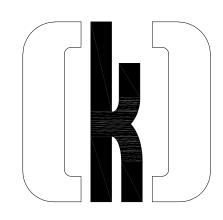
MADE IN KC TENANT DEVELOPMENT

Construction Documents Issued for Permit/Construction MARCH 10, 2020

860 NW Blue Parkway, Suite U Lee's Summit, Missouri 64086



Project Number 5513-20



Index Of Drawings

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SPECIFICATIONS

D, CODE SUMMARY, WALL TYPES AND ON

NS AND NOTES

PLAN, REFLECTED CEILING PLAN

SECTIONS AND DETAILS

TES, AND FINISH LEGEND

) SECTIONS

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Architect

WARMAN ARCHITECTURE & DESIGN 1735 SWIFT AVENUE NORTH KANSAS CITY, MO 64116 T: 816.474.2233 F: 816.474.1051

Architectural Designer KCD-KANSAS CITY DESIGN GROUP, LLC 4006 N 126TH STREET KANSAS CITY, KS 66109 T: 816.682.0329

MP Engineer LANKFORD, FENDLER & ASSOCIATES 1730 WALNUT ST. KANSAS CITY, MO 64108 T: 816-221-1411

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1 2 3 4 5	6 7
DIVISION 1	ARCHITECTURAL WOODWORK CO
GENERAL REQUIREMENTS	4. Wall cabinets shall have 1/2" thick Base cabinets shall have 1/4" thick p
1. Owner Representative reserves the right to consider and substitute materials due to untimely availability and/or faulty materials upon consultation with the Architect. Substituted material will be equal in aspects relating to flame spread, combustibility, quality and appearance and will not affect intent of Building Code for which permit was issued. The	5. Countertops shall have general pu water-resistant (MDF) medium densit Reference finish schedule for color.
Tenant agrees to accept substitution(s) when requested by Owner and approved by Architect.	<ol> <li>Plastic laminate surfaced casework</li> <li>(MDF). Reference finish schedule for</li> </ol>
2. Contractor shall guarantee all materials and workmanship executed under this contract for a period of one (1) year after date of written acceptance by Owner, unless otherwise specifically provided in contract. Contractor shall replace with new materials, including installation thereof, all items giving indication of defective material or faulty workmanship during this period. Replacement and repair, as well as repair of any damage to adjacent	7. Maximum span for open counters intermediate supports as shown for o deep, and 30" wide knee clearance a
areas or surfaces, shall be at no cost and with least inconvenience to Owner.	8. Countertops shall have 4" high ba where noted. Mechanically fasten ba
<ol><li>Contractor shall provide all insurance and certificates of insurance as required by the Owner before commencing work.</li></ol>	9. Hardware: Except as noted shall Hinges - Stanley 1503-9X self-closing
<ol><li>Contractor shall prior to commencement of the work, field verify all existing project conditions, including dimensions and utility locations.</li></ol>	Shelf standards/supports - KV 255/25 Stainless Steel Pulls - 2-3/4" aluminum HAFELE 124
5. Contractor shall verify and be responsible for all work and materials-including those furnished by sub-contractors.	Counter supports - Centerline floating
6. Written dimensions take precedence over scaled sizes. Do not scale drawings. Notify the Owner of any discrepancies prior to continuing the work.	10. Provide continuous fire retardant wall-hung cabinets, white boards, toil 3/4" F.R.T. plywood in-wall blocking a
7. These documents were created referencing existing visual conditions as basis of planning. Contractor shall bring any variances and/or discrepancies to attention of the Owner prior to	11. Coordinate <u>all</u> millwork with Tena
commencing construction.	DIVISION 7
8. Contractor shall carefully study, coordinate, and compare the contract documents and shall at once report to the Owner any error, inconsistency or omission.	JOINT SEALERS
9. Documents provided by Warman Architecture & Design, Inc consist of "Architectural" sheets as noted on cover.	<ol> <li>Caulk all interior joints and opening Butyl Rubber sealant, and closed cell manufacturer's product data and colo</li> </ol>
10. Contractor is responsible for paying all fees and obtaining all permits required for construction and occupancy.	2. All penetrations through fire resisti with a fire resistive caulking as manuf
11. All work shall be in accordance with applicable codes, regulations and ordinances of the State of Missouri and the City of Lee's Summit.	otherwise. 3. Install caulking in strict accordance
12. Definitions: For purposes of this agreement, "provide" includes furnishing and installing complete and ready for the intended use; "furnishing" includes supply and deliver to project site, ready for unloading, unpacking, assembly, installation, and similar operation, not installing; "installing" includes unloading, temporarily storing, unpacking, assembly,	to produce beads of proper width and immediately remove all surplus caulki Mask all finished surfaces. DIVISION 8
installation, and similar operations, not furnishing.	DOORS/ FRAMES
13. A pre-bid meeting for all contractors will be scheduled with the Contractor, Building Owner, Mechanical, Electrical, and Plumbing Design Builders and data/power consultants at the job site to discuss project requirements and provide the opportunity to review existing field conditions.	<ol> <li>Provide flush wood solid core door metal frames. Faces: Species and A Comply with FGMA glazing manual for with uniform clearance and bevel. U</li> </ol>
14. Construction means, methods, sequencing, and safety are the sole responsibility of the Contractor. Neither the Owner or Architect shall be liable for these actions.	Prep doors for necessary hardware- I appropriate blocking in doors.
15. It is the intent of these documents and all subsequent construction to comply with The Americans with Disabilities Act.	<ol> <li>Install all doors in strict accordanc design, and the referenced standards anchored for use intended</li> </ol>
16. Contractor to provide for the removal of trash, rubbish, surplus and sweeping of construction and demolition on a daily basis. Coordinate with the Owner.	FINISH HARDWARE
17. Contractor is to locate and identify all penetrations, new or existing, through fire-rated assemblies and provide fire and smoke stopping/sealant where work occurs.	1. Furnish all finish hardware describ manufacturer, as required for complet
18. Contractor to provide FRT backing for support of all wall, ceiling and partition mounted items such as brackets, light fixtures, shelving and equipment. Coordinate with design build portions of the work.	codes. All hardware shall be in comp guidelines for buildings and facilities." 2. Submit complete finish hardware s
19. Contractors shall take all necessary precautions to ensure the safety of the occupants and worker at all times.	approval. 3. Install all finish hardware in strict a
20. Interior wall and ceiling finishes shall not exceed flame spread classifications of applicable codes.	eliminating all hinge-bound conditions anchored into position.
21. Accurate As-built drawings shall be generated by the Contractor during construction and submitted to the Owner upon completion of final punchlist and prior to request for final	<ol> <li>Follow the door hardware institute hardware unless specifically indicated</li> <li>Follow NFPA 101 for means of egr</li> </ol>
payment. 22. Contractor to verify fire extinguisher requirements and locations with Fire Marshal and	<ol> <li>Follow NFPA 80 for fire-rated door</li> </ol>
Owner.	GLASS AND GLAZING
23. To the best of our knowledge, the building is already compliant with the Americans with Disabilities Act (ADA) with respect to the path of travel to the altered area.	1. Comply with combined recommend other glazing materials, unless more s
24. Mechanical, plumbing and electrical work indicated on architectural drawings are for design intent only. Refer to MEP HVAC plans and MEP Design/Build Contractor to design plumbing and electrical systems. Variances between documents and discrepancies shall be brought to the attention of the Owner and Architect prior to commencing work.	Manual" 2. Tempered glass - 1/4" tempered g channels at top for installation unless above floor, up to 60" and/or less than identification labol as require by code
DIVISION 6	identification label as require by code. 3. 3/8" tempered glazing complying v
ARCHITECTURAL WOODWORK	installation unless indicated otherwise application greater than 3'-0" in any d
1. Reference to Premium, Custom or Economy in this specification shall be as defined in the Seventh edition of Architectural Woodwork Institute (AWI) "Quality Standards". Construction shall be Custom.	permanent identification label as requ 4. Tempered glass - 1/2" tempered g
<ol> <li>Any item not given a specific quality grade shall be Custom.</li> <li>Interiors of achieve chall have peopler, pipe or fir calid wood with medium density.</li> </ol>	channels at top for installation unless application and any opening greater t 3'-0" of any door. Provide permanent
3. Interiors of cabinets shall have poplar, pine or fir solid wood with medium density fiberboard (MDF) or plywood carcass: Interior to be Melamine. Color to match laminate.	5. GLAZING IN HAZARDOUS LOCA

## 8 9 10 11 12 13 14 15

#### CONT.

hick plywood back, 3/4" thick top, bottom, doors and ends. k plywood back, 3/4" thick bottom, doors and ends.

Il purpose grade plastic laminate surface over 3/4" "Medex" nsity fiber board, (minimum) unless noted otherwise. r.

work (except countertops) shall be vertical grade over 3/4" for color.

ers shall be 3'-6" with 3/4" x 1-1/2" edge. Provide or open counters in excess of 3'-6". Provide 27" high, 19" e at ADA locations.

backsplash U.N.O. Self edge all tops and splashes except back and end splashes where adjoining sinks.

all be: sing

5/256 for cabinets, KV 185/186 for projected supports,

124.02.921 handles for all drawers and pulls ting hidden in wall support brackets.

ant treated wood blocking within stud space behind all toilet accessories, and at door frames with closers. Provide ng as indicated in drawings.

enant equipment and appliances prior to final build-out.

nings at door frames, walls, partitions, etc., with paint grade cell backer rod. Provide silicone at wet areas. Submit olor chart for review and color selection.

sistive wall and/or floor-ceiling construction shall be caulked inufactured by 3M, Type 25, or equal, unless noted

ance with the manufacturer's recommendations. Take care and depth. Tool as recommended by the manufacturer, and ulking. All caulking shall be fully adhered to both surfaces.

loors in 22 ga. hollow metal standard-profile welded hollow d AWI Grades per door schedule. Construction PC5 or PC7. al for all tempered glazing in doors. Align and fit in frames . Undercut 1/2" from substrate at carpet and hard surfaces. e- No through-bolting of hardware allowed. Provide

ance with all applicable codes and regulations, the original ords, hanging square, plumb and straight and firmly

cribed and all other finish hardware not described by a single plete operation of build out meeting all applicable building mpliance with ADAAG requirements- "Accessibility es."

re schedule, per DHI format, to Owner for review and

ct accordance with the manufacturer's recommendations, ons and making all items smoothly operating and firmly

ute's recommendations for locations of Architectural ted or required to comply with governing regulations.

egress door requirements

oor assemblies that are required to be listed or labeled.

endations of manufacturers of glass, sealants, gaskets and re stringent requirements are contained in GANA's "Glazing

ed glazing complying with ASTM C1048. Provide glazing ess indicated otherwise. Provide at openings less than 1'-6" than 3'-0" in all directions from any door. Provide permanent ode.

ng with ASTM C1048. Provide glazing channels at top for vise. Provide in any horizontal application or any vertical y direction from any door, but less than 8'-0" high. Provide equire by code.

d glazing complying with ASTM C1048. Provide glazing ess indicated otherwise. Provide in any horizontal er than 1'-6" wide, 8'-0" - 10'-0" high and in areas within ent identification label as require by code.

DCATIONS TO COMPLY WITH IBC 2406 AND IBC 2406.3.

DIVISION 9

## PROCELAIN AND CERAMIC TILE

## 1. Submittals: Product Data and Samples

2. Provide Tile per Finish Legend and Plans. (no substitutions)

3. Floor Preparations

A. Fill cracks, holes, and depressions in concrete substrates for tile floors with trowela leveling and patching compound specifically recommended by tile-setting material manufacturer

4. Install per manufacturer recommendations.

A. Extend tile work into recesses and under or behind equipment and fixtures to form complect covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.

B. Accurately form intersections and returns. Perform cutting and drilling of tile without marr visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

C. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.

5. Provide  $\frac{1}{16}$ " grout for wall and floor tile.

6. Provide Manufacturer's recommended product for sealing grout joints and that does not change color or appearance of grout.

7. Provide Extra Materials: Deliver to Owner 1 box of each type and color of tile.

SEALED CONCRETE - with grinding

1. Provide High-Performance, Non-Yellowing Crystal-Clear

2. Submittals: Product Data and installation instructions

3. Quality Assurance:

- A. Manufacturer: Minimum 10 years experience producing concrete coatings.
- B. Installer: Licensed installers experienced and trained in the use of specified products.
  C. Suitability of Substrate: Concrete surface must be clean and dry with all stains, oil, grease, dust and dirt removed prior to application. A thorough pressure washing is highly recommended.

4 Material

- A. Concrete Primer: Water-borne, two component epoxy with low VOC and low odor
   1. DUR-A-GLAZE #4 WB or approved equal.
- B. Concrete Sealer: High-performance, non-yellowing, two-component, clear polyester protective coating.

1. DUR-A-GLAZE POLY-THANE#2 or approved equal.

5. Installation of Flooring:

A. Grind floors to remove all telegraphing of previous adhesives and debris.B. Follow Manufacturers recommendations for installation

6. Provide care and maintenance instructions to tenant after installation is complete.

### EPOXY FLOORING

1. Provide epoxy based multi roller applied flooring system with micro or macro colored decorative chips and urethane topcoat. the system shall have the color and texture as specified by the owner with a nominal thickness of 40 mils.

- 2. Submittals: Product Data and installation instructions
  - manufacturer's safety data sheet (sds) for each product being used.
    a 3 x 3 inch square sample of the proposed system. color, texture, and thickness shall be representative of overall appearance of finished system subject to normal tolerances

3. Quality Assurance:

- A. Approved Manufacturers: DUR-A-FLEX Inc or equal
- B. Installer: Licensed installers experienced and trained in the use of specified products.
  C. Suitability of Substrate: Concrete surface must be clean and dry with all stains, oil, grease, dust and dirt removed prior to application. A thorough pressure washing is highly recommended.
- 4 Material

A. DUR-A-FLEX, inc, dur-a-chip, epoxy-based seamless flooring system

- 1. primer: dur-a-flex, inc, dur-a-glaze #4 wb resin and hardener.
- first broadcast coat: dur-a-flex, inc, dur-a-gard opf resin and hardener.
   second broadcast and grout coat: dur-a-flex, inc. dur-a-glaze #4 resin and
- water clear hardener. 4. chips: dur-a-flex, inc. macro or micro decorative colored chips if applicable.
  - 5. topcoat: dur-a-flex, inc. armor top resin, hardener and grit.
  - 6. patch materials

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- a. shallow fill and patching: use dur-a-flex, inc. dur-a-glaze #4 cove rez.
  b. deep fill and sloping material (over ¼ inch): use dur-a-flex, inc. dur-a-crete.
- 5. Installation of Flooring:

A. Follow Manufacturers recommendations for storage and installation

### ACCESSORIES

1. Submittals: Product Data and Samples

2. Provide materials per Finish Legend and Plans. Install per manufacturer's instructions. Apply protective top coat per manufacturer's instructions.

3. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.

4. Provide 4" rubber base (coil stock) throughout: Cove at all areas. Re: Finish Legend for manufacturers, Finish Plans for location. Install in accordance with manufacturer's instructions.

5. Installation of Wall Base: adhesively install resilient wall base and accessories using maximum lengths possible.

6. Provide Extra Materials: Deliver to Owner at least 20 linear feet of each type of color of resilient wall base to be installed.

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	16 17 18 19 20
	ACOUSTICAL PANEL CEILINGS
	<ol> <li>Surface-Burning Characteristics of Panels: ASTM E 1264, Class A materials, tested per ASTM E 84</li> </ol>
	GYPSUM BOARD ASSEMBLIES
able lete	1. Comply with ASTM C645 Provide 3-5/8", 25 ga., steel studs 24" o.c. with 2" deep leg deflection track top runner and bottom. Runners anchored and/or bracing to substrate. Isolate from building structure vertical and horizontal. Frame both sides of building expansion joints; do not bridge. Frame openings per manufacturer's recommendation. Provide supplementary framing for support of other work where indicated and/or required. Construct to withstand 5 psf horizontal load applied from any direction.
rring t	2. Provide Type "X" gypsum board, 5/8" thick unless shown otherwise. All walls to be painted or receive wallcovering shall have 'Level 4' finish. Tape and float all joints, install cornerbeads, compound fill, feather and sand smooth ready for paint, 'Level 3' where exposed `Level 2' where concealed. `Level 5' with 3 separate coats of compound at all joints, angles, and surfaces at all curved surfaces and other surfaces required by MPI and wallcovering manufacturer. Provide smooth surface free of tool marks, ridges and visual defects. All fastening per USG or Gold Bond specifications. Provide water-resistant gypsum

a. Corners - Outside USG Durabead, or Gold Bond Standard Corner, Inside: taped.

b. Edges at ceilings, mullions, building expansion joints, and juncture with other materials, and other surfaces USG 200 series Casing.

3. All other materials, not specifically described, but required for a complete and proper installation or gypsum drywall, shall be provided.

4. Provide sound attenuation blankets, Type 1 (without membrane facing) where indicated.

5. Frame door openings to comply with GA-600.

6. Provide expansion joints at 30' max intervals with locations approved by the Architect. Expansion joints shall be details per USG standards.

#### PAINTING/STAINING

board in all "wet" areas.

1. Except where prefinished or where noted to be painted, stain and varnish all exposed wood and plywood, except for existing ceiling/floor/columns. Repair, sand, clean and repaint any previously painted surface.

2. All unexposed wood such as cabinet interiors, closet and storage shelves, etc., except where prefinished, shall have sanding sealer. Sand shelves before and after application and apply finish coat.

3. Seal tops and bottoms of all wood doors.

4. Tint undercoats to match finish coats.

5. Paints, stains and varnishes shall not be applied at temperatures below 45 degrees F. or humidity above 75%.

6. Damaged areas, dents, cracks, holes and/or other irregularities shall be repaired and repainted to match finish in their entirety, including adjoining surfaces.

7. Allow paints to dry 24 hours, enamels and varnishes 48 hours between coats unless otherwise specified by manufacturer.

8. Sand between coats with 180-220 alum. oxide or equiv. garnet paper and dust prior to applying succeeding coats.

9. Apply paste wood filler (P&L Paste Filler Natural, mixed 2:1 with stain) to open grained woods as directed by manufacturer.

10. Fill nail holes to matching finish.

11. Paint products indicated in the finish schedule are based on Sherwin Williams as a quality standard. Refer to finish material list for actual products.

PAINTED WOOD - one coat each: Interior Trim Primer, Latex Enamel Eggshell Undercoating, Latex Enamel Eggshell.

STAINED & VARNISHED (HDPB) PARTICLE BOARD, WOOD FIBERBOARD AND PLYWOOD - one coat each stain (with filler as above), sanding sealer, Clear Finish Varnish Satin Base 30% sheen.

GYPSUM BOARD WALLS - Acrylic Latex Finish, 2 finish coats over 1 coat primer. Primer: PrepRite 200 Interior Latex Primer Finish and Second Coats: Promar 400 Interior Latex Eggshell

FERROUS METAL-Primer Alkyd based: Kem Kromik Universal Metal Primer Finish Coat: Promar 200 Alkyd Semi-Gloss

#### **DIVISION 10 - SPECIALTIES**

FIRE EXTINGUISHER AND CABINETS:

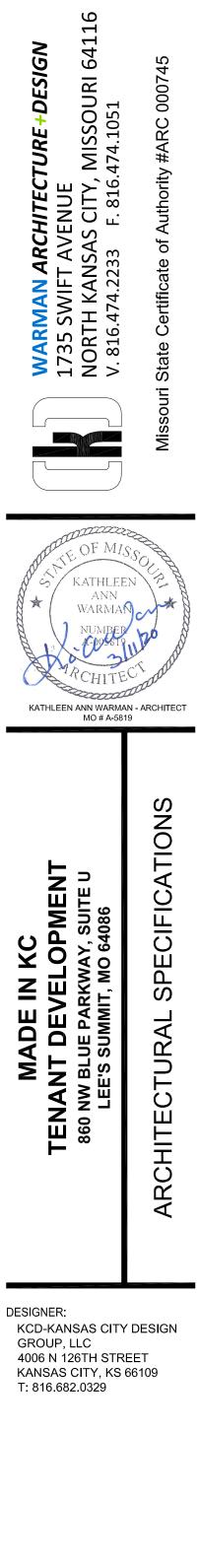
1. Portable fire extinguisher to be multi-purpose dry-chemical type, UL-Rated.

