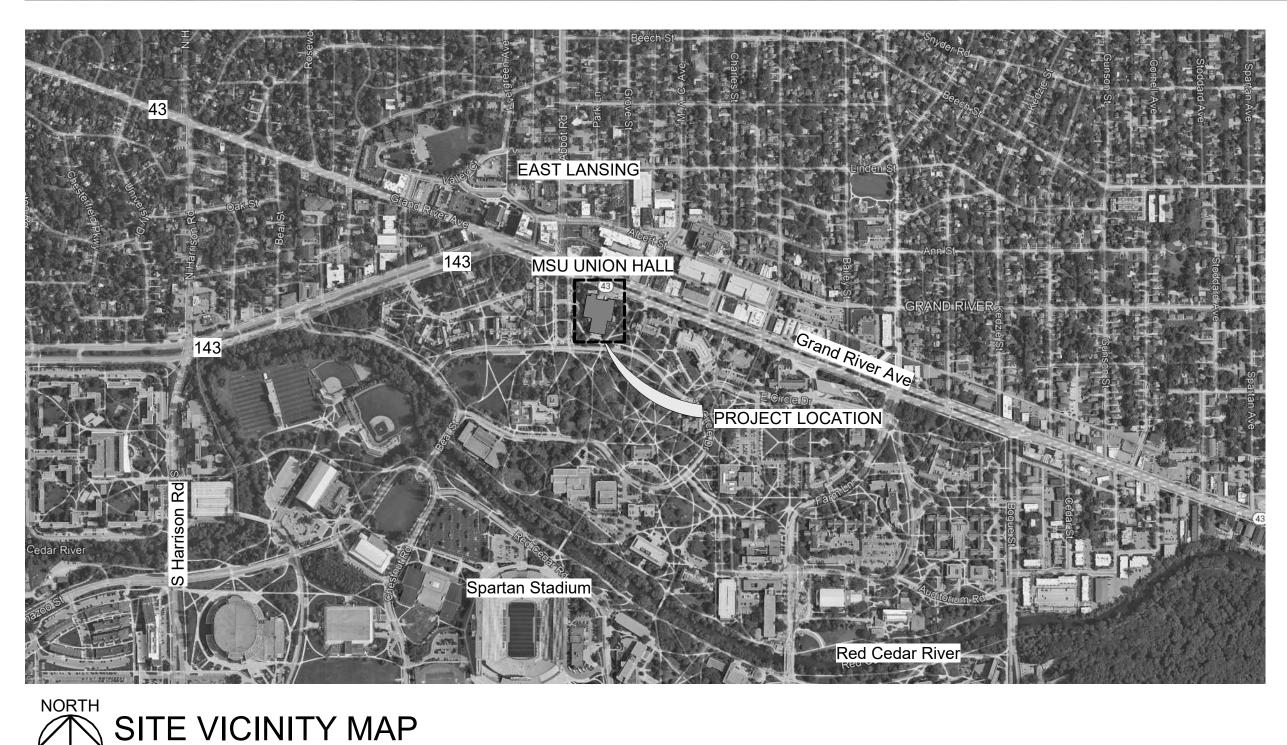
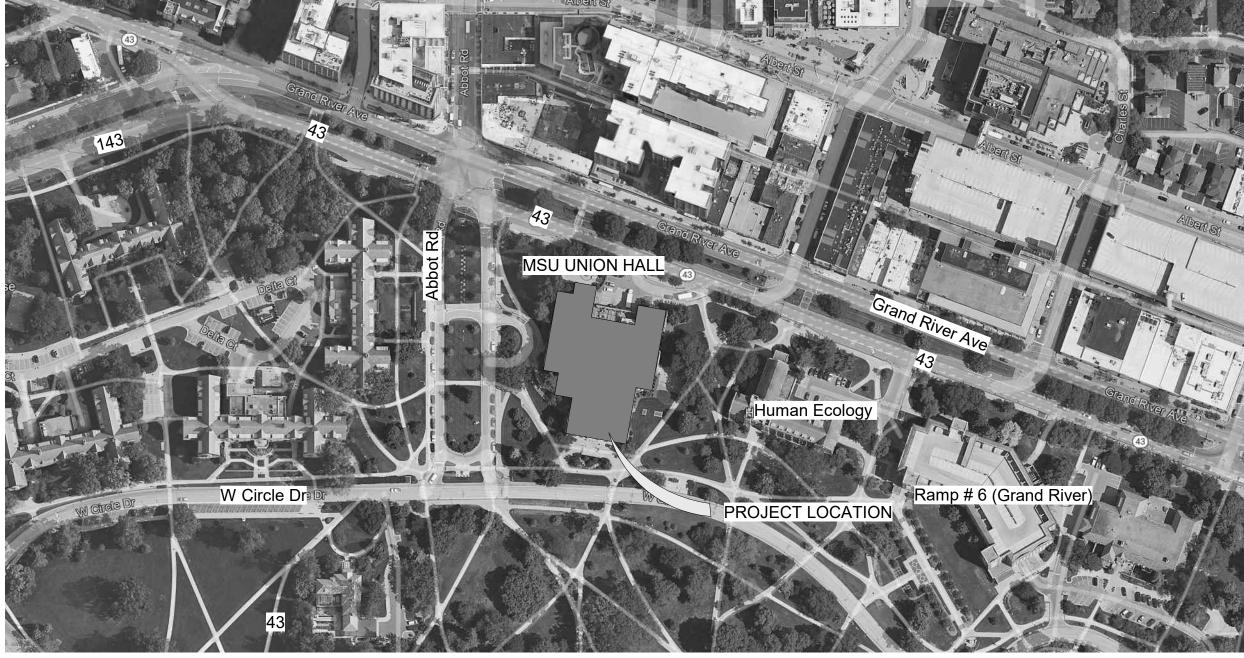
49 ABBOT RD, EAST LANSING, MI, 48824 HOBBS + BLACK PROJECT #: 25-711 BIDS & PERMITS 11/17/2025



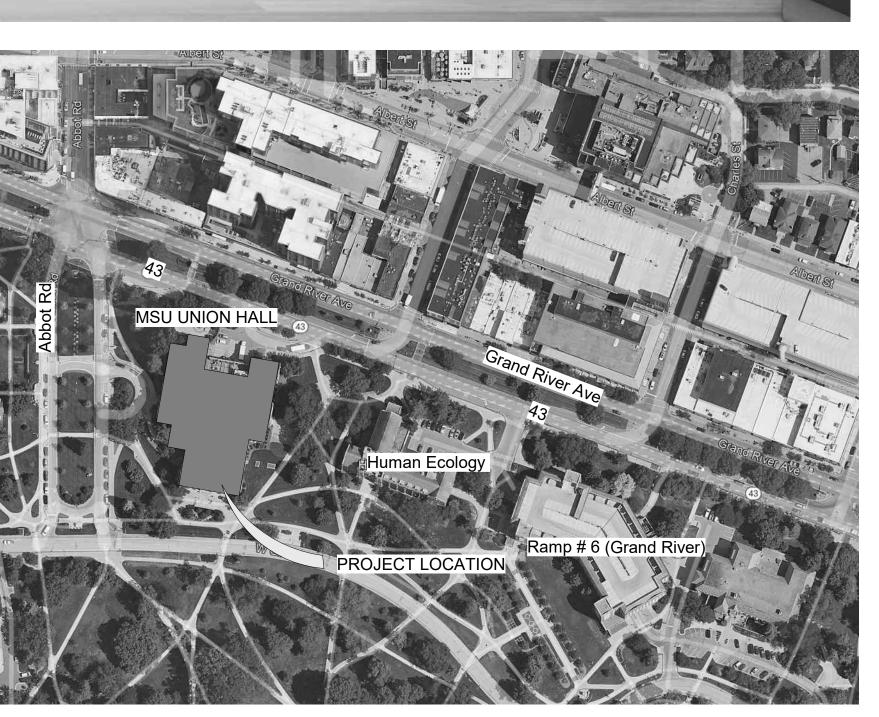
Add alternates include the following:

- 1. Upgraded FRP panel.
- 2. Replacement of flooring including accessories
- 3. Acoustic petals above POS









NORTH MSU UNION HALL KEY PLAN - 1ST FLOOR

OWNER AND CONSULTANTS:

SCALE - NOT TO SCALE

OWNER

MICHIGAN STATE UNIVERSITY 49 ABBOT RD, EAST LANSING, MI, 48824 CONTACT: Tonino Pacifico - Project Manager PHONE: (517) 243-0260

ARCHITECT OF RECORD

HOBBS + BLACK ASSOCIATES, INC. 100 N. STATE STREET ANN ARBOR, MI, 48104 CONTACT: Megan Hon PHONE: (734) 663-4189

MECHANICAL/ ELECTRICAL ENGINEER

MATRIX CONSULTING 544 CHERBOURG DR., LANSING, MI, 48917 CONTACT: Brett Thelen - Electrical Engineer
Ross Wolniakowski, P.E. - Mechanical Engineer (517) 487-2511 (517) 526-4816

FOOD SERVICE CONSULTANT

DBA FOOD SERVICE DESIGN 1220 CHARLESTON CT., NORTHVILLE, MI, 48167 CONTACT: Don Brown PHONE: (248) 345-5791

THOMAS M ARCHITECT
No.
1301057360

COVER SHEET G-000

HOBBS + BLACK ARCHITECTS

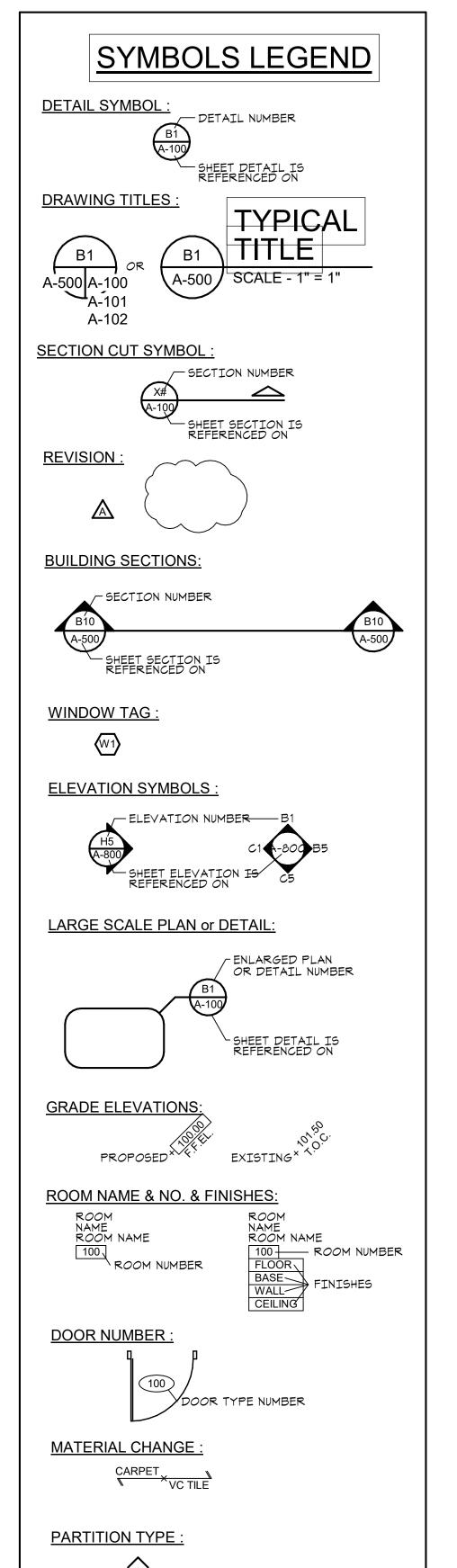
Ann Arbor, MI 48104 P. 734.663.4189

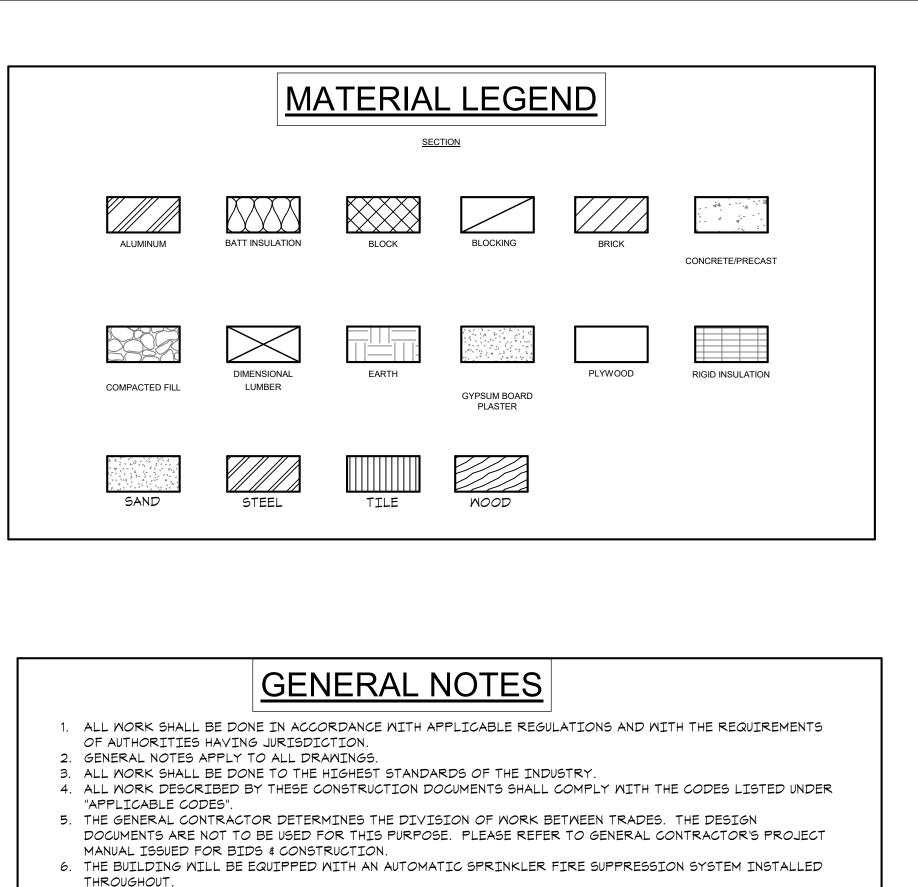
CONST. REP. APPR.

11/17/2025 SCALE ISSUED

BIDS & PERMITS 11/17/2025

1 OF 13





7. DIMENSIONS SHOWN ARE TO FACE OF STUD, FACE OF MASONRY, FACE OF GYPSUM BOARD, OR CENTER LINE

9. PRIOR TO SUBMITTING A BID PROPOSAL AND PRIOR TO THE START OF WORK, THE CONTRACTOR(S) SHALL

ANY PROBLEMS OR DISCREPANCIES. PARTIAL SETS OF DOCUMENTS SHOULD NOT BE USED. A SEPARATE

10. PRIOR TO SUBMITTING A BID PROPOSAL AND PRIOR TO THE START OF WORK, THE CONTRACTOR(S) SHALL

IMMEDIATELY OF ANY PROBLEMS OR DISCREPANCIES. PLEASE REFER TO GENERAL CONTRACTOR'S

11. THE CONTRACTORS SHALL BECOME FAMILIAR AND COMPLY WITH ALL APPLICABLE REQUIREMENTS AND

12. ALL MORK SHOWN IS TO BE INCLUDED IN THE SCOPE OF MORK UNLESS OTHERWISE NOTED AS NOT IN

16. CONTRACTORS SHALL NOTIFY LOCAL UTILITY COMPANIES A MINIMUM OF 12 HOURS PRIOR TO ANY

PENETRATIONS SLEEVES SHALL EXTEND 2" MINIMUM ABOVE THE FLOOR LEVEL. (TYPICAL FOR MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION ITEMS, SLEEVES SHALL BE SUPPLIED BY MECHANICAL AND

18. PROVIDE FIRE-RATED FIRESTOPPING AT ALL PENETRATIONS THROUGH SUPPORTED FLOORS AND FIRE-RATED PARTITIONS/ WALLS. PROVIDE FIRESTOPPING SYSTEMS UTILIZING FM APPROVED MATERIALS.
19. THE CONTRACTOR SHALL PROVIDE SOLID FIRE RETARDANT TREATED (F.R.T.) WOOD OR SHEET METAL

BACKING WHERE REQUIRED FOR ANCHORAGE OF ARCHITECTURAL, MECHANICAL, OR ELECTRICAL ITEMS. 20. ALL COMPONENTS REQUIRED FOR THE PROPER COMPLETION OF THE WORK ARE TO BE INCLUDED. THE GENERAL CONTRACTOR SHALL DETERMINE WHICH COMPONENTS ARE PROVIDED BY WHICH TRADE.

21. THE FACT THAT BIDS ARE COMPETITIVE WILL NOT BE ACCEPTED AS A LATER JUSTIFICATION FOR CHANGE

AND AS ACCEPTABLE TO ARCHITECT. CONTRACTOR TO NOTIFY ARCHITECT IF CONTROL JOINTS ARE

23. ALL SHOP DRAWINGS ARE TO BE ORIGINAL DRAWINGS. ARCHITECTS AND ENGINEER'S DESIGN DRAWINGS

26. ALL TEMPORARY ENCLOSURES SHALL PROTECT THE ENCLOSED AND/OR ADJOINING USABLE SPACES FROM THE NATURAL ELEMENTS (SUCH AS RAIN, WIND, TEMPERATURE EXTREMES) AT ALL TIMES AND BE MAINTAINED ACCORDINGLY. PUMP WATER FROM EXPOSED CONSTRUCTION AREAS AS REQUIRED TO PROTECT ADJOINING PUBLIC AND PRIVATE SPACES AND AS REQUIRED TO MAINTAIN A SAFE WORK AREA. DO NOT LET WATER OR

SOIL ACCUMULATE AGAINST TEMPORARY CONSTRUCTIONS. PROVIDE STORM WATER DISCHARGE SYSTEMS FOR ALL TEMPORARY CONSTRUCTION AND WORK AREAS. DO NOT ALLOW WATER INFILTRATION OR WATER

24. OFF HOUR WORK SHALL BE COORDINATED AND VERIFIED IN ADVANCE WITH THE OWNER AND GENERAL

STAINING TO OCCUR IN NEWLY CONSTRUCTED OR EXISTING BUILDING AREAS AT ALL PHASES OF

LOCATED IN ADDITION TO WHAT IS SHOWN ON THE DRAWINGS PRIOR TO INSTALLATION.

22. PROVIDE CONTROL JOINTS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AT ALL MATERIALS,

17. ALL PIPE AND CONDUIT PENETRATIONS THRU ANY FLOOR OR WALL SHALL BE SLEEVED. AT FLOOR

EXAMINE AND VERIFY ALL EXISTING CONDITIONS AT THE SITE AND NOTIFY THE GENERAL CONTRACTOR

EXAMINE COMPLETE SETS OF DESIGN DOCUMENTS AND NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY OF

BOUND PROJECT MANUAL WITH STANDARD CSI DIVISIONS ACCOMPANIES THESE DRAWINGS. PLEASE REFER

8. PLAN SYMBOL "V" INDICATES PARTITION TYPES. PARTITION TYPES ARE INDICATED ON THE SECTOR

OF STRUCTURAL GRID UNLESS NOTED OTHERWISE.

PROJECT MANUAL ISSUED FOR BIDS & CONSTRUCTION.

CONTRACT (N.I.C.), OR SPECIFICALLY NOTED "BY OWNER".

13. ALL MATERIALS ARE NEW UNLESS LABELED AS EXISTING.

14. ALL DETAILS ARE TYPICAL UNLESS NOTED OTHERWISE.

15. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS.

ARE NOT TO BE REPRODUCED OR DUPLICATED FOR THIS PURPOSE.

CONTRACTOR AND SHALL BE INCLUDED IN ALL BID PROPOSALS.

CONSTRUCTION. SEE PROJECT MANUAL.

28. FIRST LEVEL = 100'-0" AS SHOWN ON DRAWINGS

25. NO ELECTRICAL CONDUIT SHALL BE LOCATED WITHIN THE UPPER LEVEL SLABS.

27. CONTRACTOR MUST VERIFY ACTUAL FIELD CONDITIONS PRIOR TO BEGINNING WORK.

29. MSU MASONRY TO SCAN CONCRETE SLAB PRIOR TO TRENCHING FOR NEW ELECTRICAL SCOPE

CONDITIONS OF THE LANDLORD AND PROPERTY.

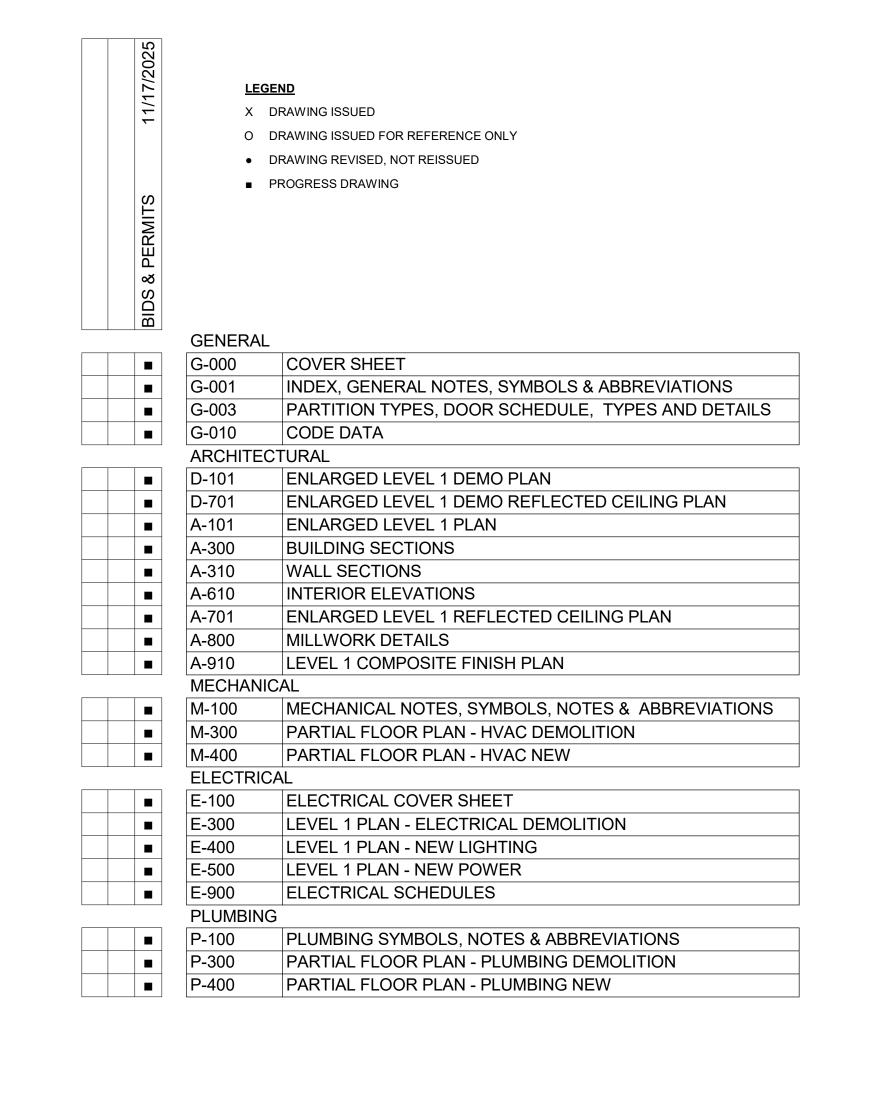
EXCAVATION.

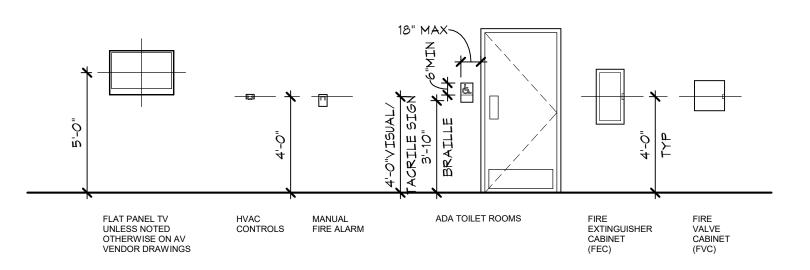
PLANS. REFER TO PARTITION LEGEND FOR ADDITIONAL INFORMATION.

TO GENERAL CONTRACTOR'S PROJECT MANUAL ISSUED FOR BIDS & CONSTRUCTION.

ARTITION TYPE :							
^							
1							
		N10					
<u> P</u>	ABBREVIATIO	<u>ons</u>					
ABOVE FINISHED FLOOR ACCESS DOOR	A.F.F. EACH A.D. EACH FACE		EA. E.F.	LIGHTING PANEL LIGHTWEIGHT	L.P. LT'WT	ROOF SUMP ROOFING	R.S. RF' <i>G</i>
ACCESS PANEL ACOUSTIC, ACOUSTICAL ACOUSTIC CEILING TILE	A.P. EACH WAY	RIC WATERPROOFING	E.M. ELAS M.P.	LIVE LOAD LONG LEG HORIZONTAL	L.L. L.L.H.	ROOM ROUGH OPENING	RM. R.O. RND
ACOUSTIC CEILING TILE ADDITION ADJUSTABLE	A.C.T. ELECTRIC, ADD'N ELECTRICA ADJ. ELECTRIC	ELECTRICAL L PANEL NATER COOLER	ELEC. E.P. EWC	LONG LEG VERTICAL LOUVER OPENING LOW POINT	L.L.Y. L.O. L.P.	ROUND RUBBER TILE SANITARY	R.T. SAN.
ALTERNATE ALUMINUM	ALT. ELEVATION ALUM ELEVATOR	(HEIGHT LEVEL)	EL. ELEV.	MACHINE MANHOLE	MACH. MH	SANİTARY NAPKIN DISPENSER SANITARY NAPKIN DISP <i>O</i> SAL	S.N.D. S.N. DISP.
ANCHOR, ANCHORAGE ANCHOR BOLTS	ANCH. ELIMINATE A.B. EMERGENC	· ·	ELIM. EMER <i>G</i> . ENAM.	MARBLE THRESHOLD MASONRY	M.T. MAS.	SCHEDULE SECRETARY SECTION	SCHED. SEC. SECT.
AND ANGLE ANODIZED	ENAMEL L ENGLOSURE ANOD. ENVIRONM	: FNT	ENGL. ENVIR.	MASONRY OPENING MATERIAL MAXIMUM	M.O. MAT'L MAX.	SERVICE SINK SHEET	S.S. SHT. SHT. MET.
APPROVED APPROXIMATE	APPR EQUAL APPROX EQUIPMENT		EQ. EQUIP.	MECHANICAL MEDIUM	MECH. MED.	SHEET METAL SHELVING	SHLV'G
ARCHITECT, ARCHITECTURAL ASH TRAY	ARCH. EXCAVATEI A.T. EXISTING ASPH EXPANSION		EXC. EXIST. EXP.	METAL OR METALLIC METAL EDGE STRIP	MET. M.E.S.	SHOWER SIMILIAR SOAP DISPENSER	SH'R SIM. S. DISP.
ASPHALT ASSEMBLY ASSISTANT	ASPH. EXPANSION ASS'Y EXPANSION ASS'T EXPANSION	I BOLT	EXP. B.	LEVEL 4 MINIMUM MIRROR	MEZZ. MIN. MIR.	SOUTH SPEAKER	S. SPK'R
AT AUTOMATIC	@ EXTERIOR AUTO FABRIC		EXT. FAB.	MĪSCELLANEOUS MISC. IRON CONTRACTOR	MISC. M.I.C.	SPECIFICATIONS SQUARE	SPEC. SQ.
AUXILIARY BARRIER FREE	AUX. FEET, FOO B.F. FINISH, FI B. PI FINISH FLO	NISHED	FT. FIN. F.F.	MOUNTED MULLION	MT'D MULL. NATURAL.	SQUARE FEET (FOOT) STAGGERED STAINLESS STEEL	S.F. STAG'D ST. ST'L
BASE PLATE BASEMENT BEAM	BSM'T FIRE ALAR		F.A. F.E.C.	NATURAL NOMINAL NORTH	NOM.	STANDARD STEEL	ST'D ST'L
BEARING BENCH MARK	BR'G FIRE HYDR BM FIRE HOSE	ANT CABINET	F.H.C.	NOT IN CONTRACT NOT TO SCALE	N.I.C. N.T.S. NO. or #	STORAGE STREET	STOR. ST. STRUCT.
BETWEEN BITUMINOUS BLOCK	BET. FIRE VALV BITUM. FIREPR <i>OO</i> BL'K FIXTURE	E CABINET FING	F.V.C. FPRF'G FIXT.	NUMBER OFFICE ON CENTER	NO. or # OFF. O.C.	STRUCTURAL STRUCTURAL STEEL STRUCTURAL STEEL CONTRACTOR	5. ST'L 5. S.C.
BLOCKING BOARD	BLK'G FLASHING BD FLOOR		FLASH. FL'R	OPENING OPPOSITE	OPN'G	SURFACE SUSPEND, SUSPENSION	SURF. SUSP. TACK BD.
BOTTOM BUILDING	BOTT. FLOOR DR BLD'G FOOTING		F.D. FT'G	OPPOSITE HAND OUTSIDE DIAMETER	OPP. OPP. HD. O.D.	TACKBOARD TELEPHONE	TEL.
BUILT-UP ROOFING CABINET CAST IN PLACE	B.U.R. FOUNDATION FAME CAB. FRAME C.I.P. FURNISH, F		FD'N FR. FURN.	OVERHEAD PAINTED PAIR	O.H. PT'D PR	TEMPERATURE TEMPERED GLASS THICK, THICKNESS	TEMP. TEMP. GL. TH'K
CATCH BASIN CEILING	C.B. FURRED, FL	RRING	FURR. G.	PAPER TOWEL DISPENSER PAPER TOWEL RECEPTACLE	P.T.D. P.T.R. PART'N	THRESHOLD TOILET TOILET PAPER DISPENSER	TH'K THRES. TOIL.
CENTER LINE CENTER TO CENTER	C.L. GAUGE C/C GALVANIZE CER. GALVANIZE	D TRON	GA. GALV. G.I.	PARTITION PAVEMENT	PVM'T	TOILET PAPER DISPENSER TOILET PAPER HOLDER TONGUE AND GROOVE	T.P.D. T.P.H. T & G
CERAMIC CERAMIC TILE CHALKBOARD	C.T. GENERAL		GEN. G.C.	PAVING PENTHOUSE PERFORATED	PY'G PENTHSE PERF.	TOP AND BOTTOM TOP OF FOOTING	T & B T.O.F.
CHANNEL CHECKERED PLATE	C GLASS CHK'D PL. GRADE		GL. GR.	PERIMETER PHYSICALLY HANDICAPPED	PERIM. P.H.	TOP OF MASONRY TOP OF COVER OR CURB	T.O.M. T/C
CLOSET COLD WATER COLUMN	CLO. GYPSUM CM HARDWARE COL. HANDICAPI		GYP. HDWR H.C.	PIECES PLASTER PLASTIC LAMINATE	PC'S PLAS. PL. LÄM.	TOP OF STEEL TOP OF WALL TOTAL LOAD	T.O.S. T/W T.L.
COMPACTED CONCRETE	COMP. HEATING, \ CONC. AIR CON	ENTILATION, DITIONING	HVAC	PLATE PLYWOOD	PLY'WD	TREAD TYPICAL	T. TYP.
CONCRETE MASONRY UNIT	C.M.U. HEIGHT CONF. HIGH POIN	T SURE LAMINATE	HG'T H.P. H.P.L.	POINTS POINTS	PT PT'S	UNDERWRITER'S LABORATORIES, INC. UNLESS NOTED OTHERWISE VENT THRU ROOF	UL U.N.O. V.T.R.
CONNECT, CONNECTION CONSTRUCTION CONTROL or CONSTRUCTION JOII	CONST. HOLLOW M		H.M. HORIZ.	POLISH, POLISHED POLYVINYL CHLORIDE POUNDS	POL. PVC LBS	VERIFY IN FIELD VERTICAL, VERTICALLY	V.I.F. VERT.
CONTINUE, CONTINUOUS CONTRACTOR	CONT. HOSE BIBE CONTR. HOT WATER		H.B. HM	POUNDS PER SQUARE FOOT POWER	P.S.F. PWR.	VESTIBULE VINYL COMPOSITION TILE	VEST. V.C.T.
CORRIDOR, CORRUGATED COUNTER DAMPPROOFING	CORR. HOT WATER CT'R HYDRANT D.P. INCH or IN		H.M.H. HYD. IN. or "	PRECAST PREFABRICATED PRESSURE TREATED	P.C. PRÉFAB. P.T.	VINYL TILE VINYL WALL COVERING VOLT	V.T. V.M.C. V.
DEAD LOAD DEMOLITION	D.L. INFORMAT DEMO INSIDE DI	ION AMETER	INFO. I.D.	PROJECT, PROJECTION PROPERTY	PROJ. PROP.	WATER RESISTANT WATERPROOFING	M.R. MP
DEPARTMENT DETAIL	DEPT. INSTALL, I DET. INSULATE,	NSTALLATION INSULATION	INSTAL. INSUL. INT.	QUARRY TILE RATH CONDUCTOR	Q.T. R.C.	MEIGHT MELDED WIRE FABRIC WINDOW	ST M.M.F. MIN
DIAMETER DIFFUSER DIMENSION	DIA. INTERIOR DIFF INVERT DIM. INVERT EL	EVATION	INT. INV. I.E.	RADIUS REFERENCE REFLECTED, REFLECTIVE	RAD. REF. REFL.	MINDOM CONTRACTOR MINDOM OPENING	MIN. CONTR. M.O.
DIRECTORY DITTO	DÎR. JOÎNT DO. KIÇK PLAT	E	JT K.P.	REFRIGERATION OF REFRIGERATOR REINFORCE REINFORCING OF	REFL. REFRIG. REINF.	MELDED MIRE MESH MIRE MESH	M.M.M. M.M.
DOOR DOOR OPENING	DR. KNOCK-OU D.O. LAMINATE,	LAMINATED	K.O.P. LAM. L.H.	REINFORGEMENT REQUIRED RESILIENT	REQ'D RESIL.	MITH MITHOUT MOMEN	W/ W/O WOM.
DOUBLE DOWN DOWELS	DN LEFT HAND DW'LS LIGHT	REVERSE	L.H.R. LT.	RESILIEN REVISED, REVISION RIGHT HAND	REV. R.H.	MOOD YARD	MD. YD.
DRAWING	DWG LIGHTING D.F.		LT'G	RIGHT HAND REVERSE RIGHT OF WAY	R.H.R. R.O.W.		

