

# SHEET INDEX:

Sheet	Sheet Name	Revision				
ARCHIT	ECTURAL					
A0.1	PROJECT INFORMATION					
A0.2	OUTLINE SPECIFICATION					
A0.3	OCCUPANCY AND EGRESS PLAN					
A0.4	ACCESSIBILITY STANDARDS					
A0.5	ACCESSIBILITY STANDARDS					
A0.6	ACCESSIBILITY STANDARDS					
A1.0	DEMOLITION PLAN					
A2.1	ARCHITECTURAL FLOOR PLAN					
A2.2	FINISH PLAN AND SCHEDULE					
A3.1	REFLECTED CEILING PLAN					
A5.0	INTERIOR ELEVATIONS					
A5.1	INTERIOR ELEVATIONS					
A6.0	PARTITION TYPES & DETAILS					
A6.1	MILWORK DETAILS					
A6.2	MILWORK DETAILS					
ELECTR	ICAL					
E1.0	ELECTRICAL SPECIFICATIONS					
E2.0	ELECTRICAL LIGHTING PLAN					
E3.0	ELECTRICAL POWER PLAN					
E4.0	ELECTRICAL SCHEDULES					
MECHAI	NICAL	<u> </u>				
M1.1	MECHANICAL PLAN					
M1.2	MECHANICAL SPECIFICATIONS					
M2.1	MECHANICAL DETAILS					
M2.2	MECHANICAL DETAILS					
M3.1	HOOD DRAWING					
M3.2	HOOD DRAWING					
M3.3	HOOD DRAWING					
M3.4	HOOD DRAWING					
M3.5	HOOD DRAWING					
M3.6	HOOD DRAWING					
PLUMBI	NG	1				
P1.0	PLUMBING PLAN					
P2.0	PLUMBING CALCULATIONS					
P3.0 PLUMBING SPECIFICATIONS						
REFERE	NCE	1				
R1.1	REFERENCE FURNITURE PLAN					

**EMERG** 

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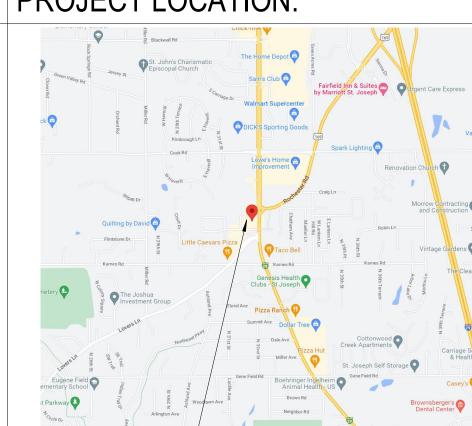
SYMBOLS LEGEND:

BBR	REVIATIONS				
ABV	Above	EXT	Exterior	OA	Overall
ACT	Acoustical Ceiling Tile	EXTG.	Existing	O.C.	On Center (s)
ACP	Acoustical Ceiling Panel	FA	Fire Alarm	OD.	Outside Diameter
ACR	Acrylic Panel	FBO	Furnished by Others	OHD	Overhead
AD	Access Door	FDN	Foundation	OPNG	Opening
ADD	Addendum	F/CONC	Face of Concrete	OPP	Opposite
ADJ	Adjacent	FD	Floor Drain	PFB	Prefabricate (d)
AFF	Above Finished Floor	FF	Finished Floor/Face	PFN	Pre-finished
AHU	Air Handling Unit	F/FIN	Face of Finish	P	Paint
ALT	Alternate	FE	Fire Extinguisher	PLY	Plywood
AL/ALUM	Aluminum	FEC	Fire Extinguisher Cabinet	PTD	Painted
ANOD	Anodized	F/MAS	Face of Masonry	PTR	Partition
APPROX		FT	Feet	RD	Roof Drain
ARCH	Architect (ural)	FTG	Footing	REF	Reference
B.D.	Bottom of Deck	FURR	Furred (ing)	REFL	Reflect (ed),(ive),(or)
BEL	Below	FoB	Face of Brick	REINF	Reinforcement
BLDG	Building	GA	Gage, Gauge	REQD	Required
BLK/G	Block (ing)	GALV	Galvanized	REV	Revision (s), Revised
BRK	Brick	GB	Grab Bar	RFG	Roofing
BS	Both Sides	GC	General Contractor (or)	RM	Room
CG	Corner Guard	GL	Glass, Glazing	RO	Rough Opening
CJ	Construction Joint	GWB	Gypsum Wall Board	S	Sink
CLG	Ceiling	GYP/BD	Gypsum (Board)	SC	Sealed Concrete
CLR	Clear (ance)	НВ	Hose Bibb	SCH	Schedule
CMU	Concrete Masonry Unit	HC	Hollow Core	SQ	Square
CO	Clean Out	HM	Hollow Metal	SS	Stainless Steel
CPT	Carpet (Ing)	HORIZ	Horizontal	STL	Steel
COL	Column	HT	Height		Structural
COMP	Compress (ed),(Ion),(Ible)	HTG	Heating	SUSP	Suspended
CONC	Concrete	INSUL	Insulate (d), (ion)	T.O.	Top of
CONN	Connection	INT	Interior	TOL	Tolerance
CONST	Construction	KP	Kick plate	T.O.S.	Top of Steel
CONT	Continuous or Continue	LAV	Lavatory	TRAN	Transition
CORR	Corridor	LVT	Luxury Vinyl Tile	T/S	Top of Slab
DEMO	Demolish, Demolition	MAS	Masonry	T.W.	Top of Wall
DET	Detail	MAT	Material (s)	TYP	Typical
DIA	Diameter	MAX	Maximum	UNF	Unfinished
DIM	Dimension	MECH	Mechanic (al)	UON	Unless Otherwise Note
DR	Door	MED	Medium	UR	Urinal
DS	Downspout	MTL	Metal	VCT	Vinyl Composition Tile
DWG	Drawing .	MFR	Manufacture (er)	VERT	Vertical
EA	Each	MIN	Minimum	VIF	Verify In Field
EJ	Expansion Joint	MIR	Mirror	VIN	Vinyl
EL	Elevation	MISC	Miscellaneous	VT	Vinyl Tile
ELEC	Electric (al)	MO	Masonry Opening	W/	With
<b>EMERG</b>	Emergency	N/A	Not Applicable	WB	Wall Base
EQ	Equal	NIC	Not In Contract	WC	Wall Covering
EQUIP	Equipment	NOM	Nominal	WD	Wood
FST	Estimate	NTS	Not To Scale		

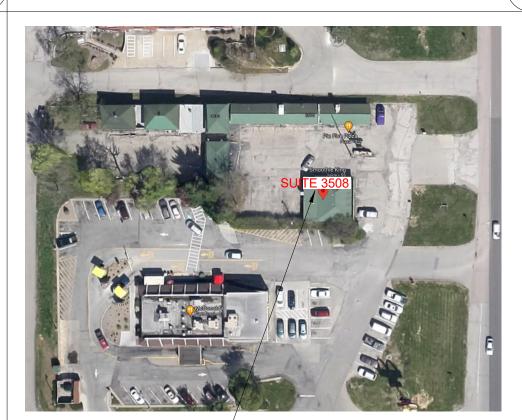
Not To Scale

NTS

# PROJECT LOCATION:



KEY PLAN:



JERSEY MIKE'S

# PROJECT GENERAL NOTES:

JERSEY MIKE'S

- THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THESE DOCUMENTS AND ANY APPLICABLE CODES BY THE AGENT INVOLVED WITH THE GOVERNING AGENCY HAVING JURISDICTION. IT IS UNDERSTOOD THAT THE "FIELD INSPECTOR" FOR SUCH AGENCY HAS FINAL AUTHORITY TO APPROVE/DISAPPROVE PROJECT CONSTRUCTION AND CORRECTNESS OF ALL CODE RELATED ITEMS. EACH SUBCONTRACTOR IS CONSIDERED A SPECIALIST IN THEIR RESPECTIVE FIELD OR TRADE AND SHALL NOTIFY, PRIOR TO PERFORMANCE OF THE WORK,
- THE GENERAL CONTRACTOR AND THE ARCHITECT OF ANY WORK CALLED OUT IN THE DRAWINGS WHICH CANNOT BE FULLY GUARANTEED OR CONSTRUCTED THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING THE WORK AND IMMEDIATELY NOTIFY THE ARCHITECT IN
- WRITING OF ANY DISCREPANCIES.
- PIPING, CONDUITS, FINISH HARDWARE, ETC. AND IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES. GENERAL CONTRACTOR TO COORDINATE ARCHITECTURAL DRAWINGS WITH MECHANICAL AND ELECTRICAL, PLUMBING, CIVIL AND LANDSCAPE DRAWINGS. GENERAL CONTRACTOR TO MAINTAIN ALL EXISTING FIRE RATINGS DURING DEMOLITION AND CONSTRUCTION.
- GENERAL CONTRACTOR SHALL NOT SCALE OFF DRAWINGS CONTACT ARCHITECT FOR ALL COORDINATION ISSUES. GENERAL CONTRACTOR TO MAINTAIN UNOBSTRUCTED ACCESS TO ALL EXITS DURING DEMOLITION AND CONSTRUCTION WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILING SHALL BE THE SAME AS FOR OTHER SIMILAR FIRST CLASS WORK FOR THE TRADE INVOLVED. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY ALTERNATE NON-STANDARD OR UNTESTED METHOD(S)
- EXTERIOR SIGNAGE IS NOT IN THE SCOPE OF THIS BUILDING PERMIT. BIDDING CONTRACTOR TO VISIT SPACE PRIOR TO COMPLETING BID.

# BUILDING CODE SUMMARY:

PROJECT SUMMARY

TENANT FITOUT OF A NEW MULTI-TENANT BUILDING

SEE SHEET A0.3 FOR EGRESS PLAN

**BUILDING DATA:** CITY OF ST. JOSEPH

PROJECT DIRECTORY:

**Tenant Contact:** 

Blakeward Holdings LLC.

Charlotte, NC 28273

**Landlord Contact:** 

9532 Hebron Commerce Dr.

Berkshire Hathaway HomeServices

Stein & Summers Real Estate.

1007 E. St. Maartens Drive

St. Joseph, MO 64506

BUILDING CODE AGENCY/JURISDICTION: 2018 International Building Code **BUILDING CODE:** 

2018 International Existing Building Code 2017 National Electrical Code 2018 International Fire Code 2018 International Fuel and Gas Code 2018 International Mechanical Code 2018 Uniform Plumbing Code 1999 Food Court (FDA)

Rodger Blake-Ward

(704) 400-8826

Adam Stein

(816) 232-2000

RBLAKE8506@AOL.COM

TYPE OF WORK:

**Architect Contact:** 

Oculus Incorporated

St. Louis, MO 63102

**Engineer Contact:** 

Case Engineering

Fenton, MO 63026

796 Merus Ct

One South Memorial Dr, Suite 1500

INTERIOR FITOUT NON-SPRINKLERED

FIRE SUPPRESSION: **EXISTING CONSTRUCTION TYPE:** 

ONE (1) TOTAL NUMBER OF FLOORS:

ONE (1) NUMBER OF FLOORS ABOVE GRADE: USE/OCCUPANCY GROUP

Matt Bradley

Nick Basler

mattb@oculusinc.com

(314) 450-5395 phone

(636) 349-1600 x263

nbasler@caseengineeringinc.com

(314) 367-1489 fax

A2 (ASSEMBLY UNCONCENTRATED)

# **ISSUE FOR PERMIT**

# **PROJECT INFORMATION**

Project#	43423-MC
Issue Date	2/23/20
Scale	As indicate

Checked by

Drawn by



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# DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

1. Contractor shall provide all wood or metal blocking, grounds, nailers, and supports, as shown in the drawings, and as required for the attachment of other work. Contractor shall install all work plumb and level. Contractor shall also fill and sand smooth all exposed nail and fastener holes, and coordinate location with other work.

2. All finish lumber, hardwood stock, and milled trim shall be kiln dried and ready for fabrication/installation. All pieces shall be of the type and grade specified and clear of warp, splits, knots or other deformities that would detract from its appearance.

3. All architectural woodwork shall comply w/ with standards and recommendations of the architectural woodwork institute's AWI current standards - "Architectural Woodwork Quality Standards".

4. Contractor shall fabricate and install base cabinets as shown on drawings. Casework shall be AWI premium grade and finished as noted on drawings.

5. Cabinets shall be of 'flush overlay construction as shown on the drawings and as follows:

a. Cabinets where shown as plastic laminate: Provide plastic laminate on all exposed surfaces with selected colors as indicated on the drawings and as listed below unless otherwise noted:

Gp-50 for non-post-formed surfaces.
 Pf-42 for post-formed surfaces.
 Gp-28 for vertical surfaces

k. Drawer and cupboard locks: Half-mortise type, 5-pin tumbler and deadbolt, round

cylinder only exposed, brass with plated finish, similar to Yale NO. 5591.

6. The following hardware shall be used for all scheduled millwork / cabinets unless otherwise noted on drawings:

a. Drawer guides: Self closing accuride C3800/C3827, or approved equal.
b. Grommets: All grommet trim unless noted otherwise to be manufactured by Doug Mockett and Co., Manhattan Beach, CA 90266, (213)318-2491. Equip with 3"diameter holes with XG series "black". Equip all slotted holes with CL series "black" to the size as shown on the drawings.
c. Hinges: Grass 1203 or Stanley 1511-2 or 1511-9X, self-closing, three dimensional adjustable, 165 degree opening.
d. Touch latching mechanisms: Stanley, Hafele or approved equal. (sized appropriately to match door size.)
e. Casework pulls: 3 1/2" polished chrome wire cabinet door pulls
f. Pocketing cabinet door hardware: NOT USED
g. Ventilation grill: Hafele #571.62.302, black or approved equal.
h. Cabinet door silencers: Provide three (3) rubber bumpers per door.
i. Self supports: Provide recessed metal standards or metric drilling at contractors' option.

## DIVISION 07 - THERMAL AND MOISTURE PROTECTION

Coat hooks: Refer to door hardware groups.

#### <u>SEALANTS</u>

1. Install sealants as mentioned below and shown on drawings (unless otherwise noted on drawings), per manufacturer's recommendations.

Type 1: All exterior vertical surfaces use sealants as follows:

a. Aluminum and glass: One part non- acid curing silicone sealant.
b. Aluminum, masonry, and EIFS: one or two part non-sag low modulus urethane sealant. Verify compatibility of sealant with EIFS manufacturer prior to use.

3. Type 2: Interior wet locations - such as bathrooms, toilet fixture bases, sinks, etc.: one-part mildew resistant silicone sealant.

4. Type 3: All interior joints exposed to view: Siliconized acrylic latex sealant (paintable) as noted or indicated in the documents. A continuous bead of caulk shall be provided at all edges of hollow metal and aluminum frames.

5. Type 4: All exterior door thresholds use: one-part butyl sealant.

### FIRE AND SMOKE PROTECTION

1. Furnish and install fireproofing system (complete w/ all required primers, metal lath, sealers, topcoats, etc as applicable) at location of steel beam reinforcement. Use "U.L." approved materials which match required fire resistive ratings used on existing beam(s). Install in compliance w/ manufacturer's recommendations and industry standards.

2. Subject to approval of local code officials and standards, apply fireproofing materials by trowel application or other placement method acceptable to manufacturer.

## **DIVISION 08 - OPENINGS**

## METAL DOORS AND FRAMES

Furnish and install hollow metal frames to comply with steel door institute "recommended specifications:

 (SDI-100) standard steel doors and frames.

b. HMMA/NAAMM "guide specifications for commercial hollow metal doors and frames" (HMMA 861-87).2. Provide labeled frames where indicated on drawings. Warranty to be in effect for two years after date of substantial completion.

3. Finish on frames to be as follows: Shop/field painting at contractor option, to match color selection as indicated in material legend on drawings, unless otherwise noted all frames to be sprayed.

4. Frames, unless noted otherwise, shall conform to the building standard as specified by the landlord and are to be Fully Welded.

5. Reuse existing hollow metal frames (unless noted otherwise on drawings), wherever possible. Contractor shall notify the owner of the type and number of existing frames which can be re-used and which have become damaged making them un-suitable for reuse.

6. Provide galvanized metal doors with shop-applied primer of type and styles indicated on drawings or schedules. Provide non-removable glazing stops installed on public side of door. Glazing beads on inside of glass and louver panels shall be removable. Glazing systems shall be minimum 20 gauge steel. All doors hollow metal doors to be 1 3/4" thick.

7. Submit shop drawings and schedules for approval, prior to fabrication. Conform to same door and opening designations used in the door schedule.

# WOOD DOORS

1. Where indicated on drawings and shown in schedules, furnish and install new solid core wood doors to match building standard. Door veneer to match existing grain, species and leaf matching. Provide labeled doors where indicated on drawings.

2. Reuse existing doors as indicated on drawings. Refinish doors to match color and sheen of new doors unless otherwise noted on drawings.

3. Rated interior solid core wood doors shall comply with requirements of AWI Section 1300, fd-5 doors. Custom/premium grade doors for transparent finish to match quality of non-rated doors. Core to be non-combustible mineral composition material per label requirements. Stiles and rails securely bonded to core per label requirements. Veneer to be as specified in material legend, "A" grade, edge glued joints for transparent finish

4. Non-rated interior solid core wood doors shall comply with requirements of AWI Section 1300, pc-5 ce doors. Custom grade veneer, bonded particle core doors for opaque finish. Core to be particleboard conforming to ANSI A208.1, 1-Id-2 grade. Stiles and rails securely bonded to core, and then entire unit abrasive planed before veneering. Veneer to be sound, close grain hardwood, minimum b grade (minimum 1/50" at 12 % mc), for opaque finish.

5. Submit shop drawings, product information and schedules for approval prior to fabrication. Conform to same door and opening designations as shown in the door schedule on the drawings.

6. Contractor to submit certificate showing that interior wood doors are to be warranted for life of installation.

7. Door manufacturer's to be considered are as follows (unless otherwise noted on drawings):

a. AMPCO, Eggers, VT Industries and Weyerhaeuser door division.

## ENTRANCES AND STOREFRONTS

f NOT APPLICABLE

## <u>HARDWARE</u>

1. Provide locksets appropriate to function where indicated in door schedule. Furnish and install new hardware to match building standard as required (unless otherwise noted), note, selections are based upon products as manufactured by "Schlage Lock Company," alternate manufacturers of equivalent "models" by Corbin, Falcon, Yale products will be considered. See drawings for additional information.

2. Project standard interior door locks and latches (unless otherwise noted):

a. Certif: ANSI A156.2, 1989, series 4000 grade 1.

Design: Schlage extra heavy duty cylindrical locks,
Series: "D" lever: "Schlage Rhodes"

Latch: 09-66X square corner strike: 10-072; 37-015(@wd fr)
Finish: 626(26D) satin chromium plated.

Keying: Master-keyed - standard interchangeable cores

Reinforcing kit: 37-001 - sized for door thickness

Project standard security deadbolts (unless otherwise noted):

a. Certif: ANSI A156.2, 1984, grade 3.
Design: Single cylinder deadbolt, thumb turn interior.
Series: "100" model: "B160"
Finish: 626(26D) satin chromium plated.
Keying: Master-keyed - standard interchangeable cores

Reinforcing kit: 37-001 - sized for door thickness.

4. Project standard cypher locks (unless otherwise noted):

a. Contractor shall retrofit, if possible, existing cypher locks hardware to meet current ADA, ANSI and building code requirements. Retrofit shall include manufacturer's approved lever handles. If retrofit of existing cypher lock cannot be achieved notify the Architect for a replacement specification.

Manufacturer: ILCO Unicam Corp.
 Certif: ANSI A156.2, grade 1.ADA & d.o.d.5220.22m
 Design: Exterior access by combination or key override.
 Egress by interior lever.

Series: "I1000" model: "1021"

Finish: Matchg bldg standard Keying: Masterkeyed - standard interchangeable cores

5. Furnish and install card key access system to match building standard where indicated on the drawings.

6. Door Closers (unless otherwise noted):

a. LCN 4040 w/back check, surface mounted with parallel arm for push side mounting.
 Similar in style and appearance to building standard.

7. Hinges, butts and pivots (unless otherwise noted). Non-ferrous hinges to be provided with stainless steel pins. Exterior doors, and out-swing corridor doors to receive non-removable pins. Provide number of hinges in accordance w/ door and hardware institute recommendations. Provide ball bearing butts for doors equipped with closures.

8. Submit for approval hardware schedule keyed to Architect's door and opening designations. List manufacturer's model number for all group components. Submit product information for each type of hardware provided.

9. Hardware supplier shall have in his/her employ an AHC member of the American Society of Hardware Consultants who must be capable of correctly interpreting the plans and specifications to furnish complete and appropriate hardware. Consultant must sign shop drawing/product information submittal thus signifying that the submittal complies with the intent of the documents and the door and hardware institute.

10. Supplier to coordinate lock cylinders and keying with Tenant, and master key system for the entire project. Supplier will meet with Tenant as required to finalize keying requirements and document/obtain final instructions in writing.

#### **GLASS AND GLAZING**

1. Comply with recommendations of flat glass marketing association (FGMA) "glazing manual" and "sealant manual" except where more stringent requirements are indicated.

2. All interior glass shall be 1/4" minimum, unless otherwise noted, glass thickness shall meet or exceed minimum standards set forth in current ASTM

3. Contractor shall furnish and install tempered safety glass. as indicated on the drawings or otherwise required by code. All safety glass shall be identified as such with visible markings located in corner and suitable for building inspector review and approve.

4. Unless otherwise noted on the drawings, contractor shall furnish and install clear non-coated annealed flat glass of the size and thickness shown Provide glass and glazing that has been produced, fabricated and installed to withstand normal thermal, wind or impact loading (where applicable), without failure. All glass for the project shall comply w/ thickness, dimensional tolerances and characteristics set forth in ASTM C1036 "Standard Specification for Flat Glass"

5. Unless otherwise noted on the drawings, contractor shall furnish and install clear heat-treated flat glass, ft (fully tempered) of the size as indicated in the documents. Provide glass and glazing material that has been produced, fabricated and installed to withstand normal thermal, wind or impact loading. Fully tempered glass shall comply w/ the requirements for safety glazing in ANSI Z97.1-"standard for glazing materials used in buildings" as

loading. Fully tempered glass shall comply w/ the requirements for safety glazing in ANSI Z97.1-"standard for glazing materials used in buildings" as well as ASTM C1048 "standard for heat treated flat glass -kind ft coated and uncoated glass. Fully tempered glass shall comply with all local building code and life safety requirements.

6. Provide glazing sealants, tapes, and misc. materials with a proven record of compatibility with other materials/surfaces with which they will come into contact, including, but not limited to, glass products, seals of insulating glass units, glazing channel substrates, under conditions of service, as demonstrated by testing and field experience.

7. Submit shop drawings and product literature for Architect review.

# DIVISION 09 - FINISHES

# PLASTER AND GYPSUM BOARD ASSEMBLIES

1. Interior finish material shall comply with the flame spread and smoke development limitation listed in the building code section.

2. Contractor shall furnish all materials and labor to construct and finish all interior rooms and spaces as shown on drawings, noted schedules or otherwise specified in these documents.

3. Gypsum wall board shall be 5/8" thick (unless otherwise noted on drawings), taped, filled and sanded smooth. Fire-code gypsum wallboard shall be 5/8" thick, taped, filled, sanded smooth, and installed per manufacturer's recommendations for ratings as shown on drawings.

4. Install (non-load bearing) screw-type metal stud support system of the gauge recommended by the manufacturer for the application shown on the drawings. Comply with manufacturer's recommendations for acoustical ceiling work but not less than recommended.

a. 25 ga / standard duty studs @ 24" o.c. max / for clear span heights, do not exceed manufacturer's recommendations for the following:
1 5/8" stud, 2 1/2" stud, 3 5/8" stud, and 4" stud.
b. 22 ga / heavy duty studs @ 24" o.c. max / for clear span heights, do not to exceed manufacturer's recommendations for the following:

1 5/8" stud, 2 1/2" stud, 3 5/8" stud, 4" stud, and 6" stud. c. 20 ga / extra duty studs @ 24" o.c. max / for clear span heights, do not exceed manufacturer's recommendations for the following: 1 5/8" stud, 2 1/2" stud, 3 5/8" stud, 4" stud, and 6" stud.

5. Contractor shall furnish and install complete suspended gypsum wall board ceiling system where indicated on the drawings. Provide components which comply with ASTM C 754 and manufacturer's recommendation for materials and sizes unless otherwise indicated. Provide seismic struts/braces as required by local codes and per building standards.

## **CEILINGS**

1. Comply with manufacturer's recommendations for all acoustical ceiling work. Products by USG, Armstrong, and Chicago Metallic will be considered if no specific materials are called for in the documents.

2. Where noted on the drawings, contractor shall replace pads with new pads as indicated. (See finish legend for additional information).

3. Contractor shall review ceiling plans and provide take off quantities to the Tenant for ordering of customers' own materials. Ordered quantities shall include sufficient amount for attic stock and waste during installation.

4. Comply with building standard details and local codes with reference to seismic struts/bracing.

#### RESILIENT FLOORING

1. Install all resilient tile flooring by direct glue method in accordance with the manufacturers' recommended installation specifications and instructions. Install only over properly prepared and cleaned substrates as recommended by manufacturer.

2. Material to be selected from manufacturer's standard colors. Color and material to be selected by Architect unless otherwise shown in finish schedule.

#### BASE

1. Install resilient base material as noted in material legend. Use direct glue method in accordance with manufacturer's recommended installation specifications and instructions. Install only over properly prepared substrates as recommended by manufacturer. Material shall be installed in the longest continuous sections feasible. final installation shall be smooth, free of bumps and other irregularities.

2. Wall base to be selected from manufacturers standard colors. Color to be integral and full thickness of material. Color and material to be selected by the Architect.

### PAINTING AND COATING

1. Contractor shall finish walls with one coat primer and two coats latex enamel paint unless otherwise noted in material legend, keyed notes and room finish schedule.

2. Where indicated on drawings, contractor shall spray finish on building door frames in semi-gloss alkyd enamel. Finish color to be as indicated on drawings and to match architect's sample.

#### SPECIAL COATINGS

1. Contractor shall furnish and install special coatings or multi-color paint system as noted in the material legend. Installer shall be experienced in the installation of special coatings or multi-color installation process and familiar with all manufacturer's equipment and application procedures and instructions. Contractor shall coordinate the installation of special materials with Owners representative to minimize disruptions to normal building operations. Prior to installation, contractor shall notify Owner if special coating application produces fumes or orders which might disrupt other building use/operations. If necessary, special coatings installation shall be conducted after hours or on weekends.

2. Contractor shall provide an additional supply equivalent to 5% of each color of paint specified for touch up and repair. Surplus paint shall be in new and unopened containers provided by the manufacturer.

3. Contractor to verify that painting contractor is certified installer/applicator of manufacturer of special coating specified in project.

## **DIVISION 10 - SPECIALTIES**

FIRE EXTINGUISHER CABINETS

Unless otherwise noted on drawings, contractor to furnish and install building standard semi recessed fire extinguisher cabinet equal to Potter Roemer #7042 fire cabinet with 2a 10bc minimum rated extinguisher, where indicated on drawings. Paint cabinet to match walls unless not allowed by local codes.

## <u>DIVISION 11 - EQUIPMENT</u>

1. Contractor to install commercial kitchen equipment provided by the tenant and as indicated on the drawings.

2. Contractor shall coordinate the installation of tenant provided equipment with all related work including millwork, plumbing and electrical. Install device in accordance with manufacturer's specifications and instructions. Contractor shall notify the tenant of all specific information required to coordinate installation of tenant provided equipment.

# <u>DIVISION 12 - FURNISHINGS</u>

1. Contractor shall furnish and install all tenant-provided furniture as indicated on the drawings.

2. Contractor shall install all Tenant/Owner provided AV equipment as indicated on the drawings. Coordinate installation of audio visual equipment with ceiling installation. Tenant shall provide contractor with specific product cut sheets/specification and mounting requirements.

# DIVISION 13 - SPECIAL CONSTRUCTION

**DIVISION 14 - CONVEYING EQUIPMENT** 

NOT APPLICABLE

# NOT APPLICABLE

DIVISION 21 - FIRE SUPPRESSION

DIVISION 22 - PLUMBING

NOT APPLICABLE

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING

RE: PLUMBING SPECIFICATIONS.

RE: MECHANICAL SPECIFICATIONS

**DIVISION 26 - ELECTRICAL** 

RE: ELECTRICAL SPECIFICATIONS



3508 N. BELT H

Description

#

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certification relating to the performance of products and materials beyond

those provided by their respective manufacturer.

BRIAN DOLLAR POLICIA DE LA CONTROL DE LA CON

**ISSUE FOR PERMIT** 

# OUTLINE SPECIFICATION

43423-MO01

2/23/2023

1" = 1'-0"

Project# Issue Date

Checked by

Scale

Drawn by

,

A0.2

EXIT REQUIREMENTS:

NON SPRINKLERED REQUIRED NUMBER OF EXITS PER CODE: NUMBER OF EXITS SHOWN ON PLANS: REQUIRED DISTANCE BETWEEN EXIT DOORS PER CODE: 84'-1 1/2"/2=42'-3/4" ACTUAL DISTANCE BETWEEN EXIT DOORS: 79'-8 3/4" MAXIMUM DEAD END CORRIDOR DEPTH:

# OCCUPANCY DATA:

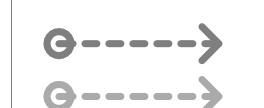
		`	Occupancy Schedule		
RM#	ROOM NAME	AREA	OCCUPANCY	LOAD FACTOR	OCCUPAN LOAD
101	DINING ROOM	1318 SF	ASSEMBLY UNCONCENTRATED	15	89
102	KITCHEN PREP	269 SF	COMMERCIAL KITCHEN	200	2
103	CLEAN-UP	324 SF	COMMERCIAL KITCHEN	200	2
104	FREEZER	18 SF	STORAGE	300	1
105	WALK IN REF.	61 SF	STORAGE	300	1
106	WOMEN'S RESTROOM	55 SF	UNOCCUPIED	0	0
107	MEN'S RESTROOM	55 SF	UNOCCUPIED	0	0
108	HALL	34 SF	UNOCCUPIED	0	0
Grand	total: 8	2133 SF			95

NOTE: AREA SQUARE FOOTAGE SHOWN ARE FOR THE BUILDING CODE OFFICIAL'S USE AND REVIEW ONLY. AREA CALCULATIONS SHOWN NOT RELATED TO TENANT LEASING INFORMATION.

# EXIT ACCESS TRAVEL DISTANCES

Path ID	Common Path Distance	Allowable Common Path	Actual Travel Distance	Allowable Travel Distance	A) REFERENCE COVER SHEET FOR BUILDING
COMMON PATH	35' - 0"	75' - 0"	35' - 0"	200' - 0"	
PATH A	35' - 0"	75' - 0"	35' - 0"	200' - 0"	
PATH B	43' - 8"	75' - 0"	43' - 8"	200' - 0"	
PATH C	44' - 3"	75' - 0"	44' - 3"	200' - 0"	

# **LEGEND**



36" ── DOOR WIDTH

36 ACTUAL EGRESS LOAD

180 — MAX EXGRESS CAPACITY DOOR TAG

**COMMON PATH PORTION** OF TRAVEL PATH

TRAVEL PATH

ASSEMBLY UNCONCENTRATED COMMERCIAL KITCHEN STORAGE

UNOCCUPIED

# PLUMBING FIXTURE REQUIREMENTS

SHEET NOTES:

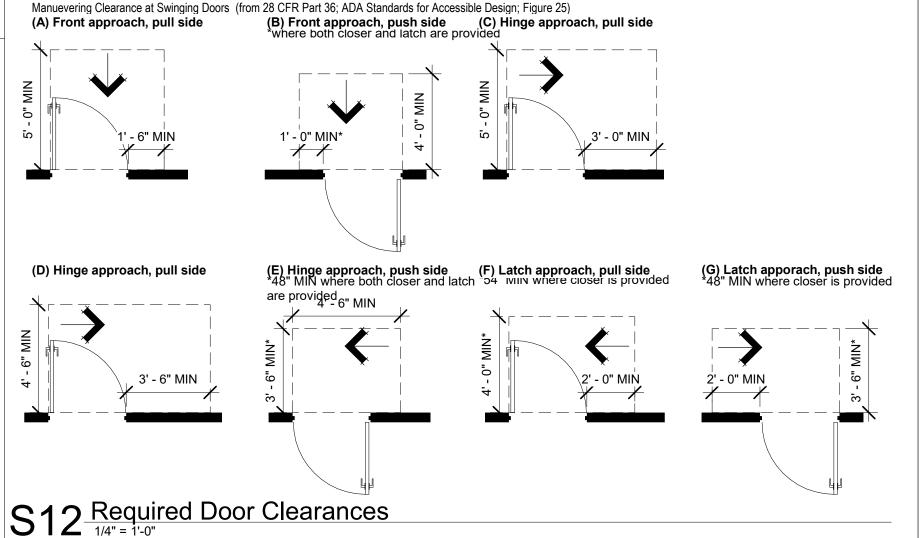
	WATERCLOSETS			LAVATORIES		DRINKING FOUNTAINS		
NAME	MALE	FEMALE	URINALS	MALE	FEMALE	REG.	ACC.	
RESTROOM 1 1 0 1 1 *0 *0								
*PER SECTION 410 OF THE INTERNATIONAL PLUMBING CODE: WHERE WATER IS SERVED IN								

RESTAURANTS, DRINKING FOUNTAINS SHALL NOT BE REQUIRED

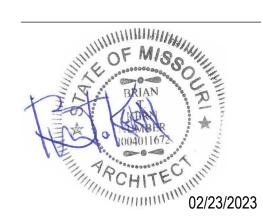
# GENERAL DOOR AND HARDWARE NOTES:

- A] HAND ACTIVATED DOOR OPENING HARDWARE IS TO BE MOUNTED 30" -34" ABOVE THE FLOOR AND BE OPERABLE WITH A SINGLE EFFORT BY LEVER-TYPE HARDWARE.
- B] LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PUSH/PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED AND APPROVED FOR PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPERATIONG HARDWARE.
- C] MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8.5 POUNDS OF FORCE FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS. SUCH FORCE BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHERE FIRE DOORS ARE REQUIRED, THE MAXIMUM FORCE REQUIRED TO OPERATE THE DOOR MAY BE INCREASED TO 15 POUNDS.
- D] THE BOTTOM 10" OF ALL NON-AUTOMATED HINGED 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
- E) EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3'-0" IN WIDTH NOT LESS THAN AND 6'-8" IN HEIGHT. ALL DOORS SHALL BE CAPEABLE OF OPENING A MINIMUM OF NINETY DEGREES AND SHALL BE MOUNTED SUCH THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32" WITH THE DOOR AT NINETY DEGREES FROM THE CLOSED POSITION. ONE DOOR OF A PAIR OF DOORS SHALL MEET THE MINIMUM WIDTH REQUIREMENTS.
- F] MAXIMUM HEIGHT OF THRESHOLD TO BE 1/2". MAXIMUM VERTICAL RISE AT EDGE IS 1/4" WITH A MAXIMUM BEVEL OF 22 DEGREES.
- G1 ALL REUSED DOORS AND HARDWARE TO BE FULLY INSPECTED FOR SOUNDNESS AND FUNCTION. ANY REUSEABLE COMPONENT SHALL BE CLEANED, OILED, PATCHED, REFINISHED AS REQUIRED PRIOR TO REINSTALLATION IN NEW WORK.

- H] GENERAL CONTRACTOR AND HARDWARE SUPPLIER SHALL BE RESPONSIBLE FOR COODINATING ALL LOCKING, LATCHING, CLOSURE AND KEYING REQUIREMENTS FOR TENANT USE.
- J] IT SHALL BE THE SPECIFIC DUTY AND RESPONSIBILITY OF THE FINISH HARDWARE SUPPLIER TO EXAMINE DRAWINGS AND SCHEDULES AND FURNISH PROPER HARDWARE FOR ALL NEW AND/OR MODIFIED OPENINGS AS REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL SUBMIT A HARDWARE SCHEDULE TO ARCHITECT FOR REVIEW AND APPROVAL OF TYPES AND STANDARDS OF QUALITY PROIR TO ORDERING.
- K] MATCH EXISTING OPENING WIDTH, HEAD & JAMB GWB CONSTRUCTION.
- L] ALL NEW DOORS TO HAVE 1/4" MAXIMUM UNDERCUT U.O.N.



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**ISSUE FOR PERMIT** 

# **OCCUPANCY AND EGRESS PLAN**

43423-MO01 Project# 2/23/2023 Issue Date Scale As indicated Drawn by

AM/JM

Checked by

## **EXCEPTIONS:**

1. In buildings or facilities not required to provide an accessible route between stories, an accessible route shall not be required to a mezzanine dining area where the mezzanine contains less than 25 percent of the total combined area for seating and dining and where the same decor and services are provided in the accessible area.

2. In alterations, an accessible route shall not be required to existing raised or sunken dining areas, or to all parts of existing outdoor dining areas where the same services and decor are provided in

an accessible space usable by the public and not restricted to use by people with disabilities. 3. In sports facilities, tiered dining areas providing seating required to comply with 221 shall be required to have accessible routes serving at least 25 percent of the dining area provided that accessible routes serve seating complying with 221 and each tier is provided with the same services.

Advisory 206.2.5 Restaurants and Cafeterias Exception 2. Examples of "same services" include, but are not limited to, bar service, rooms having smoking and non-smoking sections, lotto and other table games, carry-out, and buffet service. Examples of "same decor" include, but are not limited to, seating at or near windows and railings with views, areas designed with a certain theme, party and banquet rooms, and rooms where entertainment is provided.

# 213 TOILET FACILITIES AND BATHING FACILITIES

213.1 General. Where toilet facilities and bathing facilities are provided, they shall comply with 213. Where toilet facilities and bathing facilities are provided in facilities permitted by 206.2.3 Exceptions 1 and 2 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.

213.2 Toilet Rooms and Bathing Rooms. Where toilet rooms are provided, each toilet room shall comply with 603. Where bathing rooms are provided, each bathing room shall comply with 603.

## EXCEPTIONS:

1. In alterations where it is technically infeasible to comply with 603, altering existing toilet or bathing rooms shall not be required where a single unisex toilet room or bathing room complying with 213.2.1 is provided and located in the same area and on the same floor as existing inaccessible toilet or bathing rooms.

Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no fewer than one toilet room for each sex complying with 603 or one unisex toilet room complying with 213.2.1 shall be provided.

Where multiple single user portable toilet or bathing units are clustered at a single location, no more than 5 percent of the toilet units and bathing units at each cluster shall be required to comply with 603. Portable toilet units and bathing units complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1.

4. Where multiple single user toilet rooms are clustered at a single location, no more than 50 percent of the single user toilet rooms for each use at each cluster shall be required to comply with

Advisory 213.2 Toilet Rooms and Bathing Rooms. These requirements allow the use of unisex (or single-user) toilet rooms in alterations when technical infeasibility can be demonstrated. Unisex toilet rooms benefit people who use opposite sex personal care assistants. For this reason, it is advantageous to install unisex toilet rooms in addition to accessible single-sex toilet rooms in new

Advisory 213.2 Toilet Rooms and Bathing Rooms Exceptions 3 and 4. A "cluster" is a group of toilet rooms proximate to one another. Generally, toilet rooms in a cluster are within sight of, or

213.2.1 Unisex (Single-Use or Family) Toilet and Unisex Bathing Rooms. Unisex toilet rooms shall contain not more than one lavatory, and two water closets without urinals or one water closet and one urinal. Unisex bathing rooms shall contain one shower or one shower and one bathtub, one lavatory, and one water closet. Doors to unisex toilet rooms and unisex bathing rooms shall have privacy latches.

213.3 Plumbing Fixtures and Accessories. Plumbing fixtures and accessories provided in a toilet room or bathing room required to comply with 213.2 shall comply with 213.3.

213.3.1 Toilet Compartments. Where toilet compartments are provided, at least one toilet compartment shall comply with 604.8.1. In addition to the compartment required to comply with 604.8.1, at least one compartment shall comply with 604.8.2 where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures.

Advisory 213.3.1 Toilet Compartments. A toilet compartment is a partitioned space that is located within a toilet room, and that normally contains no more than one water closet. A toilet compartment may also contain a lavatory. A lavatory is a sink provided for hand washing. Full-height partitions and door assemblies can comprise toilet compartments where the minimum required spaces are provided

213.3.2 Water Closets. Where water closets are provided, at least one shall comply with 604.

213.3.3 Urinals. Where more than one urinal is provided, at least one shall comply with 605.

213.3.4 Lavatories. Where lavatories are provided, at least one shall comply with 606 and shall not

213.3.5 Mirrors. Where mirrors are provided, at least one shall comply with 603.3. Accessible mirrors shall be provided at locations that are consistent with the location of other mirrors in the same room.

213.3.6 Bathing Facilities. Where bathtubs or showers are provided, at least one bathtub complying with 607 or at least one shower complying with 608 shall be provided.

213.3.7 Coat Hooks and Shelves. Where coat hooks or shelves are provided in toilet rooms without toilet compartments, at least one of each type shall comply with 603.4. Where coat hooks or shelves are provided in toilet compartments, at least one of each type complying with 604.8.3 shall be provided in toilet compartments required to comply with 213.3.1. Where coat hooks or shelves are provided in bathing facilities, at least one of each type complying with 603.4 shall serve fixtures required to comply with 213.3.6.

# 216 SIGNS

216.2 Designations. Interior and exterior signs identifying permanent rooms and spaces shall comply with 703.1, 703.2, and 703.5. Where pictograms are provided as designations of permanent interior rooms and spaces, the pictograms shall comply with 703.6 and shall have text descriptors complying with 703.2 and 703.5.

# 226 DINING SURFACE AND WORK SURFACES

226.1 General. Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall

## **EXCEPTIONS:**

Sales counters and service counters shall not be required to comply with 902.

2. Check writing surfaces provided at check-out aisles not required to comply with 904.3 shall not be required to comply with 902.

Advisory 226.1 General. In facilities covered by the ADA, this requirement does not apply to work surfaces used only by employees. However, employers should consider work surfaces that are flexible and permit installation at variable heights and clearances.

226.2 Dispersion. Dining surfaces and work surfaces required to comply with 902 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.

# 302 FLOOR OR GROUND SURFACE

302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302.

#### **EXCEPTIONS:**

Within animal containment areas, floor and ground surfaces shall not be required to be stable.

Areas of sport activity shall not be required to comply with 302.

Advisory 302.1 General. A stable surface is one that remains unchanged by contaminants or applied force, so that when the contaminant or force is removed, the surface returns to its original condition. A firm surface resists deformation by either indentations or particles moving on its surface. A slipresistant surface provides sufficient frictional counterforce to the forces exerted in walking to permit safe ambulation.

# 304 TURNING SPACE

304.1 General. Turning space shall comply with 304.

304.2 Floor or Ground Surfaces. Floor or ground surfaces of a turning space shall comply with 302. Changes in level are not permitted.

**EXCEPTION:** Slopes not steeper than 1:48 shall be permitted.

Advisory 304.2 Floor or Ground Surface Exception. As used in this section, the phrase "changes in level" refers to surfaces with slopes and to surfaces with abrupt rise exceeding that permitted in Section 303.3. Such changes in level are prohibited in required clear floor and ground spaces, turning spaces, and in similar spaces where people using wheelchairs and other mobility devices must park their mobility aids such as in wheelchair spaces, or maneuver to use elements such as at doors, fixtures, and telephones. The exception permits slopes not steeper than 1:48.

304.3 Size. Turning space shall comply with 304.3.1 or 304.3.2.

304.3.1 Circular Space. The turning space shall be a space of 60 inches (1525 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

304.3.2 T-Shaped Space. The turning space shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

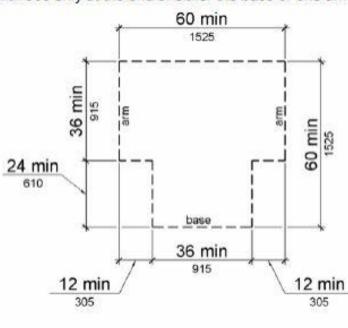


Figure 304.3.2 T-Shaped Turning Space

304.4 Door Swing. Doors shall be permitted to swing into turning spaces.

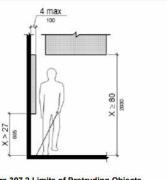
# 307 PROTRUDING OBJECTS

307.1 General. Protruding objects shall comply with 307.

307.2 Protrusion Limits. Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor or ground shall protrude 4 inches (100 mm) maximum horizontally into the circulation path.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

Advisory 307.2 Protrusion Limits. When a cane is used and the element is in the detectable range, it gives a person sufficient time to detect the element with the cane before there is body contact. Elements located on circulation paths, including operable elements, must comply with requirements for protruding objects. For example, awnings and their supporting structures cannot reduce the minimum required vertical clearance. Similarly, casement windows, when open, cannot encroach more than 4 inches (100 mm) into circulation paths above 27 inches (685 mm).



# 308 REACH RANGES

308.1 General. Reach ranges shall comply with 308.

Advisory 308.1 General. The following table provides guidance on reach ranges for children

according to age where building elements such as coat hooks, lockers, or operable parts are designed for use primarily by children. These dimensions apply to either forward or side reaches. Accessible elements and operable parts designed for adult use or children over age 12 can be located outside these ranges but must be within the adult reach ranges required by 308. Children's Reach Ranges

Forward or Side Reach	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
High (maximum)	36 in (915 mm)	40 in (1015 mm)	44 in (1120 mm)
Low (minimum)	20 in (510 mm)	18 in (455 mm)	16 in (405 mm)

#### 308.2 Forward Reach.

308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

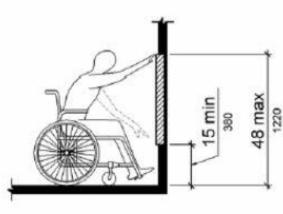


Figure 308.2.1 Unobstructed Forward Reach

308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

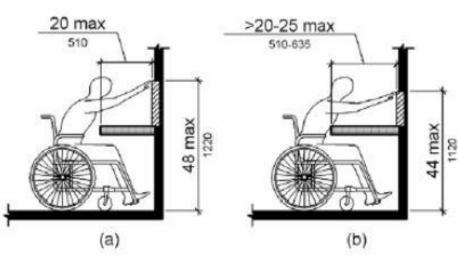


Figure 308.2.2 Obstructed High Forward Reach

## 308.3 Side Reach.

308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (255 mm) maximum.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing

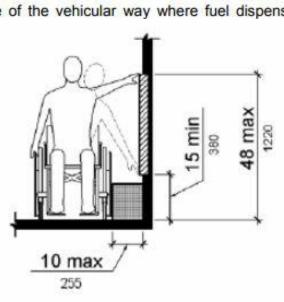


Figure 308.3.1 Unobstructed Side Reach

308.3.2 Obstructed High Reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

# **EXCEPTIONS:**

1. The top of washing machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing

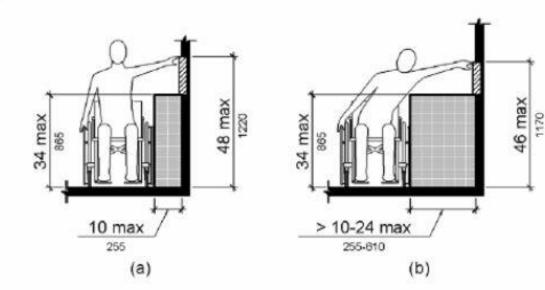


Figure 308.3.2 Obstructed High Side Reach

309 OPERABLE PARTS

**309.1 General.** Operable parts shall comply with 309. 309.2 Clear Floor Space. A clear floor or ground space complying with 305 shall be provided.

