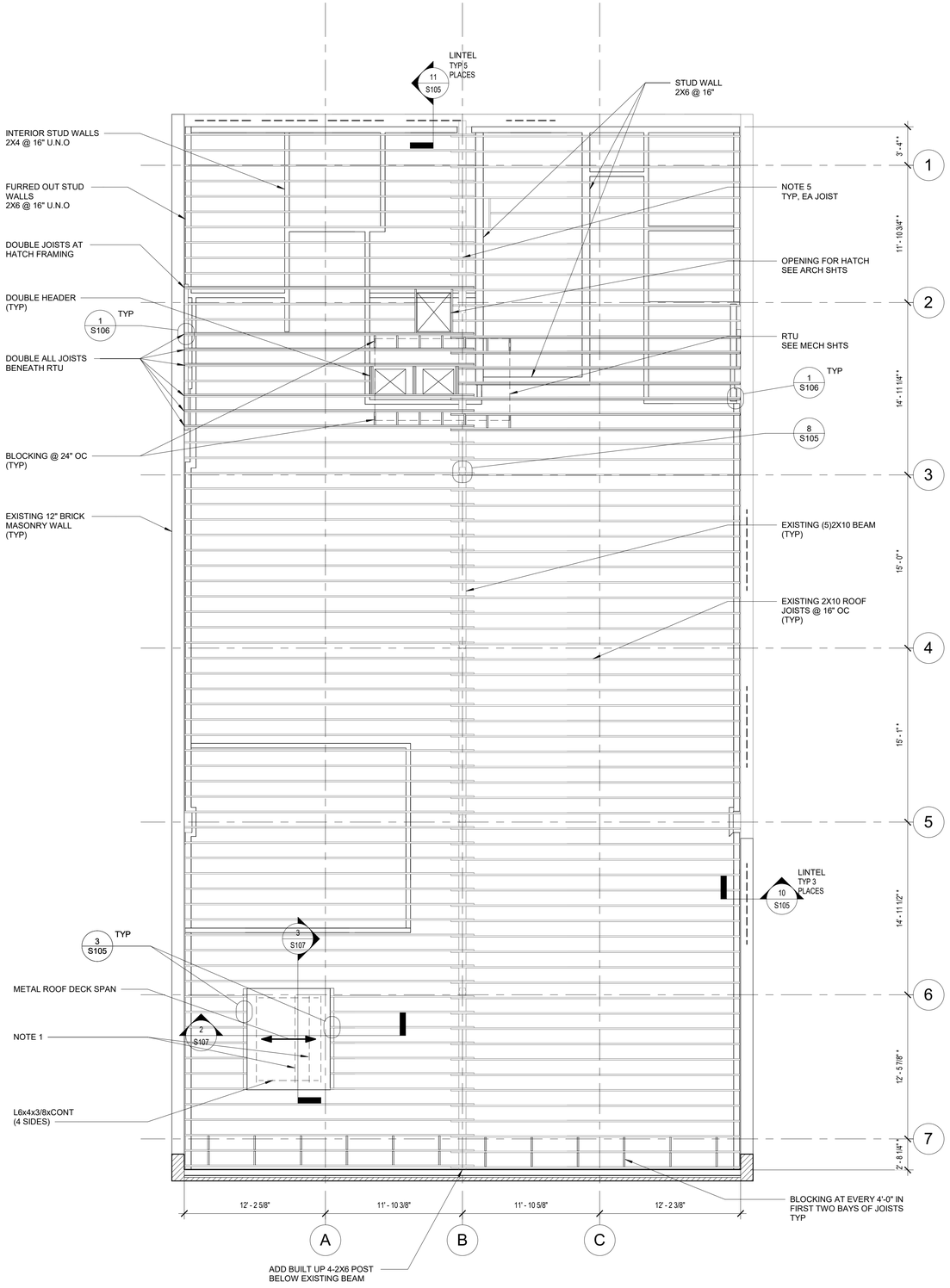
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NORTH

1 S104 **ROOF FRAMING PLAN**
3/16" = 1'-0"

NOTES:

1. PROVIDE W8X21 ELEVATOR HOIST AND LIFELINE BEAMS AND INSTALL AS DIRECTED BY ELEVATOR MANUFACTURER. ENDS SHALL BEAR ONTO 8" CMU SIMILAR TO DET 4/S105
2. COORDINATE LOCATION OF HOIST AND LIFELINE BEAMS WITH ELEVATOR MANUFACTURER
3. CONTRACTOR SHALL FURNISH AND INSTALL SIMPSON STRONG TIE H3 HURRICANE TIE AT EVERY ROOF JOIST BEARING LOCATION ON EXISTING (5)2X10 BEAM.
4. EXISTING ROOF SLOPES FROM FRONT TO BACK AT ABOUT 1/2"/FT
5. INSTALL SIMPSON STRONG TIE H3 HURRICANE TIE AT EVERY ROOF JOIST AT EXISTING BEARING 5-PLY 2X10 BEAM

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ROOF FRAMING PLAN

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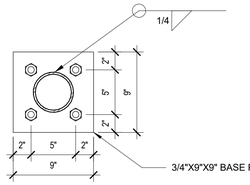
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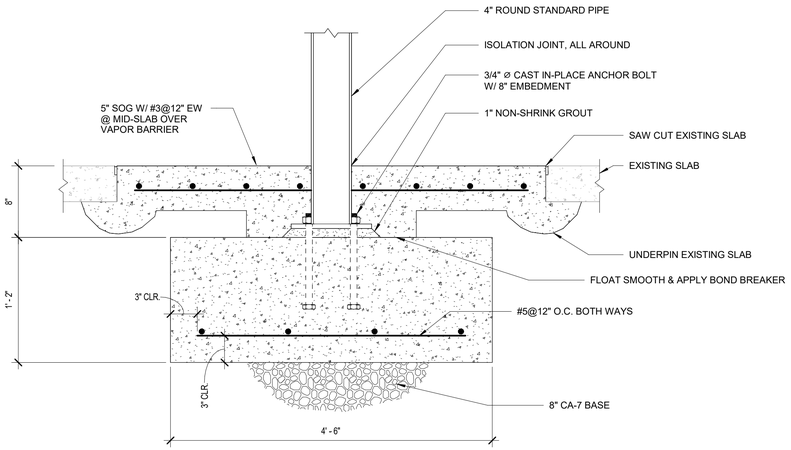
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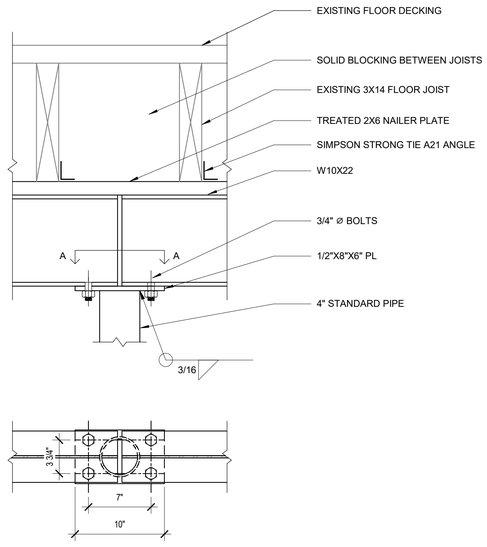
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S104



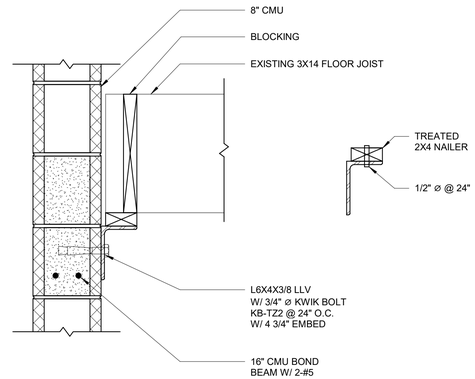


1 POST FOUNDATION S105 — 1 1/2" = 1'-0"

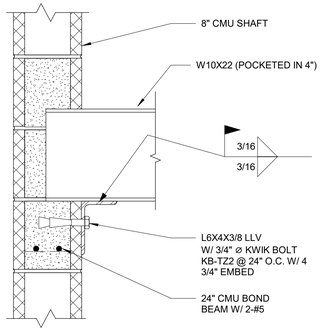


SECTION A

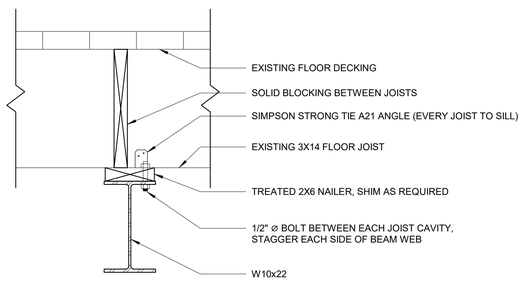
2 STEEL BEAM TO POST S105 — 1 1/2" = 1'-0"



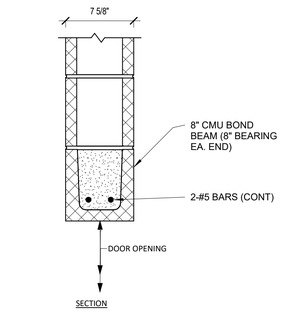
3 WOOD JOIST TO LEDGER S105 — 1 1/2" = 1'-0"



4 STEEL BEAM TO CMU S105 — 1 1/2" = 1'-0"

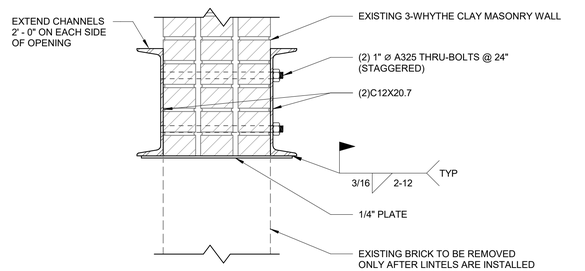


5 SUPPORT BEAM AT JOISTS S105 — 1 1/2" = 1'-0"



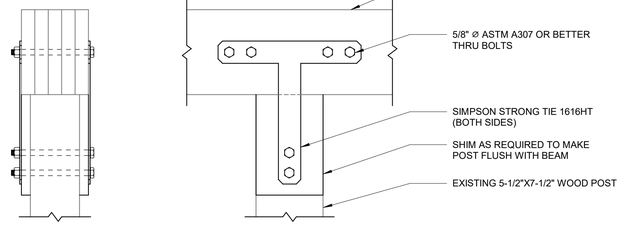
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6 TYP BOND BEAM OVER DOOR S105 — 1 1/2" = 1'-0"

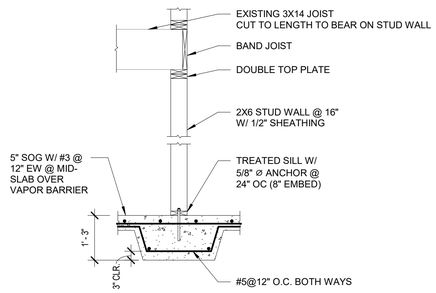


NOTE: LINTELS TO BE HOT DIPPED GALVANIZED AND FIELD COATED

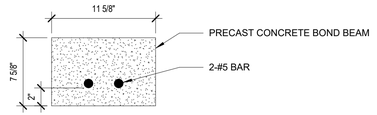
7 DOUBLE DOOR LINTEL S105 — 1 1/2" = 1'-0"



8 WOOD POST TO 5X BEAM S105 — 1 1/2" = 1'-0"

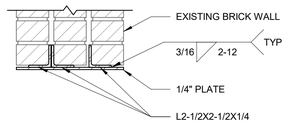


9 STUD WALL CONSTRUCTION S105 — 1/2" = 1'-0"



NOTE: LINTEL SHALL BEAR 8" ON EACH SIDE.

10 LINTEL FOR SIDE WINDOWS S105 — 1 1/2" = 1'-0"



NOTE:
1. LINTEL TO BE NOT DIPPED GALVANIZED AND FIELD COATED.
2. LINTEL SHALL BEAR 18" ON EACH SIDE.

11 REAR WINDOW LINTEL S105 — 1 1/2" = 1'-0"

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Aurora, IL 60506
630 897 4651

STRUCTURAL DETAILS

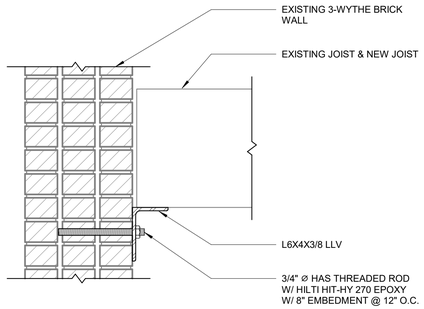
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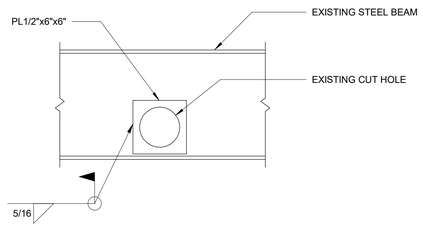
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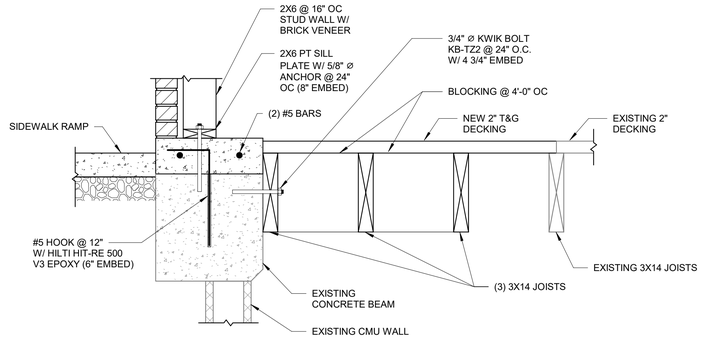
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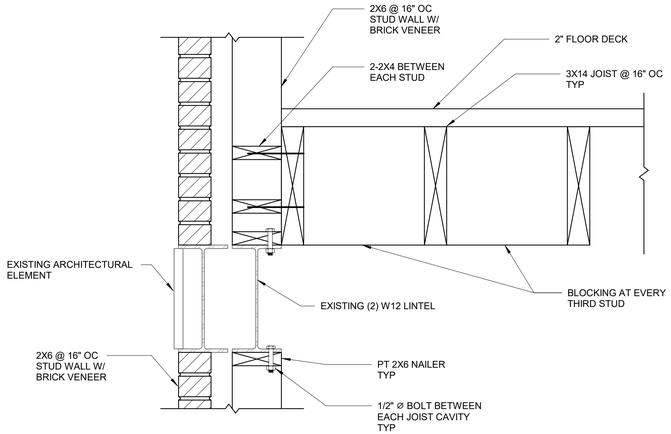
1 DOUBLED JOIST CONNECTION TO WALL
S106 1 1/2" = 1'-0"



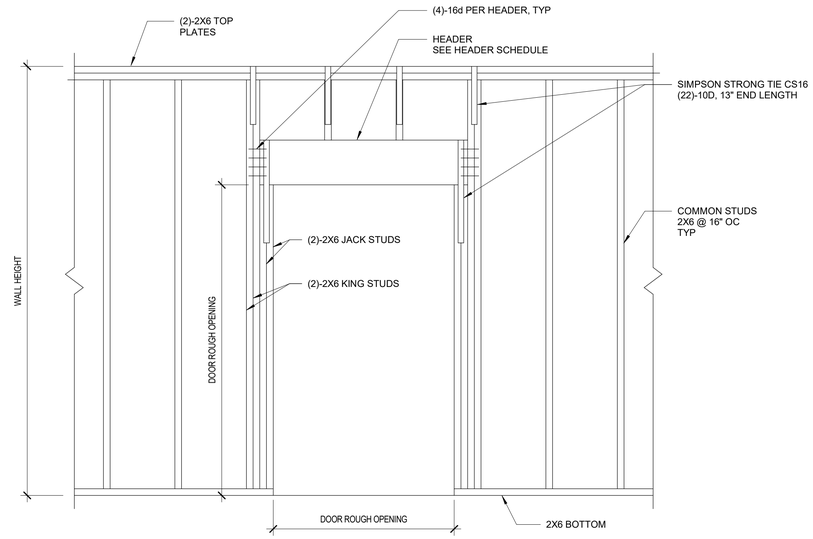
2 STEEL BEAM REPAIR
S106 1 1/2" = 1'-0"



3 CONCRETE CURB AND JOIST REPLACEMENT
S106 1" = 1'-0"

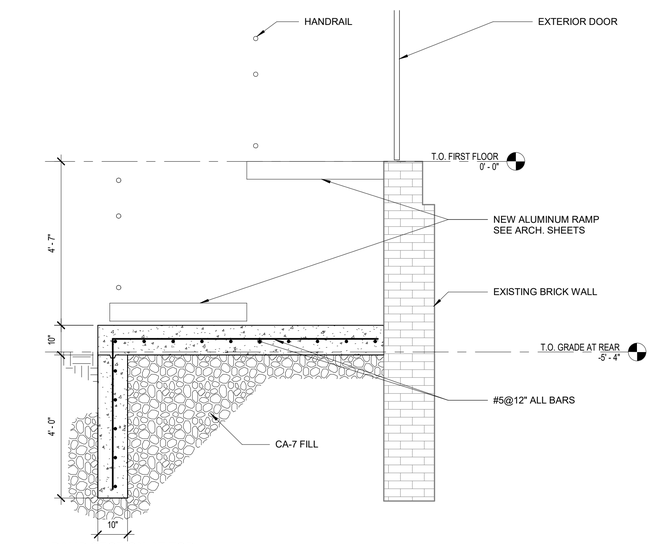


4 STUD WALL TO EXISTING W12
S106 1 1/2" = 1'-0"

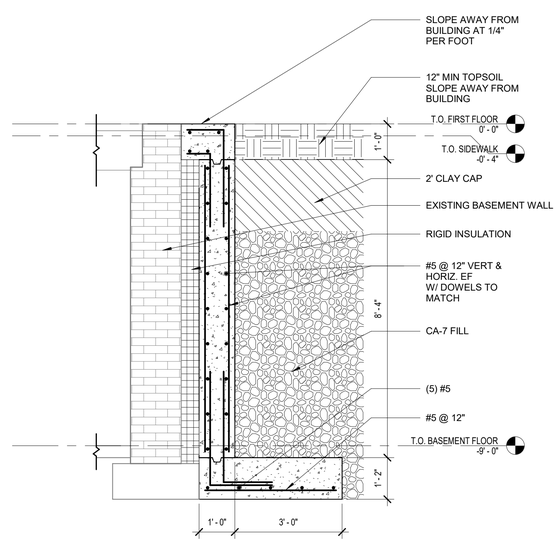


HEADER SCHEDULE	
MAXIMUM HEADER SPAN	HEADER SIZE
UP TO 4'	1-2X8
4' TO 8'	2-2X12

5 STUD WALL OPENING
S106 3/4" = 1'-0"



6 RAMP SECTION AT TOP LANDING
S106 1/2" = 1'-0"



7 RETAINING WALL
S106 1/2" = 1'-0"

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STRUCTURAL DETAILS

BUILDING RENOVATION

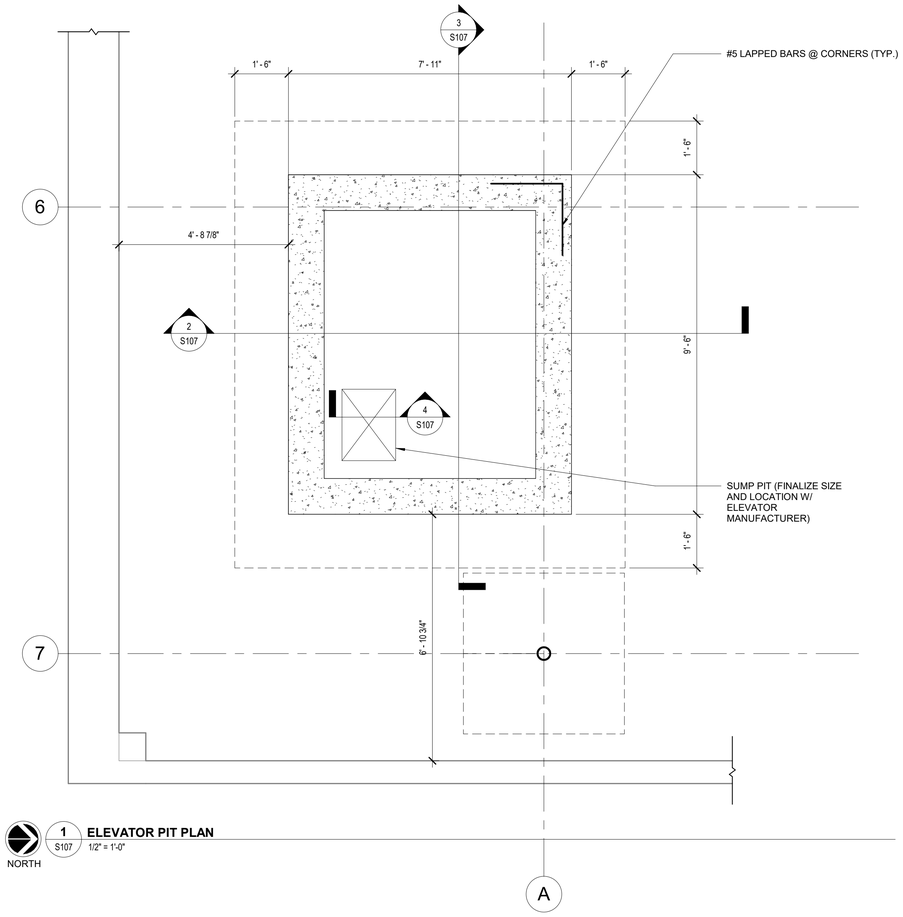
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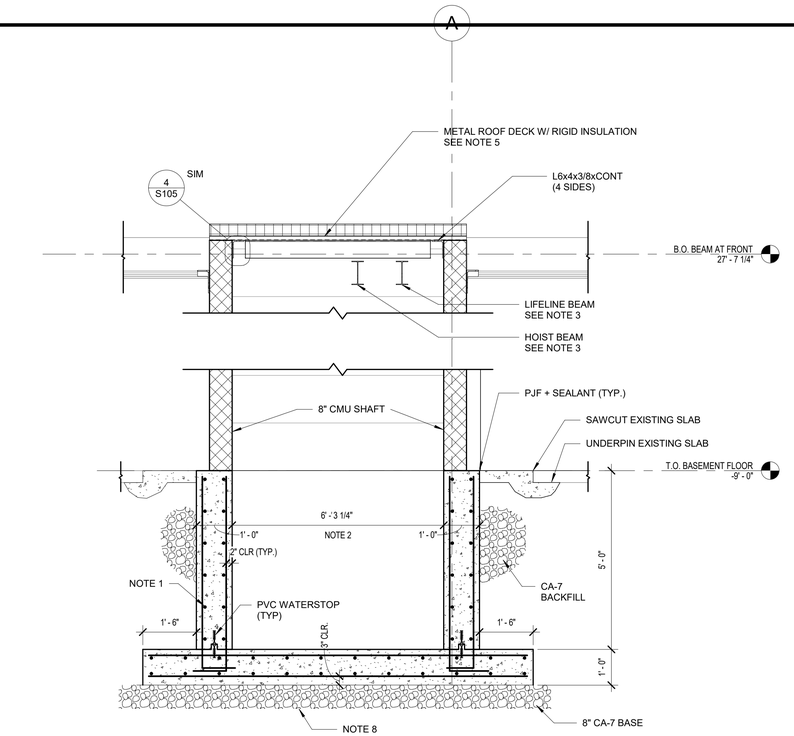
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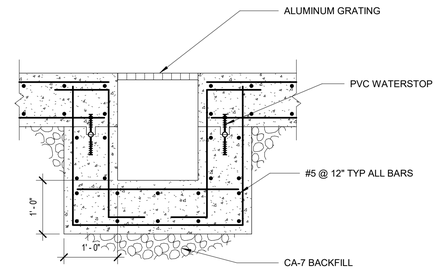
1 S107 **ELEVATOR PIT PLAN** 1/2" = 1'-0"



2 S107 **ELEVATOR PIT AND ROOF** 1/2" = 1'-0"

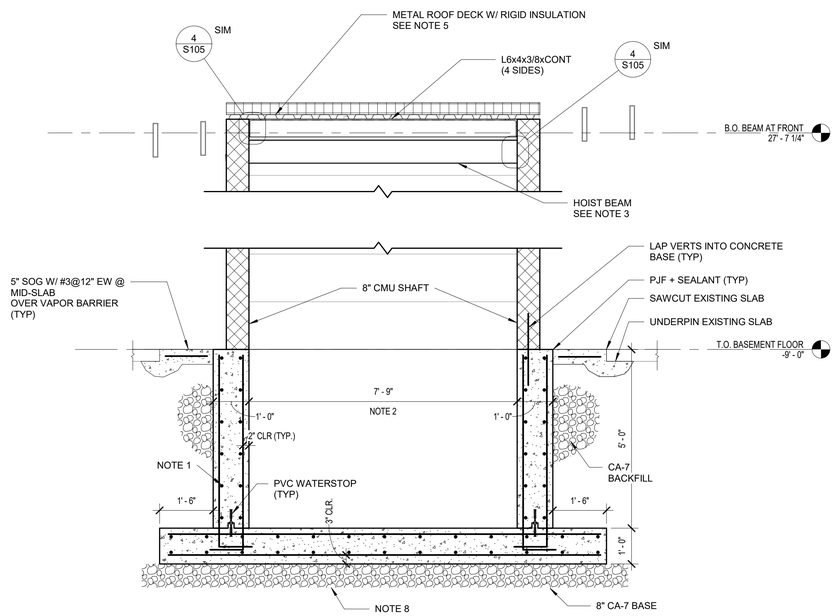
NOTES:

1. ALL BARS AND DOWELS TO BE #5 @ 12" SPACING (TYP.)
2. COORDINATE FINAL DIMENSIONS WITH ELEVATOR MANUFACTURER
3. PROVIDE W8x21 ELEVATOR HOIST AND LIFELINE BEAMS AND INSTALL AS DIRECTED BY ELEVATOR MANUFACTURER. ENDS SHALL BEAR ONTO 4" CMU SIMILAR TO DET 4/S105
4. COORDINATE LOCATION OF HOIST AND LIFELINE BEAMS WITH ELEVATOR MANUFACTURER.
5. ELEVATOR SHAFT SHALL BE ENCLOSED AT ROOF WITH 16GA 1.5B-36 GR50 METAL ROOF DECK SUPPORTED AT EVERY END WITH CONTINUOUS L6x4x3/8 LLV. CONTINUOUS ANGLE SHALL BE FASTENED TO CMU SIMILAR TO DET 4/S105.
6. PLACE DECK PANELS ON STRUCTURAL SUPPORTS WITH ENDS LAPPED OR BUTTED OVER WITH A MINIMUM END BEARING OF 1-1/2 INCHES.
7. ANCHOR METAL DECK UNITS TO STEEL SUPPORTING MEMBERS BY 5/8" EFFECTIVE DIAMETER ARC SPOT WELDS WITH A 36/4 PATTERN OR APPROVED EQUAL. SIDE LAPS SHALL BE FASTENED WITH #10 SCREWS (0.190 INCH DIA) AT 18" MAXIMUM OR APPROVED INTERVAL.
8. CONTRACTOR SHALL HIRE GEOTECHNICAL ENGINEER TO FIELD VERIFY BEARING CAPACITY OF EXISTING SUBGRADE. FOUNDATION DESIGN IS BASED ON PRESUMPTIVE ALLOWABLE BEARING CAPACITY OF 1,500 PSF.



NOTE:
1. COORDINATE SIZE WITH ELEVATOR MANUFACTURER

4 S107 **SUMP DETAIL** 3/4" = 1'-0"



3 S107 **ELEVATOR PIT AND ROOF** 1/2" = 1'-0"

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ELEVATOR SECTIONS

BUILDING RENOVATION

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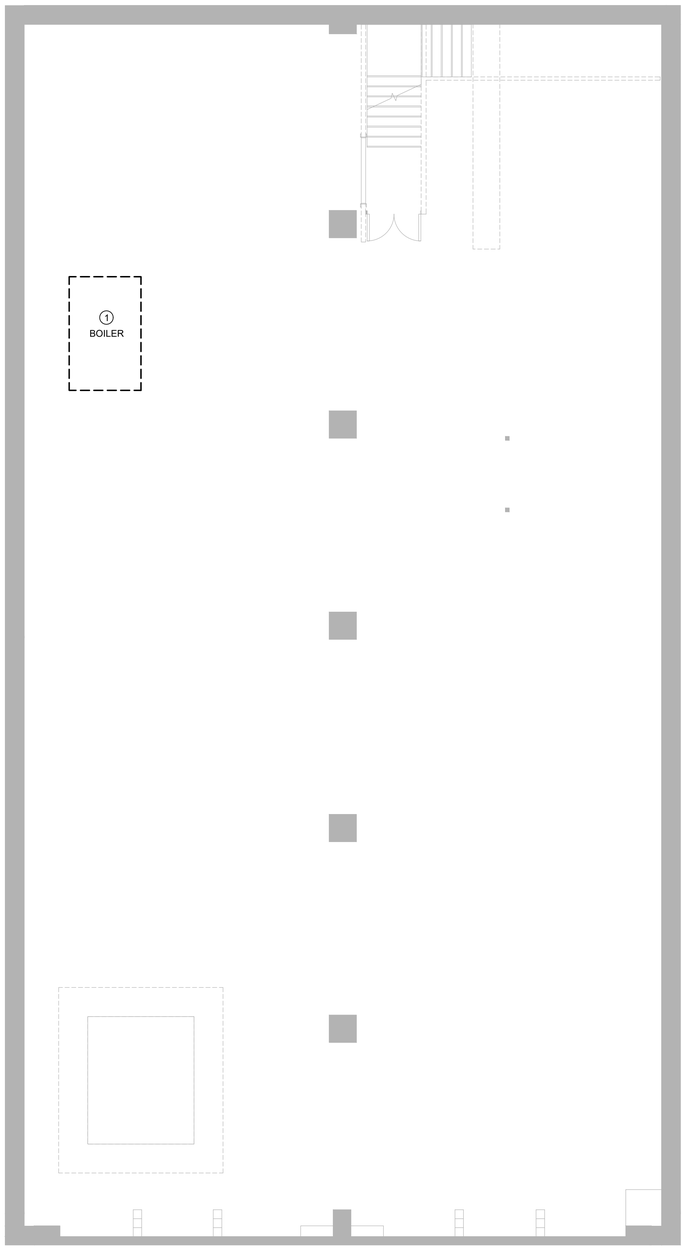
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N

1 BASEMENT MECHANICAL DEMOLITION PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

MECHANICAL PLAN GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND TO INDICATE DESIGN INTENT. EXACT ROUTING OF ALL DUCTWORK, PIPING, CONTROLS, ETC... SHALL BE VERIFIED IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CLEARANCES, OBSTRUCTIONS, ETC... PRIOR TO INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL REVISE ANY DUCT / PIPE ROUTING AND SIZING AS REQUIRED TO ACCOMMODATE SITE CONDITIONS WITH NO ADDITIONAL COST TO OWNER; AND NO DELAY TO PROJECT SCHEDULE.
2. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO ALL WORK. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR PROJECT TEAM REVIEW PRIOR TO PURCHASE AND INSTALLATION. EQUIPMENT SHALL BE INSTALLED AS REQUIRED TO MAINTAIN MANUFACTURER RECOMMENDED SERVICE CLEARANCES AND TO MAXIMIZE HEADROOM. CONTRACTOR SHALL NOTIFY THE APPROPRIATE PARTIES, IN WRITING, OF AREAS WITH INADEQUATE HEADROOM.
3. CONTRACTOR SHALL REVIEW ARCHITECTURAL, CIVIL, STRUCTURAL, ETC... DRAWINGS TO BECOME FAMILIAR WITH THE GENERAL SCOPE AND PROJECT TIMELINE PRIOR TO BID.
4. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION OF ALL AUXILIARY STRUCTURAL STEEL, CORES, ROOF PENETRATIONS, ETC... ALL EQUIPMENT ABOVE SUSPENDED CEILINGS SHALL BE SUPPORTED FROM BUILDING STRUCTURAL MEMBERS.
5. SPECIFIED EQUIPMENT SHALL BE THE BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR APPROVED ALTERNATE MANUFACTURERS. IN THE EVENT THE CONTRACTOR PROVIDES EQUIPMENT BASED ON NON PRE-APPROVED MANUFACTURERS, ANY ADDITIONAL WORK REQUIRED, BASED ON DIFFERENCES IN EQUIPMENT, (ELECTRICAL, STRUCTURAL, PIPING / DUCT SIZING, ETC...), SHALL BE PROVIDED AT THE CONTRACTOR'S OWN EXPENSE.
6. WHERE APPLICABLE, CONTRACTOR SHALL COORDINATE EQUIPMENT INSTALLATION WITH EXISTING BUILDING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, SIZE OF EXISTING BUILDING OPENINGS, DOORS, CORRIDORS, ELEVATORS, ETC... CONTRACTOR SHALL REVIEW ACCESSIBLE PATH OF TRAVEL AND PROVIDE NEW OPENINGS OR DISASSEMBLY OF EQUIPMENT AT CONTRACTOR'S OWN EXPENSE. CONTRACTOR SHALL RESTORE RESPECTIVE BUILDING AREAS TO PREVIOUS CONDITIONS PRIOR TO CLOSE OUT.
7. PROVIDE A MINIMUM OF 10'-0" CLEARANCE BETWEEN ALL FRESH AIR INTAKES AND ALL SOURCES OF CONTAMINATION SUCH AS FLUES, PLUMBING VENTS, EXHAUSTS, ETC.
8. COORDINATE ROOF PENETRATIONS WITH THE ROOFING CONTRACTOR (IF REQUIRED). WORK WITH THE LANDLORD ROOFING CONTRACTOR IF THE EXISTING ROOF IS UNDER WARRANTY.
9. ALL DUCTWORK BRANCHES SHALL BE PROVIDED WITH LOCKABLE BALANCING DAMPERS THAT ARE ACCESSIBLE.
10. ALL VOLUME DAMPERS SHALL BE EQUIPPED WITH A REMOTE OPERATOR CABLE WHEN INSTALLED IN THE GYP CEILINGS.
11. ALL REGISTERS SHALL BE PROVIDED WITH INTEGRAL OPPOSED BLADE DAMPERS WHICH ARE FULLY ADJUSTABLE AND ACCESSIBLE FROM THE DIFFUSER FACE.
12. ALL ROUND FLEXIBLE DUCTWORK SHALL BE MAXIMUM OF 5'-0" IN LENGTH.

KEYED NOTES:

1. MECHANICAL CONTRACTOR TO REMOVE EXISTING (ABANDONED) BOILER AND ASSOCIATED FLUE, GAS PIPING, ETC. PATCH WALL OPENINGS AS REQUIRED.

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BASEMENT MECHANICAL DEMOLITION PLAN

BUILDING RENOVATION

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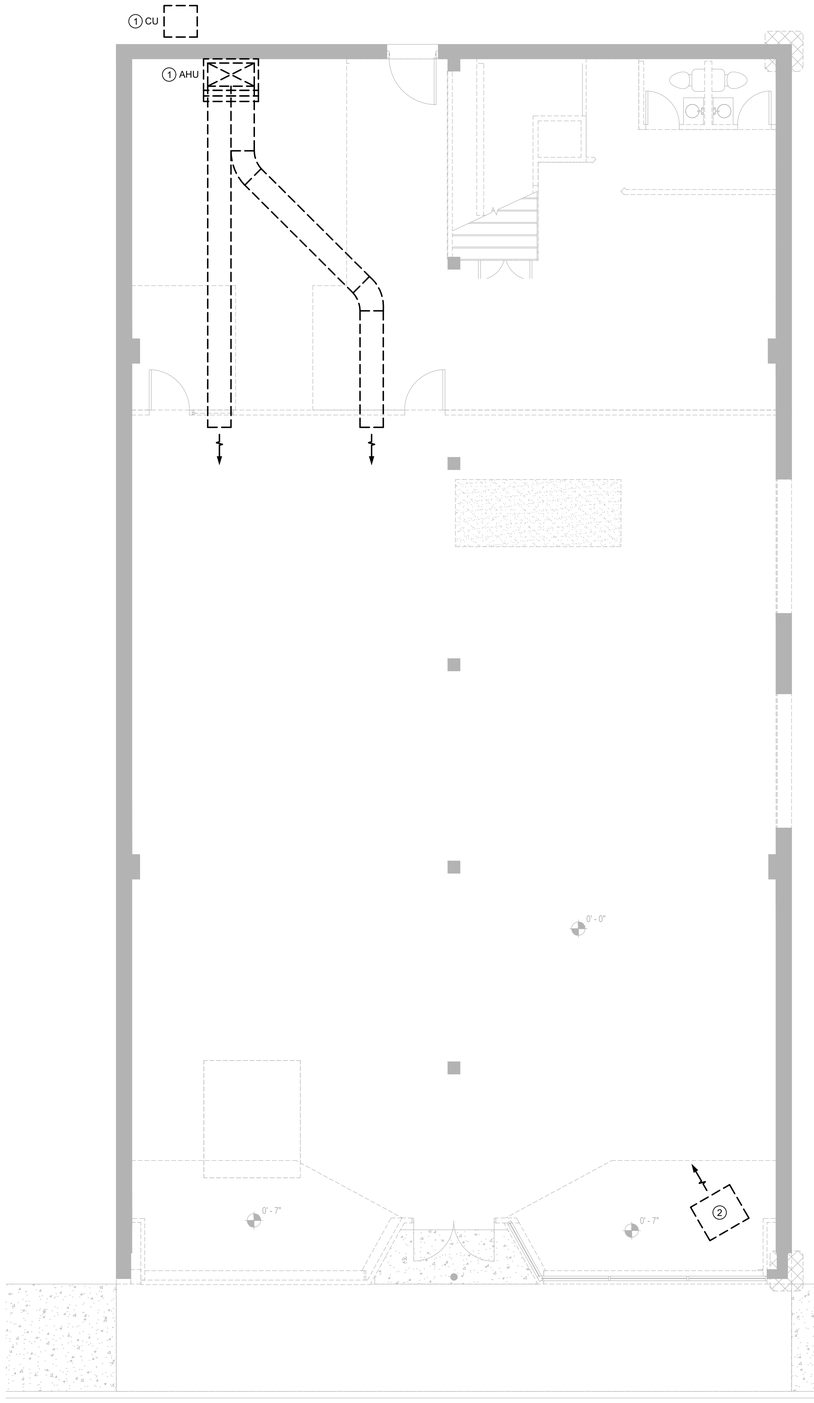
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ECE PROJECT #	25-923
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CHECKED	ECE

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03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

MD100

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N 1 FIRST FLOOR MECHANICAL DEMOLITION PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

MECHANICAL PLAN GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND TO INDICATE DESIGN INTENT. EXACT ROUTING OF ALL DUCTWORK, PIPING, CONTROLS, ETC... SHALL BE VERIFIED IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CLEARANCES, OBSTRUCTIONS, ETC... PRIOR TO INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL REVISE ANY DUCT / PIPE ROUTING AND SIZING AS REQUIRED TO ACCOMMODATE SITE CONDITIONS WITH NO ADDITIONAL COST TO OWNER; AND NO DELAY TO PROJECT SCHEDULE.
2. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO ALL WORK. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR PROJECT TEAM REVIEW PRIOR TO PURCHASE AND INSTALLATION. EQUIPMENT SHALL BE INSTALLED AS REQUIRED TO MAINTAIN MANUFACTURER RECOMMENDED SERVICE CLEARANCES AND TO MAXIMIZE HEADROOM. CONTRACTOR SHALL NOTIFY THE APPROPRIATE PARTIES, IN WRITING, OF AREAS WITH INADEQUATE HEADROOM.
3. CONTRACTOR SHALL REVIEW ARCHITECTURAL, CIVIL, STRUCTURAL, ETC... DRAWINGS TO BECOME FAMILIAR WITH THE GENERAL SCOPE AND PROJECT TIMELINE PRIOR TO BID.
4. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION OF ALL AUXILIARY STRUCTURAL STEEL, CORES, ROOF PENETRATIONS, ETC... ALL EQUIPMENT ABOVE SUSPENDED CEILINGS SHALL BE SUPPORTED FROM BUILDING STRUCTURAL MEMBERS.
5. SPECIFIED EQUIPMENT SHALL BE THE BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR APPROVED ALTERNATE MANUFACTURERS. IN THE EVENT THE CONTRACTOR PROVIDES EQUIPMENT BASED ON NON PRE-APPROVED MANUFACTURERS, ANY ADDITIONAL WORK REQUIRED, BASED ON DIFFERENCES IN EQUIPMENT, (ELECTRICAL, STRUCTURAL, PIPING / DUCT SIZING, ETC...), SHALL BE PROVIDED AT THE CONTRACTOR'S OWN EXPENSE.
6. WHERE APPLICABLE, CONTRACTOR SHALL COORDINATE EQUIPMENT INSTALLATION WITH EXISTING BUILDING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, SIZE OF EXISTING BUILDING OPENINGS, DOORS, CORRIDORS, ELEVATORS, ETC... CONTRACTOR SHALL REVIEW ACCESSIBLE PATH OF TRAVEL AND PROVIDE NEW OPENINGS OR DISASSEMBLY OF EQUIPMENT AT CONTRACTOR'S OWN EXPENSE. CONTRACTOR SHALL RESTORE RESPECTIVE BUILDING AREAS TO PREVIOUS CONDITIONS PRIOR TO CLOSE OUT.
7. PROVIDE A MINIMUM OF 10'-0" CLEARANCE BETWEEN ALL FRESH AIR INTAKES AND ALL SOURCES OF CONTAMINATION SUCH AS FLUES, PLUMBING VENTS, EXHAUSTS, ETC.
8. COORDINATE ROOF PENETRATIONS WITH THE ROOFING CONTRACTOR (IF REQUIRED). WORK WITH THE LANDLORD ROOFING CONTRACTOR IF THE EXISTING ROOF IS UNDER WARRANTY.
9. ALL DUCTWORK BRANCHES SHALL BE PROVIDED WITH LOCKABLE BALANCING DAMPERS THAT ARE ACCESSIBLE.
10. ALL VOLUME DAMPERS SHALL BE EQUIPPED WITH A REMOTE OPERATOR CABLE WHEN INSTALLED IN THE GYP CEILINGS.
11. ALL REGISTERS SHALL BE PROVIDED WITH INTEGRAL OPPOSED BLADE DAMPERS WHICH ARE FULLY ADJUSTABLE AND ACCESSIBLE FROM THE DIFFUSER FACE.
12. ALL ROUND FLEXIBLE DUCTWORK SHALL BE MAXIMUM OF 5'-0" IN LENGTH.

KEYED NOTES:

1. MECHANICAL CONTRACTOR TO REMOVE EXISTING HVAC EQUIPMENT INCLUDING AHU, CONDENSING UNIT, DUCTWORK, GAS PIPING, CONTROLS, ETC.
2. MECHANICAL CONTRACTOR TO REMOVE EXISTING GAS FIRED UNIT HEATER INCLUDING GAS PIPING, CONTROLS, ETC.

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FIRST FLOOR MECHANICAL DEMOLITION PLAN

BUILDING RENOVATION

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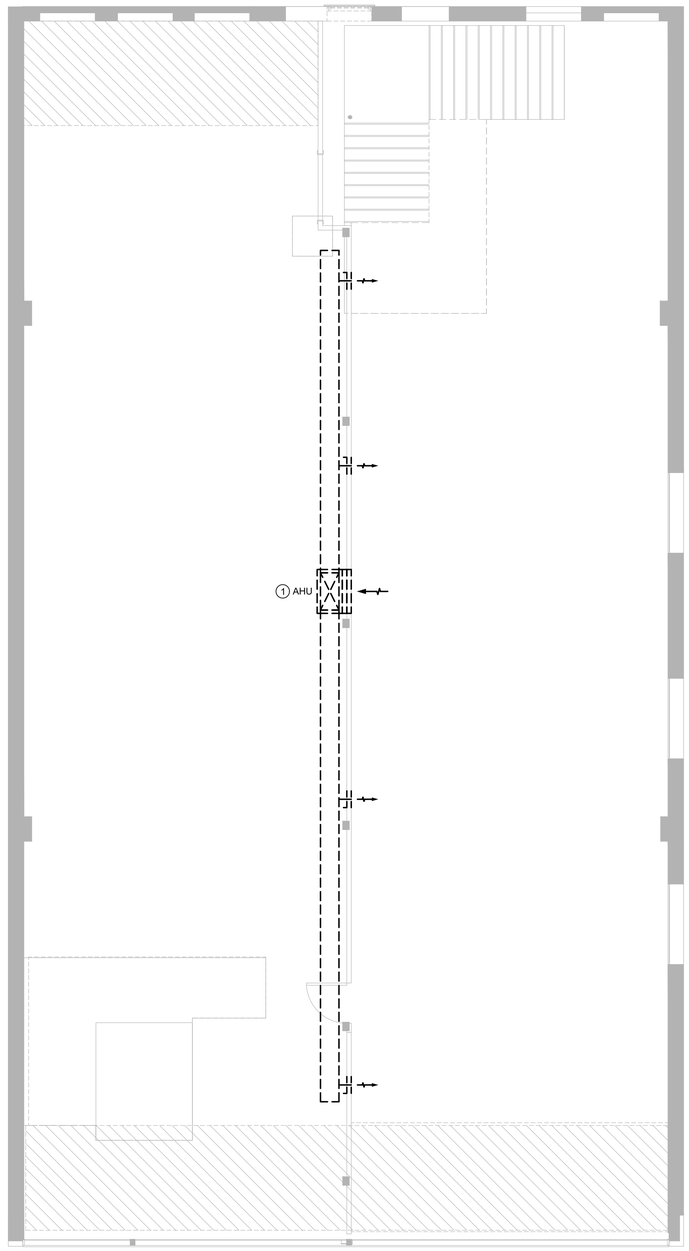
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ECE PROJECT #	25-923
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CHECKED	ECE

REVISIONS
03-24-26 BID

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JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

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N 1 SECOND FLOOR MECHANICAL DEMOLITION PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

MECHANICAL PLAN GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND TO INDICATE DESIGN INTENT. EXACT ROUTING OF ALL DUCTWORK, PIPING, CONTROLS, ETC... SHALL BE VERIFIED IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CLEARANCES, OBSTRUCTIONS, ETC... PRIOR TO INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL REVISE ANY DUCT / PIPE ROUTING AND SIZING AS REQUIRED TO ACCOMMODATE SITE CONDITIONS WITH NO ADDITIONAL COST TO OWNER; AND NO DELAY TO PROJECT SCHEDULE.
2. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO ALL WORK. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR PROJECT TEAM REVIEW PRIOR TO PURCHASE AND INSTALLATION. EQUIPMENT SHALL BE INSTALLED AS REQUIRED TO MAINTAIN MANUFACTURER RECOMMENDED SERVICE CLEARANCES AND TO MAXIMIZE HEADROOM. CONTRACTOR SHALL NOTIFY THE APPROPRIATE PARTIES, IN WRITING, OF AREAS WITH INADEQUATE HEADROOM.
3. CONTRACTOR SHALL REVIEW ARCHITECTURAL, CIVIL, STRUCTURAL, ETC... DRAWINGS TO BECOME FAMILIAR WITH THE GENERAL SCOPE AND PROJECT TIMELINE PRIOR TO BID.
4. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION OF ALL AUXILIARY STRUCTURAL STEEL, CORES, ROOF PENETRATIONS, ETC... ALL EQUIPMENT ABOVE SUSPENDED CEILINGS SHALL BE SUPPORTED FROM BUILDING STRUCTURAL MEMBERS.
5. SPECIFIED EQUIPMENT SHALL BE THE BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR APPROVED ALTERNATE MANUFACTURERS. IN THE EVENT THE CONTRACTOR PROVIDES EQUIPMENT BASED ON NON PRE-APPROVED MANUFACTURERS, ANY ADDITIONAL WORK REQUIRED, BASED ON DIFFERENCES IN EQUIPMENT, (ELECTRICAL, STRUCTURAL, PIPING / DUCT SIZING, ETC...), SHALL BE PROVIDED AT THE CONTRACTOR'S OWN EXPENSE.
6. WHERE APPLICABLE, CONTRACTOR SHALL COORDINATE EQUIPMENT INSTALLATION WITH EXISTING BUILDING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, SIZE OF EXISTING BUILDING OPENINGS, DOORS, CORRIDORS, ELEVATORS, ETC... CONTRACTOR SHALL REVIEW ACCESSIBLE PATH OF TRAVEL AND PROVIDE NEW OPENINGS OR DISASSEMBLY OF EQUIPMENT AT CONTRACTOR'S OWN EXPENSE. CONTRACTOR SHALL RESTORE RESPECTIVE BUILDING AREAS TO PREVIOUS CONDITIONS PRIOR TO CLOSE OUT.
7. PROVIDE A MINIMUM OF 10'-0" CLEARANCE BETWEEN ALL FRESH AIR INTAKES AND ALL SOURCES OF CONTAMINATION SUCH AS FLUES, PLUMBING VENTS, EXHAUSTS, ETC.
8. COORDINATE ROOF PENETRATIONS WITH THE ROOFING CONTRACTOR (IF REQUIRED). WORK WITH THE LANDLORD ROOFING CONTRACTOR IF THE EXISTING ROOF IS UNDER WARRANTY.
9. ALL DUCTWORK BRANCHES SHALL BE PROVIDED WITH LOCKABLE BALANCING DAMPERS THAT ARE ACCESSIBLE.
10. ALL VOLUME DAMPERS SHALL BE EQUIPPED WITH A REMOTE OPERATOR CABLE WHEN INSTALLED IN THE GYP CEILINGS.
11. ALL REGISTERS SHALL BE PROVIDED WITH INTEGRAL OPPOSED BLADE DAMPERS WHICH ARE FULLY ADJUSTABLE AND ACCESSIBLE FROM THE DIFFUSER FACE.
12. ALL ROUND FLEXIBLE DUCTWORK SHALL BE MAXIMUM OF 5'-0" IN LENGTH.