		CONTRACTOR	CONTRACTOR	OWNER	OWNER	GEI E DE	OFORM	
/N	ITEMS OF WORK	FURNISHED CONTRACTOR INSTALLED CFCI	INSTALLED CI	INSTALLED OI	FURNISHED CONTRACTOR INSTALLED OFCI	SCOPE	OFORM	NOTES
<u> </u>	PRE-CONSTRUCTION				•	TOR D IPF RHS Relocated per M5U Fac Y RH5 to coordinate Sod with Contractor RH5 to coordinate coff with Contractor Relocated per M5U Fac Y D55 deploy - removed of for Tech Relocated per M5U Fac IPF to design - contractor Y Y Y Y Y Y Y Y Y Y Y Y Y		
1	Install temporary construction barrier per the demo		Y					
.2	Remove and relocate existing equipment retain and store per MSU facilities team							
	 Remove and relocate existing sales gondolas FOH 		Y					Relocated per MSU Facilities team
	Remove existing soda dispenser and ice condenser						Y	RHS to coordinate Soda vendor to remove with Contractor
	3. Remove existing coffee dispenser						Y	RHS to coordinate coffee vendor to remove with Contractor
	4. Remove and relocate existing refrigerators & Freezers		Y					Relocated per MSU Facilities team
	5. Remove and relocate existing POS equipment						Y	DSS deploy - removed stored all that is need for Tech
	6. Remove and relocate existing microwave		Y					Relocated per MSU Facilities team
	7. Remove and relocate existing oven		Y					Relocated per MSU Facilities team
	8. Remove and relocate open shelving in BOH		Y					Relocated per MSU Facilities team
	9. Remove and relocate employee time clock		Y					Relocated per MSU Facilities team
<u>B</u>	FURNISHING, FIXTURES & EQUIPMENT							
31	Install menu (3) new 50" monitors	Y			Y	Y		DDS provide bracket contractor installed bracket and monitor. DSS to provision the reminder of the equipment. The mounting of signs is assigned to the maintenance or carpentry team at IPF.
	Install (3) sales gondolas				<u>'</u>			IPF to design - contractor install
B3	Install new branded graphics		Y			T		
B4	Install new BOH equipment				1	1	1	1
	1. (2) Hot food display						Y	
	2. Pastry case						Y	
	3. (2) Hot Food Mells						Y	
	4. Rapid Cook Oven						Y	
	5. Work Table						Y	
	6. Sandwich Pre Refrigerator						Y	
	7. Panini Press						Y	
	8. Prep Refrigerator						Y	
35	Install FOH equipment						Y	
	1. Install new soda dispenser and ice condenser						Y	RHS to coordinate Soda vendor to re-install with Contractor
	2. Install new coffee dispenser						Y	RHS to coordinate coffee vendor re-install with Contractor
	3. (2) Refrigerator Merchadisers						Y	
	4. Beverage Refrigerator						Y	
	5. Freezer						Y	
<u>c</u>	SECURITY AND IT	•	•		•	•	•	
51	Install/security cameras					Y		
2	Install fire safety devices		Y					
23	Install point of sales equipment						Y	DSS deploy - re-installed - all that is need fo
								Tech add convenience power and phone voice (data drop)





TYP. MOUNTING HEIGHTS

THOMAS M DILLENBECK

ARCHITECT

No.

1301057360

INDEX, GENERAL NOTES, SYMBOLS & ABBREVIATIONS

G-001

MSU PROJ. NO.:

PRJ. MGR. T.Pacifico

INT. DES. CONST. REP.

SCALE

MSU CP25028

H+B PROJ. NO.: 25-711

J.Kasdorf
R.Winkler
G.Halsey

11/17/2025

HOBBS + BLACK

100 N. State St.

P. 734.663.4189

Ann Arbor, MI 48104

11/17/2025 4:16:17 PM

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ARCHITECTS

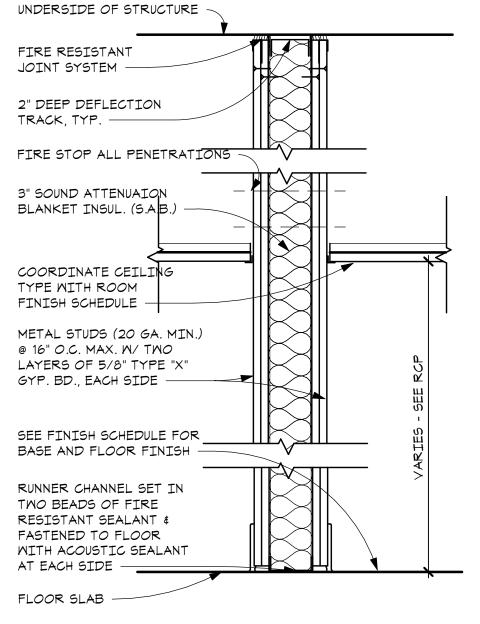
PARTITION TYPE GENERAL NOTES WALL FRAMING MEMBER WIDTH WOOD STUD - NOMINAL METAL STUD - ACTUAL A - 15/8" B - 2 1/2" C - 3 5/8" D - 4" E - 6" F - 8" G - 10" H - 12"

WALL PARTITION GENERAL NOTES:

- WHERE PARTITIONS SYSTEMS ARE INDICATED, THE PARTITION SYSTEM IS CONTINUOUS UNTIL THE PARTITION SYSTEM CHANGES DIRECTION OR A DIFFERENT PARTITION SYSTEM IS INDICATED.
- 2. ALL DIMENSIONS ARE TO FACE OF GYP. WALL , FACE OF EXTERIOR WALL, OR FACE OF MASONRY WALL, UNLESS NOTED OTHERWISE.
- 3. ALL PARTITION SYSTEMS ARE NON-FIRE RESISTANCE RATED CONSTRUCTION OR NON-SMOKE TIGHT CONSTRUCTION UNLESS OTHERWISE NOTED ON DRAWINGS.
- 4. AT ALL FIRE RESISTANCE RATED CONSTRUCTION, SEAL CONSTRUCTION AT STRUCTURE AND FLOOR AT ALL PENETRATIONS.
- 5. FINISHES ON PARTITION SYSTEMS EXTEND TO 6" ABOVE ACOUSTICAL CEILING SYSTEMS. TAPE AND SEAL ALL JOINTS ABOVE CEILING.
- 6. REFER TO SPECIFICATIONS FOR REINFORCEMENT OF METAL STUD PARTITION
- 7. ALL FIRE RATED GYPSUM WALL PARTITIONS SHALL BE CONSTRUCTED ON 5/8" TYPE" X"
- GYPSUM BOARD. 8. CONTROL JOINTS IN GYPSUM WALL PARTITIONS AND CEILING TO BE INSTALLED AS
- REQUIRED BY SPECIFICATIONS.

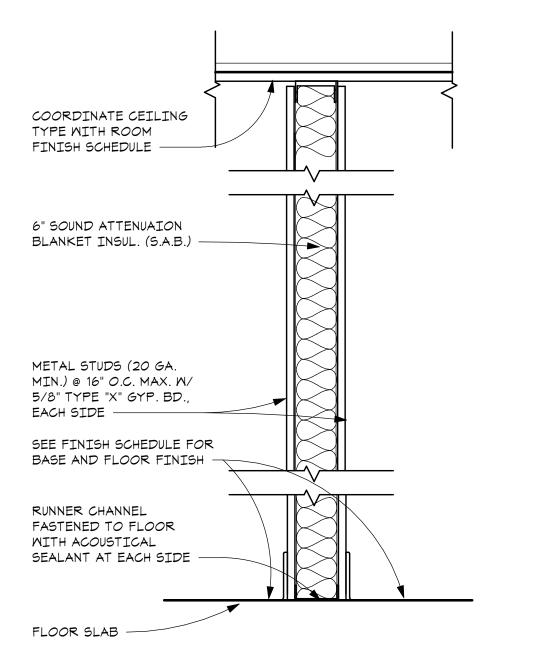
UNDERSIDE OF STRUCTURE

9. SEE INTERIOR ELEVATIONS, FINISH SCHEDULE AND FINISH PLANS FOR ADDITIONAL APPLIED FINISHES.



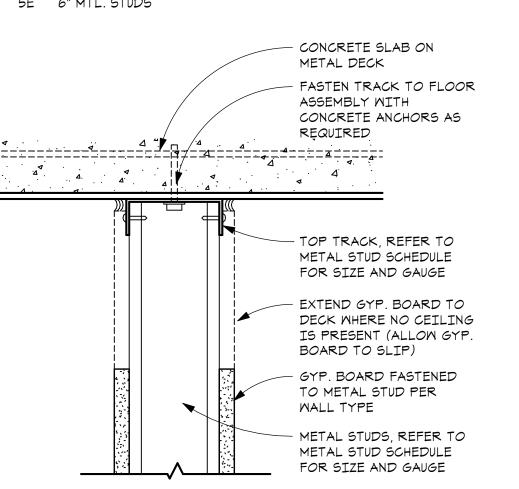
U.L. DESIGN NO. #U411 TYPE 12 - FULL HEIGHT 2HR FIRE/SMOKE RATED PARTITION

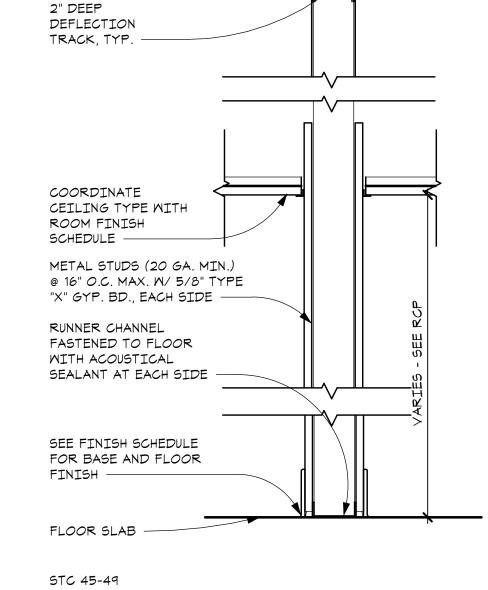
3 5/8 " MTL. STUDS



TYPE 5 - FULL HEIGHT **NON - RATED PARTITION**

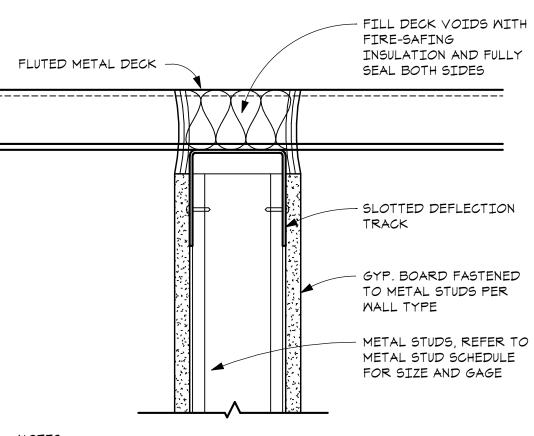
5E 6" MTL. STUDS





TYPE 1 - FULL HEIGHT **NON - RATED PARTITION**

1C 3 5/8" MTL. STUDS 6" MTL. STUDS



NOTES:

1. WALLBOARD SHALL BE FASTENED TO TOP HORIZONTAL RUNNER LEG BELOW BELLOWS. 2. FIRE TAPE ALL DRYWALL JOINTS ABOVE CEILINGS, SEAL AROUND ALL PENETRATIONS THROUGH OR INTO WALLS. 3. PROVIDE FIRESTOP CAULKING AT ALL U.L. RATED PARTITIONS. 4. PROVIDE ACOUSTICAL SEALANT AT ALL ACOUSTICAL PARTITIONS.



PT-2

PERPENDICULAR TO DECK

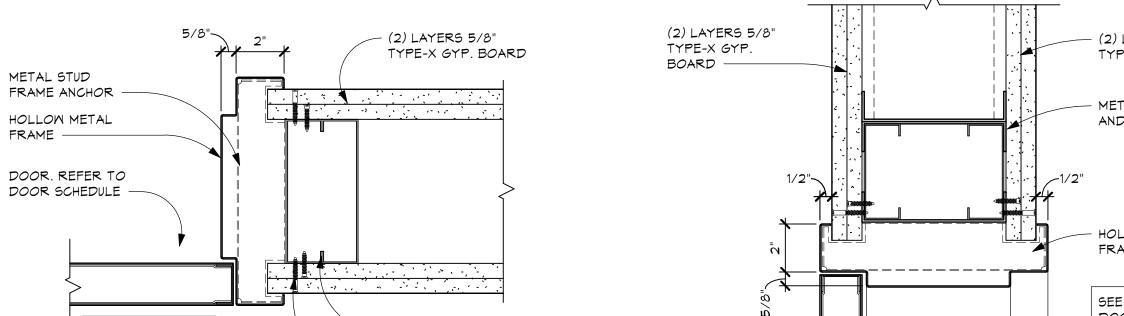


PT-2

DOOR & FRAME SCHEDULE

MATERIAL

SLIP-TRACK FIRESTOPPING



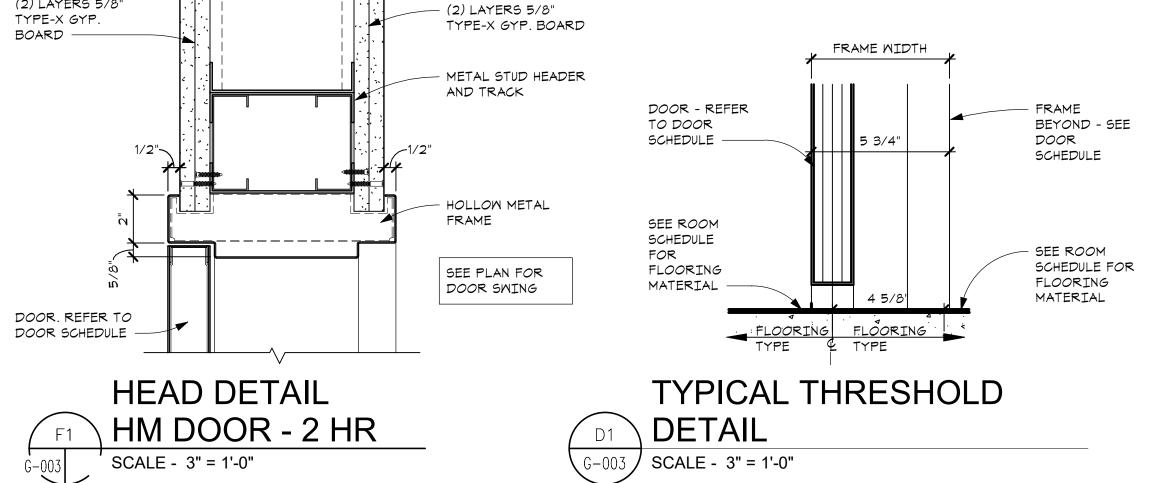
– (2) LAYERS 5/8" TYPE-X GYP. BOARD JAMB DETAIL HM DOOR - 2 HOUR SCALE - 3" = 1'-0"

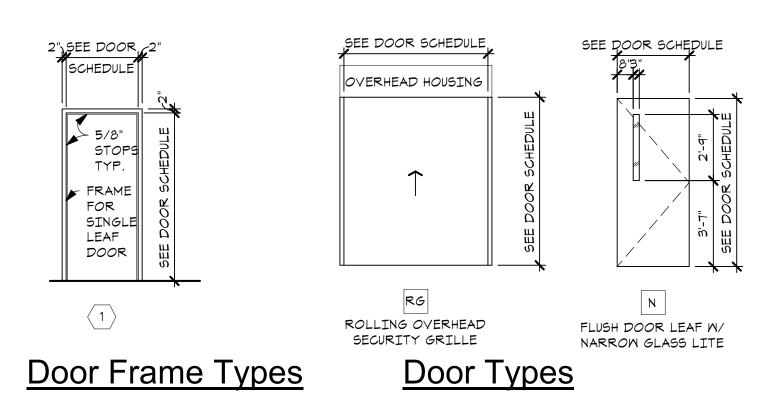
DOUBLE STUD @

JAMB. TYP.

SEE PLAN FOR

DOOR SWING

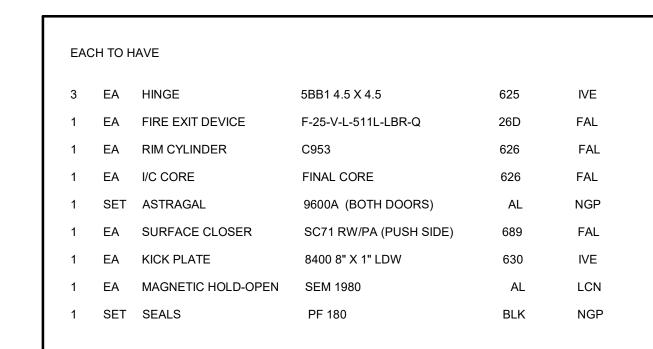




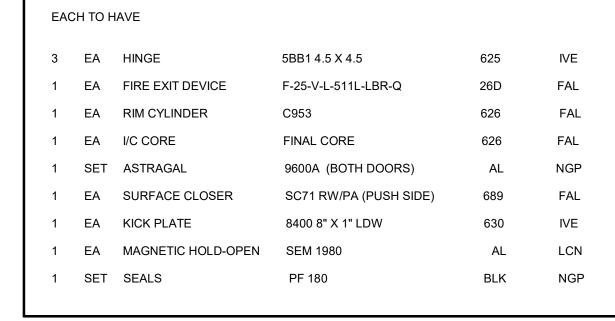
DOOR / OPENING

3'-0" x 7'-0"

SIZE W X H | MATERIAL



F1/G-003 J1/G-003 D1/G-003



THOMAS M DILLENBECK

BIDS & PERMITS 11/17/2025 PARTITION TYPES, DOOR SCHEDULE, TYPES AND DETAILS G-003 3 OF 13

MSU PROJ. NO.:

MSU CP25028

PRJ. MGR. T.Pacifico

ELEC.

INT. DES.

CONST. REP.

APPR.

SCALE

ISSUED

H+B PROJ. NO.: 25-711

J.Kasdorf R.Winkler

G.Halsey

11/17/2025

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THIS PROJECT CONSISTS OF A RENOVATION OF EXISTING STUDENT MARKET SPACE: APPROXIMATELY 1,600 SQUARE FEET OF FLOOR AREA ON THE GROUND LEVEL OF THE UNION BUILDING, INCLUDING 1,000 SF GRAB AND GO MARKET AND 600 SF BACK OF HOUSE PREPARATION AREA .ALL EXISTING USES, OCCUPANCY LOADS, SPRINKLER COVERAGE, RATED SEPARATIONS, AND EGRESS PATHS ARE MAINTAINED.

(INCORPORATING ICC/ANSI A117.1-2017

APPLICABLE CODES

EDITION MICHIGAN BUILDING CODE 2021 MICHIGAN REHABILITATION CODE **EDITION** MICHIGAN ENERGY CODE 2021 **EDITION EDITION** 2021 MICHIGAN MECHANICAL CODE MICHIGAN ELECTRICAL CODE **EDITION** 2023 **EDITION** MICHIGAN PLUMBING CODE 2021 2012 **EDITION** MICHIGAN LIFE SAFETY CODE

BUILDING CODE DATA

USE GROUP CLASSIFICATION (CHAPTER 3)

MICHIGAN BARRIER FREE LAW

USE GROUP: MERCANTILE USE WITHIN A MIXED USE (CAMPUS) BUILDING

NON - SEPARATE MIXED USES: EXISTING - UNCHANGED

CONSTRUCTION TYPE (CHAPTER 6; TABLE 601)

EXISTING - UNCHANGED

GENERAL BUILDING HEIGHTS AND AREAS (CHAPTER 5):

EXISTING - UNCHANGED

FIRE - RESISTANT -RATED CONSTRUCTION :

ALL EXISTING RATED WALL CONSTRUCTION WILL BE MAINTAINED AND REPAIRED AS MAY BE REQUIRED

NEW INFILL RATED WALL CONSTRUCTION WILL MATCH THE EXISTING WALL RATINGS (ASSUMED TO BE 2-HOUR)

FIRE PROTECTION SYSTEMS (CHAPTER 9):

THE EXISTING BUILDING IS FULLY SPRINKLERED

RENOVATED AREAS WILL MAINTAIN THE EXISTING SPRINKLER PROTECTION WITH MODIFIED AND ADD SPRINKLER HEADS PER NFPA 13

PORTABLE FIRE EXTINGUISHERS WILL BE LOCATED THROUGHOUT THE RENOVATED AREA IN ACCORDANCE

WITH NFPS 10 AND THE LOCAL AHJ

BUILDING AREA (UNCHANGED)

GROSS BUILDING AREA PER IBC 2021 DEFINITION

THE FLOOR AREA WITHIN THE INSIDE PERIMETER OF THE EXTERIOR WALLS OF THE BUILDING UNDER CONSIDERATION, EXCLUSIVE OF VENT SHAFTS AND COURTS. (SECTION 202)

GROUND FLOOR BUILDING AREA AREA OF RENOVATION

15,000 SF 1,600 SF

OCCUPANTS (UNCHANGED)

OCCUPANT LOAD FACTOR

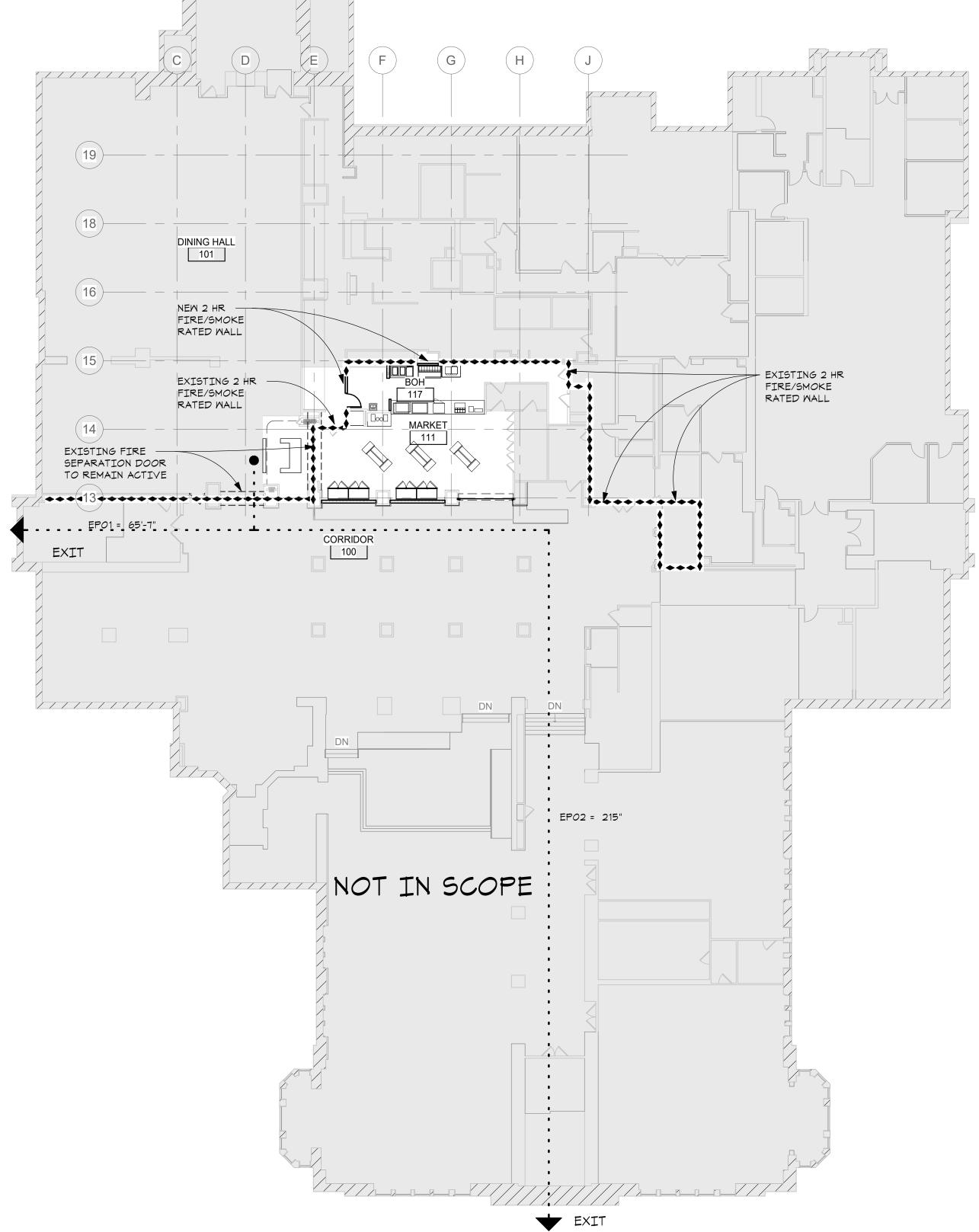
EXISTING OCCUPANT LOADS ARE UNCHANGED WITH RENOVATION SCOPE

MARKET (MERCANTILE): 1,000 SF/60 = 17 OCCUPANTS BOH (KITCHEN): 600 SF/200 = 3 OCCUPANTS

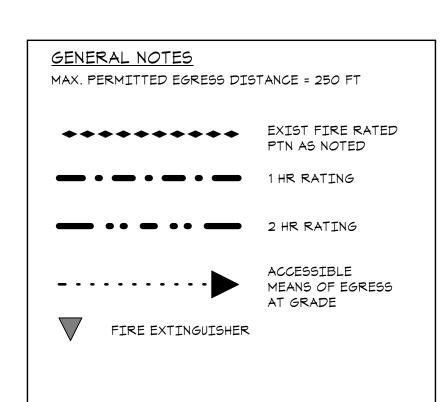
TOTAL = 20 OCCUPANTS

EXITING (UNCHANGED)

ALL EXISTING EGRESS PATHS AND COMPONENTS REMAIN UNCHANGED WITH THE RENOVATION SCOPE



GROUND LEVEL LIFE SAFETY PLAN) SCALE - 1/16" = 1'-0"



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MECH. R.Winkler ELEC. G.Halsey

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BIDS & PERMITS 11/17/2025

CODE DATA

GENERAL DEMO NOTES

- PROVIDE TEMPORARY PROTECTION OVER ALL INSTALLED LVT FLOORING. USE NON-STAINING, NON-ABRASIVE MATERIAL (RAM BOARD, MASONITE, OR EQUAL). TAPE ONLY TO ADJACENT SURFACES, NOT TO FLOOR. MAINTAIN PROTECTION IN GOOD CONDITION
- UNTIL PROJECT COMPLETION. PROVIDE FULL PROTECTION FOR EXISTING WALK-IN COOLERS DURING CONSTRUCTION. MAINTAIN COOLER OPERATION AT ALL TIMES. INSTALL TEMPORARY BARRIERS, DUST SEALS, AND FLOOR PROTECTION AS REQUIRED. PREVENT DAMAGE TO WALL PANELS, DOORS, HARDWARE, AND REFRIGERATION COMPONENTS. RESTORE ANY DAMAGED FINISHES OR EQUIPMENT TO ORIGINAL CONDITION.