**309.3 Height.** Operable parts shall be placed within one or more of the reach ranges specified in

**309.4 Operation.** Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate opeable parts shall be 5

**EXCEPTION:** Gas pump nozzles shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.

# **403 WALKING SURFACES**

403.1 General. Walking surfaces that are a part of an accessible route shall comply with 403.

403.2 Floor or Ground Surface. Floor or ground surfaces shall comply with 302.

403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

403.4 Changes in Level. Changes in level shall comply with 303.

403.5 Clearances. Walking surfaces shall provide clearances complying with 403.5.

**EXCEPTION:** Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 Clear Width. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

**EXCEPTION:** The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

403.5.2 Clear Width at Turn. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

EXCEPTION: Where the clear width at the turn is 60 inches (1525 mm) minimum compliance with 403.5.2 shall not be required.

# 404 DOORS, DOORWAYS, AND GATES

## Figure 404.2.6 Doors in Series and Gates in Series

404.2.7 Door and Gate Hardware. Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail.

2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finish floor or ground provided the self-latching devices are not also selflocking devices and operated by means of a key, electronic opener, or integral combination lock.

Advisory 404.2.7 Door and Gate Hardware. Door hardware that can be operated with a closed fist or a loose grip accommodates the greatest range of users. Hardware that requires simultaneous hand and finger movements require greater dexterity and coordination, and is not recommended.

404.2.8 Closing Speed. Door and gate closing speed shall comply with 404.2.8.

404.2.8.1 Door Closers and Gate Closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

404.2.8.2 Spring Hinges. Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

Interior hinged doors and gates: 5 pounds (22.2 N) maximum.

Sliding or folding doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

Advisory 404.2.9 Door and Gate Opening Force. The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door. It does not apply to the force required to retract bolts or to disengage other devices used to keep the door in a closed position.

404.2.10 Door and Gate Surfaces. Swinging door and gate surfaces within 10 inches (255 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

# **EXCEPTIONS:**

Sliding doors shall not be required to comply with 404.2.10.

2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (255 mm) bottom smooth surface height requirement.

3. Doors and gates that do not extend to within 10 inches (255 mm) of the finish floor or ground shall not be required to comply with 404.2.10.

4. Existing doors and gates without smooth surfaces within 10 inches (255 mm) of the finish floor or ground shall not be required to provide smooth surfaces complying with 404.2.10 provided that if added kick plates are installed, cavities created by such kick plates are capped.

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**ISSUE FOR PERMIT** 

# **ACCESSIBILITY STANDARDS**

2/23/2023

43423-MO01 Project#

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**EXCEPTION:** Vision lights with the lowest part more than 66 inches (1675 mm) from the finish floor or ground shall not be required to comply with 404.2.11.

404.3 Automatic and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

**404.3.1 Clear Width.** Doorways shall provide a clear opening of 32 inches (815 mm) minimum in power-on and power-off mode. The minimum clear width for automatic door systems in a doorway shall be based on the clear opening provided by all leaves in the open position.

# 603 TOILET AND BATHING ROOMS

603.1 General. Toilet and bathing rooms shall comply with 603.

603.2 Clearances. Clearances shall comply with 603.2.

603.2.1 Turning Space. Turning space complying with 304 shall be provided within the room.

603.2.2 Overlap. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

**603.2.3 Door Swing.** Doors shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.

### EXCEPTIONS:

1. Doors to a toilet room or bathing room for a single occupant accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space or clearance provided the swing of the door can be reversed to comply with 603.2.3.

2. Where the toilet room or bathing room is for individual use and a clear floor space complying with 305.3 is provided within the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.

Advisory 603.2.3 Door Swing Exception 1. At the time the door is installed, and if the door swing is reversed in the future, the door must meet all the requirements specified in 404. Additionally, the door swing cannot reduce the required width of an accessible route. Also, avoid violating other building or life safety codes when the door swing is reversed.

603.3 Mirrors. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.

Advisory 603.3 Mirrors. A single full-length mirror can accommodate a greater number of people, including children. In order for mirrors to be usable by people who are ambulatory and people who use wheelchairs, the top edge of mirrors should be 74 inches (1880 mm) minimum from the floor or ground.

603.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

# 604 WATER CLOSETS AND TOILET COMPARTMENTS

604.1 General. Water closets and toilet compartments shall comply with 604.2 through 604.8.

**EXCEPTION:** Water closets and toilet compartments for children's use shall be permitted to comply with 604.9.

604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.

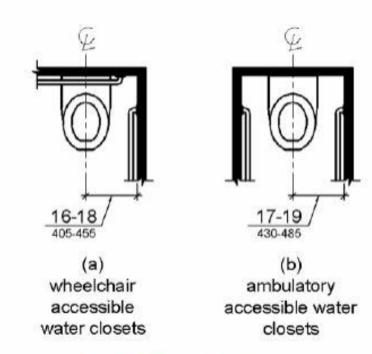
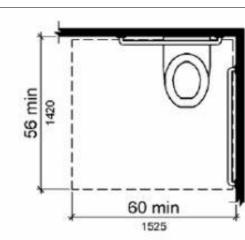


Figure 604.2 Water Closet Location

604.3 Clearance. Clearances around water closets and in toilet compartments shall comply with

604.3.1 Size. Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall.

# 604 WATER CLOSETS AND TOILET COMPARTMENTS



## Figure 604.3.1 Size of Clearance at Water Closets

**604.3.2** Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.

**EXCEPTION:** In residential dwelling units, a lavatory complying with 606 shall be permitted on the rear wall 18 inches (455 mm) minimum from the water closet centerline where the clearance at the water closet is 66 inches (1675 mm) minimum measured perpendicular from the rear wall.

Advisory 604.3.2 Overlap. When the door to the toilet room is placed directly in front of the water closet, the water closet cannot overlap the required maneuvering clearance for the door inside the room.

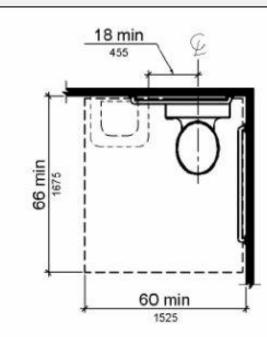


Figure 604.3.2 (Exception) Overlap of Water Closet Clearance in Residential Dwelling Units

**604.4 Seats.** The seat height of a water closet above the finish floor shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

# EXCEPTIONS:

1. A water closet in a toilet room for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 604.4.

2. In residential dwelling units, the height of water closets shall be permitted to be 15 inches (380 mm) minimum and 19 inches (485 mm) maximum above the finish floor measured to the top of the

**604.5 Grab Bars.** Grab bars for water closets shall comply with 609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall.

# EXCEPTIONS:

1. Grab bars shall not be required to be installed in a toilet room for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with

2. In residential dwelling units, grab bars shall not be required to be installed in toilet or bathrooms provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.

In detention or correction facilities, grab bars shall not be required to be installed in housing or holding cells that are specially designed without protrusions for purposes of suicide prevention.

Advisory 604.5 Grab Bars Exception 2. Reinforcement must be sufficient to permit the installation of rear and side wall grab bars that fully meet all accessibility requirements including, but not limited to, required length, installation height, and structural strength.

**604.5.1 Side Wall.** The side wall grab bar shall be 42 inches (1065 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.

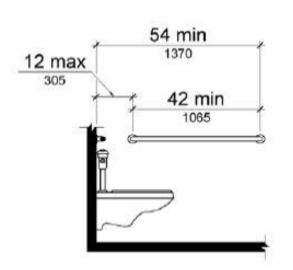


Figure 604.5.1 Side Wall Grab Bar at Water Closets

604.5.2 Rear Wall. The rear wall grab bar shall be 36 inches (915 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

# EXCEPTIONS:

1. The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to the water closet.

2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.

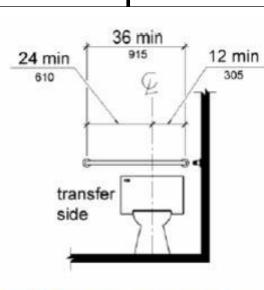


Figure 604.5.2 Rear Wall Grab Bar at Water Closets

**604.6 Flush Controls.** Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.

Advisory 604.6 Flush Controls. If plumbing valves are located directly behind the toilet seat, flush valves and related plumbing can cause injury or imbalance when a person leans back against them. To prevent causing injury or imbalance, the plumbing can be located behind walls or to the side of the toilet; or if approved by the local authority having jurisdiction, provide a toilet seat lid.

604.7 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

Advisory 604.7 Dispensers. If toilet paper dispensers are installed above the side wall grab bar, the outlet of the toilet paper dispenser must be 48 inches (1220 mm) maximum above the finish floor and the top of the gripping surface of the grab bar must be 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor.

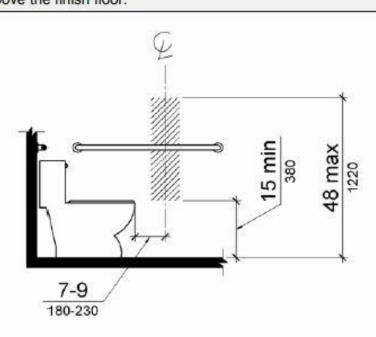


Figure 604.7 Dispenser Outlet Location

**604.8 Toilet Compartments.** Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.

604.8.1 Wheelchair Accessible Compartments. Wheelchair accessible compartments shall comply

604.8.1.1 Size. Wheelchair accessible compartments shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 56 inches (1420 mm) deep minimum for wall hung water closets and 59 inches (1500 mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 59 inches (1500 mm) deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear

Advisory 604.8.1.1 Size. The minimum space required in toilet compartments is provided so that a person using a wheelchair can maneuver into position at the water closet. This space cannot be obstructed by baby changing tables or other fixtures or conveniences, except as specified at 604.3.2 (Overlap). If toilet compartments are to be used to house fixtures other than those associated with the water closet, they must be designed to exceed the minimum space requirements. Convenience fixtures such as baby changing tables must also be accessible to people with disabilities as well as to other users. Toilet compartments that are designed to meet, and not exceed, the minimum space requirements may not provide adequate space for maneuvering into position at a baby changing table.

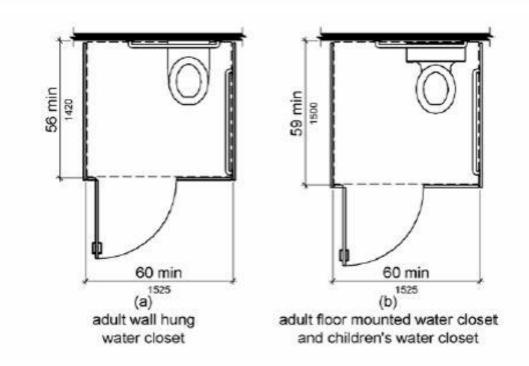


Figure 604.8.1.1 Size of Wheelchair Accessible Toilet Compartment

that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (100 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

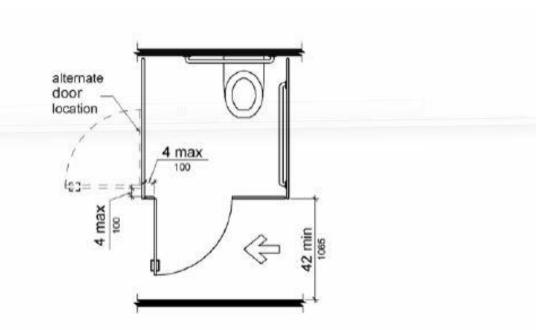


Figure 604.8.1.2 Wheelchair Accessible Toilet Compartment Doors

604.8.1.3 Approach. Compartments shall be arranged for left-hand or right-hand approach to the

**604.8.1.4 Toe Clearance.** The front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the finish floor.

**EXCEPTION:** Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) deep with a wall-hung water closet or 65 inches (1650 mm) deep with a floor-mounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) wide. Toe clearance at the front partition is not required in a compartment for children's use that is greater than 65 inches (1650 mm) deep.

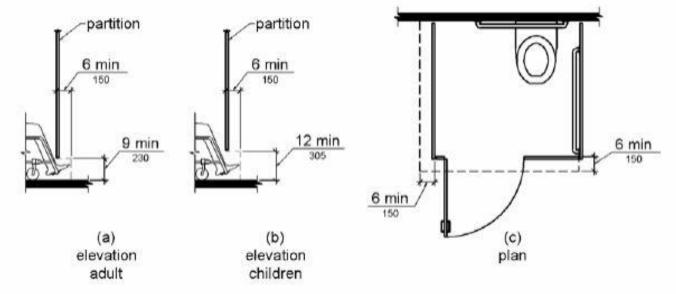


Figure 604.8.1.4 Wheelchair Accessible Toilet Compartment Toe Clearance

604.8.1.5 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided and shall be located on the wall closest to the water closet. In addition, a rear-wall grab bar complying with 604.5.2 shall be provided.

**604.8.2 Ambulatory Accessible Compartments.** Ambulatory accessible compartments shall comply with 604.8.2.

604.8.2.1 Size. Ambulatory accessible compartments shall have a depth of 60 inches (1525 mm) minimum and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

604.8.2.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

# 605 URINALS

605.1 General. Urinals shall comply with 605.

Advisory 605.1 General. Stall-type urinals provide greater accessibility for a broader range of persons, including people of short stature.

605.2 Height and Depth. Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (430 mm) maximum above the finish floor or ground. Urinals shall be 13 1/2 inches (345 mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.

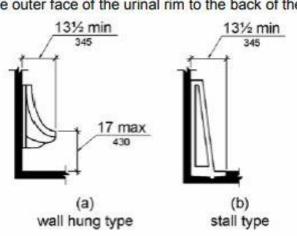


Figure 605.2 Height and Depth of Urinals

605.3 Clear Floor Space. A clear floor or ground space complying with 305 positioned for forward approach shall be provided.

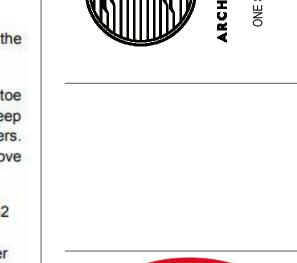
605.4 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.

# 606 LAVATORIES AND SINKS

606.1 General. Lavatories and sinks shall comply with 606.

Advisory 606.1 General. If soap and towel dispensers are provided, they must be located within the reach ranges specified in 308. Locate soap and towel dispensers so that they are conveniently usable by a person at the accessible lavatory.

606.2 Clear Floor Space. A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided.



SUBS

3508 N. BELT HIGHWA ST. JOSEPH, MO 6450

Description

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# ACCESSIBILITY STANDARDS

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**A O I** 

2. A lavatory in a toilet room or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to provide knee and toe clearance complying with 306.

3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:

(a) the cabinetry can be removed without removal or replacement of the fixture;

(b) the finish floor extends under the cabinetry; and

(c) the walls behind and surrounding the cabinetry are finished.
4. A knee clearance of 24 inches (610 mm) minimum above the finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or

counter surface is 31 inches (785 mm) maximum above the finish floor or ground.

5. A parallel approach complying with 305 shall be permitted to lavatories and sinks used primarily

by children 5 years and younger.6. The dip of the overflow shall not be considered in determining knee and toe clearances.

7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with 306.

606.3 Height. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (865 mm) maximum above the finish floor or ground.

#### **EXCEPTIONS:**

 A lavatory in a toilet or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 606.3.

2. In residential dwelling unit kitchens, sinks that are adjustable to variable heights, 29 inches (735 mm) minimum and 36 inches (915 mm) maximum, shall be permitted where rough-in plumbing permits connections of supply and drain pipes for sinks mounted at the height of 29 inches (735 mm)

606.4 Faucets. Controls for faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

606.5 Exposed Pipes and Surfaces. Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks

# 609 GRAB BARS

609.1 General. Grab bars in toilet facilities and bathing facilities shall comply with 609.

609.2 Cross Section. Grab bars shall have a cross section complying with 609.2.1 or 609.2.2.

609.2.1 Circular Cross Section. Grab bars with circular cross sections shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

609.2.2 Non-Circular Cross Section. Grab bars with non-circular cross sections shall have a crosssection dimension of 2 inches (51 mm) maximum and a perimeter dimension of 4 inches (100 mm) minimum and 4.8 inches (120 mm) maximum.

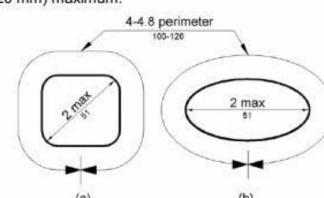


Figure 609.2.2 Grab Bar Non-Circular Cross Section

609.3 Spacing. The space between the wall and the grab bar shall be 1 1/2 inches (38 mm). The space between the grab bar and projecting objects below and at the ends shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar and projecting objects above shall be 12 inches (305 mm) minimum.

**EXCEPTION:** The space between the grab bars and shower controls, shower fittings, and other grab bars above shall be permitted to be 1 1/2 inches (38 mm) minimum.

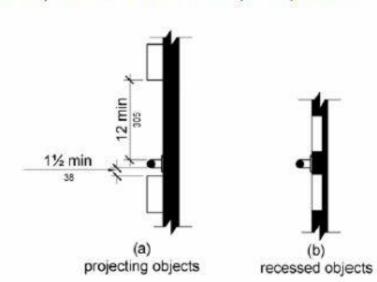


Figure 609.3 Spacing of Grab Bars

609.4 Position of Grab Bars. Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with 604.9, grab bars shall be installed in a horizontal position 18 inches (455 mm) minimum and 27 inches (685 mm) maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with 607.4.1.1 or 607.4.2.1.

609.5 Surface Hazards. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.

609.6 Fittings. Grab bars shall not rotate within their fittings.

**609.7 Installation.** Grab bars shall be installed in any manner that provides a gripping surface at the specified locations and that does not obstruct the required clear floor space.

**609.8 Structural Strength.** Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

# 703 SIGNS

**703.1 General.** Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

**703.2 Raised Characters.** Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised characters shall be installed in accordance with 703.4.

**703.4 Installation Height and Location.** Signs with tactile characters shall comply with 703.4.

**703.4.1 Height Above Finish Floor or Ground.** Tactile characters on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

**EXCEPTION:** Tactile characters for elevator car controls shall not be required to comply with 703.4.1.

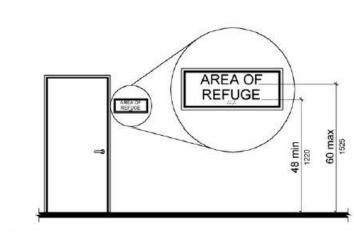


Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

**703.4.2 Location.** Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

**EXCEPTION:** Signs with tactile characters shall be permitted on the push side of doors with closers and without hold-open devices.

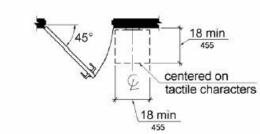


Figure 703.4.2 Location of Tactile Signs at Doors

703.5 Visual Characters. Visual characters shall comply with 703.5.

**703.6.1 Pictogram Field.** Pictograms shall have a field height of 6 inches (150 mm) minimum. Characters and braille shall not be located in the pictogram field.

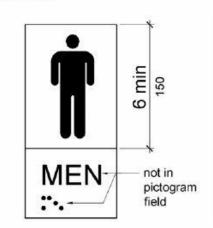


Figure 703.6.1 Pictogram Field

703.7.2 Symbols.

**703.7.2.1 International Symbol of Accessibility.** The International Symbol of Accessibility shall comply with Figure 703.7.2.1.



Figure 703.7.2.1 International Symbol of Accessibility

# 902 DINING SURFACES AND WORK SURFACES

902.1 General. Dining surfaces and work surfaces shall comply with 902.2 and 902.3.

**EXCEPTION:** Dining surfaces and work surfaces for children's use shall be permitted to comply with 902.4.

Advisory 902.1 General. Dining surfaces include, but are not limited to, bars, tables, lunch counters, and booths. Examples of work surfaces include writing surfaces, study carrels, student laboratory stations, baby changing and other tables or fixtures for personal grooming, coupon counters, and where covered by the ABA scoping provisions, employee work stations.

902.2 Clear Floor or Ground Space. A clear floor space complying with 305 positioned for a forward approach shall be provided. Knee and toe clearance complying with 306 shall be provided.

902.3 Height. The tops of dining surfaces and work surfaces shall be 28 inches (710 mm) minimum and 34 inches (865 mm) maximum above the finish floor or ground.

902.4 Dining Surfaces and Work Surfaces for Children's Use. Accessible dining surfaces and work surfaces for children's use shall comply with 902.4.

**EXCEPTION:** Dining surfaces and work surfaces that are used primarily by children 5 years and younger shall not be required to comply with 902.4 where a clear floor or ground space complying with 305 positioned for a parallel approach is provided.

**902.4.1 Clear Floor or Ground Space.** A clear floor space complying with 305 positioned for forward approach shall be provided. Knee and toe clearance complying with 306 shall be provided, except that knee clearance 24 inches (610 mm) minimum above the finish floor or ground shall be permitted.

902.4.2 Height. The tops of tables and counters shall be 26 inches (660 mm) minimum and 30 inches (760 mm) maximum above the finish floor or ground.

# 903 BENCHES

903.1 General. Benches shall comply with 903.

903.2 Clear Floor or Ground Space. Clear floor or ground space complying with 305 shall be provided and shall be positioned at the end of the bench seat and parallel to the short axis of the bench.

903.3 Size. Benches shall have seats that are 42 inches (1065 mm) long minimum and 20 inches (510 mm) deep minimum and 24 inches (610 mm) deep maximum.

903.4 Back Support. The bench shall provide for back support or shall be affixed to a wall. Back support shall be 42 inches (1065 mm) long minimum and shall extend from a point 2 inches (51 mm) maximum above the seat surface to a point 18 inches (455 mm) minimum above the seat surface. Back support shall be 2 1/2 inches (64 mm) maximum from the rear edge of the seat measured horizontally.

Advisory 903.4 Back Support. To assist in transferring to the bench, consider providing grab bars on a wall adjacent to the bench, but not on the seat back. If provided, grab bars cannot obstruct transfer to the bench.

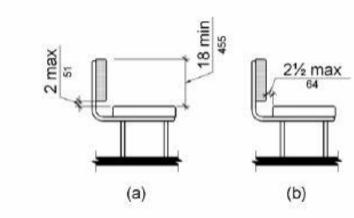


Figure 903.4 Bench Back Support

903.5 Height. The top of the bench seat surface shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the finish floor or ground.

903.6 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

903.7 Wet Locations. Where installed in wet locations, the surface of the seat shall be slip resistant and shall not accumulate water.

# 904 CHECK-OUT AISLES & SALES/SERVICE COUNTER

904.4 Sales and Service Counters. Sales counters and service counters shall comply with 904.4.1 or 904.4.2. The accessible portion of the counter top shall extend the same depth as the sales or service counter top.

**EXCEPTION:** In alterations, when the provision of a counter complying with 904.4 would result in a reduction of the number of existing counters at work stations or a reduction of the number of existing mail boxes, the counter shall be permitted to have a portion which is 24 inches (610 mm) long minimum complying with 904.4.1 provided that the required clear floor or ground space is centered on the accessible length of the counter.

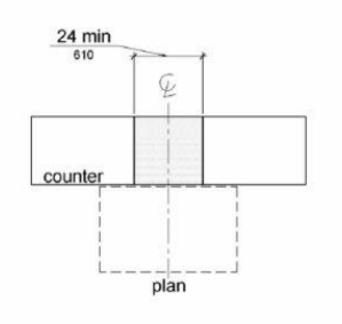


Figure 904.4 (Exception) Alteration of Sales and Service Counters

904.4.1 Parallel Approach. A portion of the counter surface that is 36 inches (915 mm) long minimum and 36 inches (915 mm) high maximum above the finish floor shall be provided. A clear floor or ground space complying with 305 shall be positioned for a parallel approach adjacent to the 36 inch (915 mm) minimum length of counter.

**EXCEPTION:** Where the provided counter surface is less than 36 inches (915 mm) long, the entire counter surface shall be 36 inches (915 mm) high maximum above the finish floor.

904.4.2 Forward Approach. A portion of the counter surface that is 30 inches (760 mm) long minimum and 36 inches (915 mm) high maximum shall be provided. Knee and toe space complying with 306 shall be provided under the counter. A clear floor or ground space complying with 305 shall be positioned for a forward approach to the counter.

904.5 Food Service Lines. Counters in food service lines shall comply with 904.5.

904.5.1 Self-Service Shelves and Dispensing Devices. Self-service shelves and dispensing devices for tableware, dishware, condiments, food and beverages shall comply with 308.





(760 mm) long

Description

These drawings/specifications are the property of Oculus Inc. They are furnished as contract documents only. The seal(s) and signature(s) apply only to the document to which they are affixed, and expressly disclaim any responsibility for all other plans, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project. Additionally these drawings and seal(s) shall in no way convey or imply any type of warranty or certification relating to the performance of products and materials beyond those provided by their respective manufacturer.



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# ACCESSIBILITY STANDARDS

2/23/2023

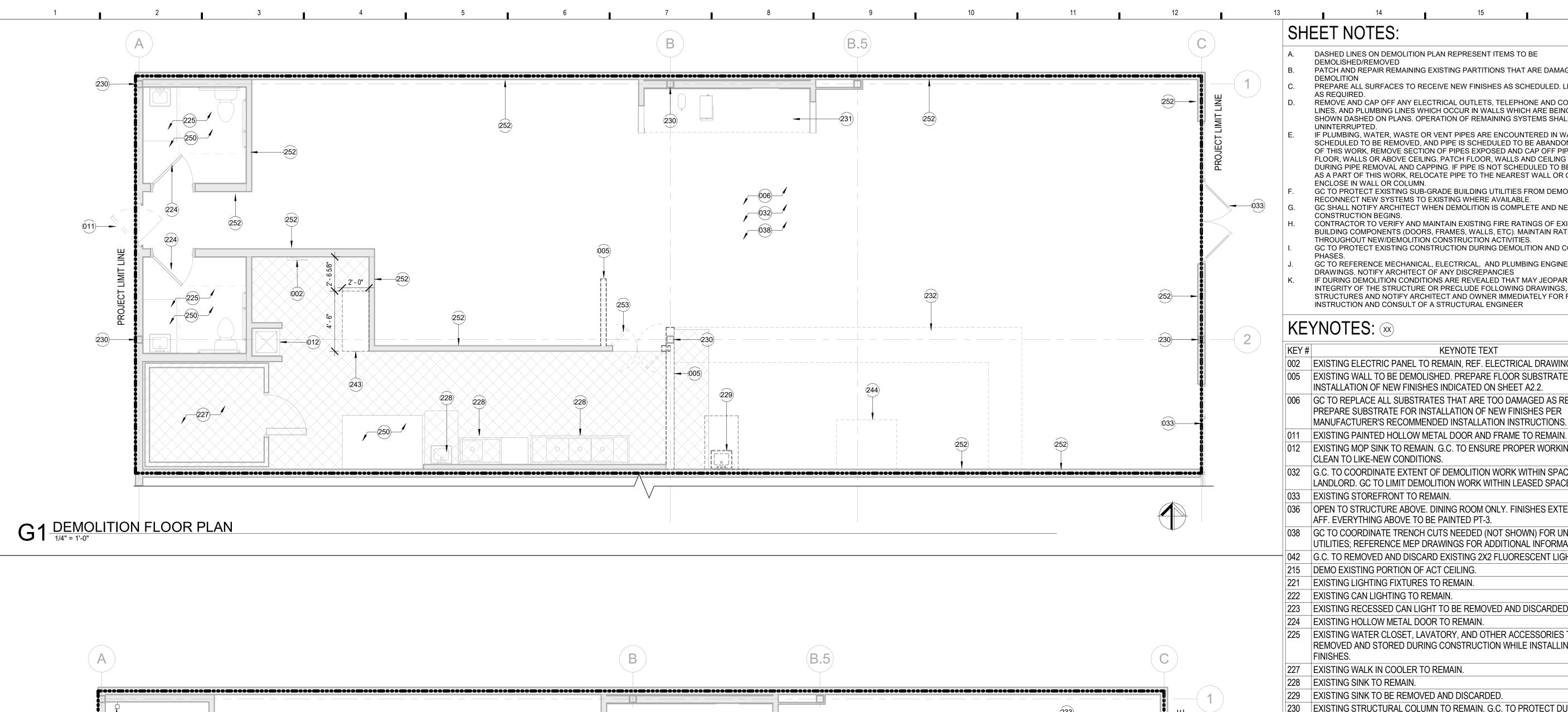
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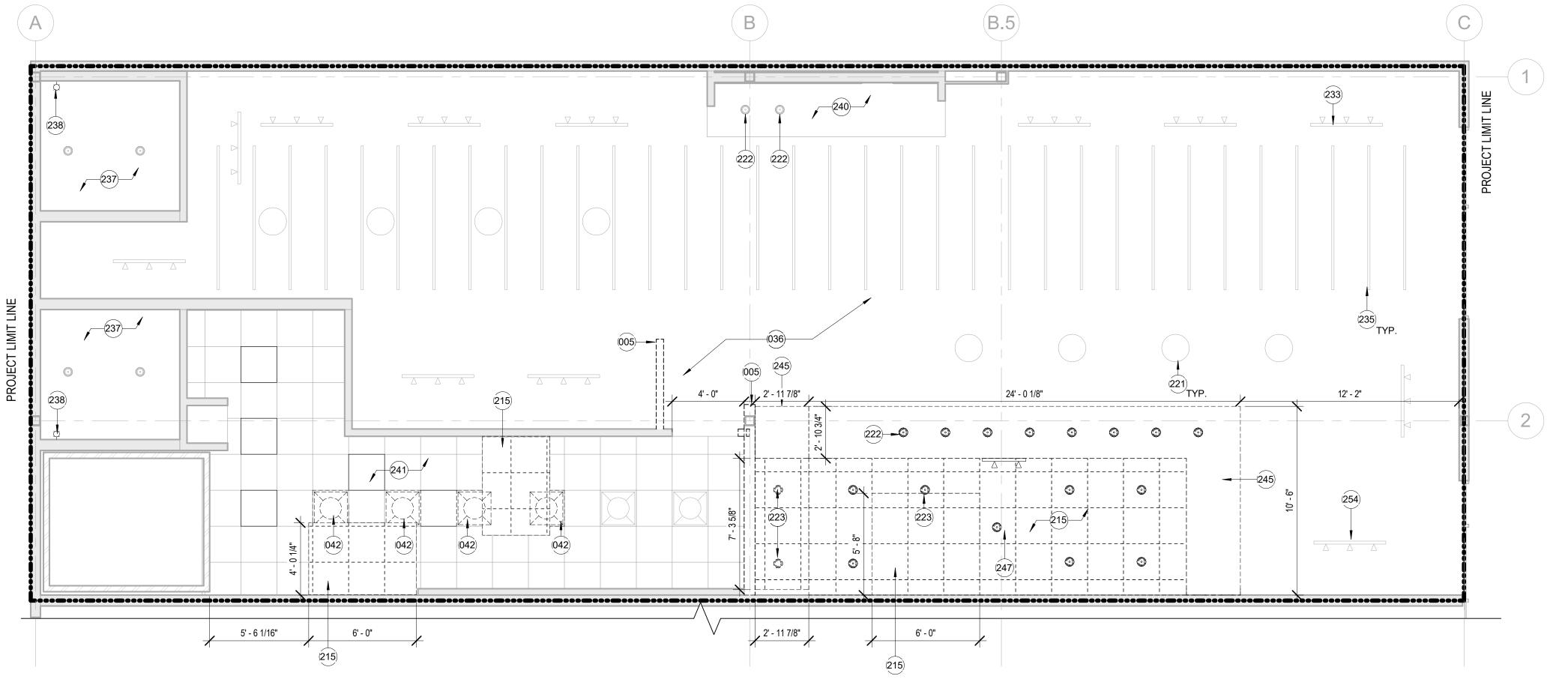
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S1 DEMOLITION REFLECTED CEILING PLAN

1/4" = 1'-0"

# SHEET NOTES:

- DASHED LINES ON DEMOLITION PLAN REPRESENT ITEMS TO BE
- DEMOLISHED/REMOVED PATCH AND REPAIR REMAINING EXISTING PARTITIONS THAT ARE DAMAGED BY
- DEMOLITION
- PREPARE ALL SURFACES TO RECEIVE NEW FINISHES AS SCHEDULED. LEVEL FLOOR AS REQUIRED REMOVE AND CAP OFF ANY ELECTRICAL OUTLETS, TELEPHONE AND COMMUNICATION
- LINES, AND PLUMBING LINES WHICH OCCUR IN WALLS WHICH ARE BEING REMOVED AS SHOWN DASHED ON PLANS. OPERATION OF REMAINING SYSTEMS SHALL CONTINUE UNINTERRUPTED. IF PLUMBING, WATER, WASTE OR VENT PIPES ARE ENCOUNTERED IN WALL SCHEDULED TO BE REMOVED, AND PIPE IS SCHEDULED TO BE ABANDONED AS A PART OF THIS WORK, REMOVE SECTION OF PIPES EXPOSED AND CAP OFF PIPE WITH-IN
- AS A PART OF THIS WORK, RELOCATE PIPE TO THE NEAREST WALL OR COLUMN AND ENCLOSE IN WALL OR COLUMN. GC TO PROTECT EXISTING SUB-GRADE BUILDING UTILITIES FROM DEMOLITION AND

FLOOR, WALLS OR ABOVE CEILING. PATCH FLOOR, WALLS AND CEILING DAMAGED DURING PIPE REMOVAL AND CAPPING. IF PIPE IS NOT SCHEDULED TO BE ABANDONED

- RECONNECT NEW SYSTEMS TO EXISTING WHERE AVAILABLE. GC SHALL NOTIFY ARCHITECT WHEN DEMOLITION IS COMPLETE AND NEW CONSTRUCTION BEGINS.
- CONTRACTOR TO VERIFY AND MAINTAIN EXISTING FIRE RATINGS OF EXISTING BUILDING COMPONENTS (DOORS, FRAMES, WALLS, ETC). MAINTAIN RATINGS THROUGHOUT NEW/DEMOLITION CONSTRUCTION ACTIVITIES. GC TO PROTECT EXISTING CONSTRUCTION DURING DEMOLITION AND CONSTRUCTION
- GC TO REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING ENGINEERED DRAWINGS. NOTIFY ARCHITECT OF ANY DISCREPANCIES
- IF DURING DEMOLITION CONDITIONS ARE REVEALED THAT MAY JEOPARDIZE THE INTEGRITY OF THE STRUCTURE OR PRECLUDE FOLLOWING DRAWINGS, GC TO SHORE STRUCTURES AND NOTIFY ARCHITECT AND OWNER IMMEDIATELY FOR FURTHER INSTRUCTION AND CONSULT OF A STRUCTURAL ENGINEER

# KEYNOTES: (XX)

KEY#	KEYNOTE TEXT
002	EXISTING ELECTRIC PANEL TO REMAIN, REF. ELECTRICAL DRAWING

INSTALLATION OF NEW FINISHES INDICATED ON SHEET A2.2. 006 GC TO REPLACE ALL SUBSTRATES THAT ARE TOO DAMAGED AS REQUIRED AND

EXISTING WALL TO BE DEMOLISHED. PREPARE FLOOR SUBSTRATE FOR

- PREPARE SUBSTRATE FOR INSTALLATION OF NEW FINISHES PER MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- 012 EXISTING MOP SINK TO REMAIN. G.C. TO ENSURE PROPER WORKING ORDER AND
  - CLEAN TO LIKE-NEW CONDITIONS.
- 032 G.C. TO COORDINATE EXTENT OF DEMOLITION WORK WITHIN SPACE WITH LANDLORD. GC TO LIMIT DEMOLITION WORK WITHIN LEASED SPACE.
- 033 EXISTING STOREFRONT TO REMAIN.
- OPEN TO STRUCTURE ABOVE. DINING ROOM ONLY. FINISHES EXTENDED TO 12' AFF. EVERYTHING ABOVE TO BE PAINTED PT-3.
- 038 GC TO COORDINATE TRENCH CUTS NEEDED (NOT SHOWN) FOR UNDERGROUND UTILITIES; REFERENCE MEP DRAWINGS FOR ADDITIONAL INFORMATION
- 042 G.C. TO REMOVED AND DISCARD EXISTING 2X2 FLUORESCENT LIGHT.
- 215 DEMO EXISTING PORTION OF ACT CEILING.
- 221 EXISTING LIGHTING FIXTURES TO REMAIN.
- 222 EXISTING CAN LIGHTING TO REMAIN.
- 223 EXISTING RECESSED CAN LIGHT TO BE REMOVED AND DISCARDED.
- 224 EXISTING HOLLOW METAL DOOR TO REMAIN.
- EXISTING WATER CLOSET, LAVATORY, AND OTHER ACCESSORIES TO BE REMOVED AND STORED DURING CONSTRUCTION WHILE INSTALLING NEW FINISHES.
- 227 EXISTING WALK IN COOLER TO REMAIN.
- 228 EXISTING SINK TO REMAIN.
- EXISTING SINK TO BE REMOVED AND DISCARDED.
- 230 EXISTING STRUCTURAL COLUMN TO REMAIN. G.C. TO PROTECT DURING CONSTRUCTION.
- 231 EXISTING COUNTER AND CASEWORK TO REMAIN.
- 232 EXISTING MILLWORK EQUIPMENT, AND ACCESSORIES TO BE REMOVED AND DISCARDED.
- 233 EXISTING TRACK LIGHTS TO REMAIN.
- 235 EXISTING SUSPENDED WOOD TROFFERS TO REMAIN.
- EXISTING RESTROOM GYP CEILING AND CAN LIGHTS TO REMAIN.
- EXISTING WALL SCONES TO REMAIN. G.C. TO CLEAN TO LIKE NEW CONDITIONS. EXISTING GYP. CEILING TO REMAIN. G.C. TO PATCH AND REPAIR TO LIKE NEW
  - CONDITIONS.
- 241 G.C. TO REPLACE ANY DAMAGE OR MISCOLORED ACT TILES.
- DEMO EXISTING RAISED CONCRETE PAD. LEVEL AND PREP FOR NEW SURFACE.
- EXSITING PIZZA OVEN TO BE REMOVED AND DISCARDED. DEMO EXISTING GYP. BD. SOFFIT
- 247 DEMO AND DISCARD EXISTING TRACK LIGHTS.
- G.C. TO REMOVE ALL EXISTING FLOOR AND WALL FINISHES. G.C. TO PREP AREA FOR NEW FINISHES.
- | 252 | EXISTING WALL FINISH TO BE REMOVED. PATCH AND REPAIR FOR INSTALLATION OF NEW FINISHES.
- 253 G.C. TO REMOVE EXISTING SALOON DOORS AND FRAME.
- 254 DEMO EXISTING TRACK LIGHT.

# WALL & DOOR LEGEND

EXISTING CONSTRUCTION TO BE DEMOLISHED EXISTING CONSTRUCTION TO REMAIN. PARTITION

INSULATED PARTITION

LOW PARTITION, SEE SECTIONS FOR HEIGHT

RATED PARTITION

**EXISTING DOOR TO REMAIN** 

NEW CONSTRUCTION DOOR

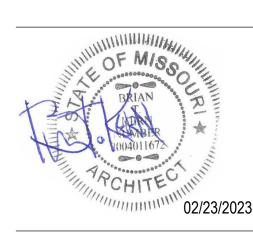
EXISTING CAN LIGHTING TO DEMOLISHED

EXISTING TRACK LIGHTING TO REMAIN



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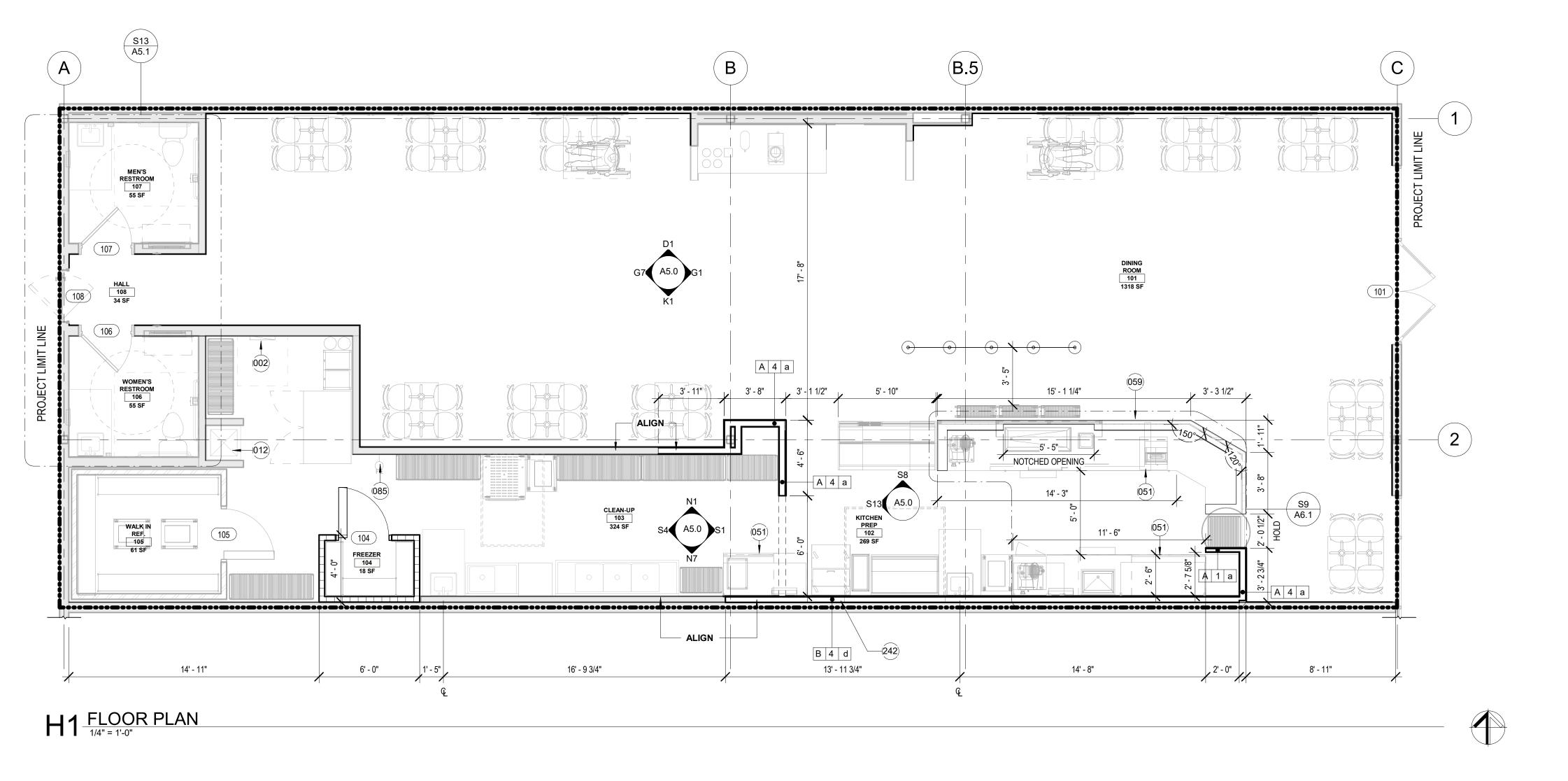
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**DEMOLITION PLAN** 

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# SHEET NOTES:

- ALL DOOR OPENINGS PERPENDICULAR TO A WALL ARE 6" FROM THE WALL UON
- GC TO NOTIFY ARCHITECT OF ANY DISCREPENCIES PRIOR TO CONSTRUCTION.
- REFER TO SHEET A0.3 FOR ACCESSIBLE DOOR CLEARANCES
- ALL DIMENSIONS ARE TO FINISH FACE OF GWB UON REFERENCE SHEET A6.0 FOR PARTITION TYPES
- SWINGING DOOR AND GATE SURFACES WITHIN 10" OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACES SHALL BE WITHIN 1/16" OF THE SAME PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED ADA 404.2.10
- ACCESSIBLE TABLES SHALL BE POSITIONED FOR A FORWARD APPROACH WITH CLEAR FLOOR SPACE COMPLIANT WITH ADA 305, SHALL BE 28" TO 34" IN HEIGHT TO THE TOP, HAVE 27" MINIMUM HIGH KNEE SPACE AND HAVE KNEE AND TOE CLEARANCE TO MEET ADA 306. ALL FOOD CONDIMENTS, UTENSILS, DRINK DISPENSERS, ETC. SHALL BE LOCATED WITHIN THE REACH RANGES REQUIRED BY ADA AND NO HIGHER THAN 48" ABOVE THE FLOOR.

EXIT DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR ERROR. DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.

# KEYNOTES: 🕸

**KEYNOTE TEXT** 002 EXISTING ELECTRIC PANEL TO REMAIN, REF. ELECTRICAL DRAWINGS 012 EXISTING MOP SINK TO REMAIN. G.C. TO ENSURE PROPER WORKING ORDER AND CLEAN TO LIKE-NEW CONDITIONS.

051 MILLWORK/CASEWORK BY G.C.

242 NEW WALL TO ALIGN WITH EXISTING.

059 HALF-HEIGHT PARTITION BELOW, SEE SECTIONS 085 PROVIDE FIRE EXTINGUISHER PER IFC SECTION 906.

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# HARDWARE

HW1 RESTROOM DOORS:

- ADA LEVER HARDWARE EQUIV TO SCHLAGE RHODES TURN/PUSH LOCKSET: ANSI F82, GRADE 1, EQUIV TO SCHLAGE ND53PD HARDWARE FINISH: #626 BRUSHED S/S
- AUTO-CLOSER: ANSI A156.4, GRADE 1, EQUIV TO LCN 4041 WALL-BUMPER: GLYNN-JOHNSON 50C AT HANDLE PLATES: 8" H x 16 GA FLUSH S/S KICK PLATE AT BOTH SIDES OF DOOR
- HW2 KITCHEN SERVICE DOOR: ADA LEVER HARDWARE EQUIV TO SCHLAGE RHODES
  - PASSAGE LOCKSET: ANSI F82, GRADE 1, EQUIV TO SCHLAGE ND10S-RHO HARDWARE FINISH: #626 BRUSHED S/S
  - AUTO-CLOSER: ANSI A156.4, GRADE 1, EQUIV TO LCN 4041 WALL-BUMPER: GLYNN-JOHNSON 50C AT HANDLE PLATES: 8" H x 16 GA FLUSH S/S KICK PLATE AT BOTH SIDES OF DOOR

HW3 STOREFRONT DOORS:

- ENTRANCE LOCK W/ PANIC EXIT TOUCH PAD FULL WIDTH, EQUIV TO VON DUPRIN SERIES 98
- AUTO-CLOSER: ANSI A156.4, GRADE 1 EQUIV TO LCN 4041

ROLL-THRU ADA SADDLE THRESHOLD

WALL AND DOOR LEGEND DOOR SCHEDULE

FRAME DOOR THICKNESS TYPE MATERIAL **HARDWARE** TYPE MATERIAL Comments

DOOR # | WIDTH | HEIGHT 101 | 6' - 0" | 7' - 0" EXIST. EXIST. **EXIST** EXISTING DOOR TO REMAIN. G.C. TO RE-KEY PER HW3. 0' - 1 3/4" EXIST. 104 | 3' - 0" | 7' - 0" DOOR PROVIDED BY VENDOR, VISION LIGHT TO BE TEMPERED OR LAMINATED GLASS. -EXISTING COOLER DOOR TO REMAIN. G.C. TO ENSURE DOOR IS IN PROPER WORKING 105 | 3' - 0" EXIST. EXIST. EXIST. EXIST. -106 | 3' - 0" | 7' - 0" 0' - 1 3/4" EXIST. EXIST. EXIST. **EXIST** EXIST. EXISTING DOOR TO REMAIN. G.C. TO RE-KEY PER HW1. PAINT DOOR AND FRAME PT-5. **EXIST** 0' - 1 3/4" EXIST. EXIST. **EXIST** EXISTING DOOR TO REMAIN. G.C. TO RE-KEY PER HW1. PAINT DOOR AND FRAME PT-5. 107 | 3' - 0" | 7' - 0" EXIST. 108 | 3' - 0" | 7' - 0" EXIST. EXIST. EXIST. EXIST. EXIST. 0' - 2 3/8" EXISTING DOOR TO REMAIN. G.C. TO RE-KEY PER HW2.

