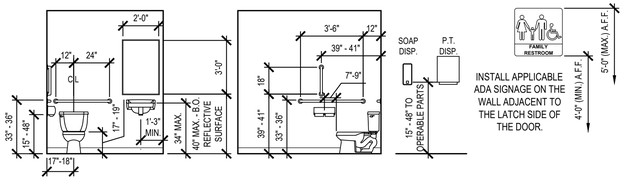
JOHNSON STORAGE

PERMIT SUBMITTAL

MAY 29, 2024

ACCESSIBILITY NOTES:

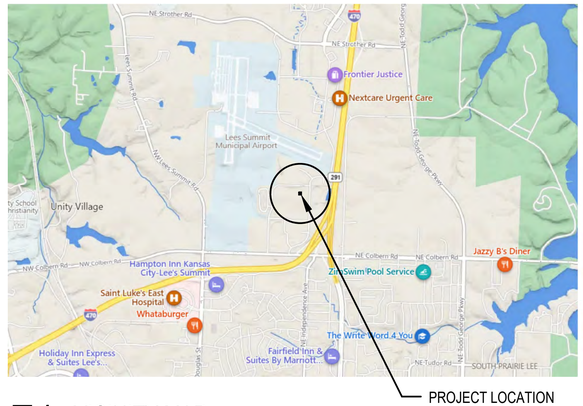
1. ACCESS TO THESE FACILITIES SHALL BE PROVIDED AT PRIMARY ENTRANCES, AS REQUIRED BY ADA.
2. WALKS & SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2" AND SHALL BE A MIN. OF 36" IN WIDTH.
3. SURFACES WITH A SLOPE OF LESS THAN 6% GRADIENT SHALL BE AT LEAST AS SLIP RESISTANT AS THAT DESCRIBED AS A MEDIUM SALTED FINISH.
4. SURFACES WITH A SLOPE OF 6% GRADIENT OR GREATER SHALL BE SLIP RESISTANT.
5. SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4" PER FOOT.
6. WALKS, SIDEWALKS & PEDESTRIAN WAYS SHALL BE FREE OF GRATING WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN THE GRATINGS SHALL BE LIMITED TO 1/2" IN THE DIRECTION OF TRAFFIC FLOW.
7. WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 VERTICAL TO 20 HORIZONTAL, IT SHALL COMPLY WITH THE PROVISIONS OF A PEDESTRIAN RAMP.
8. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2". WHEN CHANGES IN LEVEL DO OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2, EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL. WHEN CHANGES IN LEVELS GREATER THAN 1/2" ARE NECESSARY, THEY SHALL COMPLY WITH THE REQUIREMENTS FOR CURB OR PEDESTRIAN RAMPS.
9. EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 3 FT. WIDE BY NOT LESS THAN 6'-8" HIGH CAPABLE OF OPENING 90° AND MOUNTED SO THAT THE CLEAR WIDTH OF THE EXIT WAY IS 32" MIN.
10. THRESHOLDS MAY BE A MAX. 1/2" ABOVE ADJACENT FINISH FLOOR.
11. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2 LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR INTERIOR DOORS. SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED TO THE MAXIMUM ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS.
12. THE BOTTOM 10" OF ALL DOORS, EXCEPT AUTOMATIC AND SLIDING, SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
13. PROVIDE LEVER-TYPE HARDWARE, PANIC BARS, PUSH - PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE THE HARDWARE. (34" TO 48" A.F.F.)
14. PROVIDE 17" (MIN.) OR 18" (MAX.) FROM ADJACENT WALL TO CENTERLINE OF WATER CLOSET.
15. PROVIDE A 30"x48" CLEAR SPACE WITHIN THE TOILET ROOM THAT DOES NOT ENCROACH INTO THE DOOR SWING.
16. GRAB BARS LOCATED ON EACH SIDE, OR ONE SIDE AND THE BACK OF PHYSICALLY DISABLED TOILET COMPARTMENTS SHALL BE SECURELY ATTACHED 33" MIN. AND 36" MAX. FROM THE FINISHED FLOOR TO THE TOP OF THE GRAB BAR AND PARALLEL TO THE FLOOR. THE SPACE BETWEEN WALL-MOUNTED GRAB BARS AND THE WALL SHALL BE 1 1/2". GRAB BARS AT THE SIDE SHALL BE 42" LONG, AND THE BACK END SHALL BE LOCATED 12" FROM THE BACK WALL. GRAB BARS AT THE BACK SHALL BE NOT LESS THAN 36" LONG WITH THE END CLOSEST TO THE SIDE WALL MOUNTED 12" FROM THE CENTER OF THE WATER CLOSET. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1 1/4" TO 1 1/2" OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.
17. WATER CLOSET HEIGHT SHALL BE 17" (MIN.) OR 19" (MAX.) MEASURED TO THE TOP OF THE TOILET SEAT TO THE FINISHED FLOOR. CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET AREAS, NO MORE THAN 44" A.F.F. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS. OF FORCE.
18. URINALS SHALL BE 17" (MAX.) ABOVE THE FLOOR AND PROJECT 13 1/2" FROM THE WALL. URINALS SHALL HAVE A CLEAR SPACE OF 30"X48" IN FRONT. FLUSH VALVES SHALL BE AUTOMATIC OR MOUNTED NO MORE THAN 44" A.F.F. IF HAND-OPERATED.
19. IN FRONT OF LAVATORIES, PROVIDE A 30"x48" CLEAR SPACE LOCATED 25" (MAX.) FROM THE LEADING EDGE OF THE LAVATORY TOWARD THE MOUNTING WALL. KNEE CLEARANCE SHALL BE 11" DEEP (MIN.) AT 9" A.F.F. AND 8" DEEP (MIN.) AT 27" A.F.F. BETWEEN 9" AND 27" A.F.F., THE KNEE CLEARANCE SHALL BE PERMITTED TO REDUCE AT A RATE OF 1" IN DEPTH FOR EACH 6" IN HEIGHT.
20. ALL ACCESSIBLE LAVATORIES SHALL BE MOUNTED WITH THE RIM OR COUNTER SURFACE NO HIGHER THAN 34" A.F.F.
21. HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
22. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS. LEVER-OPERATED, PUSH-TYPE, AND ELECTRONIC CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET IS OPEN FOR AT LEAST 10 SECONDS.
23. LOCATE PAPER TOWEL DISPENSERS, SOAP DISPENSERS, SANITARY NAPKIN DISPENSERS, AND WASTE RECEPTACLES WITH ALL OPERABLE PARTS BETWEEN 15" AND 48" A.F.F.
24. LOCATE TISSUE DISPENSERS ON THE WALL 7" (MIN.) AND 9" (MAX.) FROM THE FRONT EDGE OF THE TOILET SEAT TO THE CENTERLINE OF DISPENSER WITH THE OUTLET BETWEEN 15" AND 48" A.F.F.
25. ACCESSIBLE RESTROOMS SHALL BE PROVIDED WITH SIGNAGE DESIGNED AND LOCATED PER SECTION 703 OF THE ADA DESIGN GUIDELINES.
26. DOORS IN ACCESSIBLE ROUTES SHALL BE DESIGNED TO MEET CLEARANCE REQUIREMENTS PER SECTION 404 OF THE ADA DESIGN GUIDELINES.
27. WALKS, HALLS, CORRIDORS, PASSAGEWAYS, AISLES OR OTHER CIRCULATION SPACES SHALL HAVE 80" MINIMUM CLEAR HEADROOM.
28. OBJECTS PROJECTING FROM WALLS WITH THEIR LEADING EDGES BETWEEN 27" AND 80" ABOVE THE FINISH FLOOR SHALL PROTRUDE NO MORE THAN 4" INTO WALKS, HALLS, CORRIDORS, PASSAGEWAYS OR AISLES. OBJECTS MOUNTED AT OR BELOW 27" ABOVE FINISH FLOOR MAY PROTRUDE ANY AMOUNT.
29. OBJECTS THAT ARE BETWEEN 27" AND 80" A.F.F. AND MOUNTED ON POSTS MAY EXTEND BEYOND THE POSTS A MAXIMUM OF 12". OBJECTS MOUNTED BETWEEN POSTS, WHERE THE SPACE BETWEEN THE POSTS IS GREATER THAN 12", THE LOWEST EDGE OF THE OBJECT SHALL BE LOCATED 27" MAX. AND 80" MIN. A.F.F.
30. IF CARPET OR CARPET TILE IS USED ON A GROUND OR FLOOR SURFACE IN A COMMON USE AREA, IT SHALL HAVE FIRM BACKING OR NO BACKING. THE MAXIMUM PILE HEIGHT SHALL BE 1/2". EXPOSED EDGES OF CARPET SHALL BE FASTENED TO FLOOR SURFACES AND HAVE TRIM ALONG THE EXPOSED EDGE, AND TRIM SHALL COMPLY WITH THE REQUIREMENTS FOR CHANGES IN LEVEL.



H2 TYP. ADA TOILET DIMENSIONS
SCALE: =

CONSTRUCTION NOTES:

1. PERFORM ALL WORK IN ACCORDANCE WITH ACCEPTABLE TRADE PRACTICE TO ENSURE THE HIGHEST QUALITY FINISHED PRODUCT - EXPRESSED OR IMPLIED. PERFORM ALL WORK BY SKILLED MECHANICS IN ACCORDANCE WITH ESTABLISHED STANDARDS OF WORKMANSHIP IN EACH OF THE VARIOUS TRADES.
2. WHEN THE PROJECT REQUIREMENTS REQUIRE THAT THE INSTALLATION OF WORK SHALL COMPLY WITH MANUFACTURER'S INSTRUCTIONS, PERFORM THE WORK IN STRICT ACCORDANCE WITH THE MOST CURRENT WRITTEN MANUFACTURER'S INSTRUCTIONS.
3. ALL PRODUCTS AND EQUIPMENT SHALL BE DELIVERED IN UNDAMAGED CONDITION AND STORED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO AVOID DISRUPTION OF THE WORK OR DAMAGE TO THE ITEMS. REPLACE DAMAGED OR UNFIT MATERIALS, AT NO COST TO THE OWNER.
4. COORDINATE BLOCKING REQUIREMENTS WITH ADJACENT OR RELATED TRADES, ACCESSORIES, EQUIPMENT AND FIXTURES. INSTALL REQUIRED BLOCKING AT NO ADDITIONAL COST TO THE CONTRACT.
5. ALL WEATHER-EXPOSED SURFACES SHALL HAVE A WEATHER-RESISTIVE BARRIER, EXTERIOR OPENINGS SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WATERPROOF.
6. REPAIR PROPERTY DAMAGE BY THE INSTALLERS TO A LIKE NEW CONDITION, OR REPLACE DAMAGED SURFACES AND MATERIALS OF THE PREVIOUSLY INSTALLED WORK BY OTHER TRADES, INSTALLERS, AND SUBCONTRACTORS.
7. ALLOWABLE TOLERANCES - UNLESS OTHERWISE NOTED OR INDICATED, THE FOLLOWING TOLERANCES SHALL APPLY TO ALL WORK:
   g. ALL VERTICAL SURFACES SHALL BE PLUMB OR CONSTRUCTED TO THE EXACT SLOPES OR ANGLES INDICATED.
   h. ALL HORIZONTAL SURFACES SHALL BE LEVEL OR CONSTRUCTED TO THE EXACT ANGLE INDICATED OR INTENDED.
   i. WALL AND SOFFIT INTERSECTIONS SHALL BE 90° OR THE EXACT ANGLE INDICATED OR INTENDED.
   j. ALL CORNERS AND EDGES SHALL BE STRAIGHT AND TRUE WITHOUT DENTS, WAVES, BULGES OR OTHER BLEMISHES.
   k. ALL JOINTS SHALL BE TIGHT, STRAIGHT, EVEN, AND SMOOTH.
   l. ALL OPERABLE ITEMS SHALL OPERATE SMOOTHLY WITHOUT STICKING OR BINDING AND WITHOUT EXCESSIVE
8. THE CONTRACTOR SHALL NOTIFY THE OWNER WHEN THE WORK IS SUBSTANTIALLY COMPLETE AND READY FOR INSPECTION. UPON INSPECTION, PROVIDE WRITTEN OPERATION AND MAINTENANCE INSTRUCTIONS AND GUARANTEES FOR ALL EQUIPMENT AND MATERIALS INSTALLED. PROVIDE WRITTEN GUARANTEES FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.



F1 VICINITY MAP
SCALE: =

GENERAL NOTES:

1. THE CONTRACTOR SHALL SECURE AND PAY FOR GOVERNMENT LICENSES, INSPECTIONS, TESTING, TEMPORARY UTILITIES AND PERMITS AS REQUIRED BY THE CONSTRUCTION DOCUMENTS AND/OR REGULATORY BODY HAVING AUTHORITY.
2. CONTRACTORS SHALL VISIT THE SITE WHILE BIDDING AND SHALL FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND THE REQUIREMENTS OF THE PROJECT AND CONSTRUCTION DOCUMENTS PRIOR TO DEVELOPING THEIR BID, FABRICATION / CONSTRUCTION, AND PURCHASING. MATERIAL QUANTITIES SHALL BE BASED ON ACTUAL FIELD CONDITIONS AND MEASUREMENTS. DO NOT RELY ON SCALING DRAWINGS FOR ACCURATE DIMENSIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES, CONFLICTS OR OMISSIONS DISCOVERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTIONS AND/OR REPAIRS REQUIRED FOR FAILING TO DO SO.
3. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL CONSTRUCTION DOCUMENTS TO THEIR SUBCONTRACTORS AS REQUIRED FOR THEM TO DEVELOP A COMPLETE BID FOR THEIR WORK AND TO HAVE A COMPLETE UNDERSTANDING OF COORDINATION NEEDED WITH OTHER SUBCONTRACTORS FOR RELATED HIDDEN OR EXPOSED WORK TO ENSURE EFFICIENT AND ORDERLY INSTALLATION.
4. THE ARCHITECT ASSUMES NO LIABILITY FOR THE SERVICES AND/OR CONSTRUCTION DOCUMENTS OF DESIGN SUB-CONSULTANTS COMPILED INTO THE SET OF DOCUMENTS ISSUED BY THE ARCHITECT. THESE DESIGN SERVICES MAY INCLUDE, BUT ARE NOT LIMITED TO, CIVIL, LANDSCAPE, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, PRE-ENGINEERED METAL BUILDING DESIGN, TILT-UP DESIGN, TRUSS SYSTEM DESIGN, AUTOMATIC FIRE SPRINKLER AND/OR ALARM SYSTEMS, LOW-VOLTAGE ELECTRICAL TELECOMMUNICATION AND SECURITY SYSTEMS AND GUTTER / DOWNSPOUT DESIGN.
5. UNLESS SPECIFICALLY NOTED OTHERWISE, THE CONTRACTOR SHALL PROVIDE AND PAY FOR LABOR, MATERIALS, EQUIPMENT, MACHINERY, SCAFFOLDING, SHORING, TOOLS, LAYOUT, ON-SITE DIMENSIONING, TRANSPORTATION, UTILITIES, AND OTHER FACILITIES AND SERVICES NECESSARY FOR PROPER EXECUTION AND COMPLETION OF THE WORK AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS. THIS SHALL ALSO INCLUDE NECESSARY CUTTING, PATCHING AND REPAIRING OF EXISTING CONSTRUCTION MATERIALS IN PLACE. ALL WORK AND MATERIAL SHALL COMPLY WITH THE APPLICABLE GOVERNING CODES LISTED.
6. WHERE DETAILS AND DESIGN INTENT ARE NOT CLEAR, THE CONTRACTOR SHALL CONSULT THE ARCHITECT FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
7. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR STRUCTURAL MODIFICATIONS, INSTALLATIONS AND ERECTION.
8. CONTRACTORS SHALL TAKE CARE TO PROTECT ADJACENT AREAS FROM DUST AND DAMAGE DURING THE CONSTRUCTION PROCESS AND SHALL CLEAN UP AFTER THEMSELVES AT THE END OF EACH WORKING DAY. ANY DAMAGE DONE TO ADJACENT AREAS MUST BE REPAIRED TO MATCH ORIGINAL CONDITIONS OR TO THE OWNER'S SATISFACTION. REPAIRS ARE TO BE PAID FOR BY THE CONTRACTOR RESPONSIBLE.
9. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY ADDITIONAL WORK OR REVISIONS REQUIRED DUE TO SITE CONDITIONS OR ADDITIONAL REQUIREMENTS OF ANY REGULATORY BODIES HAVING AUTHORITY.
10. FOR THE DURATION OF THE PROJECT AND AT ALL TIMES OF EACH DAY, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE CONDITIONS, SECURITY AND SAFETY FOR WORKERS AND THE GENERAL PUBLIC, AS REQUIRED BY THE REGULATORY BODY HAVING AUTHORITY.
11. THE GENERAL CONTRACTOR SHALL PURCHASE AND MAINTAIN INSURANCE COVERAGE IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER. VERIFY AND COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR ANY ADDITIONAL REQUIREMENTS.
12. THE OWNER OR THE OWNER'S SUBCONTRACTORS MAY OCCUPY PORTIONS OF THE PROJECT DURING THE FINAL STAGE OF CONSTRUCTION. COORDINATE AND COOPERATE WITH THE OWNER TO MINIMIZE CONFLICT AND FACILITATE THE OWNER'S OPERATION.
13. THE CONTRACTOR SHALL PROVIDE SECURITY OF THE WORK, INCLUDING TOOLS AND UNINSTALLED MATERIALS. PROTECT THE WORK, STORED PRODUCTS, CONSTRUCTION EQUIPMENT, AND OWNER'S PROPERTY FROM THEFT AND VANDALISM, AND PROTECT THE PREMISES FROM ENTRY BY UNAUTHORIZED PERSONNEL UNTIL FINAL ACCEPTANCE BY THE OWNER.
14. CONTRACTOR SHALL COORDINATE STAGING AREAS AS REQUIRED BY THE LANDLORD / OWNER.
15. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING UTILITIES.
16. THE STRUCTURAL ENGINEER AND ARCHITECT MUST BE NOTIFIED AND MUST GIVE APPROVAL PRIOR TO ANY STRUCTURAL MEMBER(S) BEING CUT OR MODIFIED TO ACCOMMODATE THE INSTALLATION OF ANY PIPES, DUCTS OR OTHER CONSTRUCTION.
17. THE STRUCTURAL ENGINEER AND ARCHITECT MUST BE NOTIFIED AND MUST GIVE APPROVAL PRIOR TO ANY MODIFICATION TO THE ROOF SYSTEM OR ADDING ANY ADDITIONAL ROOF-MOUNTED EQUIPMENT.

