savers™

LEE'S SUMMIT, MISSOURI

APPLICABLE CODES

BUILDING:	2018 INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS
PLUMBING:	2018 INTERNATIONAL PLUMBING CODE W/ LOCAL AMENDMENTS
MECHANICAL:	2018 INTERNATIONAL MECHANICAL CODE W/ LOCAL AMENDMENTS
ELECTRICAL:	2017 NATIONAL ELECTRICAL CODE W/ LOCAL AMENDMENTS
STRUCTURAL:	2018 INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS
ACCESSIBILITY:	2009 ICC A117.1 CHAPTER 11 OF IBC
FIRE:	2018 INTERNATIONAL FIRE CODE W/ LOCAL AMENDMENTS

USE GROUP (SECTION 309)

M (MERCANTILE) - SECTION 309.1

CONSTRUCTION TYPE (SECTION 602.2)

II-B (UNPROTECTED, SPRINKLERED) - TABLE 601

OCCUPANT LOAD (TABLE 1004.5)

USE GROUP	AREA	FLOOR AREA PER OCCUPANT (S.F) (TABLE 1004.5)	MAXIMUM TRAVEL DISTANCE (TABLE 1017.2)		TOTAL OCCUPANT LOAD
MERCANTILE	29448 SQ. FT.	60 GROSS	200'		490 OCC.
STORAGE, STOCK, SHIPPING AREAS	6497 SQ. FT.	300 GROSS	200'		21 OCC.
OFFICE AREAS	1473 SQ. FT.	150 GROSS	200'		10 OCC.
TOTAL	37417 SQ. FT.				521 OCC. TOTAL

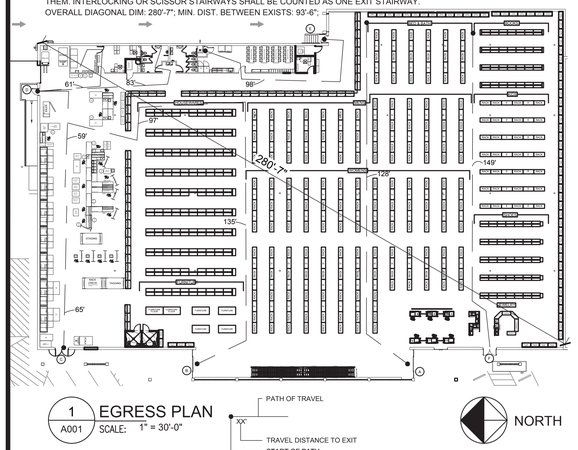
EGRESS PROVIDED (TABLE 1005.3.2)

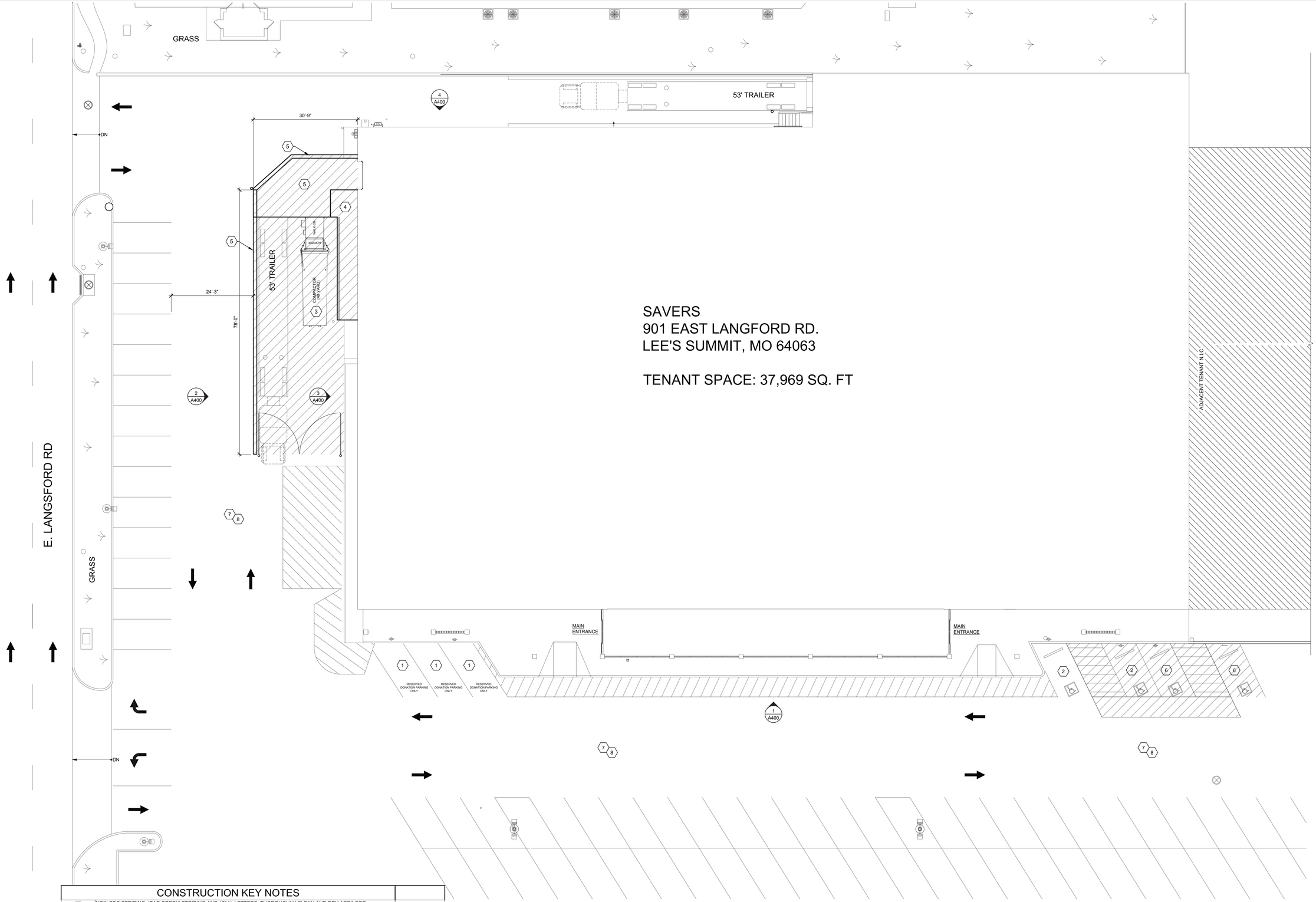
521 TOTAL OCCUPANTS x 0.2 = 104.2" TOTAL REQUIRED EGRESS WIDTH

EXIT DESIGNATION	DOOR (.2 IN PER OCCUPANT)			STAIR (.3 IN PER OCCUPANT)		MOST STRINGENT
	SIZE	EGRESS WIDTH	OCCUPANT LOAD	EGRESS WIDTH	OCCUPANT LOAD	OCCUPANT LOAD
A	7'-2"	76"	521 OCC.	---	---	521 OCC.
B	7'-2"	76"	521 OCC.	---	---	521 OCC.
C	6'-0"	68"	521 OCC.	---	---	521 OCC.
D	3'-0"	34"	31 OCC.	---	---	31 OCC.
E	3'-0"	34"	31 OCC.	---	---	31 OCC.
F	6'-0"	68"	521 OCC.	---	---	521 OCC.
		374" TOTAL EGRESS WIDTH PROVIDED				2,652 OCC.

EXIT SEPARATION

1007.1.1: WHERE TWO EXITS, EXIT ACCESS DOORWAYS, EXIT ACCESS STAIRWAYS OR RAMPS, OR ANY COMBINATION THEREOF, ARE REQUIRED FROM ANY PORTION OF THE EXIT ACCESS, THEY SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE-THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED MEASURED IN A STRAIGHT LINE BETWEEN THEM. INTERLOCKING OR SCISSOR STAIRWAYS SHALL BE COUNTED AS ONE EXIT STAIRWAY.
OVERALL DIAGONAL DIM: 280'-7"; MIN. DIST. BETWEEN EXISTS: 93'-4"


280'-7"
93'
187'
61'
59'
57'
149'
128'
135'
65'
EXIT
EXIT ONLY
ENTRANCE
ENTRANCE ONLY
VESTIBULE
MEN
WOMEN
OFFICE
STORAGE
SALES FLOOR
CHECK OUT
CHECK OUT
CHECK OUT



SAVERS
901 EAST LANGFORD RD.
LEE'S SUMMIT, MO 64063

TENANT SPACE: 37,969 SQ. FT

CONSTRUCTION KEY NOTES

1	NEW CDC STRIPING -'RAE GREEN' STRIPING AND 12" H. LETTERS. THOROUGHLY CLEAN AND DRY AREA FOR PREPARATION. APPLY FIRST COAT OF 'RAE GREEN' WATER BASED PAINT AND LET FULLY DRY. APPLY SECOND COAT. WHILE PAINT IS WET APPLY GLASS BEADS. USE BEAD DISPENSER FOR ALL LINES. FOR STENCILED ITEMS (ARROWS AND LETTERINGS) USE A HAND DELIVERY METHOD. ALLOW PAINT TO FULLY DRY AND BLOW AWAY EXCESS GLASS BEADS. DROP-ON GLASS BEADS ARE APPLIED AT THE RATE OF 3 TO 4 POUNDS PER 100 SQUARE FEET. - REFER TO OWNERS CONSTRUCTION MANUAL FOR SPECIFICATIONS, SEE 2/A002	
2	EXISTING ACCESSIBLE STALLS w/ PARKING SIGN TO REMAIN	
3	NEW COMPACTOR	
4	EXIST. CONCRETE LANDING & RAMP TO REMAIN. REPAIR AS NECESSARY.	
5	NEW CONCRETE LOADING DOCK & CMU SCREEN WALL ANCHOR TO EXIST. LANDING.SEE STRUCTURAL DRAWINGS	
6	RELOCATED ADA PARKING STALL, GC TO VERIFY ALL CONDITIONS ARE ADA COMPLIANT	
7	RE-PAINT FADED STRIPING IN ENTIRE PARKING LOT. EXTENTS TO BE DETERMINED BY CM.	
8	PATCH/REPAIR/SEAL CRACKS AND POTHOLES IN ASPHALT. SEAL ENTIRE PARKING LOT; CONC. AND ASPHALT	

1 / A002 ARCHITECTURAL SITE PLAN
SCALE: 3/32" = 1' 0"

NORTH

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER A-2025017570
2025.08.01 09:35:40-05'00'
ARCHITECT

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO	DATE	REMARKS
2	08.01.25	PLAN REVIEW COMMENTS
1	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 12.02.24

A002
ARCHITECTURAL SITE PLAN

CHECKED: JW DRAWN: HP

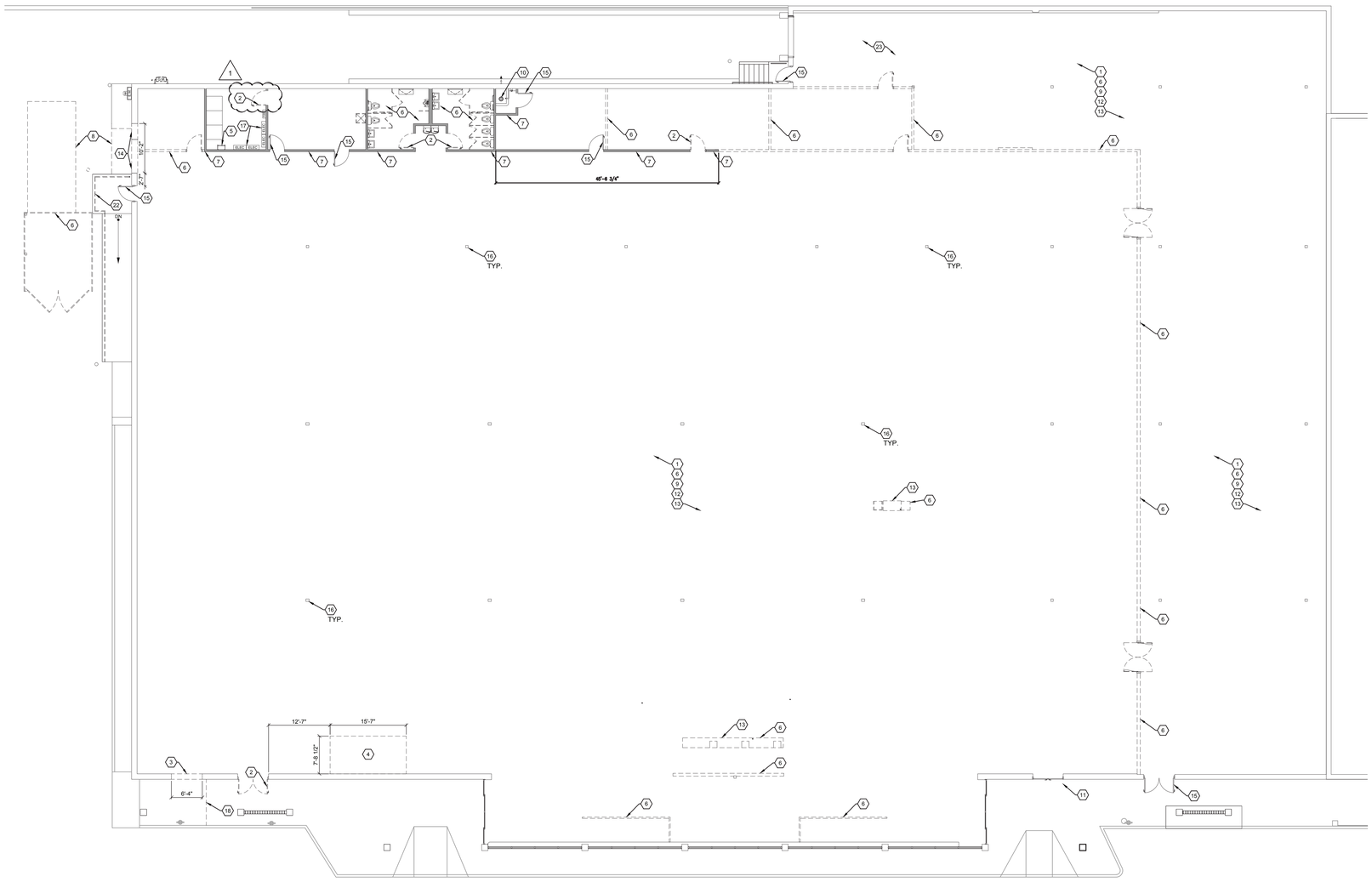
LEGEND

ITEM TO REMAIN

ITEM TO BE DEMOLISHED/REMOVED

DEMOLITION MECHANICAL AND PLUMBING NOTES

1. EXISTING THERMOSTATS TO REMAIN FOR USE WITH THE NEW FLOOR LAYOUT. SEE MECH FOR RELOCATION.
2. EXISTING SPRINKLER PIPING RISER AND ASSOCIATED PIPING TRIM/ACCESSORIES TO REMAIN. EXISTING SPRINKLER BACKFLOW DEVICES, PIV, AND FDC TO REMAIN.
3. EXISTING RTUS AND ASSOCIATED PIPING AND DUCTWORK TO REMAIN. EXISTING DROP BOX DIFFUSERS AND RETURNS TO REMAIN.
4. EXISTING ROOF DRAINAGE PIPING AND OVERFLOW PIPING TO REMAIN.
5. EXISTING DUCTWORK AND DIFFUSER/RETURN SERVING VESTIBULE TO REMAIN.
6. EXISTING GAS METER AND ALL GAS PIPING TO REMAIN.
7. EXISTING WATER SERVICE AND PIPING TO REMAIN INCLUDING THE METER AND BACKFLOW PREVENTER.
8. EXISTING LOADING AREA UNIT HEATERS AND ASSOCIATED GAS PIPING, FLUE VENT, AND THERMOSTATS TO REMAIN.
9. DEMOLISH EXISTING OFFICE AREA DUCTWORK AND DUCT ACCESSORIES.
10. DEMOLISH MAIN DUCT BRANCH SERVING FRONT AREA OFFICES. SEE MECH. FOR NEW BRANCH DUCT AT MAIN SUPPLY DROP AT THE RTU.
11. DEMOLISH EACH CEILING MOUNTED DIFFUSER AND RETURN SERVING EACH EXISTING AREA WITH A CEILING THAT IS TO BE DEMOLISHED..
12. DEMOLISH EACH SPRINKLER HEAD AND CAP EACH RELATED SPRINKLER BRANCH AT THE SPRINKLER MAIN FOR EACH AREA WITH A LAY-IN CEILING TO BE DEMOLISHED. RESTROOM AND SALES AREA SPRINKLER HEADS TO REMAIN.
13. REMOVE ALL EXISTING MECHANICAL, ELECTRICAL, AND PLUMBING FIXTURES, ACCESSORIES, AND CONDUIT NOT BEING USED IN NEW CONSTRUCTION.



1 A090 DEMOLITION FLOOR PLAN
SCALE: 3/32" = 1' 0"

NORTH

DEMOLITION KEY NOTES

1	REMOVE ALL NON CONCRETE MATERIAL (INCLUDING PAINT) FROM FLOOR. PATCH/REPAIR SLAB TO A SMOOTH AND LEVEL FINISH. SEE SLAB REPAIR SCHEDULE ON A100.	
2	REMOVE EXIST. DOOR AND ANY ASSOCIATED EXIT SIGNS	
3	REMOVE PORTION OF EXIST. WALL FOR NEW DOOR. SEE DOOR SCHEDULE AND STRUCTURAL	
4	REMOVE PORTION OF SLAB FOR NEW TOILETS. COORD. W/A100 AND PLUMBING DWGS.	30/A900
5	EXISTING ROOF LADDER TO BE REMAIN. REUSE ROOF HATCH,	
6	REMOVE EXISTING CONSTRUCTION & ABANDONED UTILITIES / DUCTS SHOWN DASHED AND ALL PREVIOUS TENANT FIXTURES AND CASHWRAPS	
7	EXISTING CONSTRUCTION TO REMAIN SHOWN SOLID.	
8	REMOVE PORTION OF EXISTING CONC. PAD SHOWN DASHED	
9	REMOVE CEILINGS, CEILING FURRING STRIPS, LIGHTS, DIFFUSERS, DUCTWORK, CONDUIT, ETC ABOVE ROOMS TO BE DEMOLISHED.	
10	EXISTING FIRE SPRINKLER RISER ASSEMBLY TO REMAIN.	
11	EXISTING DOOR TO BE ABANDONED. WELD IN CLOSE POSITION. CAULK PERIMETER OF OPENING AND ENSURE WATER-TIGHTNESS	
12	REMOVE ANY BLOCKING OR FINISHES FROM GYP. BD WALLS. SAND/PATCH/REPAIR REMAINING WALLS TO A LEVEL 4 FINISH, TYP.	
13	REMOVE ALL FLOOR OUTLETS, FLOOR DRAINS, ELECTRICAL CHASES, RAISED CURBS, RAISED/SLOPED SLABS BLTS, SCREWS, ETC. NOT RESUED IN NEW CONSTRUCTION. PROPERLY ABANDON AND STRUCTURALLY FILL ALL FLOOR PENETRATIONS, PATCH/REPAIR CONC. SLAB TO A SMOOTH AND LEVEL FINISH.	
14	REMOVE EXISTING DOOR, EXPAND OPENING TO ACCOMMODATE NEW O.H. DOOR, INFILL EXISTING OPENING. SEE STRUCTURAL.	
15	REMOVE EXISTING DOOR HARDWARE AND REPAIR DOOR AS REQ'D FOR NEW HARDWARE. DOOR TO REMAIN. SEE A900 FOR NEW HARDWARE INFO.	
16	REMOVE ANY EXISTING CONSTRUCTION ATTACHED TO COLUMNS NOT RESUED IN NEW CONSTRUCTION.	
17	SEE ELECT. DRAWINGS FOR ELECT. PANELS SCOPE.	
18	SAW CUT SIDEWALK FOR AIRBELL INSTALLATION	19/ A900
19	REMOVE PORTION OF EXISTING CONC. SLAB SHOWN DASHED. FOR NEW CONC. SLAB SEE A100	
20	NOT USED ENTIRE PROPERTY	
21	NOT USED	
22	REMOVE RAILING & REPLACE WITH NEW RAILING SEE 28/A900	
23	CUT & REPLACE APPROX. 1,500 S.F. OF THE EXISTING SLAB, COORD. w/ SAVERS C.M.	

DEMOLITION GENERAL NOTES

1. ALL DEMOLITION WORK SHALL BE COMPLETED IN STRICT ACCORDANCE WITH ALL APPLICABLE ORDINANCES AND CODES OF NORTH OLMSTEAD, OH, ALL LIFE-SAFETY CODES AND WITH ALL INDUSTRY STANDARDS PERTAINING TO THIS TYPE OF WORK.
2. DEMOLITION SHALL BE PERFORMED BY A LICENSED AND INSURED COMPANY SPECIALIZING IN THIS TYPE OF WORK. CONTRACTOR SHALL PROVIDE EVIDENCE OF ALL REQUIRED FORMS OF INSURANCE AND LICENSES TO THE OWNER AND THE ARCHITECT PRIOR TO THE START OF ANY WORK. THE CONTRACTORS STAFF RESPONSIBLE FOR DEMOLITION SHALL BE EXPERIENCED IN THIS TYPE OF WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ARCHITECT, IN WRITING, OF ALL SUBCONTRACTORS THAT HE HAS RETAINED AND PROVIDE EVIDENCE OF THE REQUIRED FORMS OF INSURANCE AND LICENSES. ALL EQUIPMENT USED FOR THE DEMOLITION PHASE SHALL BE OF A SUITABLE TYPE, IN GOOD WORKING CONDITION, AND OPERATED BY SKILLED MECHANICS.
3. THE CONTRACTOR SHALL INSPECT THE BUILDING PRIOR TO THE START OF ANY WORK, SHALL FIELD VERIFY ALL OF THE EXISTING CONDITIONS AND SHALL PROVIDE MARKED UP DRAWINGS TO THE ARCHITECT DEPICTING DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS. THE LOCATIONS OF EXISTING CONDITIONS SHOWN ON THE DEMOLITION PLANS IS TO BE CONSIDERED AS APPROXIMATE. DEMOLITION CONTRACTOR SHALL REPORT ALL DISCREPANCIES TO THE ARCHITECT, IN WRITING, PRIOR TO THE START OF ANY DEMOLITION, OR BE RESPONSIBLE FOR SAME.
4. THE DEMOLITION PLAN INDICATES THOSE IMPROVEMENTS ON THE SUBJECT PROPERTY WHICH ARE TO BE REMOVED IN THEIR ENTIRETY. THE DRAWINGS ARE TO BE USED AS A GUIDE TO ASSIST THE CONTRACTOR IN THE DEMOLITION PROCESS IN ADVANCE OF THE PERMANENT IMPROVEMENTS TO SERVE THE PROPOSED REMODEL. THE PLANS ARE NOT MEANT TO INCLUDE DETAILED SPECIFICATIONS AND/OR REQUIREMENTS FOR THE REMOVAL AND/OR DISPOSAL OF THE EXISTING BUILDING MATERIALS. MEANS AND METHODS ARE THE SOLE RESPONSIBILITY OF THE DEMOLITION CONTRACTOR, WHO, IN THE PERFORMANCE OF THE WORK, MUST FOLLOW ALL FEDERAL, STATE, COUNTY, AND LOCAL REQUIREMENTS FOR THE OPERATIONS AS SPECIFIED AND OUTLINED ON THE DEMOLITION PLANS.
5. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY THE OWNER. HAZARDOUS MATERIALS WILL BE REMOVED UNDER A SEPARATE CONTRACT AS DIRECTED BY THE OWNER.
6. SALVAGE SHALL BECOME THE PROPERTY OF THE DEMOLITION CONTRACTOR, UNLESS OTHERWISE NOTED IN THE PLANS, AND THE VALUE OF WHICH SHALL BE TAKEN INTO CONSIDERATION AT THE TIME OF ESTABLISHING THE BID. PROMPTLY REMOVE ALL SALVAGED MATERIAL FROM THE CONSTRUCTION SITE AS THE WORK PROCEEDS.
7. THE SCHEDULE FOR THE DEMOLITION PHASE SHALL BE COORDINATED WITH THE OWNER PRIOR TO THE START OF ANY DEMOLITION WORK. SUBMIT WRITTEN COPIES OF THE APPROVED SCHEDULE TO THE OWNER AND THE ARCHITECT FOR THEIR REVIEW AND APPROVAL WITHIN 5 WORKING DAYS OF THE EXECUTION OF THE CONTRACT FOR THIS PHASE OF THE WORK.
8. THE STAGING AREAS INSIDE OR OUTSIDE THE BUILDING SHALL BE COORDINATED WITH THE OWNER. PROPER CARE AND SAFETY PRECAUTIONS SHALL BE UTILIZED IN SETTING UP THIS AREA. THE AREA SHALL BE FULLY SECURED AND SHALL BE WELL LIT TO DETER THEFT, VANDALISM AND OTHER MALICIOUS ACTS. SAFETY PRECAUTIONS, IN ACCORDANCE WITH INDUSTRY STANDARDS, SHALL BE MAINTAINED AT ALL TIMES.
9. THE DEMOLITION CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES AND THE PUBLIC FROM DAMAGE OR INJURY AT ALL TIMES DURING THE DEMOLITION PHASE. ALL EXISTING EXIT WAYS SHALL BE MAINTAINED AT ALL TIMES. THE INTEGRITY OF THE EXISTING EXIT WAYS, IE. FIRE RATINGS, EXIT WIDTHS, ETC. SHALL NOT BE COMPROMISED AT ANY TIME DURING THE DEMOLITION OPERATIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE ADJACENT STRUCTURES, APPURTENANCES AND CONSTRUCTION THAT ARE TO REMAIN, AND REPAIR ALL AREAS DAMAGED DURING THE DEMOLITION PROCESS TO MATCH THE ADJACENT SURFACES. ALL AREAS ACCESSIBLE TO THE PUBLIC SHALL BE RESTORED TO A BROOM CLEAN CONDITION AT THE END OF EACH WORK DAY. ANY DAMAGE TO EXISTING CONDITIONS THAT ARE TO REMAIN SHALL BE REPAIRED AT NO COST TO THE OWNER AND WITHOUT DELAY TO THE SCHEDULE.
11. IN THE PROCESS OF REMOVING THE EXISTING WALLS, AND FLOOR CONSTRUCTION, THE DEMOLITION CONTRACTOR SHALL, AT ALL TIMES, PROTECT FROM DAMAGE ALL ROOF JOISTS, BEAMS, ROOF DECKING, FLOOR JOISTS, FLOOR DECKING, SLABS AND ANY RELATED COLUMNS THAT ARE REQUIRED TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE BUILDING AND THAT ARE TO REMAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL OF THE NECESSARY BRACING, SHORING AND SUPPORT REQUIRED TO MAINTAIN THE SAFETY AND INTEGRITY OF THE EXISTING STRUCTURE, FOR AS LONG AS REQUIRED BY THE GENERAL CONTRACTOR TO WHOM THIS CONTRACT MAY BE SUBORDINATED OR ASSIGNED TO.
12. ALL SAW CUTTING OF FLOORS, WALLS, ETC TO BE PROPERLY MARKED AND CUT TO AVOID ANY SPALLED OR UNEVEN EDGES.
13. PRIOR TO THE CUTTING AND/OR REMOVING OF ANY UTILITY LINES (IE., ELECTRICAL, MECHANICAL, PLUMBING, TELEPHONE, GAS, FIRE SPRINKLER, ETC) THE DEMOLITION CONTRACTOR MUST VERIFY THE LOCATION AND SCOPE OF THE UTILITY LINES AND RELOCATE THE SAME. SEE ELECTRICAL, MECHANICAL, PLUMBING AND FIRE SPRINKLER DRAWINGS FOR MORE INFORMATION. THE CONTRACTOR SHALL PROPERLY NOTIFY THE OWNER AND A MINIMUM OF 48 HOURS IN ADVANCE BEFORE PROCEEDING WITH ANY WORK ON THE UTILITY LINES.
14. REMOVE EXISTING CONCRETE SLAB AND FOUNDATIONS AS INDICATED ON THE FLOOR PLAN. PROVIDE SHORING DURING DEMOLITION AND BUILDING CONSTRUCTION AT AREAS WHERE EXISTING RETAINING WALLS ARE TO BE REMOVED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY AND ALL HOLES, OBSTRUCTIONS, ETC. CREATED IN THE EXISTING WALLS THAT ARE TO REMAIN DURING THE DEMOLITION PROCESS. ANY FIRE STOPPING REMOVED SHALL BE PROPERLY REPLACED. ALL FIRE RATED WALLS TO MEET RATING REQUIREMENTS.
16. CONTRACTOR SHALL REMOVE ALL TRIM, FIXTURES, FURNISHINGS, DISPLAYS, POD ROOMS, MILLWORK AND MISCELLANEOUS ITEMS WITHIN THE SPACE THAT ARE NOT SHOWN TO REMAIN (SEE THE PROPOSED FLOOR PLAN).
17. SEE ELECTRICAL DRAWINGS PRIOR TO REMOVAL OF WIRING DEVICES, LIGHT FIXTURES, CONDUIT AND WIRE, AS NOTED.
18. ALL DEMOLITION WORK RELATING TO ELECTRICAL, TELEPHONE & FIRE ALARM SHALL BE PERFORMED ONLY BY A LICENSED ELECTRICAL CONTRACTOR, AND IN STRICT CONFORMANCE WITH THE LATEST EDITION OF THE NEC AND ANY LOCAL AMENDMENTS.
19. REMOVE EXISTING BUILDING AND DIRECTIONAL SIGNAGE. REPAIR SURFACE FROM REMOVAL AND PAINT TO MATCH EXISTING.
20. REMOVE ALL OUTLETS THROUGHOUT THAT ARE NOT SHOWN TO BE REUSED. REMOVE TO DECK AND PATCH GYP. BD. AS REQUIRED.
21. ALL EXIST. DATA, VOICE, SECURITY AND VIDEO CABLING, SPEAKERS AND CAMERA/CAMERA PODS TO BE REMOVED COMPLETELY.
22. PROVIDE NEW TEMPORARY ENCLOSURES AT OPENINGS IN BUILDING WALLS EXPOSED BY DEMOLITION. TEMPORARY ENCLOSURES SHALL BE CONSTRUCTED OF 2 X 4 FIRE RETARDANT TREATED WOOD STUDS AT 16" O.C. WITH 1/2" CDX PLYWOOD EACH SIDE OF STUD WALL. FIT ENCLOSURE TO EXISTING OPENING AND SEAL WITH SEALANT AROUND PERIMETER OF ENCLOSURE.
23. GENERAL CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF DEMOLISHED MATERIALS.
24. CONTRACTOR SHALL PROVIDE TEMPORARY RAILING/BARRICADE @ ALL SLAB OPENINGS. BARRICADES SHALL MEET OR EXCEED OSHA REQUIREMENTS.
25. FOR THE PROTECTION OF THE PUBLIC, CONTRACTOR SHALL PROVIDE BARRICADES, PLASTIC SHEETS, ETC.
26. THE CONTRACTOR'S WORK SHALL BE COMPLETED IN A MANNER TO CREATE A MINIMAL AMOUNT OF DUST. ALL OPENINGS AND DUCTWORK LOCATED IN AREAS OF DEMOLITION SHALL BE PROPERLY SEALED OFF SO AS NOT TO PERMIT DUST TO INFILTRATE THE HVAC SYSTEM OR ADJACENT SPACES.
27. THE DEMOLITION CONTRACTOR SHALL VERIFY COMPLETE DEMOLITION CONDITIONS AND REPORT FINDINGS TO THE ARCHITECT BEFORE REMOVING HIS EQUIPMENT FROM THE PREMISES. THE CONTRACTOR SHALL TURN THE PREMISES OVER TO OWNER AT THE END OF THE DEMOLITION PHASE IN BROOM CLEAN CONDITION AND SHALL REMOVE ALL MATERIALS AND EQUIPMENT UTILIZED IN THE WORK.