EXISTING CONSTRUCTION TO BE DEMOLISHED EXISTING CONSTRUCTION TO REMAIN.

INSULATED PARTITION

LOW PARTITION, SEE SECTIONS FOR HEIGHT

RATED PARTITION

EXISTING DOOR TO REMAIN

NEW CONSTRUCTION DOOR

EXISTING CAN LIGHTING TO DEMOLISHED

EXISTING TRACK LIGHTING TO REMAIN

DOOR ABBREVIATIONS:

ALUMINUM STOREFRONT CO CASED OPENING CG **COILING GRILLE** F (D) FACT FG FR 45 G GL-1 HO HW

(Ō)

FLUSH (DUTCH) FACTORY **FULL GLASS** FIRE RATING LABEL IN MINUTES

PANEL PAIR POCKET SLIDE POLYVINYL CHLORIDE SMOKE CONTROL "S" LABEL STEEL COMPOSITE CORE STEEL KNOCK-DOWN STEEL WELDED TRANSPARENT FINISH - CLEAR

**GLAZING TYPE** HOLD-OPEN HARDWARE MANUFACTURER'S STANDARD NON-CASED OPENING OPPOSITE

TRANSPARENT FINISH - STAINED WOOD HOLLOW CORE WOOD SOLID CORE

STL STL-CC STL-KD STL-W TC TS WD WD-HC WD-SC

MFR NCO OPP PNL PR

TEMPERATURE RISE LABEL - DOOR

PS PVC

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2/23/2023

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**FLOOR PLAN** 

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# FINISH FLOOR NOTES

NO PAINTING OR INTERIOR FINISHING SHALL BE DONE UNDER CONDITIONS WHICH WILL JEOPARDIZE THE QUALITY OR APPEARANCE OF SUCH WORK. ALL WORKMANSHIP WHICH IS JUDGED LESS THAN FIRST QUALITY BY THE ARCHITECT WILL BE REJECTED. FLAME SPREAD TO BE CLASS I: 0-25. SMOKE DENSITY TO BE LESS THAN 450.

ALL SURFACES SHALL BE PREPARED TO RECEIVE THE SPECIFIED FINISH. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED, SPACKLED AND SANDED SMOOTH AND PREPARED TO RECEIVE THE SPECIFIED FINISH.

PROVIDE ONE PRIMER COAT AND 2 FINISH COATS AT ALL PAINTED WALLS.

SEE FINISH PLAN, ELEVATIONS AND DETAILS FOR CLARIFICATION OF EXTENT OF FINISH MATERIALS.

ALL VERTICAL SURFACES U.O.N. SHALL RECEIVE WALL BASE.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALLOWING FOR DELIVERY LEAD TIMES FOR ALL FABRICS AND OTHER CUSTOM FINISHES WITHIN THE CONSTRUCTION SCHEDULE. ALL DELIVERY TIMES MUST BE CONFIRMED, AND ANY EXCESSIVE LEAD TIME MUST BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY TO ALLOW FOR RE-SPECIFICATION IF

EXAMINE ALL FINISH SURFACES AFTER COMPLETION OF WORK AND "TOUCH-UP" AS REQUIRED.

- UPON COMPLETION, REMOVE ALL PAINT FROM WHERE IT HAS SPILLED, SPLASHED OR SPLATTERED ON EXPOSED
- INTERIOR GYPSUM BOARD SURFACES SHALL BE WIPED WITH A DAMP CLOTH JUST PRIOR TO APPLICATION OF THE FIRST COAT, IN ORDER TO LAY FLAT ANY NAP WHICH MAY HAVE FORMED IN SANDING PROCESS.
- ALL INTERSECTIONS OF FLOOR FINISH MATERIALS SHALL BE LOCATED DIRECTLY UNDER CENTER OF DOOR, WHERE OCCURS. U.O.N.

REFERENCE INTERIOR ELEVATIONS FOR WALL FINISHES.

# ROOM FINISH SCHEDULE

RM#		RM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	COMMENTS
Ι ΧΙΝΙ π		TAW INAIVIL	TINIOTT	TINIOTT	TIMOTI	OLILINO I INIOIT	COMMENTS
101	DINING	ROOM	FF-1	BT-1	SEE ELEV.	CT-2	
102	KITCHE	EN PREP	QT-1	BT-3	SEE ELEV.	CT-1	
103	CLEAN	-UP	EXISITNG	EXISTING	SEE ELEV.	CT-1	
104	FREEZ	ER	STEEL	STEEL	STEEL	STEEL	
105	WALK I	IN REF.	EXISITNG	EXISTING	EXISTING.	EXISTING	
106	WOME	N'S RESTROOM	FF-1	-	SEE ELEV.	EXISTING	
107	MEN'S	RESTROOM	FF-1	-	SEE ELEV.	EXISTING	
108	HALL		FF-1	BT-1	SEE ELEV.	CT-2	
L/C	Д. Ц				I/E\/\	OTE TEVT	
KE	Y #				KEYN	OTE TEXT	
249	G.C. TO INSTALL NEW POLYCRETE DUR-A-FLEX COVERING TO MATCH EXISTING FLOOR.						

# | G.C. TO INSTALL NEW POLYCRETE DUR-A-FLEX COVERING TO MATCH EXISTING FLOOR.

# FINISH SPECIFICATIONS XX

	FLOORING AND WALL BASE									
TAG	SOURCE	ТҮРЕ	DESCRIPTION	COLOR	COMMENTS					
FF-1	DAL TILE	PROCELAIN TIILE	6X36 JM BROWN WOOD	PART #N813 JM6361PR	CUSTOMER AREAS - DINING, RESTROOM, AND HALLWAY(S). 6"X36", 5/16 D. GROUT: MAPEI ULTRACOLOR PLUS FA - GRAY 09. GROUT JOINT RECOMMENDED AT 3/16". PATTERN TO BE INSTALLED IN RANDOM ARRANGEMENT.					
FF-2					ALTERNATIVE TO FF-1					
QT-1	DAL TILE	QUARRY TIILE	6X6 PAVER 0Q74	BLACK	KITCHEN FLOORING. GROUT: MAPEI FLEXCOLOR CQ10 BLACK					
BT-1	DAL TILE	PROCELAIN TIILE	IRON CRAFT	SABLE BLACK IC15 - UNPOLISHED	CUT FULL 12"X24" TILE (WT-2) DOWN TO 6"X12" FOR DINING ROOM WALL BASE, AND 4"X12" ON MILLWORK TOE KICK IN CUSTOMER AREAS. USE SCHLUTER DILEX-AHK (POLISHED NICKEL) WHEN COVE BASE APPLICATION IS REQUIRED. GROUT: MAPEI ULTRACOLOR PLUS FA - GRAY 09					
ВТ-3	DAL TILE	6X6 QUARRY COVE TILE	6X6 QUARRY COVE TILE 0Q74	BLACK	WILL BE INSTALLED AROUND THE PERIMETER OF KITCHEN AND KITCHEN MILLWORK TOE KICK. GROUT: MAPEI FLEXCOLOR CQ10 BLACK					
NOTES:										

1. IF INTERIOR TRANSITIONS STRIPS ARE TO BE REQUIRED, USE SCHULTER-RENO IN SATIN ANODIZED ALUMINUM. 2. FOR COVE BASE APPLICATION IN THE RESTROOM(S), USE SCHLUTER DILEX-AHK (POLISHED NICKEL) BELOW FULL WT-2 TILES. NO CUT TILE IS REQUIRED. REFER TO ELEVATIONS.

	COUNTER FINISHES								
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS				
SS-1	COUNTERTOP	CONSENTINO	SILESTONE - ETERNAL SERIES 2 CM	CHARCOAL SOAPSTONE - SUEDE	COUNTERTOP FINISH FOR ALL MILLWORK				
	FINISH REMOVED								

			SERIES 2 CM	SUEDE					
FINISH REMOVED									
WOOD									
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS				
WD-1	WAINSCOT	GC	1"X SHIPLAP, D. FIR NO2 (STANDARD) GRADE, SMOOTH FINISH	PAINTED PT-1	ON THE CUSTOMER SIDE OF THE FRONT LINE SOFFIT				
WD-2	WAINSCOT	FIVE KIDS GROUP, INC.	ENGINEERED WHITE OAK PANELING	WHITE OAK	ACCENT WALL (PER PLAN). BOTTOM OF CHAIR RAIL IN DINING ROOM AND VESTIBULE. BEVERAGE COUNTER MILLWORK DOORS. BANQUETTE BACK AND SEAT. USE SCHULTER JOLLY (POLISHED NICKEL) FOR WALL EDGING, WHEN REQUIRED.				
WD-3	BAR COUNTER	FIVE KIDS GROUP, INC.	TEAK		GC TO ORDER FROM FIVE KIDS GROUP. TABLETOP TO MATCH DINING ROOM TABLE TOPS				
WD-4	FURNITURE BASE	GC		PAINTED PT-1	CONSTRUCTION OF DINING ROOM FURNITURE - COMMUNITY TABLE, BANQUETTE, AND BAR COUNTER.				
WD-5	HARDWOOD CAP	GC	3/4" HARDWOOD	PAINTED PT-6	FOR LOW WALL CAP AND WINDOW SILLS, WHEN CONDITION(S) OCCUR. ALLOW 1/2" OVERHANG.				
WD-6	WAINSCOT PANEL	MARLITE	ITEM #206916 23 3/4" X 96" X 1/2" PANEL	BY MANUFACTURER - PNL 9099	BEHIND BEACH CHAIR GRAPHICS IN DINING ROOM - REFER TO ELEVATIONS. FACE OF COUNTER ON THE FRONT LINE.				
		•	UPHO	DLSTERY					
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS				
UP-1	BANQUETTE	NASSAMI	TOLSTOY - SYMPHONY COLLECTION	WHISKEY	BANQUETTE SEATING - 3" THICK FOAM				

			WALL	. FINISHES	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
W-1	STAINLESS STEEL WAINSCOT	CAPTIVE AIRE	BRUSHED S/S 20 GAUGE FROM TOP OF Q.T. BASE		FULL HEIGHT TO HOOD, BEHIND GRILL AND BREAD OVEN AREA
W-2	FRP WALL PANELING	MARLITE		WHITE	BACK KITCHEN FOOD PREP AREA
			LAN	∐ MINATES	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
PL-1	MILLWORK	WILSONART	STEEL MESH	FINE VELVET FINISH 4879-38	MILLWORK BEHIND THE SERVICE LINE AND BACK KITCHEN. USE PVC EDGE BANDING.
PL-2	CUTTING BOARDS	WILSONART	NATURAL RECON	FINE VELVET FINISH 7996-38	21 1/4" X 21 1/4" X 1" CUTTING BOARDS FOR PICK UP TOWER. QUANTITY 6
			1	PAINT	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
PT-1	SHIP LAP, SOFFIT, AND RESTROOM CEILINGS	BENJAMIN MOORE	OC-130	CLOUD WHITE, SATIN	CUSTOMER AREA SHIPLAP (AND SHIPLAP TRIM), FRONT LINE SOFFIT, AND RESTROOM WALLS (ABOVE TILE)
PT-2	5/8" GWP PAINTED	BENJAMIN MOORE	1613	SILENT NIGHT, SATIN	DINING ROOM AND HALLWAY WALLS ABOVE CHAIR RAIL.
PT-3	DOOR FRAME	BENJAMIN MOORE	1615	ROCK GRAY, SATIN	DOOR FRAME, IN OPEN CEILING CONDITION, EVERYTHING ABOVE 12' AFF IN DINING ROOM
PT-4					
PT-5	INTERIOR DOORS	MINWAX	WOOD FINISH PENETRATING STAIN	WEATHER OAK 270	FINISH WITH CLEAR TOP COAT
PT-6	LOW WALL/ SILL CAP	BENJAMIN MOORE	#2132-10	BLACK, EGGSHELL OR SEMI GLOSS	LOW WALL CAP AND WINDOW SILL FINISH.
			WA	ALL TILE	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
WT-1	CERAMIC TILE	DAL TILE	2X8 MOD JM BLUE	PART#: N519 JM28MOD1P2. GROUT: MAPEI ULTRACOLOR PLUS FA-IRON 107	BACK SPLASH TILE IN KITCHEN AND BEVERAGE COUNTER. RUNNING BOND. USE SCHULTER JOLLY (POLISHED NICKEL) FOR EDGING. WALL TILE EXTENDS TO CEILING TILES IN FRONT KITCHEN AREA. BEHIND THE PICK UP TOWER, AND ABOVE ALL BEVERAGE COUNTER WALLS (10' AFF)
WT-2	CERAMIC TILE	DAL TILE	IRONCRAFT	SABLE BLACK IC15-UNPOLISHED - 12"X24". GROUT: MAPEI ULTRACOLOR PLUS FA - GRAY 09	BATHROOM BOTTOM WALL TILE. USE SCHULTER JOLLY (POLISHED NICKEL) FOR EDGING
			N	IETAL	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
M-1	CHAIR RAIL	GC	1/8" X 3 1/2" HOT ROLLED STEEL	PAINTED IN BLACK SEMI-GLOSS	DINING ROOM CHAIR RAIL, WITH BUTTON HEAD HEX SOCKET SCREW





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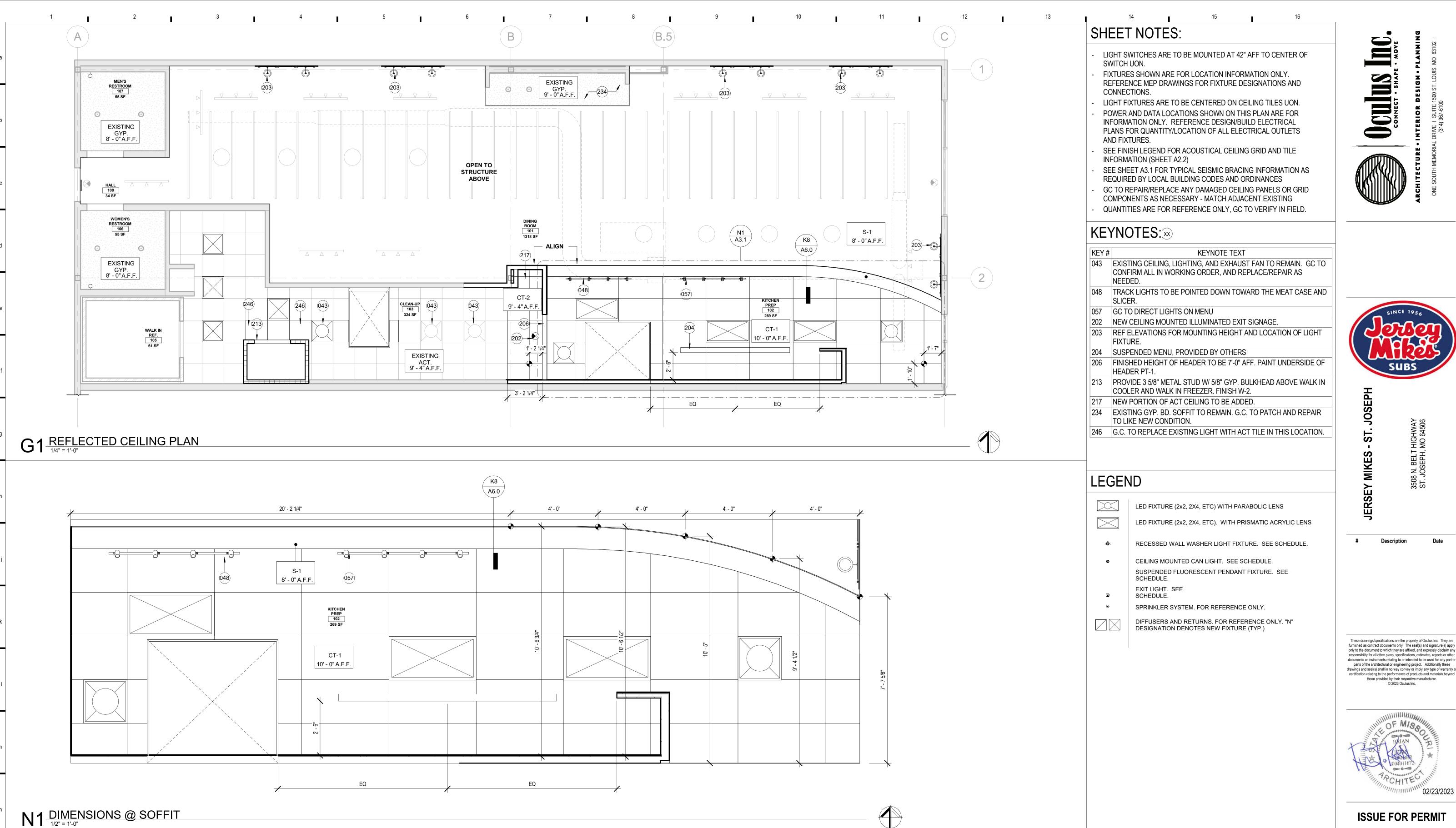
# **ISSUE FOR PERMIT**

# **FINISH PLAN AND SCHEDULE**

43423-MO01 Project#

2/23/2023 Issue Date As indicated

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CEILING LEGEND

SOURCE

SOURCE: ARMSTRONG

SOURCE: ARMSTRONG

SOURCE: BENJAMIN

MOORE

OPEN CEILING

**TYPE** 

ACOUSTIC CEILING TILE

VINYL FACED

ACOUSTIC CEILING TILE

FISSURED 2X2 WITH

**TEGULAR EDGE** 

**EXISTING** 

**CEILING SCHEDULE** 

COLOR

WHITE VINYL

WHITE

PT-3

SIZE

SIZE: 2' X 4'

SIZE: 2' X 2'

**COMMENTS** 

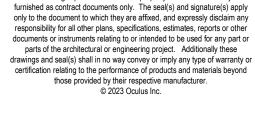
DINING ROOM ONLY. FINISHES EXTENDED TO 12' AFF. EVERYTHING ABOVE

FOOD PREP AREAS HD APPROVED VINYL FACED

SEE DETAIL

TO BE PAINTED PT-3

CUSTOMER AREA, RESTROOM VESTIBUL, AND RESTROOMS





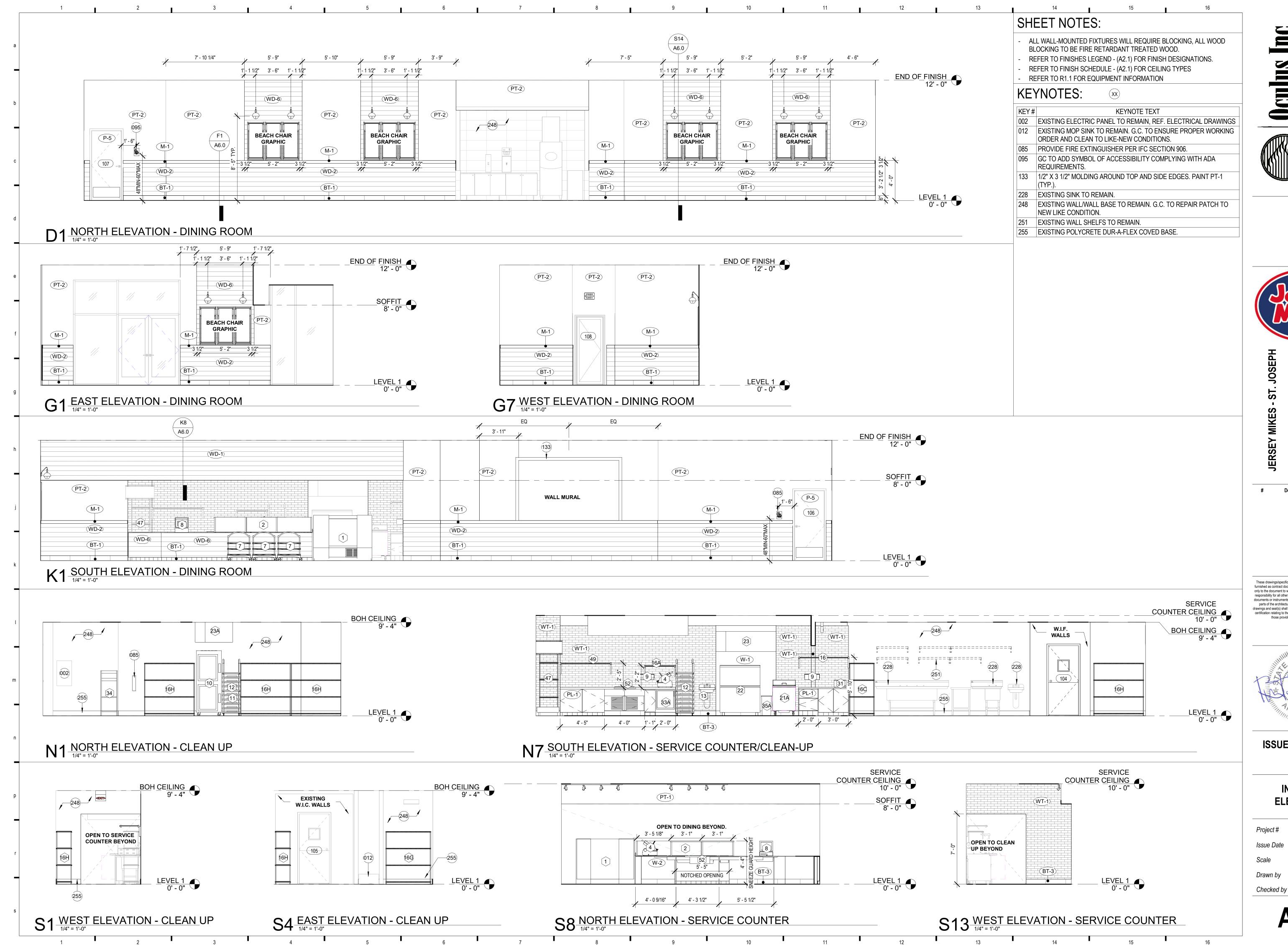
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# REFLECTED CEILING PLAN

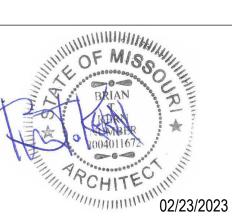
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# **INTERIOR ELEVATIONS**

43423-MO01 Project# 2/23/2023 1/4" = 1'-0" Drawn by

**A5.0** 

# SHEET NOTES:

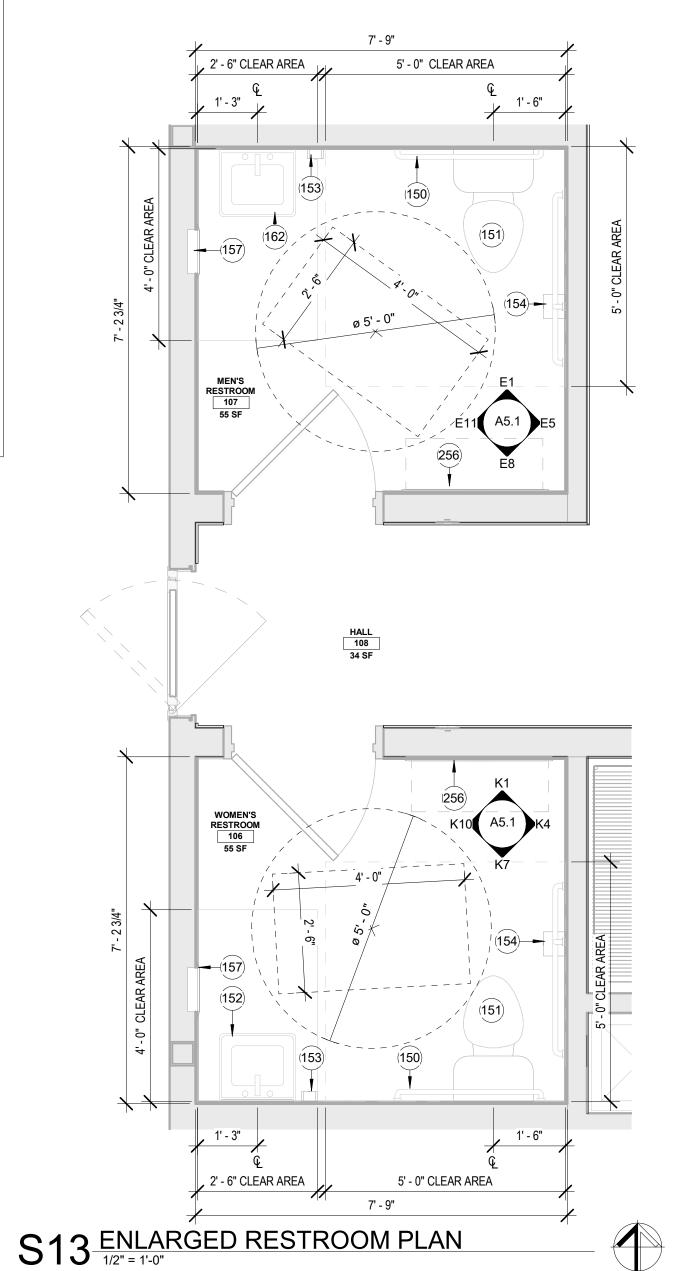
- ALL WALL-MOUNTED FIXTURES WILL REQUIRE BLOCKING, ALL WOOD BLOCKING TO BE FIRE RETARDANT TREATED WOOD.
- REFER TO FINISHES LEGEND (A2.1) FOR FINISH DESIGNATIONS.
- REFER TO FINISH SCHEDULE (A2.1) FOR CEILING TYPES
- REFER TO R1.1 FOR EQUIPMENT INFORMATION

#### **KEYNOTES:** (xx)

# KEY#

**KEYNOTE TEXT** 150 ADA GRAB BAR. DIAMETER OF THE GRIPPING SURFACE PF THE GRAE BAR SHALL BE 1-1/4" TO 1-1/2". BARS SHOULD MAINTAIN A DISTANCE OF 1-1/2" FROM INSIDE OF BAR TO FINISH WALL. THE REAR WALL GRAB BAR SHALL BE 36 INCHES (915MM) LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12 INCHES (305MM) MINIMUM ON ONE SIDE AND 24 INCHES (610MM) MINIMUM ON THE OTHER SIDE.

- 151 EXISTING ADA COMPLIANT WATER CLOSET.
- 152 EXISTING ADA COMPLIANT LAVATORY.
- SOAP DISPENSER PURCHASED BY OWNER AND INSTALLED BY GC.
- 154 TOILET PAPER DISPENSER PROVIDED AND INSTALLED BY GC. TOILET PAPER DISPENSER TO BE MOUNTED 15" MIN. A.F.F. AND 1 1/2" MIN. BELOW GRAB BARS. IF MOUNTED ABOVE GRAB BARS, ENSURE 12" MIN. OF SPACE BETWEEN BOTTOM OF DISPENSER AND TOP OF GRAB BAR. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW.
- 155 ADA PIPE GAURD PROVIDED AND INSTALLED BY GC.
- 156 ADA COMPLIANT MIRROR PROVIDED AND INSTALLED BY GC.
- 157 RECESSED PAPER TOWEL DISPENSER PURCHASED BY OWNER AND INSTALLED BY GC. OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES (685MM) AND NOT MORE THAN 80 INCHES (2030MM) ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHÉS (100MM) MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH.
- 162 EXISTING LAVATORY TO REMAIN. GC TO ENSURE LIKE NEW CONDITION AND ADA COMPLIANCE.
- 256 EXISTING BABY CHANGING STATION TO BE RE-USED CLEAN TO LIKE NEW CONDITION.





JERSEY

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# **INTERIOR ELEVATIONS**

43423-MO01 Project# 2/23/2023 Issue Date Scale As indicated

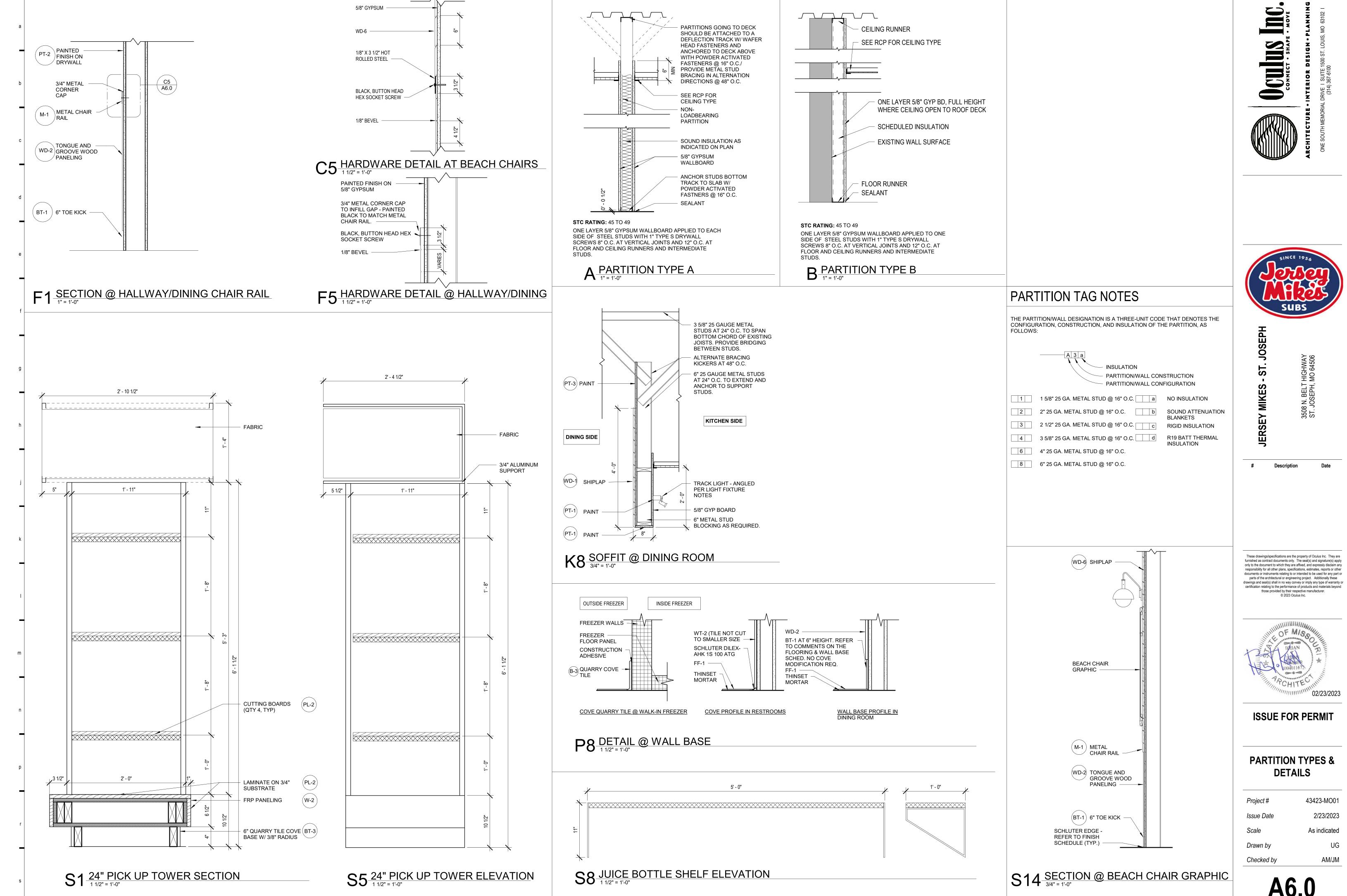
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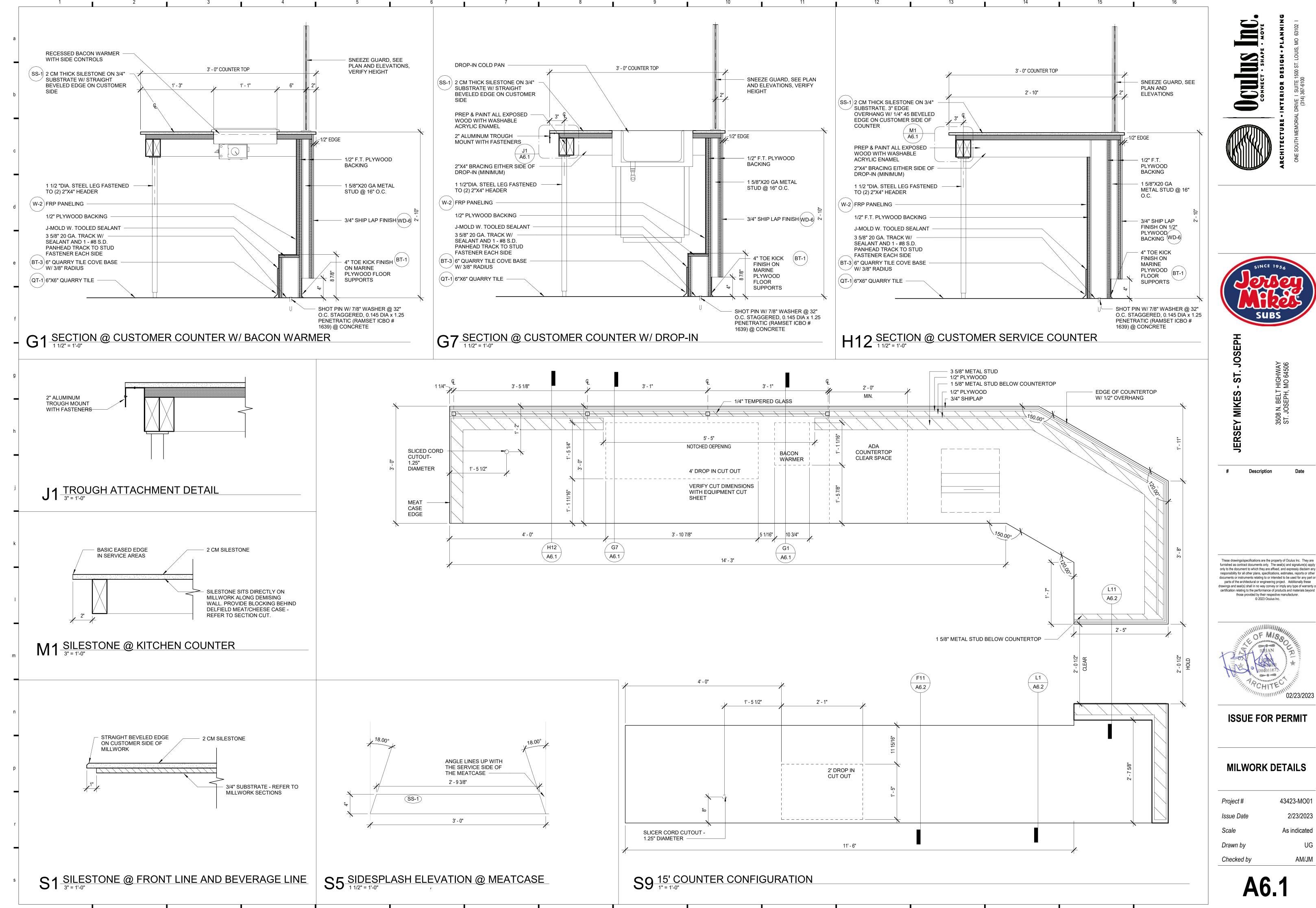
S1 RESTROOM WALL TILE
1/2" = 1'-0"

S7 RESTROOM MOUNTING HEIGHTS

1/4" = 1'-0"



A6.0



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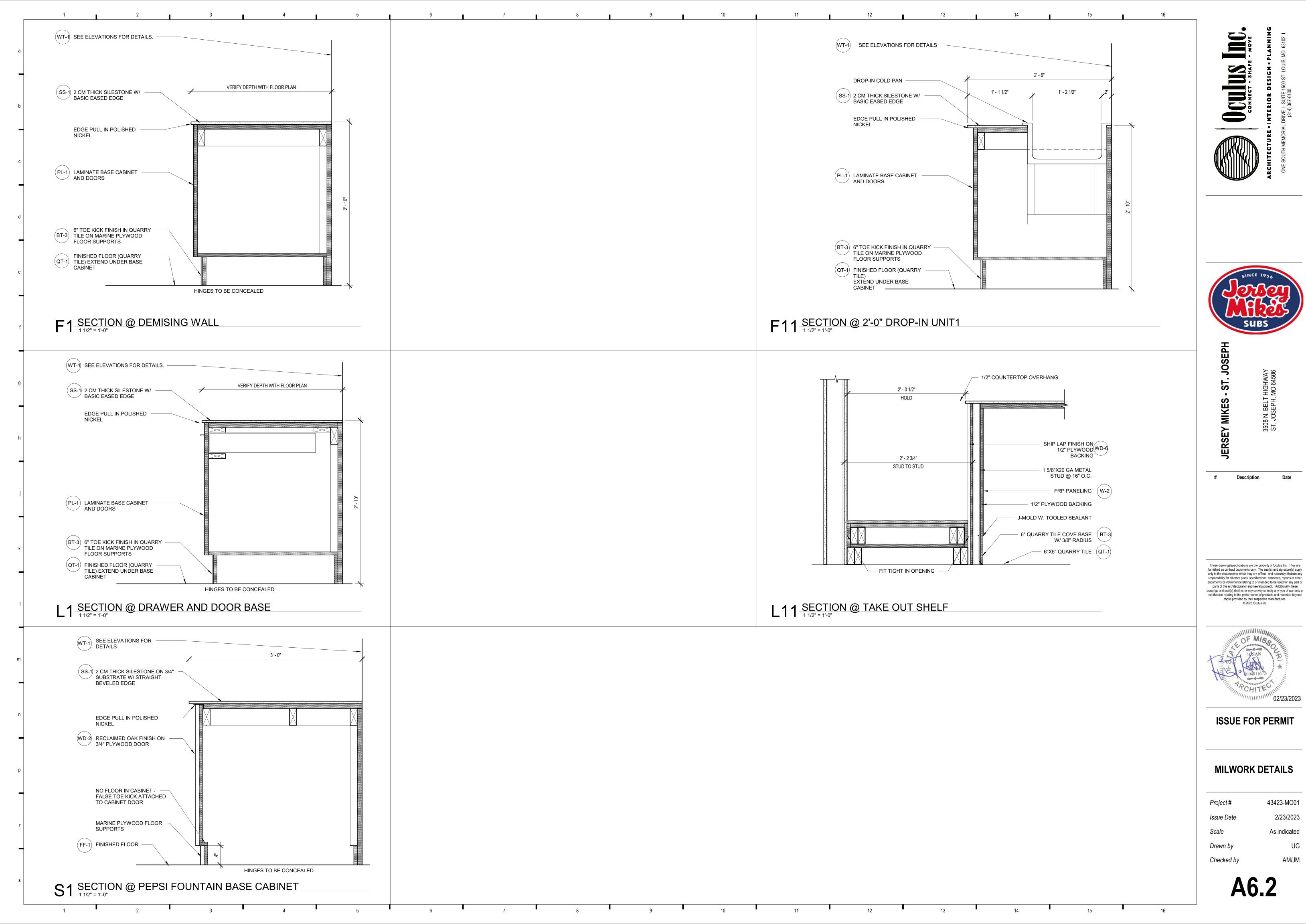
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**MILWORK DETAILS** 

43423-MO01 Project# 2/23/2023 Issue Date As indicated

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43423-MO01

2/23/2023

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AM/JM

## 1. GENERAL

- A. APPLICABLE PROVISIONS OF AIA DOCUMENT A201, "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", AND DIVISION 1 GENERAL CONDITIONS GOVERN WORK UNDER THIS SECTION AND ALL OTHER SECTIONS OF DIVISION 16.
- B. APPLICABLE PROVISIONS OF THIS SECTION GOVERN WORK UNDER ALL OTHER SECTIONS OF DIVISION 16. WORK COVERED BY THIS SECTION SHALL CONSIST OF PROVIDING ALL MATERIAL, LABOR, EQUIPMENT AND SERVICES NECESSARY FOR A COMPLETE, TESTED AND ADJUSTABLE ELECTRICAL INSTALLATION READY FOR OPERATION AS SPECIFIED HEREIN AND AS SHOWN ON THE DRAWINGS.
- C. THE TERM CONTRACTOR AS USED IN THIS SECTION SHALL MEAN ANY CONTRACTOR OR SUBCONTRACTOR WHO HAS CONTRACTED TO PERFORM WORK INCLUDED IN AND DEFINED BY THIS SECTION AND ALL OTHER SECTIONS OF DIVISION 16.

## 2. CONTRACTOR'S RESPONSIBILITY

- A. PRIOR TO SUBMITTING HIS BID, CONTRACTOR SHALL CAREFULLY EXAMINE THESE CONSTRUCTION DOCUMENTS, THE DEVELOPER'S EXHIBITS, AND THE SITE, TO INQUIRE FULLY INTO DIFFICULTIES AND COSTS OF WORK, AND TO DETERMINE THE SCOPE AND CHARACTER OF WORK TO BE DONE. CONTRACTOR SHALL INCLUDE ALL NECESSARY COSTS TO LOCATE AND/OR EXTEND ALL UTILITIES INCLUDING LIGHTING PANELS, POWER PANELS, ELECTRICAL SERVICE, PHONE SERVICE AND/OR MODIFY EQUIPMENT TO MEET THE INTENT OF THE CONTRACT DOCUMENTS. THE OWNER, OWNER'S AGENT, ARCHITECT, ENGINEER OR DESIGNER SHALL NOT BE RESPONSIBLE FOR FAILURE OF THE CONTRACTOR TO DETERMINE DIFFICULTIES AND COSTS IN THE PROJECT OR FOR HIS OVERLOOKING OF THE REQUIREMENTS.
- B. IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THE PLANS AND SPECIFICATIONS, OR IF THERE ARE ANY REQUIREMENTS WHICH ARE AMBIGUOUS IN THE CONTRACTOR'S OPINION, HE SHOULD CALL THIS TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING, SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATIONS OF THE ARCHITECT AND ENGINEER.
- C. CONTRACTOR SHALL SCHEDULE HIS WORK IN COOPERATION WITH OTHER TRADES INSTALLING INTERRELATED WORK. ALL WORK SHALL BE SCHEDULED TO MAINTAIN SERVICE TO ALL REQUIRED AREAS DURING THE COURSE OF THE CONSTRUCTION EXCEPT FOR SHORT TERM PLANNED SHUTDOWNS, ANY OF WHICH SHALL BE PRE—SCHEDULED WITH THE OWNERS AGENT AND THE LANDLORD.

## 3. WORKMANSHIP AND GUARANTEE

A. IN ENTERING INTO A CONTRACT COVERING THIS WORK, THE CONTRACTOR ACCEPTS THE SPECIFICATIONS, AND GUARANTEES THAT THE WORK WILL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR FURTHER GUARANTEES THAT THE WORKMANSHIP AND MATERIAL WILL BE OF THE BEST PROCURABLE AND THAT NONE BUT EXPERIENCED WORKMEN EXPERIENCED IN EACH PARTICULAR CLASS OF WORK WILL BE EMPLOYED. CONTRACTOR FURTHER GUARANTEES TO REPLACE AND MAKE GOOD AT HIS OWN EXPENSE ANY DEFECTS DUE TO FAULTY WORKMANSHIP OR MATERIAL WHICH MAY DEVELOP WITHIN ONE (1) YEAR AFTER FINAL PAYMENT AND ACCEPTANCE BY THE ARCHITECT.

## 4. <u>CODES AND STANDARDS</u>

A. CONTRACTOR WILL COMPLY IN ALL RESPECTS WITH THE ADOPTED BUILDING CODES, APPLICABLE LAWS, ORDINANCES, AND REGULATIONS AS MAY APPLY ACCORDING TO THE RULING OF THE CONTROLLING PUBLIC OFFICIAL SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE LAWS, ORDINANCES AND REGULATIONS, OR WHICH DOES NOT RECEIVE THE APPROVAL OF THE CONTROLLING PUBLIC OFFICIAL, HE SHALL BEAR ALL COSTS ARISING IN CORRECTING THE DEFICIENCIES. ALL ELECTRICAL EQUIPMENT SHALL SHALL BEAR THE UNDERWRITER'S LABORATORY LABEL.

## 5. <u>FEES ON PERMITS</u>

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAKING PAYMENT FOR ALL FEES, PERMITS AND INSPECTIONS RELATING TO HIS WORK.

## 6. <u>CONTRACT DRAWINGS</u>

- A. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT AND INTENT OF THE DESIGN AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONDITIONS AND THE WORK OF OTHER TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED, NOR IS IT IMPLIED THAT ALL CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE SYSTEMS OR BUILDING COMPONENTS HAVE BEEN INDICATED. THE CONTRACTOR SHALL INVESTIGATE ALL EXISTING CONDITIONS AFFECTING THE WORK AND ARRANGE HIS WORK ACCORDINGLY, PROVIDING SUCH FITTINGS, OFFSETS, ACCESSORIES AND DEVICES AS MAY BE REQUIRED. THE DRAWINGS AND SPECIFICATIONS ARE MUTUALLY COMPLEMENTARY, AND ANY WORK REQUIRED BY ONE BUT NOT BY THE OTHER SHALL BE PERFORMED BY BOTH. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS AND SERVICES REQUIRED FOR A COMPLETE AND WORKING PROJECT AT NO ADDITIONAL COST EVEN THOUGH EACH AND EVERY NECESSARY ELEMENT THEREOF IS NOT SPECIFICALLY IDENTIFIED HEREIN EACH AND EVERY NECESSARY ELEMENT THEREOF IS NOT SPECIFICALLY IDENTIFIED HEREIN.
- B. CONTRACTOR SHALL NOT SCALE FROM THE DRAWINGS BUT SHALL FOLLOW THE ARCHITECTURAL DRAWINGS OR EXISTING BUILDING CONDITIONS WHERE APPLICABLE, IN ESTABLISHING DIMENSIONS AND LINES OF RUN, SINCE DIMENSIONS ON THE FINAL ARCHITECTURAL DRAWINGS OR AT THE SITE MAY NOT COINCIDE WITH THOSE SHOWN ON THE ELECTRICAL DRAWINGS, THE CONTRACTORS SHALL VERIFY WITH THE DIMENSIONED ARCHITECTURAL DRAWINGS OR THE SITE CONDITIONS THE EXACT MATERIAL QUANTITIES AND LENGTHS NECESSARY.
- C. SIGNIFICANT DEVIATIONS OR CHANGES FROM THE DRAWINGS WHICH ARE REQUIRED TO ACCOMPLISH THE INTENT OF THE CONTRACT DOCUMENTS MUST BE REVIEWED WITH THE ARCHITECT AND APPROVED BEFORE PROCEEDING.

# 7. SHOP DRAWINGS

- A. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, FOUR (4) COPIES MINIMUM, FOR ALL MANUFACTURED PRODUCTS. EACH SHOP DRAWING SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO ASSURE THAT ALL DIMENSIONS, QUANTITIES, CONNECTIONS, CAPACITATES AND ACCESSORIES SHOWN ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, AND SHALL BE MARKED OR STAMPED TO CONFIRM THAT SUCH REVIEW WAS MADE AND COMPLIANCE WAS CONFIRMED.
- B. APPROVAL OF SHOP DRAWINGS BY THE OWNER, OWNER'S AGENT, ARCHITECT, ENGINEER OR DESIGNER, WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF COMPLYING WITH ALL TERMS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PERFORMANCE OF ALL EQUIPMENT PURCHASED, FOR PROPER FIT, AND OTHER DIMENSIONAL REQUIREMENTS.

