Baint Luke's **EAST HOSPITAL**

ABBREVIATIONS

AC. ADD.	ACOUSTIC/ACOUSTICAL ADDENDUM	FLOR. FTG.	FLUORESCENT
ADD. ADD'N.	ADDITION	FND.	FOUNDATION
ABC	AGGREGATE BASE COURSE	FR.	FRAME
AFF	ABOVE FINISH FLOOR	F.H.C.	FIRE HOSE CAB.
AGG.	AGGREGATE	FV.	FIELD VERIFY
A/C	AIR CONDITIONING		
AL.	ALUMINUM	GA.	GAUGE
ALT.	ALTERNATE	GL.	GLASS / GLAZING
A.B.	ANCHOR BOLT	GD.	GRADE
&	AND	G.	GRAM
ARCH.	ARCHITECT	GRL.	GRILLE
ASP.	ASPHALT	GRD.	GRID
@	AT	GND.	GROUND
ACT	ACOUSTIC CEILING TILE/PANEL	G.S.	GALVANIZED STEEL
4	ANGLE	GYP.	GYPSUM GYPSUM BOARD
		GWB/G.B.	
BLKG.	BLOCKING		
BSMT.	BASEMENT	H.R.	HAND RAIL
BM.	BEAM	HDN.	HARDENER
B.M.	BENCHMARK	HDW.	HARDWARE
BD.	BOARD	HDWD.	HARDWOOD
B.O.	BOTTOM OF	HTR.	HEATER
BLDG.	BUILDING	HT.	HEIGHT
		H.P.	HIGH POINT
CAB'T.	CABINET	H.M.	HOLLOW METAL
C.I.P.	CAST IN PLACE	HORIZ.	HORIZONTAL
C.B.	CATCH BASIN	H.B.	HOSE BIB
CLG.	CEILING	H.W.	HOT WATER
CEM.	CEMENT/CEMENTITIOUS		
CG.	CENTIGRAM	IN.	INCH / INCHES
CM	CENTIMETER	I.D.	INSIDE DIAMETER
CL.	CENTER LINE	INSUL.	INSULATION
CER.	CERAMIC	INT.	
C.T.	CERAMIC TILE	INV.	INVERT
CHAN.	CHANNEL		
	CHANNEL	JAN. JT.	JANITOR JOINT
CLR.		JST.	JOIST
C.O. CLOS.	CLEAN OUT CLOSET	0011	
CLUS. COL.	COLUMN	K.P.	KICK PLATE
COL.	CONCRETE		
CONC.	CONNECTION	LAM.	LAMINATED
CONN. CONST.		LB.	POUND
C.J.	CONTROL JOINT	LDG.	LANDING
0.0.	CONSTRUCTION JOINT	LTH.	LATH
CONT.	CONTINUOUS	LAV.	LAVATORY
CONTR.	CONTRACTOR	LG.	LENGTH
COR'G.	CORRUGATED	LOC. LT.	LOCATION LIGHT
CTR.	COUNTER	L.W.C.	LIGHT WEIGHT CONC
CTSK.	COUNTERSUNK	LVR.	LOUVER
C.M.U.	CONCRETE MASONRY UNIT	LOC.	LOCATION
		2001	200/1101
D.P.	DAMP PROOFING	M.O.	MASONRY OPENING
DB.	DECIBEL	MAT'L.	MATERIAL
DIAG.	DIAGONAL	MATE	MANUFACTURER
DIAM.	DIAMETER	MB.	MARKER BOARD
DIM.	DIMENSION	MAX.	MAXIMUM
DISP. DWL.	DISPENSER DOWEL	MECH.	MECHANICAL
DVL. DN.	DOWN	MTL.	METAL
D.S.	DOWNSPOUT	M.L.	METAL LATH
D.S. DWG.	DRAWING	M.	METER
DWO.	DICAWING	MIN.	MINIMUM
		MLDG.	MOLDING
EA.	EACH	MULL.	MULLION
	ELECTRIC		
E.W.C.		N.G.	NATURAL GRADE
EL.		NOM.	NOMINAL
ELEV.	ELEVATOR	N.I.C.	NOT IN CONTRACT
EQ.	EQUAL	N.T.S.	NOT TO SCALE
EQUIP. EXH.		NO. / #	NUMBER
	EXHAUST EXPANSION		
EXPAN. E.J.	EXPANSION EXPANSION JOINT	OBS.	OBSCURE
E.J. EXIST.	EXPANSION JOINT EXISTING	0.C.	ON CENTER
EXIST. EXT.	EXISTING	OPN'G.	OPENING
		0.A.	OVERALL
		0.D.	OUTSIDE DIAMETER
FT.	FEET / FOOT	0.F.S.	OVERFLOW SCUPPE
FIN.	FINISH	O.F.D.	OVERFLOW DRAIN
FIXT.	FIXTURE	O.H.D.	OVERHEAD DOOR
FL.	FLASHING		
FLR.	FLOOR		

FLR. FLOOR F.D. FLOOR DRAIN

AC. ACOUSTIC/ACOUSTICAL

FLOR. FLUORESCENT OOTING OUNDATION FRAME FIRE HOSE CAB. FIELD VERIFY

HAND RAIL HARDENER HARDWARE

> LOUVER LOCATION

> OPENING OVERALL OUTSIDE DIAMETER OVERFLOW SCUPPER OVERFLOW DRAIN OVERHEAD DOOR

PAINTED PAGE PLAM. PLASTIC LAMINATE PAIR PANEL PARTITION PENNY PLATE PLBG. PLUMBING PLYWD. PLYWOOD POINT POUNDS PER SQ. IN. P.S.F. POUNDS PER SQ. FT P.C. PRECAST P.L. PROPERTY LINE

PTD. PG.

PR.

PNL. PTN.

d

PT.

R. RAD.

R.D.

RB.

RE.

REG.

REV.

RF'G.

RGH.

RM.

SCR.

SEL.

SHG.

SHT.

SDG.

SIM.

SM.

SQ.

STD.

S.S. /

T.C.

T.G.

T.O.

ST.

SPEC.

SLDG.

P.S.I.

RISER, RISERS RADIUS ROOF DRAIN RESILIENT BASE REFER TO REGISTER REQ'D. REQUIRED REVISION ROOFING ROUGH ROOM RND. ROUND R.O. ROUGH OPENING

SCHED. SCHEDULE S.C. SEALED CONCRETE SCREW SECT. SECTION SELECT SHEATHING SHEET SIDING SIMILAR SLIDING SMOOTH SPECIFICATION SQUARE STAINED

STANDARD LENGTH ST.STL. STAINLESS STEEL LOCATION STRUC. STRUCTURE LIGHT SUSP. SUSPENDED LIGHT WEIGHT CONCRETE SW.BD. SWITCHBOARD SYS. SYSTEM

> TREAD TOP OF CURB TEMPERED GLASS TOP OF T.S.D.TOP OF STEEL DECKT.W.TEACHERS WARDROBE TYP. TYPICAL

U.O.N. UNLESS OTHERWISE NOTED

VERT. VERTICAL V.G. VERTICAL GRAIN VEST. VESTIBULE V.C.T. VINYL COMPOSITION TILE VCP VITREOUS CLAY PIPE

W.C. WATER CLOSET W.H. WATER HEATER W.F. WIDE FLANGE W/ WITH W/O WITHOUT WD. WOOD WDW. WINDOW

V. VENT W.W.M. WELDED WIRE MESH

W.W. WINDOW WALL

5



LAB REMODEL 100 NE ST LUKES BLVD, LEE'S SUMMIT, MO 64086

P R O J E C T T E A M

ARCHITECT ACI BOLAND, INC.

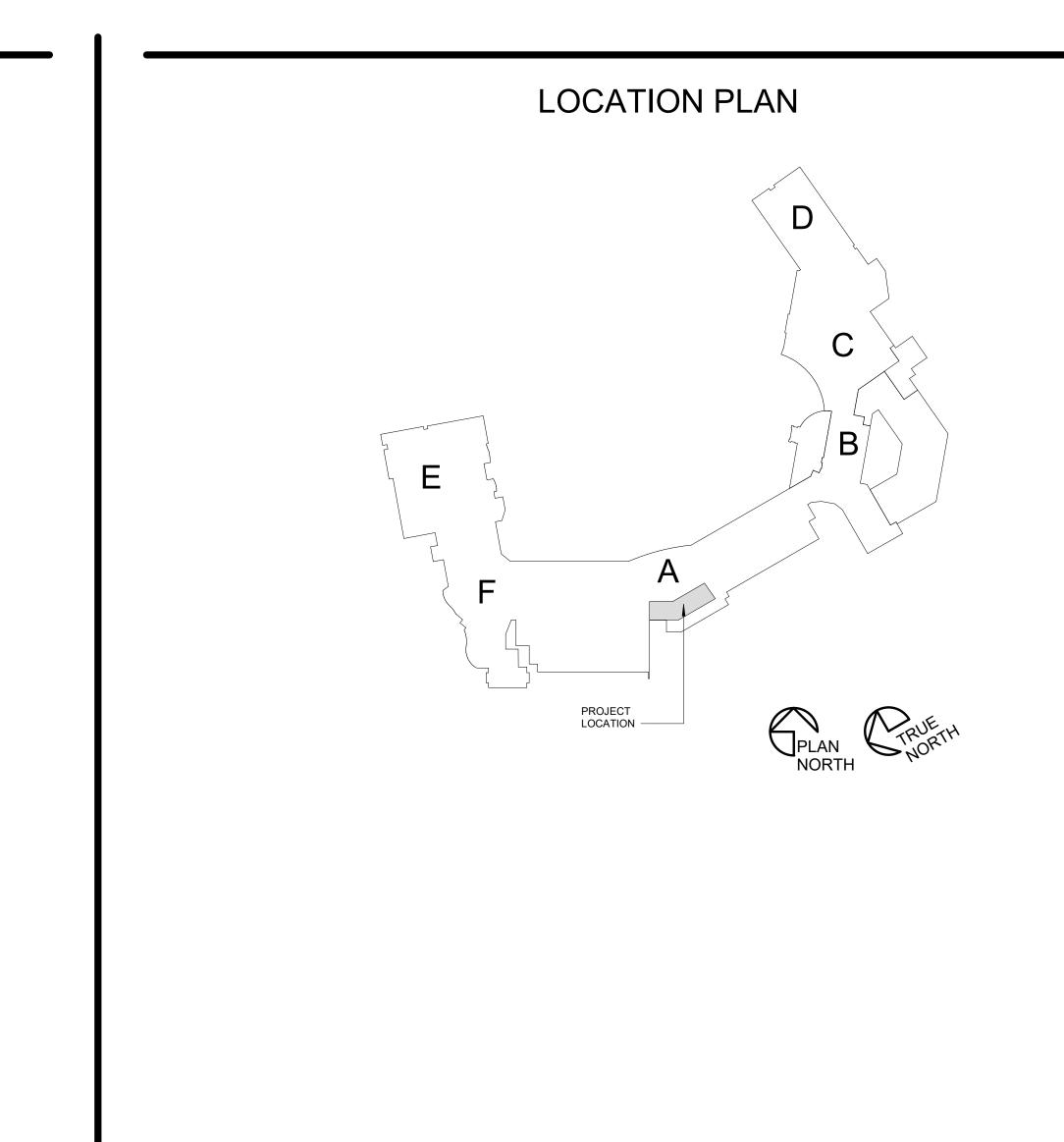
1710 WYANDOTTE STREET KANSAS CITY, MO 64108 PHONE 816.763.9600 816.763.9757 FAX

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4

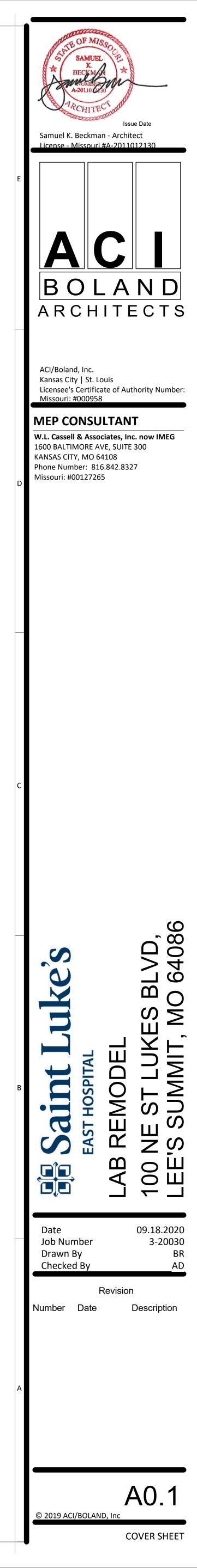
MEP ENGINEER

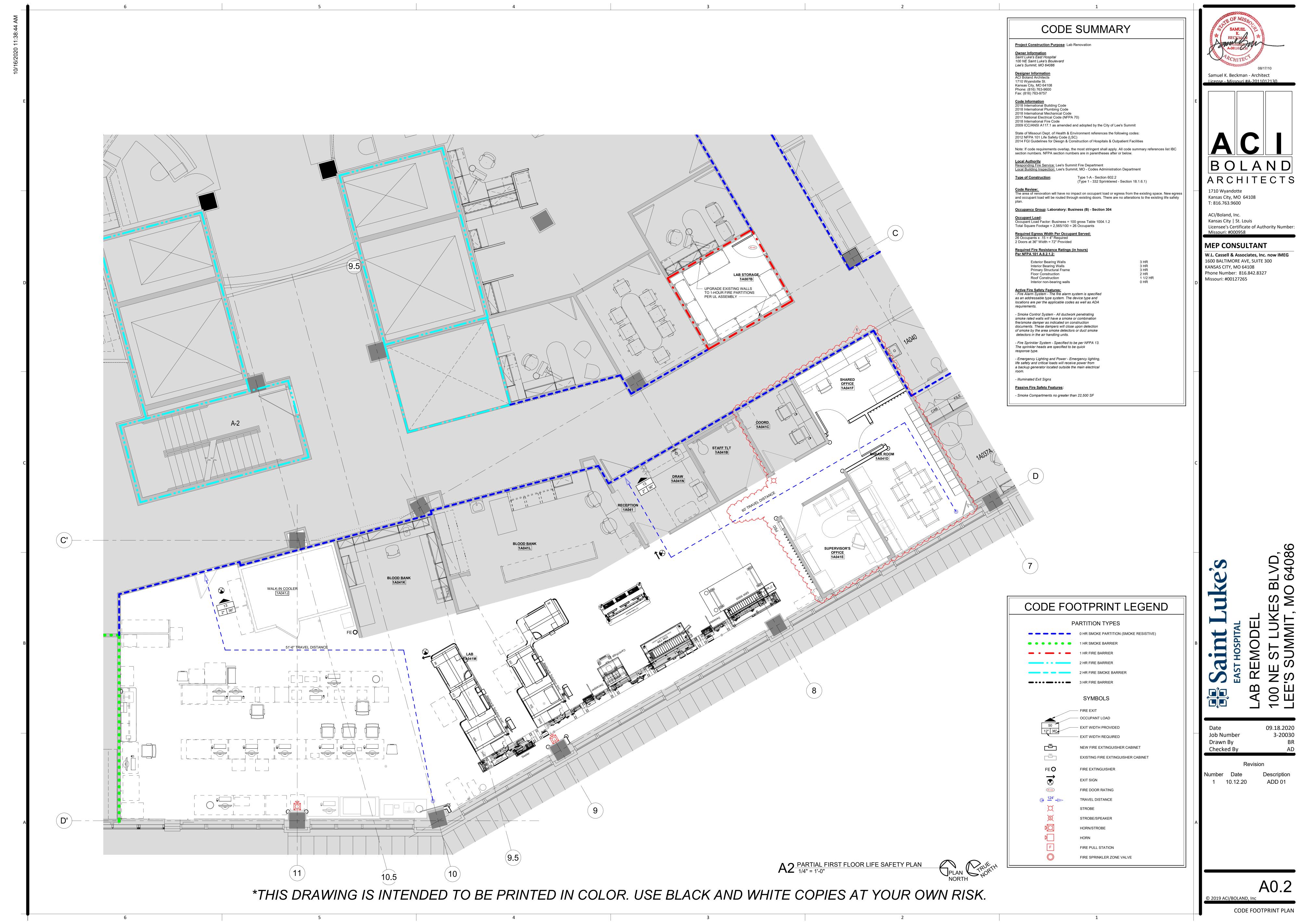
1600 BALTIMORE, SUITE 300 KANSAS CITY, MO 64108 816.842.8437 816.842.6441 PHONE FAX

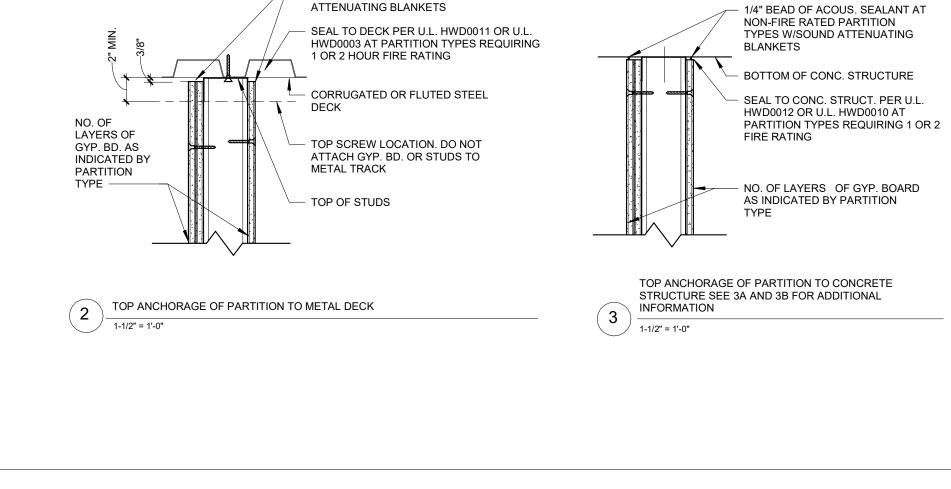


W. L. CASSELL & ASSOCIATES, INC. NOW IMEG

SHEET NUMBER	SHEET INDEX
GENERAL A0.1	COVER SHEET
A0.1 A0.2	CODE FOOTPRINT PLAN
A0.3	GENERAL NOTES, LEGENDS, SYMBOLS, & PARTITION TYPES
A0.4	U.L. DESIGN ASSEMBLIES
DEMOLITION	
AD2.1	DEMOLITION PLAN
AD2.2	DEMOLITION REFLECTED CEILING PLAN
ARCHITECTURE	
AP2.1	ARCHITECTURAL PHASING PLAN
A2.1	FIRST FLOOR PLAN
A3.1 A4.1	FIRST FLOOR REFLECTED CEILING PLAN
A4.1 A7.3	FIRST FLOOR FINISH PLAN, FINISH SCHEDULE & LEGEND INTERIOR DETAILS
PLUMBING	
PM000	SYMBOLS, ABBREVIATIONS, & GENERAL NOTES
DP2.0	PLUMBING BASEMENT DEMOLITION PLAN
DP2.1	PLUMBING FIRST FLOOR DEMOLITION PLAN
P2.0	PLUMBING BASEMENT PLAN
P2.1	PLUMBING FIRST FLOOR PLAN, SCHEDULE & DETAILS
PE2.3	PLUMBING AND ELECTRICAL THIRD FLOOR PLANS
MECHANICAL	
DM2.1	MECHANICAL FIRST FLOOR DEMOLITION PLAN
DMP2.1 M2.1	MECHANICAL PIPING FIRST FLOOR DEMOLITION PLAN MECHANICAL FIRST FLOOR PLAN AND SCHEDULE
MP2.1	MECHANICAL PIPING FIRST FLOOR PLAN
ELECTRICAL	
E000	SYMBOLS, ABBREVIATIONS, & GENERAL NOTES
DEL2.1	LIGHTING FIRST FLOOR DEMOLITION PLAN
DEP2.1	POWER FIRST FLOOR DEMOLITION PLAN
DEC2.1	COMMUNICATIONS FIRST FLOOR DEMOLITION PLAN
EL2.1	LIGHTING FIRST FLOOR PLAN
EP2.1	POWER FIRST FLOOR PLAN & SCHEDULE
EC2.1	COMMUNICATIONS FIRST FLOOR PLAN

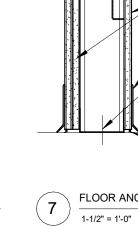


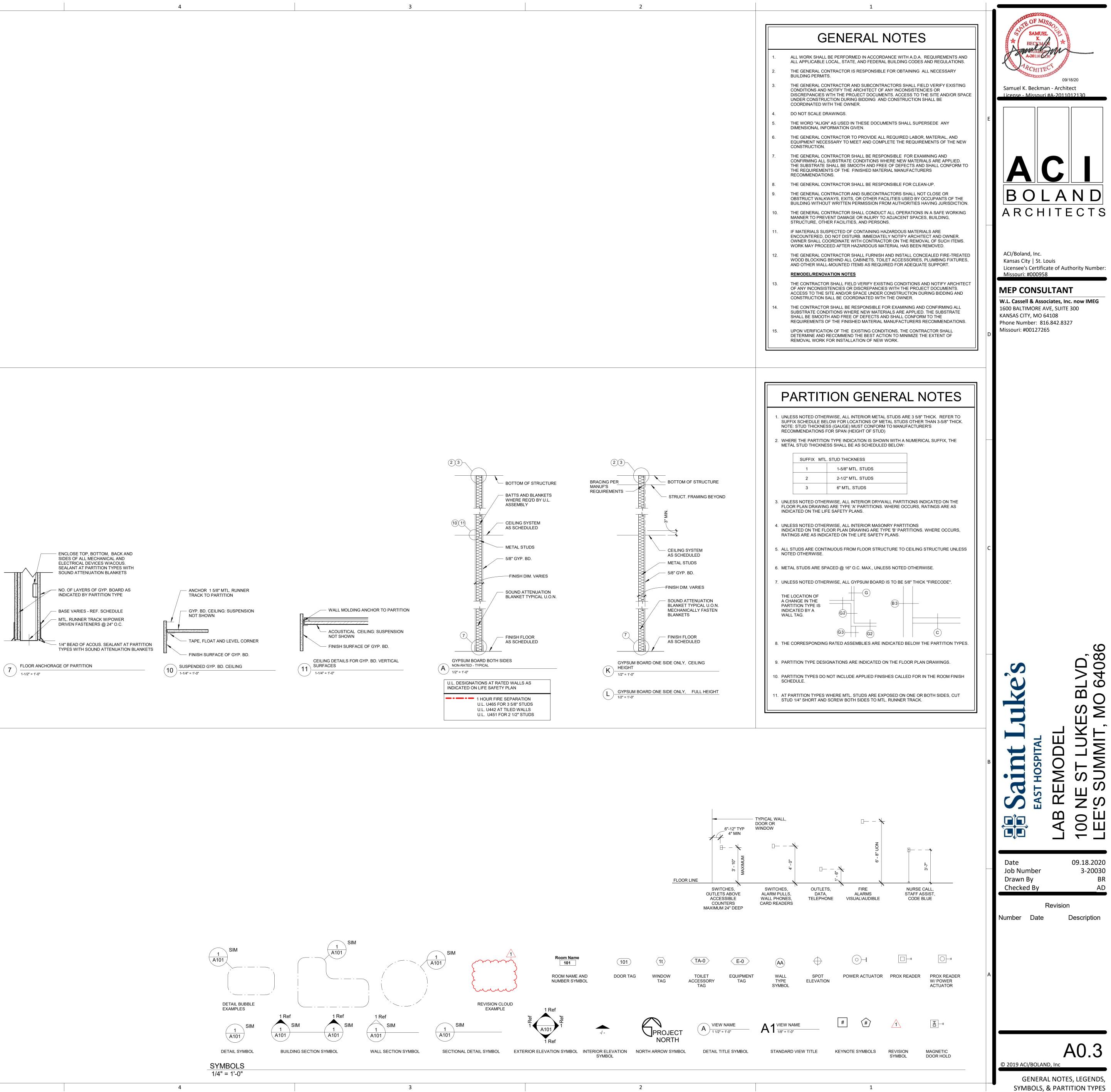


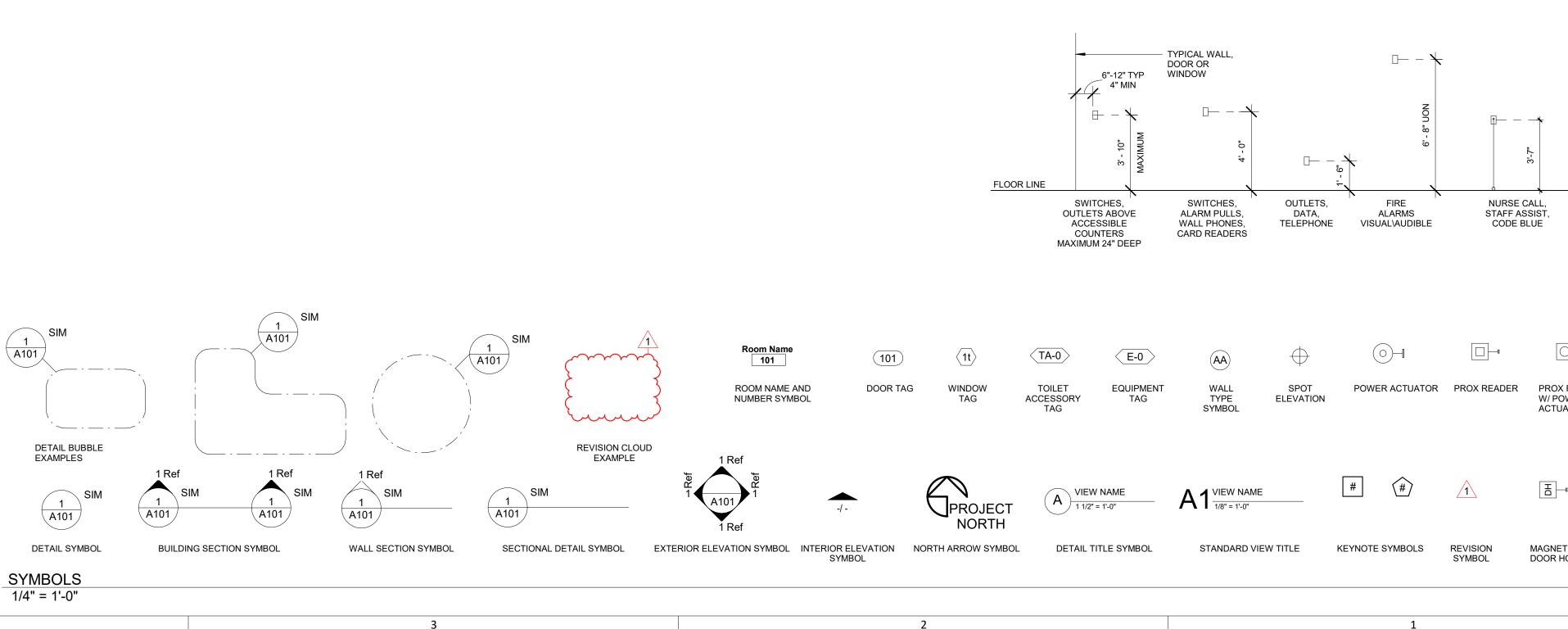


- ACOUS . SEALANT AT NON FIRE-RATED

PARTITION TYPES W/SOUND







Design No. U465 BXUV.U465

Fire-resistance Ratings - ANSI/UL 263 Page Bottom Design/System/Construction/Assembly Usage Disclaimer

• Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation tified products, equipment, system, devices, and materials Authorities Having Jurisdiction should be consulted before construction. Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compapilicable requirements. The published information cannot always address every construction nuance encountered in the f
 When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the provided b

manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Informat product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials • Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Cana See General Information for Fire-resistance Ratings - ANSI/UL 263 See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design No. U465 August 25, 2016 Nonbearing Wall Rating — 1 HR. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certif as Canada), respectively

a series and the series of the ann.

1. Floor and Ceiling Runners – (Not Shown) – Channel shaped runners, 3-5/8 in. deep (min), 1-1/4 in. legs, f from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. 1A. Framing Members* – Floor and Ceiling Runners – (Not Shown) – As an alternate to Item 1 – Channel ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV - Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System **STEEL CONSTRUCTION SYSTEMS INC** — Type SUPREME Framing System

UNITED METAL PRODUCTS INC — Type SUPREME Framing System

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

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track **CRACO MFG INC** — SmartTrack20[™]

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

1C. Floor and Ceiling Runners — (Not Shown) — For use with Item 2C — Channel shaped, fabricated from min corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor ceiling with fasteners spaced max 24 in. OC. 1D. Framing Members* - Floor and Ceiling Runners - Not Shown - In lieu of Items 1 through 1C - For o Item 2D and 4G only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

DMFCWBS L L C — ProTRAK

MBA METAL FRAMING — ProTRAK

RAM SALES L L C — Ram ProTRAK

STEEL STRUCTURAL PRODUCTS L L C - Tri-S ProTRAK

CLARKDIETRICH BUILDING SYSTEMS - CD ProTRAK

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

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

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

1H. Floor and Ceiling Runners – (Not Shown) – Channel shaped, fabricated from min 0.02 in. galv steel, mi accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.0 steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC. MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20[™] Track VT100

11. Framing Members* – Floor and Ceiling Runners – Not Shown – In lieu of Item 1 – For use with Item proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv attached to floor and ceiling with fasteners spaced 24 in. OC max. **TELLING INDUSTRIES L L C** − Viper20[™] Track

2. Steel Studs - Channel shaped, 3-5/8 in. deep (min), formed from min No. 25 MSG galv steel spaced 24 in. (tuds to be cut 3/4 in. less than assembly height 2A. Framing Members* – Steel Studs – As an alternate to Item 2 – Channel shaped studs, min 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV - Type SUPREME Framing System QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System

UNITED METAL PRODUCTS INC — Type SUPREME Framing System

2B. Framing Members* – Steel Studs – Not Shown – In lieu of Item 2 – For use with Item 1B, proprietary 1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cu less in length than assembly height. CALIFORNIA EXPANDED METAL PRODUCTS CO − Viper20[™]

CRACO MFG INC — SmartStud20[™]

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

2C. **Steel Studs** – (As an alternate to Item 2, For use with Item 4E) – Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height. 2D. Framing Members* - Steel Studs - As an alternate to Items 2 through 2C - For use with Item 1D and 4G only, annel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height. CLARKDIETRICH BUILDING SYSTEMS - CD ProSTUD