KEYED NOTES:

1. MECHANICAL CONTRACTOR TO REMOVE EXISTING HVAC EQUIPMENT INCLUDING AHU, CONDENSING UNIT, DUCTWORK, GAS PIPING, CONTROLS, ETC.

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630 897 4651

ECE CONSULTING ENGINEERS PLLC
213 Grant St
Downers Grove, IL 60515
702 525 2864

SECOND FLOOR MECHANICAL DEMOLITION PLAN

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
ECE PROJECT #	25-923
DRAWN	ECE
CHECKED	ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

MD102

2026 studioK Architecture, LLC.

MECHANICAL GENERAL NOTES:

1. THIS CONTRACTOR SHALL REVIEW ENTIRE SET OF CONTRACT DOCUMENTS: INCLUDING BUT NOT NECESSARILY LIMITED TO ALL ARCHITECTURAL, ALL STRUCTURAL, ALL MECHANICAL, ALL ELECTRICAL DRAWINGS AND ENTIRE PROJECT MANUAL. THIS CONTRACTOR SHALL ACKNOWLEDGE AND INCLUDE IN THE SCOPE OF WORK (CONTRACT) ALL CONDITIONS PERTINENT TO THE COMPLETION OF HIS WORK. THIS CONTRACTOR SHALL FULLY COORDINATE HIS WORK WITH THE INSTALLATION OF WORK BY OTHER TRADES AND MAKE NECESSARY FIELD ADJUSTMENTS AS REQUIRED TO ACCOMMODATE THE INSTALLATION. ALL OF THE ABOVE SHALL BE INCLUDED IN THE SCOPE OF WORK AT NO ADDITIONAL.

2. THIS CONTRACTOR SHALL CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK AND FULLY INFORM THEMSELVES AS TO ALL CONDITIONS AND MATTERS THAT CAN, IN ANY WAY, AFFECT THE WORK OR THE COST THEREOF. SHOULD THIS CONTRACTOR FIND DISCREPANCIES IN, OR OMISSIONS FROM THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, OR BE IN DOUBT AS TO THEIR MEANING, NOTIFY THE ENGINEER OF RECORD/CO AT ONCE, IN WRITING, OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND WORK, OR BETWEEN THEIR WORK AND THE WORK OF THEIR TRADES AND OBTAIN CLARIFICATION PRIOR TO SUBMITTING ANY BID. LACK OF SUCH NOTIFICATION SHALL BE CONSTRUED AS TO INDICATE NO DISCREPANCIES OR CONFLICTING CONDITIONS EXIST. ADDITIONAL COMPENSATION WILL NOT BE GRANTED AFTER AWARD OF CONTRACT FOR ANY WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS.

3. DRAWINGS ARE GENERALLY DIAGRAMMATIC. ROUTING OF PIPING, CONDUITS, RACEWAYS, ETC., AS SHOWN ON DRAWINGS, DOES NOT INTEND TO SHOW EVERY RISE, DROP, OFFSET, FITTING NOR EVERY STRUCTURAL ELEMENT THAT MAY BE ENCOUNTERED DURING THE INSTALLATION OF THIS WORK. EACH CONTRACTOR SHALL MAKE ANY REQUIRED CHANGES FROM THE GENERAL ROUTING SHOWN ON THESE DRAWINGS, SUCH AS OFFSETS, BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF OTHER TRADES AND BUILDING CONSTRUCTION. SUBMIT PROPOSED CHANGES TO THE ENGINEER FOR REVIEW. ALL CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR DELAY IN COMPLETION DATE OF THE PROJECT.

4. IT IS THE INTENT OF THESE DOCUMENTS THAT THE MECHANICAL CONTRACTOR PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS FOR THE COMPLETE INSTALLATION OF ALL WORK SHOWN ON THE PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL DEVICES, CONTROLS AND APPURTENANCES AND TESTING THAT IS REQUIRED TO SET SYSTEMS INTO OPERATION.

5. SHOULD CONDITIONS NECESSITATE ANY REARRANGEMENTS, OR IF PIPING CAN BE RUN TO BETTER ADVANTAGE, PREPARE AND SUBMIT SHOP DRAWINGS SHOWING THE CHANGES BEFORE PROCEEDING WITH THE WORK. IF SUCH CHANGES ARE APPROVED BY THE ENGINEER, THEY SHALL BECOME A PART OF THE CONTRACT AFTER THEIR APPROVAL.

6. THIS CONTRACTOR SHALL VERIFY ALL MOUNTING, ALL ARRANGEMENTS, HEIGHTS AND LOCATIONS PRIOR TO ROUGH-IN. ANY MENTION OF A SPECIFIC MOUNTING ARRANGEMENT, WEIGHT OR LOCATION SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO VERIFY THE SPECIFIC REQUIREMENT FURNISHED OR THE OTHER TRADES WORKING IN THE SAME AREA. NO ADDITIONS TO THE CONTRACT SUM WILL BE PERMITTED FOR ITEMS INSTALLED IMPROPERLY, IN WRONG LOCATIONS, IN CONFLICT WITH OTHER WORK, ETC.

7. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL CURRENT FEDERAL BUILDING CODES, REGULATIONS, AND REQUIREMENTS, LOCAL UTILITY COMPANY REQUIREMENTS, AND ASHRAE STANDARDS.

8. THIS CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTIONS, AND TAXES APPLICABLE TO THEIR DIVISION AND SHALL BE INCLUDED IN THE BASE BID AS PART OF THEIR CONTRACT.

9. THIS CONTRACTOR SHALL BE LICENSED, BONDED, INSURED AND CAPABLE OF PERFORMING QUALITY WORKMANSHIP. THIS CONTRACTOR GUARANTEES ALL OF HIS WORK AND MATERIALS FOR THE PERIOD AS REQUIRED IN THE SPECIFICATIONS.

10. THIS CONTRACTOR SHALL ESTABLISH SAFE WORKING PROCEDURES FOR THE PROTECTION OF THE WORKMEN IN ALL PHASES OF WORK, COMPLYING WITH ALL APPLICABLE PROVISIONS OF CITY, STATE, AND FEDERAL SAFETY LAWS (OSHA) AND AS RECOMMENDED IN THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" AS ISSUED BY THE ASSOCIATION OF GENERAL CONTRACTORS OF AMERICA, IN., 20TH AND E. STREETS, N.W. WASHINGTON, D.C.

11. CONTRACTOR SHALL CHECK DRAWINGS OF OTHER TRADES TO VERIFY THAT SPACES IN WHICH THEIR WORK WILL BE INSTALLED ARE CLEAR OF OBSTRUCTIONS. WORK SHALL BE INSTALLED TO MAINTAIN MAXIMUM HEADROOM AND SPACE CONDITIONS AT ALL POINTS IN THE BUILDING. WHERE HEADROOM OR SPACE CONDITIONS APPEAR INADEQUATE, CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE INSTALLATION OF THEIR WORK.

12. THE SEQUENCE FOR THE INSTALLATION OF ALL WORK SHALL BE COORDINATED BETWEEN ALL CONTRACTORS ON THE PROJECT.

13. CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL CORING, CUTTING, PATCHING, REPAIRING, REFINISHING AND REMOVAL/REPLACEMENT OF NEW OR EXISTING BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. CONTRACTOR SHALL XRAY ALL SLABS PRIOR TO CORING. ALL PATCHING, REPAIRING AND REFINISHING WORK SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION AS CLOSELY AS POSSIBLE. CARE SHALL BE TAKEN SO AS NOT TO DAMAGE ANY EXISTING BUILDING CONSTRUCTION OR ITEMS THAT ARE TO REMAIN. ANY EXISTING FINISHES THAT ARE DAMAGED DURING THE INSTALLATION OF NEW WORK OR REMOVAL OF EXISTING WORK SHALL BE REPAIRED, REPLACED AND PAID FOR BY THE INSTALLING CONTRACTOR, TO THE SATISFACTION OF THE ARCHITECT/ENGINEER. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING CONSTRUCTION THAT IS TO REMAIN AND, THEREFORE, SUBJECT TO PATCHING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT. WHERE THERE IS EVIDENCE THAT WORK OF ONE TRADE WILL INTERFERE WITH WORK OF OTHER TRADES, ALL TRADES SHALL MEET ON JOB SITE TO WORK OUT SPACE CONDITIONS AND MAKE SATISFACTORY ADJUSTMENTS TO INSTALLATION OF THE NEW WORK. CONTRACTORS SHALL VERIFY EXACT LOCATIONS OF ALL DEVICES AND EQUIPMENT WITH FIELD CONDITIONS, SHOP DRAWINGS, AND WORK OF OTHER TRADES PRIOR TO ROUGH-IN. EACH CONTRACTOR SHALL BE RESPONSIBLE, AT THEIR OWN EXPENSE, FOR THE REMOVAL AND REINSTALLATION OF ANY PART OF THEIR WORK IF SAME WAS INSTALLED WITHOUT CONSULTING WITH OTHER TRADES BEFORE INSTALLING THEIR WORK.

14. CONTRACTOR SHALL STORE ALL MATERIALS AND EQUIPMENT SHIPPED TO THE SITE IN A PROTECTED AREA. IF MATERIAL IS STORED OUTSIDE OF THE BUILDING, IT MUST BE STORED OFF THE GROUND A MINIMUM OF SIX INCHES (6") SET ON 6 X 6 PLANKS AND/OR WOOD PALLETS. ALL MATERIAL AND EQUIPMENT MUST BE COMPLETELY COVERED WITH WATERPROOF TARPS OR VISQUIN. ALL PIPING AND DUCTWORK WILL HAVE THE ENDS CLOSED TO KEEP OUT DIRT AND OTHER DEBRIS. NO EQUIPMENT WILL BE ALLOWED TO BE STORED OUTSIDE THE BUILDING ON THE SITE UNLESS IT IS SUPPORTED OFF THE GROUND AND COMPLETELY PROTECTED WITH WEATHERPROOF COVERS.

15. THIS CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED IN THE SPECIFICATIONS PRIOR TO THE START OF INSTALLATION FOR APPROVAL AND THE SUCCESSFUL REVIEW BY THE ARCHITECT/ENGINEER.

16. THIS CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE ENGINEER BEFORE FINAL PAYMENT WILL BE ISSUED. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED IN ELECTRONIC REPRODUCIBLE FORM TO THE ARCHITECT / ENGINEER OR RECORD FOR REVIEW AND COMPILATION.

17. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE STARTUP AND TESTING OF ALL EQUIPMENT, UTILITIES AND SYSTEMS.

18. THIS CONTRACTOR SHALL PROVIDE A COMPETENT OPERATING TECHNICIAN TO INSTRUCT THE OWNER IN THE OPERATION AND MAINTENANCE OF THE EQUIPMENT.

19. UPON COMPLETION OF THE WORK, THIS CONTRACTOR SHALL REVIEW AND CHECK THE ENTIRE PORTION OF WORK, CLEAN EQUIPMENT AND DEVICES. REMOVE SURPLUS MATERIALS AND RUBBISH FROM THE PROPERTY AND LEAVE THE WORK IN NEAT AND CLEAN ORDER AND IN COMPLETE WORKING CONDITION. EACH RESPECTIVE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY CARTONS, DEBRIS, EQUIPMENT, ETC., INSTALLED BY THIS CONTRACTOR INCLUDING EQUIPMENT FURNISHED BY OTHERS AND UNPACKED OR REMOVED FROM CARTONS BY THIS CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ON-SITE DEBRIS COLLECTIONS / STORAGE AND OFFSITE DISPOSAL. DUMPSTER LOCATIONS SHALL BE COORDINATED WITH THE OWNER.

20. ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS AND STRAINERS, TRANSMITTERS, CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS TO THE ARCHITECT / ENGINEER OF RECORD FOR RESOLUTION. FAILURE OF THE CONTRACTOR TO RESOLVE, OR POINT OUT ANY ISSUES WILL RESULT IN THE CONTRACTOR CORRECTING AT NO ADDITIONAL COST TO THE OWNER.

21. UNLESS INDICATED OTHERWISE, THE ARCHITECT/ENGINEER MAKES NO REPRESENTATION AS TO WHETHER OR NOT ANY HAZARDOUS OR CONTAMINATED MATERIALS (INCLUDING BUT NOT LIMITED TO ASBESTOS, PCB'S, LEAD, CONTAMINATED SOILS, ETC.) ARE PRESENT WITHIN THE EXISTING BUILDING OR ON THE SITE. WORK SHOWN ON THE DRAWINGS AND/OR INDICATED IN THE SPECIFICATIONS SHALL NOT BE CONSTRUED TO CALL FOR CONTACT WITH ANY OF THESE MATERIALS. IF THESE MATERIALS ARE ENCOUNTERED OR SUSPECTED, THE CONTRACTOR SHALL NOT DISTURB THEM AND SHALL CONTACT THE ARCHITECT/ENGINEER IMMEDIATELY.

22. IN CASE OF CONFLICTS OR DISCREPANCIES WITHIN OR AMONG THE CONTRACT DRAWINGS, THE BETTER QUALITY, MORE STRINGENT REQUIREMENTS, OR GREATER QUANTITY OF WORK, AS DETERMINED BY THE GOVERNMENT/CONTRACTING OFFICER, SHALL BE PROVIDED.

MECHANICAL EQUIPMENT NOTES:

1. ALL EQUIPMENT/DEVICES SHALL BE AND OF FIRST RATE QUALITY (UNLESS OTHERWISE SPECIFIED) AND IS TO BEAR THE APPROPRIATE AGA, CSA OR UL APPROVED LABELS, LISTINGS, AND CERTIFICATIONS FOR THE SPECIFIC DESIGN PURPOSE.

2. ALL EQUIPMENT SOUND LEVELS SHALL NOT EXCEED 50 DB AT PROPERTY LINE.

3. ALL INTERCONNECTING WIRING AT UNIT SHALL BE FACTORY PRE-WIRED AND REQUIRE ONLY ONE (1) POWER CONNECTION TO THE UNIT BY THE ELECTRICAL CONTRACTOR. DISCONNECT SWITCH SHALL BE BY THE ELECTRICAL CONTRACTOR.

4. SUBMIT THE REQUIRED NUMBER OF COPIES OF EACH CATALOG CUT, FOR THE EQUIPMENT SPECIFIED, TO THE ENGINEER OF RECORD FOR APPROVAL AND FOR HIS/HER SUCCESSFUL REVIEW PRIOR TO THE BEGINNING OF CONSTRUCTION. THIS CONTRACTOR SHALL ALSO ASSEMBLE PRINTED INSTRUCTIONS FOR THE OPERATION AND MAINTENANCE OF EACH ITEM INSTALLED AND BIND TOGETHER WITH EQUIPMENT CUTS AND CONTROL WIRING DIAGRAMS.

5. THE DRAWINGS, SCHEDULES AND SPECIFICATIONS HAVE BEEN PREPARED USING ONE MANUFACTURER FOR EACH PIECE OF EQUIPMENT AS THE BASIS OF DESIGN INCLUDING ALL DIMENSIONAL DESIGN. IF THE CONTRACTOR PURCHASES EQUIPMENT FROM A SPECIFIED ACCEPTABLE MANUFACTURER, BUT NOT THE SCHEDULED MANUFACTURER USED FOR THE BASE DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL THE DIMENSIONS OF THE EQUIPMENT TO VERIFY THAT IT WILL FIT IN THE SPACE SHOWN ON THE DRAWINGS. MINOR DEVIATIONS IN DIMENSIONS WILL BE PERMITTED, PROVIDED THE RATINGS MEET THOSE SHOWN ON THE DRAWINGS AND EQUIPMENT WILL PHYSICALLY FIT INTO THE SPACE ALLOCATED WITH SUITABLE ACCESS AROUND EQUIPMENT FOR OPERATION AND MAINTENANCE OF THE EQUIPMENT. WHEN EQUIPMENT SUBMITTED FOR REVIEW DOES NOT MEET THE PHYSICAL SIZE OR ARRANGEMENT OF THAT SCHEDULED AND SPECIFIED, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ALTERATIONS REQUIRED TO ACCOMMODATE SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR WILL ALSO PAY ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER CONTRACTORS AND THE OWNER TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT TO FIT IN THE SPACE AND TO FUNCTION AS INTENDED.

6. CONTRACTOR AND/OR MANUFACTURER SHALL VERIFY THAT THE CHARACTERISTICS OF THE EQUIPMENT HE SUBMITS FOR REVIEW MEET THE CAPACITY AND DUTY SPECIFIED. WHEN EQUIPMENT SUBMITTED FOR REVIEW REQUIRES MODIFICATIONS TO THE WORK OF OTHER CONTRACTORS, SUBMITTING CONTRACTOR SHALL PAY FOR ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER CONTRACTORS, ARCHITECT OR ENGINEER TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT FUNCTION SAFELY AND PROPERLY.

7. CONTRACTOR MUST FIELD VERIFY SIZES, CAPACITIES, WEIGHTS, HORSE POWERS, ETC. ON ALL EQUIPMENT. NOTIFY THE ENGINEER OF RECORD IF ANY DISCREPANCIES EXIST BETWEEN THE ACTUAL FIELD CONDITIONS AND THE DRAWINGS.

AD	ACCESS DOOR
A.F.F.	ABOVE FINISHED FLOOR
BAS	BUILDING AUTOMATION SYSTEM
BHP	BRAKE HORSEPOWER
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FEET PER MINUTE
D	DRAIN LINE
DB	DRY BULB
DN.	DOWN
(E)	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
F	FAHRENHEIT
FPF	FINS PER FOOT
FPM	FEET PER MINUTE
FV	FACE VELOCITY
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HWC	HOT WATER COIL
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MCA	MINIMUM CIRCUIT AMPS
MOCP	MAXIMUM OVERCURRENT PROTECTION
NK	NECK
NTS	NOT TO SCALE
PD	PRESSURE DROP
PH	PHASE
PSI	POUNDS PER SQUARE INCH
RA	RETURN AIR
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SF	SUPPLY FAN
SP	STATIC PRESSURE
TC	TEMPERATURE CONTROL
TSP	TOTAL STATIC PRESSURE
TYP.	TYPICAL
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
WB	WET BULB
W.C.	WATER COLUMN
WG	WATER GAUGE

SYMBOLS:

- KEYNOTE
- EQUIPMENT TAG
- NEW WORK
- EXISTING TO REMAIN
- TO BE REMOVED / DEMOLISHED
- DUCTWORK - FLEXIBLE
- DUCT CAP
- CONICAL "T" CONNECTION W/ VD
- AIRFLOW SYMBOL
- CONNECTION - NEW TO EXISTING
- DIFFUSER WITH BLANKOFF PANEL
- DIFFUSER - RETURN
- DIFFUSER - SUPPLY
- DIFFUSER (LINEAR) - SUPPLY
- HYDROGEN DETECTOR
- CARBON DIOXIDE DETECTOR
- CARBON MONOXIDE DETECTOR
- NITROUS OXIDE DETECTOR
- WALL THERMOSTAT OR TEMPERATURE SENSOR
- WALL THERMOSTAT OR TEMPERATURE SENSOR WITH GUARD
- WALL HUMIDISTAT
- ROUND
- SIDEWALL GRILLE OR REGISTER
- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- BALL VALVE
- CHECK VALVE
- CONDENSATE DRAIN
- CIRCUIT BALANCING
- DIRECTION OF FLOW
- DRAIN LINE
- GAS
- GAS VENT
- GATE VALVE
- GAS VENT
- GAS
- PIPE ELBOW (TURN DOWN)
- PIPE ELBOW (TURN UP)
- PIPE FLEXIBLE CONNECTION
- PIPE PITCH (DOWN)
- PIPE REDUCER (CONCENTRIC)
- PIPE TEE DOWN DROP (DOWN)
- PIPE TEE UP
- PIPE TEE UP OR ANGLE
- PIPE TEE DOWN OR ANGLE
- PIPE UNION
- PLUG VALVE (GAS COCK)
- PRESSURE GAUGE / NEEDLE VALVE
- SOLENOID VALVE
- STRAINER
- STRAINER WITH BLOWDOWN VALVE
- THERMOMETER WITH PIPE WELL

- ACCESS DOOR — OPEN "IN" ON DISCHARGE SIDE, OPEN "OUT" ON THE SUCTION SIDE
- DAMPER (VOLUME) MANUAL
- DAMPER BACKDRAFT
- DAMPER MOTORIZED
- DUCT AIRWAY SIZE IN INCHES — FIRST DIMENSION IS SIDE SHOWN
- DUCT (LINED) — FIRST DIMENSION IS AIRWAY SIZE
- DUCT CONNECTION FLEXIBLE
- DUCT ELBOW TURN DOWN RECTANGULAR
- DUCT ELBOW TURN DOWN ROUND
- DUCT ELBOW TURN UP RECTANGULAR
- DUCT ELBOW TURN UP ROUND
- DUCT ELBOW WITH TURNING VANES RECTANGULAR
- DUCT OFFSET DOWN WITH RESPECT TO AIRFLOW
- DUCT OFFSET UP WITH RESPECT TO AIRFLOW
- DUCT SIZE TRANSITION
- DUCT SMOKE DETECTOR
- FIRE DAMPER WITH ACCESS DOOR
- FIRE / SMOKE DAMPER WITH ACCESS DOOR
- SUPPLY AIR DUCT CROSS-SECTION
- RETURN AIR DUCT CROSS-SECTION
- EXHAUST AIR DUCT CROSS-SECTION

DIFFUSER TAG

S-SUPPLY
R-RETURN
E-EXHAUST
DIFFUSER/GRILLE IDENTIFICATION
DIFFUSER/GRILLE SIZE
DIFFUSER/GRILLE AIRFLOW RATE
CFM

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702 525 2864

MECHANICAL SPECIFICATIONS

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
ECE PROJECT #	25-923
DRAWN	ECE
CHECKED	ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

M100

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Mechanical Specifications and General Notes

1. General:

1.1. The general requirements of the architectural specifications are a part of these specifications. Where an inconsistency exists between the wording or intent this division shall take precedence.

1.2. The standard form of general conditions issued by the American Institute of Architects document A201, latest edition, shall form part of this contract.

1.3. All contractors shall apply, procure, and pay fees for all permits and inspections or other obligations that the city, county, state, or utilities may require in order for the contractors to do their work according to plans and specifications.

1.4. The contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of work as drawn and specified. If the contractor observes that the drawings and specifications are at variance therewith, he shall promptly notify the engineer in writing when submitting his bid and any necessary changes shall be adjusted as provided in the contract for such changes in work. If the contractor performs any work contrary to such laws, ordinances, rules and regulations, he shall bear all costs for correcting this work.

1.5. Specifications and drawings are intended to be cooperative. What is called for by either shall be as binding as if called for by both. Any work or materials not specifically mentioned though required to make the job complete shall be furnished by the contractor at his expense.

1.6. Deviations from contract documents and substitution of materials or equipment for those specified shall be requested individually in writing. Submit letter before transmittal of product data to the project team for their review and approval. Describe reason for change, connections to adjacent materials, electrical services, service access requirements, differences in operating characteristics or cycles and all other points of deviation. Contractor to assume full responsibility for safety, operation and performance of altered system.

2. Scope of Work:

2.1. Contractor shall verify existing conditions at the job site prior to submission of bid. Failure to recognize work required due to existing conditions shall be at the expense of this contractor. Any discrepancies shall be brought to the engineer's attention prior to bid.

2.2. All new work shall follow chicago energy conservation code including pipe insulation per table 18-13-803.3.7.

2.3. Provide all labor, materials, equipment, facilities, transportation, hoisting and rigging, breakdown and setup of equipment installation, scaffolding, and services necessary to furnish, install and complete the heating, ventilating and air conditioning work as indicated on the drawings and specified here in. The workmanship shall be complete in every respect, be tested and approved, and be satisfactory to the architect/engineer, and in accordance with the local county and state laws governing this installation, including the Fire Marshall.

2.4. Drawings are diagrammatic and indicate general arrangement of systems and work included in contract. It is not intended to specify or to show every offset, fitting, or component. However, contract documents require components and materials whether or not indicated or specified as necessary to make the installation complete and operational. Final locations of diffusers, grilles, registers, thermostats, sensors, switches and any wall mounted devices shall be as per the architect. All work shall be coordinated with other trades to avoid conflict.

2.5. Plan installation of new work and connections to existing work to insure minimum interference with regular operation of existing facilities. All system shutdowns affecting other areas shall be coordinated with building management.

2.6. All necessary cutting and patching in floor slabs, roof slabs, walls, and ceilings for the hvac work shall be performed by this contractor. Restore to match existing conditions.

2.7. Where pipe and/or ductwork penetrate rated walls, the space between the insulation and the wall shall be caulked with non-combustible material in an approved manner. All piping and/or ductwork to be installed above hung ceiling unless otherwise noted on drawings. The contractor shall coordinate with architectural drawings for all ceiling elevations.

2.8. The contractor shall prepare a list of all access doors (minimum 18"x18") required for operation and maintenance of all concealed equipment and other devices, which shall be supplied to the general contractor for installation. The cost to furnish and install access doors shall be included in this contractors bid. This contractor in advance of ceiling installations shall suitably field tag and identify all concealed equipment, valves, dampers, etc., which require access door provisions.

2.9. New ductwork shall arrive on the construction site sealed and remain protected from debris throughout construction prior to final installation. Air distribution accessories and internal components of all hvac equipment shall be sealed and protected from debris while on the construction site prior to final connection and start-up.

2.10. All equipment to be removed shall be turned over to the owner or shall be disposal at no additional cost, at the direction of the owner.

2.11. Provide concrete housekeeping pads to suit floor mounted mechanical equipment. Size pads and coordinate with other trades for exact location.

2.12. Coordinate all door under cuts indicated and required for proper air movement.

2.13. The contractor furnishing motor driven equipment shall provide starter to match equipment. Starter shall be fused disconnect with magnetic contactors. Provide two auxiliary contactors beyond those required for specified operation sequence. Electrical contractor shall provide toggle switch with thermal overload for all fractional horsepower single phase motors.

2.14. Provide equipment with EC motors whenever possible.

3. Submittals:

3.1. Prior to ordering equipment or commencing of any work, contractor shall provide shop drawings for approval.

3.2. This contractor shall submit to the engineer for approval dimensioned shop drawings of all materials, fixtures, and equipment to be furnished and installed under this contract. Provide cut sheets, selections, and any catalog data with HIGHLIGHTED options and details. DO NOT SUBMIT FULL CATALOGS OR CATALOG DATA WITHOUT SPECIFICALLY DESCRIBING THE ITEMS BEING SUBMITTED.

3.3. Prior to the beginning of work, contractor to prepare layout drawings of all system assemblies of this project including HVAC piping and/or ductwork installations, and control systems. Include completely dimensioned plans drawn to components of other systems and work of other trades. Floor plans shall be drawn at not less than 1/4" scale. AutoCAD files of the mechanical plans can be provided from engineer upon request in an effort to ease the preparation of shop drawings. Tracing of contract documents is not acceptable.

3.4. Required equipment / materials to be submitted shall include, but not be limited to the following:

3.4.1. Grilles / Registers / Diffusers / Louvers
3.4.2. HVAC Equipment
3.4.3. Terminal Units
3.4.4. Ductwork / Piping Materials
3.4.5. Valves and Piping Specialties
3.4.6. Insulation
3.4.7. Dampers and Duct Accessories
3.4.8. Access Panels
3.4.9. Roof Curbs
3.4.10. Vibration and Sound Control Devices

4. Record Drawings Submittal:

4.1. At project closeout, the contractor shall submit record drawings also known as "as-built" drawings of installed ductwork, piping, and equipment as it was actually installed so as to make a permanent record. Submit AutoCAD drawings at 1/4" = 1'-0" scale.

4.2. Provide one (1) printed copy of as-built drawings for the Owner's maintenance staff.

5. Other Closeout Documents:

5.1. Assemble printed instructions for the operation & maintenance of each item installed, equipment cuts, and control wiring diagrams.

5.2. All valves shall be marked with a metal tag and a typewritten schedule of the valves shall be given to the owner.

5.3. This contractor shall prepare and furnish to the owner, two (2) bound booklets each containing a complete list of all equipment installed under this contract. Each piece of equipment listed shall also be described by manufacturer's figure number, the components therein which make up the parts list.

6. Guarantee:

6.1. This contractor shall guarantee his work to be free from defective workmanship and materials for a period of one (1) year from date of final certificate. Any repairs or replacement during the period shall be made without cost to the owner, upon his or her request. All refrigeration compressors shall have a factory guarantee including parts and labor for five years total. The final acceptance will be made after the contractor has adjusted his equipment, balanced the various systems, demonstrated that it fulfills the requirements of the drawings and specification, and has furnished all the required certificates of inspection and approvals.

7. Ductwork and Specialties:

7.1. All new ductwork except commercial kitchen & dishwasher exhaust shall be of prime grade galvanized sheet metal. Ductwork shall conform to the latest editions of ASHRAE & Smacna as well as the minimum construction details and as herein specified, the most stringent shall apply. Provide duct material, gages, reinforcing, and sealing for operating pressures indicated.

7.2. Kitchen exhaust ductwork shall be 14 ga black iron with welded joints, OR welded 18 ga 303 stainless steel ductwork. Provide cleanouts within 3' of the exhaust fan, at each duct change of direction, and not more than 20' apart at horizontal duct runs. Cleanouts shall be provided on the side of horizontal ducts with a minimum size of 12"x12".

7.3. Dishwasher exhaust ductwork to be stainless steel or aluminum (as specified on drawings).

7.4. Domestic natural gas dryer ductwork shall be aluminum with smooth interior finish, male end overlapped joints shall extend in the direction of air flow. Ductwork shall not be connected with sheet metal screws or fasteners. Flexible transition ducts shall not exceed 8 feet and shall not be concealed within any walls or ceilings.

7.5. Supply, return, and exhaust ducts shall be class I for 2" w.g. positive or negative pressure and velocities less than 2500 fpm.

7.6. Size round ducts installed in place of rectangular ducts in accordance with ASHRAE table of equivalent rectangular and round ducts. No variation of duct configuration or sizes permitted except by written permission.

7.7. Construct T's, bends, and elbows with radius of not less than width of duct on centerline. Rectangular elbows shall only be allowed with the use of turning vanes.

7.8. Increase duct sizes gradually, not exceeding 15 degrees divergence wherever possible. Divergence upstream of equipment shall not exceed 30 degrees; convergence downstream shall not exceed 45 degrees.

7.9. Provide easements where ductwork conflicts with piping and structure. Where easements exceeds 10 percent duct area, split into two ducts maintaining original duct area.

7.10. Connect flexible ducts to metal ducts with draw bonds.

7.11. Use double nuts and lock washers on threaded rod supports.

7.12. All low and medium pressure air-conditioning supply ductwork shall be sealed in accordance with the governing edition of the IECC.

7.13. Duct Sealant: non-hardening, water resistant, fire resistive, compatible with mating materials; liquid used alone or with tape, or heavy mastic. United duct sealer or approved equal.

7.14. Maximum ductwork leakage for all systems will be 3% of total air quantity.

7.15. Provide volume or splitter dampers on all low pressure duct branches, as shown on plans and as required to properly balance system.

7.16. Ductwork sizes indicated on drawings are inside clear dimensions.

7.17. No "stove-pipe" ductwork permitted on project.

7.18. Contractor shall provide all necessary rises and drops in ductwork to satisfy field conditions. Field verify before duct fabrication.

7.19. Round spiral ductwork shall be United Sheet Metal type duct fitting or approved equal, installed and suspended as per manufacturer's recommendations.

7.20. All ducts are to have galvanized stiffeners in the form of seams involving at least three folds of sheet metal (pocket locks, standing seams, standing s-slips, etc.)

7.21. Ventilation construction not covered by the ASHRAE guide and/or governing authorities shall be in accordance with the maximum standards and trade practices as set forth by the sheet metal and air conditioning contractors national association (SMACNA) including their duct manuals, current edition.

7.22. Increase duct sizes when lining is used. All ductwork shall be coordinated with ceiling heights as set forth by architect. Route ductwork as close as possible to the underside of beams and joists OR between beams / joist spaces, and/or flatten ductwork as necessary to maintain ceiling heights.

7.23. Provide flexible connections between ductwork and fans/air handlers.

7.24. Paint flat black the inside of all ductwork visible through diffusers, grilles, and registers.

7.25. Open ended ductwork shall be terminated with 1/2" x 1/2" aluminum screen with removable frames.

7.26. Cooling coil drain pans to be stainless steel and piped with running trap to floor drain/open site drain.

7.27. A 5'-0" maximum length of insulated flexible duct shall be provided to each air supply outlet and return inlet as required. If ductwork is sound lined, extend rectangular sound lined ductwork to a point near the outlet or inlet so that the flexible duct (max. 5'-0" length) can be attached to the outlet or inlet.

7.28. Tapered spin-in fitting, with lock-in quadrant and volume damper, shall be provided from branches to diffusers for low pressure ductwork.

7.29. All branch duct take-offs will be equipped with tapered fittings.

7.30. Volume dampers shall be provided for air balance purposes. Provide manual volume dampers on all low pressure supply and return/exhaust ductwork branches and to air diffusers, registers, and grilles unless noted otherwise.

7.31. Volume dampers above drywall ceilings and other inaccessible ceilings: provide lever, position indicator, and lock nut enclosed in a deep die-cast box with adjustable 2-5/8" diameter cover. Young Regulator series 315 or Ventlock series 677 and/or provide ceiling access panels sized as required, 12" x 12" minimum size.

7.32. Volume dampers above accessible ceilings: Provide with locking type with level handle, position indicator and lock nut. Young Regulator series 400 or Ventlock series 600.

7.33. Provide factory-fabricated turning vanes in all square elbows. Radius elbows shall be used throughout the supply and return/exhaust duct mains and branch ducts. Square elbows with turning vanes to only be used as required by field conditions in main supply and return ductwork directly downstream of the HVAC / Rooftop Unit.

7.34. Rooftop A/C unit leveling curbs will be provided by the General contractor. Mechanical contractor will install factory provided roof curbs on top of leveling curb for rooftop A/C units. Mechanical contractor will install combination equipment curb/leveling curb so that the rooftop unit will be installed plumb and level.

7.35. Low pressure ductwork shall be considered as all ductwork not defined as medium pressure ductwork unless noted otherwise. Provide 2" s.p. duct construction for return air and 1" s.p. duct construction for supply and exhaust ductwork unless otherwise noted.

7.33. Medium pressure supply ductwork shall be considered as all ductwork upstream of VAV boxes and fan powered VAV boxes. Provide 3" s.p. duct construction unless noted otherwise. Round single wall medium pressure ductwork in sound-lined systems will not be permitted in lengths longer than five feet.

7.34. All duct systems shall be tested for pressure and leakage. Submit test data sheet to engineer.

7.35. All duct connections at the inlet and outlet of VAV boxes to be rigid duct for 3 duct diameters in length of straight run away from the VAV box.

7.36. Joint, seams, and connections in ductwork shall be securely fastened and sealed with welds, gaskets, mastic Liquid sealants or listed UL tapes.

7.37. Ducts shall be supported per SMACNA Duct Construction Standards and Flexible ducts shall be supported in accordance with the manufacturer's instructions.

7.38. Slope and drain all ducts exposed to moisture, construct of aluminum and do not internally line.

7.39. Automatic control dampers: provide dampers with parallel blades for 2-position or mixing control, or opposed blades for modulating control of constant or variable volume system. Automatic dampers are to be very low leaking type with a maximum leakage rate of 6 cfm per square foot at 4" w.g. damper material shall be the same as duct. Provide weatherproof components for dampers in a moisture environment.

8. Diffusers, Registers, and Grilles:

8.1. Supply, return, and exhaust diffusers, registers, and grilles will be provided as scheduled on drawings. All air outlets and inlets shall be compatible with the building tenant standards and the architectural ceiling and wall systems. All air outlets and inlets shall be provided with finishes as selected by architect. For exact locations of all air outlets and inlets, see architectural drawings. Manufacturer shall be Titus, Price, or Carnes.

8.2. All ceiling type air diffusers shall be provided with equalizing deflector.

8.3. A schedule of diffusers, grilles and registers with manufacturers models, sizes, accessories, finishes, etc., shall be submitted for approval prior to release for fabrication and delivery

8.4. Diffusers shown on diffuser schedule shall be changed to match existing diffuser type where existing diffusers are remaining.

8.5. All linear diffusers shall be provided with pattern control vanes. All adjustable pattern deflectors shall be field adjusted to optimize air distribution preventing draft conditions. Contractor shall plan for a second comfort field adjustment per owner/engineer discretion.

8.6. All unused portions of supply linear diffusers shall be used as return grille and should be provided with light shields.

8.7. All linear diffusers and diffusers in inaccessible ceilings shall be provided with a remote operated opposed blade damper and a 3-foot (minimum) flexible adjustment cable with 1/8-inch key operator.

9. Insulation and Lining - General:

9.1. Furnish and install insulation or lining where shown on plans or specified.

9.2. Insulation shall be applied to piping and ductwork of materials as specified herein and for applicable systems of this project. Insulation shall have a flame spread rating not exceeding 25 and a smoke developed index of 50 or less and shall meet the requirements of ASTM and NFPA.

9.3. Insulation shall be continuous through wall and slab sleeve openings except for rated walls or slabs where an approved firestop is required as per NFPA.

9.4. Insulation of cold surfaces where vapor barrier jackets are specified shall be applied with an unbroken vapor seal. Hangers and supports that are secured to cold surfaces shall be adequately insulated to prevent condensation. Use pipe hanger saddles as required to protect pipe insulation at hangers.

9.5. Where insulation is specified for piping, insulate similarly all connections, vents, drains, flanges, fittings, valves, tanks, pump casings and other parts of the system subject to heat gain or loss and to prevent condensation.

9.6. All equipment, valves, devices, etc requiring servicing or inspection shall have removable insulation which can be replaced without damage.

9.7. All leak and pressure tests shall be completed prior to the installation of any insulation.

10. Ductwork Insulation:

10.1. All new and existing sheet metal ductwork shall be insulated with flexible duct wrap insulation of required thickness and density to achieve a minimum installed R-6 insulation value at 75 degrees F mean temperature when located in an unconditioned space and a minimum installed R-12 insulation value when located outside of the building. Insulation to be finished with all service jacket vapor barrier. All insulation shall be secured with duct adhesive and seams sealed by two-inch sealing lip with adhesive and fastened with 16 gauge rust resistant wire or fiberglass cord on 12" centers. On ducts over 24" wide, welded pins and clips shall be used on the underside for fastening insulation.

10.2. Supply air, return air, mixed air, exhaust air, and outside air plenums: provide with 2" semi-rigid glass fiber, 3 LBS per cu. ft. density with all service jacket vapor barrier.

10.3. For any exposed ductwork, and if called for on drawings, provide internal duct liner insulation as described below in the "Duct Sound Lining" section.

10.4. Outdoor Ductwork: Minimum 2" polyiso rigid board insulation with field applied outdoor jacketing system (VentureClad or equal).

10.5. Kitchen Hood Exhaust Ductwork:

10.5.1. Fire resistive mineral-fiber insulation, lightweight non-asbestos, high temperature, inorganic, ceramic fiber blanket totally encapsulated in foil/scrim having a service temperature range up to 2300ºf. The insulation shall be UL classified for zero clearance with a two-hour fire-rating for a grease duct enclosure system. Two 1-1/2" layers having a total thickness of 3 inches are required to achieve a two-hour fire-rating.

10.5.2. All coverings over access panels shall be removable. Mark kitchen hood exhaust duct access panels with "access panel, do not obstruct". Metal corner beads shall be installed on all exposed ducts less than eight feet above floor.

10.6. Duct Sound Lining:

10.6.1. Acoustical lining shall meet the minimum thermal insulation value of R-6 or a maximum k factor of 0.24 at 1.5" thickness with a mean temperature of 75 degree F.

10.6.2. Install liner in accordance with manufacturers recommendations. Completely cover all portions of ductwork plenums and casings with approved adhesive. Install liner with all traverse joints neatly butted with no interruptions or gaps. Cover all exposed edges, joints, mechanical fasteners and any damaged areas with adhesive. Provide metal nosing at equipment discharges and at end edges of lining. Secure liner with approved mechanical fasteners installed in accordance with smacna duct liner application standard.

10.6.3. Do not externally insulate acoustically lined ducts.

10.6.4. Do not internally line ductwork which is a part of an outside air system which distributes unconditioned air.

10.6.5. Furnish and install acoustical lining in ductwork, plenums and casings as shown on the drawings and as specified below:

10.6.5.1. All ducts with duct velocities greater than 2,000 fpm shall have acoustical lining faced with 24 gauge perforated aluminum or galvanized steel supported 12" on center.

10.6.5.2. A minimum distance of 20 feet from all air conditioning unit inlets and discharges.

10.6.5.3. All terminal boxes supply ductwork shall be lined for a minimum distance of 20 feet downstream of box discharge.

10.6.5.4. All return/exhaust fans shall be acoustically lined for a minimum distance of 20 feet of the fan intake and discharge opening.

10.6.5.5. All transfer ducts shall be provided with 1" thick acoustical lining for acoustical purposes only.

10.6.5.6. All ductwork passing through or serving conference and meeting rooms shall be provided with acoustical lining.

10.6.6. All duct sizes noted on drawings are "clear" sizes without sound lining included. Adjust sheet metal sizes accordingly.

11. Pipe insulation:

11.0.1. Insulation must meet the ASTM E 84 fire and smoke ratings of 25/50 in order to be utilized within the return air plenum.

11.0.2. Refrigeration piping:

11.0.2.1. ALL refrigerant piping insulation shall be closed cell EPDM elastomeric foam as manufactured by Aeroflex or equal. Provide with Aerofix rigid pipe supports. All joints shall be glued and taped with minimum 2" wide EPDM tape.

11.0.2.2. AC Split system piping insulation thickness:

11.0.2.2.1. Outdoor/Indoor: 1" thick for both suction and liquid lines.

11.0.3. Condensate piping:

11.0.3.1. 1/2" thick elastomeric foam insulation

12. Mechanical Identification:

12.1. General: Provide mechanical identification for mechanical equipment, piping and duct systems. Comply with ANSI A13.1 for lettering size, length of color field, colors and viewing angles of identification devices.

12.2. Equipment: Provide equipment system number, capacity, flow rate, static pressure, pump head, horsepower, voltage. Provide Seton model "Ventmark" markers or equal.

12.3. Piping system: Provide system designation name and direction of flow. Provide Seton model "Setmark" pipe markers or equal.

12.4. Duct systems: Provide system designation name and direction of flow. Provide Seton model "Ventmark" markers or equal.

12.5. Valve tags: Provide brass valve tags and brass "S" hook fasteners with valve number and type of service noted on tag. Provide duplicate valve charts. The chart shall be for all valves and shall indicate valve identification number, location, and purpose. Provide Seton brass valve tags and valve charts.

13. Testing and Balancing:

13.1. HVAC contractor shall negotiate a contract with a qualified and certified member of NEBB or AABC to completely balance air and hydronic systems as required. After all adjustments have been completed the contractor shall balance each air supply outlet to +/-10% of the air quantity indicated on the plans. Contractor shall submit a project certification guarantee and certified balance report to architect and engineer before project final acceptance. Submit balancing report to the building official upon completion.

14. Refrigeration Relief:

13.1. The mechanical contractor shall furnish and install a refrigerant-relief discharge pipe for each required refrigeration system with more than six (6) pounds of refrigerant. the discharge pipe outlet shall be installed a minimum of 12'-0" above the ground, a minimum of 10'-0" from any opening, 20'-0" from any fire escape and shall discharge through a turned down elbow.

13.2. For each system with over four (4) pounds of refrigerant the mechanical contractor shall furnish and install a safety relief valve designated to relieve and/or prevent the build-up of excessive refrigerant pressure within each direct-expansion system. the pressure relief device shall be set at 400 psi and shall be installed on the high temperature side at the discharge of the compressor and upstream of the compressor shut-off (stop) valve.

14. Piping:

14.1. General: all piping for this work shall be in conformance with ASTM standards. All changes in directions shall be made with fittings. Ream all piping and clean out same before assembly. Provide valves of similar material as the piping material they are installed in. Ferrous body valves with steel piping. Brass and bronze valves with copper piping. Provide dielectric fittings, unions, etc. where piping, valves, fittings, equipment, etc. of dissimilar metals are joined. Cover open piping during construction. Flush out and clean piping in a manner approved by the architect. For each branch takeoff, provide a 3-elbow "Z" shape connection to provide piping flexibility for pipe expansion. Provide guides, anchors, expansion loops, supports, vents, drains, make-up water, controls, etc. as required.