# 8. <u>RECORD DRAWINGS</u>

A. CONTRACTOR SHALL MAINTAIN AT THE JOB SITE ONE SET OF DOCUMENTS AS "RECORD DRAWINGS" FOR THE PURPOSE OF DAILY MARKING OF ALL SUBSTANTIAL REVISIONS TO THE DOCUMENTS INCLUDING BUT NOT LIMITED TO ELECTRICAL CHANGES, AND LOCATIONS OF UTILITIES, PANELBOARDS, DISCONNECTS, STARTERS AND OTHER DEVICES REQUIRING PERIODIC OPERATIONAL ATTENTION, ADJUSTMENT, OR SERVICE INCLUDING ACCESS THERETO, AT THE COMPLETION OF THE PROJECT, THIS SET SHALL BE RETURNED TO THE ARCHITECT FOR THE PURPOSE OF MAKING FINAL "AS-BUILT DRAWINGS".

# 9. EQUIPMENT SUBSTITUTION

- A. SPECIFIC MANUFACTURERS AND MODELS OF EQUIPMENT HAVE BEEN USED IN THE DEVELOPMENT OF THE DRAWINGS AND DESIGNS. THIS CONTRACTOR MUST SUBMIT TO THE OWNER ANY CHANGES AND/OR SUBSTITUTIONS FOR APPROVAL PRIOR TO INSTALLATION OR EXECUTION. ANY CHANGES WHICH DO NOT RECEIVE THE OWNER'S APPROVAL MAY BE SUBJECT TO REMOVAL OR REPLACEMENT AS ORIGINALLY SPECIFIED, AND WILL BE AT THE CONTRACTOR'S EXPENSE.
- B. IF THIS CONTRACTOR SUBSTITUTES FOR SPECIFIED EQUIPMENT ANY OTHER EQUIPMENT WHICH REQUIRES ANY CHANGES TO THE DESIGN, ALL COST OF REDESIGN AND RECONFIGURATION RESULTING FROM SAID SUBSTITUTION SHALL BE BORNE BY THE SUBMITTING CONTRACTOR.

# 10. EQUIPMENT INSTALLATION AND SUPPORT

STRUCTURE, FINISHES OR OTHER EQUIPMENT.

- A. CONTRACTOR SHALL SUPPORT PLUMB, RIGID AND TRUE—TO—LINE ALL WORK AND EQUIPMENT INSTALLED. THIS CONTRACTOR SHALL DETERMINE HOW EQUIPMENT, FIXTURES, ETC., ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED AND SHALL PROVIDE ACCESSORIES REQUIRED FOR PROPER SUPPORT WHETHER SHOWN ON THE DRAWINGS OR NOT. IF SUPPORTS ARE REQUIRED, CONTRACTOR SHALL SUBMIT DRAWINGS TO THE ARCHITECT FOR APPROVAL.
- B. PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS PRINTED INSTALLATION AND MAINTENANCE LITERATURE. COMPONENTS REQUIRING PERIODIC MAINTENANCE OR ADJUSTMENTS SHALL BE LOCATED OR INSTALLED AS TO PERMIT ACCESS WITHOUT DAMAGE TO
- C. ALL CONDUIT CONNECTING TO SWITCHGEAR, PANELS, MOTORS, AND OTHER EQUIPMENT SHALL BE INSTALLED WITHOUT STRAIN AT THE CONNECTIONS. THE CONTRACTOR MAY BE REQUIRED, AS DIRECTED, TO DISCONNECT CONDUITS TO DEMONSTRATE THAT THEY HAVE BEEN SO CONNECTED.

#### 11. <u>DEMOLITION</u>

A. ALL EXISTING EQUIPMENT, NOT INDICATED TO BE INCORPORATED INTO THE NEW SYSTEM SHALL BE DISCONNECTED BY THIS CONTRACTOR FOR REMOVAL BY OTHERS FROM THE JOB SITE. CARE SHALL BE USED SO THAT NO DAMAGE IS DONE TO EXISTING BUILDING, PIPING, DUCTWORK, AND/OR ELECTRICAL EQUIPMENT. ANY DAMAGE ATTRIBUTED TO THIS CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THIS CONTRACTOR.

## 12. <u>CUTTING AND PATCHING</u>

- A. ALL CUTTING THAT MAY BE NECESSARY FOR THE INSTALLATION OF THE WORK OR ANY REQUIRED PATCHING THAT RESULTS THEREFROM SHALL BE DONE BY THE PROPER TRADE INVOLVED AND SHALL BE INCLUDED AS PART OF THIS CONTRACT. PATCH TO DUPLICATE UNDISTURBED ADJACENT FINISHES, COLORS, TEXTURES AND PROFILES. COLUMNS, BEAMS, GIRDERS OR JOISTS SHALL NOT BE CUT.
- B. ALL WORK AFFECTING ROOF OR STRUCTURES SHALL BE PERFORMED BY LANDLORD'S CONTRACTOR AT

#### 3. CLEANING

A. COMPLETION AS IT PERTAINS TO THE CONTRACT COMPLETION DATE IS DEFINED AS THE DAY THE PROJECT IS TURNED OVER TO THE OWNER IN THOROUGHLY CLEAN CONDITION. READY FOR THE OWNER TO TAKE POSSESSION. ALL FIXTURES, MOTORS, EQUIPMENT AND ALL OTHER ELECTRICAL EQUIPMENT FURNISHED OR INSTALLED BY THE CONTRACTOR SHALL BE THOROUGHLY CLEANED.

## 14. <u>TESTS</u>

- A. PROVIDE THE TESTS AS OUTLINED HEREINAFTER AND OTHER TESTS NECESSARY TO ESTABLISH THE ADEQUACY, QUALITY, SAFETY, COMPLETED STATUS AND SUITABLE OPERATION OF EACH SYSTEM.

  CORRECT PROMPTLY ANY FAILURE OR DEFECTS REVEALED BY THESE TESTS AND RECONDUCT TEST ON THE CORRECTED ITEMS.
- B. TEST THE GROUNDS WITH A GROUND RESISTANCE DIRECT READING SINGLE-TEST MEGGER.
- D. THE PANELBOARDS SHALL HAVE PHASE CURRENTS BALANCED TO WITHIN +/- 10% VARIATION BETWEEN AVERAGE PHASE CURRENT AND MEASURED INDIVIDUAL PHASE.

C. INSULATION RESISTANCE BETWEEN PHASE CONDUCTORS AND GROUND NOT LESS THAN 1,000,000 OHMS.

E. AN OPERATIONAL TEST OF THE EMERGENCY LIGHTS AND THE EXIT LIGHTS SHALL BE PERFORMED FOR THE OWNER TO DEMONSTRATE CONFORMANCE TO THE SPECIFICATIONS.

#### 15. TEMPORARY ELECTRICAL SERVICE

- A. TEMPORARY ELECTRICAL SERVICE SHALL BE IN ACCORDANCE WITH THE BUILDING CODE. TEMPORARY LIGHTING SHALL BE PROVIDED BY A LAMP LOCATED FOR EVERY 625 SQUARE FEET OF BUILDING AREA WITH A MINIMUM OF ONE PER ROOM. THE LAMP TO BE 100 WATT AND SHALL BE MAINTAINED BY THE GENERAL CONTRACTOR.
- B. TEMPORARY POWER DISTRIBUTION SHALL BE SUFFICIENT TO ACCOMMODATE THE TEMPORARY LIGHTING AND CONSTRUCTION OPERATIONS, INCLUDING THE USE OF POWER TOOLS (BUT NOT INCLUDING HEAVY—DUTY ELECTRICAL WELDING UNITS), ELECTRICAL HEATING UNITS, AND START—UP OF SPECIFIED BUILDING EQUIPMENT, WHICH IS TO BE TESTED, STARTED OR PLACED INTO OUR USE PRIOR TO COMPLETION OF ITS PERMANENT POWER CONNECTIONS.

#### 16. EXCAVATION AND BACKFILL

A. CONTRACTOR SHALL DO ALL EXCAVATION REQUIRED AS SHOWN ON PLANS OR REQUIRED FOR PROPER OPERATION. EXCESS EXCAVATION BELOW THE REQUIRED LEVEL SHALL BE BACKFILLED WITH EARTH AND THOROUGHLY TAMPED. UTILITY SERVICES, SHALL BE INSPECTED AND APPROVED BY THE PROPER INSPECTION AUTHORITY BEFORE BACKFILLING.

# SECTION 16200 ELECTRICAL POWER AND LIGHTING

## 1. RELATED DOCUMENTS

- A. APPLICABLE PROVISIONS OF AIA DOCUMENT A201, "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", DIVISION 1 GENERAL CONDITIONS AND SECTION 16100 ELECTRICAL SPECIAL CONDITIONS GOVERN WORK UNDER THIS SECTION.
- B. REFER TO SECTION 16100 ELECTRICAL SPECIAL CONDITIONS REGARDING REGULATIONS AND REQUIREMENTS AFFECTING ALL WORK DESCRIBED IN THIS SECTION.

## 2. <u>POWER SERVICE</u>

A. POWER SERVICE FOR THIS PROJECT SHALL BE PROVIDED FROM THE UTILITY CO. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH TO INSURE THAT ALL WORK AND MATERIALS ARE IN CONFORMANCE WITH THE UTILITY CO'S REQUIREMENTS.

# 3. NAMEPLATES

- A. ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, PANELBOARDS, DISCONNECTS
  TRANSFORMERS, CONTROLS, ETC., SHALL BE IDENTIFIED WITH THREE PLY LAMINATED PLASTIC. THE
  OUTSIDE LAMINATIONS SHALL BE BLACK. ENGRAVING SHALL EXTEND THROUGH THE FRONT
  LAMINATION SO THAT THE BLACK LETTERS APPEAR ON A WHITE BACKGROUND. NAMEPLATES SHALL
  BE PERMANENTLY ATTACHED WITH SCREWS.
- 3. CIRCUIT DIRECTORY SHALL BE TYPEWRITTEN (HANDWRITTEN IS NOT ACCEPTABLE) AND SHALL IDENTIFY CIRCUIT AS TO TYPE AND LOCATION AS FOLLOWS:
- "LTG" FOR LIGHTING CIRCUIT FOLLOWED BY AREA IN WHICH CIRCUIT APPEARS, I.E.,
  "STOCKROOM", "CASH WRAP", ETC.

  "RECEPT" FOR RECEPTACLE CIRCUIT FOLLOWED BY AREA IN WHICH RECEPTACLE APPEARS,
  "STOREFRONT", "CASH REGISTER", ETC.
  "MOTOR" FOR MOTOR FOLLOWED BY THE EQUIPMENT IDENTIFICATION AND AREA IN WHICH

MOTOR IS LOCATED, I.E. "EXH FAN TOILET", "AHU-ROOF", ETC.

# . <u>CONDUIT</u>

- A. ALL WIRING SHALL BE INSTALLED IN CONDUIT. THIN WALL EMT CONDUIT SHALL BE USED SIZES 1/2" THROUGH 2-1/2". ALL CONDUITS LARGER THAN 2-1/2" SHALL BE HEAVYWALL. CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SLABS SHALL BE SCHEDULE 40 PVC. JACKETED FLEXIBLE STEEL CONDUIT (SEALTITE) SHALL BE USED IN WET AREAS AND ON ALL MOTORIZED EQUIPMENT. "MC" CABLE MAY BE USED AT THE CONTRACTORS DISCRETION IF ALLOWED BY LOCAL CODES AND THE AUTHORITY HAVING JURISDICTION. VERIFY PERMISSABLE USE PRIOR TO BID. MC CABLE SHALL NOT BE USED FOR HOMERUNS. NO BX, ROMEX, ETC. SHALL BE ALLOWED.
- B. ALL OPENINGS IN FIRE AND SMOKE WALLS, PARTITIONS, FLOORS AND OTHER SIMILAR PENETRATIONS FOR ELECTRICAL CONDUITS, CABLE OR EQUIPMENT, WHETHER CUT OR IN PLACE, SHALL BE CLOSED WITH A UL APPROVED FIRE RESISTANT SILICONE FOAM SEALANT TO MAINTAIN THE FULL RATING AND INTEGRITY OF THE PARTITIONS, WALLS OR FLOOR.
- C. CONDUIT BENDS FOR POWER AND LIGHTING CIRCUITS SHALL NOT BE LESS THAN STANDARD RADIUS BENDS. CONDUIT BENDS FOR FEEDERS, TELEPHONE AND COMMUNICATION CIRCUITS SHALL NOT BE LESS THAN LONG RADIUS BENDS.
- D. O.Z. TYPE DX, TX, OR AX CONDUIT EXPANSION DEFLECTION FITTINGS ARE REQUIRED IN ALL CONDUIT RUNS WHERE MOVEMENT MAY BE ENCOUNTERED. ALL EMT COUPLINGS SHALL BE COMPRESSION TYPE.
- E. EXPOSED CONDUIT SHALL BE SECURELY SUPPORTED IN PLACE PER CODE BUT ON A MAXIMUM OF 10 FOOT INTERVALS, WITHIN THREE FEET OF EACH BEND, AT EVERY OUTLET OR JUNCTION BOX AND AT THE END OF EACH STRAIGHT RUN TERMINATING AT A BOX OR CABINET. CONDUIT SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPE WORK. CONDUITS SHALL BE INSTALLED PARALLEL TO AND AT RIGHT ANGLES TO THE BUILDING LINES. GENERALLY, CONDUIT SHALL BE INSTALLED IN CONTACT WITH STRUCTURAL PARTS OF THE BUILDING SO AS TO AVOID SUSPENDED LENGTHS OF CONDUIT. CONDUIT SHALL BE INSTALLED AS TO BE ACCESSIBLE FOR REPLACEMENT AND MAINTENANCE AND GENERALLY CONDUIT SHALL BE INSTALLED TO PERMIT DRAINAGE.

# 5. WIRE AND CABLE

- A. ALL WIRE AND CABLE SHALL BE COPPER AND INSTALLED IN CONDUIT. ALL WIRE AND CABLE FEEDERS AND BRANCH CIRCUITS SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE APPLICABLE EDITION OF THE N.E.C. AND SHALL MEET ALL ASTM SPECIFICATIONS. WIRE AND CABLE SHALL BE NEW, SHALL HAVE SIZE, GRADE OF INSULATION VOLTAGE AND MANUFACTURER'S NAME PERMANENTLY MARKED ON OUTER COVERING AT REGULAR INTERVAL AND SHALL BE DELIVERED IN COMPLETE COILS OR REELS WITH IDENTIFYING SIZE AND INSULATION TAGS.
- B. THE ELECTRICAL CONTRACTOR SHALL CALCULATE VOLTAGE DROP ON CONDUCTORS WITH LENGTHS GREATER THAN 75 FEET FROM THE PANELBOARD AND PROPERLY SIZE THE CONDUCTORS PER N.E.C.
- C. POWER CONDUCTORS: NO WIRE LESS THAN NO. 12 SHALL BE USED EXCEPT FOR CONTROL CIRCUITS OR LOW VOLTAGE WIRING. WIRE SIZES NO. 12 TO NO. 10 SHALL BE SOLID EXCEPT WHERE OTHERWISE INDICATED. WIRE SIZES NO. 8 AND LARGER SHALL BE STRANDED. ALL WIRE SIZES SHOWN ARE AMERICAN WIRE GAUGE SIZES. SIZES NO. 12 AWG THROUGH NO. 8 AWG SHALL BE "THHN/THWN." SIZE 4 AWG AND LARGER SHALL BE "THHN/THWN."
- D. CONTINUITY: ALL WIRES SHALL BE CONTINUOUS FROM OUTLET TO OUTLET.
- E. ACCEPTABLE MANUFACTURERS: CABLE AND WIRE SHALL BE STANDARD TYPE AS MANUFACTURED BY GENERAL CABLE COMPANY, CAROL, ANACONDA, SOUTHWIRE OR ITT ROYAL.

## 6. <u>COLOR CODING</u>

A COLOR CODING SYSTEM AS LISTED BELOW SHALL BE FOLLOWED THROUGHOUT FOR FEEDERS AND BRANCH CIRCUITS AND USED AS A BASIS FOR BALANCING LOAD.
 --120/208V: PHASE A--BLACK, PHASE B--RED, PHASE C--BLUE, NEUTRAL--WHITE, GROUND--GREEN

## 7. BOXES AND FITTINGS

- A. ALL OUTLETS SHALL BE PROVIDED WITH GALVANIZED OR SHERARDIZED BOXES SUITABLE IN DESIGN TO THE SPACE THEY OCCUPY AND THE PURPOSE THEY SERVE. WALL MOUNTED OUTLET BOXES, EXCEPT FOR 2" PARTITIONS SHALL BE 4" SQUARE AND AT LEAST 1 1/2" DEEP AND/OR DEEPER IF REQUIRED BY THE DEVICE THEY HOLD OR THE NATIONAL ELECTRICAL CODE.
- B. ALL PULLBOXES SHALL BE MADE OF GALVANIZED STEEL, OF METAL GAUGE AND PHYSICAL SIZE AS REQUIRED BY THE N.E.C. FOR THE NUMBER AND SIZE OF RACEWAYS AND CONDUCTORS INVOLVED.
- FIXTURE OUTLET BOXES IN OR ON CEILINGS SHALL NOT BE LESS THAN 1-1/2" DEEP OR LESS THAN 4" SQUARE. ALL OUTLET BOXES INTENDED TO SUPPORT FIXTURES SHALL BE EQUIPPED WITH

## 8. <u>CIRCUIT BREAKER PANELBOARDS</u>

A. PANELS SHALL BE LIGHTING AND APPLIANCE TYPE, DEAD FRONT, SAFETY TYPE, FURNISHED WITH BRANCH CIRCUIT PROTECTING DEVICES, EQUIPMENT GROUNDING BUS, MAIN BUS AND CABLE LUGS FACTORY ASSEMBLED, WITH ALL COMPONENTS IN PLACE, READY FOR INSTALLATION.

3/8" FIXTURE STUDS FASTENED THROUGH THE BOTTOM OF THE BOX WITH FOUR BOLTS.

- B. CURRENT CARRYING CONTACT SURFACES SHALL BE SILVER OR TIN PLATED. THE CIRCUIT BREAKERS SHALL BE OF THE MOLDED CASE, BOLT—IN TYPE SUITABLE FOR VOLTAGE AND AMPERE RATINGS INDICATED ON DRAWINGS AND IN SCHEDULES AND SHALL HAVE A MINIMUM INTERRUPTING CAPACITY AS INDICATED BY THE DRAWINGS.
- C. MAIN BUSES AND CONNECTORS SHALL BE HARD DRAWN COPPER OF 98% CONDUCTIVITY, WITH CURRENT CARRYING CAPACITY TO MAINTAIN ESTABLISHED RISE TESTS AS DEFINED IN UL STANDARD UL 67.
- D. CABINET SIZES ARE BASED UPON A 20" WIDE BY 6" DEEP PANEL UNLESS OTHERWISE NOTED. PANELBOARDS SHALL BE EQUIPPED WITH FLUSH TYPE LOCK AND CATCH. ALL LOCKS SHALL BE KEYED ALIKE, AND TWO KEYS ARE TO BE SUPPLIED WITH EACH LOCK.
- E. PANELBOARDS TO BE BY SCHNEIDER, ABB, SIEMENS OR EATON.

#### 10 TOGGLE SWITCHE

- A. TOGGLE SWITCHES SHALL BE WHITE AND SHALL BE RATED 20 AMPERES 120/277 VOLT AC TYPE AS MANUFACTURED BY HUBBELL AND SHALL BE AS FOLLOWS:

  SINGLE POLE --1221-W
  THREE WAY --1223-W
- B. TOGGLE SWITCHES SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR TO MOUNTING PLATE AND, AT DOORS, INSTALLED ADJACENT TO THE TRIM ON THE STRIKING SIDE OF THE DOOR, REGARDLESS OF THE LOCATION INDICATED ON THE DRAWINGS; THEREFORE, CHECK ALL DOOR SWINGS BEFORE INSTALLATION OF CONDUIT OUTLETS.
- C. COMPARABLE EQUIPMENT AS MANUFACTURED BY LEVITON AND LEGRAND WILL BE ACCEPTABLE.

## 11 RECEPTACIES

A. RECEPTACLES IN KITCHEN/PREP AREAS SHALL BE WHITE AS MANUFACTURED BY HUBBELL AND SHALL BE AS FOLLOWS:

DUPLEX RECEPTACLE -20A-125 VOLT 5362-W

RECEPTACLES IN DINING AREAS SHALL BE WHITE AS MANUFACTURED BY HUBBELL AND SHALL BE AS FOLLOWS:

DUPLEX RECEPTACLE -20A-125 VOLT 5362-B

- A. RECEPTACLES SHALL BE MOUNTED 18" ABOVE THE FINISHED FLOOR UNLESS OTHERWISE NOTED.
- B. COMPARABLE EQUIPMENT AS MANUFACTURED BY COOPER WIRING, LEGRAND AND LEVITON WILL BE ACCEPTABLE.

## 12. <u>DEVICE PLATES</u>

A. DEVICE PLATES SHALL BE WHITE IN THE KITCHEN/PREP AREA AND BLACK IN THE DINING AREA UNLESS OTHERWISE NOTED. COMPARABLE EQUIPMENT AS MANUFACTURED BY COOPER WIRING, SIERRA ELECTRIC CORPORATION, HARVEY HUBBLE INC., LEGRAND AND LEVITON WILL BE ACCEPTABLE. PAINT MATCH ADJACENT FINISH COLOR.

# 13. <u>DISCONNECT SWITCHES</u>

A. FURNISH AND INSTALL DISCONNECT SWITCHES AS REQUIRED BY CODE. DISCONNECT SWITCHES SHALL BE NEMA HEAVY DUTY TYPE AND UNDERWRITERS LABORATORIES LISTED, MANUFACTURED BY SCHENEIDER, ABB, EATON OR SIEMENS.

# 14. <u>GROUNDING</u>

- A. CONTRACTOR SHALL INSTALL GROUNDING PER APPLICABLE EDITION OF THE NEC. ARTICLE 250 EQUIPMENT GROUNDING SHALL USE ONLY APPROVED GROUNDING CLAMPS AND CONNECTORS AS MANUFACTURED BY PENN-UNION, BURNDY, OR O-Z MFG. COMPANY.
- B. GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 250 AND THE UTILITY COMPANY REGULATIONS. CONTRACTOR SHALL CONNECT THE GROUNDING ELECTRODE CONDUCTORS TO THE NEUTRAL BAR INSIDE THE MAIN PANEL.
- C. THE EQUIPMENT GROUNDING SYSTEM SHALL CONSIST OF A CONTINUOUS CONDUIT INSTALLATION AND A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR. THIS GROUNDING CONDUCTOR SHALL BE INSTALLED IN EVERY CONDUIT OR RACEWAY WITH THE FEEDER OR BRANCH CIRCUIT CONDUCTORS. THIS GROUNDING SHALL BE EXTENDED FROM THE HOUSING OF EVERY ELECTRICAL LOAD, THROUGH PANELBOARD STATIC GROUNDING BUSSES, TO THE STATIC GROUNDING BUS IN THE MAIN PANEL. THE GROUNDING BUS SHALL BE BONDED TO THE GROUNDING NEUTRAL BAR INSIDE THE MAIN PANEL.

# 15. <u>LIGHTING FIXTURES</u>

- A. ALL LIGHTING FIXTURES AND LAMPS SHALL BE FURNISHED BY ELECT. CONTR., UNLESS NOTED OTHERWISE, THIS CONTRACTOR SHALL INSTALL LIGHTING FIXTURES AND LAMPS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED BELOW, COMPLETE WITH HANGERS, PLASTER FRAMES AND ALL OTHER NECESSARY ACCESSORIES.
- B. THIS CONTRACTOR SHALL VERIFY THE FINAL CEILING AND FINISH SCHEDULES TO INSURE THE PROPER INSTALLATION AND MOUNTING OF FIXTURES AND SHALL COORDINATE BEFORE MAKING SUBMITTALS.

# 16. <u>LIGHTING CONTROLS</u>

- A. PANEL #LP8S WITH 8 RELAYS AND BUILT-IN TIME CLOCK AND AS MANUFACTURED BY WATT STOPPER.
- B. TIME SWITCHES SHALL BE 24 HOUR, 7 DAY, DAY SKIPPER 365 DAYS AND HOLIDAYS TYPE AS MANUFACTURED BY TORK, INTERMATIC, OR PARAGON.

# 17. <u>TELEPHONE SERVICE</u>

A. THIS CONTRACTOR SHALL INSTALL A TELEPHONE SERVICE CONDUIT AS SHOWN ON THE DRAWINGS AND FURNISH AND INSTALL (1) 3'  $\times$  4'  $\times$  3/4" PLYWOOD PANEL MOUNTED ON THE WALL AT LOCATION SHOWN ON PLANS.

# 18. SURFACE METAL RACEWAY

A. SURFACE METAL RACEWAY SHALL BE TWO PIECE #2100 AS MANUFACTURED BY WIREMOLD. ALL NECESSARY ACCESSORIES REQUIRED TO FIT THE CONFIGURATION SHOWN SHALL BE PROVIDED. RECEPTACLES SHALL BE 120 VAC, 23 APMS, CATALOG NUMBER #2127GT.

# SECTION 16700 FIRE ALARM SPECIAL CONDITIONS

## 1. GENERAL

A. GC TO COORDINATE ALL LOCAL FIRE ALARM REQUIREMENTS WITH LOCAL FIRE MARSHALL AND PROVIDE ALL SYSTEM DESIGN AND DEVICES REQUIRED FOR A COMPLETE FUNCTIONAL AND CODE COMPLIANT SYSTEM.

END OF DIVISION 16

# ELECTRICAL SYMBOLS DESCRIPTION HOME RUN TO PANEL. CIRCUIT NUMBERS, PHASE, NEUTRAL AND GROUND CONDUCTORS INDICATED ALONG WITH ISOLATED GROUND CONDUCTOR IF APPLICABLE SINGLE POLE SWITCH, +3'-10" OR AS NOTED DOUBLE POLE, SINGLE THROW SWITCH, +3'-10" OR AS NOTED THREE-WAY SWITCH, +3'-10" OR AS NOTED 0-10V DIMMER, +3'-10" OR AS NOTED WALL MOUNTED OCCUPANCY SENSOR, +3'-10" OR AS NOTED WALL MOUNTED OCCUPANCY SENSOR, +3'-10" OR AS NOTED, CONTROLLED BY ROOM CONTROLLER CEILING MOUNTED OCCUPANCY SENSOR CEILING MOUNTED OCCUPANCY SENSOR, CONTROLLED BY ROOM CONTROLLER CEILING MOUNTED INTERIOR DAYLIGHT HARVESTING PHOTOCELL SENSOR CONTROLLE BY ROOM CONTROLLER POWER PACK, INSTALLED ABOVE ACCESSIBLE CEILING DUPLEX RECEPTACLE, +18" OR AS NOTED GFI DUPLEX RECEPTACLE +18" OR AS NOTED QUADPLEX RECEPTACLE, +18" OR AS NOTED GFI QUADPLEX RECEPTACLE, +18" OR AS NOTED GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED WEATHERPROOF GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED SPECIAL RECEPTACLE, NEMA STYLE AS NOTED, +18" OR AS NOTED USB CHARGING DUPLEX RECEPTACLE, +18" OR AS NOTED RECEPTACLE INSTALLED FLUSH IN CEILING SWITCHED RECEPTACLE FOR INTERIOR SIGNAGE, +100" OR AS NOTED, LABEL RECEPTACLE ACCORDINGLY SWITCHED RECEPTACLE FOR PARTY LIGHTS, +100" OR AS NOTED, LABEL RECEPTACLE ACCORDINGLY JUNCTION BOX DISCONNECT SWITCH, TOP AT +6'-0" OR AS NOTED DISCONNECT SWITCH PROVIDE WITH EQUIPMENT LIGHTING CONTACTOR, INSTALLED AS NOTED TIME CLOCK, +6'-2" OR AS NOTED EXTERIOR PHOTOCELL, INSTALLED ON ROOF FACING NORTH

ELECTRICALLY OPERATED DAMPER, PROVIDED BY MECHANICAL CONTRACTOR, WIRE

HERMOSTAT, TEMPERATURE SENSOR, CARBON DIOXIDE SENSOR AND HUMIDISTAT

PROVIDED BY MECHANICAL CONTRACTOR, +3'-10" OR AS NOTED

TELEPHONE/DATA OUTLET, +18" WITH 1" CONDUIT TO ABOVE CEILING

MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTERLINE OF DEVICE

FIRE ALARM CONTROL PANEL, FLUSH MOUNTED, TOP AT +6'-0"

FIRE ALARM HORN/STROBE, +80" TO BOTTOM OF DEVICE PER ADA

AREA TYPE PHOTOELECTRIC SMOKE DETECTOR WITH SAMPLING TUBES AND REMOTE

MANUAL FIRE ALARM PULL STATION, +3'-10" PER ADA

STROBE ONLY, +80" TO BOTTOM OF DEVICE PER ADA

FIRE ALARM HORN/STROBE, CEILING MOUNTED

STROBE ONLY, CEILING MOUNTED

EXTERIOR WEATHERPROOF FIRE ALARM HORN, +10'-0" AFG

INDICATOR LIGHT MOUNTED FLUSH IN CEILING BELOW DETECTOR

DATA OUTLET, +18" WITH 3/4" CONDUIT TO ABOVE CEILING

ROOM CONTROLLER

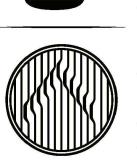
PLUG LOAD CONTROLLER

BY ELECTRICAL CONTRACTOR

PUSHBUTTON, TOP AT +4'-6" OR AS NOTED

DOOR BELL CHIME, +8'-0" OR AS NOTED

CONNECT - SHAPE - M









- ST. JOSE

3509 N. BELT HIGHW. ST. JOSEPH, MO 645

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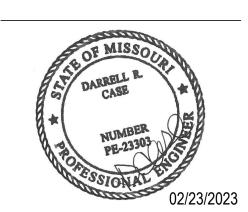
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# ISSUE FOR PERMIT

Electrical Specs

Client Approval

Project#

Issue Date 02/23/2023

As indicated

Scale

Drawn by JVH

Checked by MJ

E1.0

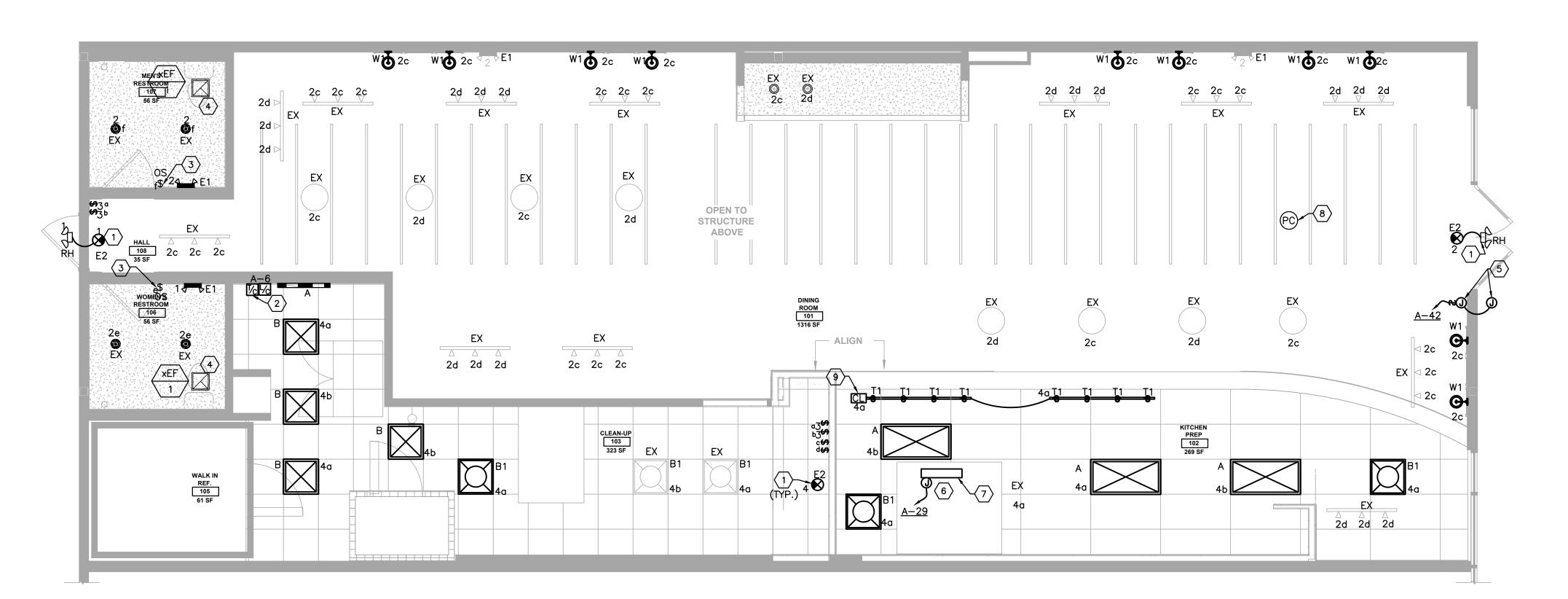
	LIGHT FIXTURE SCHEDULE LAMP SCHEDULE										
SYMBOL	TYPE	CATALOG NUMBER	DESCRIPTION	VOLTS	MOUNTING	LAMP/ FIXT	WATTS/ LAMP	FIXTURE WATTS	LAMP TYPE.		
	А	FSG-2X4FLPNL	2'X4' LED FIXTURE W/PRISMATIC LENS IN BOH/KITCHEN	UNIV	LAY-IN	1	49	49	LED		
	В	FSG-2X2FLPNL	2'X4' LED FIXTURE W/PARABOLIC LENS IN CUSTOMER AREA	UNIV	LAY-IN	1	39	39	LED		
	B1	FSG-2X2FLPLI	2'X2' LED FIXTURE W/PARABOLIC LENS IN CUSTOMER AREA	UNIV	LAY-IN	1	31	31	LED		
-00-	T1	FSG-THL9MW	LED TRACK ABOVE COUNTER	120	TRACK	1	9	9	LED		
$\mapsto$	W1	**86703506	WALL SCONCE POLISHED NICKEL G40 LED FILAMENT BULB	120	WALL	1	6	6	LED		
<b>₹</b> ₽	E1	FSG-BEWH	BUG EYE EMERGENCY FIXTURE WHITE	UNIV	WALL	2	1	2	LED		
⊗	E2	FSG-EXWRBB	EXIT RED LETTERS, WHITE HOUSING LED EXIT, WITH BATTERY BACKUP	UNIV	WALL	1	2	2	LED		
25	RH	TBD	DUAL—HEAD REMOTE EMERGENCY FIXTURE, WHITE HOUSING, 6V, LAMPS INCLUDED	UNIV	SURFACE	2	5	10	LED		
LUMINAIRE SCHE	DILLE	NOTES:									

LUMINAIRE SCHEDULE NOTES:

1. ALL LIGHTING FIXTURES AND LAMPS IN THE ABOVE SCHEDULE (UNLESS NOTED WITH \*\*) ARE PROVIDED BY THE CONTRACTOR VIA A NATIONAL CONTRACT WITH FSG LIGHTING NATIONAL ACCOUNTS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE LIGHTING FIXTURES. ANY QUESTIONS REGARDING FIXTURE AND LAMP TYPES, INSTALLATION REQUIREMENTS, AND ORDERS SHALL BE WITH LEON MOWADIA OF FSG AT (212) 776-7900 X21113, OR (848) 203-7175, OR BY EMAIL LEON.MOWADIA@FSGI.COM

2. \*\*LIGHTING FIXTURES AND LAMPS IN THE ABOVE SCHEDULE INDICATED WITH (\*\*) ARE PROVIDED BY THE CONTRACTOR VIA A NATIONAL ACCOUNT WITH HERMITAGE LIGHTING NATIONAL ACCOUNTS. THE CONTRACTOR IS RESPONSIBLE FOR PURCHASING AND INSTALLING THE LIGHTING FIXTURES. ANY QUESTIONS REGARDING FIXTURE AND LAMP TYPES, INSTALLATION REQUIREMENTS, AND ORDERS SHALL BE WITH WYATT CULVER OF HERMITAGE LIGHTING AT (800) 264–3383, OR (615) 843–3379 OR LEE DANIELS AT (615) 843–3364.

# 2 | COORDINATE WITH OWNER FOR ON/OFF SCHEDULE SCALE: NONE



EX: EXISTING LIGHT TO REMAIN.



## GENERAL NOTES

- 1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF LIGHTING FIXTURES. VERIFY CEILING TYPE AND PROVIDE NECESSARY MOUNTING HARDWARE TO ACCOMMODATE LIGHT FIXTURES USED. PROVIDE SLOPE CEILING ADAPTERS WHERE REQUIRED.
- 2. ALL CONDUITS ARE TO BE CONCEALED IN WALLS OR ABOVE CEILINGS. CONDUITS IN EXPOSED CEILING AREAS SHALL EXIT WALLS AS CLOSE TO ROOF/FLOOR STRUCTURAL DECK AS POSSIBLE.
- . ANY EXISTING MATERIALS OR EQUIPMENT NOT TO BE REUSED MUST BE COMPLETELY REMOVED AND DISPOSED OF LEGALLY. NO EQUIPMENT OR COMPONENTS MAY BE ABANDONED IN PLACE WITHOUT WRITTEN PERMISSION OF THE LANDLORD.
- 4. THE DIRECTIVE, IF ANY, OF THE BUILDING OFFICIAL SHALL TAKE PRECEDENCE OVER THIS DRAWING REGARDING LOCATION AND NUMBER OF EXIT AND EMERGENCY EGRESS LIGHTS.
- 5. ALL FIXTURES TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- 6. ALL PENDANT MOUNTED FIXTURES SHALL BE SUPPORTED DIRECTLY FROM STRUCTURE ABOVE WITH No.9 GAGE WIRE OR APPROVED ALTERNATE SUPPORT WITHOUT USING CEILING SUSPENSION SYSTEM FOR DIRECT SUPPORT.
- 7. ALL LIGHTING FIXTURES MUST BE SUPPORTED BY #12 GAUGE WIRE ATTACHED TO THE GRID MEMBERS WITHIN 3" OF EACH CORNER OF EACH FIXTURE.
- 8. ALL RACEWAYS IN MILLWORK SHALL BE INSTALLED CONCEALED FROM VIEW.
- 9. ELECTRICAL CONTRACTOR TO VERIFY LIGHTING FOR WALK—IN COOLER & FREEZER. PROVIDE FIXTURE IF COOLER DOES NOT HAVE BUILT—IN LIGHT, OR COOLER LIGHTING IS NOT EXISTING. COORDINATE LOCATION WITH SUPPLIED. CONTACT ENGINEER WITH ANY QUESTIONS REGARDING COOLER LIGHTING. LIGHTING FIXTURES FURNISHED LOOSE BY THE WALK—IN MANUFACTURER SHALL BE INSTALLED AND CONNECTED BY THE E.C.
- 10. EXIT AND EMERGENCY FIXTURES TO BE CONNECTED TO UNSWITCHED LEG OF THE LOCAL LIGHTING CIRCUIT AND PROVIDE CONTINUOUS ILLUMINATION PER N.E.C. 700–12(A) AND N.F.P.A. 101, LIFE SAFETY CODE.
- 11. ALL TRACK AND PENDANT LIGHTING FIXTURES POWER IS TO BE FED FROM THE CEILING. DO NOT FEED POWER FOR TRACK OR PENDANT LIGHT FIXTURES FROM THE WALLS.
- 12. ALL LIGHTING FIXTURES IN FOOD AND BEVERAGE PREP AREA SHALL HAVE PROTECTIVE SHIELDS.
- 13. ALL WORK TO COMPLY WITH THE APPLICABLE EDITION OF THE N.E.C. HAVING BEEN ADOPTED AND ENFORCED BY THE AUTHORITY HAVING JURISDICTION.
- 14. ALL EQUIPMENT TO BE LISTED BY A NATIONALLY RECOGNIZED TESTING LAB (I.E. U.L., ETC.).
- 15. LIGHT FIXTURES IN CONTACT WITH INSULATION TO BE U.L. LISTED FOR THERMAL BARRIER OR PROVIDE 3" MINIMUM CLEARANCE.
- 16. MOUNT THE FOLLOWING ABOVE FINISHED FLOOR.

  OUTLETS 15" (BOTTOM OF BOX MINIMUM) TO 48" (TOP OF BOX MAXIMUM)

  SWITCHES 36" (BOTTOM OF BOX MINIMUM) TO 48" (TOP OF BOX MAXIMUM)

  THERMOSTAT 36" (BOTTOM OF BOX MINIMUM) TO 48" (TOP OF BOX MAXIMUM)
- 17. ALL SERIES RATED PANELS SHALL BE PROPERLY IDENTIFIED PER SECTION 110-22, N.E.C.
- 18. SEAL CONDUITS THROUGH WALK-IN COOLER/FREEZER PER N.E.C. 300.7(A).

# LIGHTING PLAN KEYED NOTES (SE)

- 1. EMERGENCY EGRESS/EXIT FIXTURES SHALL BE CONNECTED TO A
- NON—SWITCHED LEG OF CIRCUIT INDICATED.

  2. TIMECLOCK AND LIGHTING CONTACTOR MOUNTED IN STOCKROOM. SEE 'TIMECLOCK CONTROL DIAGRAM', THIS SHEET. COORDINATE WITH OWNER FOR CONTROL SCHEDULE(S) AND OTHER

REQUIREMENTS.

- 3. CONTRACTOR TO PROVIDE A WALL MOUNTED "PIR" OCCUPANCY SENSOR (WATTSTOPPER #PW-100, OR ENGINEER APPROVED EQUAL) FOR LOCAL LIGHTING CONTROL.
- 4. RESTROOM EXHAUST FANS ARE TO BE CONTROLLED BY OCCUPANCY SENSOR. EC TO PROVIDE 20A/1PH DISCONNECT.
- 5. NEMA—3R JUNCTION BOX FOR CONNECTION TO SIGNAGE. VERIFY EXACT LOCATION WITH SIGNAGE SUPPLIER, SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL PROVIDE A WEATHER—RESISTANT TYPE SWITCH RATED FOR SIGN LOAD.
- 6. EXHAUST HOOD LIGHTS SUPPLIED WITH HOOD AND MOUNTED IN PRE-WIRED J-BOX. COMPLETE CIRCUITING. SEE MECHANICAL HOOD SHOP DRAWINGS FOR MORE INFORMATION.
- HOOD SYSTEM CONTROLLER. VERIFY EXACT LOCATION WITH EQUIPMENT SUPPLIER. SEE MECHANICAL HOOD SHOP DRAWINGS FOR ADDITIONAL CIRCUITING REQUIREMENTS.
- 8. WEATHER-PROOF PHOTOCELL MOUNTED ON ROOF FACING NORTH FOR CONTROL OF EXTERIOR SIGNAGE. COORDINATE EXACT LOCATION IN FIELD. SEE 'TIMECLOCK CONTROL DIAGRAM', THIS SHEET, FOR MORE INFORMATION.
- PROVIDE A 1—AMP CURRENT LIMITER END FEED CONNECTION COMPATIBLE WITH TRACK.

| RE-INTERIOR DESIGN-P |raldrive| Suite1500 st. Louis, m





796 Merus Court T 636.349.1600 St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

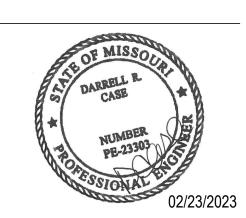


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# ISSUE FOR PERMIT

Client Approval

Electrical Lighting

Project # 43423-MO11

Issue Date 02/23/2023

Scale As indicated

Drawn by JRS
Checked by MI

E2 0

# GENERAL NOTES

- 1. THE SCOPE OF THE ELECTRICAL WORK SHALL INCLUDE FURNISHING, INSTALLING, CONNECTING AND TESTING ALL ELECTRICAL SYSTEMS FOR A COMPLETE AND FULLY OPERABLE INSTALLATION COMPLYING WITH THE LATEST VERSIONS OF ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
- 2. LOCATIONS OF EXISTING ELECTRICAL SYSTEM, EQUIPMENT AND DEVICES SHALL BE VERIFIED IN THE FIELD BY THE TENANT'S GENERAL CONTRACTOR(T.G.C.).
- 3. VERIFY ELECTRICAL REQUIREMENTS FOR ALL SPECIAL EQUIPMENT PRIOR TO ANY WORK BEING PERFORMED. PROVIDE ISOLATED GROUND WIRE PER EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS. PROVIDE CONDUIT FOR MECHANICAL CONTROLS AS REQUIRED BY CODE. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF A/C UNITS AND EXHAUST FANS WITH MECHANICAL CONTRACTOR.
- 4. E.C. SHALL DETERMINE, ARRANGE AND PAY FOR PROPER SERVICE AND METERS.

SHALL BE PROVIDED BY THE E.C.

- 5. E.C. SHALL PROVIDE, AT EACH TELEPHONE JACK INDICATED, AN OUTLET BOX, CONDUIT AND FACEPLATE AND JACK OUTLET. THE CONDUIT SHALL EXTEND ABOVE SUSPENDED CEILING. PROVIDE PLENUM RATED TELEPHONE WIRE AS REQUIRED TO EACH BOX.
- 6. E.C. SHALL PROVIDE CORD & PLUGS AS REQUIRED FOR KITCHEN EQUIPMENT. COORDINATE WITH EQUIPMENT MANUFACTURER AND K.E.C.
- 7. WHEN MAIN ELECTRICAL SERVICE IS PROVIDED BY THE LANDLORD, HIS OBLIGATIONS TERMINATE AT THE DISCONNECT. ALL PANELS, FEEDERS, ETC. REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT
- 8. STARTER & RELATED WIRING SHALL BE FURNISHED, INSTALLED AND CONNECTED BY E.C. OVERLOAD LIMITS SHALL BE INSTALLED PER GIVEN NAMEPLATE DATA ON EQUIPMENT. STARTERS SHALL BE INSTALLED AS PER REQUIREMENTS.
- 9. E.C. TO PROVIDE ELECTRICAL OUTLET FIRE PROTECTION PAD FOR ALL RECEPTACLES IN RATED WALL AS MANUFACTURED BY PFP PARTNERS. APPLY TO BOXES AS INSTRUCTED BY MFR. TO PROVIDE RATING TO MEET RATING OF CORRESPONDING WALL.
- 10. WHERE PORTIONS OF A CABLE RACEWAY OR SLEEVE ARE KNOWN TO BE SUBJECTED TO DIFFERENT TEMPERATURES AND WHERE CONDENSATION IS KNOWN TO AN ISSUE, AS IN COLD STORAGE AREAS OF BUILDINGS OR WHERE PASSING FROM THE INTERIOR TO THE EXTERIOR OF A BUILDING, THE RACEWAY OR SLEEVE SHALL BE FILLED WITH AN APPROVED MATERIAL TO PREVENT THE CIRCULATION OF WARM AIR TO COLDER SECTION OF THE RACEWAY OR SLEEVE PER N.E.C. 300.A (A)
- 11. COORDINATE LOCATIONS AND ROUTING OF FEEDERS TO PANELBOARDS WITH LANDLORD AND PROVIDE ALL NECESSARY APPURTENANCES AS REQUIRED BY LANDLORD AND OWNER.
- 12. WHERE THE WORD "PROVIDE" IS USED, THE WORD IS UNDERSTOOD TO MEAN "THE ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL AND MAKE FINAL CONNECTION TO THE EQUIPMENT", UNLESS OTHERWISE NOTED.
- 13. VERIFY EXACT LOCATION, MOUNTING HEIGHT AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PROVIDED BY OTHERS (INCLUDING HVAC EQUIPMENT) PRIOR TO ROUGH—IN AND PROVIDE ALL REQUIRED FUSIBLE SWITCHES, TRANSFORMERS, STARTERS NECESSARY FOR PROPER OPERATION OF FOUIPMENT.
- 14. REFER TO LANDLORD'S DESIGN SPECIFICATION FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
- 15. NEW & RELOCATED LIGHT SWITCHES, ELECTRICAL OUTLETS, THERMOSTATS AND OTHER ENVIRONMENTAL CONTROLS SHALL HAVE OPERABLE PARTS OF THE CONTROLS LOCATED NO HIGHER THAN 48" AND NO LOWER THAN 15" ABOVE THE FLOOR PER A.D.A. REQUIREMENTS. RESOLVE ANY CONFLICT IN MOUNTING HEIGHT WITH ARCHITECT/OWNER PRIOR TO ROUGH IN.
- 16. REFER TO ALL DISCIPLINES, INCLUDING ARCHITECTURAL & KITCHEN, PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- 17. ALL RECEPTACLES IN PUBLIC SPACES SHALL BE LISTED TAMPER—RESISTANT, AS SHOWN ON DRAWINGS.
- 18. ALL CONDUITS ARE TO BE CONCEALED IN WALLS OR ABOVE CEILINGS. CONDUITS IN EXPOSED CEILING AREAS SHALL EXIT WALLS AS CLOSE TO ROOF/FLOOR STRUCTURAL DECK AS POSSIBLE.
- 19. ALL LOW VOLTAGE WIRING IN CEILING PLENUM (INCLUDING TELEPHONE. DATA, ALARM AND TEMP. CONTROL WIRING) SHALL BE UL LISTED TEFLON PLENUM CABLE.
- 20. UNLESS OTHERWISE NOTED, ALL ELECTRICAL WORK FOR FABRICATED FOOD SERVICE EQUIPMENT SHALL BE COMPLETELY WIRED BY KITCHEN EQUIPMENT DIVISION TO A JUNCTION BOX OR PULL BOX MOUNTED ON THE EQUIPMENT IN AN ACCESSIBLE LOCATION. FINAL CONNECTIONS TO EQUIPMENT JUNCTION BOX OR PULL BOX AND ALL ELECTRICAL WORK FROM PANEL BOARDS TO BE BY THE ELECTRICAL DIVISION.
- 21. FINAL CONNECTIONS TO ALL EQUIPMENT TO BE BY ELECTRICAL CONTRACTOR, INCLUDING MATERIALS.