KEYNOTES

- DEMO EXISTING MILLWORK
- DEMO EXISTING INTERIOR STOREFRONT &
- DEMO EXISTING MOP SINK
- EXISTING SODA MACHINE RELOCATED PER
- DEMO EXISTING SECURITY GRILL RETAIN ONE (1) IN BEST CONDITION FOR RELOCATION - SEE NEW WORK PLAN
- DEMO EXISTING SALES GONDOLA.
- EXISTING SECURITY GRILLE TO REMAIN
- EXISTING MARKET EQUIPMENT- REMOVE AND RELOCATE PER OWNER
- EXISTING HAND SINK TO REMAIN
- DEMO EXISTING MILLWORK CAFE COUNTER & CAP PLUMBING FOR THE POT FILLER
- DEMO EXISTING SLAT WALL HARDWARE -KEEP ,CLEAN AND PROTECT LAMINATE SLAT WALL PANELS

FLOOR PLAN LEGEND

EXISTING WALL CONSTRUCTION

DEMO WALL CONSTRUCTION

NEW WALL CONSTRUCTION

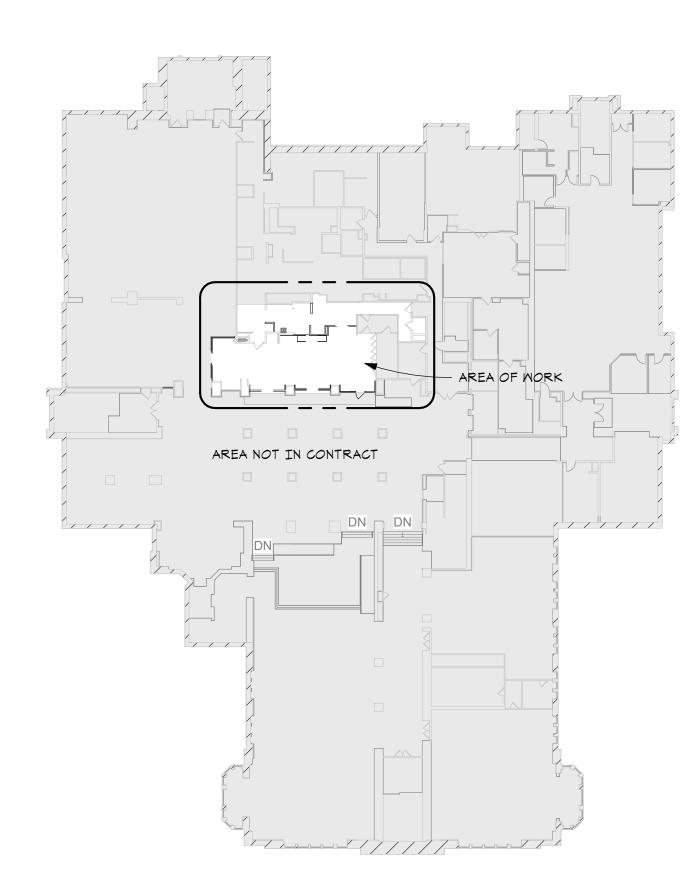
RATED WALL CONSTRUCTION

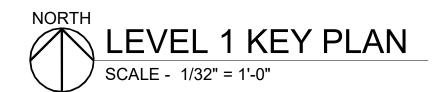
EXISTING DOOR - SEE SCHEDULE

DEMO DOOR

NEW DOOR - SEE SCHEDULE

NOT IN CONTRACT

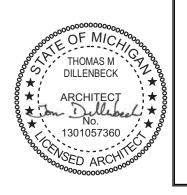




ENLARGED

LEVEL 1 DEMO PLAN

-101 A-100 SCALE - 1/4" = 1'-0"



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G.Halsey

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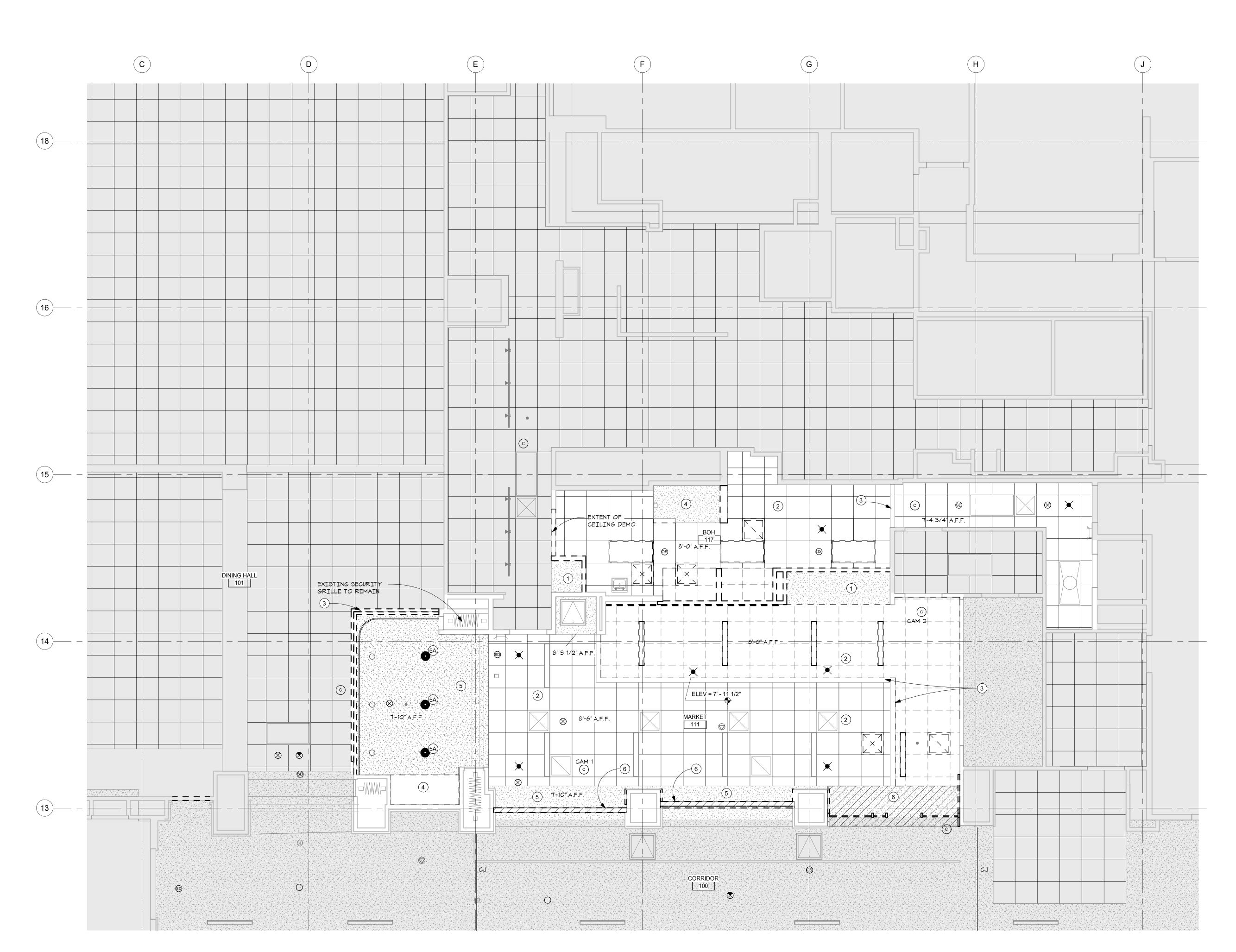
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ENLARGED LEVEL 1 DEMO PLAN

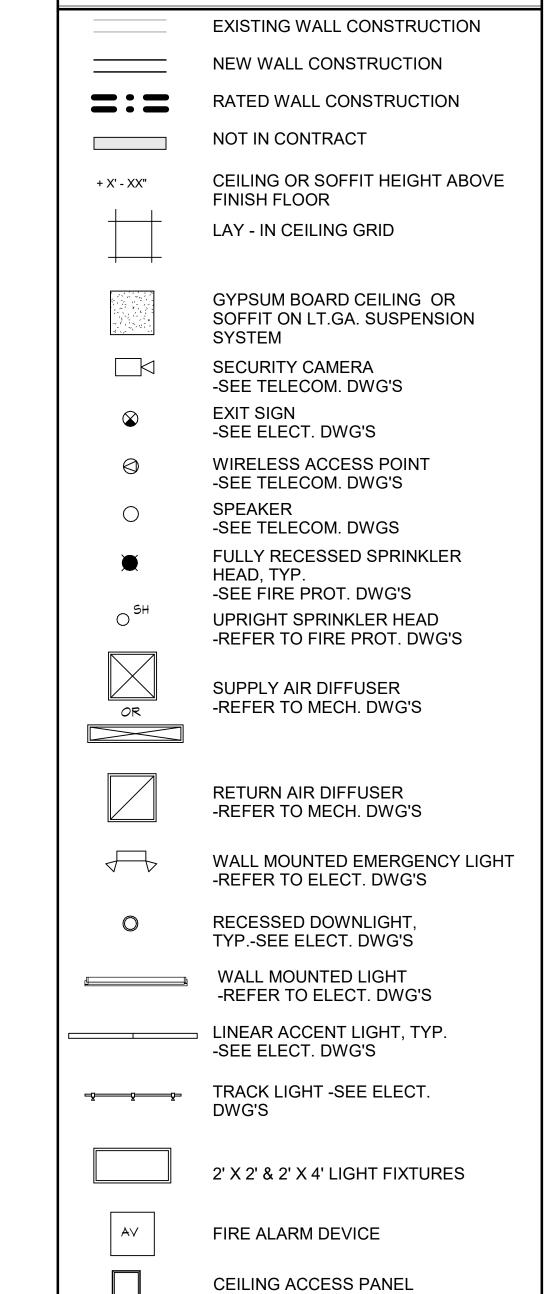
D-101 5 OF 13

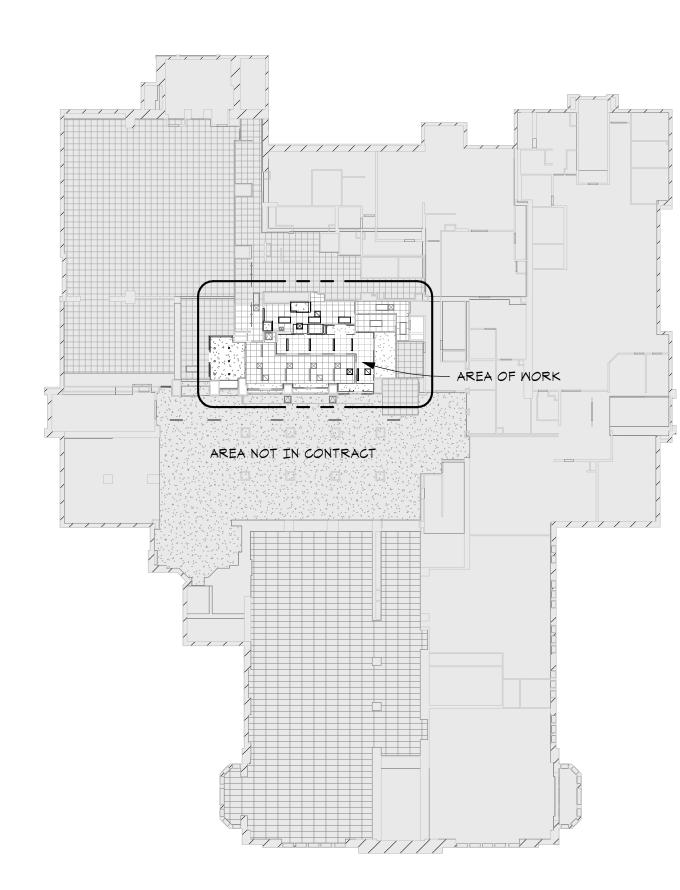
RELOCATED SECURITY GRILLE.















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ENLARGED LEVEL 1 DEMO REFLECTED CEILING PLAN

D-701 6 OF 13

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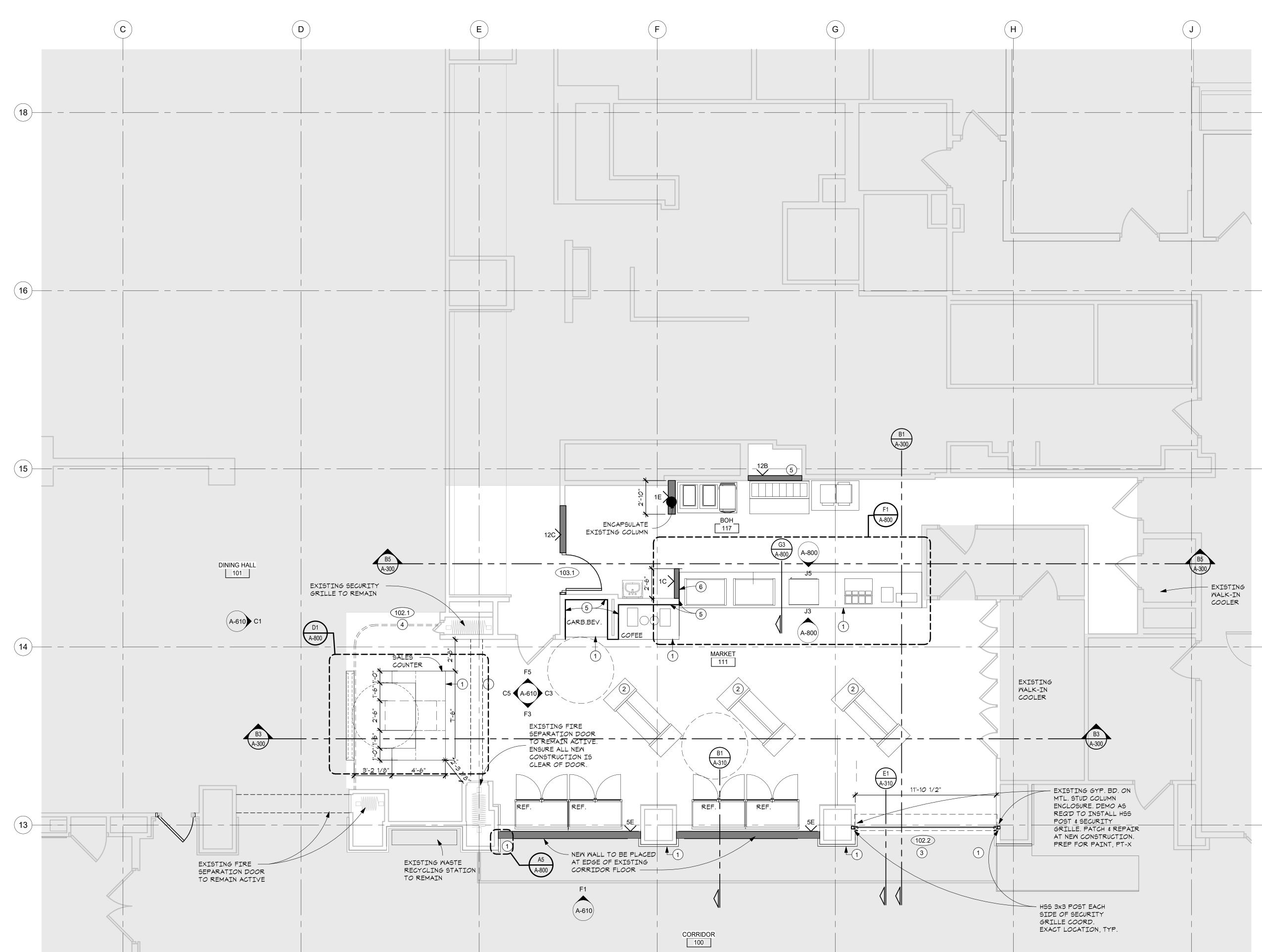
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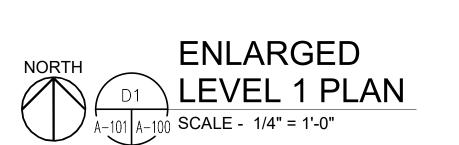
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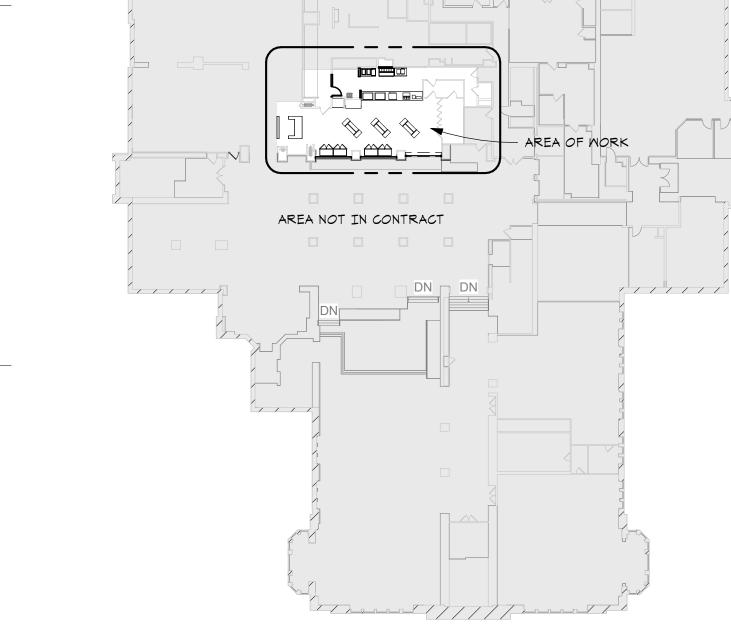
ENLARGED LEVEL 1 PLAN

THOMAS M

A-101 7 OF 13







KEYNOTES

INSTALL NEW SALES GONDOLA

EXISTING SECURITY GRILLE

INSTALL SALVAGED SECURITY GRILLE

INSTALL NEW TILE ON EXISTING WALL

FLOOR PLAN LEGEND

EXISTING WALL CONSTRUCTION

EXISTING DOOR - SEE SCHEDULE

☐ NEW DOOR - SEE SCHEDULE

NOT IN CONTRACT

INSTALL NEW TILE ON NEW WALL

see A - 910 for equipment schedule

===== DEMO WALL CONSTRUCTION

NEW WALL CONSTRUCTION

☐ DEMO DOOR

MILLWORK



FRP WALL TILE -PANELS (FRP -1)

FRP WALL TILE ~ PANELS (FRP -1)

THOMAS M

B1 BUILDING SECTION

A-300 A-100 SCALE - 3/8" = 1'-0"

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MSU CP25028 **BUILDING SECTIONS**

A-300 8 OF 13



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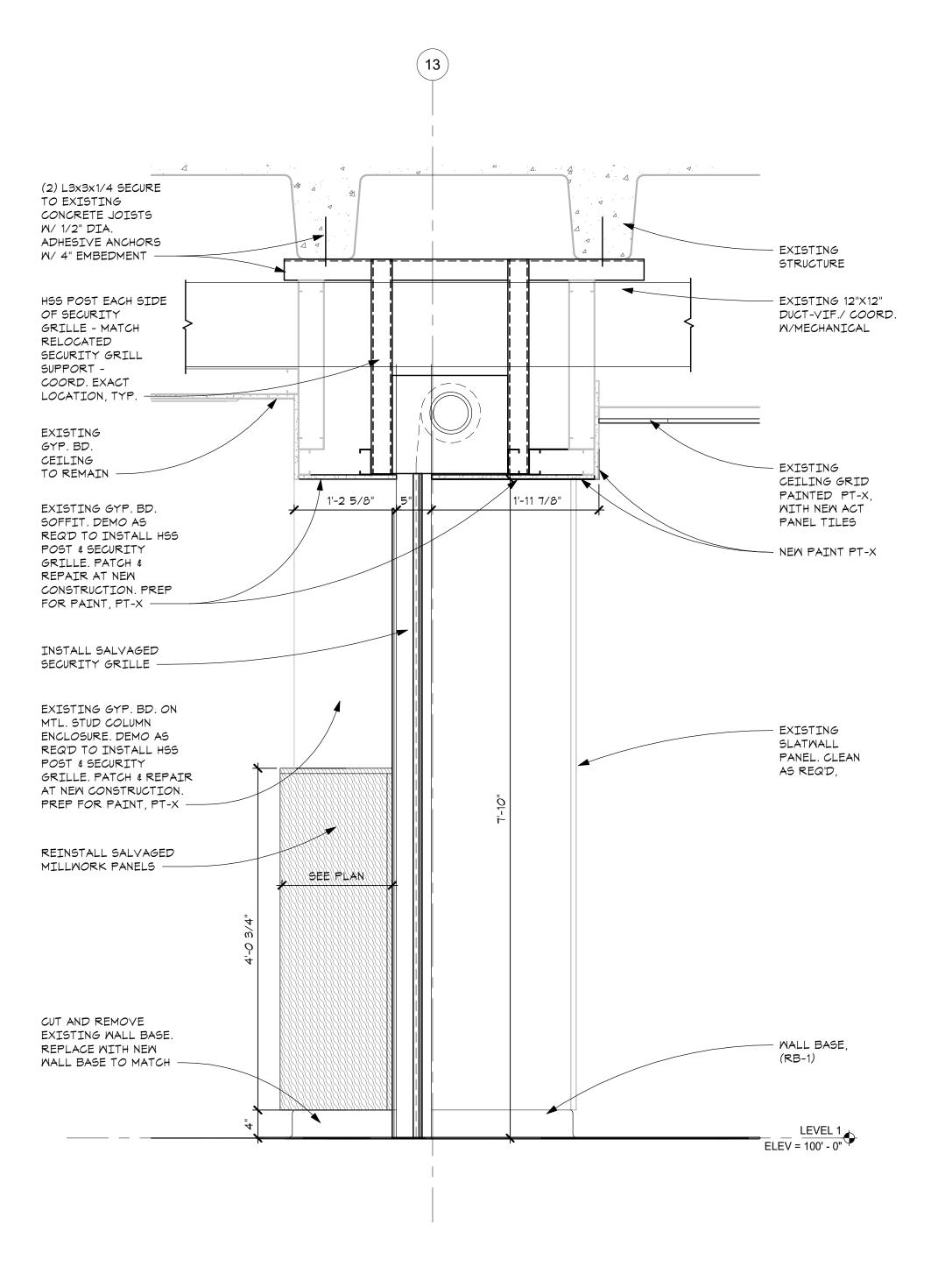
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WALL SECTIONS

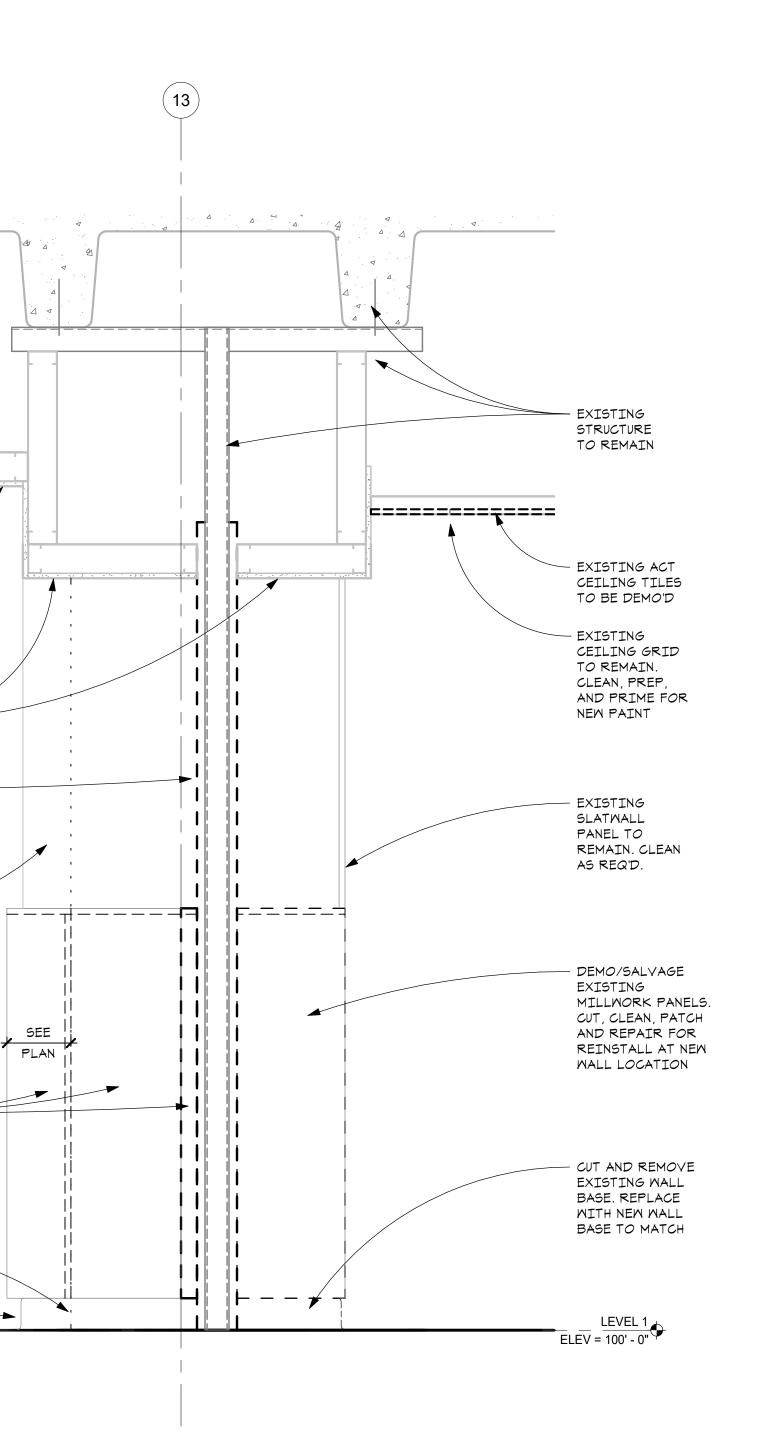
A-310 9 OF 13

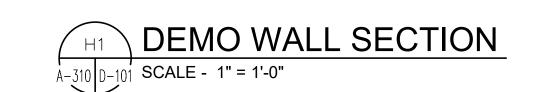
4" MIN. 5/8" GYP. BD. EA. SIDE ON FROM WALL 3 5/8" CFMF STUDS @ 16"
O.C. TO UNDERSIDE OF
STRUCTURE ABOVE HEADER - HANGER WIRE "PRELUDE 15/16" SUSPENSION SYSTEM SUSPENDED LAY-IN —
ACOUSTIC CEILING
TILE - SEE FINISH SCHEDULE - "MOODMORKS" CONCEALED PANEL - SEE MATERIAL SCHEDULE CORNER BEAD TYP.











(13)

EXISTING GYP. BD.

CEILING TO REMAIN

EXISTING GYP. BD.

SOFFIT TO REMAIN.

DEMO AS REQ'D TO

REMOVE SECURITY

GRILLE. PATCH &

CONSTRUCTION. PREP FOR PAINT, PT-X

REPAIR AT NEW

DEMO /SALVAGE

EXISTING GYP.

BD. ON MTL.

REMAIN -

STUD COLUMN

ENCLOSURE TO

DEMO/SALVAGE

MILLWORK PANELS.

CUT, CLEAN, PATCH

AND REPAIR FOR

REINSTALL AT NEW

MALL LOCATION

PLACED AT EDGE

LINE OF NEW

MALL TO BE

OF EXISTING

CORRIDOR

FLOOR -

EXISTING

EXISTING

SECURITY GRILLE



PLAN!

5/8" GYP. BD. EA. SIDE ON 3 5/8" CFMF STUDS @ 16"

SUSPENDED LAY-IN

ACOUSTIC CEILING TILE - SEE FINISH

SCHEDULE

EXISTING GYP. BD.