14.2. Copper piping shall have socket fittings for solder or brazing connections. Press joint fittings are acceptable except for refrigerant piping.

14.3. Steel piping shall be schedule 40, ASTM A120 or A53, unless otherwise noted. The fittings in pipe 2" and smaller shall be cast iron or malleable item screwed fittings, unless noted otherwise. All piping 2-1/2" and larger shall be butt welded. Welding shall be done only by welders certified for this work. Press joint fittings are acceptable in accordance with local codes and standards. For all piping exposed to the outside air, paint piping with one coat of rust-inhibiting primer and one coat of finish paint.

14.4. Piping systems and materials.

14.4.1. Refrigerant piping: Type K brazed rigid copper . All joints shall be brazed. Provide shutoff valves, filter dryers, solenoid valves, thermal expansion valves, sight glasses, pressure gauges, oil traps, etc. as required. Provide indoor refrigerant vent piping to the outside as required. None of the regrigeration valves, devices or connections to be located in the air stream.

14.4.2. HVAC drain piping: Type L drawn copper for indoor drains from copper piping system. Schedule 40, ASTM A120 or A53 steel for indoor drains from steel piping systems. Schedule 40 PVC plastic for outdoor drains. Install a trap in the drain pipe. Provide a concrete splash block for drain terminations for rooftop HVAC units.

14.4.3. Gas piping: Schedule 40 steel pipe. Provide vented enclosures for risers and horizontal runs in plenum ceilings, etc. For pipe sizes 2" and smaller threaded piping is acceptable unless directed otherwise by the local building codes. Ground all gas piping. At each connection to equipment install the following in order... gas shut off valve, dirt leg, gas pressure regulators/PRV, and union.

14.4.3.1. Gas pressure regulators shall be vented outdoors unless equipped vent limiters and allowed by the local jurisdiction. Terminate regulator vents outdoors with weatherproof and insect-proof outdoor termination devices.

15. Noise and Vibration Control:

15.1. It is recommended that final maximum sound levels are as follows:

15.1.1. Offices, conference rooms, etc,. NC 35

15.1.2. Lobby, toilets, corridors, NC 40

15.1.3. Space adjacent to fan rooms, NC 45

15.2. Acoustical and vibration treatment shall be provided, as required, to maintain space noise criteria specified, including VVT or VAV boxes, fan powered boxes, fan powered mixing units, RTU's, exhaust fans, mini-split equipment, etc.

15.3. The maximum sound pressure level, "a-scale level," at the property line bordering residential areas shall not exceed 55 db (a) for hvac equipment and 62 db (a) if bordering a business-commercial areas.

15.4. Vibration isolation hangers shall be provided within 50 feet of all pumps and refrigeration machines and other rotating equipment.

15.5. Acoustical treatment shall be provided for all equipment as required to meet code or the system design.

15.6. Vibration isolators and flexible connections shall be provided as required for fans, refrigeration compressors, emergency generators, condensers, pumps, air-handling units, air-cooled chillers, air compressors, etc.

16. Post Construction and Prior to Occupancy:

16.1. Upon completion of the installation of ventilation ducts, clean entire system of rubbish, plaster, dirt, etc., before installing grilles or diffusers.

16.2. After completion of all required work, the contractor shall operate and make any required adjustment to equipment, ductwork, etc., as may be necessary to put the systems in proper operating condition.

16.3. Replace all HVAC system filters with final clean filters.

16.4. Provide laminated name plates attached to each equipment, starter, and VFD identifying the items they serve.

17. Temperature Control:

17.1. Temperature controls shall be Direct Digital Controls (DDC) unless noted otherwise. Match existing BAS system.

17.2. Provide all control, power, and interlock wiring including conduits and install per the georgia state and national electric code. Submit terminal to terminal wiring diagram, sequence of operation and cuts of all components for approval. Provide all relays, switches, dampers and actuators, pneumatic equipment, pilot positioners thermostats, panels, limit safeties, transformers, time clocks, control valves and other devices to accomplish the desired sequence of operation.

24.2. Thermostatic controls shall have a 5 deg F deadband between heating and cooling setpoints and shall have setpoint overlap restrictions. Provide with 7-day clock, 2-hour occupant override, and 10-hour backup. Night setback temperatures shall be 55 def F (heat) and 85 deg F (cool).

25. Fire Stopping:

25.1. Contractor shall be responsible for fire stopping, fire caulking and installing all systems, wiring, ductwork, HVAC equipment etc. to maintain fire rating as specified by architect. Material shall stop and prevent fire and smoke from passing/penetrating fire barrier.

26. Initial Pricing, Value Engineering, Substitutions, Alternates and Deducts:

26.1. Contractor shall bid the drawings/project as a "plan and spec" package delivering a cost to the owner for all work including full installation, startup, programming, wiring, etc. to deliver a fully functional and operational system.

26.2. Contractor, with owners permission, may explore and offer value engineering solutions, alternates and deducts to the owner. All requested value engineering, substitutions, alternates, deducts shall be submitted in writing to owner, architect, and engineer for evaluation after the initial bid for the "plan and spec" package.

26.3. Design engineer shall not change the design plans, drawings, sketches, schedules, specifications, equipment, equipment layout and design, etc. without adequate compensation based on current hourly engineering design rates. The contractor takes all responsibility for any design changes and shall be responsible for all coordination among and between all trades which are effected or need to be re-engineered/changed and or coordinated due to value engineering changes, substitutions, alternates, equipment substitutions, deducts etc. as proposed by the contractor.

27. Post Construction Check Out

27.1. HVAC Equipment, systems and system-to-system relationships have been tested to ensure proper operation.

27.2. HVAC and service water heating control systems have been tested to ensure proper operation, calibration, and adjustment of controls.

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MECHANICAL
NOTES, SYMBOLS,
& ABBREVIATIONS

BUILDING
RENOVATION

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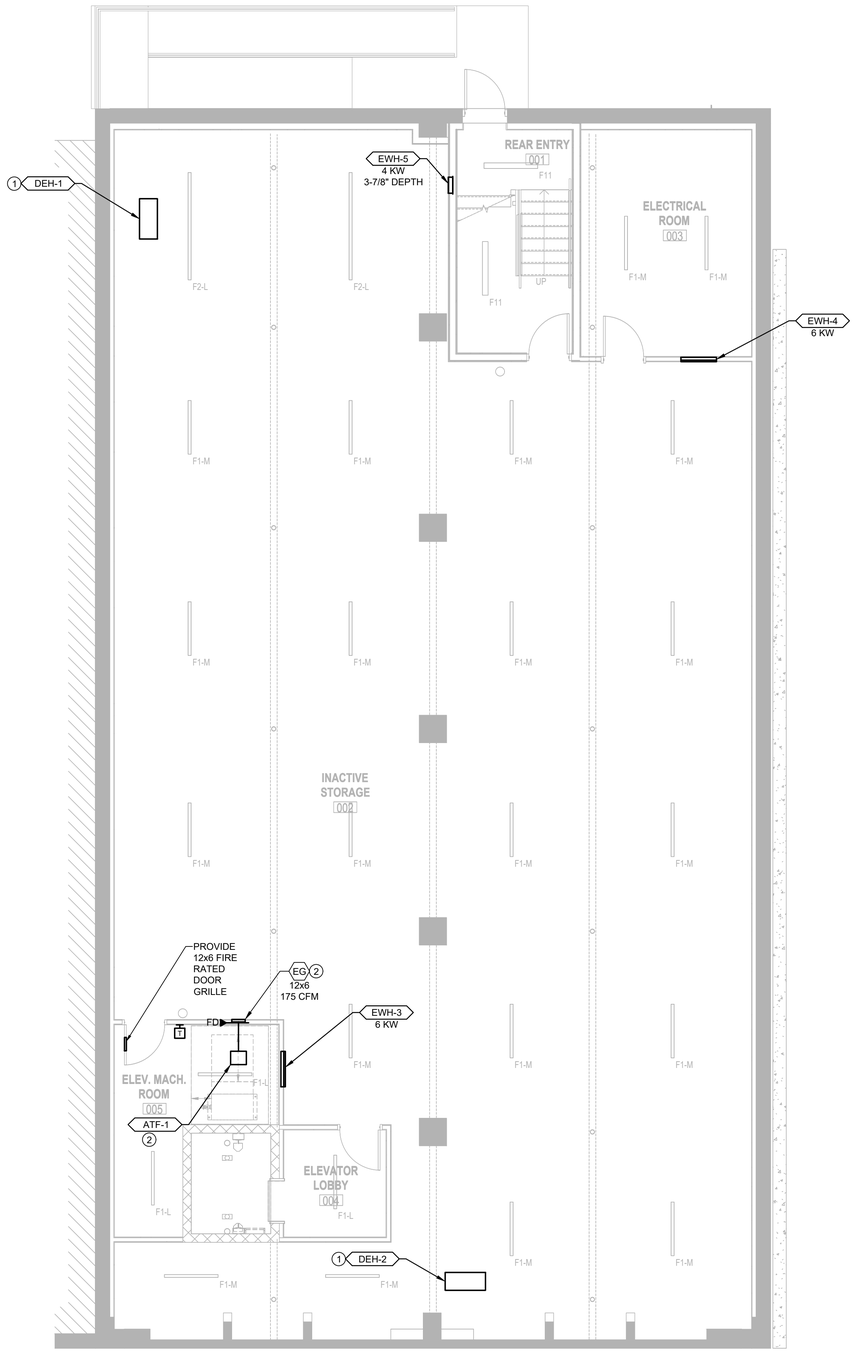
DATE	03-24-2026
ECE PROJECT #	25-923
DRAWN	ECE
CHECKED	ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
STATE OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

M101

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N 1 BASEMENT MECHANICAL PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

MECHANICAL PLAN GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND TO INDICATE DESIGN INTENT. EXACT ROUTING OF ALL DUCTWORK, PIPING, CONTROLS, ETC... SHALL BE VERIFIED IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CLEARANCES, OBSTRUCTIONS, ETC... PRIOR TO INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL REVISE ANY DUCT / PIPE ROUTING AND SIZING AS REQUIRED TO ACCOMMODATE SITE CONDITIONS WITH NO ADDITIONAL COST TO OWNER; AND NO DELAY TO PROJECT SCHEDULE.
2. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO ALL WORK. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR PROJECT TEAM REVIEW PRIOR TO PURCHASE AND INSTALLATION. EQUIPMENT SHALL BE INSTALLED AS REQUIRED TO MAINTAIN MANUFACTURER RECOMMENDED SERVICE CLEARANCES AND TO MAXIMIZE HEADROOM. CONTRACTOR SHALL NOTIFY THE APPROPRIATE PARTIES, IN WRITING, OF AREAS WITH INADEQUATE HEADROOM.
3. CONTRACTOR SHALL REVIEW ARCHITECTURAL, CIVIL, STRUCTURAL, ETC... DRAWINGS TO BECOME FAMILIAR WITH THE GENERAL SCOPE AND PROJECT TIMELINE PRIOR TO BID.
4. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION OF ALL AUXILIARY STRUCTURAL STEEL, CORES, ROOF PENETRATIONS, ETC... ALL EQUIPMENT ABOVE SUSPENDED CEILINGS SHALL BE SUPPORTED FROM BUILDING STRUCTURAL MEMBERS.
5. SPECIFIED EQUIPMENT SHALL BE THE BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR APPROVED ALTERNATE MANUFACTURERS. IN THE EVENT THE CONTRACTOR PROVIDES EQUIPMENT BASED ON NON PRE-APPROVED MANUFACTURERS, ANY ADDITIONAL WORK REQUIRED, BASED ON DIFFERENCES IN EQUIPMENT, (ELECTRICAL, STRUCTURAL, PIPING / DUCT SIZING, ETC...), SHALL BE PROVIDED AT THE CONTRACTOR'S OWN EXPENSE.
6. WHERE APPLICABLE, CONTRACTOR SHALL COORDINATE EQUIPMENT INSTALLATION WITH EXISTING BUILDING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, SIZE OF EXISTING BUILDING OPENINGS, DOORS, CORRIDORS, ELEVATORS, ETC... CONTRACTOR SHALL REVIEW ACCESSIBLE PATH OF TRAVEL AND PROVIDE NEW OPENINGS OR DISASSEMBLY OF EQUIPMENT AT CONTRACTOR'S OWN EXPENSE. CONTRACTOR SHALL RESTORE RESPECTIVE BUILDING AREAS TO PREVIOUS CONDITIONS PRIOR TO CLOSE OUT.
7. PROVIDE A MINIMUM OF 10'-0" CLEARANCE BETWEEN ALL FRESH AIR INTAKES AND ALL SOURCES OF CONTAMINATION SUCH AS FLUES, PLUMBING VENTS, EXHAUSTS, ETC.
8. COORDINATE ROOF PENETRATIONS WITH THE ROOFING CONTRACTOR (IF REQUIRED). WORK WITH THE LANDLORD ROOFING CONTRACTOR IF THE EXISTING ROOF IS UNDER WARRANTY.
9. REFER TO ARCHITECTURAL PLANS AND KITCHEN VENDOR DRAWINGS FOR ADDITIONAL INFORMATION. REFER TO KITCHEN VENTILATION VENDOR DRAWINGS ATTACHED TO THIS SET OF PLANS AS WELL.
10. THE HVAC, REFRIGERATION, AND FIRE SUPPRESSION EQUIPMENT SHALL NOT CONTAIN CFC OR HALONS.

KEYED NOTES:

1. CONDENSATE PIPE SHALL BE RUN FULL SIZE (1" MIN.) WITH DOWNWARD SLOPE OF 1/8" PER FOOT ON ALL HORIZONTAL RUNS. TERMINATE AT NEAREST OPEN SITE DRAIN OR NEAREST MOP SINK. CONDENSATE LINE SHALL NOT BE CONNECTED DIRECTLY TO WASTE LINE.
2. PROVIDE CEILING MOUNTED EXHAUST FAN (ATF-1) WITH REVERSE ACTING THERMOSTAT (SET TO 85 DEGREE F.) AND TERMINATE 10"Ø OPEN EXHAUST DUCT STUB WITH GREENHECK 1.5-HOUR FIRE DAMPER #FDR-510 OR EQUAL OUT THE WALL INTO THE BASEMENT.

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BASEMENT MECHANICAL PLAN

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

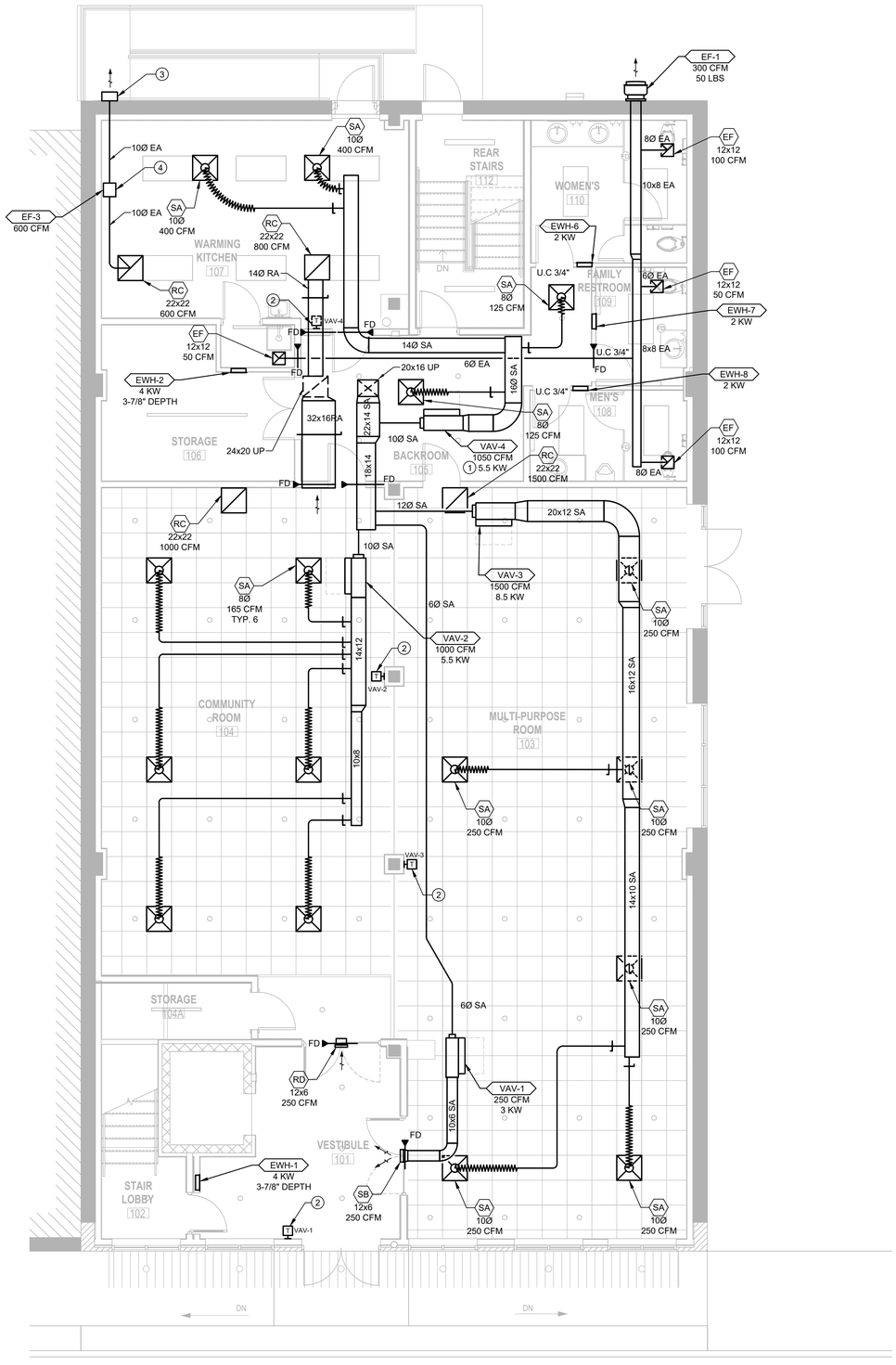
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ECE PROJECT #	25-923
DRAWN	ECE
CHECKED	ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
STATE OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

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1 FIRST FLOOR MECHANICAL PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

MECHANICAL PLAN GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND TO INDICATE DESIGN INTENT. EXACT ROUTING OF ALL DUCTWORK, PIPING, CONTROLS, ETC... SHALL BE VERIFIED IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CLEARANCES, OBSTRUCTIONS, ETC... PRIOR TO INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL REVISE ANY DUCT / PIPE ROUTING AND SIZING AS REQUIRED TO ACCOMMODATE SITE CONDITIONS WITH NO ADDITIONAL COST TO OWNER; AND NO DELAY TO PROJECT SCHEDULE.
2. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO ALL WORK. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR PROJECT TEAM REVIEW PRIOR TO PURCHASE AND INSTALLATION. EQUIPMENT SHALL BE INSTALLED AS REQUIRED TO MAINTAIN MANUFACTURER RECOMMENDED SERVICE CLEARANCES AND TO MAXIMIZE HEADROOM. CONTRACTOR SHALL NOTIFY THE APPROPRIATE PARTIES, IN WRITING, OF AREAS WITH INADEQUATE HEADROOM.
3. CONTRACTOR SHALL REVIEW ARCHITECTURAL, CIVIL, STRUCTURAL, ETC... DRAWINGS TO BECOME FAMILIAR WITH THE GENERAL SCOPE AND PROJECT TIMELINE PRIOR TO BID.
4. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION OF ALL AUXILIARY STRUCTURAL STEEL, CORES, ROOF PENETRATIONS, ETC... ALL EQUIPMENT ABOVE SUSPENDED CEILINGS SHALL BE SUPPORTED FROM BUILDING STRUCTURAL MEMBERS.
5. SPECIFIED EQUIPMENT SHALL BE THE BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR APPROVED ALTERNATE MANUFACTURERS. IN THE EVENT THE CONTRACTOR PROVIDES EQUIPMENT BASED ON NON PRE-APPROVED MANUFACTURERS, ANY ADDITIONAL WORK REQUIRED, BASED ON DIFFERENCES IN EQUIPMENT, (ELECTRICAL, STRUCTURAL, PIPING / DUCT SIZING, ETC...), SHALL BE PROVIDED AT THE CONTRACTOR'S OWN EXPENSE.
6. WHERE APPLICABLE, CONTRACTOR SHALL COORDINATE EQUIPMENT INSTALLATION WITH EXISTING BUILDING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, SIZE OF EXISTING BUILDING OPENINGS, DOORS, CORRIDORS, ELEVATORS, ETC... CONTRACTOR SHALL REVIEW ACCESSIBLE PATH OF TRAVEL AND PROVIDE NEW OPENINGS OR DISASSEMBLY OF EQUIPMENT AT CONTRACTOR'S OWN EXPENSE. CONTRACTOR SHALL RESTORE RESPECTIVE BUILDING AREAS TO PREVIOUS CONDITIONS PRIOR TO CLOSE OUT.
7. PROVIDE A MINIMUM OF 10'-0" CLEARANCE BETWEEN ALL FRESH AIR INTAKES AND ALL SOURCES OF CONTAMINATION SUCH AS FLUES, PLUMBING VENTS, EXHAUSTS, ETC.
8. COORDINATE ROOF PENETRATIONS WITH THE ROOFING CONTRACTOR (IF REQUIRED). WORK WITH THE LANDLORD ROOFING CONTRACTOR IF THE EXISTING ROOF IS UNDER WARRANTY.
9. ALL DUCTWORK BRANCHES SHALL BE PROVIDED WITH LOCKABLE BALANCING DAMPERS THAT ARE ACCESSIBLE.
10. ALL VOLUME DAMPERS SHALL BE EQUIPPED WITH A REMOTE OPERATOR CABLE WHEN INSTALLED IN THE GYP CEILINGS.
11. ALL REGISTERS SHALL BE PROVIDED WITH INTEGRAL OPPOSED BLADE DAMPERS WHICH ARE FULLY ADJUSTABLE AND ACCESSIBLE FROM THE DIFFUSER FACE.
12. ALL ROUND FLEXIBLE DUCTWORK SHALL BE MAXIMUM OF 5'-0" IN LENGTH.

KEYED NOTES:

1. COORDINATE WITH G.C. TO PROVIDE CEILING ACCESS PANELS FOR EQUIPMENT SERVICE. ACCESS PANEL TO BE SIZED TO ALLOW FOR THE FULL REMOVAL OF THE EQUIPMENT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. COORDINATE EXACT MOUNTING LOCATION OF NEW THERMOSTATS IN THE FIELD. INSTALL WITHIN LOCKABLE VENTED TAMPER PROOF COVER.
3. PROVIDE A BROAN MODEL 613 CAP, WITH BACKDRAFT DAMPER AND BIRD SCREEN. ROUTE EXHAUST AS HIGH TO THE BOTTOM OF THE 2ND FLOOR AS POSSIBLE.
4. EXHAUST FAN TO BE SWITCH OPERATED. COORDINATE EXACT MOUNTING LOCATION OF NEW SWITCH IN THE FIELD.

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FIRST FLOOR MECHANICAL PLAN

BUILDING RENOVATION

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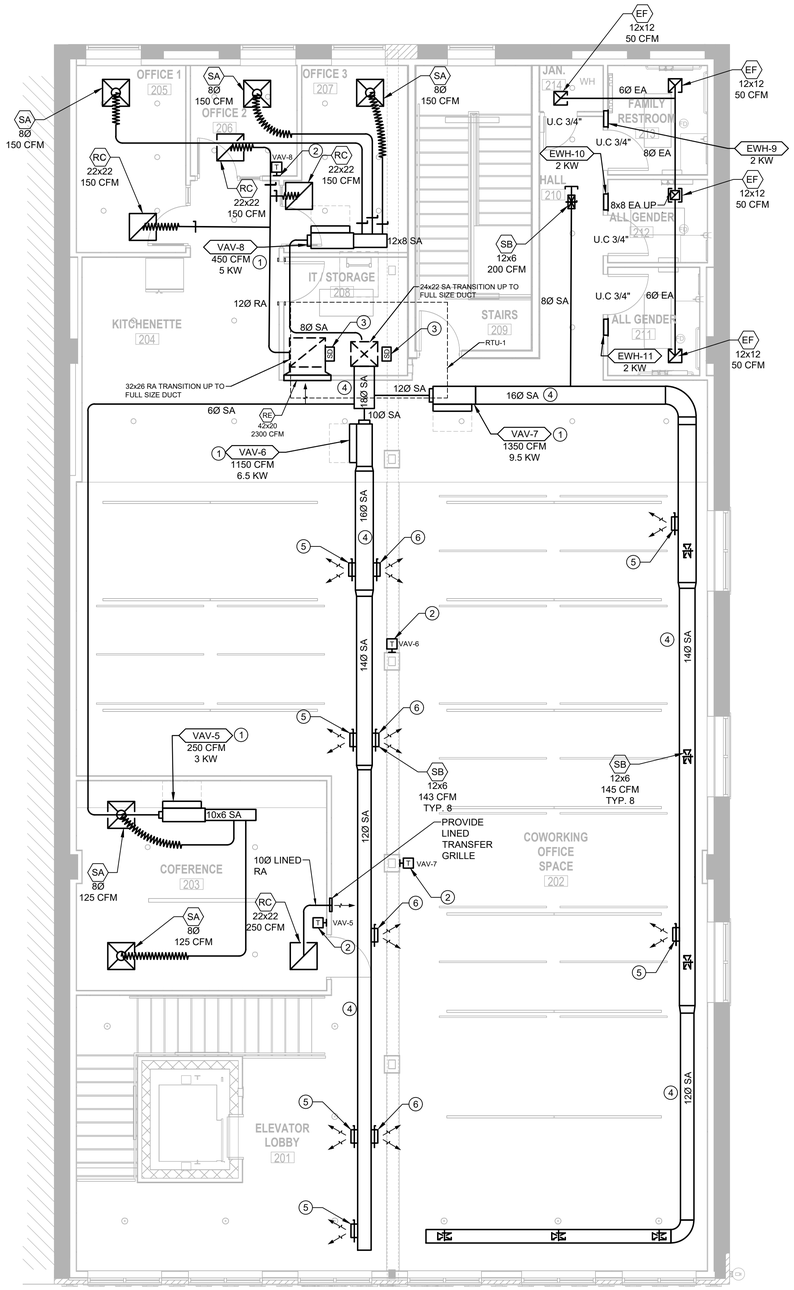
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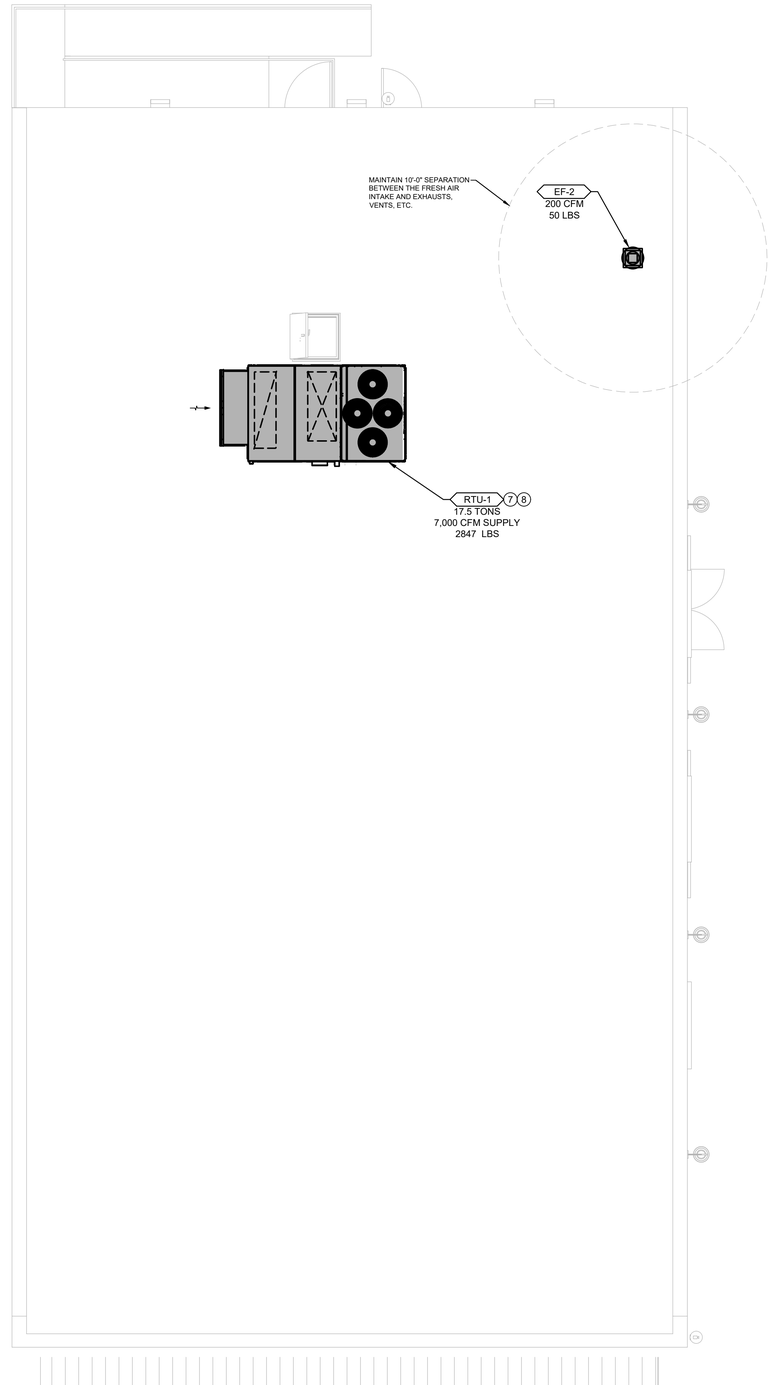
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1 SECOND FLOOR MECHANICAL PLAN

SCALE: 3/16" = 1'-0"



1 ROOF MECHANICAL PLAN

SCALE: 3/16" = 1'-0"

MECHANICAL PLAN GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND TO INDICATE DESIGN INTENT. EXACT ROUTING OF ALL DUCTWORK, PIPING, CONTROLS, ETC... SHALL BE VERIFIED IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CLEARANCES, OBSTRUCTIONS, ETC... PRIOR TO INSTALLATION OF EQUIPMENT. CONTRACTOR SHALL REVISE ANY DUCT / PIPE ROUTING AND SIZING AS REQUIRED TO ACCOMMODATE SITE CONDITIONS WITH NO ADDITIONAL COST TO OWNER; AND NO DELAY TO PROJECT SCHEDULE.
2. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO ALL WORK. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR PROJECT TEAM REVIEW PRIOR TO PURCHASE AND INSTALLATION. EQUIPMENT SHALL BE INSTALLED AS REQUIRED TO MAINTAIN MANUFACTURER RECOMMENDED SERVICE CLEARANCES AND TO MAXIMIZE HEADROOM. CONTRACTOR SHALL NOTIFY THE APPROPRIATE PARTIES, IN WRITING, OF AREAS WITH INADEQUATE HEADROOM.
3. CONTRACTOR SHALL REVIEW ARCHITECTURAL, CIVIL, STRUCTURAL, ETC... DRAWINGS TO BECOME FAMILIAR WITH THE GENERAL SCOPE AND PROJECT TIMELINE PRIOR TO BID.
4. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION OF ALL AUXILIARY STRUCTURAL STEEL, CORES, ROOF PENETRATIONS, ETC... ALL EQUIPMENT ABOVE SUSPENDED CEILINGS SHALL BE SUPPORTED FROM BUILDING STRUCTURAL MEMBERS.
5. SPECIFIED EQUIPMENT SHALL BE THE BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR APPROVED ALTERNATE MANUFACTURERS. IN THE EVENT THE CONTRACTOR PROVIDES EQUIPMENT BASED ON NON PRE-APPROVED MANUFACTURERS, ANY ADDITIONAL WORK REQUIRED, BASED ON DIFFERENCES IN EQUIPMENT, (ELECTRICAL, STRUCTURAL, PIPING / DUCT SIZING, ETC...), SHALL BE PROVIDED AT THE CONTRACTOR'S OWN EXPENSE.
6. WHERE APPLICABLE, CONTRACTOR SHALL COORDINATE EQUIPMENT INSTALLATION WITH EXISTING BUILDING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, SIZE OF EXISTING BUILDING OPENINGS, DOORS, CORRIDORS, ELEVATORS, ETC... CONTRACTOR SHALL REVIEW ACCESSIBLE PATH OF TRAVEL AND PROVIDE NEW OPENINGS OR DISASSEMBLY OF EQUIPMENT AT CONTRACTOR'S OWN EXPENSE. CONTRACTOR SHALL RESTORE RESPECTIVE BUILDING AREAS TO PREVIOUS CONDITIONS PRIOR TO CLOSE OUT.
7. PROVIDE A MINIMUM OF 10'-0" CLEARANCE BETWEEN ALL FRESH AIR INTAKES AND ALL SOURCES OF CONTAMINATION SUCH AS FLUES, PLUMBING VENTS, EXHAUSTS, ETC.
8. COORDINATE ROOF PENETRATIONS WITH THE ROOFING CONTRACTOR (IF REQUIRED). WORK WITH THE LANDLORD ROOFING CONTRACTOR IF THE EXISTING ROOF IS UNDER WARRANTY.
9. ALL DUCTWORK BRANCHES SHALL BE PROVIDED WITH LOCKABLE BALANCING DAMPERS THAT ARE ACCESSIBLE.
10. ALL VOLUME DAMPERS SHALL BE EQUIPPED WITH A REMOTE OPERATOR CABLE WHEN INSTALLED IN THE GYP CEILINGS.
11. ALL REGISTERS SHALL BE PROVIDED WITH INTEGRAL OPPOSED BLADE DAMPERS WHICH ARE FULLY ADJUSTABLE AND ACCESSIBLE FROM THE DIFFUSER FACE.
12. ALL ROUND FLEXIBLE DUCTWORK SHALL BE MAXIMUM OF 5'-0" IN LENGTH.

KEYED NOTES:

1. COORDINATE WITH G.C. TO PROVIDE CEILING ACCESS PANELS FOR EQUIPMENT SERVICE. ACCESS PANEL TO BE SIZED TO ALLOW FOR THE FULL REMOVAL OF THE EQUIPMENT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. COORDINATE EXACT MOUNTING LOCATION OF NEW THERMOSTATS IN THE FIELD. INSTALL WITHIN LOCKABLE VENTED TAMPER PROOF COVER.
3. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY ELECTRICAL (FIRE ALARM) CONTRACTOR, AND INSTALLED BY HVAC CONTRACTOR UPSTREAM OF ANY DUCT TAKE-OFFS. DUCT SMOKE DETECTORS TO DE-ENERGIZE HVAC SUPPLY FANS IF ACTIVATED.
4. ALL EXPOSED SUPPLY DUCTWORK SHALL HAVE INTERNAL INSULATION. MOUNT AS HIGH AS POSSIBLE AND RUN PARALLEL TO THE PITCH OF THE ROOF. VERIFY EXISTING CONDITIONS AND COORDINATE DUCT RUN PRIOR TO STARTING WORK.
5. SPIRAL DUCT MOUNTED SUPPLY GRILLES FACING THE INSIDE OF THE SPACE SHALL BE DIRECTED DOWN AT 30 DEGREES FROM VERTICAL. CONTRACTOR TO ADJUST DIFFUSER THROW PATTERN AS REQUIRED FOR PROPER AIR DISTRIBUTION AND TO AVOID DRAFTS.
6. SPIRAL DUCT MOUNTED SUPPLY GRILLES FACING THE INSIDE OF THE SPACE SHALL BE DIRECTED DOWN AT 30 DEGREES FROM VERTICAL AND LOCATED BELOW THE WBEAM THAT IS RUNNING DOWN CENTER OF THE BUILDING.
7. PROVIDE NEW PACKAGED ROOFTOP UNIT AS SHOWN. FIELD COORDINATE EXACT LOCATION AND ORIENTATION PRIOR TO STARTING WORK. CONTRACTOR TO REPLACE FILTERS PRIOR TO FINAL BALANCING.
8. MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES.

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SECOND FLOOR MECHANICAL PLAN

BUILDING RENOVATION

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ROOF TOP UNIT (RTU) SCHEDULE

TAG	AREA SERVED	COOLING						HEATING				SUPPLY FAN					COND TEMP.	REFRIGERANT	COMPRESSOR(S)		FILTER		ELECTRICAL			WEIGHT	MANUFACTURER	MODEL (BASIS OF DESIGN)	NOTES
		NOM. TONS	MBH TOTAL	MBH SENSIBLE	EAT DB/WB	LAT DB/WB	EER	MBH INPUT	MBH OUTPUT	EAT DB	LAT DB	CFM	MIN OA CFM	TYPE	E.S.P. (IN. WC)	MOTOR (H.P.)		TYPE	TYPE	QUANT.	TYPE	THICKNESS (IN.)	VOLTS/PH/HZ	MCA	MOCP				
RTU-1	VAV SYSTEM 1ST & 2ND FLR	17.50	213.9	153.7	80.0/67.0	55.0 / 54.0	12.0	248/310	200/251	51.5	85.6	7,000	1,900	VANE-AXIAL	1.50	15.00	95	R454B	SCROLL	1	DISPOSABLE	2	208-3-60	104.0	125.0	2,850.0	CARRIER	48GERT20A3A5-3X1Q0	1, 2, 3, 4, 5, 6, 7

NOTES:
1. FURNISH AND INSTALL 24" ROOF CURB. COORDINATE ROOF CURB INSTALLATION WITH ROOF CONSTRUCTION.
2. PROVIDE UNITS WITH MANUFACTURER PROVIDED DISCONNECT.
3. INSTALL SMOKE DETECTORS IN THE SUPPLY AND RETURN AIR DUCTS FOR ALL ROOF TOP UNITS. SMOKE DETECTORS FURNISHED AND WIRED BY THE ELECTRICAL CONTRACTOR, INSTALLED BY THE MECHANICAL CONTRACTOR.
4. PROVIDE ROOF TOP UNITS WITH DIFFERENTIAL ENTHALPY CONTROLLED ECONOMIZERS WITH BAROMETRIC RELIEF DAMPERS, WEATHER HOODS, & ECONOMIZER FAULT DETECTION CONTROLS.
5. FURNISH UNIT WITH MANUFACTURER POWER EXHAUST SYSTEM.
6. PROVIDE UNIT WITH NON-POWERED ELECTRICAL RECEPTACLE. ELECTRICAL CONTRACTOR TO PROVIDE POWER TO OUTLET ON SEPARATE CIRCUIT, COORDINATE IN FIELD.
7. UNIT SHALL BE FURNISHED WITH STAINLESS STEEL HEAT EXCHANGER.

VARIABLE AIR VOLUME (VAV) ZONE DAMPER SCHEDULE

		VAV-1	VAV-2	VAV-3	VAV-4	VAV-5	VAV-6	VAV-7	VAV-8
UNIT NO.		VAV-1	VAV-2	VAV-3	VAV-4	VAV-5	VAV-6	VAV-7	VAV-8
SYSTEM		RTU-1	RTU-1	RTU-1	RTU-1	RTU-1	RTU-1	RTU-1	RTU-1
FLOOR		SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS
LOCATION		SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS
SERVING		101 VESTIBULE	104 COMMUNITY ROOM	103 MULTI-PURPOSE	107 WARMING KITCHEN	203 CONFERENCE ROOM	202 COWORKING OFFICE SPACE	202 COWORKING OFFICE SPACE	205, 206, 207 OFFICE(S)
MANUFACTURER		CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL NO.		35E	35E	35E	35E	35E	35E	35E	35E
INLET SIZE (DIA")		6	10	12	10	6	10	12	8
OUTLET SIZE (H"xW")		8x12	12.5x14	15x16	12.5x14	8x12	12.5x14	15x16	10x12
MAX. AIR PD (WC)		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MIN. INLET SP (IN WG)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AIR FLOW (CFM)	MAXIMUM (CFM)	250	1000	1500	1050	250	1150	1350	450
	MINIMUM (CFM)	55	145	210	145	55	145	210	95
	HEATING (CFM)	250	500	750	500	250	600	900	450
	REHEAT COIL SIZE (H"xW")	8x12	12.5x14	15x16	12.5x14	8x12	12.5x14	15x16	10x12
	EAT (°F)	55	55	55	55	55	55	55	55
	LAT (°F)	90	90	90	90	90	90	90	90
	CAPACITY (kW)	3.0	5.5	8.5	5.5	3.0	6.5	9.5	5.0
	STAGES	SCR	SCR	SCR	SCR	SCR	SCR	SCR	SCR
	VOLTS / PH	208 / 1	208 / 1	208 / 1	208 / 1	208 / 1	208 / 1	208 / 1	208 / 1
	MCA	18.0	33.0	51.0	33.0	18.0	39.0	57.0	30.0
	MOCP	20.0	35.0	60.0	35.0	20.0	40.0	60.0	35.0
REMARKS									

GENERAL NOTES:
1. NEITHER RADIATED NOR DISCHARGE SOUND LEVELS SHALL EXCEED 30 NC AT 1.5" STATIC PRESSURE WHEN TESTED PER ARI STANDARD 885-98.
2. PROVIDE WITH AIRFLOW MEASURING DEVICE.
3. PROVIDE VAV WITH CLOSED CELL INSULATION.
4. PROVIDE WITH STANDARD COIL SIZE UNLESS OTHERWISE NOTED.

BUILDING VENTILATION SCHEDULE (IMC 2021)

ROOM NO.	ROOM NAME	SPACE DESIGNATION	ROOM AREA SQ.FT.	NUMBER OF OCCUPANTS	CODE REQUIREMENTS							ACTUAL AIR VOLUME				REMARKS
					Rp CFM/PERSON	Ra	Occupants *Rp CFM	Ra * Area CFM	TOTAL OA	ZONE EFFECTIVNESS	TOTAL CODE CFM	SUPPLY CFM	OA %	OA CFM	EXHAUST CFM	
101	VESTIBULE	CORRIDOR	211	0	0	0.06	0	13	13	0.8	16	250	28%	70	-	-
103	MULTI-PURPOSE ROOM	MUTLIPURPOSE ASSEMBLY	1,395	50	5	0.06	250	84	334	0.8	417	1500	28%	420	-	-
104	COMMUNITY ROOM	MUTLIPURPOSE ASSEMBLY	973	32	5	0.06	160	58	218	0.8	273	1000	28%	280	-	-
105	BACKROOM	CORRIDOR	267	0	0	0.06	0	16	16	0.8	20	250	28%	70	-	-
106	STORAGE	INACTIVE STORAGE	169	0	0	0	0	0	0	0.8	0	0	28%	0	-	-
107	WARMING KITCHEN	NON-COMMERCIAL KITCHEN	389	3	7.5	0.18	23	70	93	0.8	116	800	28%	224	600	-
108	MENS	TOILET	101	0	0	0.06	0	6	6	0.8	100 EXH.	0	28%	0	100	-
109	FAMILY RESTROOM	TOILET	63	0	0	0.06	0	4	4	0.8	50 EXH.	0	28%	0	50	-
110	WOMENS	TOILET	142	0	0	0.06	0	9	9	0.8	100 EXH.	0	28%	0	100	-
201	ELEVATOR LOBBY	CORRIDOR	185	0	0	0.06	0	11	11	0.8	14	286	28%	80.08	-	-
202	COWORKING SPACE	OFFICE	2,500	21	0	0.06	0	150	150	0.8	188	1671	28%	467.88	-	-
203	CONFERENCE	CONFERENCE/MEETING	289	7	5	0.06	35	17	52	0.8	65	250	28%	70	-	-
204	KITCHENETTE	NON-COMMERCIAL KITCHEN	114	1	7.5	0.18	8	21	28	0.8	35	143	28%	40.04	-	-
205	OFFICE 1	OFFICE	115	1	5	0.06	5	7	12	0.8	15	150	28%	42	-	-
206	OFFICE 2	OFFICE	68	1	5	0.06	5	4	9	0.8	11	150	28%	42	-	-
207	OFFICE 3	OFFICE	119	1	5	0.06	5	7	12	0.8	15	150	28%	42	-	-
208	IT/STORAGE	INACTIVE STORAGE	63	0	0	0.06	0	4	4	0.8	5	0	28%	0	-	-
209	STAIRS	CORRIDOR	183	0	0	0.06	0	11	11	0.8	14	0	28%	0	-	-
210	HALL	CORRIDOR	83	0	0	0.06	0	5	5	0.8	6	200	28%	56	-	-
211	ALL GENDER	TOILET	57	0	0	0.06	0	3	3	0.8	50 EXH.	0	28%	0	50	-
212	ALL GENDER	TOILET	45	0	0	0.06	0	3	3	0.8	50 EXH.	0	28%	0	50	-
213	FAMILY RESTROOM	TOILET	60	0	0	0.06	0	4	4	0.8	50 EXH.	0	28%	0	50	-
214	JANITOR	INACTIVE STORAGE	16		0	0.06	0	1	1	0.8	50 EXH.	0	28%	0	50	-
SUM			7607	117							1210	6800		1904	1050	

NOTES:
BUILDING IS VENTILATED AND EXHAUSTED BY HVAC EQUIPTMENT LISTED IN MECHANICAL SCHEDULES. FRESH AIR INTAKE VIA ROOFTOP. REFER TO AIRFLOWS SPECIFIED.

DIFFUSERS, REGISTERS, AND GRILLES

TAG	SERVICE	TYPE	FRAME TYPE	FINISH	N.C.	MANUFACTURER	MODEL	FRAME SIZE (L" x W")	NOTES
A	SUPPLY (S)	SQUARE CONE SUPPLY DIFFUSER	SURFACE	WHITE	<30	TITUS	TMS-AA	12" x 12" 24" x 24"	1,2,3,5
B	SUPPLY (S)	DUCT MOUNTED SUPPLY GRILLE	SURFACE	ANODIZE	<30	TITUS	300FL	SEE PLANS	1-5
C	RETURN (R)	SQUARE ALUMINIUM EGGCRATE RETURN AIR	LAY-IN	WHITE	<30	TITUS	50F	22" x 22"	1,2,3,5
D	RETURN (R)	SQUARE STRAIGHT BLADE RETURN GRILLE, WALL MOUNTED	SURFACE	WHITE	<30	TITUS	350FL	SEE PLANS	1,2,3,5
E	RETURN (R)	SQUARE STRAIGHT BLADE RETURN GRILLE, WALL MOUNTED	SURFACE	WHITE	<30	TITUS	350FL	42" x 20"	1,2,3,5
F	EXHAUST (E)	SQUARE STRAIGHT BLADE EXHAUST GRILLE	SURFACE	WHITE	<30	TITUS	350FL	12" x 12"	1-5
G	EXHAUST (E)	SQUARE STRAIGHT BLADE EXHAUST, WALL MOUNTED	SURFACE	WHITE	<30	TITUS	350FL	SEE PLANS	1-5

NOTES:
1. COORDINATE BORDER TYPES, PLASTER FRAMES, AND MOUNTING METHODS WITH THE CEILING TYPE/WALL CONSTRUCTION AT EACH DIFFUSER, REGISTER, & GRILLE LOCATION.
2. FINAL DIFFUSER COLORS OR PAINTING OF THE GRILLES SHALL BE COORDINATED WITH ARCHITECT / OWNER.
3. ACCEPTABLE ALTERNATE MANUFACTURERS: CARNES, KRUEGER, METALAIRE, AND PRICE.
4. PROVIDE WITH OPPOSED BLADE DAMPER FOR BALANCING.
5. ALL AIR DEVICES MAY NOT BE USED.