  22. ELECTRICAL CONTRACTOR TO PROVIDE THE FOLLOWING:
- 23. ALL JUNCTION BOXES, ELECTRICAL OUTLETS, COVER PLATES, SWITCHES, ETC., NOT BUILT INTO FIXTURES OR EQUIPMENT. ALL OUTLETS, JUNCTION BOXES, COVER PLATES, ETC., IN DISHROOMS OR AS INDICATED ON SCHEDULES MUST BE VAPOR PROOF.
- 24. ALL PLUGS AND CORDS AS NOTED ON SCHEDULE. ALL CORDS SHALL BE N.E.M.A.—RATED AND U.L.—APPROVED FOR MANUFACTURED AND/OR FABRICATED EQUIPMENT.
- 25. SHUNT-TRIP CIRCUIT BREAKERS/CONTACTORS OR DISCONNECTS FOR FIRE CONTROL SYSTEM SHUT-OFF OF FOODSERVICE EQUIPMENT BELOW HOODS/VENTILATORS AS REQUIRED BY ADOPTED
- 26. DISCONNECTS OR OTHER DEVICES AS REQUIRED BY CODES.

N.F.P.A. AND LOCAL CODES.

STEEL.

- 27. WHEN APPLICABLE, ELECTRICAL DIVISION TO PROVIDE CONDUIT AND WIRING, INSTALL ELECTRICAL
- COMPONENTS (PROVIDED BY K.E.C.) AND INTERWIRE BETWEEN THE FOLLOWING.

  28. REMOTE REFRIGERATION EQUIPMENT TO EVAPORATOR COILS.
- 29. CONTROL PANELS TO WATER-TYPE, VENTILATORS AND EXHAUST SUPPLY FANS PER MANUFACTURER'S INSTRUCTIONS.
- 30. KITCHEN EXHAUST HOOD/VENTILATORS TO FIRE CONTROL SYSTEM AND SHUT-OFFS.
- 31. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ALL TRADES AND VERIFY THAT ALL EQUIPMENT SHIPPED TO THE SITE IS COMPATIBLE WITH MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS PRIOR TO INSTALLATION OF SAID EQUIPMENT. IN THE EVENT OF ANY DISCREPANCIES, IMMEDIATELY CONTACT DESIGNER BEFORE PROCEEDING.
- 32. ALL DEDICATED CIRCUIT OUTLETS SHALL BE ORANGE.
- 33. SUSPENDED ELECTRICAL CONDUITS AND OUTLET BOXES ARE TO BE SUPPORTED FROM THE STRUCTURE USING METAL BRACES.
- 34. THROUGH PENETRATIONS SHALL BE PROTECTED BY AN APPROVED THROUGH—PENETRATION FIRE—STOP SYSTEM INSTALLED AND TESTED IN ACCORDANCE WITH ASTM 814 OR UL1479 WITH A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH OF WATER (2.49Pa). THE SYSTEM SHALL HAVE AN "F" RATING AND A "T" RATING OF NOT LESS THAN 1—HOUR, BUT NOT LESS THAN THE REQUIRED RATING AF THE WALL PENETRATED.

#### EQUIPMENT SCHEDULE VOLT/ AMPS DEVICE QTY | ITEM | DESCRIPTION MANUFACTURER MODEL WIRE SIZE ROUGH-IN NOTES SC-CDS34N-6-JM (1A) | 5'-10" DELI CASE HOWARD-MCRAY 120/1 | 8.7 | (1)#12G, 3/4"C. | @24" A.F.F. 5-20P (3) 4'-0" DROP-IN COLD UNIT 120/1 | 7.5 | | (2)#12, (1)#12G, 3/4"C. | @18" A.F.F. DELIFIELD N8148-EFN 5-15P (3A) | 2'-0" DROP-IN COLD UNIT N8118-EF $120/1 \mid 7.5 \mid \text{ } \mid (2)\#12, (1)\#12G, 3/4\text{°C}. \mid @18\text{° A.F.F.}$ 5-15P DELIFIELD (2)#12, (1)#12G, 3/4"C. FOH @18", A.F.F. —— 4 DELI SLICER GSP-H33 W/LIFT 120/1 | 3.5 | BIZERBA (8) 120/1 | 5.0 | $\bigoplus_{ig}$ | (2)#12, (1)#12G, 3/4"C. | @24" A.F.F. CASH REGISTER INFOSOFT UP700 | --(10) BREAD OVEN NUVU QB 5/10 AUTOMIST │208/3│ 29.0 │ └□<sup>60A</sup>│ (3)#8, (1)#10G, 1"C. │@48" A.F.F. | SINGLE-DOOR PEPSI COOLER PEPSI 1160 | WALK-IN COOLER **EXISTING** (18) WALK-IN COOLER CAPSULE PAK **EXISTING** (18A) STEP-IN FREEZER **EXISTING** STEP-IN FREEZER CAPSULE PAK NORLAKE (19A) SANDWICH UNIT ENTREE JM-ST-27E-2DX 120/1 | 7.2 | | (2)#12, (1)#12G, 3/4"C. | @24" A.F.F. 5-15P IR-G48T-XB-JMI 120/1 | 6.0 | $\oplus$ | (2)#12, (1)#12G, 3/4°C. GRILLE IMPERIAL (22) (23) EXHAUST HOOD/FIRE SUPPRESSION SYSTEM CAPTIVE AIRE ANSUL 120/1 | 5.0 | $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ (2)#12, (1)#12G, 3/4"C. | COORDINATE 120/1 7.2 5-15P CAPTIVE AIRE (2)#12, (1)#12G, 3/4°C. | @24° A.F.F. CONDENSATE HOOD 5424VHB 120/1 9.3 (2)#12, (1)#12G, 3/4°C. @48° A.F.F. DRINK DISPENSER PEPSI DISPENSER: IDC255, ADAPTOR: 80002957 120/1 14.4 TB3Q |(2)#12, (1)#12G, 3/4"C. | @48" A.F.F. | ICED TEA BREWER BUNN | --(2)#12, (1)#12G, 3/4"C. | @48" A.F.F. COUNTERTOP FOOD WARMER HOSHIZAKI 71001 MODEL 1001 120/1 5.8 5-15P COUNTER-TOP BACON WARMER MARSHALL JM8001K 120/1 | 3.5 | |(2)#12, (1)#12G, 3/4"C. | @18" A.F.F. 10 120/1 2.6 5-15P UNDER-COUNTER REFRIGERATOR HOSHIZAKI CRMR27-D |(2)#12, (1)#12G, 3/4"C. | @80" A.F.F. (34)120/1 5.0 (2)#12, (1)#12G, 3/4°C. | @80° A.F.F. BAG-IN-BOX SYSTEM PEPSI PEPSI l —— 120/1 | 10.6 (2)#12, (1)#12G, 3/4"C. | @48" A.F.F. ( 46 ) | ICE MAKER HOSHIZAKI KM-520MAJ (WH) GAS FIRED WATER HEATER NAVIEN NPE-240A 120/1 1.0 (2)#12, (1)#12G, 3/4°C. --\_\_

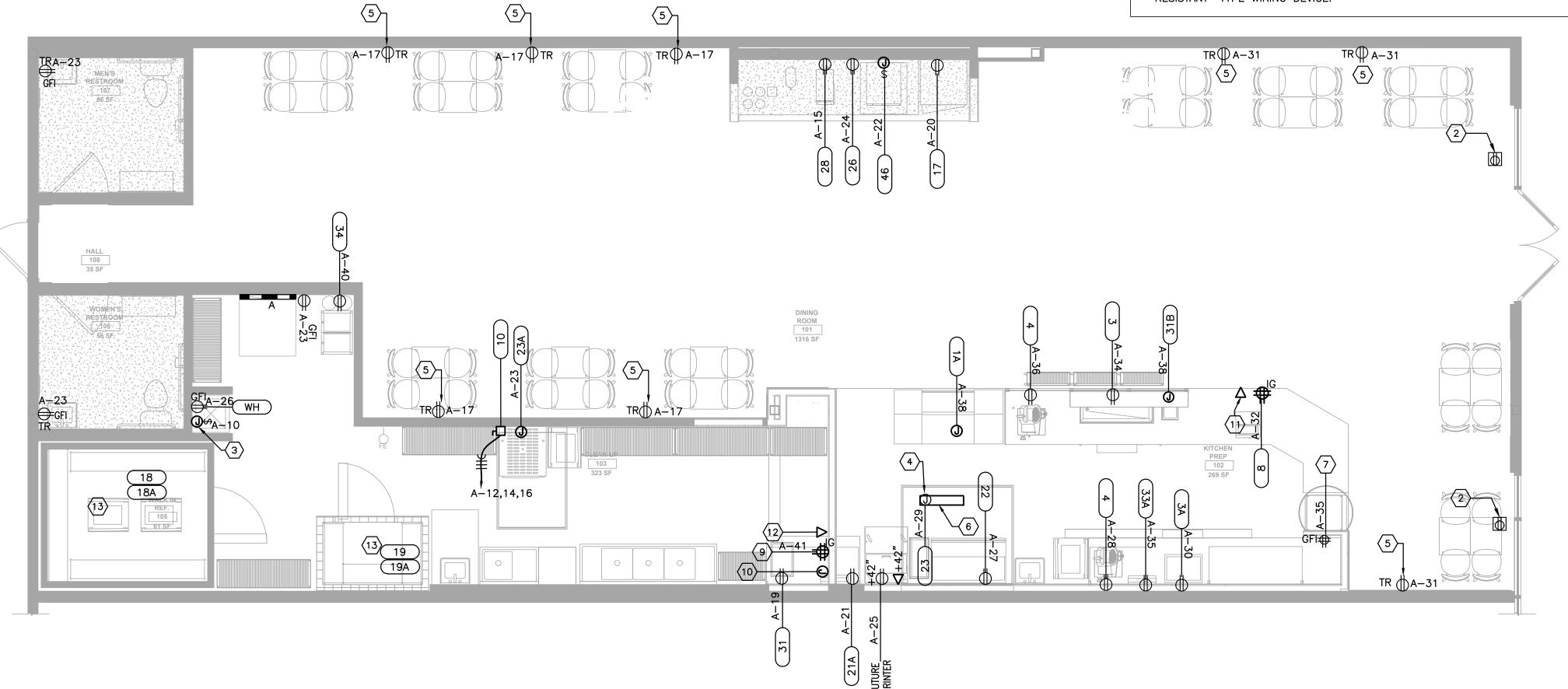
- NOTES:
  1. FOR WALK-IN COOLER LIGHTS AND DOOR HEATER. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. 15A MAX BREAKER.
- 2. FOR WALK—IN COOLER COMPRESSOR/EVAPORATOR. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. 20A MAX FUSE.
  3. FOR STA—IN FREEZER LIGHTS, DOOR HEATER, FAN, AND/OR DRAIN LINE HEATER. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. 15A MAX BREAKER.
  4. FOR STA—IN FREEZER COMPRESSOR. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. 15A MAX FUSE.
- | 4. FOR STA-IN FREEZER COMPRESSOR. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. TSA MAX FUSE. | 5. DEDICATED DUPLEX RECEPTACLE MOUNTED BELOW COUNTER-TOP WITH IN 6'-0" OF EQUIPMENT.
- 6. PROVIDE 30A, 208V/1—PHASE FUSED DISCONNECT WITH (2) 20A FUSES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MANUFACTURER.
  7. PROVIDE 30A, 208V/3—PHASE FUSED DISCONNECT WITH (3) 15A FUSES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MANUFACTURER.
- 8. SYSTEM REQUIRES 120V SERVICE FOR FAN MOTORS AND/OR DRAIN LINE HEATERS. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER.
  9. PROVIDE 30A, 208V/3-PHASE, NON-FUSED DISCONNECT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING CONTRACTOR.

10. UNIT TO BE HARDWIRED. SEE SPEC SHEET FOR EXACT MOUNTING REQUIREMENTS.

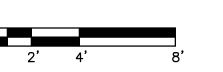
- POWER PLAN KEYED NOTES 🐵
- 1. NOT USED.
- 2. EXISTING SHOW WINDOW RECEPTACLE TO REMAIN.
- PROVIDE A MOTOR RATED SWITCH AS DISCONNECTING MEANS FOR RE—CIRC PUMP LOCATED ABOVE CEILING. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH—IN. RE—CIRC PUMP SHALL BE CONTROLLED BY AUTOMATIC TIMER KIT PROVIDED BY MANUFACTURER, CIRCUIT PER MANUFACTURER RECOMMENDATIONS.
- 4. EXHAUST FAN HOOD. CONTRACTOR SHALL PROVIDE "SHUNT-TRIP" CIRCUIT BREAKERS ON ALL ELECTRICAL EQUIPMENT UNDER THE HOOD. FAN(S) INTERLOCK AND SHUNT-TRIP SHALL BE WIRED THRU HOOD FIRE SUPPRESSION SYSTEM CONTROL. SEE MECHANICAL HOOD DRAWINGS FOR MORE INFORMATION AND ADDITIONAL REQUIREMENTS.
- 5. FINAL LOCATION OF TAMPER-RESISTANT OUTLETS IN DINING SHALL BE DETERMINED BY
- EXISTING HOOD SYSTEM CONTROLLER TO BE RELOCATED. VERIFY EXACT LOCATION WITH EQUIPMENT SUPPLIER. COORDINATE ALL WIRING REQUIREMENTS AND UNIT INTERLOCKS WITH MECHANICAL HOOD DRAWINGS.
- . EC TO PROVIDE QUAD OUTLET INSIDE OF STORAGE NOOK. MOUNT RECEPTACLE AT 54" AFF.
- 8. NOT USED.
- PROVIDE DEDICATED QUAD RECEPTACLE AT TELEPHONE/DATA/TV SHELF ON NEW SOFFIT.
  MOUNT 6" BELOW CEILING. COORDINATE EXACT LOCATION.
- 10. FIELD VERIFY LOCATION OF EXISTING 1" CONDUIT WITH PULL-STRING TO LANDLORD TELEPHONE DEMARC.
- 11. CAT6 DATA OUTLET. PROVIDE 1/2" CONDUIT WITH CAT6 CABLE TO TELEPHONE/DATA/TV
- 12. PROVIDE CAT6 DATA OUTLET AT TELEPHONE/DATA/TV SHELF ON NEW SOFFIT. MOUNT 6"
  BELOW CEILING. COORDINATE EXACT LOCATION.
- 13. EXISTING LOADS TO REMAIN.

# **GFCI NOTES**

- ALL KITCHEN AND RESTROOM SINGLE—PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS, 50 AMPERES OR LESS AND THREE PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS, 100 AMPERES OR LESS INSTALLED SHALL HAVE GROUND—FAULT CIRCUIT—INTERRUPTER PROTECTION FOR PERSONNEL PER N.E.C.
- 2. ALL GFCI RECEPTACLES AND DEAD—FRONT TYPE GFI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION OR A GFCI CIRCUIT BREAKER OR DEAD FRONT GFI DEVICE IN A READILY ACCESSIBLE LOCATION SHALL BE USED TO FEED THE CIRCUIT NOTED.
- 3. ALL 125V, 15A AND 20A CIRCUITS TO KITCHEN EQUIPMENT SHALL BE FED WITH A DEDICATED NEUTRAL WIRE.
- 4. TR NOTATION APPEARING ADJACENT TO A WIRING DEVICE IDENTIFIES A "TAMPER RESISTANT" TYPE WIRING DEVICE.









ARCHITECTURE.IN





- 500 - 100

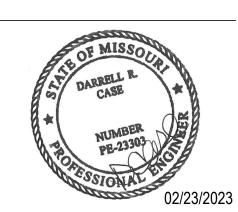
3509 N. BELT HIGHW ST. JOSEPH, MO 645

Description

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certification relating to the performance of products and materials beyond

those provided by their respective manufacturer.



ISSUE FOR PERMIT

Client Approval

Electrical Power Plan

 Project #
 43423-MO11

 Issue Date
 02/23/2023

 Scale
 As indicated

Drawn by
Checked by

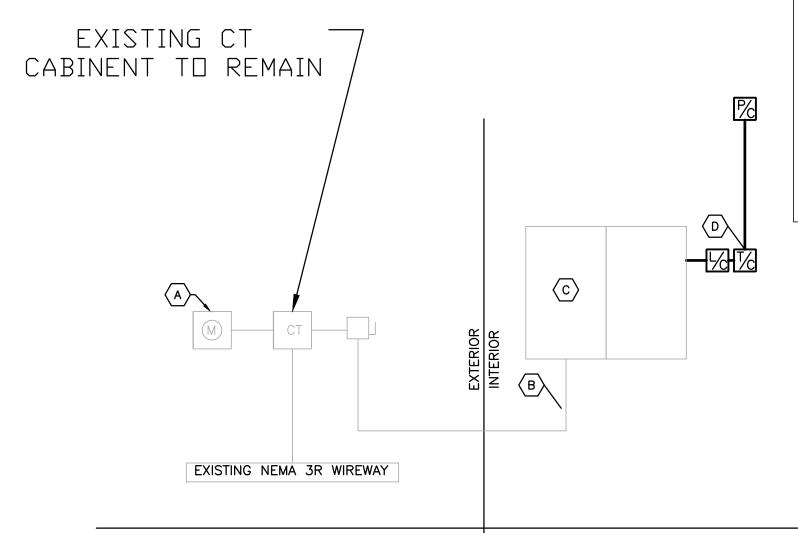
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ı	MC	DUNT:	FLUS	Н	120	<mark>/208</mark>	3-PHASE, 4W	PANEL EX A CAPACITY: 400A INT CAP: 2			22KA		Si							
	LOCA	TION:	ELEC	ROOM				LU	JGS:		MC	В	DEMAND LOAD:	202A		AV. F	AULT:	10.4K	A	NOTES
	CKT	LTG	REC	HVAC	MISC	KIT	DESCRIPTION	AMP	POLE	ф	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	KIT	CKT	Z
	1			5.52						Α	20	1	LIGHTING	1.0					2	LO/
	3			5.52						В	20	1	LIGHTING	1.0					4	LO
	5			5.52			RTU-1	50	3	С	20	1	TIME CLOCK				0.5		6	
	7			5.52						Α	20	1	SPARE						8	
	9			5.52				50	3	В	20	1	WATER HEATER		0.5				10	
П	11			5.52			RTU-2			С								3.8	12	
	13		0.50				ROOF RECEPTACLES	20	1	Α	40	3						3.8	14	
Ι	15					1.7	TEA BREWER	20	1	В			BREAD OVEN					3.8	16	
Τ	17		1.00				CONVIENCE REC	20	1	С	20	1	RECEP		0.2				18	
;	19					0.4	COUNTERTOP WARMER	20	1	Α	20	1	PEPSI COOLER				0.9		20	
Ι	21					0.9	SANDWICH UNIT	20	1	В	20	1	ICE MAKER					1.3	22	
Τ	23		0.60				BATHROOM REC	20	1	C	20	1	DRINK DISPENSER					1.2	24	
Ι	25				0.50		PRINTER	20	1	Α	20	1	RE CIRC PUMP		0.5				26	
	27		1.0				GRILL	20	1	В	20	1	SLICER					0.4	28	
J	29	0.50					LTG HOOD	20	1	С	20	1	SANDWICH UNIT					0.9	30	
Ţ	31		8.0				CONVIENCE REC	20	1	Α	20	1	CASH REGISTER				8.0		32	A/
J	33		0.80				SHOW WINDOW	20	1	В	20	1	COLD UNIT				0.9		34	
Т	35				0.5		U.C REFRIG	20	1	С	20	1	SLICER					0.4	36	
	37					1.5	HAND DRYER	20	1	Α	20	1	WARMER					1.0	38	Α
T	39					1.5	HAND DRYER	20	1	В	20	1	BAG IN BOX				1.0		40	12
T	41				0.5		TELEPHONE	20	1	С	20	1	LIGHTING EXTERIOR	1.0					42	TS
T	43					1.2	COOLER LIGHTS/EVAP	20	1	Α	20	1	EXHAUST FAN			1.2			44	
T	45					0.9		20	1	В	20	1	SPARE						46	
T	47					0.9	COOLER CONDENSER	20	1	С	20	1	SPARE						48	
T	49						SPARE	20	1	Α	20	1	SPARE						50	
T	51						SPARE	20	1	В	20	1	SPARE						52	
Т	53			1.2			EXHAUST FAN	20	1	С	20	1	SPARE						54	Π
Т	55					1.2	FREEZER	20	1	Α	20	1	SPARE						56	
Т	57						SPARE	20	1	В	20	1	SPARE						58	
T	59						SPARE	20	1	С	20	1	SPARE						60	
T	61						SPARE	20	1	Α	20	1	SPACE						62	
Т	63						SPACE	20	1	В	20	1	SPACE						64	
1	65						SPACE	20	1	С	20	1	SPACE						66	1
T	67						SPACE	20	1	Α	20	1	SPACE						68	
T	69						SPACE	20	1	В	20	1	SPACE						70	
1	71						SPACE	20	1	С	20	1	SPACE						72	
1	73						SPACE	20	1	Α	20	1	SPACE						74	
Ť	75						SPACE	20	1	В	20	1	SPACE						76	
Ţ	77						SPACE	20	1	С	20	1	SPACE						78	
1	79						SPACE	20	1	Α	20	1	SPACE						80	
Ţ	81						SPACE	20	1	В	20	1	SPACE						82	
T	83						SPACE	20	1	С	20	1	SPACE						84	
T					LOAD	TYPE	CONNECTED		DEM/	ND	)	DEM/	AND FORMULA			i	TOTAL	LOAD		
	PH	IASE E	ALAN	CE		TING	3.5 KVA		4.4 K			LOAD	X 125% NEC 210.19 CONT	INUOU	S	CONN	ECTED	DEM	AND	1
H	ф	LO	ΔD	0/		TACLE			5.9 K				A + 50% REMAINDER NEC 2		ne di		KVA	72.8		1
ŀ				%			SECTION SECTION OF THE								TOL					1
L	Α	26.3		34%	111111	AC	35.5 KVA		35.5 k				X 100% (USED MCA IN CA	17 19	•	214	I.5A	202	.0A	1
	В	26.8	KVA	35%	MI	SC	5.6 KVA		5.6 K	VA		LOAD	X 100% NEC 210.19 NON-	CONT.			Α:	SI	E	
ſ	С	24.2	KVA	31%	K	IT	26.8 KVA	21.5 KVA 80% PER NEC TABLE 220.56 Engineering Inc			nc.									

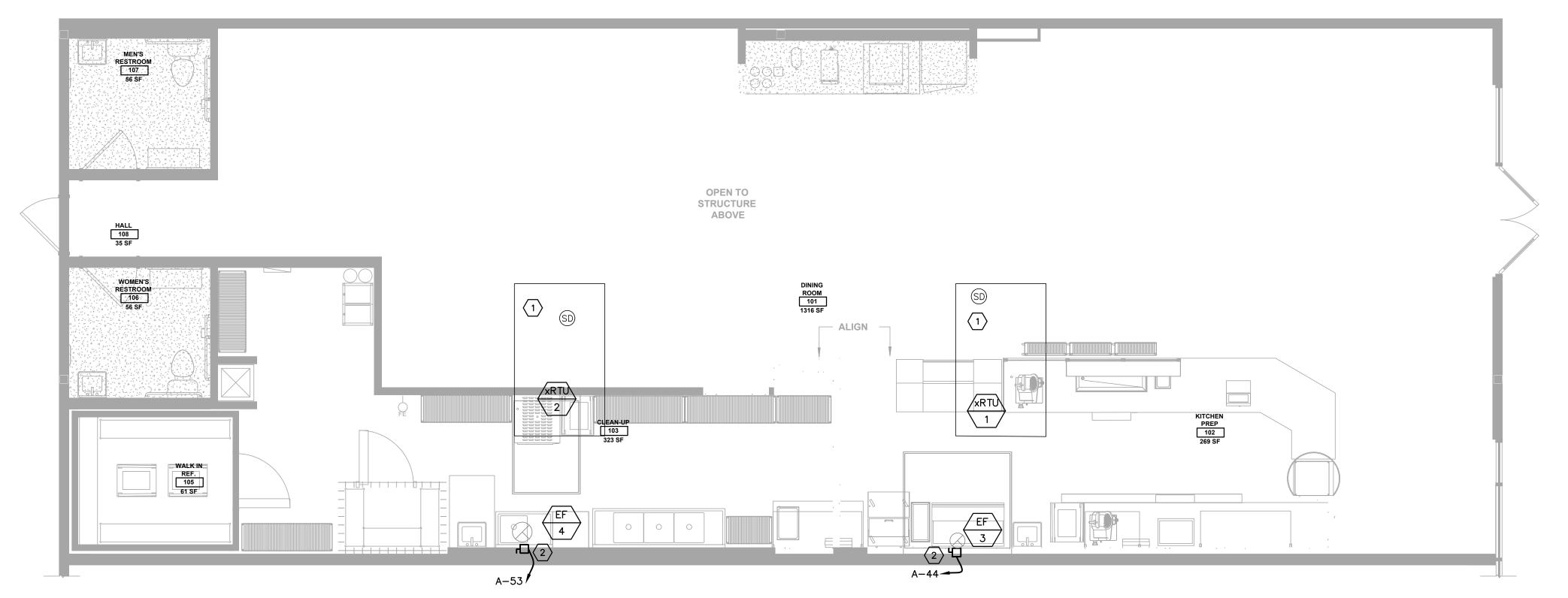
TS - CIRCUIT VIA TIMESWITCH LO - PROVIDE LOCK-ON DEVICE

PL - PROVIDE PADLOCKING ACCESSORY ON BREAKER

C. PROVIDE PADLOCK ACCESSORY ON BREAKER



2 ELECTRICAL RISER DIAGRAM
SCALE: NONE



NOTE:

AT THE TIME OF DESIGN, FAULT CURRENT CALCULATIONS WERE UNABLE TO BE PERFORMED. THE FUTURE BUILDING ELECTRICAL SERVICE AND ARRANGEMENT IS TO BE DETERMINED AT A FUTURE DATE, AND FAULT CURRENTS SHALL BE CALCULATED WHEN AVAILABLE TO THE ENGINEER. THE EQUIPMENT HAS BEEN SERIES RATED AGAINST A WORST CASE SCENARIO TO ENSURE THE PROTECTION OF EQUIPMENT.

PRIOR TO SUBMITTING THE POWER DISTRIBUTION EQUIPMENT PRODUCT DATA FOR REVIEW, THE ELECTRICAL CONTRACTOR SHALL CONTACT THE UTILITY COMPANY TO VERIFY THE FAULT CURRENT VALUES AVAILABLE FROM THE UTILITY COMPANY AND SUBMIT THE UTILITY COMPANY FAULT CURRENT INFORMATION TO THE ENGINEER FOR REVIEW AND EVALUATION.

AFTER THE UTILITY FAULT CURRENT INFORMATION HAS BEEN REVIEWED AND EVALUATED BY THE ENGINEER, ANY REVISIONS TO THE BASIS OF DESIGN AIC VALUES IDENTIFIED ON THE DRAWINGS THAT MAY BE REQUIRED BASED ON THE FAULT CURRENT INFORMATION RECEIVED FROM THE UTILITY COMPANY SHALL BE COMMUNICATED TO THE ELECTRICAL CONTRACTOR.

CONTRACTOR SHALL NOT SUBMIT THE POWER DISTRIBUTION EQUIPMENT FOR REVIEW OR ORDER THE POWER DISTRIBUTION EQUIPMENT UNTIL THE FAULT CURRENT INFORMATION FROM THE UTILITY COMPANY HAS BEEN SUBMITTED TO THE ENGINEER BY THE CONTRACTOR AND THE ENGINEER HAS EVALUATED THE INFORMATION AND PROVIDED FINAL DIRECTION REGARDING THE AIC RATING OF THE POWER DISTRIBUTION EQUIPMENT.

ALL INFORMATION REGARDING CURRENT CONDITIONS ARE VIA SECOND PARTY FIELD SURVEY. EC IS RESPONSIBLE FOR FIELD VERIFICATION OF SITE CONDITIONS AND REPORTING ANY DIFFERENCES OR DISCREPANCIES TO OWNERS REPRESENTATIVE PRIOR TO BID. NO EXTRAS OR CHANGE ORDERS SHALL BE GIVEN FOR CONTRACTOR'S FAILURE TO VERIFY SITE CONDITIONS PRIOR TO BIDDING.

# **GFCI NOTES**

- RATED 150 VOLTS TO GROUND OR LESS, 50 AMPERES OR LESS AND THREE PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS, 100 AMPERES OR LESS INSTALLED SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL PER N.E.C. 2020.
- ALL GFCI RECEPTACLES SHALL BE INSTALLED IN A READILY GFCI CIRCUIT BREAKER SHALL USED TO FEED THE CIRCUIT
- ALL 125V, 15A AND 20A CIRCUITS TO KITCHEN EQUIPMENT SHALL BE FED WITH A DEDICATED NEUTRAL WIRE.

- TGC SHALL VERIFY LENGTH OF FEEDERS PRIOR TO (AND INCLUDE PRICING IN) BID.
- PROVIDE PHENOLIC ENGRAVED NAMEPLATES PERMANENTLY ATTACHED TO ALL ELECTRICAL EQUIPMENT STATING AMPERAGE, VOLTAGE, PHASE, HIGH-LEG-DELTA, ETC.
- CONTRACTOR TO BALANCE PANELBOARD PHASE LOADS TO WITHIN
- . IN LIEU OF THE MAXIMUM AVAILABLE FAULT CURRENT MARKING AS REQUIRED BY 110.24, A PERMANENTLY AFFIXED LABEL SHALL BE APPLIED WITH THE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE 2"X3" IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. THIS LABEL SHALL ALSO INCLUDE THE DATE OF THE CALCULATION.
- ALL SPARE CIRCUIT BREAKERS SHALL BE TURNED TO THE "OFF" POSITION.
- BASED UPON WORK LETTER INFORMATION, THE SERVING LANDLORD SHALL FURNISH AND INSTALL (1) 200A, 120/208V, 3PH PANELBOARD (IDENTIFIED PANEL 'A'). PANEL BREAKERS ARE NOT ESTABLISHED BY THE WORK LETTER TO BE PROVIDED BY THE LANDLORD, AND IT IS ASSUMED ALL BREAKERS IN THE PANELBOARD SHALL BE PROVIDED BY E.C. THE E.C. SHALL VERIFY IF THEY SHALL BE RESPONSIBLE FOR THE PANELBOARD MAIN BREAKER AND PROVIDE NEW AS NECESSARY TO PROVIDE A SERIES RATED COMBINATION TO THE PANEL AS INSTRUCTED. ALL BREAKERS PROVIDED WITHIN THE EXISTING PANEL SHALL BE OF THE SAME MANUFACTURER AS THE PANELBOARD MANUFACTURER, SHALL BE OF A LETTER TYPE AS LISTED BY THE MANUFACTURER TO MAINTAIN THE 'UL' LISTING OF THE PANELBOARD, AND SHALL BE RATED TO PROTECT AGAINST THE AVAILABLE FAULT CURRENT AS INSTRUCTED BY THESE DRAWINGS.

- ALL KITCHEN AND RESTROOM SINGLE-PHASE RECEPTACLES
- ACCESSIBLE LOCATION OR A DEAD FRONT GFI DEVICE INSTALLED IN A READILY ACCESSIBLE LOCATION SHALL BE PROVIDED OR A

# RISER DIAGRAM + PANEL SCHEDULE GENERAL NOTES

- 2. VERIFY FAULT CURRENT RATING (AIC) WITH POWER COMPANY.

- PANELS SHALL BE LABELED TO INDENTIFY THE AVAILABLE ARC FLASH HAZARD AT THE PANEL IN ACCORDANCE WITH APPLICABLE NEC REQUIREMENTS.



CERTIFICATE OF AUTHORITY NO. 001498

796 Merus Court St. Louis, MO 63026 F 636.349.1730



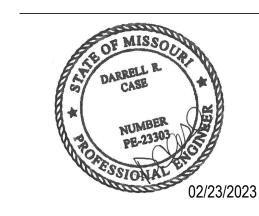
Description

RISER DIAGRAM KEYED NOTES



- A. EXISTING 400AMP CT AND 400/3 CIRCUIT TO REMAIN. PROVIDE A NEW ENGRAVED NAMEPLATE AT THIS SWITCH TO INDENTIFY THE NEW TENANT.
- B. EXISTING FEEDER TO REMAIN
- C. EXISTING PANEL 'A' AS FURNISHED AND INSTALLED BY LANDLORD. CONNECTIONS TO BE PROVIDED BY E.C. SEE PANEL SCHEDULES THIS SHEET FOR INFORMATION
- D. NEW LIGHTING CONTROLS BY EC. SEE DETAIL 2/E2.0.

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# **ISSUE FOR PERMIT**

Client Approval

# **Electrical Schedules**

43423-MO11 Project# 02/23/2023 Issue Date Scale As indicated

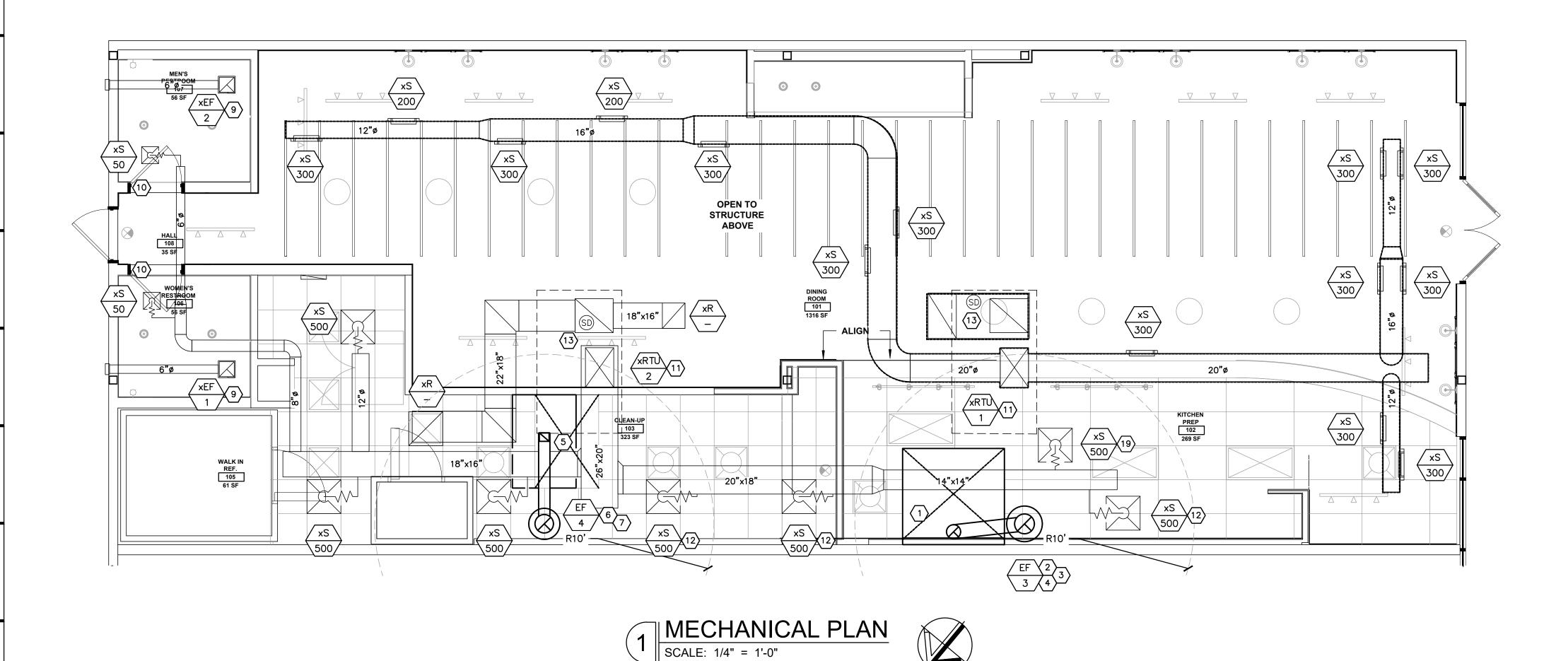
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1. EXISTING ELECTRICAL LOADS TO REMAIN

2. E.C. TO COORDINATE INSTALLATION OF EF-3, EF-4 WITH MECHANICAL CONTRACTOR. PROVIDE #12 CONDUCTORS TO MANUFACTURER PROVIDED DISCONNECT SWITCHES. PROVIDE INTERLOCK WIRING WITH RTU-1, RTU-2.

MECHANICAL EQUIPMENT POWER PLAN



	ROOFTOP UNIT SCHEDULE															
				O.A.			CLG	CLG HEATING MBH GAS MBH ELECTRICAL		TRICAL	WEIGHT					
MARK	MFR	MODEL NO.	CFM	CFM	ESP	HP	TONS	TOT.	SENS.	IN	OUT	MCA	моср	VOLT/PHASE	LBS	REMARKS
xRTU-1	LENNOX	KGA120S4B	3600	890	1.0	3	10	108.8	80.5	180	144	46	50	208/3	1600	1,2,3
xRTU-2	LENNOX	KGA120S4B	4000	890	1.0	3	10	108.8	80.5	180	144	46	50	208/3	1600	1,2,3

. INTERLOCK OPERATION SUPPLY FANS AND EXHAUST FANS. SEE EXHAUST FAN SCHEDULE FOR ADDITIONAL INFO. . VERIFY ELECTRICAL VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

EXISTING ROOFTOP UNIT TO REMAIN. VERIFY PROPER OPERATION IN FIELD.

EXHAUST FAN SCHEDULE											
MANUFACTURER	MODEL NO.	ESP	RPM	CFM	WEIGHTS	VOLTS/PH	REMARKS				
COOK	GC-128	0.1	750	75	54	120/1	1,2,3				
COOK	GC-128	0.1	750	75	54	120/1	1,2,3,4				
CAPTIVEAIRE	DU50HFA	1.0	1471	1000	84	115/1	1,5				
CAPTIVEAIRE	DU12HFA	0.5	1407	375	54	115/1	1,5				
	COOK COOK CAPTIVEAIRE	COOK GC-128 COOK GC-128 CAPTIVEAIRE DU50HFA	COOK         GC-128         0.1           COOK         GC-128         0.1           CAPTIVEAIRE         DU50HFA         1.0	COOK         GC-128         0.1         750           COOK         GC-128         0.1         750           CAPTIVEAIRE         DU50HFA         1.0         1471	COOK         GC-128         0.1         750         75           COOK         GC-128         0.1         750         75           CAPTIVEAIRE         DU50HFA         1.0         1471         1000	COOK         GC-128         0.1         750         75         54           COOK         GC-128         0.1         750         75         54           CAPTIVEAIRE         DU50HFA         1.0         1471         1000         84	COOK         GC-128         0.1         750         75         54         120/1           COOK         GC-128         0.1         750         75         54         120/1           CAPTIVEAIRE         DU50HFA         1.0         1471         1000         84         115/1				

- 1. VERIFY ELECTRICAL VOLTAGE AND PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING UNIT. PROVIDE ROOF CURBS AND DISCONNECT WITH FAN. FURNISHED AND INSTALLED BY
- MECHANICAL CONTRACTOR. . INTERLOCK OPERATION SUPPLY FANS AND EXHAUST FANS. EF-3, EF-4 WITH xRTU-1. ELECTRICAL INTERLOCK WITH OVEN CONTROLS.
- 4. FAN TO BE CONTROLLED BY SWITCH.

	AIR BALANCE	SCH	EDUL	<b>.</b> E
	MARK	OA CFM	EA CFM	BALANCE
	RTU-1	890	-	
SCK SCK	RTU-2	890	-	
INTERLOCK				
N	EF-3	-	-1000	
	EF-4	-	-375	
	xEF-1	-	-75	
	xEF-2	-	-75	
	TOTAL:	1780	-1525	+255

DESCRIPTION	AREA (SQ. FT.)	AREA OUTDOOR AIR RATE PER IMC TABLE 403.3 (RA)	AREA OUTDOOR AIR (RaAz)	OCCUPANT LOAD RATE PER IMC TABLE 403.3 (PEOPLE/1000 SQ. FT.)	OCCUPANCY CXF /1000 (Pz)	OCCUPANT OUTDOOR AIR RATE PER IMC TABLE 403.3 (Rp)	OCCUPANT OUTDOOR AIR (RpPz)	BREATHING ZONE OUTDOOR AIR (Vbz=RpPz +RgAz)	ZONE AIR DISTRIBUTION EFFECTIVENSS (Ez)	ZONE OUTDOOR AIR (Voz= Vbz/Ez)	SUPPLY AIR DESIGN (Vpz)	OUTDOOR AIR FRACTION (Zp=Voz/Vpz)
DINING	1392	0.18	251	70	97	7.5	728	979	0.8	1224	4000	0.31
KITCHEN/PREP	295	0.12	35	20	6	7.5	45	80	0.8	100	1000	0.10
вон	348	0.06	21	20	7	5	35	56	8.0	70	2500	0.03
M,W.TLT	110	_	-	_	_	-	_	-	0.8	-	100	_
TOTALS	2145				50					1394	7600	0.18
												Ev
TOTAL REQUIRED OUTDOOR AIR 1394										0.99		

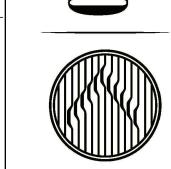
# GENERAL NOTE

ALL ROOF WORK NEEDS TO BE COORDINATED WITH THE SHELL ROOFING SUBCONTRACTOR AND OR ROOFING MANUFACTURER TO ENSURE NO WARRANTIES ARE VOIDED.

# HVAC SYMBOLS LEGEND

# HVAC + SPRINKLER KEYED NOTES

- $\langle 1 \rangle$  NEW 54"x30" TYPE I GRIDDLE HOOD WITH A 3" INTERNAL STANDOFF AND A LAYER OF INSULATION BEHIND THE HOOD FOR TO COMPLY WITH O" CLEARANCE TO COMBUSTIBLES. PROVIDE COMPLETE FIRE SUPPRESSION SYSTEM FOR EQUIPMENT UNDER HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION.
- 2 NEW EXHAUST FAN (EF-3) FOR TYPE I GRIDDLE HOOD. REUSE EXISTING EXHAUST DUCT PENETRATION. REFER TO HOOD DRAWINGS FOR INFORMATION. MAINTAIN MINIMUM 10'-0" HORIZONTAL DISTANCE BETWEEN EXHAUST FAN AND OUTSIDE AIR INTAKES.
- NEW 9"x9" WELDED 16 GAUGE BLACK STEEL GREASE DUCT WITH LIQUID TIGHT EXTERNAL WELD FROM TYPE I GRIDDLE HOOD. ROUTE DUCTWORK THRU ROOF TO EF-3. PROVIDE CLEAN-OUTS IN HORIZONTAL DUCTWORK AND EACH CHANGE OF DIRECTION AND MAX. 20 FT ON CENTER AS REQUIRED BY CODE.
- PROVIDE GREASE DUCT WRAP WITH TWO (2) LAYERS OF 3M FIRE BARRIER DUCT WRAP 15A, 1-1/2" THICK WITH 4" PERIMETER AND LONGITUDINAL OVERLAPS WHERE REQUIRED BY CODE. PROVIDE TWO HOUR FIRE RESISTIVE RATING AND ZERO CLEARANCE TO COMBUSTIBLES AT OVERLAP OR COLLAR. 3M FIRE BARRIER DUCT WRAP IS LISTED BY INTERTEK 3MU/FRD 120-13 (FORMERLY OPL GD556F) AND ASTM E 2336. INSTALL PER MANUFACTURER'S INSTRUCTIONS. REFER TO GREASE EXHAUST DUCT DETAIL ON DWG. M2.1 FOR ADDITIONAL INFORMATION.
- $\langle 5 \rangle$  NEW 45"x54" TYPE II BREAD OVEN HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION.
- 6 NEW EXHAUST FAN (EF-4) FOR TYPE II BREAD OVEN HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION. LOCATE ON ROOF IN FRONT OF TENANT'S SPACE. MAINTAIN MINIMUM 10'-0" HORIZONTAL DISTANCE BETWEEN EXHAUST FAN AND OUTSIDE AIR INTAKES.
- 7 7"x6" EXHAUST DUCT FROM TYPE II BREAD OVEN HOOD. ROUTE DUCTWORK UP THRU ROOF TO  $\underline{\text{EF}-4}$ . TRANSITION DUCT AT FAN.
- 8 FURNISH AND INSTALL SEVEN-DAY PROGRAMMABLE THERMOSTATS WITH AUTO CHANGEOVER AND RELATED WIRING TO CONTROL ROOF TOP UNITS. THERMOSTATS TO BE HONEYWELL MODEL TB7220. MOUNT AT 48" AFF. VERIFY LOCATION OF THERMOSTATS WITH ELEVATION ON ARCHITECTURAL DRAWINGS. VERIFY PROPER OPERATION IN FIELD.
- 9 EXISTING TOILET EXHAUST FANS (xEF-1,2) TO REMAIN. FAN SHALL BE WIRED AND OPERATED THROUGH THE LIGHT SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR.
- 10 DOOR TO BE UNDERCUT FOR MAKE-UP AIR.
- EXISTING 10 TON ROOFTOP UNITS, (xRTU-1,2), TO REMAIN. TRANSITION FROM ROOFTOP UNIT SUPPLY AND RETURN DUCT DROPS TO DUCT SIZES SHOWN ON PLANS. COORDINATE LOCATION IN FIELD WITH ARCHITECTURAL DRAWINGS AND STRUCTURAL DRAWINGS. SEE EQUIPMENT SCHEDULE FOR ADDITIONAL
- SUPPLY AIR DIFFUSER CFM SHALL BE ADJUSTED AS REQUIRED FOR PROPER AIR FLOW AROUND THE HOOD.
- PROVIDE NEW SMOKE DETECTOR IN RETURN DUCT TO MEET CODE REQUIREMENTS IF NONE EXISTING.