CEILING

EXISTING GYP. BD.

SOFFIT.

PAINT, PT-X

EXISTING GYP.

BD. ON MTL.

STUD COLUMN ENCLOSURE.

PAINT, PT-X

5/8" GYP. BD. ON 6" MTL.

FINISH WITH INTERIOR

LATEX PAINT, PT-X FOR VINYL WALL COVERING -

REINSTALL SALVAGED MILLWORK PANELS -

RUNNER CHANNEL

MITH ACOUSTICAL

SEALANT AT EACH

SIDE ON FOAM

NEW WALL TO BE

PLACED AT EDGE

OF EXISTING

CORRIDOR

MALL BASE,

CLEAN AND CUT EXISTING BASE

FLOOR -

RB-X ---

INSUL. -

FASTENED TO FLOOR

STUD, BOTH SIDES -

PROVIDE LEVEL 5

CORNER BEAD TYP.

O.C. TO UNDERSIDE OF STRUCTURE ABOVE

4" MIN

FROM WALL

CEILING DETAIL

13

A-310 A-300 SCALE - 1 1/2" = 1'-0"

HEADER

HANGER WIRE

- "PRELUDE 15/16" SUSPENSION SYSTEM

RECESSED LIGHT - SEE

CONCEALED PANEL - SEE

STRUCTURE

- EXISTING

CEILING GRID PAINTED PT-X,

MITH NEW ACT

NEW PAINT PT-X

REPAIR GYP. BD.

DEMO'D SECURITY

GRILLE. PAINT,

- PATCH AND

CEILING AT

PT-X

- EXISTING

SLATMALL

AS REQ'D,

- WALL BASE,

ELEV = LEVEL 1

(RB-1)

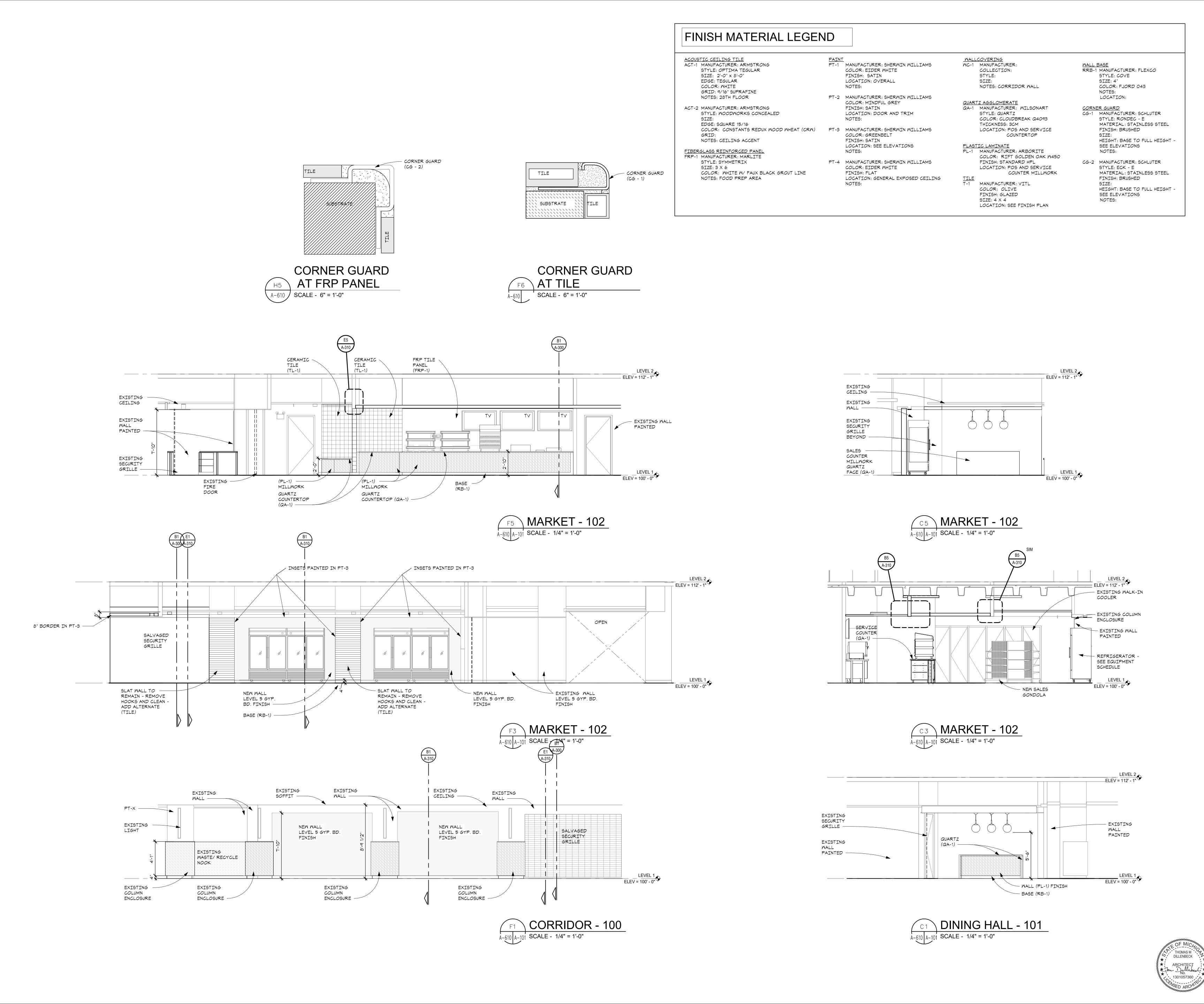
PANEL. CLEAN

PANEL TILES

MATERIAL SCHEDULE

ELECTRICAL

"MOODMORKS"



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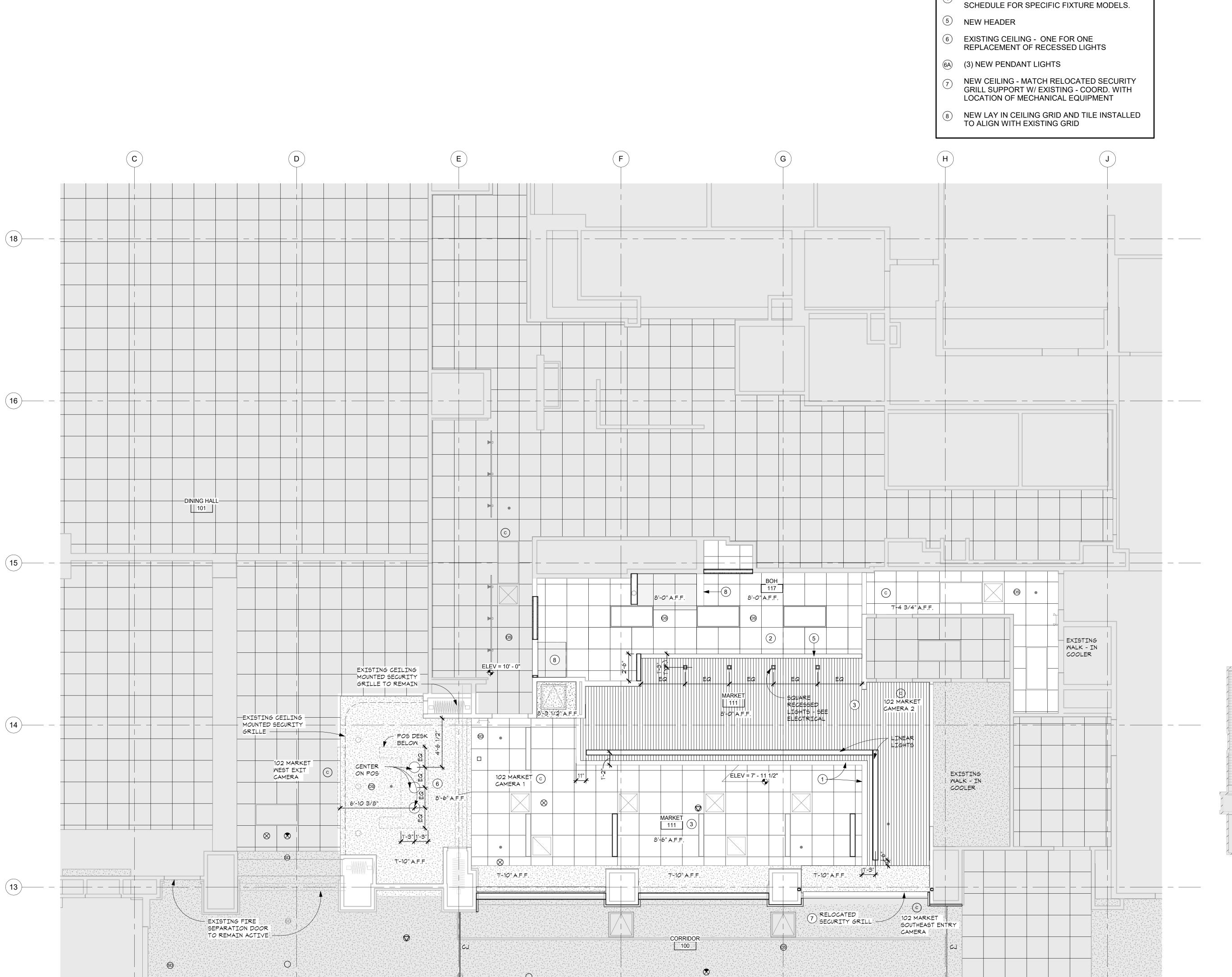
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MSU CP25028 INTERIOR ELEVATIONS

> A-610 10 OF 13





NEW WALL CONSTRUCTION RATED WALL CONSTRUCTION

=:= NOT IN CONTRACT

REFLECTED CEILING NOTES

1 PAINT NEW SOFFITS REFER TO MATERIAL

2 NEW LAY - IN CEILING TILE TRIM TO MATCH

(4) REFER TO ELECTRICAL LIGHT FIXTURE

3 NEW LAMINATED CEILING PANELS ATTACHED

LEGEND FOR PAINT COLOR.

EXISTING.

TO EXISTING GRID

CEILING OR SOFFIT HEIGHT ABOVE + X' - XX" FINISH FLOOR

LAY - IN CEILING GRID

GYPSUM BOARD CEILING OR SOFFIT ON LT.GA. SUSPENSION

SECURITY CAMERA -SEE TELECOM. DWG'S **EXIT SIGN** -SEE ELECT. DWG'S

WIRELESS ACCESS POINT -SEE TELECOM. DWG'S SPEAKER -SEE TELECOM. DWGS

FULLY RECESSED SPRINKLER HEAD, TYP. -SEE FIRE PROT. DWG'S UPRIGHT SPRINKLER HEAD

-REFER TO FIRE PROT. DWG'S SUPPLY AIR DIFFUSER

RETURN AIR DIFFUSER -REFER TO MECH. DWG'S

OR

> WALL MOUNTED EMERGENCY LIGHT -REFER TO ELECT. DWG'S

-REFER TO MECH. DWG'S

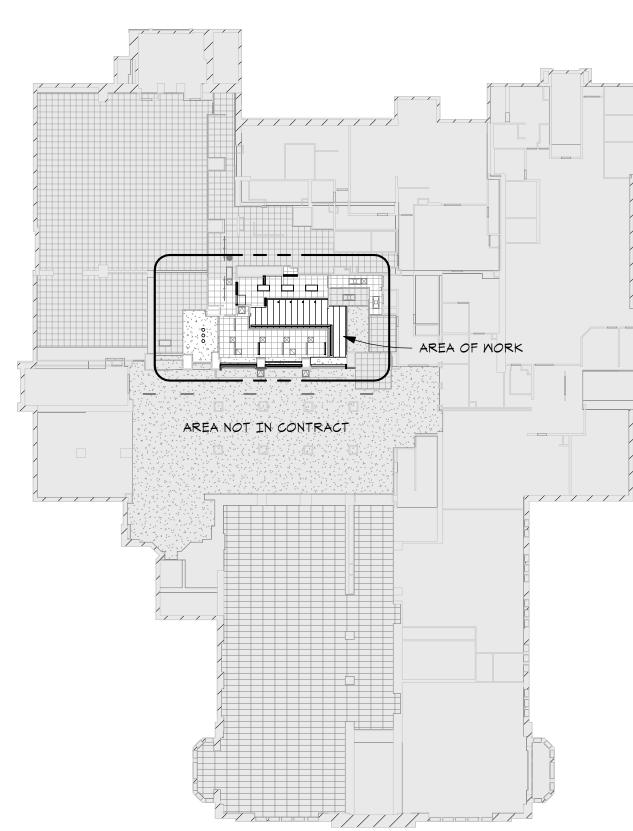
RECESSED DOWNLIGHT, TYP.-SEE ELECT. DWG'S WALL MOUNTED LIGHT

-REFER TO ELECT. DWG'S LINEAR ACCENT LIGHT, TYP. -SEE ELECT. DWG'S TRACK LIGHT -SEE ELECT.

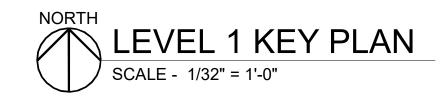
2' X 2' & 2' X 4' LIGHT FIXTURES

FIRE ALARM DEVICE

CEILING ACCESS PANEL









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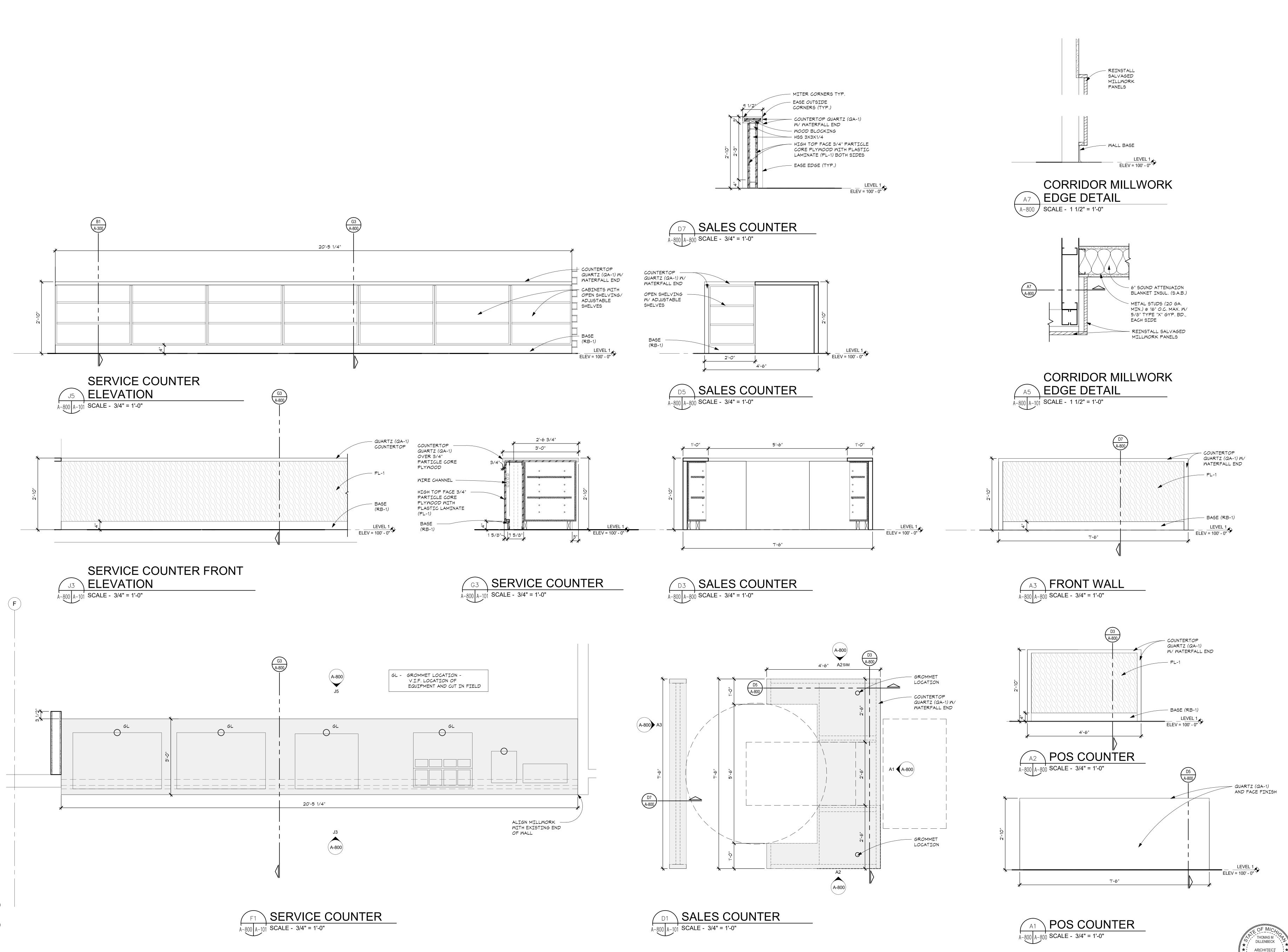
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ENLARGED LEVEL 1 REFLECTED CEILING PLAN A-701

11 OF 13

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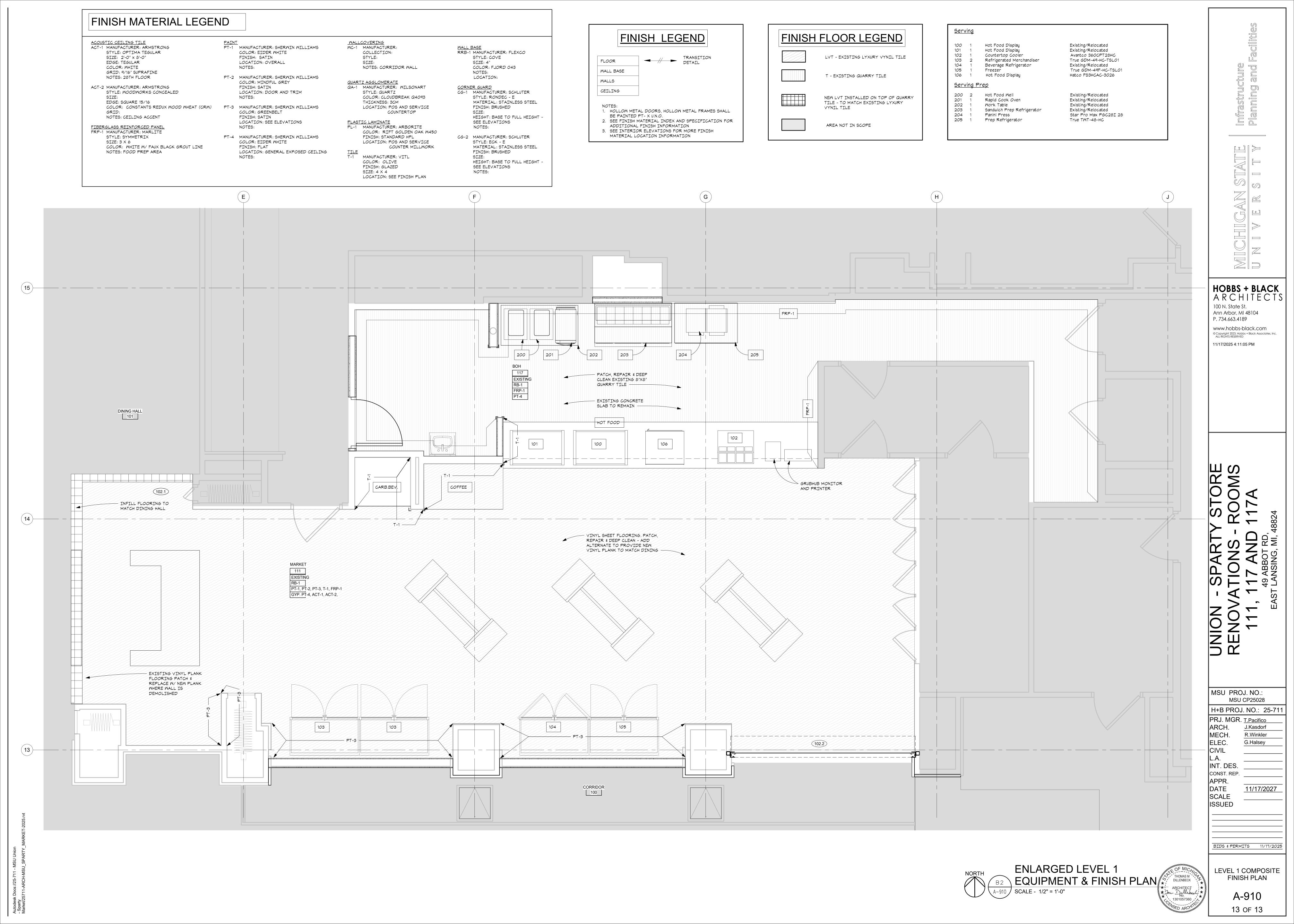
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MILLWORK DETAILS

A-800 12 OF 13



MECHANICAL ABBREVIATIONS ABOVE FINISH FLOOR AIR COMPRESSOR AIR HANDLING UNIT AIR SEPARATOR ARCHITECTURAL TRADES CONTRACTOR BOILER B.A.S.

CONV

CWP

DPR

EVR

EWT

EXH

EXIST

FTR

GAL

HVAC

FEET

FURNACE

GALLON

GRILLE

HUMIDIFIER

HEAD (FT)

HEATING

HEATING COIL

HORSE POWER

INSIDE DIAMETER INVERT ELEVATION INTAKE HOOD LEAVING AIR TEMPERATURE LAT LATENT HEAT (MBH) LWT LEAVING WATER TEMPERATURE BUILDING AUTOMATION SYSTEM MAXIMUM BTU PER HOUR (THOUSAND) MBH COMBUSTION AIR FAN COOLING COIL MIN MINIMUM **CUBIC FEET PER MINUTE** M.T.C. MECHANICAL TRADES CONTRACTOR CHILLER N.C. CONSOLE HEAT PUMP NOISE CRITERIA NFPA CONVECTOR NTS NOT TO SCALE COOLING TOWER CONDENSING UNIT CABINET UNIT HEATER PCR CONTROL VALVE PD CHILLED WATER PUMP PRESSURE DROP RCP DRY BULB

NATIONAL FIRE PROTECTION ASSOCIATION PUMPED CONDENSATE RETURN RADIANT CEILING PANEL **DUCT FURNACE** REQ'D REQUIRED DIAMETER RG RETURN GRILLE DOWN RH RELATIVE HUMIDITY RLH DAMPER RELIEF HOOD DUCT SILENCER RTU **ROOF TOP UNIT ENTERING AIR TEMPERATURE** SUPPLY DIFFUSER EXHAUST FAN SUPPLY FAN EXHAUST GRILLE SUPPLY GRILLE ELECTRICAL TRADES CONTRACTOR SH SENSIBLE HEAT (MBH) **EVAPORATOR** SHEET METAL ENTERING WATER TEMPERATURE SQ. FT. SQUARE FEET EXHAUST SST EXISTING STR STRAINER FINISH FLOOR FEET PER MINUTE

SATURATED SUCTION TEMPERATURE TOTAL COOLING (MBH) TEMPERATURE CONTROL TEMPERATURE & PRESSURE RELIEF VALVE TYP FINNED TUBE RADIATION **TYPICAL** UNIT HEATER GAS FIRED RADIANT HEATER VARIABLE AIR VOLUME BOX VRH VARIABLE AIR VOLUME REHEAT BOX **FPVAV** FAN POWERED VARIABLE AIR VOLUME BOX V.F.D VARIABLE FREQUENCY DRIVE ZONE DAMPER HORIZONTAL HEAT PUMP EXISTING ITEM (EXISTING SUPPLY AIR DUCT) - ITFM HEATING, VENTILATION, & AIR CONDITIONING EXISTING

GENERAL HVAC NOTES

- 1. ALL WORK SHALL CONFORM TO MICHIGAN MECHANICAL CODE, LATEST APPLICABLE EDITION.
- ETC.) DUCTWORK SHALL BE GALVANIZED SHEET METAL, MIN. 26 GA. 2. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES, INDUSTRY STANDARDS, 19. ALL DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSION. UTILITY COMPANY REGULATIONS, AND MICHIGAN STATE UNIVERSITY INCREASE DUCT SIZE FOR LINING..
- STANDARDS FOR CONSTRUCTION. 20. ALL EXPOSED ROUND DUCTWORK SHALL BE SPIRAL. 3. INSTALL ALL EQUIPMENT, MATERIALS, AND ACCESSORIES PER

21. ALL CONDENSATE DRAIN PIPING SET @ MIN. 1% SLOPE.

23. IF THERE IS CONFLICTING INFORMATION IN THE PLANS OR

SHALL BE USED.

22. ALL CONDENSATE DRAIN PIPING TO TERMINATE TO DRAIN VIA AIR GAP.

SPECIFICATIONS THE MORE STRINGENT AND GREATER COST ITEM

24. DRAWINGS INDICATE REQUIRED SIZES AND POINTS OF TERMINATION

OF DRAWINGS TO INDICATE ALL NECESSARY OFFSETS. INSTALL

OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND

SPECIFICATIONS, OR FOUND IN SPECIFICATIONS AND NOT IN THE

DRAWINGS, SHALL BE CONSTRUED AS TO BE INCLUDED IN BOTH THE

SPECIFICATIONS AND THE DRAWINGS. ANY CONFLICT BETWEEN THE

BIDDING, THE CONTRACTOR SHALL PRESUME THE MOST EXPENSIVE

PLANS AND THE SPECIFICATIONS WILL BE INTERPRETED BY THE

ARCHITECT. IN THE EVENT OF CONFLICT, FOR THE PURPOSE OF

COMBINATION OF QUALITY AND QUANTITY OF WORK SHALL PREVAIL

WORK IN MANNER TO CONFORM TO STRUCTURE, AVOID

PASSAGEWAYS CLEAR. DO NOT SCALE FROM DRAWINGS.

25. ANY INFORMATION FOUND ON THE DRAWINGS AND NOT IN THE

26. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS,

THE DATE BIDS ARE RECEIVED.

REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE

STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL,

27. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA,

ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA OR

INDICATED ON THE DRAWING AND SPECIFICATIONS.

29. DUCT/PIPING LAYOUT IS SCHEMATIC. EXACT LOCATION OF

INSTALLATION OF ANY AND ALL TRADES WORK.

——⋈—— GATE VALVE

DUCT/PIPING AND EQUIPMENT SHALL BE COORDINATED WITH

BUILDING STRUCTURE, EQUIPMENT FURNISHED, ARCHITECTURAL

DRAWINGS, AND ALL OTHER TRADES PRIOR TO INSTALLATION. ANY

CONTRACTOR INSTALLING WORK WITHOUT PRIOR COORDINATION

SHALL RELOCATE HIS WORK AT HIS EXPENSE TO ALLOW PROPER

INTAKE AND/OR DISCHARGE OF A FAN.

UNDERWRITERS, LABORATORIES, AMERICAN CODES, ASA, ASHRAE,

OTHERS, THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT

STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON

- MANUFACTURERS WRITTEN INSTRUCTIONS. 4. ALL EXISTING SYSTEMS (INCLUDING EXHAUST FANS; AIR HANDLING UNITS; PUMPS) THAT SERVES AREAS BEING RENOVATED SHALL BE REBALANCED AS
- NOTIFY OWNER OF ANY PIPING OR DUCTWORK DEMOLITION THAT MAY AFFECT NORMAL OPERATION OF OTHER AREAS.
- 6. FIELD VERIFY LOCATIONS OF EXISTING PIPING THAT MAY CONFLICT WITH NEW CONSTRUCTION AND RELOCATE AS NEEDED. 7. LOCATIONS OF THE THERMOSTATS TO BE VERIFIED IN FIELD.
- 8. PROVIDE BALANCE DAMPERS FOR EACH DIFFUSER/GRILLE AND BRANCH MAXIMUM LENGTH OF FLEXIBLE DUCT TO AIR TERMINAL DEVICES SHALL NOT

EXCEED 5'-0" IN LENGTH WITH A MAXIMUM OF ONE 90° TURN AND SHALL BE

- INSULATED. ELBOWS SHALL BE MIN. 1.5 RADIUS. CONNECTIONS TO TERMINAL DEVICES SHALL BE BANDED AND TAPED. 10. FIRE DAMPERS & COMBINATION FIRE/SMOKE DAMPERS SHALL MATCH RATING
- OF WALL. UNLESS NOTED OTHERWISE. 11. INTERLOCK FIRE/SMOKE DAMPERS BY ELECTRICAL TRADES. PROVE OPEN
- BEFORE AIR HANDLING UNITS FAN(S) START. 12. SMOKE DETECTORS SHALL BE FURNISHED AND CONNECTED BY ELECTRICAL
- CONTRACTOR, INSTALLATION BY MECHANICAL CONTRACTOR. 13. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER DISCIPLINES
- PRIOR TO CONSTRUCTION TO AVOID CONFLICTS. 14. OFFSET PIPING TO ACCOMMODATE LARGE DUCTWORK.
- 15. THE CONTRACTOR SHALL FIELD VERIFY THE SIZES. LOCATION, ELEVATIONS, 28. DUCTWORK SHALL BE ACOUSTICALLY LINED WITHIN 10 FT OF THE AND DETAILS OF ALL EXISTING CONDITIONS THAT MAY AFFECT THE WORK. 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE
- 17. ALL WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS AND SUBCONTRACTORS AS REQUIRED BY LAW.