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER
A-2025017570
2025.08.01 09:35:41-05'00'
ARCHITECT

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO.	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST, LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 01.29.24

A090

DEMOLITION FLOOR PLAN

CHECKED: JW DRAWN: HP

CONSTRUCTION KEY NOTES		
1	NEW CONCRETE LANDING, SEE STRUCTURAL DRAWINGS.	
2	NOT USED (MODULAR CHANGING ROOMS BY OWNER)	
3	NOT USED (EXISTING FURRING AT COLS. TO REMAIN. PATCH/REPAIR AS NEEDED. PAINT PER FINISH SCHED.)	
4	NOT USED (CONCRETE RAMP AND SIDEWALK. RAMP 1:12 MAX. SLOPE.)	
5	ELECT. PANELS/EQUIP., SEE ELEC. PLANS	
6	NOT USED (CLEAN, REPAIR AND CONFIRM FUNCTIONALITY OF ALL EXISTING DRAINS AND DRAIN LINES)	
7	NOT USED (CLEAN, REPAIR AND ENSURE FUNCTIONALITY OF EXISTING DOCK LEVELER)	
8	HIGH PALLET RACKING, SEE STRUCTURAL FOR FLOOR ANCHOR DETAILS.	
9	NOT USED (REPAINT FADED STRIPING IN ENTIRE PARKING LOT. EXTENTS TO BE DETERMINED BY CM.)	
10	NOT USED (PATCH REPAIR/SEAL CRACKS AND POTHOLES IN ASPHALT. SEAL ENTIRE PARKING LOT; CONC. AND ASPHALT)	
11	NOT USED (4" DIA., 42" H. BOLLARD, BOLT TO SLAB)	
12	NOT USED (RELOCATED ROOF LADDER AND NEW 30"X36" ROOF HATCH (IF REQUIRED))	
13	72" H. STAINLESS STEEL COL. WRAPS CONTACT: RETAIL SPECIALTY INC. 586-566-7716 OR RSICEO@YAHOO.COM	5/A100
14	NOT USED (IF ROOF DRAIN EXISTS ADJACENT TO COLUMN, FURR COL. AND DRAIN TIGHT. EXTEND TO DECK.)	
16	REPAIR ANY CRACKS, SPALLS OR DAMAGE TO THE SLAB, SEE SLAB REPAIR SCHEDULE BELOW. TYPICAL ENTIRE SPACE	
17	INSTALL WOOD BLOCKING FOR FIXTURES EXTENDING TO 6" FROM CORNERS AND DOOR FRAMES. TYPICAL ENTIRE SPACE	30/A100
18	REMOVE AND REPLACE EXISTING DOCK LEVELER, DOCK BUMPERS AND DOCK SEAL	
19	NOT USED (ALL EXTERIOR EXPOSED CONCRETE WALLS, STAIRS, CURBS, ETC. TO HAVE A SMOOTH FINISH WITH NO HOLES, SPALLS, OR AIR BUBBLES.)	
20	SAVERS VALUE VILLAGE IS RESPONSIBLE FOR INSTALLING ALL REATIL FIXTURES, FIXTURE SEPARATOR WALLS AND PALLET RACKING. THE GC IS RESPONSIBLE FOR INSTALLING OWNER-FURNISHED ANCHOR BOLTS FOR ALL FIXTURES AND RACKING. THE SAVERS VALUE VILLAGE CM SHALL PROVIDE THE GC w/ THE QUANTITY & TYPE OF ANCHOR BOLTS TO BE INSTALLED, INCLUDIGN ANY SPECIAL REQUIREMENTS - TYPICAL.	
21	NOT USED (GC TO ENSURE ALL EXPOSED CONCRETE TO BE SMOOTH FINISH WITH NO HOLES, SPALLS OR AIR BUBBLES.)	
22	BLOCK FOR PVM MONITOR MOUNTS - BLOCKING AND MOUNTS CENTERED ALONG SCO AISLES. MIN. BLOCKING SIZE, 12X12. WHERE PVM IS LOCATED ALONG A STOREFRONT PVM TO BE MOUNTED BY DROP OUTLET	
23	NOT USED (NEW 6'-0" HIGH CYCLONE FENCE w/ PRIVACY SLATS)	
24	NOT USED (PROVIDE NEW CONCRETE RAMP w/ 1:12 SLOPE)	
25	NOT USED (NEW CDC STRIPING -'RAE GREEN' STRIPING AND 12" H. LETTERS. THOROUGHLY CLEAN AND DRY AREA FOR PREPARATION. APPLY FIRST COAT OF 'RAE GREEN' WATER BASED PAINT AND LET FULLY DRY. APPLY SECOND COAT. WHILE PAINT IS WET APPLY GLASS BEADS. USE BEAD DISPENSER FOR ALL LINES. FOR STENCILED ITEMS (ARROWS AND LETTERINGS) USE A HAND DELIVERY METHOD. ALLOW PAINT TO FULLY DRY AND BLOW AWAY EXCESS GLASS BEADS. DROP-ON GLASS BEADS ARE APPLIED AT THE RATE OF 3 TO 4 POUNDS PER 100 SQUARE FEET. - REFER TO OWNERS CONSTRUCTION MANUAL FOR SPECIFICATIONS, SEE 2/A002)	
26	REPAIR ALL EXISTING GYPBOARD TO LEVEL 4 FINISH, ADD FURRING STRIPS FOR SAVERS FIXTURES	
27	GC TO FIELD VERIFY CONDITION OF EXISTING RAILING, COORD. REPLACEMENT w/ SAVERS CM	

FIRE EXTINGUISHER REQUIREMENTS FOR SIGNAGE:

1. EXTINGUISHERS MOUNTED ON COLUMNS: ULINE MODEL NO. S-19259 - PROJECTING SIGN - "FIRE EXTINGUISHER", 2-WAY
2. EXTINGUISHERS MOUNTED ON WALLS: ULINE MODEL NO. S-19260 - PROJECTING SIGN - "FIRE EXTINGUISHER", 3-WAY
3. FIRE EXTINGUISHERS SHALL BE EQUIPED w/ INSPECTION RECORD TAGS - ULINE MODEL# S-15615 OR SIMILIAR

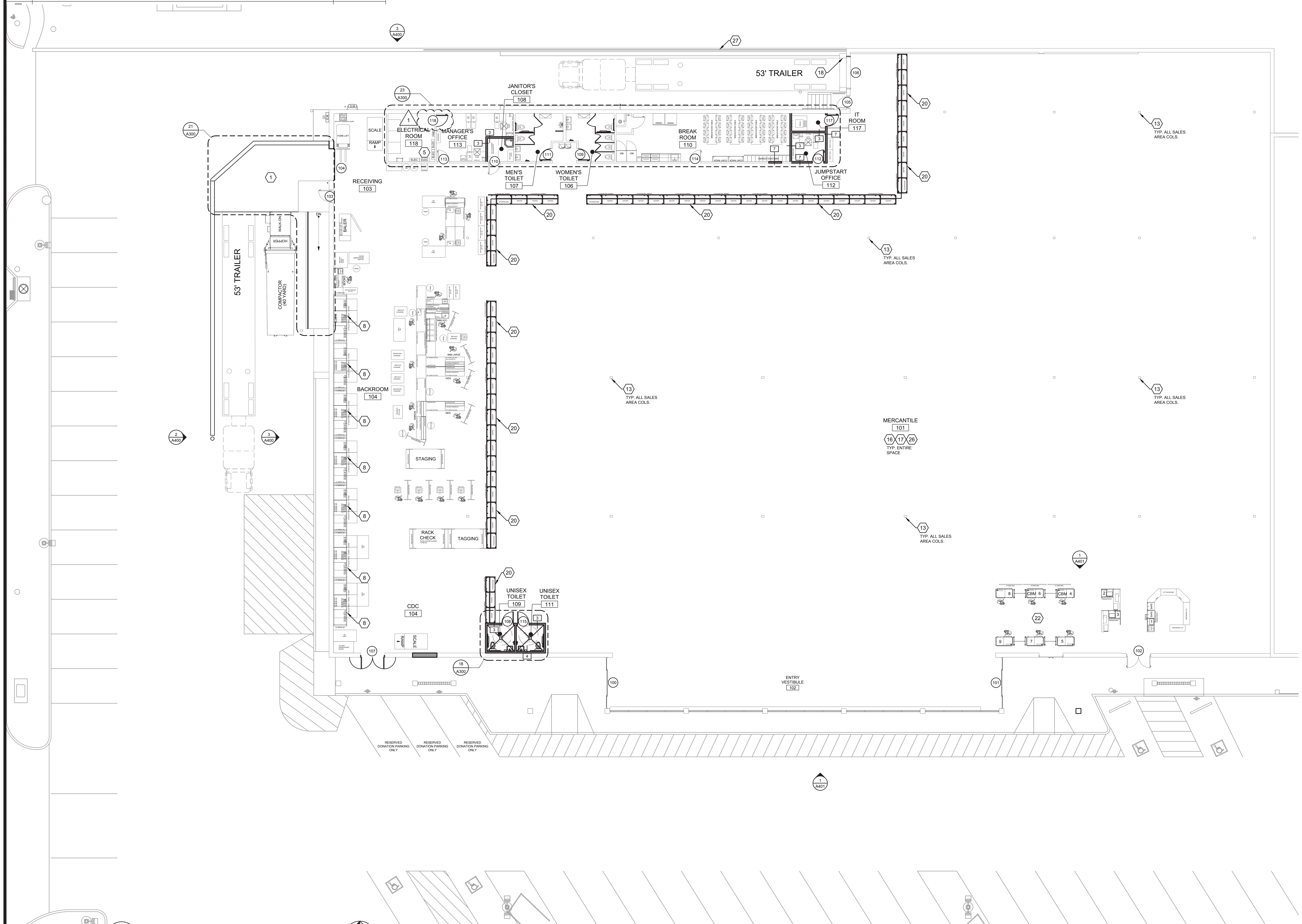
GENERAL NOTES

PROVIDE BLOCKING AS REQUIRED FOR ALL WALL MOUNTED FIXTURES, ACCESSORIES, AND EQUIPMENT.

SYMBOL LEGEND

X — PARTITION TYPE, SEE A901

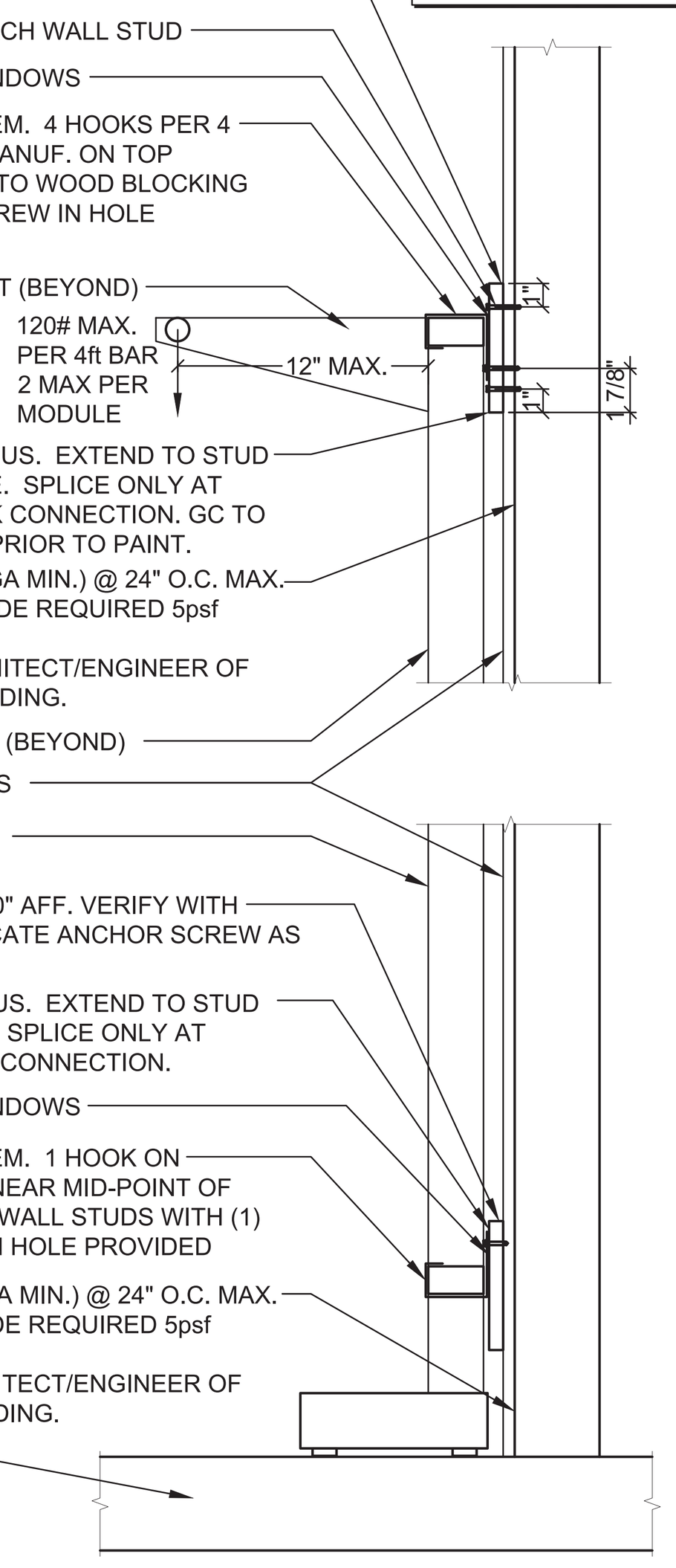
--- — DOOR NUMBER, SEE A900



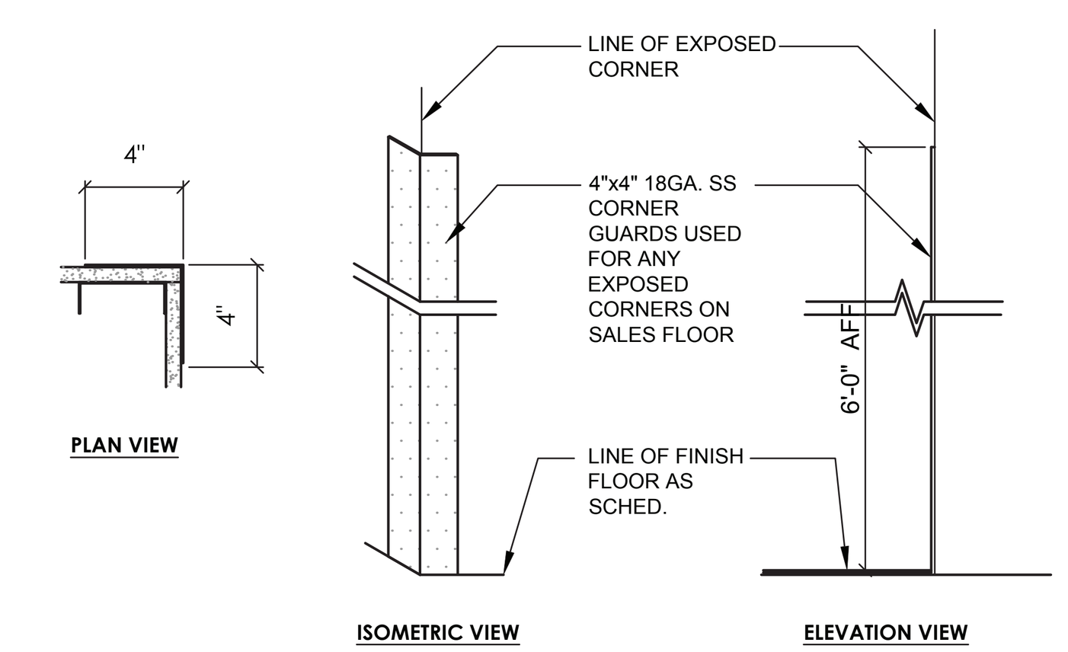
1 FLOOR PLAN
A100 SCALE: 3/32" = 1' 0"

NORTH

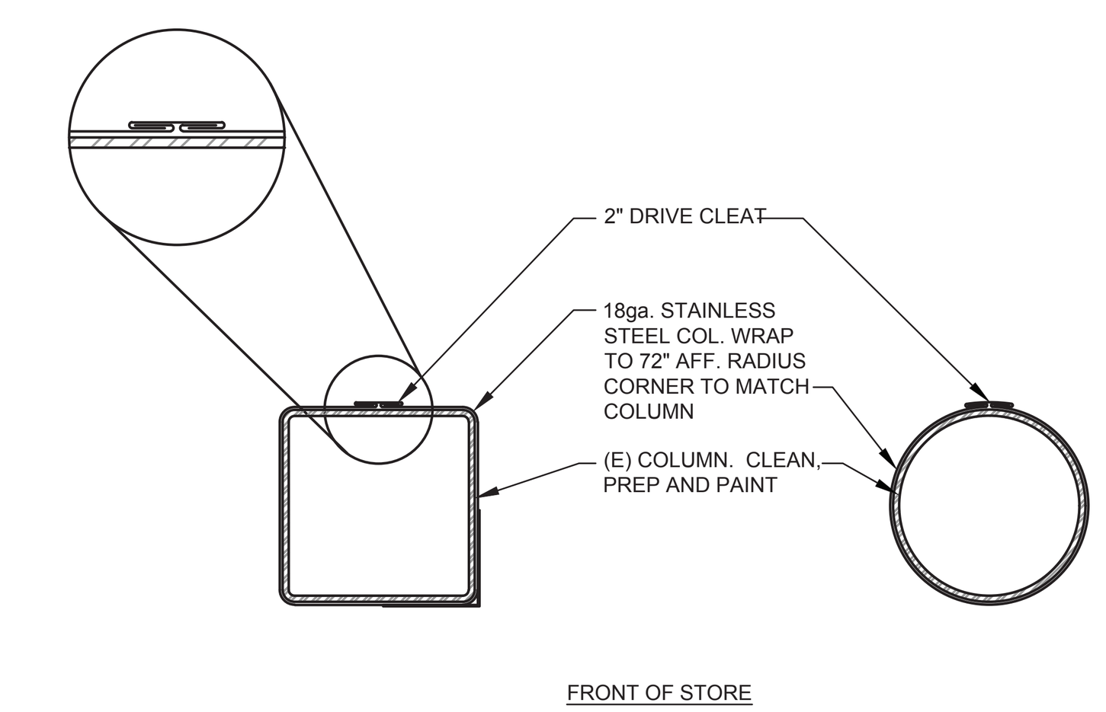
DESIGN IS BASED ON TVI WALL SYSTEMS DETAIL DRAWINGS PREPARED BY GRAND & BENEDICTS DATED 08/24/07



30 DETAIL - WALL FIXTURE ATTACHMENT - S
A100 SCALE: 1-1/2" = 1'-0"



6 DETAIL - CORNER GUARD
A100 SCALE: NOT TO SCALE



5 DETAIL - COLUMN WRAP
A100 SCALE: 1-1/2" = 1'-0"

RECOMMENDED SLAB REPAIR SCHEDULE		
NOTE	CRACK WIDTH	REPAIR MATERIAL
1	LESS THAN 1/4"	SIKADUR 55 SLV AFTER ROUTING CRACK
2	1/4" - 1/2" WIDE	SIKADUR 55 SLV W/OVEN DRIED COURSE SAND TO FILL WITHIN 1" FROM TOP OF SLAB.
3	1/2" - 7/8" WIDE	SIKAGROUT 212
4	SPALLS	SIKATOP 122 PLUS + SIKA ARMATEC 110 FOR EXPOSED REINF

NOTE:
REF. PRODUCT MANUFACTURER'S PROCEDURE FOR SURFACE PREPARATION, MIXING, AND APPLICATION FOR ALL PRODUCTS

LOADING DOCK EQUIPMENT LIST			
NOTE	ITEM	MANUFACTURER	MODEL
M-1	EDGE OF DOCK LEVELER	BEACON INDUSTRIES	BBLE-7220
M-2	MECHANICAL DOCK LEVELER	BEACON INDUSTRIES	BM36625
M-3	DOCK BUMPER	BEACON INDUSTRIES	BDBV-1136-4.5
M-4	DOCK SEAL	BEACON INDUSTRIES	B101-131-8X10-10-40
M-5	DOCK HOOD	BEACON INDUSTRIES	MH-10-18

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:
STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER A-2025017570
ARCHITECT
2025.08.01 09:35:42-05'00'

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

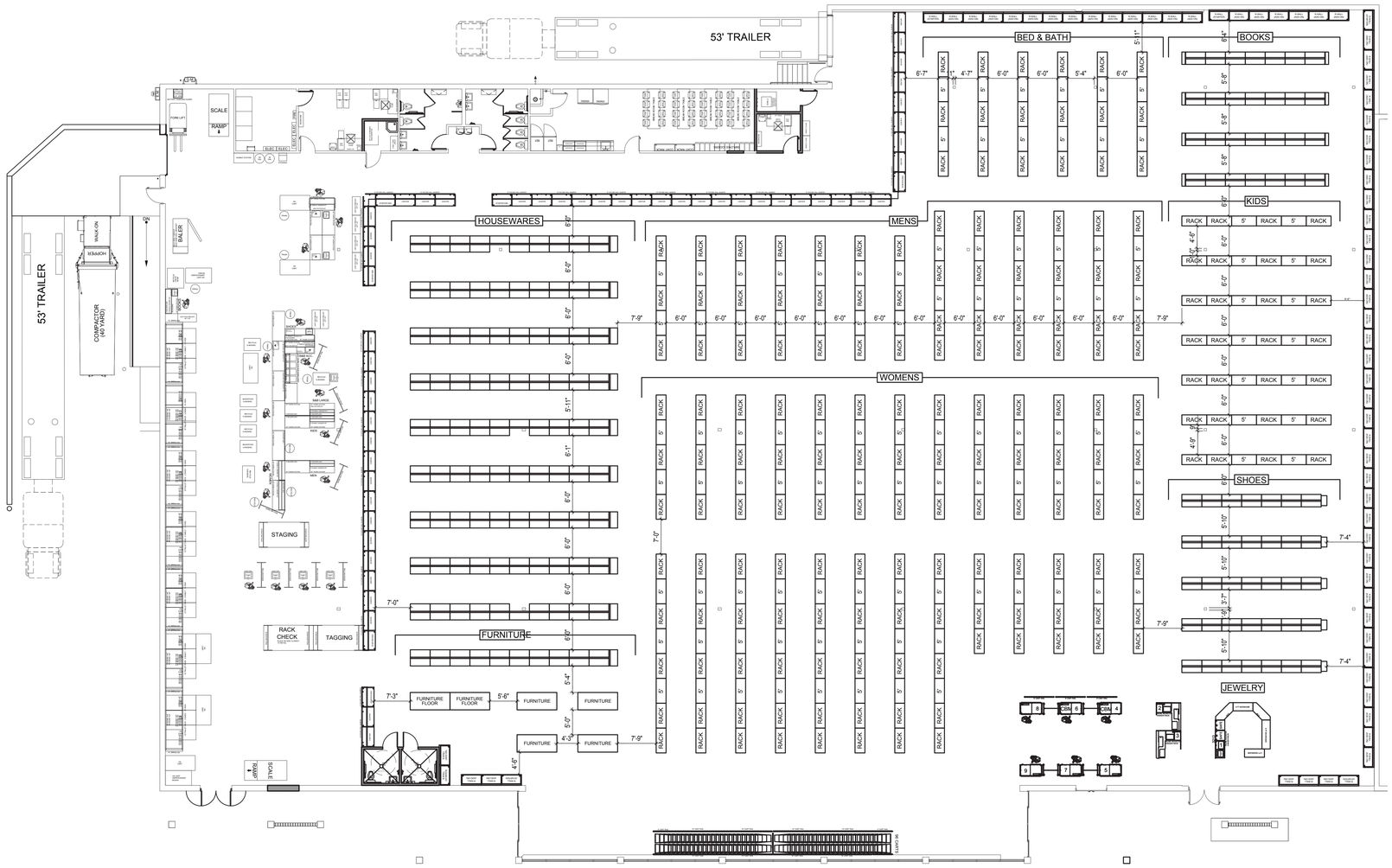
901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 01.29.24

A100

FLOOR PLAN

CHECKED: JW DRAWN: HP



1 A100 FIXTURE PLAN
SCALE: 3/32" = 1' 0"

NORTH

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER
A-2025017570
2025.08.01 09:35:42-05'00'
ARCHITECT

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.08.25

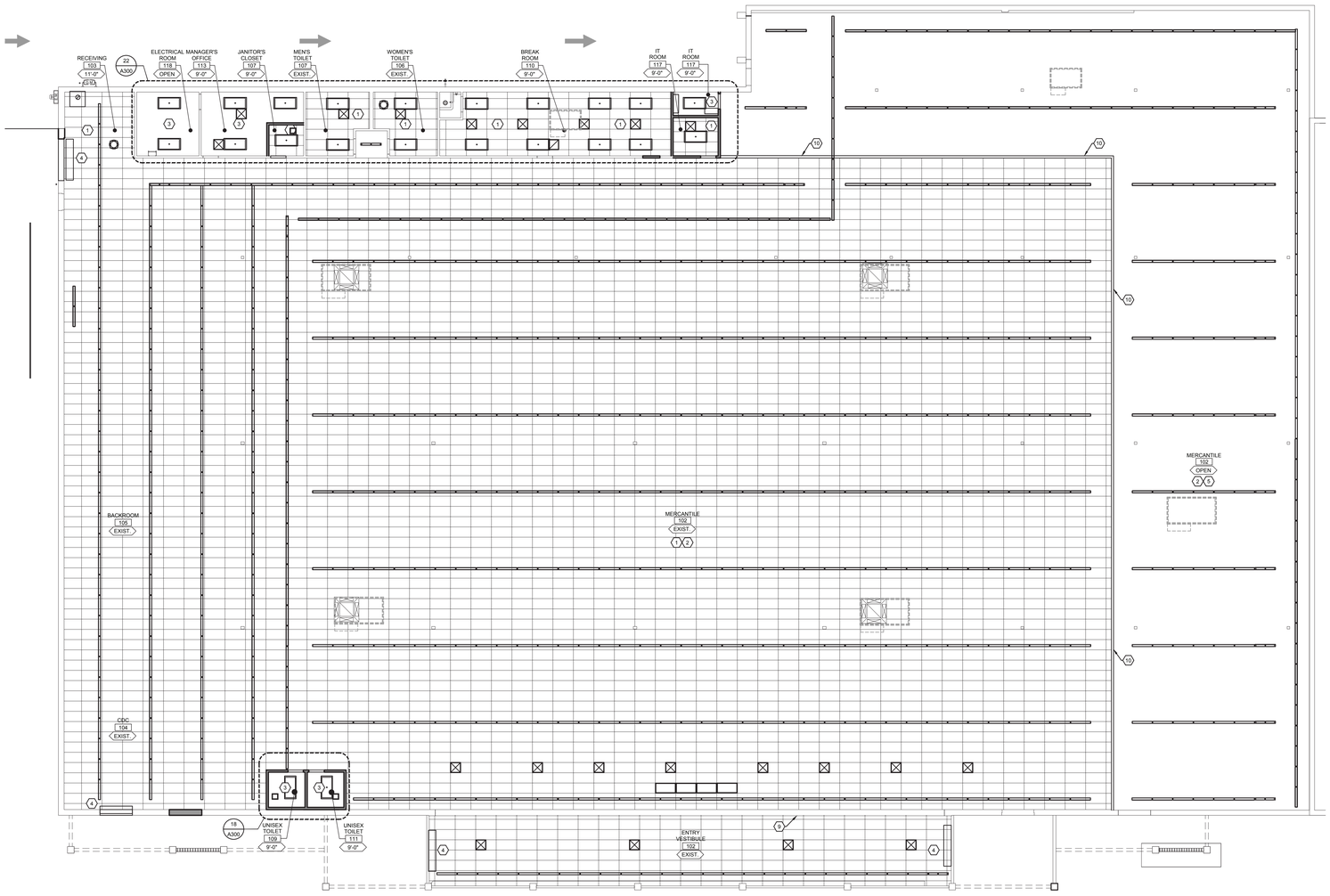
A101

FIXTURE PLAN

CHECKED: JW DRAWN: HP

CONSTRUCTION KEY NOTES

1	ACT CEILING; EXIST. CEILING TILE TO REMAIN. REPLACE TILES AS NECESSARY, COORD. W/ SAVERS CM, APPROX. 30% OF THE TILES TO BE REPLACED.	
2	LIGHTING MOUNTING HEIGHTS SHALL BE AS FOLLOW: ALL HI-BAY FIXTURES TO BE 18'-0" A.F.F.; STRIP FIXTURES FOR MERCANTILE (a & b), WALL-WASH (c) AND BACKROOM SORTING, GRADING AND WORKSTATION LIGHTING (f) TO BE 14'-6" A.F.F.; STRIP FIXTURES FOR BACKROOM GENERAL LIGHTING (d & e)TO BE AS HIGH AS UNIFORMLY POSSIBLE (TO A MAX. HEIGHT OF 16'-0"). CONTRACTOR SHALL CONFIRM LIGHTING HEIGHTS & CIRCUITING w/ THE SAVERS VALUE VILLAGE cm - TYPICAL.	ELECTRICAL
3	GYP. BD. CEILING	
4	AIR CURTAIN	MECHANICAL
5	PERFORM THOROUGH HIGH DUST OF ROOF DECK, ROOF STRUCTURE, DUCTWORK ETC. AT AREAS OF OPEN CEILING	
6	PERIMETER WALL WASH FIXTURES	ELECTRICAL
7	NOT USED	
8	NOT USED ED IN COMPACTOR ENCLOSURE	
9	SOFFIT @ 13'-8"	
10	NEW HEADER. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFO.	



1 A200 FLOOR PLAN
SCALE: 3/32" = 1' 0"

NORTH

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER A-2025017570
2025.08.01 09:35:44-05'00'
ARCHITECT

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO	DATE	REMARKS
2	08.01.25	PLAN REVIEW COMMENTS
1	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

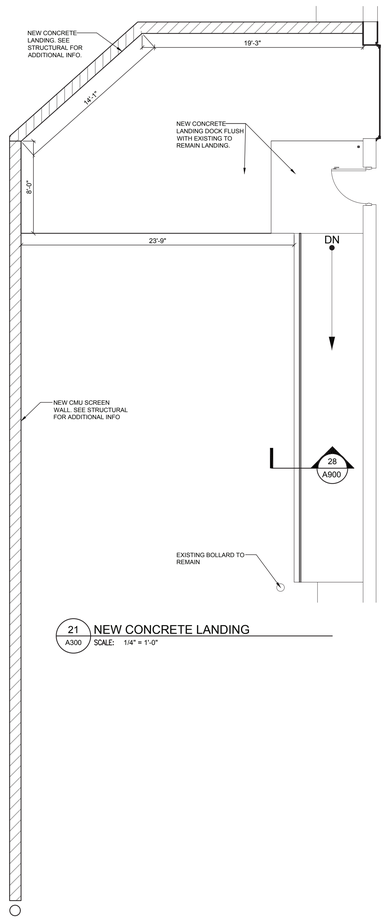
901 EAST, LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.08.25

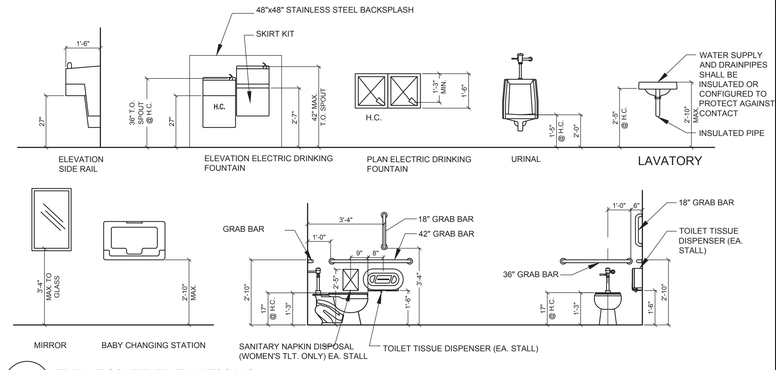
A200

REFLECTED CEILING PLAN

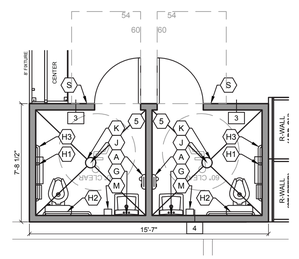
CHECKED: JW DRAWN: HP



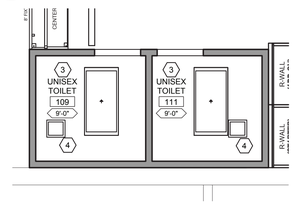
21 A300 NEW CONCRETE LANDING
SCALE: 1/4" = 1'-0"



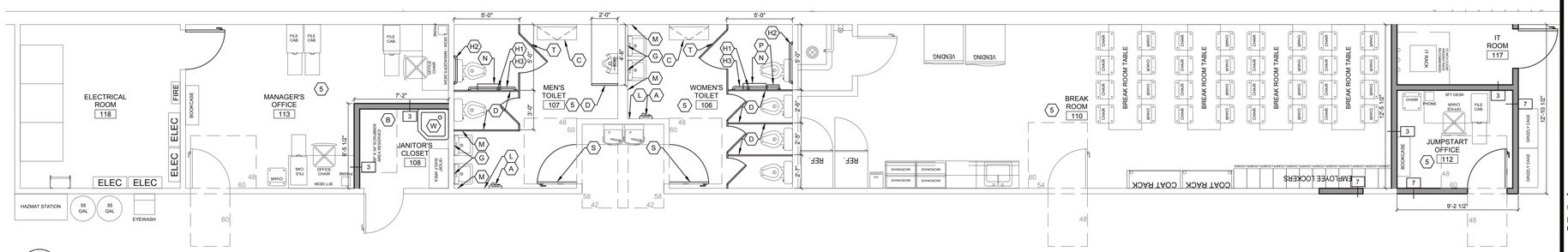
26 A300 TYP. TOILET ELEVATIONS
SCALE: 1/4" = 1'-0"



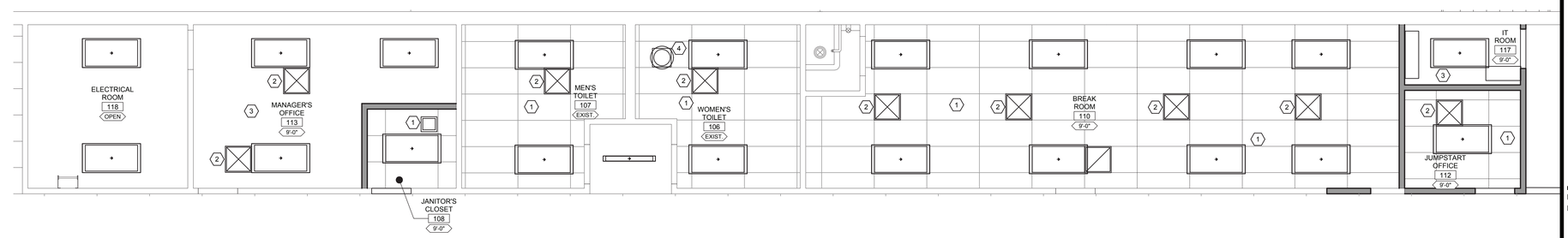
20 A300 TOILET ROOM PLAN
SCALE: 1/4" = 1'-0"



19 A300 TOILET ROOM CEILING PLAN
SCALE: 1/4" = 1'-0"



23 A300 ENLARGED PLAN
SCALE: 1/4" = 1'-0"



22 A300 ENLARGED CEILING PLAN
SCALE: 1/4" = 1'-0"

KEY NOTES

	DESCRIPTION	DETAIL/SHEET
1	A.C.T. CEILING	
2	RETURN/SUPPLY AIR DIFFUSER	MECHANICAL
3	GYP. BD. CEILING	
4	EXHAUST FAN	MECHANICAL
5	POLISHED CONCRETE	

SCOPE OF WORK TO INCLUDE:

SALES AREA, BREAK AREA, AND OFFICES:
- TEST FOR ASBESTOS, IF APPROPRIATE.
- PROVIDE POWER AS NECESSARY (GENERATOR).
- REMOVE ALL EXISTING TILE, COVE BASE AND MASTIC.
- INSTALL GROUT COAT (CREDIT BACK IF NOT REQUIRED).
- CLEAN AND FILL ALL JOINTS. REPAIR ALL HOLES, CRACKS AND GOUGES.
  - PREPARE EXISTING FLOOR JOINTS BY SAW-CUTTING, IF NEEDED, TO CLEAN OUT DEBRIS.
  - INSTALL FLEXIBLE JOINT FILLER.
  - RAZOR SCRAPE ANY OVERFILLED JOINT MATERIAL TO ENSURE A SMOOTH TRANSITION.
- PERFORM POLISH TO MEET AN 800 GRIT POLISH.
  - START THE GRINDING PROCESS USING 40 GRIT METAL-BOND DIAMONDS TO BEGIN HONING THE CONCRETE SURFACE.
  - CONTINUE THE GRINDING PROCESS USING 80 GRIT METAL-BOND DIAMONDS TO CONTINUE HONING THE CONCRETE SURFACE.
  - CONTINUE THE GRINDING PROCESS USING 150 GRIT METAL-BOND DIAMONDS TO FINISH HONING THE CONCRETE SURFACE.
  - INSTALL CONCRETE DENSIFIER TO THE CONCRETE.
  - START THE POLISHING PROCESS USING 100 GRIT RESIN-BOND DIAMONDS TO REMOVE LIGHT SCRATCHES.
  - CONTINUE THE POLISHING PROCESS USING 200 RESIN-BOND DIAMONDS TO INCREASE LIGHT REFLECTION AND PROVIDE THE INITIAL SHINE.
  - CONTINUE THE POLISHING PROCESS USING 400 RESIN-BOND DIAMONDS TO INCREASE LIGHT REFLECTION AND SHINE.
  - CONTINUE THE POLISHING PROCESS USING 800 RESIN-BOND DIAMONDS TO INCREASE LIGHT REFLECTION AND ACHIEVE HIGH GLOSS SHEEN.
- APPLY TOPICAL GUARD TO ALL AREAS POLISHED - SALES AREA, BREAK AREA, AND OFFICES.
- INSTALL VINYL COVE BASE. (4" ARMSTRONG 61 GRAPHITE GRAY).
- APPLY INVISATREAD TO ENTRY WAYS. (SLIP RESISTANT TREATMENT TO CONCRETE IN ENTRIES.)

PRODUCTION ROOM:
- PROVIDE POWER AS NECESSARY (GENERATOR).
- REMOVE ALL EXISTING TILE AND MASTIC - IF PRESENT.
- CLEAN AND FILL ALL JOINTS.
- REPAIR ALL HOLES, CRACKS AND GOUGES.
- PERFORM GRIND & SEAL:
  - PREP AND GRIND FLOOR W/#40 GRIT DIAMON
  - APPLY DENSIFIER
  - GRIND FLOOR W/#100 RESIN
  - CLEAN FLOOR & ALLOW TO DRY
  - APPLY TWO COATS OF ACRYLIC SEALER

ALL WORK TO BE COMPLETED PER SAVERS SPECIFICATIONS FOR QUALITY CONTROL.