**Engineering Inc.** 796 Merus Court St. Louis, MO 63026 F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498



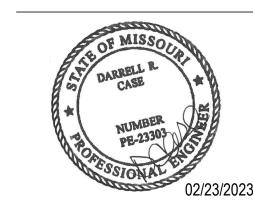
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Description

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# **ISSUE FOR PERMIT**

Client Approval

Checked by

Mechanical

43423-MO11 Project# 02/23/2023 Issue Date Scale As indicated Drawn by

## DIVISION - 15 MECHANICAL SPECIFICATIONS

A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS SHALL FORM A PART

OF THIS SECTION OF THE SPECIFICATIONS.

REFERENCE IS MADE TO REQUISITES FOR BIDDERS AND CONTRACTORS UNDER OTHER SECTIONS OF THESE SPECIFICATIONS, WHICH SHALL BE CONSIDERED BINDING, UNLESS OTHERWISE NOTED UNDER THIS

EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE CON-STRUCTION DETAILS, BOTH AS ON TENANT CONSTRUCTION DRAWINGS AND LANDLORD'S AS REFERRED TO, BEFORE SUBMITTING HIS BID AS NO ALLOW-ANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS

REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION.

ALL PROPOSALS SHALL PRECLUDE THAT CONTRACTOR IS FAMILIAR WITH JOB SITE CONDITIONS AND UTILITY LOCATIONS AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

# ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED.

ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS OR AS DIRECTED BY THE OWNER, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT, AND ALL MODIFICA-

TIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR

## MATERIALS AND WORKMANSHIP

WITHOUT ANY ADDITIONAL COST TO THE OWNER.

- A. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURERS, AND UNLESS OTHER-WISE SPECIFIED SHALL BE NEW, AND FREE FROM ANY DEFECTS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.
- ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION, AND ON COM-PLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED AND ALL DEBRIS PRESENT AS A RESULT OF THIS CONTRACT SHALL BE REMOVED FROM THE PREMISES, <u>DO NOT JUST ABANDON</u>.

EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN OR SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE, HE SHALL PROMPTLY NOTIFY THE GENERAL CONTRACTOR AND THE TENANT IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE, THE SUBCON-TRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

- A. EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PRO-TECTION OF ALL HIS WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS WORK HE SHALL MAKE GOOD ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS CONTROL AND NOT TO HIS FAULT OR NEGLIGENCE. HE SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS WELL.
- EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THEIR EMPLOYEES ON THE WORK AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSUR-ANCE REQUIRED TO PROTECT HIMSELF. OWNER AND TENANT FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC LIABILITY.

# HANGES IN THE WORK

THE TENANT, WITHOUT INVALIDATING THE CONTRACT, MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO OR DEDUCTING FROM THE WORK, THE CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CON-JUNCTION WITH OTHER CONTRACTORS AND TRADES OF THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS CONTRACTS. REFER-ENCE SHALL BE MADE TO THE OWNER FOR INSTRUCTIONS SHOULD ANY QUESTIONS ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OR STRENGTH OF THE STRUCTURE.

MANUFACTURER'S NAMES ARE LISTED HEREIN TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE, IF IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED.

# SHOP DRAWINGS

SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS, AND SUCH OTHER ILLUSTRATIVE MATERIAL AS MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THIS CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.

# DRAWINGS AND SPECIFICATIONS

- A. THE DRAWINGS SHOW DIAGRAMMATICALLY THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES, AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM.
- B. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR IN ITEMS SHOWN ON CONTRACT DRAWINGS, THE SHOP DRAWINGS, DES-CRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

A. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PRO-VIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK. REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED.

B. CONTRACTOR SHALL SUPPLY TO LANDLORD AND TENANT A CERTIFIED BALANCE REPORT AT COMPLETION OF PROJECT. THIS IS REQUIRED FOR BOTH REMODELED AND NEW STORES.

#### HEATING, VENTILATING AND AIR CONDITIONING

- A. THE WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION, OR INSTRUCTIONS TO BIDDERS, AND THE GENERAL CON-DITIONS, ADDENDA, OR DIRECTIVES WHICH MAY BE ISSUED BY THE OWNER, HEREWITH, OR OTHERWISE, SHALL BE COMPLIED WITH IN EVERY RESPECT.
- B. THE LISTING HEREIN OF AN ARTICLE OR MATERIAL, OPERATION OR METHOD, REQUIRES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL EACH ITEM LISTED, UNLESS SPECIFICALLY NOTED TO THE CONTRARY. THE CONTRACTOR SHALL PERFORM EACH OPERATION PRESCRIBED OR LISTED ACCORDING TO THE CONDITIONS STATED.

ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE THE SITE AND ALL CONDITIONS THEREON AND/OR THEREIN. ALL PROPOSALS SHALL TAKE INTO CONSIDERATION ALL SUCH CONDITIONS AS MAY AFFECT THE WORK UNDER THIS CONTRACT.

#### FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COM-PLETE FULLY OPERATIVE HEATING, VENTILATING, AND AIR CONDITIONING SYSTEM EXCEPT AS SPECIFICALLY EXCLUDED BY THE DRAWINGS, AND/OR TENANT'S DIRECTIONS.

- A. 1. SPLIT SYSTEM UNITS: FURNISH HEATING AND AIR CONDITIONING AS SCHEDULED. UNIT TO BE COMBINED PACKAGED SYSTEM, ALL SEASON EQUIPMENT, CONSISTING OF GAS HEATING SECTION, BLOWER, DX COIL, COMPRESSOR(S). AND AIR COOLED CONDENSING SECTION. UNIT SHALL BE DESIGNED FOR DOWN FLOW ARRANGEMENT WITH ALL DUCT PENETRATIONS WITHIN FACTORY ROOF CURB.
- 2. FEATURES: UNITS TO BE WOUND FOR VOLTAGE AND PHASE AS SCHEDULED. HEAVY GAUGE ALUMINIZED STEEL, STAINLESS STEEL OR COATED HEAT EXCHANGER WILL BE ACCEPTABLE. UNIT MUST BE A.G.A APPROVED FOR OUTDOOR APPLICATION. DIRECT EXPANSION COIL WITH FACTORY INSTALLED EXPANSION VALVE - BLOWER SHALL BE OF THE CENTRIFUGAL BELT DRIVEN OR MULTI-SPEED DIRECT DRIVE TYPE WITH FORWARD CURBED BLADES — BLOWER AND MOTOR ISOLATED FOR QUIET OPERATION - BUILT IN MOTOR STARTER WITH OVER VOLTAGE PROTECTION. HERMETICALLY SEALED COMPRESSOR WITH INHERENT OVERLOAD PROTECTION THERMOSTAT - NON-PRORATED 5-YEAR WARRANTY ON COMPRESSOR AND 10-YEAR WARRANTY ON HEAT EXCHANGER - CONDENSER COIL CONSTRUCTED OF COPPER TUBING WITH ALUMINUM FINS - CRANKCASE HEATERS - BUILT IN MOTOR STARTERS ELECTRIC IGNITION - HIGH, LOW PRESSURE CUTOUT ON COMPRESSOR - SHUTOFF VALVES ON LIQUID AND SUCTION LINES - SHORT CYCLE TIMER PROTECTION - FILTER -DRYER — VIBRATION ISOLATION. UNIT FACTORY CHARGED.
- 3. ACCESSORIES: SUPPLY AND RETURN FILTER CASING ASSEMBLY TWO COMPLETE SETS OF THROWAWAY TYPE FILTERS. FILTERS SHALL BE 2" THICK. ONE SET TO BE REMOVED AND REPLACED JUST PRIOR TO FINAL INSPECTION - FULL ECONOMIZER PACKAGE WITH LOW LEAKAGE FRESH AIR STANDARD RETURN AIR DAMPERS AND DAMPER MOTOR, - MINIMUM POSITION SETTING - PROVIDE MANUFACTURER'S INTERFACE AS REQUIRED FOR OPERATION WITH THERMOSTAT AS SPECIFIED. PROVIDE MOUNTING CURB APPROVED BY NATIONAL ROOF CONTRACTORS ASSOCIATION TO SUPPORT THE ENTIRE ASSEMBLY WITH NAILER STRIP AND AIR TIGHT GASKET.
- ALL SINGLE STAGE UNITS WILL BE EQUIPPED WITH PROGRAMMABLE THERMOSTAT. DESIGN AND STANDARD CONDITIONS FOR THERMOSTAT OPERATION WILL BE AS FOLLOWS:

COOLING: 75°F MAXIMUM OCCUPIED COOLING TEMPERATURE 85°F COOLING NIGHT SETBACK.

HEATING: 70°F MAXIMUM OCCUPIED HEATING TEMPERATURE 60°F HEATING NIGHT SETBACK.

FAN: CONTINUOUS IN OCCUPIED AND RECOVERY MODE AND WITH HEATING OR COOLING EQUIPMENT IN UNOCCUPIED MODE.

DEADBAND: CAPABLE OF MAINTAINING A 5°F DEADBAND.

CLOCK: 7 DAY CAPABLE OF 7 DIFFERENT DAY SCHEDULES. OVERNIGHT: HAVE A 2 HOUR OVERRIDE ACCESSIBLE TO MANAGER. BACKUP: CAPABLE OF MAINTAINING PROGRAMMED SETTING FOR AT

LEAST 10 HOURS WITHOUT POWER.

F. THE HVAC SUBCONTRACTOR SHALL IDENTIFY ALL ROOF MOUNTED HVAC EQUIPMENT AND APPARATUS WITH 2" HIGH PAINTED STENCILED STORE NAME ON ALL SIDES OF EQUIPMENT.

A. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME GRADE SHEET STEEL OF THE FOLLOWING GAUGES:

12" AND LESS NO. 26 U.S. GAUGE 13" TO 30" NO. 24 U.S. GAUGE 31" TO 54" NO. 22 U.S. GAUGE 55" TO 84" NO. 20 U.S. GAUGE 85" AND OVER NO. 18 U.S. GAUGE

B. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED AS FOLLOWS:

17" AND LESS "S" AND DRIVE CLEATS 18" TO 30" "L" STANDING SEAMS ON 3'-0" CENTERS 31" TO 54" 1-1/4" STANDING SEAMS ON 3'-0" CENTERS

GREASE DUCTS SHALL BE BLACK CARBON STEEL NOT LESS THAN 0.054" (16 GA.). ALL SEAMS, JOINTS, AND PENETRATIONS SHALL HAVE A LIQUID TIGHT, CONTINUOUS, EXTERNAL WELD.

1. THE KITCHEN HOOD EXHAUST DUCTWORK SHALL BE ENCLOSED IN A RATED ENCLOSURE PER CODE.

2. THE CONTRACTOR SHALL INCLUDE IN HIS PRICE: -ALL NECESSARY TRANSITION AND CONNECTION FITTINGS TO THE HOOD AND EXHAUST FANS.

- ALL CLEAN-OUT ACCESS PANELS AS REQUIRED BY CODE.

 ALL ELBOW AND TRANSITION FITTINGS. - ALL HANGERS AND SUPPORTS. -SHOP DRAWINGS SHOWING PROPOSED FABRICATION AND INSTALLATION COORDINATED WITH EXISTING FIELD CONDITIONS AND OTHER TRADES.

ROUND LOW PRESSURE DUCTS SHALL BE SPIRAL WOUND AS MANUFACTURED BY UNITED SHEET METAL COMPANY OR SHOP FABRICATED ROUND DUCTS WITH PITTSBURGH LOCK LONGITUDINAL SEAMS. GAUGES FOR SHOP FABRICATED DUCTS SHALL BE AS FOLLOWS:

NO. 26 GAUGE UP TO 12" IN DIAMETER 13" TO 30" NO. 24 GAUGE 31" TO 42" NO. 22 GAUGE 43" TO 60" NO. 20 GAUGE

ELBOWS SHALL HAVE A CENTERLINE RADIUS OF 1-1/2 TIMES DUCT DIAMETER AND MAY BE SMOOTH ELBOWS OR 5 PIECE 90 DEGREE ELBOWS AND 3 PIECE 45 DEGREE ELBOWS. JOINTS OF ROUND DUCTS SHALL BE SLIP TYPE WITH A MINIMUM OF 3 SHEET METAL SCREWS.

- 1. ALL EXPOSED ROUND LOW PRESSURE DUCTWORK SHALL BE INTERNALLY LINED. 2. ALL LOW PRESSURE DUCTWORK SHALL BE EXTERNALLY SEALED USING UNITED SHEET METAL, MMM EC-800, OR HARDCAST DUCT SEALER INSTALLED IN THE JOINTS PRIOR TO CLOSURE. ADDITIONALLY SEAL ALL EXTERNAL TRANSVERSE JOINTS AND FITTING CONNECTIONS EXTERNALLY.
- C. ALL SUPPLY AIR DUCTS (HEATING AND COOLING) AND RETURN AIR DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED STEEL WITH MIN. 1" (R-5) THICK EXTERNAL THERMAL INSULATION EXCEPT DUCT LINED FOR ACOUSTICAL PURPOSES. ALL EXHAUST AND RELIEF AIR DUCTS SHALL BE GALVANIZED STEEL.
- CONTRACTOR WILL INSTALL INSECT SCREENS ON ALL DUCT OPENINGS WHICH LEAD TO OR ARE OUTDOORS. INSECT SCREENS SHALL BE 10 GAUGE, ONE-HALF INCH (1/2") MESH IN REMOVABLE GALVANIZED STEEL FRAMES.
- E. ALL DUCTWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN THE AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING ENGINEERS GUIDE (ASHRAE) AND FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST METHODS RECOMMENDED IN THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) LOW VELOCITY DUCT MANUAL, LATEST EDITION.

- A. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND LESS SHALL BE SUPPORTED BY MEANS OF BAND IRON HANGERS OF NO. 18 U.S. GAUGE ATTACHED TO THE DUCT BY MEANS OF RIVETS, SCREWS, OR CLAMPS, AND FASTENED TO STRUCTURE ABOVE BY TOGGLE BOLTS OR OTHER MEANS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS. VERTICAL DUCTS SHALL BE SUPPORTED WITH 1-1/4" x 1-1/4" x 1-1/4" ANGLES WHERE THEY PASS THROUGH THE FLOOR LINES.
- B. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND MORE SHALL BE SUPPORTED BY MEANS OF ANGLE IRON TRAPEZE HANGERS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF

## A. CONTRACTOR WILL PROVIDE WATER TIGHT 24 GA. SHEET METAL FLASHINGS AT ALL EXTERIOR WALLS AND ROOF PENETRATIONS.

B. ALL CUTTING OF ROOF OPENINGS, SUPPORTS FOR ROOF OPENINGS, PITCH PANS, ROOF CURBS, FLASHINGS, COUNTER FLASHINGS, REPAIR TO ROOF, ETC. ASSOCIATED WITH HVAC SUBCONTRACTOR SHALL BE THE RESPONSIBILITY AND PART OF THE CONTRACT HVAC SUB-CONTRACTOR. HE SHALL EMPLOY THE LANDLORD'S ROOFERS FOR THIS WORK SO AS TO MAINTAIN THE ROOF BOND.

A. SPLITTER DAMPERS SHALL BE FABRICATED OF SHEET STEEL NOT LESS THAN NO. 16 U.S. GAUGE WITH THE LEADING EDGE HEMMED. EACH DAMPER SHALL BE LARGE ENOUGH TO COVER THE SMALLER OF THE TWO OPENINGS IT CONTROLS. DAMPERS SHALL BE CONTROLLED AS FOLLOWS:

EXPOSED OR ACCESSIBLE DUCTWORK - LOCKING QUADRANTS EQUAL TO YOUNG REGULATOR NO. 1 WITH DAMPER ROD END BEARINGS ON OPPOSITE

CONCEALED DUCTWORK - LOCKING QUADRANT EQUAL TO YOUNG REGULATOR NO. 315 (CHROMIUM PLATED WITH DAMPER ROD END BEARINGS ON BOTH

- VOLUME DAMPERS SHALL BE OF THE OPPOSED INTERLOCKING TYPE AS MANUFACTURED BY AMERICAN FOUNDRY AND FURNACES CO. (AFFCO) OR EQUAL. BLADES SHALL BE OF NO. 16 GAUGE SHEET METAL AND SHALL NOT EXCEED 48" IN LENGTH OR 12" IN WIDTH. BLADES SHALL BE ON ONE-HALF INCH (1/2") DIAMETER RUSTPROOF AXLE. BEARINGS SHALL BE OF THE SELF-LUBRICATING FERRULE TYPE.
- FIRE DAMPERS SHALL BE SUPPLIED AND INSTALLED BY HVAC CONTRACTOR AT DUCT PENETRATIONS IN FIRE RATED WALLS, CEILINGS, AND ROOFS AS REQUIRED. COORDINATE WITH LANDLORD, LOCAL FIRE MARSHALL AND ALL CODES AND GOVERNING AUTHORITIES HAVING JURISDICTION.
- JOB FABRICATED TURNING VANES SHALL BE ACCEPTABLE IN SQUARE ELBOWS. PROVIDE AND INSTALL BARBER-COLEMAN AIR TURNS OR EQUAL. TURNING VANES SHALL BE OF THE SAME GAUGE METAL AS THE DUCT IN WHICH THEY ARE INSTALLED. RADIUS ELBOWS SHALL HAVE A CENTER-LINE RADIUS OF ONE AND ONE-HALF (1-1/2) TIMES THE DUCT WIDTH.

DUCTWORK FOR EXHAUSTING AIR OR OUTSIDE SUPPLY AIR SHALL BE ALL METAL AND CONSTRUCTED ACCORDING TO RECOMMENDED PRACTICES AS FOUND IN THE LATEST ISSUE OF ASHRAE.

# SUPPORT OF DUCT SYSTEM

HANGER DESIGN SHALL BE AS DESCRIBED IN THE LATEST EDITION OF THE "SMACNA" MANUAL. REINFORCEMENT MEMBERS MAY BE USED TO SUPPORT DUCT SYSTEM PROVIDED DETAILS OUTLINED IN THE AFOREMENTIONED MANUAL ARE ADHERED TO.

DUCTS SHALL BE SUPPORTED AT ALL TURNS AND TRANSITIONS AND NOT MORE THAN 8'-0" O.C. STRAIGHT DUCTS UP TO 59" MAX. DIMENSIONS SHALL BE SUPPORTED 6'-0" O.C. DUCTS OVER 60" MAX. DIMENSIONS SHALL BE SUPPORTED AT 4'-0" O.C.

ALL DUCTS REQUIRING REINFORCEMENT SHALL BE REINFORCED ACCORDING TO THE LATEST EDITION OF "SMACNA" MANUAL.

MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WASHERS SHALL BE PLATED OR GALVANIZED.

# **ACCESSORY ITEMS**

ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNEC-TIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST PUBLICATION OF "SMACNA" MANUAL.

CONTRACTOR WILL DEMONSTRATE OPERATION OF SYSTEM TO FULL SATIS-FACTION OF TENANT, WILL BALANCE AIR FLOW IN ACCORDANCE WITH AIR QUANTITIES ON DRAWINGS AND WILL RECORD VOLUME READINGS IN ACCOR-DANCE WITH ASHRAE AND PROVIDE SAME TO TENANT. ALL PIPING SHALL WITHSTAND AIR PRESSURE TESTING PER GOVERNING PLUMBING CODE.

- A. AIR DISTRIBUTION SYSTEMS:
- 1. INSPECT INSTALLATION AND VERIFY CONFORMITY TO DESIGN. VERIFY THAT SUPPLY, RETURN, AND EXHAUST DUCTS HAVE BEEN PRESSURE-TESTED FOR LEAKAGE AS RECOMMENDED IN THE APPROPRIATE SMACNA STANDARDS.
- FUNCTIONAL. 3. VERIFY THAT SUPPLY, RETURN, EXHAUST AND TRANSFER GRILLES, REGISTERS AND DIFFUSERS ARE INSTALLED AND OPERATING PROPERLY.

2. VERIFY THAT VOLUME AND FIRE DAMPERS ARE PROPERLY LOCATED AND

- B. VERIFY THAT CONTROL COMPONENTS ARE INSTALLED IN ACCORDANCE WITH PROJECT REQUIREMENTS AND ARE FUNCTIONING AS INTENDED, INCLUDING ELECTRICAL POWER, CONTROL AND INTERLOCK WIRING, DAMPER SEQUENCES, SMOKE DETECTORS, ETC.
- C. UPON COMPLETION OF THE INSTALLATION AND START-UP OF THE MECHANICAL EQUIPMENT, TEST, ADJUST AND BALANCE SYSTEM COMPONENTS TO
- OBTAIN OPTIMUM CONDITIONS IN EACH CONDITIONED SPACE IN THE BUILDING.
- D. BEFORE FINAL ACCEPTANCE IS MADE, FURNISH TO THE ARCHITECT THE FOLLOWING DATA:
- 1. SUMMARY OF MAIN SUPPLY, RETURN AND EXHAUST DUCT PILOT TUBE TRANSVERSES AND FAN SETTINGS.
- 2. AIR QUANTITIES AT EACH SUPPLY, RETURN, RELIEF AND EXHAUST AIR HANDLING DEVICE.
- 3. AIR PRESSURE READINGS ENTERING AND LEAVING EACH SUPPLY FAN AND EXHAUST FAN.
- 4. MOTOR CURRENT AND VOLTAGE READINGS AT EACH EQUIPMENT MOTOR. 5. TEST RESULTS SHALL BE RECORDED ON STANDARD FORMS CONFORMING TO AABC AND NEBB REQUIREMENTS. THE REPORT SHALL INCLUDE AIR FLOW SCHEMATIC DIAGRAMS INDICATING AND IDENTIFYING TEST LOCATIONS SUCH AS DUCT TRANSVERSE, OUTLET READINGS, PRESSURE READINGS AND TEMPERATURE READINGS, AND SHALL BE REFERENCED TO THE RECORDED DATA ON THE
- E. MAKE AN INSPECTION IN THE BUILDING DURING THE OPPOSITE SEASON FROM THAT IN WHICH THE INITIAL ADJUSTMENTS WERE MADE, AND AT THAT TIME MAKE ANY NECESSARY MODIFICATIONS TO THE INITIAL ADJUSTMENTS REQUIRED TO PRODUCE OPTIMUM OPERATION OF THE SYSTEM COMPONENTS, TO PRODUCE
- THE PROPER CONDITIONS IN EACH SPACE. F. INSTRUCTION: THE CONTRACTOR SHALL INSTRUCT THE BUILDING OPERATING PERSONNEL IN THE CONSTRUCTION AND OPERATION OF ALL EQUIPMENT.

ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALI BE REPAIRED OR REPLACED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE TENANT.

# MECHANICAL

TEMPORARY SERVICE THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SPECIFIC ITEMS OF

- TEMPORARY SERVICES: A. TELEPHONE - THE TENANT'S GENERAL CONTRACTOR SHALL INSTALL A JOB SITE TELEPHONE AND NOTIFY TENANT AS LISTED ON SHEET A-1 OF THE TELEPHONE NUMBER AND THE NAME OF THE SUPERINTENDENT.
- TEMPORARY WATER WATER REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE PROVIDED AND PAID FOR BY THE CONTRACTOR. WATER USED FOR HUMAN CONSUMPTION SHALL CONFORM TO REQUIRE-MENTS OF STATE AND LOCAL AUTHORITIES FOR POTABLE WATER.
- C. TEMPORARY ELECTRICITY TEMPORARY ELECTRIC SERVICE REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE FURNISHED AND PAID FOR BY THE CONTRACTOR WHO SHALL FURNISH, INSTALL, AND MAINTAIN ALL TEMPORARY OVERHEAD CONSTRUCTION, METERS, DROPS, AND OTHER WIRING AND FITTINGS FOR BOTH LIGHT AND POWER AT LOCATIONS REQUIRED IN THE WORK AND SHALL BEAR THE COST OF MAKING THE SERVICE CONNECTIONS. BEFORE FINAL ACCEPTANCE, TEMPORARY ELECTRICAL SERVICE FACILITIES INSTALLED BY THE CONTRACTOR SHALL BE REMOVED AND THE SERVICE CONNECTIONS SEVERED IN ACCEPTABLE MANNER.
- TEMPORARY HEAT WHEN REQUIRED FOR PROPER INSTALLATION OR PROTECTION OF ANY PORTION OF THE WORK, THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY HEATING UNITS AS APPROVED BY THE LANDLORD OR LOCAL AUTHORITY.
- E. COST OF LANDLORD PROVIDED UTILITY SERVICES IF THE LANDLORD FLECTS TO PROVIDE TEMPORARY UTILITY SERVICES. THE CONTRACTOR WILL BE SO INFORMED BY THE TENANT. THE CONTRACTOR SHALL MAKE
- TO PAY THE COST OF SAID TEMPORARY CONSTRUCTION AND UTILITY SERVICES.

# IOTE FOR TENANT GENERAL CONTRACTO

IT IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES AND SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB.

# NOTE FOR GENERAL CONTRACTOR:

IT IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES AND SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB.



St. Louis, MO 63026 F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498

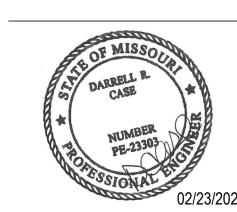


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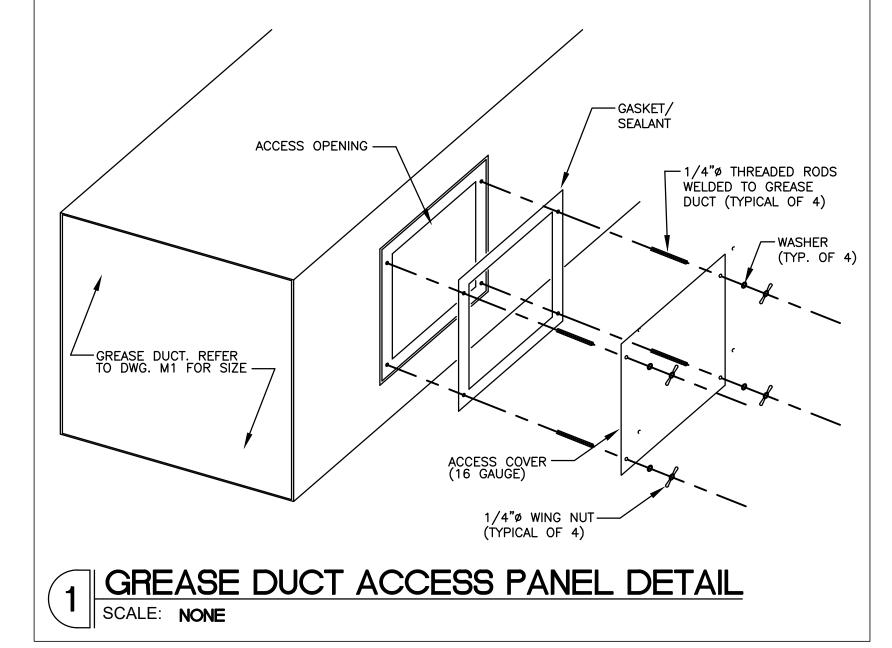
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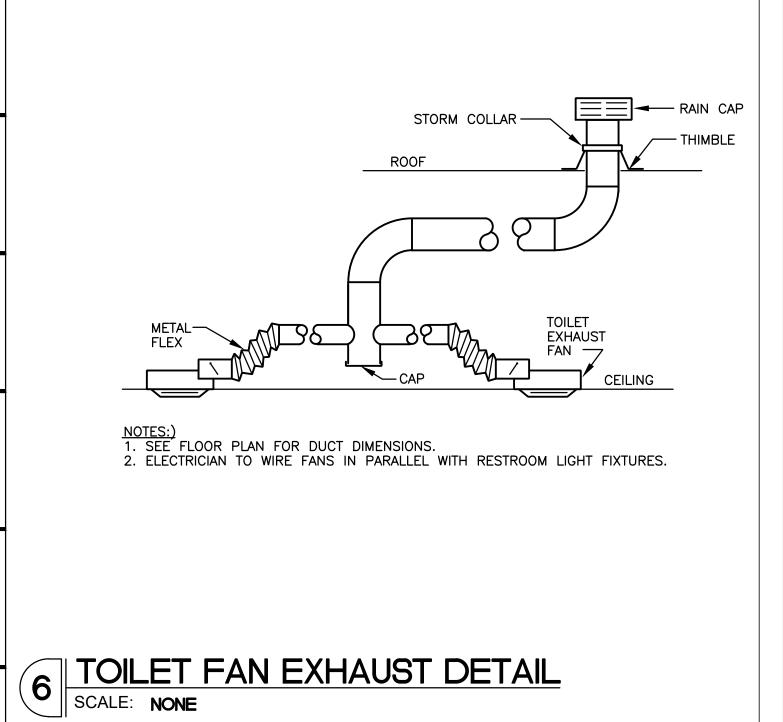
Mechanical **Specifications** 

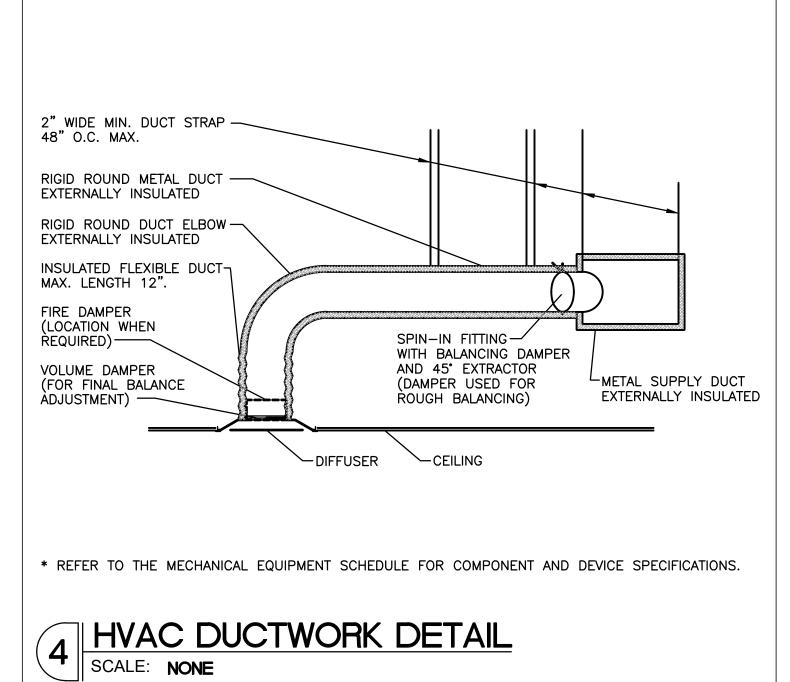
43423-MO1<sup>2</sup> Project# 02/23/2023 Issue Date

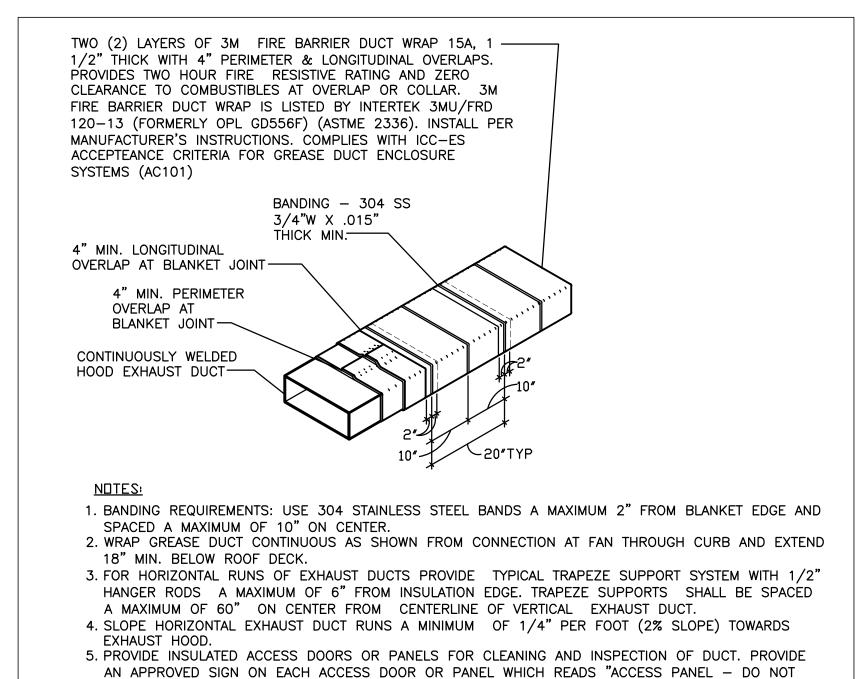
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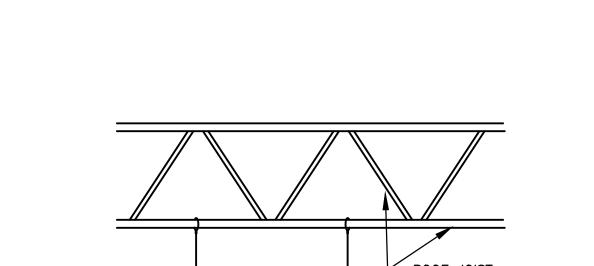
GWC Drawn by Checked by

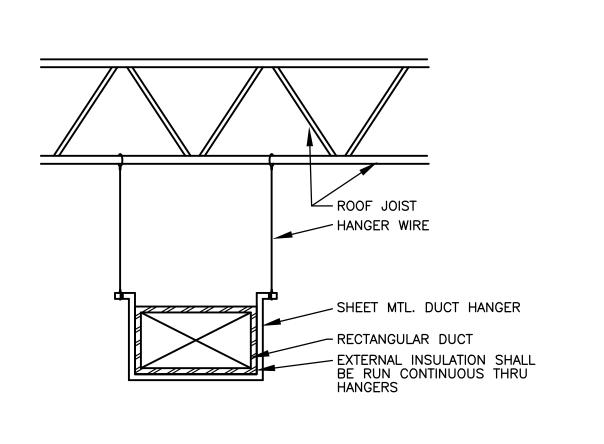




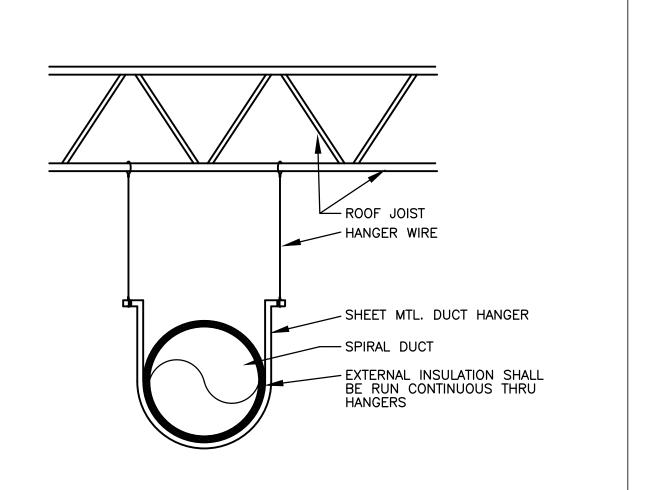








5 DUCT HANGER DETAIL
SCALE: NONE

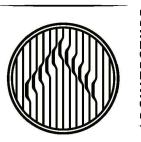


ROUND DUCT HANGER DETAIL SCALE: NONE

OBSTRUCT".

SCALE: NONE

GREASE DUCT DETAIL



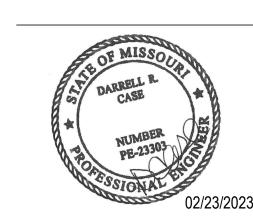
**Engineering Inc.** 796 Merus Court St. Louis, MO 63026 F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498



JERSEY

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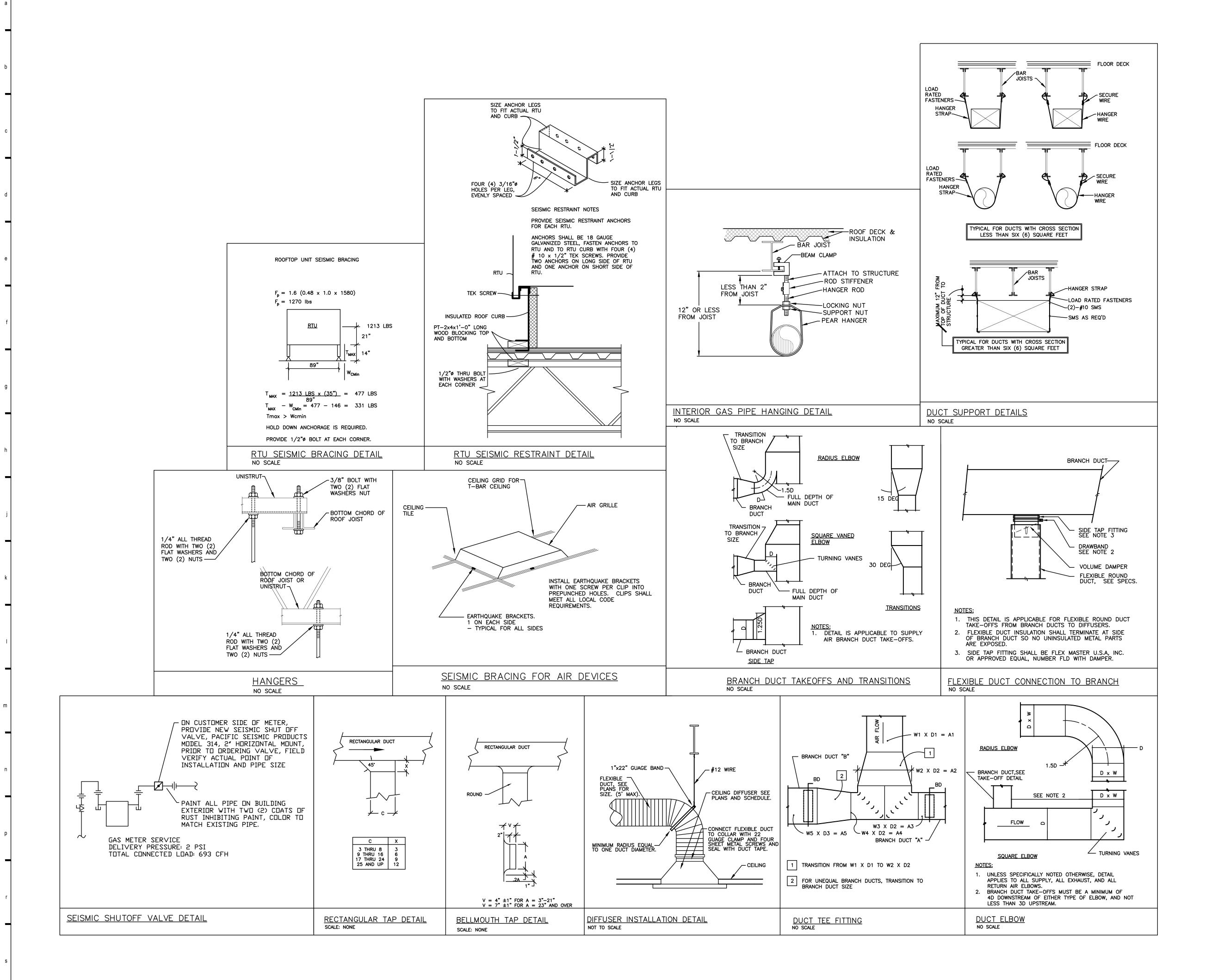
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Mechanical Details

43423-MO11 Project# 02/23/2023 Issue Date Scale As indicated

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**M2.1** 











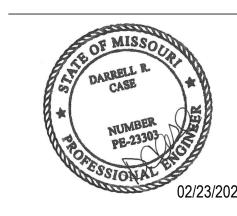
(ES - ST. JOSEPH

JERSEY

3509 N. BELT HIGHW. ST. JOSEPH, MO 645

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## Mechanical Details

Project # 43423-MO11

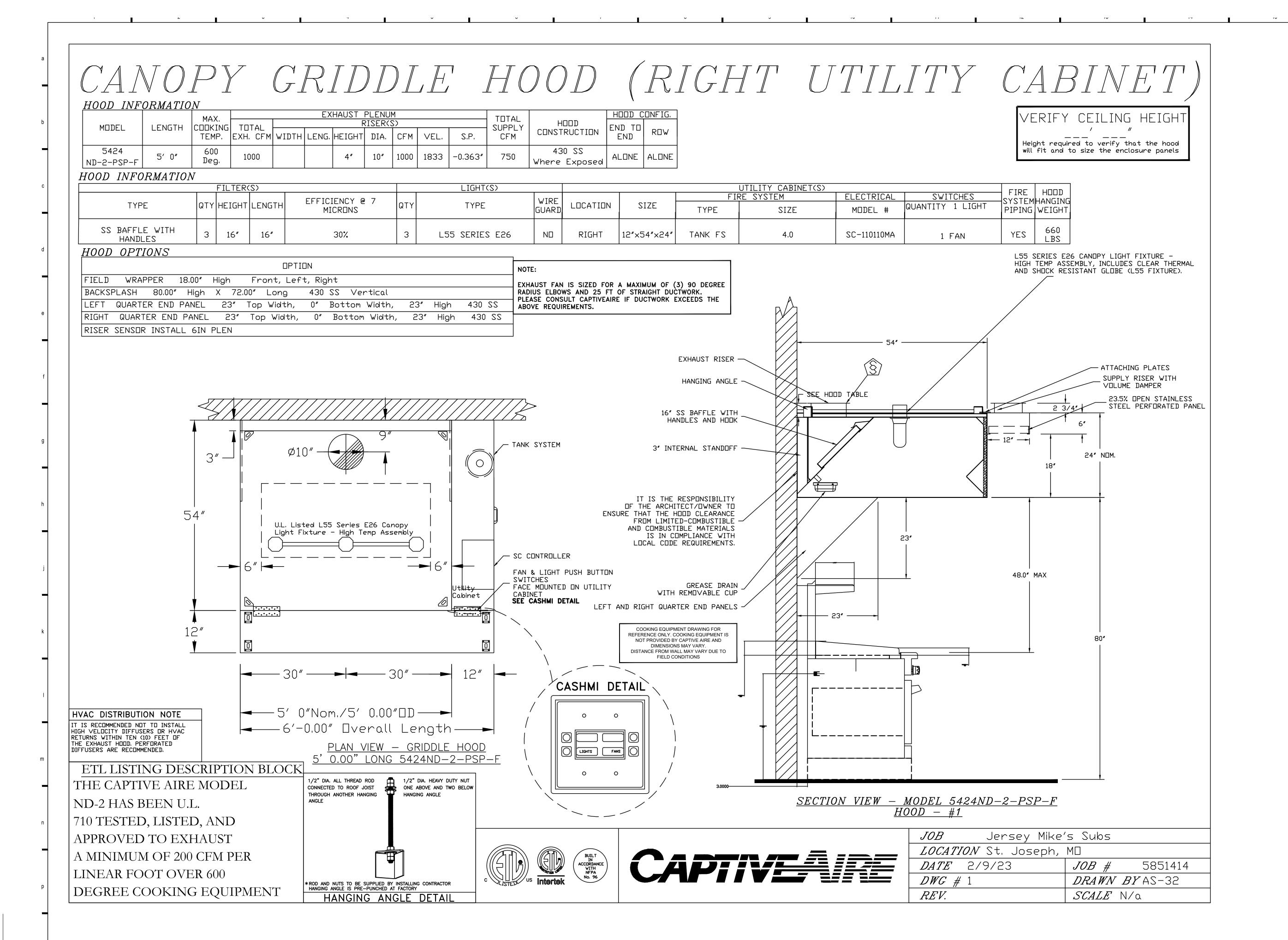
Issue Date 02/23/2023

Scale As indicated

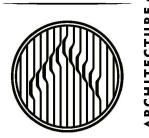
Drawn by GWC

Checked by

**M2.2** 











Jersey Subs

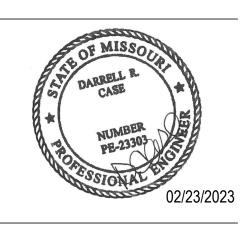
IIKES - ST. JOSEI

JERSI

3509 N. BELT HIGHN ST. JOSEPH, MO 64

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Hood Drawing

Project # 43423-MO11

Issue Date 02/23/2023

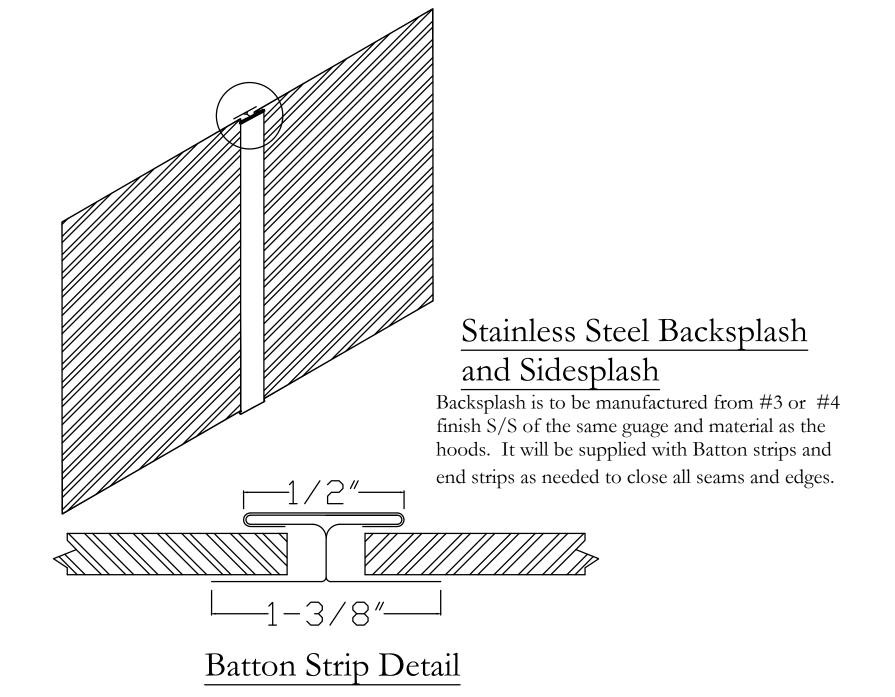
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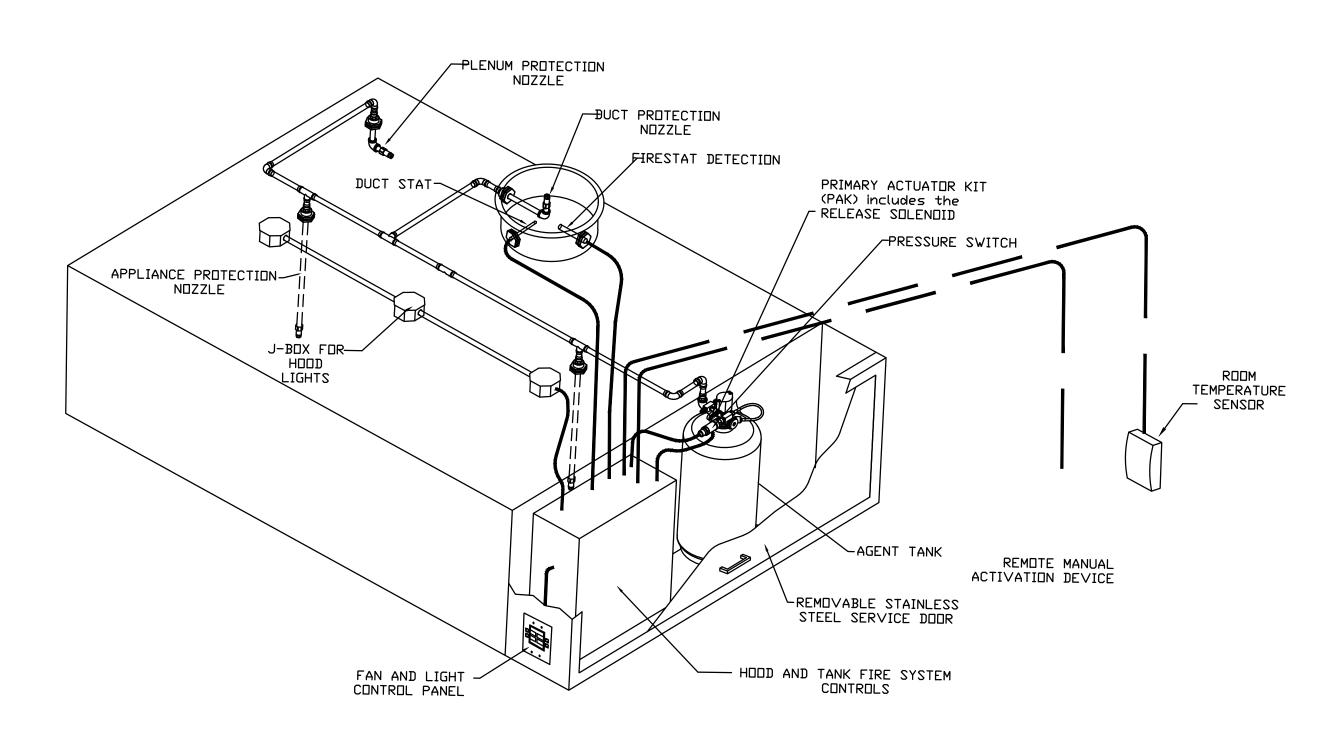
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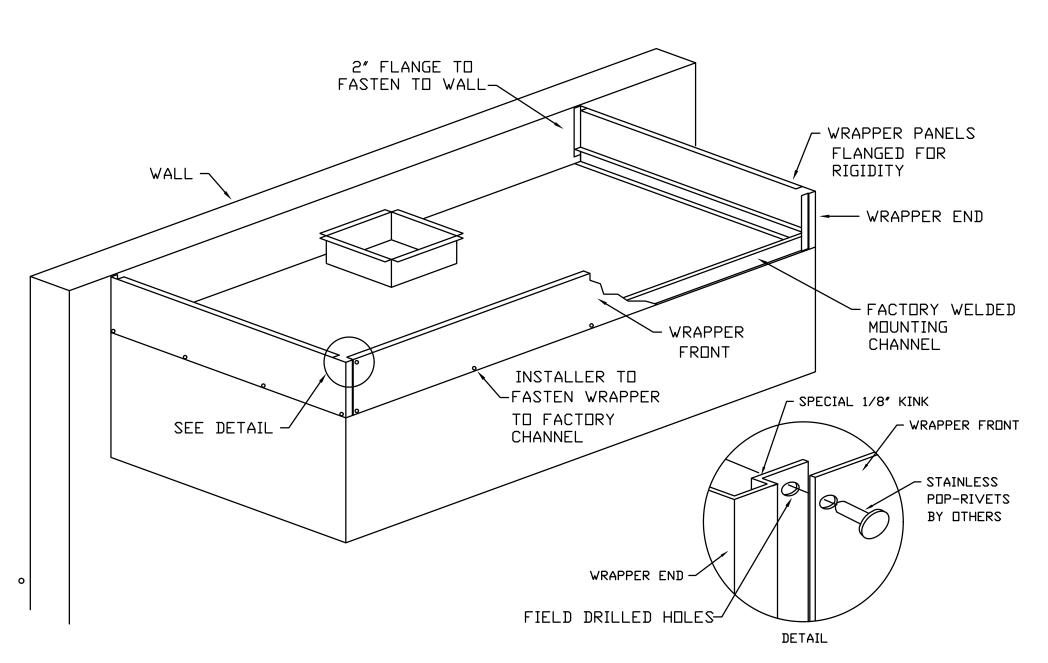
Checked by MV

M3.1

# FIRE SYSTEM/INSTALLATION DETAILS







FIELD WRAPPER

VERIFY GAS VALVE SIZE

TYPICAL HOOD and TANK FIRE SYSTEM LAYOUT

THIS DETAIL IS GENERIC AND IS NOT INTENDED TO COVER ALL POSSIBLE, ACCEPTABLE SCENARIOS.