INTEGRITY OF ALL EQUIPMENT AND MATERIALS IN A "NEW" CONDITION

18. CONTRACTOR SHALL USE LOW PRESSURE LOSS DUCT FITTINGS IN 30. UNLESS OTHERWISE NOTED, ALL DUCT/PIPING SHALL BE ACCORDANCE WITH SMACNA. (WYES, RADIUSED OR VANED TEES, CONCEALED WHEREVER POSSIBLE. PROVIDE CHROME

HVAC PIPING SYMBOLS

→ FLOW DIRECTION

†----- PIPING ELBOW

BACK FLOW PREVENTER

———[™] THERMOMETER WELL

EXPANSION COMPENSATOR

FT FLOAT & THERMOSTATIC STEAM TRAP

BT INVERTED BUCKET STEAM TRAP

____ EXPANSION LOOP

THERMOMETER

———

→ PIPING DROP

PIPING TEE

——II— UNION

———— PIPE GUIDE

———— PIPE CAP

- ESCUTCHEON OR ALUMINUM DUCT COLLAR AT EACH PENETRATION OF A FINISHED SURFACE.
- 31. DUCT/PIPING SHALL NOT BE RUN ABOVE ELECTRICAL GEAR IN THE SERVICE SPACE REQUIRED BY THE NATIONAL ELECTRICAL CODE.
- 32. ANY ADDITIONAL LOW VOLTAGE CONTROL WIRING THAT IS REQUIRED SHALL BE PROVIDED BY THE HVAC CONTRACTOR. CONTROL WIRING SHALL BE RUN IN CONDUIT IF REQUIRED BY
- 33. PROVIDE VIBRATION ISOLATION AT EACH CONNECTION TO A MOTORIZED PIECE OF EQUIPMENT BY THE HVAC CONTRACTOR.

PROVIDED BY THE ELECTRICAL CONTRACTOR.

OF PIPES AND DUCTS AND SUGGESTED ROUTES. IT IS NOT INTENTION 34. MOUNT THERMOSTAT/SENSORS AT 48" AFF UNLESS NOTED OTHERWISE.

LOCAL CODES OR THE SPECIFICATIONS. POWER SHALL BE

35. THE HVAC CONTRACTOR SHALL CLOSELY COORDINATE AIR DEVICE AND DUCTWORK LOCATIONS WITH REFLECTED CEILING AND STRUCTURAL PLANS.

GENERAL DEMOLITION NOTES

- 1. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 2. EXISTING EQUIPMENT LAYOUT IS SCHEMATIC. EXACT LOCATION OF EXISTING DUCT/PIPING AND EQUIPMENT SHALL BE COORDINATED WITH BUILDING STRUCTURE, EQUIPMENT FURNISHED, ARCHITECTURAL DRAWINGS AND ALL OTHER TRADES PRIOR TO DEMOLITION.
- . PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.
- 4. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC. STATE FIRE INSURANCE REGULATION BODY, NFPA OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.
- 5. COORDINATE CUTTING AND PATCHING WITH GENERAL CONTRACTOR.
- 6. ALL BOLD DASHED LINES INDICATE ITEMS TO BE REMOVED UNLESS NOTED BY KEYNOTE. ALL OTHER EXISTING SYSTEMS SHOWN FOR REFERENCE ONLY.
- 7. PATCH AND REPAIR ALL FLOOR AND WALL SURFACES LEFT DAMAGED OR INCOMPLETE FROM REMOVAL OF EXISTING PARTITIONS, MILLWORK, CASEWORK, OR OTHER FIXED ACCESSORIES AND EQUIPMENT WITH MATERIALS TO MATCH EXISTING, AS ACCEPTABLE TO THE ARCHITECT.
- 8. NOTATIONS ARE MADE IN VARIOUS PLACES ON THE DRAWINGS TO CALL ATTENTION TO DEMOLITION WHICH IS REQUIRED. HOWEVER, THESE DRAWINGS ARE NOT INTENDED TO SHOW EACH AND EVERY ITEM TO BE REMOVED. CONTRACTOR SHALL REMOVE ALL MATERIALS RELATED TO THEIR RESPECTIVE TRADES AS REQUIRED TO PERMIT THE CONSTRUCTION OF THE NEW WORK AS
- 9. THE GENERAL CONTRACTOR SHALL COORDINATE THE EXTENT OF THE REQUIRED DEMOLITION OF THE EXISTING BUILDING AS REQUIRED TO FACILITATE THE CONSTRUCTION OF THE PROJECT AS SHOWN AS PART OF THIS

APPROVAL OF THE LOCAL CODE JURISDICTIONS.

- 10. ALL DEMOLITION SHALL BE APPROVED BY THE OWNER/TENANT PRIOR TO COMMENCEMENT AND SHALL BE PERFORMED UNDER REQUIREMENTS AND
- 11. ASBESTOS ABATEMENT: CONTRACTOR SHALL NOTIFY BUILDING REPRESENTATIVE IMMEDIATELY WHEN AND IF ANY ITEMS ARE ENCOUNTERED THAT IN ANY WAY, SHAPE, OR FORM APPEAR TO BE HAZARDOUS OF NATURE. ASBESTOS ABATEMENT IS NOT PART OF THE SCOPE OF THE DESIGN PROFESSIONALS DOCUMENTATION OR RESPONSIBILITY TO SURVEY, IDENTIFY OR FOR CONSULTATION OF PROPER DISPOSAL.
- 12. PROTECT ALL EXISTING WORK WHICH IS TO REMAIN AND RESTORE IN AN APPROVED MANNER ANY SUCH WORK WHICH BECOMES DAMAGED.
- 13. RUBBISH AND DEBRIS RESULTING FROM THE WORK SHALL BE REMOVED IMMEDIATELY FROM THE SITE IN A SAFE AND LEGAL MANNER BY THE CONTRACTOR.
- 14. TEMPORARY LIGHTING AND POWER SHALL BE PART OF THE SCOPE OF THIS WORK; SEE ELECTRICAL.
- 15. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT BUILDING REPRESENTATIVE TO CLARIFY ANY ITEMS NOT SHOWN ON THESE DOCUMENTS OR SHOWN NOT MATCHING FIELD CONDITIONS.

HVAC DUCTWORK SYMBOLS HVAC DUCTWORK & DIFFUSER TAGS SUPPLY AIR DUCT RISER

MECHANICAL SYMBOLS LEGEND

HEATING WATER PUMP

HEAT EXCHANGER

RETURN AIR DUCT RISER OUTSIDE AIR DUCT RISER (AS NOTED) EXHAUST AIR DUCT INSULATED DUCTWORK (AS NOTED)

SUPPLY AIR DIFFUSER (SQUARE) SUPPLY AIR DIFFUSER (INLINE) TURNING VANES

SURFACE MTD. GRILLE SUPPLY AIR DIFFUSER (ROUND)

90° TEE W/45° APPROACH CONICAL TAKE-OFF \mathcal{L} CONICAL TAKE-OFF W/ DAMPER BALANCE DAMPER

RETURN AIR DUCT BOOT ECCENTRIC REDUCER \longrightarrow CONCENTRIC REDUCER VERTICAL FIRE DAMPER EXISTING VERTICAL FIRE DAMPER HORIZONTAL FIRE DAMPER VERTICAL SMOKE DAMPER

EXISTING HORIZONTAL FIRE DAMPER HORIZONTAL SMOKE DAMPER VERTICAL FIRE / SMOKE DAMPER HORIZONTAL FIRE / SMOKE DAMPER DUCT SMOKE DETECTOR, INSTALLED BY M.T.C., PROVIDED & WIRED BY E.T.C.

UNIT HEATER CEILING EXHAUST FAN ROOF MOUNTED EXHAUST FAN

HVAC PIPING

DURING CONSTRUCTION.

POINT OF CONNECTION BETWEEN NEW AND EXISTING

POINT OF EXISTING TO REMAIN AND EXISTING TO BE REMOVED INDICATES PLAN NOTE INDICATES DEMOLITION NOTE

DETAIL BUBBLE XX DETAIL NUMBER PAGE LOCATION INDICATES

NECK REMARKS

MISCELLANEOUS NOTES

HVAC PIPING VALVES

——CWR —— CHILLED WATER RETURN ——

GAS COCK ———— CHECK VALVE ——CD—— CONDENSATE DRAIN -----CS----- CONDENSER WATER SUPPLY ——⊸ BALANCE COCK ----- CIRCUIT SETTER ——CR—— CONDENSER WATER RETURN TWO-WAY CONTROL VALVE -----CTS---- COOLING TOWER WATER SUPPLY ----CTR---- COOLING TOWER WATER RETURN THREE-WAY CONTROL VALVE ——DX—— DIRECT EXPANSION ——HPS—— HEAT PUMP WATER SUPPLY BALL VALVE SOLENOID VALVE ——HPR —— HEAT PUMP WATER RETURN EXPANSION VALVE WITH THERMOSTATIC BULB ——HS—— HEATING WATER SUPPLY ——HR—— HEATING WATER RETURN ——S—— SUCTION (REFRIGERANT) ——⊸ BUTTERFLY VALVE ——L—— LIQUID (REFRIGERANT) RELIEF VALVE ——DXS—— SUCTION (DIRECT EXPANSION)

——DXL—— LIQUID (DIRECT EXPANSION) ----LPS---- LOW PRESSURE STEAM (0-20 LBS.) ——MPS —— MEDIUM PRESSURE STEAM (21-75 LBS.) — SC— STEAM CONDENSATE (GRAVITY) -- SCP-- PUMPED STEAM CONDENSATE

— SC (BF) — STEAM CONDENSATE BOILER FEED

HVAC DUCTWORK

——EA—— EXHAUST AIR DUCT

— X-EA — EXIST EXHAUST AIR DUCT

——SA—— SUPPLY AIR DUCT — X-SA — EXIST SUPPLY AIR DUCT ----RA---- RETURN AIR DUCT — X-RA — EXIST RETURN AIR DUCT ——OA — OUTSIDE AIR DUCT — X-OA — EXIST OUTSIDE AIR DUCT

THERMOSTAT

PRESSURE GAUGE

DAMPER BLADES

TEMPERATURE CONTROL SYMBOLS

PROGRAMMABLE THERMOSTAT THERMOSTAT (W/ NIGHT SETBACK)

DAMPER (ELECTRIC OPERATION)

DAMPER (PNEUMATIC OPERATION)

DIRECTION OF DETAIL SECTION

ROOM SENSOR HUMIDISTAT

HOSE & DRAIN END VALVE

PRESSURE RELIEF VALVE

TRIPLE DUTY VALVE

STRAINER (BLOW-OFF)

PRESSURE REDUCING VALVE

GAS PRESSURE REGULATOR

HOBBS + BLACK

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ARCHITECTS

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CIVIL

INT. DES. CONST. REP.

11/17/2025 DATE SCALE ISSUED

BIDS & PERMITS 10/27/2025 95% C.D. 100% D.D. 09/15/2025

MECHANICAL SYMBOLS, NOTES, 8 **ABBREVIATIONS** M-100





CONICAL TAKE-OFF WITH

CONICAL TAKE-OFF WITH VOLUME

RIGID SMOOTH RADIUS ROUND

SUPPLY DIFFUSER (SEE

SCHEDULE FOR TYPE) -

FLEXIBLE DUCT (5'-0"

OPTION C

DAMPER (TYP)

FLEXIBLE DUCT (5'-0" MAX) INSTALL

FLEXIBLE DUCT ELBOW SUPPORT, WHERE

SUPPLY DIFFUSER (SEE SCHEDULE FOR

VOLUME DAMPER (TYP)

BRANCH DUCT (TYP)

CONICAL TAKE-OFF WITH VOLUME DAMPER

FLEXIBLE DUCT (5'-0"

NEEDED.

OPTION B

LAY-IN CEILING TILE

CEILING SUPPORT TEE

RIGID SMOOTH RADIUS ROUND

1. OPTION A: IS TYPICAL INSTALLATION WHEN MINIMAL SAG CAN BE ACHIEVED

DUCTWORK HORIZONTALLY AND DIRECT INSTALLATION TO DIFFUSER

OPTION C: IS TYPICAL INSTALLATION WHEN INSTALLING FLEXIBLE

NOTE: MSU REPRESENTATIVE HAS THE RIGHT TO REQUIRE CONTRACTOR TO MAKE ALTERATIONS IN THE FIELD WHERE, UPON VISUAL INSPECTION, DETERMINES THAT THE LISTED CRITERIA IS NOT BEING ACHIEVED.

BE ACHIEVED WITHOUT STRAIN ON FLEX AT POINT OF CONNECTION.

CANNOT BE ACHIEVED WITHOUT SAG. SUPPORT FLEXIBLE DUCTWORK AS

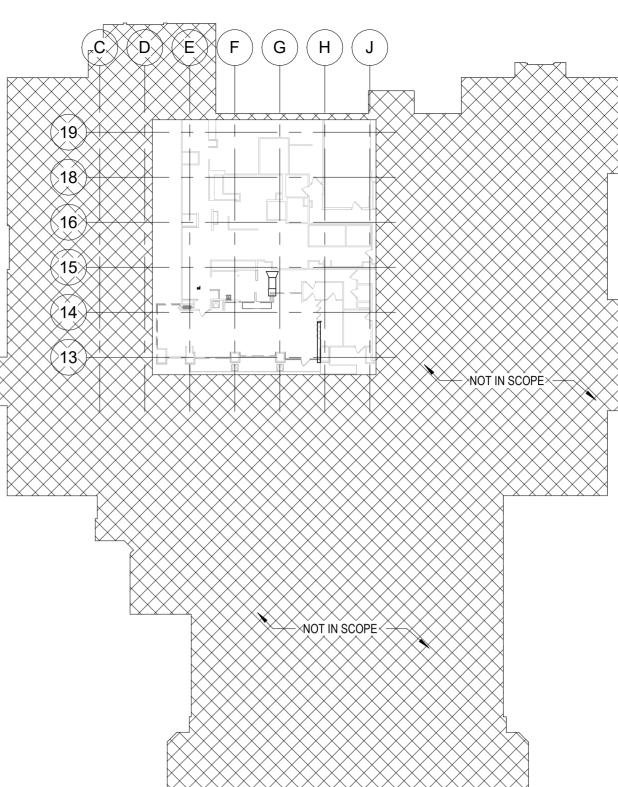
DUCTWORK VERTICALLY AND DIRECT INSTALLATION TO TAKE-OFF CANNOT

WITH DIRECT CONNECTION FROM DUCT TO DIFFUSER.

2. OPTION B: IS TYPICAL INSTALLATION WHEN INSTALLING FLEXIBLE

SUPPLY DIFFUSER (SEE SCHEDULE FOR TYPE)

OPTION A



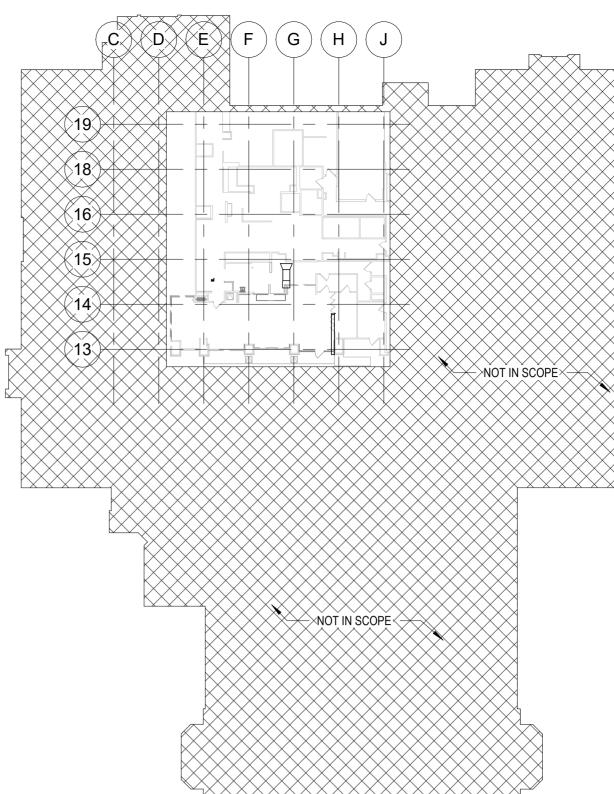
SCALE: 1/32" = 1'-0"

GENERAL NOTES

PROVIDE A TEST AND BALANCE AIR FLOW TEST ON ALL DIFFUSERS PRIOR TO STARTING CONSTRUCTION. NEW DIFFUSERS WILL NEED TO BE RE-BALANCED TO SAME AIR FLOW. REPLACE FILTERS ON FAN COIL UNITS PRIOR TO AIR BALANCE.

DEMOLITION NOTES:

- DISCONNECT, REMOVE, AND DEMO EXISTING KITCHEN HOOD. CAP ASSOCIATED DUCTWORK ABOVE CEILING. ASSOCIATED EXHAUST FAN AND MAKEUP AIR UNIT LOCATED ON ROOF SHALL BE DISCONNECTED AND ABANDONED.
- DISCONNECT, REMOVE, AND RELOCATE EXISTING SUPPLY DIFFUSER. DEMO ASSOCIATED SUPPLY AIR DUCTWORK BACK TO EXTENTS SHOWN.
- DISCONNECT, REMOVE, AND RELOCATE EXISTING THERMOSTAT TO LOCATION SHOWN ON NEW PLANS. MODIFY ASSOCIATED CONTROL WIRING AS REQUIRED.



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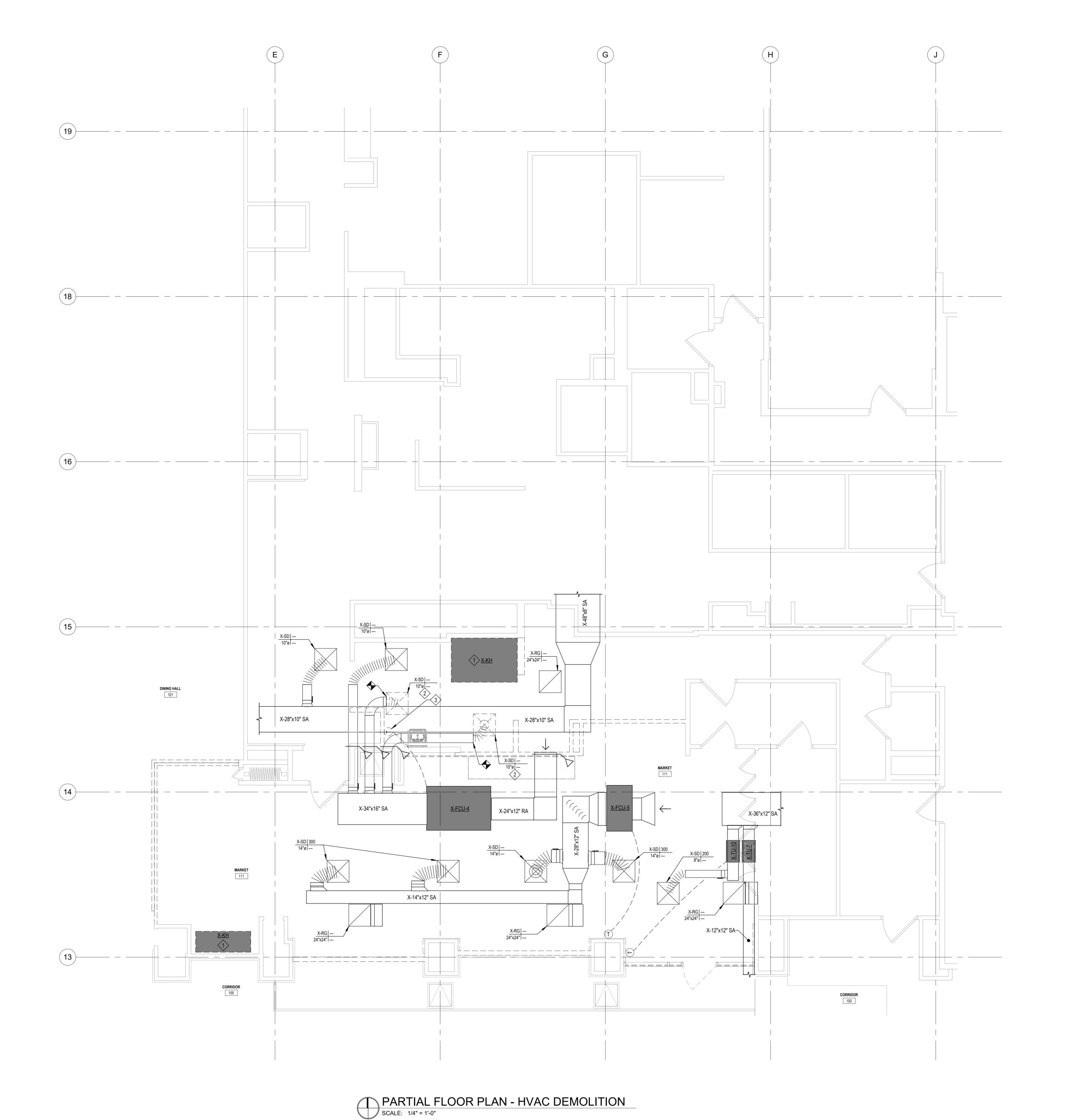
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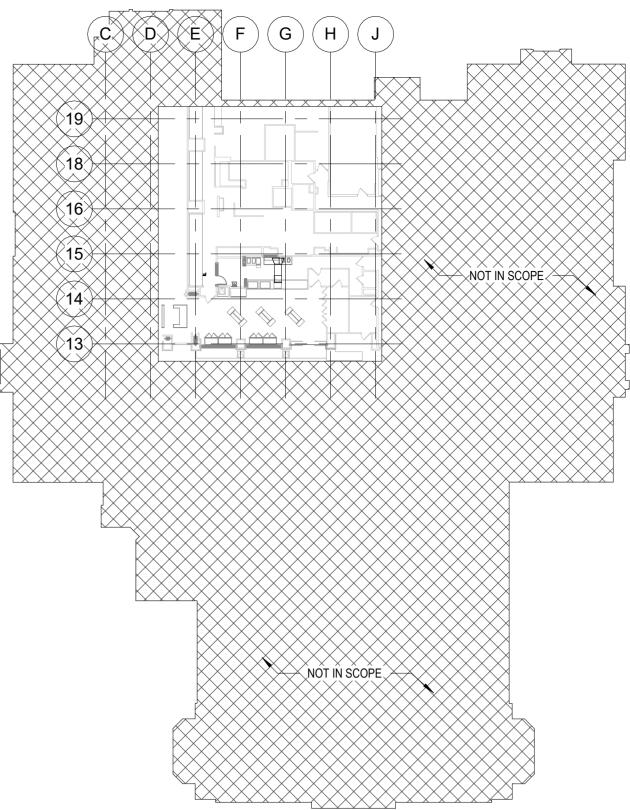
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DATE
SCALE
ISSUED 11/17/2025

11/17/25 10/27/2025 09/15/2025 100% D.D.

PARTIAL FLOOR PLAN
- HVAC DEMOLITION M-300

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GENERAL NOTES

BALANCE ALL DIFFUSERS TO CFM DOCUMENTED IN PRE-CONSTRUCTION TEST AND AIR BALANCE REPORT.

- 1 RELOCATE AND INSTALL SUPPLY AIR DIFFUSER AT LOCATION SHOWN. MODIFY EXISTING SUPPLY AIR DUCT AS REQUIRED.
- CONTRACTOR SHALL INSTALL A FILTER RACK AND MERV-8 FILTER SERVING X-FCU-4. MODIFY ASSOCIATED RETURN DUCTWORK AS REQUIRED.
- 5 CONTRACTOR SHALL INSTALL RETURN CANOPY ON X-RG. BASED ON TITUS, SIZE 24 X 24.

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

HVAC KEY NOTES:

2 RELOCATE AND INSTALL THERMOSTAT AT LOCATION SHOWN. MODIFY ASSOCIATED CONTROL WIRING AS REQUIRED.

3 INSTALL FIRE/SMOKE DAMPER AT LOCATION SHOWN. MODIFY EXISTING DUCTWORK AS REQUIRED.

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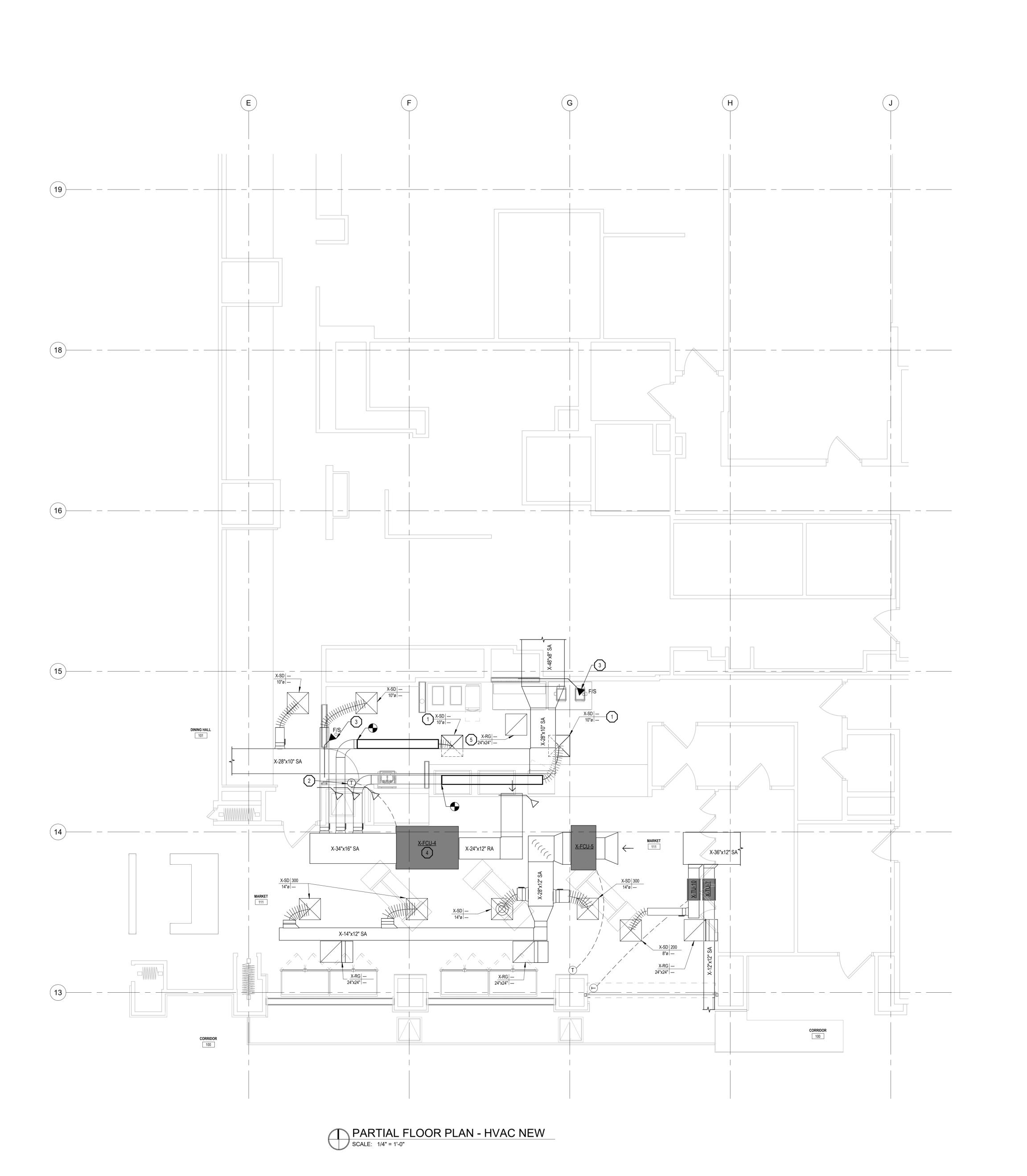
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PARTIAL FLOOR PLAN - HVAC NEW

M-400

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GENERAL FIRE PROTECTION NOTES

- A. CONTRACTOR SHALL REFER TO FIRE PROTECTION SPECIFICATIONS.
- B. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.
- C. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, MICHIGAN STATE UNIVERSITY CONSTRUCTION STANDARDS OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.
- D. FOR ADDITIONAL SPECIFICATION INFORMATION REFER TO ARCHITECTURAL
- E. FIRE PROTECTION SYSTEM SHALL BE DESIGNED IN COMPLIANCE WITH THE LATEST EDITION OF NFPA 13 AND LOCAL FIRE CODE REQUIREMENTS.
- F. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FLOW TEST DATA AND PREPARING ALL REQUIRED HYDRAULIC CALCULATIONS.
- G. SPRINKLER AND PIPING LAYOUT SHOWN FOR REFERENCE PURPOSES ONLY. CONTRACTOR SHALL CONFIRM STRUCTURAL AND WATER SUPPLY HYDRAULIC INFORMATION PRIOR TO SYSTEM FABRICATION AND INSTALLATION.
- H. WHERE REQUIRED BY CODE OR DIRECTED BY LOCAL AUTHORITIES, CONTRACTOR SHALL PROVIDE SEISMIC HANGING & CONSTRAINTS ON ALL PIPING IN COMPLETE ACCORDANCE WITH THE LATEST ISSUE OF THE STATE MECHANICAL BUILDING CODE, LOCAL CODES AND NFPA.
- I. FIRE PROTECTION CONTRACTOR SHALL PROVIDE A GUARANTEE COVERING ALL MATERIAL AND WORKMANSHIP FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE BY
- J. FLOW TEST RESULTS TO BE CALCULATED FROM TEST LOCATION NEAREST TO THE

DI LIMDINIO ADDDEVIATIONIO

MEDICAL GAS CONSOLE

MECHANICAL TRADES CONTRACTOR

PLUMBING SYMBOLS LEGEND

- - CW- - - - - - COLD WATER BELOW FINISH SLAB

- HW- - - - - - HOT WATER BELOW FINISH SLAB

- HWR----- HOT WATER RETURN BELOW FINISH SLAB

- SW- - - - - - SOFTENED WATER BELOW FINISH SLAB

-TW----- TEMPERED WATER BELOW FINISH SLAB

--DI----- DEIONIZED WATER BELOW FINISH SLAB

-TWR----- TEMPERED WATER RETURN BELOW FINISH SLAB

-RO----- REVERSE OSMOSIS WATER RETURN BELOW FINISH SLAB

ARW— — ACID RESISTANT WASTE BELOW FINISH SLAB

OVERFLOW RAIN CONDUCTOR BELOW FINISH SLAB

- SWR----- SOFTENED WATER RETURN BELOW FINISH SI AR

HOT WATER RETURN

SOFTENED WATER

— TW———— TEMPERED WATER

— DI — DEIONIZED WATER

— FP———— FIRE PROTECTION

— LP———— GAS (LIQUID PETROLEUM)