TOILET ACCESSORIES

	DESCRIPTION	DETAIL/SHEET
A	AUTOMATIC HAND DRYER	BRADLEY 2921-S (SILVER)
B	FLOOR SCRUBBER - 58" x 34" (N.I.C.) (ONLY USED FOR POLISHED CONC. FLOORS)	
C	(E) BABY CHANGING STATION, PROVIDE BLOCKING AS RECOMMENDED BY MANUF.	RUBBERMAID 7818-88
D	TOILET PARTITION	GENERAL PARTITIONS, STAINLESS STEEL, SERIES 40, SATIN FINISH
E	NOT USED	
F	(E) HI-LO DRINKING FOUNTAINS	PLUMBING
G	PROVIDE MIRROR, CENTERED ON SINK	BOBRICK B-165 1830
H1	18" GRAB BAR (VERTICAL)	BOBRICK B-6806x18
H2	36" GRAB BAR	BOBRICK B-6806x36
H3	42" GRAB BAR	BOBRICK B-6806x42
J	FLOOR DRAIN - SET 1/2" LOWER THAN FINISH FLOOR.	PLUMBING
K	SLOPE SLAB TO DRAIN	30/A900
L	(E) PAPER TOWEL DISPENSER (PROVIDED BY SAVERS, CONTRACTOR TO INSTALL)	
M	SOAP DISPENSER (PROVIDED BY SAVERS, CONTRACTOR TO INSTALL)	
N	T.P. DISPENSER (PROVIDED BY SAVERS, CONTRACTOR TO INSTALL)	
P	NOT USED SANITARY NAPKIN DISPOSAL (PROVIDED BY SAVERS, CONTRACTOR TO INSTALL)	
R	NOT USED	
S	RESTROOM SIGNAGE w/ADA COMPLIANT LOGO & BRAILLE	
T	ADA COMPLIANT TOILET STALL GRAPHIC	
V	NOT USED DOOR SHELF (N.I.C.)	
W	MOP SINK	
X	NOT USED INTED HAND SANITIZER STATION	

NOTE: SEE PLUMBING DRAWING FOR PLUMBING FIXTURE SCHEDULE.

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER
A-2025017570
2025.08.01 09:35:44-05'00'
ARCHITECT

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO.	DATE	REMARKS
2	08.01.25	PLAN REVIEW COMMENTS
1	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

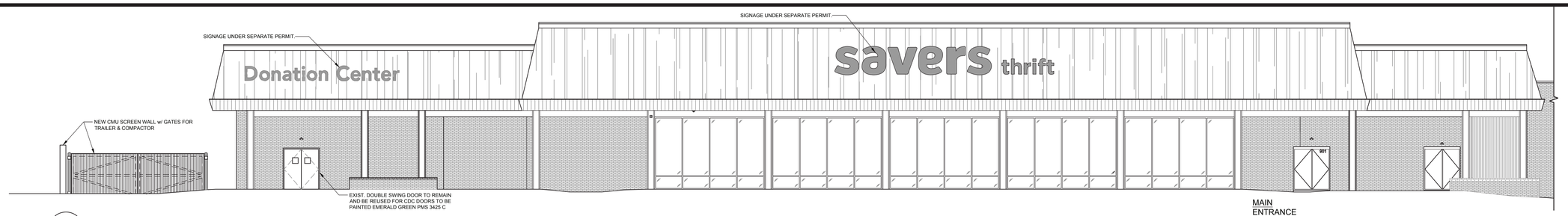
901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.08.25

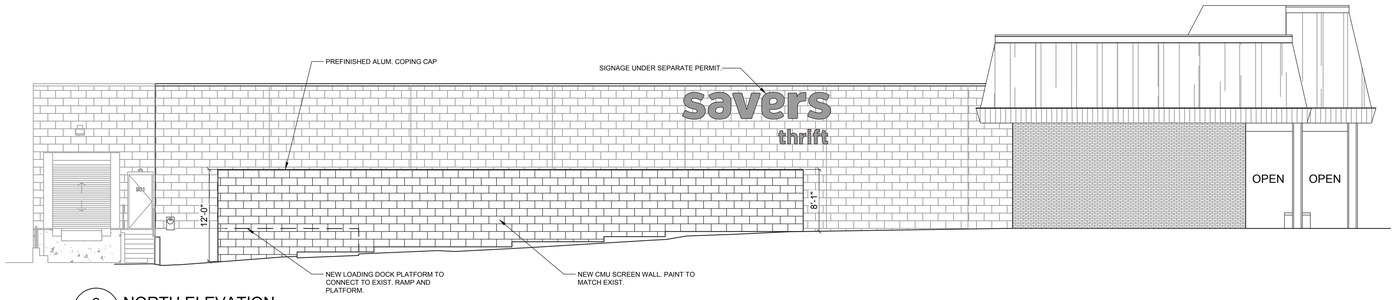
A300

ENLARGED FLOOR PLANS

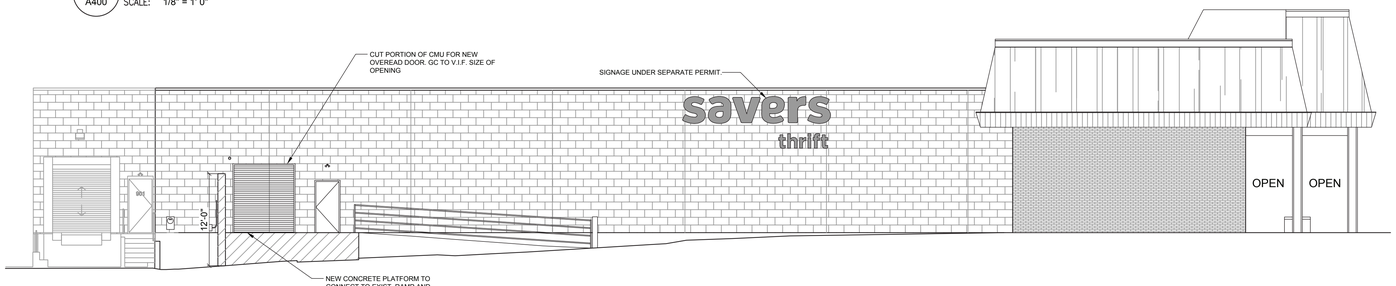
CHECKED: JW DRAWN: HP



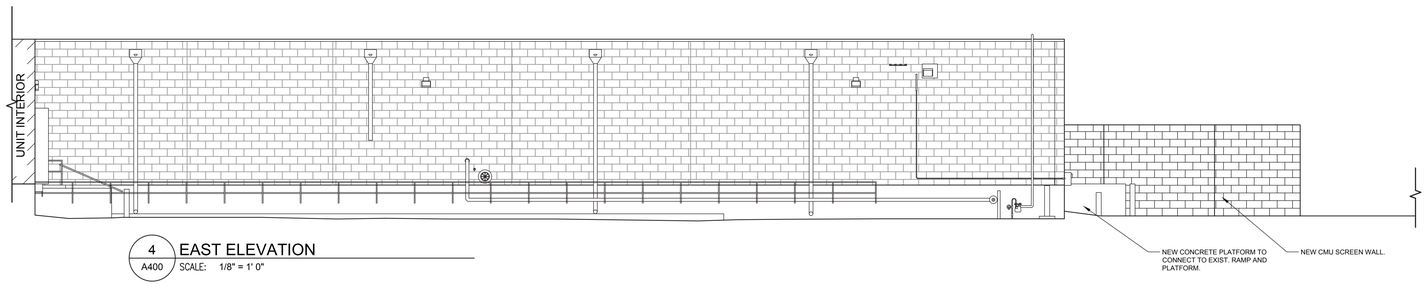
1 A400 **WEST ELEVATION**
SCALE: 1/8" = 1' 0"



2 A400 **NORTH ELEVATION**
SCALE: 1/8" = 1' 0"



3 A400 **NORTH ELEVATION**
SCALE: 1/8" = 1' 0"



4 A400 **EAST ELEVATION**
SCALE: 1/8" = 1' 0"

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER A-2025017570
2025.08.01 09:35:45-05'00'
ARCHITECT

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO	DATE	REVISIONS
⚠	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

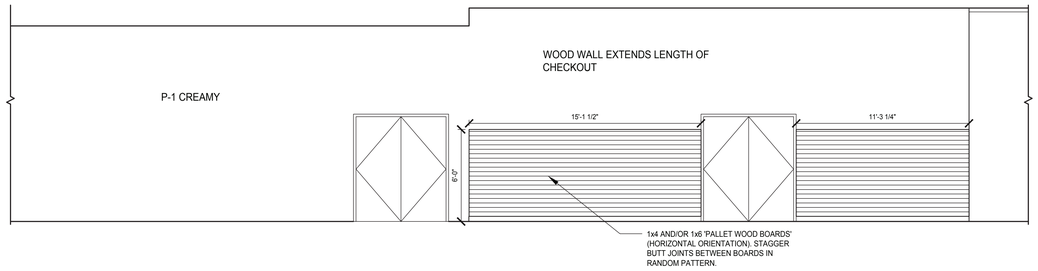
savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 05.02.25

A400
EXTERIOR ELEVATIONS

CHECKED: JW DRAWN: HP



1 / A401 INTERIOR ELEVATION

SCALE: 1/4" = 1' 0"

INTERPLAN

INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER
A-2025017570
2025.08.01 09:35:45-05'00'
ARCHITECT

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO.	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

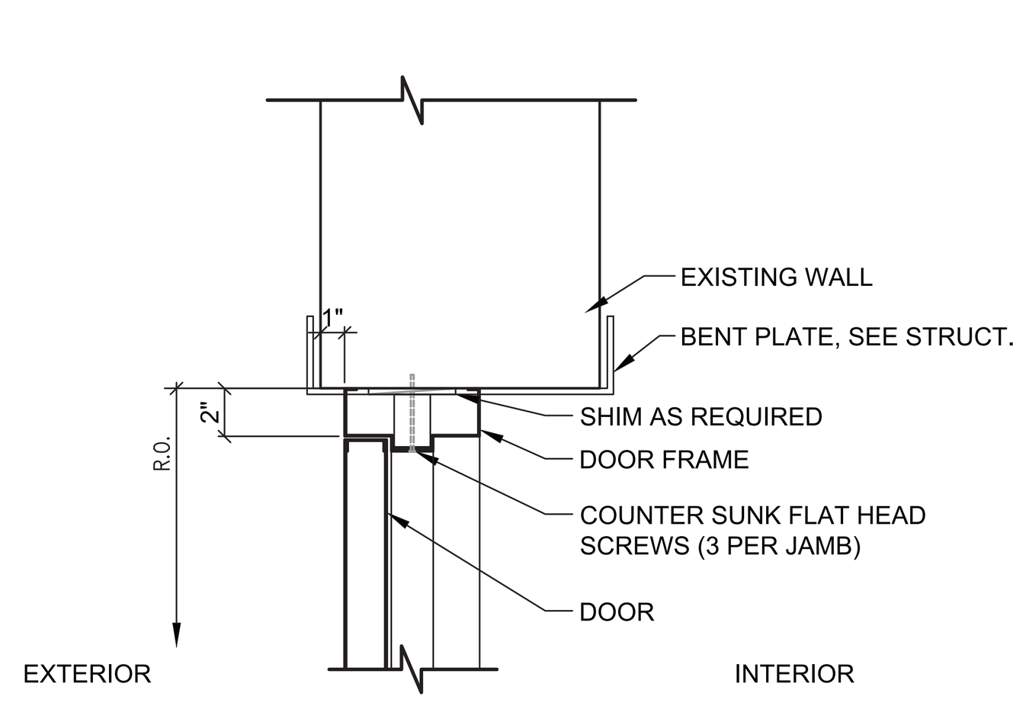
901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.08.25

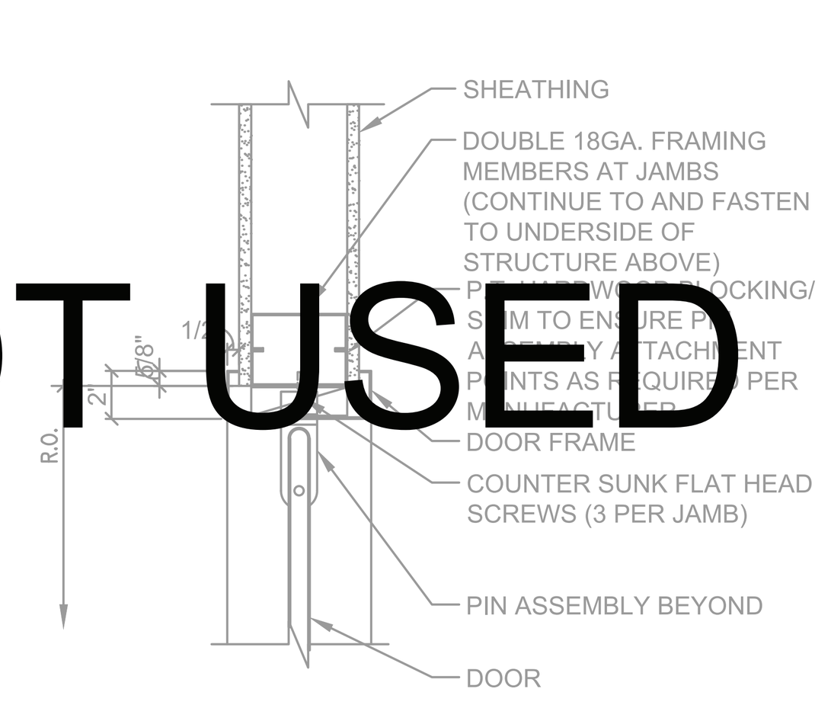
A401

INTERIOR ELEVATIONS

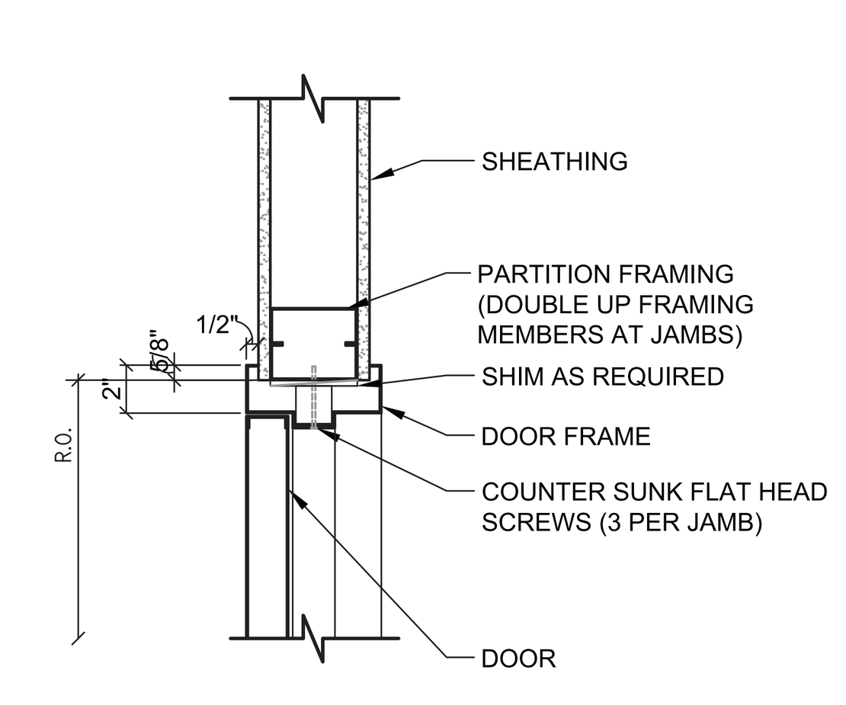
CHECKED: JW DRAWN: HP



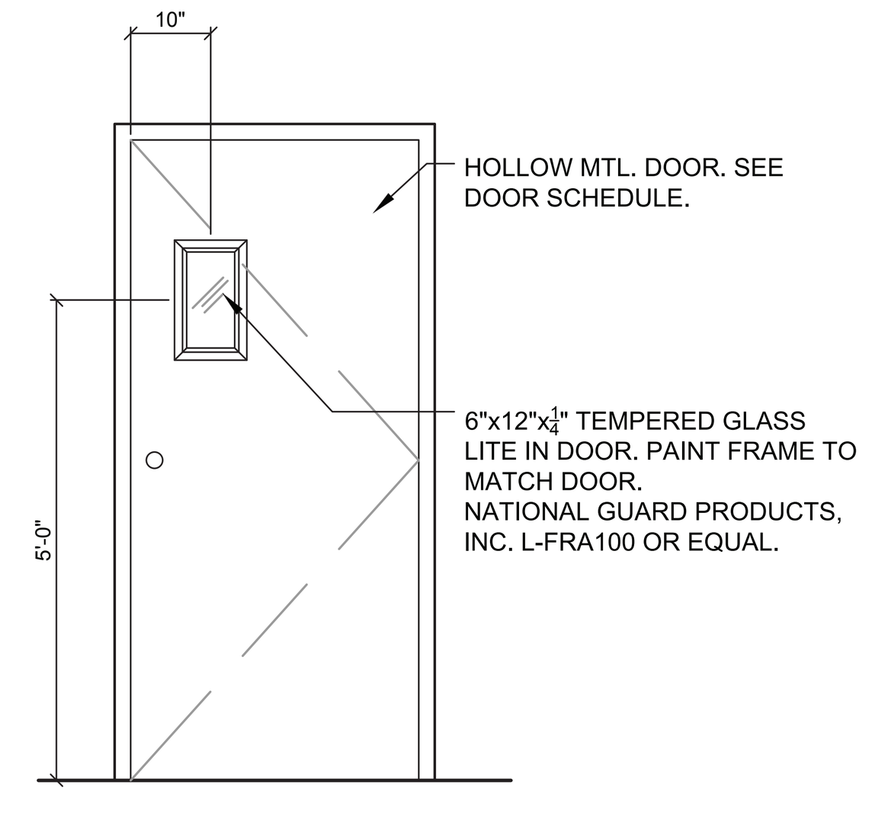
26 DETAIL - JAMB
A900 SCALE: 1 1/2" = 1'-0"



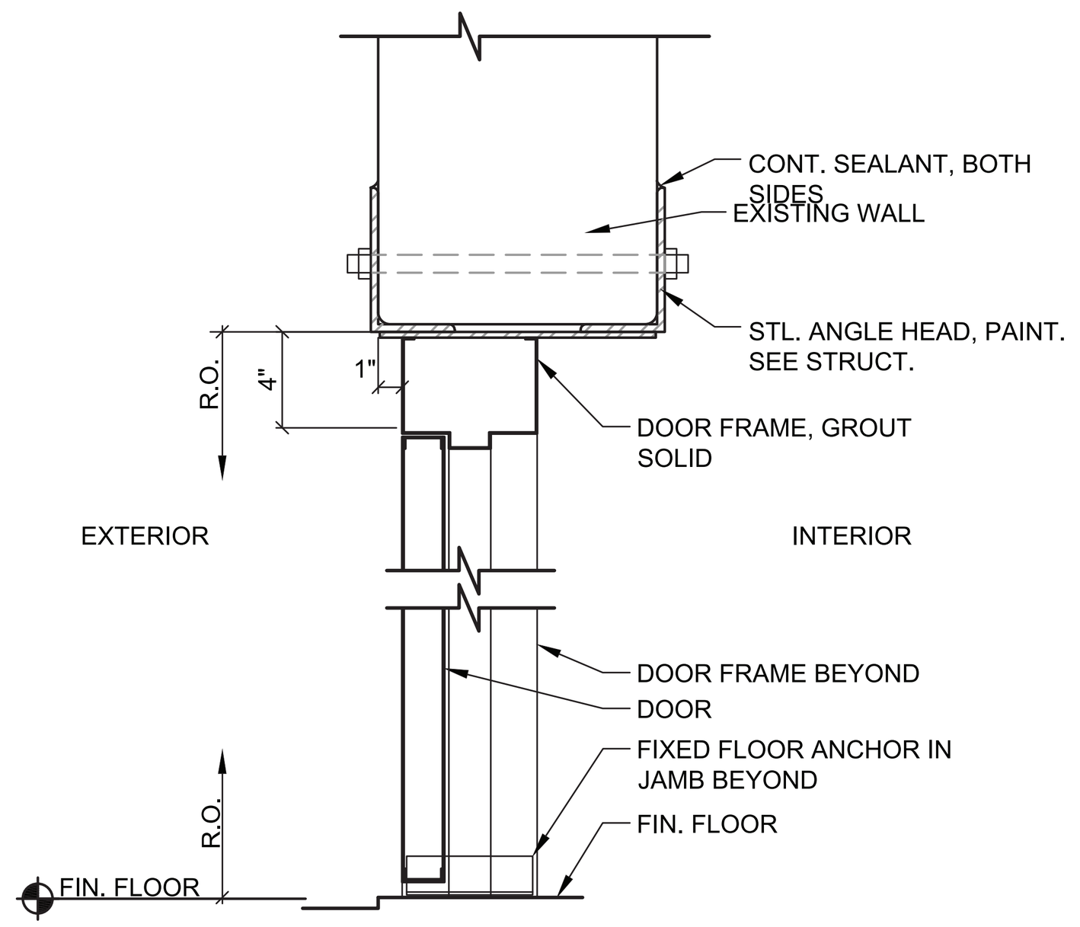
21 DETAIL - JAMB ELIASON
A900 SCALE: 1 1/2" = 1'-0"



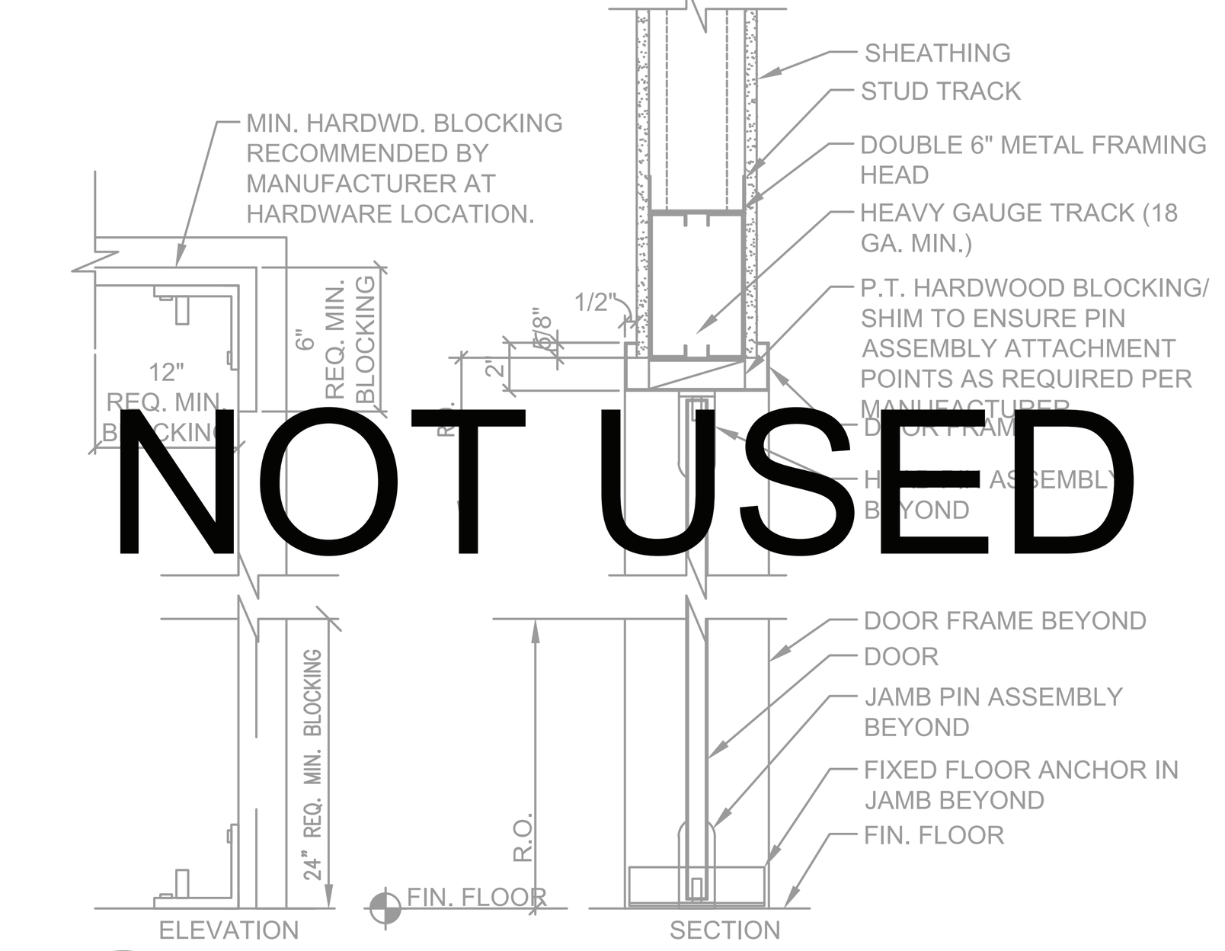
16 DETAIL - JAMB
A900 SCALE: 1 1/2" = 1'-0"



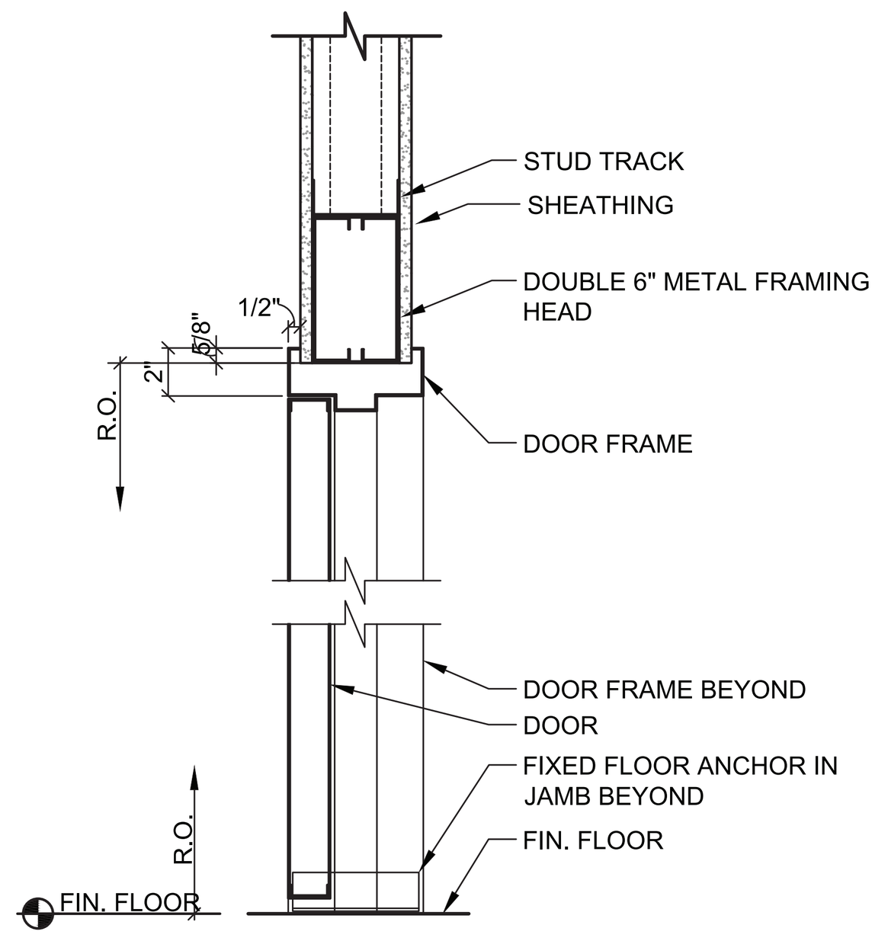
11 GLASS LITE DETAIL
A900 SCALE: 1/2" = 1'-0"



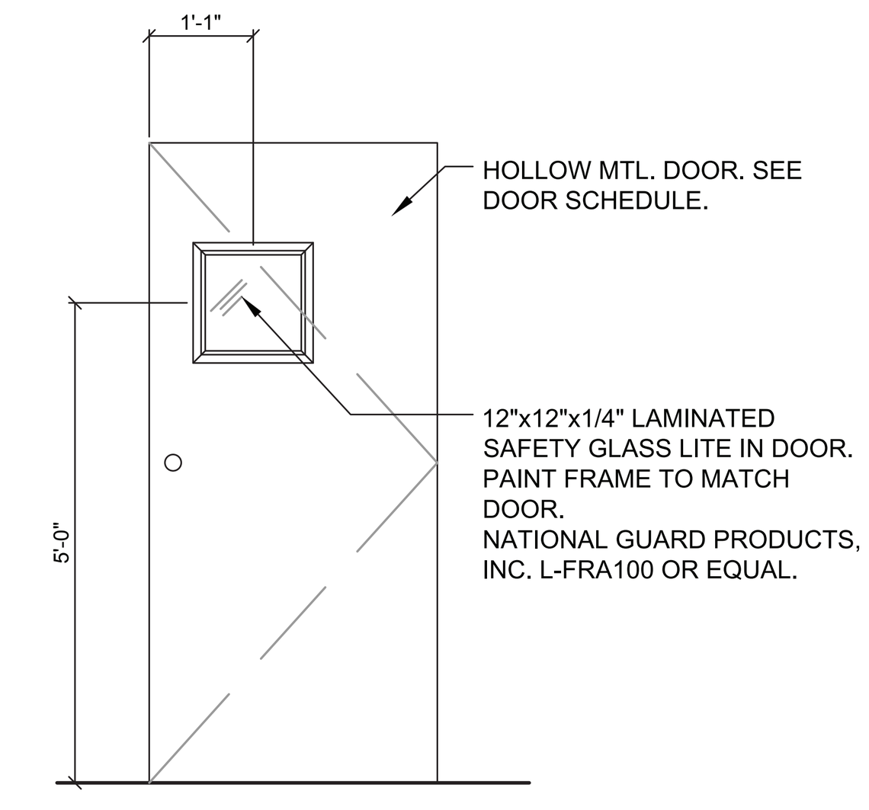
27 DETAIL - HEAD / SILL
A900 SCALE: 1 1/2" = 1'-0"



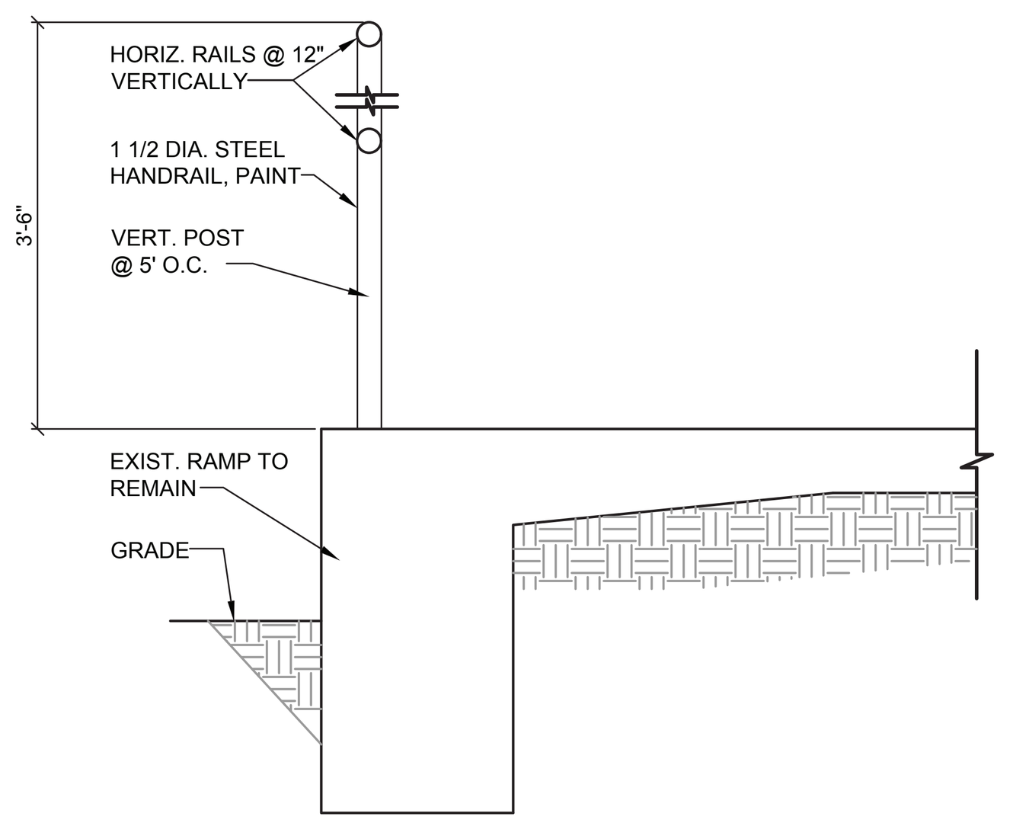
22 DETAIL - HEAD / SILL ELIASON
A900 SCALE: 1 1/2" = 1'-0"



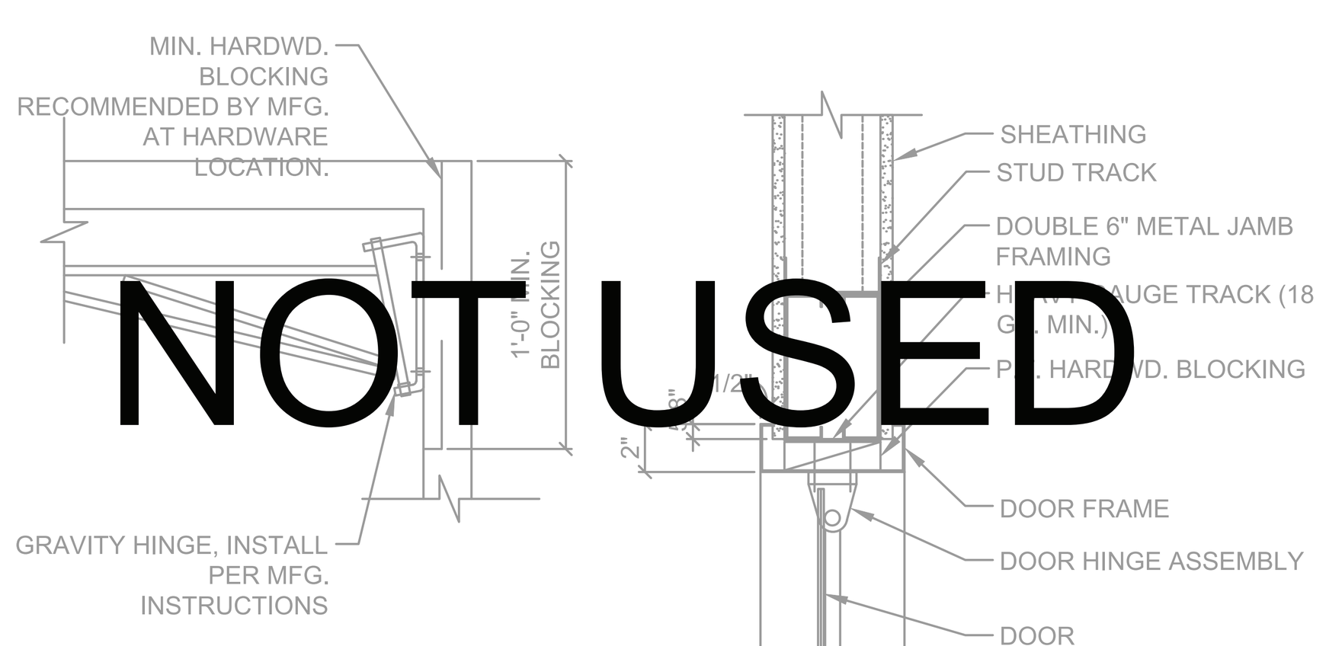
17 DETAIL - HEAD / SILL
A900 SCALE: 1 1/2" = 1'-0"