DMFCWBS L L C - ProSTUD

MBA METAL FRAMING — ProSTUD

RAM SALES L L C — Ram ProSTUD

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProSTUD

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

TELLING INDUSTRIES L L C — TRUE-STUD™

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

	4	3
	2G. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 through 2F — For use with Item 1G.	CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A, LGFC
	Proprietary channel shaped studs, minimum 3-5/8 in. wide, Studs to be cut 1/2 in. less than the assembly height. STUDCO BUILDING SYSTEMS — CROCSTUD	NATIONAL GYPSUM CO — Types FSW
	2H. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1I, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in.	UNITED STATES GYPSUM CO - Type SCX
	less in length than assembly height. TELLING INDUSTRIES L L C — Viper20™	USG BORAL ZAWAWI DRYWALL L C SFZ — Type SCX
n and use of UL mpliance with e field.	2I. Framing Members* — Steel Studs — In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height. EB MéTAL INC — EB Stud	4H. Gypsum Board* — (As an alternate to Items 4 through 4G) — Nominal 5/8 in. thic vertically and secured as described in Item 4. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES
product tion for each and alternate	2J. Framing Members* — Steel Studs — In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height. OLMAR SUPPLY INC — PRIMESTUD	4I. Gypsum Board* – (As an alternate to Items 4 through 4F) – For use with Items 1 wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel scr of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered assembly. UNITED STATES GYPSUM CO – Type SCX
nada	2K. Framing Members* — Steel Studs — As an alternate to Item 2 — For use with Item 1B (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in. wide by 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. MARINO/WARE, DIV OF WARE INDUSTRIES INC — StudRite™	USG BORAL ZAWAWI DRYWALL L L C SFZ — Type SCX 4J. Gypsum Board* — (Not Shown) — (As an alternate to Item 4 when used as the ba wall. For direct attachment only to steel studs Item 2C) — Nom 5/8 in. thick lead backer
	3. Batts and Blankets* — (Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity.	square or tapered edges, applied vertically. Vertical joints centered over studs and stagg opposite sides of studs. Gypsum board secured to studs with 1-1/4 in. long Type S-12 s perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 9A) o
tification (sucl	See Batts and Blankets (BZJZ) category for names of Classified companies. 3A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — (100% Borate Formulation) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft ³ . Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft ³ , in accordance with the application instructions supplied with the product. U S GREENFIBER L L C — INS735& INS745 for use with wet or dry application. INS765LD and INS770LD are to be used for dry application only	 MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum 4K. Gypsum Board* — (As an alternate to Item 4 and 4A, not for use with Items 1D, 1 thick gypsum panels with beveled, square or tapered edges installed as described in Item CGC INC — Type ULX
10000 100	3B. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) and Item 3A — Spray applied cellulose insulation	UNITED STATES GYPSUM CO - Type ULX
	material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft. NU-WOOL CO INC — Cellulose Insulation	USG MEXICO S A DE C V — Type ULX 4L. Gypsum Board* — (Not Shown) — (As an alternate to Item 4 when used as the ba wall. For direct attachment only to steel studs Item 2C). Nom 5/8 in. thick lead backed of
, formed	3C. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft ³ . INTERNATIONAL CELLULOSE CORP — Celbar-RL	square or tapered edges, applied vertically. Vertical joints centered over studs and stagg opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel i spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behi gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in thickness of 0.14 in. placed on the face of studs and attached to the stud with construct Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of th in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Le
el shaped,	3D. Batts and Blankets* — For use with Item 8. Nom 3 in. thick, minimum 3.4 pcf mineral wool batts, friction fit between the studs and floor and ceiling runners.	a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall
	See Batts and Blankets (BZJZ) category for names of manufacturers. 3E. Batts and Blankets* — For use with Item 4P. Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance.	4M. Gypsum Board* — (For use with Item 8) — 5/8 in. thick, 4 ft wide, applied vertica (Item 8) with vertical joints located anywhere over stud cavities. Secured to mineral and G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermedial
	See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies. 4. Gypsum Board* — 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to Items 6 (resilient channels) or 6A, 6B or 6C (furring channels), gypsum board is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.	Board (Item 8). Secured to outermost studs and floor and ceiling runners with 2 in. long Gypsum Board joints covered with paper tape and joint compound. Screw heads covered AMERICAN GYPSUM CO — Type AG-C
	ACADIA DRYWALL SUPPLIES LTD — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing AMERICAN GYPSUM CO — Types AG-C, AGX-1, M-Glass	CERTAINTEED GYPSUM INC — Type FRPC, Type C CGC INC — Types C, IP-X2, IPC-AR
	BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1	CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A
2B, Iv steel,	CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)	GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C
	CERTAINTEED GYPSUM INC — Types 1, EGRG, GlasRoc, Type X, Type X-1, Type C, SilentFX, 5/8" Easi-Lite Type X	NATIONAL GYPSUM CO — Types eXP-C, FSK-C, FSW-C
	CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD, LGLLX	PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C
n 20 MSG or and use with min	GEORGIA-PACIFIC GYPSUM L L C — Types 5, 6, 9, C, DAP, DD, DA, DAPC, DGG, DS, GPFS6, LS, Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, TG-C, GreenGlass Type X, Type X ComfortGuard Sound Deadening Gypsum Board, Type LWX, Veneer Plaster Base-Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type LWX, Type DGLW, Water Rated-Type DGLW, Soffit-Type DGLW, Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated - Type LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W	PANEL REY S A — Types PRC, PRC2 SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireSto Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACT DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine M M2TECH ACTIV'Air
	NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSMR-C, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, FSW-8, FSL	THAI GYPSUM PRODUCTS PCL - Type C
	PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-C, PG-9, PG-11, PGS-WRS	UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR
	PANEL REY S A — Types GREX, PRC, PRC2, PRX, RHX, MDX, ETX	USG BORAL ZAWAWI DRYWALL L L C SFZ — Type C
	SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air	 USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR 4N. Wall and Partition Facings and Accessories* — (As an alternate to Item 4) — N panels, applied vertically and secured as described in Item 4.
use with min 0.018	SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1	PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527
	THAI GYPSUM PRODUCTS PCL — Type X, Type C	4O. Gypsum Board* — As an alternate to Items 4, 4A, 4B, and 4C — Two layers Nom. applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opp staggered or backed by steel framing. Horizontal joints on the same side need not be st
ise with ed to floor	UNITED STATES GYPSUM CO — Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX, USGX (Joint tape and compound, Item 5, optional for use with Type USGX)	horizontally, both layers of gypsum board fastened to each side of framing with 1 in. lon in. OC and staggered 4 in. OC between layers. When applied vertically, both layers of gy of framing with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges and in. OC between layers. Screws spaced a max 12 in. along the top and bottom edges of t
	USG BORAL ZAWAWI DRYWALL L C SFZ — Types C, SCX	NATIONAL GYPSUM CO — Type FSW
ise with rs spaced	USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX) 4A. Gypsum Board* — (As alternate to Item 4) — Nom 5/8 in. thick gypsum panels with beveled, square or tapered	4P. Gypsum Board* — As an alternate to Item 4. For use with Item 3E, Batts and Bla attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws sp board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on When attached to item 6 (resilient channels) or 6A, 6B or 6C (furring channels), gypsum furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.
n width to 2 in. galv	edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Panels attached to steel studs and floor runner with 1 in. long Type S steel screws spaced 8 in. OC when applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. When used in widths other than 48 in., gypsum panels to be installed horizontally. CERTAINTEED GYPSUM INC — Type X, Type X-1, Type C, Type EGRG/ GlasRoc	UNITED STATES GYPSUM CO — Types ULIX 5. Joint Tape and Compound — Vinyl, dry or premixed joint compound, applied in two paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an altern gypsum veneer plaster may be applied to the entire surface of Classified veneer basebo and joint compound may be omplitted when gypsum boards are supplied with square edg
2H, Iv steel,	CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)	 6. Resilient Channel – (Optional – Not Shown) – 25 MSG galv steel resilient channel flange portion attached to each intersecting stud with 1/2 in. long type S-12 pan head s Item 4F or 4J. 6A. Steel Framing Members* – (Not Shown) – As an alternate to Item 6, furring characteristics of the statement of the state
OC max.	CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD GEORGIA-PACIFIC GYPSUM L L C — Types DAP, DAPC, DGG, DS	as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to s b. Ends of adjoining channels are overlapped 6 in. and tied together with SWG galv steel wire near each end of overlap. As an alternate, ends of a
	SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air, Gyproc DuraLine, Gyproc DuraLine MR, Gyproc DuraLine M2TECH, Gyproc DuraLine ACTIV'Air, Gyproc DuraLine MR ACTIV'Air, Gyproc DuraLine M2TECH ACTIV'Air	b) We gave start with related to the top of the prime with two self-tapping No. 6 framil long at the midpoint of the overlap, with one screw on each flange of the b. Framing Members* — Used to attach furring channels (Item a) to s spaced 48 in. OC., and secured to studs with 1-5/8 in. wafer or hex hea through the center grommet. Furring channels are friction fitted into clip 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/3.
	THAI GYPSUM PRODUCTS PCL — Type X, Type C	channels. PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75)
	UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX, USGX (Joint tape and compound, Item 5, optional for use with Type USGX)	6B. Framing Members* — (Not Shown) — (Optional on one or both sides) — As an alt and Steel Framing Members as described below:
	USG BORAL ZAWAWI DRYWALL L L C SFZ — Types C, SCX	a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wid max. 24 in. OC perpendicular to studs. Channels secured to studs as des board attached to furring channels as described in Item 4.
channel t 3/4 in	USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, USGX, WRC or WRX (Joint tape and compound, Item 5, optional for use with Type USGX)	b. Steel Framing Members* — Used to attach furring channels (Item Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 x drilling, S-12 steel screw through the center grommet. Furring channels clips.
it 3/4 in.	4B. Gypsum Board* — (As an alternate to Items 4 or 4A) — Nom 3/4 in. thick, 4 ft wide, installed as described in Item 4A with screw length increased to 1-1/4 in. CGC INC — Types AR, IP-AR	PLITEQ INC — Type Genie Clip 6C. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel below:

UNITED STATES GYPSUM CO - Types AR, IP-AR

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

GEORGIA-PACIFIC GYPSUM L L C – Type DGG, GreenGlass Type X

NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

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

4D. Gvosum Board* — As an alternate to Items 4, 4A, 4B, and 4C — Nom. 5/8 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Gypsum panels fastened to framing with 1 in. long Type S steel screws 8 in. OC along vertical edges and 12 in. OC in the field when panels are applied vertically. When gypsum panels applied horizontally, fasten to raming with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges and in the field. Screws spaced a max 12 in. along the top and bottom edges of the wall for both vertical and horizontal applications. NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSL, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6, FSW-8,

4E. Gypsum Board* – (As an alternate to Items 4 through 4D) – Installed as described in Item 4. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 1 in. long, Type S steel screws spaced, 8 in, OC. Not to be used with item 6.

Blankets, Item 3D, and Adhesive, Item 11, are required.

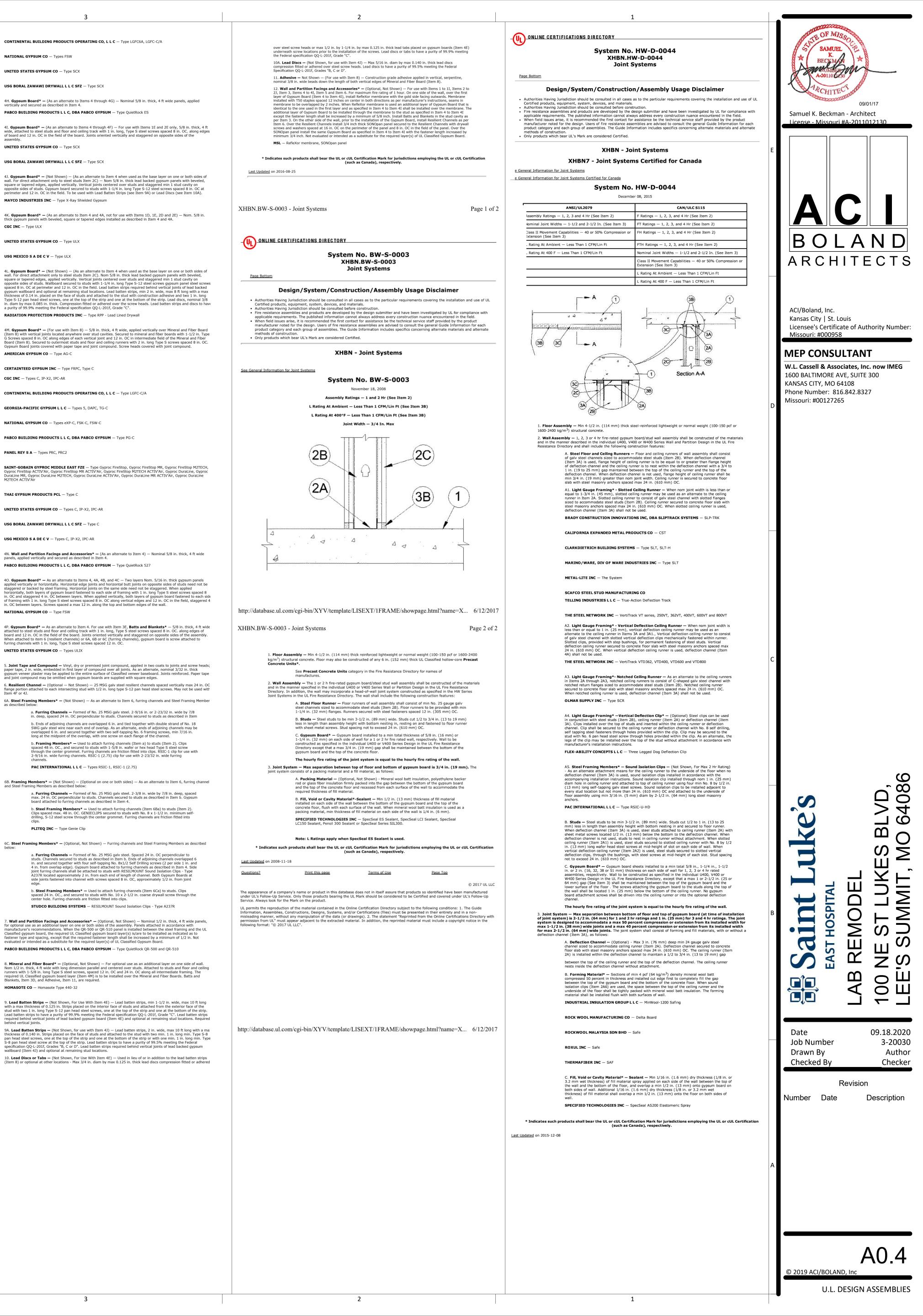
wallboard (Item 4J) and optional at remaining stud locations.

HOMASOTE CO — Homasote Type 440-32

behind vertical joints.

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

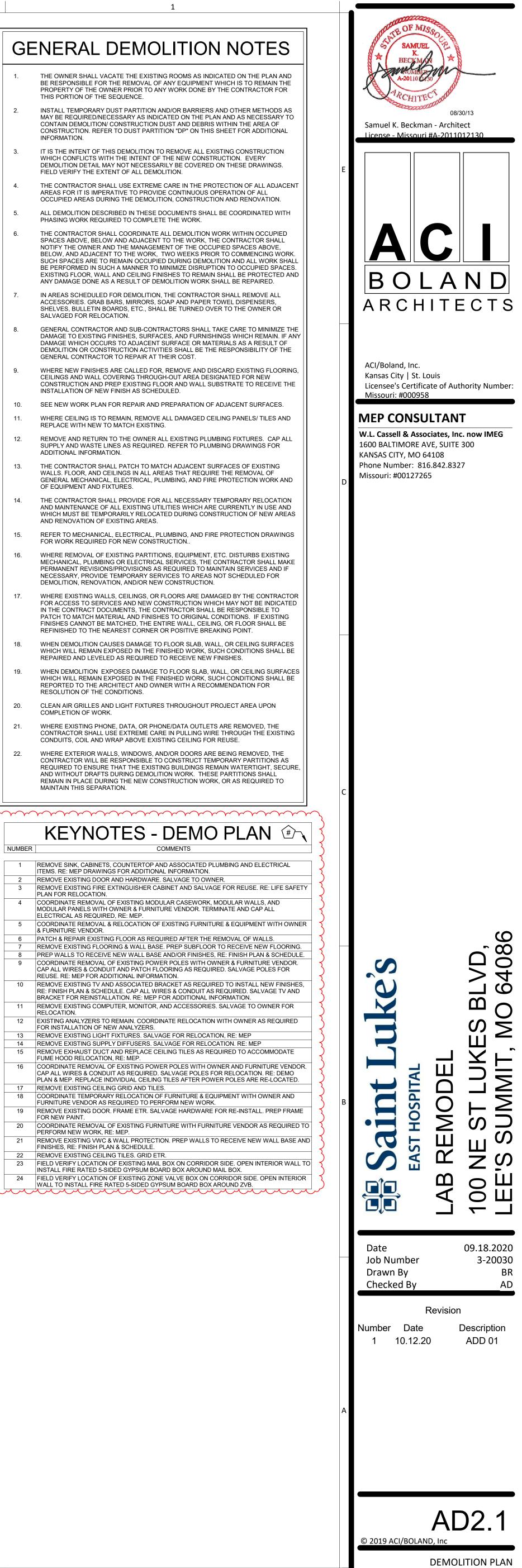
4G. **Gypsum Board*** — (As an alternate to Items 4 through 4F) — For use with Items 1D and 2D only, 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly



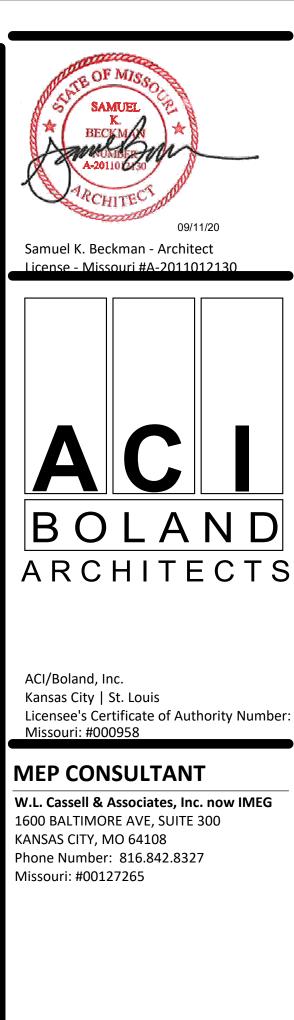


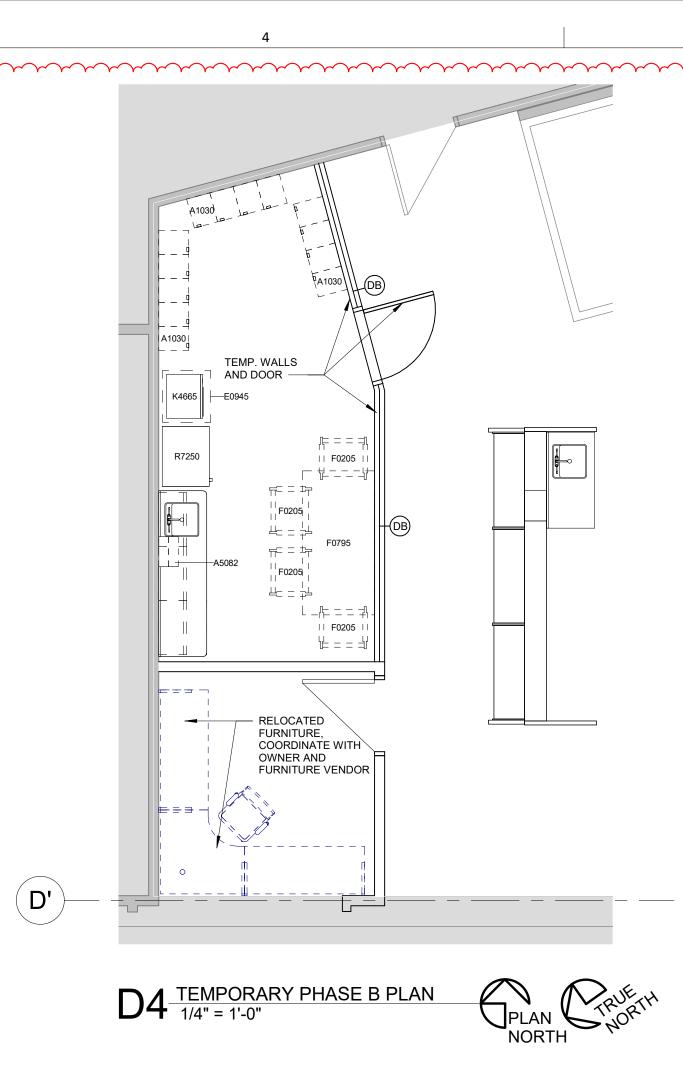
GENERAL DEMOLITION NOTES THE OWNER SHALL VACATE THE EXISTING ROOMS AS INDICATED ON THE PLAN AND BE RESPONSIBLE FOR THE REMOVAL OF ANY EQUIPMENT WHICH IS TO REMAIN THE PROPERTY OF THE OWNER PRIOR TO ANY WORK DONE BY THE CONTRACTOR FOR THIS PORTION OF THE SEQUENCE. INSTALL TEMPORARY DUST PARTITION AND/OR BARRIERS AND OTHER METHODS AS MAY BE REQUIRED/NECESSARY AS INDICATED ON THE PLAN AND AS NECESSARY TO CONTAIN DEMOLITION/ CONSTRUCTION DUST AND DEBRIS WITHIN THE AREA OF CONSTRUCTION. REFER TO DUST PARTITION "DP" ON THIS SHEET FOR ADDITIONAL INFORMATION. IT IS THE INTENT OF THIS DEMOLITION TO REMOVE ALL EXISTING CONSTRUCTION WHICH CONFLICTS WITH THE INTENT OF THE NEW CONSTRUCTION. EVERY DEMOLITION DETAIL MAY NOT NECESSARILY BE COVERED ON THESE DRAWINGS. FIELD VERIFY THE EXTENT OF ALL DEMOLITION. THE CONTRACTOR SHALL USE EXTREME CARE IN THE PROTECTION OF ALL ADJACENT AREAS FOR IT IS IMPERATIVE TO PROVIDE CONTINUOUS OPERATION OF ALL OCCUPIED AREAS DURING THE DEMOLITION, CONSTRUCTION AND RENOVATION. ALL DEMOLITION DESCRIBED IN THESE DOCUMENTS SHALL BE COORDINATED WITH PHASING WORK REQUIRED TO COMPLETE THE WORK. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITHIN OCCUPIED SPACES ABOVE, BELOW AND ADJACENT TO THE WORK, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MANAGEMENT OF THE OCCUPIED SPACES ABOVE, BELOW, AND ADJACENT TO THE WORK, TWO WEEKS PRIOR TO COMMENCING WORK. SUCH SPACES ARE TO REMAIN OCCUPIED DURING DEMOLITION AND ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO MINIMIZE DISRUPTION TO OCCUPIED SPACES. EXISTING FLOOR, WALL AND CEILING FINISHES TO REMAIN SHALL BE PROTECTED AND ANY DAMAGE DONE AS A RESULT OF DEMOLITION WORK SHALL BE REPAIRED. IN AREAS SCHEDULED FOR DEMOLITION. THE CONTRACTOR SHALL REMOVE ALL ACCESSORIES, GRAB BARS, MIRRORS, SOAP AND PAPER TOWEL DISPENSERS. SHELVES, BULLETIN BOARDS, ETC., SHALL BE TURNED OVER TO THE OWNER OR SALVAGED FOR RELOCATION. GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL TAKE CARE TO MINIMIZE THE DAMAGE TO EXISTING FINISHES, SURFACES, AND FURNISHINGS WHICH REMAIN. IF ANY DAMAGE WHICH OCCURS TO ADJACENT SURFACE OR MATERIALS AS A RESULT OF DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REPAIR AT THEIR COST. WHERE NEW FINISHES ARE CALLED FOR, REMOVE AND DISCARD EXISTING FLOORING, CEILINGS AND WALL COVERING THROUGH-OUT AREA DESIGNATED FOR NEW CONSTRUCTION AND PREP EXISTING FLOOR AND WALL SUBSTRATE TO RECEIVE THE INSTALLATION OF NEW FINISH AS SCHEDULED. SEE NEW WORK PLAN FOR REPAIR AND PREPARATION OF ADJACENT SURFACES. WHERE CEILING IS TO REMAIN, REMOVE ALL DAMAGED CEILING PANELS/ TILES AND REPLACE WITH NEW TO MATCH EXISTING. REMOVE AND RETURN TO THE OWNER ALL EXISTING PLUMBING FIXTURES. CAP ALL SUPPLY AND WASTE LINES AS REQUIRED. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL PATCH TO MATCH ADJACENT SURFACES OF EXISTING WALLS. FLOOR, AND CEILINGS IN ALL AREAS THAT REQUIRE THE REMOVAL OF GENERAL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION WORK AND OF EQUIPMENT AND FIXTURES. THE CONTRACTOR SHALL PROVIDE FOR ALL NECESSARY TEMPORARY RELOCATION AND MAINTENANCE OF ALL EXISTING UTILITIES WHICH ARE CURRENTLY IN USE AND WHICH MUST BE TEMPORARILY RELOCATED DURING CONSTRUCTION OF NEW AREAS AND RENOVATION OF EXISTING AREAS. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR WORK REQUIRED FOR NEW CONSTRUCTION... WHERE REMOVAL OF EXISTING PARTITIONS, EQUIPMENT, ETC. DISTURBS EXISTING MECHANICAL, PLUMBING OR ELECTRICAL SERVICES, THE CONTRACTOR SHALL MAKE PERMANENT REVISIONS/PROVISIONS AS REQUIRED TO MAINTAIN SERVICES AND IF NECESSARY, PROVIDE TEMPORARY SERVICES TO AREAS NOT SCHEDULED FOR DEMOLITION, RENOVATION, AND/OR NEW CONSTRUCTION. WHERE EXISTING WALLS, CEILINGS, OR FLOORS ARE DAMAGED BY THE CONTRACTOR FOR ACCESS TO SERVICES AND NEW CONSTRUCTION WHICH MAY NOT BE INDICATED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH TO MATCH MATERIAL AND FINISHES TO ORIGINAL CONDITIONS. IF EXISTING FINISHES CANNOT BE MATCHED, THE ENTIRE WALL, CEILING, OR FLOOR SHALL BE REFINISHED TO THE NEAREST CORNER OR POSITIVE BREAKING POINT. WHEN DEMOLITION CAUSES DAMAGE TO FLOOR SLAB. WALL. OR CEILING SURFACES 18. WHICH WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH CONDITIONS SHALL BE REPAIRED AND LEVELED AS REQUIRED TO RECEIVE NEW FINISHES WHEN DEMOLITION EXPOSES DAMAGE TO FLOOR SLAB, WALL, OR CEILING SURFACES 19 WHICH WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH CONDITIONS SHALL BE REPORTED TO THE ARCHITECT AND OWNER WITH A RECOMMENDATION FOR RESOLUTION OF THE CONDITIONS. CLEAN AIR GRILLES AND LIGHT FIXTURES THROUGHOUT PROJECT AREA UPON COMPLETION OF WORK. WHERE EXISTING PHONE. DATA. OR PHONE/DATA OUTLETS ARE REMOVED. THE CONTRACTOR SHALL USE EXTREME CARE IN PULLING WIRE THROUGH THE EXISTING CONDUITS, COIL AND WRAP ABOVE EXISTING CEILING FOR REUSE. WHERE EXTERIOR WALLS, WINDOWS, AND/OR DOORS ARE BEING REMOVED, THE CONTRACTOR WILL BE RESPONSIBLE TO CONSTRUCT TEMPORARY PARTITIONS AS REQUIRED TO ENSURE THAT THE EXISTING BUILDINGS REMAIN WATERTIGHT, SECURE, AND WITHOUT DRAFTS DURING DEMOLITION WORK. THESE PARTITIONS SHALL REMAIN IN PLACE DURING THE NEW CONSTRUCTION WORK, OR AS REQUIRED TO MAINTAIN THIS SEPARATION. KEYNOTES - DEMO PLAN 塗 NUMBER REMOVE SINK, CABINETS, COUNTERTOP AND ASSOCIATED PLUMBING AND ELECTRICAL ITEMS. RE: MEP DRAWINGS FOR ADDITIONAL INFORMATION. REMOVE EXISTING DOOR AND HARDWARE. SALVAGE TO OWNER. REMOVE EXISTING FIRE EXTINGUISHER CABINET AND SALVAGE FOR REUSE. RE: LIFE SAFETY PLAN FOR RELOCATION. COORDINATE REMOVAL OF EXISTING MODULAR CASEWORK, MODULAR WALLS, AND MODULAR PANELS WITH OWNER & FURNITURE VENDOR. TERMINATE AND CAP ALL ELECTRICAL AS REQUIRED, RE: MEP. COORDINATE REMOVAL & RELOCATION OF EXISTING FURNITURE & EQUIPMENT WITH OWNER & FURNITURE VENDOR. PATCH & REPAIR EXISTING FLOOR AS REQUIRED AFTER THE REMOVAL OF WALLS. REMOVE EXISTING FLOORING & WALL BASE. PREP SUBFLOOR TO RECEIVE NEW FLOORING. PREP WALLS TO RECEIVE NEW WALL BASE AND/OR FINISHES, RE: FINISH PLAN & SCHEDULE. COORDINATE REMOVAL OF EXISTING POWER POLES WITH OWNER & FURNITURE VENDOR. CAP ALL WIRES & CONDUIT AND PATCH FLOORING AS REQUIRED. SALVAGE POLES FOR REUSE. RE: MEP FOR ADDITIONAL INFORMATION. 10 REMOVE EXISTING TV AND ASSOCIATED BRACKET AS REQUIRED TO INSTALL NEW FINISHES, RE: FINISH PLAN & SCHEDULE. CAP ALL WIRES & CONDUIT AS REQUIRED. SALVAGE TV AND BRACKET FOR REINSTALLATION. RE: MEP FOR ADDITIONAL INFORMATION. REMOVE EXISTING COMPUTER, MONITOR, AND ACCESSORIES. SALVAGE TO OWNER FOR RELOCATION. 12 EXISTING ANALYZERS TO REMAIN. COORDINATE RELOCATION WITH OWNER AS REQUIRED FOR INSTALLATION OF NEW ANALYZERS. 13 REMOVE EXISTING LIGHT FIXTURES. SALVAGE FOR RELOCATION, RE: MEP 14 REMOVE EXISTING SUPPLY DIFFUSERS. SALVAGE FOR RELOCATION. RE: MEP 15 REMOVE EXHAUST DUCT AND REPLACE CEILING TILES AS REQUIRED TO ACCOMMODATE FUME HOOD RELOCATION, RE: MEP. 16 COORDINATE REMOVAL OF EXISTING POWER POLES WITH OWNER AND FURNITURE VENDOR. CAP ALL WIRES & CONDUIT AS REQUIRED. SALVAGE POLES FOR RELOCATION. RE: DEMO PLAN & MEP. REPLACE INDIVIDUAL CEILING TILES AFTER POWER POLES ARE RE-LOCATED. 17 REMOVE EXISTING CEILING GRID AND TILES. 18 COORDINATE TEMPORARY RELOCATION OF FURNITURE & EQUIPMENT WITH OWNER AND FURNITURE VENDOR AS REQUIRED TO PERFORM NEW WORK. 19 REMOVE EXISTING DOOR. FRAME ETR. SALVAGE HARDWARE FOR RE-INSTALL. PREP FRAME FOR NEW PAINT. 20 COORDINATE REMOVAL OF EXISTING FURNITURE WITH FURNITURE VENDOR AS REQUIRED TO PERFORM NEW WORK, RE: MEP.

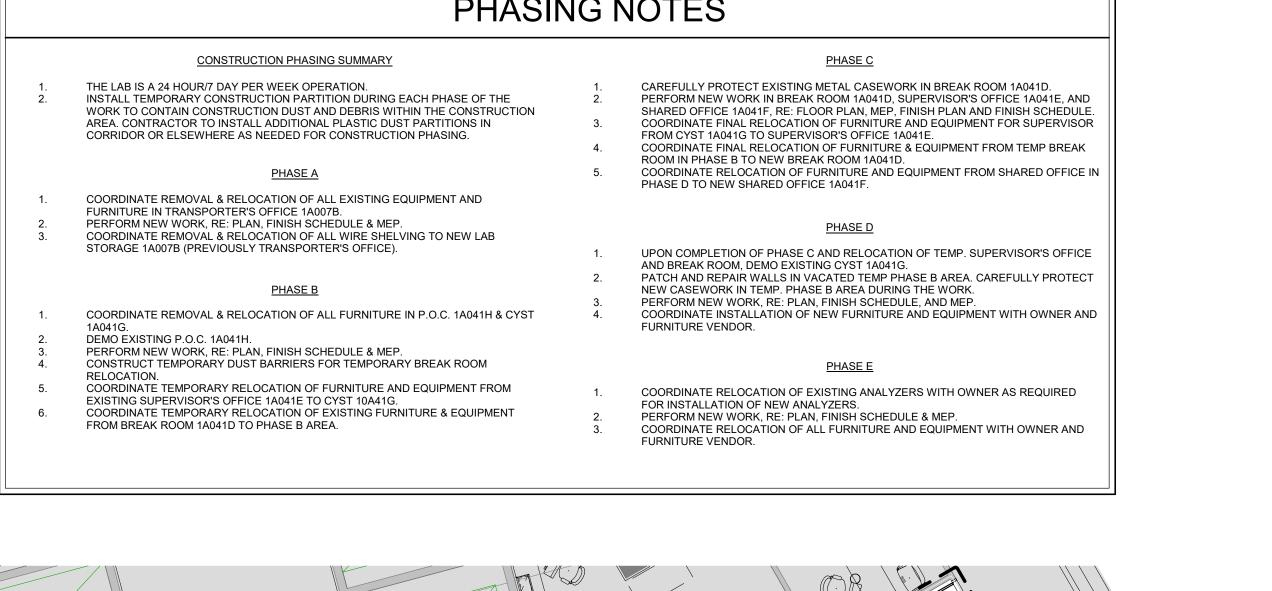
REMOVE EXISTING CEILING TILES. GRID ETR.