DISCLAIMER:

THESE DRAWINGS ARE CONSIDERED A "BUILDER'S SET" AND BY BEGINNING CONSTRUCTION, THE CONTRACTOR GUARANTEES TO THE ARCHITECT, THAT THE CONTRACTOR HAS THE COMPETENCE AND SKILL IN CONSTRUCTION NECESSARY TO BUILD THE PROJECT WITH THESE DRAWINGS. THE CONTRACTOR WILL BE REQUIRED TO ADAPT THE DRAWINGS TO ACTUAL FIELD CONDITIONS AND MAKE LOGICAL ADJUSTMENTS IN FIT, FORM, DIMENSION AND QUANTITY. IN THE EVENT ADDITIONAL DETAIL OR GUIDANCE IS NEEDED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT. FAILURE TO GIVE NOTICE SHALL RELIEVE THE ARCHITECT OF RESPONSIBILITY FOR ANY RESULTANT EXPENSES, REPAIRS OR ADDITIONAL WORK. IT IS UNDERSTOOD AND AGREED THAT IF THE ARCHITECT IS NOT HIRED TO DO CONSTRUCTION OBSERVATION OR ANY OTHER CONSTRUCTION PHASE SERVICES, THAT THE ENTITY HIRED TO PERFORM SUCH SERVICES ASSUMES ALL RESPONSIBILITY FOR THESE SERVICES, AND THE CLIENT WAIVES ANY CLAIMS AGAINST THE ARCHITECT THAT MAY BE IN ANY WAY CONNECTED THERETO.

ABBREVIATIONS:*

*NOTE: THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY ABBREVIATIONS NOT NOTED AND REQUEST CLARIFICATIONS.

@	AT	JT	JOINT
ACT	ACOUSTIC CEILING TILE		
ADJ	ADJUSTABLE	KS	KNEE SPACE
AFF	ABOVE FINISHED FLOOR		
ALUM	ALUMINUM	L	LONG
ANOD	ANODIZED	LB (#)	POUND
ATT	ATTENUATION	LVL	LAMINATED VENEER LUMBER
BD	BOARD	MAX	MAXIMUM
BET	BETWEEN	MDO	MEDIUM DENSITY OVERLAY
BF	BARRIER FREE	MECH	MECHANICAL
BIT	BITUMINOUS	MFR	MANUFACTURER
BLDG	BUILDING	MICRO	MICROWAVE
BO	BOTTOM OF	MIN	MINIMUM
BTM	BOTTOM	MO	MASONRY OPENING
		MR	MOISTURE RESISTANT
CPT	CARPET	MTD	MOUNTED
CT	CERAMIC TILE	MTL	METAL
CJ	CONTROL JOINT		
CL	CENTER LINE	NIC	NOT IN CONTRACT
CLG	CEILING	NO	NUMBER
CLR	CLEAR	NOM	NOMINAL
CMU	CONCRETE MASONRY UNIT		
COMP	COMPRESSIBLE	O.C.	ON CENTER
CONC	CONCRETE	O.D.	OUTSIDE DIAMETER
CONT	CONTINUOUS	O.H.	OVERHEAD or OPPOSITE HAND
		OSB	ORIENTED STRAND BOARD
D	DRYER	OZ	OUNCE
DEG	DEGREE		
DEMO	DEMOLITION	PREFAB	PREFABRICATED
DF	DRINKING FOUNTAIN	PLAM	PLASTIC LAMINATE
DH	DOUBLE-HUNG	PLYWD	PLYWOOD
DIA	DIAMETER	PR	PAIR
DN	DOWN	PT	PRESSURE TREATED
DP	DEEP	PNT	PAINT
DS	DOWN SPOUT	PEMB	PRE-ENGINEERED MTL BLDG
DW	DISHWASHER		
		QTY	QUANTITY
EA	EACH		
EJ	EXPANSION JOINT	R	RISER
EQ	EQUAL	RCP	REFLECTED CEILING PLAN
ETR	EXISTING TO REMAIN	REF	REFRIGERATOR, REFERENCE
EXG	EXISTING	REINF	REINFORCED
EXP	EXPOSED TO STRUCTURE	REQD	REQUIRED
		RM	ROOM
FD	FLOOR DRAIN	RO	ROUGH OPENING
FE	FIRE EXTINGUISHER, FINISHED END	RCB	RUBBER COVE BASE
FF	FINISHED FLOOR	SC	SEALED CONCRETE
F&I	FURNISH AND INSTALL	SF	SQUARE FEET
FLR	FLOOR	SIM	SIMILAR
FR	FIRE RETARDANT	SQ	SQUARE
FRP	FIBER-REINFORCED PLASTIC	SS	STAINLESS STEEL
FV	FIELD VERIFY	ST	STAIN
GA	GAUGE	T	TREAD
GALV	GALVANIZED	TBD	TO BE DETERMINED
GC	GENERAL CONTRACTOR	TO	TOP OF
GFI	GROUND FAULT CIRCUIT INTERRUPTER	TYP	TYPICAL
GL	GLASS	UNO	UNLESS NOTED OTHERWISE
GYP	GYPSUM BOARD		
		VCT	VINYL COMPOSITION TILE
H	HIGH	VERT	VERTICAL
HB	HOSE BIB		
HT	HEIGHT	W	WASHER, WIDE
HDW	HARDWARE	W/	WITH
HRDWD	HARDWOOD	WD	WOOD
HM	HOLLOW METAL	WH	WATER HEATER
HR	HOUR	WIC	WALK-IN CLOSET
		WWF	WELDED WIRE FABRIC
IN	INCH		
INSUL	INSULATION		

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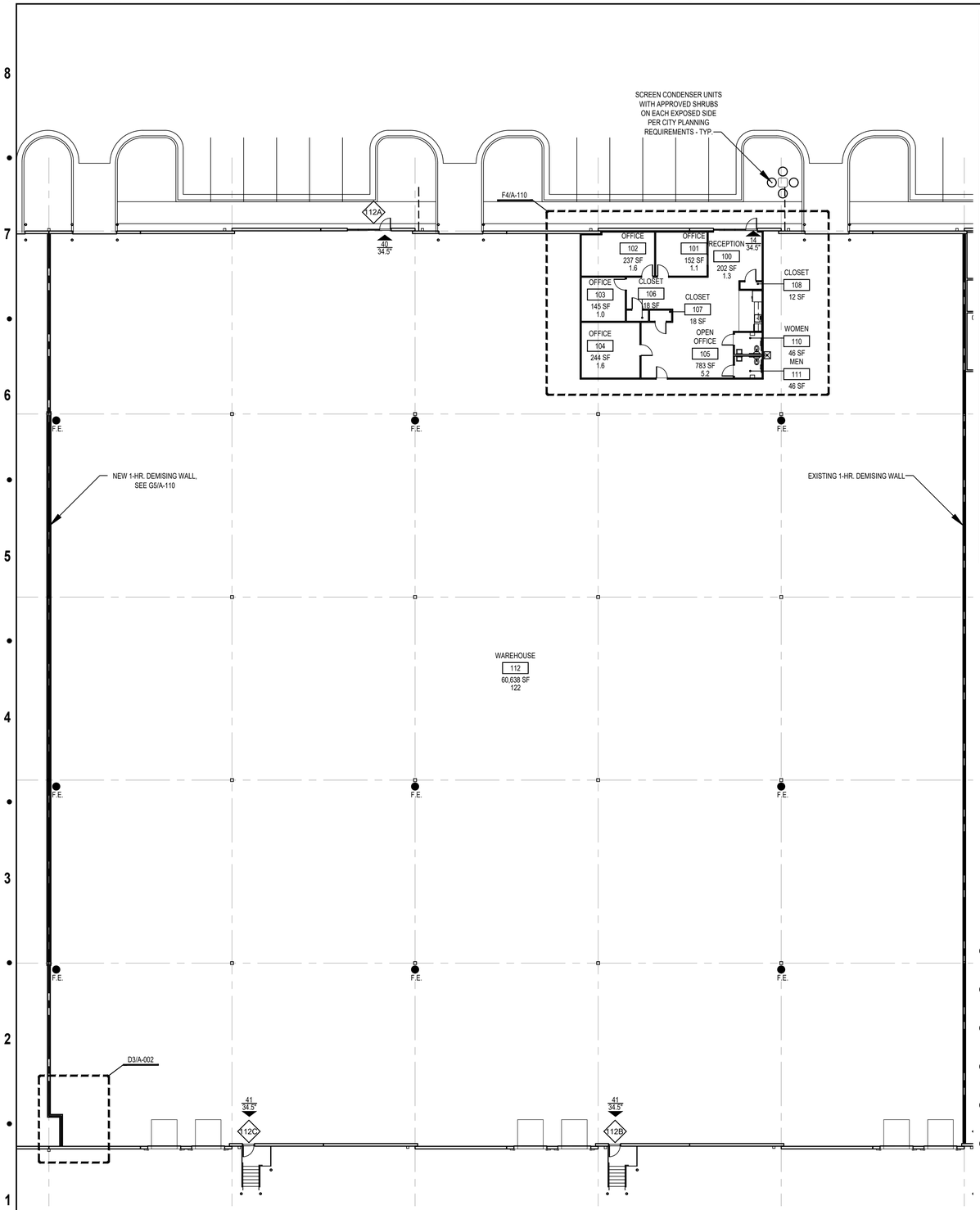
Project Number: 2404
Project Type: TENANT FINISH
Project Name and Address:
JOHNSON STORAGE
2225 NW Town Centre Blvd.
Lee's Summit, Missouri 64064

Issue:	Date:
Permit Submittal	05.29.24

Sheet Title:
COVER / MAP
GENERAL NOTES
ADA NOTES

A-001



G1 CODE / FULL SUITE PLAN
SCALE: 1/16" = 1'-0"
PROJECT NORTH

LIFE SAFETY / FIRE DEPARTMENT GENERAL NOTES

1. PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY THE FIRE DEPARTMENT FIELD INSPECTOR DURING CONSTRUCTION AND FOR COMPLETED PROJECT. EXTINGUISHERS SHALL ALSO BE COMPATIBLE WITH ANY CHEMICALS PRESENT IN THE SPACE.
2. AN OCCUPANT LOAD SIGN SHALL BE POSTED IN EACH ASSEMBLY ROOM OR SPACE. THE SIGN IS TO BE POSTED CONSPICUOUSLY NEAR THE ENTRANCE. COORDINATE FINAL LOCATION OF SIGN WITH THE FIRE DEPARTMENT FIELD INSPECTOR. THE SIGN IS TO BE PROVIDED AND INSTALLED BY THE OWNER'S REPRESENTATIVE.
3. PROVIDE INTERNALLY ILLUMINATED EXIT SIGNS ABOVE EXITS WITH 3/4" x 6" (MIN.) LETTERS LIGHTED ON CONTRASTING BACKGROUND. PROVIDE TWO (2) SEPARATE POWER SUPPLIES CONFORMING TO ADOPTED CODE. VERIFY FINAL LOCATIONS WITH THE BUILDING INSPECTOR.
4. PROVIDE EMERGENCY EXIT LIGHTING LEVEL PER CODE (ONE FOOT-CANDLE AT FLOOR LEVEL - MINIMUM).
5. FINISHES SHALL NOT EXCEED CLASS A, B, OR C AS INDICATED IN THE BUILDING CODE.
6. UNLESS ALREADY EXISTING, AN APPROVED SET OF NUMERALS, MINIMUM 6" HIGH (4" FOR REAR ENTRANCE) WITH A STROKE WIDTH OF NOT LESS THAN 1 INCH, SHALL BE PLACED ON OR NEAR THE ENTRANCE. THE NUMBERING SHALL BE PLACED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. SAID NUMERALS SHALL CONTRAST WITH THEIR BACKGROUND. VERIFY REQUIREMENTS WITH THE REGULATORY BODY HAVING AUTHORITY.
7. GENERAL CONTRACTOR SHALL SECURE PERMITS AND INSPECTION APPROVALS REQUIRED BY THE FIRE DEPARTMENT PRIOR TO OCCUPYING THIS BUILDING.
8. STORAGE, DISPENSING, OR USE OF ANY FLAMMABLE AND/OR COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES AND OTHER HAZARDOUS MATERIALS SHALL COMPLY WITH ADOPTED BUILDING CODE REGULATIONS.
9. IF AN AUTOMATIC FIRE SPRINKLER SYSTEM OR FIRE ALARM SYSTEM IS REQUIRED, THE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE ADOPTED BUILDING CODE. SYSTEM DESIGN DRAWINGS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR REVIEW PRIOR TO INSTALLATION. THIS INCLUDES DETECTION AND SUPPRESSION SYSTEMS FOR KITCHEN HOODS.
10. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY AND COORDINATE DEFERRED SUBMITTALS.
11. CODE-REQUIRED SMOKE DETECTORS IN RETURN AIR DUCTS SHALL HAVE REMOTE INDICATORS IF IN CONCEALED SPACES OR MORE THAN 10' ABOVE THE FINISHED FLOOR. SMOKE DETECTORS MUST BE READILY VISIBLE TO THE FIRE DEPARTMENT PERSONNEL.
12. INSTALL A 'NO SMOKING' SIGN PER LOCAL ORDINANCES CONSPICUOUSLY POSTED AT EVERY ENTRANCE, AS REQUIRED.

LIFE SAFETY LEGEND

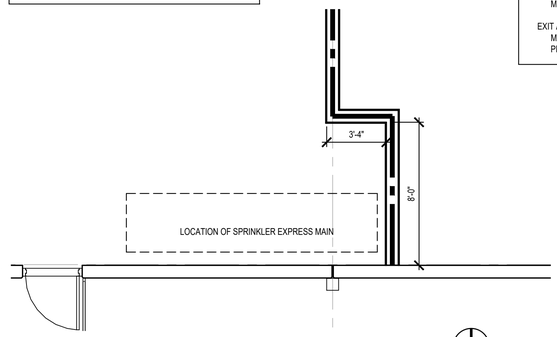
OFFICE — ROOM / SPACE NAME
110 — ROOM / SPACE NUMBER
174 SF — ROOM / SPACE AREA
2 — ROOM / SPACE OCCUPANT LOAD
5 34.5° 3 34.5° — OCCUPANT LOAD AND WIDTH AT EXIT POINT
SEE ELECTRICAL SHEETS FOR EXIT SIGNS / EMERGENCY LIGHTING
● — 5LB. 2A10BC FIRE EXTINGUISHER; DISTRIBUTE EXTINGUISHERS PER NFPA 101 SUCH THAT ONE CAN BE REACHED BY A TRAVEL DISTANCE OF NO MORE THAN 75 (IFC TABLE 906.3(1)). MOUNT TOP OF EXTINGUISHERS 60" A.F.F. (MAX.) AND WITH STATE FIRE MARSHALL INSPECTION TAG ATTACHED. VERIFY FINAL SIZES AND LOCATIONS WITH THE REGULATORY BODY HAVING AUTHORITY.
KB — KNOX BOX, MOUNT TOP OF BOX AT 72" ABOVE ADJACENT SURFACE, AND VERIFY FINAL LOCATION WITH THE REGULATORY BODY HAVING AUTHORITY

MIN. # OF REQ'D PLUMBING FIXTURES (2902.1)

WATER CLOSETS	REQUIRED	
	MEN	WOMEN
STORAGE (1 PER 100)	0.61	0.61
BUSINESS (1 PER 25)	0.28	0.28
TOTAL	0.89	0.89

LAVATORIES	REQUIRED	
	MEN	WOMEN
STORAGE (1 PER 100)	0.61	0.61
BUSINESS (1 PER 40)	0.18	0.18
TOTAL	0.79	0.79

SERVICE / UTILITY SINK	REQUIRED	PROVIDED
STORAGE	1	1
BUSINESS	0	0



D3 DEMISING WALL OFFSET
SCALE: 1/4" = 1'-0"
PROJECT NORTH

FIRE RESISTANCE

RATING REQUIREMENTS FOR BUILDING ELEMENTS (TABLE 601)

ELEMENT	RATING (HRS)
PRIMARY STRUCTURAL FRAME	0
BEARING WALLS	
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS & PARTITIONS - EXTERIOR (TABLE 705.5)	
FIRE SEPARATION DISTANCE = X (FEET)	
X < 5	2
5 <= X < 10	1
10 <= X < 30	0
X >= 30	0
NONBEARING WALLS & PARTITIONS - INTERIOR	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0

AUTOMATIC SPRINKLER SYSTEM REQ'D (507.4, 903.2.9)
EXISTING SYSTEM:
ESFR (EARLY SUPPRESSION FAST-RESPONSE)

SMOKE AND HEAT REMOVAL: NOT REQ'D IF BUILDING IS EQUIPPED WITH ESFR SPRINKLERS.