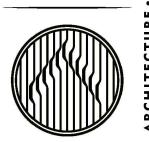
REFER TO PROJECT DRAWINGS/SCHEMATICS FOR DETAILS.

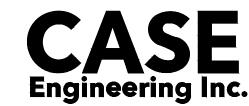




<i>JOB</i> Jersey Mike	's Subs
<i>LOCATION</i> St. Joseph,	M
<i>DATE</i> 2/9/23	<i>JOB #</i> 5851414
DWG # 1	DRAWN BY AS-32
REV.	SCALE N/a

OCULINE INC





Engineering Inc.

796 Merus Court
St. Louis, MO 63026

T 636.349.1600
F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498

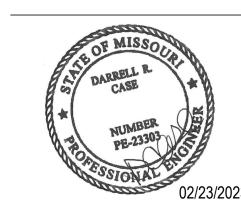


SUB

3509 N. BELT HIGHWAY ST. JOSEPH, MO 64506

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Hood Drawin

Project # 43423-MO11

Issue Date 02/23/2023

Scale As indicated

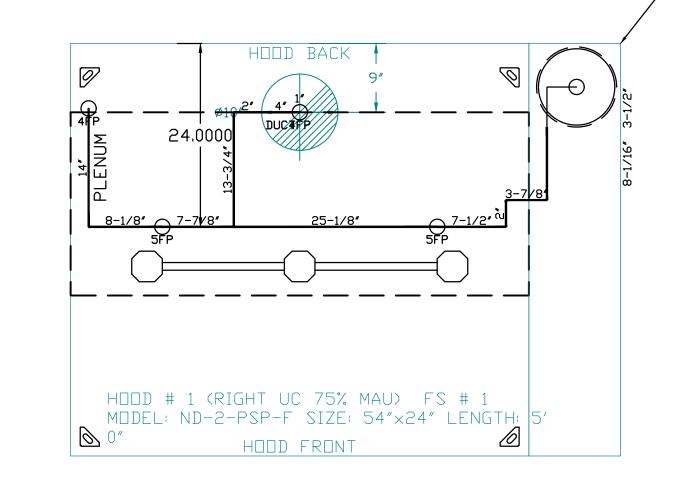
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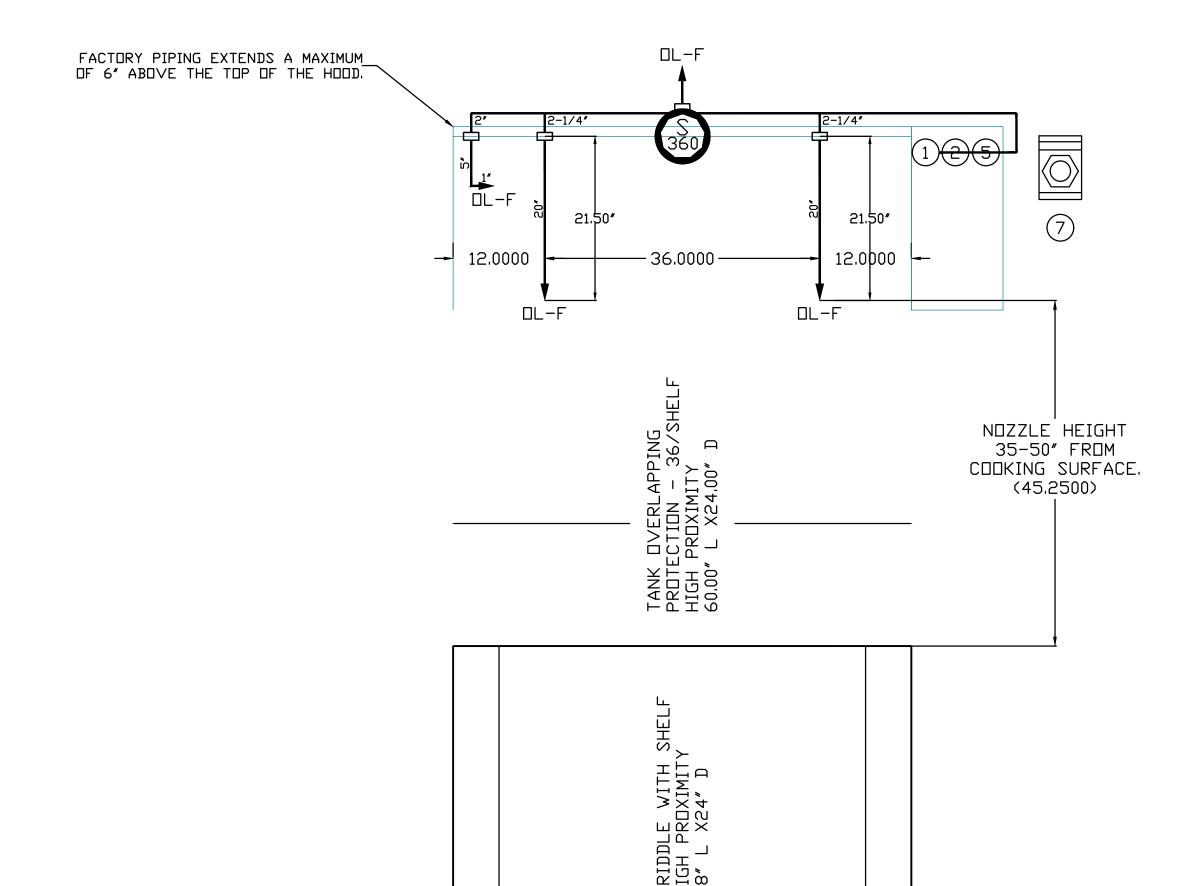
Checked by

12 2

# FIRE SYSTEM/INSTALLATION DETAILS

SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS





- FIELD PIPE DROPS AS SHOWN

PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.

- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.

- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED

SHIPPED LOOSE TO BE FIELD-INSTALLED.

- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.

- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION. - IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.

- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

- OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

JOB NAME: JERSEY MIKE'S SUBS

SYSTEM SIZE: TANK-SP-1 TOTAL FP REQUIRED: 18. HOOD # 1 5' 0.00" LONG  $\times$  54" WIDE  $\times$  24" HIGH. RISER # 1 SIZE: 10" DIA. HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH. - MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

<u>LEGEND - FIRE CABINET TANK SYSTEM</u>

4 GALLON TANK.

PRIMARY ACTUATOR RELEASE.

SECONDARY ACTUATOR RELEASE.

PRESSURE SUPERVISION SWITCH.

PRIMARY HOSE ASSEMBLY. SECONDARY HOSE ASSEMBLY.

REMOTE MANUAL ACTUATION DEVICE.





JOB Jersey Mike	's Subs
<i>LOCATION</i> St. Joseph,	M
<i>DATE</i> 2/9/23	<i>JOB #</i> 5851414
DWG # 1	<i>DRAWN BY</i> AS-32
REV.	SCALE N/a





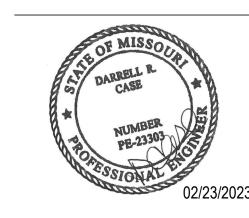
St. Louis, MO 63026 F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498



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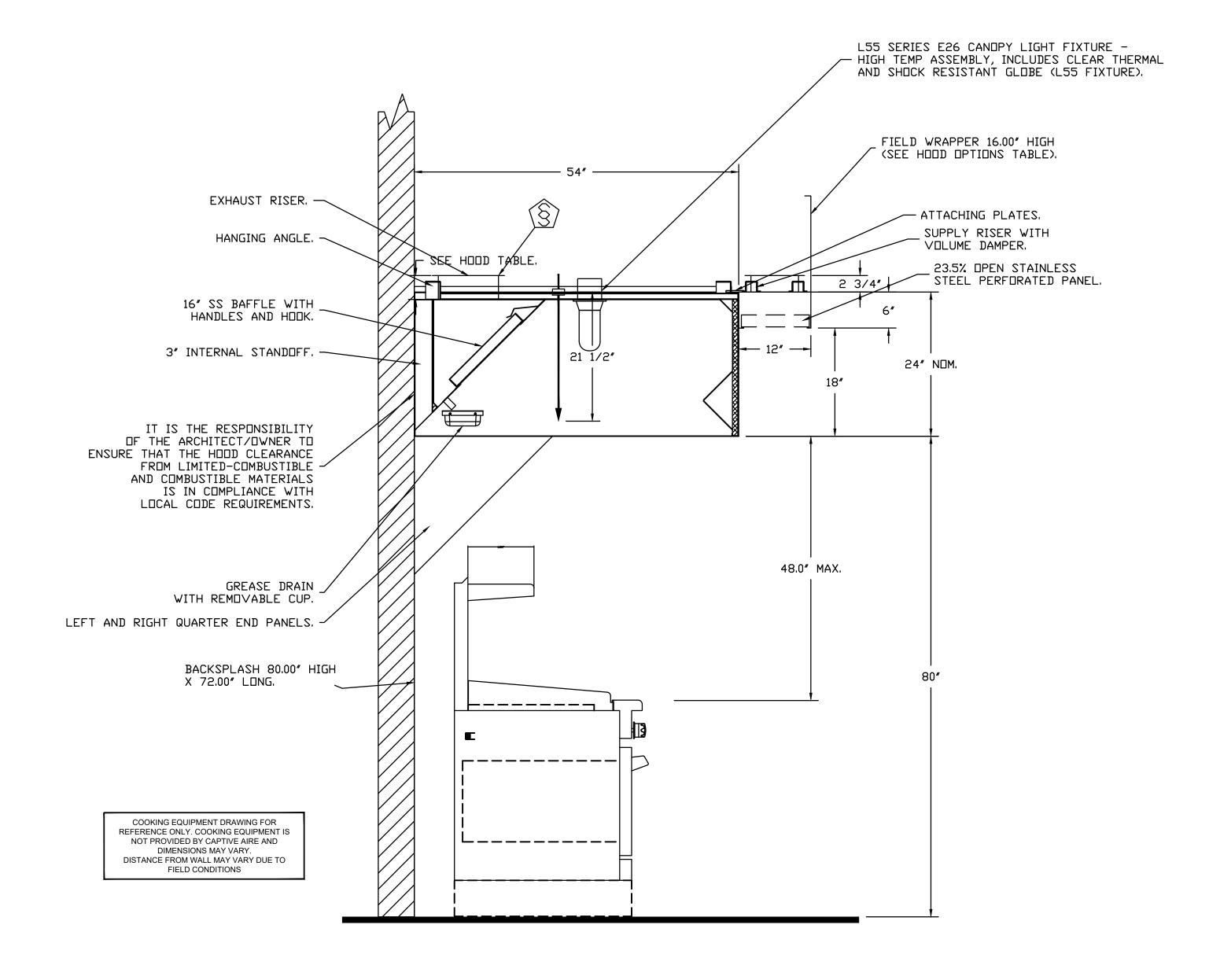
Client Approval

Drawing

43423-MO11 Project# 02/23/2023 Issue Date Scale As indicated Drawn by Checked by

M3.3

# FIRE SYSTEM/INSTALLATION DETAILS



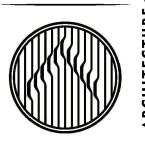
 $\frac{SECTION\ VIEW\ -\ MODEL\ 5424ND-2-PSP-F}{HOOD\ -\ \#1}$ 





JOB Jersey Mike	s Subs
LOCATION St. Joseph,	M
<i>DATE</i> 2/9/23	<i>JOB #</i> 5851414
DWG # 1	<i>DRAWN BY</i> AS-32
REV.	SCALE N/a

OCUITUS INC



# CASE Engineering Inc.

 Engineering Inc.

 796 Merus Court
 T 636.349.1600

 St. Louis, MO 63026
 F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498

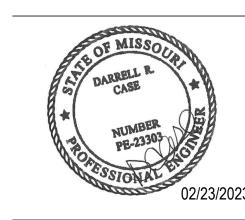


JERSEY

3509 N. BELT HIGHWAY

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Hood Drawin

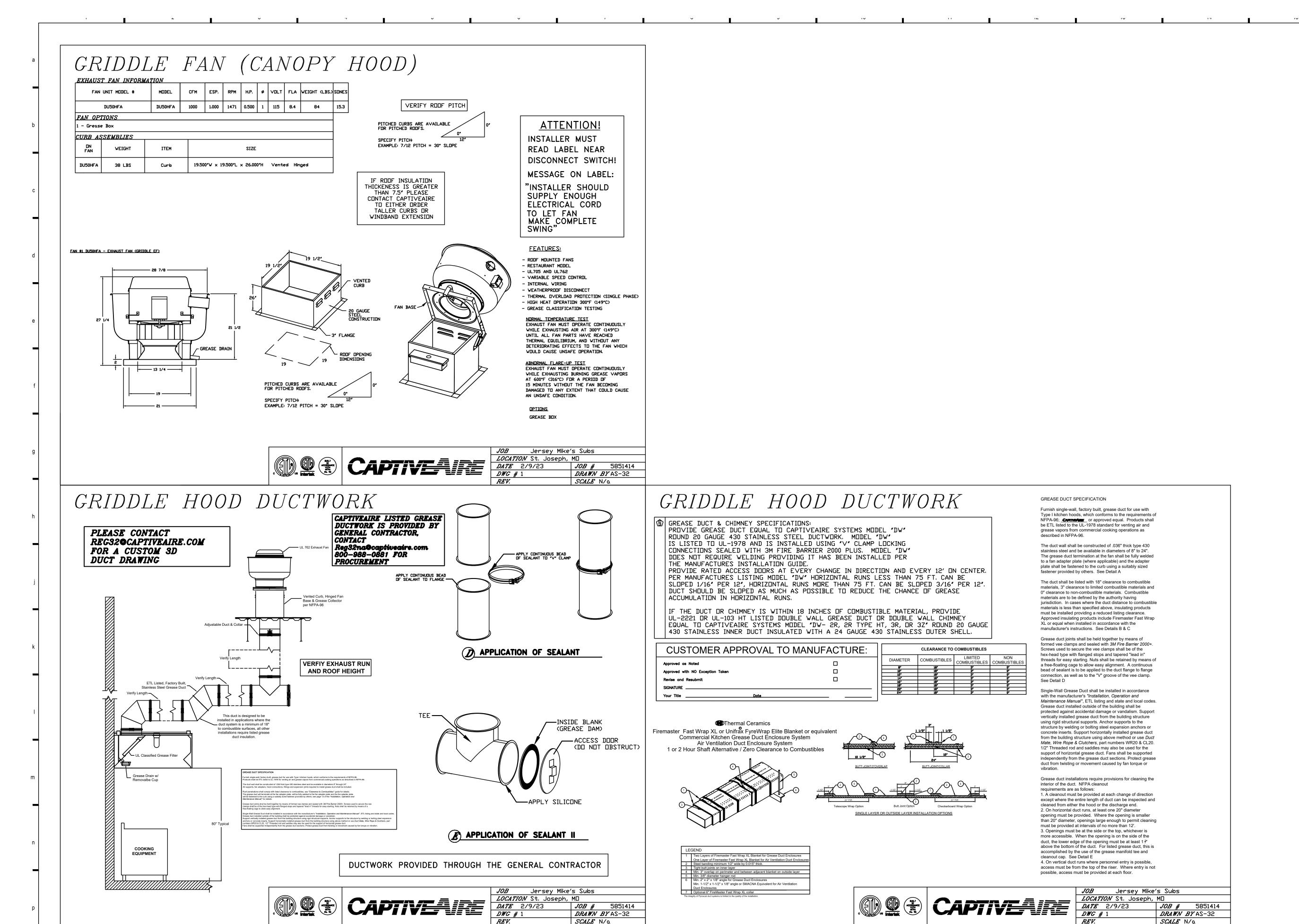
Project # 43423-MO11

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Drawn by GWC

**M3.4** 



OCUITING INC.





Engineering Inc.

796 Merus Court
St. Louis, MO 63026

T 636.349.1600
F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498



ES - SI. JOSEPH

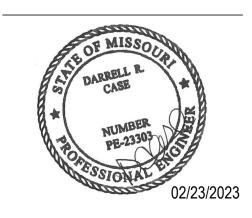
JERSEY

3509 N. BELT HIGHWA ST. JOSEPH, MO 6450

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Project # 43423-MO11

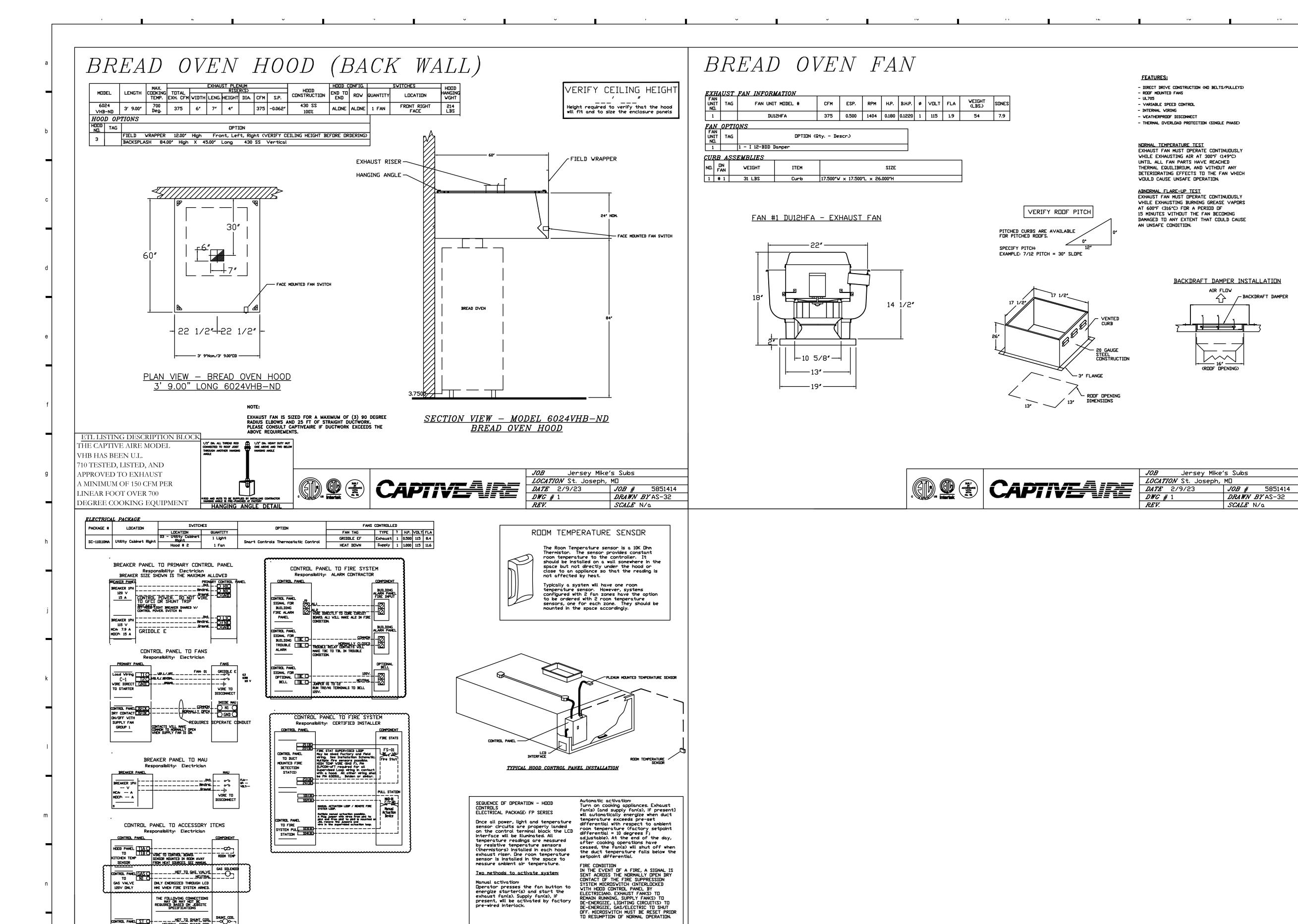
Issue Date 02/23/2023

Scale As indicated

Drawn by GWC

Checked by

**13.5** 



 JOB
 Jersey Mike's Subs

 LOCATION St. Joseph, M□

 DATE
 2/9/23
 JOB #

 DWG # 1
 DRAWN

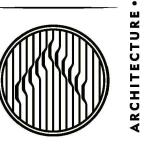
JOB # 5851414 DRAWN BY AS-32

SCALE N/a

CAPTIVE CAPTIVE

THE FOLLOWING CONNECTIONS
MAY OR MAY NOT BE
REQUIRED BASED ON JOBSITE
SPECIFICATIONS

CONTROL PANEL ST O HOT TO SHUNT COIL SHUNT C





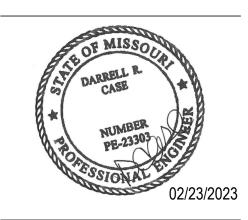


Description

JERSEY

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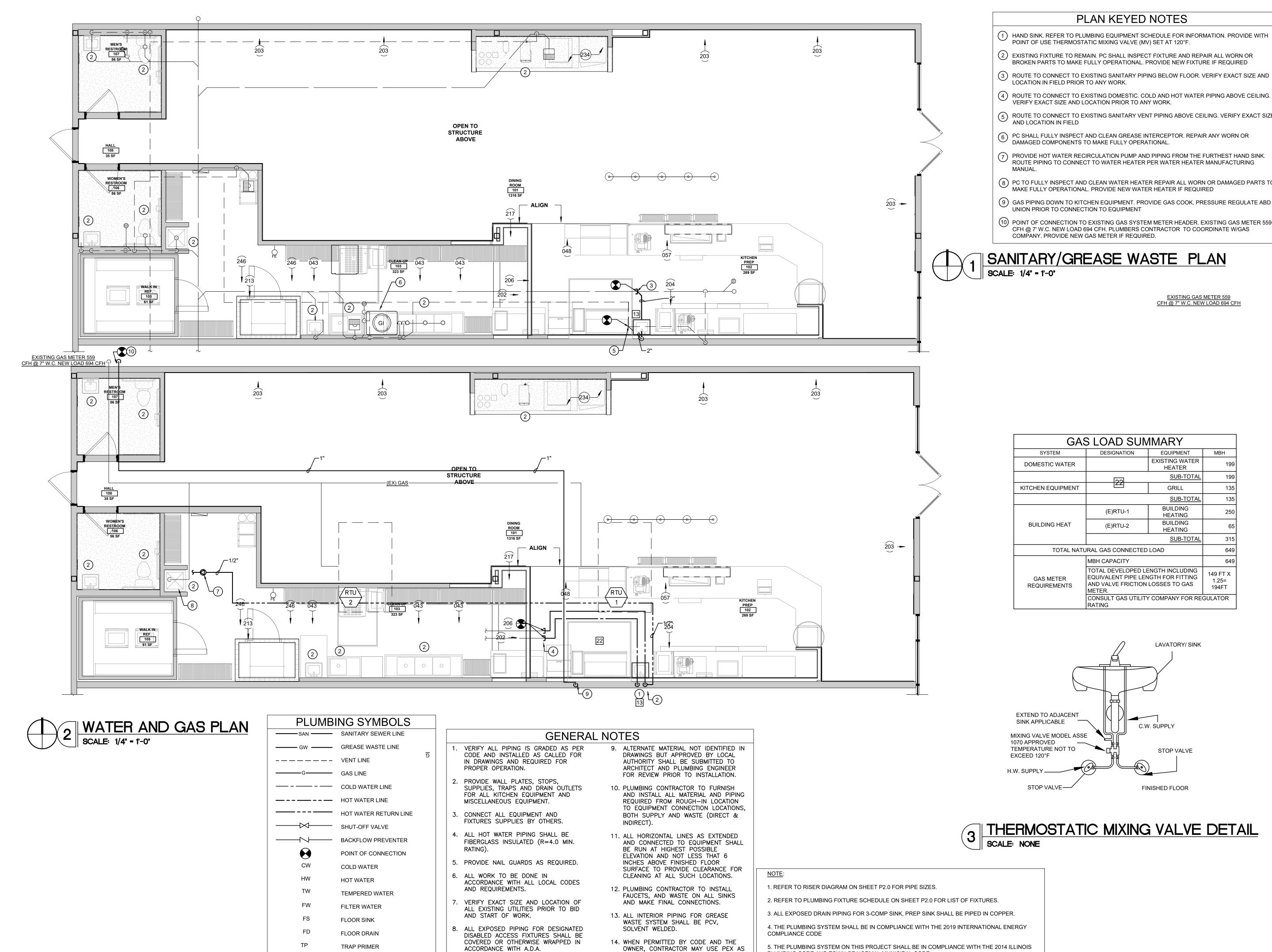
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REQUIREMENTS AND LOCAL AUTHORITY.

THERMOSTATIC MIXING

ALTERNATE SYSTEM FOR POTABLE

WATER SYSTEMS.

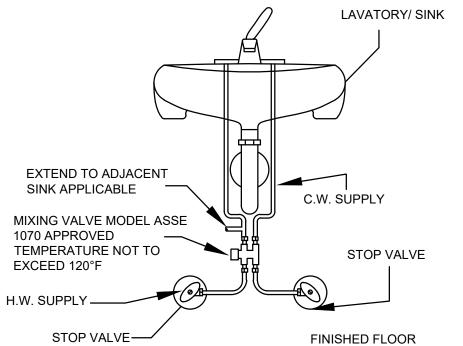
# PLAN KEYED NOTES

- 1 HAND SINK. REFER TO PLUMBING EQUIPMENT SCHEDULE FOR INFORMATION. PROVIDE WITH POINT OF USE THERMOSTATIC MIXING VALVE (MV) SET AT 120°F.
- 2 EXISTING FIXTURE TO REMAIN. PC SHALL INSPECT FIXTURE AND REPAIR ALL WORN OR BROKEN PARTS TO MAKE FULLY OPERATIONAL. PROVIDE NEW FIXTURE IF REQUIRED
- (3) ROUTE TO CONNECT TO EXISTING SANITARY PIPING BELOW FLOOR. VERIFY EXACT SIZE AND
- ROUTE TO CONNECT TO EXISTING SANITARY VENT PIPING ABOVE CEILING. VERIFY EXACT SIZE AND LOCATION IN FIELD
- 7 PROVIDE HOT WATER RECIRCULATION PUMP AND PIPING FROM THE FURTHEST HAND SINK. ROUTE PIPING TO CONNECT TO WATER HEATER PER WATER HEATER MANUFACTURING
- 8) PC TO FULLY INSPECT AND CLEAN WATER HEATER REPAIR ALL WORN OR DAMAGED PARTS TO MAKE FULLY OPERATIONAL. PROVIDE NEW WATER HEATER IF REQUIRED
- (9) GAS PIPING DOWN TO KITCHEN EQUIPMENT. PROVIDE GAS COOK, PRESSURE REGULATE ABD
- (10) POINT OF CONNECTION TO EXISTING GAS SYSTEM METER HEADER. EXISTING GAS METER 559 CFH @ 7' W.C. NEW LOAD 694 CFH. PLUMBERS CONTRACTOR TO COORDINATE W/GAS

# SANITARY/GREASE WASTE PLAN

EXISTING GAS METER 559 CFH @ 7" W.C. NEW LOAD 694 CFH

GAS	S LOAD SUM	1MARY	
SYSTEM	DESIGNATION	EQUIPMENT	MBH
DOMESTIC WATER		EXISTING WATER HEATER	199
	[22]	SUB-TOTAL	199
KITCHEN EQUIPMENT	22	GRILL	135
		SUB-TOTAL	135
	(E)RTU-1	BUILDING HEATING	250
BUILDING HEAT	(E)RTU-2	BUILDING HEATING	65
		SUB-TOTAL	315
TOTAL NATU	RAL GAS CONNECTED	LOAD	649
	MBH CAPACITY		649
GAS METER REQUIREMENTS	TOTAL DEVELOPED LE EQUIVALENT PIPE LEN AND VALVE FRICTION METER.	IGTH FOR FITTING	149 FT X 1.25= 194FT
	CONSULT GAS UTILITY	COMPANY FOR RE	GULATOR



# 3 THERMOSTATIC MIXING VALVE DETAIL

PLUMBING CODE AND TOWN OF NORMAL MUNICIPAL CODE

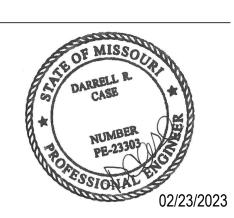
St. Louis, MO 63026 CERTIFICATE OF AUTHORITY NO. 001498



JERSEY

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Plumbing Plan

43423-MO11 Project# 02/23/2023 As indicated Drawn by Checked by

# TABLE TO CALCULATE WATER FIXTURE UNITS

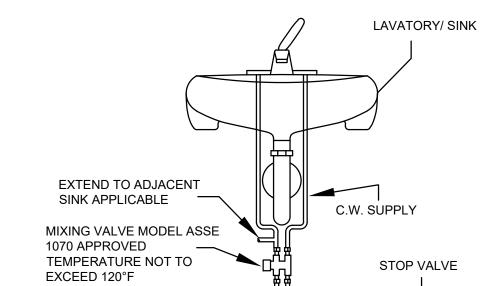
PLUMBING FIXTURE	WATER FIXTURE UNITS	NUMBER OF FIXTURES	SFUS		
HAND SINK	2	2	4		
3- COMP SINK	2	1	2		
MOP SINK	3	1	3		
ICE MACHINE	0.5	1	0.5		
TEA BREWER	0.5	1	0.5		
SOFT DRINK CARBONATOR	0.5	1	0.5		
WATER CLOSET	5	2	10		
LAVATORY	2	2	4		
TOTAL WATER FIXTURE UNITS					
GPM					
WATER SERVICE , TYPE L COPPER					

TABLE TO CALCULATE TOTAL DRAINAGE						
FIXTURES						
PLUMBING FIXTURE DRAINAGE NUMBER OF FIXTURE UNITS FIXTURES DFUS						
LAVATORY	1	1 2				
WATER CLOSET	4	2	8			
FLOOR DRAINS (FD-1) (EMERGENCY)	0	0	0			
FLOOR SINK (FS)	6	3	18			
HAND SINK	1	2	2			
MOP SINK	3	2	6			

TOTAL DRAINAGE FIXTURE UNITS

POTABLE WATER BACKFLOW SCHEDULE							
TYPE OF EQUIPMENT ON SYSTEM	METHOD OF CROSS CONNECTION CONTROL	MANUFACTURE AND MODEL NUMBER	REMARKS				
CARBONATOR SODA SYSTEM	REDUCED PRESSURE ZONE ASSEMBLY	WATTS SD2 ASSE 1032 CERTIFIED	STAINLESS STEEL BODY WITH QUARTER TURN VALVE SS STRAINER.				
ICE MACHINE	REDUCED PRESSURE ZONE ASSEMBLY	WATTS LF-009-QT-S	STAINLESS STEEL BODY WITH QUARTER TURN VALVE BRONZE STRAINER.				
TEA MACHINE	DOUBLE CHECK VALVE ASSEMBLY	WATTS 9D-LF ASSE 1022/1024 CERT.	STAINLESS STEEL BODY WITH QUARTER TURN VALVE BRONZE STRAINER.				
WATER SERVICE	REDUCED PRESSURE ZONE ASSEMBLY	WATTS LF-919-QT	LEAD FREE CAST COPPER WITH QUATER TURN				

1. CONTRACTOR SHALL PROVIDE INDIVIDUAL BACKFLOW PREVENTERS FOR EACH PIECE OF EQUIPMENT. 2. EACH BACKFLOW PREVENTER MUST HAVE TESTING PORTS. 3. BRONZE BODIED BACKFLOW PREVENTERS ARE PERMISSABLE IF ALLOWED BY LOCAL CODES.



STOP VALVE—

Reviewed by: Tye Project Name: Jersey Mikes - ST JOSEPH, MO

CALCULATIONS - USING ILLINOIS PLUMBING CODE

**GREASE INTERCEPTOR CALCULATIONS** 

Step 1: Liquid Holding Capacity to grease interceptor

Reference No. 44494

Tot. Fixture Capacity: 127.83 gal Outdoor factor

127.83 x 1 = 127.83 gal

Number of meals served per day: 250 Grease production value: Sandwich Shop (low / no flatware: 0.005 lbs per serving) Days between pump-outs: 90 days  $250 \times 0.005 \times 90 = 112.5 \text{ lbs of FOG}$ Servings per day x Grease production

value x Days between pump-outs = Grease

Step 2: Grease Production

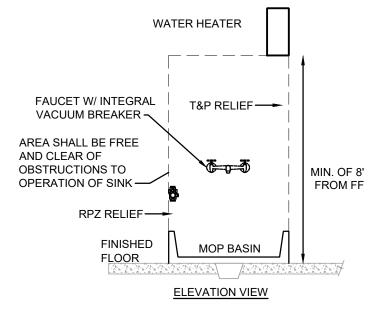
SCHIER MODEL	<b>Description:</b> Polyethylene Grease Interceptor <b>Dimensions:</b> Length: 35", Width: 23", Height: 13.75"
GB2	Flow Rates/Grease Capacities: 50 GPM / 127.6 lbs
GDZ	Liquid Capacity: 20 gal

# FIXTURE INFORMATION

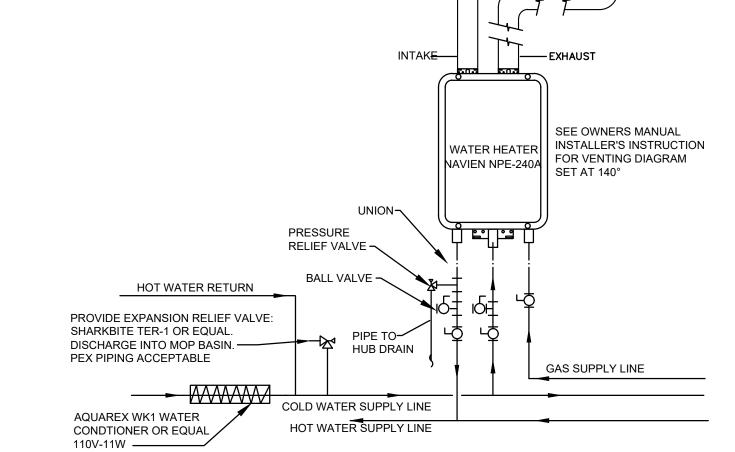
	7/25	0777	DIMENSIONS	0.0.0.0
NAME/TAG	TYPE	QTY	DIMENSIONS	CAPACITY
3 comp	3 Compartment Sink	1	21" x 21" x 14"	80 gal
FS-1	Floor Sink	2	N/A	0
hand sink	Hand Sink	2	10" x 14" x 5"	3.03 gal
mop sink	Mop Basin	1	24" x 24" x 10"	24.94 gal
Prep Sink	Prep Sink One Bowl	1	18" x 18" x 12"	16.83 gal

NAVIEN NPE-240A FLOW RATES PER UNIT													
TEMPERATURE RISE (°F)	25	30	40	45	50	60	70	80	90	100	110	120	130
FLOW RATE (GPM)	10.1	90.1	8.3	8.1	7.0	6.0	5.0	4.7	4.5	4.4	4.0	3.5	3.5

Type of Fixture	Quantity	MAX GPM	Avg. Temp [F]	Total	Sim use factor
Type of Fixture	Quantity	IVIAX GFIVI	Avg. remp[r]	TOtal	Silli use lactor
Compartment sink (1/2/3/4	1	3	140	2.4	0.8
Prep Sink	1	3	140	2.4	0.8
Hand Sink	2	1.5	110	1.5	0.5
Lavatory Sink	2	0.5	110	0.5	0.5
Mop Sink	1	2.25	140	0.45	0.2
Total Demand:				7.25	gpm
Adjusted Demand:				4.35	gpm



MOP SINK DETAIL
SCALE: NONE



PROVIDE RAIN CAP

3 THERMOSTATIC MIXING VALVE DETAIL SCALE: NONE

FINISHED FLOOR

WATER HEATER DETAIL



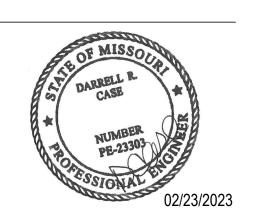
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PROVIDE

RAIN CAP

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**Plumbing Specifications** 

43423-MO11 Project# 02/23/2023 Issue Date Scale As indicated

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# TO DO AND COMPLETE THE WORK.

NO DEVIATION FROM THE DRAWINGS AND /OR SPECIFICATIONS WILL BE ALLOWED PLASTIC DRAIN, WASTE, AND VENT PIPING) AND FOR BURIED PIPE ASTM D2321 WITHOUT PRIOR WRITTEN APPROVAL OF ARCHITECT OR ENGINEER. THIS CONTRACTOR SHALL COOPERATE WITH THE OTHER CONTRACTORS TO ALLOW PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS). SUCH FOR THE INSTALLATION OF THEIR WORK AS WELL AS HIS OWN.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK FITTING IN PLACE WITHOUT CONFLICT WITH THE OTHER TRADES, WHERE PROPER PLANNING COULDSPACING AND ALLOWANCE FOR THERMAL EXPANSION. AVOID INTERFERENCE.

NOTHING IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE INTERPRETED TO INSTITUTE. CONFLICT WITH ANY CITY OR PROVINCIAL LAW, REGULATION, CODE, ORDINANCE, RULING, OR FIRE UNDERWRITER'S REQUIREMENT APPLICABLE TO THIS CLASS OF THE BOTTOM OF TRENCHES SHALL BE TAMPED HARD AN GRADED TO SECURE CHECK VALVES 2-1/2" AND SMALLER SHALL BE #36 (SCREWED ENDS) OR #1342 WORK.

STRICTLY IN ACCORDANCE WITH SUCH LAWS AND ORDINANCES WITHOUT EXTRA CLOSER THAN THREE FEET (3'0") TO FOOTING THEY MUST BE FILLED WITH

THIS CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND COMPACTED TO 95% STANDARD PROCTOR INSPECTIONS REQUIRED FOR THIS INSTALLATION OF HIS WORK.

THE INFORMATION GIVEN HEREIN AND ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED, BUT ITS EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL EXAMINE THE LOCATIONS AND VERIFY ALL MEASUREMENTS, FREE FROM CLODS, AND STONES THOROUGHLY TAMPED TO A DEPTH OF 12" DISTANCES, ELEVATIONS AND EXISTING PIPE SIZES BEFORE STARTING THE WORKABOVE THE PIPE. AFTER THAT DEPTH HAS BEEN REACHED, BACKFILLING SHALL 18. PIPE SLEEVES AND COLLARS AS ALL PIPING SYSTEMS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. BE DONE IN 12" LAYERS, THOROUGHLY TAMPED.

DROPS IN PIPING AND DUCTWORK AS REQUIRED BY BUILDING CONDITIONS AT NO OR SAGS TO THE PIPING SYSTEMS THAT OCCUR FROM THE IMPROPER ADDITIONAL COST.

MECHANICAL DRAWINGS SHALL NOT BE USED FOR GENERAL CONSTRUCTION DIMENSIONS OR FOR TYPE OF MATERIAL USED. FOR EXACT BUILDING LAYOUT, THE ARCHITECTURAL DRAWINGS.

SHOP OR INSTALLATION DRAWINGS, FOUNDATION PLANS, EQUIPMENT OR APPARATUS DRAWINGS SHALL BE FURNISHED BY THIS CONTRACTOR. THESE DRAWINGS SHALL BE CLEARLY MARKED INDICATING WHICH ITEMS ARE TO BE SUPPLIED AND SHALL STATE CAPACITIES, SIZES AND GENERAL DESCRIPTION OF 10. CUTTING AND PATCHING ALL EQUIPMENT. ANY CHANGES FROM THE SPECIFIED ITEMS SHALL BE NOTED ON THE SUBMITTALS.

SHOP DRAWINGS OF SPECIAL APPARATUS OR EQUIPMENT WHICH IS TO BE FABRICATED INDIVIDUALLY FOR THIS PROJECT AND IS NOT DESCRIBED BY FOR PROCESSING BEFORE FABRICATION.

#### THESE DRAWINGS SHALL BE SUBMITTED IN A TIMELY MANNER.

PARTIES CONCERNED WITH THE MATERIAL SUBMITTED. THIS CONTRACTOR SHALL NOT PURCHASE ANY EQUIPMENT UNTIL SHOP DRAWINGS HAVE BEEN PROCESSED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES ACCRUED FROM THE RETURN OF FIXTURES PURCHASED PRIOR TO THE REVIEW OF SHOP DRAWINGS AND THAT ARE NOT APPROVED.

THIS CONTRACTOR SHALL SUBMIT NO DRAWINGS WITHOUT NOTATION INDICATING DATE OF CONTRACTOR'S REVIEW AND SIGNATURE OF CHECK FOR CONTRACTOR TOGETHER WITH CONTRACTOR'S NAME AND PROJECT IDENTIFICATION.

ARCHITECT'S PROCESSING WILL NOT RELIEVE THE CONTRACTOR OF

RESPONSIBILITY FOR ERRORS SINCE THIS CONTRACTOR IS SOLELY RESPONSIBLE FOR DIMENSIONS AND DESIGNS OF ADEQUATE CONNECTIONS, DETAILS AND

FOR THE PREVENTION OF ELECTROLYTIC CORROSION AT CONNECTIONS SATISFACTORY CONSTRUCTION OF ALL WORK, AS WELL AS FURNISHING MATERIALS AND WORKMANSHIP REQUIRED BY DRAWINGS AND SPECIFICATIONS CONNECTIONS OF DISSIMILAR METALS, PROVIDE DIELECTRIC UNIONS OR WHICH MAY NOT BE INDICATED ON THE SUBMITTALS WHEN APPROVED.

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING ENGINEER13. MOTORS, STARTERS AND DISCONNECTS REVIEW DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE AND DIMENSIONS TO BE CONFIRMED AND CORRELATED WITH ALL DISCIPLINES PRIOR TO PURCHASE; INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION PROCESSES OR TO THE MEANS, METHODS, TECHNIQUES.

# SUBSTITUTIONS OF EQUIPMENT OR MATERIAL

THE BRAND NAMES OF EQUIPMENT OR MATERIALS SPECIFIED HEREIN SHALL ESTABLISH QUALITY, CAPACITY, TYPE AND DIMENSIONS TO BE INCLUDED IN THE MADE WITH LEAD FREE SOLDER. COPPER PIPE SHALL BE 1-1/8" HIGH FOR PIPES 3" AND UNDER AND 2-1/4" ABOVE GRADE - WHERE FITTINGS ARE SOLDERED BOTH FITTINGS AND TUBING BASE BID.

APPROVAL OF SUBSTITUTED ITEMS WILL BE BASED ON ABILITY AND CAPACITY TO PERFORM FUNCTION SERVED, QUALITY AND AVAILABILITY OF PARTS AND SERVICE, QUALITY OF EQUIPMENT, DELIVERY SCHEDULE, ETC. THE ARCHITECT PIPE HAS BEEN BEVELED TO 45 DEGREES. WELD SHALL BE ONE-FOURTH SHALL REVIEW ALL SUCH REQUESTS BUT RESERVES THE SOLE RIGHT OF JUDGEMENT TO APPROVE OR REJECT THE PROPOSED SUBSTITUTIONS.