- 2. Cabinets, trim, and door style to match building standard.
- 3. Semi-recessed.

### EXIT SIGNAGE:

- 1. Signage to be applicable to current building code
- Color to match current building standard.
   Colling crucell mount

3. Ceiling or wall mount

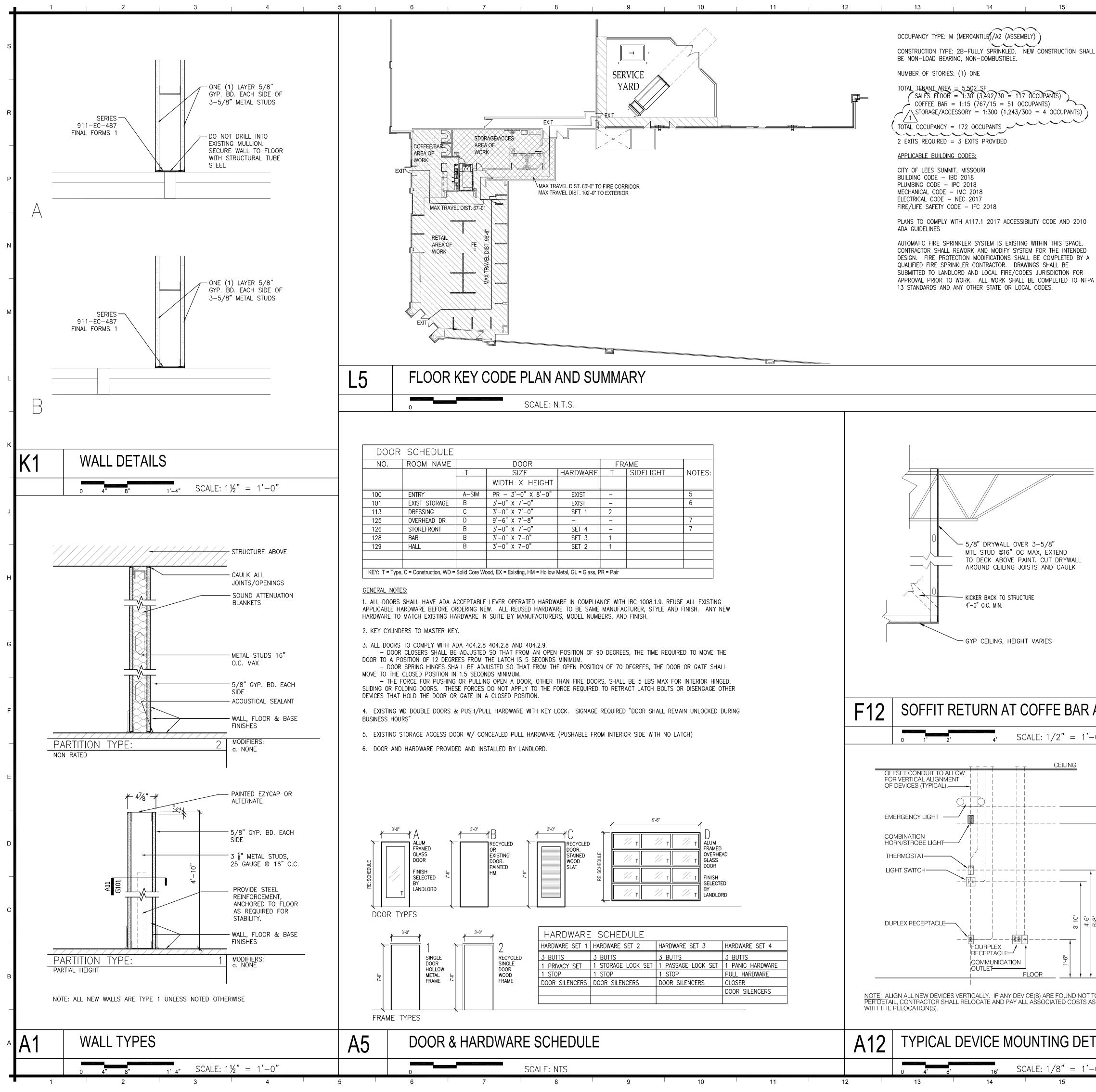




JOB NUMBER

5513-20

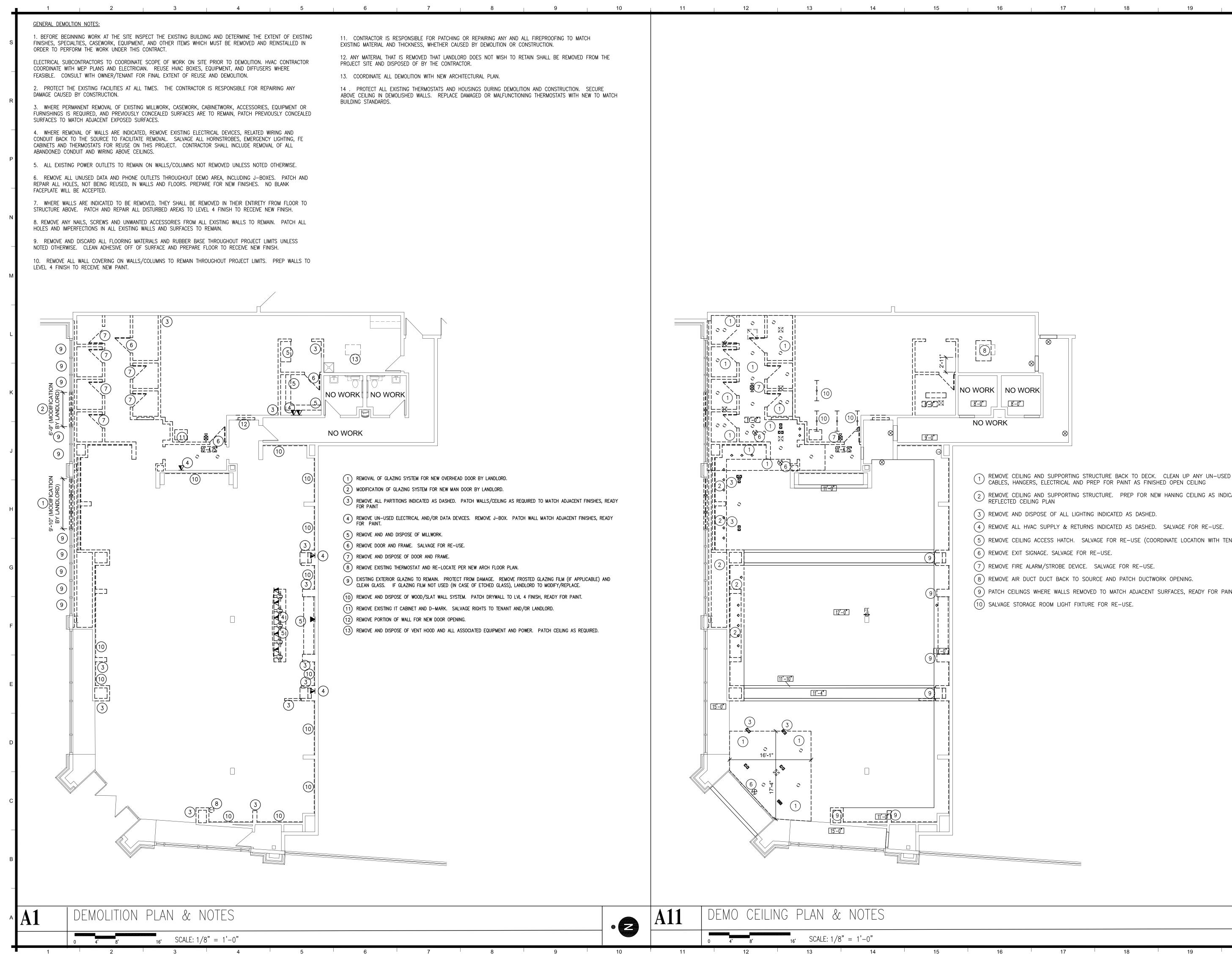
20



DOOR		FR/	FRAME				
SIZE	HARDWARE	Т	SIDELIGHT	NOTES:			
IDTH X HEIGHT							
R – 3'–0" X 8'–0"	EXIST	-		5			
-0" X 7'-0"	EXIST	-		6			
-0"X 7'-0"	SET 1	2					
-6" X 7'-8"	_			7			
-0" X 7'-0"	SET 4	1		7			
-0"X 7-0"	SET 3	1					
-0"X 7-0"	SET 2	1					

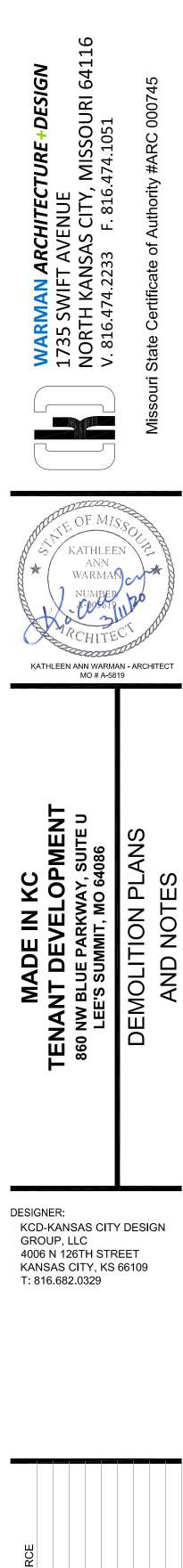
	HARDWARE	SCHEDULE			
2	HARDWARE SET 1	HARDWARE SET 2	HARDWARE SET 3	HARDWARE SET 4	
RECYCLED SINGLE	3 BUTTS	3 BUTTS	3 BUTTS	3 BUTTS	
	1 PRIVACY SET	1 STORAGE LOCK SET	1 PASSAGE LOCK SET	1 PANIC HARDWARE	
DOOR WOOD	1 STOP	1 STOP	1 STOP	PULL HARDWARE	
FRAME	DOOR SILENCERS	DOOR SILENCERS	DOOR SILENCERS	CLOSER	
				DOOR SILENCERS	

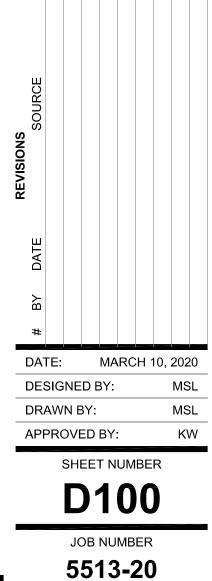
ND NOT TO BE IN COSTS ASSOCIA	TED	A17	SYMBOLS LEGEND	DATE: MARCH 10, 2020 DESIGNED BY: MSL DRAWN BY: MSL DRAWN BY: MSL APPROVED BY: KW SHEET NUMBER G101 JOB NUMBER
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				# BY
<u> </u>				ATE
3'-10" 4'-6" 6'-8" 7'-6"		Ō	EXISTING OR RELOCATED THERMOSTAT	
			EXISTING SUPPLY AIR – ANY NEW TO MATCH EXISTING	
			EXISTING RETURN AIR – ANY NEW TO MATCH EXISTING	
		$\otimes$ 1 $\otimes$ 1	EXISTING OR RELOCATED EXIT SIGN W/BATTERY BACK UP – ANY NEW TO MATCH EXISTING	JRCE
•	-	┝━━━┥	EXISTING OR RELOCATED UTILITY LIGHT FIXTURE	
<u>NG</u>		٥	EXISTING OR RELOCATED DIRECTIONAL MINI CAN LIGHT	
= 1'-0"		<b></b>	PEKOTA INDUSTRIAL ELEGANCE "TITUS DRUM KIT WITH SWAG CORD" OR EQUAL. CONSULT TENANT	1730 WALNUT ST. KANSAS CITY, MO 64108 T: 816-221-1411
	D ENTRY	$\circledast$	LARGE PENDENT LIGHT FIXTURE; T.B.D.	MEP ENGINEER: LANKFORD, FENDLER & ASSOCIATES
		0	EXISTING OR RELOCATED CAN LIGHT	T: 816.682.0329 (DIRECT ALL QUESTIONS TO MICHELLE LOCKMAN)
		ØØ	EXISTING OR RELOCATED RECESSED LIGHT FIXTURE	KCD-KANSAS CITY DESIGN GROUP, LL 4006 N 126TH STREET KANSAS CITY, KS 66109
			EXISTING SURFACE MOUNTED FLUORESCENT FIXTURE TO REMAIN EXISTING TRACK LIGHTING TO REMAIN	ARCHITECTURAL DESIGNER:
		<u>uuniaci su</u>	ZANNE MCFADDEN COORDINATION OF FIXTURE DELIVERY 913-912-2514	SYI WAI
		<u>CONTRACTOR</u>	R PROVIDED LIGHT FIXTURE AND CONTROLS PACKAGE TO BE INSTALLED BY FIXTURE PACKAGE TO BE SUPPLIED BY FACILITY SOLUTIONS GROUP. ZANNE MCEADDEN COORDINATION OF FIXTURE DELIVERY 913-912-2514	MBO LL TJ
/ALL _K		₩ ₩	LAUNTE ON NELOONED JON AC MOUNTED FINE EXHIBUTIONER	TENA 860 NV NPES YPES
		FE	EXISTING OR RELOCATED SURFACE MOUNTED FIRE EXTINGUISHER	MAI ANT C W BLUE EGEN S AND
		#cd ▷⊠⊲ ⊣⊠√	COMBINATION SPEAKER/VISUAL FIRE ALARM STROBE. CEILING OR WALL MOUNTED DEVICE SHALL COMPLY WITH NFPA 72 & NFPA 101. WALL MTD TO BE LOCATE 80" A.F.F. TO THE BOTTOM. # REFERS TO MINIMUM CANDELA RATING	MADE IN KC IANT DEVELOPMI NW BLUE PARKWAY, SUI NW BLUE PARKWAY, SUI LEGEND, CODE S LEGEND, CODE S S AND DOOR INF
				N KC ELOPMI Mo 64086 OR INF
			NEW GYPSUM CEILING	MADE IN KC TENANT DEVELOPMENT 860 NW BLUE PARKWAY, SUITE U LEE'S SUMMIT, MO 64086 SYMBOLS LEGEND, CODE SUMMANY, WALL TYPES AND DOOR INFORMATION
		N	PHONE/DATA OUTLET – CONDUIT & J–BOX BY ELECTRICIAN. (DATA CABLING BY OTHERS)	T T MAN ₹MAT
			FLUSH FLOOR POWER RECEPTACLE – STAINLESS STEEL	Norice Norice
		₽	STANDARD DUPLEX OUTLET OR DATA BOX (6" ABOVE COUNTER)	KATHLEEN ANN WARMAN - ARCHITECT MO # A-5819
		+	STANDARD QUADRAPLEX – MATCH EX COLOR	ATHIE CEN ANN MARIAN
			OUTLET ON A DEDICATED CIRCUIT (LOCATED 18" A.F.F U.N.O.) – MATCH EX COLOR	WARMAN WUMBER CACOOS 819
TO NFPA		⇒	STANDARD DUPLEX OUTLET (LOCATED 18" A.F.F. U.N.O.) – MATCH EX COLOR	MUSTATE OF MISSO KATHLEEN
D BY A FOR		XXX	DOOR NUMBER. RE: SCHEDULE A5/G101	1010000000
PACE. ENDED		XXXX	DETAIL REFERENCE	
2010		xx/xxxx xx	DRAWING ELEVATION	ssouri (
		$\rightarrow$	WALL TYPE - RE: A1/G101	WAR 1735 NORT V. 816 State C
			NEW DOOR RE: DOOR/HARDWARE SCHEDULE A5/G101	WARMAN ARCHITECTURE + DESIG 1735 SWIFT AVENUE 1735 SWIFT AVENUE NORTH KANSAS CITY, MISSOURI 6 V. 816.474.2233 F. 816.474.1051 V. 816.474.2233 F. 816.474.1051
			EXISTING DOOR TO REMAIN	ARCHITECTURE + DESIGN F AVENUE VSAS CITY, MISSOURI 64: 233 F. 816.474.1051 23 F. 816.474.1051 te of Authority #ARC 000745
NTS)			= NEW PARTIAL HEIGHT PARTITIONS – RE: A1/G101	HITECTURE +DI ENUE CITY, MISSOU F. 816.474.1051 Authority #ARC 00
			NEW FULL HEIGHT PARTITIONS – RE: A1/G101	<b>FURE + DESIGN</b> MISSOURI 64116 474.1051 y #ARC 000745
ON SHALL			= WALL OR ITEM TO BE REMOVED = EXISTING PARTITIONS TO REMAIN	<b>DESIG</b> 51 00074
				<b>5</b> 54116 5
	16	17	18 19 20	



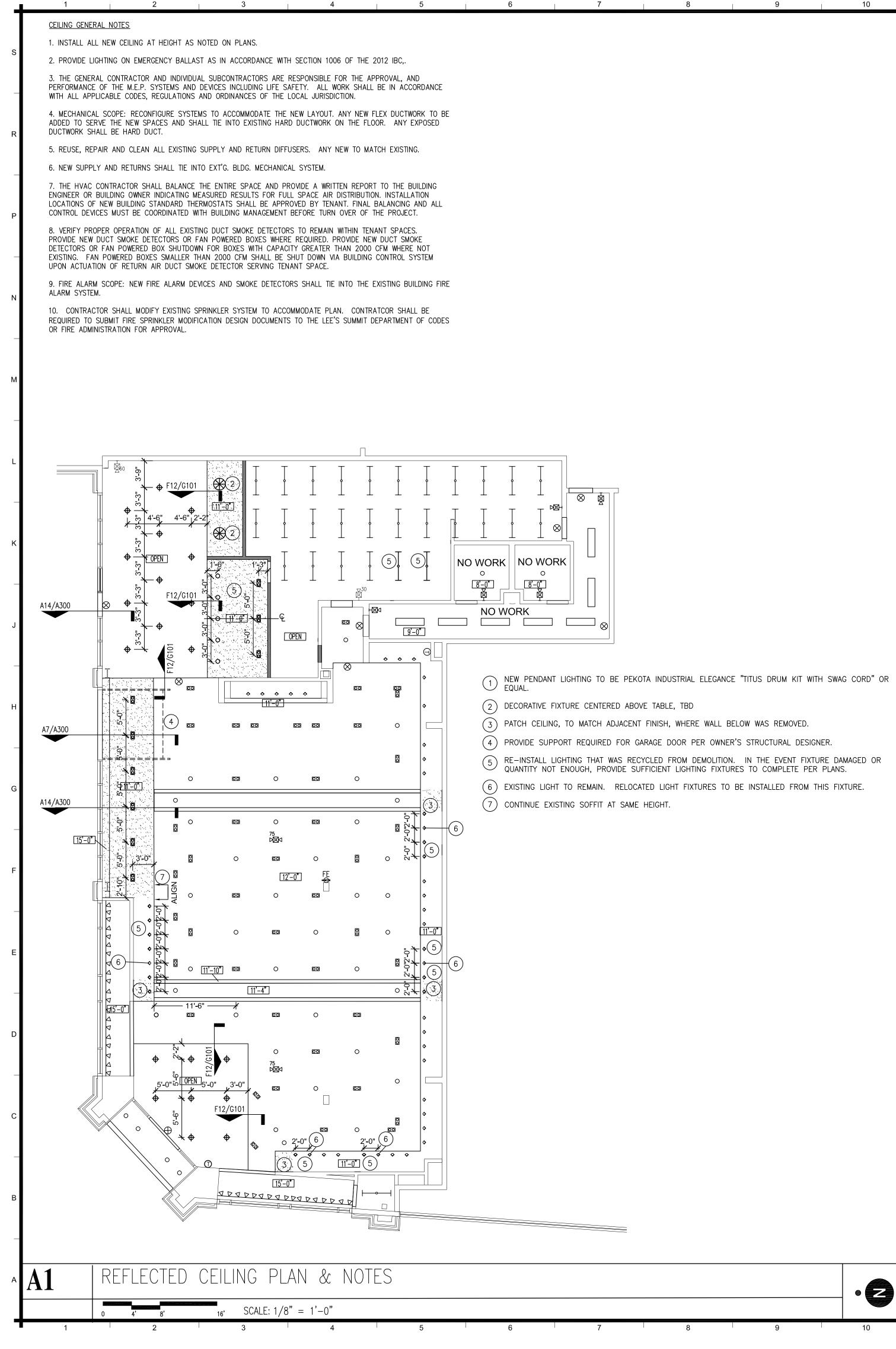
- $\frown$  REMOVE CEILING AND SUPPORTING STRUCTURE BACK TO DECK. CLEAN UP ANY UN-USED DUCT,
- (2) REMOVE CEILING AND SUPPORTING STRUCTURE. PREP FOR NEW HANING CEILING AS INDICATED ON
- (4) REMOVE ALL HVAC SUPPLY & RETURNS INDICATED AS DASHED. SALVAGE FOR RE-USE.
- (5) REMOVE CEILING ACCESS HATCH. SALVAGE FOR RE-USE (COORDINATE LOCATION WITH TENANT)

- (9) PATCH CEILINGS WHERE WALLS REMOVED TO MATCH ADJACENT SURFACES, READY FOR PAINT.