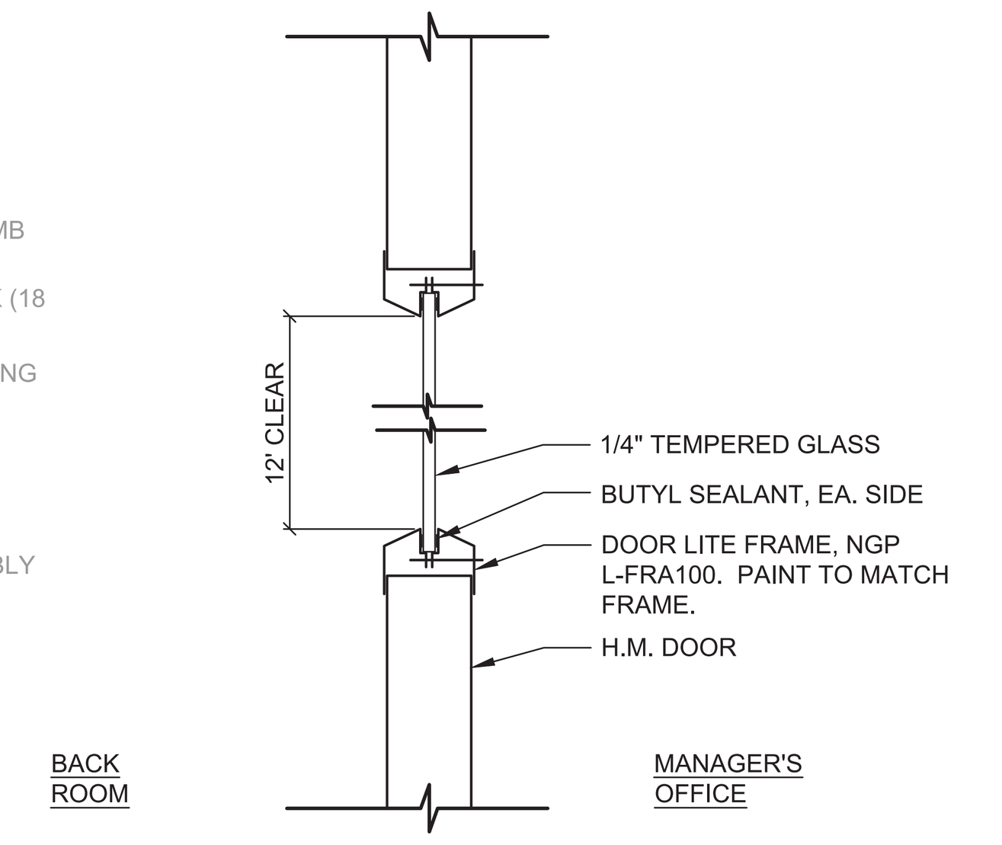
12 GLASS LITE DETAIL - CDC
A900 SCALE: 1/2" = 1'-0"



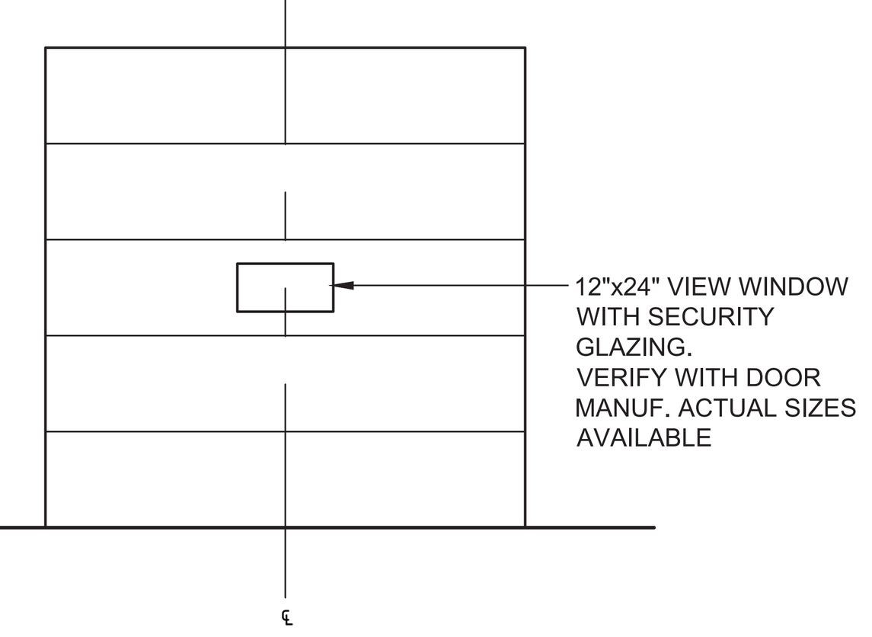
28 DETAIL - RAMP EDGE OF SLAB
A900 SCALE: 1" = 1'-0"



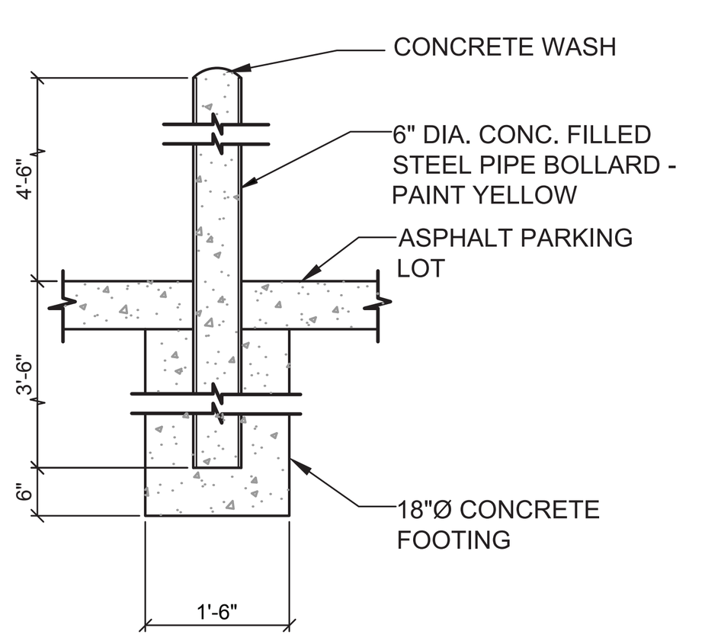
23 DETAIL - HEAD / SILL
A900 SCALE: 1 1/2" = 1'-0"



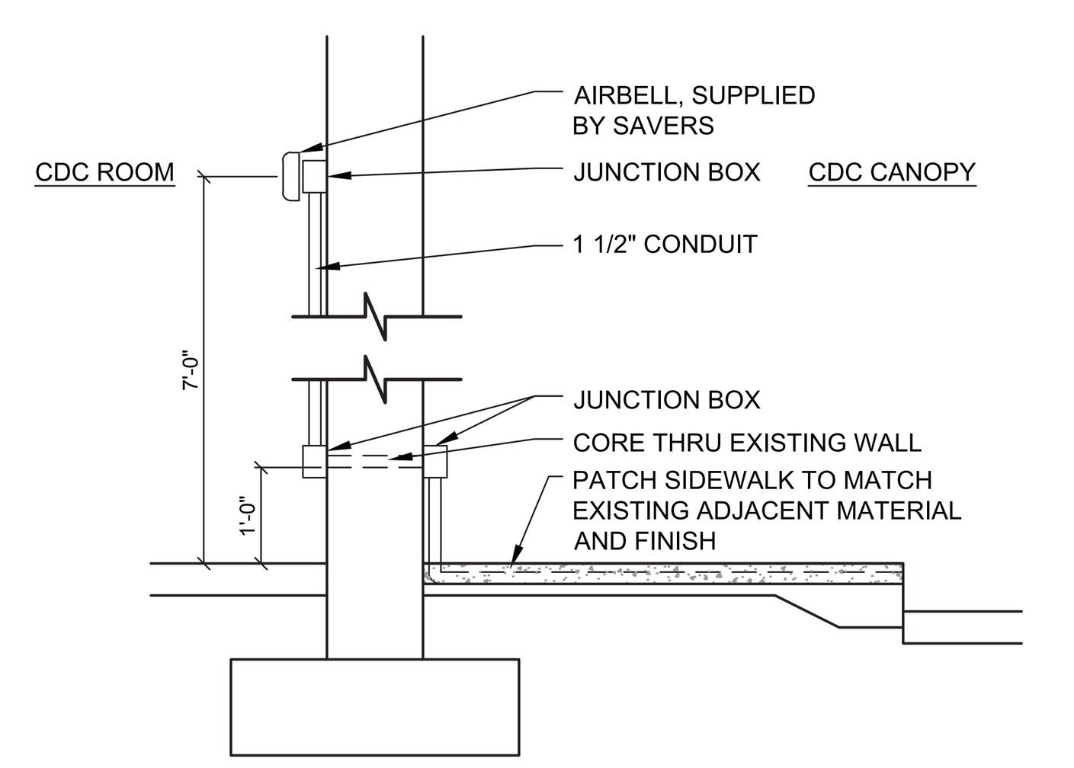
18 DETAIL - DOOR LITE
A900 SCALE: 3" = 1'-0"



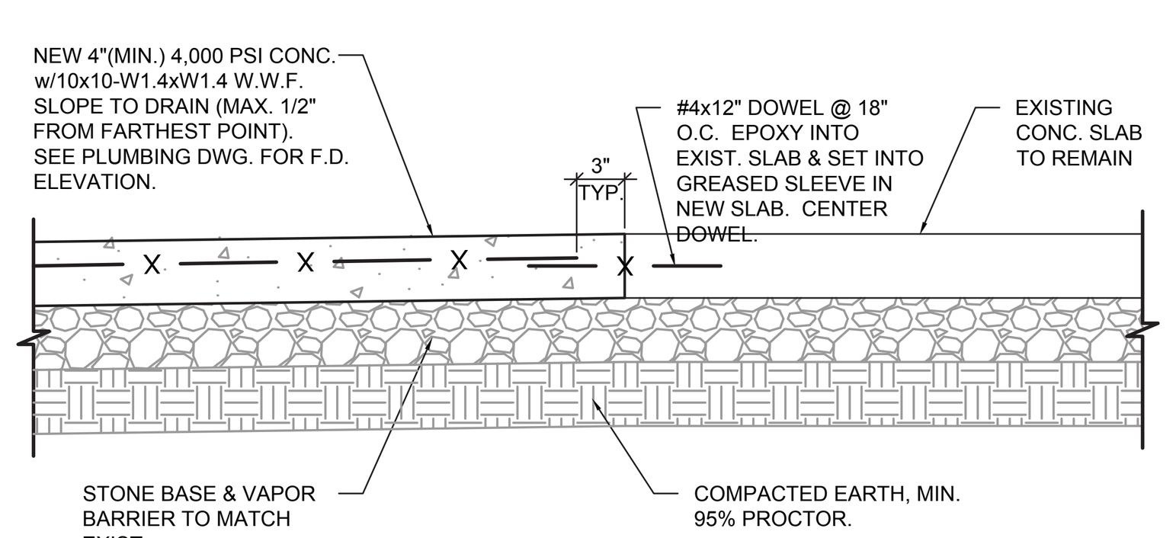
29 OVERHEAD DOOR
A900 SCALE: 1/4" = 1' 0"



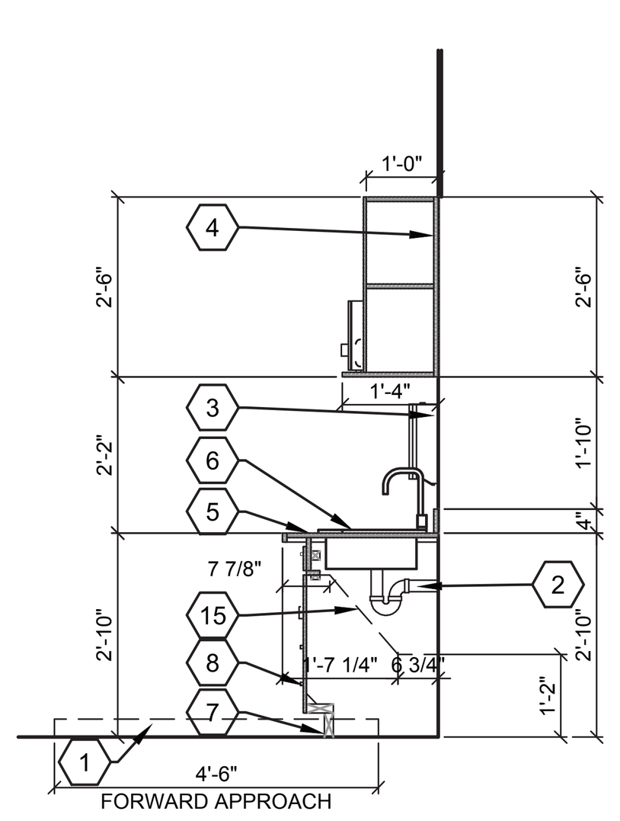
24 PIPE BOLLARD
A900 SCALE: 1/2" = 1'-0"



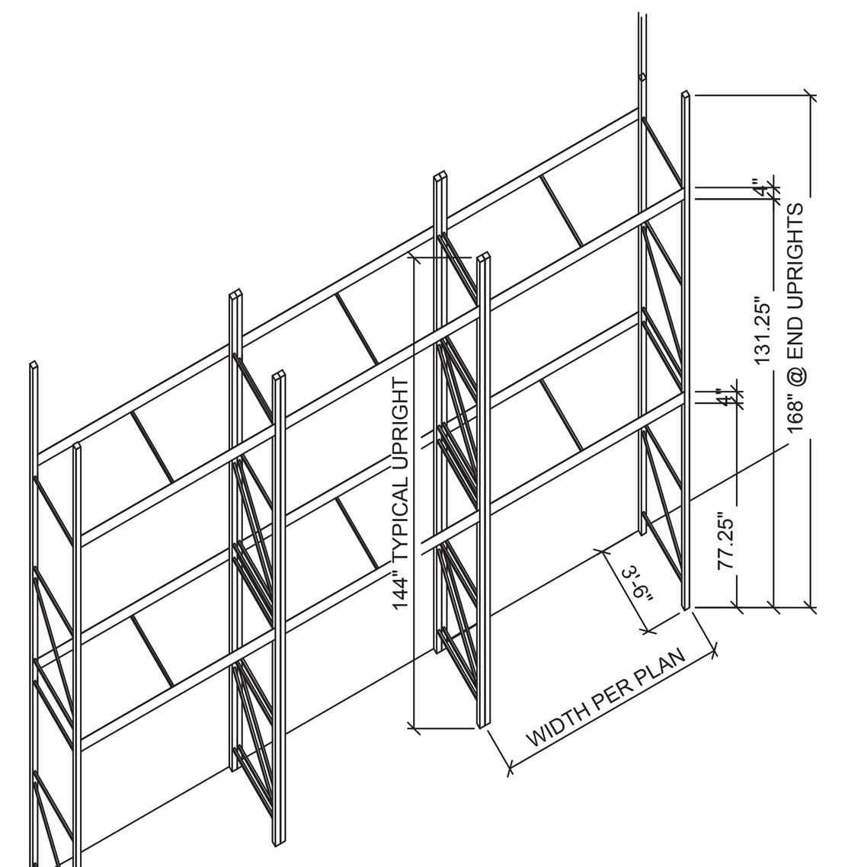
19 AIRBELL DETAIL
A900 SCALE: 1/2" = 1'-0"



30 DETAIL - SLAB INFILL @ TOILET ROOMS
A900 SCALE: 1" = 1'-0"



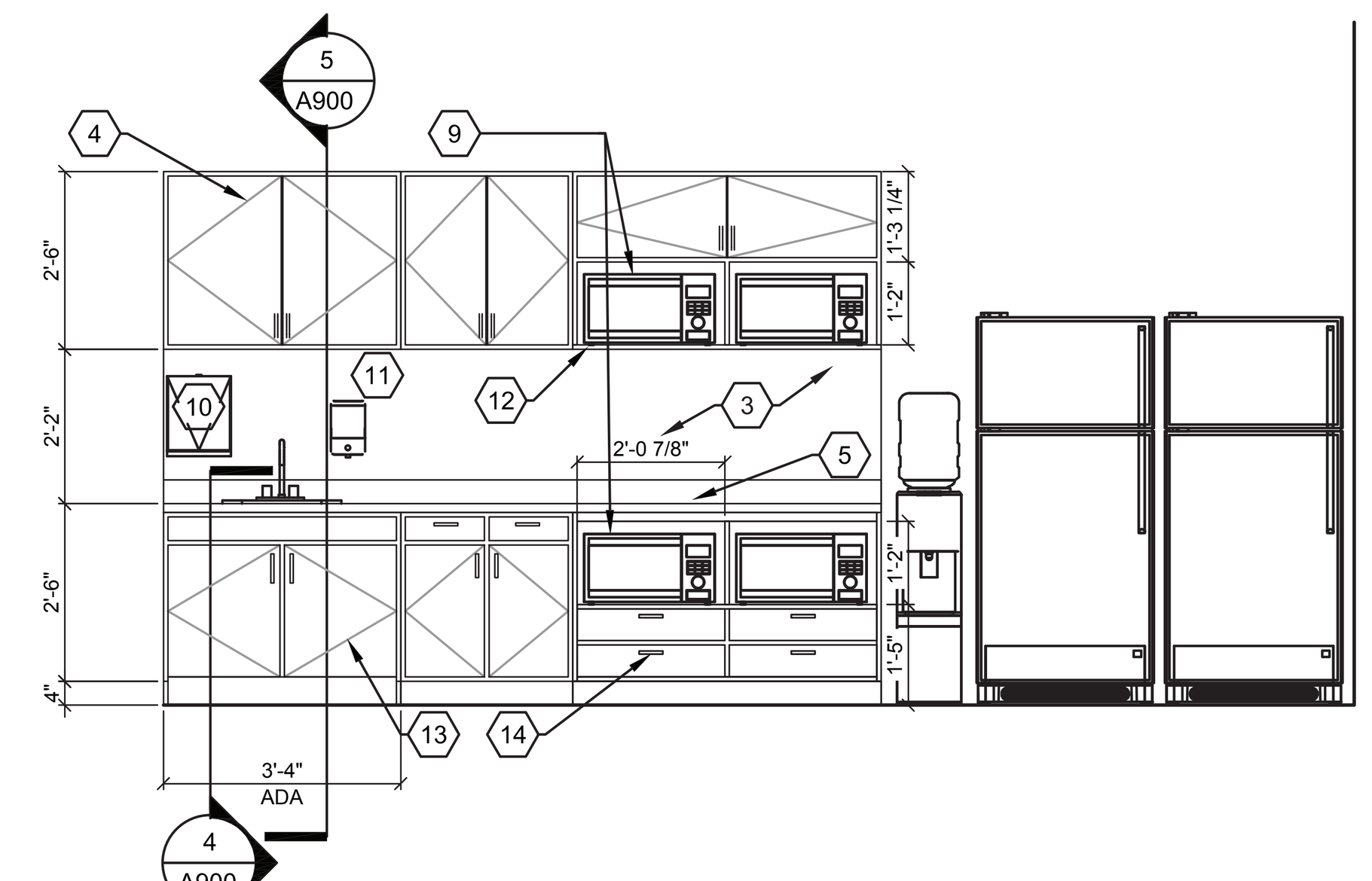
5 BREAK ROOM SECTION
A900 SCALE: 3/16" = 1' 0"



10 PALLET RACKING - REFERENCE ONLY
A900 SCALE: NONE

BREAKROOM ELEV. KEYED NOTES

1. 54" x 36 1/4" FORWARD APPROACH FOR BARRIER FREE ACCESS
2. WATER SUPPLY & DRAIN PIPING TO BE INSULATED
3. FRP ABOVE BACKSPLASH
4. 12" DEEP WHITE MELAMINE CABINETS w/ ADJUSTABLE WHITE SHELVES. REPLACE GYPSUM BOARD BEHIND CABINETS WITH SOLID WOOD BLOCKING AND PLYWOOD TO MATCH EXISTING FINISH FACE.
5. PLASTIC LAMINATE COUNTERTOP w/ COVE BACKSPLASH. FORMICA 7813-58 CARDBOARD SOLIDS.
6. SINK (SEE MECHANICAL)
7. CABINET BASE
8. WHITE MELAMINE BASE CABINETS w/ ADJUSTABLE WHITE SHELVES.
9. MICROWAVES BY OWNER
10. PAPER TOWEL DISPENSER
11. SOAP DISPENSER
12. 16" MICROWAVE SHELF
13. ADA BASE SINK CABINET
14. WHITE MELAMINE MICROWAVE BASE CABINET W/ DRAWERS
15. LINE OF BARRIER FREE CLEARANCE UNDER CABINET



11 BREAK ROOM ELEVATION
A900 SCALE: 3/16" = 1' 0"

DOOR & FRAME SCHEDULE

DOOR #	LOCATION	DOOR MATERIAL	DOOR FINISH	DOOR SIZE	FRAME MATERIAL	FRAME FINISH	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	ELEVATION	HARDWARE	NOTES
100	VESTIBULE	(E) ALUM.	CLEAR ANOD. ALUM	EXIST.	(E) ALUM.	CLEAR ANOD. ALUM	---	---	---	---	EXIST.	1, 9 & 10
101	VESTIBULE	(E) ALUM.	CLEAR ANOD. ALUM	EXIST.	(E) ALUM.	CLEAR ANOD. ALUM	---	---	---	---	EXIST.	1, 9 & 10
102	SALES	(E) H.M.	PAINT	6'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H1	1 & 9
103	COMPACTOR	(E) H.M.	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H10	9, 11, & 13
104	RECEIVING	(N) OVERHEAD	PAINT	8'-0" X 9'-0"	H.M.	PAINT	---	---	---	29/A900	---	9
105	RECEIVING	(E) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H1	1, 6, & 9
106	RECEIVING	(E) OVERHEAD	PAINT	EXIST.	---	---	---	---	---	---	---	1, 6, & 9
107	CDC	(N) HM	PAINT	6'-0" X 7'-0"	H.M.	PAINT	27/A900	26/A900	27/A900	12/A900	H8	3 & 11
108	UNISEX TOILET	(N) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	17/A900	16/A900	17/A900	---	H6A	15
109	WOMEN'S	(N) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H6	16
110	JANITOR	(E) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H4	
111	MEN'S	(N) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H6	16
112	JUMP START	(N) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	17/A900	16/A900	17/A900	---	H3	7
113	MANAGER	(E) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H3	8
114	BREAKROOM	(E) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H11	7
115	UNISEX TOILET	(N) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	17/A900	16/A900	17/A900	---	H6A	15
117	IT ROOM	(N) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	17/A900	16/A900	17/A900	11/A900	H3	
118	ELECTRICAL ROOM	(N) HM	PAINT	3'-0" X 7'-0"	H.M.	PAINT	---	---	---	---	H4	16 & 17

1

DOOR HARDWARE LEGEND

H1 GENERAL EXTERIOR EGRESS DOORS
HINGES: 1-1/2 PR, HAGER BB1191 X 626 X NRP (OR EQUAL) (N&E)
EXIT DEVICE: DETEX V40xEB (N&E)
CORE CYLINDER: BEST 1E74 (N&E)
DOOR CLOSER: SARGENT 1331 JP9 EN (N&E)
WEATHER STRIPPING: NGP 2525 B (N&E)
DOOR SWEEP: NGP 200SA (N&E)
SECURITY ASTRAGAL: NGP 1392 SP (N&E)
THRESHOLD: NGP 896 BUMPER THRESHOLD (N&E)
DRIP CAP: NGP 16A (N&E)
KICK PLATE: DON-JO J 102 8"x34" X 26 METAL ON INTERIOR SIDE ONLY (OR EQUAL)

H3 MANAGER'S OFFICE & JUMP START OFFICE
HINGE: 1-1/2 PR, HAGER BB1199 X 626 (OR EQUAL) (N&E)
CYLINDRICAL LOCKSET: BEST 73KC7D X 14D X 626 (STOREROOM FUNCTION) (N&E)
DOOR CLOSER: SARGENT 1331 JO EN (N&E)
DOOR STOP: IVES FS13 X US26D (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON BOTH SIDES (OR EQUAL) (N&E)
KICK DOWN DOOR STOP: CANAROPA 1026.02 (OR EQUAL) (N&E)
COAT HOOK: VERIFY SPEC WITH CM PRIOR TO INSTALL

H4 JANITOR'S CLOSET & UTILITY ROOMS
HINGES: 1-1/2 PR, HAGER BB1199 X 626 (OR EQUAL) (N&E)
CYLINDRICAL LOCKSET: BEST 73KC7D X 14D X 626 (STOREROOM FUNCTION) (N&E)
DOOR CLOSER: SARGENT 1331 JO EN (N&E)
DOOR STOP: IVES FS13 X US26D (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON BOTH SIDES (OR EQUAL) (N&E)
KICK DOWN DOOR STOP: CANAROPA 1026.02 (OR EQUAL) (N&E)

H4A COMPACTOR DOOR (ENCLOSURE) — NOT USED
HINGES: 1-1/2 PR, HAGER BB1199 X 626 X NRP (OR EQUAL) (N&E)
CYLINDRICAL LOCKSET: BEST 93K0N X 14D X 626 (N&E)
DEADBOLT: BEST 8T3 7 L S5 626
DOOR CLOSER: SARGENT 1431 HZA EN (N&E)
WEATHER STRIPPING: NGP 2525 B (N&E)
DOOR SWEEP: NGP 200S (N&E)
THRESHOLD: PEMKO 1719A (N&E)
DRIP CAP: NGP 16A (N&E)
KICK PLATE: DON-JO J102 8"x46" X 626 METAL ON BOTH SIDES (OR EQUAL)

H5 NOT USED

H6 TOILETS
HINGES: 1-1/2 PR, HAGER BB1199 X 626 (OR EQUAL) (N)
LOCKSET: SCHLAGE CO100CY40KPRHO62 6BRH (N&E)
DOOR CLOSER: SARGENT 1331 JO EN (N&E)
DOOR STOP: IVES FS13 X US26D (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON BOTH SIDES (OR EQUAL) (N&E)

H6A TOILETS
HINGES: 1-1/2 PR, HAGER BB1199 X 626 (OR EQUAL) (N)
LOCKSET: BEST 73KC7D X 14D X 626 (N&E)
DOOR CLOSER: SARGENT 1331 JO EN (N&E)
DOOR STOP: IVES FS13 X US26D (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON BOTH SIDES (OR EQUAL) (N&E)

H7 ELIASON DOOR — NOT USED
SENNECA HOLDINGS - SCP8, SOLID-CORE HPL TRAFFIC DOOR; 35⅜" x 821/4" DOOR SIZE
9"x30" ADA WINDOWS
DOOR FINISH GRAPHITE 837-58
18" BLACK STANDARD BUMPERS, EASY SWING HARDWARE

H7A CHASE DOOR — NOT USED
200 FLEXIBLE AIRGARD DOOR
2-LAYER 0.120 TEXTURED PVC, CHOCOLATE BROWN
DOUBLE UNIT
METAL JAMB FASTENERS
STANDARD 100 BRACKET
15"x14" 4-SIDED TYPE-50 PVC WINDOW

H8 CDC EGRESS DOORS (PR.)
HINGES: 3 PR, HAGER BB1199 X 626 X NRP (OR EQUAL) (N&E)
EXIT DEVICE: VON DUPRIN 2227EO X SP28 AND 304L (EA. LEAF) (N&E)
EXIT ALARM: DETEX EAX-500 X SK2 X GY X IC7 (N&E)
DOOR CLOSER: SARGENT 1431 HZA EN (N&E)
WEATHER STRIPPING NGP 2525 B (JAMB) NGP 600A (ASTRAGAL) (N&E)
SECURITY ASTRAGAL: NGP 139 SP (N&E)
GRAVITY COORDINATOR: ROCKWOOD 576 X 626 (N&E)
DOOR SWEEP: NGP 200SA (N&E)
THRESHOLD: PEMKO 1719A (N&E)
DRIP CAP: NGP 16A (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON INTERIOR SIDE ONLY (OR EQUAL) (N&E)

H8A CDC EGRESS DOORS (SINGLE 4-0) — NOT USED
GEAR HINGE: IVES 224HD X CL (N&E)
EXIT DEVICE: VON DUPRIN 22EO X SP28 (N&E)
EXIT ALARM: DETEX EAX-500 X SK1 X GY X IC7 (N&E)
DOOR CLOSER: SARGENT 1431 HZA EN (N&E)
WEATHER STRIPPING: NGP 2525 B (N&E)
SECURITY ASTRAGAL: NGP 1392 SP (N&E)
DOOR SWEEP: NGP 200SA (N&E)
THRESHOLD: PEMKO 1719A (N&E)
DRIP CAP: NGP 16A (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON INTERIOR SIDE ONLY (OR EQUAL) (N&E)

H9 VESTIBULE STOREFRONT DOORS — NOT USED
HINGE: 3 PR. (BY STOREFRONT MANUFACTURER) (N&E)
PUSH/PULL: PUSH/PULL (BY STOREFRONT MANUFACTURER) (N)
DOOR CLOSER: SARGENT 1331 JP9 EN (N&E)
*FOR EXISTING STOREFRONT, HINGES ARE TO MATCH STOREFRONT IN FINISH

H10 COMPACTOR WALK OUT MAN DOOR (SINGLE OR PAIR)
HINGES: 1-1/2 OR 3 PR, HAGER BB1199 X 626 X NRP (OR EQUAL) (N&E)
EXIT DEVICE: VON DUPRIN 22EO X SP28 (SGL), 2227EO X SP28 AND 304L (EA. LEAF OF PAIR) (N&E)
EXIT ALARM: DETEX EAX-500 X SK1 X GY X IC7 (SGL), DETEX EAX-500 X SK2 X GY X IC7 (PR) (N&E)
DOOR CLOSER: SARGENT 1431 HZA EN (N&E)
WEATHER STRIPPING: NGP 2525 B (JAMB) NGP 600A (ASTRAGAL @ PR) (N&E)
SECURITY ASTRAGAL: NGP 1392 SP (SGL), NGP 139 SP (PR) (N&E)
GRAVITY COORDINATOR: ROCKWOOD 576 X 626 (N&E)
DOOR SWEEP: NGP 200SA (N&E)
THRESHOLD: PEMKO 1719A (N&E)
DRIP CAP: NGP 16A (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON INTERIOR SIDE ONLY (OR EQUAL) (N&E)

H11 BREAK ROOM OPEN TO SALES AREA
HINGES: 1-1/2 PR, HAGER BB1199 X 626 (OR EQUAL) (N)
LOCKSET: SCHLAGE CO100CY40KPRHO62 6BRH (N&E)
DOOR CLOSER: SARGENT 1331 JO EN (N&E)
DOOR STOP: IVES FS13 X US26D (N&E)
KICK PLATE: DON-JO J102 8" X 34" X 626 METAL ON BOTH SIDES (OR EQUAL)
KICK DOWN DOOR STOP: CANAROPA 1026.02 (OR EQUAL) (N&E)

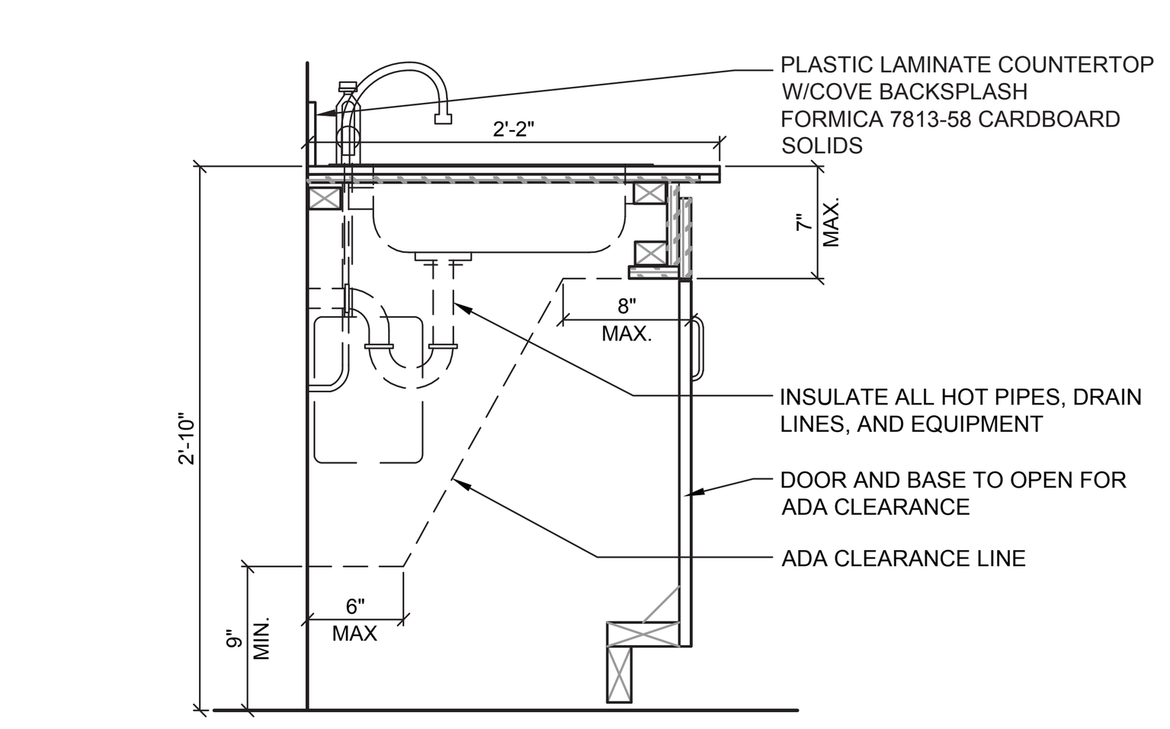
H12 STOREFRONT EXTERIOR EGRESS DOORS — NOT USED
EXIT DEVICE: DETEX V40xEB WITH GLASS KIT
CORE CYLINDER: BEST 1E74

DOOR SCHEDULE NOTES

1. EXISTING DOOR TO REMAIN. REPLACE HARDWARE AND PAINT AS SCHEDULED (ALL DOORS TO RECEIVE 7-PIN BEST CYLINDERS AND CONSTRUCTION CORES).
2. DOOR AND DOOR HARDWARE TO BE PROVIDED AND INSTALLED BY CONTRACTOR. CONTRACTOR TO PROVIDE AND INSTALL HM FRAME TO MATCH DOOR SIZE SHOWN IN DOOR SCHEDULE.
3. CDC EGRESS DOOR MAY BE 4'-0" X 7'-0", AT THE DISCRETION OF SAVERS CM.
4. DOOR TO BE ABANDONED IN PLACE. ENSURE WATERTIGHTNESS. MECHANICALLY SECURE DOOR.
5. PROVIDE STANLEY STANDARD DG3000 SERIES BI-PART SLIDING DOOR OR STANDARD DG2000 SERIES SINGLE SLIDING DOOR SYSTEM WITH NEW BEST CYLINDER WITH CONSTRUCTION CORE.
6. PROVIDE PEEPHOLE, CENTERED IN DOOR, INSTALLED 5'-0" AFF.
7. PROVIDE 6"x12" TEMP. GLASS LITE IN DOOR. DIMENSION FOR LITE, NOT ROUGH OPENING. SEE 11 & 18/A900
8. PROVIDE 6"x12" ONE WAY TEMP. GLASS LITE IN DOOR. DIMENSION FOR LITE, NOT ROUGH OPENING. SEE 11 & 18/A900
9. ALL REMAINING DOORS TO BE CLEANED AND SERVICED, SUCH AS REPLACE DAMAGED OR MISSING HINGES, SEALS, SILENCERS, WEATHER STRIPPING. ETC. TO ENSURE PROPER OPERATION.
10. GC RESPONSIBLE FOR COMPLETE AND PROPER OPERATION OF AUTOSLIDER DOORS, INCLUDING BUT NOT LIMITED TO SENSORS, MOTORS, TRACKS, SEALS, HINGES.
11. PROVIDE 12"x12" LAMINATED SAFETY GLASS, SEE 12/A900
12. PROVIDE H4A HARDWARE FOR COMPACTORS WITH FULL ENCLOSURES. PROVIDE VISION GLASS PER DETAIL 12/A900. COORDINATE WITH SAVERS CM.
13. ONE-WAY DEADBOLT, KEY ON INSIDE CYLINDER, OUTSIDE CYLINDER IS BLANK.
14. SEE DETAIL 29/A900 FOR OH DOOR CONFIG.
15. RESTROOM OCCUPANCY INDICATOR BOLT, SCHLAGE B571 - SINGLE USE RESTROOMS ONLY.
16. REPLACE EXISTING DOOR WITH NEW. FRAME TO REMAIN IF POSSIBLE
17. INCLUDE DETEX V40XEB TO DOOR

DOOR GENERAL NOTES

1. ALL NEW INTERIOR DOORS TO BE 3070 HM DOORS WITH WELDED FRAMES AND BACKING FOR CLOSER
2. ALL DOORS ENTERING AND LEAVING RETAIL AREA TO PRODUCTION AREA ARE TO BE CASED OPENINGS, SEE 21 & 22/A900 SIM.
3. ALL JAMBS FOR CHASE AND/OR ELIASON DOORS ARE TO BE HM WELDED JAMBS FOR CASED OPENING WITH BACKING PER MANUFACTURER RECOMMENDATIONS. FRAME SUPPLIED AND INSTALLED BY GC.
4. U.N.O. ALL DOORS TO BE OFFSET 4" FROM ADJOINING WALL
5. ALL DOORS AND FRAMES SCHEDULED TO BE PAINTED SHALL BE PAINTED P2 (SEE PAINT LEGEND)
6. AT PEMKO 1719 THRESHOLDS, GC TO CONFIRM APPROPRIATE THRESHOLD WIDTH PER EXISTING CONDITIONS. ORDER MIN. WIDTH OF 12" WHICH CAN BE EXTENDED AS REQUIRED BY 1" INCREMENTS UP TO 15"
7. H4A, H8, H8A AND H10 REQUIRE TOP JAMB INSTALLATIONS FOR DOOR CLOSERS
8. ALL EXTERIOR HOLLOW METAL DOORS TO RECEIVE SECURITY ASTRAGALS, NGP 1392 SP FOR SINGLE DOORS AND NGP 139 SP FOR PAIRS.