ACCEPTANCE OR REJECTION OF PROPOSED SUBSTITUTIONS SHALL NOT CAUSE UNIONS SHALL BE PROVIDED AT EACH SCREWED VALVE AND UNIONS OR ADDITIONAL COST. ANY CHANGES OF PIPING, DUCTWORK, ELECTRICAL CONTROLS OR INSTALLATION REQUIRED BECAUSE OF THE SUBSTITUTION OR EQUIPMENT SHALL BE PAID FOR BY THIS CONTRACTOR PROPOSING THE SUBSTITUTION.

# **ERECTION OF APPARATUS**

AND SATISFACTORY MANNER.

ALL WORK SHALL BE DONE UNDER THE PERSONAL SUPERVISION OF THIS CONTRACTOR WHO SHALL PROVIDE A COMPETENT FOREMAN TO LAY OUT ALL STAINLESS STEEL BELLOWS AND HAVE WELDED OR FLANGED END. JOINTS SHALL WORK. ALL WORK SHALL BE LAID OUT WITH DUE REGARD FOR THE SPACE REQUIREMENTS OF THE OTHER CONTRACTORS. THIS CONTRACTOR SHALL REPORT ANY CONFLICTS OR DIFFICULTIES IN REGARD TO THE INSTALLATION IMMEDIATELY.

WHERE CROWDED LOCATIONS EXIST OR WHERE THERE IS A POSSIBILITY OF CONFLICT BETWEEN TRADES, THIS CONTRACTOR SHALL MAKE COMPOSITE DRAWINGS SHOWING THE EXACT LOCATIONS OF PIPES, DUCT, CONDUIT AND EQUIPMENT. DRAWINGS SHALL BE BASED ON FIELD MEASUREMENTS AND AFTER EXPANSION JOINTS IN STEEL PIPE UNDER 4" IN SIZE SHALL BE OF THE CONSULTATION AND AGREEMENT BETWEEN THE TRADES, SHALL BE APPROVED COMPENSATOR TYPE CONSTRUCTED OF TWO-PLY STAINLESS STEEL ELBOWS BY ARCHITECT AND ENGINEER BEFORE INSTALLATION OF THE WORK.

EQUIPMENT OF A TYPE TO REQUIRE REPLACEMENT, SERVICING, ADJUSTING OR MAINTENANCE SHALL BE LOCATED TO ALLOW EASY ACCESS AND SPACE FOR REMOVAL OF INTERNAL ASSEMBLIES, IT REQUIRED.

#### 8. EXCAVATION AND BACKFILL

EQUIPMENT SHOWN ON THE PLANS OR REQUIRED FOR PROPER OPERATION. EQUAL FLEXIBLE CONNECTIONS MADE FROM TEFLON. EXCESS EXCAVATION BELOW THE REQUIRED LEVEL SHALL BE BACKFILLED WITH INSPECTED AND APPROVED BY THE PROPER INSPECTION AUTHORITY BEFORE ON THE ABOVE REQUIREMENTS AND THAT IT COVERS EVERYTHING NECESSARY

INSTALL PLASTIC PIPE AND FITTINGS IN STRICT ACCORDANCE WITH THE INSTALLATION RECOMMENDATIONS OF THE PIPE AND FITTINGS MANUFACTURER, 17. <u>VALVES</u> APPENDIX X1 OF ASTM D2265 (STORAGE AND INSTALLATION PROCEDURES FOR (STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC MANUFACTURER, FIGURE NUMBER AND TYPE THROUGHOUT THE ENTIRE INSTRUCTIONS SHALL INCLUDE BUT ARE NOT LIMITED TO CUTTING, SOLVENT CEMENTING AND PRIMING, JOINTS, CONNECTIONS, TRANSITIONS, ALIGNMENT ANDMANUFACTURERS, SUCH AS HAMMOND, NIBCO-SCOTT AND/OR JENKINS WILL BE INSTRUCTIONS FOR INSTALLATION. GRADE, TRENCHING, BEDDING, BACKFILL AND COMPACTION, SUPPORTS AND CONSIDERED EQUIVALENT.

CAST IRON PIPING TRENCHING SHALL BE IN ACCORDANCE TO THE CAST IRON SOIL PIPE AND FITTINGS HANDBOOK ISSUED BY THE CAST IRON SOIL PIPE

THE REQUIRED FALL. ROCK, WHERE ENCOUNTERED SHALL BE EXCAVATED TO A (SOLDER-JOINT ENDS) SWING-TYPE WITH BRONZE BODY AND BRONZE TRIM. DEPTH OF SIX INCHES (6") BELOW THE BOTTOM OF THE PIPE, AND BEFORE THE SHOULD THE DRAWINGS AND/OR SPECIFICATIONS CONFLICT WITH SUCH LAWS PIPE IS LAID, THE SPACE BETWEEN BOTTOM PIPE AND ROCK SURFACE SHALL BE BUTTERFLY VALVES 2" AND LARGER SHALL BE #12F, IRON BODY, CAST-IRON OR ORDINANCES, THE CONFLICTING PORTION OF THE WORK SHALL BE INSTALLEDFILLED WITH GRAVEL. IF TRENCHES ARE DEEPER THAN BOTTOM OF FLOORING OR WAFER W/LOCK LEVER. COHESIVE SOIL AND COMPACTED TO 95% OF MAXIMUM DENSITY, STANDARD PROCTOR, ASTM D- 698. ALL OTHER EXCAVATIONS UNDER FLOOR SLABS

THE REQUIRED LEVEL WITH SAND AND GRAVEL FIRMLY COMPACTED.

TRENCHES AND EXCAVATION SHALL BE BACKFILLED IN 6" LAYERS OF EARTH,

EXCAVATION AND BACKFILL METHODS.

### EQUIPMENT SUPPORTS

DIMENSIONS AND BUILDING MATERIAL USED, THIS CONTRACTOR SHALL REFER TO ANY STRUCTURAL STEEL MEMBERS REQUIRED TO ADAPT THE EQUIPMENT AND COPPER TUBING OR CLOSE AS POSSIBLE TO THE CONSTRUCTION ABOVE WHERE THERE IS PIPING AS FURNISHED BY THIS CONTRACTOR, TO THE BUILDING STEEL OR THE EQUIPMENT OR PIPING. HANGING OF ALL EQUIPMENT AND REQUIRED SUPPORTING STEEL AND BRACING SHALL BE FURNISHED BY THE CONTRACTOR WHO SUPPLIES THE EQUIPMENT.

PATCHED AREAS REQUIRED FOR AND RESULTING FROM THE INSTALLATION OF SHALL BE MADE WATERTIGHT. ALL OF THIS CONTRACTOR'S WORK, EXCEPT WHERE NOTED OTHERWISE.

STANDARD MANUFACTURER'S DRAWINGS OR BULLETINS SHALL BE SUBMITTED ALL OPENINGS AROUND PIPE PENETRATIONS THROUGH SMOKE OR FIRE-RATED FLOORS SHALL BE SEALED AIRTIGHT WITH MATERIALS OR EQUIPMENT AS FLOORS, CEILINGS OR WALLS SHALL BE SEALED AIRTIGHT WITH MATERIAL HAVING A RATING EQUAL TO THE MATERIAL OF THE WALL, CEILING AND/OR FLOOR

IT SHALL BE THIS CONTRACTORS RESPONSIBILITY TO MAINTAIN LIAISON WITH ALL ALL PATCHING SHALL BE NEATLY FINISHED TO THE SATISFACTION OF THE ARCHITECT.

THIS CONTRACTOR SHALL LOCATE AND FURNISH FOR INSTALLATION BY THE GENERAL CONTRACTOR, ALL ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES, AND THE PROPER SERVICING OF EQUIPMENT AND LINES INSTALLED UNDER THE CONTRACT.

ALL PANELS SHALL BE MILCOR, STYLE "M" FOR MASONRY, "A" FOR ACOUSTICAL TILE AND "K" FOR PLASTER; EXCEPT FOR FIRE-RATED UL 1-1/2 HOUR AND "B" ARCHITECT'S PROCESSING WILL NOT CONSTITUTE A COMPLETE CHECK BUT WILL LABEL ACCESS PANELS SHALL BE FURNISHED IN FIRE-RATED WALLS AND INDICATE ONLY THAT GENERAL METHOD OF CONSTRUCTION AND DETAILING IS CEILINGS AS INDICATED ON THE DRAWINGS. ACCESS DOORS SHALL BE 12" X 12"

MINIMUM SIZE FOR VALVES.

BETWEEN PIPE OF DISSIMILAR METALS OR BETWEEN PIPE AND EQUIPMENT

REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. REVIEW OF A SPECIFIC UNLESS SPECIFIED TO BE FURNISHED WITH EQUIPMENT, ALL MOTOR STARTERS ITEM SHALL NOT INCLUDE REVIEW OF AN ASSEMBLY OF WHICH THE ITEM IS A AND DISCONNECT SWITCHES SHALL BE FURNISHED AND INSTALLED BY THE

SEQUENCES AND PROCEDURES OF CONSTRUCTION; COORDINATION OF THE THREADS ON SCREWED PIPE SHALL BE STANDARD, CLEAN BUTT AND TAPERED. ELECTRICAL SYSTEMS AND THEIR EQUIPMENT AND CONTENT, CAUSED BY LEAKS JOINTS SHALL BE CLEANED AND DEBURRED AS RECOMMENDED BY THE WORK WITH THAT OF ALL OTHER TRADES AND PERFORMING ALL WORK IN A SAFE PIPE SHALL BE REAMED OF BURRS AND KEPT CLEAN OF SCALE, DIRT AND IN THE PIPING SYSTEMS BEING INSTALLED OR HAVING BEEN INSTALLED HEREIN. MANUFACTURER AND FEDERAL, STATE, AND LOCAL CODES AND PRESS FITTINGS SHAVINGS. TREADS SHALL BE MADE WITH FLAKED GRAPHITE AND LUBRICATING ALL REPAIRS WILL BE MADE AT THIS CONTRACTOR'S EXPENSE. OIL OR APPROVED PIPE COMPOUND ON THE MALE THREAD ONLY.

> COPPER-TO-STEEL AND COPPER-TO-BRASS JOINTS SHALL BE MADE WITH SILVER SOLDER. ALL OTHER COPPER-TO-COPPER JOINTS ABOVE GROUND SHALL BE FURNISH AND INSTALL BRADY #B-350 THIN FILM OR APPROVED EQUAL PIPE REMOVED AND CARE SHALL BE GIVEN TO KEEP THE LINES FREE OF DIRT AND MOISTURE. ALL TUBING AND FITTINGS SHALL BE THOROUGHLY CLEANED.

WELDED PIPE SHALL HAVE BUTT WELDED SINGLE "V" TYPE JOINTS FOR WHICH PIPE MARKERS SHALL BE LOCATED: GREATER THICKNESS THAN THE PIPE. CONNECTIONS TO EQUIPMENT, ACCESSORIES, ETC. SHALL BE MADE BY MEANS OF FLANGES AND/OR ADAPTERS.

FLANGES AT EACH EQUIPMENT CONNECTION.

FURNISH AND INSTALL FLEXONICS EXPANSION JOINTS IN PIPING SYSTEM WHERE CHROME- PLATED PLATES OR ESCUTCHEONS LARGE ENOUGH TO COMPLETELY ALTERNATE MATERIALS - PEX-A PIPING IS AN ACCEPTABLE ALTERNATE IF NOT SHOWN OR NECESSARY FOR EXPANSION AND CONTRACTION.

HAVE TRAVERSE AS INDICATED ON THE PLANS. EXPANSION JOINTS SHALL BE OF 23. FIRE STOPPING THE CONTROLLED FLEXING TYPE.

EXPANSION JOINTS IN COPPER PIPE UNDER 4" IN SIZE SHALL BE OF THE COMPENSATOR TYPE CONSTRUCTED OF TWO-PLY STAINLESS STEEL BELLOWS AND CARBON STEEL SHROUDS AND END FITTINGS, INTERNAL GUIDES AND ANTI-TORQUE DEVICES.

AND CARBON STEEL SHROUDS AND END FITTINGS, INTERNAL GUIDES AND ANTI-TORQUE DEVICES.

PROVIDE GUIDES ON EACH SIDE OF EXPANSION JOINT, AT 4 PIPE DIAMETERS, 14 PIPE DIAMETERS, AND A THIRD GUIDE AS RECOMMENDED BY THE MANUFACTURER.

### 16. PIPE FLEXIBLE CONNECTIONS

THIS CONTRACTOR SHALL DO ALL EXCAVATION REQUIRED TO INSTALL PIPES AND FLEXIBLE PIPE CONNECTIONS SHALL BE RESISTOFLEX #R6904 OR APPROVED

PROVIDE FOR MOVEMENT IN PIPING BY USE OF SWING JOINTS AT CONNECTION MATERIALS MEET THE REQUIREMENTS SPECIFIED IN ASTM E814 AND ARE SO THE SUB-GRADES SHALL BE KEPT FREE FROM WATER WHILE PIPES ARE BEING DEVELOPED 50) OF ALL BRANCHES TO MAINS AND RISERS. ALL BRANCHES FROM MAINS AND CLASSIFIED IN UL'S BUILDING MATERIALS DIRECTORY. MATERIALS SHALL MEET LAID. ALL PIPE SHALL BE LAID WITH ENDS ABUTTING AND TRUE TO LINE AND RISERS SHALL HAVE 1/4" CLEARANCE BETWEEN PIPE INSULATION AND SLEEVE TO AND BE ACCEPTABLE FOR USE BY ALL MODEL BUILDING CODES. MATERIALS GRADE. THEY SHALL BE FITTED AND MATCHED SO THAT THEY WILL FORM A

THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL VALVES OF ONE NUMBERS ARE FROM THE CRANE CATALOG. EQUAL VALVES OF REPUTABLE

ALL VALVES SHALL BE BUILT FOR A MINIMUM OF 125 PSIG WORKING PRESSURE. ANCHORAGE, FASTENINGS, AND METHOD OF INSTALLATION. CONSTRUCTION ISOLATION VALVES SHALL BE PROVIDED ON ALL INDIVIDUAL FIXTURES AND

CHROME-PLATED BALL AND TEFLON SEAT.

GAS LINE COCKS UP TO 4" SHALL BE #320. 1/2 PSI FOR INDOOR APPLIANCE SHUTOFF SHALL CONFORM TO CGA 91-002 AND ASME B16.44

# HOSE END VALVES SHALL BE #438 GATE VALVES WITH HOSE END NIPPLES.

THIS CONTRACTOR SHALL LAY OUT ALL HIS WORK AND SET SLEEVES IN NEW THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, RAISED AND THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO ANY DAMAGES CONSTRUCTION AS CONCRETE FORMS AND WALL ARE ERECTED SO AS TO BE ABLE TO INSTALL HIS WORK WITHOUT CUTTING OR BREAKING OF FLOORS OR WALLS. ALL SLEEVES FOR INSULATED PIPING SHALL BE LARGE ENOUGH TO ALLOW INSULATION TO PASS THROUGH SLEEVE.

> SLEEVES SHALL BE 24 GAUGE GALVANIZED PIPES AND SLEEVES TO BE STRUCTURE, SHALL BE INCLUDED IN THE BID OF THE CONTRACTOR FURNISHING THOROUGHLY PACKED WITH WATERPROOF SEALANT AND THE REMAINING SPACE IS REQUIRED TO RECALIBRATE AND RESET CONTROLS, VALVES, BALANCING FILLED WITH MASTIC AND MUST BE WATERTIGHT.

> > ALL SLEEVES PASSING THROUGH INNER WALLS SHALL BE STANDARD PIPE HIMBLES EQUAL TO THE THICKNESS OF THE WALL.

SPACES BETWEEN PIPES AND SLEEVES THROUGH OUTSIDE WALLS, ABOVE

SPACE AROUND ALL PIPING THROUGH FIRE OR SMOKE RATED PARTITIONS OR SPECIFIED UNDER FIRESTOPPING.

ALL PIPE PENETRATIONS OF SLABS ON GRADE SHALL BE WRAPPED WITH #15 BUILDING FELTS OR FOAM WRAP.

- A. PIPE HANGER AND SUPPORT PRODUCTS INSTALLATION a. VERTICAL PIPING: MSS TYPE 8 OR 42 CLAMPS.
- b. INDIVIDUAL, STRAIGHT, HORIZONTAL PIPING RUNS: 100 FEET AND LESS: MSS TYPE 1, ADJUSTABLE, STEEL CLEVIS HANGERS. LONGER THAN 100 FEET: MSS TYPE 43, ADJUSTABLE ROLLER
- d. BASE OF VERTICAL PIPING: MSS TYPE 52, SPRING HANGERS.
- B. SUPPORT VERTICAL PIPING AND TUBING AT BASE AND AT EACH
- C. ROD DIAMETER MAY BE REDUCED ONE SIZE FOR DOUBLE-ROD HANGERS, TO A MINIMUM OF 3/8 INCH
- INSTALL SUPPORTS FOR VERTICAL COPPER TUBING EVERY 10 FEET. DURING CONSTRUCTION. INSTALL SUPPORTS FOR VERTICAL STEEL PIPING EVERY 15 FEET.
- G. SUPPORT PIPING AND TUBING NOT LISTED IN THIS ARTICLE ACCORDING TO MSS SP-69 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO THE GROUNDS, ABOVE 80 PSI. WALKS, ROADS, ALL BUILDING COMPONENTS AND FINISHES, PIPING SYSTEMS

HIGH FOR PIPES OVER 3". MARKERS SHALL INDICATE TYPE OF SERVICE AND DIRECTION OF FLOW.

- AT EQUIPMENT CONNECTIONS AT ACCESS DOORS
- AT BRANCH MAINS
- ON ALL ACCESSIBLE PIPE A MAXIMUM OF 75' BETWEEN MARKERS. AT ALL PENETRATIONS ON EITHER SIDE OF PENETRATION

# 22. FLOOR, WALL AND CEILING PLATES

PIPES PASSING THROUGH FLOORS AND FINISHED CEILINGS, FITTED WITH CLOSE OPENING AROUND PIPE OR PIPE COVERING AND FLOOR SUPPORT IN THE INSTALLED IN A PLENUM AND APPROVED BY LOCAL CODE OFFICIALS. CASE OF VERTICAL PIPING, SECURELY HELD IN PLACE; CAULK WATERTIGHT EXPANSION JOINTS IN PIPE 4" AND GREATER SHALL BE THE PACKLESS TYPE WITH AROUND PIPE IN UNFINISHED ROOMS.

THE PENETRATIONS OF FIRE AND/OR SMOKE RATED WALLS OR FLOORS SHALL BE 31. STERILIZATION OF DOMESTIC WATER SYSTEM PROTECTED BY A UL APPROVED MATERIAL TO RETAIN THE INTEGRITY OF THE CABLE, CONDUIT AND PIPING PENETRATIONS THROUGH FLOOR SLABS AND EQUAL THE RATING OF THE TIME-RATED ASSEMBLY.

FIRESTOPPING MATERIAL SHALL BE 3M FIRE BARRIER SEALING SYSTEM OF APPROVED EQUAL. FIRESTOPPING MATERIAL SHALL CONSTITUTE ONE OR MORE THE CHLORINE LEVEL OF THE AVAILABLE WATER SUPPLY. OF THE FOLLOWING PRODUCTS:

- CAULK: CP-25 PUTTY: #303
- WRAP/STRIP: FS195
- COMPOSITE SHEET: CS195 PENETRATING SEALING SYSTEMS: 7900 SERIES

INSTALLATION OF FIRESTOPPING SHALL BE INSTALLED IN ACCORDANCE WITH AND IN STRICT CONFORMITY WITH MANUFACTURER'S PRINTED INSTRUCTIONS AS 32. SANITARY SEWERS TO SURFACE PREPARATION, INSTALLATION AND QUALITY CONTROL. AREAS OF APPLICABLE CODE AUTHORITIES.

ON INSULATED PIPES, THE FIRE-RATING CLASSIFICATION SHALL NOT REQUIRE REMOVAL OF THE INSULATION.

QUALITY ASSURANCE:

SUBMIT MANUFACTURER'S PRODUCT DATA, LETTER OF CERTIFICATION OR CERTIFIED LABORATORY TEST REPORT THAT THE MATERIAL OR COMBINATION OF SHALL MEET THE REQUIREMENTS OF NFPME61- LIFE SAFETY CODE AND NFPA  $70^\circ$  SEWER WITH A SMOOTH AND UNIFORM INVERT NATIONAL ELECTRICAL CODE.

## SUBMITTALS:

SUBMIT SHOP DRAWINGS, PRODUCT DATA, CERTIFICATES AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. SUBMIT MANUFACTURER'S PRODUCT DATA FOR PVC SEWER PIPE MAY BE USED IN LIEU OF THAT SPECIFIED ABOVE IF ALLOWED 38. NATURAL GAS PIPING SYSTEM INSTALLATION OF THE WORK, UNLESS OTHERWISE SPECIFIED. THE FOLLOWING ALL MATERIALS AND PREFABRICATED DEVICES, PROVIDING DESCRIPTIONS BY LOCAL CODES. SUFFICIENT FOR IDENTIFICATION AT THE JOB SITE. INCLUDE MANUFACTURER'S

> SUBMIT SHOP DRAWINGS SHOWING PROPOSED MATERIAL, REINFORCEMENT, DETAILS SHALL ACCURATELY REFLECT ACTUAL JOB CONDITIONS.

### 24. <u>CLEANUP AND ADJUSTMENT</u>

ALL PARTS WORK LEFT CLEAN: EQUIPMENT, FIXTURES, VALVES, PIPES AND FITTINGS CLEANED OF GREASE AND METAL CUTTINGS. ANY DISCOLORATION OR OTHER DAMAGE TO PORTIONS OF BUILDING, ITS FINISH OR FURNISHING DUE TO ALL TRENCHES TO BE DUG WITH GRADUAL FALL, THE PIPING TO BE STRAIGHT THIS CONTRACTORS FAILURE TO PROPERLY CLEAN INTERIOR OF PIPING, REPAIRED AT THIS CONTRACTOR'S EXPENSE. ALL AUTOMATIC CONTROL DEVISES ADJUSTED FOR PROPER OPERATION. ALL SURPLUS MATERIALS AND ANY BALL VALVE UP TO 3" IN SIZE SHALL BE APOLLO SERIES #70 BRONZE VALVE WITH RUBBISH REMOVED AS IT ACCUMULATES. ALL EQUIPMENT LEFT IN SAFE, PROPER AND AS DIRECT AS POSSIBLE, AVOIDING ALL UNNECESSARY OFFSETS. THE OPERATING CONDITION.

> DAMAGE TO ANY PORTIONS MUST BE REPAIRED OF THE PART REPLACED BY THIS FINISH PAINT, LOOSE PLASTER, STAINS OR OTHER BLEMISHES.

#### 25. PIPE TESTING AND START-UP

ALL PIPING TO BE TESTED IN ACCORDANCE WITH THE FOLLOWING: WATER - 100 PSI WATER PRESSURE

COCKS, ETC. TO ENSURE PROPER OPERATION OF THIS SYSTEM.

ALL TESTING MUST HOLD FOR AT LEAST 24 HOURS WITHOUT LOSS OF PRESSURE NOT ALL CLEANOUTS LOCATIONS MAY BE SHOWN ON THE DRAWING. OR VACUUM. ALL CONCEALED PIPING SHALL BE TESTED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE PRIOR TO COVERING. BEFORE STARTING ANY ALL TRAP SCREWS MUST BE OF FULL SIZE OF PIPE UP TO 4" AND 4" FOR ALL OVER FOR RESISTANCE TO ARCING FROM TRANSIENT ENERGY. SYSTEM, ALL EQUIPMENT SHALL BE LUBRICATED PER MANUFACTURERS REQUIREMENTS BY THIS CONTRACTOR. TEST ENTIRE BUILDING SYSTEMS UNDER PIPE SHALL BE MADE WITH "Y" BRANCHES TO "TY" BRANCHES WHEREVER FULL LOAD CONDITIONS FOR A PERIOD OF NOT LESS THAT ONE (1) WEEK DURING POSSIBLE. ALL HORIZONTAL SOIL WASTE AND VENT PIPE SHALL BE GRADED ALL SLEEVES PASSING THROUGH FLOORS WHICH ARE WATERPROOFED SHALL BEWHICH TIME THE OPERATING PERSONNEL SHALL BE FULLY INSTRUCTED IN THE TOWARD OUTLETS AND PIPE NOT BURIED SHALL BE INSTALLED ABOVE THE OPERATION, THIS CONTRACTOR IS TO FURNISH WHATEVER ADDITIONAL SERVICE NO CEILING.

## 26. TESTING AND BALANCING

THIS CONTRACTOR SHALL AT THE TIME OF INSTALLATION ENSURE THAT ALL DEVICES TO COMPLETE TESTING AND BALANCING AS DIRECTED HEREIN ARE DOWN INTO END OF PIPE IN AN APPROVED MANNER. THIS CONTRACTOR SHALL INCLUDE ALL CUTTING, PATCHING AND PAINTING OF GRADE, SHALL BE CAULKED WITH CAULKING COMPOUND; THOSE BELOW GRADE FURNISHED AND INSTALLED DURING FABRICATION AND INSTALLATION OF WORK THIS WORK SHALL BE PERFORMED PRIOR TO TURNOVER TO BUILDING OCCUPANTALL CLEANOUTS IN FLOORS TO BE JOSAM #8360 OR EQUAL. ADJUSTABLE AND WITH AMPLE TIME TO MAKE ANY NECESSARY REPAIRS OR CHANGES TO ACHIEVE A PROPERLY OPERATING SYSTEM.

## 27. <u>SEISMIC RESTRAINTS ON MECHANICAL EQUIPMENT</u>

ALL PLUMBING EQUIPMENT SHALL BE PROVIDED WITH SEISMIC RESTRAINING SERVICES AS REQUIRED BY LOCAL BUILDING CODES. CONTRACTOR SHALL HAVE LOCAL BUILDING OFFICE REVIEW EACH PIECE OF EQUIPMENT WHEN INSTALLED ALL JOINTS OF CAST IRON PIPE SHALL BE MADE WITH MANUFACTURERS AND THE CONTRACTOR SHALL INSTALL ALL REQUIRED TIE DOWN, ANCHORS, STRAPS OR OTHER DEVICES REQUIRED.

THIS CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, MATERIALS, AND LABOR MAY BE USED FOR THE WASTE AND VENT SYSTEM. PVC PIPE AND FITTINGS FURNISHED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS FOR A PERIOD SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL CODES. ENCASEMENT HANGERS. LONGER THAN 100 FEET IF INDICATED: MSS TYPE 49, OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL REPAIR OR REPLACE ANY EQUIPMENT OR MATERIAL WHICH IS DEFECTIVE OR SCHEDULE 40 PVC SHALL NOT BE INSTALLED WITHIN A PLENUM. c. MULTIPLE, STRAIGHT, HORIZONTAL PIPING RUNS 100 FEET OR IMPROPERLY INSTALLED. IN ADDITION, THIS CONTRACTOR SHALL ASSUME FULL LONGER:MSS TYPE 44, PIPE ROLLS. SUPPORT PIPE ROLLS ON RESPONSIBILITY FOR ANY DAMAGE TO THE BUILDINGS AND ITS CONTENTS OR ABS AND FOAM CORE PVC ARE NOT ACCEPTABLE MATERIALS. OTHER EQUIPMENT, CAUSED BY DEFECTS OR IMPROPER INSTALLATION OF EQUIPMENT OR MATERIALS INSTALLED UNDER THIS SECTION OF THE SPECIFICATIONS.

# 29. <u>TEMPORARY WATER</u>

TEMPORARY WATER SERVICE (IF REQUIRED) TO THE BUILDING SHALL BE D. INSTALL HANGERS FOR ALL PIPING PER MSS SP-69, MANUFACTURERS PROVIDED BY THIS CONTRACTOR TO THE BUILDING FOR CONSTRUCTION MANUALS AND AS PER HANGER SUPPORT DETAIL ON DRAWINGS PURPOSES. THIS CONTRACTOR TO MAINTAIN WATER SERVICE AS REQUIRED

# 30. <u>DOMESTIC WATER SERVICE</u>

THIS CONTRACTOR SHALL COORDINATE EXACT AVAILABLE DELIVERY PRESSURE WHERE FIXTURES ARE GROUPED PIPES SHALL BE INCREASED IN PROPORTION: IN AND PROVIDE ALTERNATE FEE FOR A PRESSURE BOOSTING SYSTEM IF WITH STRAINER IN SERVICE LINE IF REQUIRED BY LOCAL CODES OR PRESSURE IS AND APPEARING IN FIXTURE LIST. NO WATER PIPE LESS THAN 1/2" SHALL BE

ARE AN ACCEPTABLE IF ALLOWED BY LOCAL AHJ. WHERE PRESS FITTING S ARE PLUMBING FIXTURES SHALL BE FURNISHED AND INSTALLED IN A NEAT AND

SHALL BE CLEANED AS DESCRIBED ABOVE. UNDER NO CIRCUMSTANCES SHALL MATERIALS: FIXTURES SHALL BE THE STANDARD PRODUCT OF ONE OF THE DISSIMILAR METALS COME INTO DIRECT CONTACT WITH COPPER TUBING; E.G., MANUFACTURER'S LISTED IN THE PLUMBING FIXTURE SCHEDULE, OR ANY EQUAL GALVANIZED STRAPPING, HANGERS, OR CLAMPS TO SECURE THE TUBING.

SOLDER, 1200 DEG. F OR GREATER MELTING POINT. NOTE: WATER PIPE TO BE PROPERLY SECURED AND ALIGNED SO AS NOT TO DEFACED AND/OR BROKEN. FIXTURES SHALL BE COVERED WITH BUILDING PAPER EXERT VERTICAL OR HORIZONTAL STRESSES ON THE SEATING OF THE MATING AND WOODEN CRATES DURING CONSTRUCTION.

MATERIALS - UNDERGROUND: TYPE "K" COPPER TUBE, SOFT TEMPER MATERIALS - ABOVEGROUND: TYPE "L" COPPER TUBE, HARD DRAWN. VIEGA, PROPRESS COPPER 1/2-INCH THROUGH 4-INCH WITH EPDM SEALING ELEMENT AND/OR VIEGA, PROPRESS 304 OR 316 STAINLESS 1/2-INCH THROUGH WATER CLOSETS SHALL HAVE CAULKING BETWEEN THE FLOOR AND UNDERSIDE 4-INCH WITH EPDM OR FKM SEALING ELEMENT IS ACCEPTABLE IF ALLOWED BY OF THE WATER CLOSET. LOCAL CODE

(MALE AND FEMALE) SURFACES OF THE UNIONS.

TIME-RATED CONSTRUCTION BY MAINTAINING AS EFFECTIVE BARRIER AGAINST THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE FLUSHED CLEAR NOT LESS THAN 100 PARTS PER MILLION OF AVAILABLE CHLORINE. THE SOLUTION ADHESIVE USED TO ADHERE THE FACING OR JACKET TO THE INSULATION) FIRE TIME-RATED WALLS, AND/OR FLOORS. THE RATING OF THE FIRESTOPPING SHALL SHALL REMAIN IN THE SYSTEM FOR TWO (2) HOURS DURING WHICH TIME ALL AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE ASTM E-84, NFPA 225 VALVES AND FAUCETS SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER UL 723 NOT EXCEEDING: STERILIZATION, THE SOLUTION SHALL BE FLUSHED FROM THE SYSTEM WITH CLEAN WATER UNTIL THE RESIDUE CHLORINE CONTENT IS NOT GREATER THAN FLAME SPREAD 25

# HEALTH DEPARTMENT.

WORK SHALL REMAIN ACCESSIBLE UNTIL INSPECTION AND APPROVAL BY THE THIS CONTRACTOR SHALL CONNECT SANITARY SEWER AS INDICATED ON THE DRAWINGS. VERIFY DIRECTION OF FLOW PRIOR TO ANY ROUGH-IN WORK.

EACH PIPE SHALL BE LAID TO THE LINE AND GRADE INDICATED ON THE PLANS AND SUCH A MANNER AS TO FORM A CLOSE CONCENTRIC JOINT WITH THE

SPREAD 25/ SMOKE DEVELOPED 50) EACH JOINT SHALL BE CLEANED AS IT IS LAID AND ALL BELLS SHALL BE CLEANED BEFORE PIPES ARE JOINED.

ABS AND FOAM CORE PVC ARE NOT ACCEPTABLE MATERIALS.

## SDR 35 IS NOT ACCEPTABLE FOR UNDER BUILDING USE

33. WASTE, SOIL, DRAIN AND VENT PIPING

AND FREE FROM ANY SAGS. THE ARRANGEMENT OF THE SYSTEM SHALL BE AS SHOWN ON THE DRAWINGS

AT EACH FLOOR. WHEN EXCESS DIRT HAS BEEN REMOVED, THE TRENCH SHALL BE BROUGHT TO CONNECTIONS SHALL CONFORM TO ANSI Z21.15 AND CSA 9.1, 5 PSI FOR INDOOR CONTRACTOR AND ALL PARTS LEFT WITHOUT DENTS, SCRATCHES, THROUGH THEALL CHANGES IN DIRECTION OF SOIL OR WASTE PIPE SHALL BE MADE BY MEANS (CSST) FLEXIBLE GAS PIPING WITH MECHANICAL ATTACHMENT AUTOFLARE® OF "Y" BRANCHES AND 1/8 BENDS. NINETY DEGREE SHORT TURN FITTINGS WILL FITTINGS THAT CONFORM TO THE LATEST ANSI STANDARDS FOR SAFE NOT BE PERMITTED EXCEPT TO INDIVIDUAL FIXTURE CONNECTIONS OR WHERE PERFORMANCE ANSI LC-1 /CSA 6.26.

THE FLOW IS FROM THE HORIZONTAL TO THE VERTICAL. SANITARY CLEANOUTS ARE TO BE PROVIDED AT EVERY TURN GREATER THAN 45°, THREE AND FOUR HOUR TESTS.

THIS SIZE. CONNECTIONS BETWEEN OUTLETS OF FIXTURES AND SOIL OR WASTE

THE STACKS SHALL BE EXTENDED THROUGH ROOF OF BUILDING TO POINTS NOT LESS THAT 12" ABOVE ROOF. EXTENSIONS THROUGH ROOF SHALL BE MADE WATER- TIGHT BY MEANS OF A LEAD FLASHING OF FOUR POINTS SHEET LEAD SPREAD OVER A DISTANCE OF NOT LESS THAN TWELVE INCHES (12") AROUND PIPE. THIMBLE TO BE SOLDERED TO BASE AND EXTENDED OVER AND TURNED

CLEANOUT WITH BODY TO MATCH THE PIPING MATERIAL, CAST BRASS SCORIATED COVER WITH LETTERS C.O. CAST IN TOP AND CONCEALED BRASS PLUG.

CLEANOUTS SHALL BE INSTALLED IN BASE OF EACH STACK. CONCEALED

CLEANOUTS SHALL HAVE JOSAM #8600 OR EQUAL. CAST BRASS CHROMIUM PLATED FLAT ACCESS COVER PLATES. RECOMMENDED JOINING MATERIAL. AT THE CONTRACTOR'S OPTION HE MAY USE

NO-HUB PIPE, FITTINGS, COUPLING AND GASKETS IN LIEU OF CAULKED JOINTS IF

IF APPROVED BY THE LOCAL CODES, SCHEDULE 40 PVC PIPE WITH DWV FITTINGS OF PVC PIPES WITHIN RATED SHAFTS SHALL BE THE COST OF THIS CONTRACTOR.

# SDR 35 IS NOT ACCEPTABLE FOR UNDER BUILDING USE

APPROVED BY THE LOCAL CODES AND ORDINANCES.

EACH VENT FLASHING SHALL BE MADE WATER-TIGHT WITH THE ROOF BY PROPER WATER PROOF FLASHING.

35. WASTE, VENT AND WATER CONNECTIONS

THE MINIMUM SIZE OF WASTE, VENT, AND WATER CONNECTION TO THE INDIVIDUAL FIXTURES SHALL BE AS SHOWN ON DRAWINGS.

ALL CASES THE SIZE ARRANGEMENTS AND CONNECTIONS OF WATER AND VENT PRESSURE IS LESS THAN 65PSI STATIC. PROVIDE PRESSURE REDUCING VALVE PIPING SHALL NOT BE LESS THAN SIZE OF OPENINGS SPECIFIED FOR FIXTURES INSTALLED IN CONCEALED PLACES SUCH AS IN PARTITIONS OR WALLS ETC.

NOT ALLOWED SOLDERED AS LISTED BELOW. FLUX SHALL BE NON-CORROSIVE. WORKMANLIKE MANNER WITH PROPER CONNECTIONS TO SUPPLY AND DRAINAGE VICTAULIC GROUVED COUPLINGS ARE ACCEPTABLE ALTERNATE IF ALLOWED BY PIPING. ALL FIXTURES SHALL BE FREE OF FLAWS AND DEFECTS OF ANY SORT IN MATERIAL AND WORKMANSHIP AND SHALL OPERATE PERFECTLY WHEN

INSTALLED IN ACCORDANCE WITH MANUFACTURER'S DIRECTION.

UNIT APPROVED BY THE ENGINEER. BELOW GRADE, OR FLOOR SLAB ON EARTH OR STONE FILL - HIGH TEMPERATURE, INSTALLATION: THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE PLUMBING FIXTURES AND ACCESSORIES DURING CONSTRUCTION. HE SHALL REPLACE AT HIS EXPENSE ANY MATERIAL THAT IS MARRED, SCRATCHED,

> CONTRACTOR SHALL COORDINATE EXACT AND PROVIDE ROUGH-IN LOCATIONS WITH FIELD CONDITIONS AND PLANS PRIOR TO ANY WORK. CONTRACTOR SHALL CONNECT ALL FIXTURES TO THE PLUMBING SYSTEM. ALL FIXTURES TO BE INSTALLED TO DIMENSIONS WITH CHROME-PLATED SUPPLIES WITH STOPS.

ALL FIXTURES INSTALLED TO DIMENSIONS SHOWN ON THE DRAWINGS. ALL

# PLUMBING EQUIPMENT: (REFER TO SCHEDULE ON THE DRAWINGS)

THE SPREAD OF FLAME, SMOKE AND GASES. IT SHALL BE USED IN ALL DUCT OF ANY DEBRIS AND THOROUGHLY STERILIZED WITH A SOLUTION CONTAINING ALL INSULATION SHALL HAVE COMPOSITE (INSULATION, JACKET OR FACINGS AND

SMOKE DEVELOPED 50

STERILIZATION SHALL BE PERFORMED PRIOR TO TURNOVER TO OCCUPANT AS TOALL ACCESSORIES SUCH AS ADHESIVES, MASTICS, CEMENTS, TAPES AND CLOTH NOT ALLOW FOR THE WATER SYSTEM TO REMAIN STAGNANT FOR LONGER THAN FOR FITTINGS SHALL HAVE THE SAME COMPONENTS RATINGS AS LISTED ABOVE. INSULATION SHALL BE APPLIED ON CLEAN, DRY SURFACES AND AFTER

THIS CONTRACTOR SHALL HAVE THE WATER TESTED AND APPROVED BY THE INSPECTION AND RELEASE FOR INSULATION APPLICATION. ALL INSULATION SHALL BE CONTINUOUS THROUGH WALL AND CEILING OPENINGS AND SLEEVES. INSULATION ON ALL COLD SURFACES WHERE VAPOR BARRIER JACKETS ARE USED, WILL BE APPLIED WITH A CONTINUOUS, UNBROKEN VAPOR SEAL, INCLUDING ALL FITTINGS AND VALVES. ALL INSULATION TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S. FITTINGS SHALL BE FINISHED WITH 1/4"

COAT OF INSULATING CEMENT AND CANVAS.

CODES, AND REGULATIONS.

ADJOINING PIPE AND TO PRESENT OFFSETS IN FLOW LINE. ALL PIPE SHALL BE DOMESTIC COLD WATER - 1/2" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE

DOMESTIC HOT WATER RETURN- 1" THICK ARMAFLEX (FLAME SPREAD 25/ SMOK DEVELOPED 50) EXPOSED STORM WASTE AND SANITARY WASTE - 1/2" THICK ARMAFLEX (FLAME

DOMESTIC HOT WATER - 1" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE

ALL MATERIALS USED SHALL COMPLY WITH SECTIONS 1712 AND 1713 OF THE UB

ALL PIPING FROM GAS METER TO GAS-FIRED EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. ALL GAS PIPING TO BE IN ACCORDANCE WITH LOCAL CODES, NFPA-54, IFGC AND

UPC ALL GAS PIPING SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-54, LOCA

THE DRAINS, SOIL WASTE AND VENT PIPE AND FITTINGS INCLUDING EXTENSIONS ALL GAS PIPING SHALL BE SCHEDULE 40 BLACK OR GALVANIZED STEEL WITH TO SEWERS SHALL BE OF THE SIZES INDICATED ON THE DRAWINGS. PIPE AND BLACK OR GALVANIZED WITH MALLEABLE SCREWED FITTINGS. USE TEFLON TAP FITTINGS TO BE, CYLINDRICAL AND FREE FROM CRACKS OR OTHER DEFECTS. ON ALL THREADED JOINTS. FITTINGS LARGER THAN TWO INCHES (2") SHALL BE WELDED. PROVIDE UNIONS AND GAS SHUT-OFF VALVES AT EACH PIECE OF GAS FIRED EQUIPMENT OR APPLIANCE. ANY GAS PIPING CONCEALED IN CHASES

> FLEXIBLE CSST PIPING MATERIAL IS AN ACCEPTABLE ALTERNATE ONLY IF ALLOWED BY LOCAL AHJ AND RESIZED PER MANUFACTURERS SIZING GUIDELINI

AND/OR INACCESSIBLE CEILING IS TO BE WELDED WITH WELDED FITTINGS.

STACKS SHALL BE FIRMLY SECURED IN POSITION WITH WROUGHT IRON CLAMPS ALL FLEXIBLE GAS PIPING SYSTEM COMPONENTS MUST BE: A.1 CSA INTERNATIONAL CERTIFIED CORRUGATED STAINLESS STEEL TUBING A.2 UNDERWRITERS LABORATORIES CLASSIFICATION LISTED FOR THRU

AT INTERVALS OF NO GREATER THAN 50', AT ANY STACK ROUTING BELOW GRADE. A.3 LISTED WITH FM (FACTORY MUTUAL) REQUIREMENTS FOR FLAMMABLE GAS PIPING SYSTEMS. FOR SEISMIC RESISTANCE. A.4 TUBING SHALL BE TESTED AND LISTED IN ACCORDANCE WITH ICC LC-1024

PENETRATION FIRE STOP REQUIREMENTS RATINGS TO INCLUDE ONE, TWO,

St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

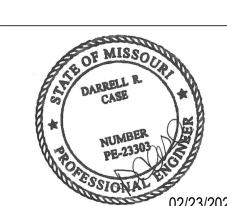


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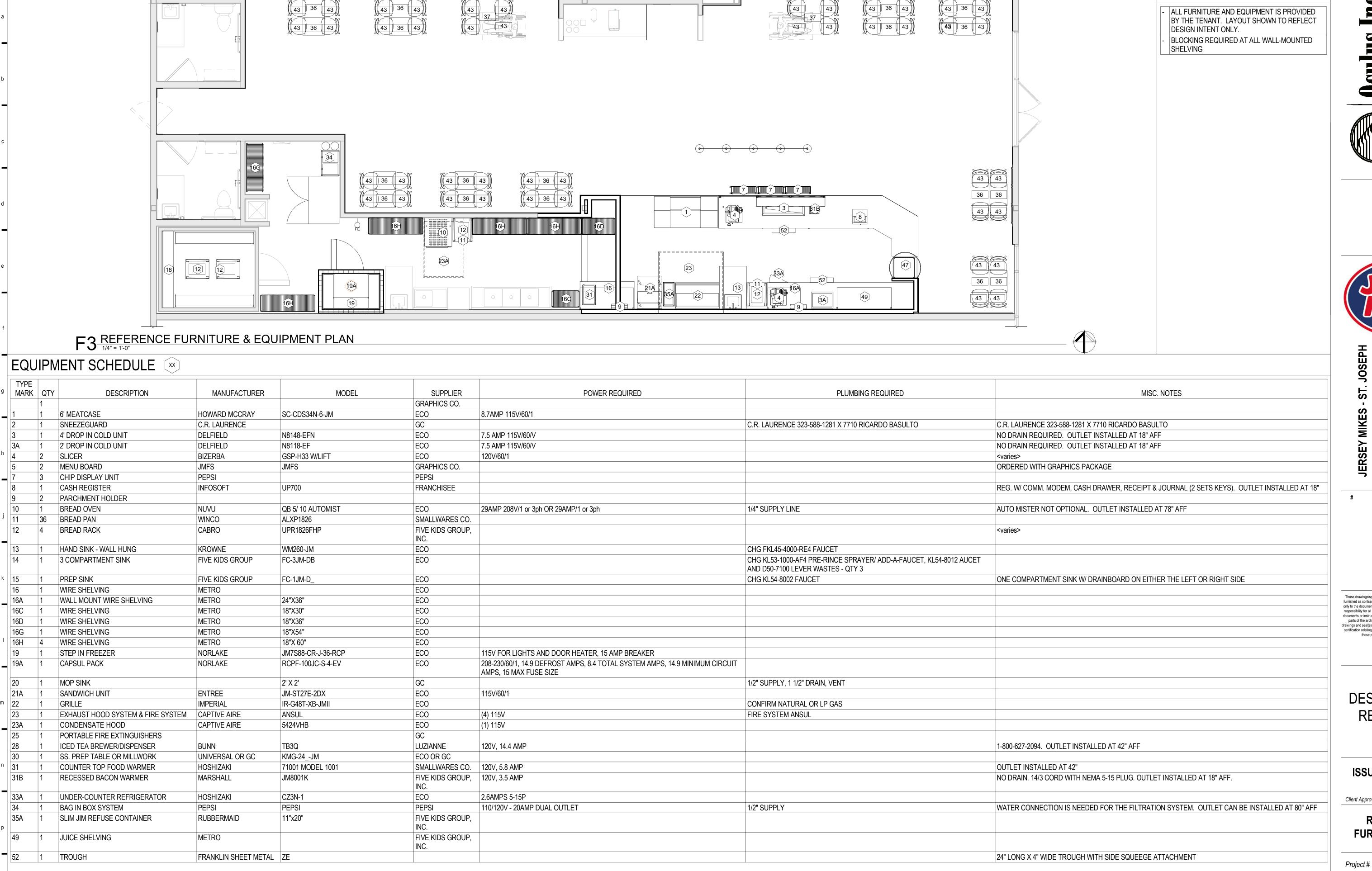


Client Approval

Plumbing Plan

Project #

Checked by



FURNITURE FURNISHED AND INSTALLED BY THE GC.

Count | Type Mark

37

18 36

FURNITURE SCHEDULE XX

TABLE TOP AND BASE

TABLE TOP AND BASE

CHAIRS - LOW

Description

SHEET NOTES:



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# **DESIGN INTENT** REFERENCE ONLY

**ISSUE FOR PERMIT** 

Client Approval

# REFERENCE **FURNITURE PLAN**

43423-MO01 Issue Date

2/23/2023 1/4" = 1'-0" Scale

AM/JM

Drawn by

Checked by

SUPPLIER

FURNITURE CO.

FURNITURE CO.

FURNITURE CO.

Comments

ADA COMPLIANT TABLETOP

ADA COMPLIANT TABLETOP

Manufacturer

24"x20"

24"x45"

ATS

ATS

ATS