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8 9 10 11 12 13 14 1 1 15 GENERAL ARCHITECTURAL NOTES: 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SCHEDULES ESTABLISHED BY THE BUILDING MANAGER. 2. THE DOCUMENTS REFLECT CONDITIONS REASONABLY INTERPRETED FROM THE EXISTING VISIBLE CONDITIONS. THE CONTRACTOR SHALL VISIT THE SITE AND BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND THEIR IMPACT ON THE SCOPE OF THE WORK. 3. ALL DIMENSIONS ARE TO FACE OF FINISHED WALL, UNLESS NOTED OTHERWISE. 4. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB, INCLUDING MECHANICAL, ELECTRICAL, AND PLUMBING LAYOUTS. 5. COORDINATE WITH OWNER THE SHUT DOWN OF UTILITY SERVICE WITHIN THE EXISTING BUILDING SO AS TO MINIMIZE THE DISRUPTION OF SERVICE TO OTHER BUILDING TENANTS. 6. ALL COORDINATION OF WORK PERFORMED BY THE SUBCONTRACTORS SHALL BE BY THE GENERAL CONTRACTOR. 7. CORRIDOR & PUBLIC SPACE FINISHES DAMAGED BY CONTRACTOR OR SUB CONTRACTORS (INCLUDING WALL COVERIN WOOD, STONE, PAINT, CARPET, AND WALL BASE) SHALL BE RETURNED TO ORIGINAL CONDITION PRIOR TO CONSTRUCTION REPORT ANY EXISTING DAMAGE TO LANDLORD PRIOR TO COMMENCEMENT OF CONTRACT. 8. IN ACCORDANCE W/ SECTION 1008.1.9 OF IBC INTERNATIONAL BUILDING CODE, ALL DOOR HARDWARE ON EXIT DOOR SERVING AS A MEANS OF EGRESS SHALL MEET THE FOLLOWING REQUIREMENTS LISTED BELOW: "ALL DOORS WILL BE READILY OPENABLE FROM THE SIDE FROM WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT." 9. ALL GLAZING TO MEET SAFETY GLAZING REQUIREMENTS PER IBC 2406 10. ALL MATERIALS TO MEET THE REQUIREMENTS OF IBC CHAPTER 8 FOR MATERIALS AND TESTING. 11. ALL EXISTING ELECTRICAL OUTLETS ARE TO REMAIN U.N.O. VERIFY NEW ELECTRIC & DATA RECEPTACLE LOCATION & CONFIGURATIONS WITH TENANT. ALL TELEPHONE AND DATA CABLES IN THE SPACE AND FROM THE DEMARK LOCAT ARE TO BE LABELED, BUNDLED AND STRAPPED TO THE STRUCTURE ABOVE. WHERE OUTLETS OR DATA ARE NOT REUSED, REMOVE BOX AND PATCH WALL TO LEVEL 4 FINISH TO RECEIVE NEW PAINT. 19'-8"

_____ (5)<u>-05</u> STORAGE 134 OPFN SEATING 126  $\Rightarrow$ A14/A300 (126) HALL 6'-8" 128 BOOTH 114 (1)VENDOR 115 OPEN SEATING 125 ⊀└─┴ ⊀─⊀ TI3 DRESSING 1'-9" (125) A7/A300 B00TH (112) 6 K1B E17/A600 G101 VENDOR A16/A600 10'-0" ((2) H 2 BOOTH 118 C BOOTH C BOOT C C BOOT BOOT 124 A14/A300 പ E17/A600 BOOTH 111 K1A E17/A600 (6)123 17/A600 6'-0" SIM BOOTH 6 110 6 E17/A600 5 BOOTH 120 ່ 5'-10" BOOTH 119 E17/A600 BOOTH 109 6 2)E17/A600 (2)CHECK OUT E17/A600( BOOTH BOOTH 121 E17/A600 BOOTH 108 6 DISPLAY 6'-0" 6'-0" VENDOR [104] A16/A600 SIM E17/A600 FNTRY B00TH 107 (6) 100 9'-0" 8'-0" BOOTH 106 (6)DISPLAY 11 LIGN

3) PATCH CEILING, TO MATCH ADJACENT FINISH, WHERE WALL BELOW WAS REMOVED.

4) PROVIDE SUPPORT REQUIRED FOR GARAGE DOOR PER OWNER'S STRUCTURAL DESIGNER.

RE-INSTALL LIGHTING THAT WAS RECYCLED FROM DEMOLITION. IN THE EVENT FIXTURE DAMAGED OR QUANTITY NOT ENOUGH, PROVIDE SUFFICIENT LIGHTING FIXTURES TO COMPLETE PER PLANS. (6) EXISTING LIGHT TO REMAIN. RELOCATED LIGHT FIXTURES TO BE INSTALLED FROM THIS FIXTURE.

# ARCHITECTURE PLAN & NOTES

A11

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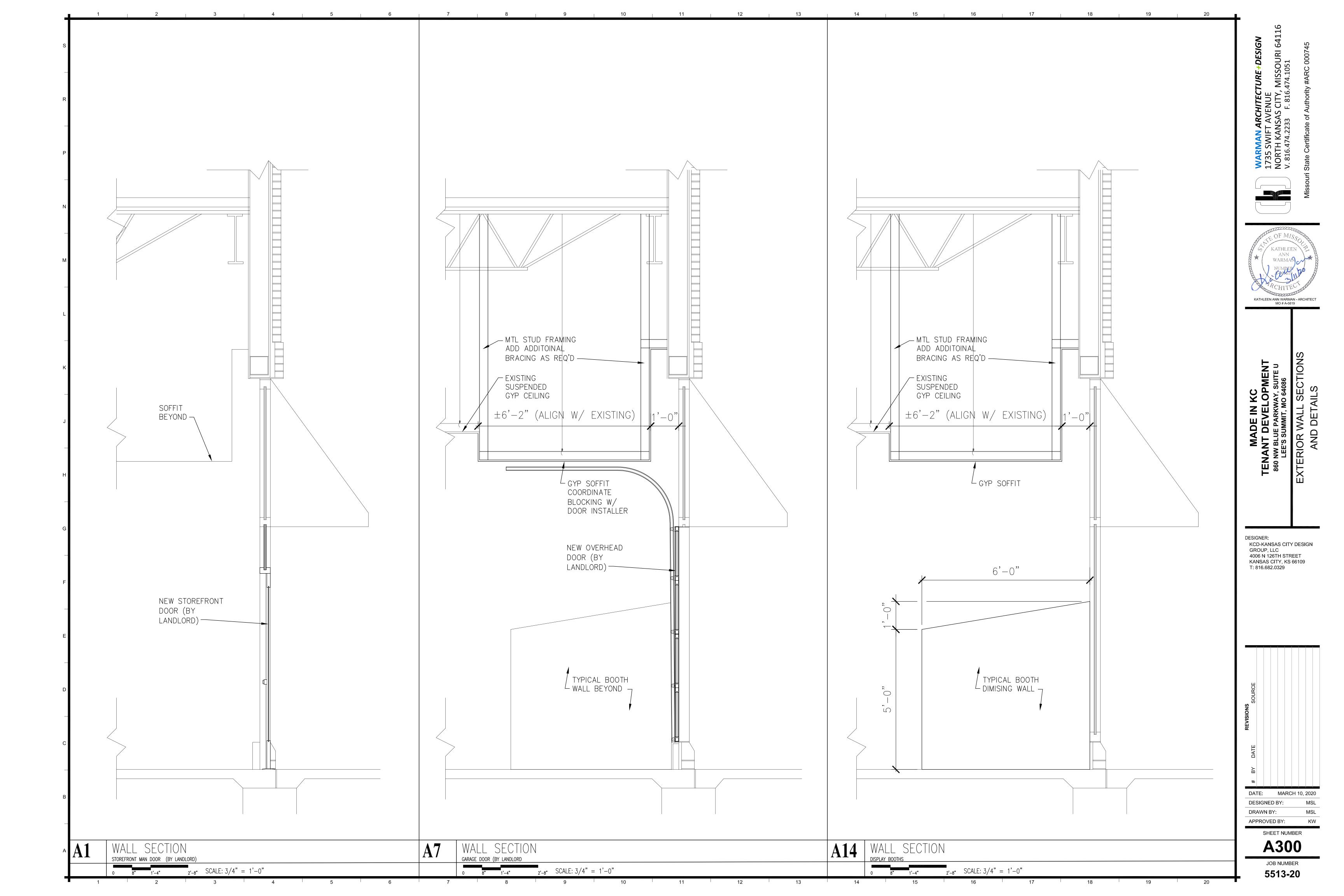
 $_{16'}$  SCALE: 1/8" = 1'-0"4' 8' 14 12 13

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E NG, ION. ORS	<ul> <li>12. THE GENERAL CONTRACTOR PERFORMANCE OF THE MEP SY IN ACCORDANCE WITH ALL APP</li> <li>13. FIRE ALARM SCOPE: NEW IF FIRE ALARM SYSTEM. COORDIN.</li> <li>14. CONTRACTOR SHALL SUBMI ADMINISTRATION FOR APPROVAL</li> <li>15. ALL LOCKS AND KEYS FOR</li> <li>16. CLEAN, REPAIR AND TOUCH</li> <li>17. ALL ³/₄" PLYWOOD BLOCKIN</li> <li>18. ATTIC STOCK: GENERAL OC CONTRACTOR IS ALSO REQUIRE *ONE PARTIAL BOX OF EACH TO</li> </ul>	(STEMS AND DEVICES IN LICABLE CODES, REGUL FIRE ALARM DEVICES AI ATE WITH LANDLORD. T FIRE SPRINKLER MOD  E ENTRY DOORS MUST E H UP, TO LIKE NEW CO G TO BE FIRE RETARDA CONTRACTOR TO PROVID TO PROVIDE THE FOI	ACLUDING LIFE SAFET ATIONS AND ORDINAN ND SMOKE DETECTOR IFICATION DESIGN DO BE COORDINATED WITH NDITION, ALL EXISTIN ANT TREATED, EXCEP DE TO TENANT ALL LI LOWING IF USED ON	7. ALL WORK SHALL E CES OF THE LOCAL JU S SHALL TIE INTO THE CUMENTS TO THE CITY H BUILDING MANAGEMEN G WINDOW SILLS. T IN FULL WALLS GOING THE PROJECT: *ONE	BE RISDICTION. EXISTING BUILDING DEPARTMENT OF CO NT FOR SPECIFICATI G TO STRUCTURE. RIALS. GENERAL	ON.	VARMAN ARCHITECTURE + DESIGN 1735 SWIFT AVENUE NORTH KANSAS CITY, MISSOURI 64116 V. 816.474.2233 F. 816.474.1051	e Certificate of Authority #A
IS TION							KATHLEEN ANN WARMAN KATHLEEN ANN WARMAN NUMBER KATHLEEN ANN WARM MO # A-58	Dent the stand
	OPEN/ JANITOR 133	DUPLEX OUTLET PEF ID OUTLET REQUIREM OUTLETS IN TENANT	R BOOTH. ENTS WITH OWNER SUPPLIED CASEWO	PRIOR TO INSTALLA ⁻ RK.			MADE IN KC TENANT DEVELOPMENT 860 NW BLUE PARKWAY, SUITE U LEE'S SUMMIT, MO 64086	ARCHITECTURAL PLAN, REFLECTED CEILING PLAN AND NOTES
6	<ul> <li>PATCH AND REPAIR W DAMAGES HAVE OCCUP</li> <li>NO WORK IN EXISTING</li> <li>PROVIDE POWER FOR VERIFY DIMENSIONS O</li> <li>BUILT IN WOOD FRAME</li> <li>PROVIDE 4'-0"H WING</li> <li>WALL AT 6'-0" AFF F</li> </ul>	RRED FROM ORIGINAL FULLY COMPLIANT / TENANT PROVIDED W F COOLER PRIOR TO ED BOOTHS WITH UP WALLS SIMILAR TO	. TENANT. DRYWAL ADA TOILET ROOMS ALK-IN COOLER. WALL CONSTRUCTI HOLSTERED SEAT A DETAILS K1/G101.	L PREP TO LVL 4, 1 GC TO VERIFY POWE ON.	READY FOR PAINT		DESIGNER: KCD-KANSAS CIT GROUP, LLC 4006 N 126TH STF KANSAS CITY, KS T: 816.682.0329	REET
-2-1 							Щ	
							REVISIONS SOURCE	
12'-8"							# BY DATE	
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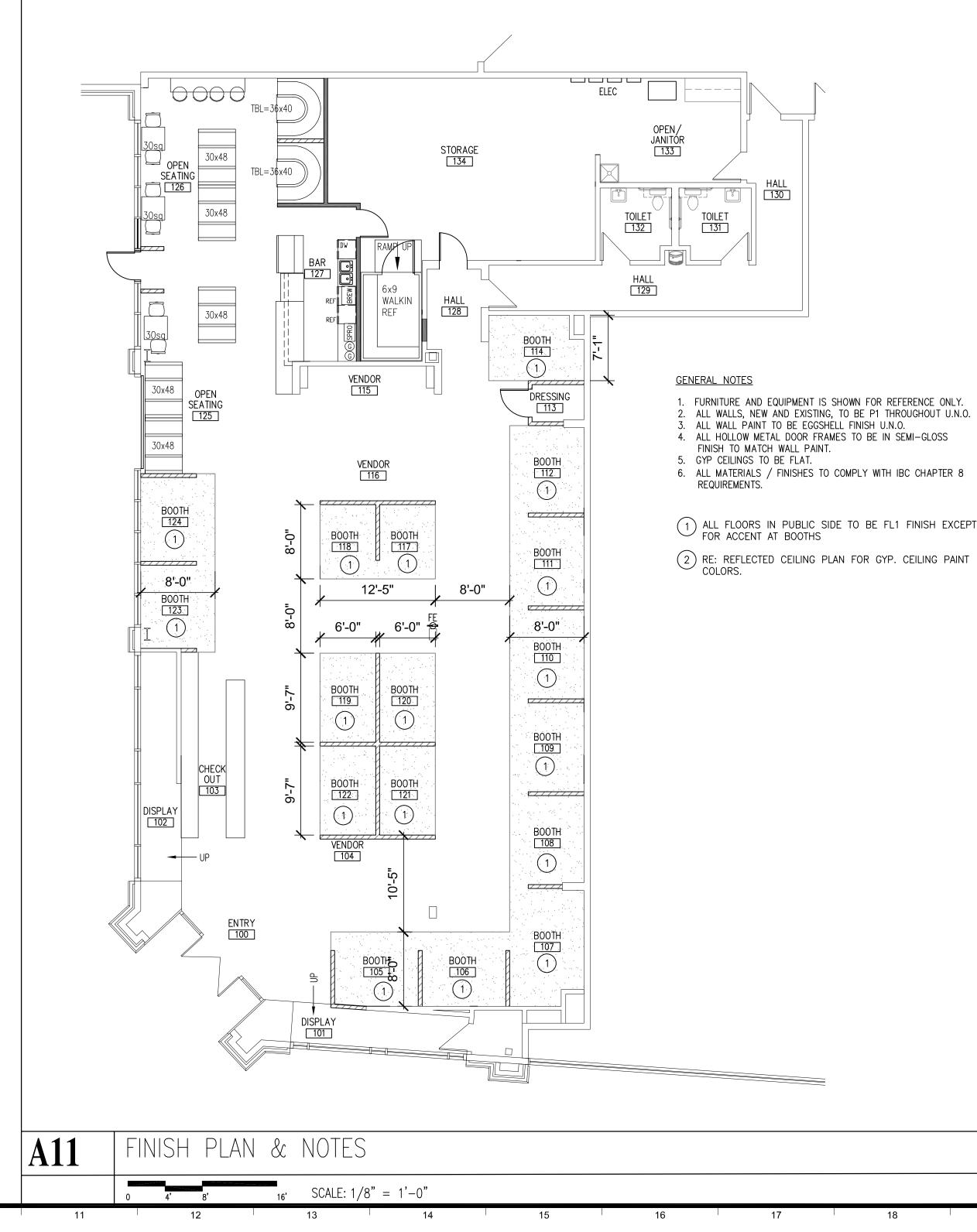


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FINIS	H LEGEND									
CODE	TYPE	DESCRIPTION						NOTES;		
T1	TILE	TBD						BAR BACK	SPLASH	
GR1	GROUT	TBD						BAR BACK	SPLASH	
P1	PAINT (EGGSHELL)	TBD						AL WALLS	THROUGHOUT	
P2	PAINT (EGGSHELL)	TBD						ACCENT		
P3	PAINT (FLAT)	SHERWIN WILLIA	MS SW7007 CEILING E	BRIGHT WIHTE				GYP CEILI	NGS AND HEADERS U.N	.0
P4	PAINT (DRYFALL)	TBD						ALL EXPO	SED STRUCTURE ABOVE	11'-0" A
FL1	CONCRETE FINISH	COLOR TBD -	BASE COLOR THROUGH	HOUT PUBLIC SIDE						
FL2	CONCRETE FINISH	COLOR TBD -	ACCENT COLOR AT BC	OTHS						
RB1	BASE	4" COVED, CON	TINUOUS COIL COLOR	TBD						
SS1	SOLID SURFACE	COLOR TBD						BAR COUN	ITER TOPS	-
WD1	WOOD	COLOR TBD						BUILT IN	BOOTH BENCHES	



- 4. ALL HOLLOW METAL DOOR FRAMES TO BE IN SEMI-GLOSS
- FINISH TO MATCH WALL PAINT.
- 6. ALL MATERIALS / FINISHES TO COMPLY WITH IBC CHAPTER 8

1 ALL FLOORS IN PUBLIC SIDE TO BE FL1 FINISH EXCEPT FOR ACCENT AT BOOTHS

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• 2 JOB NUMBER 5513-20

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DESIGNED BY:

APPROVED BY:

DRAWN BY:

DATE: MARCH 10, 2020

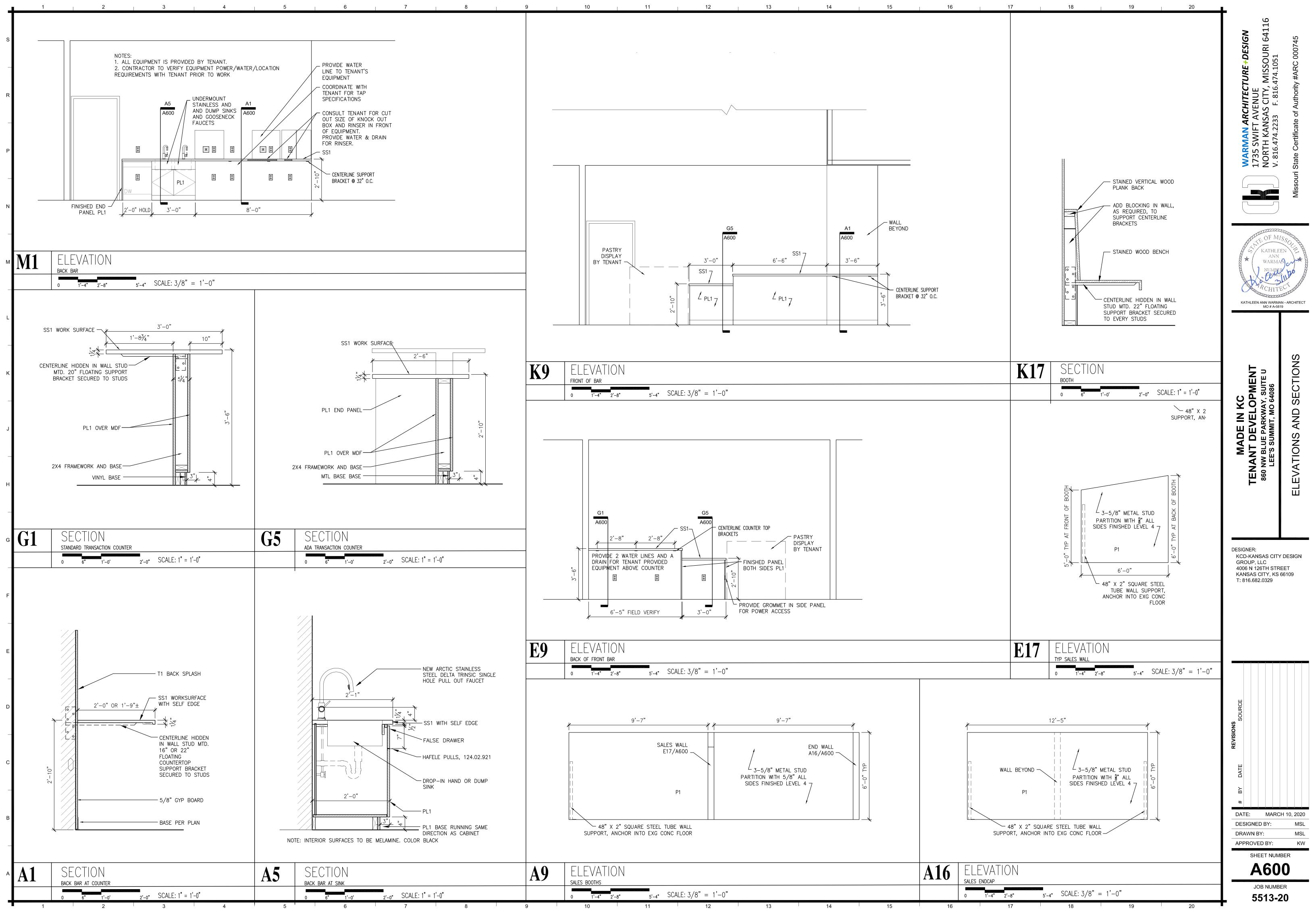
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MSL

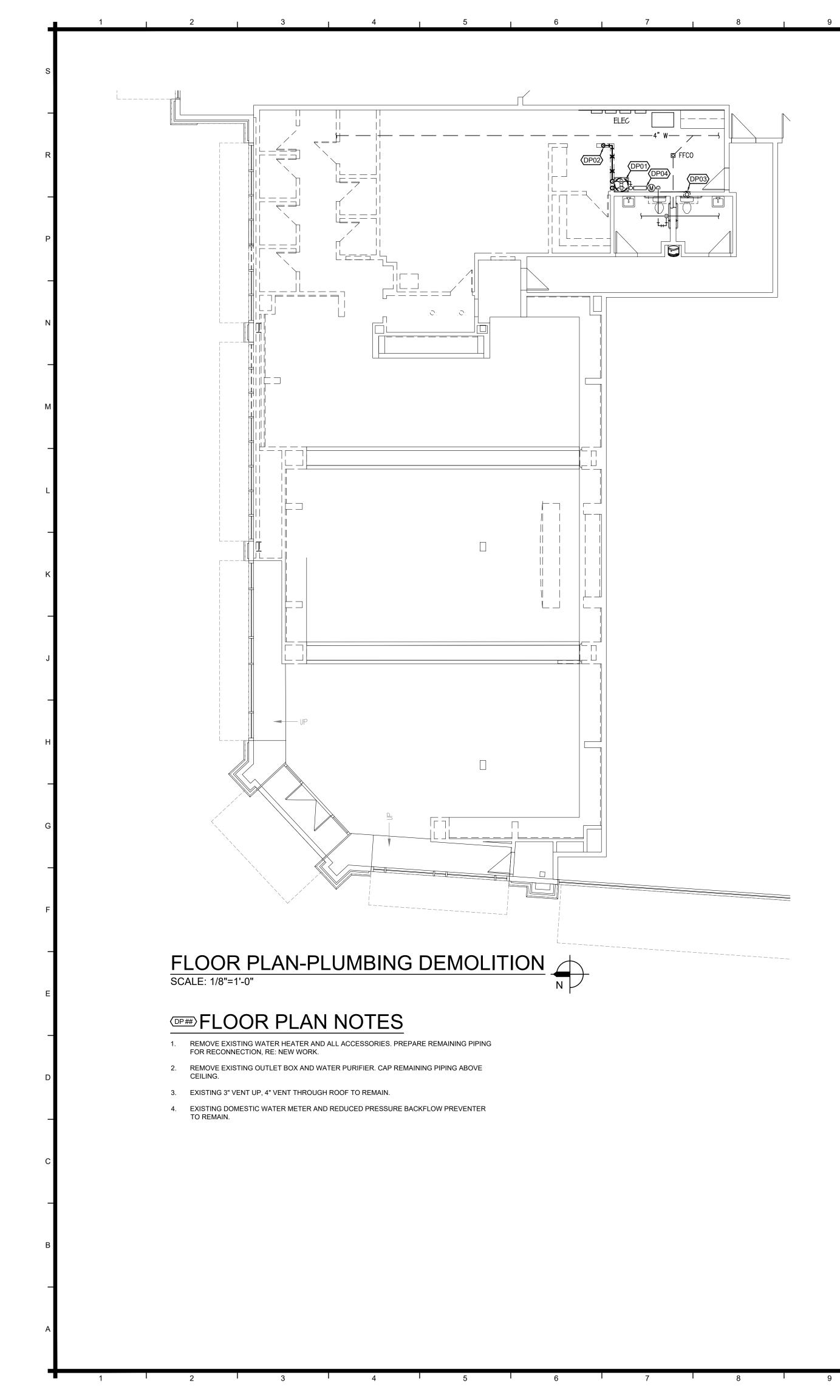
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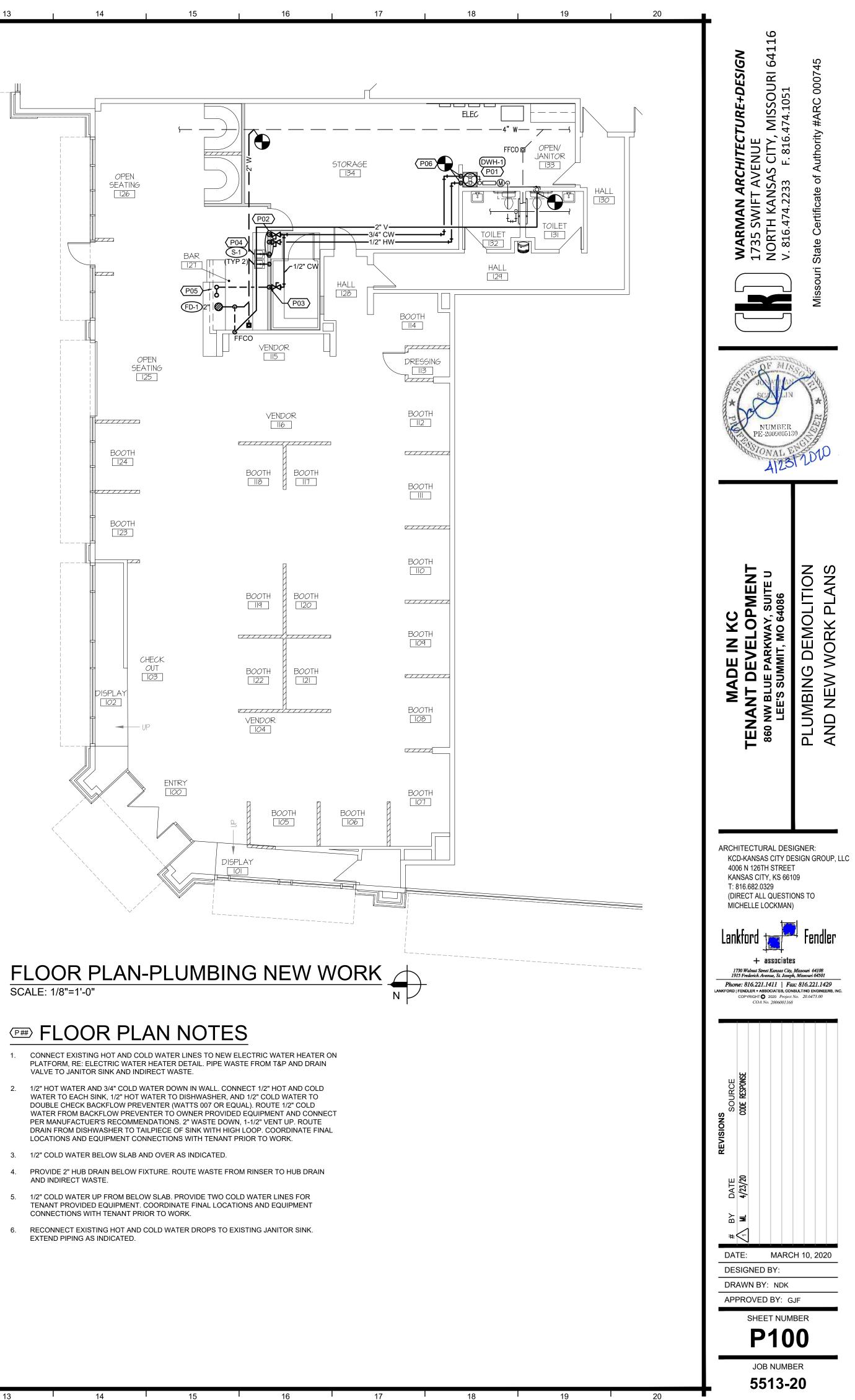
KW



ELEVATION

-	>	SALES BOOTHS					
= 1'-0"		0 1'-4" 2'-8"	5'-4"	SCALE: 3/8" = 1'-0"			
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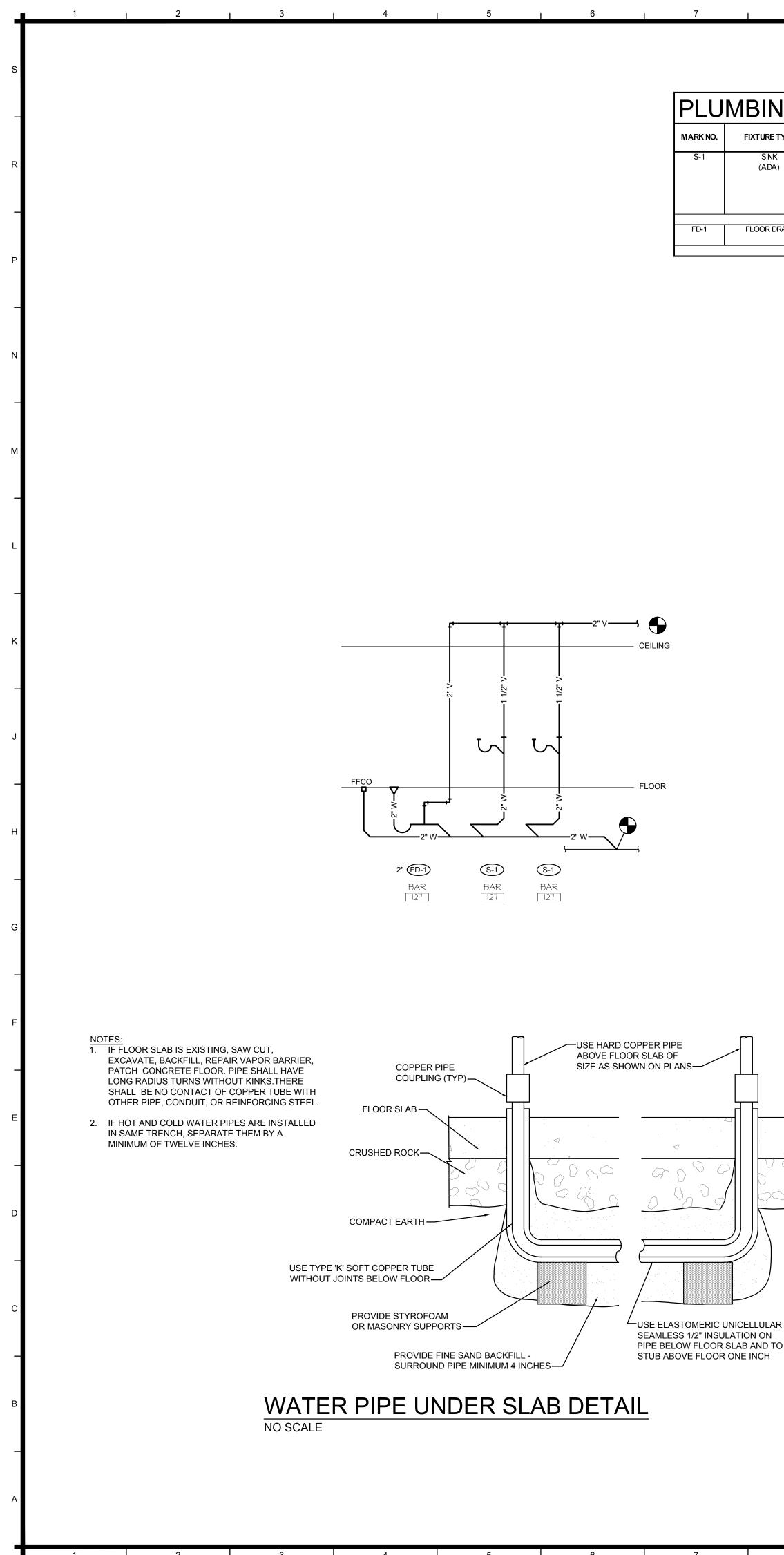




# SCALE: 1/8"=1'-0"

## FLOOR PLAN NOTES

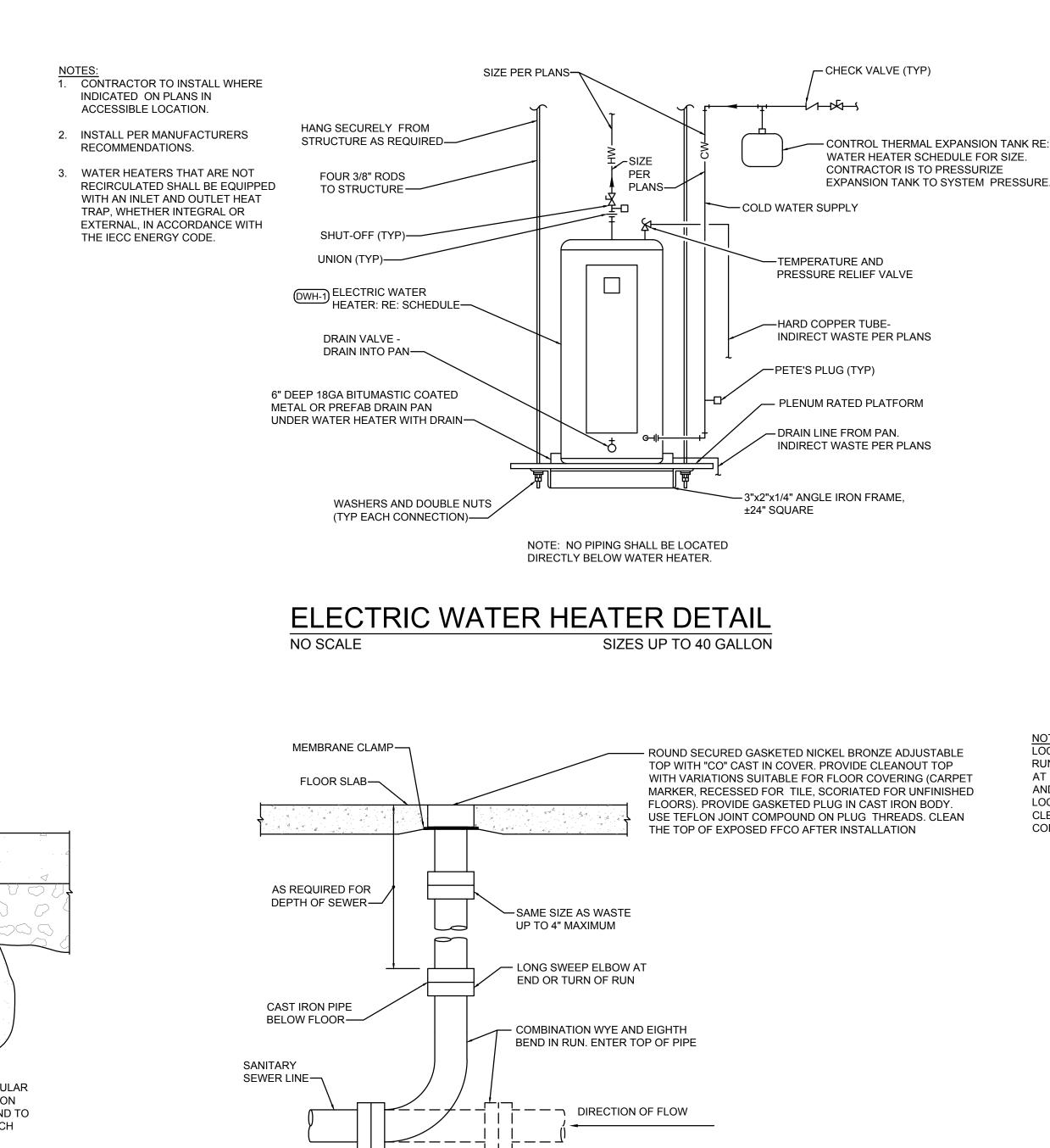
- VALVE TO JANITOR SINK AND INDIRECT WASTE.
- 3. 1/2" COLD WATER BELOW SLAB AND OVER AS INDICATED.
- AND INDIRECT WASTE.



<b>FIXTURE TYPE</b>	MANUFACTURER	MODEL NO.	DESCRIPTION		CONNEC	TION SIZE	
FIATURE ITPE	WANUFACTURER	WODEL NO.	DESCRIPTION	cw	нw	WASTE	VENT
SINK (ADA)	ELKAY	ELUH131655	SINGLE COMPARTMENT UNDERMOUNT SINK, 18 GA, TYPE 304 STAINLESS STEEL, 4-3/8" DEEP BOWL. DELTA MODEL 9913-DST ESSA DECK MOUNTED FAUCET WITH CERAMIC OPERATING CARTRIDGE, SINGLE LEVER HANDLE, 2 FUNCTION PULL DOWN 6-5/8" SWING SPOUT WITH MAGNETIC DOCKING, DUAL CHECK AND 1.8 GPM AERATOR, 1 HOLE MOUNTING. ACCESSORIES: ELKAY LK-35 STRAINER WITH 1-1/2" TAILPIECE, 1-1/2" 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH LOOSE KEY ANGLE STOPS.	1/2"	1/2"	2"	1-1/2"
FLOOR DRAIN	J.R. Smith	2005YA-NB	GENERAL PURPOSE, DUCO CAST IRON BODY WITH FLASHING COLLAR, ADJUSTABLE STRAINER HEAD, OUTLET SIZE PER PLANS, NICKEL BRONZE STRAINER, SEEPAGE OPENINGS.	-	-	2"	1-1/2"

WATER HEATER SCHEDULE (ELECTRIC)						-					
		MODE	<b>TANK</b>					E	ECTRIC		NOTEO
MARK NO.	MANUFACTURER	MODEL NO.	TANK LINING	CAPACITY (GAL)	RECOVERY (GPH @ 80°F)	INPUT (KW)	THERMAL EXPANSION TANK MODEL NO.	VOLT	ø	ΗZ	NOTES
DWH-1	AO SMITH	DEL-20	GLASS	20	23	4.5	PLT-5	208	1	60	1,2
NOTES:	1. PROVIDE WITH	ITEMPERATURE	AND PRESSUF	RE RELIEF VALV	E AND DRAIN.						
	2. PROVIDE WITH	CONTROL THE	RMAL EXPANS	ION TANK. WAT	TS MODEL SCHEDU	LED WITH WA	TTS SCV SERVICE CHECK V	ALVE.			

*HEATING KW IS NET CAPACITY AT VOLTAGE AND PHASE INDICATED.