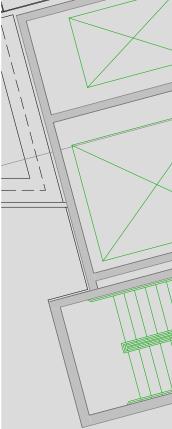


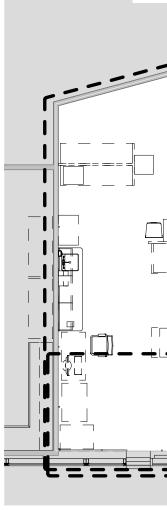


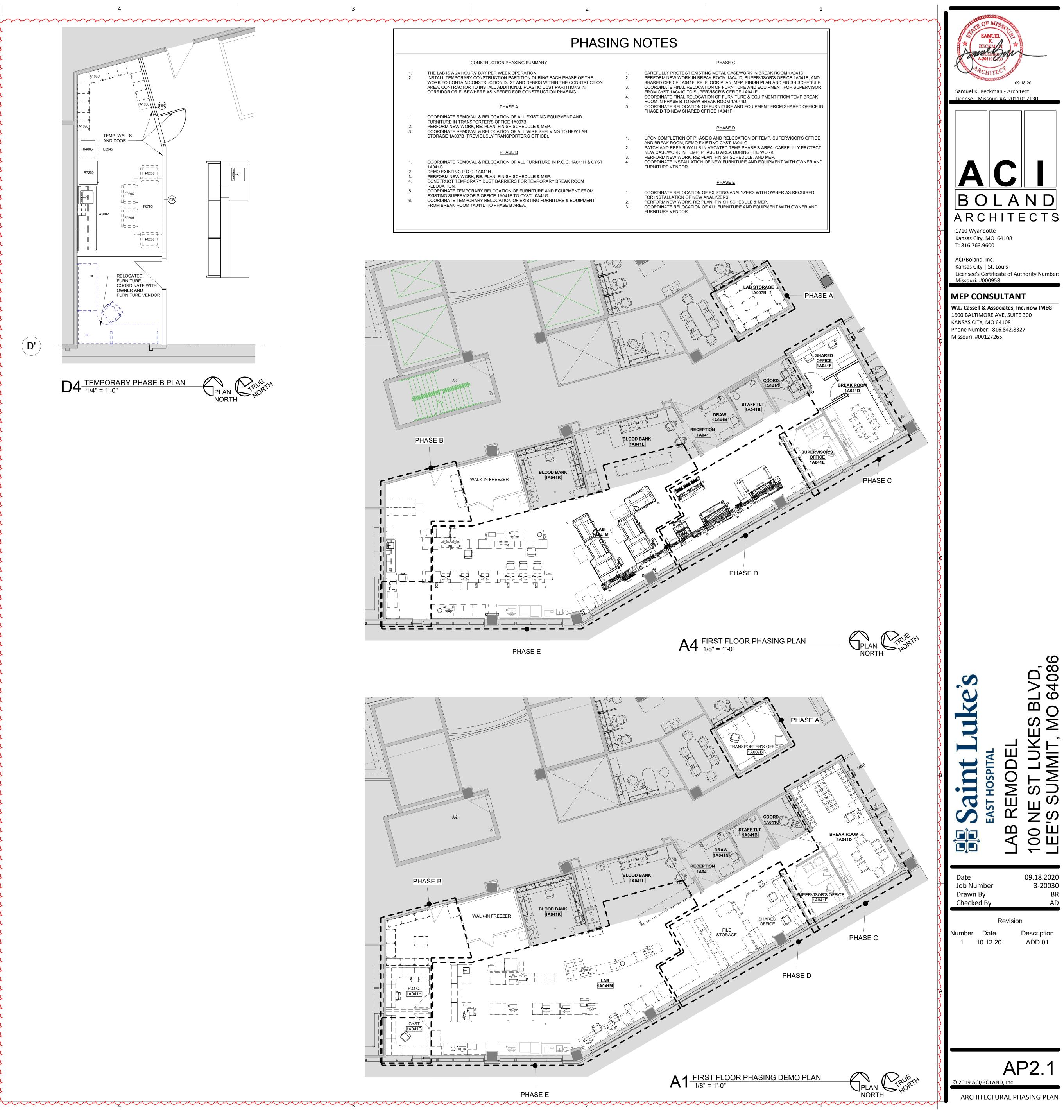


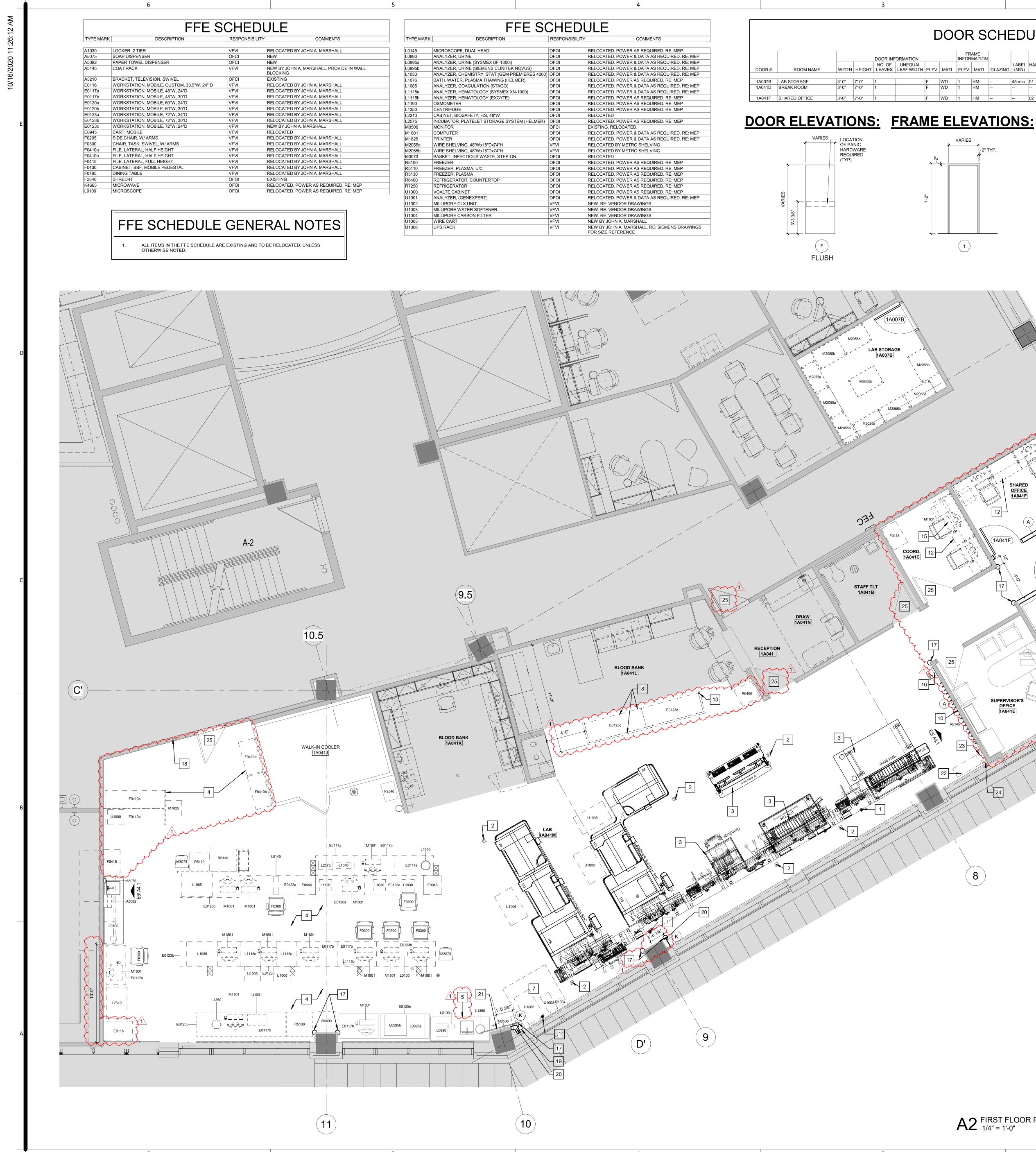




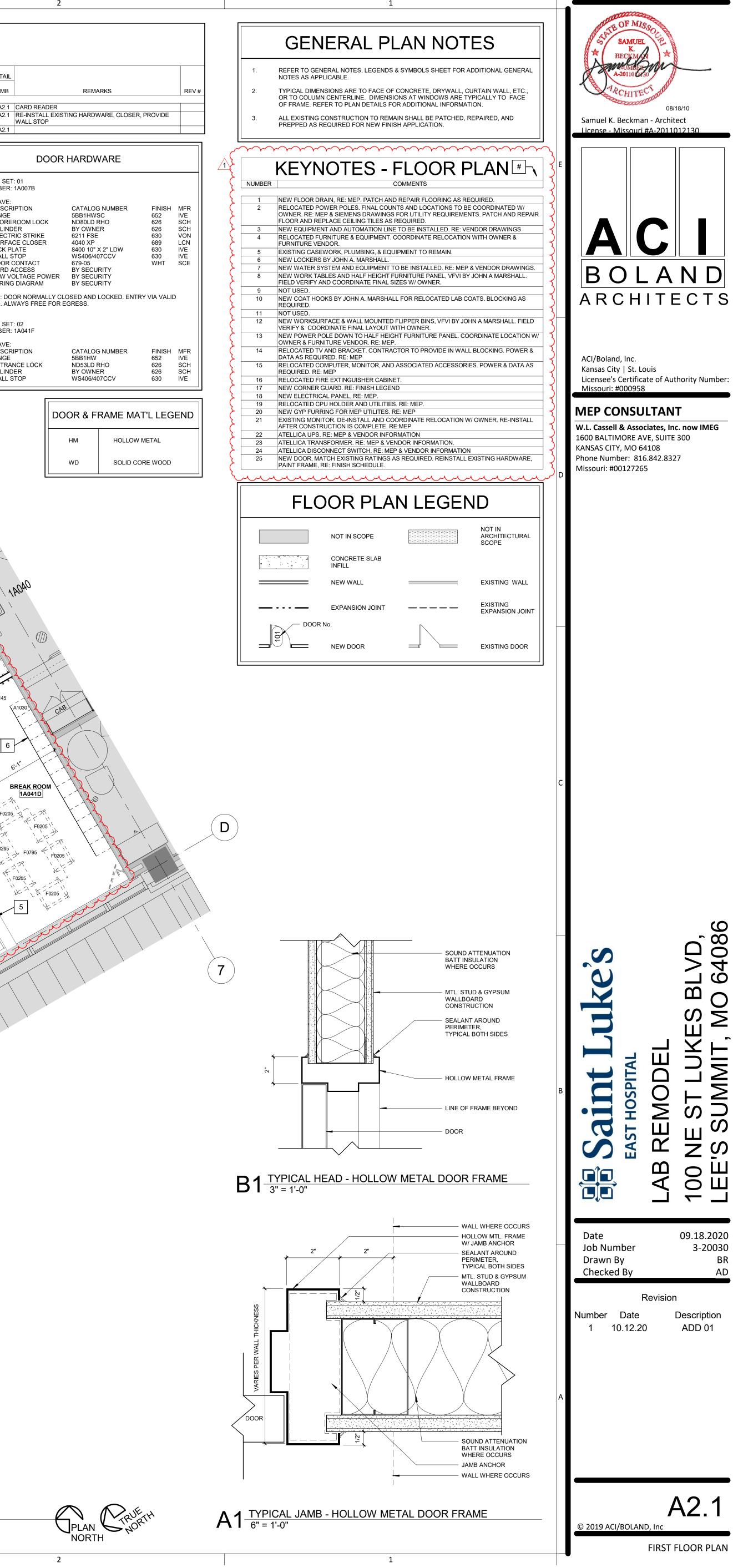




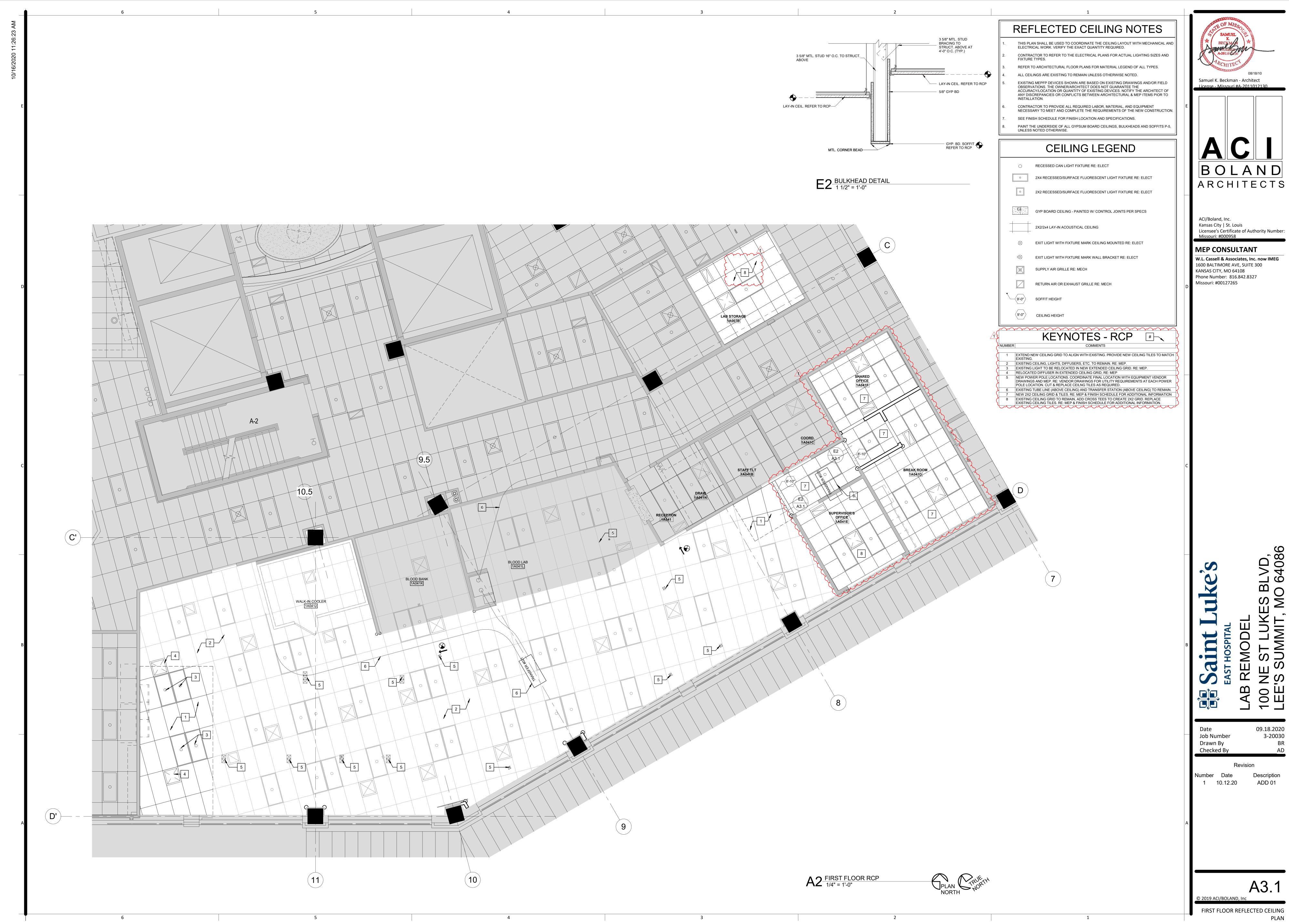


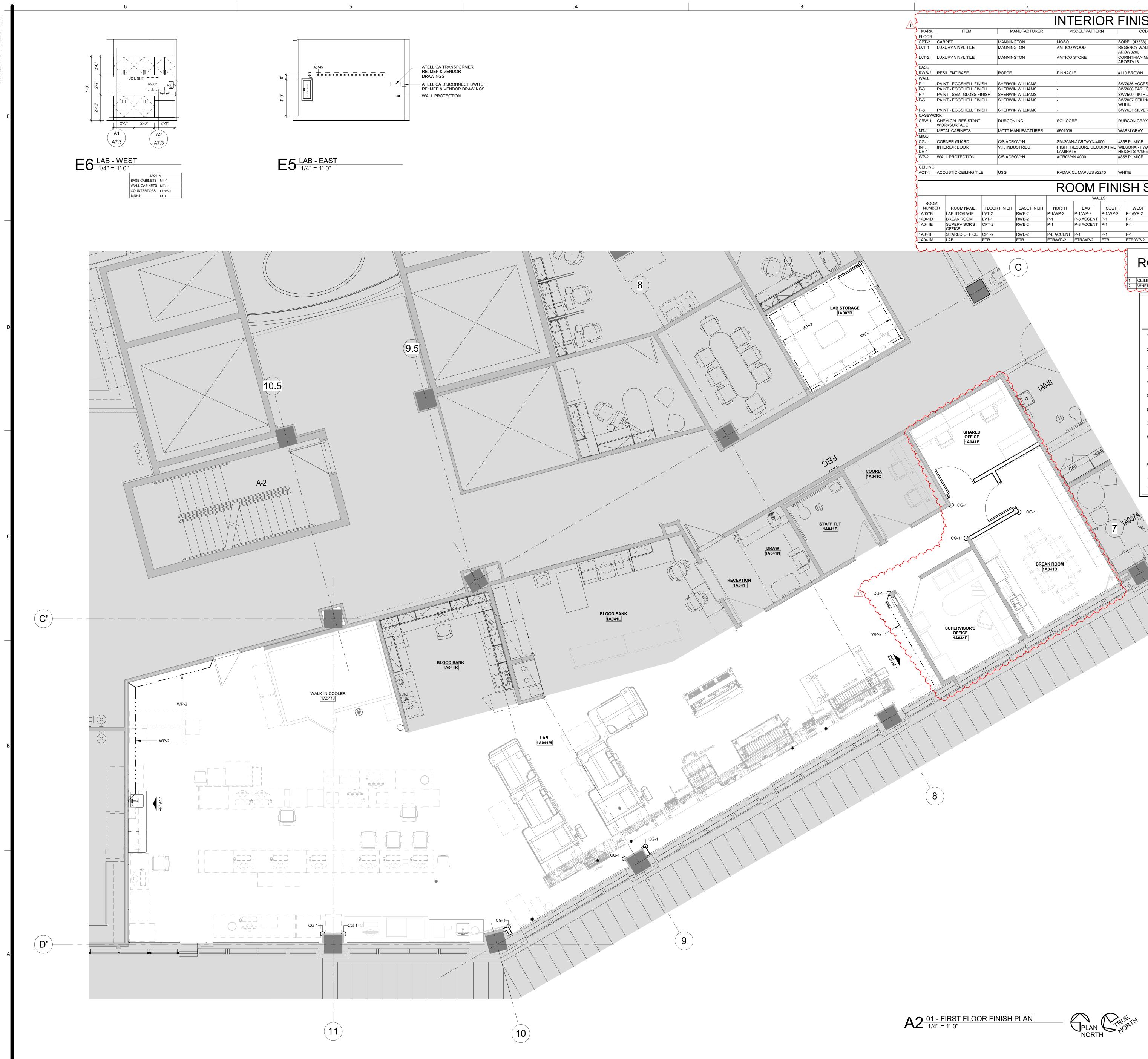


SUPERVISOR'S OFFICE 1A041E



DOOR SCHEDULE **OPENING DETAIL** LABEL HARDWARE . MATL. ELEV. MATL. GLAZING (MIN) SET HEAD JAME B1/A2.1 A1/A2.1 CARD READER 45 min B1/A2.1 A1/A2.1 RE-INSTALL EXISTING HARDWARE, CLOSER, PROVIDE B1/A2.1 A1/A2.1 HARDWARE SET: 01 DOOR NUMBER: 1A007B EACH TO HAVE: QTY DESCRIPTION 3 EA HINGE 1 EA STOREROOM LOCK 1 EA CYLINDER 1 EA ELECTRIC STRIKE 1 EA SURFACE CLOSER 1 EA KICK PLATE 1 EA WALL STOP 1 EA DOOR CONTACT 1 EA CARD ACCESS BY SECURITY 1 EA LOW VOLTAGE POWER BY SECURITY 1 EA WIRING DIAGRAM OPERATION: DOOR NORMALLY CLOSED AND LOCKED. ENTRY VIA VALID CARD READ. ALWAYS FREE FOR EGRESS. HARDWARE SET: 02 DOOR NUMBER: 1A041F EACH TO HAVE: QTY DESCRIPTION 3 EA HINGE 1 EA ENTRANCE LOCK 1 EA CYLINDER 1 EA WALL STOP С





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MARK	ITEM	M	ANUFACTURER	M	ODEL/ PATTER	RN	COLO	OR	SIZE		RE	MARKS	
FLOOR													
CPT-2	CARPET	MANNIN	GTON	MOSO		S	SOREL (43333)		24"X24"	INSTALLATION	I: MONOLITHIC		
LVT-1	LUXURY VINYL TILE	MANNIN	GTON	AMTICO	WOOD		REGENCY WALM AROW8200	NUT	4-1/2"X36"	STRAIGHT ED	GE ONLY; INSTALLA	FION: RANDOM	
LVT-2	LUXURY VINYL TILE	MANNIN	GTON	AMTICO	STONE		CORINTHIAN MA AROSTV13	ARBLE	18"X18"	STRAIGHT ED	GE ONLY; INSTALLA	FION: ASHLAR	
BASE				I					1				
RWB-2	RESILIENT BASE	ROPPE		PINNACI	LE	#	110 BROWN		4" COVE	-			
WALL				I									
P-1	PAINT - EGGSHELL FIN	IISH SHERWI	N WILLIAMS	-		S	W7036 ACCES	SIBLE BEIGE	-	FIELD PAINT			
P-3	PAINT - EGGSHELL FIN	IISH SHERWI	N WILLIAMS	-		S	W7660 EARL G	RAY	-	ACCENT PAIN	Т		
P-4	PAINT - SEMI-GLOSS F	INISH SHERWI	N WILLIAMS	-		S	W7509 TIKI HU	Т	-	HOLLOW MET	AL DOOR FRAME PA	INT	
P-5	PAINT - EGGSHELL FIN	IISH SHERWI	N WILLIAMS	-			W7007 CEILING	G BRIGHT	-	CEILING PAINT	Г		
P-8	PAINT - EGGSHELL FIN	IISH SHERWI	N WILLIAMS	-		S	W7621 SILVER	MIST	-	ACCENT PAIN	Т		
CASEWC	DRK					I							
CRW-1	CHEMICAL RESISTANT	DURCON	N INC.	SOLICO	RE	C	URCON GRAY		1" THICK	-			
MT-1	METAL CABINETS	MOTT M	ANUFACTURER	#601006		V	VARM GRAY		-	COLOR SHALL	MATCH IF USING O	THER MANUFACTU	JRER.
MISC	1	1		1		I				1			
CG-1	CORNER GUARD	C/S ACR	OVYN	SM-20AM	N-ACROVYN-40	000 #	858 PUMICE		3" WING	ABOVE BASE	TO CEILING. INCLUD	E ALL TRIM AND A	CCESSORIE
INT. DR-1	INTERIOR DOOR	V.T. INDI	USTRIES	HIGH PF LAMINA		-	VILSONART WA IEIGHTS #7965		-		ES, LAMINATED TOF		EFER TO DO
WP-2	WALL PROTECTION	C/S ACR	OVYN	ACROVY	/N 4000	#	858 PUMICE		.060" THICK, 4X10 SHEETS	48" ABOVE BA	SE. INCLUDE ALL TR	IM AND ACCESSO	RIES.
CEILING													
ACT-1	ACOUSTIC CEILING TIL	E USG		RADAR	CLIMAPLUS #2	2210 V	VHITE		24"X24"	SQ EDGE, DOM	NN DX TEE 15/16" GR	RID SYSTEM	
	1			l.									
				RC	MO	FIN	ISH S	SCHE	EDULE				
					WAI	LLS			CA	SEWORK			
ROOI	M							BASE			UPPER	7	
NUMB	ER ROOM NAME	FLOOR FINISH	BASE FINISH	NORTH	EAST	SOUTH	WEST	CABINET	COUNTERTOP	S SINK	CABINETS	CEILING	NO
1A007B	LAB STORAGE	LVT-2	RWB-2	P-1/WP-2	P-1/WP-2	P-1/WP-2	P-1/WP-2	-	-	-	-	ACT-1	-
1A041D	BREAK ROOM	LVT-1	RWB-2	P-1	P-3 ACCENT	P-1	P-1	ETR	ETR	ETR	ETR	ACT-1	-
1A041E	SUPERVISOR'S OFFICE	CPT-2	RWB-2	P-1	P-8 ACCENT	P-1	P-1	-	-	-	-	ACT-1	-
1A041F	SHARED OFFICE	CPT-2	RWB-2	P-8 ACCENT	P-1	P-1	P-1	-	-	-	-	ACT-1	-

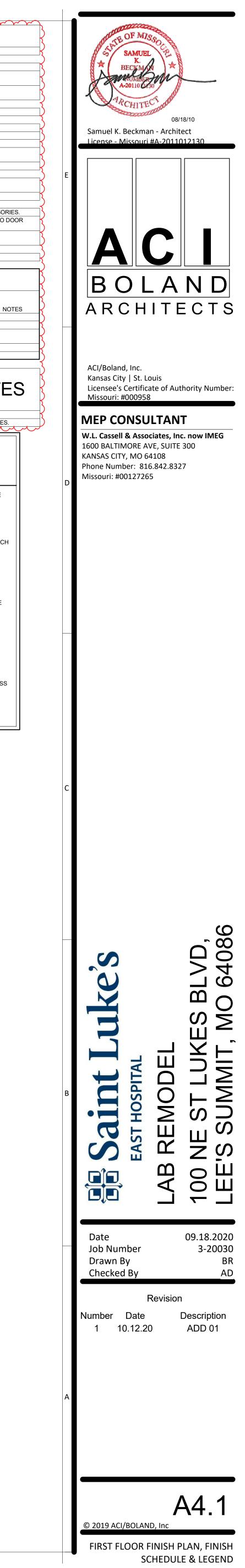
ROOM FINISH SCHEDULE NOTES

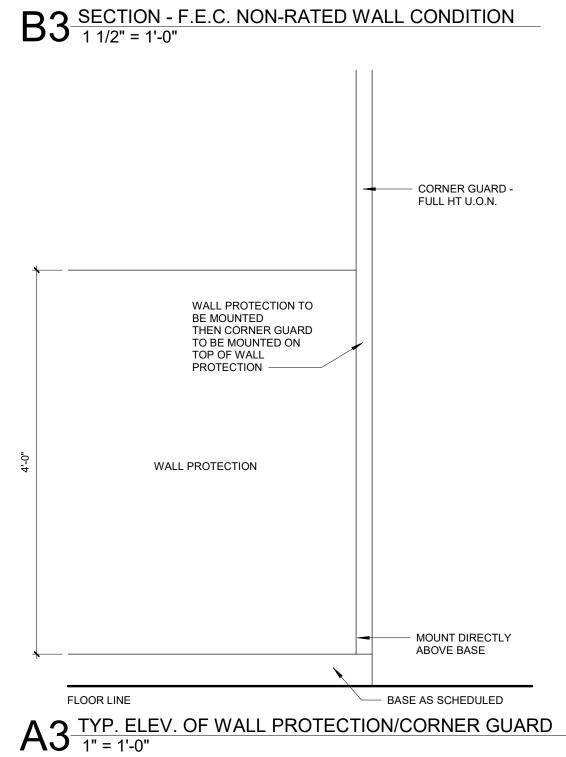
CEILING TO BE EXISTING TO REMAIN. REPLACE DAMAGED CEILING TILES AS REQUIRED. WHERE EXISTING CEILING GRID IS EXTENDED, NEW CEILING TILES TO MATCH EXISTING 2X4 TILES.

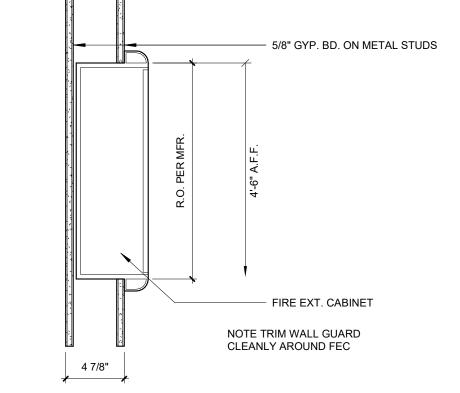
GENERAL FINISH NOTES

- SUBMIT SAMPLES OF ALL FINISHES TO ARCHITECT FOR REVIEW PRIOR TO THE ORDERING OF MATERIAL.
- NO IRREGULARITIES OR IMPERFECTIONS SHALL BE PRESENT IN ANY OF THE MATERIAL BEING INSTALLED. IF SUCH ITEMS ARE IDENTIFIED DURING APPLICATION, WORK SHALL BE STOPPED AND THE ARCHITECT NOTIFIED.
- PROVIDE ALL MAINTENANCE MANUALS AND WARRANTY INFORMATION FOR EACH FINISH MATERIAL TO OWNER AT COMPLETION OF THE PROJECT.
- ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED (P-4) UNLESS NOTED OTHERWISE.
- PAINT THE UNDERSIDE OF ALL GYPSUM BOARD CEILINGS, BULKHEADS AND SOFFITS (P-5) UNLESS NOTED OTHERWISE.
- FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE WORK OF FINISH APPLICATIONS.
- ALL FINISHES SHALL BE INSTALLED AND MAINTAINED PER MANUFACTURER'S RECOMMENDATION AND INDUSTRY STANDARDS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING AND CONFIRMING ALL SUBSTRATE CONDITIONS WHERE NEW MATERIALS ARE APPLIED. SUBSTRATE SHALL BE SMOOTH, FREE OF DEFECTS AND SHALL
- CONFORM TO THE REQUIREMENTS OF THE FINISHED MATERIAL MANUFACTURERS RECOMMENDATIONS. ALL MATERIAL TO COMPLY WITH FLAME SPREAD CLASSIFICATION EITHER CLASS (1) ONE OR CLASS A DEPENDING ON GOVERNING CODE IN EFFECT.
- SMOKE DEVELOPMENT RATING < 450 FOR ALL FINISHES.
- RE: MEP FOR ALL SST SINKS.

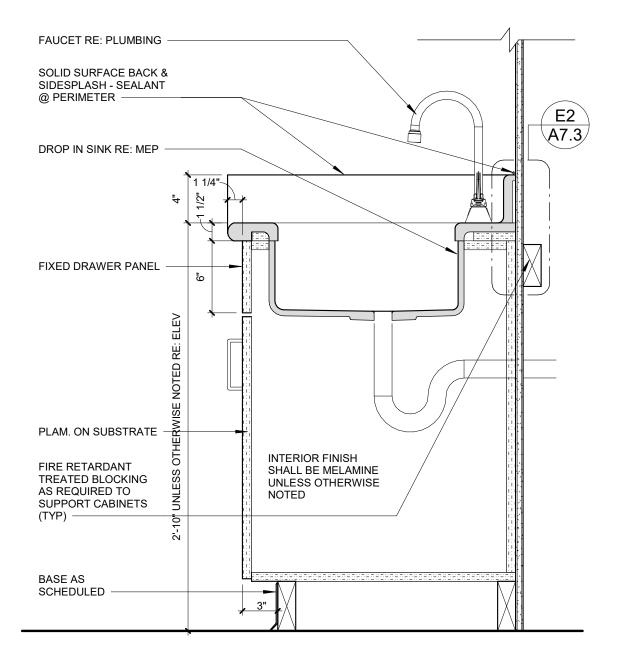
FINISH FLOOR PLAN LEGEND				
N				
wS	E	ROOM FINISH SCHEDULE DIRECTION		
		FLOOR FINISH DIRECTION		



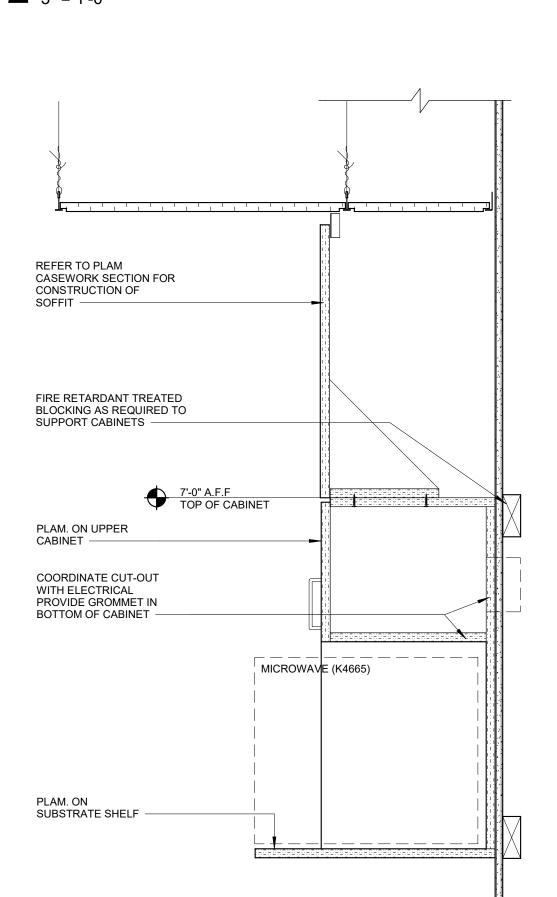




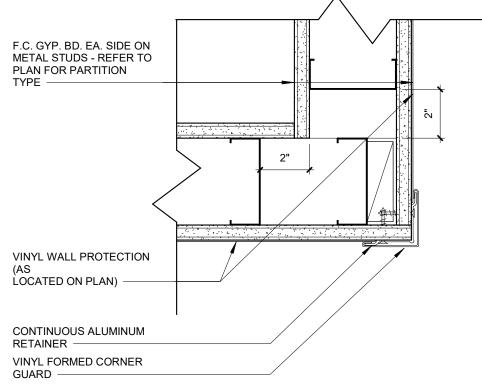
4



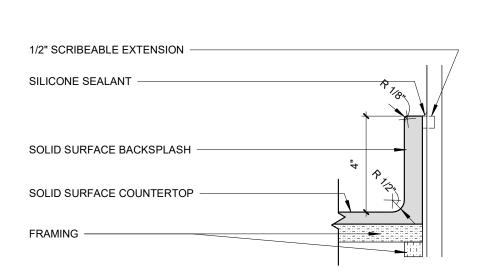
B2 WALL-MOUNTED MICROWAVE SHELF

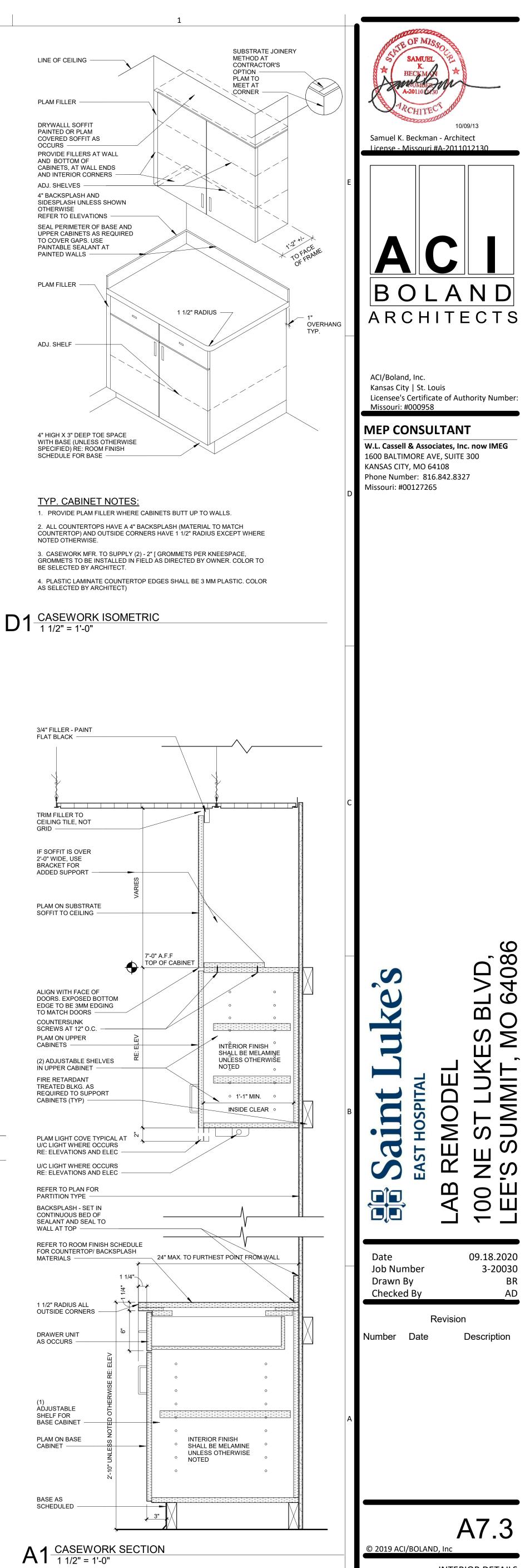


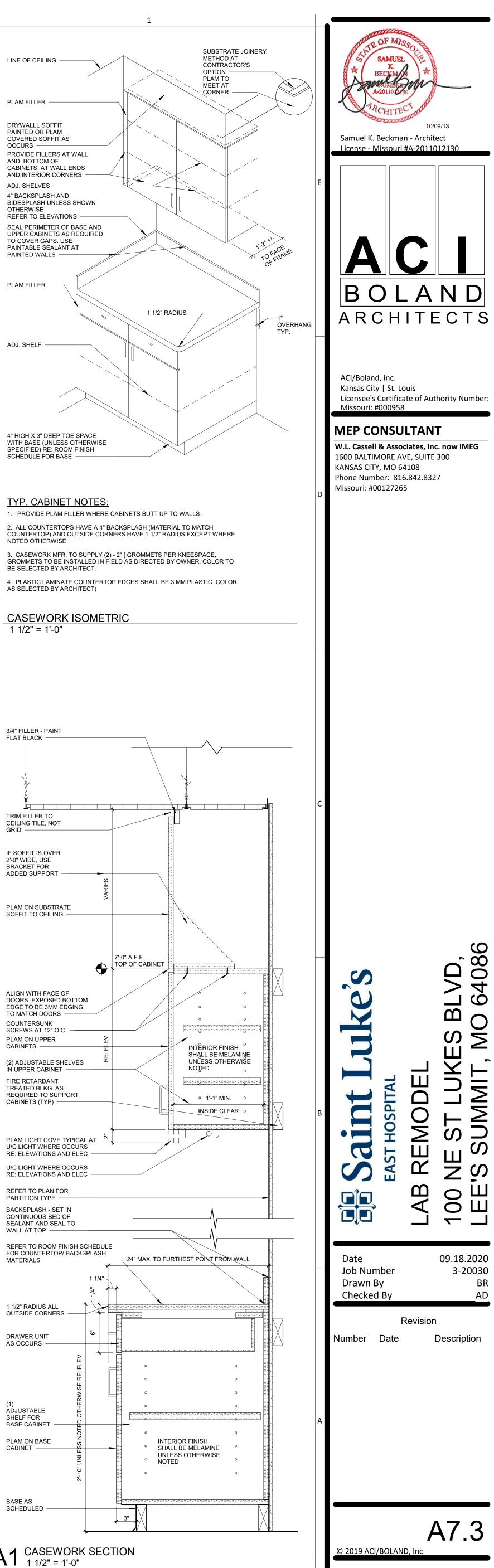
D2 TYPICAL SINGLE VINYL CORNER GUARD 3" = 1'-0"