- ARW------ VENT ACID RESISTANT WASTE

— ST— — STORM BELOW FINISH SLAB

ORC—ORC—OVERFLOW RAIN CONDUCTOR

— SAN— — SANITARY WASTE BELOW FINISH SLAB

--V----- VENT PIPING BELOW FINISH SLAB

— G — GAS (NATURAL)

ARV———— ACID RESISTANT

RC—RC—RAIN CONDUCTOR

— CA———— COMPRESSED AIR

NO NITROUS OXIDE

— N2———— NITROGEN

— VAC——— VACUUM

---- DEMOLITION

MEDICAL AIR

— V− — — — VENT PIPING

— 02———— OXYGEN

-ORC------

SOFTENED WATER RETURN

TWR—TWR—TEMPERED WATER RETURN

RO-RO-REVERSE OSMOSIS WATER

MAN HOLE

MINIMUM

MOP SINK

PLUMBING PIPING

— CW———— COLD WATER

— HW———— HOT WATER

<u>PLU</u>	<u>MBING ABBREVIATION</u>	<u> </u>	
AD	AREA DRAIN		
ASR	AUTOMATIC SPRINKLER RISER	NTS	NOT TO SCALE
BFS	BELOW FLOOR SLAB	ORD	OVERFLOW ROOF DRAIN
BWV	BACK WATER VALVE	OS OXY	OIL SEPARATOR OXYGEN
СВ	CATCH BASIN		
CI	CAST IRON	Р	PUMP
CO	CLEAN OUT	PD	PRESSURE DROP
CV	CONTROL VALVE	PVC	POLY-VINYL-CHLORIDE
DF	DRINKING FOUNTAIN	RC	RAIN CONDUCTOR
DIA	DIAMETER	RD	ROOF DRAIN
DN	DOWN	RI	ROUGH-IN
DWH	DOMESTIC WATER HEATER	REQ'D	REQUIRED
E.T.C.	ELECTRICAL TRADES CONTRACTOR	SAN	SANITARY
EWC	ELECTRIC WATER COOLER	SHWR	SHOWER
EXIST	EXISTING	SK	SINK
		SP	STAND PIPE
FD	FLOOR DRAIN	SQ. FT.	SQUARE FEET
FC	FINAL CONNECTIONS	SS	SERVICE SINK
FDC	FIRE DEPT. CONNECTION	ST	STORM
FF	FINISH FLOOR	S&W	STOP & WASTE
FHV	FIRE HOSE VALVE	STR	STRAINER
FT	FEET	SV	STACKED VENT
GAL	GALLON	TYP.	TYPICAL
GD	GARBAGE DISPOSAL		
GI	GREASE INTERCEPTOR	UR	URINAL
GPH	GALLONS PER HOUR		
GPM	GALLONS PER MINUTE	VB	VACUUM BREAKER
		VS	VENT STACK
HB	HOSE BIB	V.F.D	VARIABLE FREQUENCY DRIV
HD	HEAD (FT)	VTR	VENT THRU ROOF
HP	HORSE POWER		
		W	WASTE
ID	INSIDE DIAMETER	WB	WET BULB
I.E.	INVERT ELEVATION	WC	WATER CLOSET
	HAVERT ELEVATION	WH	WALL HYDRANT
LAV	LAVATORY	WS	WASTE STACK
LT	LAUNDRY TRAY	W&V	WASTE AND VENT
_1	ENORDIN TIVAT		
MA	MEDICAL AIR	X-CW	EXIST. CW PIPING
MAX	MAXIMUM		— ITEM
1400	MEDICAL CAS CONSOLE		

— EXISTING

PLUMBING VALVES

——── GATE VALVE

——⊸⊸— GAS COCK

—— CHECK VALVE

——⊸⊗⊢—— BALANCE COCK

------ CIRCUIT SETTER

—— III GLOBE VALVE

BALL VALVE

─────Ö── OS&Y VALVE

——√—— PLUG VALVE

————— SOLENOID VALVE

HOSE & DRAIN END VALVE

PRESSURE RELIEF VALVE

TRIPLE DUTY VALVE

STRAINER (BLOW-OFF)

MISCELLANEOUS NOTES

PRESSURE REDUCING VALVE

GAS PRESSURE REGULATOR

RELIEF VALVE

TWO-WAY CONTROL VALVE

THREE-WAY CONTROL VALVE

EXPANSION VALVE WITH THERMOSTATIC BULB

POINT OF CONNECTION BETWEEN NEW AND

GENERAL PLUMBING NOTES

- 1. ALL PLUMBING WORK SHALL CONFORM TO MICHIGAN PLUMBING CODE, LATEST APPLICABLE EDITION, AND ALL APPLICABLE LOCAL CODES.
- 2. INSTALL ALL EQUIPMENT, MATERIALS, AND ACCESSORIES PER MANUFACTURERS WRITTEN INSTRUCTIONS.
- 3. INSTALL ISOLATION BALL VALVES @ ALL FIXTURE WATER SUPPLY LINES.
- 4. ALL PIPE SIZES SHOWN ARE SERVICE SIZE. SIZE SLEEVES FOR 1" CLEAR SPACE BETWEEN PIPE AND SLEEVE FOR INSTALLATION OF MECHANICAL SEAL.
- 5. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE BEGINNING WORK.
- CONTRACTOR SHALL DEMOLISH & REMOVE EXISTING PIPING, FITTINGS, & EQUIPMENT AS REQUIRED FOR NEW INSTALLATIONS. VALVE & CAP PIPING TO REMAIN.
- 7. FIELD VERIFY LOCATIONS OF EXISTING PIPING THAT MAY CONFLICT WITH NEW CONSTRUCTION AND RELOCATE AS NEEDED.
- 8. NOTIFY OWNER OF ANY PIPING DEMOLITION THAT MAY AFFECT NORMAL OPERATION OF OTHER AREAS.
- DIAMETER. 1% SLOPE FOR ALL SANITARY PIPING 3" OR MORE IN DIAMETER.

LOCATION, ELEVATIONS, AND DETAILS OF ALL EXISTING

9. 2% SLOPE FOR ALL SANITARY PIPING 2-1/2" OR LESS IN

CONDITIONS THAT MAY AFFECT THE WORK. 11. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES, INDUSTRY STANDARDS, UTILITY COMPANY

REGULATIONS, AND MICHIGAN STATE UNIVERSITY

STANDARDS FOR CONSTRUCTION.

10. THE CONTRACTOR SHALL FIELD VERIFY THE SIZES,

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EQUIPMENT AND

PLUMBING EQUIPMENT

→ FLOW DIRECTION

†---- PIPING ELBOW

----- CONNECTION

———— PIPE GUIDE

PIPE CAP

——M—— WATER METER

PRESSURE GAUGE

———— FIRE HYDRANT

——M—— GAS METER

──IDI PUMP

——∣⊢—— UNION

PLUMBING TRAP

THERMOMETER

FLOOR DRAIN & FLOOR SINK

FLANGE END CONNECTION

--- WALL HYDRANT & HOSE BIBB

REGULAR & OVERFLOW ROOF DRAIN

BACK FLOW PREVENTER

----[†]+----- PIPING TEE

13. ALL WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS AND SUBCONTRACTORS AS REQUIRED BY

- 14. DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CODES AND REGULATIONS ENFORCED BY LOCAL BUILDING OFFICIALS.
- 15. IF THERE IS CONFLICTING INFORMATION IN THE PLANS OR SPECIFICATIONS THE MORE STRINGENT AND GREATER COST ITEM SHALL BE USED.
 - 16. DRAWINGS INDICATE REQUIRED SIZES AND POINTS OF TERMINATION OF PIPES AND SUGGESTED ROUTES. IT IS NOT INTENTION OF DRAWINGS TO INDICATE ALL NECESSARY OFFSETS. INSTALL WORK IN MANNER TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. DO NOT SCALE FROM DRAWINGS.
 - 17. ANY INFORMATION FOUND ON THE DRAWINGS AND NOT IN THE SPECIFICATIONS, OR FOUND IN SPECIFICATIONS AND NOT IN THE DRAWINGS, SHALL BE CONSTRUED AS TO BE INCLUDED IN BOTH THE SPECIFICATIONS AND THE DRAWINGS. ANY CONFLICT BETWEEN THE PLANS AND THE SPECIFICATIONS WILL BE INTERPRETED BY THE ARCHITECT. IN THE EVENT OF CONFLICT, FOR THE PURPOSE OF BIDDING, THE CONTRACTOR SHALL PRESUME THE MOST EXPENSIVE COMBINATION OF QUALITY AND QUANTITY OF WORK SHALL PREVAIL.
 - 18. PIPING LAYOUT IS SCHEMATIC. EXACT LOCATION OF PIPING AND EQUIPMENT SHALL BE COORDINATED WITH BUILDING STRUCTURE, EQUIPMENT FURNISHED, ARCHITECTURAL DRAWINGS AND ALL OTHER TRADES PRIOR TO INSTALLATION. ANY CONTRACTOR INSTALLING WORK WITHOUT PRIOR COORDINATION SHALL RELOCATE HIS WORK AT HIS EXPENSE TO ALLOW PROPER INSTALLATION OF ANY AND ALL TRADES WORK.
 - 19. UNLESS OTHERWISE NOTED, ALL PIPING SHALL BE CONCEALED WHEREVER POSSIBLE. PROVIDE CHROME ESCUTCHEON AT EACH PENETRATION OF A FINISHED
 - 20. PLUMBING UTILITY PIPING SHALL NOT BE RUN ABOVE ELECTRICAL GEAR OR IN THE SERVICE SPACE REQUIRED BY THE NATIONAL ELECTRICAL CODE.
- MATERIALS IN A "NEW" CONDITION DURING CONSTRUCTION. 21. PROVIDE FIRE STOPPING AT ALL PENETRATIONS OF FIRE RATED ENCLOSURES.

GENERAL DEMOLITION NOTES

- SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 2. EXISTING EQUIPMENT LAYOUT IS SCHEMATIC. EXACT LOCATION OF EXISTING DUCT/PIPING AND EQUIPMENT SHALL BE COORDINATED WITH BUILDING STRUCTURE, EQUIPMENT FURNISHED, ARCHITECTURAL DRAWINGS AND ALL OTHER TRADES PRIOR TO DEMOLITION.
- 3. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.
- 4. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA. UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.
- 5. COORDINATE CUTTING AND PATCHING WITH GENERAL CONTRACTOR.
- 6. ALL BOLD DASHED LINES INDICATE ITEMS TO BE REMOVED UNLESS NOTED BY KEYNOTE. ALL OTHER EXISTING SYSTEMS SHOWN FOR REFERENCE ONLY.
- 7. PATCH AND REPAIR ALL FLOOR AND WALL SURFACES LEFT DAMAGED OR INCOMPLETE FROM REMOVAL OF EXISTING PARTITIONS, MILLWORK, CASEWORK, OR OTHER FIXED ACCESSORIES AND EQUIPMENT WITH MATERIALS TO MATCH EXISTING, AS ACCEPTABLE TO THE ARCHITECT.
- 8. NOTATIONS ARE MADE IN VARIOUS PLACES ON THE DRAWINGS TO CALL ATTENTION TO DEMOLITION WHICH IS REQUIRED. HOWEVER, THESE DRAWINGS ARE NOT INTENDED TO SHOW EACH AND EVERY ITEM TO BE REMOVED. CONTRACTOR SHALL REMOVE ALL MATERIALS RELATED TO THEIR RESPECTIVE TRADES AS REQUIRED TO PERMIT THE CONSTRUCTION OF THE NEW WORK AS
- 9. THE GENERAL CONTRACTOR SHALL COORDINATE THE EXTENT OF THE REQUIRED DEMOLITION OF THE EXISTING BUILDING AS REQUIRED TO FACILITATE THE CONSTRUCTION OF THE PROJECT AS SHOWN AS PART OF THIS WORK.
- 10. ALL DEMOLITION SHALL BE APPROVED BY THE OWNER/TENANT PRIOR TO COMMENCEMENT AND SHALL BE PERFORMED UNDER REQUIREMENTS AND APPROVAL OF THE LOCAL CODE JURISDICTIONS.
- 11. ASBESTOS ABATEMENT: CONTRACTOR SHALL NOTIFY BUILDING REPRESENTATIVE IMMEDIATELY WHEN AND IF ANY ITEMS ARE ENCOUNTERED THAT IN ANY WAY. SHAPE, OR FORM APPEAR TO BE HAZARDOUS OF NATURE. ASBESTOS ABATEMENT IS NOT PART OF THE SCOPE OF THE DESIGN PROFESSIONALS DOCUMENTATION OR RESPONSIBILITY TO SURVEY, IDENTIFY, OR FOR CONSULTATION OF PROPER DISPOSAL.
- 12. PROTECT ALL EXISTING WORK WHICH IS TO REMAIN AND RESTORE IN AN APPROVED MANNER ANY SUCH WORK WHICH BECOMES DAMAGED.
- 13. RUBBISH AND DEBRIS RESULTING FROM THE WORK SHALL BE REMOVED IMMEDIATELY FROM THE SITE IN A SAFE AND LEGAL MANNER BY THE CONTRACTOR.
- 14. TEMPORARY LIGHTING AND POWER SHALL BE PART OF THE SCOPE OF THIS WORK; SEE ELECTRICAL.
- 15. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT BUILDING REPRESENTATIVE TO CLARIFY ANY ITEMS NOT SHOWN ON THESE DOCUMENTS OR SHOWN NOT MATCHING FIELD CONDITIONS.

POINT OF EXISTING TO REMAIN AND EXISTING TO BE REMOVED SPRINKLER HEAD (PENDANT) SPRINKLER HEAD (UPRIGHT) INDICATES PLAN NOTE SPRINKLER HEAD (SIDEWALL) FIRE DEPARTMENT CONNECTION INDICATES DEMOLITION NOTE PIPING FLEXIBLE CONNECTOR DETAIL BUBBLE

XX — DETAIL NUMBER PIPE EXPANSION PAGE LOCATION INDICATES COMPENSATOR FLOW SENSOR DEVICE — FLOW METER DIRECTION OF DETAIL SECTION FS FLOW SWITCH

PS PRESSURE SWITCH SS SUPERVISORY SWITCH INVERTED BT BUCKET TRAP FLOAT & THERMOSTATIC TRAP

INDOOR PUMP OUT FREQ. CALCULATION DESCRIPTION SYMBOL VALUE MEAL ESTIMATE (30-DAY AVERAGE) # OF MEALS PER DAY LOW GREASE PRODUCTION NO FLATWARE (FROM SCHIER SIZING LBS. OF GREASE PER MEAL PRODUCT SPEC SHEET SCHIER GB2 (LBS. OF GREASE) DAYS TO REACH CAPACITY (C/(A*B))

			GREASE	E/OIL SE	PARATOR S	CHED	JLE			
TAC	DESIGN B	ASIS	DESCRIPTION	GALLON	GREASE CAPACITY	GPM	INLET SIZE	OUTLET	COMMENTS	
TAG	MANUFACTURER	MODEL	DESCRIPTION	DESCRIPTION CAPACITY (LBS)	(LBS)	GPIVI	INLET SIZE	SIZE	COMMENTS	
OS-1	SCHIER	GB2	HYDROMECHANICAL	20.0	130	35	3"	3"	1,2,3	

PUMP OUT FREQUENCY:



Autodesk Docs://25-711 - MSU Union - Sparty Market/24950.01 - MSU -Union - 1st Floor Kitchen - MEP -

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ARCHITECTS

MSU PROJ. NO.: MSU CP25028 H+B PROJ. NO.: 25-711

PRJ. MGR. T.Pacifico J.Kasdorf R.Winkler G.Halsey CIVIL

11/17/2025 SCALE ISSUED

10/27/2025 100% D.D. 09/15/2025

> AND PLUMBING SYMBOLS, NOTES, 8 **ABBREVIATIONS** 17 of 25

FIRE PROTECTION

MSU PROJ. NO.: MSU CP25028

H+B PROJ. NO.: 25-711 PRJ. MGR. T.Pacifico ARCH. J.Kasdorf

G.Halsey

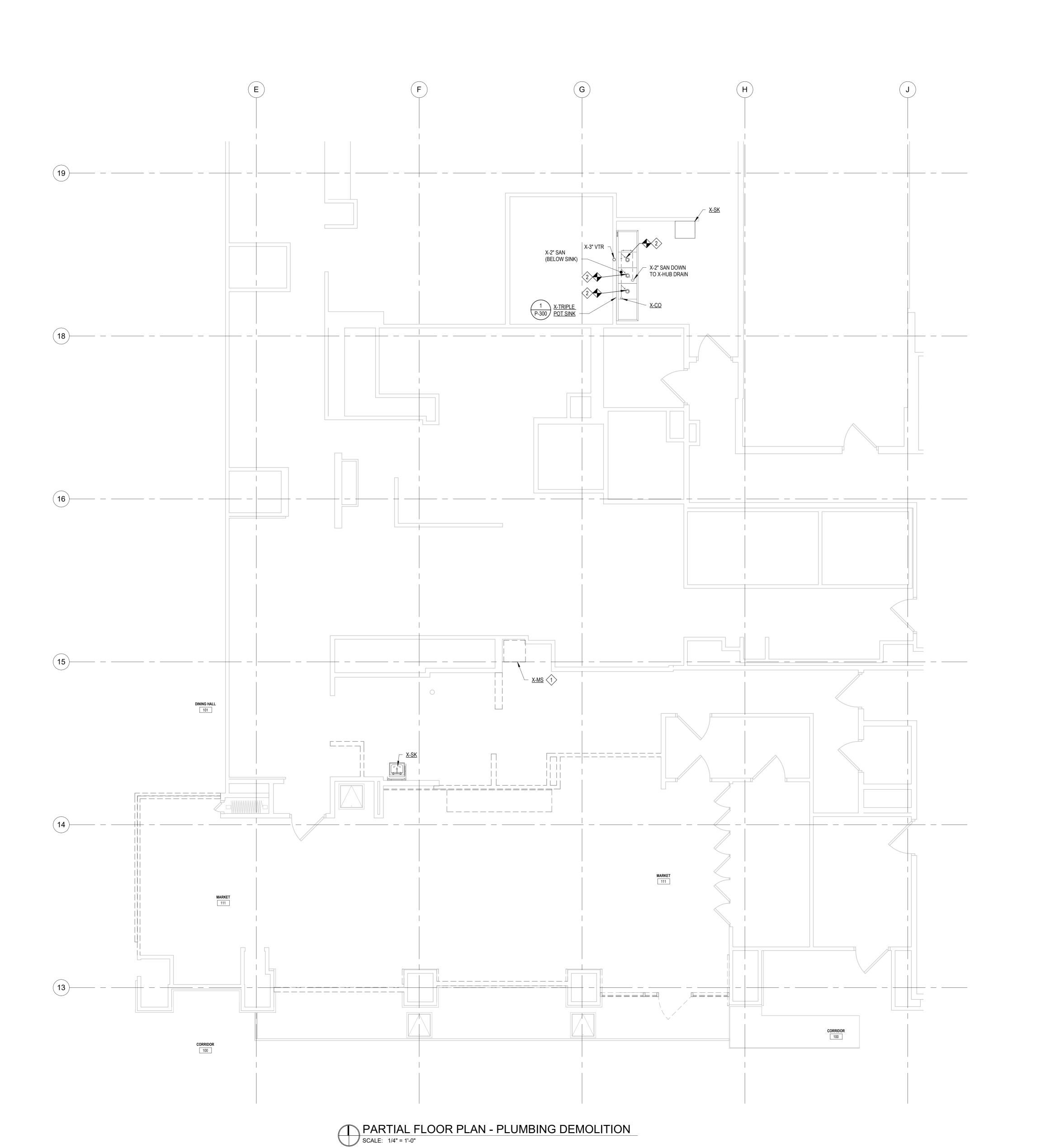
INT. DES. CONST. REP.

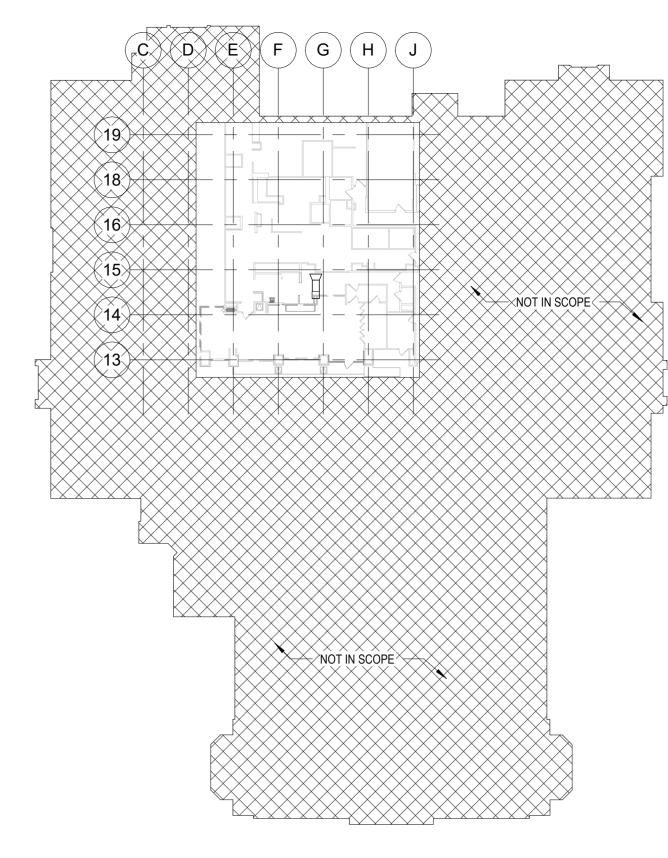
APPR.
DATE
SCALE
ISSUED 11/17/2025

BIDS & PERMITS 11/17/25 10/27/2025 09/15/2025 95% C.D.

100% D.D.

PARTIAL FLOOR PLAN
- PLUMBING
DEMOLITION P-300 18 of 25

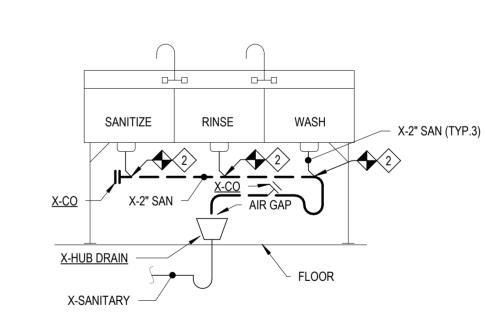






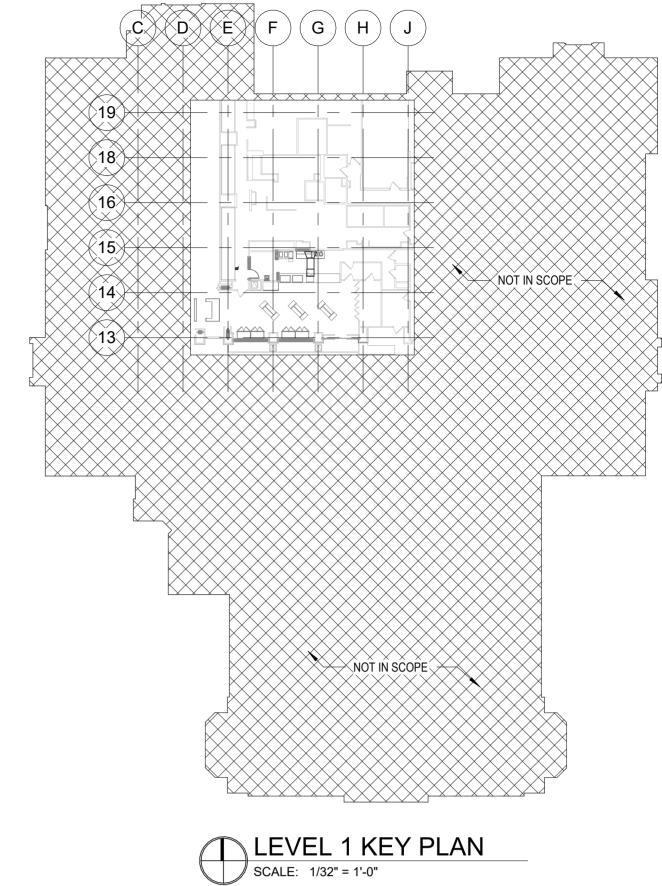
DEMOLITION NOTES:

- DISCONNECT, REMOVE, AND DEMO EXISTING MOP SINK. DEMO ASSOCIATED HOT WATER AND COLD WATER PIPING BACK TO MAIN AND CAP. DEMO ASSOCIATED SANITARY PIPING BELOW FLOOR AND CAP.
- DISCONNECT, REMOVE, AND DEMO EXISTING SANITARY PIPING TO EXTENTS SHOWN. MODIFY SANITARY PIPE AS REQUIRED TO CONNECT TO NEW.



1 TRIPLE POT SINK DETAIL
P-300 NOT TO SCALE



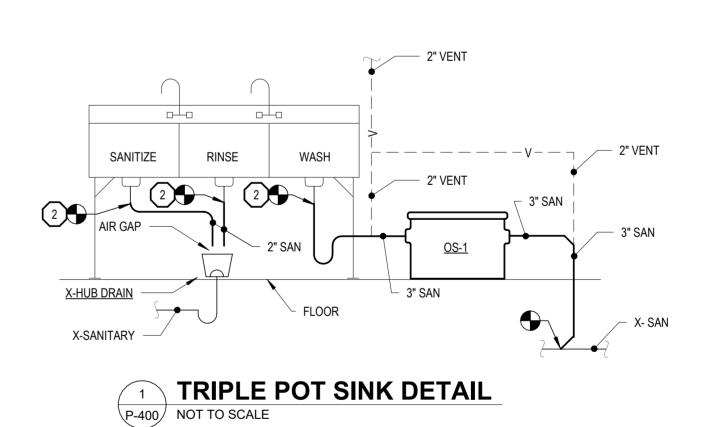


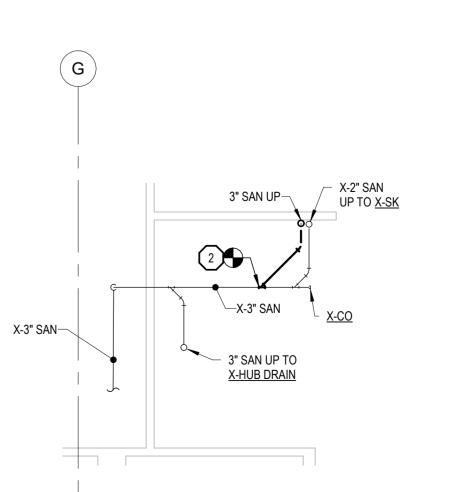
PLUMBING KEY NOTES

- ROUTE 2" VENT PIPING UP AND EXTEND AS REQUIRED TO CONNECT TO EXISTING VENT PIPING. MODIFY EXISTING VENT PIPING AS REQUIRED TO CONNECT TO NEW VENT PIPING.
- (2) MODIFY EXISTING SANITARY PIPING AS REQUIRED TO CONNECT TO NEW SANITARY PIPING.

FIRE PROTECTION KEY NOTES

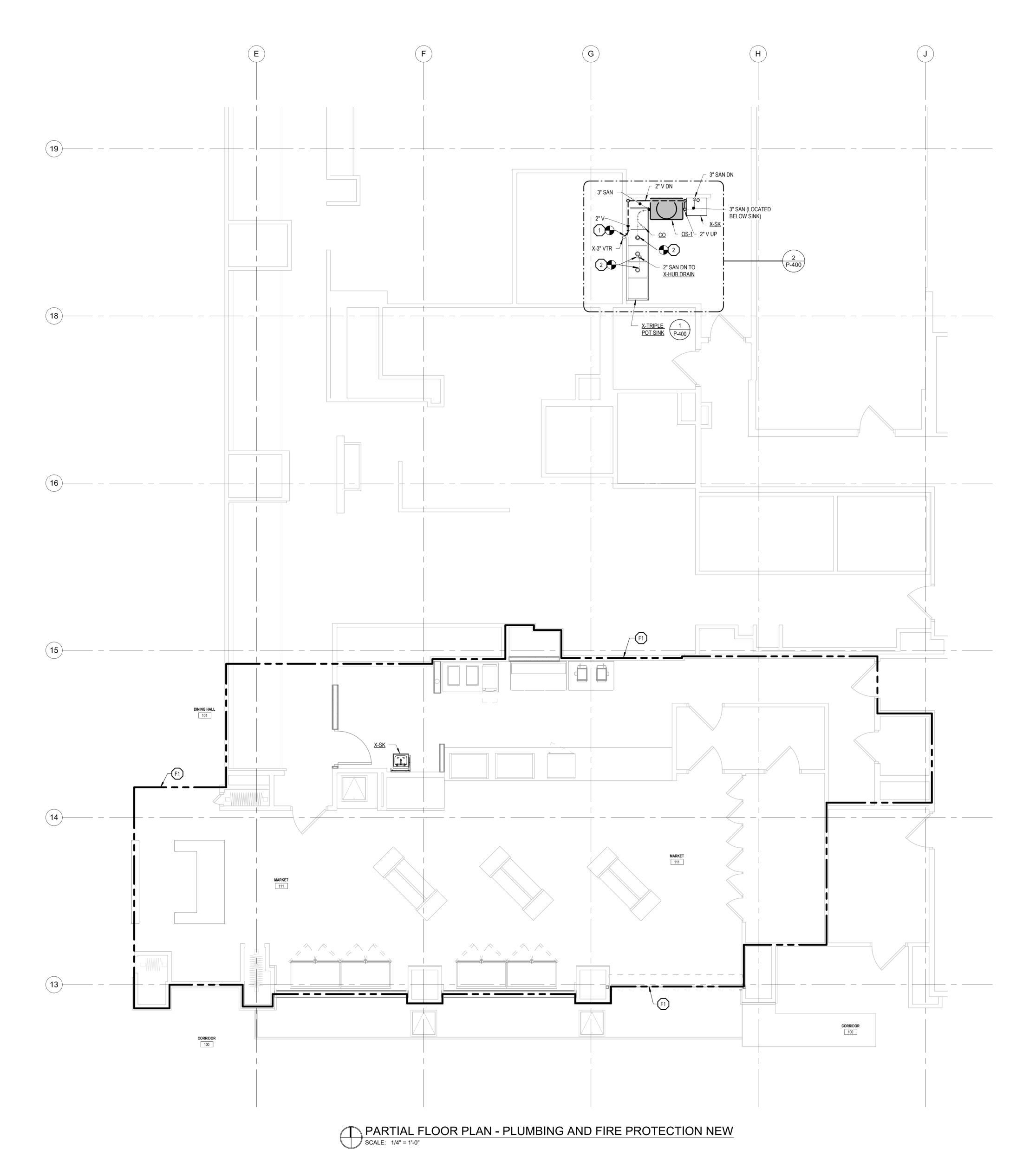
F1 REPLACE AND MODIFY SPRINKLERS AND ASSOCIATED SPRINKLER PIPING PER NFPA 13 FOR NEW FLOOR LAYOUT AND CEILING LAYOUT IN AREA SHOWN.