FLOOR CLEANOUT DETAIL

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## GENERAL NOTES (TYPICAL ALL SHEETS)

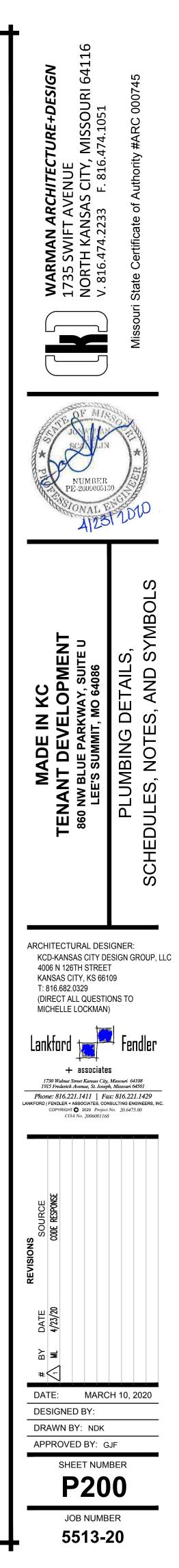
- A. PLUMBING CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK MEETS AND IS IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS AND CODES AND/OR REQUIREMENTS, INCLUDING HEALTH CODES AND BUILDING OWNER.
- B. ALL EXISTING PIPING SHOWN ON DRAWINGS IS SCHEMATIC AND IS BASED ON EXISTING RECORD DRAWINGS PROVIDED BY THE OWNER AND DO NOT REFLECT EXACT EXISTING CONDITIONS. CONTRACTOR TO FIELD VERIFY EXACT DEPTH AND/OR LOCATIONS ON JOB SITE. CONTRACTOR SHALL REROUTE NEW WORK TO ACCOMMODATE EXACT LOCATIONS OF EXISTING UTILITIES, STUBOUTS AND/OR CONNECTIONS.
- C. CUTTING AND PATCHING OF FLOORS, WALLS, CEILING, ETC., REQUIRED IN STRICT ACCORDANCE WITH THE RULES AND REGULATIONS OF THE ARCHITECT'S AND/OR BUILDING OWNER REQUIREMENTS.
- D. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION TO AVOID ROUTING CONFLICTS.
- E. ANY MATERIAL REMOVED THAT OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED FROM PROJECT SITE AND DISPOSED OF BY CONTRACTOR.
- F. INSTALL ELASTOMERIC JOINT SEALER AROUND ALL PIPES PASSING THRU INTERIOR NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS. FOR FIRE RATED INTERIOR CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS SEAL ALL PIPES. INSTALL FIRESTOP MATERIALS IN ALL GAPS PRIOR TO SEALANT APPLICATION. INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- G. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL EQUIPMENT BY OTHERS. VERIFY CONNECTIONS SIZES AND REQUIREMENTS.
- H. PIPING ROUTED BELOW COUNTER IN CABINETS SHALL BE ROUTED AS NOTED. NOT TO INTERFERE WITH DRAWERS, SHELVES, EQUIPMENT, ETC., AND SUPPORT FROM BACK WALL OF CABINET.
- I. PLUMBING CONTRACTOR SHALL BID AND SCHEDULE ALL CORE DRILLING AND HAMMER DRILLING FOR AFTER BUSINESS HOURS.
- J. PLUMBING CONTRACTOR SHALL SCAN FLOOR UTILIZING GROUND PENETRATING RADAR PRIOR TO ANY CORE DRILLING OR SAW CUTTING OF SLAB AND SHALL VERIFY PLACEMENT WITH BUILDING OWNER'S REPRESENTATIVE PRIOR TO DRILLING.
- K. PLUMBING CONTRACTOR SHALL PROVIDE PRO-SET SYSTEMS 'TRAP GUARD' IN ALL FLOOR DRAIN TRAPS WITHIN PROJECT SCOPE OF WORK.
- L. ALL CABLE TIES FOR LOW VOLTAGE SYSTEMS LOCATED IN PLENUMS UTILIZED FOR AIR MOVEMENT THAT ARE NOT INSTALLED IN CONDUIT SHALL BE 25/50 FLAME AND SMOKE RATED, HELLERMANN TYTON T50 R2C2UL OR EQUIVALENT.

## PLUMBING SYMBOLS

<del>x</del>	EXISTING TO BE REMOVED
	EXISTING TO REMAIN
	NEW PIPING
CW	COLD WATER
——HW——	HOT WATER
V	SANITARY VENT ABOVE GROUND/FLOOR
V	SANITARY VENT BELOW GROUND/FLOOR
— — w— —	SANITARY WASTE BELOW GROUND/FLOOR
— <b>k</b> —	SHUT OFF VALVE
🖾 or 🧭	FLOOR DRAIN OR EQMT FLOOR DRAIN
	PIPE DROP/PIPE RISE
<del></del>	BOTTOM OUTLET TEE
<b>—0</b> —	TOP OUTLET TEE
<b>O</b> FFCO	FINISHED FLOOR CLEANOUT
Ø VTR	SANITARY VENT THROUGH ROOF
DWH-1	EQUIPMENT TYPE AND DESIGNATION
$\bigcirc$	PLUMBING FIXTURE DESIGNATION
$\bigcirc$	CONNECT TO EXISTING
-	

NOTES:

LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE 90° OR GREATER, AT 100' INTERVALS ON STRAIGHT RUNS, AND/ OR WHERE SHOWN ON PLANS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONFORM TO LOCAL CODE FOR OTHER FFCO REQUIREMENTS.



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DIVISION 22 PLUMBING GENERAL PROVISIONS	
<ul><li>1.0 DESCRIPTION:</li><li>A. Divisions 22 shall be governed by all applicable provisions of the Contract Document.</li></ul>	<ul><li>16.0 FOUNDATIONS AND SUPPORTS:</li><li>A. The Plumbing Contractor shall provide concrete</li></ul>
B. The Plumbing Contractor shall furnish, install and connect all materials, equipment, apparatuses, and incidentals required for a complete and working installation. For all systems shown and required, the Plumbing Contractor shall supply all necessary labor, equipment, tools, insurance, and tax services, and shall assume full responsibility for all obligations associated with completion of work as provided by the Contract Documents.	equipment specified or shown in this contract, includ noted otherwise. B. All hangers, brackets, clamps, etc., shall be of stat used in any work. When two (2) or more pipes are ru
<ul><li>STANDARDS, REGULATIONS AND CODES:</li><li>A. Work shall comply with the edition of the applicable standards, regulations and codes currently in force of all Federal, State and local authorities having jurisdiction. Where quantities, sizes, or other requirements indicated</li></ul>	of hangers, they may be supported on trapeze hang Grinnell or Fee and Mason or approved equal with loads imposed. All piping systems shall each be equipment so that no weight is born by equipment.
on the drawings or herein specified are in excess of the standard or code requirements, the specifications and/or drawings shall govern. In the absence of other applicable local codes, acceptable to the Architect/Engineer, the International Set of Codes and the National Electrical Code shall apply to this work. B. The Plumbing Contractor shall comply with rules and regulations of public utilities and municipal departments	C. The Plumbing Contractor shall take all precautions items of equipment from the building structure. Pro equipment and for equipment mounted on vibration
<ul><li>affected by connections of services. The Plumbing Contractor shall pay all fees associated there with.</li><li>C. The Plumbing Contractor shall be licensed to perform associated work in the municipality in which the project is located.</li></ul>	<ul> <li>17.0 CUTTING AND PATCHING:</li> <li>A. All necessary cutting, drilling and patching shall be shall not be disturbed without prior approval of the arrays and surfaces disturbed by work paformed up</li> </ul>
<ul> <li>D. All products and types of construction shall meet or exceed the latest edition of applicable standards of manufacturer, testing, performance and installation.</li> <li>E. Where indicated or required, comply with all provisions of the ADA and/or the ABA Accessibility Guidelines.</li> </ul>	areas and surfaces disturbed by work performed un the condition of adjoining surfaces in a manner suit 18.0 SLEEVES AND ESCUTCHEONS:
<ul> <li>F. Where indicated or required, comply with all applicable provisions of energy and ventilation codes in force at the local jurisdiction.</li> <li>3.0 GRAPHIC REPRESENTATION AND JOB CONDITIONS:</li> </ul>	<ul><li>A. Penetrations thru walls and floors shall be as detaile</li><li>B. Where not otherwise shown, penetrations shall con</li><li>1. Where pipes or conduits pass through interior</li></ul>
A. The Contract Documents shall serve as working drawings for the general layout of the various items of equipment; are diagrammatic unless specifically dimensioned, and do not necessarily indicate every required item. The Plumbing Contractor shall include all necessary components and accessories as required for a	<ul><li>sheet sleeves shall be used.</li><li>Where pipes or conduits pass thru concrete floo on grade, cast iron or steel pipe sleeves shall be</li></ul>
complete working system whether so specifically indicated or not. B. Architectural and Structural drawings take precedence over all other drawings in the representation of the general construction work; any conflicts shall be resolved prior to commencing work. Failure to do so shall not be considered a basis for the granting of additional compensation.	<ul><li>C. Sleeves through interior non-rated walls, including fiberglass or mineral wool and caulked.</li><li>D. Sleeves below grade, in exterior walls or thru slab</li></ul>
C. Arrange work in a neat, well organized manner. Coordinate work with other trades involved, prior to commencing work. Sub-contractors shall work together to resolve any conflicts of space or routing.	<ul> <li>seals, Thunder line or acceptable equivalent.</li> <li>E. Penetrations of fire rated construction shall be mad rating at each location. Where required, sleeves the routing strip expected with the expectable equivalence.</li> </ul>
4.0 GUARANTEES/WARRANTY: A. The Plumbing Contractor shall guarantee/warranty all work performed, including labor, materials and equipment furnished under this contract, against defects in materials and workmanship for a minimum period of one year from the date of the Owner's Representative Final Acceptance of the work. Provide extended	<ul> <li>putty strip or sheet by 3M, Hilti or acceptable equiva</li> <li>F. Provide steel (dry locations) or brass (damp location in floors, walls, or ceilings. Provide pipe escutched paint finish for unoccupied areas, brass for exterior.</li> </ul>
<ul> <li>5.0 WORKMANSHIP:</li> <li>A. All work performed under this Contract shall provide a neat and "workmanlike" appearance when completed, to</li> </ul>	<ul> <li>A. Disconnects and motor starters for equipment sha with the equipment or as otherwise indicated. Inst</li> </ul>
<ul> <li>All work performed under this Contract shall provide a near and workmanike appearance when completed, to the satisfaction of the Owner's Representative. The complete installation shall function as designed and intended with respect to efficiency, capacity, and noise level, etc.</li> <li>6.0 LOCAL CONDITIONS:</li> </ul>	devices factory installed and shipped with equipm auxiliary contacts to accomplish the specified or req 20.0 PIPING IN ELECTRICAL ROOMS:
A. The Contractor shall carefully examine and become thoroughly familiar with local conditions, existing installations and all other conditions which may affect associated work. The Plumbing Contractor shall locate all existing utilities and protect them during the execution of the work	A. No piping except specifically noted otherwise will I Server Rooms and IT Closets. In rooms where pipi galvanized sheet metal pan or gutter piped to the dr
B. The Plumbing Contractor shall carefully examine all contract documents including project drawings and specifications to become familiar with the type of construction, materials, and equipment to be used for all work and how it will affect the installation of this contract.	END (
C. By the act of submitting a bid, the Plumbing Contractor will be deemed to have made such examination, to have accepted such conditions, to have made allowance therefore, and included all costs in his proposal. Failure to determine existing conditions will not be considered a basis for the granting of additional compensation.	
<ul> <li>7.0 OPERATION DURING CONSTRUCTION:</li> <li>A. The Plumbing Contractor is responsible for the installation and operation, service and maintenance of all new equipment during construction and prior to acceptance by the Owner of the completed project. Warranty</li> </ul>	
<ul><li>periods shall not commence until final acceptance by the Owner or Owner Representative.</li><li>B. The Plumbing Contractor shall provide, at his own expense, all temporary utilities required to provide for and protect the work and as necessary to maintain an adequate work force unless use of existing facilities is specifically permitted.</li></ul>	
<ul> <li>8.0 SAFETY REGULATIONS:</li> <li>A. All work shall be performed in compliance with all applicable governing safety regulations, including OSHA regulations. Provide safety lights, guards and signs required.</li> </ul>	
<ul><li>9.0 HOUSEKEEPING:</li><li>A. The Plumbing Contractor shall be responsible for keeping stocks of material and equipment stored on the premises in a neat and orderly manner.</li></ul>	
<ul><li>B. The Plumbing Contractor shall clean and maintain their specific portions of the work on a daily basis or as specified in the General Conditions.</li><li>C. The Plumbing Contractor shall remove from the premises all waste material present as a result of his work.</li></ul>	
<ul><li>10.0 CONNECTION AND ALTERATION TO EXISTING SYSTEMS:</li><li>A. Connection to the existing building systems must be accomplished under this contract. System "downtime" due to connection shall be kept to an absolute minimum. The Owner's Representative shall judge if at what time,</li></ul>	
and for what length of time a shut-down can be tolerated. B. Provide all temporary piping systems required during construction in order to keep all existing systems functioning.	
C. Demolition, cutting and patching to restore surfaces to original condition as necessitated for access to work performed by the Plumbing Contractor or his subcontractors shall be the responsibility of the Plumbing Contractor.	
<ul><li>11.0 SUBSTITUTIONS:</li><li>A. Materials, products and equipment described in the Bidding Documents established a standard of quality to be met by any proposed substitution.</li></ul>	
B. Plumbing Contractor's bids shall be based on the material identified or specified in the contract documents. Any proposals for substitution shall be made in writing to the Architect/Engineer with all supporting documentation, allowing adequate time for appropriate action. The products of other manufacturers may be accepted, if in the opinion of the Architect/Engineer, the substitute material is of 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. The burden of proof of equality is entirely upon the proposer.	
<ul> <li>C. Refer to Division 1 requirements for additional substitution procedures.</li> <li>D. Wherever substitutions alter the design or space requirements, the Plumbing Contractor shall be responsible for and include all associated cost items of the revised design and or construction work required by his or other</li> </ul>	
trades affected by the proposed substitution. 12.0 SHOP DRAWINGS AND PRODUCT DATA:	
<ul> <li>A. The checking of shop drawings is a gratuitous assistance and in no way relieves the Plumbing Contractor of responsibility for deviations from the Contract Documents.</li> <li>B. Shop drawings and catalog data on all major items of equipment and apparatus, and such other illustrative materials as may be considered necessary by the Owner's Representative shall be submitted by the Plumbing</li> </ul>	
Contractor in adequate time to prevent delay and changes during construction. C. Refer to Architectural Documents for additional shop drawing submission procedures. 13.0 OPERATING AND MAINTENANCE BROCHURE:	
<ul> <li>A. On completion of the project, the Contractor shall provide manuals electronically (PDF format unless otherwise instructed) containing operating, service and lubrication instructions, and parts lists for all major equipment and manufacturer's guaranties or warranties.</li> </ul>	
14.0 RECORD DRAWINGS: A. Refer to Architectural Documents for additional record drawing submission procedures.	
<ul><li>15.0 SITE WORK AND CONDITIONS:</li><li>A. The Plumbing Contractor shall do all necessary excavating and backfilling for the installation of associated work. After the piping has been installed, tested and approved, the trenches shall be backfilled to grade with</li></ul>	
<ul><li>compacted sand, gravel or AB-3 material or other material as required by local authorities. Compact to 85% density for unpaved areas, 95% density for paved area or under slabs.</li><li>B. All water bearing piping shall be 48" minimum below grade, all gas piping shall be 24" minimum below grade, unless instructed otherwise.</li></ul>	
C. Roads, alleys, street, sidewalks and utilities damaged during this work shall be restored to the satisfaction of Owner's Representative and authorities having jurisdiction.	
D. Where subsidence is measurable or observable at excavation during general project warranty period, remove surface, add backfill material, compact, and replace surface treatment. Restore appearance of surface to match adjacent work.	

- 11 12 13
  - 220 100 PLUMBING

procrete bases, hangers and foundations for all machinery and , including pumps, water heaters, motors, etc., unless specifically

e of standard weight steel. Perforated strap hangers shall not be es are run parallel, or where ducts interfere with the proper location eze hangers. Other hangers shall be hinged ring malleable iron, by ual with rods and hanger adjusters for adequate size to carry the each be independently supported from other systems and from nent.

autions against excessive noise or vibration by isolating the various ure. Provide flexible connectors where indicated and at all rotating ibration isolators.

shall be provided by this Plumbing Contractor. Structural members I of the Structural Engineer and/or the Owner's Representative. All med under this Contract shall be neatly repaired and refinished to ner suitable to the Owner's Representative.

#### detailed.

hall conform to the following:

nterior partitions, galvanized steel pipe sleeves or galvanized steel

rete floors and walls, walls below grade or exterior walls and slabs shall be used.

ncluding walls indicated as sound partitions, shall be packed with nru slabs on grade shall have lead and oakum or mechanical link

be made with a UL listed fire penetration assembly suitable for the eves through fire rated structure shall be fire barrier caulked with

equivalent. locations) escutcheons to completely cover pipe penetration holes scutcheons with nickel or chrome finish for occupied areas, prime

INTERFACE:

ent shall be by the Electrical Contractor unless furnished integral ated. Installation shall be by the Electrical Contractor except for equipment. Provide manual or magnetic starters with necessary d or required sequence of operation.

se will be permitted in Electrical Rooms or Data Rooms including ere piping is indicated over or near electrical equipment, a suitable o the drainage system shall be provided.