EXHAUST FAN (EF) SCHEDULE

TAG	AREA SERVED	LOCATION	CFM	E.S.P. (IN. WC)	FAN RPM	DRIVE TYPE	FAN TYPE	ELECTRICAL HP	ELECTRICAL VOLTS/PH/HZ	WEIGHT (LBS.)	MANUFACTURER	MODEL (BASIS OF DESIGN)	NOTES
EF-1	SEE PLANS	SIDE WALL	250	0.50	1359	DIRECT	BI	1/6	208/1/60	45	GREENHECK	CUE-090-VG	1, 2, 3, 4, 5
EF-2	SEE PLANS	ROOF	150	0.33	1430	DIRECT	BI	1/6	208/1/60	36	GREENHECK	G-070-VG	1, 2, 3, 4, 5
EF-3	WARMING KITCHEN 107	CEILING - INLINE	600	0.3	2138	DIRECT	BI	1/3	115/60/1	55	GREENHECK	SQ-7-VG	3, 7
ATF-1	BASEMENT	CEILING	175	0.33	900	DIRECT	BI	1/6	115/60/1	24	GREENHECK	SP-A200	6

NOTES:
1. FURNISH AND INSTALL 14" ROOF CURBS FOR ALL ROOF MOUNTED EXHAUST FANS. COORDINATE ROOF CURB INSTALLATION WITH ROOF CONSTRUCTION.
2. PROVIDE FACTORY MOUNTED AND WIRED NEMA 3R DISCONNECT SWITCH FOR EXHAUST FANS.
3. PROVIDE FAN WITH SPEED CONTROLLER.
4. EXHAUST FAN TO BE CONTROLLED BY A LINE VOLTAGE TIME CLOCK (SIMILAR TO HONEYWELL ST6008B1005). THIS EXHAUST FAN IS TO OPERATE WHEN THE BUILDING IS OCCUPIED.
5. PROVIDE GRAVITY BACKDRAFT DAMPER.
6. PROVIDE REVERSE ACTING THERMOSTAT, SET TO 85 DEG. F.
7. EXHAUST FAN TO BE CONTROLLED BY A WALL MOUNTED SWITCH.

ELECTRIC DEHUMIDIFER (DEH) SCHEDULE

TAG	LOCATION	CAPACITY PPD	CAPACITY AIRFLOW CFM	ENCLOSURE LENGTH (IN.)	ENCLOSURE WIDTH (IN.)	ENCLOSURE HEIGHT (IN.)	ENCLOSURE WEIGHT (LBS)	ELECTRICAL VOLTS/PH/HZ	ELECTRICAL AMPS	MANUFACTURER	MODEL (BASIS OF DESIGN)	NOTES
DEH-1	BASEMENT	80	135	34.2	14	15.7	63	120/1/60	4.8	APRILAIRE	E080	1
DEH-2	BASEMENT	80	135	34.2	14	15.7	63	120/1/60	4.8	APRILAIRE	E080	1

NOTES:
1. PROVIDE UNIT WITH HANGING KIT, CONDENSATE PUMP, AND HUMIDITY CONTROL WALL MOUNT

ELECTRIC WALL HEATER (EWH) SCHEDULE

TAG	LOCATION	HEATING DATA WATTS	HEATING DATA BTUH	HEATING DATA STAGES	ENCLOSURE HEIGHT (IN.)	ENCLOSURE WIDTH (IN.)	ENCLOSURE DEPTH (IN.)	ELECTRICAL VOLTS/PH/HZ	ELECTRICAL AMPS	MANUFACTURER	MODEL (BASIS OF DESIGN)	NOTES
EWH-1	101 VESTIBULE	4000	13,652	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-2	106 STORAGE	4000	13,652	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-3	BASEMENT	6000	20,525	2	31-3/4	22-19/32	3-3/4	208/1/60	28.8	QMARK	EFQ6008	1, 2
EWH-4	BASEMENT	6000	20,525	2	31-3/4	22-19/32	3-3/4	208/1/60	28.8	QMARK	EFQ6008	1, 2
EWH-5	REAR ENTRY 001	4000	13,652	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-6	WOMENS 110	2000	6,826	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-7	FAMILY RESTROOM 109	2000	6,826	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-8	MENS 108	2000	6,826	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-9	FAMILY RESTROOM 213	2000	6,826	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-10	ALL GENDER 212	2000	6,826	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2
EWH-11	ALL GENDER 211	2000	6,826	2	19-5/16	15-3/4	3.875	208/1/60	19.2	QMARK	AWH4408F	1, 2

NOTES:
1. ALL ELECTRIC UNIT HEATERS SHALL BE COMPLETE WITH FACTORY MOUNTED DISCONNECTS AND BUILT-IN THERMOSTATS.
2. PROVIDE RECESSED WALL MOUNTED HEATER WITH TRIM KIT. COLOR TO BE COORDINATED WITH ARCHITECT.

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MECHANICAL SCHEDULES

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE 03-24-2026
ECE PROJECT # 25-923
DRAWN ECE
CHECKED ECE

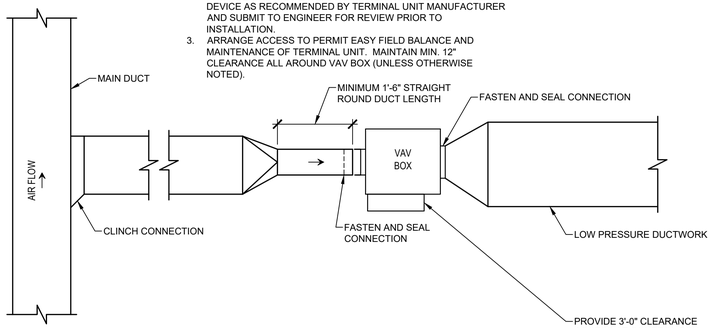
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03-24-26 BID

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062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

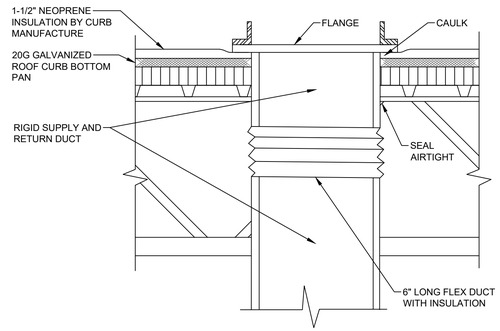
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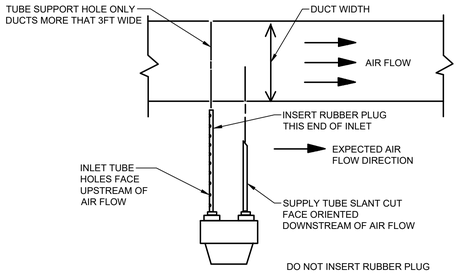
NOTES:
1. THE OPERATION OF VARIABLE VOLUME TERMINAL UNITS ARE AFFECTED BY EXCESSIVE TURBULANCE ON THE ENTERING SIDE OF EACH TERMINAL UNIT THEREFORE, TERMINAL UNITS MUST NOT BE INSTALLED TOO CLOSE TO MAIN DUCTS, ELBOWS AND FITTINGS.
2. WHEN MINIMUM UPSTREAM STRAIGHT DUCT CONNECTION TO TERMINALS AS INDICATED ABOVE CANNOT BE MAINTAINED, PROVIDE ORIFICE PLATE, STRAIGHTENING VANES OR OTHER DEVICE AS RECOMMENDED BY TERMINAL UNIT MANUFACTURER AND SUBMIT TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
3. ARRANGE ACCESS TO PERMIT EASY FIELD BALANCE AND MAINTENANCE OF TERMINAL UNIT. MAINTAIN MIN. 12" CLEARANCE ALL AROUND VAV BOX (UNLESS OTHERWISE NOTED).



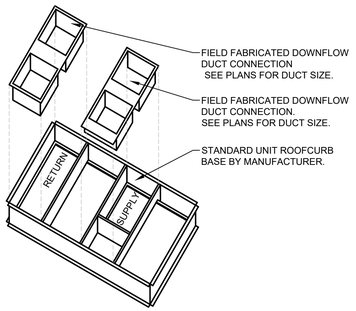
9 VAV BOX INSTALLATION DETAIL
NOT TO SCALE



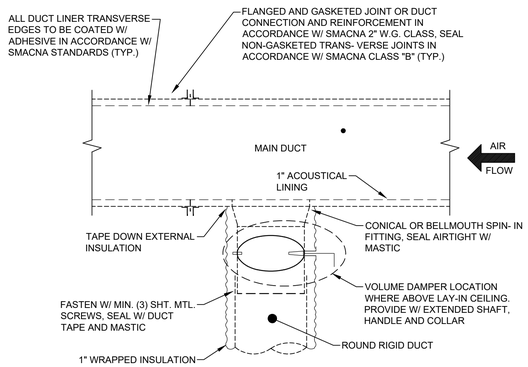
8 DUCT PENETRATION THRUROOF SLAB DETAIL DETAIL
NOT TO SCALE



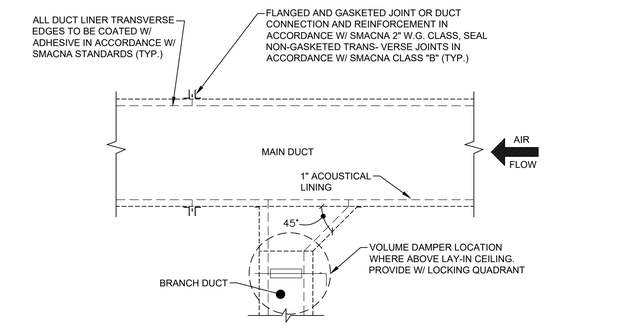
7 DUCT SMOKE DETECTOR DETAIL
NOT TO SCALE



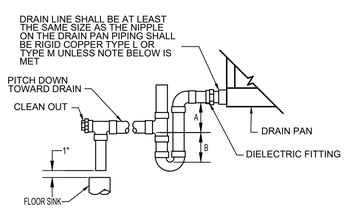
6 DUCTWORK CONNECTION TO ROOFCURB DETAIL
NOT TO SCALE



5 TYPICAL ROUND DUCT TAKEOFF DETAIL
NOT TO SCALE



4 TYPICAL RECTANGULAR DUCT TAKEOFF DETAIL
NOT TO SCALE

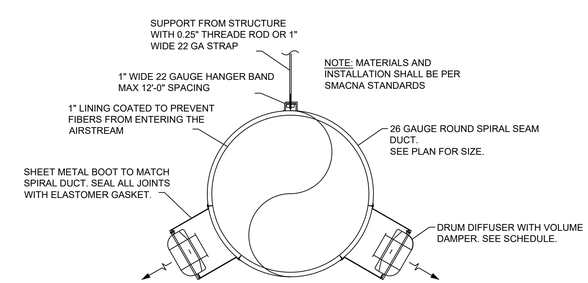


NOTE
1. CPVC PIPE MAY BE USED ONLY IF APPROVED BY LOCAL VA AND IS INDOORS AND DOES NOT PASS THROUGH RATED BARRIERS.
2. DIELECTRIC FITTING TO BE USED WHEN TWO DISSIMILAR METALS ARE TO BE CONNECTED.

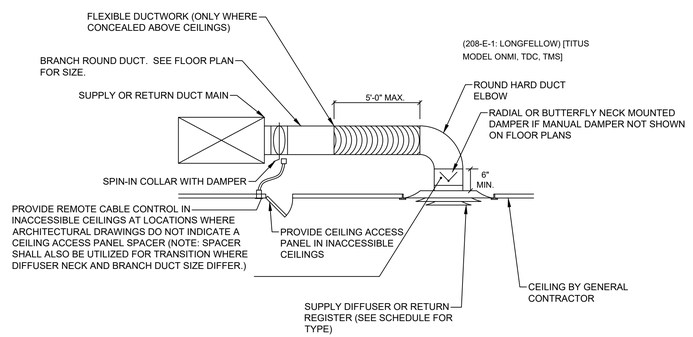
UNIT TYPE	A	B
DRAW THRU	2" PLUS X	X
BLOW THRU	1" MINIMUM	2X

WHERE X = STATIC PRESSURE IN PAN

3 ROOF TOP UNIT DRAIN TRAP DETAIL
NOT TO SCALE



2 INSULATED SPIRAL DUCT DETAIL
NOT TO SCALE



1 DIFFUSER CEILING MOUNT DETAIL
NOT TO SCALE

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MECHANICAL DETAILS

BUILDING RENOVATION

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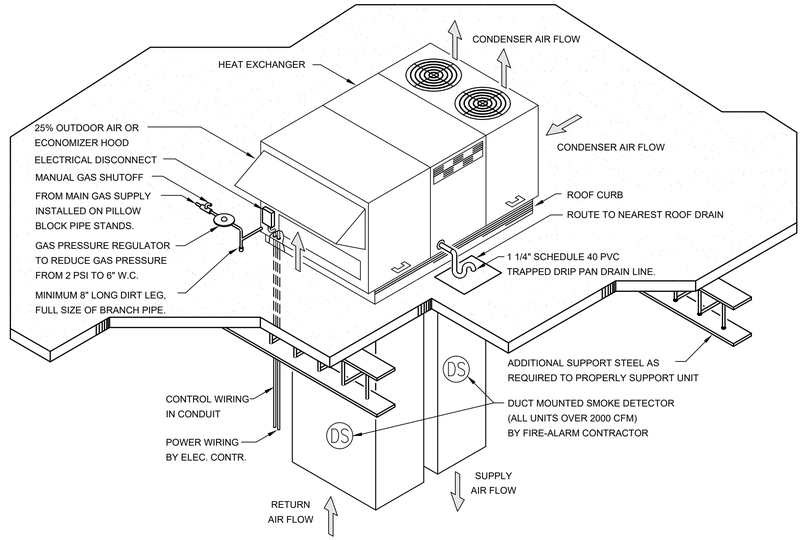
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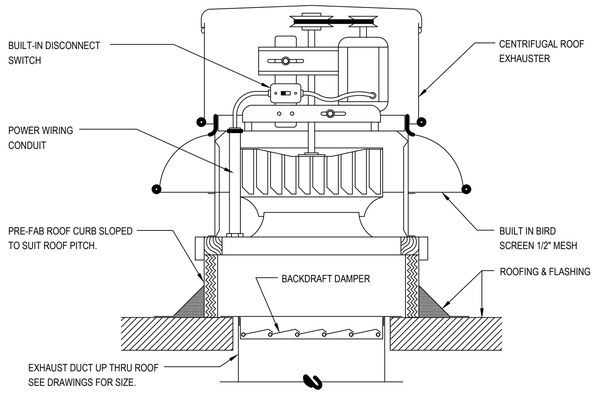
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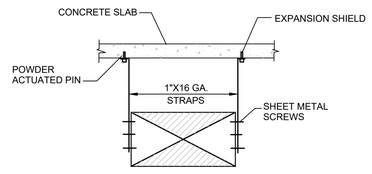
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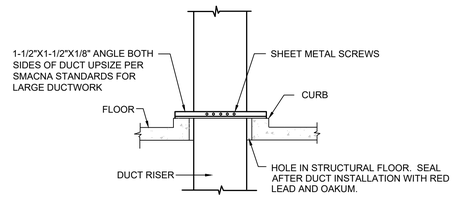
13 ROOFTOP UNIT INSTALLATION DETAIL
NOT TO SCALE



12 CENTRIFUGAL ROOF EXHAUST DETAIL
NOT TO SCALE



11 TYPICAL HORIZONTAL DUCT HANGER SUPPORT DETAIL
NOT TO SCALE



10 VERTICAL DUCT RISER SUPPORT DETAIL
NOT TO SCALE

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Electrical Specifications and General Notes

1. General

1.1. The Contractor shall provide and pay for all labor, materials and equipment necessary for a complete and functional electrical system(s). Items and accessories implied as necessary to complete the proper operation of the system(s) shall be provided.

1.2. Materials and installation shall comply with codes, utility requirements, laws and ordinances of federal, state, OSHA and local governing bodies having jurisdiction. The Contractor shall familiarize himself with all the local code amendments to ensure compliance.

1.3. The Contractor shall guarantee all materials and workmanship for a period of 12 months after final acceptance of the work.

1.4. Clean Up: The contractor is responsible for daily cleanup of all items associated to their trade in order to maintain a "broom swept" condition.

1.5. Approvals: the contractor is required to test, adjust and retest systems as required in order to obtain approvals from local jurisdictions, Owners insurance and underwriters, and Owners representatives.

1.6. The contract documents are not a direction for the contractor to violate any codes or local amendments. Should the contractor believe a code violation is present in the contract documents he shall bring it to the attention of the engineer immediately with an accompanying code reference or standard. The contractor shall not proceed with any work until the potential conflict has been resolved.

2. Review of contract documents and field conditions

2.1. The Contractor shall carefully examine all contract documents, visit the site, and become thoroughly familiar with the building standards and local conditions relating to the work. Failure to do so shall not relieve the Contractor of the obligations of the contract. Identify all discrepancies to the Engineer.

2.2. The drawings shall serve to indicate the general layout of the various items of equipment. The layout of the equipment may not include all items required. Accessories and other components are diagrammatic unless specifically shown or dimensioned. Existing conditions are reflective of as-built/as-designed drawings and items that were visually observable during the time of the field survey. Due to occupancy and accessibility, not all areas may have been field verified. The Contractor shall review all existing conditions prior to Bid and shall identify all areas in question within his Bid. Items not identified during the bidding process will be assumed to have been field verified and no issues or conflicts exist.

2.3. The Contractor shall notify the Engineer of any materials, equipment or configuration believed to be inadequate, unsuitable, in violation of laws, ordinances, rules or regulations of authorities having jurisdiction prior to installation.

2.4. The existing power, signal and communication systems are to remain in service to provide for the Owner's function. Should it become necessary to shut down any system or portion of a system, approval in writing shall be obtained from the Owner and shall be only for the period and time agreed upon. The bid is to include the cost of any temporary wiring and premium time required for the shutdown.

2.5. Cost Change Requests: all cost change requests shall be submitted using the latest edition of "RSMeans Electrical Cost Data". All requests shall be submitted broken down with the following:

- **2.5.1.** Material cost per item, linear foot, etc.
- **2.5.2.** Labor cost including cost per man hour and quantity of hours
- **2.5.3.** Overhead and profit percentage
- **2.5.4.** Total cost of the change order

2.6. All change requests shall be accompanied by initiating sketch, addenda, bulletin, directive, etc. including number for tracking. All change requirements shall include the date of documents the original, and changes were based off of.

2.7. Any associated costs for drafting to include the document change into the "AS-BUILT" documents shall not exceed 10% of the cost of change request. This shall include three dimensional drafting or BIM implementation.

2.8. Should the Contractor elect not to use RSMeans, this qualification must be outlined in writing in the Contractors bid. Alternatives to RSMeans shall be submitted in all inclusive (material and labor) unit prices, and each unit price shall be defined in the Contractors bid. All items not defined in the bid shall be reviewed using RSMeans.

2.9. The Contractor shall coordinate all phasing requirements with the General Contractor and/or Architect during bid. All costs to accommodate required phasing shall be included in bid.

2.10. All projects prepared using Revit or other three dimensional design tool shall not be assumed by the Contractor to be 100% coordinated installation documents. The Contractor shall fully field survey existing conditions and prepare shop drawings coordinated with all other trades.

3. Permits and fees

3.1. The Contractor shall secure and pay for all permits, governmental fees, taxes, inspections and licenses necessary for the proper execution and completion of the work.

4. Submittals and shop drawings

4.1. The Contractor shall prepare and submit to governmental agencies and utility companies, the shop drawings that are required by these agencies, for their approval.

4.2. The Contractor shall prepare and submit to the Authority Having Jurisdiction, the documents, including drawings, required to obtain approval of emergency lighting and exit sign types and locations. A copy of the approved drawings shall be provided to the Engineer before the start of construction.

4.3. The Contractor shall prepare and submit to the Authority Having Jurisdiction, the documents, including drawings, battery calculations, equipment cuts, etc. required to obtain approval of the equipment and locations of the devices that comprise the fire alarm and life safety systems. A copy of the approved drawings shall be provided to the Engineer before the start of construction.

4.4. Contractor shall submit complete floor plan and ceiling plans drawn to the scale of the Construction Documents, showing all equipment, wireways, and conduit to be installed. The complete branch wiring distribution system shall also be shown, accurately indicating power supplies, branch circuit runs, circuit designations and locations in walls, floors or ceilings. The drawing shall also show the work coordinated with all other trades. All drawings shall be submitted prior to starting the work, and in accordance with an approved schedule, provided by the Contractor, to avoid any delay on project.

4.5. Shop drawings shall include Contractor's name, job address, manufacturers' names, catalog numbers, cuts, diagrams, dimensions, and maintenance clearances and other such descriptive data as may be required to identify and review the equipment. Submittals shall be in logical groups: for example, all lighting fixtures. Partial submittals shall not be reviewed. Reviewing shop drawings by Elevate is a service only and does not imply a guarantee of existing conditions or building measurements. Reviewing of the shop drawings does in no way alleviate the Contractor of his responsibilities under the contract.

4.6. The shop drawing submittals shall be in electronic (.PDF) format unless noted otherwise in the Architectural specifications. Where hard copies are submitted, a minimum of (6) copies will be provided. Electronic shop drawings greater than 10MB in size shall not be submitted via email, but shall be posted to Elevate's FTP site (and the Architects upon request). The following items shall be submitted for review as applicable by project:

- **4.6.1.** Lighting fixtures, lamps and ballasts/drivers.
- **4.6.2.** Receptacles, switches, wiring devices, dimmers, floor fittings, relays, time switches.
- **4.6.3.** Fuses, disconnect switches, motor starters.
- **4.6.4.** Panelboards, transformers and other distribution equipment.
- **4.6.5.** Fire alarm system, including point-to-point drawings.
- **4.6.6.** Security and access control equipment, CCTV cameras, card readers, proximity, sensors, control panels, etc.
- **4.6.7.** Electrified items provided by other trades IE, elevators, kitchen equipment, etc. shall also be forwarded to the electrical engineer for review and coordination approval.

4.7. The Contractor shall submit to the Engineer for review enlarged plans of all electrical and mechanical rooms that contain electrical distribution equipment. These plans shall include all switchgear, switchboards, distribution boards, panelboards, transformers, automatic transfer switches (ATS), generators, uninterruptible power supplies (UPS), etc. Plans shall reflect dimensions of equipment consistent with submitted product data. Plans shall include any ductwork, piping, sprinkler lines, etc. so as to reflect maintained code required clearances. Those plans shall be submitted concurrently with product data for a comprehensive review by the Engineer. Cost to reinstall or replace or repurchase equipment due to the failure to submit these plans will not be approved.

4.8. No equipment shall be purchased or installed without an approved shop drawing submitted. The Contractor assumes all risk associated with failure to comply with this provision.

4.9. Substitutions

- **4.9.1.** The Contractor may substitute in accordance with the Architectural general provisions of the specifications. Where no Architect is present in the project, all substitutions must be presented in writing, with the Contractors bid. No substitutions will be accepted without prior approval of the Engineer and Architect and/ or Owner.
- **4.9.2.** The Contractor is required to provide equivalent physical size, materials, weight, performance, criteria, as the product specified. In addition, any differences between the product specified and the substitution which may affect other trades IE electrical characteristics, mechanical characteristics, etc. shall be accounted for prior to suggesting the substitution. All cost impacts to all other trades shall be accounted for in the substitution. No additional costs for other trades (including any required design fees) shall be approved after the approval of the substitution.

5. Cutting and patching

5.1. All cutting, drilling and patching of building concrete, masonry, steel or iron work shall be included by the Contractor, so that the work shall be properly installed. Under no conditions may structural work be cut, without written approval from the Engineer and Structural Engineer prior to the start of work.

5.2. The Contractor shall x-ray or use ground penetrating radar (GPR) prior to coring ensure that all proposed floor core locations are free of embedded conduit, steel rebar, etc.

5.3. All coring or holes drilled into the structural floor, of any size, shall be pre-approved and inspected by the building Engineer. Store the core spoils for inspection prior to disposal. Notify the Engineer if there is any damage to raceways that are buried in the slab. The Contractor shall remove any devices or raceways that are placed into the holes prior to inspection.

5.4. Fire seal all penetrations through rated walls, ceilings, and floors with approved firestopping. When coring into parking garage, areas with gaseous fire suppression systems and similar areas where transfer of air from one side to the other is a concern, those penetrations shall be properly sealed to prevent that migration of air/gasses.

6. Construction requirements

6.1. The Contractor shall provide and maintain temporary power, lighting and wiring for the performance of all trades, for the entire period of construction and shall remove all temporary services at the completion of construction.

6.2. Materials and equipment shall be listed and/or labeled by UL, ETL, CSA or another nationally recognized testing laboratory and shall be rated for a minimum temperature of 75°C.

6.3. All materials used shall be new, unless specifically indicated as existing to be re-used.

6.4. All materials and equipment shall be stored, handled, erected, installed, connected, cleaned, adjusted, tested, conditioned, and placed in service in accordance with the manufacturers' directions and recommendations.

6.5. Except as noted otherwise, all work required including labor, equipment, and materials shall be in strict compliance with the building standard.

6.6. Where temporary power is required to maintain continuity of electrical service during construction, the Contractor shall provide any and all temporary generators, panels, connections, transfer switches, etc. as required including multiple shut downs where required for the entire construction period. All costs shall be included in the Contractor's bid.

6.7. Equipment Installation/Removal Access. Access to install or remove electrical equipment shall be identified by the Architect or Engineer. Where not indicated, all required access shall be defined by the Electrical Contractor at the time of bid.

7. Demolition

7.1. The Contractor shall review with the Owner prior to removal, all equipment, fixtures, devices, etc., which are to be salvaged. These items shall be carefully removed undamaged and shall be returned to Owner's stock. All items that the Owner does not salvage and which are not re-used shall become the property of the Contractor and shall be removed from the site. Include in the bid, the cost of proper disposal of all debris or refuse.

7.2. Coordinate with the manufacturers of existing equipment that is to be revised or extended and include all work necessary for the proper completion of the revisions.

7.3. Where existing electrical work must be removed as a result of alterations, it shall be completely removed, back to the first outlet which is unaffected by the revision. All raceways, conduit, wire, supports, hangers, etc. shall be included under this requirement. Conduit that is embedded in concrete or otherwise inaccessibly positioned may be abandoned. In such cases, all wire shall be pulled out of the conduit back to source and the conduit shall be itself plugged and tagged at each end.

7.4. Where the work is adjacent to an existing area that is to remain, the Contractor shall maintain service to all equipment, lighting fixtures, and outlets that are outside the limits of construction. Maintain continuity of circuits as required.

7.5. The Contractor shall be responsible for damage caused to the existing conditions or other Contractor's work, including damage outside the limits of construction. Repair or replace any existing equipment that is to remain that is damaged during the work.

7.6. Cap all unused raceways, boxes or knockouts.

7.7. The Electrical Contractor shall disconnect and make safe for removal any mechanical, plumbing, or equipment provided by others as listed elsewhere in the contract documents.

8. Raceways

8.1. Provide complete metal raceway systems and enclosures for all lighting, power, telecommunications, fire alarm, and security wiring throughout the extent of the required systems.

8.2. Raceways shall consist of the following:

- **8.2.1.** Electrical metallic tubing (EMT) shall be used indoors. EMT fittings shall be of the steel compression type.
- **8.2.2.** All conduit fittings within environmental air/plenum areas shall be compression type or threaded.
- **8.2.3.** Rigid metallic conduit (RMC) or intermediate metal conduit (IMC) shall be used for any size conduit routed outdoors, where in direct contact with the earth, incoming electrical service, power conduits 2-1/2" diameter or larger, or any size conduit when encased in the floor slab. All RMC and IMC fittings and couplings shall be threaded.
- **8.2.4.** Where exposed to corrosive environments or liquids, conduit shall be PVC coated IMC with a zinc supplemental substrate coating. All PVC coated IMC fittings and couplings shall be threaded.

8.3. Minimum conduit size for live voltage interior installations shall be 3/4" unless otherwise indicated. Where installed outside, minimum conduit size shall be 3/4" unless otherwise indicated.

8.4. Where conduit crosses expansion joints or otherwise subject to movement and/or expansion, provide UL listed expansion fittings with external ground jumpers to prevent damage to enclosed conductors or connected equipment.

8.5. Communications system and low voltage control cabling raceway:
The raceway system for combination telephone/data outlets shall utilize a 4" square 2-1/8" deep back box with single gang flush wall opening with a 3/4" conduit to the raceway system or stubbed into the accessible ceiling space if code allows. Terminate each conduit with a nylon bushing Provide a raceway system of conduits, configured for at least 2 cables per outlet, 0.24" OD, unless otherwise noted or inferred. Utilize wide-radius bends and oversized junction boxes. The conduits shall terminate where noted on the plans. The grouping of cables shall be as follows:

Maximum Quantity of Cables in Conduit

Conduit Trade Size	Cable Outside Diameter 0.19"	0.23"	0.27"	0.31"	0.35"
3/4"	7	5	3	3	2
1"	11	8	6	4	3
1 1/4"	19	13	10	8	6
1 1/2"	26	18	13	10	8
2"	43	30	22	17	13
2 1/2"	62	43	31	24	19
3"	95	66	49	37	29
4"	163	113	83	64	50

This table applies only to power limited Class 2 communications cabling as per Article 800 of the Electrical Code. Conduit fill is based on 40% initial fill factor assuming straight runs with no offsets or bends. These values represent the minimum acceptable fill ratio and shall only be used if there is no guidance on the drawings or from the structured cabling vendor. Contractor shall confirm exact conduit fill ratios as required to maintain the structured cabling system's performance warrantee. Provide larger/additional conduit raceways where inferred or directed. This chart does not apply where POE Plus is utilized due to conductor heat dissipation issues.

8.6. Provide a pull wire or rope in all empty conduit.

8.7. All raceways shall be concealed. Devices shall be flush mounted, unless otherwise noted.

8.8. Each switch, lighting fixture, receptacle, and other miscellaneous devices shall be provided with a galvanized pressed steel outlet box of not less than No. 14 US gauge steel. Raceways shall be fastened with locknuts. All unused knockouts must be sealed. There must be sufficient volume per Code for conductors and devices - deep boxes shall be installed where required. Boxes shall be securely and adequately supported.

8.9. Final connections to motors, transformers, and similar equipment that are subject to vibration or adjustment shall be made with sections of flexible metal conduit. The minimum length shall be 18" and the maximum shall be 36" long.

8.10. In suspended ceilings where recessed lighting fixtures are installed, provide junction boxes near the fixtures for extending the branch circuit conductors to the fixture using flexible metal conduit. The flexible metal conduit shall be 3/8" minimum, in lengths not exceeding 6'. Flexible conduit shall be plenum rated where applicable.

8.11. The Contractor may reuse existing raceways wherever possible, provided they are of suitable size, cleaned, in good condition and are properly supported. All wiring shall be new. Where conduit systems are used as a ground path, continuity of ground shall be tested prior to reuse.

8.12. In suspended ceilings, provide dedicated support for conduit and junction boxes directly from the structural slab, deck, or framing provided for that purpose. Branch circuit conduits shall not be clipped to ductwork, the ceiling support wires or spline unless that ceiling system has been specifically designed for that purpose.

8.13. The Contractor shall field verify exact conduit raceway termination locations and configuration requirements for all specialized systems that require conduit raceways but are furnished by others (audio/visual, structured cabling, security system, etc.) to ensure that all associated electrical work is included in his bid. This coordination with related trades and vendors shall be performed prior to start of work.

9. Conductors

9.1. Branch circuit wire for use in interior dry locations no. 8 AWG and smaller shall be type THHN copper conductors. All other size wire for use in interior dry locations shall be dual rated THHN/THWN 600 volt insulated copper conductors. Wire that is installed in raceways outdoors, or in damp or wet locations shall be type XHHW-2, 600 volt insulated copper conductors. No wire smaller than no. 12 AWG shall be used for lighting or power wiring. Wire no. 10 AWG and smaller shall be solid and wire no. 8 AWG and larger shall be stranded. Aluminum conductors are not acceptable unless specifically called for in the design documents. Ampacity of the conductors to be installed shall be at least equal to the size of the upstream overcurrent protection device unless otherwise noted.

9.2. Wire size shown on the contract drawings is a minimum size only. The contractor shall adjust the branch circuit size accordingly to account for the voltage drop. Maximum voltage drop allowed for branch circuits shall be no more than 3% at the furthest device. Maximum voltage drop allowed for feeders shall be no more than 2%.

9.3. Where multiwire branch circuits are utilized, provide an approved means that will simultaneously disconnect all ungrounded conductors, otherwise, provide dedicated neutrals for each circuit.

10. Grounding

10.1. Provide dedicated ground conductor in all branch circuits and feeders.

10.2. Comply with UL467 for grounding and bonding of equipment.

10.3. Comply with all local jurisdictional requirements for grounding requirements.

10.4. Ground all electrical devices and non-current-carrying conductive materials enclosing electrical conductors or utilization equipment, or forming part of such equipment, etc - all as in accordance with Article 250 of the Electrical Code.

11. Wiring devices

11.1. Special receptacles shall be as noted on the drawings. The Contractor shall provide all special outlet boxes that may be required to enclose receptacles.

11.2. Receptacles and switches shall be rectangular decorator style with smooth face, 20A rated, commercial specification grade, back and side wired, plated steel wrap-around bridge, rocker type switch operators and thermoplastic nylon face.

11.3. Devices with back-stab/push-in type wiring connectors are not acceptable.

11.4. Faceplates shall be thermoplastic nylon.

11.5. The color of receptacles, switches, and wall plates shall be as specified by Architect.

11.6. Controlled receptacles shall be identified with a specific symbol and the word "CONTROLLED" per Electrical Code.

11.7. Provide permanent marking on the inside of cover plate of each wiring device indicating panel and circuit number.

11.8. Wiring devices shall be manufactured by Eaton, Hubbell, Legrand, or Leviton.

12. Floor fittings

12.1. Where floor fittings require penetration of the floor slab, they shall be a standard device listed for the purpose and shall have a fire rating equal to the floor rating. Coordinate all device locations with Architect, furniture layout, structural beams and floor construction prior to beginning work. Spacing restrictions - minimum of 2' on center and not more than 1 unit per each 65 square foot of floor area in each span. Floor fittings shall be as follows:

- **12.1.1.** Monument-style through-floor fittings shall be dual service type, fire-rated to match floor construction, with a finish as selected by the architect. Refer to plans for manufacturer and model numbers.
- **12.1.2.** Flush-style through-floor fittings shall be dual service type, UL scrub-tight, fire-rated to match floor construction, with multi-gang opening and matching carpet flange with a finish as selected by the architect. Refer to plans for manufacturer and model numbers.

12.2. Where floor fittings require flush mounting without penetration through the floor slab, they shall be of a standard device listed for that purpose. Coordinate all device locations with Architect, furniture layout, structural beams and floor construction prior to beginning work. Include in the bid the channeling and patching of the floor. Floor fittings shall be as follows:

- **12.2.1.** Flush floor boxes shall be adjustable, standard-depth cast iron construction, with a UL scrub-tight, rectangular gasketed cover plate and matching carpet flange. Provide one continuous cover plate for multiple boxes. Manufactured by Hubbell, Wiremold, or Thomas & Betts. Refer to plans for manufacturer and model number.
- **12.2.2.** Shallow flush floor boxes shall be nonadjustable, single gang, cast iron construction, with round or rectangular satin finish brass cover plate and matching carpet flange, total depth of 2". Manufactured by Wiremold or Hubbell.

12.3. Remove unused through-floor fittings and patch slab as required to restore its structural integrity. Remove associated conduit raceways and cabling in ceiling space below. Do not abandon through-floor fittings in place.

12.4. Provide blank cover plates in all unused or abandoned floor duct activation locations. Provide listed abandonment fittings available from the floor duct system manufacturer.

13. Lighting

13.1. The Contractor shall verify the ceiling type before ordering lighting fixtures. Recessed fixtures installed in plenum ceiling shall be plenum approved and designed for air return to plenum. Fixtures shall be provided with the proper frame or adapter to receive the type of ceiling, complete with lamps, lenses, end caps, mounting hardware, etc. Modify the fixture catalog numbers as required to obtain the necessary options and accessories.

13.2. Each lighting fixture shall be rigidly supported from the building construction and shall include suspension hangers, devices and other work for fixture support. Fixtures shall not be supported from the ceiling grid system unless the ceiling system is specifically manufactured and approved to do so and allowable by the Authority Having Jurisdiction.

14. Fire alarm

14.1. Provide a fully functional extension of the building fire alarm system or new system as indicated on contract drawings. Include all necessary hardware and software improvements and point-to-point wiring diagrams. Provide additional circuits, power supplies and amplification as required. Test, adjust, program and recertify the system at the completion of construction. Provide updates to all zone schedules and zone maps.

14.2. All fire alarm devices shall comply with the Americans With Disabilities Act (ADA) and shall match building standard.

14.3. All fire alarm devices shall fully comply with NFPA 72 and ICC/ANSI A117.1-2003, Section 7.702. All visual fire alarm notification appliances within the area of work shall be flash synchronized. Furnish and install additional control modules and power supplies as required.

14.4. Where required by Code and/or indicated on the contract documents, interface door access control systems, clean agent fire suppression systems, and other similar system which are furnished by others but require fire alarm connections for compliance with the Code.

14.5. Manufacturer: Silent Knight.

15. Distribution

15.1. New panelboards shall utilize bolt on type branch circuit breakers, with withstand ratings exceeding the available short circuit current. Manufactured by Siemens, General Electric, Square D, Eaton, Gus Berthold, Erickson, or Peterson.

15.2. Fuses 601 ampere and above shall be 600 volt rated, current limiting, time delay, silver link type, UL class L, as manufactured by Bussmann #KRPC-SP.

15.3. Fuses 600 ampere and below shall be current-limiting, dual element, time delay, rejection type, UL class RK-1, as manufactured by Bussmann LPS-RK-SP(600V), LPN-RK-SP(250V).

16. Mechanical/HVAC

16.1. Motors:

- **16.1.1.** Refer to the mechanical drawings for exact location of motors.
- **16.1.2.** Contractor shall wire, set and connect all individual motors, controls and equipment.

16.2. Provide local disconnect switches for all motors. All disconnects, starters, variable frequency drives, etc. installed by the Electrical Contractor shall be installed so as to provide the Code required clearances. Locations are shown for reference only. The Contractor shall coordinate with all trades prior to rough-in.

16.3. For **electric baseboard heat and electric radiant heat**, provide new wiring, raceways and disconnects where required to match existing; utilize existing circuits made available in the building panels; re-use user local disconnect switches where available; provide new user local disconnect switches to match existing; provide engraved nameplate with the marking "ELECTRIC HEAT".

17. Modular furniture

17.1. The Contractor shall provide all raceways, boxes, wiring and outlets for a complete hardwired electrified modular furniture system in compliance with local Code requirements. All equipment, raceways, boxes, etc. Shall be listed and/or labeled and shall meet the furniture manufacturer's requirements.

17.2. Provide circuits as shown via floor fittings or junction boxes as indicated on plans with flexible conduit connections. In-feed whips shall be kept as short as possible and located so as not to cause a trip hazard. Coordinate all infeed locations with Architect, furniture vendor and structural beams prior to beginning work.

17.3. Exact quantity of devices per workstation shall be directed and detailed by Architect/furniture vendor.

17.4. Coordinate power outlet and communication outlet locations in the furniture base prior to installation of raceway. Utilize furniture base knockouts for the power outlet locations. Provide additional openings in the furniture base required to install the communications outlets as required. Associated conduit raceways for final connection to furniture systems shall be sized in accordance with the provision in section 8 of this specification.

18. Execution

18.1. Refer to architectural drawings for exact locations and mounting heights of the electrical equipment. Dimensions indicated on the architectural drawings take precedence over those indicated here. Unless otherwise noted, mounting heights shall be as follows:

18.2. Receptacles and communications outlets shall be mounted 15" A.F.F. on centerline. The long dimension shall be vertically oriented with ground prong down.

- **18.2.1.** Switches shall be mounted 42" A.F.F. on centerline.
- **18.2.2.** Above-counter outlets and switches shall be mounted at 48"A.F.F. to centerline, but not less than 3-1/2" on centerline above the backsplash.
- **18.2.3.** Wall-mounted telephones shall be mounted 48" A.F.F. to centerline.
- **18.2.4.** HVAC user local disconnect switches shall be mounted 54" A.F.F. to centerline.
- **18.2.5.** Where existing devices are present in the area of work, new devices shall be mounted at the same mounting height and orientation to maintain a consistent appearance.

18.3. Fire alarm devices:

- **18.3.1.** Visual or Combination audible/visual alarm devices, where wall-mounted, shall be mounted 80"A.F.F. to centerline or 6" below ceiling, whichever is lower.
- **18.3.2.** Audible alarm devices shall be ceiling mounted or wall mounted, 80" A.F.F. to centerline, or 6" below the ceiling, whichever is lower.
- **18.3.3.** Manual pull stations shall be wall-mounted 48" A.F.F. to centerline.

18.4. Contractor shall give careful consideration to existing conditions including columns, beams, suspended ceilings, pipes, ductwork, expansion joints, etc. Contractor shall coordinate with all other trades and install electrical appurtances so as to maximize headroom and maintain code required clearances in all cases. The contractor shall notify the architect/ engineer where conflicts occur prior to rough-in. The contractor, under no circumstances, shall penetrate or otherwise modify structural members including but not limited to structural slabs/ floors, ceilings, beams, walls, columns, etc. without prior written approval from the electrical engineer and structural engineer and/ or architect.

18.5. The Contractor shall make every effort to minimize noise during construction. Noise shall be kept within maximum OSHA recommended levels and/or other local authorities having jurisdiction.

18.6. Numbered circuits that are indicated on the plans are for convenience of design only; field conditions may vary. Indicate the actual circuit numbers used on the "as-built" drawings.

18.7. All work installed within the ceiling plenum shall be in accordance with wiring method requirements for air handling ceiling spaces. Refer to the mechanical and architectural drawings for plenum areas and additional information.

19. Closeout

19.1. Upon completion of construction, the Contractor shall balance each panel so that there is no more than 10% difference between phases. The load shall be monitored during the peak a.m. Demand period. However, the reconfiguration of the panel shall occur after close of business. The scheduling of all work shall be with the construction manager. Submit report to Engineer.

19.2. The Contractor shall provide new typewritten panel directories for all panels changed or added. Provide engraved plastic labels permanently attached (no adhesives) for all new panels and distribution equipment.

19.3. Contractor shall provide all required software and/or technical labor for lighting relay panels, day light sensors, electrical demand meters, uninterruptable power supplies and other similar equipment requiring setup/programming to complete their installation. These technical startup and functional testing services be performed prior to occupancy and shall be subcontracted by the Contractor to the equipment manufacturer or a vendor authorized by the manufacturer to perform such services. All functional testing shall be furnished by the Contractor, in accordance with the applicable Energy Code requirements. Include at least one (1) extra post occupancy visit for each applicable system for the express purpose of adjustment and user training.

19.4. Prior to final acceptance, the Contractor shall provide a written certificate that all equipment and systems have been properly installed per code, cleaned, adjusted and tested. Include in the certificate, correspondence from each equipment manufacturer's representative that the configuration of their equipment, system and the installation conform to the manufacturer's requirements. Certification shall include all operation and maintenance manuals for all equipment.

19.5. The Contractor shall provide original "as-built" documents in both hard copy and AutoCAD drawing files. These drawings shall be made at the Contractor's expense on reproducible sheets of the same size as the Architectural drawings. Submit as-built drawings to Engineer.

19.6. Contractor Final Payment Final payment shall be withheld until the receipt of final certification of occupancy, approval as-builts, and owners training and corrections of all deficiencies and punch list items have been received.

- **19.6.1.** The Engineer, at his discretion may make portions of the contract documents available in electronic format. These documents are proprietary and remain the Engineer's property and shall be used solely with respect to this project. The documents will be provided for the convenience of the user, for use in preparing shop drawings and/or coordination drawings related to the construction of this project only. The user acknowledges that neither Elevate Consulting Engineers PLLC, the Architect, Consultants, the Client or the Owner make any warranty or representation that these files reflect the contract documents in their entirety. An agreement and waiver form is available through the Engineer's office and must be signed and submitted prior to delivery of the files.
- **19.6.2.** "As-Built" documents shall include all revisions, bulletins, addenda, etc. included as a part of the project. These files in AutoCAD DWG format are available on execution of a legal waiver.

20. Date-sensitive components

20.1. All components, either hardware or software, of any system described in these specifications, which rely upon calendar date and/or time for proper functioning, or which generate, calculate, measure or store calendar date and/or time for internal use, or for use by other systems or components described in these specifications shall continue to correctly and accurately represent and interpret calendar date and time substantially beyond the useful life of the component and its related systems where required by the AHJ.

21. Additional notes

21.1. Per 2024 Illinois Energy Conservation Code, Section C408 - System Commissioning, the general contractor shall ensure that documentation is provided as required for compliance with C408.3 - Lighting System Functional Testing. Subcontract commissioning/functional test work to the lighting control system manufacturer or a manufacturer's authorized representative as required by the AHJ. Submit executed copies of the functional checklists to Engineer and Owner for approval upon closeout of project.

21.2. Electrical Contractor shall comply with all recommended arc flash safety practices per NFPA70E. Utilize appropriately rated personnel protective equipment (PPE) as required. Where new electrical distribution equipment is being installed or existing is significantly modified, contractor shall provide updated arc flash boundary hazard warning labels. Subcontract any required arc flash study update work to the building's approved vendor.