INTERIOR DETAILS

ABBREVIATIONS				
ABBREV.	DESCRIPTION			
AAV	AUTOMATIC AIR VENT			
ABAN ABV	ABANDON ABOVE			
AC	AIR CONDITIONING UNIT			
ACC				
ACU AD	AIR COOLED CONDENSING UNIT ACCESS DOOR			
AF	AFTER FILTER			
AFF AHU	ABOVE FINISHED FLOOR AIR HANDLING UNIT			
AMB	AMBIENT			
APPROX ARCH	APPROXIMATE ARCHITECTURAL			
ARCH	AIR SEPARATOR			
ATM	ATMOSPHERE			
ATMV AWT	ATMOSPHERIC VENT AVERAGE WATER TEMPERATURE			
BB	BAR BARRIER			
BDD BFWP	BACKDRAFT DAMPER BOILER FEED WATER PUMP			
BFW	BOILER FEED WATER			
BHP BLDG	BRAKE HORSEPOWER BUILDING			
BLWDN	BLOWDOWN			
BS	BLOWDOWN SEPARATOR			
BLR BLW	BOILER BELOW			
ВМ	BEAM			
BOT BOD	BOTTOM BOTTOM OF DUCT			
BSMT	BASEMENT			
BTU	BRITISH THERMAL UNIT			
BTUH C	BTU PER HOUR CONVERTER			
C/C	CENTER TO CENTER			
CC CF	COOLING COIL CUBIC FEET			
CFM	CUBIC FEET PER MINUTE			
CFP CHD	CHEMICAL FEED PUMP CONCEALED HAND DAMPER W/ REMOTE OPERATOR			
СН	CHILLER			
CJ CL	CONSTRUCTION JOINT CENTER LINE			
CLG	CEILING			
CLR	CLEAR			
CO COL	CLEANOUT COLUMN			
CONC	CONCRETE			
COND CONDR	CONDENSATE CONDENSOR			
CONN				
CONT CONV	CONTINUATION/CONTINUOUS CONVECTOR			
COP	COEFFICIENT OF PERFORMANCE			
CP CPF	CONTROL PANEL CHEMICAL POT FEEDER			
CRP	CONDENSATE RETURN PUMP			
	COOLING TOWER CUBIC FEET			
CT CILET	ODDICTEET			
CT CU FT CU IN	CUBIC INCHES			
CU FT CU IN DB	DRY BULB			
CU FT CU IN				
CU FT CU IN DB DEG DEMO DET	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL			
CU FT CU IN DB DEG DEMO	DRY BULB DEGREE FAHRENHEIT DEMOLITION			
CU FT CU IN DB DEG DEMO DET DIA	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER			
CU FT CU IN DB DEG DEMO DET DIA DIM DLV DMPR	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER			
CU FT CU IN DB DEG DEMO DET DIA DIA DIM DLV	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER			
CU FT CU IN DB DEG DEMO DET DIA DIM DLV DMPR DN DN DR DWG	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING			
CU FT CU IN DB DEG DEMO DET DIA DIA DIV DLV DMPR DN DR	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DOWN DRAIN			
CU FT CU IN DB DEG DEMO DET DIA DIM DLV DMPR DN DN DR DWG EX EA EA EAT	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAIN EXISTING EACH ENTERING AIR TEMPERATURE			
CU FT CU IN DB DEG DEMO DET DIA DIM DLV DMPR DN DN DR DN DR DWG EX EA	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EACH			
CU FT CU IN DB DEG DEMO DET DIA DIM DIV DMPR DN DN DR DN DR DN EX EA EA EA EA EA EA EA EF EF EF	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY			
CU FT CU IN DB DEG DEMO DET DIA DIM DIV DMPR DN DR DN DR DWG EX EA EAT EAT EDBT EF EF EFF EJ	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT			
CU FT CU IN DB DEG DEMO DET DIA DIM DIV DMPR DN DR DN DR DN EX EA EA EA EA EA EA EA EF EF EF	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY			
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CU FT CU IN DB DEG DEMO DET DIA DIM DIV DMPR DN DN DR DN DR EX EA EA EA EA EA EA EA EA EA EA EA EA EA	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION			
CU FT CU IN DB DEG DEMO DET DIA DIM DIV DMPR DN DN DR DN DR DWG EX EA EA EA EA EA EA EA EA EA EA EA EA EA	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK EXPANSION TANK EXPANSION TANK			
CU FT CU IN DB DEG DEMO DET DIA DIM DLV DMPR DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK			
CU FT CU IN DB DEG DEMO DET DIA DIA DIM DLV DMPR DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK EXHAUST EXPANSION TANK			
CU FT CU IN DB DEG DEMO DET DIA DIN DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH EXP EXH EXP EXT EWBT	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK EXHAUST EXTERIOR ENTERING WET BULB TEMPERATURE			
CU FT CU IN DB DEG DEMO DET DIA DIN DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH EXP EXT EWBT	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK EXPANSION TANK EXPANSION EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR EXTERIOR ENTERING WET BULB TEMPERATURE			
CU FT CU IN DB DEG DEMO DET DIA DIN DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH EXP EXT EWBT EWBT FA FCV FD	DRY BULBDEGREE FAHRENHEITDEMOLITIONDETAILDIAMETERDIMENSIONDOOR LOUVERDAMPERDOWNDRAINDRAWINGEXISTINGEACHENTERING AIR TEMPERATUREENTERING DRY BULB TEMPERATUREEXPANSION JOINTELECTRICALELEVATIONEXPANSION JOINTELECTRICALEXPANSION TANKEXPANSION TANKEXTERING WET BULB TEMPERATUREENTERINGENTERINGENTERING WET BULB TEMPERATUREEXPANSIONEXTERIORENTERING WET BULB TEMPERATUREENTERING WET BULB TEMPERATUREFACE AREAFLOW CONTROL VALVEFIRE DAMPER			
CU FT CU IN DB DEG DEMO DET DIA DIN DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH EXT EWBT FA FCV FD FF	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK EXPANSION TANK EXPANSION EXTERIOR ENTERING WET BULB TEMPERATURE EXPANSION EXTERIOR EXTERIOR EXTERIOR ENTERING WET BULB TEMPERATURE EXTERIOR ENTERING WET BULB TEMPERATURE ENTERING WET BULB TEMPERATURE FACE AREA FLOW CONTROL VALVE FIRE DAMPER FINAL FILTER			
CU FT CU IN DB DEG DEMO DET DIA DIN DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH EXP EXT EWBT EWBT FA FCV FD	DRY BULBDEGREE FAHRENHEITDEMOLITIONDETAILDIAMETERDIMENSIONDOOR LOUVERDAMPERDOWNDRAINDRAWINGEXISTINGEACHENTERING AIR TEMPERATUREENTERING DRY BULB TEMPERATUREEXPANSION JOINTELECTRICALELEVATIONEXPANSION JOINTELECTRICALEXPANSION TANKEXPANSION TANKEXTERING WET BULB TEMPERATUREENTERINGENTERINGENTERING WET BULB TEMPERATUREEXPANSIONEXTERIORENTERING WET BULB TEMPERATUREENTERING WET BULB TEMPERATUREFACE AREAFLOW CONTROL VALVEFIRE DAMPER			
CU FT CU IN DB DEG DEMO DET DIA DIN DN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH EXT EWBT EWT FA FCV FD FF FFA FFA FFA FFA FFA FFA FFA FFA FFA FFB FFA FFB FLA	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK EXHAUST EXPANSION TANK EXHAUST EXPANSION EXTERIOR ENTERING WET BULB TEMPERATURE ENTERING WET BULB TEMPERATURE ENTERING WATER TEMPERATURE ENTERING WATER TEMPERATURE ENTERING WATER TEMPERATURE ENTERING WATER TEMPERATURE FACE AREA FLOW CONTROL VALVE FIRE DAMPER FINAL FILTER FROM FLOOR ABOVE FROM FLOOR ABOVE FROM FLOOR BELOW FULL LOAD AMP			
CU FT CU IN DB DEG DEMO DET DIA DIA DIM DIN DR DWG EX EA EAT EDBT EF EJ ELEC ELEV ENT EQ ET EXH EXP EWBT EWBT FA FCV FD FF FFA FFA FFA FFA	DRY BULBDEGREE FAHRENHEITDEMOLITIONDETAILDIAMETERDIMENSIONDOOR LOUVERDAMPERDOWNDRAINDRAWINGEXISTINGEACHENTERING AIR TEMPERATUREENTERING DRY BULB TEMPERATUREEXHAUST FANEFFICIENCYEXPANSION JOINTELECTRICALELEVATIONENTERINGEQUALEXPANSION TANKEXHAUSTEXPANSIONEXTERIORENTERING WATER TEMPERATUREENTERINGEQUALEXPANSION TANKEXTERIORENTERING WATER TEMPERATUREFACE AREAFLOW CONTROL VALVEFIRE DAMPERFINAL FILTERFROM FLOOR ABOVEFROM FLOOR BELOW			
CU FT CU IN DB DEG DEMO DET DIA DIA DIM DLV DMPR DN DR DWG EX EA EAT EDBT EF EJ ELEC ENT EQ EXH EXP EXT EWBT EWT FA FCV FD FF FFA FFB FLA FMD	DRY BULB DEGREE FAHRENHEIT DEMOLITION DETAIL DIAMETER DIMENSION DOOR LOUVER DAMPER DOWN DRAIN DRAIN DRAWING EXISTING EACH ENTERING AIR TEMPERATURE ENTERING AIR TEMPERATURE ENTERING DRY BULB TEMPERATURE EXHAUST FAN EFFICIENCY EXPANSION JOINT ELECTRICAL ELEVATION ENTERING EQUAL EXPANSION TANK EXTANSION EXTERIOR EXTERIOR EXTERIOR ENTERING WATER TEMPERATURE ENTERING WATER TEMPERATURE ENTERING WATER TEMPERATURE FACE AREA FLOW CONTROL VALVE FIRE DAMPER FINAL FILTER FROM FLOOR ABOVE FROM FLOOR ABOVE FROM FLOOR BELOW FULL LOAD AMP FLOW MEASURING DEVICE			

ABBREV.	DESCRIPTION
FTR	FINNED TUBE RADIATION
GA GAL	GAUGE GALLON
GALV	GALVANIZED
GRD	GROUND
GPM GRL	GALLON PER MINUTE GRILLE
GSNK	GOOSENECK
НС	HEATING COIL
HX	HEAT EXCHANGER
HORIZ HP	HORIZONTAL HORSEPOWER
HP	HIGH PRESSURE
HPT	HIGH POINT
HTG HZ	HEATING HERTZ
IN	INCHES
KW	
LAT LB	LEAVING AIR TEMPERATURE POUND
LD	LINEAR DIFFUSER
LDBT	LEAVING DRY BULB TEMPERATURE
LWBT LWT	LEAVING WET BULB TEMPERATURE
M	MOTORIZED DAMPER
MAT	MIXED AIR TEMPERATURE
MAX MBTU	MAXIMUM BRITISH THERMAL UNIT (1000)
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MEZZ MIN	MEZZANINE MINIMUM
MIN MISC	MINIMUM MISCELLANEOUS
NA	NOT APPLICABLE
NC NO	NORMALLY CLOSED
NTS	NORMALLY OPEN NOT TO SCALE
OA	OUTSIDE AIR
00	ON CENTER
OD OPNG	OUTSIDE DIAMETER OPENING
OPWT	OPERATING WEIGHT
P	PUMP
PA PCF	PIPE ANCHOR POUNDS PER CUBIC FOOT
PEN	PENETRATION
PERF	PERFORATOR
PL PRV	PLATE PRESSURE REDUCING VALVE
PSIA	POUNDS PER SQUARE INCH (ABSOLUTE)
PSIG	POUNDS PER SQUARE INCH (GAUGE)
RA RD	RETURN AIR RETURN DIFFUSER
RET	RETURN
RF	RETURN FAN
RG RH	RETURN GRILLE RELATIVE HUMIDITY
RHC	REHEAT COIL
RPM	REVOLUTIONS PER MINUTE
S SA	STEAM TRAP SUPPLY AIR
SD	SUPPLY DIFFUSER
SF	SUPPLY FAN
SG SP	SUPPLY GRILLE STATIC PRESSURE
SP SQ FT	STATIC PRESSURE SQUARE FEET
SRV	SAFETY RELIEF VALVE
SS	STEAM SEPARATOR
SST ST	STAINLESS STEEL SOUND ATTENUATOR
STL	STEEL
STM	STEAM
STRUCT TEMP	STRUCTURAL TEMPERATURE
TFA	TO FLOOR ABOVE
TFB TC	
TG THK	TRANSFER GRILLE THICK
TNL	TUNNEL
TYP	
UFD UG	UNDERFLOOR DUCT UNDERGROUND
UON	UNLESS OTHERWISE NOTED
VAV	VARIABLE AIR VOLUME
VB VD	VACUUM BREAKER VOLUME DAMPER
VD VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
W/ WB	WITH WET BULB
WB WC	WATER COLUMN
WF	WATER FILTER
WG	WATER GAUGE
WMS W/O	WIRE MESH SCREEN WITHOUT
W/O WT	WEIGHT

MECHANICAL SHEET METAL SYMBOLS

MECHANICAL PIPING SYMBOLS

	EXISTING DUCTWORK TO REMAIN		EXISTING PIPING TO REMAIN
—			EXISTING PIPING TO BE REMOVED
++ {	EXISTING DUCTWORK TO BE REMOVED		NEW PIPING
++		<u> —</u> нws —	HOT WATER SUPPLY
	NEW DUCTWORK	— HWR —	HOT WATER RETURN
+		— LPS —	STEAM SUPPLY (LOW PRESSURE)
	HAND DAMPER IN DUCT	— LPR —	STEAM RETURN (LOW PRESSURE)
HD		— MPS —	STEAM SUPPLY (MEDIUM PRESSURE)
ţŢŢ	HAND DAMPER IN CONCEALED DUCT W/	- MPR -	STEAM RETURN (MEDIUM PRESSURE)
HD	CONCEALED DAMPER ACTUATOR	— HPS —	STEAM SUPPLY (HIGH PRESSURE)
	HUMIDIFIER IN DUCT	— HPR —	STEAM RETURN (HIGH PRESSURE)
<u>}</u>	HOMIDFIER IN DOCT		STEAM RELIEF VENT
			CHILLED WATER SUPPLY
	FIRE DAMPER WITH HINGED ACCESS DOOR		
	(B) DENOTES 'B' STYLE DAMPER	— <i>CWR</i> —	
		— CHS —	CHILLED/HOT WATER SUPPLY
	SMOKE DAMPER WITH HINGED ACCESS DOOR	— CHR —	CHILLED/HOT WATER RETURN
	COMBINATION FIRE/SMOKE DAMPER WITH HINGED	SWS	SECONDARY WATER SUPPLY
	ACCESS DOOR		SECONDARY WATER RETURN
		— <i>TS</i> —	COOLING TOWER SUPPLY
	RECTANGULAR TO ROUND BRANCH CONNECTION	TR	COOLING TOWER RETURN
	FROM MAIN DUCT	— RS —	REFRIGERANT SUCTION PIPING
	RECTANGULAR TO ROUND BRANCH CONNECTION FROM	RL	REFRIGERANT LIQUID PIPING
	MAIN DUCT WITH HAND DAMPER IN ROUND SECTION	HG	HOT GAS PIPING
-		GS	GLYCOL SUPPLY PIPING
\square	RECTANGULAR TO ROUND TRANSITION	GR	GLYCOL RETURN PIPING
N .		PD	PUMP DISCHARGE
	RECTANGULAR TO ROUND TRANSITION WITH HAND DAMPER	CD	CONDENSATE DRAIN PIPING
			CONDENSER WATER SUPPLY
	CEILING SUPPLY OUTLET. (A) DENOTES DIFFUSER TYPE. (300) DENOTES CFM. SEE SCHEDULE FOR SIZE.	CDR	CONDENSER WATER RETURN
A 300	ARROWS INDICATE DIRECTION OF THROW. NO ARROWS	SMS	SNOW MELTING SYSTEM SUPPLY
0	INDICATE 4-WAY THROW.	SMR	SNOW MELTING SYSTEM RETURN
		\bigcirc	THERMOSTAT
	CEILING SUPPLY OUTLET WITH FLEXIBLE DUCT CONNECTION. A DENOTES DIFFUSER TYPE. (300) DENOTES CFM. SEE	(\mathbf{H})	HUMIDISTAT
A 300	SCHEDULE FOR FACE SIZE AND FLEXIBLE DUCT (NECK) SIZE. ARROWS INDICATE DIRECTION OF THROW. NO ARROWS	\bigcirc	CONNECTION - NEW TO EXISTING
	INDICATE 4-WAY THROW.	 B	FLOAT AND THERMOSTATIC TRAP
		.1.	
(A) 300	CEILING RETURN OR EXHAUST GRILLE DENOTES GRILLE TYPE. (300) DENOTES CFM. SEE SCHEDULE FOR SIZE.	; ¥ ;	SHUT-OFF VALVE
() 300		 	BALANCING VALVE
A 600			GLOBE VALVE
	WALL SUPPLY GRILLE A DENOTES GRILLE TYPE. (600) DENOTES CFM. SEE SCHEDULE FOR	+Q+ ₽	CHECK VALVE (SWING OR CUSHION)
┶┹	SIZE.	t	CONTROL VALVE
f (A) 600			LUBRICATED PLUG COCK
	WALL RETURN OR EXHAUST GRILLE. DENOTES		SOLENOID VALVE
┶┷┰	GRILLE TYPE. (600) DENOTES CFM. SEE SCHEDULE FOR SIZE.	24	PRESSURE RELIEF VALVE
$\Box \stackrel{VAV}{\longleftarrow}$	VARIABLE AIR VOLUME BOX		PRESSURE REDUCING VALVE
			WYE STRAINER
$\square \xrightarrow{VAV}$	VARIABLE AIR VOLUME BOX WITH REHEAT COIL		UNION
			PIPE ANCHOR
<u> </u>	RECTANGULAR DUCT TRANSITION IN SINGLE LINE DUCTWORK		FLOW ELEMENTS
1 '		—	DIRECTION OF FLOW IN PIPES
	RECTANGULAR TO ROUND TRANSITION		DIRECTION OF PITCH IN PIPES
	IN SINGLE LINE DUCTWORK	+≎+∋	RISE AND DROP IN PIPING
			BRANCH PIPING CONNECTION (TOP OF PIPE)
	CEILING RETURN GRILLE WITH LINED BOOT ABOVE FINISH CEILING - FREE AREA OF BOOT = 2/3 OF	· t	BRANCH PIPING CONNECTION (BOTTOM OF PIPE)
	FINISH CEILING - FREE AREA OF BOOT = 2/3 OF GRILLE FACE. A DENOTES GRILLE TYPE. (300) DENOTES CFM. SEE DIFFUSER SCHEDULE FOR SIZE.	<u> </u>	WELDED ELBOW
(A) 300	DENVIES UTM. SEE DIFFUSER SUMEDULE FUR SIZE.	, 63	EXPANSION JOINT
1910 - W-	LINED RETURN AIR BOOT WITH TURNING VANES ABOVE		
	CEILING - SIZE OF BOOT IS INDICATED ON DRAWINGS		
_		MEDICAI	GAS SYMBOLS
	DUAL DUCT MIXING BOX		

TEMPERATURE CONTROLS SYMBOLS

DUAL DUCT MIXING BOX - HIGH PERFORMANCE BLENDING

PREUMATIC PIPING//ELECTRIC WIRING////PARALLEL BLADE DAMPER////OPPOSED BLADE DAMPER////AVERAGE SENSING ELEMENT////AVERAGE SENSING ELEMENT////AVERAGE SENSING ELEMENT////AVERAGE SENSING ELEMENT////AVERAGE SENSING ELEMENT////AVERAGE SENSING ELEMENT/////AVERAGE SENSING ELEMENT//////////AVERAGE SENSING ELEMENT//////////////AVERAGE SENSING ELEMENT///////////////////////////////////		
Image: Control of the second secon		PNEUMATIC PIPING
OPPOSED BLADE DAMPER HUMIDIFIER AVERAGE SENSING ELEMENT HIH AIR FLOW PROBE DAMPER ACTUATOR PILOT POSITIONER I 11/2" AIR GAGE I MOTOR STARTER NOTOR STARTER NAL PRESSURE AIR SUPPLY NEAL PRESSURE SWITCH ESS END SWITCH HEL HIGH LIMIT SWITCH HES HUMIDITY SENSOR SD SMOKE DETECTOR SP STATIC PRESSURE SENSOR VED VARIABLE FREQUENCY DRIVE	//	ELECTRIC WIRING
HUMIDIFIER AVERAGE SENSING ELEMENT HIH AIR FLOW PROBE DAMPER ACTUATOR PILOT POSITIONER I 11/2" AIR GAGE I 11/2" AIR GAGE I ROOM THERMOSTAT MOTOR STARTER MOTOR STARTER I ROOM THERMOSTAT I NOTOR STARTER II NOTOR STARTER III NOTOR STARTER III NOTOR STARTER IIII MOTOR STARTER IIII MOTOR STARTER IIII MOTOR STARTER IIIII HIRL IIIIII HIRL IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		PARALLEL BLADE DAMPER
HOMILIPIERAVERAGE SENSING ELEMENTHIAIR FLOW PROBEDAMPER ACTUATORHILOT POSITIONERII-1/2" AIR GAGEII-1/2" AIR GAGEIROOM THERMOSTATMOTOR STARTERMMAIN AIR SUPPLY 20 PSIGIDDLAL PRESSURE AIR SUPPLYMMAIN AIR SUPPLY 20 PSIGIDDLAL PRESSURE AIR SUPPLYMMAIN AIR SUPPLY 20 PSIGIDUAL PRESSURE AIR SUPPLYMMARM UPDPDIFFERENTIAL PRESSURE SWITCHESEND SWITCHHLHIGH LIMIT SWITCHHKHEXHUMIDITY SENSORITSTEMPERATURE SENSORISDSMOKE DETECTORSPSTATIC PRESSURE SENSORISDSMOKE DETECTORSPSTATIC PRESSURE SENSORISDVEDVARIABLE FREQUENCY DRIVEVEDVARIABLE FREQUENCY DRIVEVEDVARIABLE TACTINGDALOCATED ON CONTROL CABINET DOORAIANALOG OUTPUTAOANALOG OUTPUTAO-PANALOG OUTPUTAO-PANALOG OUTPUTAO-PANALOG OUTPUTAO-PANALOG OUTPUTDIDIDIFTAL INPUTDODIFTAL IN	/ - \ - / - \-	OPPOSED BLADE DAMPER
HIIIAIR FLOW PROBEDAMPER ACTUATORIIIDAMPER ACTUATORIIIIPILOT POSITIONERIIIIIAIR FLOW PROBEIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	V	HUMIDIFIER
□DAMPER ACTUATOR□PILOT POSITIONER○1-12" AIR GAGE○3-12" DIAL THERMOMETER□ROOM THERMOSTAT○MAIN AIR SUPPLY 20 PSIG○DUAL PRESSURE AIR SUPPLY●WARM UP□DIFFERENTIAL PRESSURE SWITCHESEND SWITCHHLHIGH LIMIT SWITCHHSHUMIDITY SENSORFRSSTATIC PRESSURE SENSORISDSMOKE DETECTORSSDSMOKE DETECTORSSDSMOKE DETECTORISDVELOCITY SENSORISSTEMPERATURE SENSORISSVELOCITY SENSORISSVELOCITY SENSORALOCATED ON CONTROL CABINET△LOCATED ON CONTROL CABINET DOORAIANALOG OUTPUTAOANALOG OUTPUTAOANALOG OUTPUTAOANALOG OUTPUTAODIRECT ACTINGDDCDIGITAL INPUTDODIGITAL OUTPUTPEELECTRIC TO PNEUMATIC SWITCHNCNORMALLY OPENPEPROOF OF FLOWRAREVERSE ACTINGRCRECEIVER-CONTROLLERSSSTART/STOPCRCURRENT RELAYDI-PDIGITAL TRELAYDI-PDIGITAL TRELAYDI-PDIGITAL TRELAY	\sim	AVERAGE SENSING ELEMENT
Image: Price Positioner Image: Positioner	-++++	AIR FLOW PROBE
○ 1.1/2" AIR GAGE ○ 3.1/2" DIAL THERMOMETER □ ROOM THERMOSTAT ○ J.1/2" DIAL THERMOMETER □ ROOM THERMOSTAT ○ DUAL PRESSURE AIR SUPPLY ● DUFFERENTIAL PRESSURE SWITCH ESS END SWITCH HL HIGH LIMIT SWITCH HS HUMIDITY SENSOR HX HEAT EXCHANGER SD SMOKE DETECTOR SP STATIC PRESSURE SENSOR TS TEMPERATURE SENSOR TS TEMPERATURE SENSOR VED VARIABLE FREQUENCY DRIVE VS VELOCITY SENSOR ▲ LOCATED ON CONTROL CABINET △ LOCATED ON CONTROL CABINET △ LOCATED ON CONTROL CABINET DOOR AI ANALOG OUTPUT AO ANALOG OUTPUT PNEUMATIC C COMMON		DAMPER ACTUATOR
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Image: State of the second		ROOM THERMOSTAT
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RAREVERSE ACTINGR-CRECEIVER-CONTROLLERS/SSTART/STOPCRCURRENT RELAYDI-PDIGITAL ANPUT PNEUMATIC	PE	PNEUMATIC TO ELECTRIC SWITCH
R-CRECEIVER-CONTROLLERS/SSTART/STOPCRCURRENT RELAYDI-PDIGITAL INPUT PNEUMATIC	POF	PROOF OF FLOW
S/S START/STOP CR CURRENT RELAY DI-P DIGITAL 1 NPUT PNEUMATIC	RA	REVERSE ACTING
CR CURRENT RELAY DI-P DIGITAL INPUT PNEUMATIC	R-C	RECEIVER-CONTROLLER
DI-P DIGITAL I NPUT PNEUMATIC	S/S	START/STOP
	CR	CURRENT RELAY
PN PNEUMATIC	DI-P	DIGITAL APUT PNEUMATIC
	PN	PNEUMATIC

N NITROGEN PIPING OXYGEN PIPING SA SURGICAL AIR PIPING V V VACUUM PIPING — EVAC — MEDICAL GAS EVACUATION PIPING COMPRESSED AIR PIPING ——CO2 —— CARBON DIOXIDE PIPING ⊢ NO NITROUS OXIDE OUTLET $\mapsto N$ NITROGEN OUTLET **⊢** 0 OXYGEN OUTLET ⊢ SA SURGICAL AIR OUTLET ⊢A MEDICAL AIR OUTLET $\mapsto V$ VACUUM OUTLET CHECK VALVE LOCKABLE SERVICE SHUT-OFF VALVE PS PRESSURE SWITCH

MEDICAL GAS ZONE VALVE
NITROGEN CONTROL PANEL

NCP

PLUMBING SYMBOLS

c	COLD WATER PIPING
— — н —	HOT WATER PIPING
— —нс —	HOT WATER CIRCULATING PIPING
	VENT PIPING
	WASTE PIPING
— sw ——	SAFE WASTE PIPING
	DOWNSPOUT PIPING
	EMERGENCY DOWNSPOUT PIPING
	GAS PIPING
	FUEL OIL SUPPLY PIPING
	FUEL OIL RETURN PIPING
—_A —	ACID WASTE PIPING
A	ACID VENT PIPING
	SOFT COLD WATER PIPING
	REVERSE OSMOSIS WATER PIPING
	ETHYLENE OXIDE PIPING
— PD ——	PUMP DISCHARGE
— <i>TW</i> ——	TEMPERED WATER PIPING
— DW ——	DRINKING WATER PIPING
~	COMPRESSED AIR PIPING
- >- (CA)	COMPRESSED AIR OUTLET
CO	CLEANOUT
FCO	FLUSH CLEANOUT
🖉 RD	ROOF DRAIN
🖉 ERD	EMERGENCY ROOF DRAIN
🖉 FD	FLOOR DRAIN
🖉 FFD	FLOOR DRAIN WITH FUNNEL
🖉 SFD	SAFE WASTE FLOOR DRAIN
-Оч НВ	HOSE BIBB
-04 <i>WH</i>	WALL HYDRANT
」∟ <i>∨</i> т	VENT THRU ROOF
—-+ ₹ +	SHUT-OFF VALVE
	BALANCING VALVE
_ <u> </u>	GLOBE VALVE
<i>i</i> Ø	CHECK VALVE (SWING OR CUSHION)
₩	CONTROL VALVE
+ #	LUBRICATED PLUG COCK
—————————————————————————————————————	SOLENOID VALVE
24	PRESSURE RELIEF VALVE
— \ \\\\	PRESSURE REDUCING VALVE
<u>-</u>	WYE STRAINER
	UNION
	PIPE ANCHOR
<u> </u>	FLOW ELEMENTS
-	DIRECTION OF FLOW IN PIPES
	DIRECTION OF PITCH IN PIPES
	RISE AND DROP IN PIPING
<u></u> ፡ዋ፡	BRANCH PIPING CONNECTION (TOP OF PIPE)
	BRANCH PIPING CONNECTION (BOTTOM OF PIPE)
<u> </u>	WELDED ELBOW

FIRE PROTECTION SYMBOLS

-----PSP ----- PRESSURIZED STANDPIPE PIPING SPRINKLER PIPING (WET TYPE) -----SD ------ SPRINKLER PIPING (DRY TYPE) ------F FIRE SERVICE PIPING ID INSPECTOR TEST DRAIN -----FPS ------ FIRE PUMP SUCTION PIPING FIRE HOSE CABINET FHC POST INDICATOR VALVE PIV Ø EXISTING SPRINKLER HEAD NEW SPRINKLER HEAD -OH FV FIRE DEPARTMENT HOSE VALVE SPRINKLER FLOW INDICATOR SWITCH TAMPER SWITCH FIRE DEPARTMENT CONNECTION

PROJECT MECHANICAL GENERAL NOTES (THESE NOTES APPY TO ALL MECHANICAL SHEETS)

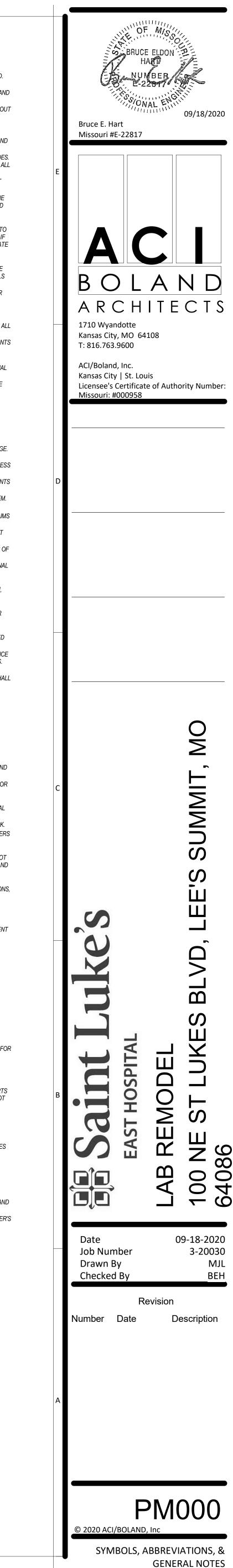
- 1 THE LOCATION OF ALL STRUCTURAL OPENINGS SHALL BE AS INDICATED ON THE MECHANICAL, STRUCTURAL AND ARCHITECTURAL DRAWINGS. COORDINATE EXACT SIZES OF OPENINGS REQUIRED. 2 ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT
- MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- 3 CONTRACTOR SHALL FIELD VERIFY CLEARANCE ABOVE THE CEILING AND NOTIFY THE ENGINEER ABOUT POSSIBLE CONFLICTS.
- 4 DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES RELATING TO WORK TO VERIFY SPACE IN WHICH WORK WILL BE INSTALLED. MAINTAIN HEADROOM AND
- SPACE CONDITIONS AT ALL TIMES. 5 IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE ALL WORK WITH ALL OTHER TRADES. THE SHOP DRAWINGS PREPARED BY THIS CONTRACTOR SHALL INDICATE SPACE ALLOWANCES FOR ALL
- WORK OF ALL OTHER TRADES AND SHALL BE SIGNED OFF BY ALL OTHER CONTRACTORS. 6 CONTRACTOR SHALL VERIFY ON-SITE ALL CONDITIONS AND MEASUREMENTS SHOWN ON CONTRACT DRAWINGS.
- 7 ALL SUPPORTS FOR MECHANICAL EQUIPMENT ARE BASED ON PRELIMINARY INFORMATION FROM ONE MANUFACTURER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING SIZES FROM CERTIFIED DRAWINGS OF EQUIPMENT BEING SUBMITTED AND SHALL MAKE ANY STRUCTURAL MODIFICATIONS REQUIRED WITHOUT ANY ADDITIONAL COST TO THE OWNER. 8 ALL NEW EQUIPMENT FURNISHED BY THE MECHANICAL CONTRACTOR SHALL BE MANUFACTURED INTO
- COMPONENTS THAT CAN BE MOVED INTO THE BUILDING THROUGH AVAILABLE BUILDING OPENINGS. IF ADDITIONAL BUILDING OPENINGS ARE REQUIRED, THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND MAKE ALL PROVISIONS TO MOVE EQUIPMENT INTO FINAL LOCATION.
- 9 WHERE EQUIPMENT AND/OR PIPING AND/OR DUCTWORK IS NOTED TO BE DEMOLISHED, COORDINATE WITH GENERAL CONTRACTOR PRIOR TO REMOVAL OR ENSURE THAT REMOVAL OR EQUIPMENT FALLS WITHIN PRESENT CONSTRUCTION LIMITS AND SCOPE OF WORK.
- 10 WHERE REFRIGERANT PIPING OR SYSTEM ARE TO BE DEMOLISHED, RECLAIM ALL REFRIGERANT PER GUIDELINES AND STORE OR DISPOSE OF AS REQUIRED. 11 ALL STORED AND/OR PARTIALLY INSTALLED SHEET METAL, PIPING, AND EQUIPMENT SHALL BE
- PROTECTED FROM WEATHER. CONTRACTOR SHALL COVER OPEN ENDS AT END OF WORK DAY. 12 CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE BUILDING CODE REQUIREMENTS AND PROVIDE ALL
- REQUIRED CONTROLLED INSPECTIONS FOR HIS WORK. 13 DUCTWORK SHALL BE INSULATED PER SPECIFICATIONS OR AS NOTED ON DRAWINGS. ALL DUCT JOINTS
- AND SEAMS SHALL BE SEALED PER SPECIFICATIONS. 14 DUCT AND PLENUM SIZES INDICATED ON THE DRAWINGS ARE SHEET METAL DIMENSIONS. 15 MANUAL DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES AND IN ALL BRANCHES TO INDIVIDUAL
- DIFFUSERS, GRILLES AND REGISTERS. 16 CONTRACTOR SHALL FURNISH AND INSTALL CONCEALED DAMPER ACTUATORS AND DAMPER WHERE
- DAMPERS ARE INSTALLED IN INACCESSIBLE CEILINGS. 17 EXACT LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS AND GRILLES DETAILED ON THE
- ARCHITECTURAL REFLECTIVE CEILING PLAN, AND ARCHITECTURAL ROOM ELEVATIONS. 18 ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED AND TESTED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS. PROCEDURES DETAILED IN THE ASHRAE HANDBOOK OF FUNDAMENTALS, OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR
- CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA). 19 PROVIDE METAL COVER PLATES FOR ALL PIPES LOCATED AT FLOOR LEVEL TO PREVENT PIPE DAMAGE.
- PLATES SHALL NOT BE DAMAGED BY NORMAL MAINTENANCE TRAFFIC. 20 ALL BRANCH PIPING TO VAV BOXES, FCUS, OR OTHER COMPONENTS SHALL BE MINIMUM OF 3/4" UNLESS
- NOTED OTHERWISE. 21 PROVIDE MANUAL AIR VENTS, DRAINS AND RELIEF VALVES AS REQUIRED AT THE HIGH AND LOW POINTS IN THE SYSTEM.
- 22 PROVIDE VALVED AND CAPPED CONNECTIONS FOR DRAINAGE AT ALL LOW POINTS OF PIPING SYSTEM. 23 MINIMUM PITCH SHALL BE SUFFICIENT TO INSURE ADEQUATE VENTING OR DRAINAGE.
- 24 CONTRACTOR SHALL COORDINATE INSTALLATION OF HORIZONTAL PIPE RUNS IN THE CEILING PLENUMS WITH ALL TRADES.
- 25 PROVIDE REDUCER FITTINGS FOR CHANGE IN PIPE SIZE AND FOR FINAL CONNECTION AT EQUIPMENT AND AS REQUIRED TO PERMIT DRAINAGE AND VENTING.
- 26 ALL PIPING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS AND RISERS OF
- 27 THERMOSTAT AND/OR HUMIDISTAT LOCATIONS SHALL BE COORDINATED WITH LIGHT SWITCHES. FINAL LOCATIONS OF THERMOSTAT AND/OR HUMIDISTAT SHALL BE COORDINATED WITH ARCHITECT AND ENGINEER.
- 28 INSTALL BREAK GLASS SWITCHES FOR EMERGENCY SHUTDOWN FOR CHILLER ROOM, BOILER ROOM, AND ALL REQUIRED PRESSURE VESSELS.
- 29 MECHANICAL CONTRACTOR IS RESPONSIBLE TO FURNISH DISCONNECT SWITCHES AND MOTOR STARTERS FOR ALL HVAC EQUIPMENT. FOR INSTALLATION AND WIRING, MECHANICAL CONTRACTOR SHALL COORDINATE ELECTRICAL CONTRACTOR AND ELECTRICAL SPECIFICATIONS.
- 30 MECHANICAL CONTRACTOR IS RESPONSIBLE TO INSTALL DUCT MOUNTED SMOKE DETECTOR AS INDICATED ON DESIGN DRAWINGS. DUCT MOUNTED SMOKE DETECTORS ARE FURNISHED AND WIRED
- BY ELECTRICAL CONTRACTOR PER ELECTRICAL SPECIFICATIONS. 1 PROVIDE ESCUTCHEONS AND SEALING OF ALL PENETRATIONS OF FIRE SEPARATIONS IN ACCORDANCE DETAIL DRAWINGS AND PER APPLICABLE CODES AS REFERENCE ON ARCHITECTURAL CODE SHEETS.
- 32 THIS IS A 24 HOUR OPERATING FACILITY, SO SOME WORK MAY HAVE TO BE DONE AFTER NORMAL WORKING HOURS OR ON WEEKENDS AT NO ADDITIONAL COST TO OWNER. SYSTEM SHUT DOWNS SHALL BE COORDINATED AND SCHEDULE WITH OWNER AT LEAST TWO WEEKS IN ADVANCE.