FIRE PUMP ROOM WALLS AND LID (913.2.1) 1 HR. REQ'D

TENANT SEPARATION WALL (508.3, 508.4) 0 HR. REQ'D*
* 1 HR. PROVIDED PER TENANT'S REQUIREMENTS

DRAWING DESIGNATIONS:
1 HR. RATED WALL
2 HR. RATED WALL

MEANS OF EGRESS

OCCUPANT LOAD (TABLE 1004.5)
MAX. FLOOR ALLOWANCE PER OCCUPANT (LOAD FACTOR)

SPACE	AREA / LOAD FACTOR	OCCUPANTS
STORAGE AREAS	60,638 SF / 500 GROSS	122
BUSINESS	2,019 SF / 150 GROSS	14
TOTAL OCCUPANTS		**136**

EXITS (CHAPTER 10)
EGRESS WIDTH (1005.3.2)
MINIMUM REQUIRED (136 OCCUPANTS x 0.2"): 27.2"
PROVIDED (4 DOORS x 34.5" CLR. WIDTH/DOOR): 138.0"

NUMBER OF EXITS (TABLE 1006.3.2)
MINIMUM REQUIRED 2
PROVIDED 4

EXIT SEPARATION DISTANCE (1007.1.1)
MINIMUM REQ'D: 1/3 THE DIAGONAL OF AREA SERVED

EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2.2)
MAXIMUM ALLOWED 400'
PROVIDED <400'

PROJECT SUMMARY

THIS IS A NEW TENANT FINISH PROJECT FOR A WAREHOUSING TENANT.

CODE ANALYSIS

APPLICABLE GOVERNING CODES

2018	INTERNATIONAL BUILDING CODE
2018	INTERNATIONAL PLUMBING CODE
2018	INTERNATIONAL MECHANICAL CODE
2018	INTERNATIONAL FUEL GAS CODE
2018	INTERNATIONAL FIRE CODE
2017	NATIONAL ELECTRICAL CODE
CURRENT	ICC / ANSI A117.1 - 2009, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

OCCUPANCY CLASSIFICATION

OCCUPANCY GROUPS:
GROUP S-1: MODERATE HAZARD STORAGE (311.2)
GROUP B: BUSINESS (304)

NONSEPARATED MIXED USE (508.3):
NO SEPARATION REQUIRED BETWEEN S-1 AND B (TABLE 508.4)

TYPE OF CONSTRUCTION

V-B (602.5)

THE SHELL WAS DESIGNED AS AN UNLIMITED AREA BUILDING (SPRINKLERED, ONE-STORY) (507.4)
PUBLIC WAY OR YARD WIDTH REQ'D: >/= 60' ON ALL SIDES

BUILDING HEIGHT LIMITATIONS

GROUPS S-1, B - FULLY SPRINKLED (504.1.1, 507.4)
ALLOWABLE HEIGHT IN FEET (TABLE 504.3) 60'
ACTUAL HEIGHT IN FEET 44'

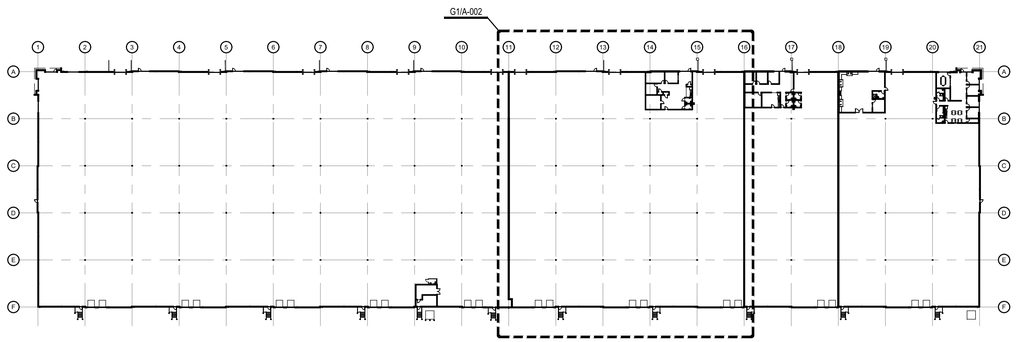
ALLOWABLE # OF STORIES (TABLE 507.4) 1
ACTUAL # OF STORIES 1

BUILDING AREA LIMITATIONS

GROUPS F-1, B - FULLY SPRINKLED
ALLOWABLE AREA (507.4) UL SF
ACTUAL AREA 249,050 SF

TENANT USE AREAS

STORAGE GROUP S-1 AREA	60,638 SF
BUSINESS GROUP B AREA (OFFICE)	2,019 SF
TENANT FINISH SUITE AREA	62,657 SF



B1 BUILDING KEY PLAN
SCALE: = N.T.S.
PROJECT NORTH

Architect:
MIDWEST ARCHITECTS
1120 NW Eagle Ridge Blvd.
Grain Valley, Missouri 64029
t: (816) 229-8115

Client:
Ward Development
1120 NW Eagle Ridge Blvd.
Grain Valley, Missouri 64029
t: (816) 229-8115

Consultants:
MEP Engineering:
Casburn Consultants
Professional Engineering
128 SW Hillcrest Lane
Lee's Summit, MO 64063
t: (816) 726-6531

Seal:
STATE OF MISSOURI
MICHAEL MOORES
NUMBER A-2009032812
ARCHITECT
05.29.24
MICHAEL MOORES, MO Architect #2009032812

Project Number: 2404
Project Type: TENANT FINISH
Project Name and Address:

JOHNSON STORAGE
2225 NW Town Centre Blvd.
Lee's Summit, Missouri 64064

Issue:	Date:
Permit Submittal	05.29.24

Sheet Title:
BUILDING KEY PLAN
FULL SUITE PLAN
CODE INFORMATION

A-002

UL Product **iQ**®

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

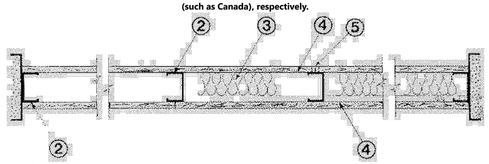
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. **U465**

February 16, 2024

Nonbearing Wall Rating — 1 HR.
*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Floor and Ceiling Runners** — (Not Shown) — Channel shaped runners, 3-5/8 in. deep (min), 1-1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

1A. **Framing Members* — Floor and Ceiling Runners —** (Not Shown) — As an alternate to Item 1 — Channel shaped, min 3-5/8 in. deep, attached to floor and ceiling with fasteners 24 in. OC. max.
ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME D24/30EQD and Type SUPREME D20

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME D24/30EQD and Type SUPREME D20

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME D24/30EQD and Type SUPREME D20

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME D24/30EQD and Type SUPREME D20

TELLING INDUSTRIES L L C — Type SUPREME D24/30EQD and Type SUPREME D20

UNITED METAL PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

1B. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CEMCO, LLC — Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track

1C. **Floor and Ceiling Runners —** (Not Shown) — For use with Item 2C — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC.

1D. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Items 1 through 1C — For use with Item 2D and 4G only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CLARKDIETRICH BUILDING SYSTEMS — CD ProTRAK

DMFCWBS L L C — ProTRAK

MBA METAL FRAMING — ProTRAK

RAM SALES L L C — Ram ProTRAK

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProTRAK

1E. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Items 1 through 1D — For use with Item 2E and 4I only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
TELLING INDUSTRIES L L C — TRUE-TRACK™

1F. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Items 1 through 1E — For use with Item 2, channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 25 MSG steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
KIRII (HONG KONG) LTD — Type KIRII

1G. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Items 1 through 1F — For use with Item 2, channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide, attached to floor and ceiling with fasteners spaced 24 in. OC max.
STUDCO BUILDING SYSTEMS — CROCSTUD Track

1H. **Floor and Ceiling Runners —** (Not Shown) — Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.02 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track VT100

1I. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 1 — For use with Item 2H, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

1J. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Items 1 — For use with Item 2 L, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
RESCUE METAL FRAMING, L L C — AlphaTRAK

1K. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 1 — For use with Item 2M, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep, fabricated from min 25 MSG (0.018 in. min. bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max.
CEMCO, LLC — Viper X Track

1L. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 1 — For use with Item 2N, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CRACO MFG INC — SmartTrack20™

1M. **Framing Members* - Floor and Ceiling Runners –** Not shown – In lieu of Items 1 through 1L – For use with Item 2O, proprietary channel shaped runners, min 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 20 MSG galv steel (0.0329 in. min bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max.

PANEL REY S A – SUPRA Track 20/33 mil

1N. **Framing Members* — Floor and Ceiling Runner —** Not Shown — In lieu of Item 1 – For use with Item 2P, proprietary channel shaped runners, 1-1/4 in. wide by min. 3-5/8 in. deep fabricated from min 0.019 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

PANEL REY S A – SUPRA Track 20EQ/19 mil

1O. **Framing Members* — Floor and Ceiling Runner —** (Not Shown — Alternate to Item 1) — For use with Item 2Q, channel shaped runners pre-equipped with proprietary attachment clips. Min. 3-5/8 in. wide. Legs of top runners minimum 3-1/4 in. wide. Legs of bottom runners minimum 1-1/2 in. wide. Runners attached to floor and ceiling with fasteners 24 in. OC max.

HYPERFRAME INC - Hypertrack

1P. **Framing Members* — Floor and Ceiling Runner —** Not Shown — In lieu of Item 1 – For use with Item 2R, proprietary channel shaped runners, 1-1/4 in. wide by min. 3-5/8 in. deep fabricated from min. 20 EQ/22 mils. (min. 0.0221 in. thick) galvanized steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

JJC INTERNATIONAL DISTRIBUTORS — Non-structural Tracks 3-5/8" and 6".

2. **Steel Studs —** Channel shaped, 3-5/8 in. deep (min), formed from min No. 25 MSG galv steel spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height.

2A. **Framing Members* — Steel Studs —** As an alternate to Item 2 — Channel shaped studs, min 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.
ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME D24/30EQD and Type SUPREME D20

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME D24/30EQD and Type SUPREME D20

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME D24/30EQD and Type SUPREME D20

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME D24/30EQD and Type SUPREME D20

TELLING INDUSTRIES L L C — Type SUPREME D24/30EQD and Type SUPREME D20

UNITED METAL PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

2B. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 2 — For use with Item 1B, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height.
CEMCO, LLC — Viper20™

CRACO MFG INC — SmartStud20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

IMPERIAL MANUFACTURING GROUP INC — Viper20™

2C. **Steel Studs —** (As an alternate to Item 2, For use with Item 1C) — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height. See materials in Item(s) 4 that require Item 2C studs.

2D. **Framing Members* — Steel Studs —** As an alternate to Items 2 through 2C — For use with Item 1D and 4G only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height.
CLARKDIETRICH BUILDING SYSTEMS — CD ProSTUD

DMFCWBS L L C — ProSTUD

MBA METAL FRAMING — ProSTUD

RAM SALES L L C — Ram ProSTUD

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProSTUD

2E. **Framing Members* — Steel Studs —** As an alternate to Items 2 through 2D — For use with Item 1E and 4I only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height.
TELLING INDUSTRIES L L C — TRUE-STUD™

2F. **Framing Members* — Steel Studs —** As an alternate to Items 2 through 2E — For use with Item 1F, channel shaped studs, min 3-5/8 in. wide fabricated from min 25 MSG steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height.
KIRII (HONG KONG) LTD — Type KIRII

2G. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 2 through 2F — For use with Item 1G. Proprietary channel shaped studs, minimum 3-5/8 in. wide, Studs to be cut 1/2 in. less than the assembly height.
STUDCO BUILDING SYSTEMS — CROCSTUD

2H. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 2 — For use with Item 1I, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

2I. **Framing Members* — Steel Studs —** In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height.
EB METAL INC — NITROSTUD

2J. **Framing Members* — Steel Studs —** In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height.
OLMAR SUPPLY INC — PRIMESTUD

2K. **Framing Members* — Steel Studs —** As an alternate to Item 2 — For use with Item 1B (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in. wide by 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — StudRite™

2L. **Framing Members* — Steel Studs —** As an alternate to Items 2 — For use with Item 1J, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.
RESCUE METAL FRAMING, L L C — AlphaSTUD

2M. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 2 — For use with Item 1K, proprietary channel shaped steel studs, min 1-1/4 in. wide by min 3-5/8 in. deep, fabricated from min 25 MSG (0.018 in. min. bare metal thickness). Studs cut 3/4 in. less in length than assembly height.
CEMCO, LLC — Viper X

2N. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 2 — For use with Item 1L, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height.
CRACO MFG INC — SmartStud20™

2O. **Framing Members* - Steel Studs –** Not Shown – In lieu of Items 2 through 2N – For use with Item 1M, proprietary channel shaped steel studs, min 1-5/8 in. wide by min 3-5/8 in. deep fabricated from min 20 MSG galv steel (0.0329 in. min bare metal thickness) spaced 24 in. OC max. Studs cut 3/4 in. less in length than assembly height.

PANEL REY S A – SUPRA Stud 20/33 mil

2P. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 2 – For use with Item 1N, proprietary channel shaped steel studs, min 1-1/4 in. wide by min 3-5/8 in. deep with 1/4 in. return lips fabricated from min 0.019 in. thick galv steel, spaced 24 in. OC max. Studs cut 3/4 in. less in length than assembly height.

PANEL REY S A – SUPRA Stud 20EQ/19 mil

2Q. **Framing Members* — Steel Studs —** (Not Shown — Alternate to Item 2, For use with Item 1O) — Channel shaped steel studs with attachment clips at top and bottom, min 3-5/8 in. depth, spaced a max of 24 in. OC. Studs clipped into floor and ceiling runners (Item 1O). Max 2-3/8 in. extension reveal from top of stud to inside of ceiling runner.

HYPERFRAME INC— Hyperstud

2R. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 2 – For use with Item 1P, proprietary channel shaped steel studs, min 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min. 20 EQ/22 mils. (min. 0.0221 in. thick) galvanized steel, spaced 24 in. OC max. Studs cut 3/4 in. less in length than assembly height.

JJC INTERNATIONAL DISTRIBUTORS — Non-structural Studs 3-5/8" and 6".

3. **Batts and Blankets* —** (Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity.
See **Batts and Blankets** (BZJZ) category for names of Classified companies.

ROCKWOOL — Type AFB, min. density 1.69 pcf / 27.0 kg/m^3

ROCKWOOL MALAYSIA SDN BHD — Type Acoustical Fire Batts

3A. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 3) — (100% Borate Formulation) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft^3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft^3, in accordance with the application instructions supplied with the product.
Applegate Greenfiber Acquisition LLC — Insulmax and SANCTUARY for use with wet or dry application.

3B. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.
NU-WOOL CO INC — Cellulose Insulation

3C. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft^3.
INTERNATIONAL CELLULOSE CORP — Celbar-RL

3D. **Batts and Blankets* —** For use with Item 8. Nom 3 in. thick, minimum 3.4 pcf mineral wool batts, friction fit between the studs and floor and ceiling runners.

Architect:

MIDWEST ARCHITECTS
1120 NW Eagle Ridge Blvd.
Grain Valley, Missouri 64029
t: (816) 229-8115

Client:

Ward Development
1120 NW Eagle Ridge Blvd.
Grain Valley, Missouri 64029
t: (816) 229-8115

Consultants:

MEP Engineering:

Casburn Consultants
Professional Engineering
128 SW Hillcrest Lane
Lee's Summit, MO 64063
t: (816) 726-6531

Seal:

STATE OF MISSOURI
MICHAEL MOORES
NUMBER A-2009032812
ARCHITECT
05.29.24

MICHAEL MOORES, MO Architect #2009032812

Project Number: 2404
Project Type: TENANT FINISH
Project Name and Address:

JOHNSON STORAGE
2225 NW Town Centre Blvd.
Lee's Summit, Missouri 64064

Issue:	Date:
Permit Submittal	05.29.24

Sheet Title:

U.L. LISTING
DESIGN NO.
U465

A-003

See **Batts and Blankets** (BZJZ) category for names of manufacturers.

3E. **Batts and Blankets* —** For use with Item 4R and 4S. Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance.
See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

3F. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 3) — Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft^3.

Applegate Greenfiber Acquisition LLC— Applegate Advanced Stabilized Cellulose Insulation

3G. **Foamed Plastic*** — As an alternate to Batts and Blankets (Items 3-3F), for use with Item 4U — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. When foamed plastic is used, minimum stud depth shall be 3-1/2 in. with min. 20 MSG thickness.

CARLISLE SPRAY FOAM INSULATION — Types SealTite ONE, SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

3H. **Foamed Plastic*** — As an alternate to Batts and Blankets (Items 3-3F), for use with Item 4U — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. When foamed plastic is used, minimum stud depth shall be 3-1/2 in. with min. 20 MSG thickness.

BASF CORP - Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, Walltite® HP+, FE137®, FE158®, Spraytite® 158, Spraytite® SP, Spraytite® 81205, Spraytite® Comfort XL, Walltite® XL, and Walltite® MAX

4. **Gypsum Board* —** 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When Steel Framing Members* (Item 6 or any alternate clips) are used, gypsum board is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.

AMERICAN GYPSUM CO — Types AG-C, AGX-1, M-Glass, LightRoc

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1

CABOT MANUFACTURING ULC — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)

CERTAINTEED GYPSUM INC — Types EGRG, GlasRoc, Type X-1, Type C, 5/8" Easi-Lite Type X, Easi-Lite Type X-2, Type LWTX

CERTAINTEED GYPSUM INC — Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD, LGLLX

GEORGIA-PACIFIC GYPSUM L L C — Types 5, 6, 9, C, DAP, DD, DA, DAPC, DGG, DS, GPFS6, LS, Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, TG-C, GreenGlass Type X, Type X ComfortGuard Sound Deadening Gypsum Board, Type LWX, Veneer Plaster Base-Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type LWX, Type DGLW, Water Rated-Type DGLW, Sheathing Type-DGLW, Soffit-Type DGLW, Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated - Type LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSMR-C, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, FSW-8, FSL, RSX.