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ELECTRICAL SPECIFICATIONS

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

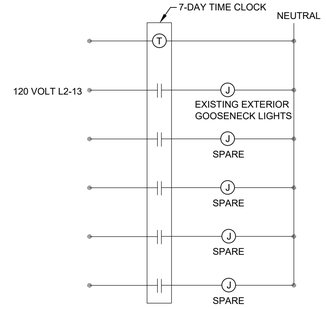
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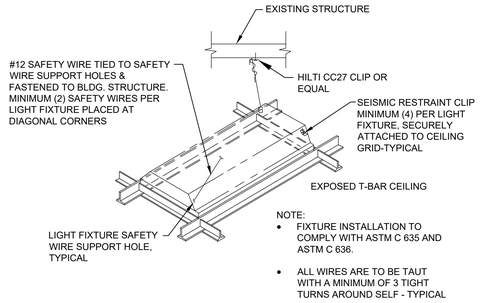
LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

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1 EXT LTG & SIGNAGE CONTROL
NOT TO SCALE



2 RECESSED LIGHT SUPPORT
NOT TO SCALE

SYMBOLS:

- KEYNOTE
- EQUIPMENT TAG
- NEW WORK
- EXISTING TO REMAIN
- TO BE REMOVED / DEMOLISHED
- CONDUIT - CONCEALED
- CONDUIT - EXPOSED
- CONDUIT - FLEXIBLE
- BELL
- CARD READER
- DISCONNECT SWITCH - NON-FUSED
- DISCONNECT SWITCH - FUSED
- EMERGENCY BATTERY PACK
- EMERGENCY REMOTE HEAD
- EPO-EMERGENCY POWER OFF PUSHBUTTON
- EXIT SIGN - SINGLE FACE
- EXIT SIGN - DOUBLE FACE
- EXIT SIGN - SINGLE FACE W/ CHEVRON(S)
- EXIT SIGN - DOUBLE FACE W/ CHEVRON(S)
- FIRE ALARM - DUCT DETECTOR
- FIRE ALARM - DUCT DETECTOR TEST SWITCH
- FIRE ALARM - HEAT DETECTOR
- FIRE ALARM - MANUAL PULL STATION
- FIRE ALARM - SMOKE DETECTOR
- FIRE ALARM - SPEAKER
- FIRE ALARM - HORN
- FIRE ALARM - STROBE
- FIRE ALARM - STROBE / HORN COMBINATION
- FIRE ALARM - STROBE / SPEAKER COMBINATION
- FIRE ALARM - VALVE SUPERVISORY (TAMPER)
- FIRE ALARM - WATERFLOW
- FLOOR BOX OR POKE-THRU
- GROUNDING CONNECTION
- HOMERUN TO PANEL
- JUNCTION BOX
- LUMINAIRE - 2X2
- LUMINAIRE - DOWNLIGHT
- LUMINAIRE - STRIP
- LUMINAIRE W/ BATTERY OR EM CIRCUIT
- LUMINAIRE W/ BATTERY OR EM CIRCUIT
- MAGNETIC DOOR HOLDER
- MOTOR
- MOTOR STARTER
- MOTOR STARTER - COMBINATION
- MOTOR STARTER - W/ THERMAL OVERLOAD
- SOUND SYSTEM SPEAKER
- PANEL - CONTROL, RELAY, MISC. AS NOTED
- PANELBOARD - LIGHTING / APPLIANCE
- PANELBOARD / SWITCHBOARD - DISTRIBUTION
- RECEPTACLE - DUPLEX
- RECEPTACLE - DUPLEX SPLIT-WIRED
- RECEPTACLE - QUAD
- RECEPTACLE - SINGLE
- RECEPTACLE - SPECIALZED
- SENSOR - VACANCY
- SENSOR - PHOTOCELL
- SWITCH - DIMMER
- SWITCH - MOMENTARY CONTACT
- SWITCH - OCCUPANCY / VACANCY SENSOR
- SWITCH - SINGLE-POLE
- SWITCH - THREE WAY
- SWITCH - TWO POLE
- TELEPHONE / DATA COMBINATION OUTLET
- DATA OUTLET
- TELEPHONE OUTLET - WALL MOUNTED
- TRANSFORMER
- WIRE IN CONDUIT - GROUND
- WIRE IN CONDUIT - NEUTRAL
- WIRE IN CONDUIT - PHASE
- WIRELESS ACCESS POINT

ABBREVIATIONS:

A	AMPERE
AF/AS	AMP FUSED / AMP SWITCHED
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BPS	BOLTED PRESSURE SWITCH
C, C.	CONDUIT
CB, C/B	CIRCUIT BREAKER
CCT	CIRCUIT
CLG	CEILING
DISC	DISCONNECT
E	EXISTING
ER	EXISTING/RELOCATED
EF	EXHAUST FAN
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FU	FUSE / FUSED
GFCI, GFI	GROUND FAULT CIRCUIT INTERRUPTER
GRD	GROUND
GRS	GALVANIZED RIGID STEEL
HACR	HEATING AND AIR-CONDITIONING RATED
HOA	HAND-OFF-AUTO
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
JB, J-BOX	JUNCTION BOX
LV	LOW VOLTAGE
MANUF	MANUFACTURER
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NL	NIGHT LIGHTING FIXTURE
PB	PULLBOX
PNL	PANEL
R	REMOVE
REQ'D	REQUIRED
SC	SEPARATE CIRCUIT
SW	SWITCH
SWBD	SWITCHBOARD
TTB	TELEPHONE TERMINATION BOARD
TTC	TELEPHONE TERMINATION CABINET
TYP	TYPICAL
V	VOLT
WP	WEATHERPROOF
XFMR	TRANSFORMER

ABBREVIATIONS AND SYMBOLS ARE OFFICE STANDARD AND ARE NOT ALL NECESSARILY USED IN THIS PROJECT

2020 NATIONAL ELECTRICAL CODE (NFPA 70)
2024 ILLINOIS ENERGY CONSERVATION CODE
2021 INTERNATIONAL BUILDING CODE

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ELECTRICAL NOTES, SYMBOLS, & ABBREVIATIONS

BUILDING RENOVATION

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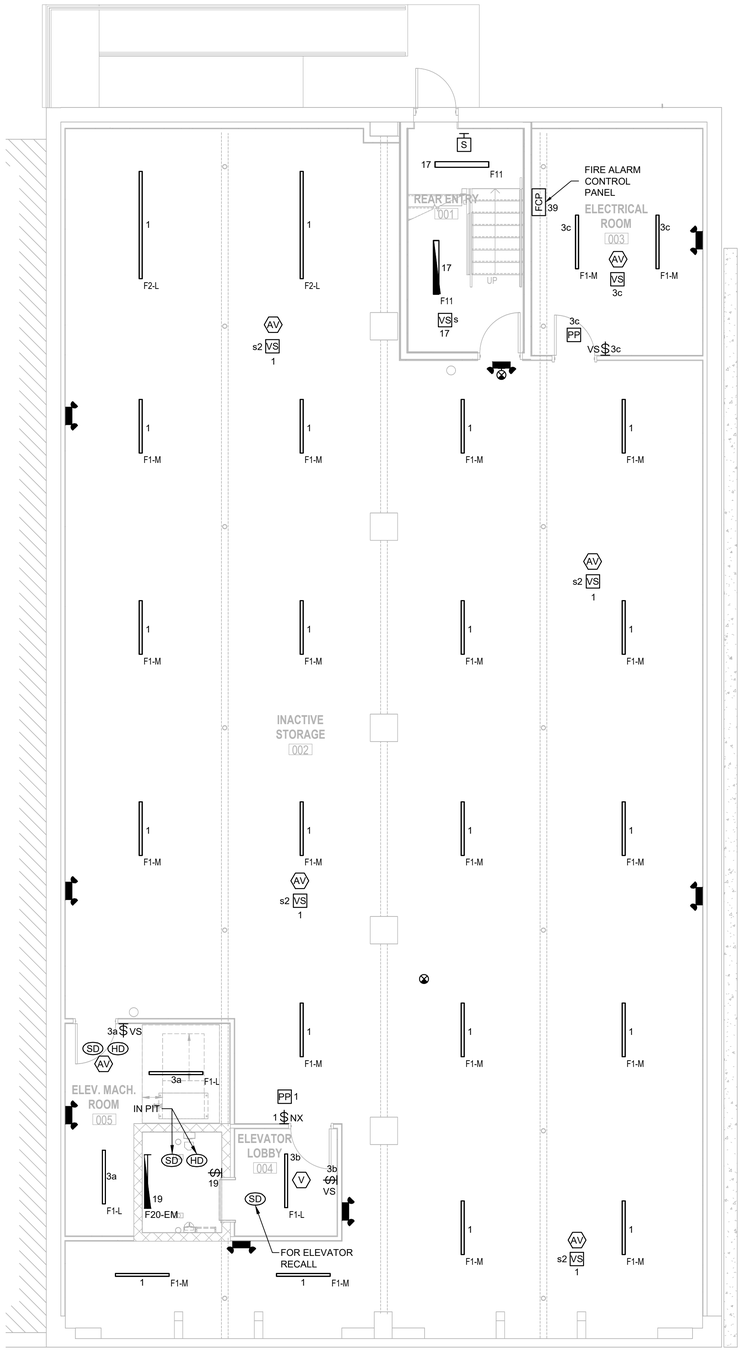
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ECE PROJECT # 25-923
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CHECKED ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
STATE OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

E101

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N

1 BASEMENT ELECTRICAL LIGHTING PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

FIRE ALARM NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW COMPLETE, FUNCTIONAL, AND COMPLIANT SYSTEM PER LOCAL AHJ FIRE DEPARTMENT. CONFORM TO ALL NATIONAL, STATE, AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, NFPA 72, NFPA 101, IBC, IFC, NEC, ILLINOIS ACCESSIBILITY CODE, ETC..... ALL WITH THE CURRENT EDITION OF LOCAL AHJ / FIRE DEPARTMENTS' REGULATIONS AND LOCAL AMENDMENTS.
2. ALL WORK INDICATED ON PLANS IS DIAGRAMMATIC FOR REFERNCE ONLY. FIRE ALARM CONTRACTOR SHALL PRODUCE SHOP DRAWINGS FOR LOCAL AHJ / FIRE DEPARTMENT REVIEW AND PERMIT SUBMISSION. SHOP DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, INSTALLATION INSTRUCTIONS, WIRING DIAGRAMS, POINT-TO-POINT CALCULATIONS, BATTERY CALCULATIONS, ETC.... PROVIDE ZONE SCHEDULES AND ZONE MAPS.
3. IT SHALL BE THE FIRE ALARM MANUFACTURER'S RESPONSIBILITY TO INDICATE (I.E. SHOP DRAWINGS) THE REQUIRED cd SETTINGS OF DEVICES TO SATISFY THE REQUIRED LIGHT OUTPUTS, AS PER NFPA7.5.4.3.1(a) AND 7.5.4.3.1(b). WHERE DEVICE IS "OFF-CENTER" IN ROOM / AREA, A HIGH CANDELA RANGE DEVICE MAY BE REQUIRED IN LIEU OF STANDARD CANDELA RANGE DEVICE - NO EXCEPTIONS.
4. DOOR IN EGRESS PATHS SHALL BE WIRED FAIL-SAFE TO ALLOW EXITING IN THE EVENT OF A SYSTEM FAILURE.
5. THE FIRE ALARM SYSTEM SHALL BE A CONVENTIONAL HORN (AUDIO) SYSTEM.

PANEL DESIGNATION NOTE:

CIRCUIT ALL LIGHTING TO PANEL 'L1', UNLESS NOTED OTHERWISE.

OCCUPANCY / VACANCY SENSOR NOTE:

ALL SENSORS SHALL BE INSTALLED IN ACCORDANCE TO ALL MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL COORDINATE SETTINGS & OPTIONS WITH OWNER PRIOR TO ALL WORK. ALL SENSORS SHALL BE LOCATED AND INSTALLED AS TO AVOID OBSTRUCTIONS AND PRE-MATURE ACTIVATIONS. SENSORS SHALL BE SWITCH OVERRIDE CAPABLE. PROVIDE AND INSTALL POWER / SLAVE PACKS (NOT SHOWN ON PLANS) WHERE REQUIRED. CATALOG NUMBERS ON PLANS ARE FOR REFERENCE ONLY. IT SHALL BE THE MANUFACTURER'S RESPONSIBILITY TO PROVIDE EXACT TYPE, QUANTITIES, AND LOCATIONS TO ENSURE A "GUARANTEED" FULLY OPERATIONAL AND FUNCTIONAL SYSTEM. COLOR TO BE WHITE UNLESS OTHER DIRECTED BY ARCHITECT.

UNLESS SPECIFICALLY INDICATED OTHERWISE BY RESPECTIVE DRAWING NOTE(S), THE FOLLOWING SHALL BE PROVIDED AND INSTALLED AS MANUFACTURED BY ACUITY CONTROLS OR EQUAL:

- VS — LINE VOLTAGE, DUAL TECHNOLOGY, WALL MOUNTED VACANCY MODE (MANUAL ON/AUTO OFF CONTROL) nLIGHT MODEL# ' nWSXA-PDT-LV-"BY ARCHITECT" '.
- VS ds1 — LINE VOLTAGE, DUAL TECHNOLOGY, WALL MOUNTED WITH RAISE-LOWER DIMMING CONTROLS VACANCY MODE (MANUAL ON/AUTO OFF CONTROL) nLIGHT MODEL# 'nWSXA-PDT-LV-"FINISH BY ARCHITECT"'.
- VS s — LOW VOLTAGE, DUAL TECHNOLOGY, STANDARD RANGE CEILING MOUNTED SENSOR nLIGHT MODEL# 'nCM-PDT-9-SERIES'.
- VS s2 — LOW VOLTAGE, DUAL TECHNOLOGY, EXTENDED RANGE CEILING MOUNTED SENSOR nLIGHT MODEL# 'nCM-PDT-10-SERIES'.
- VS s3 — LOW VOLTAGE, DUAL TECHNOLOGY, 120 DEGREE VIEW, WALL MOUNTED SENSOR WITH MOUNTING BRACKET nLIGHT MODEL# 'nWV-PDT-16-KIT-SERIES'.
- VS s4 — LOW VOLTAGE, DUAL TECHNOLOGY, HALLWAY VIEW SENSOR nLIGHT MODEL# 'nHV-13-SERIES'.
- PP — POWER PACK FOR SINGLE LIGHTING CONTROL WITH DIMMING nLIGHT MODEL # 'nPP16-(D)'.
- PL — PLUG LOAD CONTROLLER FOR SINGLE CIRCUIT nLIGHT MODEL # 'nPP20-PL'.

NOTES:
VERIFY EXACT ROOM CONTROLLER MODEL(S) WITH LIGHTING FIXTURES BEING SUPPLIED.

KEYED NOTES:

1. EXTERIOR LIGHTS TO BE CONTROLLED VIA ASTRONOMIC TIME CLOCK. 7-DAY/365 PROGRAMMABLE. INTERMATIC Model # ET2825C OR EQUAL.
2. EXHAUST FANS SHALL BE CONNECTED TO AND CONTROLLED VIA THE LIGHT SWITCH.

LIGHTING GENERAL NOTES:

1. EMERGENCY LIGHTING AND EXIT SIGNS SHALL BE CIRCUITED TO THE EXISTING BASE BUILDING EMERGENCY PANEL SERVING THE AREA. UTILIZE EXISTING CIRCUITS SERVING RESPECTIVE AREA OF WORK. VERIFY EXACT CIRCUIT LOAD PRIOR TO CONNECTING NEW SIGNS OR LIGHTING FIXTURES. EXIT SIGNS AND EMERGENCY LIGHTING SHALL BE CIRCUITED TO SEPARATE DEDICATED RACEWAYS FROM ALL OTHER ELECTRICAL SYSTEMS. NO MORE THAN (15) DEVICES PER CIRCUIT. REFER TO LIGHTING PLANS FOR EXACT CIRCUITING REQUIREMENTS. PROVIDE NEW CIRCUITS AS REQUIRED.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS FOR GENERAL LIGHTING. EXIT SIGN AND EMERGENCY LIGHTING SHALL BE BASED ON THE ENGINEERING PLANS. SUBMIT EXITING AND EMERGENCY LIGHTING LAYOUT TO CITY OFFICIALS PER SPECIFICATIONS AND ADJUST LOCATIONS AS REQUIRED.
3. COORDINATE THE EXACT MOUNTING OF ALL EXIT SIGNS WITH ARCHITECT PRIOR TO ORDERING. COORDINATE LOCATIONS WITH DOOR SWINGS, SOFFITS, OBSTRUCTIONS, ETC TO AVOID CONFLICTS. PROVIDE PENDANTS AS REQUIRED.
4. WHERE FIXTURES ARE NOT SHOWN IN EXISTING AREAS OUTSIDE THE SCOPE OF WORK OR ARE INDICATED AS BE "EXISTING", ELECTRICAL CONTRACTOR SHALL MAINTAIN THE CIRCUIT CONTINUITY OF THOSE FIXTURES. WHERE DOOR LOCATIONS ARE ADDED OR ALTERED, ELECTRICAL CONTRACTOR SHALL PROVIDE ANY NEW SWITCHING AND/OR RECIRCUITING AS REQUIRED.
5. WHERE MULTIPLE SWITCHES ARE MOUNTED AT THE SAME LOCATION, ELECTRICAL CONTRACTOR SHALL PROVIDE A SINGLE COMMON FACEPLATE WHENEVER POSSIBLE. UTILIZE TAP SWITCHES TO MATCH DIMMERS WHERE APPLICABLE. REFER TO POWER PLANS FOR ANY MOTORIZED SCREEN OR EXHAUST FAN CONTROLS.
6. TYPICAL-ALL NEW UNDERCABINET, COVE, ETC. LIGHTING FIXTURES; COORDINATE EXACT LENGTHS AND INFEED POINTS WITH MILLWORK CONTRACTOR.
7. ALL LIGHTING FIXTURES SHALL BE LOCATED AS REQUIRED ON THE JOB TO CLEAR DUCTS, PIPING, EQUIPMENT AND/OR MECHANICAL COMPONENTS.

EMERGENCY LIGHTING NOTE:

LIGHTING FIXTURES INDICATED WITH HALF SHADING (i.e. ◪) INDICATES THAT IS IT EQUIPPED WITH EMERGENCY BATTERY BACKUP FROM MANUFACTURER. THESE SHALL BE CONTROLLED VIA RESPECTIVE ROOM / AREA LOCAL CONTROL(S) BUT SHALL HAVE AN ADDITIONAL UNSWITCHED HOT TO KEEP BATTERY CHARGED AND TO MONITOR POWER LOSS FOR EMERGENCY BATTERY FUNCTION. CONTRACTOR TO OBTAIN WIRING DETAIL OF THE EMERGENCY PACK PACK INSIDE THE LIGHTING FIXTURE TO ENSURE IT COMES WITH BOTH A CONSTANT HOT AND A SWITCHED HOT.

LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	LAMPS	LUMINARE		MOUNTING	MANUFACTURER & CATALOG NUMBER	REMARKS
			WATTS	VOLTS			
F1	4' LED STRIP LIGHT	4333 LUMENS 4000K	38	120/277	SURFACE	LITHONIA LIGHTING CSS L48 4000LM MVOLT 40K 80CRI	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F2	8' LED STRIP LIGHT	8377 LUMENS 4000K	58	120/277	SURFACE	LITHONIA LIGHTING CSS L96 8000LM MVOLT 40K 80CRI	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F3	4" DOWLIGHT	3066 LUMENS 4000K	32	120/277	RECESSED	LITHONIA LIGHTING LBR4-NCH-30LM-40K-MVOLT-UGZ	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F5	2X4 LED FLAT PANEL LIGHT SURFACE MOUNT	4450 LUMENS 4000K	34	120/277	SURFACE	LITHONIA LIGHTING CPANL 2X4 ALO6 SWW7 M2	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F6	LINEAR LED FIXTURE	4000 LUMENS 4000K	37	120/277	SURFACE	STARTREK LIGHTING AMERICA BEAMDI-8'-500LPF-40K-80-U-1C	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F7	LINEAR LED FIXTURE	8000 LUMENS 4000K	74	120/277	SURFACE	STARTREK LIGHTING AMERICA BEAMDI-16'-500LPF-40K-80-U-1C	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F9	4" PENDANT LIGHT	2000 LUMENS 4000K	20	120/277	PENDANT	GOTHAM LIGHTING - EVO EVO4CC-40-20-MVOLT-GZ10	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F10	LINEAR LED FIXTURE	1500 LUMENS 4000K	14	120/277	SURFACE	STARTREK LIGHTING AMERICA BEAMDI-3'-500LPF-40K-80-U-1C	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F11	4' LED STAIR STRIP LIGHT	4263 LUMENS 4000K	35	120/277	SURFACE	LITHONIA LIGHTING BLWP2-40L-GZ10-LP840	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT. EMERGENCY MODEL SHALL HAVE 90-MINUTE BATTERY BACKUP
F12	LINEAR LED FIXTURE	2000 LUMENS 4000K	19	120/277	SURFACE	STARTREK LIGHTING AMERICA BEAMDI-4'-500LPF-40K-80-U-1C	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
F20-EM	4FT VAPORTIGHT WET RATED LED STRIP WITH INTEGRAL EMERGENCY BATTERY BACKUP	5,000 LUMENS 3500K	42	UNV	WALL	LITHONIA - CSVT SERIES CSVT-L48-5000LM-MVOLT-35K-80CRI -IE7WCPHE	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT
S1	EXTERIOR CANOPY LIGHTING	1500 LUMENS 4000K	14	120/277	CANOPY	LITHONIA LIGHTING OLCFM LED -15-40K-120V	EXACT MODELS BY ARCHITECT
S2	EXTERIOR WALL SCONCE	1000 LUMENS 4000K	9.1	120/277	WALL	LITHONIA LIGHTING OLLWD LED - P1-40K-MVOLT	EXACT MODELS BY ARCHITECT
S3	EXTERIOR WALL PACK	10,000 LUMENS 4000K	75	120/277	WALL	LITHONIA LIGHTING WDGE3-LED-P3	EXACT MODELS BY ARCHITECT
	CONTEMPORARY LED EMERGENCY LIGHT	440 LUMENS	4.8	120/277	SURFACE	LITHONIA LIGHTING ELM2L	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT. EMERGENCY FIXTURES SHALL HAVE 90-MINUTE BATTERY BACKUP
	COMBINATION EMERGENCY-EXIT SIGN LIGHT	400 LUMENS	3.5	120/277	SURFACE	LITHONIA LIGHTING LHQM-HO (REMOTE HEAD) ELMRW LP220L DWHXD SGL	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT. EMERGENCY FIXTURES SHALL HAVE 90-MINUTE BATTERY BACKUP
	THERMOPLASTIC EXIT SIGN	220 LUMENS	1.5	120/277	SURFACE	LITHONIA LIGHTING LQM	EXACT MODELS BY INTERIOR DESIGNER AND ARCHITECT. EMERGENCY FIXTURES SHALL HAVE 90-MINUTE BATTERY BACKUP

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BASEMENT ELECTRICAL LIGHTING PLAN

BUILDING RENOVATION

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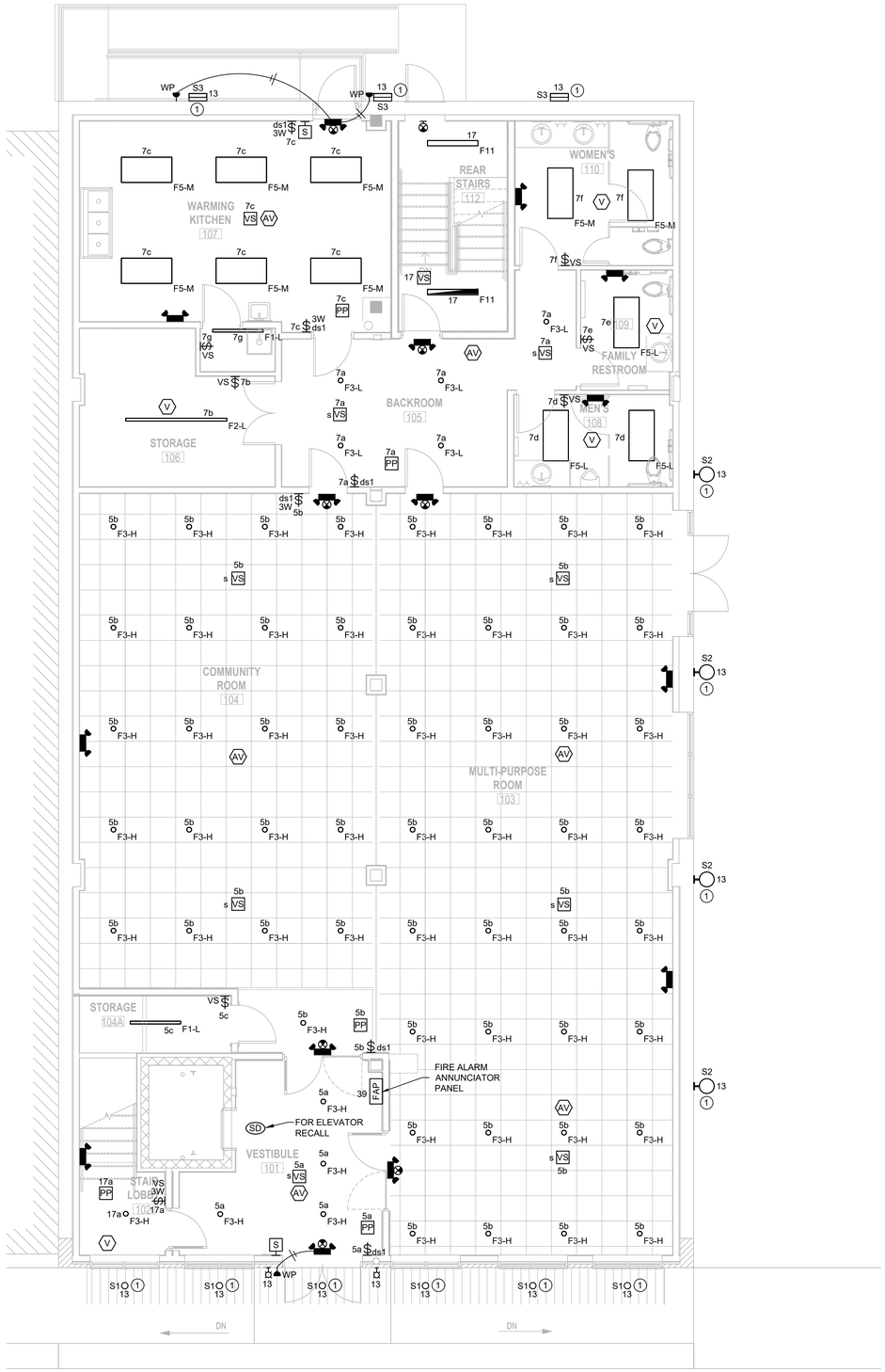
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REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

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1 FIRST FLOOR ELECTRICAL LIGHTING PLAN

SCALE: 3/16" = 1'-0"

FIRE ALARM NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW COMPLETE, FUNCTIONAL, AND COMPLIANT SYSTEM PER LOCAL AHJ FIRE DEPARTMENT. CONFORM TO ALL NATIONAL, STATE, AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, NFPA 72, NFPA 101, IBC, IFC, NEC, ILLINOIS ACCESSIBILITY CODE, ETC...., ALL WITH THE CURRENT EDITION OF LOCAL AHJ / FIRE DEPARTMENTS' REGULATIONS AND LOCAL AMENDMENTS.
2. ALL WORK INDICATED ON PLANS IS DIAGRAMMATIC FOR REFERNCE ONLY. FIRE ALARM CONTRACTOR SHALL PRODUCE SHOP DRAWINGS FOR LOCAL AHJ / FIRE DEPARTMENT REVIEW AND PERMIT SUBMISSION. SHOP DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, INSTALLATION INSTRUCTIONS, WIRING DIAGRAMS, POINT-TO-POINT CALCULATIONS, BATTERY CALCULATIONS, ETC.... PROVIDE ZONE SCHEDULES AND ZONE MAPS.
3. IT SHALL BE THE FIRE ALARM MANUFACTURER'S RESPONSIBILITY TO INDICATE (I.E. SHOP DRAWINGS) THE REQUIRED cd SETTINGS OF DEVICES TO SATISFY THE REQUIRED LIGHT OUTPUTS, AS PER NFPA7.5.4.3.1(a) AND 7.5.4.3.1(b). WHERE DEVICE IS "OFF-CENTER" IN ROOM / AREA, A HIGH CANDELA RANGE DEVICE MAY BE REQUIRED IN LIEU OF STANDARD CANDELA RANGE DEVICE - NO EXCEPTIONS.
4. DOOR IN EGRESS PATHS SHALL BE WIRED FAIL-SAFE TO ALLOW EXITING IN THE EVENT OF A SYSTEM FAILURE.
5. THE FIRE ALARM SYSTEM SHALL BE A CONVENTIONAL HORN (AUDIO) SYSTEM.

OCCUPANCY / VACANCY SENSOR NOTE:

ALL SENSORS SHALL BE INSTALLED IN ACCORDANCE TO ALL MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL COORDINATE SETTINGS & OPTIONS WITH OWNER PRIOR TO ALL WORK. ALL SENSORS SHALL BE LOCATED AND INSTALLED AS TO AVOID OBSTRUCTIONS AND PRE-MATURE ACTIVATIONS. SENSORS SHALL BE SWITCH OVERRIDE CAPABLE. PROVIDE AND INSTALL POWER / SLAVE PACKS (NOT SHOWN ON PLANS) WHERE REQUIRED. CATALOG NUMBERS ON PLANS ARE FOR REFERENCE ONLY. IT SHALL BE THE MANUFACTURER'S RESPONSIBILITY TO PROVIDE EXACT TYPE, QUANTITIES, AND LOCATIONS TO ENSURE A "GUARANTEED" FULLY OPERATIONAL AND FUNCTIONAL SYSTEM. COLOR TO BE WHITE UNLESS OTHER DIRECTED BY ARCHITECT.

UNLESS SPECIFICALLY INDICATED OTHERWISE BY RESPECTIVE DRAWING NOTE(S), THE FOLLOWING SHALL BE PROVIDED AND INSTALLED AS MANUFACTURED BY ACUITY CONTROLS OR EQUAL:

- $vs — LINE VOLTAGE, DUAL TECHNOLOGY, WALL MOUNTED VACANCY MODE (MANUAL ON/AUTO OFF CONTROL) nLIGHT MODEL# ' nWSXA-PDT-LV-"BY ARCHITECT" '.
- $ds1 — LINE VOLTAGE, DUAL TECHNOLOGY, WALL MOUNTED WITH RAISE-LOWER DIMMING CONTROLS VACANCY MODE (MANUAL ON/AUTO OFF CONTROL) nLIGHT MODEL# 'nWSXA-PDT-LV-"FINISH BY ARCHITECT"'.
- VS s — LOW VOLTAGE, DUAL TECHNOLOGY, STANDARD RANGE CEILING MOUNTED SENSOR nLIGHT MODEL# 'nCM-PDT-9-SERIES'.
- VS s2 — LOW VOLTAGE, DUAL TECHNOLOGY, EXTENDED RANGE CEILING MOUNTED SENSOR nLIGHT MODEL# 'nCM-PDT-10-SERIES'.
- VS s3 — LOW VOLTAGE, DUAL TECHNOLOGY, 120 DEGREE VIEW, WALL MOUNTED SENSOR WITH MOUNTING BRACKET nLIGHT MODEL# 'nWV-PDT-16-KIT-SERIES'.
- VS s4 — LOW VOLTAGE, DUAL TECHNOLOGY, HALLWAY VIEW SENSOR nLIGHT MODEL# 'nHV-13-SERIES'.
- PP — POWER PACK FOR SINGLE LIGHTING CONTROL WITH DIMMING nLIGHT MODEL # 'nPP16-(D)'.
- PL — PLUG LOAD CONTROLLER FOR SINGLE CIRCUIT nLIGHT MODEL # 'nPP20-PL'.

NOTES:
VERIFY EXACT ROOM CONTROLLER MODEL(S) WITH LIGHTING FIXTURES BEING SUPPLIED.

KEYED NOTES:

1. EXTERIOR LIGHTS TO BE CONTROLLED VIA ASTRONOMIC TIME CLOCK. 7-DAY/365 PROGRAMMABLE. INTERMATIC Model # ET2825C OR EQUAL.
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LIGHTING GENERAL NOTES:

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3. COORDINATE THE EXACT MOUNTING OF ALL EXIT SIGNS WITH ARCHITECT PRIOR TO ORDERING. COORDINATE LOCATIONS WITH DOOR SWINGS, SOFFITS, OBSTRUCTIONS, ETC TO AVOID CONFLICTS. PROVIDE PENDANTS AS REQUIRED.
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5. WHERE MULTIPLE SWITCHES ARE MOUNTED AT THE SAME LOCATION, ELECTRICAL CONTRACTOR SHALL PROVIDE A SINGLE COMMON FACEPLATE WHENEVER POSSIBLE. UTILIZE TAP SWITCHES TO MATCH DIMMERS WHERE APPLICABLE. REFER TO POWER PLANS FOR ANY MOTORIZED SCREEN OR EXHAUST FAN CONTROLS.
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EMERGENCY LIGHTING NOTE:

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PANEL DESIGNATION NOTE:

CIRCUIT ALL LIGHTING TO PANEL 'L1', UNLESS NOTED OTHERWISE.

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FIRST FLOOR ELECTRICAL LIGHTING PLAN

BUILDING RENOVATION

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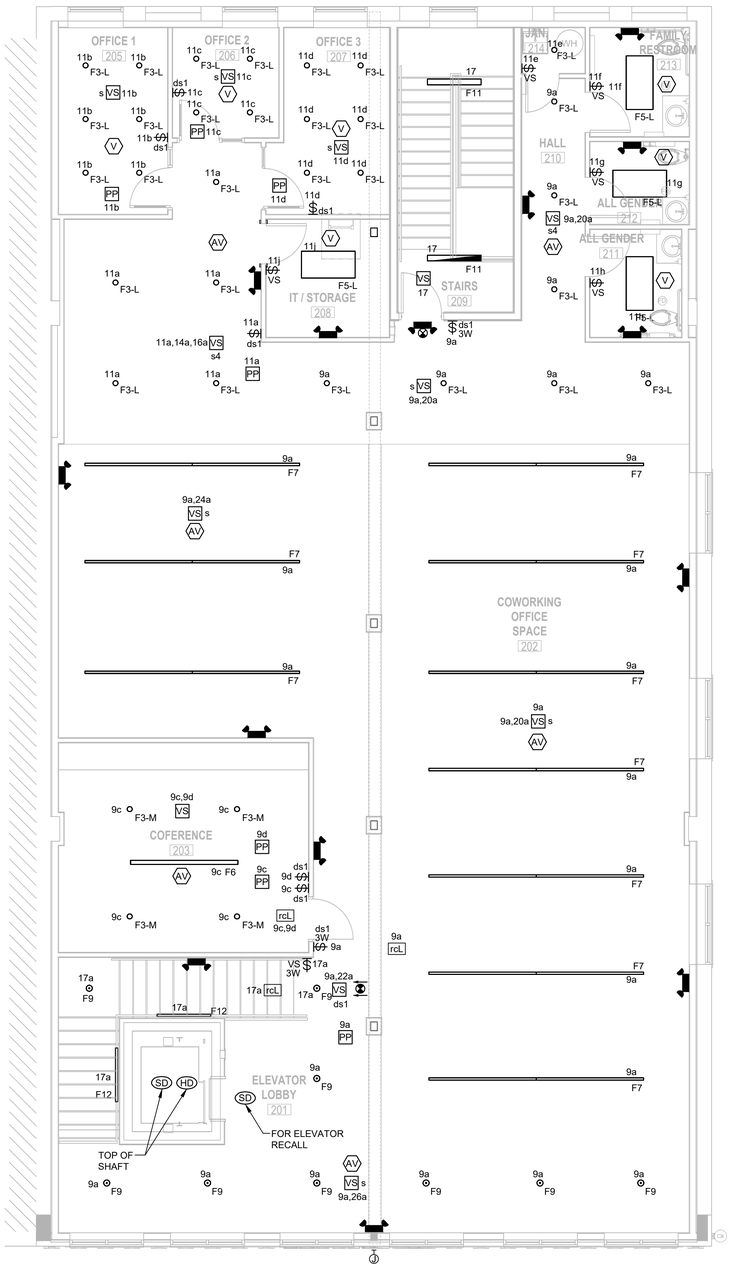
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REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
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OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

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2026 studioK Architecture, LLC.



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1 SECOND FLOOR ELECTRICAL LIGHTING PLAN

SCALE: 3/16" = 1'-0"

FIRE ALARM NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A NEW COMPLETE, FUNCTIONAL, AND COMPLIANT SYSTEM PER LOCAL AHJ FIRE DEPARTMENT. CONFORM TO ALL NATIONAL, STATE, AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, NFPA 72, NFPA 101, IBC, IFC, NEC, ILLINOIS ACCESSIBILITY CODE, ETC.…, ALL WITH THE CURRENT EDITION OF LOCAL AHJ / FIRE DEPARTMENTS' REGULATIONS AND LOCAL AMENDMENTS.
2. ALL WORK INDICATED ON PLANS IS DIAGRAMMATIC FOR REFERNCE ONLY. FIRE ALARM CONTRACTOR SHALL PRODUCE SHOP DRAWINGS FOR LOCAL AHJ / FIRE DEPARTMENT REVIEW AND PERMIT SUBMISSION. SHOP DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, INSTALLATION INSTRUCTIONS, WIRING DIAGRAMS, POINT-TO-POINT CALCULATIONS, BATTERY CALCULATIONS, ETC.... PROVIDE ZONE SCHEDULES AND ZONE MAPS.
3. IT SHALL BE THE FIRE ALARM MANUFACTURER'S RESPONSIBILITY TO INDICATE (I.E. SHOP DRAWINGS) THE REQUIRED cd SETTINGS OF DEVICES TO SATISFY THE REQUIRED LIGHT OUTPUTS, AS PER NFPA7.5.4.3.1(a) AND 7.5.4.3.1(b). WHERE DEVICE IS "OFF-CENTER" IN ROOM / AREA, A HIGH CANDELA RANGE DEVICE MAY BE REQUIRED IN LIEU OF STANDARD CANDELA RANGE DEVICE - NO EXCEPTIONS.
4. DOOR IN EGRESS PATHS SHALL BE WIRED FAIL-SAFE TO ALLOW EXITING IN THE EVENT OF A SYSTEM FAILURE.
5. THE FIRE ALARM SYSTEM SHALL BE A CONVENTIONAL HORN (AUDIO) SYSTEM.

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- PL — PLUG LOAD CONTROLLER FOR SINGLE CIRCUIT nLIGHT MODEL # 'nPP20-PL'.

NOTES:
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PANEL DESIGNATION NOTE:

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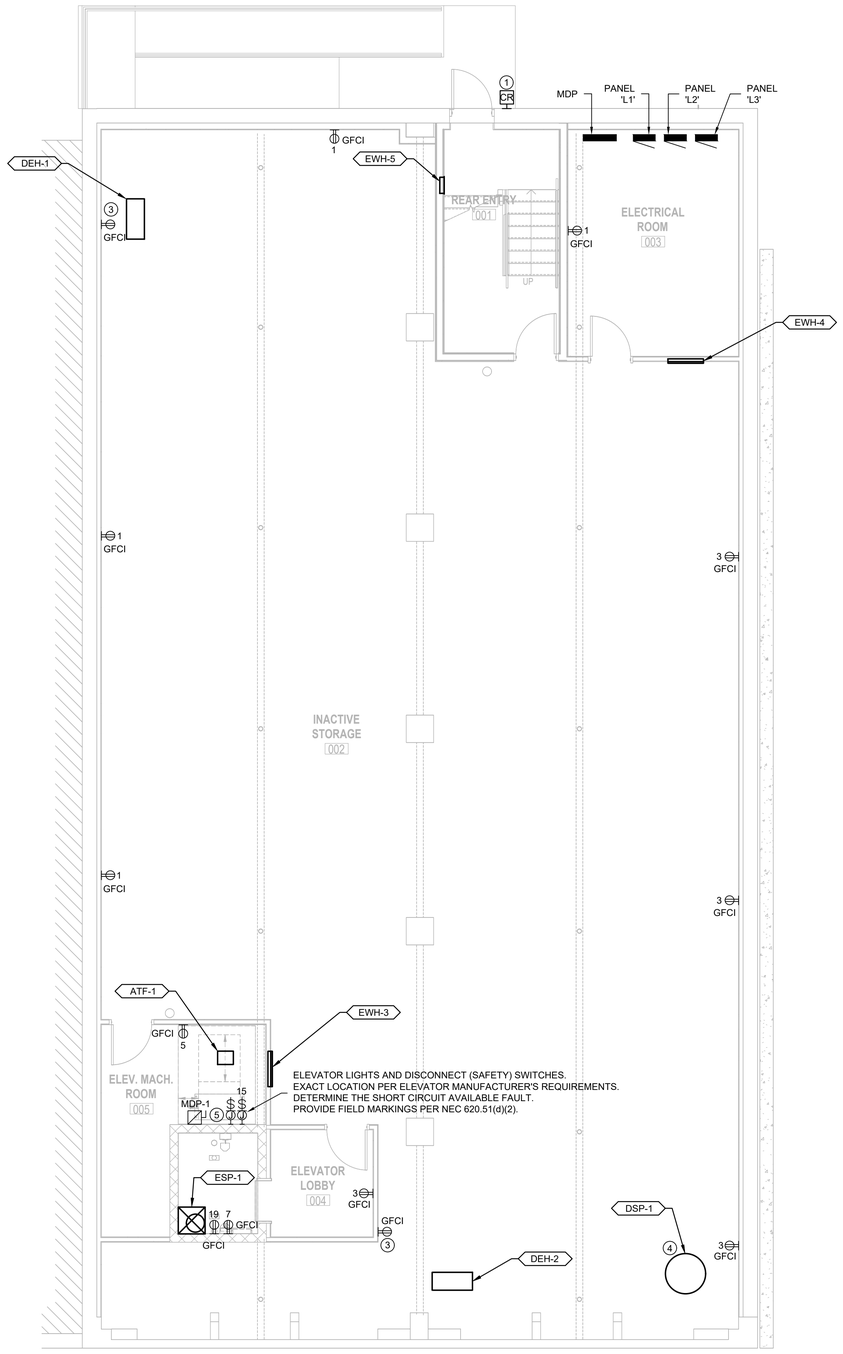
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LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

E202

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N

1 BASEMENT ELECTRICAL POWER PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

POWER GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPROPRIATE PPE (PERSONAL PROTECTIVE EQUIPMENT) REGARDING ALL WORK TO ELECTRICAL BUILDING EQUIPMENT & RELATED ELECTRICAL PANELS TO PROTECT FROM ARC FLASH, SHOCK HAZARDS AND RELATED EXPOSED DANGERS.
2. VERIFY ALL TELE/DATA ROOM EQUIPMENT ELECTRICAL & GROUNDING REQUIREMENTS WITH TENANT. EQUIPMENT MAY REQUIRE SPECIALIZED RECEPTACLES DIFFERENT THAN INDICATED. PROVIDE ALL AS REQUIRED FOR A FULLY FUNCTIONAL INSTALLATION.
3. VERIFY ALL SPECIALIZED ELECTRICAL REQUIREMENTS (VOLTAGE, RECEPTACLE/PLUG TYPE, AMPERAGE) OF ALL EQUIPMENT BEING SUPPLIED PRIOR TO THE START OF CONSTRUCTION. PROVIDE DEDICATED CIRCUITS, SPECIALIZED PLUGS/RECEPTACLES AND PROPERLY SIZED CIRCUIT BREAKERS PER MANUFACTURER'S SPECIFICATIONS/EQUIPMENT TAGS AS REQUIRED.
4. PROVIDE AND INSTALL GFCI RECEPTACLES WITHIN 6 FEET OF WATER SOURCE AS REQUIRED PER CODE.

PANEL DESIGNATION NOTE:

CIRCUIT ALL LIGHTING TO NEW PANEL 'L2', UNLESS NOTED OTHERWISE.

GENERAL NOTES:

1. EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO ENSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
2. COORDINATE ALL WORK WITH OTHER TRADES AND INSTALL CONDUIT AND JUNCTION BOXES TO CLEAR EMBEDDED DUCTS, OPENINGS AND OTHER STRUCTURAL FEATURES.
3. CONDUIT RUNS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC, ALL CONDUITS SHALL RUN CONCEALED, EXCEPT IN EQUIPMENT ROOMS AND WHERE APPROVED BY THE ARCHITECT. VERIFY EXACT ROUTING PRIOR TO ALL WORK.
4. FURNISH AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS.
5. IN AREAS WHERE COUNTER ARE PROVIDED, COORDINATE EXACT LOCATIONS OF OUTLETS AND WIRING WITH CASEWORK.
6. ALL CIRCUIT NUMBERS ARE SHOWN FOR COORDINATION AND CONVENIENCE OF THE CONTRACTOR.

KEYED NOTES:

1. PROVIDE POWER FOR LOW VOLTAGE CARD READER. COORDINATE WITH LOW VOLTAGE CONTRACTOR
2. PROVIDE POWER FOR SECURITY CAMERAS. COORDINATE WITH LOW VOLTAGE CONTRACTOR.
3. 'DEH' SHALL PLUG INTO DEDICATED RECEPTACLE ADJACENT TO THE PROPOSED LOCATION. COORDINATE WITH OWNER.
4. DSP-1 REQUIRES (3) 120V CIRCUITS THAT TERMINATE INTO THE CONTROLLER. COORDINATE WITH PLUMBING CONTRACTOR.
5. PROVIDE CONNECTION TO ELEVATOR MANUFACTURER DISCONNECT SWITCH AND OVERCURRENT PROTECTION DEVICE. VERIFY EXACT WIRE SIZE, CIRCUIT BREAKER SIZE, AND FUSE SIZE WITH ELEVATOR MANUFACTURER. BASE BID ELEVATOR 208V, 3PH, ESTIMATED 25HP, 74.8A, 200A SWITCH, 125A FUSES MOCP. HARDWIRE 4#1CU & 1#6 CU GROUND, 2" CONDUIT FROM PANEL 'MDP'. ELEVATOR DISCONNECTS SHALL BE HEAVY DUTY AND LOCKABLE, PROVIDE DEDICATE COMMUNICATION CABLES AS REQUIRED. ELEVATOR MANUFACTURER TO PROVIDE UNIT BATTERY BACK-UP.

ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE

ITEM NO.	ITEM DESCRIPTION	QTY.	LOAD RATING	EQUIPMENT LOAD		POWER FEED				LOCAL DISCONNECT
			VOLTS/PHASE	AMPS	VA	PANEL NO.	CIRCUIT NO.	OVERCURRENT PROTECTION	WIRE & CONDUIT	DISC SWITCH SIZE & TYPE
ATF-1	AIR TRANSFER FAN	1	120V-1Ø	4.4	528	'L2'	9	20A-1P	2#12 & 1#12 GRD, 3/4"C	FACTORY PROVIDED
EWH-3	ELECTRIC WALL HEATER	1	208V-1Ø	28.8	6000	'L2'	11-13	40A-2P	2#8 & 1#10 GRD, 1"C	FACTORY PROVIDED
EWH-4	ELECTRIC WALL HEATER	1	208V-1Ø	28.8	6000	'L2'	15-17	40A-2P	2#8 & 1#10 GRD, 1"C	FACTORY PROVIDED
EWH-5	ELECTRIC WALL HEATER	1	208V-1Ø	19.2	4000	'L2'	26-28	25A-2P	2#10 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
ESP-1	ELEVATOR SUMP PUMP	1	120V-1Ø	5.8	696	'L2'	19	20A-1P	2#12 & 1#12 GRD, 3/4"C	NEMA 5-20R
DSP-1	DRAINAGE SUMP PUMPS	2	120V-1Ø	8.5	1020	'L2'	21 & 23	20A-1P	2#12 & 1#12 GRD, 3/4"C	FACTORY PROVIDED IN CONTROLLER
	DRAINAGE SUMP PUMP ALARM	1	120V-1Ø	1.3	150	'L2'	25	15A-1P	2#12 & 1#12 GRD, 3/4"C	
DEH-1	DEHUMIDIFIER	1	120V-1Ø	4.8	576	'L2'	27	20A-1P	2#12 & 1#12 GRD, 3/4"C	CORD & PLUG
DEH-2	DEHUMIDIFIER	1	120V-1Ø	4.8	576	'L2'	29	20A-1P	2#12 & 1#12 GRD, 3/4"C	CORD & PLUG

NOTES:

1. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR EXACT LOCATION AND MORE DETAILS.
2. ELECTRICAL COMPONENTS FURNISHED, MOUNTED & CIRCUITED BY ELECTRICAL CONTRACTOR. INCLUDE ALL ASSOCIATED CONDUIT & WIRING AS REQUIRED.
3. LOCAL DISCONNECT SWITCHES SHALL BE PROVIDED FOR ALL MECHANICAL EQUIPMENT UNLESS FACTORY PROVIDED.
4. ALL EXTERIOR CONDUIT SHALL BE IMC TYPE AND ALL EXTERIOR WIRE SHALL BE XHHW-2 TYPE.