PARTIAL BASEMENT FLOOR PLAN - PLUMBING 2 **NEW**P-400 SCALE = 1/4" = 1'-0"

95% C.D. 100% D.D. PARTIAL FLOOR PLAN
- PLUMBING AND FIRE
PROTECTION NEW



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APPR.
DATE
SCALE
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11/17/25 10/27/2025 09/15/2025

P-400 19 of 25

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TELECOMMUNICATION

PROVIDED OR 4" ABOVE COUNTER OR BACK SPLASH AS APPLICABLE IF NO KNEE SPACE IS NOTE C: WHERE ASTERISK (*) IS INDICATED NEXT TO OUTLET AT WORK COUNTER, OUTLET SHALL BE LOCATED ABOVE COUNTER RATHER THAN IN KNEE

NOTE A: OUTLETS IN FINISHED OR SHELL SPACES SHALL BE MOUNTED AT +18" UON.

NOTE B: OUTLETS LOCATED AT COUNTERS SHALL BE LOCATED 18"AFF IN KNEE SPACE IF

FIRE DETECTION AND ALARM

FACP CONTROL PANEL AT +72" TO TOP

DUCT SMOKE DETECTOR

AUTOMATIC HEAT DETECTOR

VISUAL NOTIFICATION APPLICANCE

FIRE/ SMOKE DAMPER

OF HEAT DETECTORS

MANUFACTURER.

VALVE TAMPER SWITCH

GENERAL NOTES

F MANUAL STATION AT +48"

FAA FIRE ALARM ANNUNCIATOR PANEL AT +72" TO TOP

FIRE SUPPRESSION SYSTEM ABORT SWITCH STATION AT +48"

SMOKE DETECTOR - PHOTO ELECTRIC AREA BEAM

COMBINATION CARBON MONOXIDE / SMOKE DETECTOR WITH ANNUNCIATION

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPE

R/F — COMBINATION RATE OF RISE FIXED TEMPERATURE (135 DEGREE U.O.N.)

XP — EXPLOSION PROOF, FIXED TEMPERATURE (135 DEGREE U.O.N.) CLASS 1,

NOTE: WALL MOUNT VISUAL AND COMBINATION AUDIO/VISUAL NOTIFICATION

WALL MOUNTED COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE

CEILING MOUNTED COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE

ELECTROMECHANICAL DOOR RELEASE. COORDINATE WITH DOOR MANUFACTURER.

MAGNETIC DOOR HOLDER. COORDINATE MOUNTING HEIGHT WITH DOOR

AIR PRESSURE MONITOR SWITCH FOR PRE-ACTION OR DRY PIPE SPRINKLER

SPRINKLER OR STANDPIPE FLOW ALARM SWITCH CONNECTION

NO SUBSCRIPT - FIXED TEMPERATURE (155 DEGREE U.O.N.)

APPLIANCES AT +80" AFF TO BOTTOM OF FACE PLATE U.O.N.

WALL MOUNTED AUDIBLE NOTIFICATION APPLIANCE

CEILING MOUNTED VISUAL NOTIFICATION APPLIANCE

CEILING MOUNTED AUDIBLE NOTIFICATION APPLIANCE

▼ STANDARD TELECOMMUNICATIONS OUTLET - PROVIDE EXTRA DEEP DOUBLE GANG BOX WITH SINGLE GANG MUD RING AND (1) 1" CONDUIT TO ABOVE FINISHED CEILING, MOUNTED AT 18" AFF, UON. PROVIDE PLASTIC BUSHING AT THE ENDS OF THE CONDUITS. DATA DEVICES AND WIRING PROVIDED BY OTHERS, UON.

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE

VARIOUS (NON-STANDARD) TYPES OF OUTLETS

FLOOR MOUNTED. CEILING MOUNTED. MOUNTED 48" AFF, UON

MOUNTED 72" AFF, UON. TELEPHONE AT 44" AFF, UON. TV TELEVISION, MOUNTED AT NOTED HEIGHT.

B — BLANK (ROUGH-IN TO ACCESSABLE CEILING SPACE) WITH BLANK COVERPLATE — THE FIRST NUMBER INDICATES THE NUMBER OF CAT6 CABLES.

THE SECOND NUMBER INDICATES THE TO QUANTITY OF JACK LOCATIONS. CLOCK - SEE SPECIFICATIONS FOR REQUIREMENTS.

SPEAKER FOR PA SYSTEM.

ADA DOOR CONTROL OPENER, COORDINATE WITH DOOR REQUIREMENTS

DOOR CONTROLS, COORDINATE WITH SECURITY, AUTO AND MANUAL CONTROLS

SECURITY

FIXED VIDEO SURVEILANCE CAMERA DOOR POSITION SWITCH

CONNECTION TO ELECTRIC OR PNEUMATIC DOOR LOCK

CARD READER AT +48"

SYMBOLS SHOWN ARE FOR REFERENCE ONLY AND DO NOT CONSTITUTE A CHECK LIST OF

GENERAL DEMOLITION NOTES:

- DEMOLITION NOTES ARE BASED UPON FIELD OBSERVATION AND EXISTING RECORD DOCUMENTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY EXACT CONDITIONS AT SITE AND REPORT DISCREPANCIES TO THE ARCHITECT/ENGINEER BEFORE DISTURBING THE INSTALLATION.
- 2. THE SCOPE OF REQUIRED DEMOLITION IS NOT LIMITED TO ITEMS OR WORK INDICATED ON THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR SHALL DETERMINE THE NATURE AND EXTENT OF WORK REQUIRED. THE CONTRACTOR ACCEPTS EXISTING SITE CONDITIONS AT THE START OF DEMOLITION.
- 3. WHERE ELECTRICAL COMPONENT ARE SHOWN TO BE REMOVED, THE ELECTRICAL CONTRACTOR SHALL RECONNECT REMAINING COMPONENTS TO EXISTING CIRCUIT(S).
- 4. WHERE THE DRAWINGS SHOW DEVICES OR EQUIPMENT TO BE PERMANENTLY REMOVED. THE ELECTRICAL CONTRACTOR SHALL REMOVE CONDUCTORS BACK TO SOURCE. TURN BREAKER 'OFF' AND LABEL THE BREAKER AS 'SPARE' ON NEWLY PRINTED PANEL DIRECTORY.
- 5. THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL ABANDONED CONDUIT. THE ELECTRICAL CONTRACTOR SHALL CUT CONDUIT FLUSH WITH WALLS AND FLOORS, UON. PATCH ALL SURFACES AND PROVIDE FIRESTOP WHERE REQUIRED.
- 6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF DAMAGE TO ALL ADJACENT CONSTRUCTION AND FINISHES. REPAIRS SHALL BE MADE TO RETURN SPACE TO ORIGINAL CONDITION PRIOR TO COMPLETION OF PROJECT.
- 7. EQUIPMENT AND DEVICES SHOWN AS DASHED ON THE DRAWING ARE TO BE REMOVED
- 8. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT ALL ELECTRICAL SYSTEMS IN WALLS, FLOORS AND CEILINGS SCHEDULED FOR REMOVAL, INCLUDING SPECIAL SYSTEMS.
- 9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN OPERATION OF EXISTING SYSTEMS DURING CONSTRUCTION. CONDITIONS SHALL BE RETURNED TO NORMAL AT THE CLOSE OF THE PROJECT.
- 10. CONTRACTOR SHALL MAINTAIN ALL POWER AND DATA CONDUIT AND WIRING SERVING AREAS NOT INCLUDED IN THE SCOPE OF WORK, UON. NOTIFY ARCHITECT/ ENGINEER IF THESE DEVICES WILL IMPEDE UPON SCOPE OF WORK DURING RENOVATION TO RECEIVED DIRECTION ON
- 11. THE ELECTRICAL CONTRACTOR SHALL PROVIDE BLANK COVERS ON ALL JUNCTION BOXES WHERE DEVICE HAS BEEN REMOVED AND THE JUNCTION BOX IS TO REMAIN FOR FUTURE USE.
- 12. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL LAMPS AS REQUIRED AND DIRECTED IN THE LATEST STATE LAWS.
- 13. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL EQUIPMENT AND DEVICES REMOVED. CONTRACTOR SHALL TURN OVER ALL REMOVED LIGHTS, DEVICES, AND EQUIPMENT TO MSU SURPLUS.
- 14. ALL DISRUPTIONS OF SERVICE SHALL BE COORDINATED AND APPROVED BY OWNER.

GENERAL NOTES:

- 1. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ACCEPTED EDITION OF THE NATIONAL ELECTRICAL CODE, NEC, MICHIGAN STATE UNIVERSITY STANDARDS FOR CONSTRUCTION AND SPECIFICATIONS, AND ALL STATE AND LOCAL CODES.
- 2. COORDINATE THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT AND CONNECTIONS WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL AND EQUIPMENT DRAWINGS.
- 3. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL POWER, CONDUITS, CABLETRAY, AND OTHER COMPONENTS AS SHOWN ON THE EQUIPMENT PROVIDER DRAWINGS FOR
- 4. "BACK TO BACK" OR THROUGH THE WALL BOXES SHALL NOT BE USED.
- 5. INSTALL HANDLE LOCK-ON, ON ALL CIRCUIT BREAKERS CONTROLLING NIGHT LIGHT, EMERGENCY LIGHT AND EXIT LIGHT CIRCUITS.
- 6. ALL RECEPTACLES SHALL BE HARD USE, SPECIFICATION GRADE.
- 7. PROVIDE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY APPLICABLE CODES.
- 8. RECEPTACLES INDICATED AS GROUND FAULT CIRCUIT INTERRUPTER TYPE SHALL BE MOUNTED IN AN ACCESIBLE LOCATION, PER CODE OR PROVIDED WITH A GFCI BREAKER.
- 9. ALL CONDUCTORS SHALL BE COPPER. ALUMINUM WIRES SHALL NOT BE USED.
- 10. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR POWER FEEDS AND 1" FOR DATA FEEDS.
- 11. FINAL CONNECTION TO ITEMS SUBJECT TO VIBRATION SHALL BE MADE WITH LIQUIDTIGHT 12. 120/208VAC CIRCUIT WIRING FOR ANY ROOM OR AREA MAY BE GROUPED INTO RACEWAYS UNLESS SEPARATE RACEWAYS ARE REQUIRED BY THE NEC. COMPLY WITH NEC
- 13. PROVIDE EQUIPMENT GROUNDING CONDUCTORS FOR ALL POWER AND LIGHTING CIRCUITS.
- 14. ALL LIGHTING AND POWER CONDUCTORS SHALL BE 12 AWG MINIMUM. ALL CONTROL CONDUCTORS SHALL BE 14 AWG MINIMUM OR AS SPECIFIED BY MANUFACTURER.

REQUIREMENTS FOR CONDUCTOR DERATING.

- 15. DEDICATED NEUTRAL SHALL BE PROVIDED FOR ALL CIRCUITS. SHARED NEUTRALS ARE NOT
- 16. BASIS OF DESIGN IS FOR A COMPLETE ELECTRICAL SYSTEM, INSTALLED PER CODE REQUIREMENTS.
- 17. PROVIDE AN UNSWITCHED HOT TO ALL EMERGENCY BATTERY PACKS, LIGHTING INVERTERS AND EMERGENCY LIGHTING UNITS AHEAD OF AN LIGHTING CONTROLS FROM THE BRANCH CIRCUIT SERVING LIGHTING IN THE SURROUNDING AREA.
- 18. COORDINATE FIRE ALARM WORK WITH MSU SAFETY AND SECURITY SERVICES. EXISTING SYSTEM IS MANUFACTURED BY NATIONAL TIME.
- 19. MSU TO INSTALL ALL NEW DATA JACKS, FACEPLATES, AND TERMINATIONS. MSU TO PULL NEW DATA CABLES.

CONN. CONNECT OR CONNECTION COPPER **DURESS ALARM** DOOR BELL DISCONNECT DOUBLE POLE SINGLE THROW ELECTRICAL CONTRACTOR ELECTRIC WATER COOLER (COORDINATE ACCESSIBILITY OF GFCI) ELECTRIC OR ELECTRICAL **ELEVATION OR ELEVATOR** EMERG, EM **EMERGENCY** EMERGENCY POWER OFF ELECTRICAL METAL TUBING FLA FULL LOAD AMPERES FLUOR. FLUORESCENT GRC,GCR GALVANIZED RIGID CONDUIT GEN GENERATOR **GFCI** GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT INTERRUPTER GRD,GND,G GROUND HIGH INTENSITY DISCHARGE HAND-OFF-AUTO HORSEPOWER HIGH PRESSURE SODIUM HERTZ INTERMEDIATE METAL CONDUIT ISOLATED GROUND **INCAND** INCANDESCENT JUNCTION BOX THOUSAND AMPERE INTERRUPTING CAPACITY KILOVOLT AMPERES KII OWATT KILOWATT HOUR LIGHTING LOW VOLTAGE MASTER ANTENNA TELEVISION MAIN CIRCUIT BREAKER MCC MOTOR CONTROL CENTER MANHOLE, METAL HALIDE OR MOUNTING HEIGHT MAIN LUGS ONLY NORMALLY CLOSED N.E.C. NATIONAL ELECTRICAL CODE NOT IN CONTRACT NON FUSIBLE NORMALLY OPEN NOT TO SCALE OVERLOADS POLE PULLBOX PHASE PH OR Ø PANEL PAIR POLYVINYL CHLORIDE POWER RECEPTACLE RIGID GALVANIZED STEEL SOLENOID SINGLE POLE DOUBLE THROW SPKR SPEAKER SPST SINGLE POLE SINGLE THROW SWBD **SWITCHBOARD** SYMMETRICAL TELEPHONE TRANSFORMER TELEPHONE TERMINAL BACKBOARD **TELEVISION** TYPICAL UNDERGROUND UNLESS OTHERWISE NOTED VOLT **VOLT AMPERES** VOLTAGE DROP **VOLT METER** WATTS OR WIRE WITH WITHOUT

ABBREVIATIONS

AMPERES

AMMFTFR

AMP TRIP

ASYMMETRICAL

A.F.F.

ASYM.

CCTV

CKT,CCT

AMP FUSE OR AMP FRAME

ABOVE FINISHED FLOOR

AMPERE INTERRUPTING CAPACITY

AUTOMATIC TRANSFER SWITCH

COMMUNITY ANTENNA TELEVISION

AMERICAN WIRE GAUGE

CAPACITY OR CAPACITOR

CLOSED CIRCUIT TELEVISION

CIRCUIT BREAKER

CONDUIT ONLY

AVAILABLE FAULT CURRENT (SYMMETRICAL)

GENERAL

MOUNTING HEIGHTS TO BE AS INDICATED, UON. MOUNTING HEIGHTS ARE TO CENTER OF DEVICE FROM FINISHED FLOOR OR GRADE, UON. SEE SPECIFICATION

KEY NOTE REFERENCE SYMBOL. DENOTES "SEE KEY NOTE NO. 2"

FOOT ON DEVICE INDICATES WALL MOUNTED

WEATHERPROOF

EXPLOSION PROOF

DEMOLITION AND REMODEL

EXISTING ELECTRICAL ITEM TO REMAIN

EXISTING ELECTRICAL ITEM TO BE REMOVED AND PROVIDED WITH A BLANK COVERPLATE

EXISTING ELECTRICAL CIRCUIT TO BE REMOVED SHOWN ONLY WHERE CLARIFICATION BETWEEN EXISTING TO REMAIN AND REMOVED ITEMS IS

SEE PLANS AND NOTES FOR DEVICES INTEND FOR REUSE AND / OR REPURPOSING.

DIV 26 FOR ADDITIONAL REQUIREMENTS.

2 — DOUBLE POLE 3 — THREE WAY 4 — FOUR WAY

 DIMMER, COMPATIBLE WITH FIXTURE. f — FUSED

NO SUBSCRIPT - SINGLE POLE

SWITCH AT +48" U.O.N.

OF SWITCHES.

L — PILOT LIGHT LV — LOW VOLTAGE/DIGITAL SWITCH OS — WALL SWITCH OCCUPANCY SENSOR, DUAL TECHNOLOGY. DOS — WALL SWITCH OCCUPANCY SENSOR W/ DIMMER, DUAL TECHNOLOGY.

CIRCUIT DESIGNATIONS

ALL ISOLATED GROUND DEVICES.

MAX QUANTITY OF

CONDUIT | CONDUCTORS PER CONDUIT

ON QUANTITY OF CURRENT CARRYING

CONDUCTORS PER CONDUIT

INDICATES CIRCUIT CONTINUATION

CONDUIT SEAL FITTING FOR HAZARDOUS AREAS

CONDUIT RISER UP

CONDUIT RISER DOWN

├── CONDUIT SLEEVE

>> CAP END OF CONDUIT

CABLE OR CORD CONNECTED

CONDUCTOR SIZE

9 TO 13 | 7 TO 11 | 4 TO 5

POLE NUMBERS —

BRANCH CIRCUIT HOMERUN. PROVIDE PHASE, NEUTRAL AND GROUND

CONDUCTORS FOR EACH INDICATED CIRCUIT OR MULTI WIRE BRANCH

AS REQUIRED. PROVIDE SWITCH LEGS FOR SWITCH CIRCUITING AS

REQUIRED. PROVIDE EQUIPMENT GROUND WIRE IN ALL BRANCH CIRCUIT

STUB INTO ACCESSIBLE CORRIDOR CEILING SPACE UNLESS OTHERWISE NOTED

NOTE A: UPPER CASE ALPHANUMERIC SUBSCRIPT DENOTES FIXTURE TYPE. SEE

NOTE B: LOWER CASE LETTER SUBSCRIPT PROVIDED ADJACENT TO SWITCHING

WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

RECESSED LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

EXIT LIGHT OUTLET WITH FIXTURE - SHADING INDICATES LOCATION OF FACE(S).

EMERGENCY LIGHT FIXTURE WITH INTEGRAL BATTERY SOURCE AND HEADS

CEILING LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

DEVICE AND ASSOCIATED LIGHT FIXTURE(S) WHERE REQUIRED FOR CLARIFICATION.

LIGHTING

DIRECTIONAL AIMED FIXTURE AIM IN DIRECTION OF ARROW

UNDERCABINET/ COUNTER LIGHT OUTLET OR STRIP LIGHT OUTLET WITH

LINEAR PENDANT/SUSPENDED LIGHT FIXTURE CONNECTED TO NORMAL SOURCE

ARROWS INDICATE DIRECTIONAL ARROWS WHERE REQUIRED. WALL MOUNTED

SIGNS AT +90" CENTERED ABOVE DOOR WHERE APPLICABLE

⊕ ♦ ♦ TRACK LIGHT OUTLET WITH FIXTURE. TYPE INDICATED, QUANTITY AND LENGTH

PENDANT LIGHT FIXTURE CONNECTED TO NORMAL SOURCE

LIGHTING STANDARD POLE FIXTURE, PROVIDE QUANTITY OF HEADS

CEILING LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE

WALL SCONCE LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY

LINEAR WALL LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY

LINEAR PENDANT/SUSPENDED LIGHT FIXTURE CONNECTED TO EMERGENCY

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE VARIOUS TYPES

LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE

SURFACE / STRIP LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY

PENDANT LIGHT FIXTURE CONNECTED TO EMERGENCY

FIXTURE CONNECTED TO NORMAL SOURCE

AS SHOWN OR SCHEDULED

AND ORIENTATION AS INDICATED

BOLLARD FIXTURE

SOURCE

SOURCE

LIGHTING STANDARD WITH POST-TOP FIXTURE

RACEWAYS/CIRCUITS. PROVIDE SEPARATE ISOLATED GROUND WIRE TO

MANUAL STARTER WITH THERMAL ELEMENT XP — EXPLOSION PROOF M — MOTOR RATED

WIRELESS DEVICE

EXTERIOR PHOTOCELL. ON/OFF WITH ADJUSTABLE SET-POINT. DAYLIGHT HARVESTING SENSOR. ANALOG 0-10V OUTPUT WITH INTEGRAL MOTION SENSOR.

CEILING / DIRECTIONAL / DIRECTIONAL WALL MOUNTED OCCUPANCY SENSOR DUAL TECHNOLOGY, WITH REQUIRED POWER PACKS. TC TIME CLOCK AT +48"

POWER AND DIAGRAMS

A. OUTLETS IN FINISHED OR SHELL SPACES SHALL BE MOUNTED AT +18" UON. B. OUTLETS IN GARAGE, MECHANICAL, AND ELECTRICAL SPACES SHALL BE MOUNTED AT 48" UON.

OUTLETS SHALL BE TAMPER PROOF, WHERE REQUIRED PER CODE. D. OUTLETS SHALL HAVE AFCI PROTECTION, WHERE REQUIRED PER CODE. E. OUTLETS SHALL HAVE GFCI PROTECTION, WHERE REQUIRED PER CODE.

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE DIFFERENT TYPES OF RECEPTACLES WP — WEATHERPROOF, EXTRA DUTY, WITH STEEL IN-USE COVER. CL — CLOCK MOUNTED AT +84", REGRESSED SINGLE RECEPTACLE, WITH CLOCK HANGER.

U — DUAL USB INCLUDED WITH RECEPTACLE TYPE SHOWN.

TYPICAL SYMBOLOGY:

H — HORIZONTAL MOUNTING

© 20A, 125V, 2 POLE, 3 WIRE GROUNDING SINGLE RECEPTACLE, NEMA 5-20R

20A, 125V, 2 POLE, 3 WIRE GROUNDING DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R

250V, 2 POLE, 3 WIRE GROUNDING SINGLE RECEPTACLE, SIZE AND TYPE AS NOTED.

RECEPTACLES MOUNTED 4" ABOVE COUNTER OR BACK SPLASH AS APPLICABLE, UON.

RECEPTACLES WITH GFCI AND MOUNTED 4" ABOVE COUNTER OR BACK SPLASH AS

• RECEPTACLES WITH GROUND FAULT CIRCUIT INTERRUPTOR

⊕ ⊕ CEILING MOUNTED RECEPTACLE. TYPE AS INDICATED ABOVE. ♠ ● CEILING MOUNTED GFCI RECEPTACLES, TYPE AS INDICATED ABOVE.

FLUSH FLOOR MOUNTED RECEPTACLE, TYPE AS INDICATED ABOVE. FLUSH FLOOR MOUNTED RECEPTACLE, GFCI, TYPE AS INDICATED ABOVE.

PEDESTAL MOUNTED RECEPTACLE, TYPE AS INDICATED ABOVE.

The special purpose receptacle. Subscript denotes Nema Type. COMBINATION POWER/ COMMUNICATIONS FLOOR BOX, TYPE AND COMMUNICATIONS DEVICE AS INDICATED.

J DUNCTION BOX. 4" SQUARE, UON. WALL AND CEILING MOUNTED. PIGTAIL TO SWITCH DENOTES TOP HALF OF RECEPTACLE SWITCHED.

JUNCTION BOX. 4" SQUARE, UON. WALL AND CEILING MOUNTED.

SURFACE RECEPTACLE STRIP. TYPE AND LENGTH AS INDICATED.

208 VOLT PANELBOARD AT +72" TO TOP 480 VOLT PANELBOARD AT +72" TO TOP M ELECTRIC METER

CABLE TRAY OR WIREWAY

SAFETY SWITCH AT +54". CHARACTERISTICS AS INDICATED BY FRAME/POLES.

FUSED SAFETY SWITCH AT +54". CHARACTERISTICS AS INDICATED BY

MAGNETIC MOTOR STARTER AT +54". CHARACTERISTICS AS INDICATED BY FRAME SIZE/POLES/NEMA SIZE. COMBINATION MAGNETIC MOTOR STARTER WITH DISCONNECT AT +54".

CHARACTERISTICS AS INDICATED BY FRAME/FUSE/POLES/NEMA SIZE AFD ADJUSTABLE FREQUENCY DRIVE WITH INTEGRAL CIRCUIT BREAKER DISCONNECT

MAGNETIC CONTACTOR AT +54". AMPS/POLES/CONTACT VOLTS/ COIL VOLTS AS SEPARATELY MOUNTED, ENCLOSED MOLDED CASE CIRCUIT BREAKER AT +48". FLUSH MOUNTED IN FINISHED AREAS. AMP/POLES AS INDICATED.

_____ CIRCUIT BREAKER. AMP/POLES AS INDICATED - FUSE. SIZE AS INDICATED

FUSIBLE SWITCH. AMP/POLES/FUSE SIZE AS INDICATED AUTOMATIC TRANSFER SWITCH +72" TO TOP OR FLOOR MOUNTED.

→ DISCONNECT STABS FOR DRAWOUT TYPE EQUIPMENT

TRANSFORMER I GROUND CONNECTION

MOTOR CONNECTION, HP AS INDICATED (G) GENERATOR

START-STOP PUSHBUTTON STATION AT +48" GROUND BUS ON STANDOFFS

PS POWER SUPPLY

CONTROL PANEL: EQUIPMENT OR TERMINAL CABINET AT +72" TO TOP

PUSHBUTTON STATION AT +48"

DEVICES REQUIRED BY THE CONTRACT



ELECTRICAL COVER

E-100 20 OF 25

SHEET

MSU PROJ. NO.:

PRJ. MGR. T.Pacifico

INT. DES. CONST. REP.