END OF SECTION

#### 1.0 SCOPE:

- A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation and to provide complete working systems of the Plumbing Systems, including hot and cold water, waste and vent, fixtures, equipment and other items described in these specifications, as illustrated in the accompanying drawings or as directed by the Architect/Engineer.
- B. Extend piping systems as indicated on contract documents or to point of connection as follows: 1. Points of connection within the existing building.
- 2.0 PIPING, FITTINGS AND VALVES:
- A. Provide service valves for each item of equipment, at branch piping and elsewhere as indicated or required. Provide strainers, check valves and other valves as indicated or required by the application.
- B. Provide a union or flanged connection between each item of equipment and its service valve. Copper to ferrous pipe connections shall have isolation coupling, flange or union.
- C. Domestic cold water underground --
- 1. Pipes, copper -- type "K", soft temper, wrought copper fittings, silver solder joints, 1/2" through 3". D. Domestic water, interior, above ground -
- 1. Pipe, copper tube -
- a. 2-1/2" and Smaller -Type "L" hard temper, wrought or cast copper fittings, Lead free 95/5 or Eagle Hard Silvabrite or "CB" solder joints, or pressure seal joint fittings with EPDM O-ring seals.
- 2. Valves -
- a. 1/4 turn Service -
- 1) 1/2" thru 2" Nibco 585-66-LF bronze lead free, 600 PSIG, full port, stainless steel ball and stem. b. Check, Strainers and Miscellaneous -
- 1) Check 1/2" thru 2" Nibco 413-Y-LF bronze lead free, 200 PSIG, PTFE seats, Y-pattern check valve
- 2) Check 1/2" thru 2" Nibco 480-Y-LF lead free, 200 PSIG, PTFE seats, spring loaded, resilient disc, spring loaded inline non-slam check valve, in pump discharge.
- 3) Strainer 1/2" thru 2" Watts LF777 bronze body, lead free 125 PSIG, 20 mesh stainless steel screen. Provide with ball type blowdown valve.
- 3. Provide valves where indicated on the drawings, where required by code or required for service.
- 4. Securely anchor and support piping, valves and fittings, with adequate provisions for expansion and contraction. Grade lines, free of traps, to low point at cutDOI-off and drain valve.
- 5. Hot and cold supply lines to have manufactured pre-charged piston type water hammer arrestors at each and every fixture or group or battery of fixtures to prevent water hammer, sized as shown or per manufacturers recommendation. An arrestor shall also be required at each solenoid actuated quick closing valve. Sioux Chief, JR Smith or equal. Provide access panel where required.
- E. Sanitary sewer, vent, interior --
- 1. Pipe Standard weight cast iron hubless with no-hub shielded mechanical joints; solid wall schedule 40 PVC, ABS with solvent cement joints; vents may be galvanized malleable iron.
- 2. Plastic piping shall not be allowed in return air plenums.
- 3. Hub drains, where shown, shall be of material compatible with piping system, 2" minimum connection size, top flared out to accept indirect wastes required at each location. Hub drains shall be fitted with trap guards. Floor mounted hub drains shall extend 2" above finish floor.
- 4. All gravity drainage shall be graded per code but not less than 1/8" per foot unless noted otherwise. 3" and 4" piping shall be sloped at 1/4" per foot where possible and where required by local codes.
- F. Sanitary sewer, vent, below grade --1. Pipe - Standard weight cast iron hubless with no-hub shielded mechanical joint fittings; solid wall schedule
- 2. All gravity drainage shall be graded per code but not less than 1/8" per foot unless noted otherwise. 3" and 4" piping shall be sloped at 1/4" per foot where possible and where required by local codes.
- 3.0 CLEANOUTS, TEST TEES, TRAPS AND TRAP SEALS:

40 PVC. ABS with solvent cement joints.

- A. Provide cleanout at the base of each stack or riser, at ends of runs greater than 10', each 135 degree aggregate change of direction in horizontal piping, where indicated on the drawings or as required by code. Plugs, extra heavy cast brass, screwed. Scoriated tops in unfinished areas, carpet markets in carpet floors, tile top in tile floors, stainless steel cover in finished walls. Cleanouts same size as pipe up to 4" diameter, 4" cleanouts for larger pipe unless otherwise noted.
- B. All traps shall be deep seal type with liquid seal not less than specified by code.
- C. Where trap primers are not specified provide all floor and hub drains with trap seal with EPDM diaphragm,
- Provent Proset Series SG22 or TG22, Rectorseal SS series or acceptable equal.
- 4.0 SLEEVES AND SEALS, FLASHINGS, ROOF PIPE SUPPORTS AND UV PROTECTION:
- A. Provide sleeves where piping penetrations are required thru partitions, concrete floors, concrete slabs on or below grade or foundation walls. Where penetrations are through fire rated assemblies, sleeves shall be in accordance with UL listing requirements. Sleeves shall be galvanized steel pipe, sheet steel or cast iron. Sleeves are not required for core drilled penetrations of existing concrete slabs above grade. Penetrations of below grade structures and slabs on grade shall be water proofed with mechanical link seal system, Thunder Line or acceptable equivalent.
- 5.0 CROSS- CONNECTIONS AND INTERCONNECTIONS:
- A. No plumbing device or piping shall be installed which will provide cross-connection or interconnection between a distributing supply or waste so as to make possible the backflow or back-siphonage of polluted water into the potable water supply system. Where the possibility of back-siphonage exists, water supply to the fixture shall be introduced through a suitable backflow preventer device suitable for the hazard protected. Installed backflow preventers must be approved through the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research.
- 1. They may be an air gap, anti-syphon valve, atmospheric vacuum breaker, pressure vacuum breaker, double check, reduced pressure backflow preventer or as otherwise required by the authority having iurisdiction.
- 2. Where not otherwise indicated, miscellaneous equipment items with direct water connections, shall have backflow devices in accordance with authority having jurisdiction. Where not otherwise indicated, equipment such as coffee and tea makers, shall be equipped with dual check valves, ASSE 1024. Drink or carbonated water systems shall be equipped with stainless steel backpressure or backsiphonage devices, ASSE 1022.
- 6.0 PLUMBING EQUIPMENT:
- A. Water heaters, expansion tanks and other equipment shall be as scheduled or by acceptable equal by one of the following:
- Water Heaters and Accessories:

Water Heaters: A.O. Smith, State, Rheem.

Expansion Tanks: Watts, Amtrol, Armstrong, Taco, Wessels.

- B. Water Heater Installation
- 1. Pipe water heater drains and/or pan drains to indirect waste per code and as noted or detailed. Water heater P&T relief valves shall be piped independently, indirectly wasted 6" above receptor per code and as noted or detailed.
- 2. Install vacuum relief valve on each bottom fed storage water heater, installed above the top of the water heater on cold water inlet piping.
- 3. Mount water heaters as indicated on drawings.
- 7.0 INSULATION:
- A. Pipe insulation shall conform to the International Energy Conservation Code.
- B. Insulate all cold water, hot water piping, Owens Corning or acceptable equal.
- 1. Cold water piping insulation: 1" fiber glass sectional pipe covering with universal vapor barrier jacket. 2. Hot Water piping insulation: 1" fiber glass sectional pipe covering with universal vapor barrier jacket.
- C. Seal all joints on cold water insulation to maintain vapor barrier.
- D. Insulation shall run continuously thru hangers and supports without interruption.
- E. Refer to plumbing fixture schedule for insulation of fixture drains and water piping for compliance with ADA requirements for People with Disabilities.

#### 8.0 PIPE SUPPORTS AND F A. Hangers and Supports. 1. Piping shall be suppo spacing. All supports

- A-A-1192A. 2. Pipe Slopes: Install drainage and venting
- 3. Deflection: Maximum
- 4. Each piping system s that no weight of pipin
- 5. Space hangers and s attachments at require 6. Provide copper plate
- abrasion on copper or 7. Hangers shall be desi
- size to permit covering piping to prevent crush 8. All hanger and suppo
- corrosive or damp env 9. Cable systems may
- adjustable locking fas B. Routing.

#### 1. Piping shall be rout coordinated with build pipe offsets or change

9.0 EQUIPMENT AND PIPE A. Equipment labels shall be blue with white lettering,

- shall indicate drawing des 10.0 MISCELLANEOUS
- A. Indirect wastes shall disc floor or equipment drain the grate shall be omitted.

#### B. Provide escutcheons at a brass in occupied areas exterior or moist areas sha

11.0 PROTECTION OF WORK

## A. Protection

 Protect and cover pipil 2. Cover and protect fixtu 12.0 TEST, ADJUSTMENTS A

#### A. Soil, waste and vent piping 1. Fill with water to the t water column, and allo

B. Water line testing: 1. Water piping shall be pressure but not to ex measurable pressure

#### 2. For renovation project testing.

C. After successful testing, officials.

#### 13.0 FIXTURE BRANCH PIPIN A. Fixture branch and connect not less than required by

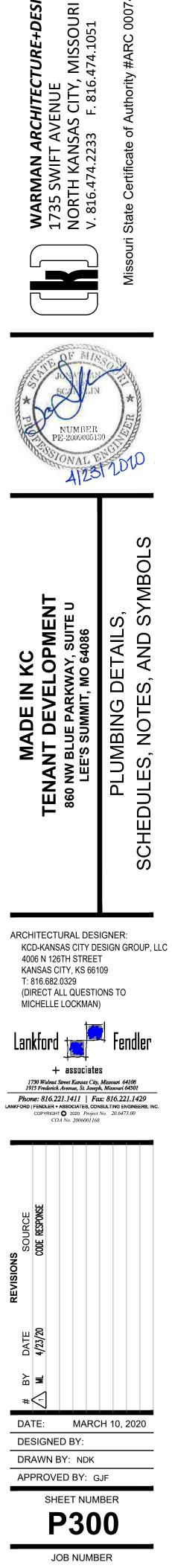
B. Minimum waste or vent siz

#### 14.0 FIXTURE AND ACCESS A. Refer to plumbing fixture as required for a complete

follows: FIXTURE, ITEM OR EQU Stainless Steel Sinks Stops & Supplies Waste Fittings ADA Under Lavatory Pipe Drains and Drainage Prod Mixing Valves, point of use

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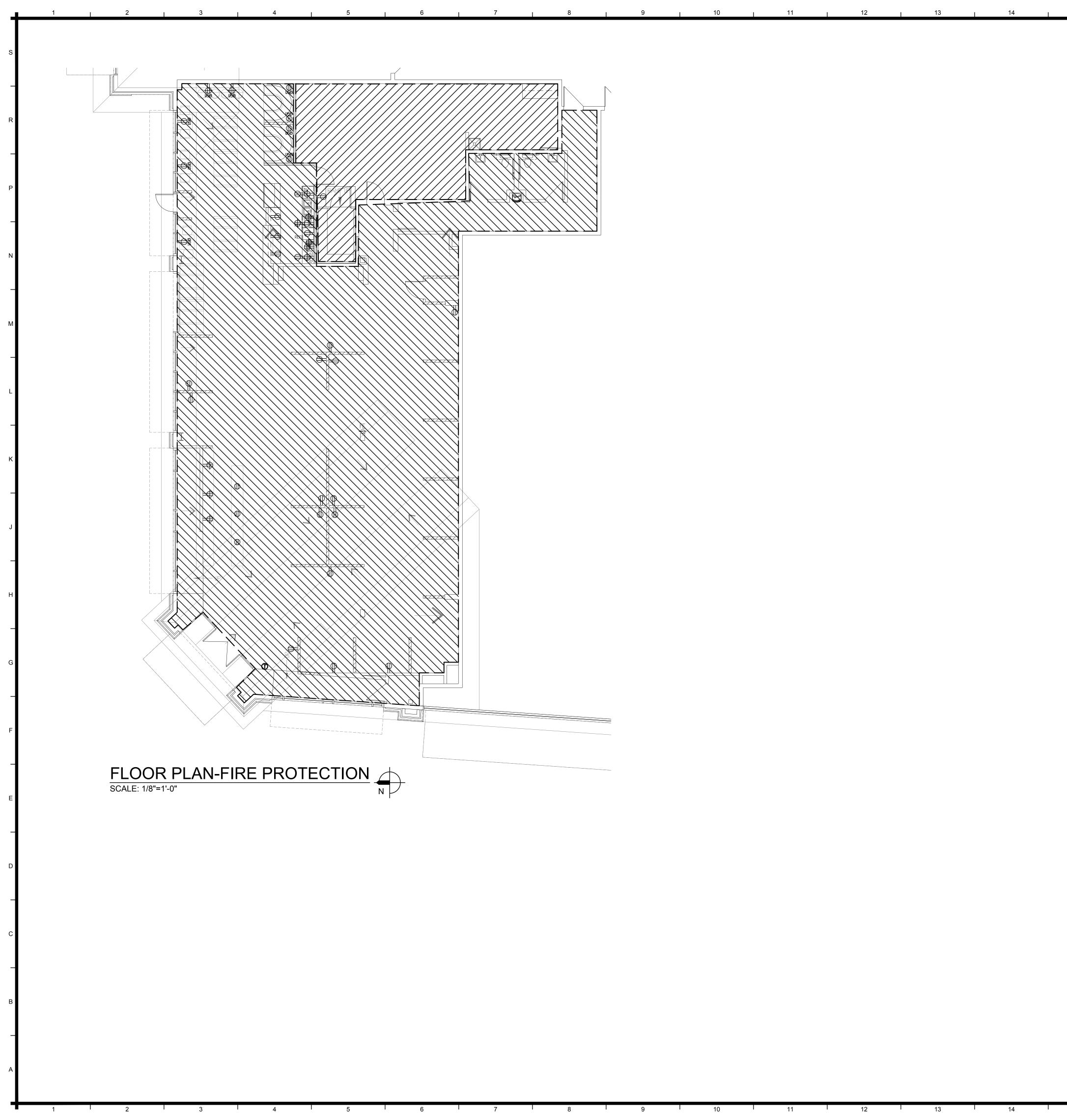
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ired loca	tions for prope	num piping span er piping support. felt lined hang	-			-					WARMAN ARCHITECTURE+DESIGN
or plastic	c piping systen to allow for ex	ns. pansion and con	traction of pipe	lines and sha	ll be of ade	quate					3,
ushing in	sulation.	vide protective sa anized steel for n									
nvironme	ents.	r option. They s									
asteners	or clips and al	l upper and lower	r attachments by	/ Gripple or acc	ceptable equ	ıal.				-	
ilding str	ucture and oth evation to acco	Irawings, paralle er trades. Adjust ommodate beams	pipe routing an	d drop location							AS ST
be provi , sized, r	ded for all plu minimum 1-1/2	Imbing equipmer 2" high, and locat quipment number	ed for viewing f								*6
n grate s	hall be fitted v	n air gap to a flo vith a funnel, the ted so they are a	sanitary floor s	ink shall have	a partial gra						A CONTRACT
	paint finish fo	posed walls and or unoccupied a									
iping and	fixture waste	and water openir	ngs to prevent e	ntry of dirt and	debris.						
	nd plumbing ec .EANING:	quipment to preve	ent damage.								F
	ne highest poir	nt of the system e		jh roof, but not	less than 10	) feet					NE NE
allow to r	emain for a pe	riod of two hours									NC OP
		with compressed ating of piping sy									MADE IN KC ANT DEVELOPMENT
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g, steriliz PING:	e water syste	em with an appr	oved solution in	n accordance	with local h	nealth					≥ 'Z ∀
	sizes shall be a	as shown in the	plumbing fixture	e schedule on t	the drawings	s and					TEN
	w slab on grad										
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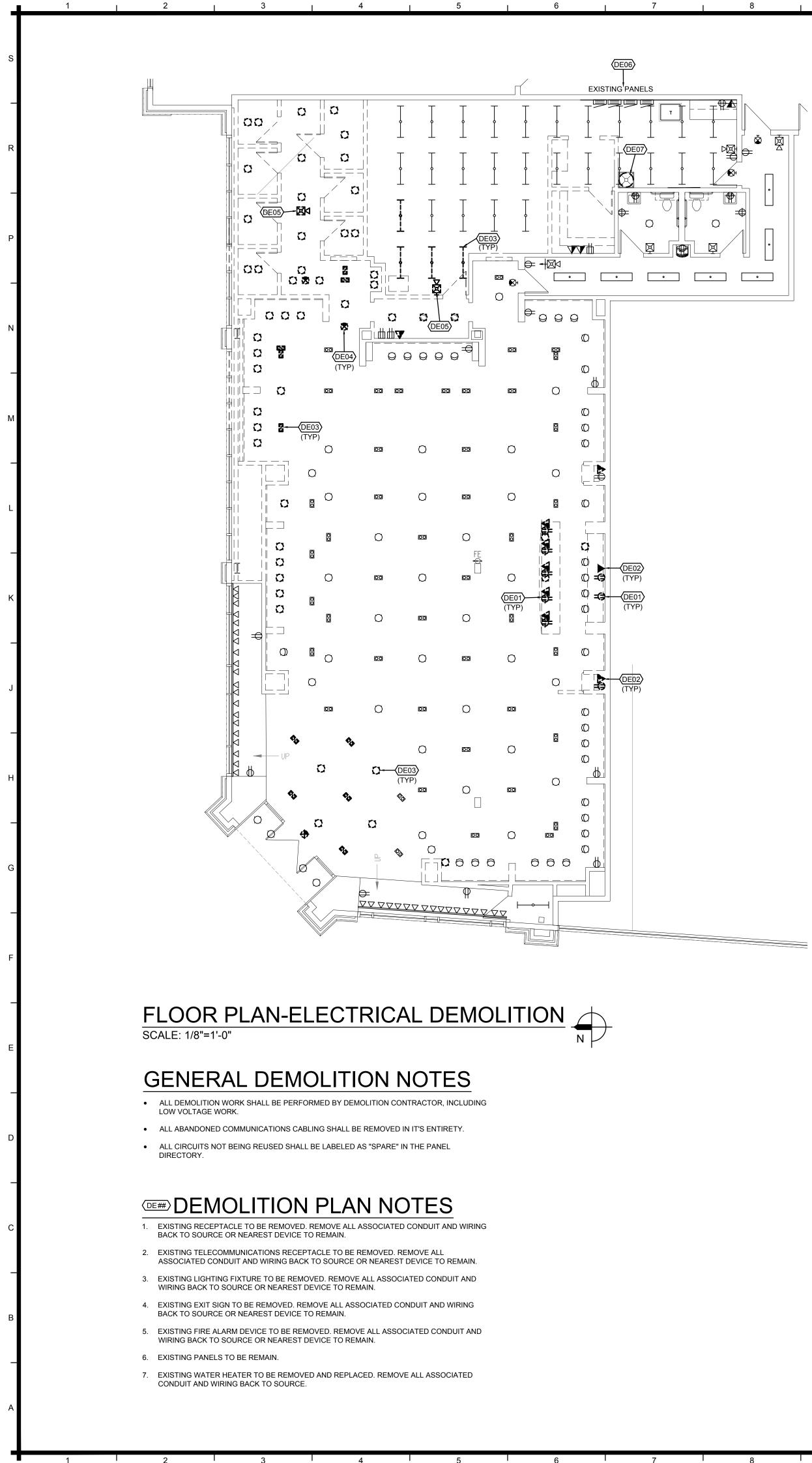
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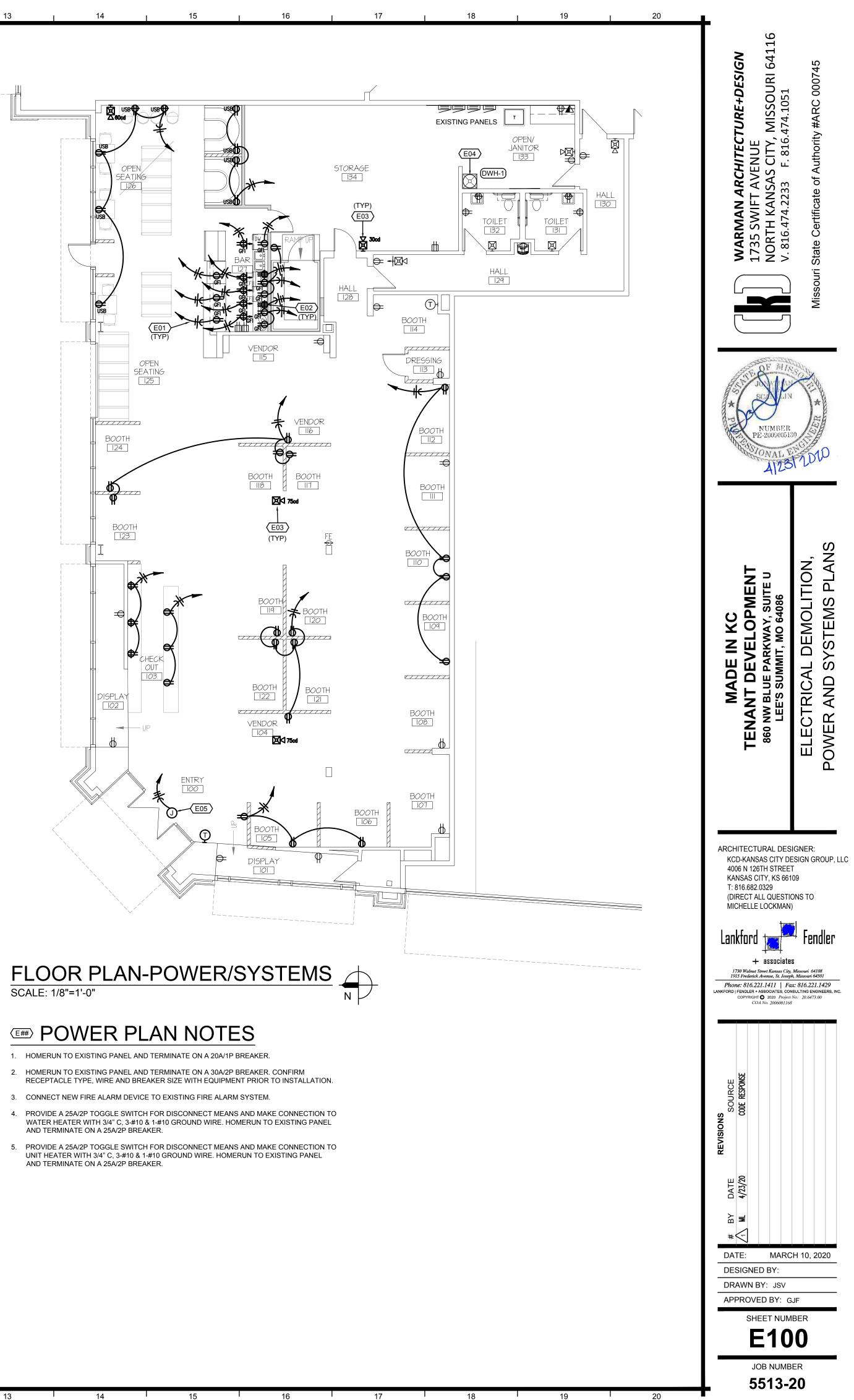
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FIF	RE PROTECTION DESIGN CRITERIA	<b>DESIGN</b> JURI 641 51 000745
Α.	ENTIRE BUILDING AS SHOWN ON DRAWINGS IS CURRENTLY PROVIDED WITH A WET TYPE SPRINKLER SYSTEM. MODIFY SYSTEM AS NECESSARY FOR NEW WALL LAYOUTS AND IN COMPLIANCE WITH THE RULES AND REGULATIONS OF APPLICABLE FEDERAL, STATE AND LOCAL LAWS, CODES AND ORDINANCES, THE OWNER'S INSURANCE COMPANY AND NFPA 13.	<b>СТИRE</b> Е Ү, MISS .6.474.1 rity #AR
В.	FURNISH ALL MATERIALS, LABOR, TOOLS, TRANSPORTATION, INCIDENTALS AND APPURTENANCES TO COMPLETE IN EVERY DETAIL AND LEAVE IN WORKING ORDER ALL ITEMS OF WORK REQUIRED FOR STRICT COMPLIANCE.	<b><i>RCHITE</i></b> VENUI AS CIT F. 81 F. 81 of Autho
C.	NEW FIRE PROTECTION PIPING AND FITTINGS SHALL MATCH EXISTING, OR PROVIDE SCHEDULE 40 FOR 2" AND SMALLER WITH THREADED ENDS AND SCHEDULE 10 FOR 1-1/2" AND LARGER WITH ROLL-GROOVED ENDS AND GROOVED JOINTS. ALL PIPING IN AREAS WITH CEILINGS SHALL BE RUN CONCEALED WITH NO EXCEPTIONS UNLESS COORDINATED WITH ARCHITECT AND ENGINEER. PIPE SIZES SHOWN ON PLANS FOR INFORMATION ONLY. VERIFY BY HYDRAULIC CALCULATIONS.	WARMAN ARCHITECTURE+ 1735 SWIFT AVENUE NORTH KANSAS CITY, MISSC V. 816.474.2233 F. 816.474.109 V. 816.474.2233 F. 816.474.109 Missouri State Certificate of Authority #ARC
D.	NEW FIRE SPRINKLERS SHALL MATCH EXISTING IN TYPE, STYLE AND APPEARANCE. ANY REMOVED/RELOCATED FIRE SPRINKLERS MUST BE REPLACED WITH NEW PER NFPA 13. CONTRACTOR RESPONSIBLE FOR FIELD VERIFICATION OF ALL INFORMATION.	NOF V. 8 [°] V. 8 [°]
E.	ALL SPRINKLERS IN LAY-IN CEILINGS ARE TO BE CENTERED ±1/2" IN 2'x2' PORTION OF TILE. ALL SPRINKLERS IN GYP-BOARD CEILINGS ARE TO BE CENTERED ±1/2" WITH LIGHT FIXTURES AND ALIGNED WITH ALL OTHER DEVICES IN CEILING IN BOTH DIRECTIONS. COORDINATE WITH ARCHITECT.	Missou
F.	FIRE PROTECTION CONTRACTOR SHALL PREPARE DETAILED AND COORDINATED SHOP DRAWINGS SO AS TO AVOID CONFLICTS IN THE FIELD. CONTRACTOR SHALL COORDINATE WITH REFLECTED CEILING PLAN, DUCTWORK LAYOUT AND LIGHTING LAYOUT. ALL COORDINATION SHALL TAKE PLACE PRIOR TO INSTALLATION.	
G.	CONTRACTOR SHALL FILE ALL DRAWINGS, PAY ALL FEES AND OBTAIN PERMITS AND CERTIFICATES OF INSPECTIONS RELATIVE TO THIS WORK.	STE OF MISSON
н. I.	PREPARE AND SUBMIT SHOP DRAWINGS, PRODUCT DATA AND HYDRAULIC CALCULATIONS AS REQUIRED. ALL INFORMATION SHOWN ON FIRE PROTECTION DRAWINGS SHALL BE INCLUDED ON THE SHOP DRAWINGS. CONTRACTOR TO BE RESPONSIBLE FOR MAKING FINAL COORDINATION WITH STRUCTURE AND ALL OTHER TRADES PRIOR TO SUBMITTING SHOP DRAWINGS. ALL ELEVATIONS OF PIPE MUST BE SHOWN ON SHOP DRAWINGS.	NUMBER PE-2009005130
J.	SPRINKLER SYSTEM SHALL BE TESTED AND DRAINED PER NFPA STANDARDS AND LOCAL AND STATE AUTHORITY HAVING JURISDICTION.COMPLETED CONTRACTOR MATERIAL TEST CERTIFICATES SHALL BE FORWARDED TO OWNER.	ALZST LDLD
K.	FIRE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH FIRE ALARM PANEL AND SUPERVISION OF NEW SPRINKLER TAMPER AND FLOW SWITCHES.	
L. M.	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. SPRINKLER HEAD PLACEMENT SHALL BE OUT OF THE SWING AREA OF DOORS TO AVOID CONFLICT WITH TALL DOORS.	
RECON IN ORD ALL RE NFPA 1	REPROTECTION LEGEND FIGURE EXISTING BASE BUILDING FIRE SPRINKLER LAYOUT WITHIN THIS AREA ER TO PROVIDE PROPER COVERAGE PER NFPA 13 AND LOCAL AUTHORITIES. MOVED / RELOCATED FIRE SPRINKLERS MUST BE REPLACED WITH NEW PER 3. NEW SPRINKLERS TO MATCH EXISTING. REFER TO REFLECTED CEILING FOR COORDINATION WITH LIGHTS, DIFFUSERS, EXIT SIGNS, ETC.	MADE IN KC TENANT DEVELOPMENT 860 NW BLUE PARKWAY, SUITE U LEE'S SUMMIT, MO 64086 FIRE PROTECTION PLAN
	LIGHT HAZARD - PROVIDE PROPER COVERAGE PER NFPA 13 (0.1 GPM PER 1500 SF) PLUS 100 GPM HOSE STREAM ALLOWANCE. ORDINARY HAZARD GROUP 1 - PROVIDE PROPER COVERAGE PER NFPA 13 (0.15 GPM PER 1500	ARCHITECTURAL DESIGNER: KCD-KANSAS CITY DESIGN GROUP, LLC 4006 N 126TH STREET KANSAS CITY, KS 66109
	SF) PLUS 250 GPM HOSE STREAM ALLOWANCE.	T: 816.682.0329 (DIRECT ALL QUESTIONS TO MICHELLE LOCKMAN)
$\bigotimes$	ORDINARY HAZARD GROUP 2 - PROVIDE PROPER COVERAGE PER NFPA 13 (0.2 GPM PER 1500 SF) PLUS 250 GPM HOSE STREAM ALLOWANCE.	Lankford Fendler + associates 1730 Walnut Street Kansas City, Missouri 64108 1915 Frederick Avenue, St. Joseph, Missouri 64501 Phone: 816.221.1411 Fax: 816.221.1429
	PROVIDE PRE-ENGINEERED CLEAN AGENT FIRE EXTINGUISHING SYSTEM, INCLUDING TANKS, VALVES, PIPING, CONTROL PANEL, NOZZLES, SENSORS AND ALARMS IN ACCORDANCE WITH NFPA 2001, NFPA 72 AND LOCAL AUTHORITIES. SYSTEM INCLUDES SEPARATE ZONES ABOVE AND BELOW THE CEILING AND BENEATH THE RAISED FLOOR. RE: DRAWINGS FOR LOCATION OF MAJOR COMPONENTS.	LANKFORD J FENDLER + ASSOCIATES, CONSULTING ENGINEERS, INC. COPYRIGHT 2020 Project No. 20.6473.00 COA No. 2006001168
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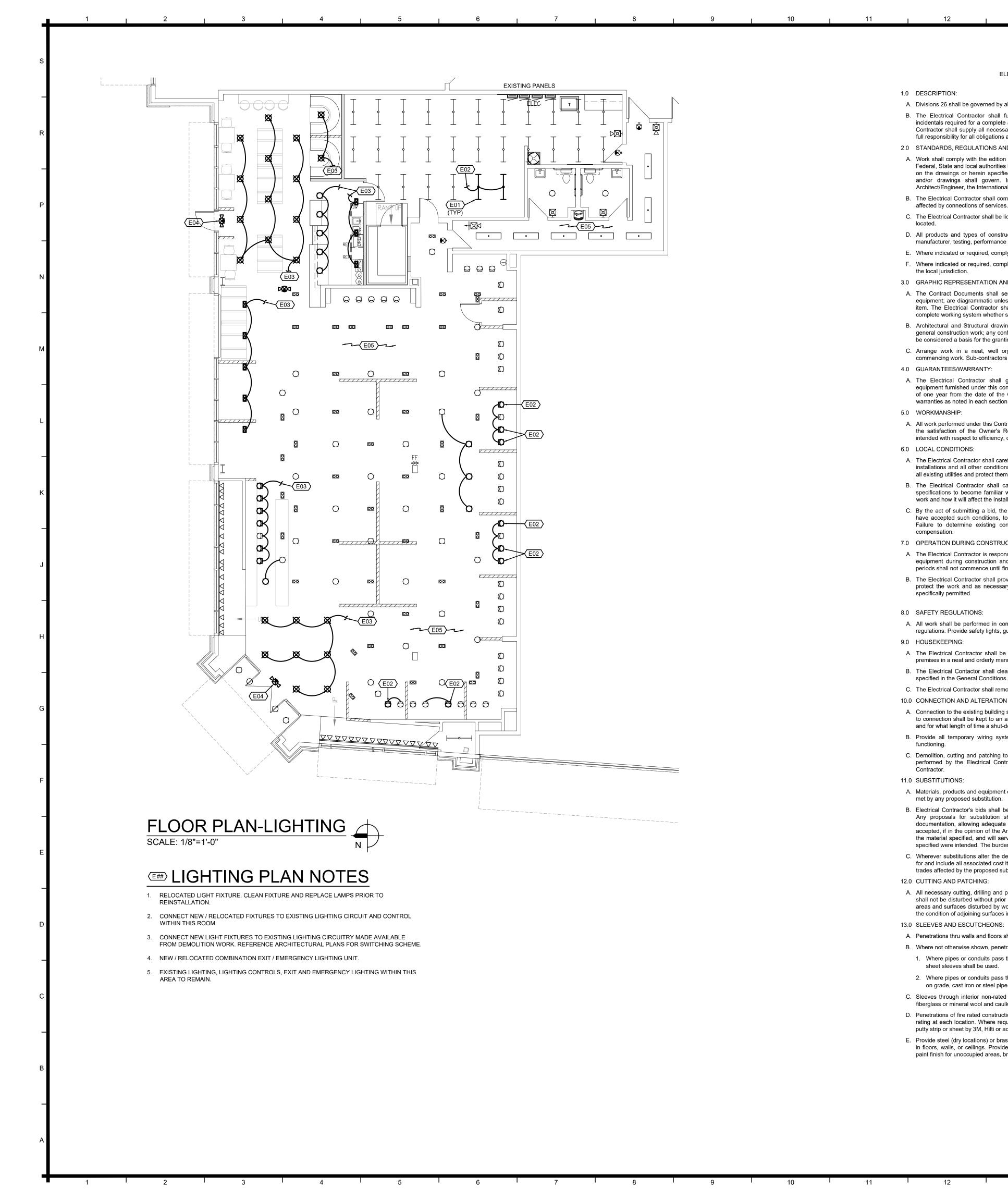