NATIONAL GYPSUM CO — Riyadh, Saudi Arabia — Type FR, or WR

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-C, PG-9, PG-11, PGS-WRS, PGI

PANEL REY S A — Types GREX, GRIX, PRC, PRC2, PRX, RHX, MDX, ETX, PRX2

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

THAI GYPSUM PRODUCTS PCL — Type X and Type C, M2Tech Type C

UNITED STATES GYPSUM CO — Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, USGX, WRC, WRX, (Joint tape and compound, Item 5, optional for use with Type USGX)

USG BORAL DRYWALL SFZ LLC — Types C, SCX, USGX (Joint tape and compound, Item 5, optional for use with Type USGX)

USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)

4A. **Gypsum Board* —** (As alternate to Item 4) — Nom 5/8 in. thick gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Panels attached to steel studs and floor runner with 1 in. long Type S steel screws spaced 8 in. OC when applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. When used in widths other than 48 in., gypsum panels to be installed horizontally. When using ULIX, panels need not be staggered in horizontal applications and screw spacing can be increased to 12 in. OC in field and perimeter.
CERTAINTEED GYPSUM INC — Type X-1, Type C, Type EGRG/ GlasRoc, GlasRoc-2, Type SilentFX, Easi-Lite Type X-2

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)

CERTAINTEED GYPSUM INC — Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD

GEORGIA-PACIFIC GYPSUM L L C — Types DAP, DAPC, DGG, DS

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air

THAI GYPSUM PRODUCTS PCL — Type X and Type C, M2Tech Type C

UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, USGX, WRC, WRX (Joint tape and compound, Item 5, optional for use with Type USGX)

USG BORAL DRYWALL SFZ LLC — Types C, SCX, USGX (Joint tape and compound, Item 5, optional for use with Type USGX)

USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)

4B. **Gypsum Board* —** (As an alternate to Items 4 or 4A) — Nom 3/4 in. thick, 4 ft wide, installed as described in Item 4A with screw length increased to 1-1/4 in.
CGC INC — Types AR, IP-AR

UNITED STATES GYPSUM CO — Types AR, IP-AR

USG MEXICO S A DE C V — Types AR, IP-AR

4C. **Gypsum Board* —** As an alternate to Items 4, 4A, and 4B — Nom. 5/8 in. thick gypsum panels, with square edges, applied horizontally. Gypsum panels fastened to framing with 1 in. long bugle head steel screws spaced a max 8 in. OC, with last 2 screws 3/4 in. and 4 in. from each edge of board. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs on interior walls need not be staggered or backed by steel framing.
GEORGIA-PACIFIC GYPSUM L L C — Type DGG, GreenGlass Type X

4D. **Gypsum Board* —** As an alternate to Items 4, 4A, 4B, 4C, 4G — Nom. 5/8 in. thick gypsum panels applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Gypsum panels fastened to framing with 1 in. long Type S steel screws 12 in. OC along vertical edges and in the field, and12 in. along the top and bottom of the wall. When used in widths other than 48 in., gypsum panels to be installed horizontally. When studs (Item 2) spaced a max 16 in. OC, 5/8 in. thick gypsum panels applied vertically or horizontally, 1 in. long spaced 16 in. OC along vertical edges and in the field, and 16 in. OC along top and bottom of wall.
NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, FSMR-C

4E. **Gypsum Board* —** (As an Alternate to Items 4 through 4D) – Installed as described in item 4. 5/8 in. thick, 4 ft wide, applied vertically only and fastened to the studs and plates with 1 in. long Type S steel screws spaced 12 in. OC. When studs (Item 2) spaced a max 16 in. OC, 5/8" in. thick gypsum panels applied vertically or horizontally with 1 in. long Type S steel screws spaced 16 in. OC along vertical edges and in the field, and 16 in. OC along top and bottom of wall.
NATIONAL GYPSUM CO — Type SBWB

4F. **Gypsum Board* —** (Not Shown) — (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studs Item 2C) - Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.
RAY-BAR ENGINEERING CORP — Type RB-LBG

4G. **Gypsum Board* —** (As an alternate to Items 4 through 4F) — For use with Items 1D and 2D only, 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When using Types eXP-C, FSK, FSK-C, FSK-G, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, FSMR-C and ULIX, panels need not be staggered in horizontal applications and screw spacing can be increased to 12 in. OC in field and perimeter.
CGC INC — Type SCX, ULIX

CERTAINTEED GYPSUM INC — Type LGFC6A, LGFC-C/A

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, and FSMR-C

UNITED STATES GYPSUM CO — Type SCX, ULIX

USG BORAL DRYWALL SFZ LLC — Type SCX

4H. **Gypsum Board* —** (As an alternate to Items 4 through 4G) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES

4I. **Gypsum Board* —** (As an alternate to Items 4 through 4F) — 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When using ULIX, panels need not be staggered in horizontal applications and screw spacing can be increased to 12 in. OC in field and perimeter. When using ULIX, panels need not be staggered in horizontal applications and screw spacing can be increased to 12 in. OC in field and perimeter.
CGC INC — Types SCX, ULIX

UNITED STATES GYPSUM CO — Types SCX, ULIX

USG BORAL DRYWALL SFZ LLC — Type SCX

4J. **Gypsum Board* —** (Not Shown) — (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studs Item 2C) — Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips (see Item 9A) or Lead Discs (see Item 10A).
MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

4K. **Gypsum Board* —** (As an alternate to Item 4 and 4A, not for use with Items 1D, 1E, 2D and 2E) — Nom. 5/8 in. thick gypsum panels with beveled, square or tapered edges installed as described in Item 4 and 4A.
CGC INC — Type ULX

UNITED STATES GYPSUM CO — Type ULX

USG MEXICO S A DE C V — Type ULX

4L. **Gypsum Board* —** (Not Shown) — (As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studs Item 2C). Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".
RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

4M. **Gypsum Board* —** (For use with Item 8) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 8) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 8). Secured to outermost studs and floor and ceiling runners with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound.
AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Type C

CGC INC — Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C

NATIONAL GYPSUM CO — Types eXP-C, FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C

PANEL REY S A — Types PRC, PRC2

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air

THAI GYPSUM PRODUCTS PCL — Type C, M2Tech Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR, ULIX

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

4N. **Wall and Partition Facings and Accessories* —** (As an alternate to Item 4) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527

4O. **Gypsum Board* —** As an alternate to Items 4, 4A, 4B, and 4C — Two layers Nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Horizontal joints on the same side need not be staggered. When applied horizontally, both layers of gypsum board fastened to each side of framing with 1 in. long Type S steel screws spaced 8 in. OC and staggered 4 in. OC between layers. When applied vertically, both layers of gypsum board fastened to each side of framing with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges and 12 in. OC in the field, staggered 4 in. OC between layers. Screws spaced a max 12 in. along the top and bottom edges of the wall.
NATIONAL GYPSUM CO — Type FSW

4P. **Gypsum Board* —** As an alternate to Item 4. Nom 5/8 in. thick, 4 ft wide, Nom 5/8 in. thick gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Panels attached to steel studs and runners with 1 in. long Type S steel screws spaced 12 in. OC when applied horizontally or vertically. When used in widths other than 48 in., gypsum panels to be installed horizontally.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — Types ULIX

4Q. **Gypsum Board* —** 3/4 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track as described in Item 4 with screw length increased to min. 1- 1/8 in.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-13

4R. **Gypsum Board* —** As an alternate to Item 4D. For use with Item 3E, **Batts and Blankets*** — 5/8 in. thick, 4 ft wide, installed as described in Item 4. When studs (Item 2) spaced a max 16 in. OC, 5/8 in. thick gypsum panels applied vertically or horizontally, 1 in. long spaced 16 in. OC along vertical edges and in the field, and 16 in. OC along top and bottom of wall.
NATIONAL GYPSUM CO — Type FSLX.

4S. **Gypsum Board* —** As an alternate to Item 4. For use with Item 3E, **Batts and Blankets*** — 5/8 in. thick, 4 ft wide, installed as described in Item 4A.
CERTAINTEED GYPSUM INC — Type CLLX.

4T. **Wall and Partition Facings and Accessories* —** (As an alternate to 5/8 in. thick board as outlined in Item 4) — Nominal 1-3/8 in. thick, 4 ft wide panels, applied vertically or horizontally. Fastened with #6 x 2 in. long drywall screws spaced 8 in. OC along the perimeter and 12 in. OC in the field.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 545

4U. **Gypsum Board*—** (As an alternate to Item 4 when Foam Plastic insulation Items 3G or 3H is used) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 4 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-1/4 in. long Type S steel screws spaced 8 in. OC at perimeter and in the field. For 2 layer assemblies outer layer will be attached to studs over inner layer with the 1-7/8 in. long steel screws spaced 8 in. OC.

4V. **Gypsum Board* —** (As an alternate to Item 4, for 1 hr. rating) — Nom. 5/8 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Gypsum panels fastened to framing with 1 in. long Type S steel screws 12 in. OC along vertical edges and in the field. Screws spaced a max 12 in. along the top and bottom edges of the wall for both vertical and horizontal applications.

CERTAINTEED GYPSUM INC — Type X-1, SilentFX, GlasRoc, Type C

5. **Joint Tape and Compound —** Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges.

6. **Resilient Channel —** (Optional — Not Shown) — 25 MSG galv steel resilient channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long type S-12 pan head steel screws. May not be used with Item 4F, 4J or 4L.

6A. **Steel Framing Members* —** (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Not for use with Items 4F, 4J, or 4L.

b. **Framing Members* —** Used to attach furring channels (Item a) to studs (Item 2). Clips spaced 48 in. OC., and secured to studs with 1-5/8 in. wafer or hex head Type S steel screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75)

6B. **Framing Members* —** — (Optional on one or both sides, Not Shown, As an alternate to Item 6) — Furring channel and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 4. Not for use with Items 4F, 4J, or 4L.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ba) to studs (Item 2). Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.
PLITEQ INC — Type Genie Clip

6C. **Steel Framing Members* —** (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire.Gypsum board attached to furring channels as described in Item 4. Not for use with Items 4F, 4J, or 4L.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

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Seal:

STATE OF MISSOURI
MICHAEL MOORES
NUMBER A-2009032812
ARCHITECT
05.29.24

MICHAEL MOORES, MO Architect #2009032812

Project Number: 2404
Project Type: TENANT FINISH
Project Name and Address:

JOHNSON STORAGE

2225 NW Town Centre Blvd.
Lee's Summit, Missouri 64064

Issue:	Date:
Permit Submittal	05.29.24

Sheet Title:

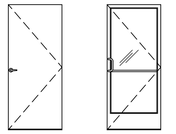
U.L. LISTING - CONT'D
DESIGN NO.
U465

A-004

DOOR AND FRAME LEGEND

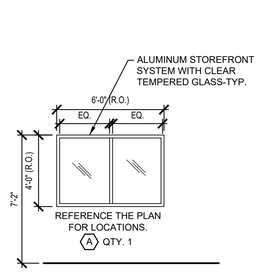
DOOR	MATERIAL	DESCRIPTION
	WD	PAINT-GRADE FLUSH / SLAB SOLID CORE WOOD DOOR.
	HM	HOLLOW METAL - 18 GAUGE COLD ROLLED STEEL / POLYSTYRENE FOAM CORE (CLASSIFICATION SD1 - LEVEL 2 - MODEL 1) 1 3/4"
	AL	ALUMINUM
	ETR	EXISTING TO REMAIN
FRAME	**MATERIAL**	**DESCRIPTION**
	WD	WOOD
	HM	HOLLOW METAL - 16 GAUGE COLD ROLLED STEEL
	AL	ALUMINUM
	ETR	EXISTING TO REMAIN

DOOR TYPES



TYPE 'A' TYPE 'B'

WINDOW TYPES



HARDWARE SETS

1 (EXISTING TO REMAIN)
3-HINGES
1-1" PUSH / PULL SET
1-KEYED (INTERIOR AND EXTERIOR) CYLINDER LOCK
1-SURFACE-MOUNTED CLOSER
1-ALUMINUM THRESHOLD
1-DOOR SHOE WITH BRUSH
1-WEATHER STRIP SET

2 3-HINGES
1-LEVER-HANDLE OFFICE FUNCTION LOCKSET
1-WALL STOP

3 3-HINGES
1-LEVER-HANDLE CLASSROOM FUNCTION LOCKSET
1-CLOSER

4 3-HINGES
1-LEVER-HANDLE PRIVACY FUNCTION LOCKSET
1-CLOSER
1-WALL STOP

5 (EXISTING TO REMAIN)
3-HINGES
1-ENTRANCE LOCKSET KEYED FROM EXTERIOR, FREE PASSAGE FROM INTERIOR
1-LOCK GUARD AT STRIKE
1-SURFACE-MOUNTED CLOSER
1-KICKPLATE
1-ALUMINUM THRESHOLD
1-DOOR SHOE WITH BRUSH
1-WEATHER STRIP SET

MATERIAL LEGEND

ITEM	DESCRIPTION
HM	HOLLOW METAL
WD	WOOD (PAINT GRADE, SOLID CORE SLAB DOOR)
STL	STEEL
RCB	4" RUBBER COVE BASE
PNT	PAINT
EXP	EXPOSED TO STRUCTURE
AL	ALUMINUM
ANOD	ANODIZED - MATCH EXISTING
SC	SEALED CONCRETE
GYP	GYPSUM BOARD
ACT	ACOUSTIC CEILING TILE
LVT	LUXURY VINYL TILE
CONC	CONCRETE

DOOR SCHEDULE

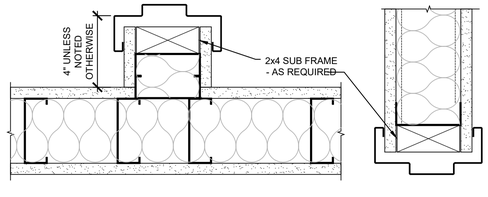
	DOOR					FRAME			DETAILS - (SEE SHEET A-003)				
NO.	TYPE	SIZE	MATERIAL	PUSH FINISH	PULL FINISH	MATERIAL	PUSH FINISH	PULL FINISH	HEAD	JAMB	THRESHOLD	HARD-WARE	KEY NOTES / COMMENTS
100	B	1 3/4" X 3'-0" X 7'-0" (ETR)	AL	ANOD	ANOD	AL	ANOD	ANOD	-	-	-	1	A., B.
101	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	2	
102	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	2	
103	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	2	
104	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	2	
105	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	3	
106	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	3	
107	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	3	
108	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	3	
110	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	4	
111	A	1 3/4" X 3'-0" X 7'-0"	WD	PNT	PNT	HM	PNT	PNT	-	H2/A-005	-	4	
124	B	1 3/4" X 3'-0" X 7'-0" (ETR)	AL	ANOD	ANOD	AL	ANOD	ANOD	-	-	-	1	A., B.
128	A	1 3/4" X 3'-0" X 7'-0" (ETR)	HM	PNT	-	HM	PNT	-	-	-	-	5	A.
120	A	1 3/4" X 3'-0" X 7'-0" (ETR)	HM	PNT	-	HM	PNT	-	-	-	-	5	A.

KEY NOTES:
A. EXISTING FRAME, DOOR, AND HARDWARE TO REMAIN
B. INSTALL A SIGN ABOVE THIS DOOR THAT READS, "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED"

INTERIOR FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR MATERIAL	BASE MATERIAL	WALL FINISH (NORTH)	WALL FINISH (EAST)	WALL FINISH (SOUTH)	WALL FINISH (WEST)	CEILING MATERIAL	CEILING FINISH	COMMENT KEY NOTES
100	RECEPTION	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
101	OFFICE	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
102	OFFICE	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
103	OFFICE	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
104	OFFICE	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
105	OFFICE	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
106	CLOSET	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
107	CLOSET	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
108	CLOSET	CPT	RCB	PNT	PNT	PNT	PNT	ACT	-	
109	KITCHENETTE	LVT	RCB	PNT	PNT	PNT	PNT	ACT	-	
110	WOMEN	LVT	RCB	PNT	PNT	PNT	PNT	ACT	-	1.
111	MEN	LVT	RCB	PNT	PNT	PNT	PNT	ACT	-	1.
112	WAREHOUSE	-	-	PNT	PNT	-	PNT	EXP		1, 2.

COMMENTS:
1. WALLS WITHIN 2' OF SERVICE SINKS, URINALS, AND WATER CLOSETS MUST BE PAINTED WITH EPOXY-BASED PAINT UP TO A MINIMUM OF 4' A.F.F.
2. ONLY PAINT THE GYPSUM BOARD OF THE DEMISING WALLS AND THE OUTSIDE WALLS OF THE OFFICE, NOT THE CONCRETE WALLS.