REMARKS:

T = THERMAL OVERLOAD ELEMENT
NF = NON-FUSED
F = FUSED

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BASEMENT ELECTRICAL POWER PLAN

BUILDING RENOVATION

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DATE 03-24-2026
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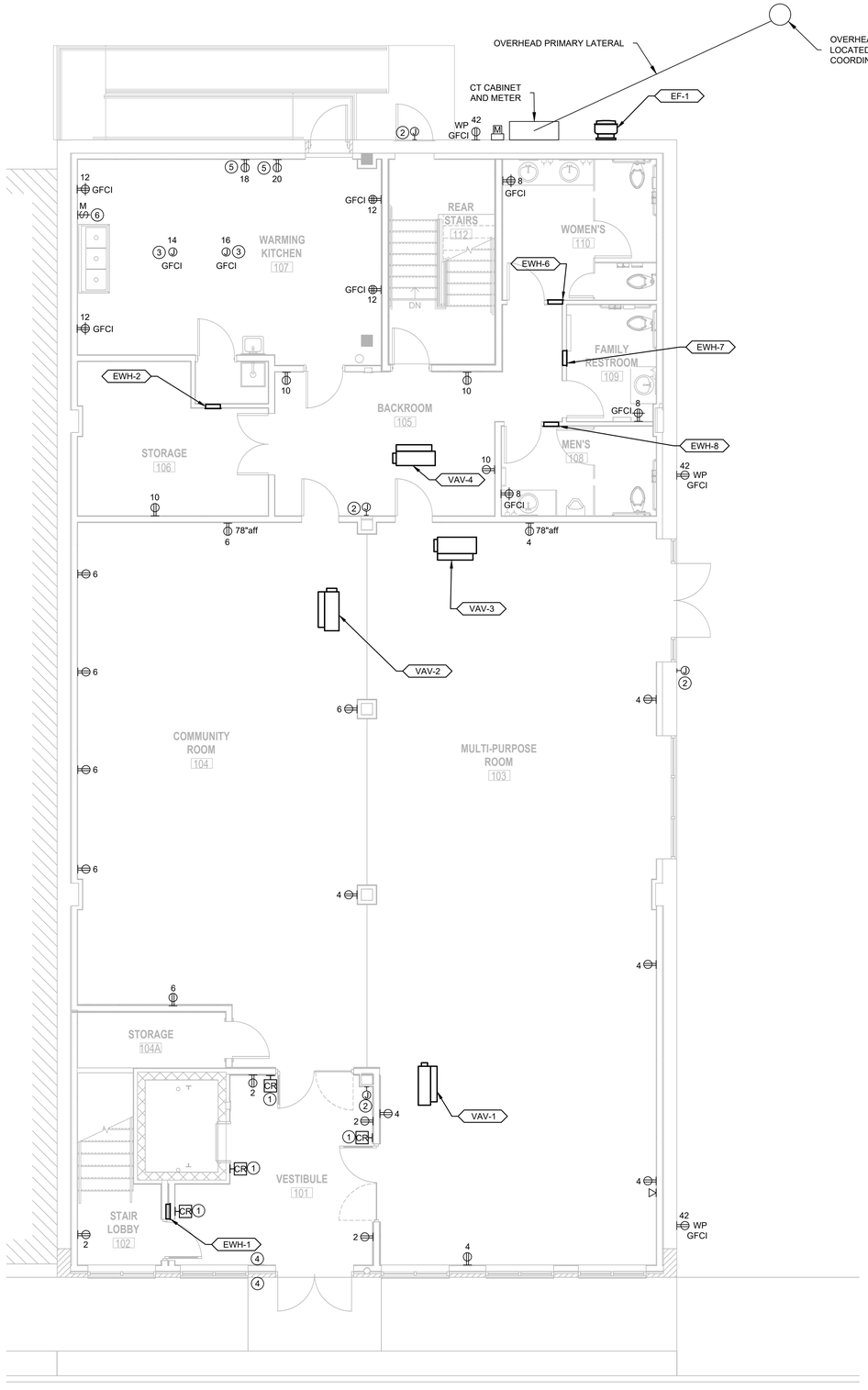
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N

1 FIRST FLOOR ELECTRICAL POWER PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

POWER GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPROPRIATE PPE (PERSONAL PROTECTIVE EQUIPMENT) REGARDING ALL WORK TO ELECTRICAL BUILDING EQUIPMENT & RELATED ELECTRICAL PANELS TO PROTECT FROM ARC FLASH, SHOCK HAZARDS AND RELATED EXPOSED DANGERS.
2. VERIFY ALL TELE/DATA ROOM EQUIPMENT ELECTRICAL & GROUNDING REQUIREMENTS WITH TENANT. EQUIPMENT MAY REQUIRE SPECIALIZED RECEPTACLES DIFFERENT THAN INDICATED. PROVIDE ALL AS REQUIRED FOR A FULLY FUNCTIONAL INSTALLATION.
3. VERIFY ALL SPECIALIZED ELECTRICAL REQUIREMENTS (VOLTAGE, RECEPTACLE/PLUG TYPE, AMPERAGE) OF ALL EQUIPMENT BEING SUPPLIED PRIOR TO THE START OF CONSTRUCTION. PROVIDE DEDICATED CIRCUITS, SPECIALIZED PLUGS/RECEPTACLES AND PROPERLY SIZED CIRCUIT BREAKERS PER MANUFACTURER'S SPECIFICATIONS/EQUIPMENT TAGS AS REQUIRED.
4. PROVIDE AND INSTALL GFCI RECEPTACLES WITHIN 6 FEET OF WATER SOURCE AS REQUIRED PER CODE.

PANEL DESIGNATION NOTE:

CIRCUIT ALL LIGHTING TO NEW PANEL 'L2', UNLESS NOTED OTHERWISE.

CONTROLLED RECEPTACLE NOTE:

THE FOLLOWING RECEPTACLES SHALL BE CONTROLLED AS REQUIRED PER 2024 ILLINOIS ENERGY CODE. CONTRACTOR SHALL TIE-INTO LIGHTING CONTROLS CEILING MOUNTED SENSOR ('VR') - REFER TO LIGHTING PLAN AND DETAILS ON SHEET 'E101'.

- HALF-CONTROLLED RECEPTACLE
- HALF-CONTROLLED RECEPTACLE ABOVE COUNTER
- HALF-CONTROLLED QUAD RECEPTACLE
- FULL-CONTROLLED RECEPTACLE

GENERAL NOTES:

1. EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO ENSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
2. COORDINATE ALL WORK WITH OTHER TRADES AND INSTALL CONDUIT AND JUNCTION BOXES TO CLEAR EMBEDDED DUCTS, OPENINGS AND OTHER STRUCTURAL FEATURES.
3. CONDUIT RUNS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC, ALL CONDUITS SHALL RUN CONCEALED, EXCEPT IN EQUIPMENT ROOMS AND WHERE APPROVED BY THE ARCHITECT. VERIFY EXACT ROUTING PRIOR TO ALL WORK.
4. FURNISH AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS.
5. IN AREAS WHERE COUNTER ARE PROVIDED, COORDINATE EXACT LOCATIONS OF OUTLETS AND WIRING WITH CASEWORK.
6. ALL CIRCUIT NUMBERS ARE SHOWN FOR COORDINATION AND CONVENIENCE OF THE CONTRACTOR.
7. ALL RECEPTACLES IN KID AREAS SHALL BE TAMPER RESISTANT TYPE RECEPTACLES.

KEYED NOTES:

1. PROVIDE POWER FOR LOW VOLTAGE CARD READER. COORDINATE WITH LOW VOLTAGE CONTRACTOR
2. PROVIDE POWER FOR SECURITY CAMERAS. COORDINATE WITH LOW VOLTAGE CONTRACTOR.
3. RETRACTABLE CORD REEL LOCATED AT THE CEILING. COORDINATE FOR CONNECTION TYPE WITH OWNER AND INSTALL AS REQUIRED.
4. PROVIDE AUTOMATIC DOOR OPERATOR/ADA PUSH BUTTON. COORDINATE WITH ARCHITECT FOR REQUIREMENTS.
5. PROVIDE GFCI BREAKER PROTECTION FOR REFRIGERATORS.
6. EXHAUST FAN IN WARMING KITCHEN TO BE OPERATED VIA CONTROL SWITCH. COORDINATE WITH MECHANICAL CONTRACTOR AND OWNER.

ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE

ITEM NO.	ITEM DESCRIPTION	QTY.	LOAD RATING	EQUIPMENT LOAD		POWER FEED				LOCAL DISCONNECT
			VOLTS/PHASE	AMPS	VA	PANEL NO.	CIRCUIT NO.	OVERCURRENT PROTECTION	WIRE & CONDUIT	DISC SWITCH SIZE & TYPE
EF-1	EXHAUST FAN	1	208V-1Ø	4.4	528	'L2'	22-24	20A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
EF-3	EXHAUST FAN	1	120V-1Ø	7.2	864	'L1	29	20A-1P	2#12 & 1#12 GRD, 3/4"C	CONTROL SWITCH
EWH-1	ELECTRIC WALL HEATER	1	208V-1Ø	19.2	4000	'L2'	26-28	25A-2P	2#10 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
EWH-2	ELECTRIC WALL HEATER	1	208V-1Ø	19.2	4000	'L2'	30-32	25A-2P	2#10 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
VAV-1	VARIABLE AIR VOLUME	1	208V-1Ø	14.4	3000	'L2'	34-36	20A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
VAV-2	VARIABLE AIR VOLUME	1	208V-1Ø	26.4	5500	'L2'	38-40	35A-2P	2#8 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
VAV-3	VARIABLE AIR VOLUME	1	208V-1Ø	40.9	8500	'L2'	31-33	60A-2P	2#6 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
VAV-4	VARIABLE AIR VOLUME	1	208V-1Ø	26.4	5500	'L2'	35-37	35A-2P	2#8 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
EWH-6	ELECTRIC WALL HEATER	1	208V-1Ø	9.6	2000	'L3	1-3	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
EWH-7	ELECTRIC WALL HEATER	1	208V-1Ø	9.6	2000	'L3	5-7	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
EWH-8	ELECTRIC WALL HEATER	1	208V-1Ø	9.6	2000	'L3	9-11	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED

NOTES:

1. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR EXACT LOCATION AND MORE DETAILS.
2. ELECTRICAL COMPONENTS FURNISHED, MOUNTED & CIRCUITED BY ELECTRICAL CONTRACTOR. INCLUDE ALL ASSOCIATED CONDUIT & WIRING AS REQUIRED.
3. LOCAL DISCONNECT SWITCHES SHALL BE PROVIDED FOR ALL MECHANICAL EQUIPMENT UNLESS FACTORY PROVIDED.
4. ALL EXTERIOR CONDUIT SHALL BE IMC TYPE AND ALL EXTERIOR WIRE SHALL BE XHHW-2 TYPE.

REMARKS:

T = THERMAL OVERLOAD ELEMENT
NF = NON-FUSED
F = FUSED

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FIRST FLOOR ELECTRICAL POWER PLAN

BUILDING RENOVATION

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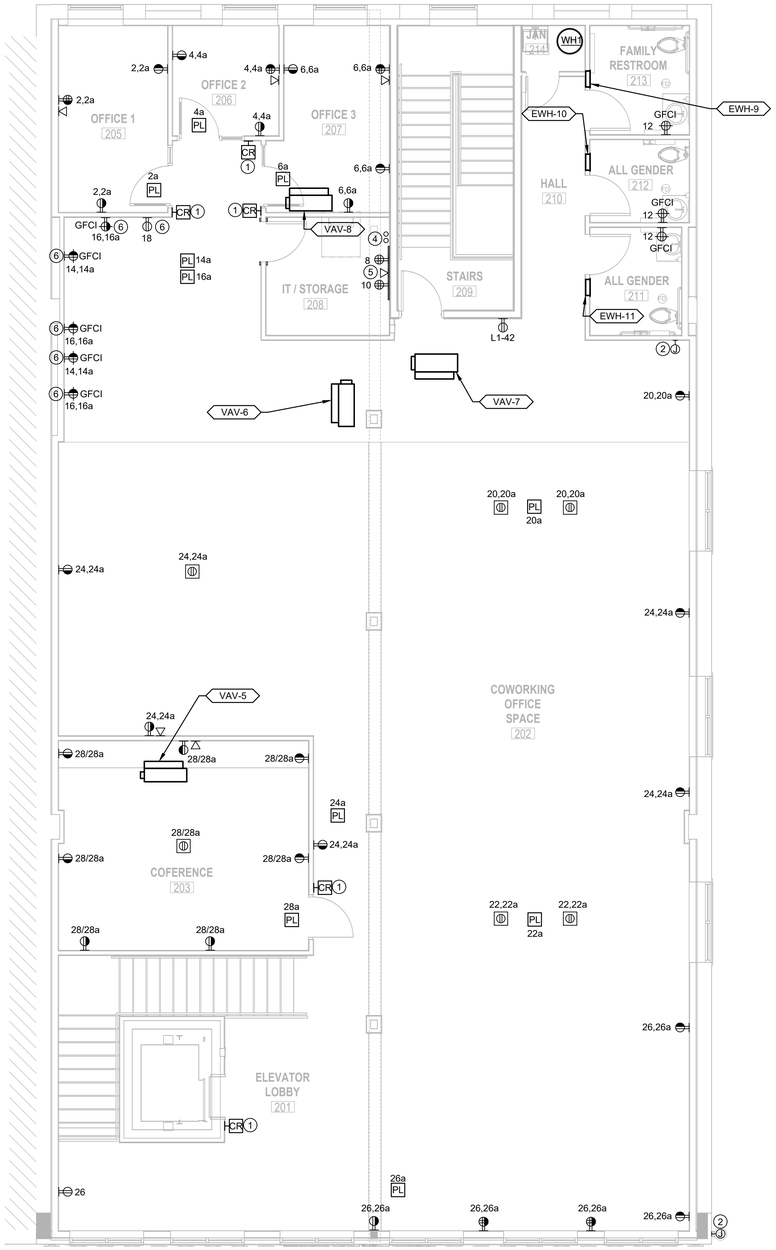
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1 SECOND FLOOR ELECTRICAL POWER PLAN

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

POWER GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPROPRIATE PPE (PERSONAL PROTECTIVE EQUIPMENT) REGARDING ALL WORK TO ELECTRICAL BUILDING EQUIPMENT & RELATED ELECTRICAL PANELS TO PROTECT FROM ARC FLASH, SHOCK HAZARDS AND RELATED EXPOSED DANGERS.
2. VERIFY ALL TELE/DATA ROOM EQUIPMENT ELECTRICAL & GROUNDING REQUIREMENTS WITH TENANT. EQUIPMENT MAY REQUIRE SPECIALIZED RECEPTACLES DIFFERENT THAN INDICATED. PROVIDE ALL AS REQUIRED FOR A FULLY FUNCTIONAL INSTALLATION.
3. VERIFY ALL SPECIALIZED ELECTRICAL REQUIREMENTS (VOLTAGE, RECEPTACLE/PLUG TYPE, AMPERAGE) OF ALL EQUIPMENT BEING SUPPLIED PRIOR TO THE START OF CONSTRUCTION. PROVIDE DEDICATED CIRCUITS, SPECIALIZED PLUGS/RECEPTACLES AND PROPERLY SIZED CIRCUIT BREAKERS PER MANUFACTURER'S SPECIFICATIONS/EQUIPMENT TAGS AS REQUIRED.
4. PROVIDE AND INSTALL GFCI RECEPTACLES WITHIN 6 FEET OF WATER SOURCE AS REQUIRED PER CODE.

PANEL DESIGNATION NOTE:

CIRCUIT ALL LIGHTING TO NEW PANEL 'L2', UNLESS NOTED OTHERWISE.

CONTROLLED RECEPTACLE NOTE:

THE FOLLOWING RECEPTACLES SHALL BE CONTROLLED AS REQUIRED PER 2024 ILLINOIS ENERGY CODE. CONTRACTOR SHALL TIE-INTO LIGHTING CONTROLS CEILING MOUNTED SENSOR ('VS') - REFER TO LIGHTING PLAN AND DETAILS ON SHEET 'E101'.

- HALF-CONTROLLED RECEPTACLE
- HALF-CONTROLLED RECEPTACLE ABOVE COUNTER
- HALF-CONTROLLED QUAD RECEPTACLE
- FULL-CONTROLLED RECEPTACLE

GENERAL NOTES:

1. EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO ENSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
2. COORDINATE ALL WORK WITH OTHER TRADES AND INSTALL CONDUIT AND JUNCTION BOXES TO CLEAR EMBEDDED DUCTS, OPENINGS AND OTHER STRUCTURAL FEATURES.
3. CONDUIT RUNS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC, ALL CONDUITS SHALL RUN CONCEALED, EXCEPT IN EQUIPMENT ROOMS AND WHERE APPROVED BY THE ARCHITECT. VERIFY EXACT ROUTING PRIOR TO ALL WORK.
4. FURNISH AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS.
5. IN AREAS WHERE COUNTER ARE PROVIDED, COORDINATE EXACT LOCATIONS OF OUTLETS AND WIRING WITH CASEWORK.
6. ALL CIRCUIT NUMBERS ARE SHOWN FOR COORDINATION AND CONVENIENCE OF THE CONTRACTOR.
7. ALL RECEPTACLES IN KID AREAS SHALL BE TAMPER RESISTANT TYPE RECEPTACLES.

KEYED NOTES:

1. PROVIDE POWER FOR LOW VOLTAGE CARD READER. COORDINATE WITH LOW VOLTAGE CONTRACTOR
2. PROVIDE POWER FOR SECURITY CAMERAS. COORDINATE WITH LOW VOLTAGE CONTRACTOR.
3. RETRACTABLE CORD REEL LOCATED AT THE CEILING. COORDINATE FOR CONNECTION TYPE WITH OWNER AND INSTALL AS REQUIRED.
4. PROVIDE (2) 3" CONDUIT FOR TELE/DATA BACKBOARD. CONNECT TO TELE/COM VAULT. COORDINATE WITH CIVIL DRAWINGS FOR EXACT LOCATION.
5. PROVIDE QUAD RECEPTACLES FOR LOW VOLTAGE BACKBOARD EQUIPMENT AND SECURITY SYSTEM. COORDINATE REQUIREMENTS WITH LOW VOLTAGE CONTRACTOR.
6. COORDINATE RECEPTACLE LOCATIONS WITH ARCHITECTURAL PLANS IN THIS AREA.
7. FLOOR BOX RECEPTACLES. ASSUME LEGRAND / WIREMOLD MODEL# 'OMNI-SERIES 880M1'. FINISH AS DIRECTED BY ARCHITECT & OWNER. MUST BE INSTALLED PRIOR TO CONCRETE, CONTRACTOR TO COORDINATE.

ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE

ITEM NO.	ITEM DESCRIPTION	QTY.	LOAD RATING	EQUIPMENT LOAD		POWER FEED				LOCAL DISCONNECT
			VOLTS/PHASE	AMPS	VA	PANEL NO.	CIRCUIT NO.	OVERCURRENT PROTECTION	WIRE & CONDUIT	DISC SWITCH SIZE & TYPE
WH-1	GAS WATER HEATER	1	120V-1Ø	4.2	500	'L1'	3	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
RCP-1	RECIRCULATION PUMP	1	120V-1Ø	5.8	696	'L1'	3	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
VAV-5	VARIABLE AIR VOLUME	1	**208V-1Ø**	14.4	3000	'L1'	3	20A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
VAV-6	VARIABLE AIR VOLUME	1	**208V-1Ø**	31.3	6500	'L1'	3	40A-2P	2#8 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
VAV-7	VARIABLE AIR VOLUME	1	**208V-1Ø**	45.7	9500	'L1'	3	60A-2P	2#6 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
VAV-8	VARIABLE AIR VOLUME	1	**208V-1Ø**	24	5000	'L1'	3	35A-2P	2#8 & 1#10 GRD, 3/4"C	FACTORY INSTALLED
EWH-9	ELECTRIC WALL HEATER	1	208V-1Ø	9.6	2000	'L3	2-4	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
EWH-10	ELECTRIC WALL HEATER	1	208V-1Ø	9.6	2000	'L3	6-8	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED
EWH-11	ELECTRIC WALL HEATER	1	208V-1Ø	9.6	2000	'L3	10-12	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED

NOTES:

1. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR EXACT LOCATION AND MORE DETAILS.
2. ELECTRICAL COMPONENTS FURNISHED, MOUNTED & CIRCUITED BY ELECTRICAL CONTRACTOR. INCLUDE ALL ASSOCIATED CONDUIT & WIRING AS REQUIRED.
3. LOCAL DISCONNECT SWITCHES SHALL BE PROVIDED FOR ALL MECHANICAL EQUIPMENT UNLESS FACTORY PROVIDED.
4. ALL EXTERIOR CONDUIT SHALL BE IMC TYPE AND ALL EXTERIOR WIRE SHALL BE XHHW-2 TYPE.

REMARKS:

T = THERMAL OVERLOAD ELEMENT
NF = NON-FUSED
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SECOND FLOOR ELECTRICAL POWER PLAN

BUILDING RENOVATION

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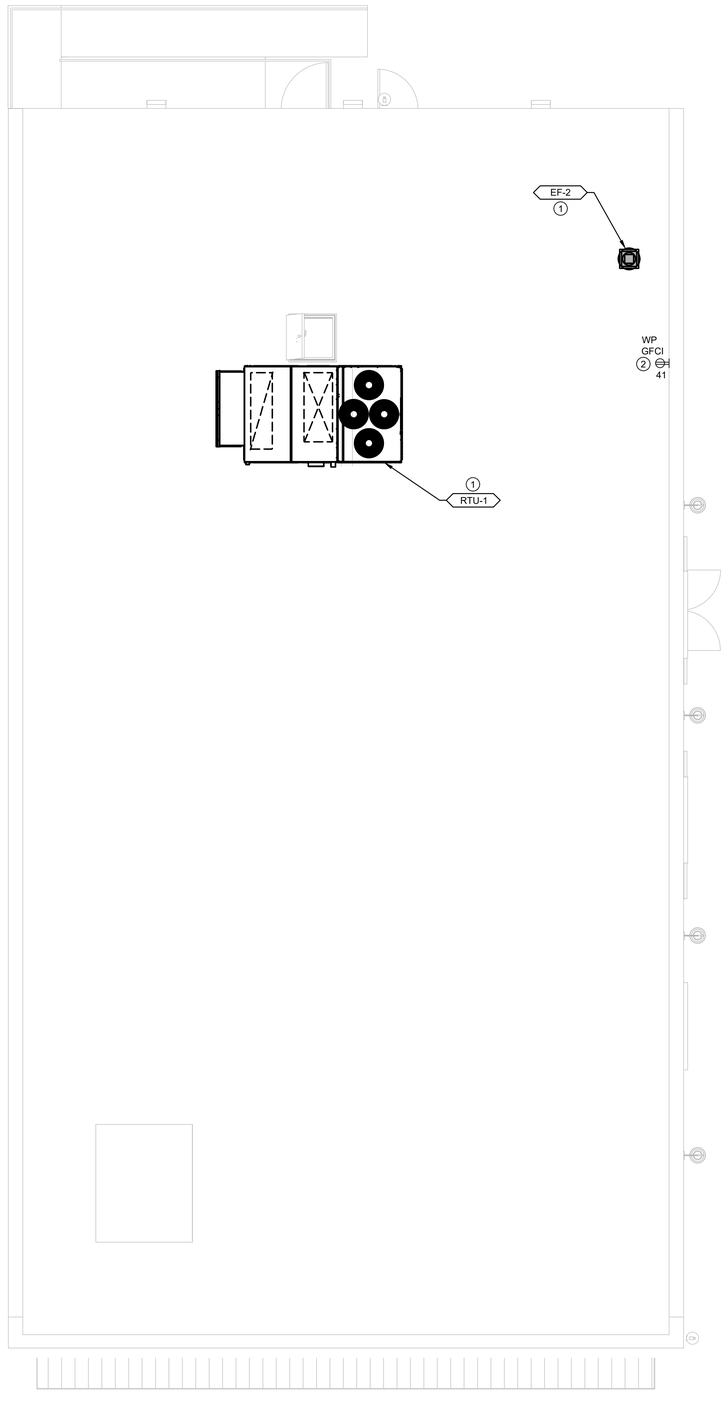
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N 1 ROOF ELECTRICAL POWER PLAN

0 4' 2' 4' 8'

SCALE: 3/16" = 1'-0"

ELECTRICAL MECHANICAL EQUIPMENT GENERAL NOTES:

1. COORDINATE INSTALLATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR. PROVIDE DISCONNECT SWITCHES WHERE HARDWIRED CONNECTIONS ARE INDICATED - ALL IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. DISCONNECT SWITCHES SHALL BE WITHIN LINE OF SIGHT OF EQUIPMENT OR PLACABLE IN ACCORDANCE WITH CEC 110.25. DISCONNECT SWITCHES SHALL BE LOCATED IN A FULLY ACCESSIBLE LOCATION. DISCONNECT SWITCHES INSTALLED OUTSIDE OF THE BUILDING SHALL BE WEATHERPROOF, NEMA 3R RATED.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL POWER AND CONTROL WIRING AS REQUIRED TO COMPLETE INSTALLATION FOR MECHANICAL EQUIPMENT SYSTEMS.
3. NO CONDUITS SHALL BE ROUTED ON THE ROOF. ELECTRICAL CONTRACTOR SHALL COORDINATE ROOF PENETRATIONS WITH MECHANICAL PIPE CURBS. WHERE CONDUIT MUST BE RUN ON THE ROOF, IT SHALL BE RACKED WITH OTHER TRADES WHERE POSSIBLE OR PROVIDED WITH ITS OWN ROOF RACK SUPPORT SYSTEM WITH PROPER ROOF PLATES IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S REQUIREMENTS TO AVOID CAUSING DAMAGE TO ROOF MEMBRANE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPROPRIATE PPE (PERSONAL PROTECTIVE EQUIPMENT) REGARDING ALL WORK TO ELECTRICAL BUILDING EQUIPMENT & RELATED ELECTRICAL PANELS TO PROTECT FROM ARC FLASH, SHOCK HAZARDS AND RELATED EXPOSED DANGERS.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION OF WIRING WHIPS TO ELECTRIC BASEBOARD HEATERS. CONDUIT WHIPS SHALL NOT BE INSTALLED NEXT TO HEATING ELEMENT AND SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

KEYED NOTES:

1. COORDINATE EXACT POWER REQUIREMENTS WITH MECHANICAL CONTRACTOR.
2. PROVIDE MAINTENANCE RECEPTACLE WITHIN 25FT OF ALL ROOF TOP UNITS. CIRCUIT TO PANEL 'L2'.

ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE

ITEM NO.	ITEM DESCRIPTION	QTY.	LOAD RATING	EQUIPMENT LOAD		POWER FEED				LOCAL DISCONNECT
			VOLTS/PHASE	AMPS	VA	PANEL NO.	CIRCUIT NO.	OVERCURRENT PROTECTION	WIRE & CONDUIT	DISC SWITCH SIZE & TYPE
RTU-1	ROOFTOP UNIT	1	208V-3Ø	104	37440	'MDP'	1	125A-3P	3#1 & 1#6 GRD, 1-1/2"C	200AS-3P, NF
EF-2	ROOF EXHAUST FAN	1	208V-1Ø	1.5	312	'MDP'	3	15A-2P	2#12 & 1#12 GRD, 3/4"C	FACTORY INSTALLED

NOTES:

1. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR EXACT LOCATION AND MORE DETAILS.
2. ELECTRICAL COMPONENTS FURNISHED, MOUNTED & CIRCUITED BY ELECTRICAL CONTRACTOR. INCLUDE ALL ASSOCIATED CONDUIT & WIRING AS REQUIRED.
3. LOCAL DISCONNECT SWITCHES SHALL BE PROVIDED FOR ALL MECHANICAL EQUIPMENT UNLESS FACTORY PROVIDED.
4. ALL EXTERIOR CONDUIT SHALL BE IMC TYPE AND ALL EXTERIOR WIRE SHALL BE XHHW-2 TYPE.

REMARKS:

T = THERMAL OVERLOAD ELEMENT
NF = NON-FUSED
F = FUSED

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ELEVATE CONSULTING ENGINEERS PLLC
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Downers Grove, IL 60515
702 525 2864

ROOF ELECTRICAL POWER PLAN

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

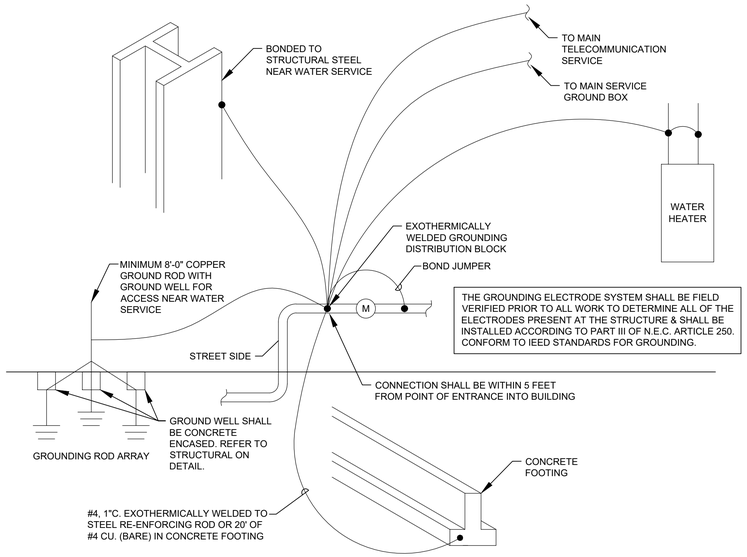
DATE 03-24-2026
ECE PROJECT # 25-923
DRAWN ECE
CHECKED ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
STATE OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

E303

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ELECTRICAL SERVICE GROUNDING DETAIL

N.T.S.
ELECTRICAL CONTRACTOR SHALL INSTALL PER N.E.C. ARTICLE 250

VOLTAGE DROP NOTE:

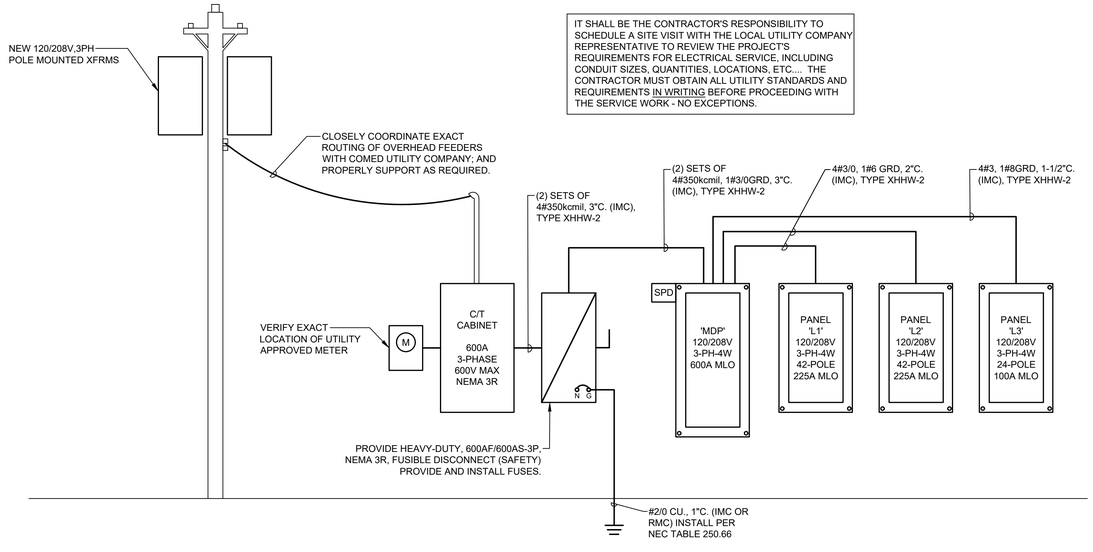
VOLTAGE DROP OF BRANCH CIRCUITS SHALL NOT EXCEED 3%.

VOLTAGE DROP OF FEEDER CIRCUITS SHALL NOT EXCEED 2%.

CONTRACTOR SHALL BE RESPONSIBLE TO MODIFY / ADJUST ALL AS REQUIRED AND UPSIZE CONDUCTORS TO MEET THESE REQUIREMENTS.

ELECTRICAL RISER NOTES:

1. ALL PANELBOARDS, PRIMARY FEEDERS, ETC INDICATED ON THE RISER ARE EXISTING UNLESS OTHERWISE NOTED AND ARE SHOWN ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. FIELD VERIFY.
2. RISER DIAGRAM IS BASED ON VISUAL INSPECTION ONLY AND AS SUCH MAY NOT ACCURATELY REPRESENT ALL EXISTING CONDITIONS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS.
3. ANY SHUTDOWN OF EXISTING DISTRIBUTION SHALL BE PERFORMED OUTSIDE OF NORMAL BUSINESS HOURS. INCLUDE ANY PREMIUM TIME IN BID.
4. PROVIDE ENGRAVED NAMETAGS FOR ALL NEW/REVISED PANELS.
5. PROVIDE UPDATED PANEL SCHEDULES FOR PANELS UPON CLOSEOUT OF PROJECT. CURRENT SCHEDULES ARE OUTDATED & NEED REPLACEMENT.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW PERMANENTLY AFFIXED NAMEPLATES FOR DISTRIBUTION PANELS AND ALL EQUIPMENT WITHIN SCOPE OF WORK. NAMEPLATES SHALL BE BLACK WITH WHITE LETTERING, MINIMUM 1/2" LETTER HEIGHT, AND SHALL INCLUDE EQUIPMENT NAME AND WHERE IT IS FED FROM.
6. METERING SHALL BE PER LOCAL UTILITY REQUIREMENTS.
7. COMBINATION C/T SECTION AND DISCONNECT & ASSOCIATED EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED PER NEC 250.96, NEC 250.102 AND NEC 250.142.
8. C/T SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR AND INSTALLED OUTDOORS.
9. PROVIDE A MINIMUM UTILITY COMPANY CLEARANCE SPACE OF 4'-0" IN FRONT OF C/T CABINET AT ALL TIMES.
10. COORDINATION STUDY SHALL BE COORDINATED AND PERFORMED TO DETERMINE ADEQUATE INTERRUPTING RATING OF MAIN DISTRIBUTION PANEL BASED ON SECONDARY FAULT CURRENTS FROM UTILITY COMPANY TRANSFORMER. ASSUME MINIMUM ACCEPTABLE IS EXISTING 22KAIC.
11. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW PERMANENTLY AFFIXED NAMEPLATES FOR ELECTRIC METERS INDICATING THEIR ADDRESS. NAMEPLATES SHALL BE BLACK WITH WHITE LETTERING, MINIMUM 1/2" LETTER HEIGHT.



ELECTRICAL RISER DIAGRAM (ALL NEW WORK)

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ELECTRICAL
RISER DIAGRAM

BUILDING
RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE	03-24-2026
ECE PROJECT #	25-923
DRAWN	ECE
CHECKED	ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

E400

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NEW DISTRIBUTION BOARD

PROJECT: 704 Illinois Ave. Mendota, IL 61342

NAME:	MDP	MAIN:	MLO	MOUNTING:	SURFACE	KAIC RATING:	42,000				
VOLTAGE:	208Y/120	MAIN OPTIONS:		ENCLOSURE:	NEMA 1	BUSSING:	COPPER				
PHASE/WIRE:	3PH 4W	BUS:	600A	NEUTRAL:	100%	INTEGRAL SPD:	YES				
SVC ENTRANCE:	NO	GROUNDING:	YES								

NO.	LOAD DESCRIPTION	OCPD AMPS	DEVICE OPTIONS	A	B	C	A	B	C	DEVICE OPTIONS	OCPD AMPS	LOAD DESCRIPTION	NO.
1	ELEVATOR	125/3		8976	8976	8976	12480	12480	12480		125/3	RTU-1	2
3	PANEL 'L1'	200/3		12178	17540	16644	4000	4000	4000		100/3	PANEL 'L3'	4
5	PANEL 'L2'	200/3		21136	19088	16810						BUSSED SPACE	6
7	BUSSED SPACE						-	-	-		30/3	SPD	8
			SUB-TOTAL	42290	45604	42430	16480	16480	16480	SUB-TOTAL			

TOTAL A PHASE: 58770 VA
TOTAL B PHASE: 62084 VA
TOTAL C PHASE: 58910 VA

TOTAL CONNECTED LOAD: 179.76 KVA
498.97 AMPS
TOTAL DEMAND LOAD: 185.15 KVA
513.92 AMPS

REMARKS:

LEGEND: ST = SHUNT TRIP, GFI = GROUND FAULT INTERRUPTER (PERSONNEL), DL = DOUBLE LUG, FT = FEED THRU

3/27/2026 10:26

NEW PANELBOARD SCHEDULE

PROJECT: 704 Illinois Ave. Mendota, IL 61342

NAME:	L1	MAIN:	MLO	MOUNTING:	SURFACE	KAIC RATING:	22,000				
VOLTAGE:	208Y/120	MAIN OPTIONS:		ENCLOSURE:	NEMA 1	BUSSING:	COPPER				
PHASE/WIRE:	3PH 4W	BUS:	225A	NEUTRAL:	100%	INTEGRAL SPD:	NO				
SVC ENTRANCE:	NO	GROUNDING:	YES								

NO.	LOAD DESCRIPTION	OCPD AMPS	DEVICE OPTIONS	A	B	C	A	B	C	DEVICE OPTIONS	OCPD AMPS	LOAD DESCRIPTION	NO.
1	BASEMENT LIGHTS	20		1000			720				20	OFFICE RECEPTACLES	2
3	BASEMENT LIGHTS	20			1000			720			20	OFFICE RECEPTACLES	4
5	1ST FL LIGHTS	20				1000			900		20	OFFICE RECEPTACLES	6
7	1ST FL LIGHTS	20		1000			360				20	IT RECEPTACLES	8
9	2ND FL LIGHTS	20			1000			360			20	IT RECEPTACLES	10
11	2ND FL LIGHTS	20				500			540		20	RESTROOM RECPT	12
13	EXTERIOR LIGHTING	20		500			360				20	KITCHEN RECPT	14
15	ELEVATOR CAB LTG	20	HB		100			540			20	KITCHEN RECPT	16
17	STAIR LIGHTING	20				500			1200	GFCI	20	REFRIGERATOR	18
19	ELEVATOR PIT LTG	20		42			540				20	FLOOR BOX RECPT	20
21	SPARE	20			0			360			20	FLOOR BOX RECPT	22
23	SPARE	20				0			960		20	COWORKING RECPT	24
25	SPARE	20		0			960				20	COWORKING RECPT	26
27	SPARE	20			0			960			20	CONFERENCE RECPT	28
29	EF-3	20				864			500		15	WH-1	30
31	EWH-5	25/2		2000			696				15	RCP-1	32
33					2000			4750			60/2	VAV-7	34
35	VAV-5	20/2				1500			4750				36
37				1500			2500				35/2	VAV-8	38
39	VAV-6	40/2			3250			2500					40
41						3250			180		20	LOCKER SYSTEEM	42
			SUB-TOTAL	6042	7350	7614	6136	10190	9030	SUB-TOTAL			

TOTAL A PHASE: 12178 VA
TOTAL B PHASE: 17540 VA
TOTAL C PHASE: 16644 VA

TOTAL CONNECTED LOAD: 46.36 KVA
128.69 AMPS
TOTAL DEMAND LOAD: 48.02 KVA
133.30 AMPS

REMARKS:

LEGEND: ST = SHUNT TRIP, GFI = GROUND FAULT INTERRUPTER (PERSONNEL), DL = DOUBLE LUG, FT = FEED THRU, HB = HANDLE BLOCK (LOCK)

3/27/2026 10:26

NEW PANELBOARD SCHEDULE

PROJECT: 704 Illinois Ave. Mendota, IL 61342

NAME:	L2	MAIN:	MLO	MOUNTING:	SURFACE	KAIC RATING:	22,000				
VOLTAGE:	208Y/120	MAIN OPTIONS:		ENCLOSURE:	NEMA 1	BUSSING:	COPPER				
PHASE/WIRE:	3PH 4W	BUS:	225A	NEUTRAL:	100%	INTEGRAL SPD:	NO				
SVC ENTRANCE:	NO	GROUNDING:	YES								

NO.	LOAD DESCRIPTION	OCPD AMPS	DEVICE OPTIONS	A	B	C	A	B	C	DEVICE OPTIONS	OCPD AMPS	LOAD DESCRIPTION	NO.
1	BASEMENT RECPT	20		540			720				20	VESTIBULE/STAIR RECPT	2
3	BASEMENT RECPT	20			540			1260			20	MULTIPURPOSE RECPT	4
5	ELEV MACHINE RM RECPT	20				180			1260		20	COMMUNITY RM RECPT	6
7	ELEV PIT RECPT	20		180			540				20	RESTROOM RECPT	8
9	ATF-1	20			528			720			20	BACKROOM RECPT	10
11	EWH-3	40/2				3000			360		20	KITCHEN RECPT	12
13				3000			360				20	KITCHEN RECPT	14
15	EWH-4	40/2			3000			180			20	KITCHEN RECPT	16
17						3000			180		20	REFRIGERATOR RECPT	18
19	ESP-2	20		696			1200				20	REFRIGERATOR RECPT	20
21	DPS-1 - PUMP	20			1020			264			20/2	EF-1	22
23	DPS-1 - PUMP	20				1020			264				24
25	DPS-1 - ALARM	20		150			2000				25/2	EWH-1	26
27	DEH-1	20			576			2000					28
29	DEH-2	20				576			2000		25/2	EWH-2	30
31	VAV-3	60/2		4250			2000						32
33					4250			1500			20/2	VAV-1	34
35	VAV-4	35/2				2750			1500				36
37				2750			2750				35/2	VAV-2	38
39	FIRE ALARM PANEL	20			500			2750					40
41	ROOFTOP RECEPTS	20				180			540		20	EXTERIOR RECPT	42
			SUB-TOTAL	11566	10414	10706	9570	8674	6104	SUB-TOTAL			

TOTAL A PHASE: 21136 VA
TOTAL B PHASE: 19088 VA
TOTAL C PHASE: 16810 VA

TOTAL CONNECTED LOAD: 57.03 KVA
158.31 AMPS
TOTAL DEMAND LOAD: 57.03 KVA
158.31 AMPS

REMARKS:

LEGEND: ST = SHUNT TRIP, GFI = GROUND FAULT INTERRUPTER (PERSONNEL), DL = DOUBLE LUG, FT = FEED THRU

3/27/2026 10:26

NEW PANELBOARD SCHEDULE

PROJECT: 704 Illinois Ave. Mendota, IL 61342

NAME:	L3	MAIN:	MLO	MOUNTING:	SURFACE	KAIC RATING:	22,000				
VOLTAGE:	208Y/120	MAIN OPTIONS:		ENCLOSURE:	NEMA 1	BUSSING:	COPPER				
PHASE/WIRE:	3PH 4W	BUS:	100A	NEUTRAL:	100%	INTEGRAL SPD:	NO				
SVC ENTRANCE:	NO	GROUNDING:	YES								

NO.	LOAD DESCRIPTION	OCPD AMPS	DEVICE OPTIONS	A	B	C	A	B	C	DEVICE OPTIONS	OCPD AMPS	LOAD DESCRIPTION	NO.
1	EWH-6	15/2		1000			1000				15/2	EWH-9	2
3					1000			1000					4
5	EWH-7	15/2				1000			1000		15/2	EWH-10	6
7				1000			1000						8
9	EWH-8	15/2			1000			1000			15/2	EWH-11	10
11						1000			1000				12
13	SPARE	20		0			0				20	SPARE	14
15	SPARE	20			0			0			20	SPARE	16
17	SPARE	20				0			0		20	SPARE	18
19	SPARE	20		0			0				20	SPARE	20
21	SPARE	20			0			0			20	SPARE	22
23	SPARE	20				0			0		20	SPARE	24
			SUB-TOTAL	2000	2000	2000	2000	2000	2000	SUB-TOTAL			

TOTAL A PHASE: 4000 VA
TOTAL B PHASE: 4000 VA
TOTAL C PHASE: 4000 VA

TOTAL CONNECTED LOAD: 12.00 KVA
33.31 AMPS
TOTAL DEMAND LOAD: 12.00 KVA
33.31 AMPS

REMARKS:

LEGEND: ST = SHUNT TRIP, GFI = GROUND FAULT INTERRUPTER (PERSONNEL), DL = DOUBLE LUG, FT = FEED THRU

3/27/2026 10:26

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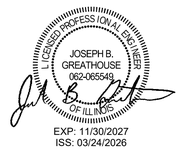
ELECTRICAL SCHEDULES

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE 03-24-2026
ECE PROJECT # 25-923
DRAWN ECE
CHECKED ECE

REVISIONS
03-24-26 BID



EXP: 11/30/2027
ISS: 03/24/2026

E500

2026 studioK Architecture, LLC.

Plumbing Specifications and General Notes

1. General Notes - All Contractors

1.1. Drawings are generally diagrammatic. Routing of piping, ductwork, conduits, raceways, etc, as shown on drawings, does not intend to show every rise, drop, offset, fitting nor every structural element that may be encountered during the installation of this work. Each contractor shall make any required changes from the general routing shown on these drawings, such as offsets, bends or changes in elevation due to coordination with the work of other trades and building construction. All changes shall be made without additional cost to the owner or delay in completion date of the project.

1.2. It is intended that equipment shall be located symmetrically with the architectural elements of the building, notwithstanding the fact that locations indicated by these drawings may be distorted for clearness of presentation.

1.3. Contractor shall check drawings of other trades to verify that spaces in which their work will be installed are clear of obstructions. Work shall be installed to maintain maximum headroom and space condition at all points in the building. Where headroom or space conditions appear inadequate, contractor shall notify architect/engineer before proceeding with the installation of their work.

1.4. Contractor shall furnish other trades advance information and/or shop drawings on locations and sizes of piping, ductwork, conduit, raceways, equipment, frames, boxes, sleeves and openings, etc. Needed for their work to permit other trades affected to install their work properly and without delay.

1.5. Where there is evidence that work of one trade will interfere with work of other trades, all trades shall meet on job site to work out space conditions and make satisfactory adjustments to installation of the new work. Contractors shall verify exact locations of all devices and equipment with field conditions, shop drawings, and work of other trades prior to rough-in. Each contractor shall be responsible, at their own expense, for the removal and reinstallation of any part of their work if same was installed without consulting with other trades before installing their work.