PROJECT PLUMBING GENERAL NOTES

- (THESE NOTES APPY TO ALL PLUMBING SHEETS) 1 DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES RELATING TO WORK TO VERIFY SPACE IN WHICH WORK WILL BE INSTALLED. MAINTAIN HEADROOM AND SPACE CONDITIONS AT ALL TIMES.
- 2 COORDINATE PLUMBING SYSTEMS WITH WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- 3 MAINTENANCE LABEL SHALL BE AFFIXED TO ALL PLUMBING EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED TO OWNER. 4 CONTRACTOR SHALL REFER TO ALL THE ARCHITECTURAL DRAWINGS FOR PLUMBING RELATED WORK.
- 5 PLUMBING CONTRACTOR IS RESPONSIBLE TO FURNISH DISCONNECT SWITCHES AND MOTOR STARTERS FOR ALL PLUMBING EQUIPMENT. FOR INSTALLATION AND WIRING, PLUMBING CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND ELECTRICAL SPECIFICATIONS.
- 6 CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS INCLUDING BUT NOT LIMITED TO ENTERING MANHOLES, USE OF WATER FROM LOW PRESSURE HYDRANTS, DEMOLITION AND NEW WORK, ETC. PRIOR TO COMMENCEMENT OF WORK.
- 7 ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE ALL FITTINGS, TRANSITIONS, VALVES AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- 8 ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO ALL APPLICABLE LOCAL CODES AND REGULATIONS AS REFERENCED ON ARCHITECTURAL CODE PLANS.
- 9 WHERE EQUIPMENT AND/OR PIPING IS NOTED TO BE DEMOLISHED, COORDINATE WITH GENERAL CONTRACTOR PRIOR TO REMOVAL TO ENSURE THAT REMOVAL OF EQUIPMENT FALLS WITHIN PRESENT CONSTRUCTION LIMITS AND SCOPE OF WORK. DEMOLITION PLANS SHOW GENERAL INTENT OF DEMOLITION WORK, NOT ALL DEMO WORK MAY BE SHOWN. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ITEMS NOT REQUIRED TO REMAIN.

PROJECT FIRE PROTECTION GENERAL NOTES (THESE NOTES APPY TO ALL FIRE PROTECTION SHEETS)

- 1 COORDINATE FIRE PROTECTION SYSTEMS WITH WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- 2 COMPLETE SPRINKLER INSTALLATION WITH ALL EQUIPMENT, SPRINKLER HEADS, PIPES, FITTINGS, DRAINS AND HANGERS.
- 3 UNLESS OTHERWISE NOTED, ALL CONTROL VALVES SHALL BE PROVIDED WITH TAMPER SWITCHES. 4 SPRINKLER PIPING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE. HANGERS AND SUPPORTS SHALL BE UL LISTED APPROVED FOR USE IN SPRINKLER SYSTEMS. WHERE FIELD CONDITIONS DO NOT PERMIT SUPPORTING FROM THE BUILDING STRUCTURE, PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED. NO SPRINKLER PIPING SHALL BE HUNG FROM THE PIPING OF OTHER TRADES OR
- MECHANICAL SYSTEMS. 5 MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED BETWEEN TOP OF STORAGE AND SPRINKLER DEFLECTOR.
- 6 FIRE SPRINKLER CONTRACTOR SHALL OBTAIN APPROVAL FROM THE FIRE MARSHAL AND AUTHORITIES HAVING JURISDICTION FOR THE SPRINKLER SYSTEM PRIOR TO INSTALLATION. 7 FIRE SPRINKLER CONTRACTOR SHALL PREPARE AND SUBMIT PRIOR TO ANY FABRICATION AND INSTALLATION OF ALL NECESSARY DRAWINGS AND/OR DOCUMENTS FOR THE PROVISION AND INSTALLATION OF A FULLY AUTOMATIC FIRE SPRINKLER SYSTEM THROUGHOUT THE BUILDING, IN
- ACCORDANCE WITH AND SUBJECT TO THE INTERNATIONAL BUILDING AND FIRE CODES AND THE AUTHORITIES HAVING JURISDICTION. 8 ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING AND FIRE CODES, AND ALL LOCAL FIRE DEPARTMENT REQUIREMENTS.
- 9 ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE ALL FITTINGS, TRANSITIONS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.



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1/8" = 1'-0"

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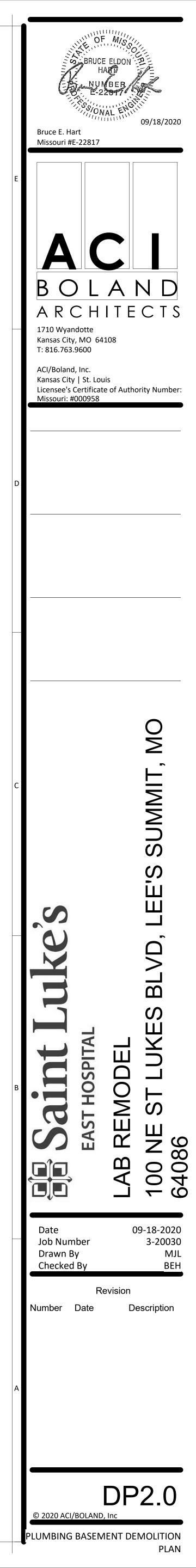
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GENERAL NOTES

1 REFER TO GENERAL NOTES ON SHEET PM000 AND SHEET DP2.1.

- CUT 3" WASTE PIPING AND REMOVE UPSTREAM PIPING THAT SERVED SINK AND/OR FLOOR DRAIN ABOVE, INCLUDING ASSOCIATED VENT PIPING UP THRU FIRST FLOOR SLAB. PATCH SLAB AS SPECIFIED AND PROTECT REMAINING 3" WASTE PIPING FOR NEW CONNECTION, RE: SHEET P2.0.
 CUT AND CAP 3" WASTE PIPING THAT SERVED FLOOR DRAIN ABOVE.
- 3 CUT VENT PIPING BELOW SLAB AND REMOVE VENT PIPING BELOW SLAB ASSOCIATED WITH THE FLOOR DRAIN THAT IS BEING REMOVED. PROTECT VENT PIPING RISER FOR A NEW CONNECTION JUST BELOW THE SLAB, RE: SHEET P2.0.





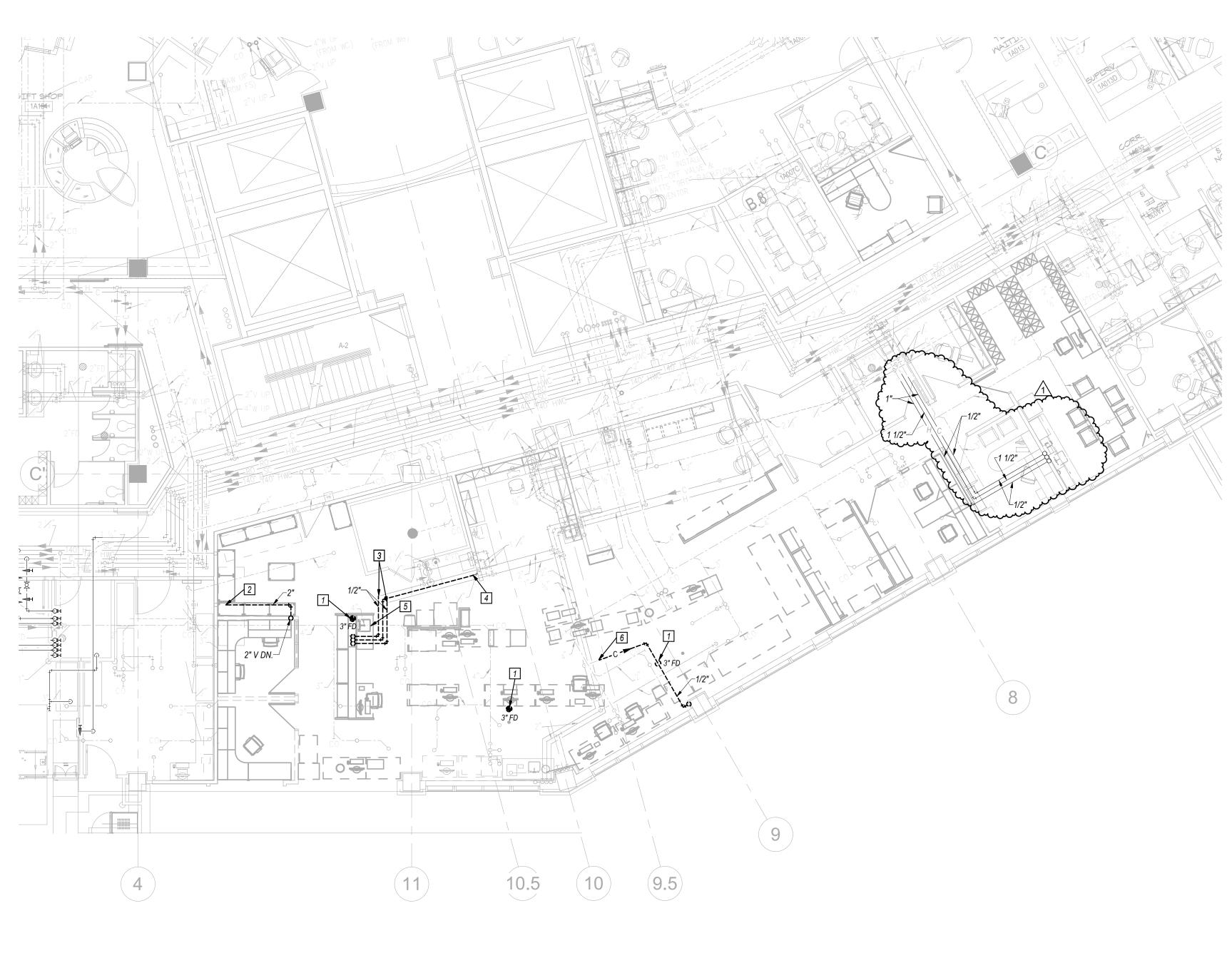
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1 FIRST FLOOR PLUMBING DEMOLITION PLAN 1/8" = 1'-0"

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GENERAL NOTES SEE SHEET PM000 FOR GENERAL NOTES AND SYMBOLS LISTS.

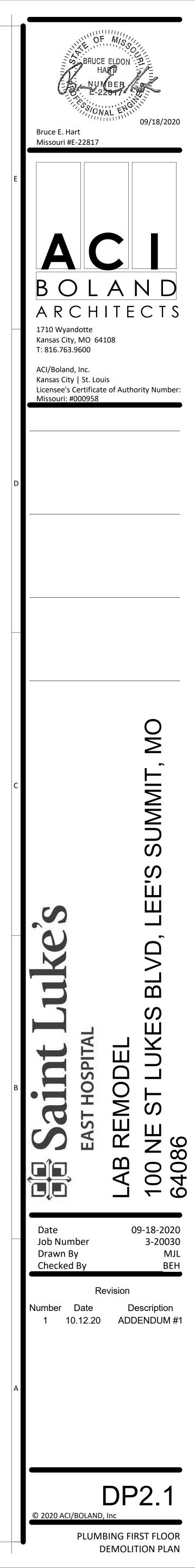
- 2 THIS PLAN SHOWS GENERAL INTENT OF DEMOLITION WORK. CONTRACTOR SHALL COORDINATE DEMOLITION WITH OWNER. THIS IS A 24-HOUR FACILITY. THEREFORE, WORK MAY NEED TO BE COMPLETED AFTER NORMAL WORKING HOURS OR DURING WEEKENDS AT NO EXTRA COST TO THE OWNER. ALL SHUTDOWNS SHALL BE COORDINATED AND SCHEDULED WITH OWNER A MINIMUM OF TWO WEEKS BEFORE BEGINNING WORK.
- 3 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN, WORK SHOWN DASHED BOLD IS WORK TO BE REMOVED.
- 4 REMOVE PLUMBING FIXTURES, PIPING, DRAINS, EQUIPMENT, ETC. AS SHOWN. CAP PIPING BELOW FLOOR, BEHIND WALLS AND PATCH OPENINGS AS REQUIRED. PIPING NOT REQUIRED TO REMAIN TO BE REMOVED TO MAINS AND CAPPED. PATCH FLOOR OPENINGS NOT REQUIRED TO REMAIN TO MATCH EXISTING GRADE.
- 5 REMOVE SPRINKLER HEADS ASSOCIATED BRANCH PIPING AS REQUIRED IN REMODEL AREAS. RELOCATE SPRINKLER MAINS AS REQUIRED FOR NEW WORK
- 6 CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.
- 7 NOT ALL DEMOLITION WORK MAY BE SHOWN. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ITEMS NOT REQUIRED TO REMAIN.
- 8 OWNER SHALL HAVE FIRST RIGHT OF REFUSAL AN ALL EQUIPMENT REMOVED.

KEYED NOTES

- DISCONNECT AND REMOVE FLOOR DRAIN. PATCH SLAB AS SPECIFIED.
 CUT 2" V AND REMOVE PIPING DOWN THRU SLAB THAT SERVED NEARBY FLOOR
- DRAIN. PATCH SLAB AS SPECIFIED. PROTECT REMAINING PIPING FOR NEW CONNECTION, RE: SHEET P2.1.
- 3 CUT 1/2" C AND 1/2" H AND REMOVE DOWNSTREAM PIPING TO SINK. PROTECT REMAINING PIPING FOR NEW CONNECTIONS, RE: SHEET P2.1.
- CUT AND CAP 1 ½" V AND REMOVE PIPING THAT SERVED SINK.
 DISCONNECT AND REMOVE SINK AND ACCESSORIES. REMOVE WASTE PIPING DOWN THRU SLAB AND PATCH SLAB AS SPECIFIED.
- 6 CUT AND CAP AND REMOVE DOMESTIC WATER PIPING NOT REQUIRED TO
- A REMAIN. 7 NOT USED. 8 NOT USED.

PLAN CTRUETH NORTH

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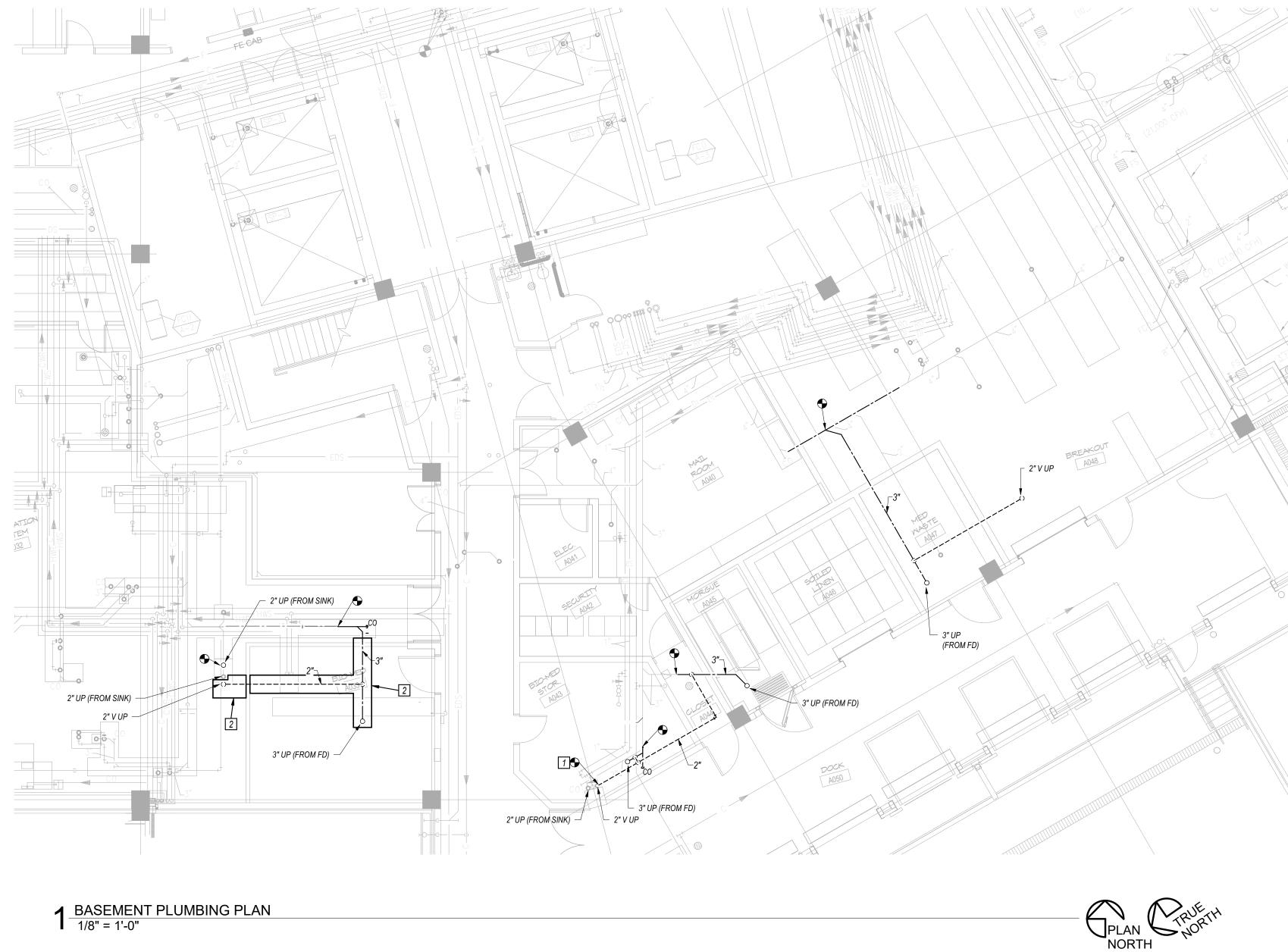
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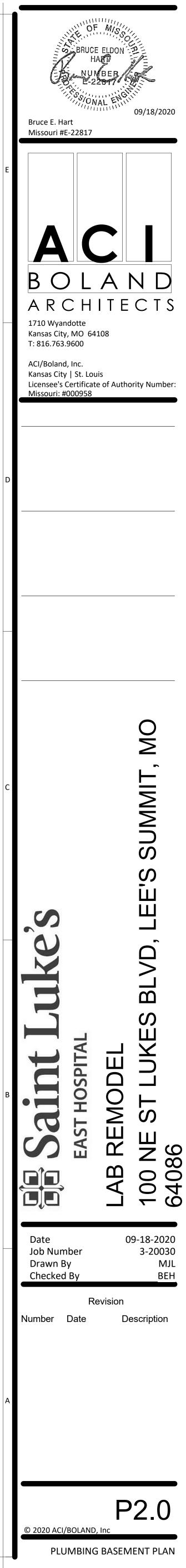
GENERAL NOTES

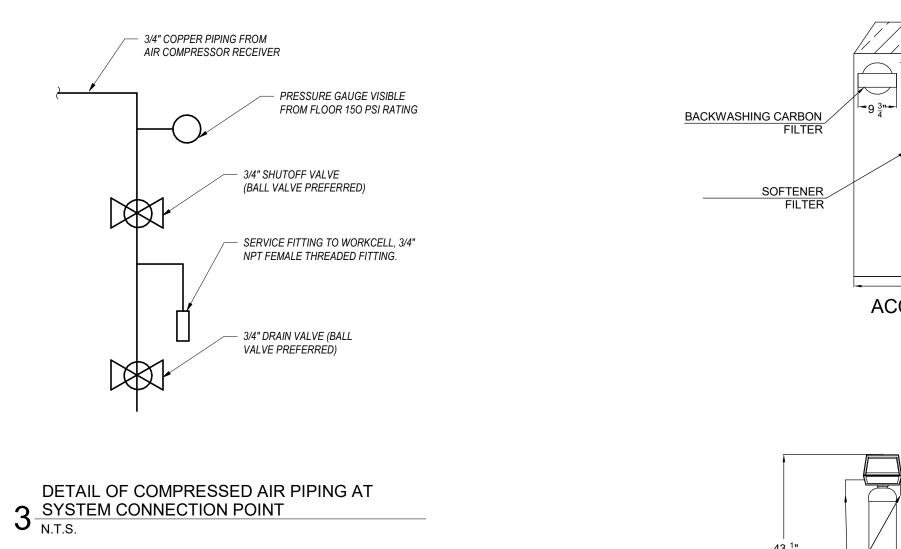
1 REFER TO GENERAL NOTES ON SHEET PM000 AND SHEET P2.1.

KEYED NOTES 0

PANS.

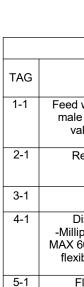
1 CONNECT NEW 2" V PIPING TO EXISTING 2" V RISER JUST BELOW SLAB, WHERE IT WAS CUT DURING DEMOLITION. SHEET METAL DRIP PAN BELIVELITIEN.
 SHEET METAL DRIP PAN BELOW NEW PIPING. PAN SHALL BE 24" WIDE BY 3" DEEP. CONNECT NEW SEGMENTS OF DRIP PAN TO EXISTING DRIP PANS AS REQUIRED, AND SLOPE THE NEW SEGMENTS TO DRAIN INTO THE EXISTING DRIP

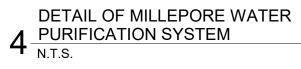




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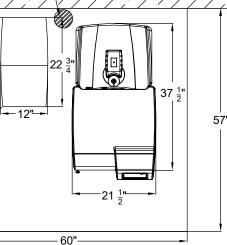


PLUMBING FIXTURE SCHEDULE MANFR AND MODEL NO. WASTE VENT COLD HOT INER AND 1-1/2" C.P. ELKAY NO. LR-1720 INER AND 1-1/2" 1/2" 1/2" V CONTROL DEVICE. " TRAP WITH ORN NO. 2712 KCW INLET SUPPLIES

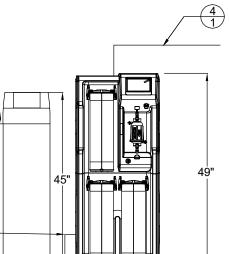
MARK	FIXTURE	DESCRIPTION	ACCESSORIES
СМ	Mana NOTUSED A A A A		ununununun
S-1	LABORATORY CRITICAL AREA SINK	17"x20" 18 GAUGE NO. 302 STAINLESS STEEL SINGLE COMPARTMENT SINK WITH COVED CORNERS, SELF-RIMMED, LK-6K-H SATIN FINISH.	ELKAY NO. LK-8 C.P. BRASS GRID STRAINER / BRASS TAILPIECE. CHICAGO FAUCET NO. 89 FAUCET, 4" CENTERS, NO. GN2A 5-3/8" SPOUT WRIST BLADE HANDLES AND "FC" FLOW CON DEARBORN NO. 510-17 GAUGE 1-1/2" "P" TRAF CLEANOUT AND ESCUTCHEON, DEARBORN N HOT AND COLD WATER COMPRESSION INLET WITH STOPS.







ACCESS AREA REQUIRED



_____ ELEVATION VIEW

INTERF	ACE CALL-OUT TABLE						
DESCRIPTION	LOCATION						
Feed water source - provide 3/4" npt male connection with isolation ball valve. 30 LPM at 50 - 85 psi.	On wall, within 5 feet of system. If under a sink, provide 2" Ø hole in counter or casework for tubing for connection to system by MilliporeSigma						
Reject from make-up system and pre-treatment	MilliporeSigma will run tubing from system to floor drain provided by contractor.						
Not used.							
Distribution recirculating loop MilliporeSigma will provide & install IAX 60 feet of 16 mm OD (10 mm ID) flexible tubing to feed analyzer(s).	Surface mounted in accessible location.						
Floor drain or stand pipe by others, capable of handling 30LPM flow.	MilliporeSigma will run tubing from system to floor drain provided by contractor.						

SPRINKLER NOTE SPRINKLER CONTRACTOR SHALL DISCONNECT, REMOVE, AND RELOCATE ANY AND/OR ALL

SPRINKLER PIPING AND SPRINKLER HEADS AS REQUIRED BY MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS. AFTER ALL LARGER DUCTWORK AND PIPING HAVE BEEN INSTALLED, SPRINKLER CONTRACTOR SHALL REINSTALL SPRINKLER PIPING AND HEADS REQUIRED TO SPRINKLER REMODELED SPACE. SPRINKLER CONTRACTOR SHALL ALSO INSTALL NEW SPRINKLER HEADS AND/OR PIPING AS REQUIRED BY REMODEL OF SPACE. ALL SPRINKLER HEADS SHALL BE CONCEALED TYPE.

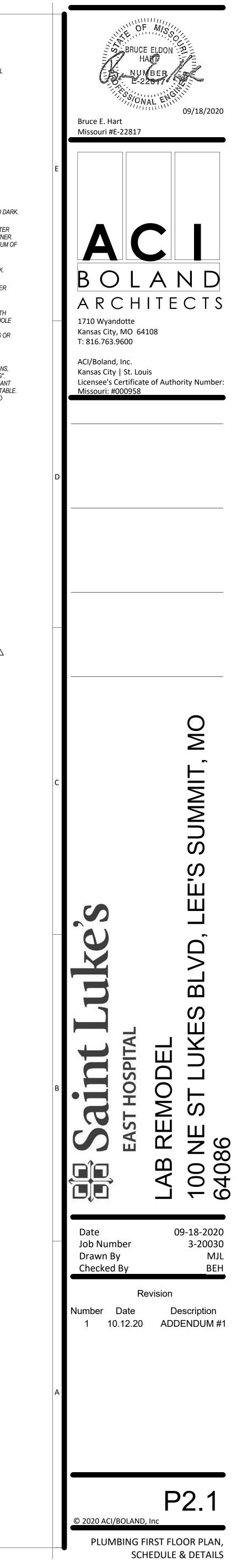
GENERAL NOTES

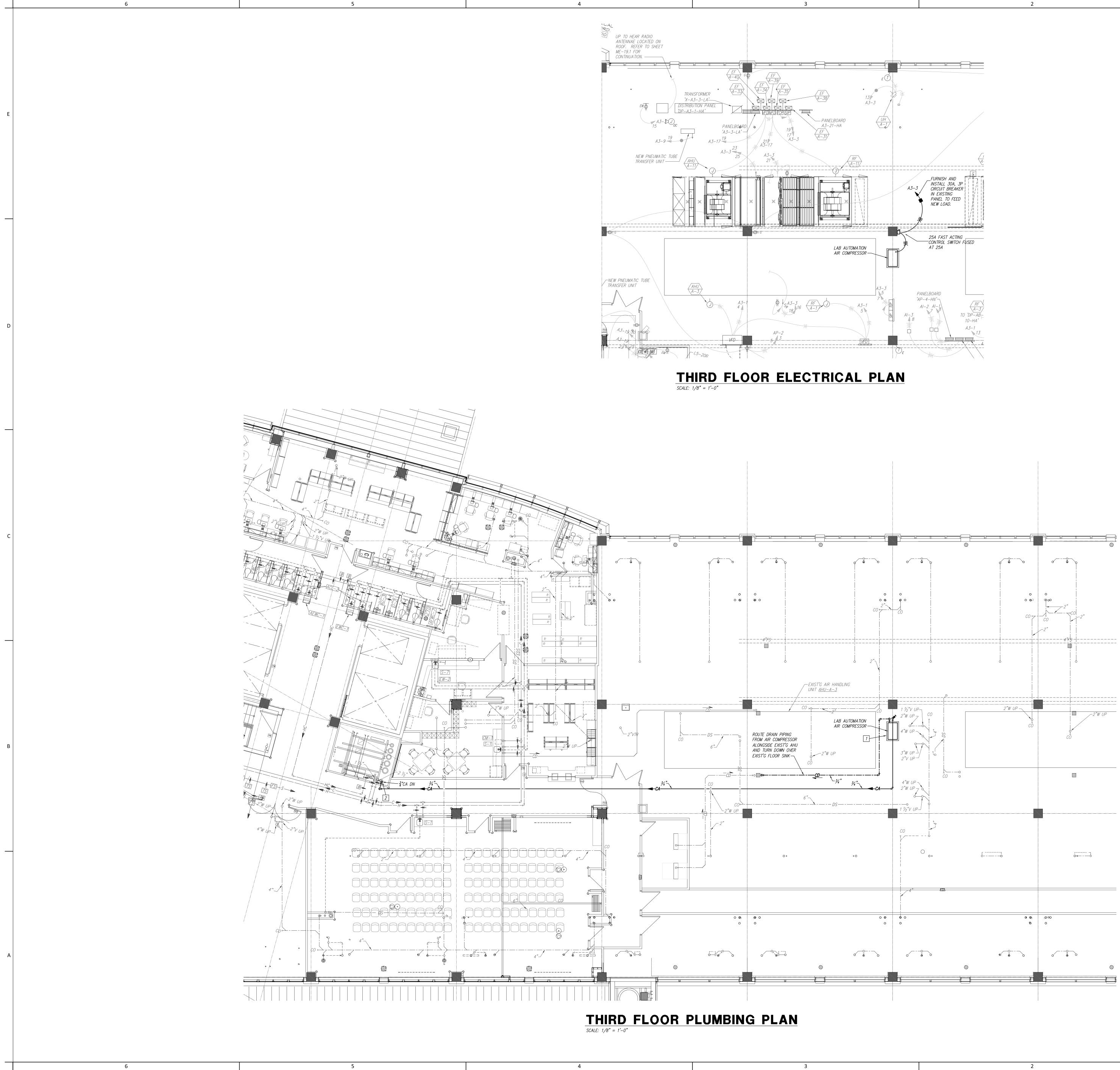
- 1 SEE SHEET PM000 FOR GENERAL NOTES AND SYMBOLS LISTS.
- 2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. ALL NEW WORK SHOWN BOLD AND DARK. 3 THIS IS A 24-HOUR FACILITY. THEREFORE, WORK MAY NEED TO BE COMPLETED AFTER NORMAL WORKING HOURS OR DURING WEEKENDS AT NO EXTRA COST TO THE OWNER. ALL SHUTDOWNS SHALL BE COORDINATED AND SCHEDULED WITH OWNER A MINIMUM OF
- TWO WEEKS BEFORE BEGINNING WORK. 4 FIELD VERIFY ALL EXISTING PIPE SIZES AND LOCATIONS PRIOR TO STARTING WORK.
- 5 CAREFULLY COORDINATE NEW WORK WITH EXISTING FIELD CONDITIONS AND OTHER TRADES.
- 6 BEFORE CORE DRILLING ANY HOLES, LOCATE REBAR IN THE SLAB BY X-RAY OR WITH R-METER. IF REBAR IN ENCOUNTERED WITHIN THE PROPOSED LOCATION OF THE HOLE THEN EITHER RELOCATE THE HOLE TO MISS REBAR OR IF THE HOLE CANNOT BE RELOCATED, CONTACT STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CORING OR DRILLING. DO NOT CORE ANY HOLES THROUGH THE BEAM WITHOUT APPROVAL OF STRUCTURAL ENGINEER
- 7 ALL NEW WASTE PIPING SERVING THE LAB AREA (SERVING SINKS AND FLOOR DRAINS, EXCEPT THE BREAK ROOM SINK) SHALL BE CONSIDERED "CHEMICAL WASTE PIPING". CHEMICAL WASTE PIPING AND FITTINGS SHALL BE ORION "BLUELINE" FIRE RETARDANT POLYPROPYLENE, OR APPROVED EQUAL. NEITHER CAST IRON NOR PVC IS ACCEPTABLE. ADDITIONALLY, VENT PIPING ASSOCIATED WITH THE CHEMICAL WASTE DRAINS AND LOCATED BELOW THE FIRST FLOOR SLAB SHALL BE THE SAME MATERIAL AS THE CHEMICAL WASTE PIPING.