DATE

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BIDS & PERMITS

MSU CP25028

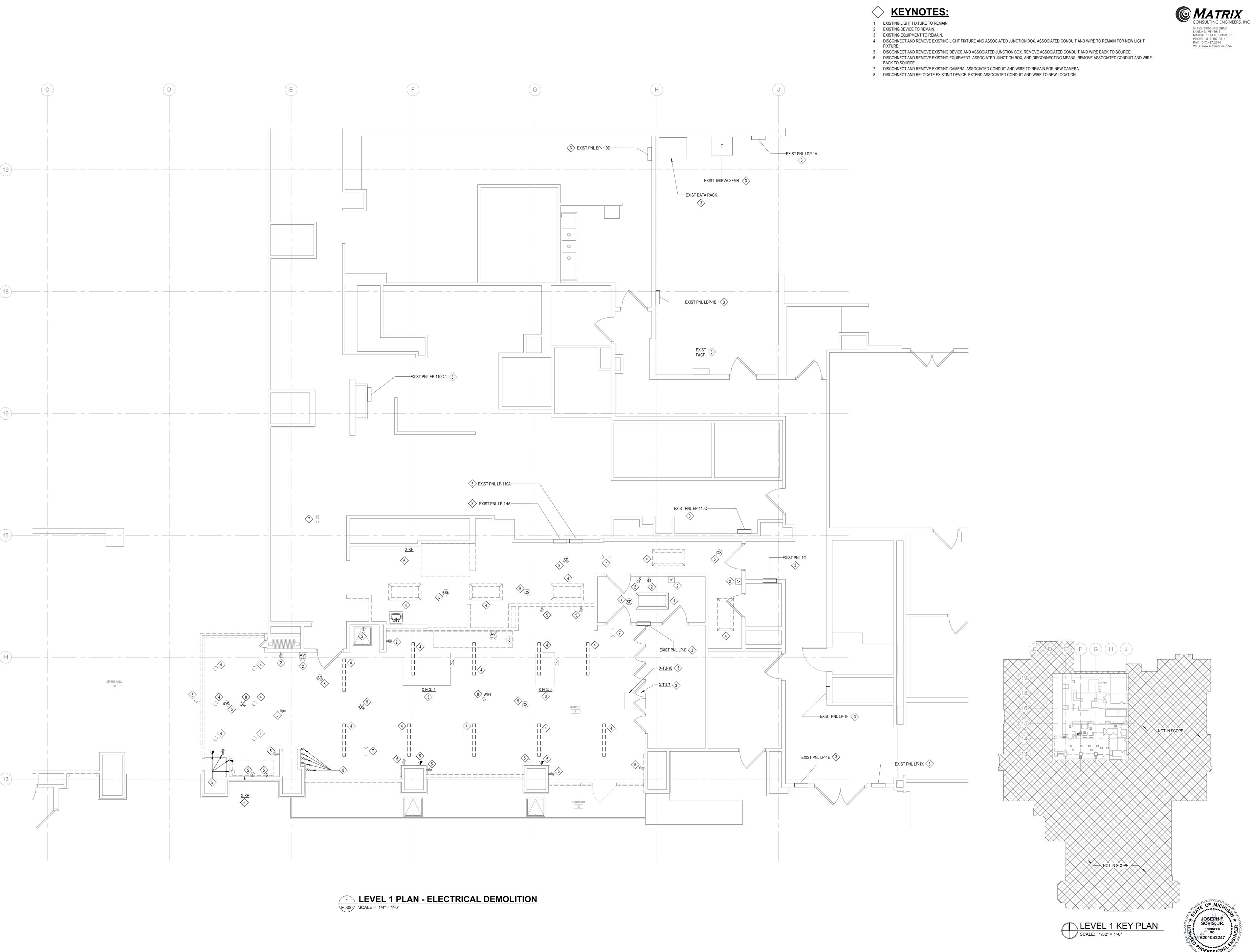
H+B PROJ. NO.: 25-711

J.Kasdorf

R.Winkler

G.Halsey

11/17/25



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LEVEL 1 PLAN -ELECTRICAL DEMOLITION E-300 21 of 25

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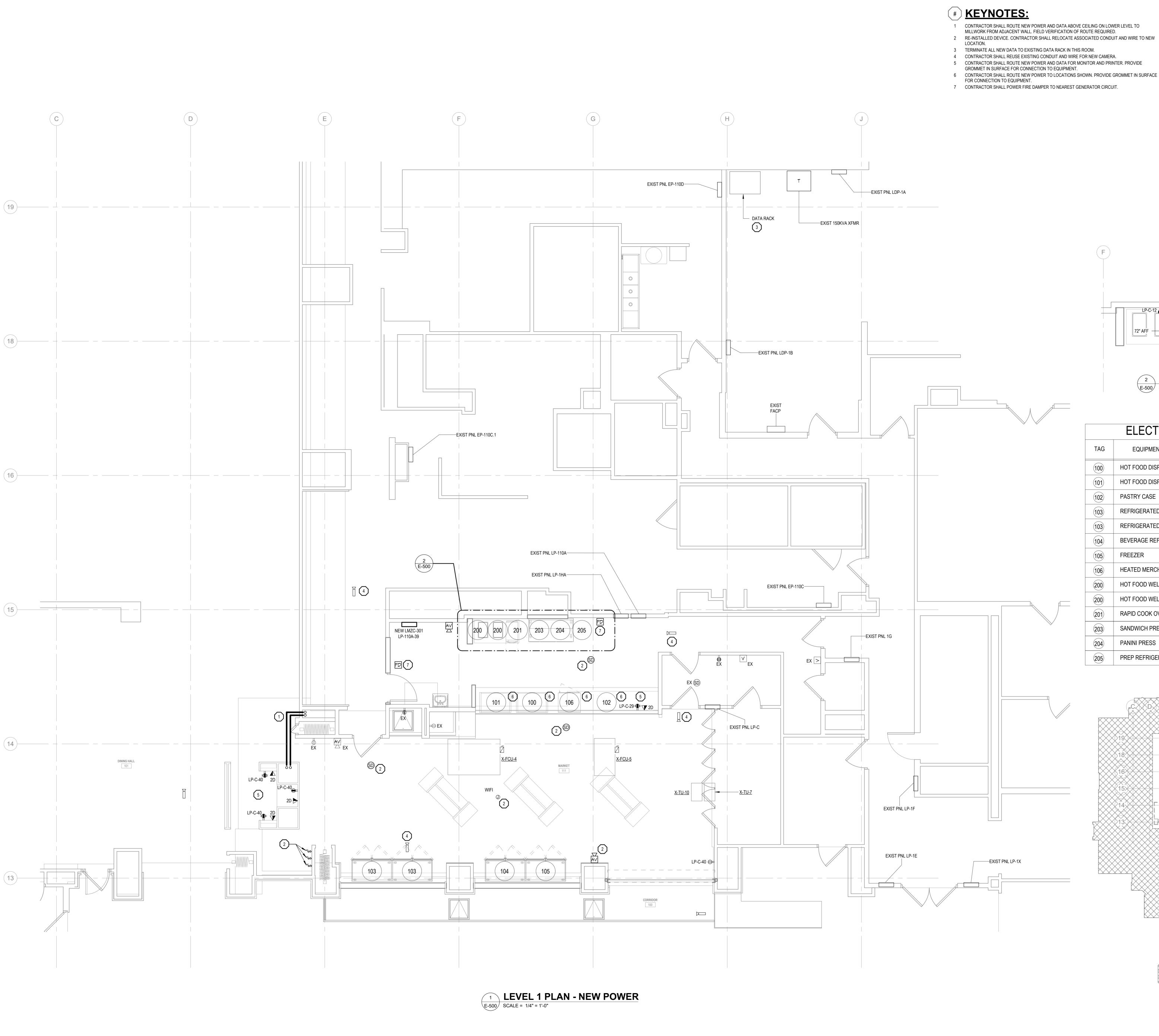
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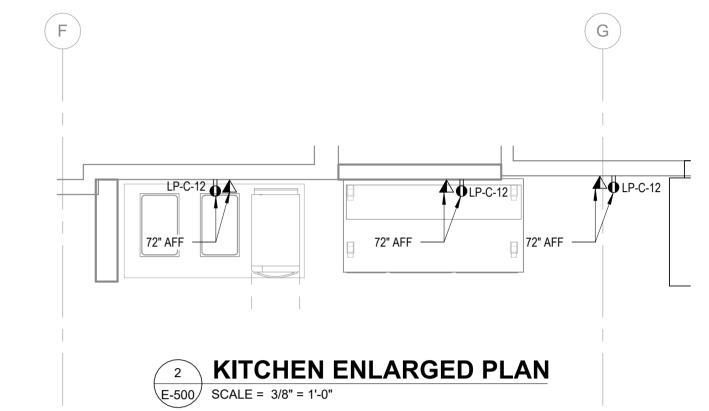
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LEVEL 1 PLAN - NEW LIGHTING

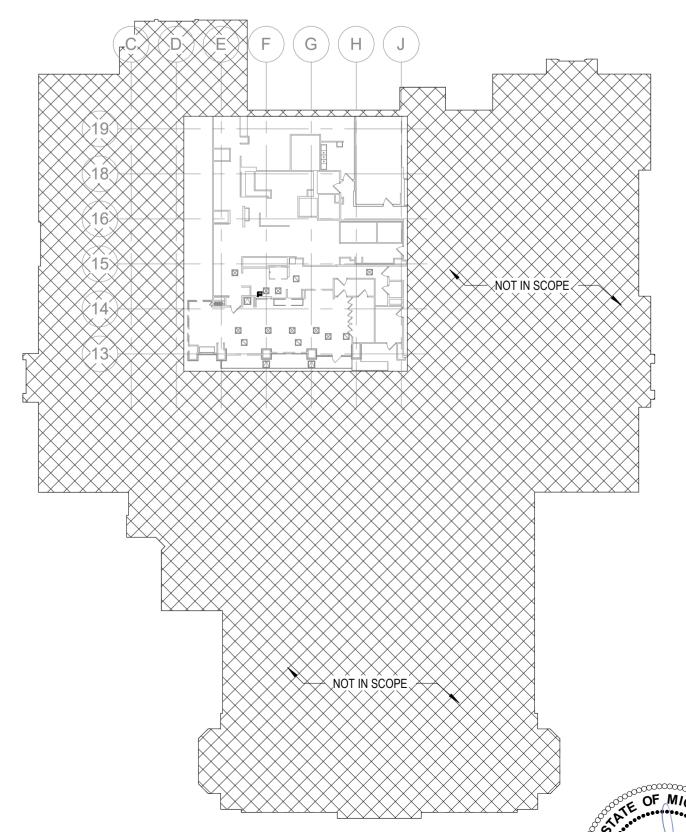
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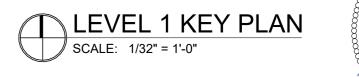


- 2 RE-INSTALLED DEVICE. CONTRACTOR SHALL RELOCATE ASSOCIATED CONDUIT AND WIRE TO NEW



	ELECTRICAL KITC	HEN E	QUIPI	MENT	LIST	
TAG	EQUIPMENT DESCRIPTION	VOLTAGE	PHASE	AMPS	CIRCUIT	DEVICE
100	HOT FOOD DISPLAY	120V	1Ø	10.2A	LP-110A-5	Ф
101)	HOT FOOD DISPLAY	120V	1Ø	10.2A	LP-110A-17	Φ
102	PASTRY CASE	120V	1Ø	0.4A	LP-110A-37	Φ
103	REFRIGERATED MERCHANDISER	120V	1Ø	7.3A	LP-C-33	Φ
103	REFRIGERATED MERCHANDISER	120V	1Ø	7.3A	LP-C-35	Ф
104	BEVERAGE REFRIGERATOR	120V	1Ø	7.3A	LP-C-31	Ф
105	FREEZER	120V	1Ø	9.5A	LP-C-28	Ф
106	HEATED MERCHANDISER	120V	1Ø	4.4A	LP-110A-41	Ф
200	HOT FOOD WELL	120V	1Ø	5.8A	LP-C-36	Ф
200	HOT FOOD WELL	120V	1Ø	5.8A	LP-C-36	Φ
201)	RAPID COOK OVEN	208V	1Ø	30.0A	LP-110A-8,10	♀ 6-30R
203	SANDWICH PREP REFRIGERATOR	120V	1Ø	9.0A	LP-C-38	Φ
204)	PANINI PRESS	208V	1Ø	30.0A	LP-110A-22,24	♀ 6-30R
205	PREP REFRIGERATOR	120V	1Ø	3.0A	LP-C-38	Φ





MATRIXCONSULTING ENGINEERS, INC.

544 CHERBOURG DRIVE LANSING, MI 48917 MATRIX PROJECT: 24590.01 PHONE: 517.487.2511 FAX: 517.487.2544 WEB: www.matrixceinc.com

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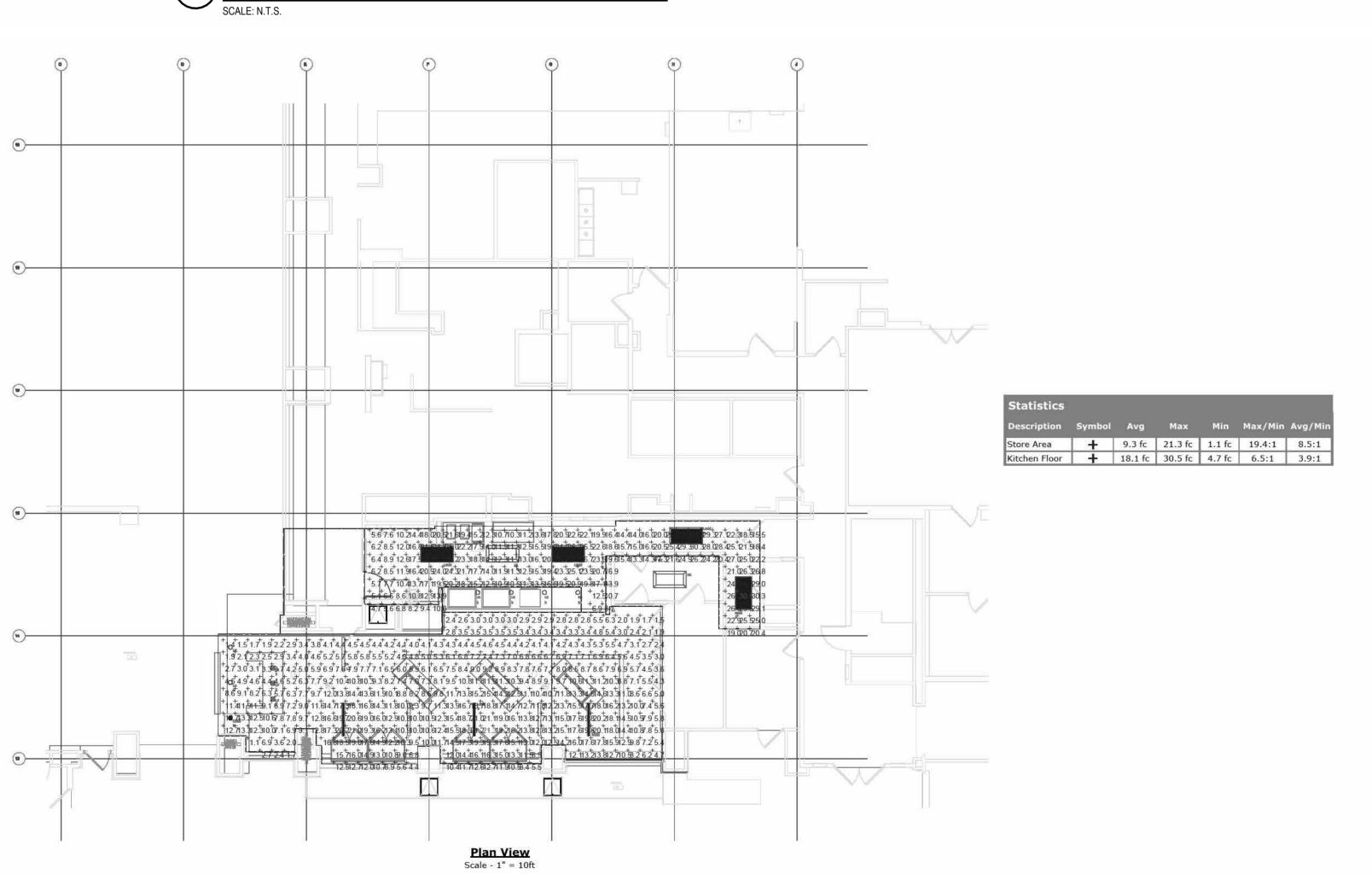
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LEVEL 1 PLAN - NEW POWER

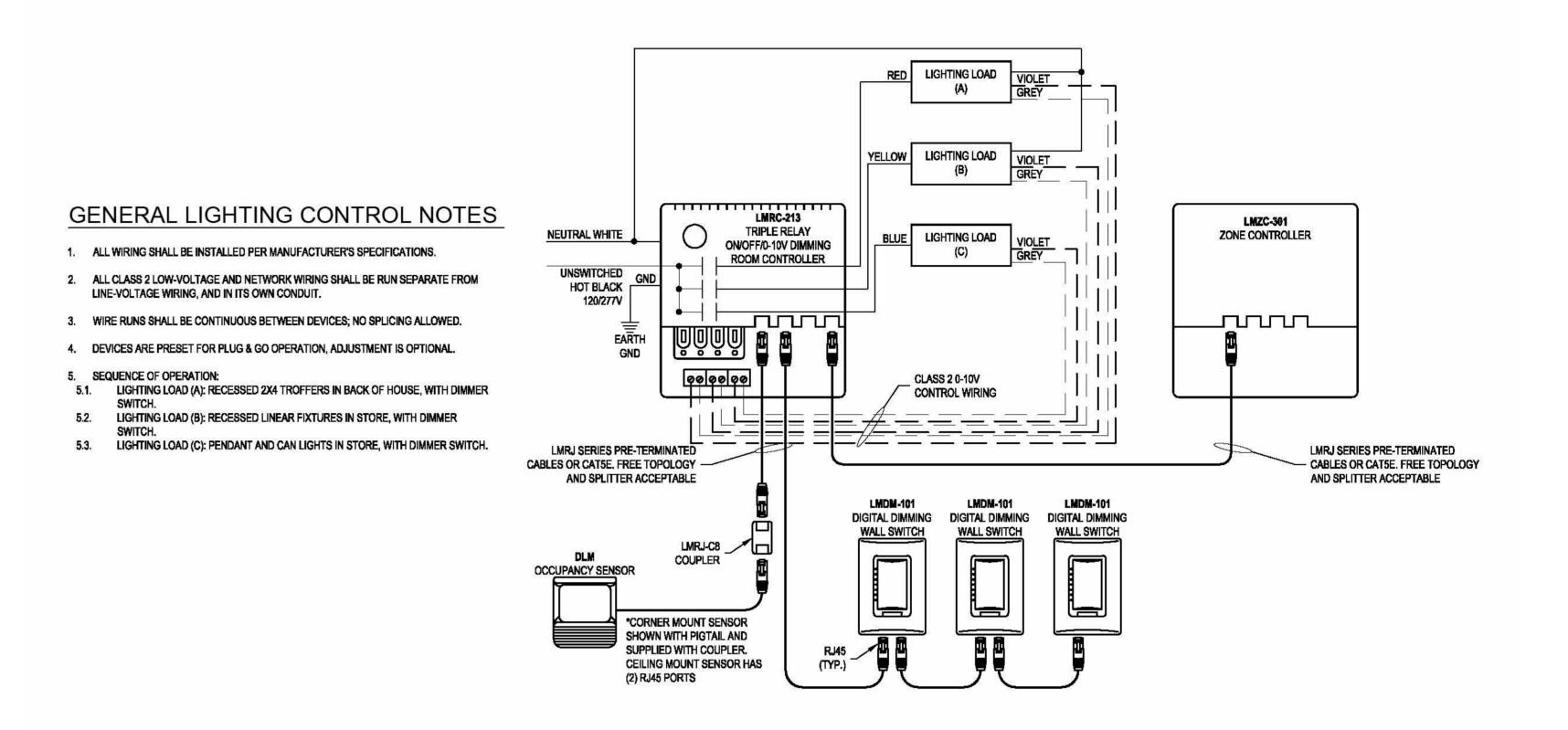


EMERGENCY LIGHTING PHOTOMETRICS
SCALE: N.T.S.

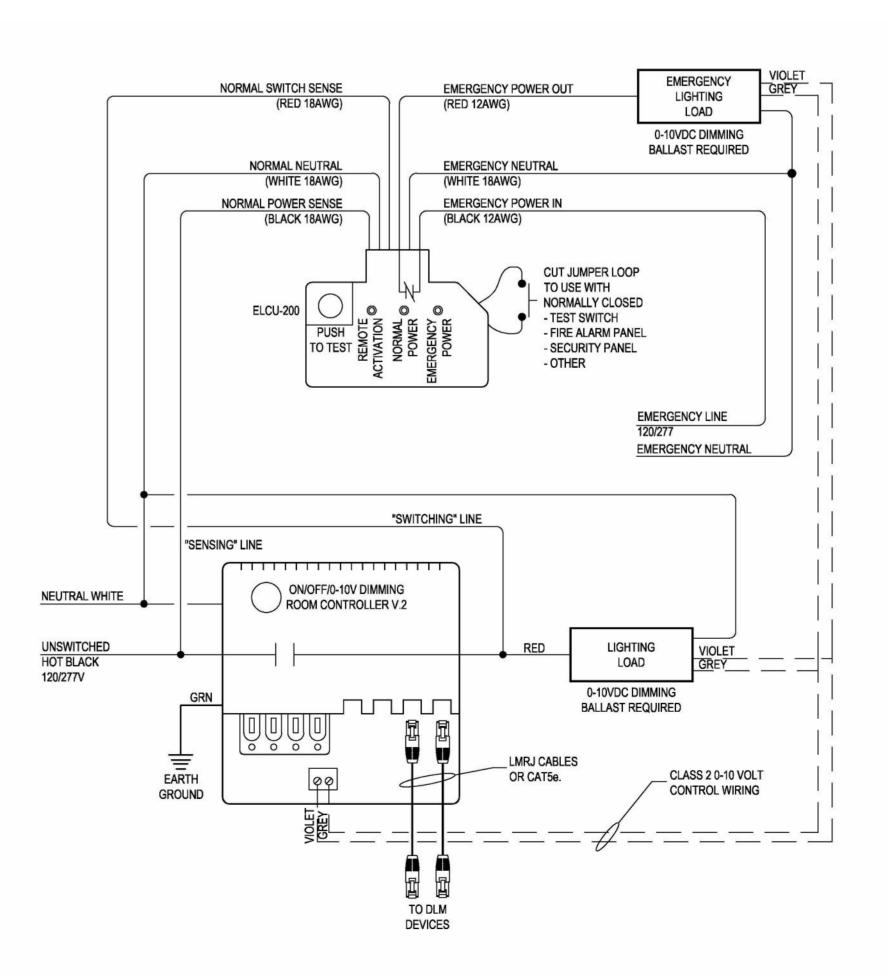


FAX: 517.487.2544 WEB: www.matrixceinc.com

	LIGHT FIXTU	JRE SCHEDULE	
ID	MANUFACTURER	DESCRIPTION	Model
LA	ARON	4' LED LINEAR RECESSED STRIP FIXTURE.	EDGET1-FF-RTB-4FA-850-B1-35K8-UNV-DM-W
LAEM	ARON	4' LED LINEAR RECESSED STRIP FIXTURE. CIRCUIT LIGHTING TO LIFE SAFETY SYSTEM. REFER TO DETAIL 4 ON SHEET E-800.	EDGET1-FF-RTB-4FA-850-B1-35K8-UNV-DM-W
LB	HE WILLIAMS	LED 2'X4' RECESSED WASHDOWN RATED FLAT PANEL.	50-G-S-2-4-L33-8-35-F-AF12125-DIM-UNV
LBEM	HE WILLIAMS	LED 2'X4' RECESSED WASHDOWN RATED FLAT PANEL. CIRCUIT LIGHTING TO LIFE SAFETY SYSTEM. REFER TO DETAIL 4 ON SHEET E-800.	50-G-S-2-4-L33-8-35-F-AF12125-DIM-UNV
LC	FINELITE	26'6"X10'2" LED LINEAR RECESSED STRIP FIXTURE. CIRCUIT LIGHTING TO LIFE SAFETY SYSTEM. REFER TO DETAIL 4 ON SHEET E-800.	HP-2-R-D-(26'6" & 10'2" W/ 90° CORNER)-S-940-F-DSO-96LG-120-SC-FC-10%-SW
LD	HE WILLIAMS	6" DOWNLIGHT, WHITE FLANGE	6DR-TR-L15/940-DIM-UNV-L-M-MWT
LDEM	HE WILLIAMS	6" DOWNLIGHT, WHITE FLANGE. CIRCUIT LIGHTING TO LIFE SAFETY SYSTEM. REFER TO DETAIL 4 ON SHEET E-800.	6DR-TR-L15/940-DIM-UNV-L-M-MWT
LE	HE WILLIAMS	4" SQUARE DOWNLIGHT, WHITE FLANGE	4DS-L15/940-DIM-UNV-L-M-MWT
LF	CAMMAN LIGHTING	LED SPHERE PENDANT.	P9346-12-40K-CLV-MV-WM



WATTSTOPPER LMRC-213 TRIPLE RELAY 0-10V DIMMING WIRING DIAGRAM SCALE: N.T.S.



GENERAL LIGHTING CONTROL NOTES

- PROVIDE AND INSTALL SEPARATE ELCU-200 EMERGENCY LIGHTING DEVICE PER LIGHTING ZONE.
- LIGHTING ZONE.

 2. SEQUENCE OF OPERATION:
 2.1. UPON THE LOSS OF NORMAL POWER, THE ELCU-200 WILL BYPASS THE ROOM

CONTROLLER AND FORCE THE EMERGENCY FIXTURES ON. THE ROOM

CONTROLLER WILL FORCE THE DIMMED EMERGENCY FIXTURE TO 100%. THE

WATTSTOPPER LMRC-213 EMERGENCY
BYPASS WIRING DIAGRAM
SCALE: N.T.S.



PRJ. MGR. T.Pacifico
ARCH. J.Kasdorf
MECH. R.Winkler
ELEC. G.Halsey
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ELECTRICAL DETAIL TEMPLATE

E-800

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	EX Panel: LP-1	10A												
Location: Supply From: Mounting: RECESSED Enclosure: TYPE 1 Series: PANELBOARD						hases: Wires:	3 4	120 Wy	e	A.I.C. Rating: 10kAIC Mains Type: MCB Mains Rating: 250 A Bus Rating: 250 A Neutral Buss: Yes				
Notes:						Lugs:					Gro	ound Buss: Yes		
CIRCUI	TS SHOWN WITH AN ASTERIC "*" IN	I THE DE	SCRIPT	ION SI	HALL B	E GFI I	I YPE C	IRCUII	BREA	KERS.				
СКТ	Circuit Description	Trip	Poles	,	A	В		С		Poles	Trip	Circuit F	Description	СК
1	Circuit Description KITCHEN LIGHTS	20	1	1.00	8.00					3	100		L LP 1HA	2
3	TRACK LIGHTS	20	1	1.00	0.00	0.50	8.00					174421		4
5	HOT FOOD DISPLAY*	20	1			0.00	0.00	1.22	8.00					6
7	MUH-EF-1	20	3	1.94	4.20			1.22	3.00	2	30	RAPID CO	OOK OVEN*	8
9					0	1.94	4.20							10
11						1.0.	0	1.94	1.00	1	20	REF PREP 1	TABLE ITEM 70	12
13	HOOD LIGHTS	20	1	0.50	2.50			1.0.		2	30		ESS ITEM 69	14
15	MUH-1/EF-1 CONTROLS	20	1			0.50	2.50							16
17	HOT FOOD DISPLAY*	20	1					1.22	2.50	2	30	FC	CU-1	18
19	SPARE	100	3	0.00	2.50									20
21						0.00	3.12			2	30	PANIN	I PRESS*	22
23						0.00		0.00	3.12					
25	SOUP WELLS ITEM 75	20	1	1.00	0.00					3	30	SF	SPARE	
27	POS ITEM 73	20	1			0.60	0.00							28
29	CONVECTION MICRO 65	40	2					3.30	0.00					30
31				3.30	1.00					1	20	LIGHTS RI	Л 117,118,119	32
33	SPARE	20	2			0.00	1.00			1	20		S RM 117	34
35								0.00	5.80	3	60	C	:U-1	36
37	PASTRY CASE*	20	1	0.05	5.80									38
39	LIGHTING CONTROL PANEL	20	1			0.18	5.80							40
41	HEATED MERCHANDISER*	20	1					0.53		1		SF	PACE	42
		Tota	l Load:	32	kW	28	kW	29	kW					
		Total	Amps:	26	5 A	230	6 A	239	9 A					
oad C	lassification	Con	nected	Load	Dem	nand Fa	actor	Estima	ated Do	emand		Panel	Totals	
Other			17844 V		_	100.00%			7844 V					
										-		Total Load:	88.76 kW	
												Demand Load:	18.55 kW	
											(Connected Amps:	246 A	
												Demand Amps:	51 A	
Notes:														

EX Panel: LP-C Location: Supply From: Mounting: RECESSED Enclosure: TYPE 1 Series: PANELBOARD Notes: CIRCUITS SHOWN WITH AN ASTERIC "*" IN THE DESCRIF					b-Feed	hases: Wires: Lugs:	3 4 No	120 Wy		.VEDS	Ma Ma B Ne	I.C. Rating: 10kAl0 Mains Type: MCB nins Rating: 100 A Bus Rating: 100 A eutral Buss: Yes ound Buss: Yes		
Oil Coc	THE CHEWIN WITH AN ACTERIO IN				4		В			INC.				
CKT	Circuit Description LIGHTS C STORE	Trip	Poles							Poles	Trip	Circuit D	escription	СКТ
1		20	1	1.00	1.00					1	20		11B,116A,116	2
3	SODA DISPENSER ITEM 120	20	1			0.80	1.92			1	20		NE ITEM 117	6
5	POP CORN EX HOOD	20	1					1.00	0.60	1	20	POS ITEM 136		
7	POS ITEM 136A	20	1	0.60	1.00					1	30	POPCORN MACHINE ITEM 132		8
9	REACH IN REF ITEM 95	20	1			1.92	0.50			1	20	RCPT		1
11	REACH IN REF ITEM 96	20	1					1.92	0.54	1	20	MONITOR RECEPTACLES		1:
13	EX COOLER	20	2	1.66	0.00					1	20	SPARE		1
15						1.66	0.00			1	20	SPARE		1
17	EX COOLER LIGHTS	20	1					0.30	0.60	1	20	WALK-IN COOLER LIGHTS, ALARM		1
19	FCU-5	20	2	1.66	0.60					1	20	WALK-IN COOLER DISPLAY DOOR		2
21						1.66	0.50			1	20	RCPT RM 116		2
23	COILING DOOR WEST	20	1					1.92	1.92	1	20	COILING DOOR EAST		24
25	SPARE	20	1	0.00	1.92					1	20	WALK-IN COOLER EVAPORATOR		2
27	SPARE	20	1			0.00	1.14			1	20	FREEZER*		2
29	COUNTER MONITOR AND PRINTER	20	1					0.18	0.30	1	20	TV MONITOR		3
31	BEVERAGE REFRIGERATOR*	20	1	0.88	0.50					1	20	DESK RCPT RM 116A		32
33	REFRIGERATED MERCHANDISER*	20	1			0.88	0.50			1	20	DESK RCPT RM 116A		34
35	REFRIGERATED MERCHANDISER*	20	1					0.88	0.70	1	20	HOT FOOD WELLS*		
37	SPARE	20	3	0.00	1.44		4.00			1	20	PREP REFRIGERATORS*		38
39						0.00	1.08	0.00	0.00	1	20		N RECEPTACLES	40
41		 T-4-		40	LAAZ	40	1-10/	0.00		1	20	SP	ARE	42
			al Load: I Amps:		kW 4 A		kW 6 A		kW A					
Load (Classification	Con	nected	Load	Den	nand Fa	actor	Estimated Do		emand		Panel	Totals	
Other		301	7008 V			100.009			7008 V			1 41101		
201				-				<u> </u>	230 11	-		Total Load:	35.66 kW	
												Demand Load:		
												Connected Amps:	99 A	
												Demand Amps:	22 A	
												•		



Infrastructure Planning and Facilities

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ELECTRICAL SCHEDULES E-900

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