# SCALE: 1/8"=1'-0"

## Empower plan notes

- AND TERMINATE ON A 25A/2P BREAKER.
- AND TERMINATE ON A 25A/2P BREAKER.



ELECTRICAL GENERAL PROVISIONS

13

- 1.0 DESCRIPTION:
- A. Divisions 26 shall be governed by all applicable provisions of the Contract Document.
- B. The Electrical Contractor shall furnish, install and connect all materials, equipment, apparatuses, and incidentals required for a complete and working installation. For all systems shown and required, the Electrical Contractor shall supply all necessary labor, equipment, tools, insurance, and tax services, and shall assume full responsibility for all obligations associated with completion of work as provided by the Contract Documents. 2.0 STANDARDS, REGULATIONS AND CODES:

**DIVISION 26** 

14

15

- A. Work shall comply with the edition of the applicable standards, regulations and codes currently in force of all Federal, State and local authorities having jurisdiction. Where quantities, sizes, or other requirements indicated on the drawings or herein specified are in excess of the standard or code requirements, the specifications and/or drawings shall govern. In the absence of other applicable local codes, acceptable to the Architect/Engineer, the International Set of Codes and the National Electrical Code shall apply to this work.
- B. The Electrical Contractor shall comply with rules and regulations of public utilities and municipal departments affected by connections of services. The Electrical Contractor shall pay all fees associated there with.
- C. The Electrical Contractor shall be licensed to perform associated work in the municipality in which the project is D. All products and types of construction shall meet or exceed the latest edition of applicable standards of
- manufacturer, testing, performance and installation. E. Where indicated or required, comply with all provisions of the ADA and/or the ABA Accessibility Guidelines.
- F. Where indicated or required, comply with all applicable provisions of energy and ventilation codes in force at the local jurisdiction.
- 3.0 GRAPHIC REPRESENTATION AND JOB CONDITIONS:
- A. The Contract Documents shall serve as working drawings for the general layout of the various items of equipment; are diagrammatic unless specifically dimensioned, and do not necessarily indicate every required item. The Electrical Contractor shall include all necessary components and accessories as required for a complete working system whether so specifically indicated or not.
- B. Architectural and Structural drawings take precedence over all other drawings in the representation of the general construction work; any conflicts shall be resolved prior to commencing work. Failure to do so shall not be considered a basis for the granting of additional compensation.
- C. Arrange work in a neat, well organized manner. Coordinate work with other trades involved, prior to commencing work. Sub-contractors shall work together to resolve any conflicts of space or routing. 4.0 GUARANTEES/WARRANTY:
- A. The Electrical Contractor shall guarantee/warranty all work performed, including labor, materials and equipment furnished under this contract, against defects in materials and workmanship for a minimum period of one year from the date of the Owner's Representative Final Acceptance of the work. Provide extended warranties as noted in each section or specified for specific products.
- 5.0 WORKMANSHIP:

A. All work performed under this Contract shall provide a neat and "workmanlike" appearance when completed, to the satisfaction of the Owner's Representative. The complete installation shall function as designed and intended with respect to efficiency, capacity, and noise level, etc.

- 6.0 LOCAL CONDITIONS:
- A. The Electrical Contractor shall carefully examine and become thoroughly familiar with local conditions, existing installations and all other conditions which may affect associated work. The Electrical Contractor shall locate all existing utilities and protect them during the execution of the work
- B. The Electrical Contractor shall carefully examine all contract documents including project drawings and specifications to become familiar with the type of construction, materials, and equipment to be used for all work and how it will affect the installation of this contract.
- C. By the act of submitting a bid, the Electrical Contractor will be deemed to have made such examination, to have accepted such conditions, to have made allowance therefore, and included all costs in his proposal. Failure to determine existing conditions will not be considered a basis for the granting of additional compensation.
- 7.0 OPERATION DURING CONSTRUCTION:
- A. The Electrical Contractor is responsible for the installation and operation, service and maintenance of all new equipment during construction and prior to acceptance by the Owner of the completed project. Warranty periods shall not commence until final acceptance by the Owner or Owner Representative.
- B. The Electrical Contractor shall provide, at his own expense, all temporary utilities required to provide for and protect the work and as necessary to maintain an adequate work force unless use of existing facilities is specifically permitted.
- 8.0 SAFETY REGULATIONS:

A. All work shall be performed in compliance with all applicable governing safety regulations, including OSHA regulations. Provide safety lights, guards and signs required.

- 9.0 HOUSEKEEPING: A. The Electrical Contractor shall be responsible for keeping stocks of material and equipment stored on the premises in a neat and orderly manner.
- B. The Electrical Contactor shall clean and maintain their specific portions of the work on a daily basis or as specified in the General Conditions.
- C. The Electrical Contractor shall remove from the premises all waste material present as a result of his work. 10.0 CONNECTION AND ALTERATION TO EXISTING SYSTEMS:
- A. Connection to the existing building systems must be accomplished under this contract. System "downtime" due to connection shall be kept to an absolute minimum. The Owner's Representative shall judge if at what time, and for what length of time a shut-down can be tolerated.
- B. Provide all temporary wiring systems required during construction in order to keep all existing systems functioning.
- C. Demolition, cutting and patching to restore surfaces to original condition as necessitated for access to work performed by the Electrical Contractor or his subcontractors shall be the responsibility of the Electrical Contractor
- 11.0 SUBSTITUTIONS:
- A. Materials, products and equipment described in the Bidding Documents established a standard of quality to be met by any proposed substitution.
- B. Electrical Contractor's bids shall be based on the material identified or specified in the contract documents. Any proposals for substitution shall be made in writing to the Architect/Engineer with all supporting documentation, allowing adequate time for appropriate action. The products of other manufacturers may be accepted, if in the opinion of the Architect/Engineer, the substitute material is of 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. The burden of proof of equality is entirely upon the proposer.
- C. Wherever substitutions alter the design or space requirements, the Electrical Contractor shall be responsible for and include all associated cost items of the revised design and or construction work required by his or other trades affected by the proposed substitution.
- 12.0 CUTTING AND PATCHING:

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- A. All necessary cutting, drilling and patching shall be provided by the Electrical Contractor. Structural members shall not be disturbed without prior approval of the Structural Engineer and/or the Owner's Representative. All areas and surfaces disturbed by work performed under this Contract shall be neatly repaired and refinished to the condition of adjoining surfaces in a manner suitable to the Owner's Representative
- 13.0 SLEEVES AND ESCUTCHEONS:
- A. Penetrations thru walls and floors shall be as detailed. B. Where not otherwise shown, penetrations shall conform to the following:
- 1. Where pipes or conduits pass through interior partitions, galvanized steel pipe sleeves or galvanized steel sheet sleeves shall be used.
- 2. Where pipes or conduits pass thru concrete floors and walls, walls below grade or exterior walls and slabs on grade, cast iron or steel pipe sleeves shall be used.
- C. Sleeves through interior non-rated walls, including walls indicated as sound partitions, shall be packed with fiberglass or mineral wool and caulked. D. Penetrations of fire rated construction shall be made with a UL listed fire penetration assembly suitable for the
- rating at each location. Where required, sleeves through fire rated structure shall be fire barrier caulked with putty strip or sheet by 3M, Hilti or acceptable equivalent.
- E. Provide steel (dry locations) or brass (damp locations) escutcheons to completely cover pipe penetration holes in floors, walls, or ceilings. Provide pipe escutcheons with nickel or chrome finish for occupied areas, prime paint finish for unoccupied areas, brass for exterior.