4 DETAIL - BREAK ROOM SINK
A900 SCALE: 1" = 1'-0"

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
JOSEPH R. WHALEN
NUMBER A-2025017570
ARCHITECT
2025.08.01 09:35:46-05'00'

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.08.25

A900

DOOR SCHEDULE / MISC. DETAILS

CHECKED: JW DRAWN: HP

WARRANTY INFORMATION

BUILDING COMPONENT	DESCRIPTION	WARRANTY	MANUALS	CM	PM
DIVISION 1					
AIA 201 GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION	3.5 Contractor warrants that the materials and equipment furnished will be of good quality and new unless permitted otherwise. . . The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.				
	12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition.				
DIVISION 3					
CONCRETE SLAB REPLACEMENT	1 YEAR BASIC				
CONCRETE CRACK REPAIR	1 YEAR DEFECTIVE PRODUCT WARRANTY				
EPOXY JOINT SEALANT	1 YEAR MATERIAL AND WORKMANSHIP WARRANTY				
SLAB LEVELING AND REPAIR	1 YEAR DEFECTIVE PRODUCT WARRANTY				
POLISHED CONCRETE SLAB	10 – 20 YEARS ON CHEMICALLY HARDENED AND POLISHED FLOORING. PERFORMANCE WARRANTY AGAINST WATER REPELLENT, DUSTPROOF, HARDENED AND ABRASIVE RESISTANT.				
DIVISION 5					
STRUCTURAL STEEL, JOISTS, DECK	1 YEAR BASIC				
STRUCTURAL METAL FRAMING	1 YEAR BASIC				
STEEL STAIRS	LIFETIME WARRANTY AVAILABLE FROM SOME VENDORS.				
METAL STUDS, DRYWALL CHANNELS AND FURRING	1 YEAR BASIC. DEFECT FREE AT TIME OF SHIPMENT.				
DIVISION 6					
ROUGH CARPENTRY	1 YEAR BASIC				
CABINETRY AND MILLWORK	WARRANTIES VARY BY MANUFACTURER. 5 YEAR LIMITED TO LIFETIME WARRANTIES AVAILABLE.				
DIVISION 7					
INSULATION	1 YEAR MATERIAL FREE FROM DEFECTS				
EIFS (SYNTHETIC STUCCO)	12 YEAR LIMITED MATERIAL AND LABOR				
ROOFING PENETRATIONS	1 year water tight warranty from vendor on non-warrantied roofs. Can be included under existing roofing warranty terms if installed by manufacturer approved installer using matching system products and completed installation inspected and approved by manufacturer.				
FLASHING AND SHEET METAL	PREFINISHED METALS COATING WARRANTIES VARY FROM 10 TO 20 YEARS. COVERS COLOR RETENTION, CHALKING, PEEL RESISTANCE.				
FIREPROOFING	2 YEAR MATERIAL AND WORKMANSHIP.				
FIRESTOPPING	FREE FROM DEFECT IN MATERIAL OR MANUFACTURE FOR 90 DAYS.				
JOINT SEALERS	Exterior Vertical Silicone 5-20 years, Exterior Horizontal Silicone 5 years.				
	Urethane Sealants 5 years				
	INTERIOR LATEX 1 YEAR				
DIVISION 8					
STEEL DOORS	1 YEAR BASIC				
WOOD DOORS	INTERIOR 5 PLY WOOD DOORS – LIFETIME OF ORIGINAL INSTALLATION				
IMPACT DOORS	2 YEAR MATERIAL AND WORKMANSHIP				
ACCESS DOORS	1 YEAR MATERIAL AND WORKMANSHIP				
ROLLING SERVICE DOORS	2 YEAR MATERIAL AND WORKMANSHIP				
ALUMINUM STOREFRONTS AND ENTRY DOORS	Storefront Framing: 2 years material and workmanship				
	Door closers: 5 years				
	DOORS: USEFUL LIFE OF DOOR				
AUTOMATIC SLIDING DOORS	1 YEAR MATERIAL AND WORKMANSHIP				
FINISH HARDWARE	Best Locksets: 3 years				
	Panic Devices: 10 year mechanical, 3 year Electrical				
	Closers: 10 year limited warranty				
	HINGES: 1 YEAR WARRANTY				
GLAZING	10 YEAR MATERIAL DETERIORATION ON INSULATED AND COATED GLASS				
WINDOW FILM	SUN CONTROL FILM 10 YEARS NON-TRANSFERABLE FOR FILM AND GLASS FAILURE DUE TO THERMAL SHOCK.				
DIVISION 9					
GYPSUM BOARD ASSEMBLIES	Paper faced board: 2 years material warranty from date of manufacture				
	FIBERGLASS FACED BOARDS: 3 YEARS MATERIAL WARRANTY				
ACOUSTICAL CEILINGS	SPECIFIED "GEORGIAN" TILE 30 YEARS MATERIAL AND FACTORY WORKMANSHIP.				
RESILIENT FLOOR TILE AND WALL BASE	ARMSTRONG HAS 5 YEAR MATERIAL WARRANTY WITH FULL LABOR FOR FIRST YEAR, 50% COST OF LABOR THROUGH SECOND YEAR AND NO LABOR BEYOND 2 YEARS.				
PAINT	Customer Satisfaction Warranty from Sherwin Williams (general)				
	PROJECT SPECIFIC WARRANTY AVAILABLE BASED ON SITE SPECIFIC CONDITIONS AND SUBSTRATES.				
DIVISION 10					
LOUVER AND VENTS	20 year on baked enamel finishes.				
	1 year material on louvers				
	5 YEAR MATERIAL AND WORKMANSHIP ON SMOKE DAMPERS.				
FIRE EXTINGUISHERS	2 – 6 YEAR WARRANTIES ON PORTABLE FIRE EXTINGUISHERS.				
TOILET ACCESSORIES / HAND DRIER	Washroom accessories/soap dispensers: 3 year limited warranty				
	Mirrors: 10 to 15 year limited based on model				
	Had dryers: 3 years motor brushes, 10 years all other parts				
	PARTITIONS: 1 TO 15 YEARS BASED ON MODEL SELECTED.				
DIVISION 15					
SINKS AND FAUCET	Drinking Fountain: 5 year on refrigeration system, 1 year on electrical components and plumbing components.				
	Lounge Sink: 1 year limited warranty Faucet 10 years				
	Mop Sink and faucets: Lifetime limited warranty				
	Water Heater: 3 years on tank				
	Lavatory: 1 year limited warranty Faucet 5 year material and manufacturer defect				
	Water Closet: 1 year limited warranty Flush Valve: 3 year limited				
	URINAL: 1 YEAR LIMITED WARRANTY: FLUSH VALVE: 3 YEAR LIMITED				
FIRE PROTECTION	VARIES BY INSTALLER 5 YEAR MATERIAL, 1 YEAR MAINTENANCE STANDARD.				
PLUMBING	1 YEAR STANDARD				
HVAC	NEW UNITS: 5 YEAR COMPRESSOR, 10 YEAR HEAT EXCHANGER				
CONTROL WIRING	THERMOSTAT: 5 YEARS				
DIVISION 16					
ELECTRICAL PANELS	18 MONTH TO 3 YEARS BASED ON MANUFACTURER				
TRANSFORMERS	5 YEARS.				
LIGHTING	FLUORESCENT BALLAST 3 YEARS				
FIRE ALARM SYSTEM	1 YEAR MAINTENANCE WARRANTY				

PARTITION STUD SPACING/ PARTITION HEIGHT

20 GA. STUD MIN.

3-5/8" STUD

SPACING	PARTITION HEIGHT
24"	14'-0"
16"	15'-0"
12"	17'-6"

6" STUD

SPACING	PARTITION HEIGHT
24"	20'-0"
16"	22'-6"
12"	24'-6"

PAINT LEGEND

P#	Color Name	Match # or SW #	Area Used-REFERENCE ONLY, DO NOT PLOT
P1	SW 7012 SW Creamy-Egg Shell	SW 7012	Walls: Vestibule, Sales floor, Offices, Breakroom, Restrooms
P2	SW 7032 Warm Stone-Semi-gloss	SW 7032	Doors & Frames
P3	SW 6803 Danube-Egg Shell	SW 6803	Walls: Retail Area
P14	SW 7005 Pure White-Egg Shell	SW 7005	Walls: CDC, Back Room, Receiving
P15	SW 7005 Pure White-Flat	SW 7005	Ceiling: exposed deck
P16	SW 7006 Extra White-Semi-gloss	SW 7006	Ceiling: Offices, Restrooms
P17	SW 6921 ELECTRIC LIME	SW 6921	CDC Exterior
P18	SW 6457 DARK GREEN	SW 6457	CDC Exterior

PAINT SYSTEMS SCHEDULE

INTERIOR FINISHES

DRYWALL - FLAT
PRIMER: B28W00600 - PROGREEN 200 LOW VOC INTERIOR LATEX PRIMER
FIRST COAT: B30W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX FLAT
SECOND COAT: B30W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX FLAT

DRYWALL - EGGSHELL
PRIMER: B28W00600 - PROGREEN 200 LOW VOC INTERIOR LATEX PRIMER
FIRST COAT: B20W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX EG-SHEL
SECOND COAT: B20W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX EGGSHELL

DRYWALL - SEMI-GLOSS
PRIMER: B28W00600 - PROGREEN 200 LOW VOC INTERIOR LATEX PRIMER
FIRST COAT: B31W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX SEMI-GLOSS
SECOND COAT: B31W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX SEMI-GLOSS

CONCRETE/CEMENT - FLAT
PRIMER: A24W08300 - LOXON® CONCRETE AND INTERIOR/EXTERIOR LATEX PRIMER
FIRST COAT: B30W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX FLAT
SECOND COAT: B30W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX FLAT

CONCRETE/CEMENT - EG-SHEL
PRIMER: A24W08300 - LOXON® CONCRETE AND INTERIOR/EXTERIOR LATEX PRIMER
FIRST COAT: B20W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX EG-SHEL
SECOND COAT: B20W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX EG-SHEL

CONCRETE/CEMENT - SEMI-GLOSS
PRIMER: A24W08300 - LOXON® CONCRETE AND INTERIOR/EXTERIOR LATEX PRIMER
FIRST COAT: B31W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX SEMI-GLOSS
SECOND COAT: B31W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX SEMI-GLOSS

STEEL - SEMI-GLOSS
SPOT PRIME: B66W00310 - PRO INDUSTRIAL PRO-CRYL® UNIVERSAL PRIMER
FIRST COAT: B66W00351 - SHER-CRYL HPA HIGH PERFORMANCE ACRYLIC SEMI-GLOSS
SECOND COAT: B66W00351 - SHER-CRYL HPA HIGH PERFORMANCE ACRYLIC SEMI-GLOSS

ALUMINUM / GALVANIZED - SEMI-GLOSS
SPOT PRIME: B66W00310 - PRO INDUSTRIAL PRO-CRYL® UNIVERSAL PRIMER
FIRST COAT: B66W00351 - SHER-CRYL HPA HIGH PERFORMANCE ACRYLIC SEMI-GLOSS
SECOND COAT: B66W00351 - SHER-CRYL HPA HIGH PERFORMANCE ACRYLIC SEMI-GLOSS

WOOD - FLAT
PRIMER: B51W08020 - MULTI-PURPOSE LATEX PRIMER WHITE
FIRST COAT: B30W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX FLAT
SECOND COAT: B30W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX FLAT

WOOD - EG-SHEL
PRIMER: B51W08020 - MULTI-PURPOSE LATEX PRIMER
FIRST COAT: B20W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX EG-SHEL
SECOND COAT: B20W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX EG-SHEL

WOOD - SEMI-GLOSS
PRIMER: B51W08020 - MULTI-PURPOSE LATEX PRIMER
FIRST COAT: B31W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX SEMI-GLOSS
SECOND COAT: B31W00651 - PROGREEN 200 LOW VOC INTERIOR LATEX SEMI-GLOSS

STEEL - STAINLESS
PRIMER: B71Y00001 - DTM WASH PRIMER YELLOW GREEN
FIRST COAT: B66W00351 - SHER-CRYL HPA HIGH PERFORMANCE ACRYLIC SEMI-GLOSS
SECOND COAT: B66W00351 - SHER-CRYL HPA HIGH PERFORMANCE ACRYLIC SEMI-GLOSS

EXPOSED CEILINGS
TOPCOAT: B42W00001 - WATERBORNE ACRYLIC DRY FALL FLAT

EXTERIOR FINISHES

WOOD - FLAT FINISH
SPOT PRIME: B42W08041 - EXTERIOR LATEX WOOD PRIMER
FIRST COAT: A06W00151 - A-100® EXTERIOR LATEX FLAT
SECOND COAT: A06W00151 - A-100® EXTERIOR LATEX FLAT

WOOD - SATIN FINISH
SPOT PRIME: B42W08041 - EXTERIOR LATEX WOOD PRIMER
FIRST COAT: A82W00151 - A-100® EXTERIOR LATEX SATIN
SECOND COAT: A82W00151 - A-100® EXTERIOR LATEX SATIN

MASONRY - FLAT FINISH
SPOT PRIME: A24W08300 - LOXON® CONCRETE AND INTERIOR/EXTERIOR LATEX PRIMER
FIRST COAT: A06W00151 - A-100® EXTERIOR LATEX FLAT
SECOND COAT: A06W00151 - A-100® EXTERIOR LATEX FLAT

MASONRY - SATIN FINISH
SPOT PRIME: A24W08300 - LOXON® CONCRETE AND INTERIOR/EXTERIOR LATEX PRIMER
FIRST COAT: A82W00151 - A-100® EXTERIOR LATEX SATIN
SECOND COAT: A82W00151 - A-100® EXTERIOR LATEX SATIN

MASONRY - CLEAR
TOPCOAT: A10T00007 - LOXON® 7% SILOXANE WATER REPELLANT CLEAR

KYNAR - GLOSS
PRIMER: B66A50 DTM BONDING PRIMER @ 2.0 - 5.0 MILS DFT
FIRST COAT: B66-300 SERIES SHER CRYL COATING GLOSS @ 2.5 - 4.0 MILS DFT
SECOND COAT: B66-300 SERIES SHER CRYL COATING GLOSS @ 2.5 - 4.0 MILS DFT

FLUOROCARBON, SILICON POLYESTER, OR POLYESTER POLYMERS PANELS AND SIDING - GLOSS FINISH

1. SURFACE PREPARATION BEFORE SOLVENT OR WATER BLAST CLEANING: SURFACE MUST BE CLEAN, DRY AND IN SOUND CONDITION. REMOVE ALL FOREIGN MATTER (OTHER THAN OIL, GREASE), DIRT, LOOSE RUST, VISIBLE CONTAMINANTS, PEELING PAINT AND OTHER CONTAMINANTS BY BRUSH, ABRASIVE, SCRAPING OR CHEMICAL CLEANER MEANS TO ENSURE ADEQUATE ADHESION TO SUBSTRATE AND RINSE WITH FRESH WATER.
2. REMOVE OIL, GREASE, DIRT, OXIDES, AND OTHER CONTAMINANTS FROM THE SURFACE BY CLEANING PER SSPC-SP1 OR WATER BLASTING PER NACE STANDARD RP-01-72 (CAUTION: EXCESSIVE BLASTING PRESSURE MAY CAUSE WARPING OF PANELS, USE CAUTION).

a. PROHIBITED MATERIALS: HYDROCARBON SOLVENTS.

3. SURFACE PREPARATION AFTER SOLVENT CLEANING: REMOVE DIRT, DUST OR OTHER CONTAMINANTS FORM THE SURFACE PRIOR TO PAINT APPLICATION.
4. CHECK FOR COMPATIBILITY OF THE PREVIOUSLY PAINTED SURFACE WITH THE NEW COATING BY APPLYING A TEST PATCH OF 2 - 3 SQUARE FEET. ALLOW TO DRY THOROUGHLY FOR 1 WEEK BEFORE CHECKING ADHESION.
5. PAINT SYSTEM:

PRIMER: B66A50 DTM BONDING PRIMER @ 2.0 - 5.0 MILS DFT
FIRST COAT: B66-300 SERIES SHER CRYL COATING GLOSS @ 2.5 - 4.0 MILS DFT
SECOND COAT: B66-300 SERIES SHER CRYL COATING GLOSS @ 2.5 - 4.0 MILS DFT

FINISH SCHEDULE

ROOM #	ROOM NAME	CEILING			FLOOR	WALLS			NOTES
		MATERIAL	CEILING HEIGHT	FINISH		MATERIAL	PAINT	BASE	
101	MERCANTILE	1.0/1.1	OPEN/EXIST.	P15	2.1	3.1	P1	5.1	4
102	VESTIBULE	1.1	EXIST.		2.3	3.1	P1	5.1	
103	RECEIVING	1.1	EXIST.		2.0	3.0 / 3.1/ 3.3	P14	5.0	1
104	CDC	1.1	EXIST.		2.1	3.0 / 3.1/ 3.3	P14	5.0	1
105	BACK ROOM	1.1	EXIST.		2.0	3.0 / 3.1/ 3.3	P14	5.0	1
106	WOMEN'S TOILET	1.2	EXIST.	P16	2.1	3.4	P1	5.1	3
107	MEN'S TOILET	1.2	EXIST.	P16	2.1	3.4	P1	5.1	3
108	JANITOR	1.1	9'-0"		2.0	3.4	-	5.1	3
109	UNISEX TOILET	1.2	9'-0"	P16	2.1	3.4	P1	5.1	3
110	BREAK ROOM	1.1	9'-0"		2.1	3.1 / 3.4	P1	5.1	2
111	UNISEX TOILET	1.2	9'-0"	P16	2.1	3.4	P1	5.1	3
112	JUMP START	1.1	9'-0"		2.1	3.1	P1	5.1	
113	MANAGER'S OFFICE	1.2	9'-0"	P16	2.1	3.1	P1	5.1	
117	IT	1.2	9'-0"	P16	2.0	3.1	P1	5.1	
118	ELECTRICAL	1.2	OPEN		2.0	3.1	P1	5.0	

FINISH SCHEDULE NOTES

1. INSTALL 1/2" CDX PLYWOOD OVER GYP. BD. AND CMU WALLS TO 4' 0" A.F.F. PLYWOOD TO BE FIRE RETARDANT TREATED. INSTALL 2x12 BOARD AT BASE OF PLYWOOD TO ACT AS A KICKPLATE. INSTALL 12'-0" AFF PLYWOOD AT ALL PALLET RACKING LOCATIONS. COORDINATE WITH SAVERS CM. PAINT ALL PLYWOOD AND BASE IN CDC P17
2. INSTALL FRP TO 4' 0" A.F.F. INSTALL FULL HEIGHT FRP BACKSPLASH AT MILLWORK COUNTERTOP
3. INSTALL FULL HEIGHT FRP.
4. REFERENCE SHEET A401 FOR INTERIOR ELEVATIONS AND RETAIL PAINT LAYOUT.
5. NOT USED.
6. NOT USED.

CEILING FINISH LEGEND

1.0 EXPOSED STRUCTURE

1.1 ACT - ARMSTRONG 763-GEORGIAN 2' X 4' LAY-IN ACOUSTIC CEILING TILE WITH ARMSTRONG 15/16" GRID OR EQUAL

1.2 GYP. BD.

ACOUSTICAL CEILINGS:
- GENERAL: PATCH AND REPAIR ACT WERE WALLS HAVE BEEN MOVED OR REMOVED (MATCH EXISTING).
- GENERAL: REMOVE ALL OUTLETS, SPEAKERS, CLIPS AND WIRES IN EXISTING CEILINGS.
- GENERAL: REPLACE ANY STAINED OR DAMAGED CEILING TILES (MATCH EXISTING).
- GENERAL: REPLACE OR REPAIR DAMAGED GRID (MATCH EXISTING). CLEAN ALL EXISTING GRID TO BE REUSED.

FLOOR FINISH LEGEND

2.0 EXPOSED CONCRETE - REFER TO QUESTMARK SPECIFICATION

2.1 POLISHED CONCRETE - REFER TO QUESTMARK SPECIFICATION

2.2 NOT USED

2.3 INVISATREAD; QUESTMARK FLOORING, REFER TO QUESTMARK SPECIFICATION [PROVIDE IMPACT SPECIALITIES, HELIX Z1 12" x 9" TILE, BLACK, SURFACE MOUNT INSTALLATION, AT VESTIBULE DOORWAYS.]

WALL FINISH LEGEND

3.0 EXISTING EXPOSED CMU

3.1 GYP. BD

3.2 NOT USED

3.3 1/2" CDX PLYWOOD

3.4 FRP (SMOOTH, WHITE)

BASE FINISH LEGEND

5.0 NO BASE

5.1 RESILIENT BASE - 4" ARMSTRONG: SMOKEY GRAY, R48SG

5.2 CERAMIC TILE (EXISTING TO REMAIN)

GENERAL FINISH NOTES

1. ALL NEW AND EXISTING GYP. BD. WALLS TO BE LEVEL 4 FINISH ON SALES AND OFFICE AREAS (MANAGER, JUMP START, BREAK ROOM, RESTROOMS). PRODUCTION AND RECEIVING WALLS TO BE LEVEL 3 FINISH.
2. ALL COLUMNS OTHER THAN THOSE IN THE SALES AREA ARE TO BE PAINTED WHITE.
3. POWER POLES TO BE PAINTED P1. DO NOT PAINT ANODIZED ALUMINUM POWER POLES.
4. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE VCT STRIP AND WAX AND FINAL CLEANING PRIOR TO TURNOVER TO SAVERS VALUE VILLAGE.
5. WHERE MERCANTILE IS DIRECTLY ADJACENT TO THE BACK ROOM AND/OR CDC AND SEPARATED BY FIXTURE WALL, CONTINUE P1 FOR THE FULL EXTENT OF ANY SHARED WALLS

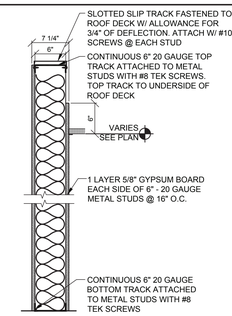
GENERAL PROJECT NOTES

TOILET COMPARTMENTS:
SIGNAGE:
- PROVIDE EXIT SIGNS AS REQUIRED BY LOCAL JURISDICTION.
- PROVIDE FIRE EXTINGUISHER SIGN AS REQUIRED BY LOCAL JURISDICTION.
- PROVIDE SIGNS FOR RESTROOMS TO MEET CODE REQUIREMENTS.

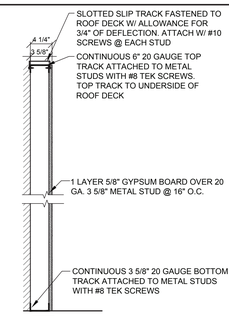
GENERAL PARTITION NOTES

1. SEE PARTITION STUD SPACING FOR HEIGHT LIMITATION
2. STUD GAUGE SHALL BE PER MANUFACTURER'S RECOMMENDATIONS, APPLICABLE CODES AND THE U.S. GYPSUM BOARD INSTITUTE, U.N.O. IN NO CASE SHALL THE STUD GAUGE BE LESS THAN 20 GAUGE.
3. GYP. BD. SHALL BE MOISTURE RESISTANT, IN AREAS SUBJECT TO MOISTURE.
4. NOT USED.
5. PROVIDE F.R.T. WOOD BLOCKING IN PARTITIONS FOR SUPPORT OF ALL WALL MOUNTED ACCESSORIES, FIXTURES, AND ROOF LADDER, WHERE APPLICABLE.
6. PROVIDE SLIP TRACK CONNECTION AT THE TOP OF ALL PARTITIONS THAT TERMINATE AT THE UNDERSIDE OF THE FLOOR DECK, FLOOR STRUCTURE, ROOF DECK AND ROOF STRUCTURE. THIS CONNECTION SHALL ACCOMMODATE 2" OF VERTICAL DEFLECTION AT THE ROOF.
7. PROVIDE CONTROL JOINTS IN GYP. BD. WALLS AS REQUIRED BY "THE GYPSUM CONSTRUCTION HANDBOOK", LATEST EDITION. MIN. EVERY 30L.F.

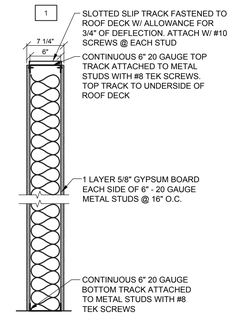
PARTITION SCHEDULE



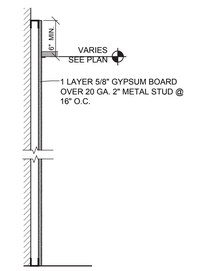
1



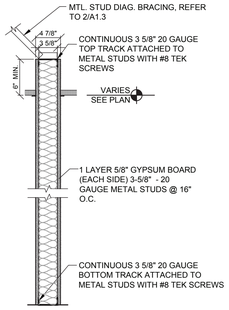
4



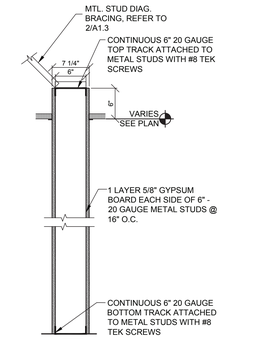
2



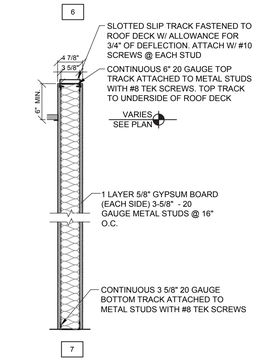
5



3



6



7

WALL TYPE 1:
6" 20 GA. METAL STUDS FROM FLOOR SLAB TO DECK ABOVE. INSTALL ONE LAYER OF 5/8" GYP. BD. FULL HEIGHT OF STUDS ON ONE SIDE, GWB TO 6" ABOVE CEILING ON OTHER SIDE

WALL TYPE 2:
6" 20 GA. METAL STUDS FROM FLOOR SLAB TO DECK ABOVE. INSTALL ONE LAYER OF 5/8" GYP. BD. FULL HEIGHT OF STUDS ON EACH SIDE.

WALL TYPE 3:
3-5/8" 20 GA. METAL STUDS FROM FLOOR SLAB TO 6" ABOVE CEILING. INSTALL ONE LAYER OF 5/8" GYP. BD. FULL HEIGHT OF STUDS ON BOTH SIDES.

WALL TYPE 4:
3-5/8" 20 GA. METAL STUDS FROM FLOOR SLAB TO DECK. BRACE STUDS TO EXT. WALL. INSTALL ONE LAYER OF 5/8" GYP. BD. FULL HEIGHT OF STUDS ON SALES SIDE.

WALL TYPE 5:
2 1/2" MTL. STUDS ON EXISTING MASONRY WALL TO 6" ABOVE CEILING. INSTALL ONE LAYER OF 5/8" GYP. BD. FULL HT. OF FURRING ON EXPOSED SIDE. ALIGN W/ EXISTING WALL FURRING

WALL TYPE 6:
6" 20 GA. METAL STUDS FROM FLOOR SLAB TO 6" ABOVE CEILING. INSTALL ONE LAYER OF 5/8" GYP. BD. FULL HEIGHT OF STUDS ON BOTH SIDES.

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

JOSEPH WHALEN - ARCHITECT
LIC # A-2025017570

NO.	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.08.25

A901

FINISH / PARTITION SCHEDULES WARRANTY INFO.

CHECKED: JW DRAWN: HP

GENERAL

A. USE THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND SHOP DRAWINGS.
B. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONTRACT DOCUMENTS AND LATEST ADDENDA, AS WELL AS SUBMITTING TO ALL SUBCONTRACTORS AND SUPPLIERS PRIOR TO SUBMITTING SHOP DRAWINGS.
C. DO NOT SCALE DRAWINGS OR AUTO-DIMENSION ELECTRONIC FILES. NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES IN WRITING PRIOR TO FABRICATION OR CONSTRUCTION.
D. COMPARE ALL CONTRACT DRAWINGS AND REPORT ANY DISCREPANCIES BETWEEN DISCIPLINES, AND WITHIN A GIVEN DISCIPLINE, TO THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND ERECTION.
E. IF A CONFLICT EXISTS AMONG THE STRUCTURAL DRAWINGS OR GENERAL NOTES, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE ENGINEER, GOVERNS.
F. COORDINATE ALL ELEVATIONS AND DIMENSIONS, INCLUDING BUT NOT LIMITED TO, OPENINGS IN WALLS, ROOFS, AND FLOOR SYSTEMS, WITH THE ARCHITECTURAL, PLUMBING, ELECTRICAL, AND MECHANICAL PLANS.
G. VERIFY ALL DIMENSIONS, ELEVATIONS, AND ANY OTHER EXISTING CONDITIONS. NOTIFY THE ARCHITECT AND ENGINEER OF DISCREPANCIES BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. DURING THE CONSTRUCTION PROCESS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE AND TO PROTECT FROM DAMAGE ANY PORTIONS THAT REMAIN. THE SHORING AND BRACING SHOWN (IF ANY) IS A PARTIAL AND SCHEMATIC REPRESENTATION. DETERMINE THE ERECTION PROCEDURE TO ENSURE THE STABILITY AND SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION.
H. UNLESS NOTED OTHERWISE, DETAILS SHOWN ARE TYPICAL FOR ALL SIMILAR CONDITIONS.
I. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS, AS WELL AS SAFETY PRECAUTIONS AND PROGRAMS.
J. BRITT, PETERS & ASSOCIATES, INC. IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, NOR FAILURE TO PERFORM WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

DESIGN CRITERIA

A. STRUCTURAL DRAWINGS ARE BASED ON THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE AND THE REFERENCED SECTIONS WITHIN.
B. DEAD LOADS:
ROOF SYSTEMS: 20 PSF TOTAL (ASSUMED)
C. LIVE LOADS:
1. LIVE LOADS ARE BASED ON THE MORE RESTRICTIVE OF THE UNIFORM LOAD OR THE CONCENTRATED LOAD LISTED ACTING OVER A 6.25 SQUARE FOOT AREA. LIVE LOADS HAVE BEEN REDUCED AS PRESCRIBED IN THE AFOREMENTIONED BUILDING CODE.

LIVE LOADS		
CATEGORY	UNIFORM LOAD (PSF)	CONCENTRATED LOAD (LBS)
ROOFS: ALL ROOF SURFACES SUBJECT TO WORKERS		300
ROOFS: ORDINARY ROOF	20	
STAIRS AND EXITS: ALL OTHER	100	

D. DESIGN SNOW LOADS:
EXISTING BUILDING
1. GROUND SNOW LOAD: P_G 20 PSF
2. FLAT ROOF SNOW LOAD: P_F 20 PSF
3. SNOW EXPOSURE FACTOR: C_E 1.0
4. SNOW THERMAL FACTOR: C_T 1.0
5. SLOPE FACTOR: C_S 1.0
6. SNOW IMPORTANCE FACTOR: I_S 1.0
EXTERIOR CANOPY
1. GROUND SNOW LOAD: P_G 20 PSF
2. FLAT ROOF SNOW LOAD: P_F 20 PSF
3. SNOW EXPOSURE FACTOR: C_E 1.0
4. SNOW THERMAL FACTOR: C_T 1.0
5. SLOPE FACTOR: C_S 1.0
6. SNOW IMPORTANCE FACTOR: I_S 1.0

E. DESIGN WIND LOADS:
1. BASIC WIND SPEED: V_{ULT} 109 MPH (3-SEC GUST)
2. BASIC WIND SPEED: V_{ASD} 85 MPH (3-SEC GUST)
3. RISK CATEGORY: II
4. WIND EXPOSURE: B
5. INTERNAL PRESSURE COEFFICIENT: GC_{PI} ±0.18
6. COMPONENTS & CLADDING WIND PRESSURES (ULTIMATE):

Ultimate Design Wind Pressure (psf):								
			Effective Wind Area (sq ft)					
Walls:			10	20	50	100	200	500
Interior	Zone 4	+	16.5	16.0	16.0	16.0	16.0	16.0
		-	-17.9	-17.1	-16.2	-16.0	-16.0	-16.0
Edge	Zone 5	+	16.5	16.0	16.0	16.0	16.0	16.0
		-	-22.0	-20.5	-18.6	-17.1	-16.0	-16.0
Roof:			10	20	50	100	200	500
Interior	Zone 1	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-28.7	-26.8	-24.3	-22.4	-20.5	-18.0
Interior	Zone 1'	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-16.5	-16.5	-16.5	-16.5	-16.0	-16.0
Edge	Zone 2	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-37.9	-35.4	-32.2	-29.8	-27.3	-24.1
Parapet:			10	20	50	100	200	500
Edge	Zone 2	+	61.1	57.1	51.9	47.9	44.0	38.7
		-	-36.1	-34.2	-31.8	-30.0	-28.2	-25.8
Corner	Zone 3	+	78.2	71.2	62.0	55.0	48.0	38.7
		-	-41.2	-38.5	-34.9	-32.1	-29.4	-25.8

WIDTH OF ZONE, a = 7.5 FT

F. SEISMIC LOADS:
1. RISK CATEGORY: II
2. SEISMIC IMPORTANCE FACTOR: I_E 1.0
3. SHORT PERIOD SPECTRAL RESPONSE ACCELERATION: S_S 0.100 g
4. 1-SEC PERIOD SPECTRAL RESPONSE ACCELERATION: S_1 0.068 g
5. SITE CLASS: D (ASSUMED)
6. SHORT PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION: S_{DS} 0.107 g
7. 1-SEC PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION: S_{D1} 0.109 g
8. SEISMIC DESIGN CATEGORY: B

DEMOLITION

A. REMOVE STRUCTURE FROM TOP DOWN. DO NOT ALLOW DEBRIS TO PILE UP OR FALL ON SLABS TO REMAIN. USE PLYWOOD AND/OR OTHER MEANS TO PROTECT SLABS FROM DAMAGE. REPAIR OR REPLACE DAMAGED SLABS, BEAMS, OR OTHER COMPONENTS AS DIRECTED BY OWNER.
B. THESE DRAWINGS ARE INTENDED TO DEFINE PRECAUTIONS FOR PREVENTING DAMAGE TO STRUCTURE TO REMAIN. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION.
C. FIELD VERIFY ALL EXISTING CONDITIONS. SUBMIT A WRITTEN REPORT IDENTIFYING DEVIATIONS FROM THE EXISTING STRUCTURE INDICATED.
D. INSTALL TEMPORARY SHORING AND BRACING OF STRUCTURE AS REQUIRED.
E. CONTACT THE ENGINEER FOR QUESTIONABLE LOCATIONS OR SPECIAL CONDITIONS NOT INDICATED.
F. SUBMIT DETAILS AND CALCULATIONS OF SHORING, BRACING AND OTHER CONSTRUCTION REQUIRED, INCLUDING PHASING, STAGING, AND SEQUENCE. SUBMITTAL MUST BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER, RETAINED BY THE CONTRACTOR. PROVIDE SUBMITTAL TO SPECIAL INSPECTION AGENCY FOR REVIEWING THE INSTALLED SHORING/BRACING, PRIOR TO PROCEEDING WITH WORK.