H2 HOLLOW METAL JAMB DETAILS
SCALE: 3" = 1'-0"

DOOR NOTES

DOORS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

1. ALL DOOR HANDLES TO BE LEVER TYPE.
2. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
3. PROVIDE DOOR STOPS OF APPROPRIATE TYPE FOR ALL INTERIOR DOORS, MATCH ADJACENT HARDWARE FINISH.
4. DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES WILL BE 5 SECONDS MINIMUM.
5. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED TO THE MAXIMUM ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 POUNDS.
6. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC DOORS, POWER ASSISTED DOORS, AND SLIDING DOORS SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
7. EXIT DOORS IN ASSEMBLY AND EDUCATION OCCUPANCIES SERVING AN OCCUPANT LOAD OF 50 OR MORE SHALL BE EQUIPPED WITH PANIC HARDWARE, WITH THE EXCEPTION BELOW (NOTE 8).
8. MAIN EXIT DOORS HAVING KEY-OPERATED LOCKING DEVICES ON THE EGRESS SIDE IN GROUP A OCCUPANCIES (SERVING 300 OCCUPANTS OR LESS), GROUPS B, F, M, S, AND PLACES OF RELIGIOUS WORSHIP SHALL HAVE DURABLE SIGNAGE ABOVE THE DOOR IN 1" HIGH LETTERS ON CONTRASTING BACKGROUND STATING: "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED". LOCKING DEVICES SHALL BE READILY DISTINGUISHABLE AS LOCKED.
9. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN THE PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. LOCKABLE EXIT DOORS SHALL OPERATE AS ABOVE IN EGRESS DIRECTION.
10. HAND-ACTIVATED DOOR OPENING HARDWARE TO BE CENTERED BETWEEN 34" AND 44" ABOVE THE FLOOR.
11. EVERY DOORWAY WHICH IS LOCATED WITHIN AN ACCESSIBLE PATH OF TRAVEL SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3'-0" IN WIDTH AND NOT LESS THAN 6'-8" IN HEIGHT. WHEN INSTALLED, EXIT DOORS SHALL BE CAPABLE OF OPENING SO THAT THE CLEAR WIDTH OF THE EXIT IS NOT LESS THAT 32", MEASURED BETWEEN THE FACE OF THE OPENED DOOR AND THE OPPOSITE STOP.
12. MINIMUM MANEUVERING CLEARANCES AT DOORS SHALL BE AS REQUIRED BY THE ICC/ANSI A117.1 ACCESSIBILITY CODE. THE FLOOR OR GROUND AREA WITHIN THE REQUIRED CLEARANCES SHALL BE LEVEL AND CLEAR. THE FLOOR OR LANDING SHALL BE NOT MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY.
13. DOORS SHALL NOT PROJECT MORE THAN 7" INTO THE REQUIRED CORRIDOR WIDTH WHEN FULLY OPENED OR MORE THAN ONE HALF INTO THE REQUIRED WIDTH WHEN IN ANY POSITION.
14. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" WITH THE LEAF POSITIONED AT AN ANGLE OF 90° FROM ITS CLOSED POSITION.
15. EXIT DOORS SHALL SWING IN THE DIRECTION OF EXIT TRAVEL WHEN SERVING 50 OR MORE OCCUPANTS.
16. COORDINATE ALL DOOR HARDWARE WITH THE OWNER TO ENSURE THE MANUFACTURER, FUNCTIONS, MODELS, AND KEYING SYSTEMS MEET THE OWNER'S STANDARD REQUIREMENTS.

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MICHAEL MOORES, MO Architect #2009032812

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Issue:	Date:
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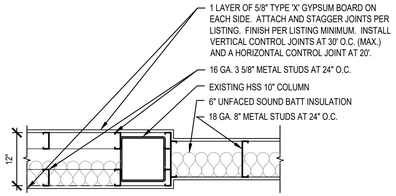
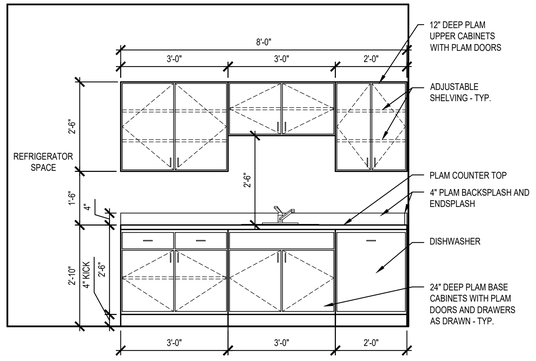
Sheet Title:
DOOR / WINDOW / FINISH SCHEDULES AND NOTES

A-005



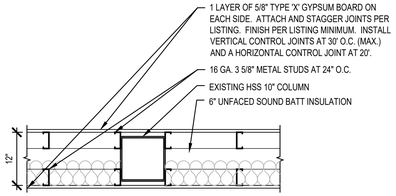
H6 1-HR. (U465) DEMISING WALL DETAIL

SCALE: 3/4" = 1'-0"



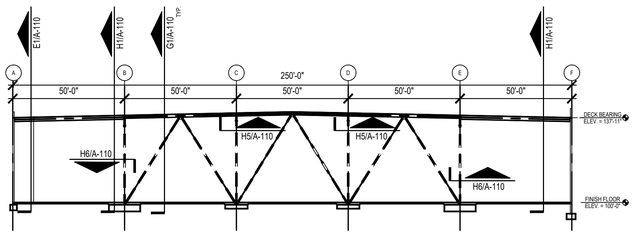
G6 BREAK ROOM CABINETS

SCALE: 1/2" = 1'-0"



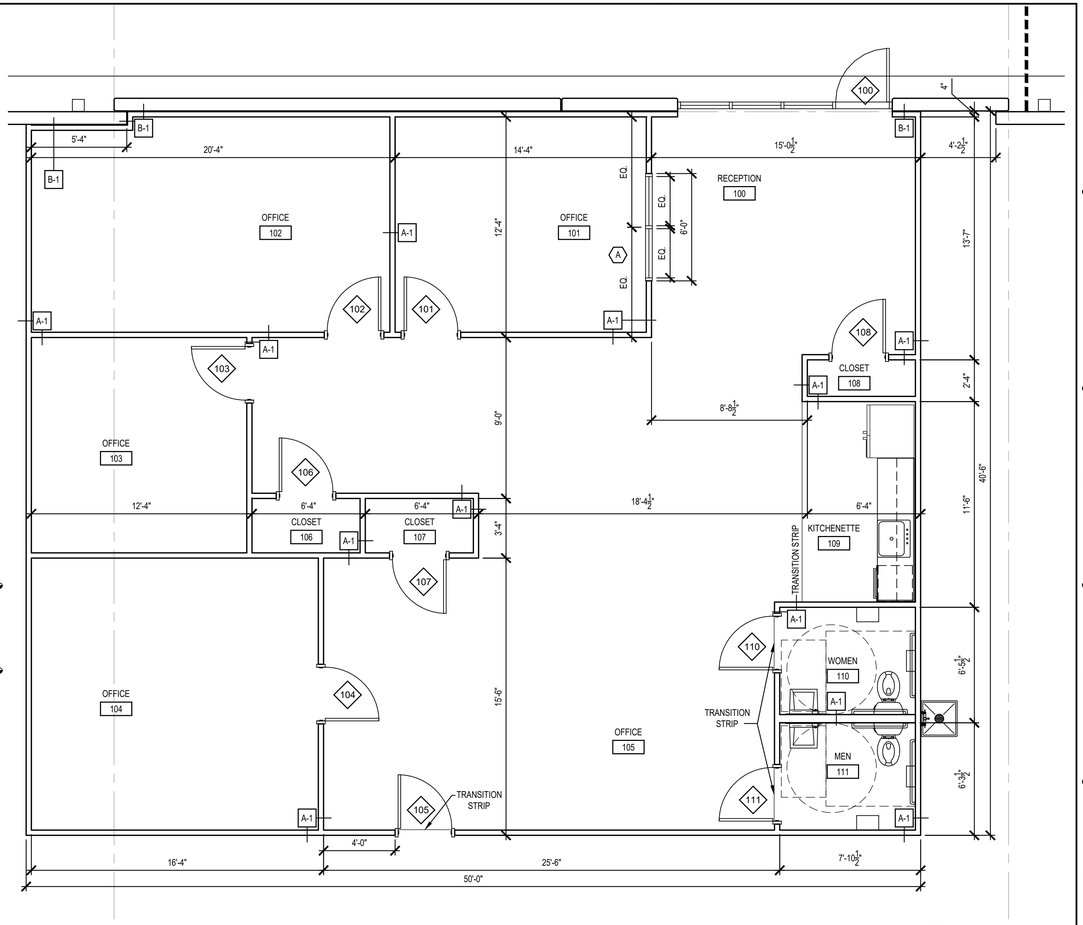
H5 1-HR. (U465) DEMISING WALL DETAIL

SCALE: 3/4" = 1'-0"



G5 1-HR. DEMISING WALL ELEVATION

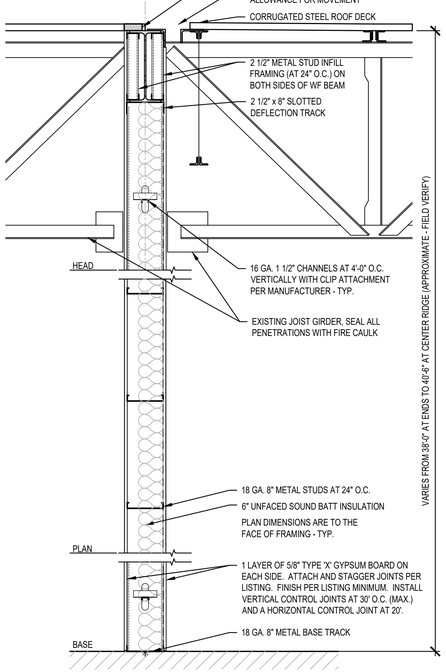
SCALE: 1/32" = 1'-0"



B4 ENLARGED OFFICE PLAN

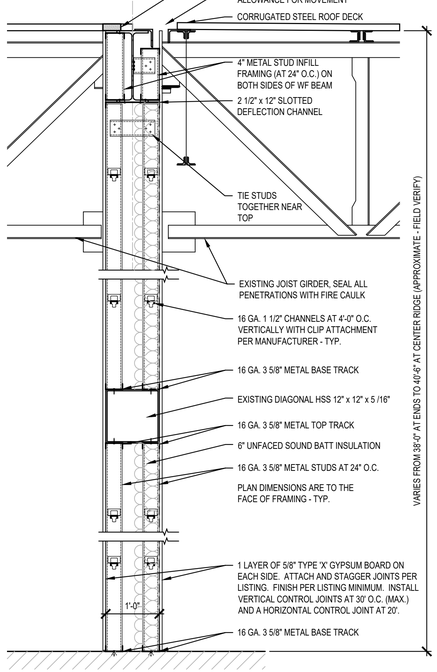
SCALE: 1/4" = 1'-0"

PROJECT NORTH



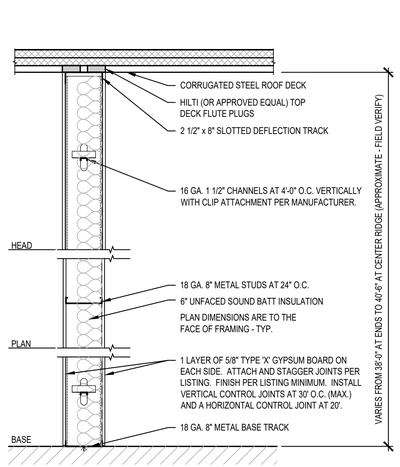
H1 1-HR. (U465) DEMISING WALL DETAIL

SCALE: 3/4" = 1'-0"



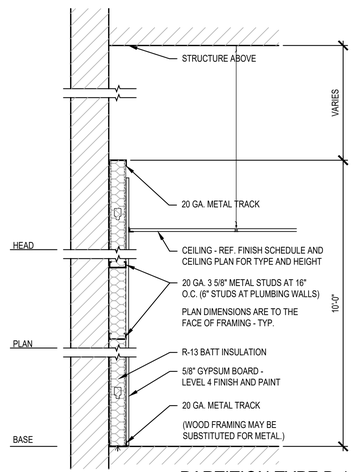
G1 1-HR. (U465) DEMISING WALL DETAIL

SCALE: 3/4" = 1'-0"

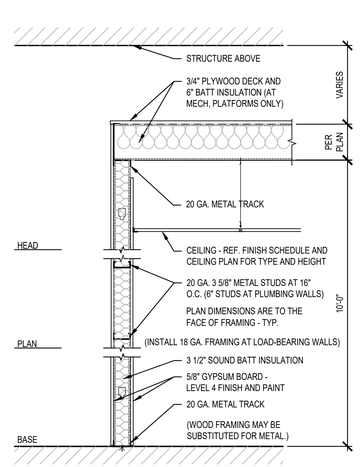


E1 1-HR. (U465) DEMISING WALL DETAIL

SCALE: 3/4" = 1'-0"



PARTITION TYPE B-1



PARTITION TYPE A-1

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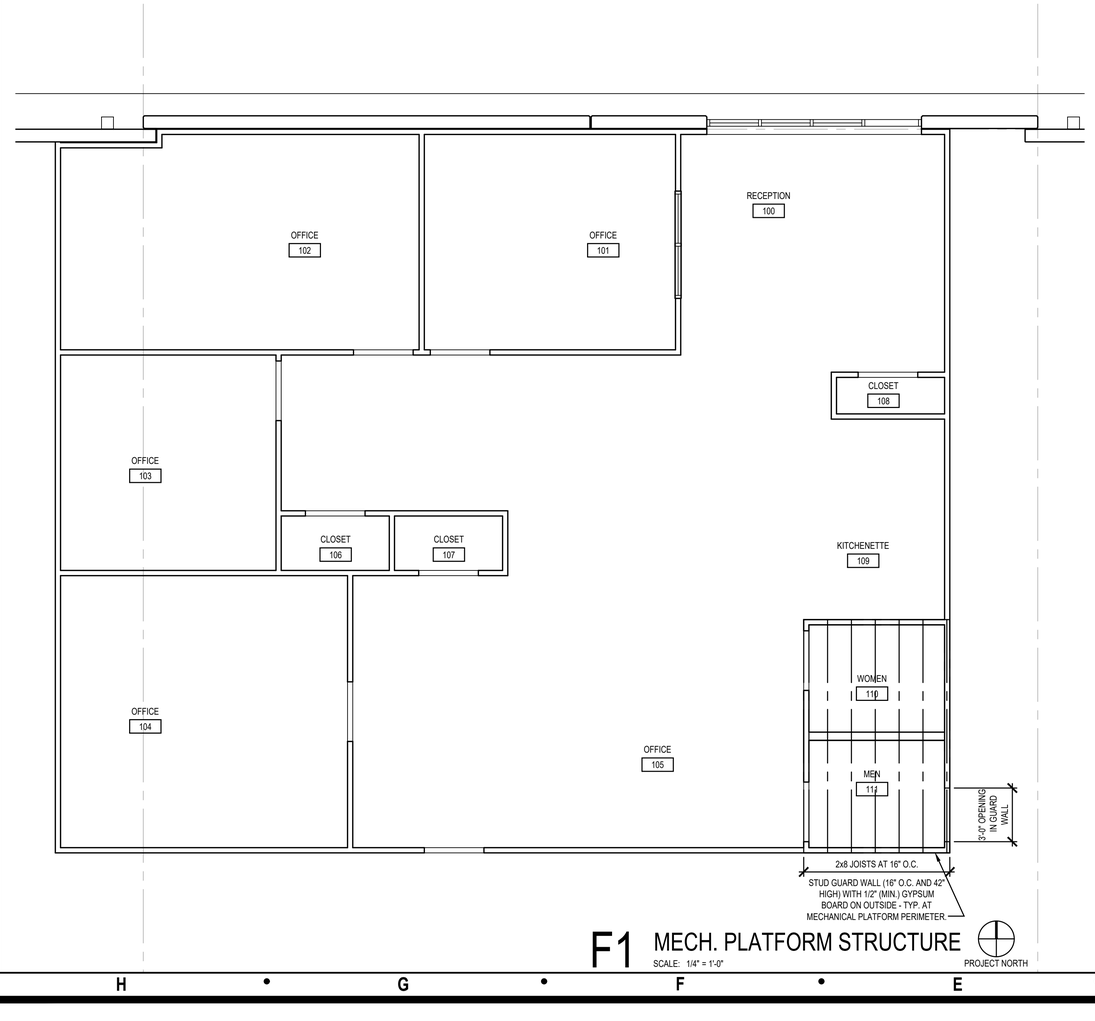
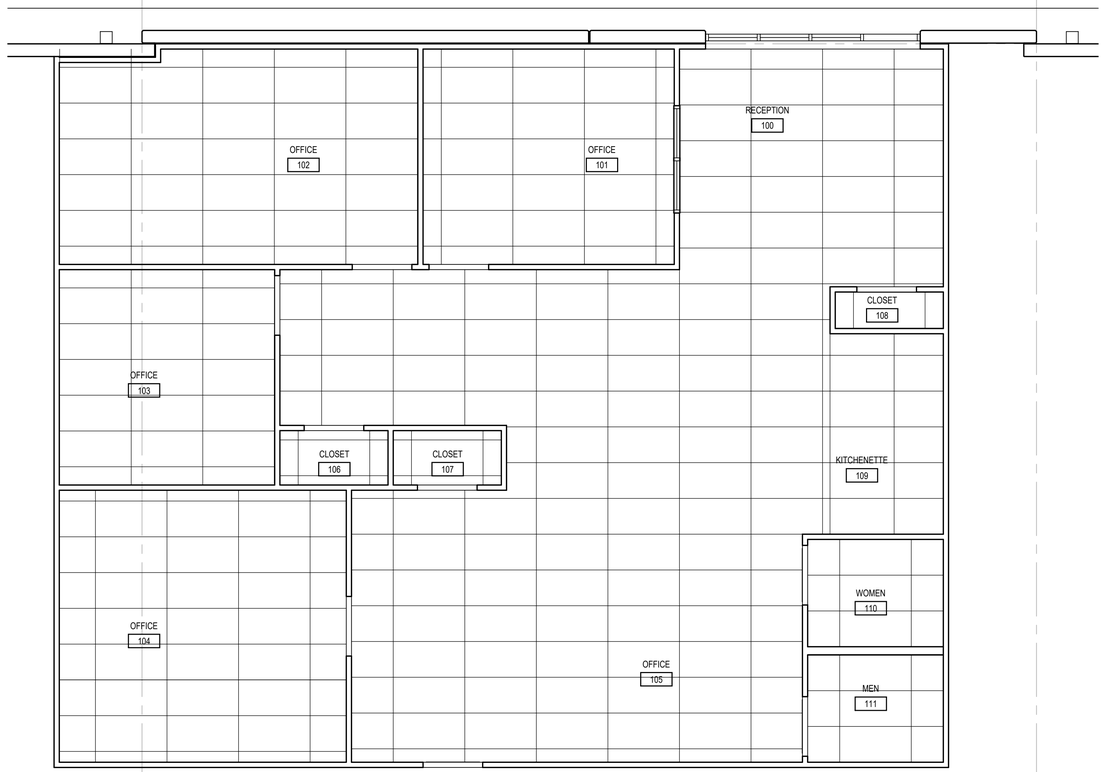
ENLARGED PLAN
PARTITION TYPES
CASEWORK

A-110



F1 MECH. PLATFORM STRUCTURE

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



B4 OFFICE CEILING PLAN

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

PROJECT NORTH

2'x4' WHITE, FISSURED, SQUARE EDGE, LAY-IN ACOUSTIC CEILING TILE AND GRID SYSTEM

GYPSUM BOARD CEILING

9'-0" A.F.F. CEILING HEIGHT TAG (ALL CEILINGS ARE 9'-0" U.N.O.)