END OF SECTION

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16 17 18 Q *itecture+design* NUE City, Missouri 641 . 816.474.1051 260 100 ELECTRICAL 000 1.0 SCOPE: ()A. The work included under this contract consists of the furnishing of all labor, materials, tools, transportation, services, etc., necessary to complete the installation of the electrical systems and other items herein listed. all as directed by the Architect or Engineer, which work is comprised of, but not limited to the following principal items: 1. Electrical system for light and power: ΞΖŪ" ы S a. Receptacles and wiring devices. C > b. Lighting fixtures and lamps. N.A.I c. Power service to the various motors. **A** AN 22 d. Complete lighting and power systems. **AN** KA 74.2 e. All systems, wiring and conduit as required. **∑** ∖S ⊥ 4 2. Control wiring and electrical installation and connections for items in other contracts as may be listed in the **WARN** 1735 9 1735 9 NORTI V. 816. drawings 3. Empty conduit and boxes for future installation of telephone wiring and miscellaneous systems. 4. Rough-in and final connection to equipment furnished by others. B. Raceway wiring systems shall be concealed in all finished parts of the building, where possible. Where the raceways are exposed, they shall be run parallel with the building walls in a neat and workmanlike manner. Should it appear necessary to expose any conduit or wiring in finished spaces, it shall be brought to the Architect's attention immediately and this Contractor shall rearrange associated work as directed to facilitate an approved installation. Contractor to coordinate with mechanical trades to avoid ductwork and piping. 2.0 RACEWAYS: A. All electrical conductors are to be installed in metal raceways, unless specifically specified or noted otherwise. Galvanized steel or intermediate steel conduit as permitted by code. No conduit smaller than 1/2" to be used. Provide flexible conduit connection for final connection to each motor not to exceed 3' in length and recessed lighting fixtures not to exceed 6' in length. Provide pull wires in all empty conduit systems. Identify terminus of each pull wire. All exposed raceways shall be installed with runs parallel and/or perpendicular with building walls. Fasten all rigid/non-flexible conduit every 8' and 2' from each box. Conduit shall be EMT where not subject to mechanical damage as permitted by National Electric Code (N.E.C.). EMT connectors and couplings 4" and smaller shall be compression type. Type MC Cable with ground wire is allowed in concealed spaces only, behind walls and above ceiling. B. Conduit bushings shall be provided and installed inside all disconnects, pull boxes, panelboards, switchboard or similar type equipment and where permitted by National Electric Code (N.E.C.). 3.0 WIRES AND CABLES: A. Electrical conductors, soft annealed copper with conductivity 98% of that of pure, stranded copper, 90 degree - 600V insulation and equal to General Cable Company. Wire and cable for all feeders, subfeeders, motor circuits and high ambient location type shall be THHN. All other branch circuit wiring shall be type XHHN or THHN. Minimum wire size shall be #12 gauge AWG. Control wiring may be #14 gauge. B. For conductors #4 or small use the following color-code: • 208Y/120V, 3-phase: black, red, blue, white. • 480Y/277V, 3-phase: brown, orange, yellow, gray. • Green shall be used for ground wire conductor. • Contractor shall use the following color designations and be consistent throughout the project. Color designation for switch legs and or travelers: Violet, Pink or Purple may be used. C. Conductor Material Applications: a. Branch Circuits: Copper. Solid for No. 12 AWG and smaller; stranded for No. 10 AWG and larger. D. Conductor insulation and multi-conductor cable application and wiring methods: a. Exposed Branch Circuits, Including in Crawlspaces: Type THHN, single conductors in raceway or Metal-clad cable, Type MC. 4.0 GROUNDING: A. Ground all electrical apparatus in accordance with N.E.C. and as specified herein. Provide a separate grounding conductor for all lighting, receptacle and equipment circuits. All cabinets, switchboards, equipment cases, motor frames, interior metal cold water piping systems, and system neutral conductors shall be effectively grounded. Use solderless pressure type connectors, no perforated strap connectors will be KC OP allowed. Ensure continuous bond where flexible conduit is used. Provide bonding jumper inside all flexible conduit. Grounding per N.E.C. 250, and any local requirements. 5.0 SPLICE AND TAPS: A. Make splices at junction boxes, pull boxes, or outlet boxes only. шб 6.0 CABINETS, JUNCTION AND PULL BOXES: Ū D y A. Flush or surface mounted as indicated on drawings. Provide where shown on drawings and where required by code. Construct of cold gauge steel for flush surface mounting. 7.0 OUTLET BOXES: TENAN 860 NW BI A. General Electric, Appleton, Steel City or Raco hot dipped galvanized steel boxes, or equal. Install at terminal of each conduit run, each outlet, or device. Provide size, type and design to suit structural conditions. Adequate to accommodate size and number of raceways, conductors, device or fixture served. Provide plaster rings or covers on boxes where required on exposed work, use approved cast ferrous allov outlet. junction boxes and fittings. Fixture or device cover shall completely conceal the size outlet box used. Instal 3/8" fixture stud for lighting fixtures where required. Locate ceiling outlets to work with architectural features as directed. Switches installed 48" above floor on strike side of door as finally hung. Receptacles and telephone outlets, 18" above finished floor unless otherwise noted. Verify all outlet locations on job with Architect. 8.0 LABELING: A. Contractor shall label each and every j-box above ceiling with a permanent marker with panel and circuit

ARCHITECTURAL DESIGNER:

4006 N 126TH STREET

MICHELLE LOCKMAN)

T: 816.682.0329

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DESIGNED BY: DRAWN BY: JSV APPROVED BY: GJF

DATE: MARCH 10, 2020

SHEET NUMBER

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JOB NUMBER

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KANSAS CITY, KS 66109

(DIRECT ALL QUESTIONS TO

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NKFORD | FENDLER + ASSOCIATES, CONSULTING ENGINEERS, IN

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- B. Outlets, adhesive film label, machine printed clear background with black letters, by thermal transfer or equivalent process. Minimum letter height shall be 1/4 inch. Face plate shall be labeled with panel and circuit number.
- C. Interior equipment self-adhesive, engraved, laminated acrylic or melamine label: adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch (10 mm).

9.0 WIRING DEVICES:

A. Duplex receptacles shall be Hubbell #5352-X grounding type, 20A., 125V.; G.F.C.I. shall be Hubbell GF-5352-X, 20A., 125V.; duplex, G.F.C.I. TYPE. Wall toggle switches shall be Hubbell Number 1221-X and Number 1223-X for single pole and three way types respectively. Other switch, receptacle, and outlet device variations shall be by Hubbell of "Spec. Grade" quality. Equivalent devices of P & S or Leviton will be acceptable in lieu of the above listed devices.

10.0 LIGHTING FIXTURES:

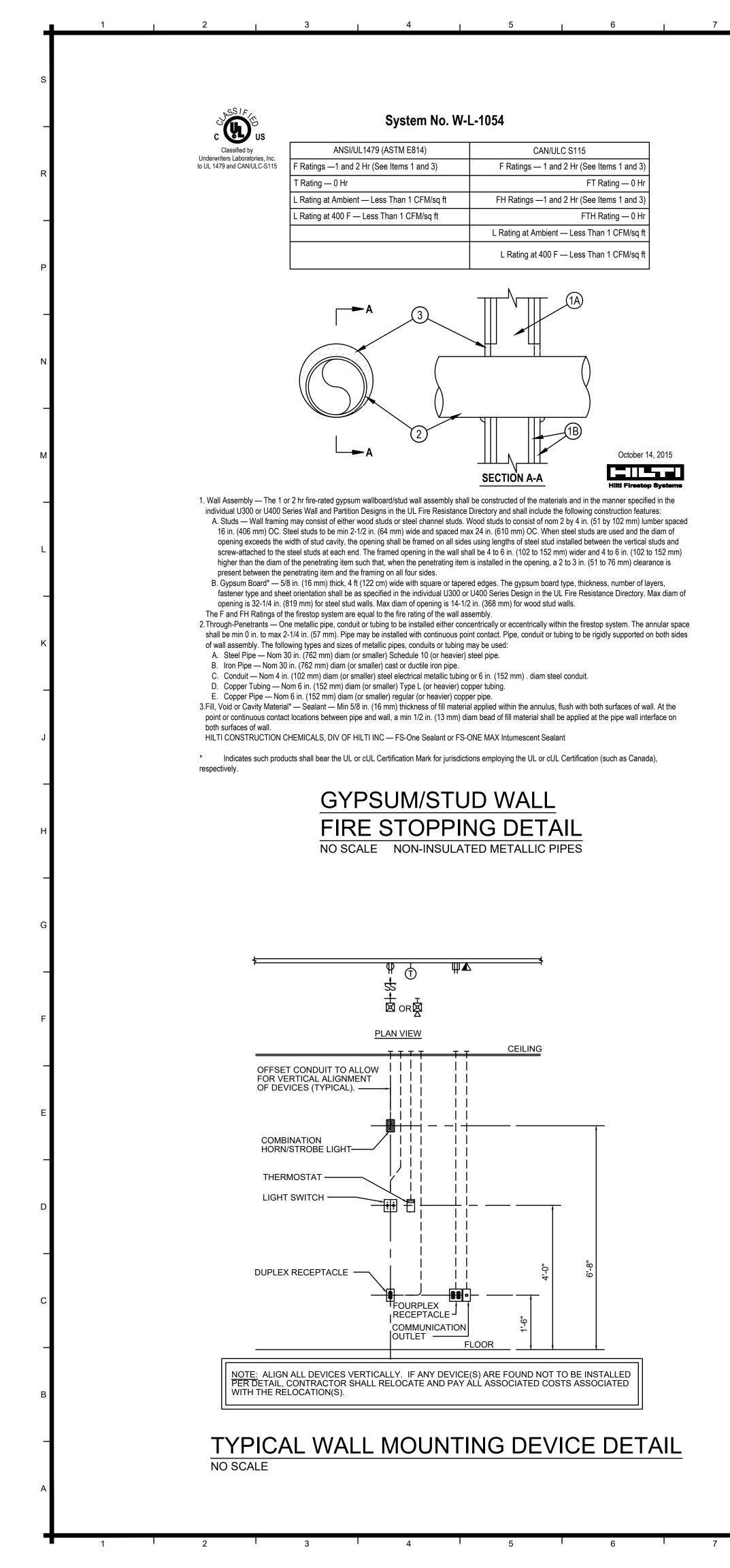
A. This Contractor shall furnish and install complete, unless otherwise specified, a lighting fixture on each and every lighting outlet shown on the drawings of each type scheduled by letter and description. All fixtures shall be equipped with lamps as scheduled or specified herein. All fixtures installed in suspended ceilings must be securely fastened to framing members per NEC 410-36b and local seismic code requirements.

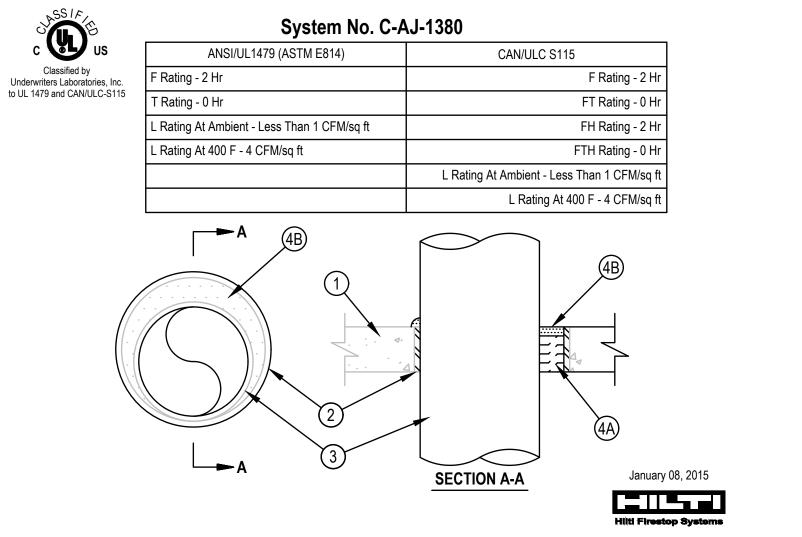
11.0 FIRE ALARM SYSTEM:

- A. Fire alarm system shall be a delegated design, contractor shall be responsible for layout and design of the fire alarm system. Submit all necessary documentation including stamped and signed drawings to the authority having jurisdiction and obtain necessary permits for approval and installation of the system prior to submitting shop drawings. B. Fire alarm system shall be relocated or added for code compliance.
- C. All new equipment shall be ADA compliant, be by one manufacturer, and warranted for a minimum of one

END OF SECTION

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 Floor or Wall Assembly — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 31-7/8 in. (810 mm). See Concrete Blocks (CAZT) in the Fire Resistance Directory for names of manufacturers.

2. Metallic Sleeve — (Optional) Nom 32 in. (813 mm) diam (or smaller) Schedule 40 steel pipe cast or grouted into floor or wall assembly, flush with floor or wall surfaces.

3. Through-Penetrant — One metallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor assembly. The annular space between pipe or conduit and periphery of opening shall be min 0 in. (point contact) to max 1-7/8 in. (48 mm). The following types and sizes of metallic pipes or conduits may be used:

- A. Steel Pipe Nom 30 in.(762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. Cast Iron Pipe Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
- C. Copper Pipe Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe. D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- E. Conduit Nom 6 in. (152 mm) diam (or smaller) steel conduit.
- F. Conduit Nom 4 in. (102 mm) (or smaller) steel electrical metallic tubing (EMT).
- 4. Firestop System The firestop system shall consist of the following:
- A. Packing Materials Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor to accommodate the required thickness of fill material.
   B. Fill Void or Cavity Materials* Sealant Min 1/2 in. (13 mm) thickness of fill material applied within annulus, flush with top surface of floor. At point contact, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the concrete/sleeve/pipe interface on the top surface of the floor and both

surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

## CONCRETE WALL/FLOOR FIRE STOPPING DETAIL NO SCALE NON-INSULATED METALLIC PIPES

## BRANCH CIRCUIT COPPER CONDUCTOR AND CONDUIT SIZING CHART*

OVERCURRENT PROTECTION DEVICE RATING (AMPS)	REQUIRED CONDUCTOR SIZE	EQUIPMENT GROUNDING CONDUCTOR SIZE	SINGLE PHASE 2 WIRE + GND. CONDUIT SIZE	SINGLE PHASE 3 WIRE + GND. CONDUIT SIZE	THREE PHASE 3 WIRE + GND. CONDUIT SIZE	THREE PHASE 4 WIRE + GND. CONDUIT SIZE
15	12 AWG	12 AWG	3/4"	3/4"	3/4"	3/4"
20	12 AWG	12 AWG	3/4"	3/4"	3/4"	3/4"
25	10 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
30	10 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
35	8 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
40	8 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
45	6 AWG	10 AWG	3/4"	3/4"	3/4"	1"
50	6 AWG	10 AWG	3/4"	3/4"	3/4"	1"
60	4 AWG	10 AWG	1"	1"	1"	1-1/4"
70	4 AWG	8 AWG	1"	1"	1"	1-1/4"
80	3 AWG	8 AWG	1"	1-1/4"	1-1/4"	1-1/4"
90	2 AWG	8 AWG	1"	1-1/4"	1-1/4"	1-1/4"
100	1 AWG	8 AWG	1-1/4"	1-1/2"	1-1/2"	1-1/2"

* = UNLESS OTHERWISE NOTED ON THE DRAWINGS.

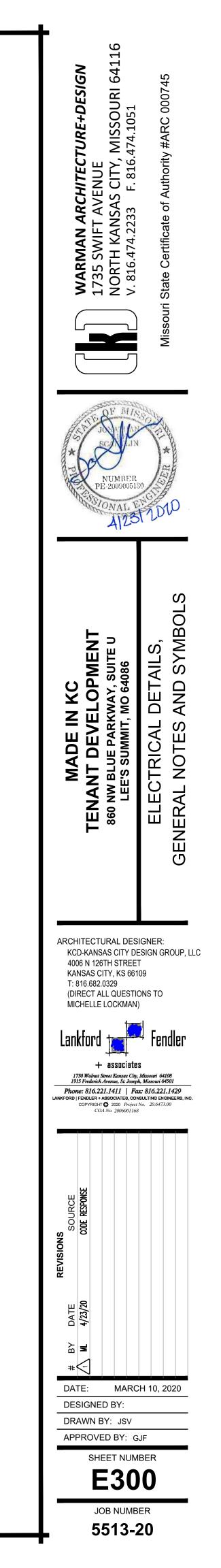
* = UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL BRANCH CIRCUITS AND FEEDERS TO BE PROVIDED WITH A NEUTRAL WIRE.
 * = ALL CONDUCTORS SIZED ON THE POWER RISER DIAGRAM OR IN BRANCH CIRCUIT CONDUCTOR TABLE ARE BASED ON 3 CURRENT CARRYING CONDUCTORS IN A RACEWAY OR CABLE. CONDUCTORS SHALL BE DERATED IN ACCORDANCE WITH THE NEC IF 4 OR MORE CONDUCTORS ARE PLACED IN A RACEWAY OR CABLE.

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## GENERAL NOTES (TYPICAL ALL SHEETS)

- A. REFER TO ARCHITECTS REFLECTED CEILING PLANS FOR EXACT PLACEMENT OF LIGHT FIXTURES, SPEAKER AND F.A. DEVICES IN THE CEILING SYSTEM.
- B. WIRING TO BE REMOVED BACK TO THE NEAREST DEVICE TO REMAIN. WIRING SHALL NOT BE TAKEN PAST THE FIRST JUNCTION BOX BEFORE THE PANELBOARD.
- C. ANY MATERIAL REMOVED THAT OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED FROM PROJECT SITE AND DISPOSED OF BY THE CONTRACTOR.

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- D. NEW CIRCUITRY SHOWN FOR NEW/EXISTING POWER AND LIGHTING IS DIAGRAMMATIC AND IS INTENDED TO SHOW WHICH DEVICES ARE TO BE GROUPED ON INDIVIDUAL CIRCUITS. EXISTING WIRING THAT CONFORMS TO THE INTENT OF THE DRAWINGS MAY BE USED.
- E. PROVIDE UPDATED, TYPEWRITTEN PANELBOARD DIRECTORY FOR EACH PANELBOARD WHICH CIRCUITS HAVE BEEN ADDED TO OR MODIFIED.
- F. SUPPORT ALL LIGHT FIXTURES WITH A MINIMUM OF (4) 12 GA. HANGER WIRES TO STRUCTURE ABOVE.
- G. CONNECT EXIT AND EMERGENCY LIGHTS TO HOT LEG, NOT SWITCH LEG.

## ELECTRICAL SYMBOLS

	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL. ARROWS INDICATE HOMERUNS TO PANEL. ALL CONDUCTORS ARE MINIMUM NO.12 UNLESS NOTED OTHERWISE. PHASE CONDUCTORS NEUTRAL CONDUCTOR SWITCH-LEG AND OR TRAVELER GROUND CONDUCTOR CONDUIT CONCEALED IN CEILING OR WALL WITH THREE CONDUCTORS:
	1-PHASE; 1-NEUTRAL; 1-GROUND WIRE, MINIMUM NO.12 WIRE UNLESS OTHERWISE SPECIFIED ON DRAWINGS.
	CONDUIT RUN UNDERGROUND OR CONCEALED IN FLOOR SLAB.
	GROUNDING CONDUCTOR NO.12 WIRE EXCEPT AS NOTED
🗴 or 🙀	EXIT SIGN - SINGLE FACED - ARROWS AS SHOWN ON DRAWING. SHADED SIDE(S) INDICATES FACE SIDE(S) OF EXIT.
101	EXIT SIGN - DOUBLE FACED - ARROWS AS SHOWN ON DRAWING. SHADED SIDE(S) INDICATES FACE SIDE(S) OF EXIT.
	COMBINATION EXIT SIGN/EMERGENCY LIGHTING UNIT - CEILING OR WALL MOUNTED. SHADED SIDE(S) INDICATES FACE SIDE(S) OF EXIT.
┝━━━┥	STRIP FIXTURE, LETTER DENOTES FIXTURE TYPE, REFER TO SCHEDULE
O OR O	WALL WASH OR RECESSED CEILING LIGHT FIXTURE
×	PENDANT MOUNTED LIGHT FIXTURE, SIZE AND TYPE AS NOTED
	TRACK LIGHTING, SIZE AND TYPE AS NOTED
	208Y/120V OR 120/240V PANELBOARD (SURFACE) TOP MOUNTED 6'-0" AFF
Ф	DUPLEX RECEPTACLE. +1'-6" AFF OR AS NOTED
⇔	DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP
∯GFI	DUPLEX RECEPTACLE W/GROUND FAULT PROTECTION. +1'-6" AFF OR AS NOTED
₩	HEAVY DUTY RECEPTACLE. VOLTAGE, PHASE AND AMPS AS NOTED. +1'-6" AFF OR AS NOTED.
茵	FA COMBINATION AUDIBLE/VISUAL WALL MOUNTED, +6'-8" AFF.
M	FA COMBINATION AUDIBLE/VISUAL CEILING MOUNTED (FLUSH)
μŢ	THERMOSTAT OUTLET BOX WITH 3/4"C, STUBBED UP OUT OF BOX TO ABOVE ACCESSIBLE CEILING. THERMOSTAT AND WIRING BY OTHERS. +4'-0" AFF OR AS NOTED.
	INDICATES WIRING DEVICE ABOVE RE: DRAWING
<u>XX-X</u>	ELECTRICAL EQUIPMENT PROVIDED BY AND INSTALLED BY E.C.
+4'-0"	HEIGHT TO CENTERLINE OF OUTLET BOX ABOVE FINISHED FLOOR
AFF	ABOVE FINISH FLOOR
ETR	EXISTING TO REMAIN
FA	FIRE ALARM

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