FOUNDATIONS

A. FOUNDATIONS HAVE BEEN DESIGNED USING A NET ALLOWABLE SOIL BEARING PRESSURE OF 1,500 PSF HAS BEEN ASSUMED AND MUST BE CONFIRMED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
B. ALL SOILS WORK, INCLUDING BACKFILL OF UTILITY TRENCHES AND THE VERIFICATION OF BEARING CAPACITY MUST BE UNDER THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER, PROXIMITY OF UTILITY TRENCHES TO BUILDING FOUNDATION SYSTEM MUST BE AS APPROVED BY THE GEOTECHNICAL ENGINEER TO ENSURE INTEGRITY OF THE BEARING SOILS.
C. ALL FOUNDATIONS BEAR ON UNDISTURBED EARTH OR ENGINEERED FILL AT ELEVATIONS SHOWN ON PLANS AND DETAILS. COORDINATE FINAL TOP OF FOOTING ELEVATIONS WITH THE ARCHITECTURAL ELEVATIONS, MEP DRAWINGS, AND CIVIL GRADING PLANS PRIOR TO PLACEMENT. FOUNDATION STEPS INDICATED ARE APPROXIMATE, UNLESS NOTED OTHERWISE, AND MUST BE FIELD COORDINATED. THE BOTTOM OF EXTERIOR FOUNDATION ELEVATIONS MUST BE BELOW THE FROST DEPTH ELEVATION 3'-0" MEASURED FROM EXTERIOR FINISHED GRADE.
D. BEAR FLOOR SLABS ON 4 INCH MINIMUM DRAINAGE COURSE (COMPACTED STONE) UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT OR DRAWINGS. PLACE THE VAPOR RETARDER BETWEEN THE DRAINAGE COURSE AND THE SLAB. VAPOR RETARDER IS ASTM E1745, CLASS B, 10 MIL UNLESS NOTED OTHERWISE. PLACE, PROTECT, AND REPAIR PER ASTM E1643 AND MANUFACTURER'S INSTRUCTIONS.
E. DO NOT INSTALL FOUNDATION CONCRETE UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. NOTIFY THE ENGINEER OF ALL CONFLICTS BETWEEN FOUNDATIONS AND UTILITIES.
F. ALL FOUNDATIONS, OR PORTIONS THEREOF BELOW GRADE, MAY BE EARTH FORMED BY NEAT EXCAVATIONS. DO NOT PLACE FOUNDATIONS, SLABS, OR OTHER CONCRETE ON FROZEN SUBGRADE OR IN STANDING WATER.
G. CENTER ALL FOUNDATIONS ON WALLS AND/OR COLUMNS, UNLESS NOTED OTHERWISE.
H. RETAINING WALL (LATERAL EARTH PRESSURE) DESIGN VALUES:
1. SOIL UNIT WEIGHT: 110 PCF
2. ACTIVE LATERAL EARTH PRESSURE: (EFPa) 45 PCF
3. PASSIVE LATERAL EARTH PRESSURE: (EFPp) 150 PCF
4. FRICTION COEFFICIENT (SOIL/CONCRETE) 0.25
I. BACK FILL BEHIND RETAINING WALLS WITH AN ENGINEERED FILL CONSISTING OF CLEAN COARSE SAND. DO NOT ALLOW HEAVY EQUIPMENT WITHIN A DISTANCE TO EARTH RETAINING WALLS EQUAL TO THE HEIGHT OF RETAINED EARTH PLUS TWO FEET. USE ONLY HAND-OPERATED VIBRATORY COMPACTORS FOR COMPACTING BEHIND RETAINING WALLS.

CONCRETE

A. CONCRETE MUST CONFORM TO THE CONCRETE PROPERTIES SPECIFIED IN THE CONCRETE PROPERTIES TABLE.
B. CONCRETE MUST HAVE ALLOWABLE UNIT SHRINKAGE OF 0.045% AT 28 DAYS (SEE ASTM C157).
C. SLABS TO RECEIVE MOISTURE SENSITIVE FLOOR COVERINGS MUST HAVE MAXIMUM WATER/CEMENTITIOUS MATERIAL RATIO OF 0.45.
D. CONCRETE CONSTRUCTION MUST CONFORM TO THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".
E. ALL CONCRETE PLACEMENT SHALL ADHERE TO APPLICABLE SECTIONS OF ACI 305 AND ACI 306 FOR HOT WEATHER/COLD WEATHER CONCRETE PLACEMENT.
F. CONCRETE MATERIALS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS:
1. PORTLAND CEMENT: ASTM C150, TYPE I OR II
2. AGGREGATE (NORMAL WEIGHT): ASTM C33
G. ALL REINFORCEMENT MUST CONFORM TO THE FOLLOWING SPECIFICATIONS:
1. ALL REINFORCING, UNO: ASTM A615 GRADE 60
2. EPOXY-COATED REINFORCING: ASTM A775
H. REINFORCEMENT DETAILING:
1. DETAIL AND PLACE REINFORCEMENT IN ACCORDANCE WITH ACI 315.
2. DEVELOPMENT AND SPLICE LENGTHS ARE IN TENSION UNLESS NOTED OTHERWISE. REFER TO THE REINFORCING BAR LAP LENGTH SCHEDULE ON THE TYPICAL DETAIL SHEETS.
3. LAP WWR ONE CROSSWIRE SPACING PLUS 2".
4. INSTALL CORNER BARS AT ALL FOOTINGS AND WALL INTERSECTIONS TO MATCH HORIZONTAL REINFORCING SIZE AND SPACING. AT INTERSECTIONS OF CONTINUOUS SPREAD FOOTINGS, EXTEND ALL BARS TO FAR SIDE OF INTERSECTING FOOTING.
I. INSTALL AND SECURE REINFORCEMENT TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. PROVIDE THE FOLLOWING CONCRETE COVER FOR REINFORCING ACI 318 SECTION 7.7 AND IBC TABLE 720.1, UNLESS SPECIFICALLY NOTED OTHERWISE:
a. CAST AGAINST EARTH: 3"
b. EXPOSED TO EARTH/WEATHER: #5 & SMALLER 1 1/2"
c. SLABS, WALLS, JOISTS: #11 & SMALLER 3/4"
5. INSTALL DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED, UNLESS NOTED OTHERWISE.
J. CHAMFER ALL PERMANENTLY EXPOSED CONCRETE EDGES 3/4 INCH, UNLESS NOTED OTHERWISE.
K. NO HOLES OR OPENINGS THROUGH FOUNDATION WALLS AND/OR FOOTINGS WITHOUT ENGINEER'S APPROVAL. DO NOT EMBED ALUMINUM IN CONCRETE.

CONCRETE PROPERTIES				
CATEGORY	STRENGTH (PSI)	TYPE	COMMENTS	DURABILITY CLASSIFICATION
FOOTINGS	3,000	NWT		F0, S0, W0, C1
SLAB-ON-GRADE INTERIOR	3,000	NWT		F0, S0, W0, C1
SLAB-ON-GRADE EXTERIOR	4,500	NWT		F2, S0, W0, C1

CONCRETE PROPERTIES TABLE NOTES:
1. MINIMUM STRENGTH AND MAXIMUM DENSITY MEASURED AT 28 DAYS.
2. NWT = NORMAL WEIGHT CONCRETE
3. DURABILITY CLASSIFICATION INDICATES CONCRETE REQUIREMENTS BY EXPOSURE CLASS, REFER TO TABLE 19.3.2.1 OF ACI 318.

CONCRETE MASONRY UNIT

A. MASONRY CONSTRUCTION MUST CONFORM WITH ACI 530.1.
B. CONCRETE MASONRY UNITS (CMU) ARE LIGHTWEIGHT COMPLYING WITH ASTM C90. UNITS HAVE A MINIMUM AVERAGE NET-AREA COMPRESSIVE STRENGTH OF 2,000 PSI. MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY (F'M) IS 2,000 PSI.
C. MORTAR MUST CONFORM TO ASTM C270, TYPE M OR S.
D. GROUT MUST CONFORM WITH ASTM C476, WITH A 28 DAY COMPRESSIVE STRENGTH EQUAL TO OR GREATER THAN THE SPECIFIED NET AREA COMPRESSIVE STRENGTH OF MASONRY (F'M).
E. REINFORCING BARS ARE ASTM A615, GRADE 60.
F. VERTICAL AND HORIZONTAL REINFORCING ARE CONTINUOUS AND LAPPED A MINIMUM OF 72 BAR DIAMETERS.
G. POSITION AND HOLD REINFORCING STRAIGHT AS INDICATED. INSTALL REBAR POSITIONERS AT SPACING NOT TO EXCEED 200 BAR DIAMETERS, AT GROUT LIFT HEIGHTS, OR BAR SPLICE LOCATIONS, WHICHEVER IS LESS, TO HOLD REBAR IN PROPER LOCATION UNTIL GROUT CURES.
H. INSTALL 9 GAGE LADDER TYPE HORIZONTAL JOINT REINFORCING AT 16" OC MAXIMUM SPACING UNLESS NOTED OTHERWISE. JOINT REINFORCING COMPLIES WITH ASTM A951 AND GALVANIZED PER ASTM A153, CLASS B. LAP JOINT REINFORCEMENT AT LEAST 6 INCHES (MUST CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE LAP). LAP WITH STANDARD T- AND L-SHAPED PIECES AT INTERSECTIONS AND CORNERS.
I. INSTALL DOWELS FROM FOUNDATIONS OR SUPPORTING CONCRETE MEMBER BELOW, SAME SIZE AND SPACING AS VERTICAL REINFORCING, UNLESS NOTED OTHERWISE. DOWELS HAVE STANDARD ACI HOOKS.
J. FULLY GROUT ALL CELLS AND WALLS BELOW GRADE. SLUSH JOINT BETWEEN WYTHES.
K. LOW-LIFT GROUTING PROCEDURES IN ACCORDANCE WITH ACI 530.1.
L. IF HIGH-LIFT GROUTING, COMPLY WITH ACI 530.1, INCLUDING CLEANOUTS AT EACH GROUTED CELL.
1. DO NOT EXCEED 5 FEET GROUT POUR LIFT, UNLESS CLEANOUTS ARE PROVIDED IN THE BOTTOM COURSE OF EACH 5 FOOT LIFT.
2. MECHANICALLY VIBRATE ALL LIFTS IN EXCESS OF 1 FOOT.
3. DO NOT STOP GROUT POUR WITHIN 1-1/2 INCHES OF BED JOINT.
4. TOTAL GROUT POUR MUST NOT EXCEED 24 FEET WHEN GROUTING THE CELLS OF HOLLOW MASONRY.
M. INSTALL MASONRY IN A RUNNING BOND PATTERN.
N. SHORE ALL MASONRY LINTELS UNTIL MASONRY AND GROUT HAVE SET FOR A MINIMUM OF 7 DAYS.
O. MASONRY WALLS HAVE BEEN DESIGNED IN THE FINAL CONSTRUCTED CONFIGURATION ASSUMING FULL BRACING TOP, BOTTOM, AND/OR SIDE OF WALL. DURING CONSTRUCTION, BRACE ALL CMU TO RESIST ERECTION AND LATERAL LOADS THAT MAY BE APPLIED PRIOR TO COMPLETION OF CONSTRUCTION.

STRUCTURAL STEEL

A. HOT-ROLLED STEEL BARS, PLATES, SHAPES, AND SHEET PILING MUST BE NEW STEEL CONFORMING TO ASTM A6. FABRICATE AND INSTALL STEEL IN ACCORDANCE WITH AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS."
B. STRUCTURAL STEEL IS AS FOLLOWS, UNLESS NOTED OTHERWISE:
1. ALL OTHER STRUCTURAL STEEL: ASTM A36 FY = 36 KSI
C. CENTER COLUMNS AND BEAMS ON GRID LINES UNLESS NOTED OTHERWISE.
D. CONNECTIONS:
STEEL CONNECTIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE REFERENCED DESIGN CRITERIA.
E. WELD CONNECTIONS (UNLESS NOTED OTHERWISE):
1. WELDING IN ACCORDANCE WITH AWS D1.1, "STRUCTURAL WELDING CODE - STEEL".
2. USE E70XX (SMAW), F7XX-EXXX (SAW), ER70S-X (GMAW), OR E7XT-X (FCAW) ELECTRODES FOR WELDING, UNLESS NOTED OTHERWISE.
3. SHOW ALL FIELD WELDS REQUIRED ON ERECTION DRAWINGS.
4. USE CONTINUOUS 1/4" FILLET WELDS UNLESS NOTED OTHERWISE.
F. BEAR STEEL BEAMS ON MASONRY AND CONCRETE A MINIMUM OF 8 INCHES, UNLESS NOTED OTHERWISE.
G. CUTS INDICATED ON THE DRAWINGS, OR AS REQUIRED FOR OTHER TRADES, MUST BE MADE IN THE SHOP AND SHOWN ON THE SHOP DRAWINGS. FIELD PERFORMED HOLES OR CUTS ARE NOT PERMITTED WITHOUT ENGINEER APPROVAL.
H. FABRICATE STRUCTURAL STEEL WITH ONE COAT OF SHOP PRIMER EXCEPT THE FOLLOWING MEMBERS: GALVANIZED SURFACES, SLIP-CRITICAL SURFACES, SURFACES TO BE FIELD WELDED, SURFACES TO RECEIVE FIRE PROOFING, OR UNLESS NOTED OTHERWISE. COORDINATE AREAS TO BE FIREPROOFED WITH ARCHITECTURAL DRAWINGS PRIOR TO FABRICATION.
I. GALVANIZED STRUCTURAL STEEL: ASTM A123 OR ASTM A153. GALVANIZE AFTER FABRICATION. GALVANIZE ALL EXTERIOR EXPOSED STEEL, UNLESS NOTED OTHERWISE. REPAIR DAMAGED GALVANIZED COATINGS IN ACCORDANCE WITH ASTM A780.
J. UNLESS NOTED OTHERWISE, THE TOP OF ALL STEEL COLUMNS ARE FABRICATED WITH A STEEL CAP PLATE - MINIMUM CAP PLATE DIMENSIONS MATCH COLUMN WIDTH AND DEPTH, AND MINIMUM THICKNESS OF CAP PLATE EQUALS COLUMN WEB THICKNESS (1/2" MINIMUM).
K. COORDINATE THE EXACT LOCATION AND SIZE OF ALL OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION.
L. REFERENCE THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL STEEL (IF ANY) NOT INDICATED ON THE STRUCTURAL DRAWINGS.

COLD-FORMED STEEL FRAMING

A. COLD-FORMED STEEL FRAMING FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" (AISI S100).
B. DETAIL MEMBERS AND CONNECTIONS FOR ALL FRAMING CONDITIONS, INCLUDING WALLS, CORNERS, HEADERS, AND JAMBS. SOME CONDITIONS MAY REQUIRE MODIFICATION OF COLD-FORMED FRAMING MEMBERS (SUCH AS NOTCHING OR REVISING SIZES) OR MULTIPLE STUDS TO SUPPORT INCREASED LOADS. CONTRACTOR COORDINATE ALL CONDITIONS, CONNECTIONS, AND DETAILS.
C. FABRICATION AND INSTALLATION MUST BE IN ACCORDANCE WITH AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" AND MANUFACTURER INSTRUCTIONS. INSTALL MANUFACTURER'S RECOMMENDED STANDARD TRACK, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS, AND ACCESSORIES FOR THE APPLICATIONS INDICATED AND AS NEEDED FOR A COMPLETE FRAMING SYSTEM. TEMPORARY (CONSTRUCTION) BRACING OF FRAMING MEMBERS (PRIOR TO SHEATHING INSTALLATION) IS BY THE CONTRACTOR PER AISI AND MANUFACTURER RECOMMENDATIONS.
D. COLD-FORMED STEEL MATERIAL: ASTM A1003 STEEL SHEET WITH G60 GALV COATING CONFORMING TO ASTM A653, WITH A MINIMUM YIELD STRENGTH OF 33 KSI (USE 50 KSI FOR 54 MILS AND THICKER) UNLESS NOTED OTHERWISE.
E. MEMBER SIZES INDICATED ARE PER THE "STEEL STUD MANUFACTURERS ASSOCIATION" (SSMA). COMPONENTS SHOWN ARE STRUCTURAL MEMBERS (33 MIL OR THICKER). UNLESS NOTED OTHERWISE: NON-STRUCTURAL MEMBERS AND DRYWALL GAGES ARE NOT PERMITTED.
F. SCREWS ARE NON-CORROSIVE NO 8-18 (DIA=0.125") OR LARGER, UNLESS NOTED OTHERWISE. DO NOT USE STAINLESS STEEL OR COPPER-COATED FASTENERS.
G. WELDING: AWS D1.3 "STRUCTURAL WELDING CODE-SHEET STEEL". CONSULT MANUFACTURER FOR EQUIPMENT RECOMMENDATIONS AND PROPER ELECTRODE SELECTION.
H. INSTALL MINIMUM OF THREE (3) WALL STUDS AT CORNERS AND INTERSECTING STUD WALLS (UNLESS OTHERWISE INDICATED).
I. PREPUNCHED HOLES CANNOT BE LOCATED WITHIN 10 INCHES FROM WALL STUD ENDS.
J. TRACKS ARE THE SAME DEPTH AS STUDS OR JOISTS, UNLESS NOTED OTHERWISE. CONNECT TRACKS TO STUD AND/OR JOIST SUPPORTS AT 16" OC MAXIMUM, ON EACH SIDE. ALIGN WALL STUD FRAMING WITH SUPPORTED STUD/JOIST MEMBERS ABOVE.
K. DO NOT SPLICE MEMBERS UNLESS OTHERWISE INDICATED. FASTEN MULTI-PLY MEMBERS TOGETHER USING TACK WELDS OR #10 SCREWS AT 12" OC MAXIMUM SPACING, UNLESS NOTED OTHERWISE.

POST-INSTALLED ANCHORS

A. ONLY USE POST-INSTALLED ANCHORS WHERE SPECIFIED ON THE DRAWINGS.
B. OBTAIN APPROVAL FROM THE ENGINEER OF RECORD PRIOR TO USING POST-INSTALLED ANCHORS FOR MISSING OR MISPLACED CAST-IN-PLACE ANCHORS.
C. LOCATE EXISTING REBAR, REINFORCING, AND ANCHORS PRIOR TO DRILLING. DO NOT DAMAGE OR DISTURB EXISTING REBAR, REINFORCING OR ANCHORS.
D. INSTALL ANCHORS ACCORDING TO MANUFACTURER'S INSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO: EXPIRATION DATE, INSTALLATION TEMPERATURE, DRILLING METHOD, HOLE SIZE, HOLE DEPTH, HOLE CLEANING, MIXING PROCEDURE, ANCHOR INSTALLATION, AND CURING.
E. FOR PROJECTS MEETING IBC 2012 OR LATER, ACI/CRSI ADHESIVE ANCHORS INSTALLER CERTIFICATION IS REQUIRED FOR ALL INSTALLERS OF ADHESIVE ANCHORS IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATION. PROOF OF CERTIFICATION OR ON-SITE TRAINING FOR ALL ADHESIVE ANCHOR INSTALLERS SHALL BE PROVIDED TO THE EOR PRIOR TO INSTALLATION.
F. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR MINIMUM EDGE DISTANCES AND SPACING.
G. UNLESS NOTED OTHERWISE, EMBED ANCHORS IN THE APPROPRIATE SUBSTRATE WITH A MINIMUM EMBEDMENT OF 8 TIMES THE NOMINAL ANCHOR DIAMETER OR THE EMBEDMENT REQUIRED TO SUPPORT THE INTENDED LOAD.
H. ADHESIVE ANCHOR DESIGN BOND STRENGTH IS BASED ON CRACKED CONCRETE, ACI 355.4 TEMPERATURE CATEGORY B, AND INSTALLATIONS IN DRY HOLES DRILLED USING A HAMMER DRILL INTO CONCRETE CURED FOR AT LEAST 21 DAYS AND NOT EXPOSED TO WATER FOR THE PRECEDING 14 DAYS. ADHESIVE ANCHORS MUST BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318.
I. INSPECT ANCHOR INSTALLATION PER APPLICABLE BUILDING CODE AND SPECIAL INSPECTION REQUIREMENTS.
J. SUBMIT SUBSTITUTION REQUESTS TO THE STRUCTURAL ENGINEER, INCLUDING CALCULATIONS PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER SHOWING THE SUBSTITUTED PRODUCT WILL ACHIEVE AN EQUIVALENT CAPACITY USING THE APPROPRIATE DESIGN PROCEDURE REQUIRED BY THE BUILDING CODE.
K. NON-ADHESIVE ANCHORS IN NEW CONCRETE SHALL NOT BE INSTALLED UNTIL CONCRETE HAS CURED A MINIMUM OF 7 DAYS AND SHALL NOT BE LOADED PRIOR TO CONCRETE CURING FOR 28 DAYS (UNLESS OTHERWISE SPECIFIED BY MANUFACTURER).
L. INSTALL ANCHORS PER THE MANUFACTURER PRINTED INSTALLATION INSTRUCTIONS (MPII), AS INCLUDED IN THE ANCHOR PACKAGING.
M. THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THE ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF ANCHOR INSTALLATION.

SPECIAL INSPECTIONS AND TESTING

A. SPECIAL INSPECTIONS AND TESTING ARE PERFORMED IN ACCORDANCE WITH IBC CHAPTER 17 AND LOCAL JURISDICTION PROVISIONS, BY AN INDEPENDENT INSPECTION AND TESTING AGENCY. THE SPECIAL INSPECTOR MUST OBSERVE AND TEST THE WORK FOR CONFORMANCE TO THE CONTRACT DOCUMENTS.
B. THE SPECIAL INSPECTOR MUST FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND ALL OTHER DESIGNATED INDIVIDUALS. ALL DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF NOT CORRECTED, TO THE PROPER DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
C. THE SPECIAL INSPECTOR MUST SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK IS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, SOILS REPORT, AND APPLICABLE WORKMANSHIP OF THE BUILDING CODE.

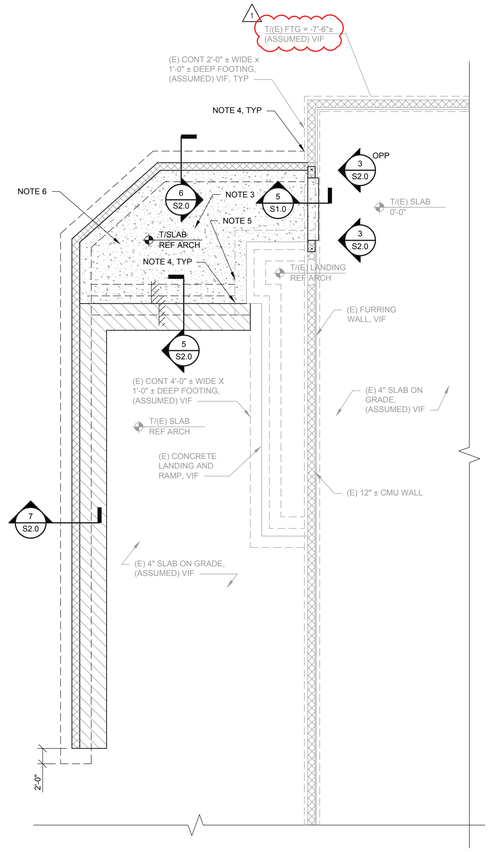
SUBMITTALS

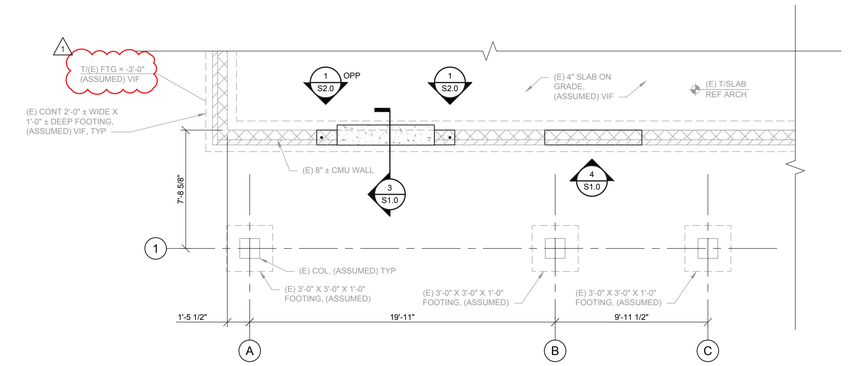
A. CONTRACTOR MUST REVIEW AND STAMP ALL SHOP DRAWINGS BEFORE SUBMITTING FOR REVIEW. SUBMIT SHOP DRAWINGS TO THE ARCHITECT AND/OR ENGINEER FOR REVIEW. FABRICATE AND CONSTRUCT FROM THE REVIEWED SUBMITTALS. ALLOW 10 BUSINESS DAYS FOR EACH SUBMITTAL REVIEW UNLESS AN ALTERNATE REVIEW TIME IS AGREED UPON BY ALL PARTIES. IN THE EVENT MULTIPLE SUBMITTALS ARE SUBMITTED AT THE SAME TIME, THE CONTRACTOR MUST INDICATE WHICH SUBMITTALS HAVE PRIORITY.
B. MAINTAIN A RECORD SET OF APPROVED SHOP DRAWINGS IN THE FIELD.
C. SUBMIT IN WRITING ANY DEVIATION FROM, ADDITION TO, SUBSTITUTION FOR, OR MODIFICATION TO, THE STRUCTURE OR ANY PART OF THE STRUCTURE DETAILED, TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN-WRITING" UNLESS IT IS CLEARLY NOTED SPECIFIC CHANGES ARE BEING REQUESTED.
D. PREPARE A LIST AND SCHEDULE OF ALL STRUCTURAL SUBMITTALS PRIOR TO CONSTRUCTION.
E. SUBMIT THE FOLLOWING SHOP DRAWINGS FOR THE ENGINEER'S REVIEW:
1. CONCRETE MIX DESIGNS
2. REINFORCING STEEL
3. STRUCTURAL STEEL SHOP AND ERECTION DRAWINGS
F. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED.
G. THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATES THEM TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

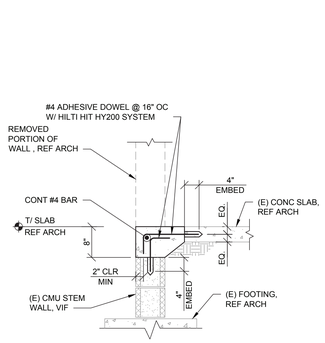
SEAL:


STATE OF MISSOURI
DAVID
IMPSON
NUMBER
PE-2021046162
07/31/2025
PROFESSIONAL ENGINEER

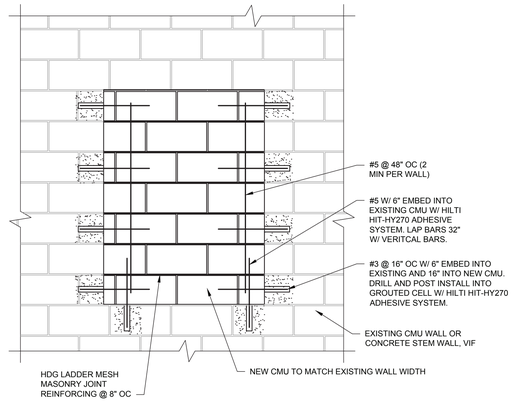




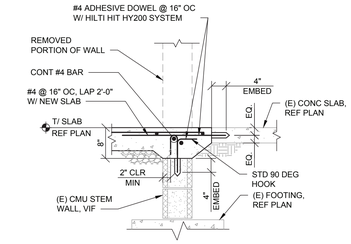
2 S1.0 PLAN @ ENTRANCE
1/4" = 1'-0"



3 S1.0 SECTION AT SLAB
NTS



4 S1.0 EXISTING CMU OPENING INFILL DETAIL
NTS



5 S1.0 SECTION AT SLAB
NTS

1 S1.0 EXISTING PARTIAL FOUNDATION PLAN
1/8" = 1'-0"

PLAN NOTES:

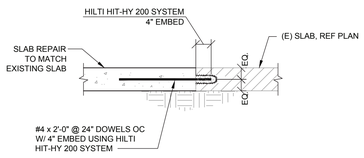
1. EXISTING STRUCTURAL INFORMATION SHOWN IS BASED UPON INFORMATION PROVIDED BY INTERPLAN, LLC. FIELD VERIFY ALL EXISTING FRAMING SIZES, CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION OF NEW MATERIAL. FIELD VERIFY AND CONTACT ENGINEER WITH DISCREPANCIES PRIOR TO FABRICATION OF NEW MATERIAL.
2. REF 7/S2.0 AND 8/S2.0 FOR DISPLAY ANCHORAGE DETAIL.
3. 6" CONCRETE SLAB REINFORCED WITH #3 @12" EACH WAY OVER 4" GRANULAR BASE ON PREPARED SUBGRADE.
4. TIE-IN NEW FOUNDATION TO EXISTING FOUNDATION WITH #5 ADHESIVE DOWEL @ 12" OC USING HILTI HY200 SYSTEM W/ 8" EMBED.
5. TIE-IN NEW SLAB ON GRADE TO EXISTING SLAB ON GRADE WITH #5 ADHESIVE DOWEL @ 12" OC USING HILTI HY200 SYSTEM W/ 4" EMBED. LOCATE REBAR 2" FROM T/SLAB.
6. CONTROL JOINT SHALL BE PLACED AT 15 FEET OC MAX. SLAB UNITS CREATED BY JOINT LAYOUTS SHALL BE AS SQUARE AS POSSIBLE & WITH A MAXIMUM ASPECT RATIO OF 1.25 TO 1. IN ADDITION CONTROL JOINTS SHALL BE LOCATED AT THE CORNERS OF ALL ISOLATION POCKETS.

NOTE:
ALL EXTERNALLY EXPOSED STEEL SHALL BE
HOT-DIPPED GALVANIZED PRIOR TO INSTALLATION.

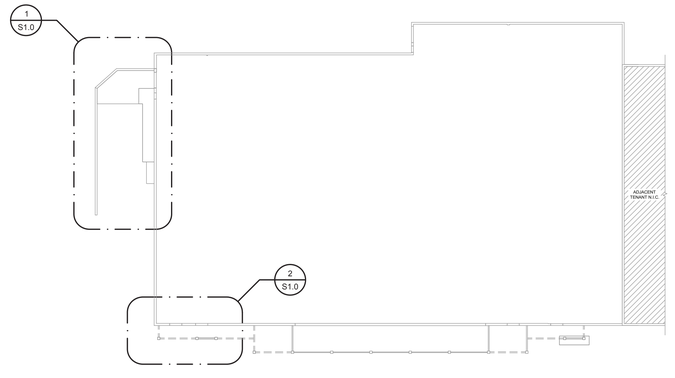
NOTE REGARDING EXISTING CONSTRUCTION:
FIELD VERIFY STRUCTURAL COMPONENTS SHOWN ON THESE DRAWINGS ARE ACCURATE IN REPRESENTING WHAT IS CURRENTLY BUILT. NOTIFY THE STRUCTURAL ENGINEER OF RECORD IF ANY AS-BUILT CONDITION DIFFERS FROM WHAT IS DEPICTED ON THESE DOCUMENTS.

LEGEND:

(E)	DENOTES EXISTING BUILDING ELEMENT, VIF
VIF	DENOTES VERIFY IN FIELD
±	DENOTES APPROXIMATE DIMENSION / ELEVATION, VIF
	DENOTES NEW CMU
	DENOTES NEW CONCRETE
	DENOTES (E) CMU WALL, VIF
	DENOTES EXTERNAL CONCRETE SLAB REPAIR, REF 6/S1.0



6 S1.0 EXTERIOR SLAB REPAIR
N.T.S.



KEYPLAN
NTS

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

BRITT PETERS
AND
ASSOCIATES
INC
consulting engineers
999 Waterside Drive
Suite 2202
Norfolk, VA 23510
(757) 965-5710
BPA Job No. 250372

NO	DATE	REVISIONS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

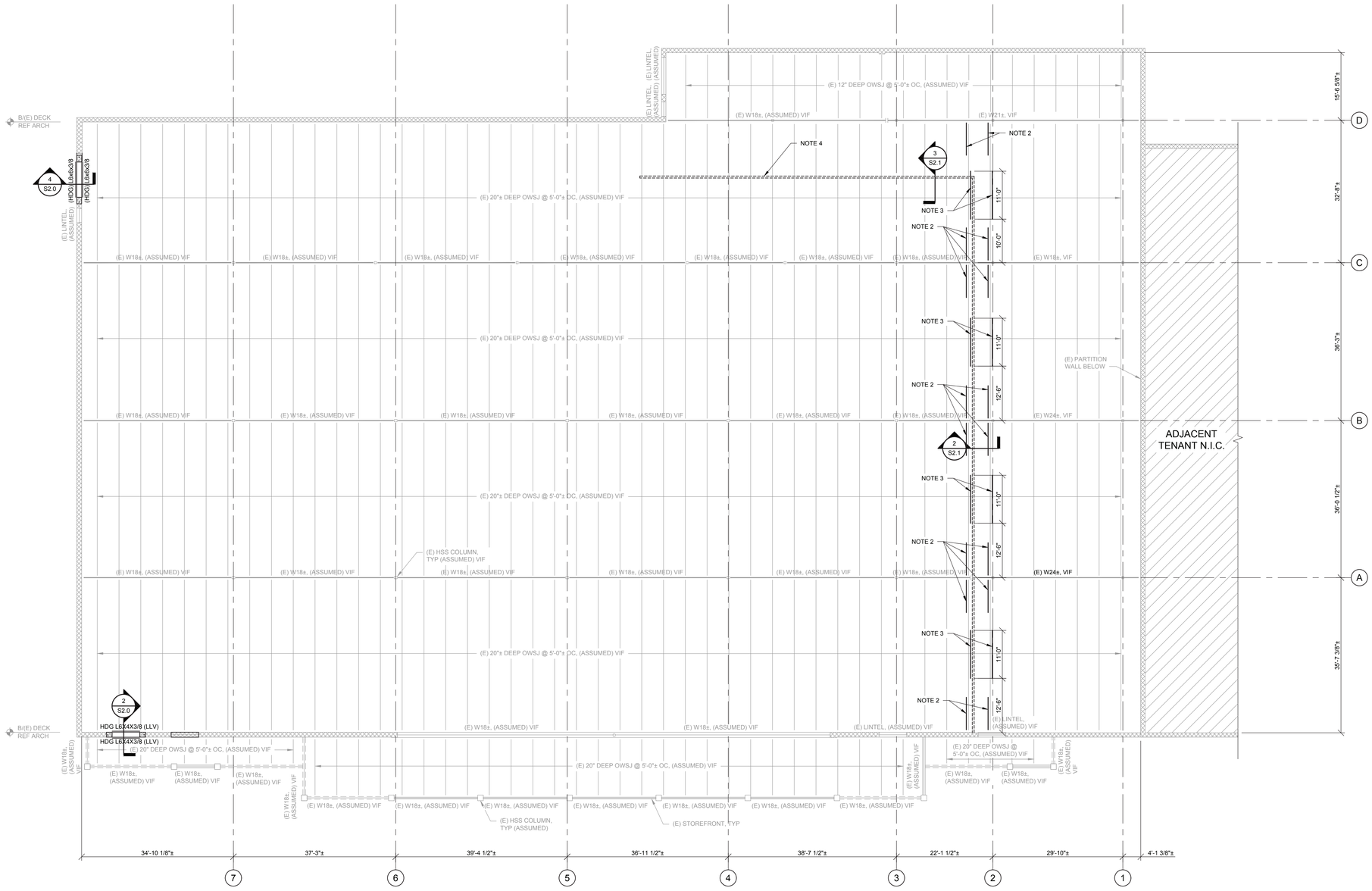
savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.31.2025

S1.0
EXISTING PARTIAL
FOUNDATION PLAN
AND DETAILS

CHECKED: BF DRAWN: JC



1 S1.1 EXISTING ROOF FRAMING PLAN

3/32" = 1'-0"

PLAN NOTES:

1. EXISTING STRUCTURAL INFORMATION SHOWN IS BASED UPON INFORMATION PROVIDED BY INTERPLAN, LLC. FIELD VERIFY ALL EXISTING FRAMING SIZES, CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION OF NEW MATERIAL. FIELD VERIFY AND CONTACT ENGINEER WITH DISCREPANCIES PRIOR TO FABRICATION OF NEW MATERIAL.
2. SHEAR REINFORCING, REF 6/S3.0.
3. MOMENT REINFORCING, REF 6/S3.0.
4. HUNG SOFFIT BELOW REF ARCH FOR EXTENTS AND LOCATION.