GENERAL NOTE: REFERENCE MEP DRAWINGS FOR ALL CEILING MOUNTED FIXTURES.

B1 CEILING PLAN LEGEND

SCALE: =

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CEILING PLAN
MECH PLATFORM

A-410

GENERAL ELECTRICAL NOTES

1. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.
2. TELEPHONE/DATA CABLES TO BE 4-PAIR CAT. 5. CABLE TO BE FURNISHED AND INSTALLED BY COMMUNICATIONS CONTR.. ALL CABLING TO BE PLENUM RATED.
3. ELECTRICAL CONTRACTOR TO INCLUDE GROUND WIRE IN ALL RACEWAYS. SIZE RACEWAYS AS NECESSARY TO COMPLY WITH N.E.C.
4. REFER TO REFLECTED CEILING PLAN AND DETAILS FOR THE EXACT LOCATION OF ALL LIGHTING FIXTURES AND ANY OTHER EQUIPMENT INSTALLED IN THE CEILING SYSTEM. VERIFY EXACT MOUNTING HEIGHTS AND FINISHES WITH CONSTURCTION COMPANY PRIOR TO ROUGH-IN.
5. DUAL LIGHT SWITCH TO BE PROVIDED IN RESTROOMS, ONE FOR FAN VENT, AND ONE FOR LIGHTING.
6. EMPTY MUD RING W/ CONDUIT AND PULL STRING NEXT TO LIGHT SWITCH FOR SPEAKER CONTROLS
7. PLYWOOD TELEPHONE BACKERBOARD (4'X4') TO HAVE ROUTED 2" EMPTY CONDUIT BACK TO THE EXISTING TELEPHONE SERVICE ENTRANCE AND 110V OUTLET, FIELD COORDINATE.
8. THE WORD "PROVIDE" HEREIN SHALL MEAN FURNISH AND INSTALL.

D. ELECTRICAL SPECIFICATIONS

1. THE ENTIRE ELECTRICAL SYSTEM SHALL COMPLY WITH THE FOLLWING:
   - A. NATIONAL ELECTRICAL CODE AND ANY OTHER APPLICABLE LOCAL CODES.
   - B. ALL FEEDER AND BRANCH CIRCUIT WIRING SHALL BE COPPER OR ALUM.
   - C. THE REQUIREMENTS FOR ALL ROOF AND WALL OPENINGS DESRIBED IN SECTIONS HEREIN.
2. MATERIALS, PRODUCTS AND EQUIPMENT INCLUDING COMPONENTS THEREOF, SHALL BE NEW AND SUITABLE FOR THE PURPOSE AND SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND OF THE LOCAL AUTHORITIES HAVING JURISDICTION. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING COMPONENTS THEREOF, SHALL BE SIZED IN CONFORMITY WITH THE REQUIREMENTS OF OTHER RECOGNIZED STANDARDS, SUCH AS, ASTM, IEEE, IPCEA, NFPA AND NEMA WHERE THE REQUIREMENTS OF SUCH STANDARDS ARE MORE STRINGENT THAN THOSE CITED ABOVE.
3. ELECTRICAL SERVICE PROVIDED IS 200 AMP, 277/480V, 3 PHASE.
4. ALL CONDUCTORS SHALL BE SOFT DRAWN ANNEALED COPPER. MINIMUM SIZE SHALL BE #12 FOR POWER WIRING AND #14 FOR CONTROL WIRING. WIRE SHALL BE 600 VOLT INSULATED, NEC TYPE THW, OR THHN/THWN. ALL WIRE SHALL BE RUN IN RIGID CONDUIT OR EMT. NO PLASTIC CONDUIT WILL BE PERMITTED, EXCEPT WHERE PERMITTED BY THE NATIONAL ELECTRIC CODES LATEST EDITION.
5. LIGHTING AND APPLIANCE PANELBOARDS WITHIN THE SPACE, THEY SHALL BE OF THE THREE PHASE, FOUR WIRE DISTRIBUTED PHASING TYPE, ALL BREAKERS SHALL BE BOLT-ON TYPE. CIRCUITING SHALL BE ARRANGED TO PRESENT, AS NEARLY AS POSSIBLE, AND EVENLY BALANCED LOAD ON ALL PHASES. PANELBOARDS SHALL BE CIRCUIT BREAKER TYPE. ALL CIRCUIT BREAKERS SHALL HAVE INTERRUPTING CAPACITY AT LEAST 10% GREATER THAN THE AVAILABLE FAULT CURRENT AT THE BREAKER LOCATION.
6. ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE EXPOSED CONDUIT SHALL BE IN STRAIGHT LINES PARALLEL WITH, OR AT LEAST 3 INCHES FROM WATER LINES WHENEVER THEY RUN ALONGSIDE OR ACROSS SUCH LINES. HANGERS SHALL BE FASTENED TO STEEL, CONCRETE OR MASONRY, BUT NOT TO PIPING. HANGERS AND SUPPORT SYSTEMS ARE AN INTEGRAL PART OF THE VISUAL ENVIRONMENT. ALL HANGERS AND SUPPORTS EXPOSED TO PUBLIC VIEW MUST BE SHOWN IN DETAIL ON PLANS SUBMITTED TO LANDLORD FOR APPROVAL OF APPEARANCE. ALL HANGERS MUST BE UNIFORMILY SPACED AND NEATLY INSTALLED WITH NO

   EXCESS MATERIAL BEYOND WHAT IS REQUIRED FOR THE SUPPORT FUNCTION. SELECT ACCESSORIES AND HARDWIRE WITH A SMOOTH, NEAT

   FINISHED APPEARANCE. PAINT ALL EXPOSED CONDUIT HANGERS TO MATCH THE ADJACENT FINISHES.
7. GROUNDING SHALL CONSIST OF COPPER CONDUCTORS IN CONDUIT WITH BOLTED, OR BRAZED CONNECTION TO COLD WATER LINE FOR THE NEUTRAL
   GROUNDING AND BONDING SHALL COMPLY WITH NEC ARTICLE 250. ALL METALLIC RACEWAYS SHALL BE GROUNDED.
8. PROVIDE WIRING DEVICES EQUAL TO THE FOLLOWING: TOGGLE SWITCHES

   LEVITON CAT #1221, RECEPTACLES- LEVITON CAT # 5262, GFCI RECEPTACLES, LEVITON #6699, PROVIDE AN EMPTY CONDUIT SYSTEM FOR THE TELEPHONE SYSTEMS.
9. EQUIPMENT TO BE APPROVED BY THE LOCAL TELEPHONE COMPANY. COORDINATE ALL CONDUIT REQUIREMENTS AND TERMINATION WITH THE LOCAL SOUTHWESTERN BELL TELEPHONE COMPANY OR OTHER TELEPHONE SYSTEM PROVIDER.
10. DUPLEX RECEPTACLES AND TELE-COMMUNICATION OUTLETS SHALL BE MOUNTED AT 15" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED. TOGGLE SWITCHES SHALL MOUNT AT 48" ABOVE FINISH FLOOR. WALL MOUNTED TELEPHONE OUTLETS SHALL BE MOUNTED AT 48" ABOVE FINISH FLOOR.

A. PLUMBING SPECIFICATIONS

1. ALL PLUMBING SYSTEMS MUST BE COMPATIBLE WITH THE TYPE OF MATERIALS USED BY LANDLORD AND SHALL COMPLY WITH THE FOLLOWING

   REQUIREMENTS:

   DRAINAGE AND VENT PIPE FITTING FOR ABOVE GRADE USE SHALL BE SERVICE WEIGHT, HUBLESS, CAST IRON WITH RUBBER SEALING SLEEVE AND STAINLESS STEEL COUPLING JOINTS WITH STAINLESS STEEL CLAMPS

   AND BOLTS AS MANUFACTURED BY TYLER PIPE OR EQUIVALENT. BELOW GRADE USE SERVICE WEIGHT, BELL AND SPIGOT CAST IRON WITH LEAD AND OAKUM OR GASKETED JOINTS. PVC IS PERMITTED ONLY WITH PRIOR LANDLORD APPROVAL.

   WATER PIPING ABOVE GRADE SHALL BE TYPE L COPPER TUBING, SEAMLESS DRAWN, HARD TEMPERED WITH PLAIN ENDS ASTM B88. FITTING SHALL BE WROUGHT, OR CAST, COPPER WITH SOCKET ENDS FOR

   LEAD FREE SOLDER.
2. ALL VALVES FOR DOMESTIC WATER SHALL BE 125 PSI TEST ALL BRONZE LINE SIZE FULL PORT BALL VALVES QUARTER-TURN INSTALLED IN THE PROPER ORIENTATION. BALL VALVES SHALL BE MANUFACTURED BY ONE OF THE FOLLWING:

   NIBCO
   CRANE
   WATTS

   ALL VALVES SHALL BE ACCESIBLE FOR EASE OF OPERATIONS.
3. PIPE IS TO BE SUPPORTED SECURELY FROM HANGERS AS FOLLOWS:
4. PIPES SUPPORTED FROM STEEL STRUCTURE SHALL BE SUPPORTED FROM STEEL BEAMS AND JOISTS WITH APPROVED CLAMPS AND OTHER STRUCTURAL ATTACHMENTS.

   IN AREAS WITH CONCRETE FLAT SLABS AND CONCRETE ON METAL INSERTS, SELF-DRILLING ANCHORS OR POWER-DRIVEN ANCHORS WILL BE

   ALLOWED.

   NO PIPE HANGERS WILL BE SUPPORTED FROM THE METAL ROOF DECK.

   HANGERS SHALL NOT PIERCE PIPING INSULATION VAPOR BARRIER.

   ALL STEEL HANGERS, RODS, SEAM CLAMPS, ETC., EXPOSED TO PUBLIC VIEW SHALL BE PAINTED TO MATCH ADJACENT FINISH.

   APPEARANCE AND SPACING OF HANGERS EXPOSED TO PUBLIC VIEW ARE IMPORTANT ASPECTS OF THE FINAL VISUAL ENVIROMENT, SPECIFIC DETAILS OF SUPPORT METHODS AND LOCATION OF HANGERS MUST BE DEDICATED ON DRAWINGS SUBMITTED TO LANDLORD FOR REVIEW AND ARE SUBJECT TO LANDLORDS APPROVAL. ALL HANGERS MUST BE EVENLY SPACED AND GROUPED AS MUCH AS POSSIBLE WITH SUPPORTS FOR OTHER TRADES TO MINIMIZE VISUAL CLUTTER IN THE UPPER PORTIONS OF ALL SPACES EXPOSED TO PUBLIC VIEW. SUPPORT SYSTEMS MUST BE NEAT AND WORKMANLIKE AND FREE OF EXTRA LENGTH OF SUPPORT RODS BELOW THE SUPPORTED MEMBERHARDWARE

   AND ACCESSORIES MUST BE SELECTED WITH A SMOOTH- FINISHED APPEARANCE FOR THE COMPLETED SUPPORT ASSEMBLY. HANGERS EXPOSED TO PUBLIC VIEW SHALL BE OF THE CLEVIS, OR TRAPEZE TYPE, COMPLETE WITH BOLTS, RODS, AND NUTS.

   MINIMUM HANGER ROD DIAMETER SHALL BE LESS THAN, AND MAXIMUM SPACING OF SUPPORTS FOR STEEL AND COPPER HORIZONTAL PIPING MUST NOT BE GREATER THAN, THE VALUES IN THE LATEST ISSUE OF THE ASHRAE EQUIPMENT HANDBOOK. CAST IRON PIPE MUST BE SUPPORTED

   AT LEAST EVERY FIVE FEET AND AT EVERY JOINT AND FITTING. CAST IRON PIPE BRANCHES MUST HAVE HANGERS FOUR FOOT ON CENTER MAXIMUM. WHERE REQUIRED TO MEET MINIMUM SPACING OF HANGERS,

   PLUMBING CONTRACTOR IS RESPONSIBLE FOR INSTALLING ADDITIONAL INTERMEDIATE STRUCTURAL SUPPORTS.

   PROVIDE CAST BRASS OR CHROME ESCUTCHEONS WITH SET SCREWS, DEEP TYPE, TO COVER SLEEVES OR OF A SIZE TO COVER FITTING PROJECTIONS. PROVIDE ESCUTCHEONS FOR ALL EXPOSED PIPING THROUGH WALLS, FLOORS, AND EXPOSED CEILING.
5. ALL PIPE INSULATION IN AREAS EXPOSED TO PUBLIC VIEW SHALL BE INSTALLED IN THE MOST WORKMANLIKE MANNER AND IS SUBJECT TO THE APPROVAL OF PROJECT DESIGNER FOR APPEARANCE.
6. FIRE PROTECTION

   LANDLORD WILL PROVIDE A FIRE SPRINKLER SYSTEM. ALL MODIFICATIONS, ADDITIONS OR RELOCATIONS TO FIRE PROTECTION SYSTEM SHALL BE PERFORMED BY LANDLORD APPROVED SPRINKLER CONTRACTOR AT TENANT'S EXPENSE.

   SPRINKLER SUB CONTRACTOR SHALL SUBMIT DRAWINGS, AND ALL REQUIRED LANDLORD, STATE, AND CITY REQUIREMENTS FOR APPROVAL AS PART OF THE WORK.

   THE SPRINKLER SYSTEM SHALL BE FULLY CHARGED AND OPERATIONAL WHEN THE CONTRACTOR IS OFF-SITE.

   TENANT TO VERIFY WITH LOCAL AUTHORITIES IF A SPRINKLER HEAD IS REQUIRED ABOVE RESTROOM AREA.

B. MECHANICAL SPECIFICATIONS

1. NOISE AND VIBRATION CONTROL. ALL EQUIPMENT INSTALLED BY MECHANICAL CONTRACTOR SHALL BE PROVIDED WITH VIBRATION ISOLATORS, SOUND TRAPS, DUCT LINING, ACOUSTICAL HOUSINGS, ACOUSTICAL LOUVERS, AND OTHER NOISE AND VIBRATION CONTROL APPARATUS REQUIRED TO LIMIT INTRUSION INTO THE ADJACENT SPACES ACCORDINGLY.
   - A. INTRUSIVE NOISE LEVELS IN ADJACENT SPACES SHALL NOT EXCEED NC-40 WHEN MEASURED IN THESE SPACES.
   - B. TENANT EQUIPMENT NOISE EMITTED TO THE EXTERIOR SHALL NOT EXCEED 55 DBA IN ANY OCCUPIED EXTERIOR SPACES.
   - C. MECHANICAL CONTRACTOR SHALL PROVIDE VIBRATION ISOLATION OF

     DUCTWORK, PIPING AND EQUIPMENT IN ACCORDANCE WITH PRACTICES DESCRIBED IN THE LATEST ASHRAE HANDBOOK SO THAT THE MEASURENTS MADE IN ADJACENT SPACES DO NOT EXCEED 5 DECIBELS.
2. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN ON THE DRAWINGS. THE MECHANICAL CONTRACTOR IS REQUIRED TO VISIT THE SITE AND VERIFY FIELD CONDITIONS WHICH MAY AFFECT THE DESIGN AND INSTALLATION BEFORE SUBMITTING A BID.
3. ALL ROOF PENETRATIONS SHALL BE BY LANDLORDS APPROVED ROOF CONTRACTOR ONLY.

   ALL OPENINGS THROUGH STRUCTURALLY SUPPORTED SLABS MUST BE CORE BORED, SLEEVED, GROUTED, SEALED AND MADE WATERPROOF. SLEEVES, EXCEPT FOR WATER CLOSETS, MUST EXTEND AT LEAST TWO INCHES (2) ABOVE THE FINISHED FLOOR. LOCATION OF ALL FLOOR OPENINGS MUST BE APPROVED BY THE LANDLORD IN WRITING. WATERPROOFING MUST BE INSPECTED AND APPROVED BY THE LANDLORD BEFORE ANY FLOOR MATERIAL IS INSTALLED. MECHANICAL CONTRACTOR IS RESPONSIBLE TO TAKE WHATEVER MEASURES ARE NECESSARY INCLUDING, BUT NOT LIMITED TO, THOSE MEASURES PRESCRIBED BY LANDLORD IN THE EXERCISE OF ITS REASONABLE JUDGEMENT TO ASSURE THAT CORE BORING WILL NOT DAMAGE THE LANDLORDS STRUCTURE, CONDUITS, ETC. THE COST OF SUCH TESTS OR REPAIR OF ANY DAMAGE WILL BE BORNE BY THE MECHANICAL CONTRACTOR.