1.6. The sequence for the installation of all work shall be coordinated between all contractors on the project and in strict accordance with architect/ engineer and owners stipulation as called for in the specification and/or as directed.

1.7. Contractor shall refer to the architectural and structural contract drawings (before submitting their bids) to familiarize themselves with the extent of the general contractors work, ceiling heights and clearance for installing their work.

1.8. Contractor shall be responsible for their own clean-up during construction. If contractor fails to provide such clean-up, the architect/engineer will direct another contractor to perform the clean-up and the negligent contractor shall pay the associated back-charges as deemed appropriate by the architect/ engineer.

1.9. Contractor shall install all auxiliary supporting steel as required for the supporting of their piping, ductwork, conduit, tanks, equipment, etc. All supporting steel for items above a suspended ceiling shall be from building structural members only.

1.10. Contractor shall store all materials and equipment shipped to the site in a protected area. If material is stored outside of the building, it must be stored off the ground a minimum of six inches (6") set on 6 x 6 planks and/ or wood pallets. All material and equipment must be completely covered with waterproof tarps or visquin. All piping and ductwork will have the ends closed to keep out dirt and other debris. Equipment will be allowed to be stored on the site unless it is sitting on wood planks and completely protected with weatherproof covers.

1.11. The drawings, schedules and specifications have been prepared using one manufacturer for each piece of equipment as the basis for dimensional design. If the contractor purchases equipment listed as a specified acceptable manufacturer but is not the scheduled manufacturer used for the base design, the contractor shall be responsible for checking all the dimensions of the equipment to verify that it will fit in the space shown on the drawings. Minor deviations in dimensions will be permitted, provided the ratings meet those shown on the drawings and equipment will physically fit into the space allocated with suitable access around equipment for operation and maintenance on the equipment.

1.12. Contractor and/or manufacturer shall verify that the characteristics of the equipment he submits for review meets the capacity and duty specified.

1.13. When equipment is submitted for review and does not meet the physical size or arrangement of that scheduled and specified, contractor shall pay for all alterations required to accommodate such equipment at no additional cost to owner. Contractor will also pay all costs for additional work required by other contractors, owner, architect or engineer to make changes which would allow the equipment to fit in the space and function as intended.

2. General Notes - Plumbing

2.1. All water supply piping shall be insulated, including all piping within ceilings, inside equipment, cabinets, pipe chases and in walls. See specifications for type and thickness of insulation.

2.2. Pitch all supply water lines to drain completely through lower equipment fixtures, unions, or drain valves. Install a 1/2" drain valve with 3/4" hose thread and vacuum breaker outlet in all main piping runs which would not be able to drain thru a lower piece of equipment.

2.3. All vent and waste piping sizes are minimum. Additional vents shall be added and/or pipe size increased as required by applicable codes, statutes and regulations, etc. Without additional cost to the owner.

2.4. Provide access panels at all cleanouts and valves located in walls or ceilings which are inaccessible. Coordinate locations and types with architect.

2.5. Domestic water piping: ASTM B88 hard drawn, type-l, copper with solder joint wrought copper fittings; option to use class 52 ductile iron for underground water supply main. Sanitary and sanitary vent piping: ASTM A74, service weight cast iron with hub and spigot compression joining; option for no-hub mechanical clamp joint shall be available for above ground applications.

2.7. All new material shall bear the underwriter's seal of approval, as well as those seals of all municipalities having jurisdiction. Certificates to this affect to be furnished to architect upon request.

3. Specifications

I. Scope

3.1. The work covered by this specification includes the complete plumbing system. The work to be performed under the plumbing specifications and drawings consists of furnishing all labor and material for the complete installation of these systems, including, but not limited to, the following:

A. Underground and above ground piping, fixtures, valves, etc.

B. Hot water heaters, etc.

C. Plumbing specialties

D. Plumbing equipment

II. General

3.2. This specification is inclusive for each item requiring all labor, material and equipment necessary to properly install, alter, adjust and put in operation, the complete plumbing and fire protection system.

3.3. The contractor is responsible for the proper layout and construction of the work included in this contract.

3.4. The drawings and specifications shall be understood to cover, according to their intent and meaning, complete systems as described herein.

3.5. Minor items, accessories and devices reasonably inferable as necessary for the complete and proper operation of any system shall be provided by the contractor for such system(s) whether they are specifically called for by the drawings and/or specifications or not.

3.6. Drawings are generally diagrammatic.

3.7. Routing of piping are shown, but do not intend to show every rise, drop, offset, fitting, nor every structural element that may be encountered during the installation of this work.

3.8. Contractor shall make any required changes from the general routing shown on these drawings, such as offsets, bends or changes in elevation due to coordination with the work of other trades and building construction.

3.9. All changes shall be made without additional cost to the owner or delay in completion date of the project.

3.10. It is intended that equipment shall be located symmetrically with the architectural elements of the building, notwithstanding the fact that locations indicated by these drawings may be distorted for clearness of presentation.

3.11. Contractor shall be responsible and pay for all coring, cutting, patching, repairing and refinishing of building construction required to accommodate the installation of their work.

3.12. All patching, repairing and refinishing work shall be performed by those regularly involved in that trade and shall match the new construction as closely as possible.

3.13. Care shall be taken so as not to damage any existing building construction or items that are to remain.

3.14. Any existing finishes that are damaged during the installation of new work shall be repaired,

3.15. Replaced and paid for by the installing contractor, to the satisfaction of the architect and owner.

3.16. Refer to architectural drawings for existing building construction that is to remain and, therefore, subject to patching, repairing, and refinishing.

3.17. Contractor shall be responsible for their own clean-up during construction.

3.18. If contractor fails to provide such clean-up, the architect/engineer will direct another contractor to perform the clean-up and the negligent contractor shall pay the associated back-charges as deemed appropriate by the architect/ engineer.

3.19. Contractor shall furnish materials and use installation methods suitable for the environmental conditions of the area in which equipment, fixtures and devices are installed. Contractor shall provide sleeves in beams, floors, columns and walls as shown on the drawings, as required by job site conditions, and/or as specified, when installing their work.

3.20. All beams and columns which are required to be sleeved shall be cut and reinforced as required by field conditions and locations and sizes shall be checked and approved by architect before contractor cuts any structural building member. Contractor shall refer to the architectural and structural contract drawings (before submitting their bids) to familiarize themselves with the extent of the general contractors work, ceiling heights and clearance for installing their work.

3.21. System installation shall comply with all applicable codes.

III. Visit to site

3.22. Attention is directed to the necessity for contractor to visit the site and examine all conditions affecting the proper execution of this contract. Submission of proposals shall be considered evidence that the contractor has visited and examined the site.

3.23. No extra payment will be allowed the contractor for extra work caused by failure to visit, examine and clarify.

3.24. IV. Laws, ordinances and regulations

3.25. All systems shall conform in full and/or part shall conform to all pertinent laws, ordinances and regulations of all bodies having jurisdiction at all governing levels, notwithstanding anything in these drawings or specifications to the contrary.

3.26. In case of conflict between governing levels, the more stringent laws shall apply. The contractor shall pay all fees and obtain and pay for all permits and inspections required by any authority having jurisdiction in connection with his work. Where applicable,

V. Workmanship

3.28. All work to be performed shall be done by qualified mechanics.

3.29. All mechanics in the employ of this contractor on this project shall be skilled in the phases of the work to which they are used. All work must be done in workmanlike manner to the complete satisfaction of the architect.

3.30. All material shall be new, of the quality specified, free from defects and in first-class condition.

3.31. All vertical pipe shall be plumb. Materials and equipment all materials and equipment shall be new and shall conform to the grade, quality and standard specified herein.

3.32. All equipment offered under these specifications shall be limited to products regularly produced and recommended for service, in accordance with engineering data, ratings or other comprehensive literature made available to the public and in effect at the time of opening of bids.

3.33. Equipment shall be installed in strict accordance with manufacturer's instructions for type and capacity of each piece of equipment used.

3.34. Unless indicated otherwise, the architect/engineer makes no representation as to whether or not any hazardous or contaminated materials (including but not limited to asbestos, pcb's, contaminated soils, etc.) are present within the existing building or on the site.

3.35. Work shown on the drawings and/or indicated in the specifications shall not be construed to call for contact with any of these materials.

3.36. If these materials are encountered or suspected, the contractor shall not disturb them and shall contact the architect/engineer immediately.

3.37. System installation shall comply with all applicable codes.

VII. Coordination with other trades

3.38. The contractor shall be responsible for coordinating his work with that work of the other trades. Contractor is completely responsible if failure on his part to coordinate efforts results in extra work having to be done to complete a task. As such, his failure shall not be the basis for any extra charge against the owner.

3.39. Contractor shall check drawings of other trades to verify that spaces in which their work will be installed is clear of obstructions. Work shall be installed to maintain maximum headroom and space condition at all points in the building. Where headroom or space conditions appear inadequate, contractor shall notify architect/engineer before proceeding with the installation of their work.

3.40. Contractor shall furnish other trades advance information and/or shop drawings on locations and sizes of piping, equipment, frames, boxes, sleeves and openings, etc. Needed for their work to permit other trades affected to install their work properly and without delay.

3.41. Where there is evidence that work of one trade will interfere with work of other trades, all trades shall meet on job site to work out space conditions, and make satisfactory adjustments to installation of the new work. Contractor shall verify exact locations of all plumbing and fire protection devices and equipment prior to rough-in with field conditions, shop drawings and work of other trades. Each contractor shall be responsible, at their own expense, for the removal and reinstallation of any part of their work if same was installed without consulting with other trades before installing their work.

VIII. Shop drawings

3.42. The contractor is required to submit five (5) sets of shop drawings for material items specifically designated in this specification and/or called out for on the drawings. Contractor is cautioned that any material items purchased prior to approval of shop drawings are purchased at contractor's own risk and may be subject to rejection by the architect/ engineer. Shop drawings are to be submitted to the general contractor for his forwarding.

3.43. Product submittal shall be prepared in an organized, legible format with cover sheet indicating project, location, date, contractor(s) and engineer. Individual blank spaces of minimum 5 inch by 5 inch size for approval stamps from general contractor, architect and engineer.

3.44. All products specified herein or on the drawings shall be submitted with the same product tag that is used in the construction documents. Where a product tag is not used, the submittal shall reference the paragraph of this specification for which the product is being submitted.

3.45. Reproduction of the contract documents for submittal purposes is not acceptable.

3.46. All submittals which are not submitted in accordance with these requirements will be rejected without any allowances made for delays that may be incurred.

IX. Piping insulation

3.47. Piping insulation on condensate drain piping, domestic hot water and cold water piping to be rigid molded fiberglass with "K" value of .24 at 75 degrees f. With vapor barrier jacket white kraft paper with fiber yarn on aluminized film. Insulation thickness to be 1/2 inch.

3.48. All insulation to have maximum 25/50 flame spread/smoke developed. Same component rating for accessories (adhesives, mastic and cements for fittings).

3.49. All insulation jackets installed within walk-in coolers for condensate drain must be nsf approved.

3.50. Domestic hot water piping insulation schedule:

3.51. Pipe sizethicknesstype

3.52. 3/4" to 1-1/4"1/2"d

3.53. 1-1/2" and up1-1/2"d

X. Plumbing piping

3.54. Domestic water piping: astm b88 hard drawn, type-k (underground) and type-l (above ground), copper with solder joint wrought copper fittings; option to use class 52 ductile iron for underground water supply main.

3.55. Sanitary and sanitary vent piping: astm a74, service weight cast iron with hub and spigot compression joining; mechanical clamp joint shall be available for above ground applications.

3.56. Dielectric unions or couplings shall be used where joining piping of dissimilar metals.

Valves:

3.57. Ball valves (bv) up to 2 inches: 600 psi wog, bronze body, stainless steel full port ball, teflon seats and stuffing box ring, lever handle and solder ends. All newly installed valves shall comply with 1417(a)1 of the 2014 swda.

3.58. Domestic water piping disinfection: chlorination of piping system in order to comply with state of illinois safe drinking water standards.

3.59. Prior to starting work, verify system is complete, flushed and clean.

3.60. Ensure ph of water to be treated is between 7.4 and 7.6 by adding alkali (caustic soda or soda ash) oracid (hydrochloric).

3.61. Inject disinfectant, free chlorine in liquid, powder, tablet or gas form, throughout system to obtain 50 to 80 mg/l residual.

3.62. Bleed water from outlets to ensure distribution and test for disinfectant residual at minimum 15 percent outlets.

3.63. Maintain disinfectant in system for 24 hours.

3.64. If final disinfectant residual tests less than 25 mg/l, repeat treatment.

3.65. Flush disinfectant from system until residual equal to that of incoming water or 1.0 mg/l.

3.66. Take samples no sooner than 24 hours after flushing, from 10 percent of outlets and from water entry, and analyze in accordance with awwa c651.

3.67. Piping testing: pneumatic and hydrostatic testing required for the above referenced systems.

XI. Plumbing specialties

3.68. Acceptable manufacturers - plumbing specialties:

A. Ancon

B. Zurn

C. Wade co.

D. Approved equal

3.69. FCO: Model co2400 manufactured by zurn (for unfinished floors)

3.70. FCO: Model co2449 manufactured by zurn (for finished floors)

3.71. FCO: Model z1402 manufactured by zurn (for heavy duty applications)

3.72. WCO: Model z1441 manufactured by zurn

3.73. CO: Model z1470 manufactured by zurn

3.74. Water hammer arrestors: fit water supply to each fixture or group of fixtures with air chamber; air chambers same size as supply line or 3/4 inch minimum 18 inches long.

3.75. Acceptable manufacturers - backflow preventers:

A. Watts regulator

B. Hersey co.

C. No substitutions.

3.76. ANSI/ASSE 1013, reduced pressure backflow preventor; cast iron body with bronze and stainless steel internals, spring loaded check valves, differential pressure relief valve, non-threaded vent outlet, bronze body ball valves and test cocks (4),vent outlet funnel drain and strainer; model 909-s-ag-el-qt manufactured by watts regulator.

3.77. ANSI/ASSE 1013, reduced pressure detector check backflow preventor; cast iron body with fda epoxy interior coating, bronze seats, stainless steel spring and internal parts; two independantly operating check valves with differential pressure relief; protected bypass assembly with meter, non-threaded vent outlet; resilient wedge os&y gate valves; long radius elbow piping arrangement as shown on plans and four test cocks; model 909-rpda-rw- osy-ag-el as manufactured by watts regulator.

XII. Plumbing fixtures

3.78. Acceptable manufacturers - plumbing fixtures:

A. American standard

B. Eljer plumbingware

C. Kohler co.

D. Approved equal

3.79. Acceptable manufacturers - flush valves:

A. Sloan valve co.

B. Approved equal

3.80. Acceptable manufacturers - faucet trim, supplies & stops:

A. Chicago faucet co.

B. Approved equal

3.81. Acceptable manufacturers - sinks and sink drains:

A. Elkay manufacturing co.

B. Just manufacturing co.

C. Approved equal

3.82. Provide loose key stops and p-traps for each fixture. P-traps will be required to be installed parallel with wall in order to accommodate off-set tailpiece's on handicap lavatories.

3.83. Insulate traps and fixture stops in accordance with ada requirements.

XIII. Plumbing equipment

3.84. Acceptable manufacturers - expansion tanks:

A. Amtrol.

B. Bell & gossett/itt.

C. John wood co.

3.85. Provide expansion tank rated to 150 psig, pre-charged to 70 psig with flexible epdm diaphragm suitable for potable water supply.

3.86. Provide supports to anchor expansion tank to roof structure.

XIV. Fire stopping

3.87. Contractor shall fire stop all penetrations thru fire rated walls, partitions, roofs and/or floors so that the integrity of the fire rating is not compromised by the contractor's installation of any pipe. Fire stopping methods and materials shall conform to local code authority requirements. As a minimum, contractor shall grout pipes in penetration rated partition/ floor construction with non-shrink grout so that all open spaces are filled in solidly. Contractor shall refer to architectural plans for the location of all fire rated ceilings, partitions and walls.

3.88. Guarantee this contractor shall unconditionally guarantee in writing all material, equipment and workmanship for a period of one year from date of acceptance by owner. The contractor shall provide free service for all equipment involved in his contract during this guarantee period.

3.89. The guarantee shall include restoration to its original condition of all adjacent work that must be disturbed in fulfilling this guarantee.

3.90. All such repairs and/or replacements shall be made without delay and at the convenience of the developer and tenant.

XVI. Substitutions

3.91. Approvals of substitutions, for "Approved equal", must be made in writing and substitutions must be approved before installation. Installation without prior approval may result in contractor removing substitution and replacing it with specified item at his expense.

3.92. Approval may be given by engineer only.

SYMBOLS:

(#)	KEYNOTE
#	EQUIPMENT TAG
	NEW WORK
	EXISTING TO REMAIN
	TO BE REMOVED / DEMOLISHED
SAN	ABOVE GROUND SANITARY
SAN	UNDERGROUND SANITARY
V	VENT
STM	ABOVE GROUND STORM
STM	UNDERGROUND STORM
CW	COLD WATER LINE
HW	HOT WATER LINE
HWR	HOT WATER RECIRCULATION LINE
FP	FIRE PROTECTION LINE
D	DRAIN LINE
	UNION
	PIPE CAPPED
	PIPE CONTINUATION
	PIPE DROP (ELBOW)
	PIPE UP/RISER (ELBOW)
	P-TRAP
	PIPE UP/RISER (TEE)
	PIPE DROP (TEE)
CO	CLEANOUT
WCO	WALL CLEANOUT
FCO	FLOOR CLEANOUT
YCO	YARD CLEANOUT
FD	FLOOR DRAIN
HD	HUB DRAIN
	TRENCH DRAIN
	FLOOR SINK
GV	GATE VALVE
BV	BALL VALVE SHUT-OFF
STR	STRAINER
CV	CHECK VALVE
FPWH	WALL HYDRANT W/ BOX
HB	HOSE BIBB W/ VB
BFP	BACKFLOW PREVENTER
	CONNECTION - NEW TO EXISTING

ABBREVIATIONS:

AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
AVG	AVERAGE
D	DRAIN
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DN	DOWN
DWG	DRAWING
E	EXISTING
EA	EACH
ET	EXPANSION TANK
FD	FLOOR DRAIN
FM	FLOW METER
FPM	FEET PER MINUTE
FT	FEET
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HWR	DOMESTIC HOT WATER RETURN
HORIZ	HORIZONTAL
HR	HOUR
IN	INCHES
LBS	POUNDS
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NPCW	NON-POTABLE COLD WATER
NTS	NOT TO SCALE
P	PUMP
PD	PRESSURE DROP
PH	PHASE
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS / SQUARE INCH GAUGE
RM	ROOM
Ø	ROUND
TYP	TYPICAL
V	VOLTAGE
VTR	VENT THROUGH ROOF
W	WATT
WC	WATER COLUMN

ABBREVIATIONS AND SYMBOLS ARE OFFICE STANDARD AND ARE NOT ALL NECESSARILY USED IN THIS PROJECT

DRAINAGE AND VENT PIPING/TUBING MATERIAL MATRIX

MATERIAL	PERMITTED	NOT PERMITTED	STANDARDS	PIPE FITTING STANDARDS	REMARKS
POLYVINYL CHLORIDE (PVC) PLASTIC PIPE (SCHEDULE 40)	YES	-	ASTM D2665; ASTM D2449; ASTM F891; CSA B181.2	ASTM D3311	ABOVE-GROUND DRAINAGE & VENT PIPE
CAT-IRON HUB & SPIGOT	YES	-	ASTM A74; CISPI 301; ASTM A888	ASME B16; ASME B16.12; ASTM A74; ASTM A888; CISPI 301	ABOVE-GROUND DRAINAGE & VENT PIPE
COPPER OR COPPER-ALLOY PIPE	YES	-	ASTM B42; ASTM B302	ASME B16.15; ASME B16.18 ASME B16.22; ASME B16.23 ASME B16.26; ASME B16.29; ASME B16.32	ABOVE-GROUND DRAINAGE & VENT PIPE
COPPER OR COPPER-ALLOY TUBING (TYPE K, L, OR M)	YES	-	ASTM 75; ASTM B88; ASTM B251; ASTM B306	ASME B16.15; ASME B16.18 ASME B16.22; ASME B16.23 ASME B16.26; ASME B16.29; ASME B16.32	ABOVE-GROUND DRAINAGE & VENT PIPE
GALVANIZED STEEL	YES	-	ASTM A53	ASME B16.19; ASME B16.11; ASME B16.28	ABOVE-GROUND DRAINAGE & VENT PIPE
POLYVINYL CHLORIDE (PVC) PLASTIC PIPE (SCHEDULE 40)	YES	-	ASTM D2665; ASTM D2449; ASTM F891; CSA B181.2	ASTM D2855; ASTM D3311	UNDERGROUND DRAINAGE & VENT PIPE
CAT-IRON HUB & SPIGOT	YES	-	ASTM A74; CISPI 301; ASTM A888	ASME B16; ASME B16.12; ASTM A74; ASTM A888; CISPI 301	UNDERGROUND DRAINAGE & VENT PIPE
COPPER OR COPPER-ALLOY TUBING (TYPE K)	YES	-	ASTM 75; ASTM B88; ASTM B251	ASME B16.15; ASME B16.18 ASME B16.22; ASME B16.23 ASME B16.26; ASME B16.29; ASME B16.32	UNDERGROUND DRAINAGE & VENT PIPE
DUCTILE IRON PIPE	YES	-	AWWA C151; AWWA C115	AWWA C151; AWWA C115	UNDERGROUND DRAINAGE & VENT PIPE

NOTE: CONTRACTOR RESPONSIBLE TO ASSURE THAT THE DESIGN CONFORMS TO ALL REQUIREMENTS OF 77 ILL. ADM. CODE 890 OF THE CITY OF EVANSTON PLUMBING CODE. ALL NON-PLENUM RATED PVC PIPING INSTALLED IN THE PLENUM CELING SPACES OF THIS PROJECT SHALL BE PROVIDED WITH FIRE-RATED PIPE INSULATION RATED 25/50 FIRE-SMOKE RATING.

WATER PIPING/TUBING MATERIAL MATRIX

MATERIAL	PERMITTED	NOT PERMITTED	STANDARDS	PIPE FITTING STANDARDS	REMARKS
COPPER OR COPPER-ALLOY TUBING (TYPE K)	YES	-	ASTM B75; ASTM B88; ASTM B251; ASTM B447	-	WATER SERVICE PIPE
DUCTILE IRON WATER PIPE	YES	-	AWWA C151; AWWA C115	AWWA C110; AWWA C153	WATER SERVICE PIPE
BRASS PIPE	YES	-	ASTM B43	-	WATER DISTRIBUTION PIPE
COPPER OR COPPER-ALLOY PIPE/TUBING	YES	-	ASTM B42; ASTM B302; ASTM B74; ASTM B88	ASME B16.15; ASME B16.18 ASME B16.22; ASME B16.23 ASME B16.26; ASME B16.29; ASTM B16.32	WATER DISTRIBUTION PIPE
COPPER TYPE K, L , OR M	YES	-	ASTM B251; ASTM B447	ASME B16.15; ASME B16.18 ASME B16.22; ASME B16.23 ASME B16.26; ASME B16.29; ASTM B16.32	WATER DISTRIBUTION PIPE
GALVANIZED STEEL PIPE	YES	-	ASTM A53	ASME B16.19; ASME B16.11; ASME B16.28	WATER DISTRIBUTION PIPE

NOTE: WATER DISTRUBUTION PIPING SHALL CONFORM TO NSF 61 AND SHALL CONFORM TO ONE OF THE STANDARDS LISTED ABOVE. CONTRACTOR RESPONSIBLE TO ASSURE THAT THE DESIGN CONFORMS TO ALL REQUIREMENTS TO FOLLOW 77 ILL. ADM. CODE 890 APPENDIX A, TABLE A OF THE CITY OF EVANSTON PLUMBING CODE.

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PLUMBING SPECIFICATIONS

BUILDING RENOVATION

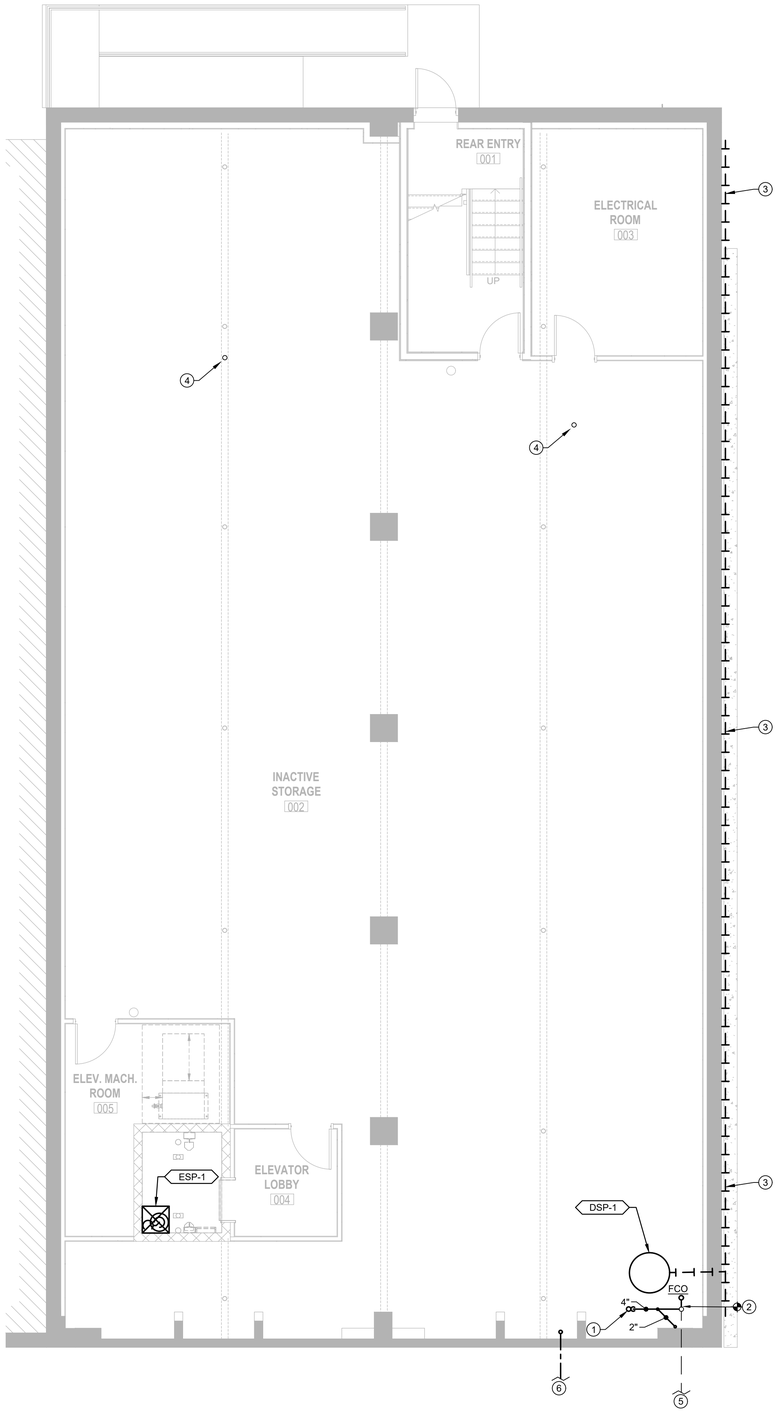
704 Illinois Ave
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DATE 03-24-2026
ECE PROJECT # 25-923
DRAWN ECE
CHECKED ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
STATE OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

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N 1 BASEMENT PLUMBING PLAN (UNDERGROUND)

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

GENERAL DEMOLITION NOTES

1. REMOVE ALL EXISTING UNUSED SANITARY AND VENT PIPING. REMOVE OR CAP ANY UNDER SLAB THAT WILL NO LONGER BE IN USE TO ELIMINATE "DEAD END" CONDITION.
2. REMOVE ALL EXISTING UNUSED WATER LINES.
3. REMOVE ALL UNUSED PLUMBING FIXTURES.

KEYED NOTES:

1. PROVIDE OPEN SITE DRAIN FOR DISCHARGE FROM ELEVATOR PIT PUMP. DRAIN TO OPEN SITE DRAIN WITH CODE APPROVED AIR GAP.
2. CONNECT TO EXISTING SANITARY LINE AT THIS POINT. THE PLUMBING CONTRACTOR SHALL SCOPE THIS LINE PRIOR TO THE START OF CONSTRUCTION. REPORT ANY DAMAGE OR DISCREPANCIES TO THE ARCHITECT/ENGINEER.
3. FOUNDATION DRAIN. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR MORE INFORMATION.
4. EXISTING FLOOR DRAIN TO REMAIN. THE PLUMBING CONTRACTOR SHALL SCOPE THIS LINE PRIOR TO THE START OF CONSTRUCTION TO DETERMINE UNDERSLAB ROUTING. REPORT ANY DAMAGE OR DISCREPANCIES TO THE ARCHITECT/ENGINEER. INSTALL NEW GRID COVER.
5. EXISTING SANITARY MAIN.
6. NEW 1 1/2" WATER SERVICE. WATER METER LOCATED IN PIT. VERIFY WITH LOCAL WATER UTILITY THAT EXISTING WATER METER CAN BE USED WITH NEW 60 WSFU LOAD. INSTALL NEW WATER METER SIZED TO SUPPLY NEW WSFU LOAD IF REQUIRED.

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BASEMENT PLUMBING PLAN (UNDERGROUND)

BUILDING RENOVATION

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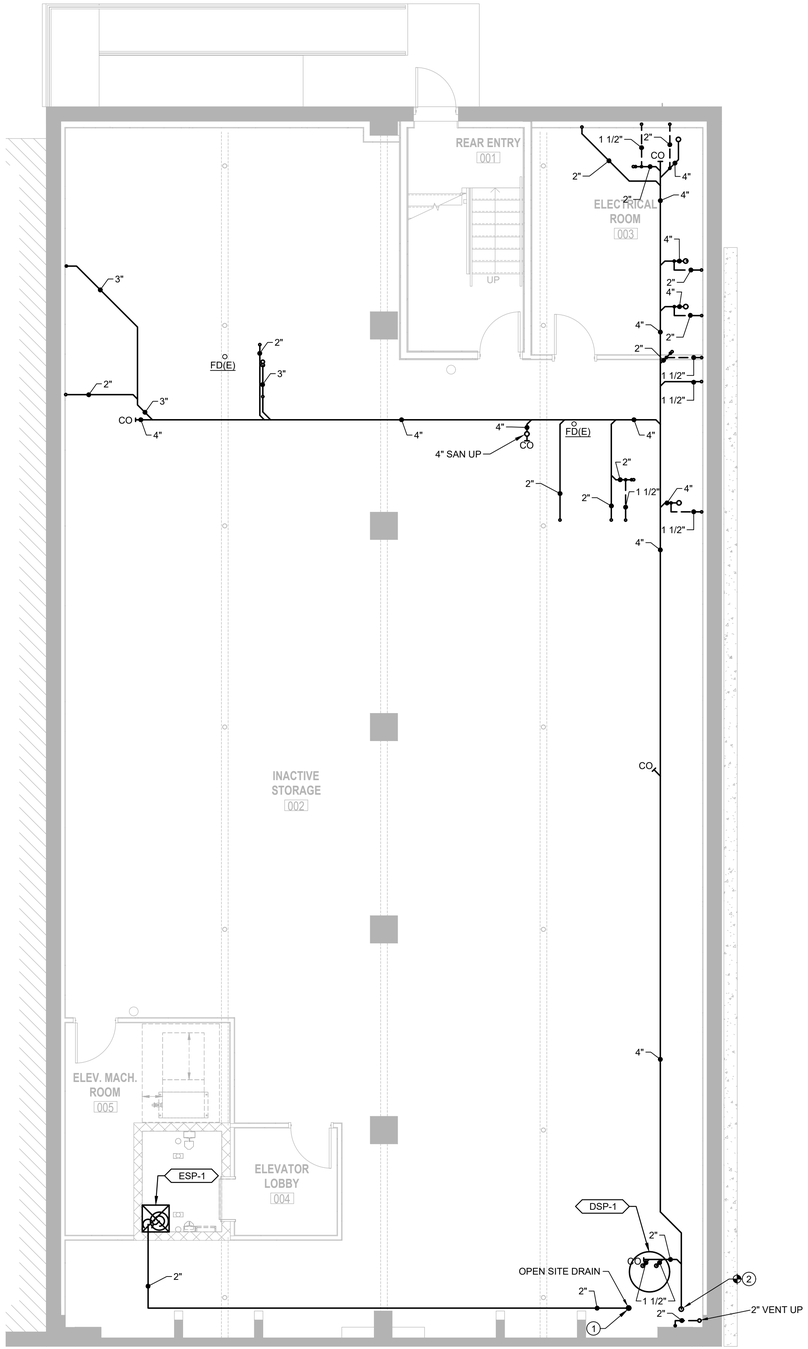
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KEYED NOTES:

1. PROVIDE OPEN SITE DRAIN FOR DISCHARGE FROM ELEVATOR PIT PUMP. DRAIN TO OPEN SITE DRAIN WITH CODE APPROVED AIR GAP.
2. CONNECT TO EXISTING SANITARY LINE AT THIS POINT. THE PLUMBING CONTRACTOR SHALL SCOPE THIS LINE PRIOR TO THE START OF CONSTRUCTION. REPORT ANY DAMAGE OR DISCREPANCIES TO THE ARCHITECT/ENGINEER.
3.

N

1 BASEMENT PLUMBING PLAN (WASTE & VENT)

0 1' 2' 4' 8'
SCALE: 3/16" = 1'-0"

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BASEMENT
PLUMBING PLAN
(WASTE & VENT)

BUILDING RENOVATION

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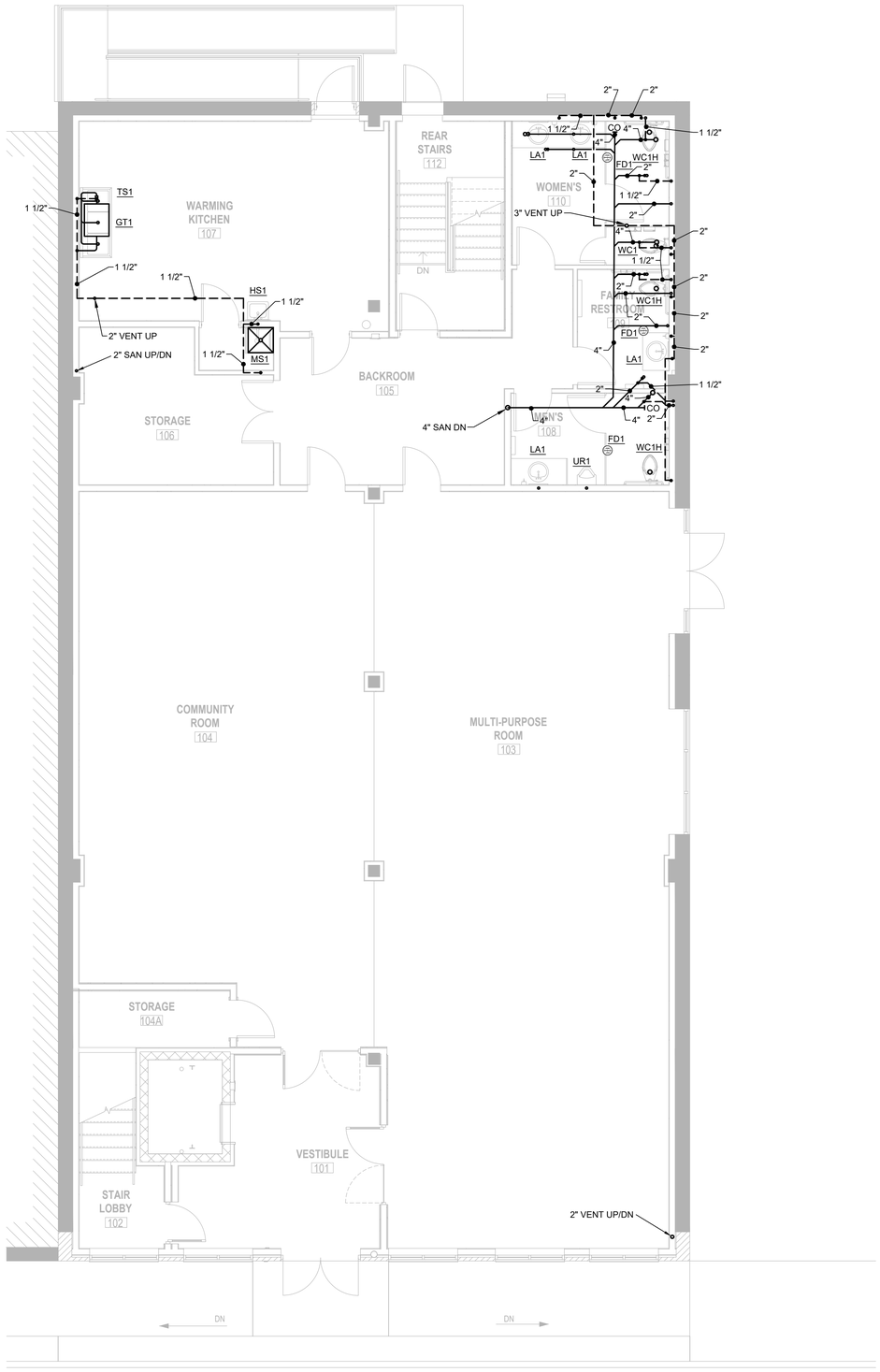
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N 1 FIRST FLOOR PLUMBING PLAN (WASTE & VENT)

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

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FIRST FLOOR PLUMBING PLAN (WASTE & VENT)

BUILDING RENOVATION

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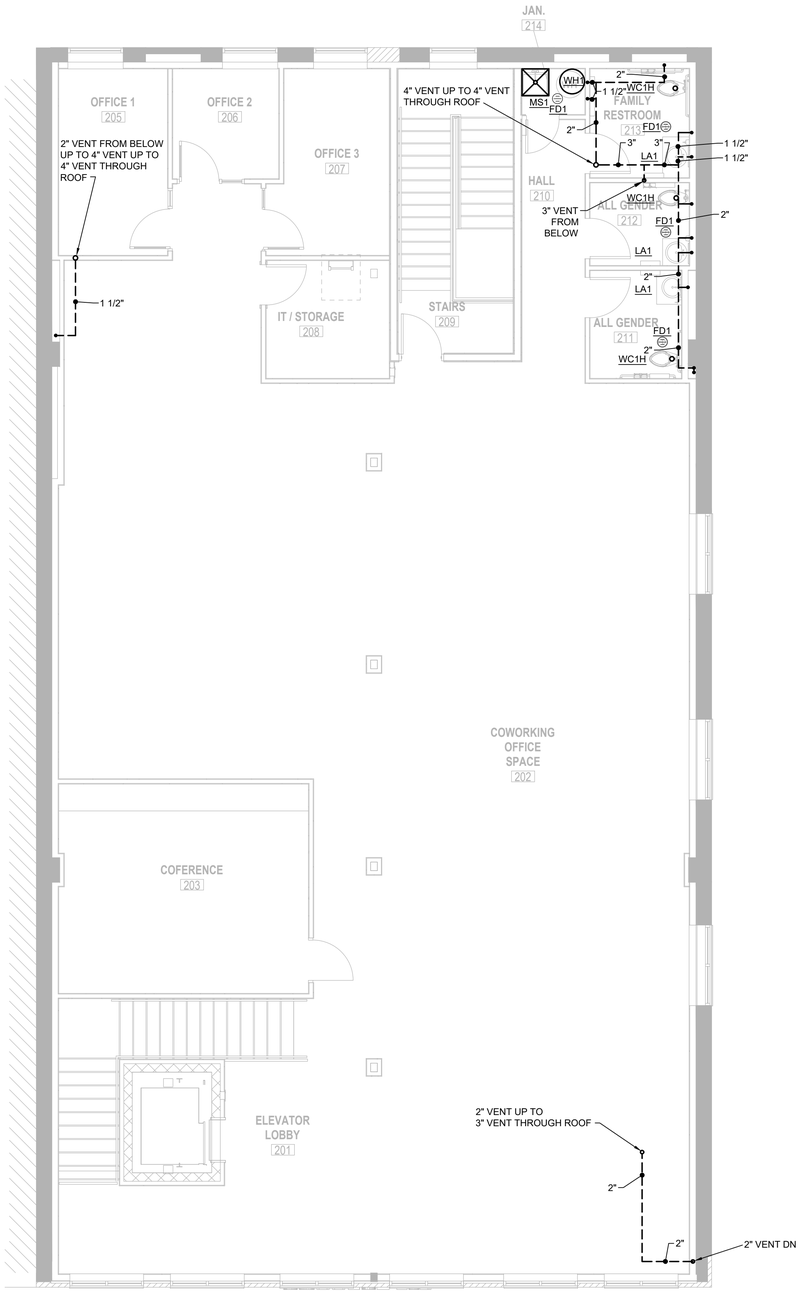
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N

1 SECOND FLOOR PLUMBING PLAN (WASTE & VENT)

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

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SECOND FLOOR PLUMBING PLAN (WASTE & VENT)

BUILDING RENOVATION

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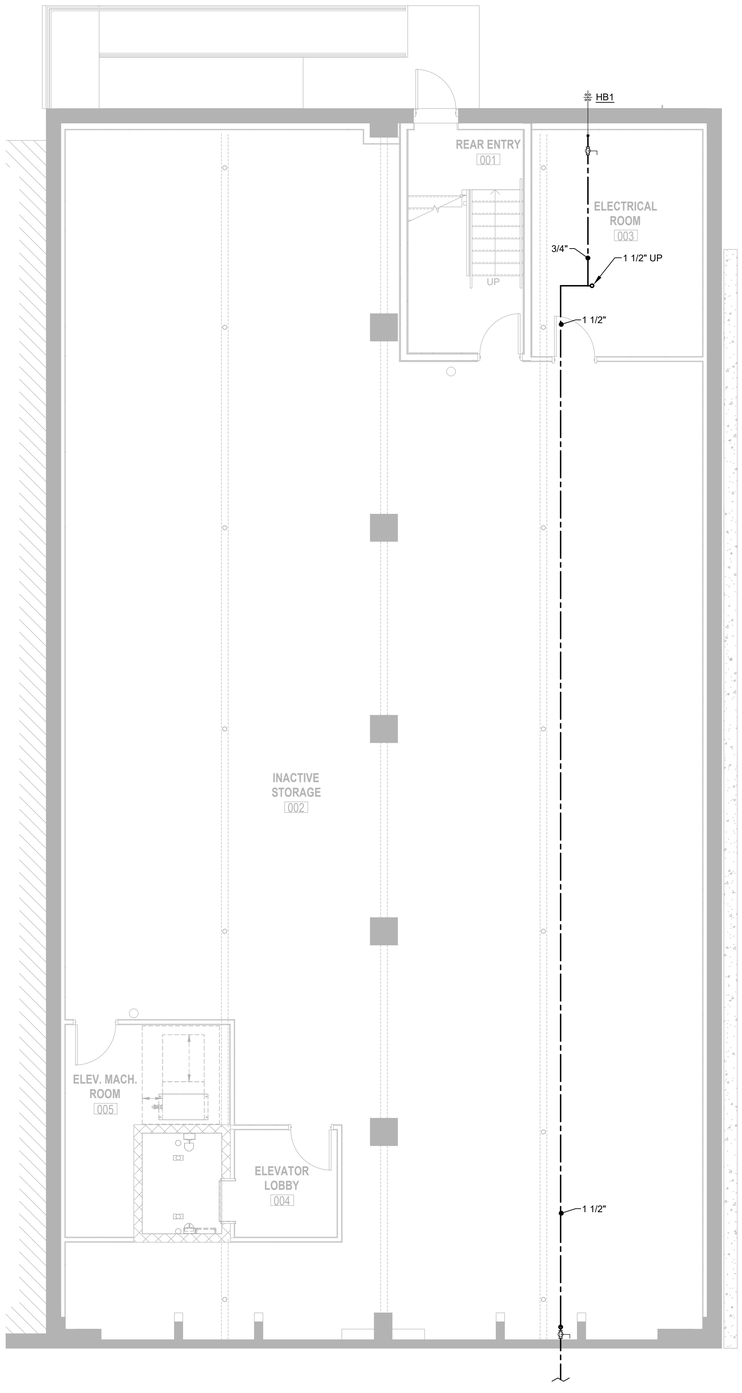
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NOTE; PROVIDE ADD ALTERNATE TO PROVIDE A FIRE PROTECTION SYSTEM FOR THE BUILDING. THIS SHALL INCLUDE A BACKFLOW PREVENTION DEVICE, ALL REQUIRED VALVES AND PIPING. SPRINKLER HEADS IN FINISHED CEILING AREAS SHALL BE CONCEALED HEAD TYPE. SPRINKLER HEADS IN EXPOSED CEILING AREAS SHALL BE UPTURNED TYPE. COORDINATE LOCATION OF FIRE DEPARTMENT CONNECTION. A NEW COMBINED WATER SERVICE SHALL BE 6".