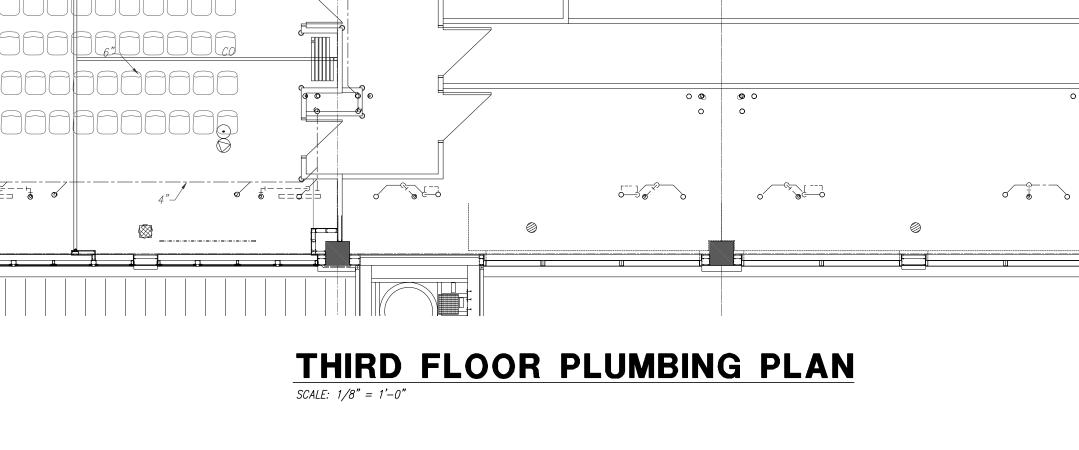
KEYED NOTES 0

- 1 1/2" C, 1/2" H AND 1 1/2" V DN IN WALL TO NEW SINK. EXTEND 2" WASTE FROM FIXTURE DOWN IN WALL AND CORE DRILL DOWN THRU SLAB.
- 2 COORDINATE EXACT LOCATION OF NEW FLOOR DRAIN WITH OWNER PRIOR TO INSTALLATION. 3 COORDINATE EXACT LOCATION OF NEW FLOOR DRAIN WITH OWNER'S WATER
- PURIFICATION VENDOR (MILLEPORE SIGMA) PRIOR TO INSTALLATION. 4 COORDINATE EXACT LOCATION OF NEW FLOOR DRAIN WITH OWNER'S LAB
- AUTOMATION VENDOR (SIEMENS) PRIOR TO INSTALLATION. 5 COORDINATE EXACT LOCATION OF NEW PIPING IN EXIST'G UTILITY CHASE WITH OWNER (MANAGER OF FACILITIES) PRIOR TO INSTALLATION. NEW PIPING SHALL NOT BLOCK ACCESS TO EXIST'G VALVES OR ANY OTHER ITEMS REQUIRING ACCESS. ROUTE PIPING FROM FIRST FLOOR UP THROUGH SECOND FLOOR LEVEL (NOT SHOWN) TO THIRD FLOOR LEVEL.
- 6 3/4" CA DOWN TO LAB AUTOMATION SYSTEM CONNECTION POINT, RE: DETAIL ON THIS SHEET. 7 3/4" SOFT COLD WATER DOWN TO NEW 3/4" REDUCED-PRESSURE BACKFLOW PREVENTER MOUNTED IN ACCESSIBLE LOCATION ON WALL. EXTEND DRAIN PIPING FROM BACKFLOW PREVENTER AND TURN DOWN OVER EXIST'G FLOOR

DRAIN IN THIS ROOM. 8 3/4" SC DOWN TO WATER PURIFICATION SYSTEM CONNECTION POINT, RE: DETAIL ON THIS SHEET.



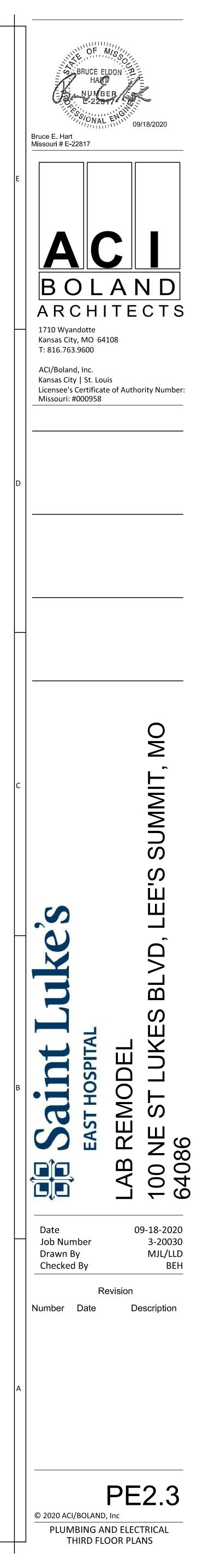




GENERAL NOTES:

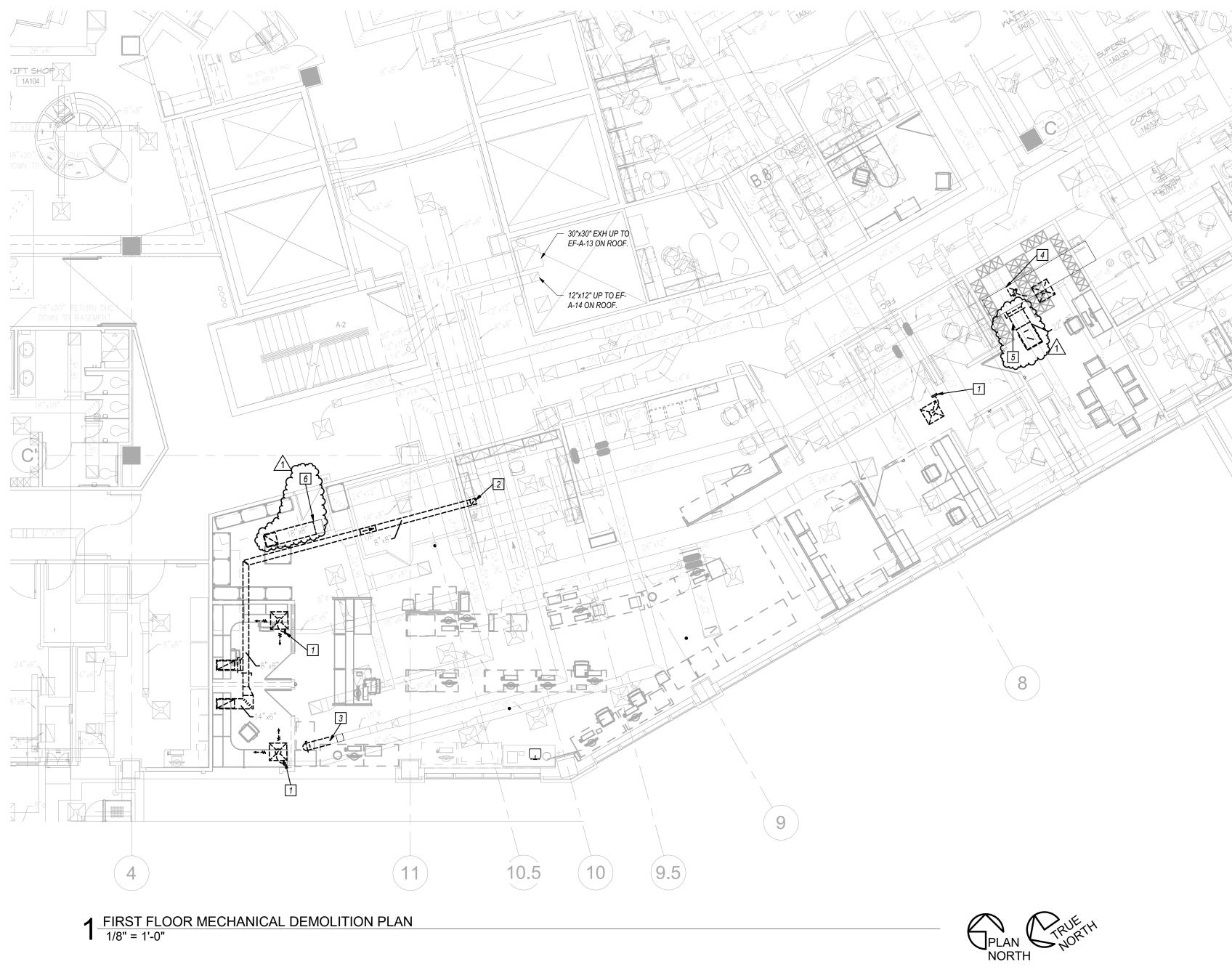
1. REFER TO GENERAL NOTES ON SHEETS PMOOO, EOOO AND P2.1.

- 1 INSTALL NEW COMPRESSOR ON NEW 4" THICK CONCRETE HOUSEKEEPING PAD. COMPRESSOR IS BEING FURNISHED BY OWNER (THROUGH THEIR LAB AUTOMATION VENDOR) AND IS EXPECTED TO BE ATLAS COPCO MODEL SF4, WITH INTEGRATED RECEIVER, REFRIGERATED AIR DRYER AND CONTROLS. COORDINATE EXACT LOCATION OF EQUIPMENT WITH OWNER (MANAGER OF FACILITIES) PRIOR TO INSTALLATION.
- 2 COORDINATE EXACT LOCATION OF NEW PIPING IN EXISTING UTILITY CHASE WITH OWNER (MANAGER OF FACILITIES) PRIOR TO INSTALLATION. NEW PIPING SHALL NOT BLOCK ACCESS TO EXISTING VALVES OR ANY OTHER ITEMS REQUIRING ACCESS. ROUTE PIPING FROM THIRD FLOOR DOWN THROUGH SECOND FLOOR LEVEL (NOT SHOWN) TO FIRST FLOOR LEVEL.



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GENERAL NOTES

- 1 REFER TO GENERAL NOTES ON SHEET PM000.
- 2 PRIOR TO PERFORMING DEMOLITION, TAKE AIRFLOW READINGS AT THE FOLLOWING LOCATIONS AND SUBMIT THOSE READINGS IN A WRITTEN REPORT TO THE ENGINEER: •FAN SOURCE READINGS AT THE AHU-A-3 SUPPLY FAN; DUCT TRAVERSE OF THE MEDIUM-PRESSURE SUPPLY AIR MAIN DUCT, OUTSIDE AIR DUCT, AND RELIEF AIR DUCT. ALSO PROVIDE TOTAL UNIT STATIC PRESSURE, STATIC PRESSURE ACROSS EACH AHU SECTION/COMPONENT, FAN SPEED, MOTOR

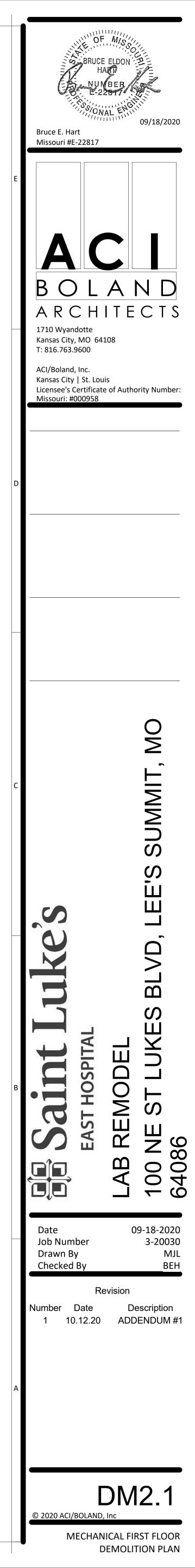
NAMEPLATE DATA, VFD FREQUENCY, MOTOR AMP READING, AND A DIAGRAM OF AHU & DUCTWORK

- SHOWING WHERE READINGS WERE TAKEN. •FAN SOURCE READINGS AT THE ASSOCIATED RETURN FAN; DUCT TRAVERSE FOR THE RETURN AIR MAIN DUCT. ALSO PROVIDE STATIC PRESSURE, FAN SPEED, MOTOR NAMEPLATE DATA, VFD FREQUENCY, AND MOTOR AMP READING.
- •FAN SOURCE READINGS AT THE EF-A-13 GENERAL LABORATORY EXHAUST FAN (LOCATED ON HIGH ROOF, BETWEEN THE ELEVATORS). PROVIDE FAN NAMEPLATE DATA & SERIAL NUMBER, AIRFLOW RATE, STATIC PRESSURE, FAN SPEED, MOTOR NAMEPLATE DATA, VFD FREQUENCY (IF APPLICABLE), AND MOTOR AMP READING.
- •FAN SOURCE READINGS AT THE EF-A-14 BIOSAFETY CABINET EXHAUST FAN (LOCATED ON HIGH ROOF, BETWEEN THE ELEVATORS). PROVIDE FAN NAMEPLATE DATA & SERIAL NUMBER, AIRFLOW RATE, STATIC PRESSURE, FAN SPEED, MÓTOR NAMEPLATE DATA, VFD FREQUENCY (IF APPLICABLE), AND MOTOR AMP READING.
- •GRILLE, REGISTER, AND DIFFUSER (GRD) READINGS AT ALL EXISTING GRDS SERVING THE ENTIRE LABOARATORY AREA, INCLUDING THE OPEN LAB AREA, ASSOCIATED OFFICES, BLOOD BANK AREAS, RECEPTION/DRAW, BREAK ROOM, AND TOILET ROOM. TAKE READINGS AT ALL EXISTING GRDS, WHETHER THEY ARE SHOWN ON THESE PLANS OR NOT.
- 3 THIS PLAN SHOWS GENERAL INTENT OF DEMOLITION WORK. CONTRACTOR SHALL COORDINATE DEMOLITION WITH OWNER. THIS IS A 24 HOUR OPERATING FACILITY, SO SOME WORK MAY NEED TO BE COMPLETED AFTER NORMAL WORKING HOURS OR ON WEEKENDS AT NO EXTRA COST TO OWNER. SYSTEM SHUT DOWNS SHALL BE COORDINATED AND SCHEDULED WITH OWNER.

•BIOSAFETY CABINET (BSC) EXHAUST AIRFLOW READING, FROM THE EXISTING BSC IN THE LAB AREA.

- 4 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. WORK SHOWN DASHED BOLD IS WORK TO BE REMOVED.
- 5 CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.
- 6 NOT ALL DEMOLITION WORK MAY BE SHOWN. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ITEMS NOT REQUIRED TO REMAIN.
- 7 DUE TO CONTINUED OPERATION OF EXISTING FACILITY, DEMOLITION MAY HAVE TO BE COMPLETED IN PHASES. COORDINATE PHASING OF WORK WITH OWNER.
- 8 MOST DIFFUSERS AND GRILLES IN PROJECT AREA ARE SHOWN LIGHTLY, AS EXISTING TO REMAIN. HOWEVER, WHERE REQUIRED FOR GENERAL CONTRUCTION, OR OTHER WORK ABOVE CEILINGS, CONTRACTOR SHALL TEMPORARILY DISCONNECT DIFFUSERS/GRILLES AND/OR COVER OPENINGS, THEN CLEAN AND RE-INSTALL IN CEILING GRIDS PRIOR TO OCCUPANCY. PROVIDE NEW FLEXIBLE DUCTS AS REQUIRED.

- 1 DISCONNECT AND REMOVE FLEX DUCT SERVING SUPPLY DIFFUSER. CLEAN DIFFUSER AND RE-LOCATE AS INDICATED ON SHEET M2.1 PROTECT REMAINING DUCT FOR NEW CONNECTION, RE: SHEET M2.1. DUCT FORNEW CONNECTION, RE. SHELT M2.1.
 DISCONNECT RETURN AIR BRANCH DUCT AND CAP MAIN DUCT AIR TIGHT REMOVE RETURN DUCTWORK AND GBILLES SHOWN DARK & DASHED NOTE: THIS DUCTWORK AND THE GRILLES SHALL REMAIN TO SERVE CYST 1A041G AND THE TEMPORARY BREAK ROOM AREA THROUGH THE END OF PHASE C, RE: ARCHITECTURAL PHASING PLAN SHEET AP2.1.
 CUT 10' ROUND EXHAUST DUCT AND REMOVE UPSTREAM DUCTWORK FROM DIODACTED DUPSTREAK TO UPSTREAT. TO AND THE OWN BIOSAFETY CABINET(BSC). PROTECT THE SHEET METAL TRANSITION BELOW THE CEILING FOR RE-LOCATION AND RE-USE AT NEW LOCATION OF BSC. PROTECT REMAINING DUCTWORK FOR NEW CONNECTION, RE: SHEET M2.1. 4 DISCONNECT AND REMOVE SUPPLY DIFFUSER AND CAP ASSOCIATED SUPPLY AIR DUCT AIR TIGHT. DISCONNECT AND REMOVE RETURN AIR DUCT AND GRILLE AS INDICATED. PATCH MAIN DUCT AS REQ'D TO PREPARE FOR NEW CONNECTIONS, RE: SHEET
- M2.1.
- 6 CUT AND REMOVE EXHAUST DUCT BUT PROTECT THE ASSOCIATED GRILLE. CLEAN THE GRILLE AND RELOCATE IT AS REQ'D TO KEEP IT OUT OF THE TEMPORARY BREAK ROOM AREA, RE: ARCHITECTURAL PHASING PLAN SHEET AP2.1 AND SHEET M2.1.



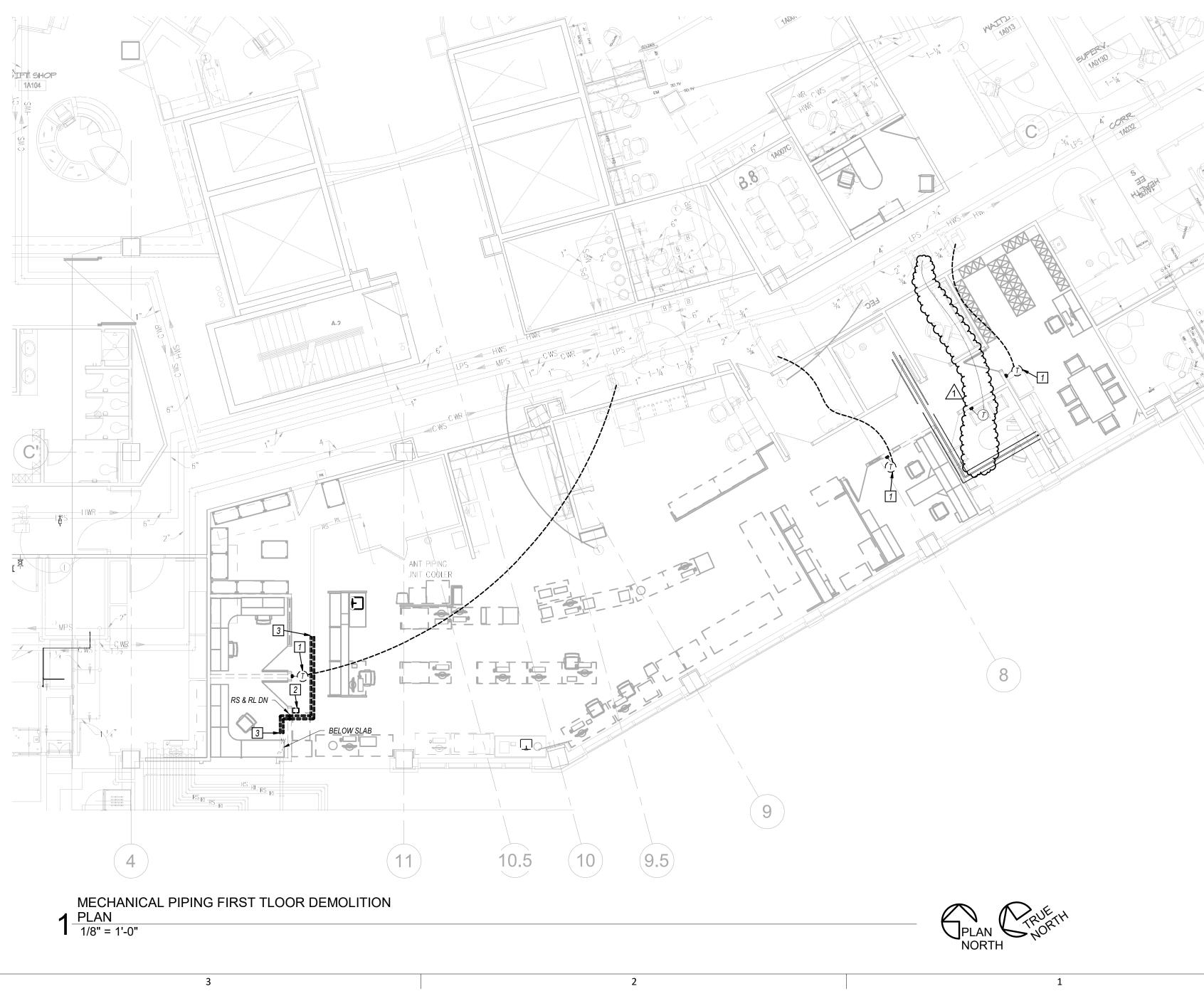
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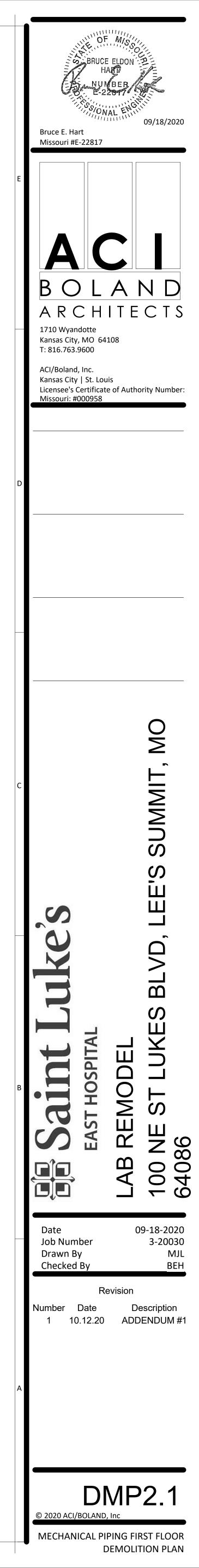


GENERAL NOTES 1 SEE SHEET PM000 FOR GENERAL NOTES AND SYMBOLS LISTS.

- 2 THIS PLAN SHOWS GENERAL INTENT OF DEMOLITION WORK. CONTRACTOR SHALL COORDINATE DEMOLITION WITH OWNER. THIS IS A 24-HOUR FACILITY. THEREFORE, WORK MAY NEED TO BE COMPLETED AFTER NORMAL WORKING HOURS OR DURING WEEKENDS AT NO EXTRA COST TO THE OWNER. ALL SHUTDOWNS SHALL BE COORDINATED AND SCHEDULED WITH OWNER A MINIMUM OF TWO WEEKS BEFORE BEGINNING WORK.
- 3 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN, WORK SHOWN DASHED BOLD IS WORK TO BE REMOVED.
- 4 CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.
- 5 NOT ALL DEMOLITION WORK MAY BE SHOWN. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ITEMS NOT REQUIRED TO REMAIN.

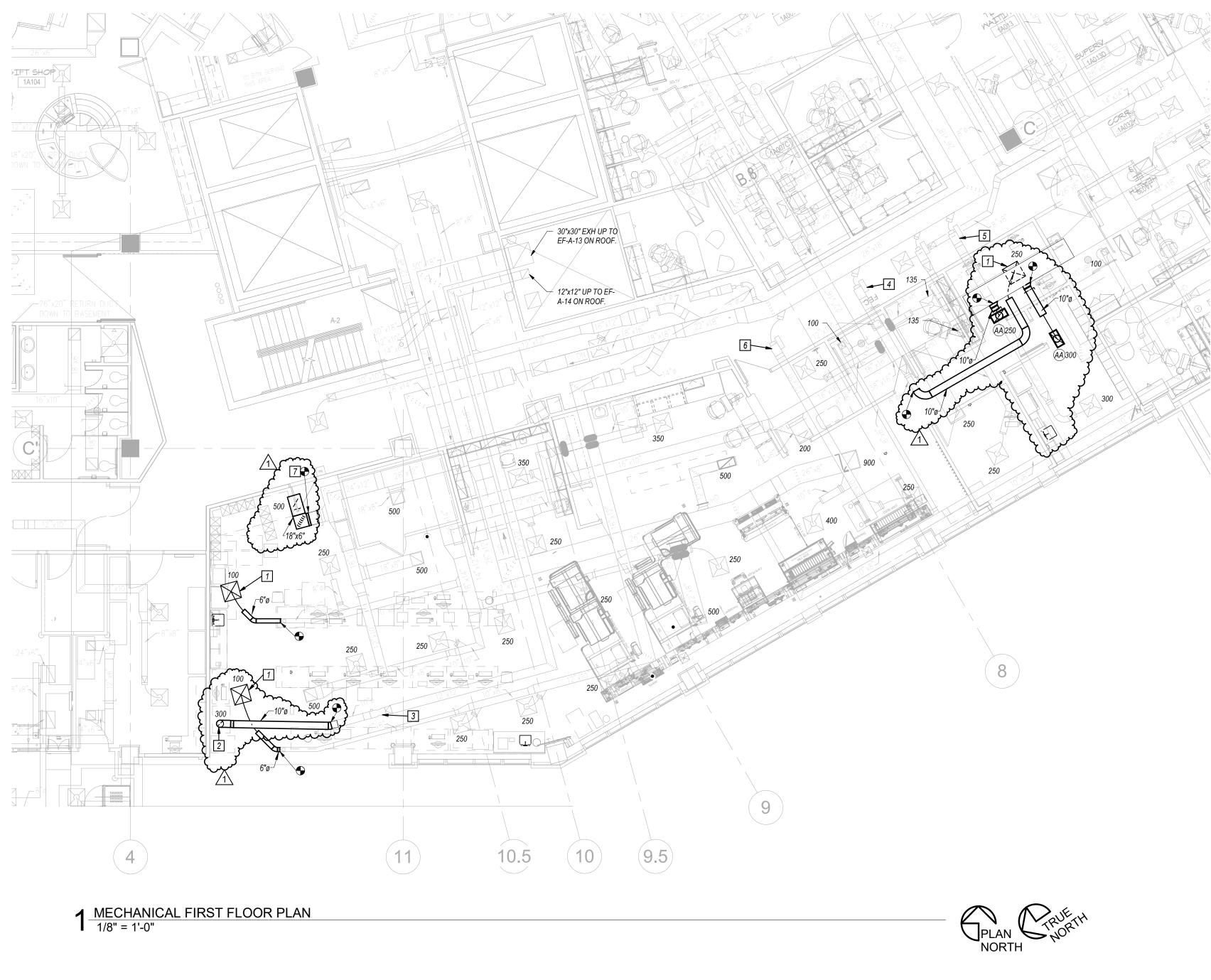
KEYED NOTES

- DISCONNECT THERMOSTAT AND RELOCATE AS INDICATED ON SHEET MP2.1. REMOVE ANY CONTROL WIRING THAT CANNOT BE RE-USED.
 DISCONNECT FUME HOOD MONITOR FOR BIOLOGICAL SAFETY CABINET AND RELOCATE AS INDICATED ON SHEET MP2.1. REMOVE ANY CONTROL WIRING
- THAT CANNOT BE RE-USED.
 CUT REFRIGERANT PIPING THAT SERVES LAB COOLER AND REMOVE VERTICAL RISERS IN WALL AND A PORTION OF HORIZONTAL PIPING BOTH ABOVE CEILING AND BELOW SLAB. PATCH SLAB AS SPECIFIED. PROTECT REMAINING PIPING FOR NEW CONNECTIONS, RE: SHEET MP2.1.



5 No Andrew Contraction of the second s

	PLAN MARK SERVICE MANUFACTURER MODEL STYLE FACE SIZE (IN.) NECK SIZE (IN.) BORDER TYPE FINISH REMARKS											
PLAN	SERVICE	MANUFACTURER	MODEL	STYLE	FACE SIZE (IN.)		BORDER TYPE	FINISH	REMARKS			
AA	RETURN	TITUS	23RL	LOUVERED FACE 45 DEGREE DEFLECTION	24x12	22x10	LAY-IN	COLOR AS DIRECTED BY ARCHITECT				



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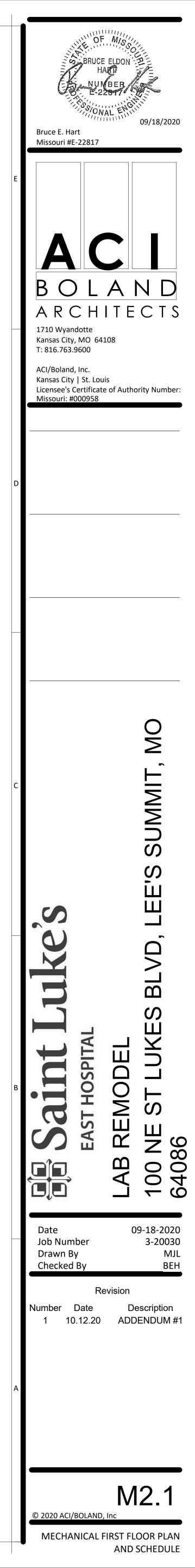
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GENERAL NOTES 1 REFER TO GENERAL NOTES ON SHEET PM000 AND DM1.

- 2 THIS IS A 24 HOUR OPERATING FACILITY, SO SOME WORK MAY NEED TO BE COMPLETED AFTER NORMAL WORKING HOURS OR ON WEEKENDS AT NO EXTRA COST TO OWNER. SYSTEM SHUTDOWNS SHALL BE COORDINATED AND SCHEDULED WITH OWNER.
- 3 DUE TO CONTINUED OPERATION OF EXISTING FACILITY, NEW WORK MAY HAVE TO BE COMPLETED IN PHASES. COORDINATE PHASING OF WORK WITH OWNER.
- 4 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. WORK SHOWN BOLD IS NEW WORK.
- 5 TEST, ADJUST AND BALANCE EXISTING AIR HANDLING UNIT AHU-A-3 AND ITS RETURN FAN, AND MAKE ADJUSTMENTS TO THE SUPPLY AIR STATIC PRESSURE SETPOINT AND THE RETURN FAN AIRFLOW OFFSET VALUE AS REQUIRED. COORDINATE WITH ENGINEER AS REQUIRED.
- 6 TEST, ADJUST AND BALANCE EXISTING LABORATORY EXHAUST FAN EF-A-13 TO NEW DESIGN AIRFLOW RATE OF 4100 CFM. PROVIDE AND INSTALL NEW BELTS AND SHEAVES ON FAN AS REQUIRED TO ACHIEVE THE NEW DESIGN AIRFLOW RATE.
- 7 TEST, ADJUST, AND BALANCE ALL SUPPLY DIFFUSERS, RETURN GRILLES, AND EXHAUST GRILLES IN THE LAB AREA AND SUBMIT A WRITTEN REPORT TO THE ENGINEER. THIS INCLUDES SUPPORTING SPACES SUCH AS OFFICES, BLOOD BANK AREAS, RECEPTION/DRAW, BREAKROOM, AND TOILET ROOM. INCLUDE A PLAN IN THE REPORT SHOWING LOCATION OF EACH INDIVIDUAL DIFFUSER/GRILLE AND ITS AIRFLOW READING.
- 8 UPGRADE THE EXISTING BUILDING MANAGEMENT SYSTEM (BMS) WITH NEW GRAPHICS TO SHOW THE NEW FLOOR PLAN AND NEW THERMOSTAT LOCATIONS.

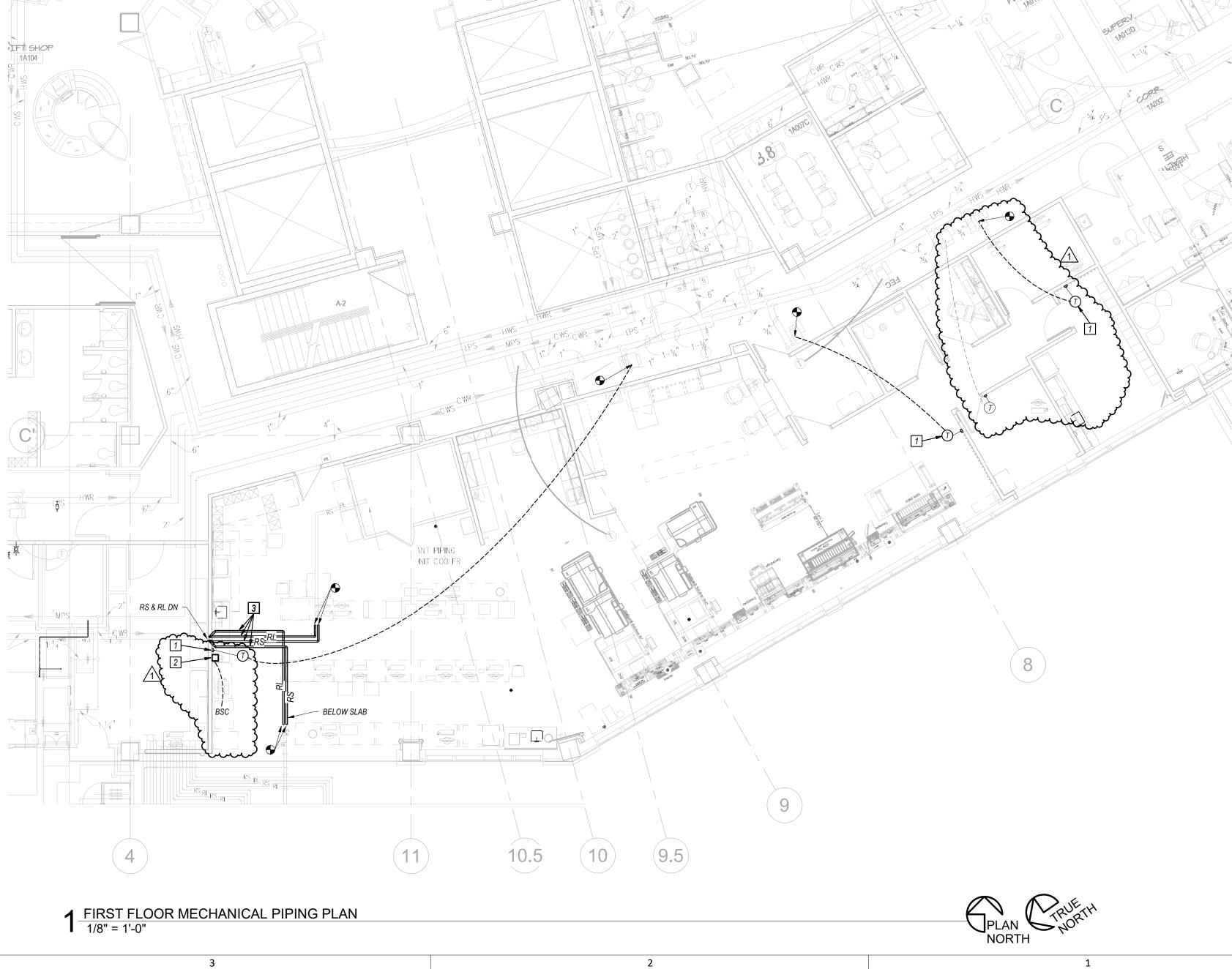
KEYED NOTES 1 NEW LOCATION FOR DIFFUSER THAT WAS DISCONNECTED DURING DEMOLITION. BALANCE TO AIRFLOW RATE (CFM) INDICATED. 2 TURN 10"DIA. RIGID EXHAUST DUCT DOWN THRU CEILING AND RE-INSTALL THE SHEET METAL TRANSITION THAT WAS DISCONNECTED DURING DEMOLITION, TO SERVE THE RELOCATED BIOLOGICAL SAFETY CABINET(BSC). INSTALL THE TRANSITION DIRECTLY ABOVE THE TOP OUTLET OF THE BSC, WITH AS SMALL AIR GAP TO MAKE AN "INDIRECT" CONNECTION. 3 ADJUST EXIST'G EXHAUST AIR VALVE TO AIRFLOW RATE AS REQUIRED FOR THE EXIST'G BSC (300 CFM OR AS REQUIRED BY BSC MANUFACTURER). 4 ADJUST EXIST'G SINGLE DUCT BOX TO NEW MAX. AIRFLOW RATE OF 635 CFM. ADJUST EXIST'G SINGLE DUCT BOX TO NEW MAX. AIRFLOW RATE OF 300 CFM. 6 ADJUST EXIST'G SINGLE DUCT BOX TO NEW MAX. AIRELOW RATE OF 650 CFM 7 CONNECT TO EXIST'G EXHAUST DUCT AND RE-INSTALL GRILLE THAT WAS DISCONNECTED DURING DEMOLITION. ENSURE THE NEW LOCATION IS OUTSIDE 0F THE TEMPORARY BREAK ROOM AREA, RE: ARCHITECTURAL PHASING PLAN SHEET AP2.1.