C. HVAC SPECIFICATIONS

1. WHERE ANY HVAC UNITS, DUCTWORK AND/OR DIFFUSERS, OR OUTLETS ARE PROVIDED BY MECHANICAL CONTRACTOR, M.C. SHALL ENGAGE THE SERVICES OF A CERTIFIED AIR BALANCE CONTRACTOR TO ADJUST AND COMPLETELY BALANCE GENERAL CONTRACTORS PORTION OF THE SYSTEM TO DESIGN AIR AND CHILLED WATER QUANTITIES, GENERAL CONTRACTOR SHALL PROVIDE TO LANDLORD A COPY OF THE CERTIFIED BALANCE REPORT SHOWING DESIGN AND MEASURED QUANTITIES, STATIC PRESSURE, FAN MOTOR RPM, MOTOR CURRENT AND EXHAUST QUANTITIES.
2. CONSTRUCTION OF ALL DUCTWORK SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL IN ACCORDANCE WITH THE BEST RECOMMENDED PRACTICES OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE) AND IN STRICT COMPLIANCE WITH ALL THE APPLICABLE STANDARDS OF THE SHEET

   METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATIONS (SMACNA) LATEST EDITIONS. BRANCHES FROM THE MAIN LOW VELOCITY TRUNK DUCTWORK SHALL BE FURNISHED WITH SPLITTER DAMPERS OR SIMILAR BALANCE DEVICES IN THE LATEST STANDARDS OF THE ASSOCIATED AIR BALANCE COUNCIL. ACCESS PANELS ARE REQUIERED FOR THESE DEVICES IN THE CEILINGS.
3. DUCT INSULATION: ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INSULATED WITH A MINIMUM R-5 VALUE GLASS FIBER INSULATION WITH FOIL VAPOR BARRIER, EXCEPT THOSE PORTIONS WHICH ARE LINED FOR ACOUSTICAL PURPOSES, (USE 2" MINIMUM LINER) AND SUPPLY AIR DUCTWORK WITHIN AIR CONDITIONED SPACES (NOT RETURN AIR PLUNUMS.)
4. AIR DISTRIBUTION DEVICES: AIR DISTRIBUTION DEVICES SHALL BE GRILLES OR CEILING DIFFUSERS INSTALLED AS REQUIRED TO ACHIEVE DRAFT FREE DISTRIBUTION IN ACCORDANCE WITH GOOD ENGINEERING PRACTICE. DIFFUSERS OR GRILLES SHALL HAVE LOCKABLE, INDIVIDUAL MANUAL VOLUME CONTROL DEVICES.
5. PIPING SYSTEMS: ALL PIPING SYSTEMS MUST BE COMPATIBLE WITH THE TYPE OF MATERIALS USED BY THE LANDLORD AND SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS: PIPE SUPPORTS AND VALVES SHALL BE AS SPECIFIED UNDER PLUMBING SPECIFICATIONS UNLESS OTHERWISE NOTED.
6. PIPING SUPPORTS AND VALVES SHALL BE SPECIFIED UNDER PLUMBING SPECIFICATIONS UNLESS OTHERWISE NOTED.

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JOHN WILLIAM CASBURN JR.
NUMBER E-14378
PROFESSIONAL ENGINEER

5/29/24

Project Number:	2404
Project Type:	TENANT FINISH

Project Name and Address:

JOHNSON STORAGE

2225 NW Town Centre Blvd.
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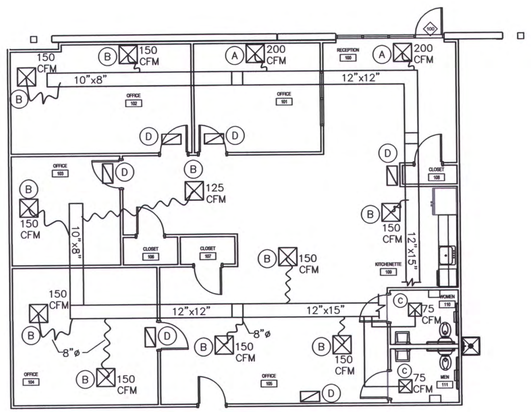
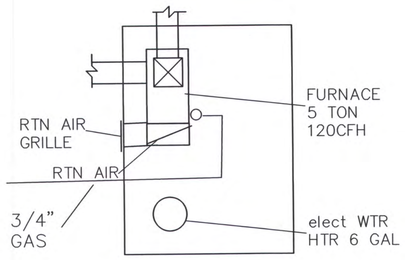
Issue:	Date:
Permit Submittal	05.29.24

Sheet Title:

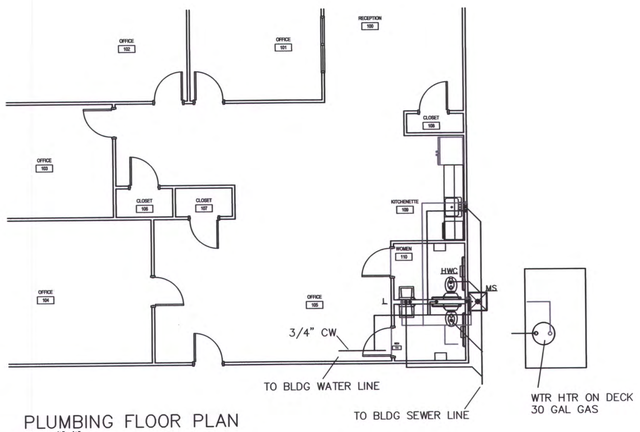
MEP1



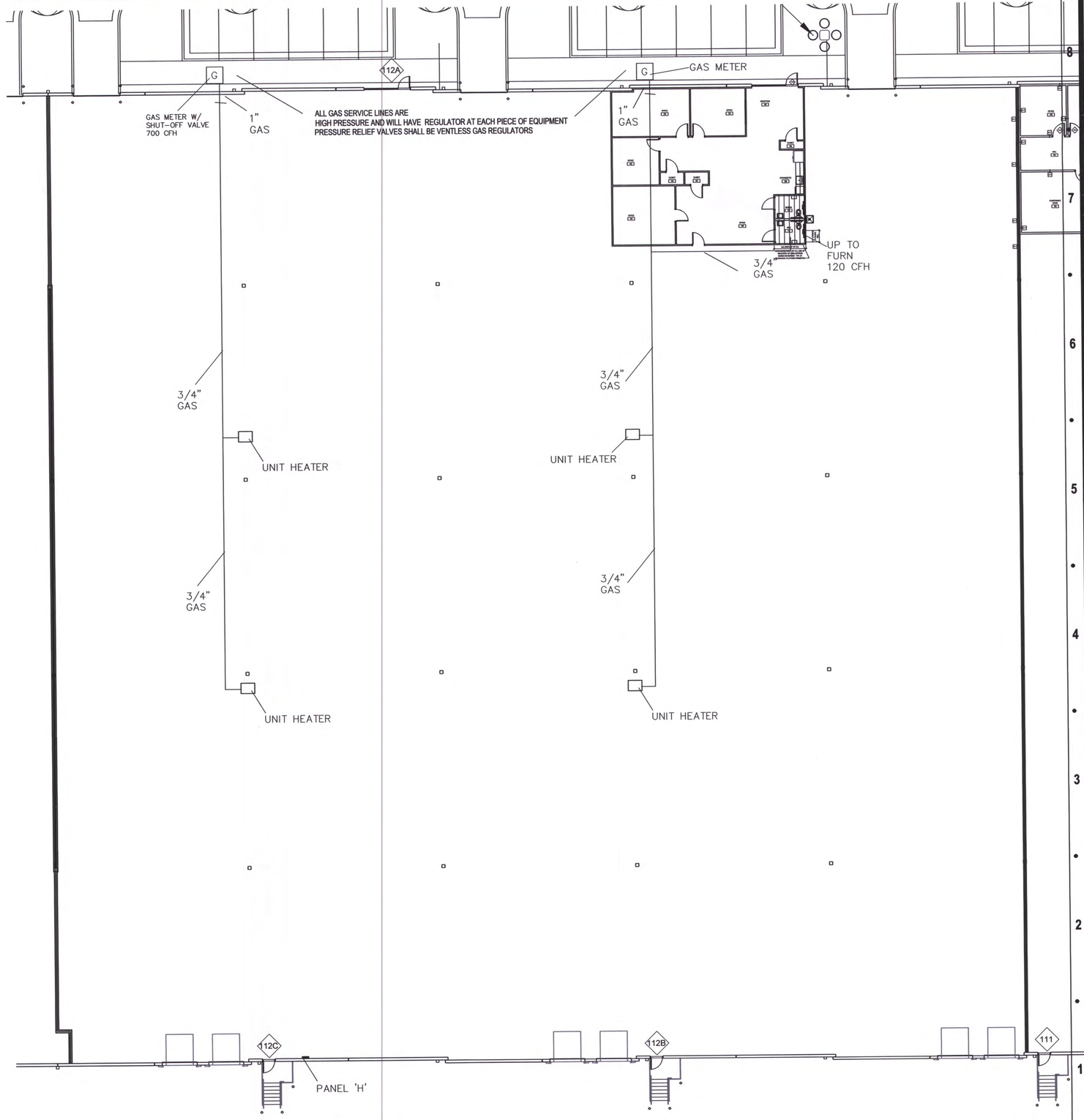
MECHANICAL PLAN
SCALE: 1/8"=1'0"



PLATFORM



PLUMBING FLOOR PLAN
SCALE: 1/8"=1'0"



MECHANICAL & PLUMBING PLAN
SCALE: 1/8"=1'0"

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MP-1

SCHEDULE OF PIPE AND FITTING MATERIAL

SERVICE	MATERIAL	JOINTS	FITTINGS	NOTES
ROOF DRAINS	SERVICE WEIGHT CAST IRON (CI)			
CONDENSATE DRAINS	COPPER "M" HARD	SOLDERED OR BRAZED	WROUGHT COPPER OR CAST BRONZE	(1)
VENTS AND WASTE LINES (ABOVE GROUND)	SERVICE WEIGHT CAST IRON (CI) (PVC WHEN APPROVED BY CITY)	LEAD OR TYSEAL	CAST IRON-PVC APPROVED	(1)
SOIL LINES (BELOW GROUND) - UNDER SLAB	CAST IRON (CI) (PVC WHEN APPROVED BY CITY)	LEAD OR TYSEAL	CAST IRON-PVC APPROVED	(2)
REFRIGERANT AND DOMESTIC WATER PIPE - (BELOW GROUND) SMALLER THAN 3"	COPPER "K" SOFT DRAWN	SOLDERED OR BRAZED	WROUGHT COPPER OR CAST BRONZE	(6)(7)
DOMESTIC WATER 3" AND LARGER	DUCTILE IRON	MECHANICAL		
DOMESTIC WATER PIPE (ABOVE GROUND)	COPPER "L" HARD ASTM C-200	SOLDERED OR BRAZED	WROUGHT COPPER OR CAST BRONZE	(7)
SEWER LINE PIPING (BELOW GROUND) NOT UNDER SLAB	PVC	ASTM C-425	ASTM C-200	(1)(2)
GAS PIPE (BELOW GROUND)	SCHEDULE 40, BLACK STEEL-X-TRUE COATED ABD WRAPPED	CAST IRON	CAST IRON MALLEABLE IRON	(3)(4)
GAS PIPE (ABOVE GROUND)	SCHEDULE 40 BLACK STEEL	SCREWED	CAST IRON MALLEABLE IRON	(3)(5)

NOTES

(1) PVC OR ABS SCHEDULE 40, SOLVENT WELDED JOINTS MAY BE USED ONLY WITH WRITTEN AUTHORIZATION OF APPROVAL BY LOCAL INSPECTING AUTHORITY SUBMITTED BELOW TO ARCHITECT AND ENGINEER PRIOR TO BIDDING. CONDITIONS OF NOTE BELOW. SCR-35 SNAITARY PIPE WHEN APPROVED.

(2) NO PVC OR ABS TO BE USED IN TYPE II CONSTRUCTION, THROUGH OR IN RETURN AIR PLENUMS, IN CITIES WHERE SUCH MATERIAL IS NOT ACCEPTABLE; OR BELOW BUILDING SLAB OR DRIVEWAY SURFACES.

(3) SCREWED GAS CONNECTION FOR 2" AND SMALLER; WELDED CONNECTION FOR 2" AND LARGER, AND IN RETURN AIR PLENUMS.

(4) THREADS AND WELDS PAINTED PRIOR TO WRAPPING, ALL EXTERIOR PIPING (ESPECIALLY ON ROOF) TO BE PAINTED (COLOR BY ARCHITECT) TO MATCH ADJACENT SURFACE. PROVIDE CATHODIC UNDERGROUND PROTECTION ON GAS PIPING AS RECOMMENDED BY LOACL KPL GAS SERVICE (FOR GOVERNING AUTHORITY)

(5) CONNECT ALL GAS TO EQUIPMENT THROUGH GAS COCK, UNION AND DIRT LEG.

(6) NO WATER FITTINGS OR CONNECTIONS BELOW FLOOR SLAB. MAKE GRADUAL BEND OR RADIUS.

(7) PROVIDE WTR HAMMER ARRESTERS PRIOR TO CONECTION OF HOT/COLD WATER LINES TO PLUMBING FIXTURES. COLD WATER LINES TO PLUMBING FIXTURES. ALL POTABLE WATER SYSTEMS SOLDERING TO BE 95/5, TIN/ ANTIMONIAL OR UL, BOCA, UPC APPROVAL FOR SUBSTITUTION.

PIPING INSULATION SCHEDULE

PIPE SYSTEM	INSULATION	THICKNESS	TEMP.
REFRIGERANT SUCTION		1/2"	-20°F TO 70°F
DOMESTIC HOT & COLD HORIZONTAL MAINS ONLY		1/2"	-20°F TO 70°F
HANDICAP "P" TRAP & HOT WATER UNDER LAVATORYS		1/2"	-20°F TO 70°F

NOTE: ALL HORIZONTAL HOT & COLD WATER MAINS ARE TO BE INSULATED. VERTICAL MAINS AS NOTED OR SHOWN ON PLANS.

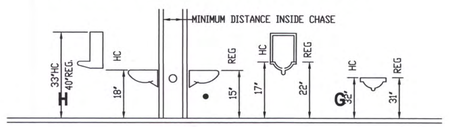
INSULATE INCONDITIONED AND UNCONDITIONAL SPACES.

PLUMBING CONNECTION/MOUNT.

FIXTURE	HOT WATER	COLD WATER	WASTE	VENT
LAVATORY OR SINK	1/2"	1/2"	1-1/2"	1-1/2"
WATER CLOSET, TANK TYPE		1/2"	4"	3"
URINALS		3/4"	2"	1-1/2"
DRINKING FOUNTAINS		1/2"	1-1/4"	1-1/4"

FIXTURE	MOUNTING HEIGHT
LAVATORY OR SINK	31" FLOOR TO RIM
HANDICAPPED LAVATORIES	34" FLOOR TO RIM
WATER CLOSET	15" FLOOR RIM
HANDICAPPED WATER CLOSET	18" FLOOR TO RIM
STANDARD URINALS	22" FLOOR TO RIM
HANDICAPPED URINALS	17" FLOOR TO RIM
HANDICAPPED DRINKING FOUNTAIN	35" FLOOR TO RIM, 27" KNEE SPACE

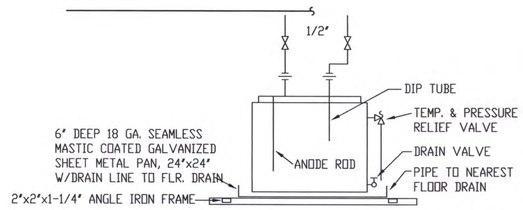
PLUMBING CONTRACTOR TO REFERENCE PLUMBING FLOOR PLANS AND DETAIL SHEET AND SPECIFICATIONS FOR SPECIFIC FIXTURE INDENTIFICATION USED.



DIFFUSER & REGISTER SCHEDULE

INDENT.	MANUF.	MODEL	SIZE	FINISH	
(A)	TITUS	TMS-8"	24"X24"	WHITE	SUPPLY
(B)	TITUS	TMS-6"	12"x12"	WHITE	SUPPLY
(C)	TITUS	355RL	24"X24"	WHITE	RETURN
(D)	TITUS	355RL	24"X12"	WHITE	RETURN

CONTRACTOR SHALL VERIFY ALL CEILING TYPES AND DUCT SIZES FOR DIFFUSERS

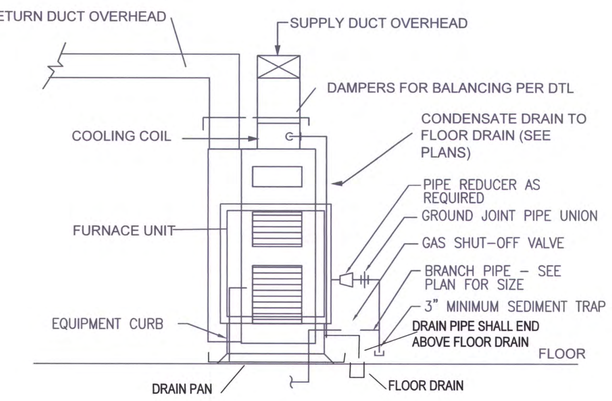


ELECTRIC WATER HEATER DETAIL

NO SCALE — APPROX. 120 LBS OPERATING WEIGHT.

6 GALLON WATER HEATER C: NATION #NSG-6 GLASS LINED, 6 GALLON CAPACITY, 1.25 KW, 120V-1Ø, WITH MAGNESIUM ANODE. PIPE RELIEF VALVE DISCHARGE DOWN TO TRAPPED CONNECTION TO VENT ABOVE CEILING.

APPROVED EQUALS: AO SMITH, MOR/FLO AMERICAN, RHEEM.



TYPICAL FURNACE ELEVATION

NO SCALE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED.