LEGEND:

(E)	DENOTES EXISTING BUILDING ELEMENT, VIF
VIF	DENOTES VERIFY IN FIELD
±	DENOTES APPROXIMATE DIMENSION / ELEVATION, VIF
OWSJ	DENOTES OPEN-WEB STEEL JOIST
	DENOTES (E) 12"± CMU WALL

NOTE:
ALL EXTERNALLY EXPOSED STEEL SHALL BE HOT-DIPPED GALVANIZED PRIOR TO INSTALLATION.

NOTE REGARDING EXISTING CONSTRUCTION:
FIELD VERIFY STRUCTURAL COMPONENTS SHOWN ON THESE DRAWINGS ARE ACCURATE IN REPRESENTING WHAT IS CURRENTLY BUILT. NOTIFY THE STRUCTURAL ENGINEER OF RECORD IF ANY AS-BUILT CONDITION DIFFERS FROM WHAT IS DEPICTED ON THESE DOCUMENTS

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

BRITT PETERS
AND
ASSOCIATES
INC
consulting engineers
999 Waterside Drive
Suite 2202
Norfolk, VA 23510
(757) 965-5710
BPA Job No. 250372

NO	DATE	REMARKS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

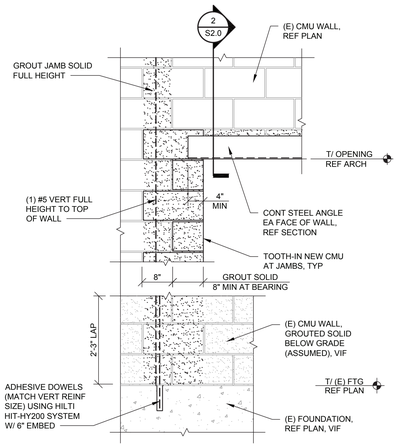
savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.31.2025

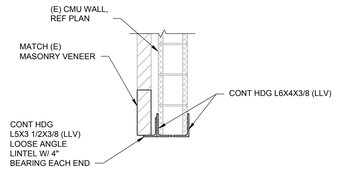
S1.1
EXISTING
ROOF FRAMING PLAN

CHECKED: BF DRAWN: JC

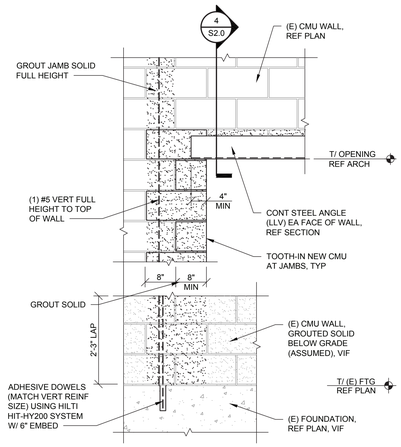


INSTALLATION NOTES:
1. LINTEL SHALL BE INSTALLED PRIOR TO REMOVAL OF (E) CMU WALL.

1 S2.0 ELEVATION
N.T.S.

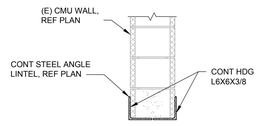


2 S2.0 LINTEL SECTION
N.T.S.

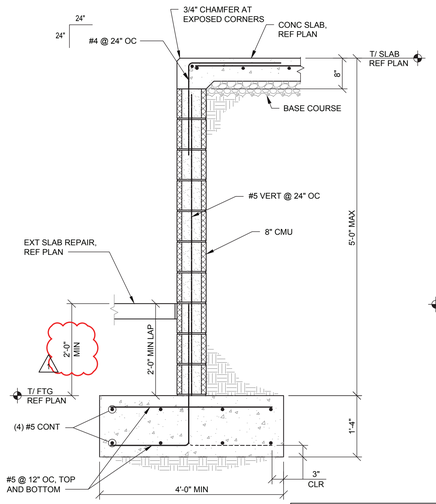


INSTALLATION NOTES:
1. LINTEL SHALL BE INSTALLED PRIOR TO REMOVAL OF (E) CMU WALL.

3 S2.0 ELEVATION
N.T.S.

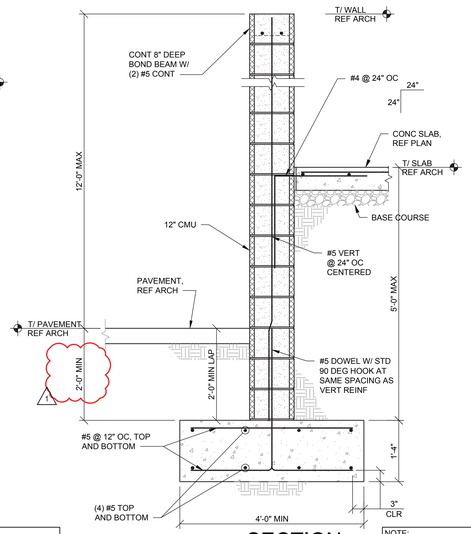


4 S2.0 LINTEL SECTION
N.T.S.



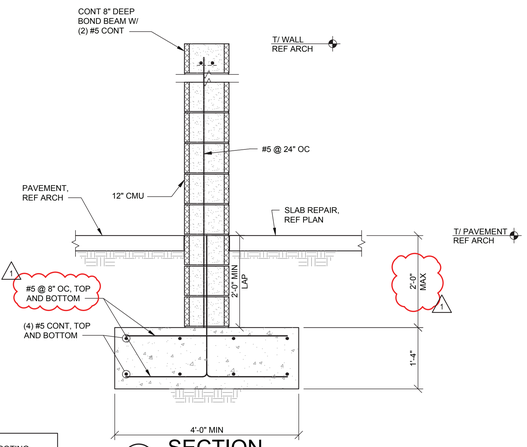
5 S2.0 SECTION
NTS

NOTE:
ALL DIM BASED ON ASSUMED FOOTING ELEVATIONS AND (E) LANDING HEIGHTS. VERIFY DIMENSIONS IN FIELD AND PROVIDE TO SER PRIOR TO FABRICATION OF MATERIALS



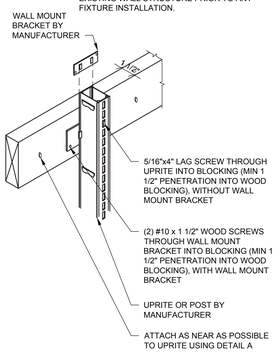
6 S2.0 SECTION
NTS

NOTE:
ALL DIM BASED ON ASSUMED FOOTING ELEVATIONS AND (E) LANDING HEIGHTS. VERIFY DIMENSIONS IN FIELD AND PROVIDE TO SER PRIOR TO FABRICATION OF MATERIALS

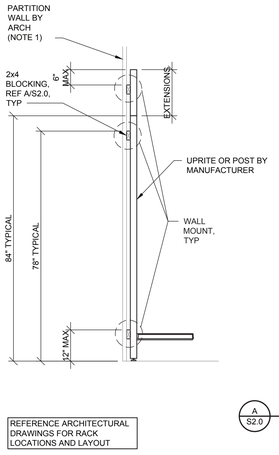


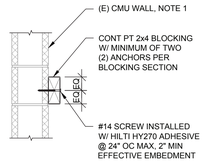
7 S2.0 SECTION
NTS

NOTE 1:
THE EVALUATION OF THE EXISTING WALL STRUCTURE TO SUPPORT THE FIXTURE SYSTEM IS EXCLUDED FROM THIS SCOPE OF WORK. THE BUILDING ENGINEER OF RECORD SHALL EVALUATE THE LATERAL LOADS IMPOSED BY THE FIXTURE SYSTEM ONTO THE EXISTING WALL STRUCTURE PRIOR TO ANY FIXTURE INSTALLATION.



WALL ATTACHMENT DETAIL

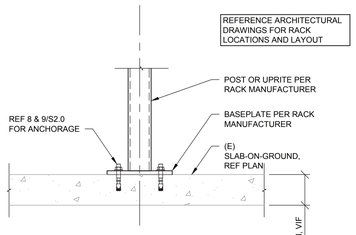




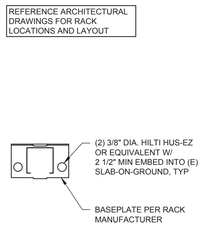
A S2.0 DETAIL
CMU WALL

TYPICAL BLOCKING ATTACHMENT TO WALL

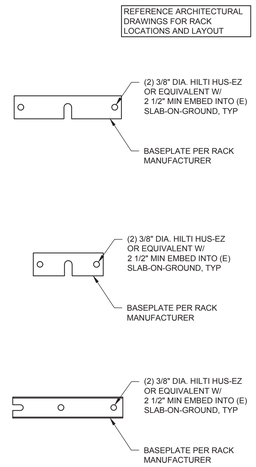
7 S2.0 WALL ATTACHMENT DETAILS FOR FIXTURES
N.T.S.



8 S2.0 TYPICAL STORAGE RACK BASE PLATE CONNECTION
1 1/2" = 1'-0"



9 S2.0 TYPICAL PALLET RACK ANCHORAGE
3" = 1'-0"



10 S2.0 TYPICAL GONDOLA RACK ANCHORAGE
3" = 1'-0"

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

BRITT PETERS AND ASSOCIATES INC
consulting engineers
999 Waterside Drive
Suite 2202
Norfolk, VA 23510
(757) 965-5710
BPA Job No. 250372

NO	DATE	REVISIONS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

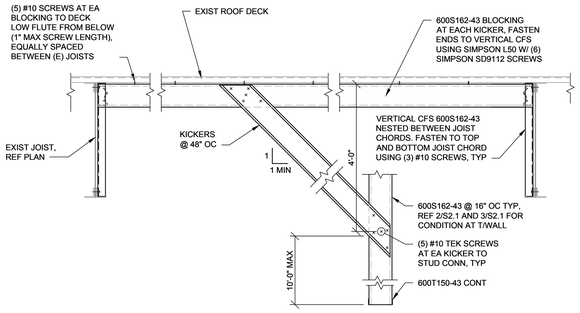
savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.31.2025

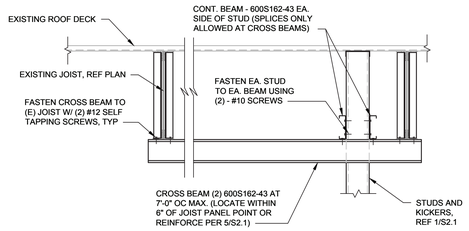
S2.0
SECTIONS AND DETAILS

CHECKED: BF DRAWN: JC



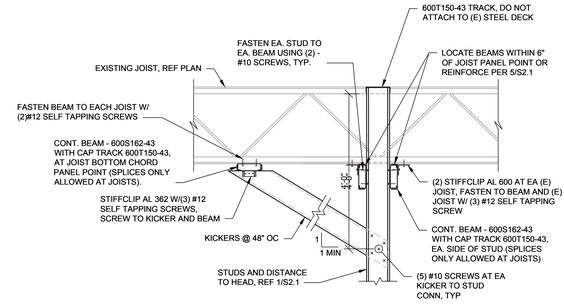
1 S2.1 TYP KICKER TO DECK ATTACHMENT DETAIL

3/4" = 1'-0"



2 S2.1 SECTION

3/4" = 1'-0"



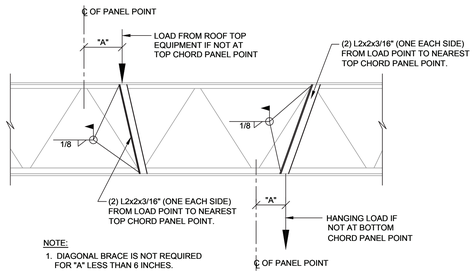
3 S2.1 SECTION

3/4" = 1'-0"

NOTE: ANY SPLICES MUST BE CJP WELDS

4 S2.1 JOIST REINFORCEMENT SECTION

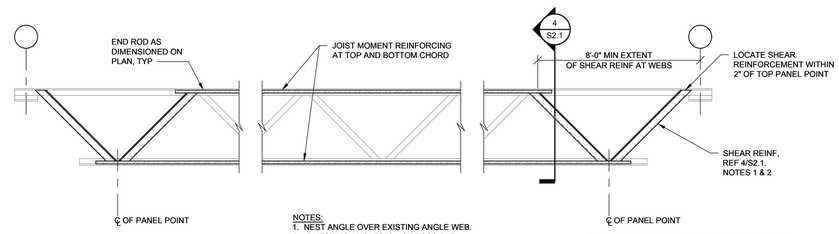
NTS



NOTE:
1. DIAGONAL BRACE IS NOT REQUIRED FOR "A" LESS THAN 6 INCHES.

5 S2.1 TYPICAL STEEL JOIST REINFORCEMENT FOR CONCENTRATED LOADS DETAIL

NTS

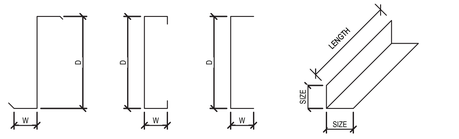


NOTES:
1. NEST ANGLE OVER EXISTING ANGLE WEB.
2. IF NESTING ANGLES IS NOT POSSIBLE, LOCATE SHEAR REINFORCEMENT WITHIN 2" OF THE PANEL POINT CENTERLINE, TYP.

NOTE: IF EXISTING FIELD CONDITIONS PROHIBIT THE INSTALLATION OF THE JOIST REINFORCING SHOWN, CONTACT THE ENGINEER FOR AN ALTERNATE SOLUTION. REATTACH ANY EXISTING JOIST BRIDGING / BRACING DAMAGED DURING REINFORCING WORK

6 S2.1 TYP. JOIST REINFORCEMENT ELEVATION

NTS



MEMBERS ARE DESIGNATED ON DETAILS AND PLANS AS FOLLOWS:

- CEES - 600S162-033 — D, S=STUDS, W, THICKNESS IN MILS
- TRACKS - 600T125-033 — D, T=TRACK, W, THICKNESS IN MILS
- ZEES - 8ZS2.25-070 — D, W, ZS=Z-SEC LIP, THICKNESS IN INCHES
- ANGLES - L3x3x16ga — SIZE, THICKNESS IN GAUGE

125 = 1.25" = 1 1/4"
137 = 1.37" = 1 3/8"
162 = 1.62" = 1 5/8"
200 = 2.00" = 2"
250 = 2.50" = 2 1/2"
300 = 3.00" = 3"
362 = 3.62" = 3 5/8"
400 = 4.00" = 4"
600 = 6.00" = 6"
800 = 8.00" = 8"
1000 = 10.00" = 10"
1200 = 12.00" = 12"

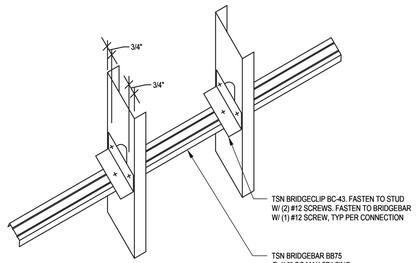
D = SECTION DEPTH
W = FLANGE WIDTH

MIL - GAUGE DESIGNATIONS

MIL THICK	GAUGE
33	20 GA
43	18 GA
54	16 GA
68	14 GA
97	12 GA
118	10 GA

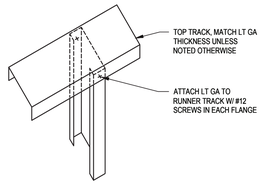
7 S2.1 LIGHT GAUGE MEMBER DESIGNATION LEGEND

NTS



8 S2.1 LATERAL BRIDGING

NTS



9 S2.1 STUD TO TOP TRACK CONNECTION

NTS

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE ENGINEERING PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

BRITT PETERS AND ASSOCIATES INC
consulting engineers
999 Waterside Drive
Suite 2202
Norfolk, VA 23510
(757) 965-5710
BPA Job No. 250372

NO.	DATE	REMARKS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

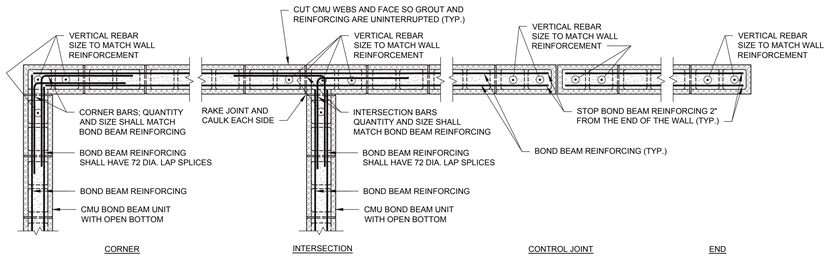
savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

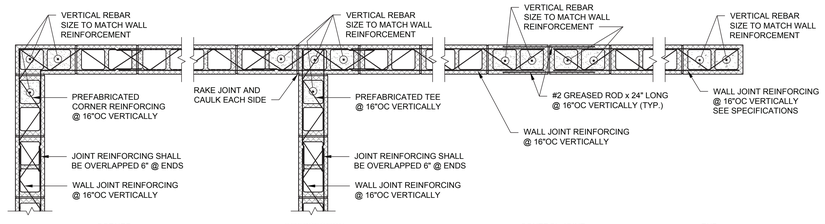
PROJECT NO: 2025.0167
DATE: 07.31.2025

S2.1
SECTIONS AND DETAILS

CHECKED: BF DRAWN: JC



BOND BEAM DETAILS



JOINT REINFORCEMENT DETAILS

STRUCTURAL MASONRY WALL DETAILS

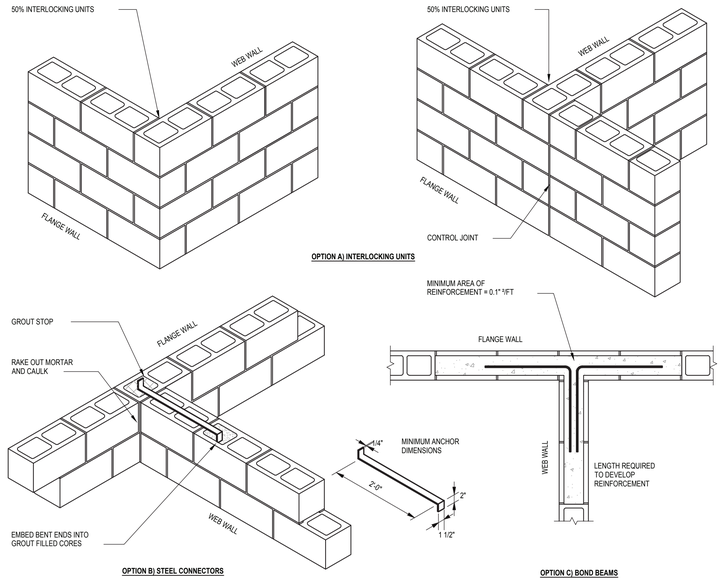
DETAIL 1 / S1.11
NOT TO SCALE

NOTES:
1. PROVIDE 1/2" JOINT B/W ALL MASONRY & CIP COLUMNS.

OPTION A: CONSTRUCTED SUCH THAT 50% OF THE UNITS INTERLOCK AT THE INTERFACE. THIS OPTION, RESULTS IN BOND INTERRUPTION AT 'T' INTERSECTIONS. IT IS GOOD PRACTICE TO INSTALL A CONTROL JOINT IN THE FLANGE WALL TO MINIMIZE CRACKING AT THIS LOCATION UNLESS HORIZONTAL REINFORCEMENT OR OTHER DETAILING IS PROVIDED TO ELIMINATE THE NEED FOR A CONTROL JOINT. IF A CONTROL JOINT IS CONSTRUCTED, THE PORTION OF THE FLANGE WALL SEPARATED FROM THE INTERSECTION BY THE CONTROL JOINT GENERALLY SHOULD NOT BE CONSIDERED EFFECTIVE IN RESISTING APPLIED LOADS FROM THE WEB WALL. REF SECTION 2C FOR CONTROL JOINTS.

OPTION B: WALLS ARE ANCHORED TOGETHER BY STEEL CONNECTORS SPACED AT VERTICAL INTERVALS NOT EXCEEDING 48" OC. IT IS GENERALLY GOOD PRACTICE TO CONSTRUCT A CONTROL JOINT (TO MINIMIZE CRACKING POTENTIAL) AT THE INTERSECTION OF 2 WALLS.

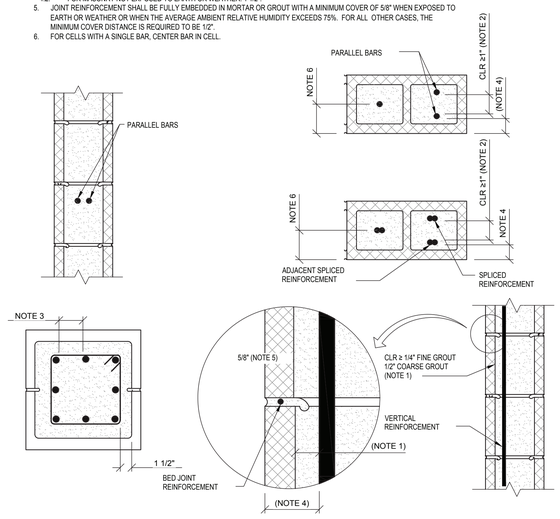
OPTION C: BOND BEAMS ARE INCORPORATED INTO THE INTERSECTING WALLS. THE BOND BEAMS ARE REQUIRED TO CONTAIN AT LEAST 0.1" SQUARED OF REINFORCEMENT PER FOOT OF WALL HEIGHT SPACED NO FURTHER THAN 48" OC VERTICALLY.



INTERSECTING WALLS

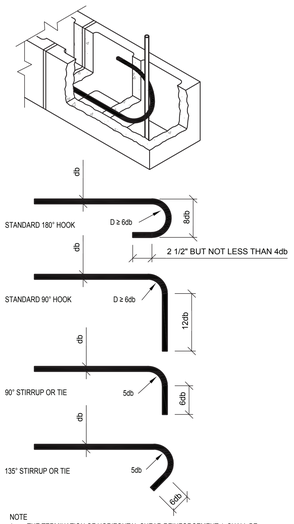
DETAIL 2 / S1.11
NOT TO SCALE

NOTES
1. THE THICKNESS OF GROUT BETWEEN THE REINFORCEMENT AND MASONRY UNITS SHALL NOT BE LESS THAN 1/4" FOR FINE GROUT OR 1/2" FOR COARSE GROUT. (NOTE, THIS REQUIREMENT DOES NOT APPLY TO THE PRESENCE OF MORTAR PROTRUSIONS.)
2. THE CLEAR DISTANCE BETWEEN PARALLEL BARS SHALL NOT BE LESS THAN THE NOMINAL DIAMETER OF THE BARS (db), NOR LESS THAN 1".
3. IN COLUMNS AND PILASTERS, THE CLEAR DISTANCE BETWEEN VERTICAL BARS SHALL NOT BE LESS THAN ONE AND ONE-HALF TIMES THE NOMINAL BAR DIAMETER (db), NOR LESS THAN 1 1/2".
4. REINFORCING BARS SHALL HAVE A MASONRY COVER DISTANCE (WHICH INCLUDES THE UNIT, GROUT, AND MORTAR) OF NOT LESS THAN:
   4.1. FOR MASONRY EXPOSED TO EARTH OR WEATHER: 2" FOR BARS LARGER THAN #5 AND 1 1/2" FOR #5 BARS OR SMALLER.
   4.2. FOR MASONRY NOT EXPOSED TO EARTH OR WEATHER: 1 1/2".
5. JOINT REINFORCEMENT SHALL BE FULLY EMBEDDED IN MORTAR OR GROUT WITH A MINIMUM COVER OF 5/8" WHEN EXPOSED TO EARTH OR WEATHER OR WHEN THE AVERAGE AMBIENT RELATIVE HUMIDITY EXCEEDS 75%. FOR ALL OTHER CASES, THE MINIMUM COVER DISTANCE IS REQUIRED TO BE 1/2".
6. FOR CELLS WITH A SINGLE BAR, CENTER BAR IN CELL.



PLACEMENT OF REINFORCEMENT

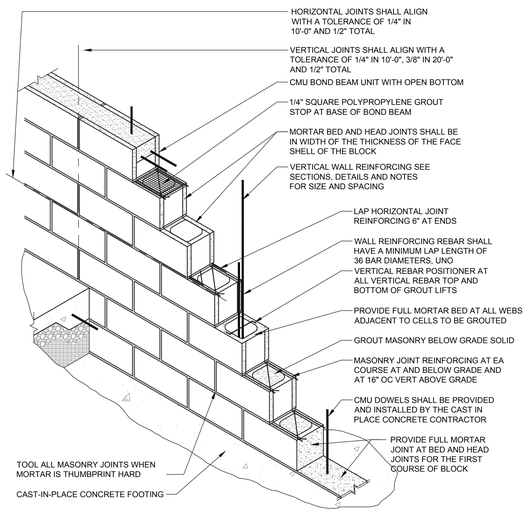
DETAIL 3 / S1.11
NOT TO SCALE



NOTE
1. THE TERMINATION OF HORIZONTAL SHEAR REINFORCEMENT 1. SHALL BE ANCHORED AROUND VERTICAL REINFORCEMENT WITH A STANDARD 180° HOOK. SPACE TO ACCOMMODATE THE HOOK IS LIMITED. THE HOOK MAY NEED TO BE PLACED ON AN ANGLE WITHIN THE BOND BEAM AS SHOWN.

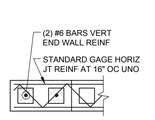
STANDARD HOOKS AND BENDS

DETAIL 4 / S1.11
NOT TO SCALE



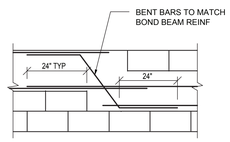
TYPICAL MASONRY WALL CONSTRUCTION

DETAIL 5 / S1.11
NOT TO SCALE



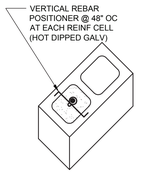
TYPICAL CMU JAMB REINF

DETAIL 6 / S1.11
NOT TO SCALE



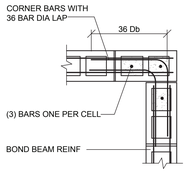
TYPICAL BOND BEAM / LINTEL STEP

DETAIL 7 / S1.11
NOT TO SCALE



TYPICAL REINFORCING POSITIONER

DETAIL 8 / S1.11
NOT TO SCALE



TYPICAL CMU CORNER REINF

DETAIL 9 / S1.11
NOT TO SCALE

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

BRITT PETERS AND ASSOCIATES INC
consulting engineers
999 Waterside Drive
Suite 2202
Norfolk, VA 23510
(757) 965-5710
BPA Job No. 250372

NO	DATE	REVISIONS
	07.11.25	ISSUE FOR PERMIT

savers

901 EAST. LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.0167
DATE: 07.31.2025

S2.2
SECTIONS AND DETAILS

CHECKED: BF DRAWN: JC

ELECTRICAL SPECIFICATIONS

SECTION 16010 - BASIC ELECTRICAL REQUIREMENTS

A THE WORK OF EACH OF THE ELECTRICAL SECTIONS INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT, AND SYSTEMS COMPLETE AS SPECIFIED AND/OR AS INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED, READY FOR SATISFACTORY SERVICE.

B THE WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL, STATE AND OTHER LOCAL CODES, THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND THE 1990 AMERICANS WITH DISABILITIES ACT. REFER TO APPLICABLE CODES TABLE ON DRAWING SHEET A001.

C THE CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES.

D THE GENERAL ARRANGEMENT OF CONDUIT, WIRING AND EQUIPMENT SHALL BE AS IDENTIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE SITE, STRUCTURAL, AND FINISH CONDITIONS AFFECTING HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, PROVIDING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.

E THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK AND RELATED SYSTEMS AS INDICATED ON THE DRAWINGS OR AS NECESSARY TO PROVIDE A COMPLETE SYSTEM.

F THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY WIRING, LIGHTING AND CONSTRUCTION POWER FOR ALL TRADES AS REQUIRED TO COMPLETE THE PROJECT.

G ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A FIRST CLASS WORKMANLIKE MANNER. ALL MATERIALS SHALL BE NEW AND THE BEST OF THEIR RESPECTIVE KINDS. ALL EQUIPMENT AND SYSTEMS SHALL BE APPROVED BY UL OR SIMILAR NATIONALLY ACCEPTED TESTING AGENCY SUCH AS ETL TESTING LABORATORIES.

H THE CONTRACTOR SHALL VISIT THE SITE AND OBSERVE THE CONDITIONS UNDER WHICH THE WORK SHALL BE COMPLETED. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONTRACT FOR ANY ERROR OR NEGLIGENCE IN THE CONTRACTOR'S PART.

I THE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED SHOP DRAWINGS, TOGETHER WITH WIRING DIAGRAMS, SPECIFICATIONS, OPERATING DATA, AND/OR CATALOG CUTS FOR ALL EQUIPMENT.

J A THOROUGH TEST SHALL BE MADE PRIOR TO ENERGIZING THE SYSTEM TO DEMONSTRATE THAT THE SYSTEM IS ENTIRELY FREE FROM GROUND FAULTS, SHORT CIRCUITS, AND OPEN CIRCUITS; THAT THE RESISTANCE TO GROUND ALL NON-GROUNDED CIRCUITS, BEFORE AND AFTER CONNECTION OF EQUIPMENT MEETS THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND IEEE STANDARDS/RECOMMENDATIONS.

K IDENTIFY ALL MOTOR STARTERS, SWITCHES, CONTROLS, PANELBOARDS, SWITCHBOARDS, TERMINAL BOARDS, CONTROL CENTERS AND OTHER EQUIPMENT. IDENTIFICATION PLATES SHALL BE LAMINATED PLASTIC, BLACK ON WHITE ENGRAVED LETTERS. LETTERING FOR CONTROL CENTERS, CONTROL PANELS, METERING AND INSTRUMENT PANELS SHALL BE 3/8" HIGH.

L THE MATERIAL AND WORKMANSHIP OF ALL PARTS OF THE ELECTRICAL INSTALLATION SPECIFIED HEREIN SHALL BE GUARANTEED UNCONDITIONALLY FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE.

M UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL DELIVER TO THE OWNER TWO (2) SETS OF PRINTS OF AS-BUILT ELECTRICAL DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED PENCIL TO SHOW ALL ADDITIONS, CHANGES AND DEPARTURES OF THE INSTALLATION AS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.

N THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A RECORD AND INFORMATION MANUAL. THE MANUAL SHALL BE BOUND IN A THREE-RING LOOSE-LEAF BINDER. PROVIDE THE FOLLOWING DATE IN THE BOOKLET:
1. CUTS OF ALL EQUIPMENT WITH TECHNICAL SPECIFICATIONS.
2. OPERATION AND MAINTENANCE PROCEDURES.
3. SERVICING INSTRUCTIONS.
4. COPIES OF PANELBOARD DIRECTORIES.
5. COPIES OF WARRANTIES.
6. LIST OF LAMPS SHOWING QUANTITY, TYPE, WATTAGE, MANUFACTURER, CATALOG NUMBER, ETC., FOR EACH FIXTURE TYPE.
7. COPIES OF TEST REPORTS.

O EXACT LOCATIONS OF OUTLETS SHALL BE COORDINATED WITH DOOR SWINGS AND VARIOUS PROTRUSIONS. MOUNTING HEIGHTS OF THE VARIOUS ELECTRICAL DEVICES SHALL BE AS FOLLOWS:

SWITCHES	46" AFF TO CENTER OF BOX
RECEPTACLES	20" AFF TO CENTER OF BOX
TELEPHONE OUTLETS	20" AFF TO CENTER OF BOX
EXIT LIGHTS	CENTERED BETWEEN CEILING AND TOP OF DOOR (UP TO 1'-0" ABOVE DOOR), SURFACE OR CEILING MOUNTED AS SHOWN.
DISCONNECTING SWITCHES	52" AFF TO CENTER OF SWITCH

P PROVIDE A DISCONNECT SWITCH FOR EACH MOTOR AS SHOWN ON THE DRAWINGS SIZED AS REQUIRED TO MEET THE NEC AND PROVIDE ALL WIRING CONNECTIONS FROM SOURCE. PROVIDE REQUIRED VOLTAGE.

Q SEAL ALL CONDUIT PENETRATIONS THRU RATED WALLS AND FLOORS TO MAINTAIN FIRE INTEGRITY. REFER TO ARCHITECTURAL DRAWING FOR FIRE WALL LOCATIONS.

R ELECTRICAL CONTRACTOR SHALL VERIFY ALL VOLTAGES OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

A INSTALL ALL WIRING CONDUIT EXCEPT AS OTHERWISE INDICATED. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUIT EMBEDDED IN CONCRETE SHALL BE 3/4" MINIMUM. INSTALL ALL CONDUIT CONCEALED UNLESS ON UNFINISHED WALLS, ON UNFURRED CEILINGS OR MECHANICAL EQUIPMENT SPACES. PROVIDE CONDUIT AS FOLLOWS:
1. RIGID STEEL CONDUIT FOR WORK EXPOSED TO WEATHER OR EMBEDDED IN CONCRETE OR MASONRY
2. GALVANIZED ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR EXPOSED WORK, CONCEALED WORK ABOVE SUSPENDED CEILINGS, AND WITHIN INTERIOR PARTITIONS OR NON-MASONRY WALLS.
3. FLEXIBLE METAL CONDUIT IN SHORT LENGTHS (6" MAXIMUM) FOR THE CONNECTION OF RECESSED LIGHTING FIXTURES AND MOTORS.
4. LIQUID TIGHT FLEXIBLE METAL CONDUIT WHEREVER MOISTURE MAY BE PRESENT AND MOTORS IN MECHANICAL EQUIPMENT SPACES.
5. POLYVINYLCHLORIDE (PVC) SCHEDULE 40 CONDUIT WITH GROUND CONDUCTOR FOR UNDERGROUND OUTSIDE OF BUILDING (SITE) INSTALLATION UNDERGROUND OUTSIDE OF BUILDING (SITE) INSTALLATION.