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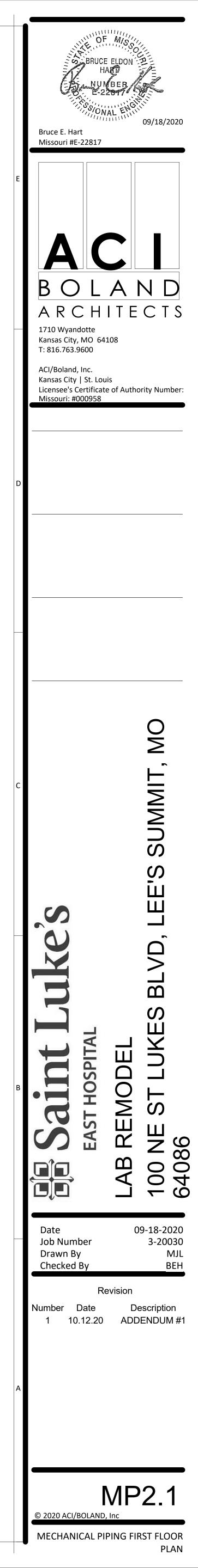
GENERAL NOTES

- 1 SEE SHEET PM000 FOR GENERAL NOTES AND SYMBOLS LISTS.
- 3 THIS IS A 24-HOUR FACILITY. THEREFORE, WORK MAY NEED TO BE COMPLETED AFTER NORMAL WORKING HOURS OR DURING WEEKENDS AT NO EXTRA COST TO THE OWNER. ALL SHUTDOWNS SHALL BE COORDINATED AND SCHEDULED WITH OWNER A MINIMUM OF TWO WEEKS BEFORE BEGINNING WORK.

2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. ALL NEW WORK SHOWN BOLD AND DARK.

- 4 FIELD VERIFY ALL EXISTING PIPE SIZES AND LOCATIONS PRIOR TO STARTING WORK.
- 5 CAREFULLY COORDINATE NEW WORK WITH EXISTING FIELD CONDITIONS AND OTHER TRADES.
- 6 BEFORE CORE DRILLING ANY HOLES, LOCATE REBAR IN THE SLAB BY X-RAY OR WITH R-METER. IF REBAR IN ENCOUNTERED WITHIN THE PROPOSED LOCATION OF THE HOLE THEN EITHER RELOCATE THE HOLE TO MISS REBAR OR IF THE HOLE CANNOT BE RELOCATED, CONTACT STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CORING OR DRILLING. DO NOT CORE ANY HOLES THROUGH THE BEAM WITHOUT APPROVAL OF STRUCTURAL ENGINEER

- 1 NEW LOCATION FOR THERMOSTAT THAT WAS DISCONNECTED DURING DEMOLITION. COORDINATE EXACT LOCATION WITH ARCHITECT. PROVIDE AND INSTALL NEW CONTROL WIRING AS REQUIRED. TEST DEVICE FOR ACCURACY NAD CALIBRATE OR REPLACE AS REQUIRED. 2 NEW LOCATION FOR FUME HOOD MONITOR THAT WAS DISCONNECTED DURING
- DEMOLITION. COORDINATE EXACT LOCATION WITH ARCHITECT. PROVIDE AND INSTALL NEW CONTROL WIRING AS REQUIRED. TEST DEVICE FOR PROPER OPERATION AND REPAIR OR REPLACE AS REQUIRED. DEVICE SHALL SIGNAL A LOCAL ALARM UPON LOSS OF EXHAUST AIRFLOW AT NEARBY BIOLOGICAL SAFETY CABINET (BSC).
- 3 SIZE NEW REFRIGERANT PIPING PER EQUIPMENT MANUFACTURER RECOMMENDATIONS. INSULATE PIPING USING ¼" THICK FLEXIBLE ELASTOMERIC PIPE INSULATION WITH VAPOR BARRIER. CHARGE REFRIGERATION SYSTEM WITH NEW REFRIGERANT AS REQUIRED.



(ALL MAY NOT APPLY)

ELECTRICAL SYMBOLS LIST

LIGHTING SYMBOLS

POWER SYMBOLS

	HOMERUN TO SOURCE AS NOTED	
	CONDUIT IN WALL OR CEILING CONSTRUCTION WITH ONE	
	PHASE WIRE, ONE NEUTRAL WIRE AND ONE GROUND WIRE CONDUIT IN FLOOR OR BELOW GRADE CONSTRUCTION WITH ONE PHASE WIRE, ONE NEUTRAL WIRE AND ONE GROUND	
~ ~	WIRE	
<u>∕₩</u>	CONDUIT WITH WIRING (TWO PHASE WIRES, NEUTRAL	
_	AND GROUND WIRE)	Г
	CONDUIT WITH #10 WIRE THROUGHOUT ENTIRE CIRCUIT	∇
	PARTIAL CIRCUIT, HOMERUN TO SOURCE AS NOTED	
	LOW VOLTAGE WIRING	•
η_{N}	EXISTING CONDUIT WITH NEW WIRE	0=
	PANELBOARD (DOUBLE LINE INDICATES	
	FRONT OF PANELBOARD)	
<u> </u>		
 4X	DISCONNECTING SWITCH	
	COMB. MOTOR STARTER AND DISC. SWITCH	
NF	NF DENOTES NON-FUSED	
VFD	VARIABLE FREQUENCY DRIVE	
<u> </u>	VARIABLE FREQUENCY DRIVE WITH DISCONNECTING MEANS	
TCP	TEMPERATURE CONTROL PANEL	
\sim	MOTOR CONNECTION	
₽	MECHANICAL VAV BOX	
	MECHANICAL MIXING BOX	
	TRANSFORMER	
- 0 -	SINGLE RECEPTACLE	
—	DUPLEX CONVENIENCE RECEPTACLE	
\	FOURPLEX CONVENIENCE RECEPTACLE	
+	HEAVY DUTY OUTLET - WITH NEMA	
6-20R	CONFIGURATION	
	CONVENIENCE RECEPTACLE - TOP HALF SWITCHED	
€G	GROUND FAULT CIRCUIT INTERRUPTER	
	ISOLATED GROUND RECEPTACLE	
−●_H	CONVENIENCE RECEPTACLE - MOUNTED HORIZONTALLY	
	NUMBER INDICATES MOUNTING HEIGHT OF	
	DEVICE (CENTER LINE ABOVE FLOOR) IF OTHER THAN SPECIFIED HEIGHT	
EWC	ELECTRIC WATER COOLER	
	JUNCTION BOX FOR ELECTRIC WATER COOLER	
•	FLOOR OUTLET - DUPLEX RECEPTACLE	
$\lfloor \cdot \rfloor_4$	FLOOR OUTLET - FOURPLEX RECEPTACLE	
\square	CEILING DROP	
$\bigcirc_{_{PT}}$	FLOOR POKE THROUGH - DUPLEX RECEPTACLE	
⊙ _{₽т} ⊘ -Ø	JUNCTION BOX	
-(])	WALL MOUNTED JUNCTION BOX	
つ _{oc} ノ	JUNCTION BOX MOUNTED OVER CEILING	
	FLOOR JUNCTION BOX	
$-\overline{O}_{E}$	ELECTRIC THERMOSTAT - WALL MOUNTED	
-0	PUSHBUTTON - WALL MOUNTED	
$-\bigcirc_{P}$	PUSHBUTTON WITH PILOT LIGHT	
⊡÷	BELL OR BUZZER	
—— P ——	SINGLE CIRCUIT PLUGMOLD	
P ₂	TWO CIRCUIT PLUGMOLD	
	SURFACE RACEWAY	
3	BUSHING AT END OF CONDUIT	
СМ	INDICATES DEVICE THAT SHALL BE MOUNTED ABOVE OR OTHER THAN SPECIFIED HEIGHT REFER TO ARCHITECTURAL DETAILS AND ELEVATIONS AND COORDINATE EXACT LOCATION OF DEVICE. WHERE DEVICES ARE NOT SHOWN IN ARCHITECTURAL DETAILS, CONTRACTOR SHALL CONFIRM EXACT MOUNTING LOCATION WITH ARCHITECT.	
ЕМ	INDICATES LIGHT OR DEVICE CONNECTED TO EMERGENCY POWER OR FURNISHED WITH A BATTERY PACK CONNECTED TO A NON- SWITCHED HOT WIRE	
EX	EXISTING DEVICE, LIGHT, OR CONDUIT & WIRE TO REMAIN	
Ν	NEW DEVICE IN EXISTING OUTLET BOX	
NL	INDICATES NIGHT LIGHT FIXTURE CONNECTED TO A NON-SWITCHED HOT WIRE	
R	EXISTING DEVICE, LIGHT, OR CONDUIT & WIRE TO BE REMOVED	<u>HC</u>
RB	EXISTING DEVICE OR LIGHT TO BE REMOVED WITH BLANK COVER ON OUTLET BOX	
RL	EXISTING DEVICE OR LIGHT RELOCATED	
RN	EXISTING DEVICE OR LIGHT TO BE REMOVED AND	
1.114	OUTLET BOX REUSED FOR NEW DEVICE OR LIGHT	
RT	RAINTIGHT DEVICE - NEMA 3R	
TP	TAMPER-PROOF DEVICE	
WP	WEATHER-PROOF DEVICE	
VUH	VERTICAL UNIT HEATER. REFER TO DETAIL FOR ALL WIRING REQUIRED. REFER TO	
	FLOOR PLANS FOR LOCATIONS.	
LK	DEVICE WITH LOCKABLE COVERPLATE	
USB	RECEPTACLE FURNISHED WITH (1) TYPE-A AND (1) TYPE-C USB OUTLET.	

0	CEILING MOUNTED LIGHT FIXTURE	
\diamond	CEILING MOUNTED WALL WASH LIGHT FIXTURE	
-0	WALL MOUNTED LIGHT FIXTURE	
-	WALL MOUNTED LIGHT FIXTURE	
•	CEILING MOUNTED FLUORESCENT LIGHT FIXTURE	
•	WALL MOUNTED FLUORESCENT LIGHT FIXTURE	
$\nabla \nabla \nabla X$	TRACK LIGHT FIXTURE	
Y	X - INDICATES TYPE OF AIMABLE LIGHT FIXTURE Y - INDICATES TYPE OF TRACK	
⊶	POLE MOUNTED LIGHT FIXTURE	
- M	CEILING MOUNTED EXIT LIGHT	
_8	WALL MOUNTED EXIT LIGHT	
\bigotimes_{i}		
$-\otimes$	CEILING MOUNTED EXIT LIGHT W/DIRECTIONAL ARROW	
	WALL MOUNTED EXIT LIGHT W/DIRECTIONAL ARROW	
× ×	SHADING DENOTES FACE DIRECTION OF EXIT LIGHT	
ц e	BATTERY OPERATED EMERGENCY LIGHT - WALL MOUNTED	
Ц	BATTERY OPERATED EMERGENCY LIGHT - CEILING MOUNTED	
-+-	SINGLE POLE SWITCH	
-+ S ₂	DOUBLE POLE SWITCH	
—+ S ₃	THREE WAY SWITCH	
+ S4	FOUR WAY SWITCH	
+ S _K	KEYED SWITCH	
+ S _M	MOMENTARY SWITCH	
-+ S _P	SWITCH WITH PILOT LIGHT	
$-+ S_T$	THERMAL MOTOR PROTECTION SWITCH	
$-+ S_{LV}$	LOW VOLTAGE SWITCH	
$\rightarrow D_6$	DIMMER - NUMBER (X 100) EQUALS WATTAGE	
$\rightarrow D_F$	FLUORESCENT DIMMER	
$\rightarrow D_{LV}$	LOW-VOLTAGE DIMMER	
→ D _{3W}	3-WAY DIMMER	
X- S _?	MULTIPLE SWITCHES	
	X - INDICATES HOW MANY ? - INDICATES WHAT TYPE OF SWITCH	
X- D _?	MULTIPLE DIMMERS	
	X - INDICATES HOW MANY ? - INDICATES WHAT TYPE OF DIMMER	
→ s _{MS}	WATTSTOPPER DIGITAL TIME SWITCH: TS-400	
$-+ cs_{XX}$	WATTSTOPPER DIFITAL LIGHTING MANAGEMENT CONTROL	
~~	STATION KEYPAD WITH PROGRAMMABLE FUNCTION BUTTONS. REFER TO DETAILS FOR ADDITIONAL REQUIREMENTS. XX INDICATES TYPE: S1: ONE BUTTON KEYPAD S2: TWO BUTTON KEYPAD S3: THREE BUTTON KEYPAD S4: FOUR BUTTON KEYPAD S8: EIGHT BUTTON KEYPAD D1: ONE ROCKER BUTTON KEYPAD	
-+ S _{MS}	WATTSTOPPER DUAL TECHNOLOGY LINE VOLTAGE WALL OCCUPANCY SENSOR: DSW-301	
03	WATTSTOPPER DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR WITH POWER PACK: DT-300 AND BZ-150	
→ S _{MS-D}	WATTSTOPPER DUAL TECHNOLOGY 0-10 VOLT DIMMING WALL SWITCH OCCUPANCY SENSOR: DW-311	
Ø	WATTSTOPPER DLM SYSTEM PHOTO CELL: LMLS-500	
MS	WATTSTOPPER DLM SYSTEM DUAL TECHNOLOGY CEILING MOTION SENSOR: LMDC-100	
₩9 _{EM}	WATTSTOPPER EMERGENCY LIGHTING CONTROL UNIT. UPON LOSS OF NORMAL POWER, EMERGENCY LIGHTING SHALL BE BROUGHT TO FULL BRIGHTNESS REGARDLESS OF SWITCH POSITION. PROVIDE ALL LOW VOLTAGE CABLINGS AS REQUIRED: ELCU-200	
₩9 _{BMS}	WATTSTOPPER DIGITAL LIGHTING MANAGEMENT INPUT/OUTPUT INTERFACE FOR BMS CONTROL OF LIGHTING. PROVIDE ALL LOW VOLTAGE CABLING AS REQUIRED: LMIN-104	
rc _x	WATTSTOPPER DIGITAL LIGHTING MANAGEMENT ROOM CONTROLLER. REFER TO DETAILS FOR SYSTEM INTERCONNECTION REQUIREMENTS. X INDICATES TYPE. A: ONE RELAY SWITCHING CONTROLLER: LMRC-101 B: TWO RELAY SWITCHING CONTROLLER: LMRC-102 C: ONE RELAY SWITCHING OR 0-10V DIMMING CONTROLLER: LMRC-211 D: TWO RELAY SWITCHING OR 0-10V DIMMING CONTROLLER: LMRC-212 E: THREE RELAY SWITCHING OR 0-10V DIMMING CONTROLLER: LMRC-213	
HOSPITA	L SYMBOLS	
_	NURSE CALL PATIENT STATION - SINGLE	
-(N) -(N)	NURSE CALL PATIENT STATION - SINGLE	
$ \overset{-}{\boxtimes}^{2} \bigotimes_{\mathbb{Z}}^{\mathbb{Z}} \bigotimes_{\mathbb{Z}} \bigotimes_{\mathbb{Z}}^{\mathbb{Z}} \bigotimes_{\mathbb{Z}} \bigotimes_{\mathbb{Z}} \bigotimes_{\mathbb{Z}} \bigotimes_{\mathbb{Z}} \bigotimes_$		
	NURSE CALL MASTER	
	NURSE CALL DOME LIGHT	
	NURSE CALL ZONE LIGHT	
	NURSE CALL DUTY STATION	
W _{SS}	NURSE CALL STAFF STATION	
~	NURSE CALL EMERGENCY PULL CORD STATION	
(N)	NURSE CALL CODE BLUE STATION	

NURSE CALL CODE BLUE STATION NURSE CALL STAFF LOCATOR

NURSE ASSISTANCE CALL STATION

EQUIPOTENTIAL GROUNDING MODULE TIME AND ATTENDANCE STATION

5

PATIENT MONITORING OUTLET

X-RAY VIEW BOX

-TA

XVB

COMMUNICATION SYMBOLS

4

◀	TELEPHONE OUTLET WITH 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE
\triangleleft	DATA OUTLET WITH 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE
4	TELEPHONE/DATA OUTLET WITH 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE
◀ 48	WALL MOUNTED TELEPHONE OUTLET - NUMBER INDICATES HEIGHT ABOVE FINISHED FLOOR
	FLOOR OUTLET - TELEPHONE
\Box	FLOOR OUTLET - DATA
	FLOOR OUTLET - TELEPHONE/DATA
	FLOOR POKE THROUGH - TELEPHONE
	FLOOR POKE THROUGH - DATA
	FLOOR POKE THROUGH - TELEPHONE/DATA
S	CEILING SPEAKER
-S	WALL MOUNTED SPEAKER
SA	HORN TYPE SPEAKER
-(V)	VOLUME CONTROL
-	TELEVISION OUTLET WITH 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE
-0	INTERCOM STAFF STATION
-(C)_M	INTERCOM MASTER STATION
A	CLOCK OUTLET
⊖	DOUBLE DIAL CLOCK - CEILING MOUNTED
-0	DOUBLE DIAL CLOCK - WALL MOUNTED
-O_MIC	MICROPHONE OUTLET WITH 3/4" CONDUIT INTO ACCESSIBLE CEILING SPACE

SECURITY SYMBOLS

FIRE AI	ARM SYMBOLS
ES	ELECTRIC DOOR STRIKE
ΙΑ	INTRUSION ALARM
PR	PROXIMITY READER (CARD READER)
MD	SECURITY MOTION DETECTOR
TV P/T/Z	CCTV CAMERA WITH PAN/TILT/ZOOM
	CCTV CAMERA WITH MOTORIZED DOME
TV	FIXED CCTV CAMERA

FIRE ALARIVI STIVIDULS

В	MANUAL PULL STATION
	WALL MOUNTED FIRE ALARM SPEAKER
B	COMBINATION PULLSTATION/HORN
S	SMOKE DETECTOR
S	SMOKE DETECTOR - DUCT MOUNTED
SE	SMOKE DETECTOR - ELEVATOR LOBBY
S _{AC}	SMOKE DETECTOR WITH AUXILIARY CONTACTS FOR USE IN PATIENT ROOMS AND TREATMENT ROOMS, INCLUDING NURSE CALL RELAY LOCATED AT NURSE CALL LIGHT
Н	HEAT DETECTOR
DH	DOOR HOLDER - WALL MOUNTED
DH	DOOR HOLDER - FLOOR MOUNTED
DC	DOOR CLOSER
FR	FAN SHUT-DOWN RELAY
FS	SPRINKLER FLOW SWITCH
TS	SPRINKLER VALVE TAMPER SWITCH
VA A	VISUAL/AUDIBLE ALARM - NUMBER INDICATES CANDELA OUTPUT, LACK OF NUMBER INDICATES 15/75 CANDELA OUTPUT
VA 75	VISUAL ALARM - NUMBER INDICATES CANDELA OUTPUT, LACK OF NUMBER INDICATES 15/75 CANDELA OUTPUT
R	AREA OF RESCUE STATION
R	AREA OF RESCUE - MASTER STATION
PIV	POST INDICATOR VALVE
	FIRE ALARM CONTROL PANEL (DOUBLE LINE INDICATES FRONT OF PANEL)
FAA	FIRE ALARM ANNUNCIATOR (DOUBLE LINE INDICATES FRONT OF PANEL)
AI	ADDRESSABLE INTERFACE MODULE
	ADDRESSABLE INTERFACE MODULE WITH RELAY
ONTRO	LS
YMBOL	<u>S</u>
IR	INTER RELAY

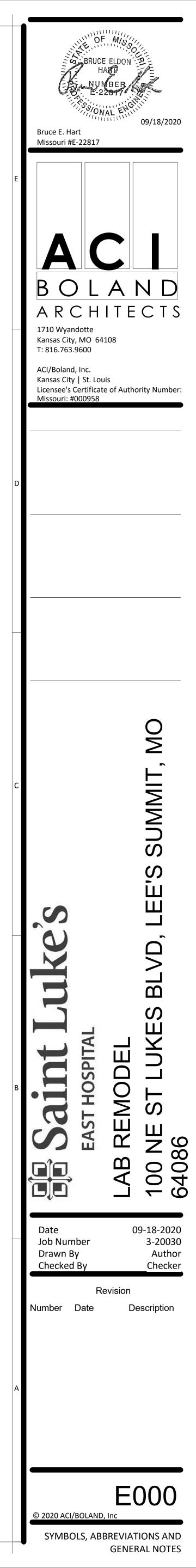
IR	INTER RELAY
EP	ELECTRIC TO PNEUMATIC SWITCH
PE	PNEUMATIC TO ELECTRIC SWITCH
DP	DIFFERENTIAL PRESSURE SWITCH
T1	THERMOSTAT - SEE TEMP. CONT. DRAWIN
<u>T2</u>	THERMOSTAT - SEE TEMP. CONT. DRAWIN

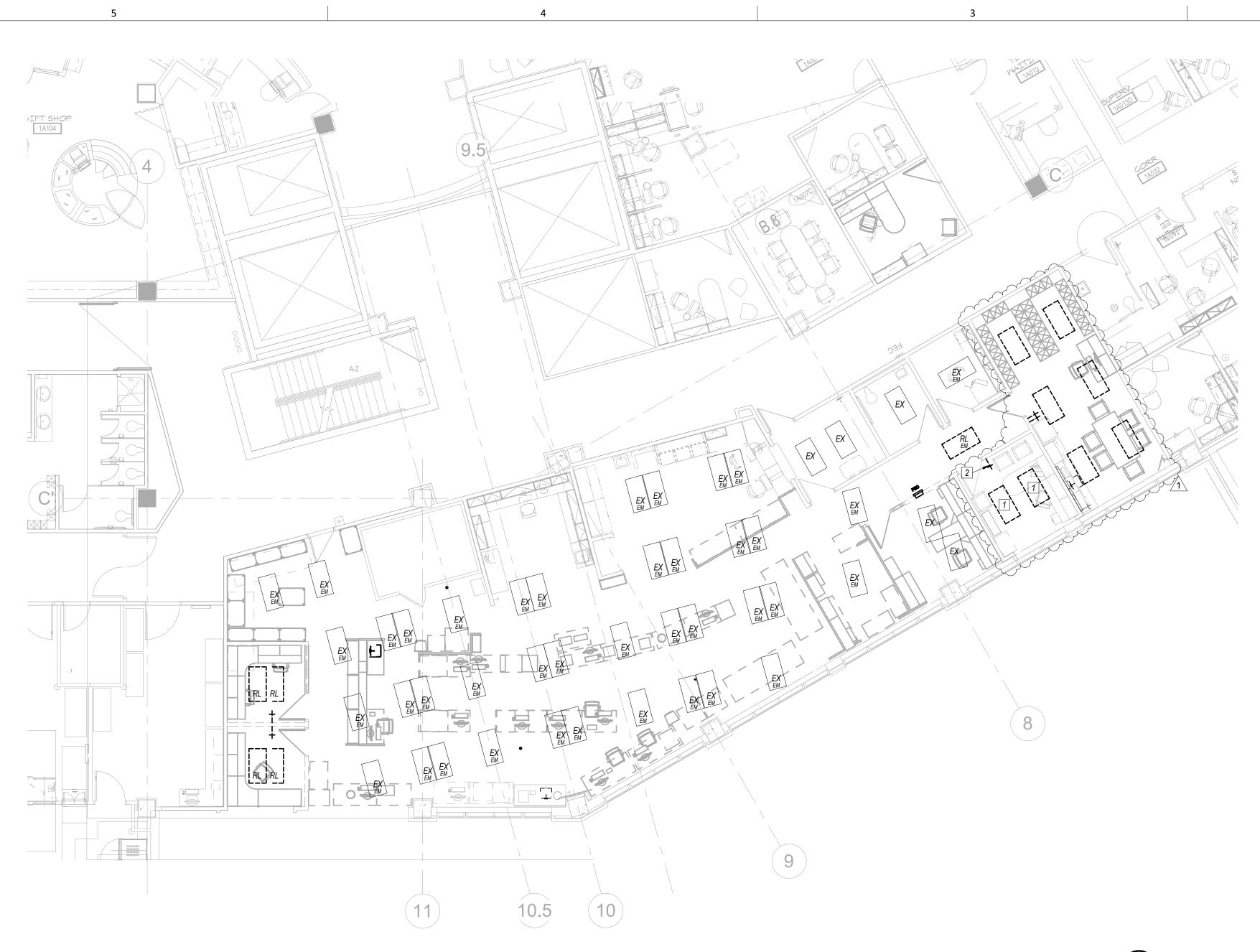
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SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
4	AMPERES(AMPS)	LTG	LIGHTING
AFF	ABOVE FINISHED FLOOR		
AFG	ABOVE FINISHED GRADE	МСВ	MAIN CIRCUIT BREAKER
AG	ABOVE GRADE	MECH	MECHANICAL
AIC	AMPS INTERRUPTING CURRENT	MERC (MV)	MECHANICAL MERCURY VAPOR
APPROX.	APPROXIMATE	MERC (MV)	METAL HALIDE
APPROX. ARCH	ARCHITECTURAL	MISC	MISCELLANEOUS
	AUTOMATIC TRANSFER SWITCH		
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUGS ONLY
B / B O	21/// 2010	MTD	MOUNTED
BLDG	BUILDING	MTG	MOUNTING
		MV	MEDIUM VOLTAGE
С	CONDUIT		
СВ	CIRCUIT BREAKER	N	NEUTRAL
CKT	CIRCUIT	NC	NORMALLY CLOSED
CL	CENTER LINE	NEC	NATIONAL ELECTRICAL CODE
CLG	CEILING	NEMA	NAT'L ELEC MFR ASSOCIATION
СМ	COORDINATE MOUNTING	NF	NON-FUSED
CO	CONDUIT ONLY	NIC	NOT IN CONTRACT
CT	CURRENT TRANSFORMER	NL	NIGHT LIGHT (NON-SWITCHED LIGHT)
CU	COPPER	NO	NORMALLY OPEN
~~		NO.	NUMBER
DISC	DISCONNECT	NO. NTS	NOT TO SCALE
DISC DP	DISCONNECT DISTRIBUTION PANEL	1113	NUT TO SUALE
DP DPDT	DISTRIBUTION PANEL DOUBLE POLE DOUBLE THROW	PB	PULL BOX
DPST	DOUBLE POLE SINGLE THROW	PF	POWER FACTOR
DWG	DRAWING	PH	PHASE
		PNL	PANEL, PANELBOARD
EM	INDIC. LIGHT OR DEVICE IS ON EMERG. POWER	PRI	PRIMARY
EMT	ELECTRICAL METALLIC TUBING	PVC	POLYVINYL CHLORIDE CONDUIT
EQUIP	EQUIPMENT	PWR	POWER
ETR	EXISTING TO REMAIN		
		RGS	RIGID GALVANIZED STEEL CONDUIT
F	FUSED		
FC	FOOTCANDLE	SEC	SECONDARY
FDR	FEEDER	SPEC	SPECIFICATION
FLA	FULL LOAD AMPS	SPST	SINGLE POLE SINGLE THROW
FLR	FLOOR	STD	STANDARD
FLUOR	FLUORESCENT	SPKR	SPEAKER
FT	FOOT, FEET	SWT	SWITCH
11	1001,1221	SWBD	SWITCH BOARD
			SWITCH GEAR
G,GFI,GFCI		SWGR, SG	SWITCH GEAR
GEC	GROUNDING ELECTRODE CONDUCTOR		TELEDUONE
GND	GROUND	TELE	TELEPHONE
		TEMP	TEMPERATURE
HID	HIGH INTENSITY DISCHARGE	T'STAT	THERMOSTAT
НМС	HAZARDOUS MATERIAL CONTRACTOR	TV	TELEVISION
HPS	HIGH PRESSURE SODIUM	TYP	TYPICAL
HZ	HERTZ		
		UG	UNDERGROUND
IG	ISOLATED GROUND	UL	UNDERWRITERS LABORATORY
IN	INCHES	UON	UNLESS OTHERWISE NOTED
INC	INCANDESCENT	UPS	
ISC (AIC)	SHORT CIRCUIT CURRENT		
		V	VOLTS
J, JB	JUNCTION BOX	VA	VOLTS
J, JD		VA VFD	
	KILOAMDO		VARIABLE FREQUENCY DRIVE
KA	KILOAMPS		
KV	KILOVOLTS	W	WATTS (OR WIRE)
KVA	KILOVOLT AMPS	W/	WITH
KW	KILOWATTS	W/O	WITHOUT
KWH	KILOWATT HOURS	WP	WEATHERPROOF
		WT	WATERTIGHT
			TRANSFORMER

GENERAL NOTES (THESE NOTES APPY TO ALL ELECTRICAL SHEETS)

- 1 A MAXIMUM OF SIX(6) CURRENT CARRYING WIRES SHALL BE INSTALLED IN ANY ONE(1) CONDUIT. ÀLL BRANCH CIRCUITS EXCEPT MOTOR CIRCUITS SHALL BE
- INSTALLED WITH A DEDICATED NEUTRAL WIRE. 2 COORDINATE ALL WORK WITH OTHER TRADES. OFFSET PANELS, LIGHTS, RECEPTACLES AND CONDUIT AS REQUIRED. APPROVAL MUST BE OBTAINED FROM
- ARCHITECT PRIOR TO OFFSETTING ANY DEVICE OR EQUIPMENT. 3 CONTRACTOR SHALL COORDINATE ALL SHUT DOWNS WITH OWNER. NO SHUT DOWNS SHALL BE PERFORMED WITHOUT RECEIVING PRIOR APPROVAL FROM
- OWNER. 4 COORDINATE WITH ALL OTHER TRADES AND DISCONNECT OR REMOVE ELECTRICAL WIRING, EQUIPMENT, ETC. TO MAKE SITE SAFE FOR DEMOLITION BY OTHER
- CONTRACTORS. REFER TO CIVIL PLANS FOR SITE DEMOLITION THAT MAY NOT BE SHOWN ON ELECTRICAL SHEETS. 5 CONTRACTOR SHALL COORDINATE ALL PRIMARY VOLTAGE UTILITY WORK WITH
- OWNER AND ELECTRICAL UTILITY. 6 NO CONDUIT OR DEVICES IN FINISHED AREAS SHALL BE SURFACE MOUNTED. CONTRACTOR SHALL RECESS OR CONCEAL CONDUITS AND DEVICES AS REQUIRED. WHERE WALL TRENCHING IS REQUIRED, SAME SHALL BE APPROVED BY
- ARCHITECT. 7 CONTRACTOR SHALL GAIN APPROVAL FROM ARCHITECT PRIOR TO INSTALLING ANY SURFACE MOUNTED DEVICES.
- 8 WHERE FLOOR TRENCHING IS REQUIRED, THE CONTRACTOR SHALL TRENCH TO NEAREST WALL AS REQUIRED. FLOOR SHALL BE PATCHED TO MATCH ADJACENT SURFACES. COORDINATE WITH ARCHITECT FOR ANY TRENCHING REQUIRED.
- 9 ALL LOW-VOLTAGE CABLING SHALL BE PLENUM RATED. THIS IS NOT LIMITED TO, BUT SHOULD INCLUDE, ALL FIRE ALARM CABLING.
- 10 CONTRACTOR SHALL RE-LABEL AND UPDATE SCHEDULES IN ALL EXISTING-TO-REMAIN PANELBOARDS AT THE COMPLETION OF THE PROJECT. PROVIDE NEW TYPED DIRECTORIES FOR EXISTING PANELBOARDS TO REFLECT ALL
- WORK DONE AS PART OF THIS PROJECT. 11 ALL EXISTING CONDUIT AND WIRING BEING CONNECTED TO NEW WORK THAT IS
- NOT IN COMPLIANCE WITH THE NEC SHALL BE CORRECTED AS REQUIRED. 12 AFTER COMPLETION OF NEW WORK, REMOVE ALL TEMPORARY EQUIPMENT,
- CONDUIT, AND WIRING NOT REQUIRED TO REMAIN. 13 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK.
- 14 ALL EXISTING ITEMS REMOVED DURING DEMOLITION SHALL BE TURNED OVER TO OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MOVING THE ITEMS TO A STORAGE LOCATION AS DETERMINED BY THE OWNER. ANY ITEMS THAT ARE NOT TO BE KEPT BY THE OWNER SHALL BE DISPOSED OF BY THE CONTRACTOR. COORDINATE AS REQUIRED.
- 15 ELECTRICAL SERVICE SHALL BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. 16 ALL CONDUITS SHALL BE HELD AS HIGH AND AS TIGHT AS POSSIBLE TO THE STRUCTURE SUPPORTING THE FLOOR ABOVE AREA WHERE INSTALLATION
- OCCURS. COORDINATE WITH OTHER TRADES AS REQUIRED. 17 COORDINATE THE ROUTING OF ALL CONDUITS WITH OTHER TRADES. MAKE
- OFFSETS AS REQUIRED. FURNISH AND INSTALL JUNCTION AND PULL BOXES AS REQUIRED. ROUTING SHOWN ON PLANS IS DIAGRAMMATIC. 18 CONTRACTOR SHALL REROUTE, RELOCATE, OR REMOVE ANY CONDUIT, FIXTURES, OR OTHER EXISTING ELECTRICAL DEVICES AS REQUIRED FOR NEW WORK. MAINTAIN AND RESTORE POWER TO ALL EXISTING DEVICES BEING SERVED IN
- UNDISTURBED AREAS, AND DEVICES THAT ARE SHOWN AS EXISTING TO REMAIN. 19 ALL CIRCUITS FROM EXISTING-TO-REMAIN PANELBOARDS THAT HAVE THEIR ENTIRE LOAD REMOVED AND ARE NOT REQUIRED TO BE REUSED TO SERVE NEW LOADS, AS SHOWN ON NEW WORK DRAWINGS, SHALL HAVE THEIR CONDUIT AND WIRE REMOVED BACK TO THEIR PANELBOARD AND THEIR ASSOCIATED BREAKER SHALL BE LABELED AS A SPARE. CONDUIT THAT IS LOCATED IN THE FLOOR SLAB OR
- ABOVE INACCESSIBLE CEILING SHALL BE ABANDONED IN PLACE; HOWEVER, ALL CONDUCTORS SHALL BE REMOVED. 20 DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL DEVICES, LIGHT FIXTURES,
- ELECTRICAL EQUIPMENT SHOWN DARK AND DASHED ON THE DEMOLITION PLANS. DEVICES SHOWN LIGHT ARE EXISTING TO REMAIN. 21 THE CONTRACTOR SHALL VERIFY THE OPERATION OF ALL DEVICES THAT ARE EXISTING TO REMAIN. ALL NON-OPERATIONAL DEVICES SHALL BE CORRECTED OR REPLACED AS REQUIRED. REPLACE ALL DAMAGED AND MISSING COVERPLATES IN
- AREAS OF NEW WORK AS REQUIRED. 22 COORDINATE REMOVAL OF ALL COMMUNICATION WIRING WITH OWNER. ALL ABANDONED COMMUNICATION CABLING SHALL BE REMOVED AS REQUIRED.
- COORDINATE REMOVAL WITH OWNER. 23 ALL CONDUIT, WIRING, DEVICES AND EQUIPMENT TO BE REMOVED MAY NOT BE SHOWN. HOWEVER, ALL ITEMS NOT REQUIRED TO REMAIN SHALL BE REMOVED. 24 THE CONTRACTOR SHALL MATCH THE RATINGS AND CHARACTERISTICS OF ALL
- NEW CIRCUIT BREAKERS BEING FURNISHED TO THOSE OF THE EXISTING BREAKERS IN EXISTING PANELBOARDS.
- 25 REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATIONS FOR EXACT LOCATION OF LIGHT FIXTURES. 26 ALL RECEPTACLES INSTALLED IN BATHROOMS OR WITHIN SIX FEET OF ANY SINK
- SHALL BE GFI PROTECTED. 27 ALL LOW-VOLTAGE ELECTRICAL CONNECTIONS ON THE SITE, EXTERIOR OF BUILDING, OR IN TUNNELS SHALL BE MADE USING WATERPROOF CONNECTORS.