FURNACE FOR THIS PROJECT IS HORIZONTAL

GAS FIRED MECHANICAL EQUIPMENT SCHEDULE

FURN A — FURNACES SHALL BE CARRIER CONFORT 92 SERIES WITH 120,000BTU HEATING, 90% EFFICENT WITH 100 CFM OF FRESH AIR ENTERING INTO THE RETURN AIR DUCT. COMBUSTION AIR AND FLUE GASES SHALL GO OUT THE ROOF IN PVC PIPING. EQUIVALENT BY TRANE & LENNOX IS ACCEPTABLE.

CU-A — PROVIDE MATCHING 5 TON CONDENSING UNIT, 480V-3Ø

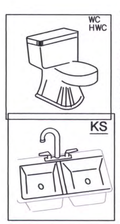
EF-E — EXHAUST FAN - SERVING TOILETS . BROAN #684, 100 CFM, 120V, 1Ø PROVIDE DAMPER AND FLASH WATER TIGHT.

WATER HTR — WATER HEATER SHALL BE 6GAL ELECTRICAL, 1200WATT, 120V

PLUMBING CONTR SHALL PROVIDE A WATER SENSOR ALARM IN THE PANS OF THE WATER HEATER AND THE FURNACES AND WILL BE THE 9 VOLT TYPE SIMILAR TO SUMP PUMP TYPE ALARM SHALL BE LOUD SCHREECH..

PLUMBING CONTR SHALL PROVIDE A PAN UNDER THE WATER HEATER AND THE FURNACE

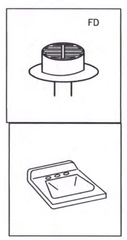
PLUMBING FIXTURE SCHEDULE



WATER CLOSET - GERBER, AQUA SAVER 21-702 ROUND VITREOUS CHINA, ELONGATED FLOOR OUTLET, SIPHON JET ACTION, TANK TYPE TOILET W/WHITE, SOLID PLASTIC - KOHLER #KA716 OPEN FRONT SEAT LESS COVER. PROVIDE FLEXIBLE SUPPLY PIPE WITH WHEEL HANDLE STOP. 1/2", 4"WASTE. 2"VENT.

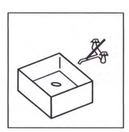
HWC - HANDICAPPED WC GERBER, AQUA SAVER 21-718, 18" A.F.F. TO RIM. KOLHER K-4712 SEAT

2 COMPARTMENT SINK - COUNTERTOP ELKAY #GECR-3321, 20 GUAGE, TYPE 302 SELF RIMMING DOUBLE COMPARTMENT SINK. 3 FAUCET HOLES FOR CHICAGO 785-E3 ASSENBLY FAUCET, 1/2" FLEXIBLE SUPPLIES & STOPS IN SHANKS. PROVIDE CUP STRAINER 1-1/2" P-TRAP. COORDINATE INSTALLATION W/CABINET SUPPLIER. CHICAGO 317, 4" WRIST BLADES, GN-1A-E3 SWING GOOSENECK. PROVIDE 1/2HP GARBAGE DISPOSAL
1/2" H & CW, 1-1/2" WASTE, 1-1/2" VENT.



FLOOR DRAIN - JOSAM 32000 CAST IRON, ROUND 7" NIKOLOY MEDIUM DUTY LOOSE SET ANTI-TILTING GRATE. SIZE TO SUIT PIPE SIZE AS SHOWN ON DWG. OR EQUAL.

BATHMASTER: BF7404-00 WINTHROP 20 X 18 WALL HUNG, 4" CENTERSET FAUCET, INCLUDE STRAINER, OR EQUAL FAUCET: DELTA 2567 - LPH H22, A22 CHROME, OR EQUAL



JANITOR SINK - WILLIAMS MODEL MTB-24"x24" FLOOR MOUNTED BASIN W/AMERICAN STANDARD 8341.075 FAUCET WITH VACUUM BREAKER. INCLUDE VINYL BUMPER FOR EXPOSED SIDE & PROVIDE P-TRAP FOR DRAIN. 1/2"H & CW, 3"WASTE, 2"VENT.

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PROFESSIONAL ENGINEER
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Project Number: 2404
Project Type: TENANT FINISH
Project Name and Address:

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2225 NW Town Centre Blvd.
Lee's Summit, Missouri 64064

Issue:	Date:
Permit Submittal	05.29.24

Sheet Title:

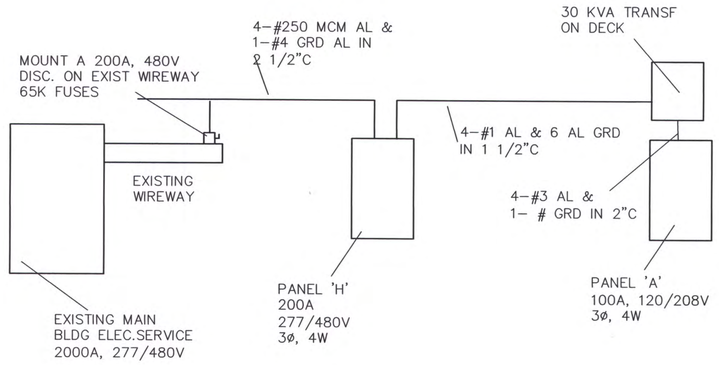
MP-2

PANEL A MOUNTING SURFACE BUS 100A MAIN 100A CB TYPE PLUG-IN
LOCATION WAREHOUSE VOLT 120/208 3 Ø 4 WIRE

CKT. NO.	DESCRIPTION	BKR.	CKT. V.A.	CKT. V.A.	BKR.	DESCRIPTION	CKT. NO.
1	LGHTING	20	1000	1000	20	LIGHTING	2
3	RECEPTS	20	1200	600	20	RECEPTS	4
5	RECEPTS	20	1000	1000	20	RECEPTS	6
7	RECEPTS	20	1000	1000	20	RECEPTS	8
9	KIT RECEPTS	20	800	800	20	DISPOSAL	10
11	KIT RECEPTS	20	800	800	20	DISHWASHER	12
13	REFRIG	20	800	1000	20	FURNACE	14
15	COND UNIT	50/2	10,000	1200	20	WTR HTR - 6 GAL	16
17					20	SPARE	18
19	SPARE	20		1000	20	UNIT HEATER	20
21	UNIT HEATER	20	1000	1000	20	UNIT HEATER	22
23	UNIT HEATER	20	1000	800	20	RECEPTS	24
25	FURNACE	20	1200	400	20	RECEPTS	26
27	SPARE	20			20	SPARE	28
29	SPARE	20			20	SPARE	30
			30,000			TOTAL VOLT AMPS 83 AMPS	

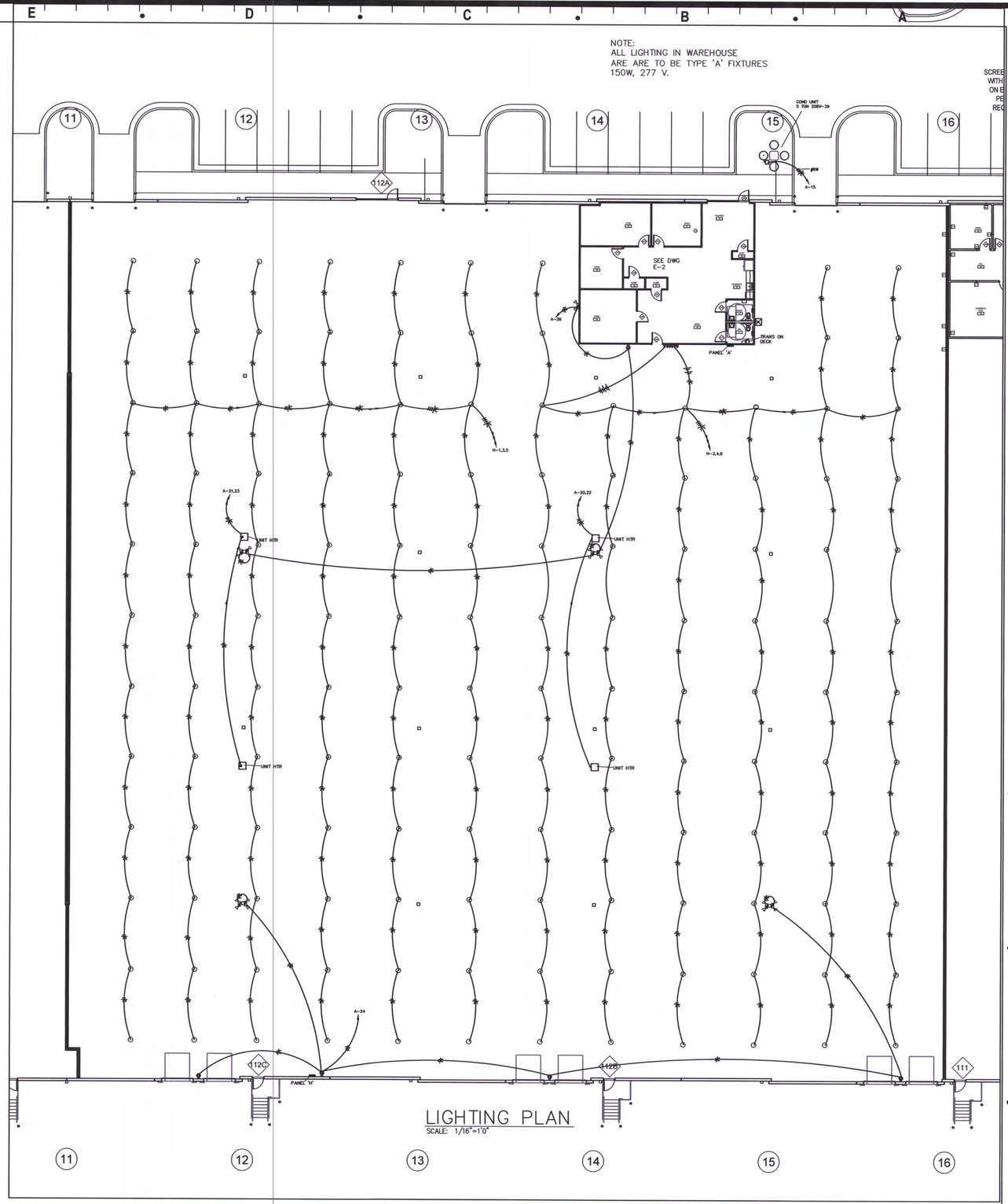
PANEL H MOUNTING SURFACE BUS 200 MAIN MLO TYPE BOLT-ON
LOCATION WAREHOUSE VOLT 277/480 3 Ø 4 WIRE

CKT. NO.	DESCRIPTION	BKR.	CKT. V.A.	CKT. V.A.	BKR.	DESCRIPTION	CKT. NO.
1	LIGHTING	20	3600	3600	20	LIGHTING	2
3	LIGHTING	20	3600	3600	20	LIGHTING	4
5	LIGHTING	20	3600	3600	20	LIGHTING	6
7	PANEL A	100/3	30,000		20	SPARE	8
9					20	SPARE	10
11					20	SPARE	12
13	SPACE					SPACE	14
15	SPACE					SPACE	16
17	SPACE					SPACE	18
			51600			TOTAL VOLT AMPS 62 AMPS	



ELECTRICAL RISER DIAGRAM

NOTE:
ALL LIGHTING IN WAREHOUSE
ARE ARE TO BE TYPE 'A' FIXTURES
150W, 277 V.



LIGHTING PLAN
SCALE: 1/16"=1'0"

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t: (816) 726-6531

Seal:

STATE OF MISSOURI
JOHN WILLIAM CASBURN, IV
E-14378
PROFESSIONAL ENGINEER
5/29/24

Project Number: 2404
Project Type: TENANT FINISH
Project Name and Address:

JOHNSON STORAGE
2225 NW Town Centre Blvd.
Lee's Summit, Missouri 64064

Issue:	Date:
Permit Submittal	05.29.24

Sheet Title:

E-1

LIGHT FIXTURE SCHEDULE

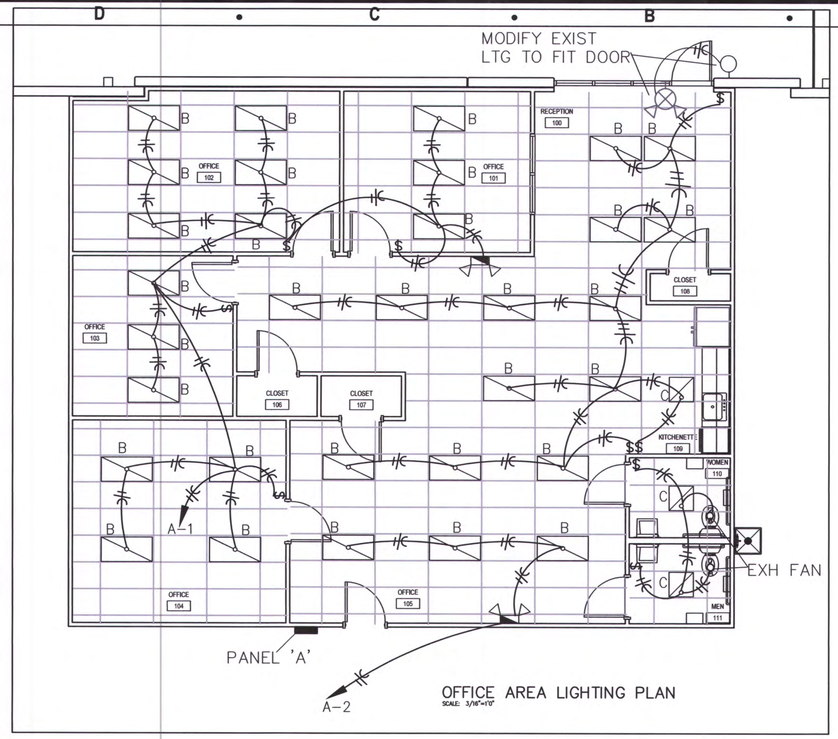
A — RAB #H17 HIGH BAY LED, 150WATT, 277V, 4000K, WITH CORD PROVIDE WITH HOOK TO HANG FROM ROOF

B — EIKO #SLM2462C5840U 2'X4' LEDSLIM PANEL 6200 LUMENS, 4000K, 50 WATT, 120 V

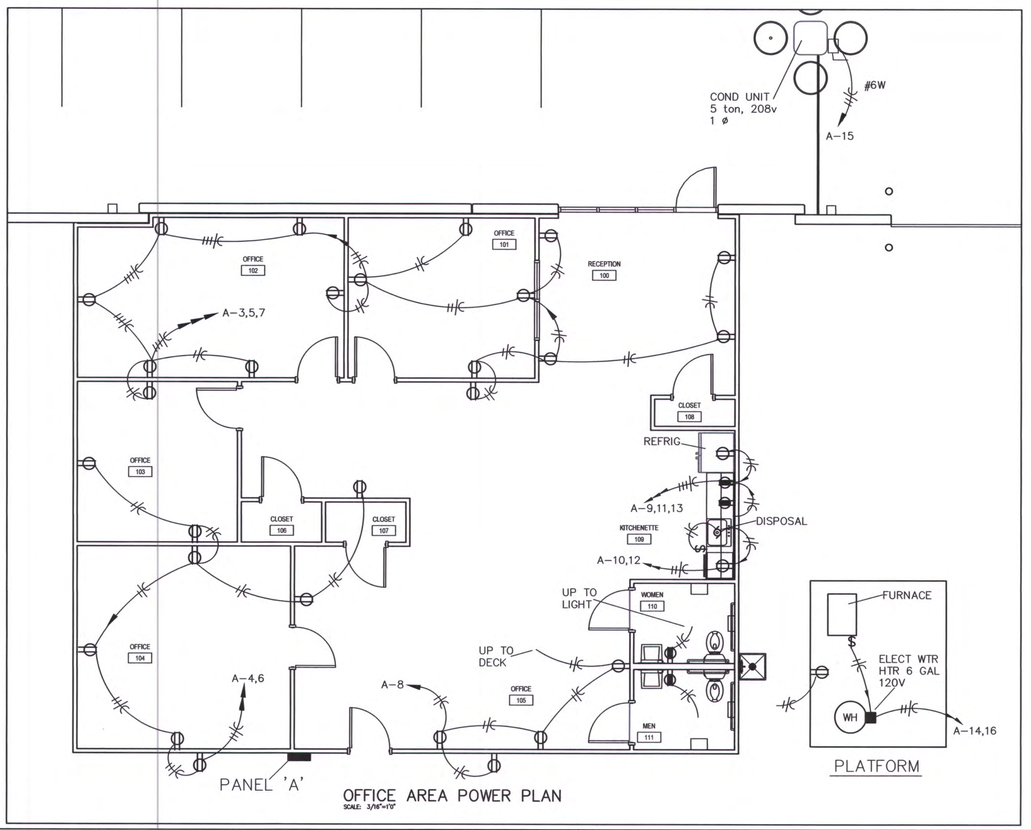
C — SIMILAR TO TYPE B EXCEPT 2'X2'LED, 120 V

COMBO EXIT/ EMERGENCY LIGHT LITHONIA #LHQM LED RHO

EMERGENCY LIGHT LITHONIA #ELM2 LED



OFFICE AREA LIGHTING PLAN
SCALE: 3/16"=1'0"



OFFICE AREA POWER PLAN
SCALE: 3/16"=1'0"

Architect:

MIDWEST ARCHITECTS
1120 NW Eagle Ridge Blvd.
Grain Valley, Missouri 64029
t: (816) 229-8115

Client:

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Consultants:

MEP Engineering:

Casburn Consultants
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Seal:

STATE OF MISSOURI
JOHN WILLIAM CASBURN, JR.
NUMBER E-14378
PROFESSIONAL ENGINEER
5/29/24

Project Number:	2404
Project Type:	TENANT FINISH

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E-2