N

1 BASEMENT PLUMBING PLAN (WATER)

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

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BASEMENT
PLUMBING PLAN
(WATER)

BUILDING
RENOVATION

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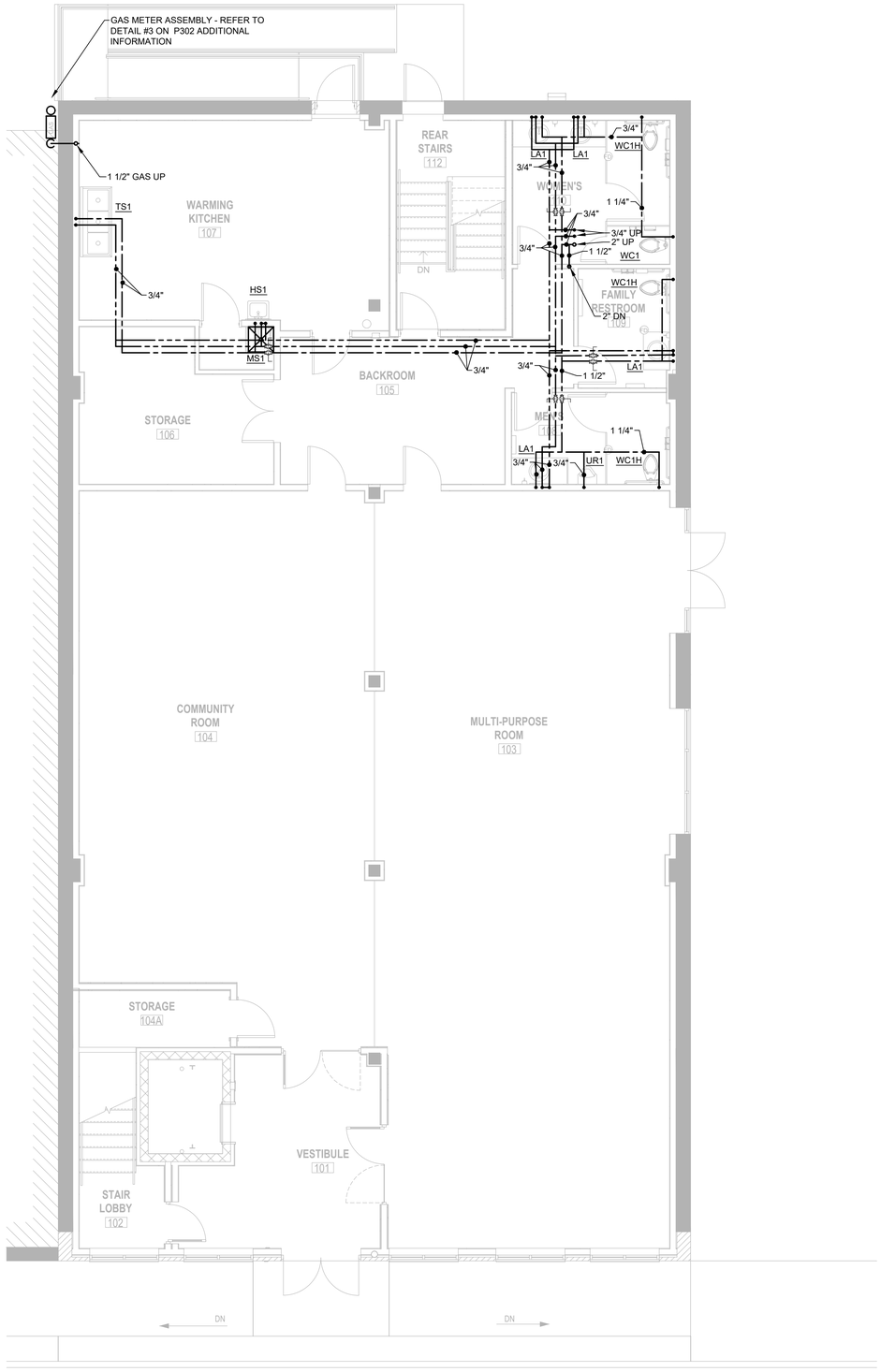
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N 1 FIRST FLOOR PLUMBING PLAN (WATER)

0 1' 2' 4' 8'

SCALE: 3/16" = 1'-0"

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FIRST FLOOR PLUMBING PLAN (WATER)

BUILDING RENOVATION

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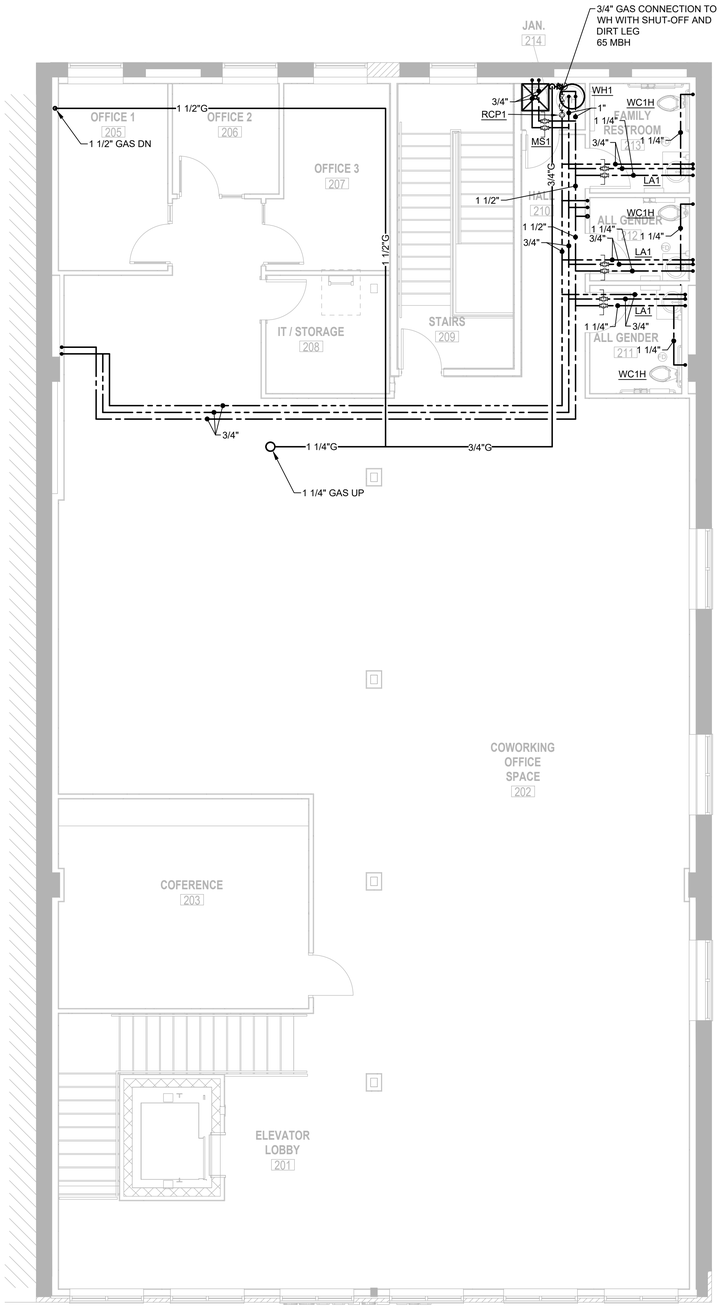
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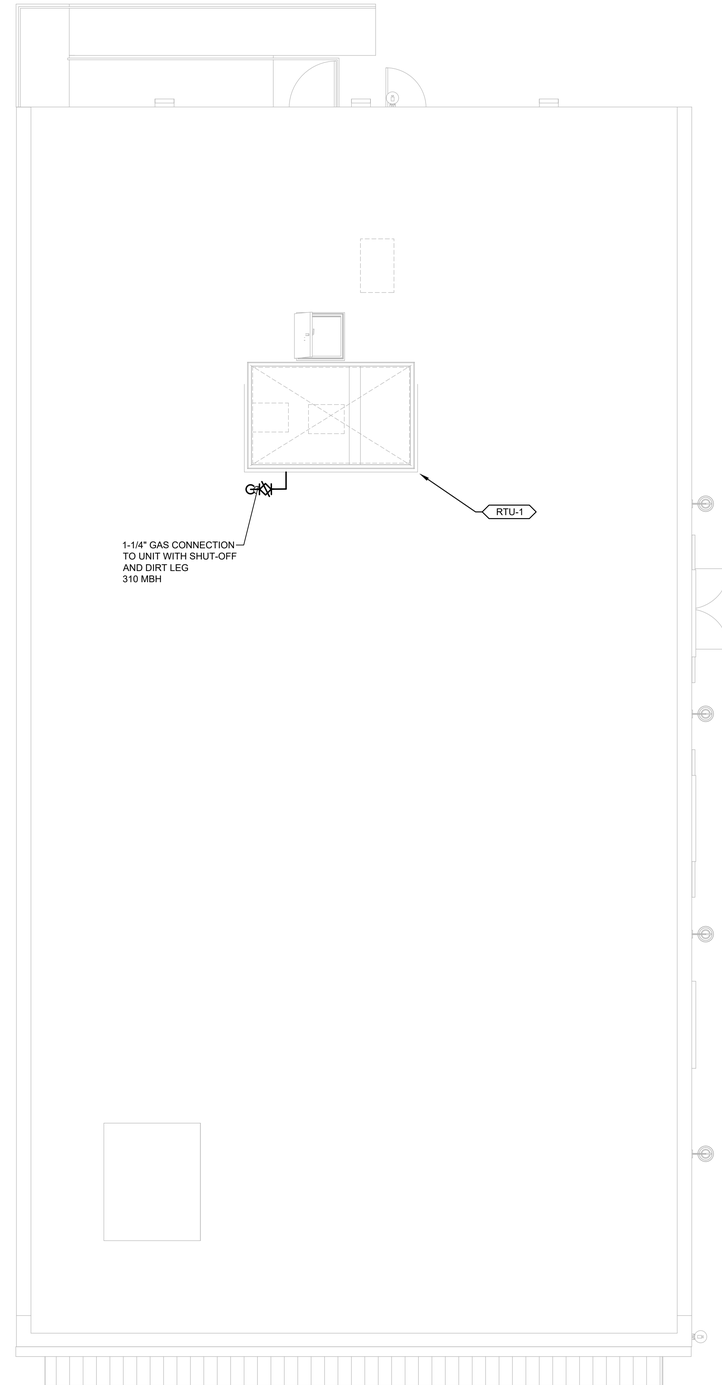
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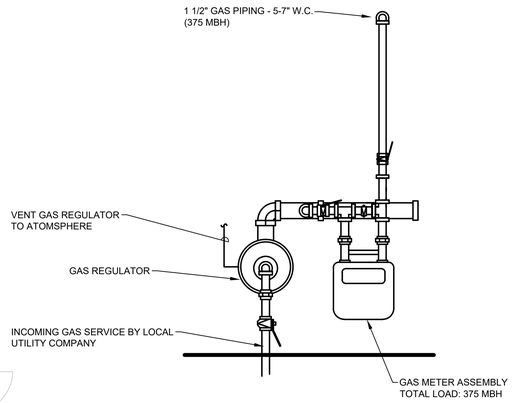
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3 GAS METER DETAIL
NOT TO SCALE

GAS PIPING INSTALLATION NOTES:

1. GAS SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH STATE AND LOCAL CODES. SUBMIT SHOP DRAWINGS TO ENGINEER SHOWING FINAL ROUTING, MATERIALS, SHUT-OFFS, DETAILS, LINE SIZES FOR A COMPLETE GAS SERVICE TO THIS PROJECT.
2. THE GAS SYSTEM HAS BEEN DESIGNED USING THE LONGEST LINE METHOD WITH THE FOLLOWING CRITERIA:

   GAS: 1,000 BUT/HR = 1 MBH = 1 CFH
   SPECIFIC GRAVITY: 0.60
   INLET PRESSURE: EQUAL TO OR GREATER THAN 2 PSI
   DISCHARGE PRESSURE: 2 PSI
   PRESSURE DROP: 1.0 PSI
   DISCHARGE PRESSURE: 7" TO 10" WC
   PRESSURE DROP: 0.3 IN. W.C.
   GAS PIPE SIZING: PER CURRENT STATE CODE

   CONTRACTOR SHALL CONTACT NIGAS PRIOR TO START OF WORK. CONTRACTOR SHALL PROVIDE AND PAY FOR ANY REQUIRED FOR NEW GAS SERVICE AND METERS.
3. VERIFY ALL GAS CONNECTIONS WITH MANUFACTURER'S INSTRUCTIONS PRIOR TO CONSTRUCTION. PROVIDE CABLE RESTRAINTS FOR ALL GAS FIRED EQUIPMENT THAT IS MOVABLE.

N 1 SECOND FLOOR PLUMBING PLAN (WATER)
0 1' 2' 4' 8'
SCALE: 3/16" = 1'-0"

N 2 ROOF PLUMBING PLAN
0 1' 2' 4' 8'
SCALE: 3/16" = 1'-0"

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SECOND FLOOR PLUMBING PLAN (WATER)

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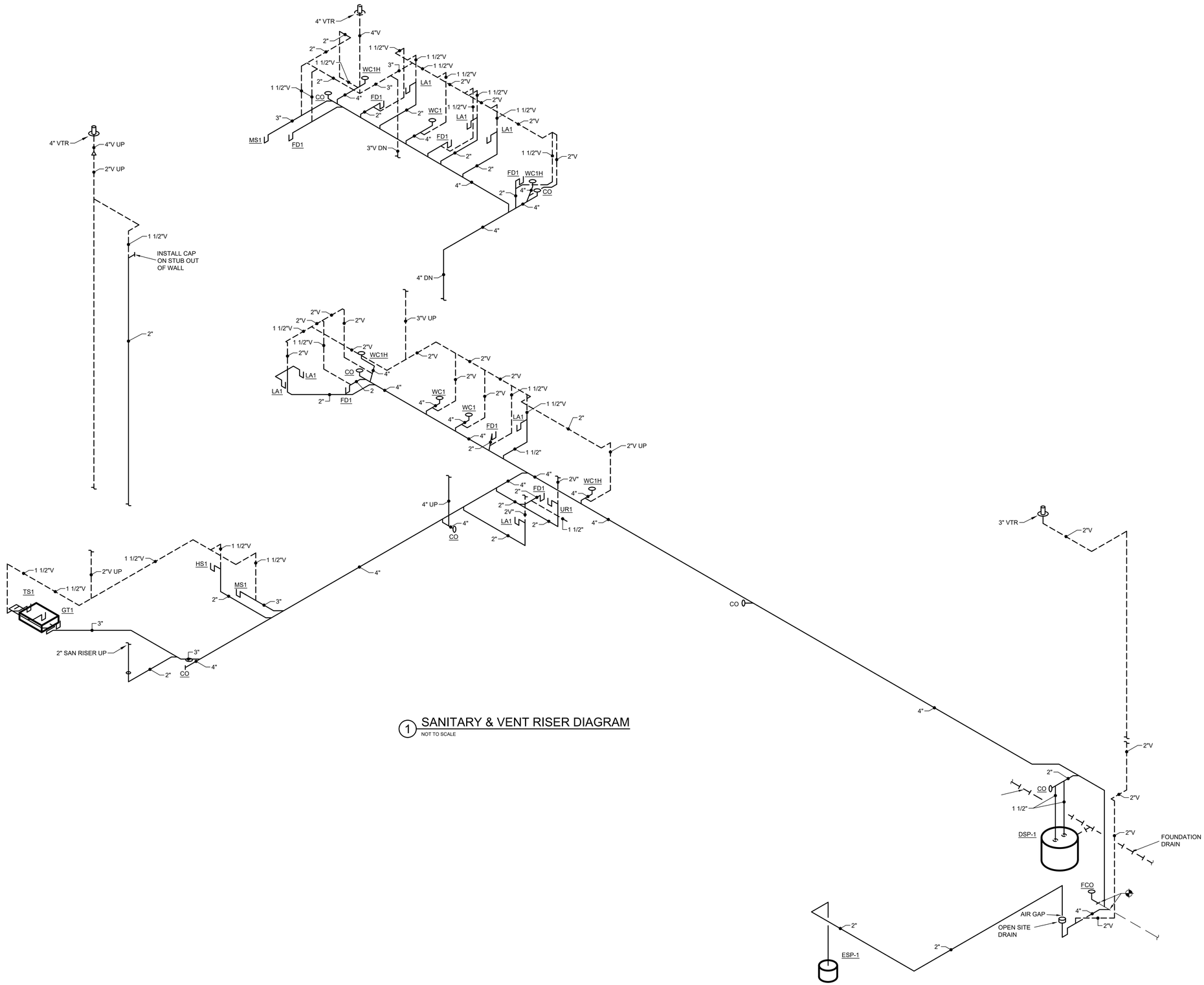
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1 SANITARY & VENT RISER DIAGRAM
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PLUMBING RISER DIAGRAMS

BUILDING RENOVATION

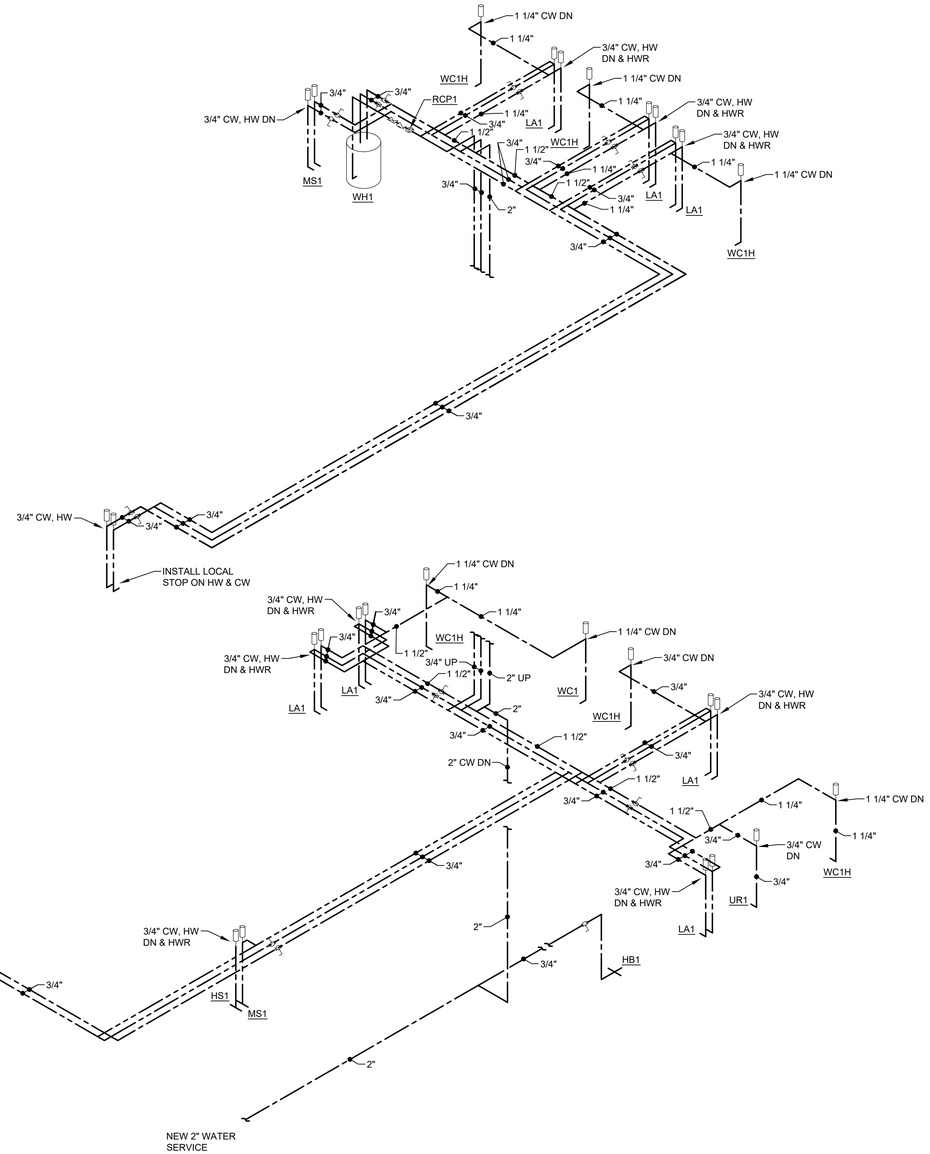
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1 DOMESTIC WATER RISER DIAGRAM
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PLUMBING RISER DIAGRAMS

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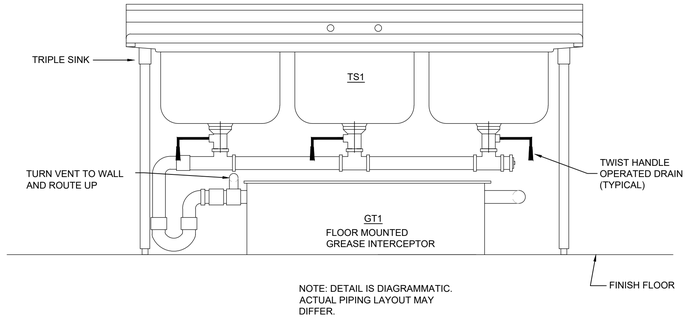
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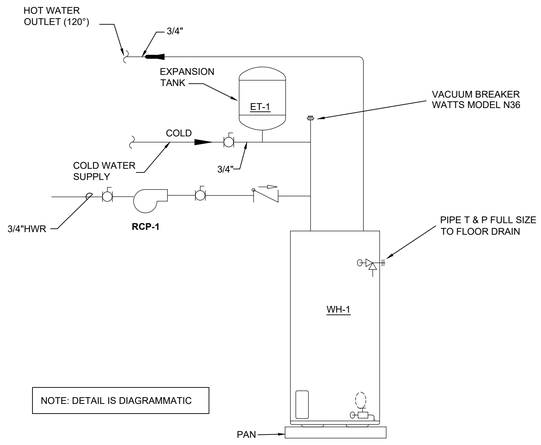
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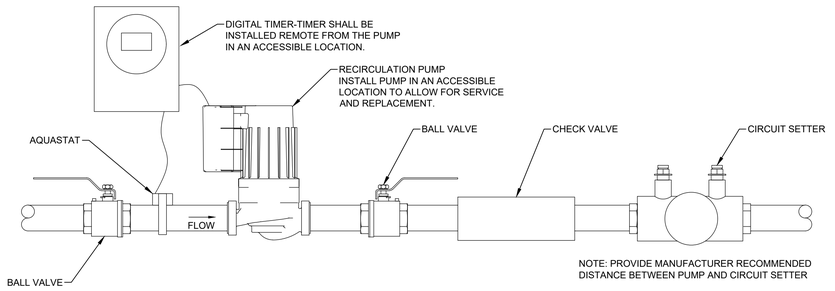
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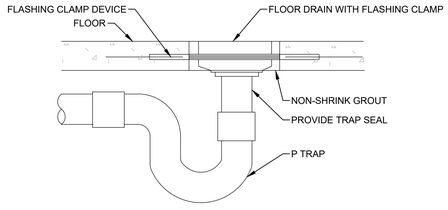
8 GREASE INTERCEPTOR DETAIL (GT1)
NOT TO SCALE



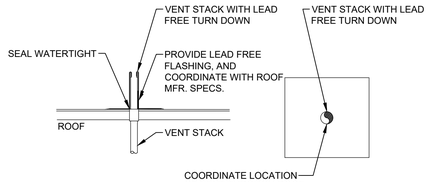
7 WATER HEATER DETAIL
NOT TO SCALE



6 HOT WATER RECIRCULATION PUMP DETAIL (RCP-1)
NOT TO SCALE



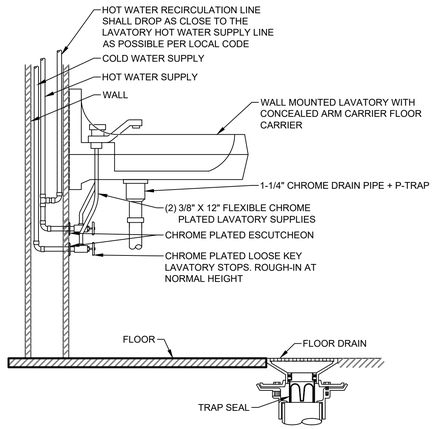
5 FLOOR DRAIN DETAIL
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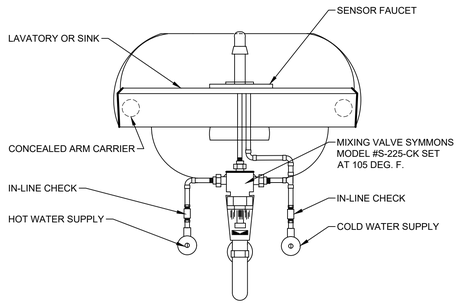
NOTES:

1. CONTRACTOR MAY PROVIDE A PRE-FABRICATED VENT STACK AS AN APPROVED EQUAL.
2. SEAL PENETRATION THROUGH ROOF WATERTIGHT.

4 VENT THRU ROOF DETAIL
NOT TO SCALE



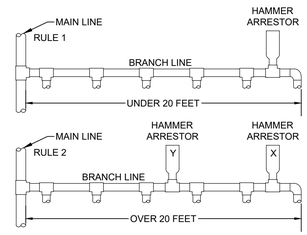
3 LAVATORY DETAIL
NOT TO SCALE



2 FIXTURE MIXING VALVE DETAIL
NOT TO SCALE

RULE 1: BRANCH LINES OF 20 FEET OR LESS.
THE HAMMER ARRESTOR SHOULD BE PLACED AT THE END OF THE BRANCH LINE BETWEEN THE LAST TWO FIXTURES.

RULE 2: BRANCH LINES OVER 20 FEET.
AN ADDITIONAL HAMMER ARRESTOR (Y) SHOULD BE PLACED AS SHOWN (BELOW). THE ADDITIONAL UNIT PLACED AT THE MIDPOINT OF THE RUN LONGER THAN 20 FEET. THE SUM OF THE FIXTURE UNIT RATINGS OF (X) AND (Y) COMBINED. SHOULD BE EQUAL TO OR GREATER THAN THE DEMAND OF ALL BRANCHES. INSTALL IN A ACCESSIBLE AREA



1 WATER HAMMER DETAIL
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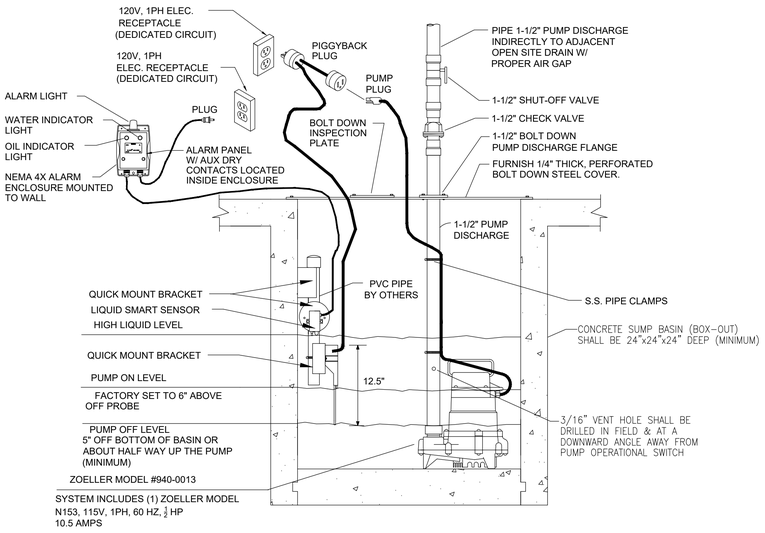
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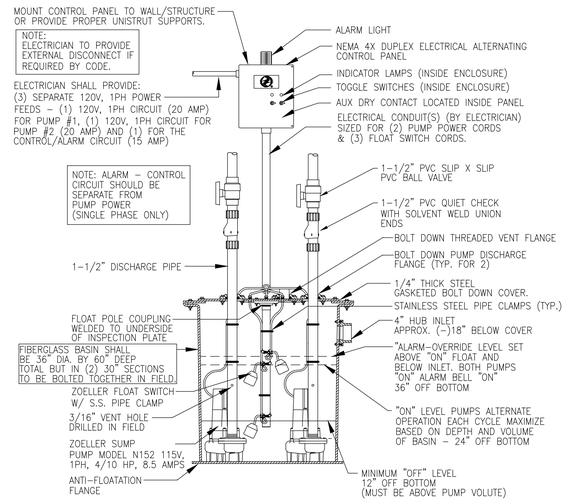


NOTES:
1.) BOTTOM STAINLESS STEEL PROBE ON PUMP OPERATIONAL SWITCH SHALL BE SET HALF WAY UP THE PUMP OR 5" OFF BOTTOM OF BASIN (MINIMUM).

2.) NEMA 4X OIL GUARD ALARM PANEL SHALL BE MOUNTED IN ELEVATOR SHAFT NEXT TO PUMP BASIN. COMMUNICATIONS CONTRACTOR/ ELECTRICIAN SHALL RUN WIRES FROM AUX DRY CONTACT (LOCATED INSIDE ALARM PANEL) TO BAS/REMOTE MONITORING SYSTEM WHEN AVAILABLE.

3.) PLUMBING CONTRACTOR SHALL FURNISH PROPER CHECK VALVE AND SHUT-OFF VALVE ON PUMP DISCAHRGE PIPE.

(2) SIMPLEX OIL-SENSING ELVATOR SUBMERSIBLE SUMP PUMP DETAIL-ESP-1
NOT TO SCALE



NOTES:
1.) PUMP SYSTEM SHALL HAVE A SYSTEM START-UP PERFORMED BY HART, TRAVERS & ASSOCIATES, INC. 630.261.1166 OR A REPRESENTATIVE OF ZOELLER PUMP COMPANY PRIOR TO PUTTING THE SYSTEM INTO SERVICE.

2.) PLUMBING CONTRACTOR SHALL COORDINATE ALL PUMP POWER AND FLOAT SWITCH CORD LENGTHS REQUIRED TO REACH THE CONTROL PANEL PRIOR TO BID.

3.) PLUMBING CONTRACTOR SHALL SECURE PUMP LIFTING CABLE (IF APPLICABLE) TO THE LIFTING BAIL ON TOP OF THE PUMP AND SECURE VIA ZIP TIE TO PUMP DISCHARGE PIPE OUTSIDE THE BASIN AND ABOVE THE COVER.

4.) PLUMBING CONTRACTOR SHALL LOCATE FLOAT SWITCH TREE AWAY FROM INLET PIPES WHERE POSSIBLE.

5.) ELECTRICIAN SHALL BE RESPONSIBLE FOR LANDING ALL PUMP POWER AND FLOAT SWITCH CORDS ON PROPER TERMINALS INSIDE CONTROL PANEL PRIOR TO SYSTEM START-UP. PROVIDE LIQUID TIGHT CORD GRIPS ON ALL PENETRATIONS IF CONDUIT IS NOT BEING USED.

(1) DUPLEX SUBMERSIBLE SUMP SYSTEM-(DSP-1)
NOT TO SCALE

SUBMERSIBLE PUMP SCHEDULE

TAG	TYPE	APPLICATION	MFG. & MODEL	GPM	TDH	VOLTAGE	PHASE	HP	AMPS (EACH PUMP)	IMPELLER	PUMP DISCHARGE SIZE	PUMP DISCHARGE ORIENTATION	SOLIDS HANDLING	RAIL SYSTEM	PIPING MATERIAL	BASIN DIA.	BASIN DEPTH	BASIN MATERIAL	COVER MATERIAL	COVER TYPE	LOWEST INLET PIPE ELEV.	INCLUDED OPTIONS	ADDITIONAL NOTES
DSP-1	[ ] SIMPLEX [X] DUPLEX	[ ] SEWAGE [X] STORM [ ] GRINDER [ ] EXPLOSION PROOF [ ] HI-TEMP	ZOELLER N152	50	15	[X] 115 [ ] 200 [X] 230 [ ] 460	[X] SINGLE [ ] THREE	4/10	8.5	VORTEX	[X] 1-1/2" [ ] 2" [X] 3" [ ] 4"	[X] VERT. [ ] HORIZ. [X] TOP [ ] SIDEWALL	1/2"	[ ] REQ. [X] NOT REQ'D [ ] INT. BRACKET	[X] PVC [ ] COPPER [ ] GALVANIZED	36"	60"	[X] FIBERGLASS [ ] CONCRETE [ ] POLY	[ ] EPOXY STEEL [ ] STEEL [ ] PERFORATED	[ ] ALUMINUM [ ] H20 TRAFFIC [X] GAS TIGHT	[X] STANDARD [ ] HINGED DOOR [ ] SOLID	(-)18"	[1] [2] [3] [4] [5] [6]	BASIN: AK INDUSTRIES #GB-36X060-200 (SECTIONED) COVER: AK INDUSTRIES #LB-S3602.250 FURNISH (1) 4" BOLT ON CAST IRON INLET HUB
ESP-1	[X] SIMPLEX [ ] DUPLEX	[ ] SEWAGE [X] STORM [ ] GRINDER [ ] EXPLOSION PROOF [ ] HI-TEMP	ZOELLER 940-0013	50	20	[X] 115 [ ] 200 [X] 230 [ ] 460	[X] SINGLE [ ] THREE	1/2	10.5	VORTEX	[X] 1-1/2" [ ] 2" [X] 3" [ ] 4"	[X] VERT. [X] TOP [ ] HORIZ. [ ] SIDEWALL	1/2"	[ ] REQ. [X] NOT REQ'D	[X] PVC [ ] COPPER [ ] GALVANIZED	24"	24"	[ ] FIBERGLASS [X] CONCRETE [ ] POLY	[ ] EPOXY STEEL [X] STEEL [X] PERFORATED	[ ] ALUMINUM [ ] H20 TRAFFIC [ ] GAS TIGHT	[X] STANDARD [ ] HINGED DOOR [ ] SOLID	N/A	[7]	24"x24" BASIN & AK INDUSTRIES #LB-2401-I-01 PERF 24"x24" SQUARE BOLT DOWN PERFORATED COVER W/ INSPECTION PLATE & INSTALLATION PLATE

PUMP SYSTEM AVAILABLE OPTIONS/ACCESSORIES

[1] INCLUDE (3) ZOELLER #10-0744 VARIABLE LEVEL FLOAT SWITCHES WITH 20' LONG CORDS AND STAINLESS STEEL PIPE CLAMPS.

[2] FURNISH (2) ZOELLER #30-0046 1-1/2" PVC QUIET CHECK/SHUT-OFF COMBOS - ONE FOR EACH PUMP.

[3] FURNISH (2) ZOELLER #39-0031 8' LONG STAINLESS STEEL LIFTING CABLE FOR EACH PUMP.

[4] FURNISH (1) ZOELLER #12324-0001 PIVOT PRO NEMA 4X SINGLE PHASE DUPLEX ALTERNATING CONTROL PANEL W/ AUX DRY CONTACTS, H-O-A SWITCHES, ALARM LIGHT/HORN, LCD DISPLAY SCREEN, SMART FLOAT LOGIC, TEST/SILENCE SWITCH, PUMP RUN LIGHTS, MOTOR CONTACTORS, CIRCUIT BREAKERS & FLOAT LEVEL INDICATOR LIGHTS

[5] FURNISH (1) ZOELLER #90001-0001 WIFI/CLOUD ENABLED GATEWAY DEVICE FOR REMOTE MONITORING OF CONTROL PANEL AUX DRY CONTACT. GATEWAY WILL SEND REMOTE NOTIFICATIONS VIA TEXT/PUSH NOTIFICATION & EMAIL FOR HIGH WATER, POWER OUTAGE/RESTORE & WIFI LOSS. DEVICE SHALL BE SUBSCRIPTION FREE

[6] BASIN SHALL BE 36" DIAMETER BY 60" DEEP TOTAL BUT IN (2) 30" SECTIONS TO BE BOLTED TOGETHER IN FIELD IN ORDER TO FIT THROUGH EXISTING 36" WIDE DOORWAY.

[7] FURNISH OIL-SENSING CONTROLS INCLUDING PUMP SWITCH, HIGH WATER ALARM, PIGGYBACK PLUG AND DRY AUX CONTACTS FOR REMOTE MONITORING (ELEVATOR SUMP PUMP SYSTEMS)

INSTALLING CONTRACTOR COORDINATION NOTES:

1.) PLUMBING CONTRACTOR SHALL DRILL 3/16" VENT HOLE ON EACH PUMP DISCHARGE PIPE AT OR NEAR THE TOP OF THE PUMP. ANGLE DOWNWARD & AWAY FROM FLOATS WHERE POSSIBLE.

2.) PLUMBING CONTRACTOR SHALL VERIFY PROPER VOLTAGE/PHASE OF PUMPS AND REQUIRED CORD LENGTHS TO REACH CONTROL PANEL PRIOR TO BID. J-BOXES INSIDE THE BASIN WILL NOT BE PERMITTED.

3.) ELECTRICIAN SHALL BE RESPONSIBLE FOR LANDING ALL PUMP POWER CORD, SENSOR CORDS AND FLOAT SWITCH CORDS ON PROPER TERMINALS INSIDE CONTROL PANEL

4.) ELECTRICIAN SHALL FURNISH PROPERLY SIZED CONDUIT(S) FROM CONTROL PANEL DOWN TO PUMP SYSTEM BASIN. VERIFY ABOVE GRADE OR BELOW GRADE PRIOR TO BID.

5.) ELECTRICIAN SHALL PROVIDE (3) SEPARATE AND DEDICATED POWER CIRCUITS FOR ALL SINGLE PHASE CONTROL PANELS. (1) 1PH POWER CIRCUIT FOR PUMP #1 (20 AMP BREAKER), (1) 1PH POWER CIRCUIT FOR PUMP #2 (20 AMP BREAKER) AND (1) 120V, 1PH POWER CIRCUIT (15 AMP BREAKER) FOR CONTROL/ALARM CIRCUIT.

6.) PUMP SYSTEM START-UP SHALL BE REQUIRED PRIOR TO PUTTING SYSTEM INTO SERVICE AND SHALL BE PERFORMED BY A REPRESENTATIVE OF HART, TRAVERS & ASSOCIATES, INC. 630.261.1166 OR ZOELLER PUMP COMPANY.

7.) PUMP POWER CORD LENGTH AND SENSOR CORD LENGTH (IF APPLICABLE) SHALL MATCH FLOAT CORD LENGTH.

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PLUMBING FIXTURE SCHEDULE

FIXTURE TYPE								FIXTURE CONNECTION						FIXTURE UNITS			
								WASTE			VENT (INCHES)	DOMESTIC SUPPLY		COLD WATER	HOT WATER	TOTAL SUPPLY	SANITARY
TAG	QUANTITY	DESCRIPTION	TYPE	VALVE	FAUCET	MATERIAL	REMARKS	TRAP	DIRECT	INDIRECT		COLD	HOT				
WC1	2	WATER CLOSET (FLUSH VALVE)	AMERICAN STANDARD MODEL #3461.001 "AFWALL MILLENNIUM" STD HEIGHT, ELONGATED BOWL	AMERICAN STANDARD MODEL NUMBER 6065111.002 EXPOSED 1.1 GPF BATTERY OPERATED SENSOR FLUSH VALVE	-	VITREOUS CHINA WITH EVERCLEAN	INCLUDE AMERICAN STANDARD MODEL #3461.001 - OPEN FRONT SEAT LESS COVER TOILET SEAT	INTEGRAL	2 1/2"	-	2"	1"	-	20	-	20	8
WC1H	5	WATER CLOSET (FLUSH VALVE) (ADA HT.)	AMERICAN STANDARD MODEL #3461.001 "AFWALL MILLENNIUM" ADA HEIGHT, ELONGATED BOWL	AMERICAN STANDARD MODEL NUMBER 6065111.002 EXPOSED 1.1 GPF BATTERY OPERATED SENSOR FLUSH VALVE	-	VITREOUS CHINA WITH EVERCLEAN	INCLUDE AMERICAN STANDARD MODEL #5901.100 - OPEN FRONT SEAT LESS COVER TOILET SEAT, WALL CARRIER	INTEGRAL	2 1/2"	-	2"	1"	-	50	-	50	20
UR1	1	URINAL (FLUSH VALVE) (ADA HT.)	AMERICAN STANDARD MODEL #6550.001 "ALLBROOK" WALL MOUNTED AT ADA HT	AMERICAN STANDARD MODEL NUMBER 6063051.002 EXPOSED 0.5 GPF BATTERY OPERATED SENSOR FLUSH VALVE	-	VITREOUS CHINA	INCLUDE WALL CARRIER	INTEGRAL	2"	-	1 1/2"	3/4"	-	5	-	5	3
LA1	7	LAVATORY	AMERICAN STANDARD MODEL #9482.000 "OVALYN" UNDERMOUNT LAVATORY, 4" CENTERS, ADA COMPLIANCE.	-	AMERICAN STANDARD #605B215-0.5 GPM, ELECTRONIC TOUCHLESS FAUCET, PLUG-IN POWER SUPPLY, BELOW DECK MOUNTED THERMOSTATIC MIXING VALVE, CHROME FINISHED	VITREOUS CHINA	UNIT TO INCLUDE POLISHED CHROME PLATE DRAIN WITH PERFORATED STRAINER, BRASS TAILPIECE, CHROME PLATED BRASS P-TRAP WITH CO, ANGLE SUPPLY STOPS WITH FLEXIBLE SUPPLIES. INSULATE PIPING BELOW WITH TRUEBRO "LAV-GUARD" WHITE VINYL PIPE COVER WITH SNAP CLIPS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING HEIGHT.	1 1/2"	1 1/2"	-	1 1/2"	3/4"	3/4"	10.5	10.5	14	14
HS1	1	HAND SINK	REGENCY #PWB427-433943, 17"WIDE X 15" FRONT TO BACK X 5" DEEP BOWL	UNIT TO BE PROVIDED WITH SYMMONS #7-225-CK-MS THERMOSTATIC MIXING VALVE.	REGENCY KNEE OPERATED FAUCET VALVE, GOOSENECK FAUCET SPOUT, 1.8 GPM	20/304 STAINLESS STEEL , NSF	UNIT TO INCLUDE POLISHED CHROME PLATE DRAIN WITH PERFORATED STRAINER, BRASS TAILPIECE, CHROME PLATED BRASS P-TRAP WITH CO, ANGLE SUPPLY STOPS WITH FLEXIBLE SUPPLIES. INSULATE PIPING BELOW WITH TRUEBRO "LAV-GUARD" WHITE VINYL PIPE COVER WITH SNAP CLIPS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING HEIGHT.	1 1/2"	2"	-	2"	3/4"	3/4"	1	1	2	2
TS1	1	TRIPLE SINK	BK RESOURCES MODEL #BKS-3-18-12-18T, 90" W X 23-13/16" D X 43-3/4" H OVERALL SIZE, 18" WIDE X 18" FRONT TO BACK X 12" DEEP BOWL, (2) LEFT & RIGHT 18" DRAINBOARDS, 9" H BACKSPLASH, 8" OC SPLASH MOUNT FAUCET HOLES	-	BK RESOURCES MODEL #BKF-SMPR-WB-AF12-G "OPTIFLOW" PRE-RINSE ASSEMBLY, WITH 12" ADD-ON FAUCET, SPLASH-MOUNTED, 8" OC, TRIPLE PLY HOSE, 1/4 TURN CERAMIC CARTRIDGES, INTEGRAL CHECK VALVES COLOR CODED HOT & COLD	304 STAINLESS STEEL , NSF	UNIT TO INCLUDE BASKET DRAINS (BKDR-4), GALVANIZED STEEL LEGS, ADJUSTABLE HIGH IMPACT CORRISION RESISTANT FEET . UNIT TO BE CONNECTED TO FLOOR MOUNTED GREASE TRAP ASSEMBLY.	2"	-	3"	-	3/4"	3/4"	3	3	4	3
MS1	2	MOP SINK	MUSTEE MODEL 65M, 36"X24"X10" DURASTONE	-	CHICAGO FAUCET MODEL #897-CCP SERVICE SINK FAUCET W/ INTEGRAL SERVICE STOPS & VACUUM BREAKER ASSEMBLY.	-	UNIT TO INCLUDE MUSTEE MODEL #65.700 (HOSE HOLDER); #65.600 (MOP HANGER); & #67.2424 (WALL GUARDS)	3"	3"	-	2"'	3/4"	3/4"	4.5	4.5	6	4
HB-1	1	HOSE BIB	WOODFORD MODEL #B67	-		CHROME	UNIT IS ASSE 1052 LISTED AND INCLUDES HIGH FLOW DOUBLE CHECK BACKFLOW PREVENTER ASSEMBLY.	-	-	-	-	3/4"	-	4	-	4	-
FD1	7	FLOOR DRAIN (EMERGENCY USE)	SIOUX CHIEF #832 SERIES	-	-	CAST IRON BODY	6" ROUND NICKEL BRONZE STRAINER W/ VANDAL RESISTANT SCREWS, 835 SERIES TRAP PROTECTION DEVICE	2"	2"	-	1-1/2"	-	-	-	-	-	0
GT	1	GREASE TRAP ASSEMBLY	DRAINNET TECHNOLOGIES MODEL NUMBER D3935A03, 35 GPM, 50 LBS GREASE CAPACITY, 39.4 GAL LIQUID CAPACITY	-	-	-	UNIT TO BE LOCATED UNDER TRIPLE SINK. PROVIDE FLOW CONTROL FITTING AND AIR INTAKE TEE.	3"	3"	-	1/12"	-	-	-	-	-	-
RCP-1	1	RECIRCULATION PUMP	TACO MODEL 0034E-SF2 STAINLESS STEEL IN-LINE PUMP	-	-	-	CAPACITY: 4 GPM @ 8' TDH, 10 – 170 WATT ECM MOTOR, 115V/1PH/60HZ AND 3/4" STAINLESS STEEL FLANGE SET, AQUASTAT AND DIGITAL TIMER.	-	-	-	-	-	-	-	-	-	-
														98.32	19.32	105	54

NOTES:
1. INSTALL BACKING AND SUPPORTS AS REQUIRED FOR ALL FIXTURES AND ACCESSORIES.
2. ALL FIXTURES SHALL MEET ADA AND LOCAL CODES
3. SUPPLY PIPING AND FITTING FOR ALL FIXTURES SHALL BE INSTALLED SO AS TO PREVENT BACKFLOW
4. ALL FIXTURES SHALL BE PROVIDED WITH ACCESSIBLE SHUT OFF VALVES AT COLD AND HOT WATER PIPING CONNECTIONS
5. PROVIDE INSULATION FOR ALL PIPING IN EXTERIOR WALLS.
6. ALL PLUMBING FIXTURES SHALL BE COORDINATED AND APPROVED BY ARCHITECT PRIOR TO PURCHASE.
7. HOT WATER TO ALL LAVATORIES AND HAND SINKS SHALL NOT EXCEED 110 DEGREES.
8. COORDINATE ADA HEIGHT REQUIREMENTS WITH ARCHITECT DRAWINGS.
9. ALL LAVATORIES SHALL BE PROVIDED WITH APPROVED AUTOMATIC SAFETY WATER MIXING DEVICE AND PRESSURE BALANCE

98 SUPPLY FIXTURE UNITS FOR PROJECT AREA - 68 GPM - 2" WATER SUPPLY

56 DRAINAGE FIXTURE UNITS FOR PROJECT AREA

GAS FIRED WATER HEATER SCHEDULE

GENERAL												HEATING		ELECTRICAL				
EQUIPMENT TAG	LOCATION	MANUFACTURER	MODEL	UNIT TYPE	CAPACITY (GALLONS)	WEIGHT (LBS.)	DIMENSIONS (INCHES)				INPUT (BTU)	RECOVERY CAPACITY @ 90 DEGREE RISE	MCA	MOCP	PHASE	VOLTS	NOTES
							DIA	HEIGHT	FLUE	COMBUSTION AIR							
WH1	JAN CLO	STATE	GP8-50-YXP CSL	DIRECT VENT	50	216	22"	54.25"	2"	2"	65,000	81	-	-	1	120	1 THRU 5

NOTES:
1. UNIT DIMENSIONS DOES NOT INCLUDE ASSOCIATED BRACKETS AND PIPE CONNECTIONS
2. PROVIDE UNIT MOUNTED DISCONNECT
3. UNIT SHALL BE MANUFACTURED FOR A MINIMUM OF 50 PSI
4. UNIT TO BE PROVIDE WITH FLUE ASSEMBLY PER MANUFACTURER'S RECOMMENDATION
5. UNIT TO BE ENERGY START RATED WITH A THERMAL EFFICIENCY UP TO 97%

EXPANSION TANK SCHEDULE

EQUIPMENT TAG	LOCATION	MANUFACTURER	MODEL	CAPACITY (GALLONS)	WEIGHT (LBS.)	DIMENSIONS (INCHES)	
						DIAMETER	HEIGHT
ET-1	WH1	WATTS	DETA 5	2.3	22	10	14.00

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630 897 4651

EVENATE CONSULTING ENGINEERS PLLC
213 Grant St
Downers Grove, IL 60515
702 525 2864

PLUMBING SCHEDULES

BUILDING RENOVATION

704 Illinois Ave
Mendota, IL 61342

DATE 03-24-2026
ECE PROJECT # 25-923
DRAWN ECE
CHECKED ECE

REVISIONS
03-24-26 BID

LICENSED PROFESSIONAL ENGINEER
JOSEPH B. GREATHOUSE
062-065549
STATE OF ILLINOIS
EXP: 11/30/2027
ISS: 03/24/2026

P502

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