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1 FIRST FLOOR LIGHTING DEMOLITION PLAN 1/8" = 1'-0"

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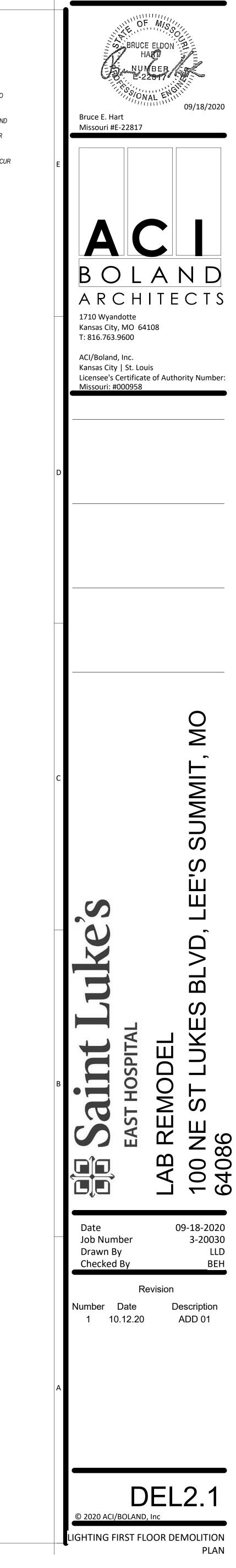
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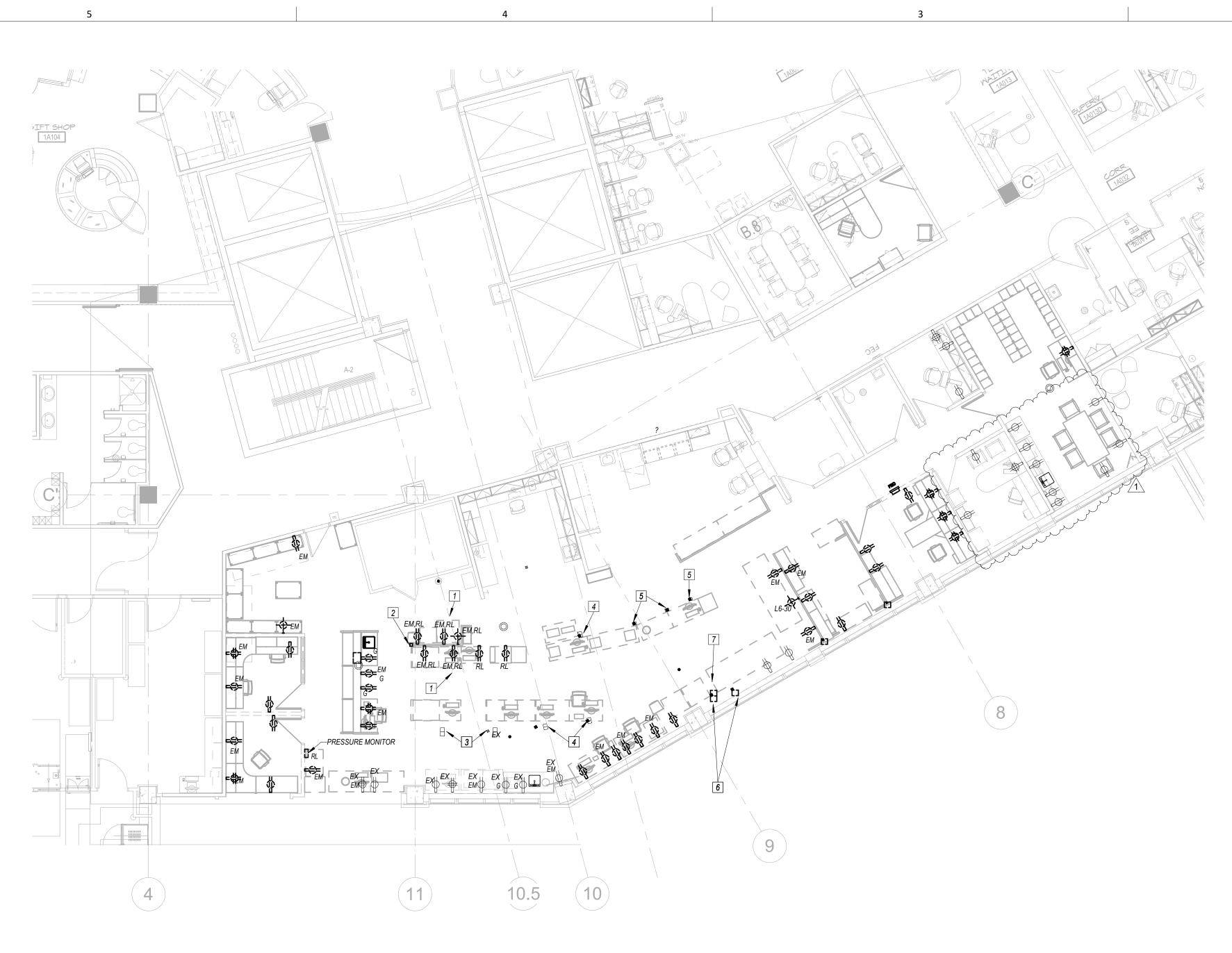
ELECTRICAL LIGHTING DEMOLITION GENERAL NOTES

REFER TO SHEET E000 FOR GENERAL NOTES. NOT ALL GENERAL NOTES MAY APPLY TO THIS SHEET.

2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. DISCONNECT, REMOVE, RELOCATE AND RECONNECT ALL FIXTURES SHOWN DARK AND DASHED ON DEMOLITION PLAN. DISCONNECT AND REMOVE ASSOCIATED SWITCHES, CONDUIT AND WIRING NO LONGER NECESSARY TO REMAIN.

3 THIS IS A 24 HOUR OPERATIONAL FACILITY THEREFORE SOME WORK MAY NEED TO OCCUR AFTER HOURS OR ON WEEKENDS AT NO EXTRA COST TO THE OWNER.





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FIRST FLOOR POWER DEMOLITION PLAN
1/8" = 1'-0"

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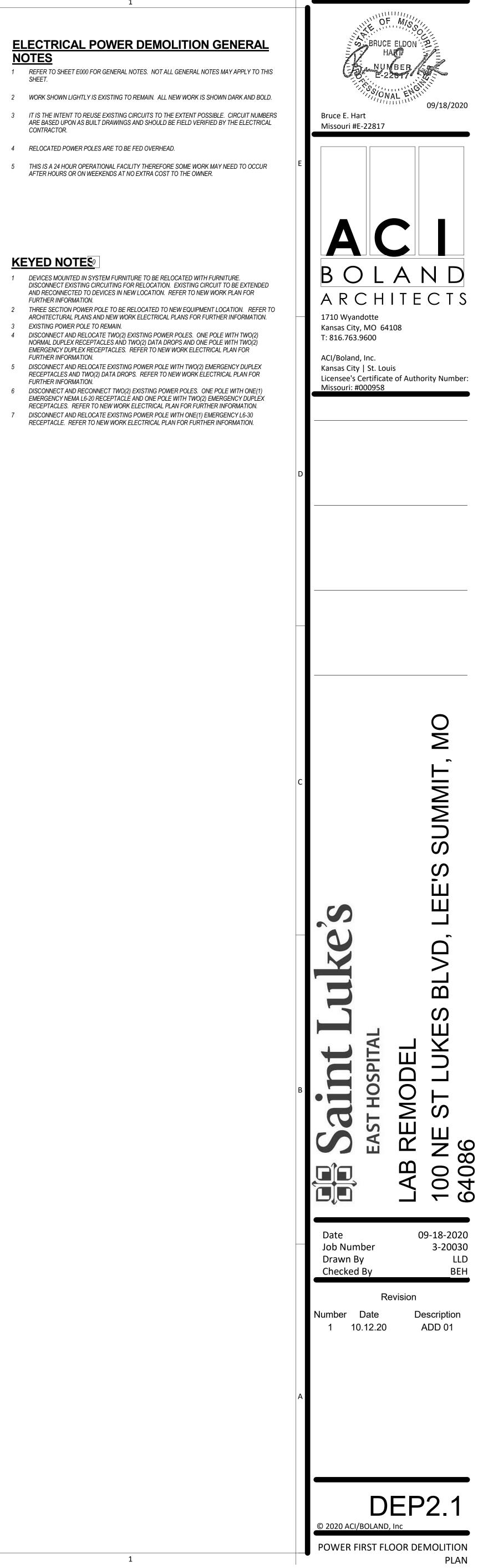
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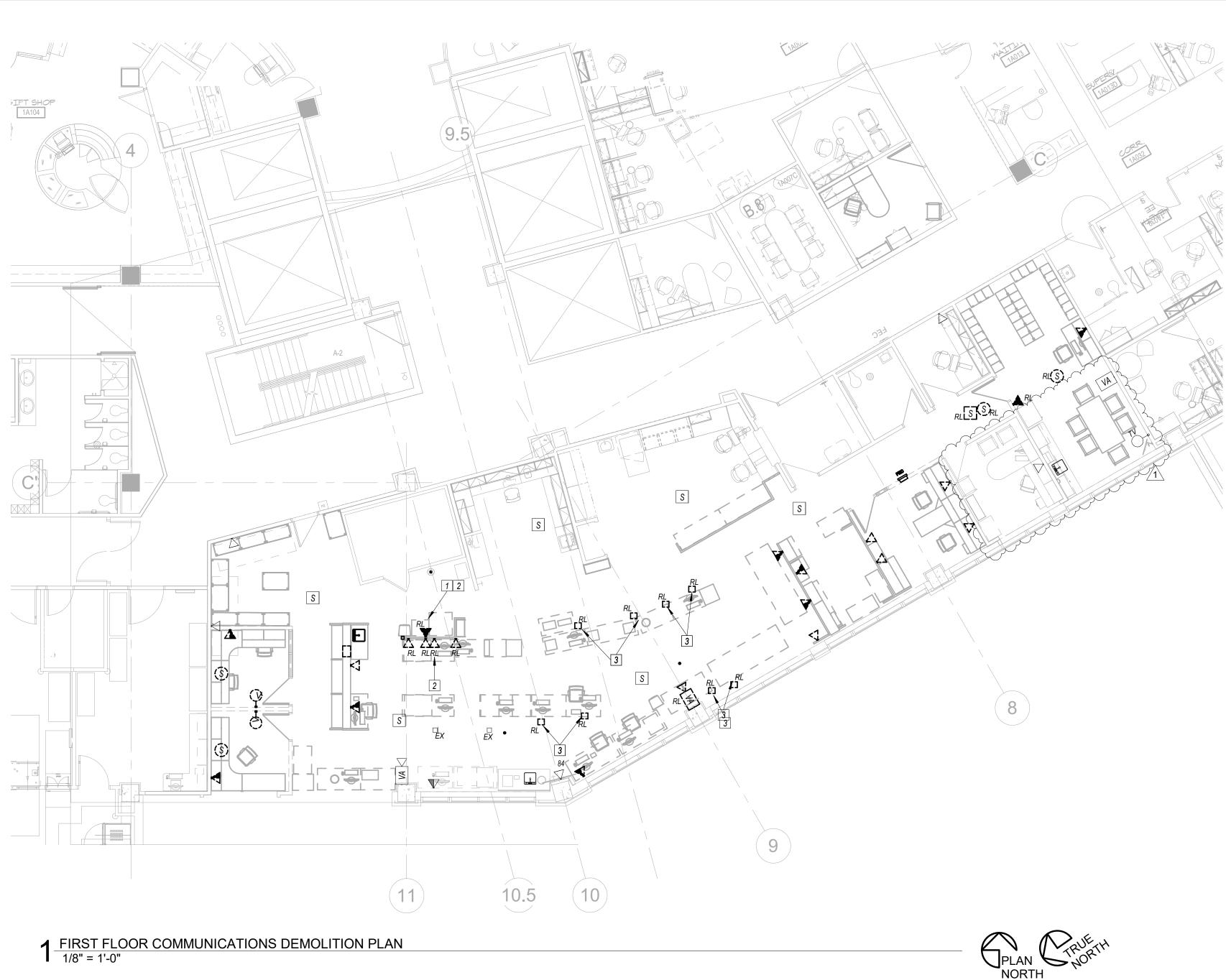
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ELECTRICAL POWER DEMOLITION GENERAL NOTES

- 1 REFER TO SHEET E000 FOR GENERAL NOTES. NOT ALL GENERAL NOTES MAY APPLY TO THIS SHEET.
- 2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. ALL NEW WORK IS SHOWN DARK AND BOLD.
- 3 IT IS THE INTENT TO REUSE EXISTING CIRCUITS TO THE EXTENT POSSIBLE. CIRCUIT NUMBERS ARE BASED UPON AS BUILT DRAWINGS AND SHOULD BE FIELD VERIFIED BY THE ELECTRICAL CONTRACTOR.
- 4 RELOCATED POWER POLES ARE TO BE FED OVERHEAD.
- 5 THIS IS A 24 HOUR OPERATIONAL FACILITY THEREFORE SOME WORK MAY NEED TO OCCUR AFTER HOURS OR ON WEEKENDS AT NO EXTRA COST TO THE OWNER.

- 1 DEVICES MOUNTED IN SYSTEM FURNITURE TO BE RELOCATED WITH FURNITURE. DISCONNECT EXISTING CIRCUITING FOR RELOCATION. EXISTING CIRCUIT TO BE EXTENDED AND RECONNECTED TO DEVICES IN NEW LOCATION. REFER TO NEW WORK PLAN FOR FURTHER INFORMATION.
- 2 THREE SECTION POWER POLE TO BE RELOCATED TO NEW EQUIPMENT LOCATION. REFER TO ARCHITECTURAL PLANS AND NEW WORK ELECTRICAL PLANS FOR FURTHER INFORMATION. 3 EXISTING POWER POLE TO REMAIN.
- 4 DISCONNECT AND RELOCATE TWO(2) EXISTING POWER POLES. ONE POLE WITH TWO(2) NORMAL DUPLEX RECEPTACLES AND TWO(2) DATA DROPS AND ONE POLE WITH TWO(2) EMERGENCY DUPLEX RECEPTACLES. REFER TO NEW WORK ELECTRICAL PLAN FOR FURTHER INFORMATION.
- 5 DISCONNECT AND RELOCATE EXISTING POWER POLE WITH TWO(2) EMERGENCY DUPLEX RECEPTACLES AND TWO(2) DATA DROPS. REFER TO NEW WORK ELECTRICAL PLAN FOR FURTHER INFORMATION.
- 6 DISCONNECT AND RECONNECT TWO(2) EXISTING POWER POLES. ONE POLE WITH ONE(1) EMERGENCY NEMA L6-20 RECEPTACLE AND ONE POLE WITH TWO(2) EMERGENCY DUPLEX RECEPTACLES. REFER TO NEW WORK ELECTRICAL PLAN FOR FURTHER INFORMATION.





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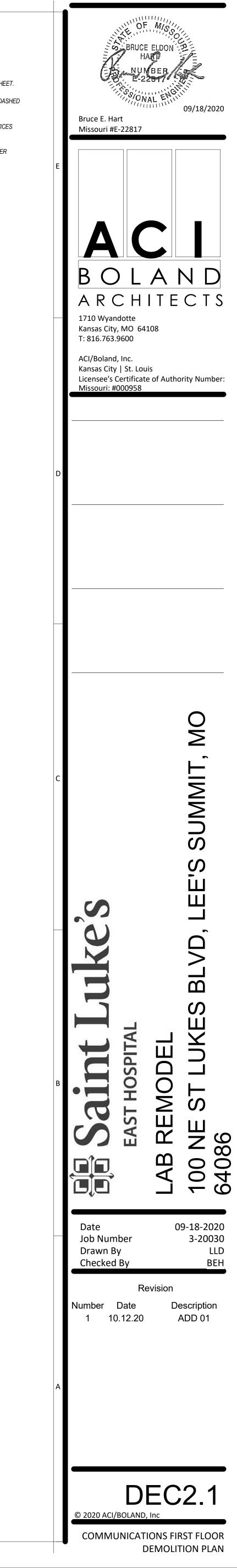
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ELECTRICAL COMMUNICATIONS DEMOLITION GENERAL NOTES

- 1 REFER TO SHEET E000 FOR GENERAL NOTES. NOT ALL GENERAL NOTES MAY APPLY TO THIS SHEET.
- 2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. ALL DEMOLITION WORK IS SHOWN DARK AND DASHED ON DEMOLITION PLAN.
- 3 NOT ALL EXISTING DEVICES ARE SHOWN. CONTRCATOR SHALL MAINTAIN SERVICE TO ALL DEVICES NOT BEING REMOVED AS PART OF THIS PROJECT.
- 4 THIS IS A 24 HOUR OPERATIONAL FACILITY THEREFORE SOME WORK MAY NEED TO OCCUR AFTER HOURS OR ON WEEKENDS AT NO EXTRA COST TO THE OWNER.

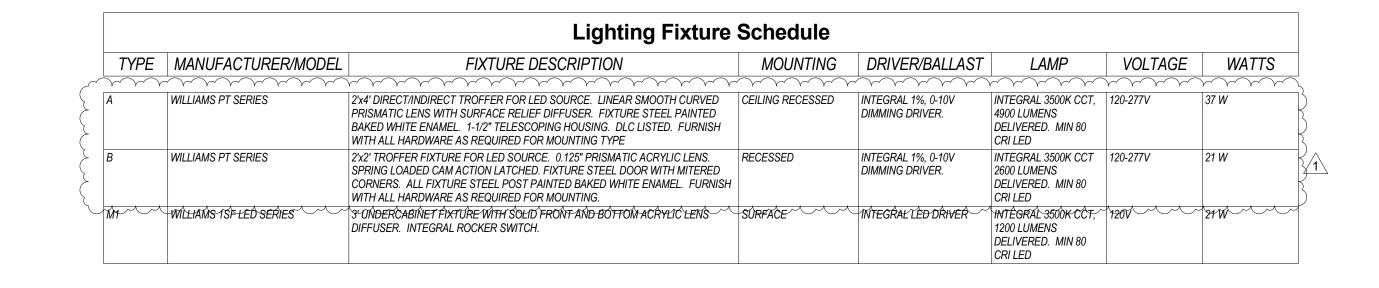
- DISCONNECT AND RELOCATE SENSAPHONE ALARM, MONITORING BLOOD BANK FREEZER AND REFRIGERATOR, TO NEW FREEZER AND REFRIGERATOR LOCATION. REFER TO NEW WORK PLAN FOR RECONNECTION OF CIRCUITS.
 DEVICES MOUNTED IN SYSTEM FURNITURE TO BE RELOCATED WITH FURNITURE. REFER TO NEW WORK PLAN FOR FURTHER INFORMATION.
- 3 DISCONNECT, REMOVE AND RELOCATE EXISTING COMMUNICATIONS POWER POLE WITH TWO(2) DATA CONNECTIONS.





1/8" = 1'-0"

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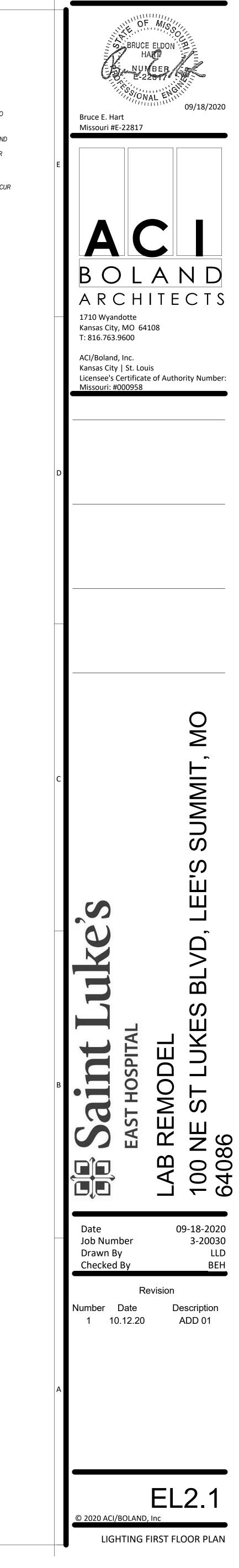
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ELECTRICAL LIGHTING GENERAL NOTES 1 REFER TO SHEET E000 FOR GENERAL NOTES. NOT ALL GENERAL NOTES MAY APPLY TO THIS SHEET.

- 2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. DISCONNECT, REMOVE, RELOCATE AND RECONNECT ALL FIXTURES SHOWN DARK AND DASHED ON DEMOLITION PLAN. DISCONNECT AND REMOVE ASSOCIATED SWITCHES, CONDUIT AND WIRING NO LONGER NECESSARY TO REMAIN. ALL NEW WORK IS SHOWN DARK AND BOLD ON NEW WORK ΡΙ ΔΝ
- 3 THIS IS A 24 HOUR OPERATIONAL FACILITY THEREFORE SOME WORK MAY NEED TO OCCUR AFTER HOURS OR ON WEEKENDS AT NO EXTRA COST TO THE OWNER.

- 1 EXTEND AND CONNECT TO EXISTING EMERGENCY LIGHTING CIRCUIT. 2 EXTEND AND CONNECT TO EXISTING NON-SWITCHED LEG OF NORMAL POWER LIGHTING CIRCUIT.
- 3 EXTEND AND CONNECT TO COUNTERTOP RECEPTACLE CIRCUIT.
 4 FURNISH AND INSTALL NEW SWITCH IN EXISTING BACKBOX AND CONNECT TO EXISTING CIRCUITING AS REQUIRED.
- 5 CONNECT NEW LIGHT FIXTURE TO EXISTING ROOM CIRCUIT.





1 FIRST FLOOR POWER PLAN 1/8" = 1'-0"

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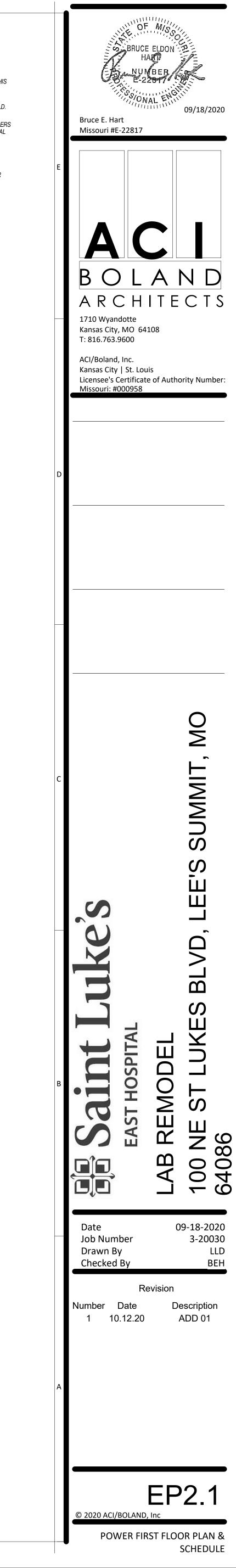
	Location: LAB 1A041M Supply From: A1-14-LC Mounting: Surface Enclosure: Type 1				I	Volts: Phases: Wires:		Wye				A.I.C. Rating: 10K Mains Type: MCB Mains Rating: 100 A MCB Rating: 100 A		
Votes:														
СКТ	Circuit Description	Trip	Poles		4	E	3		C	Poles	Trip	Circuit De	escription	СК
1	ATELLICA ACCESSORY POWER	20 A	1	0 VA	1200								-	2
3				-		1200	1200			2	20 A	ATELLICA SAMPLER HA	NDLER POWER	4
5	ATELLICA CHEMISTRY ANALYZER POWER	20 A	2					1200	1200		00.4			6
7	ATELLICA ACCESSORY POWER	20 A	1	0 VA	1200					2	20 A	ATELLICA IMMUNOASS	YPOWER	8
9	ATELLICA SAMPLER HANDLER POWER	20 A	2			1200	1200			2	20 1	ATELLICA CHEMISTRY		10
11	ATELLICA SAWFLER HANDLER POWER	20 A	2					1200	1200		20 A		HIVALIZER POWER	12
13	ATELLICA SYSTEM POWER	20 A	2	1200	0 VA					1	20 A	AUTOMATION WORKST		14
15			2			1200	0 VA			1	20 A	AUTOMATION WORKST		16
17	ACCESSORY POWER	20 A	1					0 VA	0 VA	1	20 A	AUTOMATION WORKST		18
19	APTIO UPS	100 A	2	0 VA	180 VA					1	20 A	MILLIPORE SYSTEM RE		20
21						0 VA	180 VA			1	20 A	MILLIPORE SYSTEM RE	CEPTACLE	22
23	SPARE	20 A	1	0.1/4	0.1/0			0 VA	0 VA	1	20 A	SPARE		24
25	SPARE	20 A	1	0 VA	0 VA	0.1/4	0.1/4			1	20 A	SPARE		26
27	SPARE	20 A	1			0 VA	0 VA	0.)/A	0.)(A	1	20 A	SPARE		28
29	SPARE	20 A	1	0.)/A	0.)//			0 VA	0 VA	1	20 A	SPARE		30
31 33	SPARE BLOOD BANK MINI-FRIG	20 A 20 A	1	0 VA	0 VA	180 VA				1	20 A	SPARE		32
35	BLOOD BANK MINI-FRIG	20 A				100 VA								34
37														38
39														40
41														42
71		Tot	al Load:	378	0 VA	636	0 VA	480	0 VA					72
			Amps:		2 A		4 A		I A					
.egend .oad C	d: Classification	Con	nected L	oad	Den	nand Fa	ctor	Estin	nated De	emand		Panel	Totals	
Other		14400 VA				100.00%		14400 VA		4				
Recept	acle		540 VA			100.00%	,		540 VA			Total Conn. Load:		
												Total Est. Demand:		
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											Το	tal Est. Demand Current:	41 A	
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ELECTRICAL POWER GENERAL NOTES

- 1 REFER TO SHEET E000 FOR GENERAL NOTES. NOT ALL GENERAL NOTES MAY APPLY TO THIS 2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. ALL NEW WORK IS SHOWN DARK AND BOLD.
- 3 IT IS THE INTENT TO REUSE EXISTING CIRCUITS TO THE EXTENT POSSIBLE. CIRCUIT NUMBERS ARE BASED UPON AS BUILT DRAWINGS AND SHOULD BE FIELD VERIFIED BY THE ELECTRICAL CONTRACTOR.
- 4 RELOCATED POWER POLES ARE TO BE FED OVERHEAD.
- 5 THIS IS A 24 HOUR OPERATIONAL FACILITY THEREFORE SOME WORK MAY NEED TO OCCUR AFTER HOURS OR ON WEEKENDS AT NO EXTRA COST TO THE OWNER.

- 1 EXTEND AND CONNECT TO 20A, 1P CIRCUIT BREAKER(S) MADE AVAILABLE DURING DEMOLITION PORTION OF PROJECT.
- 2 RELOCATED THREE SECTION POWER POLE FOR ROUTING OF CIRCUITING AND DATA OF
- SYSTEM MOUNTED DEVICES. 3 RELOCATED SENSAPHONE MONITORING ALARM. MAKE ALL CONNECTIONS TO
- REFRIGERATOR AND FREEZER AS REQUIRED. 4 DROP CIRCUITING DOWN IN RELOCATED POWER POLE FOR CONNECTION TO DEVICES MOUNTED IN SYSTEM FURNITURE. EXTEND AND CONNECT TO EXISTING CIRCUIT
- BREAKER MADE SPARE DURING DEMOLITION PHASE OF PROJECT. RELOCATE AND RECONNECT THREE(3) EXISTING POWER POLES. ONE POLE WITH TWO(2) 5 NORMAL DUPLEX RECEPTACLES AND TWO(2) DATA DROPS, ONE POLE WITH TWO(2) EMERGENCY DUPLEX RECEPTACLES AND ONE POLE WITH TWO(2) EMERGENCY DUPLEX
- RECEPTACLES AND TWO(2) DATA DROPS. 6 RELOCATE AND RECONNECT TWO(2) EXISTING POWER POLES, EACH WITH TWO(2)
- EMERGENCY DUPLEX RECEPTACLES AND TWO(2) DATA DROPS). RELOCATE AND RECONNECT TWO(2) EXISTING POWER POLES. ONE POLE WITH TWO(2) 7
- NORMAL DUPLEX RECEPTACLES AND TWO(2) DATA DROPS AND ONE POLE WITH TWO(2) EMERGENCY DUPLEX RECEPTACLES. FURNISH AND INSTALL 6"x6" SEPARATED POWER COLUMN FOR ROUTING OF EMERGENCY POWER, DATA AND WATER. THE FRONT SIDE SHALL CONSIST OF THREE(3) 208V, L6-20R 8
- RECEPTACLES, ONE(1) 120V EMERGENCY DUPLEX RECEPTACLE AND CAT6 NETWORK DROP. REFER TO SIEMENS HEALTHINEER DRAWINGS FOR ADDITIONAL INFORMATION. 9 EXISTING POWER POLE TO REMAIN. 10 FURNISH AND INSTALL NEW 100A, 3P CIRCUIT BREAKER IN EXISTING PANEL TO FEED NEW
- PANEL. REFER TO PANEL LOCATION PLAN ON THIS SHEET FOR EXISTING PANEL LOCATION. 11 4-#1W, 1-#8 GND IN 1-1.2"C.
- 12 2-#2W, 1-#8 GND IN 1"C.
- 13 EATON 9155, 1-PH 12kVA UPS. REFER TO SIEMENS HEALTHINEERS DRAWINGS FOR FURTHER INFORMATION. EXACT LOCATION IN ROOM TO BE FIELD VERIFIED. 14 12kVA, 208 TO 230VAC STEP UP TRANSFORMER. REFER TO SIEMENS HEALTHINEERS DRAWINGS FOR FURTHER INFORMATION. EXACT LOCATION IN ROOM TO BE FIELD
- VERIFIED. 15 FURNISH AND INSTALL 40A, 1PH, 230VAC PHASE-TO-NEUTRAL CIRCUIT BREAKER IN NEMA 1 ENCLOSURE. REFER TO SIEMENS HEALTHINEERS DRAWINGS FOR FURTHER
- INFORMATION. 16 2-#8W, 1-#10 GND IN 1"C. 17 FURNISH AND INSTALL 40A, 3PH, 230VAC PHASE-TO-NEUTRAL DISCONNECT SWITCH AND
- MAKE ALL CONNECTIONS TO APTIO AS REQUIRED. REFER TO SIEMENS HEALTHINEERS DRAWINGS FOR FURTHER INFORMATION. 18 REVISE RELOCATED POWER POLE TO HAVE THREE(3) EMERGENCY RECEPTACLES AND
- CONNECT TO NEW CIRCUIT AS SPECIFIED.
- 19 RELOCATE AND EXISTING POWER POLE WITH TWO(2) EMERGENCY DUPLEX RECEPTACLES AND EXTEND AND CONNECT TO NEW CIRCUIT AS SPECIFIED.
- 20 FURNISH AND INSTALL NEW TWO COMPARTMENT POWER POLE FOR EMERGENCY POWER AND DATA. FURNISH WITH FOUR(4) EMERGENCY DUPLEX RECEPTACLES , TWO(2) WIRED PER CIRCUIT, AND WITH FOUR(4) DATA PORTS.
- 21 EXTEND AND CONNECT TO EXISTING CIRCUIT.





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ELECTRICAL COMMUNICATIONS GENERAL NOTES

- 1 REFER TO SHEET E000 FOR GENERAL NOTES. NOT ALL GENERAL NOTES MAY APPLY TO THIS SHEET. 2 WORK SHOWN LIGHTLY IS EXISTING TO REMAIN. ALL NEW WORK IS SHOWN DARK AND BOLD.
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KEYED NOTES

2

- 1 DEDICATED ANALOG TELEPHONE LINE FOR CONNECTION TO REFRIGERATOR/FREEZER ALARM.
- 2 DROP CABLING DOWN IN POWER POLE AND EXTEND AND CONNECT TO SYSTEM FURNITURE MOUNTED DEVICE(S).
- 3 DEVICE MOUNTED IN SYSTEM FURNITURE. EXTEND CABLING THROUGH FURNITURE RACEWAY TO POWER POLE CONNECTION POINT.
- 4 DROP CABLING DOWN IN RELOCATED POWER POLE AND RECONNECT TO TWO(2) EXISTING POLE MOUNTED DATA DROPS. 5 CAT6 NETWORK DROP MOUNTED IN 6"x6" SEPARATED POWER COLUMN. REFER
- TO SIEMENS HEALTHINEER DRAWINGS FOR ADDITIONAL INFORMATION. 6 FURNISH AND INSTALL SIX(6) CAT 6 CABLES BETWEEN APTIO WORKSTATION AND APTIO UTILITY LOCATION. REFER TO SIEMENS HEALTHINEERS DRAWINGS FOR FURTHER INFORMATION.
- 7 REVISE RELOCATED POWER POLE WITH THREE(3) NETWORK DATA DROPS AND CONNECTION POINT FOR SIX(6) CAT6 CABLES TO APTIO. REFER TO SIEMENS HEALTHINEERS DRAWINGS FOR FURTHER INFORMATION.
- 8 REVISE RELOCATED POWER POLE WITH ONE(1)NETWORK DATA DROPS AND CONNECTION POINT FOR SIX(6) CAT6 CABLES FROM APTIO WORKSTATION. REFER TO SIEMENS HEALTHINEERS DRAWINGS FOR FURTHER INFORMATION. 9 DATA DROPS MOUNTED IN NEW POWER POLE. REFER TO ELECTRICAL POWER PLAN FOR ADDITIONAL POWER POLE INFORMATION.