B INSTALL CONDUITS PARALLEL AND PERPENDICULAR TO WALLS AND INTERIOR SURFACES. CLEAN AND PLUG AND PROVIDE A PULL LINE IN EACH CONDUIT LEFT EMPTY. USE MANUFACTURED ELBOWS AND SCREW JOINTED CONDUIT FITTINGS. USED CAPPED BUSHINGS OR "PUSH PENNY" PLUGS. ALL FITTINGS SHALL BE STEEL OR MALLEABLE IRON. ALL EMT FITTINGS SHALL BE COMPRESSION TYPE.

C ALL OUTLET, SWITCH AND JUNCTION BOXES, SHALL BE SHERARDIZED OR GALVANIZED STAMPED STEEL BY STEEL CITY, RACO, APPLETON, VALENT OR EQUIVALENT. OUTLET BOXES IN CONCRETE CONSTRUCTION SHALL BE OCTAGONAL. NO "THRU-WALL" BOXES SHALL BE USED IN PARTITIONS. ALL BOXES SHALL BE FURNISHED WITH APPROPRIATE COVERS.

D JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS INDICATED OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. BOXES FOR EXTERIOR WORK SHALL BE CAST ALUMINUM OR GALVANIZED CAST IRON TYPE WITH THREADED HUBS, UNLESS OTHERWISE DIRECTED. GASKETED COVER PLATES SHALL BE FURNISHED FOR OUTDOOR INSTALLATIONS.

E BUILDING WIRE. UNLESS OTHERWISE INDICATED, SHALL BE COPPER, 600 VOLT, TYPE THWN/THHN INSULATION, #12 AWG MINIMUM, FOR INTERIOR AND EXTERIOR USED. FOR BRANCH CIRCUITS TYPE MC (METAL CLAD) CABLE MAY BE USED WHERE PERMITTED BY THE NEC AND LOCAL CODES. NON-METALLIC SHEATH CABLE (TYPE NM-B) OR ARMORED CABLE (TYPE AC) WILL NOT BE ALLOWED ON THE PROJECT.

F MINIMUM WIRE SIZE SHALL BE NUMBER TWELVE (12) AWG. NO SPLICES SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES. WIRES NUMBER EIGHT (8) AWG AND LARGER SHALL BE STRANDED. WIRES AND CABLES SHALL BE MANUFACTURED BY PIRELLI, ROYAL, TRIANGLE OR EQUIVALENT.

G THE COLOR CODING SYSTEM LISTED BELOW SHALL BE USED THROUGHOUT THE BUILDING:

SYSTEM	PHASE A	PHASE B	PHASE C	NEUTRAL	GROUND	ISOLATED GROUND
120/208V	BLACK	RED	BLUE	WHITE	GREEN	GREEN/YELLOW
277/480V	BROWN	ORANGE	YELLOW	GRAY	GREEN	GREEN/YELLOW

H THE WIRE SIZE INDICATED IN THE HOMERUN SHALL BE USED THROUGH THE CIRCUIT.

I PROVIDE DISCONNECT SWITCHES WHERE INDICATED AND AS REQUIRED. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NONFUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE. ALL SAFETY SWITCHES SHALL BE NEMA I ENCLOSURE "HD" WITH INTERLOCKING COVER AND HANDLE, MANUFACTURED BY SQUARE "D". PROVIDE NEMA 3R ENCLOSURES IN DAMP, WET, AND OUTDOOR LOCATIONS.

J PROVIDE STARTERS AND CONTROL WIRING AS INDICATED ON THE DRAWINGS, OR SPECIFIED HEREIN. ALL TEMPERATURE CONTROL WIRING AND COMPONENTS SHALL BE UNDER DIVISION 15.

K PROVIDE THERMAL MANUAL MOTOR STARTING SWITCHES FOR FRACTIONAL HORSEPOWER, SINGLE PHASE MOTORS. THE STARTERS SHALL BE SQUARE D COMPANY, CLASS 2510, ALLEN BRADLEY BULLETIN 600 FOR SINGLE SPEED MOTORS. ENCLOSURES SHALL BE NEMA I FOR INTERIOR USE AND NEMA 3R FOR EXTERIOR USE.

L THREE PHASE MOTOR STARTERS SHALL BE 3 POLE, FULL-VOLTAGE, MAGNETIC TYPE. ENCLOSURES SHALL BE NEMA I FOR INTERIOR USE AND NEMA 3R FOR EXTERIOR USE. PROVIDE H-A SWITCH WHEN AUTOMATICALLY CONTROLLED, PILOT INDICATING LIGHT, CONTROL TRANSFORMER, AND NO/NC AUXILIARY CONTACTS. STARTERS SHALL BE SQUARE D COMPANY, CLASS 8536 AND CLASS 8538 COMBINATION TYPE.

M WIRING DEVICES SHALL BE ARROW HART, GENERAL ELECTRIC, P & S, LEVITON OR HUBBELL:
1. WALL SWITCHES: ARROW HART 1991. THREE AND FOUR-WAY SWITCHES SHALL BE OF THE SAME MANUFACTURER AND GRADE.
2. RECEPTACLES: ARROW HART 5362 FOR 20 AMPERES. GFCI SHALL BE #GFCS20 RATED 20 AMPERE, 120 VOLT, TAMPER RESISTANT AND WEATHER RESISTANT RECEPTACLES SHALL BE PROVIDED WHERE REQUIRED PER NEC.
3. DIMMERS: 600/1000/1500/2000 WATTS AS REQUIRED BY JOB CONDITIONS. LUTRON 'NOVA' SERIES OR EQUAL.
4. DEVICE PLATES: ARROW HART SWITCH PLATES SI-S6 SERIES. ARROW HART RECEPTACLE PLATES S8. ARROW HART TELEPHONE BLANK PLATES S14.

N MOUNT WEATHERPROOF DEVICES IN CAST METAL BOXES WITH GASKETED, SPRING-HINGED LID-TYPE LOCKING COVERS HAVING CORROSION-RESISTANT FINISH AND WP, WHILE IN USE COVER.

O THE ENTIRE ELECTRICAL SYSTEM SHALL BE SOLIDLY GROUNDED INCLUDING MAIN SERVICE EQUIPMENT, DISCONNECT SWITCHES, WIRING TROUGHS AND PULL BOXES, CONDUIT SYSTEM, OUTLET BOXES, MOTORS, ELECTRIC HEATING EQUIPMENT, LIGHTING FIXTURES, TRANSFORMERS, EMERGENCY SYSTEMS, UPS SYSTEMS, AND FIRE ALARM SYSTEMS.

P PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN ALL BRANCH CIRCUITS AND FEEDERS SIZED IN ACCORDANCE WITH THE NEC TABLE 250.122.

Q ALL BRANCH CIRCUITS SHALL BE RUN CONCEALED IN EXISTING AND NEW WALLS. CUT AND PATCH EXISTING WALLS AND SURFACES AS REQUIRED.

R ALL D.C. WIRING SHALL BE #10 AWG MINIMUM.

S GROUND, PHASE AND NEUTRAL CONDUCTORS SHALL BE PIG-TAILED IN OUTLET BOXES OR MULTI-OUTLET ASSEMBLY FOR RECEPTACLES SO THAT GROUND AND ELECTRICAL SERVICE WILL NOT BE DISTURBED TO OTHER RECEPTACLES ON THE SAME MULTI-WIRE CIRCUIT IF RECEPTACLE IS REMOVED.

SECTION 16400 - SERVICE AND DISTRIBUTION

A COORDINATE ALL SERVICE ENTRANCE WORK WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL ARRANGE FOR TRANSFER OF SERVICE TO NEW TENANT AT COMPLETION OF CONTRACT.

B DISTRIBUTE POWER AT 277/480V, 3 PHASE, 4 WIRE, FOR FLUORESCENT LIGHTING, AIR CONDITIONING, ELECTRIC HEATING, MOTOR CIRCUITS, AND 120/208V FOR RECEPTACLES, INCANDESCENT LIGHTS AND SMALL MOTORS, OR AS INDICATED ON THE DRAWINGS.

C PANELBOARDS ARE 277/480 VOLTS AND 120/208 VOLTS, THREE PHASE EMPLOYING BREAKERS WITH A MINIMUM 10,000 SYMMETRICAL A.I.C. AT 120 VOLTS OR 240 VOLTS AND 14,000 SYMMETRICAL A.I.C. AT 277 VOLTS. MATCH AIC RATING OF EXISTING BREAKERS FOR NEW BREAKERS ADDED IN AN EXISTING PANEL.

D PANELBOARDS ARE EXISTING FACTORY ASSEMBLED WITH BOLT-ON TYPE CIRCUIT BREAKERS. PROVIDE NEW CIRCUIT BREAKERS, AS REQUIRED, OF THE SAME MANUFACTURER & OF EQUAL RATING TO BREAKERS IN EXISTING PANELBOARDS.

E PROVIDE THREE (3) 3/4 INCH SPARE CONDUITS FROM EACH RECESSED PANEL TO THE CEILING SPACE.

F FUSES FOR SERVICE ENTRANCE EQUIPMENT SHALL BE U.L. LISTED CLASS L, J, OR RKI. FUSES FOR FEEDER CIRCUITS AND PANELBOARDS SHALL BE U.L. CLASS RKI FAST-ACTING TYPE. FUSES FOR MOTOR OVERCURRENT, MOTOR CONTROLLER, AND TRANSFORMER PROTECTION SHALL BE DUAL-ELEMENT, U.L. CLASS RKI TIME-DELAY TYPE.

G PROVIDE ENERGY EFFICIENT, NEMA TP-1, SELF-COOLED, DRY TYPE TRANSFORMERS OF KVA, PHASE, "K" AND VOLTAGE RATINGS AS INDICATED. TRANSFORMERS 15 KVA AND LESS SHALL HAVE A CLASS F INSULATION, 115 DEGREES C RISE. TRANSFORMERS ABOVE 15 KVA SHALL HAVE CLASS H INSULATION, 115 DEGREE C RISE. PROVIDE FOUR 2-1/2 TAPS BELOW TWO 2-1/2 TAPS ABOVE RATED PRIMARY VOLTAGE. TRANSFORMERS OF 150 KVA AND LESS SHALL BE RATED 45 DB. LARGER TRANSFORMERS SHALL BE RATED 55 DB. NEUTRALS AND NEUTRAL CONNECTIONS OF ALL "K" RATED DRY TYPE TRANSFORMERS H SHALL BE 200% OF THE PHASE CONDUCTOR SIZE. TRANSFORMER SHALL BE SQUARE D, GENERAL ELECTRIC, SIEMENS, ACME OR CUTLER-HAMMER

SECTION 16500 - LIGHTING

A LIGHTING FIXTURES SHALL BE AS INDICATED ON THE DRAWINGS. PROVIDE A NEW COMPLETE LIGHTING FIXTURE AT EACH LOCATION INDICATED ON THE DRAWINGS. NEW FIXTURES SHALL BE SPECIFIED ON THE LIGHTING FIXTURE SCHEDULE ON THE DRAWINGS.

B LED LIGHTING FIXTURES. RECESSED FIXTURES: COMPLY WITH NEMA LE 4. BULB SHAPE COMPLYING WITH ANSI C79.1. LAMP BASE COMPLYING WITH ANSI C81.61. CRI OF MINIMUM 80. CCT AS SHOWN ON THE PLANS OR FIXTURE SCHEDULE.

C RATED LAMP LIFE OF 50,000 HOURS, MINIMUM AT 70 PERCENT LUMEN MAINTENANCE.

D INTEGRAL DRIVER. DRIVER POWER FACTOR SHALL BE 40 PERCENT OR GREATER. HARMONIC DISTORTION SHALL BE LESS THAN 10% THD. DRIVERS SHALL BE EQUIPPED WITH AUTOMATIC THERMAL PROTECTION AND 20 KA SURGE PROTECTION WITH END OF LIFE LED INDICATOR.

E ALL PLASTIC DIFFUSERS SHALL BE 100 PERCENT VIRGIN ACRYLIC (NOMINAL .125 INCH THICK) AND ALL LEXAN DIFFUSERS SHALL BE LEXAN TYPE MR-4000, OR EQUAL.

F 8-FOOT TANDEM LAMP UNITS MAY NOT BE USED IN LIEU OF 4 FOOT UNITS IN CONTINUOUS ROWS.

G THE CONTRACTOR SHALL CONSULT THE CEILING CONTRACTOR AND ARCHITECT'S DRAWINGS FOR APPROVED REFLECTED CEILING PLANS BEFORE ORDERING FIXTURES TO INSURE THAT ALL ARE COMPATIBLE WITH THE CEILING SYSTEM AND PROPERLY LOCATED. VERIFY THAT ADEQUATE CLEARANCE FOR INSTALLATION, MAINTENANCE, AND HEAT DISSIPATION IS AVAILABLE.

H PROVIDE A MINIMUM OF TWO (2) GALVANIZED STEEL #12 GAUGE HANGER WIRES (ALTERNATE CORNERS) ON ALL RECESSED FIXTURES.

I CONTRACTOR SHALL PROVIDE UP TO 10 ADDITIONAL EXIT SIGNS AND 10 ADDITIONAL EMERGENCY BATTERY PACKS WITH DUAL HEADS AS NEEDED TO MEET FIRE MARSHAL'S WALK-THROUGH AND ACCEPTANCE. LIGHT FIXTURES, LABOR, EXTENDING CIRCUITS SHALL ALL BE INCLUDED IN THE CONTRACTOR'S BASE BID.

J CONNECT EXIT LIGHTS, EMERGENCY BATTERY UNITS AND NIGHT LIGHTS (NL) TO UNSWITCHED PORTION OF LIGHTING CIRCUIT SERVING RESPECTIVE AREA.

K EXTERIOR SITE LIGHTING SHALL BE PROVIDED ACCORDING TO LOCAL CODE REQUIREMENTS FOR NEW, FREESTANDING BUILDINGS. FOR EXISTING BUILDINGS, THE FOLLOWING TWO CONDITIONS SHALL APPLY. (1) WHEN THE EXTERIOR SITE LIGHTING IS CONTROLLED BY SAVERS, THE CONTRACTOR IS TO RE-LAMP AND RE-BALLAST THE EXISTING FIXTURES AS REQUIRED FOR PROPER OPERATION . (2) WHEN THE EXTERIOR SITE LIGHTING IS CONTROLLED BY THE LANDLORD, THE CONTRACTOR SHALL VERIFY THAT ALL EXTERIOR SITE FIXTURES ARE PROPERLY OPERATING, AND SHALL NOTIFY THE SAVERS CONSTRUCTION MANAGER OF ANY PROBLEMS.

SECTION 16700 - COMMUNICATION SYSTEMS

A TELEPHONE SERVICE SHALL BE INSTALLED BY THE TELEPHONE COMPANY. EXISTING TELEPHONE ENTRY CONDUIT TO BE RELOCATED, AS INDICATED ON THE DRAWINGS. COORDINATE ALL WORK WITH THE TELEPHONE COMPANY.

B PROVIDE WALL OUTLETS IN 4" SQUARE 2-1/8" DEEP BOX WITH RAISED SINGLE GANG COVERS EQUIPPED WITH BLANK STAINLESS STEEL DEVICE PLATES. EXTEND 3/4" EMPTY CONDUIT FROM EACH OUTLET TO THE CEILING SPACE AND TERMINATE WITH INSULATED BUSHINGS. PROVIDE NYLON PULL WIRE IN ALL CONDUITS LEFT EMPTY.

SECTION 16720 - FIRE ALARM SYSTEM

A PROVIDE ALL REQUIRED LABOR, WARRANTY LABOR, MATERIAL EQUIPMENT, SYSTEM PROGRAMMING, SUBMITTALS AND SERVICES NECESSARY TO FACILITATE A COMPLETE AND OPERATIONAL FIRE ALARM SYSTEM, IN ACCORDANCE WITH ALL LOCAL CODES, CONSISTING OF BUT NOT LIMITED TO:
- FIRE ALARM - ADD OR RELOCATE AUDIO/VISUAL ALARM DEVICES, AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION, TO PROVIDE THE NECESSARY COVERAGE, PER CODE.
- SMOKE DETECTORS AND OTHER INITIATING DEVICES - PROVIDE NEW OR RELOCATE, AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION, TO PROVIDE THE NECESSARY COVERAGE, PER CODE.
- DEVICE MOUNTING HEIGHT AND LOCATION - COORDINATE SYSTEM DEVICE LAYOUT WITH PROPOSED FIXTURE PLAN TO ENSURE ALL EXISTING AND/OR NEW VISUAL ALARMS ARE UNOBSTRUCTED FROM THE VIEW OF OCCUPANTS AT GRADE LEVEL. ALL DEVICES LOCATED IN THE SALES AREA SHALL BE MOUNTED AT NO LESS THAN 96" A.F.F. AND THE BACK ROOM AREA LAYOUT SHALL UTILIZE THE CEILING FOR MOUNTING DEVICES TO AVOID CONFLICTS WITH RACKING, RELOCATE EXISTING EQUIPMENT, AS NEEDED.

B GC IS RESPONSIBLE TO PROGRAM SYSTEM AND SET UP OF FIRE ALARM MONITORING WITH THE TENANTS VENDOR;
CONTACT INFORMATION - KIM RANGEL
ACADEMY FIRE
H PHONE: (480) 405-6907 E-MAIL: KRANGEL@ACADEMYFIRE.COM

C GC SHALL COORDINATE ALL REQUIREMENTS FOR ANY REQUIRED DEVICES AND/OR SYSTEM. GC WILL BE RESPONSIBLE FOR COORDINATION BETWEEN THE LAND LORD AND ANY OTHER TENANT ASSOCIATED WITH THE SYSTEM.

D IF APPROPRIATE AND/OR NECESSARY, THE EXISTING SYSTEM MAY BE COMPLETELY REPLACED WITH A NEW SYSTEM, BUT THE GC SHALL BE COMPLETELY RESPONSIBLE FOR MAINTAINING FIRE ALARM PROTECTION TO THE FACILITY IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION.

E GC SHALL BE RESPONSIBLE FOR EXTENDING ANY REQUIRED TELEPHONE/DATA LINES TO THE FIRE ALARM SYSTEM. PROVIDE ONE DEDICATED TELEPHONE LINE AND ONE SHARED TELEPHONE LINE FOR FIRE ALARM SYSTEM. COORDINATE ALL REQUIREMENTS WITH THE

LIGHTING FIXTURE SCHEDULE-US

SYMBOL	DESCRIPTION	MANUFACTURER/MODEL NO.	LAMP	VOLTS	WATTS	REMARKS
A	4FT MICROSTRIP FIXTURE W/ POWER SELECT & COLOR SELECT, FROSTED LENS, 0-10V DIMMING	KEYSTONE KT-MSLED44PS-4-8CSA-VDIM	WITH FIXTURE	120/277	18/ 28/ 44	3500K/4000K/5000K KT-MSLED-VH-KIT (CHAIN) KT-MSLED-LSM-KIT (LINK-MOUNT)
AA	8FT MICROSTRIP FIXTURE W/ POWER SELECT & COLOR SELECT, FROSTED LENS, 0-10V DIMMING	KEYSTONE KT-MSLED44PS-8-8CSA-VDIM	WITH FIXTURE	120/277	54/ 75/ 90	3500K/4000K/5000K KT-MSLED-VH-KIT (CHAIN) KT-MSLED-LSM-KIT (LINK-MOUNT)
AAEM	8FT MICROSTRIP FIXTURE W/ POWER SELECT & COLOR SELECT, FROSTED LENS, 0-10V DIMMING	KEYSTONE KT-MSLED44PS-8-8CSA-VDIM/ EM12	WITH FIXTURE	120/277	54/ 75/ 90	3500K/4000K/5000K, KT-MSLED-VH-KIT (CHAIN) KT-MSLED-LSM-KIT (LINK-MOUNT)
VT	4FT NARROW BODY VAPOR-TIGHT LED W/FROSTED LENS AND 0-10V DIMMING	KEYSTONE VTLED63-4A-850-VDIM-P/ EM12	WITH FIXTURE	120/277	63	5000K, EM DRIVER
CC	2'X4' LED PANEL W/ POWER SELECT & COLOR SELECT, FROSTED LENS, 0-10V DIMMING	KEYSTONE KT-BPLED590PS-24-840-VDIM/G2		120/277	30/ 40/ 50	3500K/4000K/5000K
CCEM	2'X4' LED PANEL W/ POWER SELECT & COLOR SELECT, FROSTED LENS, 0-10V DIMMING	KEYSTONE KT-BPLED590PS-24-840-VDIM/G2/EM12		120/277	30/ 40/ 50	3500K/4000K/5000K, EM DRIVER
FLANGE CC	SAME AS TYPE 'CC' EXCEPT WITH FLANGE KIT	KEYSTONE KT-BPLED590PS-24-840-VDIM/G2 KT-CBLED-RMF-24-KIT		120/277	30/ 40/ 50	3500K/4000K/5000K
FLANGE CCEM	SAME AS TYPE 'CCEM' EXCEPT WITH FLANGE KIT	KEYSTONE KT-BPLED590PS-24-840-VDIM/G2/EM12 KT-CBLED-RMF-24-KIT		120/277	30/ 40/ 50	3500K/4000K/5000K, EM DRIVER
F5	WALL-MOUNTED BATHROOM VANITY LIGHT	SAYLITE WP232 LEDL15W-840		120/277	15	W/ GE ULTRA MAX BALLAST
F6	EXTERIOR CANOPY FIXTURE LISTED FOR WET LOCATIONS	SAYLITE CITLB232ZWMV-GE78623	SIGNIFY 47394-2 13T8 LED/48-4000 IF DIM	120/277	54/ 53	W/ GE ULTRA MAX BALLAST
F6EM	EXTERIOR CANOPY FIXTURE LISTED FOR WET LOCATIONS	SAYLITE CITLB232ZWMV-GE78623	SIGNIFY 47394-2 13T8 LED/48-4000 IF DIM	120/277	54/ 53	W/ GE ULTRA MAX BALLAST
F7	EXTERIOR WALL-MOUNTED BUILDING LIGHT FIXTURE	SAYLITE LEDWPC50W-4K	SIGNIFY LED (50W)	120/277	50	
F8	EXTERIOR WALL-MOUNTED BUILDING LIGHT FIXTURE	SAYLITE LEDWPC80W-4K	SIGNIFY LED (80W)	120/277	80	
EX1	LED EXIT SIGN	BEST ELXTEU1RCBE M		120/277		UNIVERSAL PER SYMBOL ON PLAN. MOUNTING WALL,CEILING OR SUSPENDED. 90 MINUTE BATTERY BACKUP.
EX1RC	LED EXIT SIGN/EMERGENCY COMBO	BEST LEDCXTEU2RW-XX		120/277		UNIVERSAL PER SYMBOL ON PLAN. MOUNTING WALL,CEILING OR SUSPENDED. 90 MINUTE BATTERY BACKUP.
	REMOTE HEAD	BEST RHLED2		120	10	
DD	DOCK LIGHT	PHOENIX DLAW2-12LED-FL-42-NS		120*	9	* PLUG-IN TYPE. SEE E300 FOR RECEPTACLE
NL/EM	REFER TO PLAN AND NOTE - 4					

NOTES:
1. CONTRACTOR SHALL FURNISH ALL FIXTURES.
2. COORDINATE WITH SAVERS CONSTRUCTION MANAGER FOR INFORMATION PERTAINING TO OWNER'S NATIONAL ACCOUNT PURCHASE AGREEMENT.
3. COORDINATE EXACT MANUFACTURER, MODEL NUMBER, MOUNTING, LAMPS, COLORS AND FINISHES WITH OWNER PRIOR TO INSTALLATION.
4. LIGHTING FIXTURES DESIGNATED AS NIGHT LIGHT SHALL BE WIRED AND PROVIDED WITH CONSTANT HOT WIRE AND AHEADOF ANY LOCAL CONTROL AND/OR SWITCH. PROVIDE 1400 LUMEN EMERGENCY BATTERY PACK IN ALL NIGHT LIGHT FIXTURES. PROVIDE LOCK CLIP ON BRANCH CIRCUIT CIRCUIT BREAKER.
5. THE PROTOTYPE F7 FIXTURE LAYOUT IS SHOWN FOR USE WITH NEW, FREESTANDING BUILDINGS. FOR BUILDING-MOUNTED EXTERIOR LIGHTS ON EXISTING BUILDINGS, THE FOLLOWING TWO CONDITIONS SHALL APPLY: (1) WHEN THE EXTERIOR BUILDING LIGHTING IS CONTROLLED BY SAVERS, THE CONTRACTOR IS TO RE-LAMP AND RE-BALLAST THE EXISTING FIXTURES AS REQUIRED FOR PROPER OPERATION. IF REPLACEMENT OR ADDITIONAL EXTERIOR BUILDING FIXTURES ARE REQUIRED, THEN THE CONTRACTOR SHALL SUPPLEMENT WITH NEW F7 FIXTURES, OR MATCH EXISTING. (2) WHEN THE EXTERIOR BUILDING LIGHTING IS CONTROLLED BY THE LANDLORD, THE CONTRACTOR SHALL VERIFY THAT ALL EXTERIOR BUILDING FIXTURES ARE PROPERLY OPERATING, AND SHALL NOTIFY THE SAVERS CONSTRUCTION MANAGER OF ANY PROBLEMS.

ELECTRICAL SYMBOLS

NOTES:
1. ALL MOUNTING HEIGHTS ARE TO CENTER LINE OF OUTLES BOX UNLESS OTHERWISE NOTED.
2. ALL SYMBOLS MAY NOT BE USED ON THE PLANS.

SYMBOL	DESCRIPTION	MTG. HT. UNO
	FIXTURE-FLUORESCENT-CEILING. SEE LIGHTING FIXTURE SCHEDULE.	
NL / NL	SHADING DENOTES FIXTURE ON EMERGENCY OR NIGHT LIGHT CIRCUIT. SEE LFS.	
	EXIT LIGHT - CEILING, WALL DIRECTIONAL ARROWS AS INDICATED. SEE LFS.	
	EMERGENCY BATTERY UNIT. SEE LIGHTING FIXTURE SCHEDULE.	
	FLUSH-MOUNTED/SURFACE-MOUNTED PANELBOARD	78" TO TOP
F 30AS 15AF	DISCONNECT SWITCH-UNFUSED, FUSED M.H., FRAME SIZE OVER FUSE SIZE	66" TO TOP
S S_3 S_a	SWITCH-SINGLE POLE, THREE-WAY, SUBSCRIPT DENOTES OUTLET CONTROLLED	48"
S_{PL} / S_{OS}	SWITCH-PILOT LIGHT/OCCUPANCY SENSOR	48"
S_M	SWITCH-MOTOR RATED	
OS	CEILING-MOUNTED OCCUPANCY SENSOR. LEVITON ODC10-MRW OR APPROVED EQUAL	
	JUNCTION BOX	
	RECEPTACLE-20A-125 VOLTS-DUPLEX/QUADRUPLEX / LEFT SIDE SHADED ARE ARC RECPT.	18"
	RECEPTACLE-20A-125 VOLTS-DUPLEX/QUAD - MOUNTED FLUSH IN CEILING	
IG	RECEPTACLE-20A-125 VOLTS-ISOLATED GROUND	18"
GFI	RECEPTACLE-20A-125 VOLTS- GROUND FAULT CIRCUIT INTERRUPTER	18"
	RECEPTACLE-20A-125 VOLTS-6" ABOVE COUNTER/BACKSPLASH	
WP	RECEPTACLE-20A-125 VOLTS- WITH WEATHERPROOF IN-USE COVER	18"

SYMBOL	DESCRIPTION	MTG. HT. UNO
	SPECIAL RECEPTACLE AS NOTED	
	OUTLET-COMBINATION TELEPHONE/DATA (4"x4"x2.25"D) WITH

COM*check* Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: 2025.014_Savers Lees Summit MO
Project Type: Alteration

Construction Site:
901 E. Langsford Rd
Lee's Summit, Missouri 64063

Owner/Agent:

Designer/Contractor:
Mike Gleason
Gleason Engineering
62 S. Broadway
Aurora, Illinois 60505
6306215090
mgleason@gleasonengr.com

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Retail	37315	1.06	39554
		Total Allowed Watts =	39554

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Retail (37315 sq.ft.)				
LED: A: Other:	1	25	44	1100
LED: AA: Other:	1	348	90	31320
LED: CC: Other:	1	20	50	1000
		Total Proposed Watts =		33420

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Michael Gleason - Principal
Name - Title | Signature | Date

Project Title: 2025.014_Savers Lees Summit MO
Data filename:
Report date: 07/10/25
Page 1 of 5

EMS LIGHTING CONTROL ZONE LEGEND

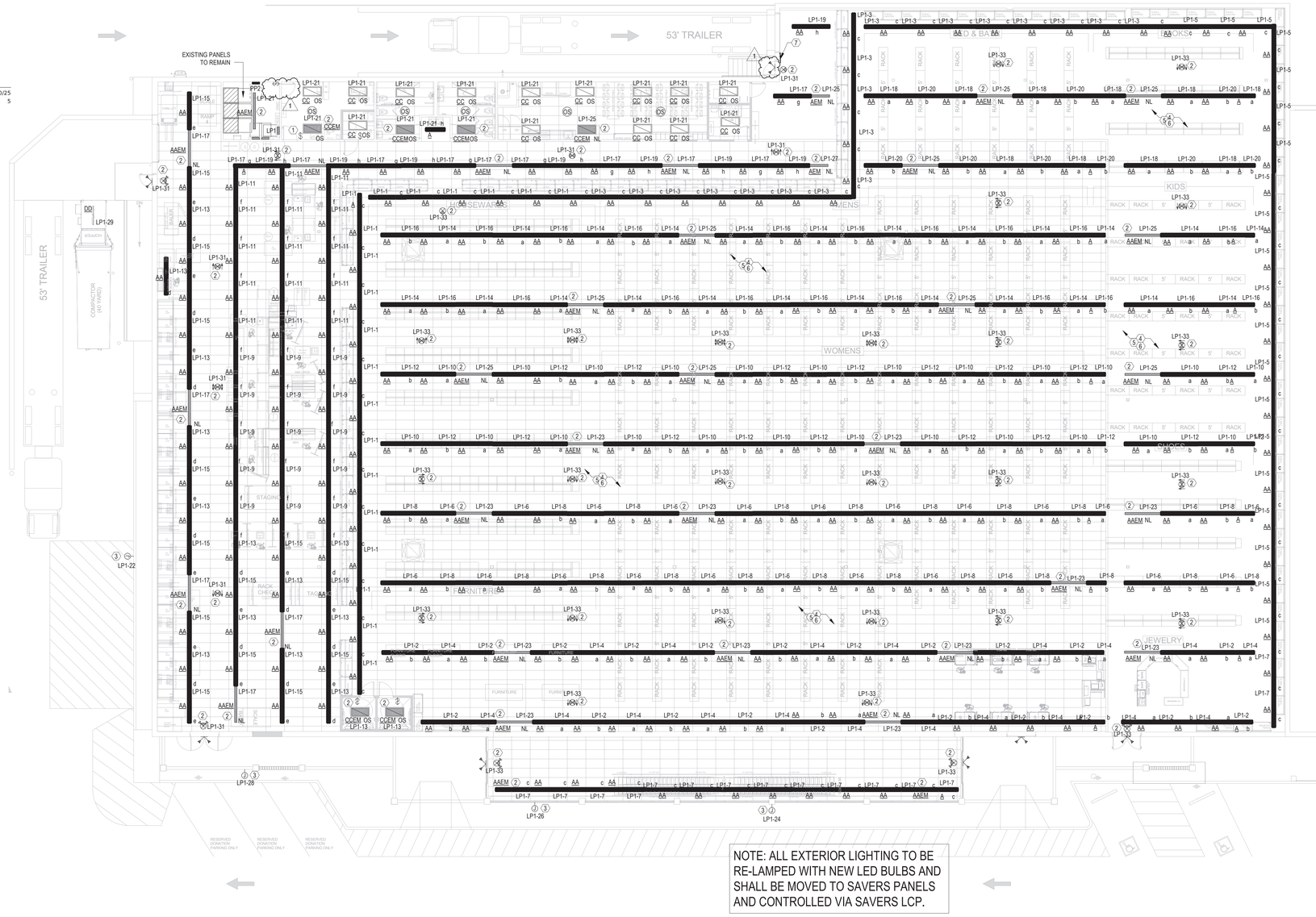
E200	SHEET EM1, PARAGRAPH Q.	SHEET EM3, PANEL TERMINAL/WIRING	COMMENTS
a	i. EMPLOYEE LIGHTS	EMPLOYEE (C1/C2)	50% OF SALES, WITH CDC, IF FRONT OF HOUSE
b	ii. CUSTOMER LIGHTS	CUSTOMER (C3/C4)	50% OF SALES
c	iii. WALL WASH LIGHTS	WALL WASH (C5)	ALL SALES WALL WASH LIGHTING
d	iv. PRODUCTION LIGHTS 1	PRODUCTION 1 (C6)	50% BACKROOM GENERAL LIGHTING
e	v. PRODUCTION LIGHTS 2	PRODUCTION 2 (C7)	50% BACKROOM GENERAL LIGHTING, WITH CDC IF BACK OF HOUSE
f	vi. SPEED RAIL LIGHTS	SPEED RAIL (C8)	SORTING, GRAING, WORKSTATION LIGHTING
g	vii. EXTERIOR LIGHTS	EXTERIOR LIGHTS (C9)	ALL EXTERIOR LIGHTING
h	viii. BUILDING SIGN/PYLON LIGHTS	CANOPY SIGNAGE (C10)	DUST TO DAWN LIGHTING

LIGHTING GENERAL NOTES

1. LOWERCASE LETTERS NEXT TO LIGHT FIXTURES REPRESENT THE SAVERS SWITCHING CRITERIA. FIXTURE BRANCH CIRCUITS SHALL BE ROUTED THROUGH CONTACTORS WITHIN EMS SYSTEM TO COMPLY WITH SWITCHING PATTERN.
2. EM/NL & EXIT SIGN CIRCUITS SHALL BE DEDICATED AND ROUTED IN A SEPARATE RACEWAY FROM EACH OTHER AND ANY NORMAL CIRCUITS.
3. EMERGENCY IS DESIGNED IN COMPLIANCE WITH 2000 LIFE SAFETY CODE (NFPA-101), 0.1FC. 1.0 FC AVERAGE.ANY DEVIATION FROM THIS REQUIRES A SIGNED LETTER FROM THE LOCAL AUTHORITY HAVING JURISDICTION.
4. ALL LIGHTING CONTROLS SHALL MEET OR EXCEED REQUIREMENTS AS OUTLINED BY INTERNATIONAL ENERGY CODE (2018), INCLUDING COMMISSIONING.

ELECTRICAL LIGHTING KEYED NOTES

1	PROVIDE TELETROL ENERGY MANAGEMENT SYSTEM REMOTE OVERRIDE SWITCH (ROS) IN MANAGER'S OFFICE. COORDINATE EXACT LOCATION OF ROS WITH PROJECT MANAGER. REFER TO EM DRAWINGS FOR ADDITIONAL DETAILS.
2	LIGHTING FIXTURES DESIGNATED AS NIGHT LIGHT/EMERGENCY (NL/EM) SHALL BE WIRED AND PROVIDED WITH CONSTANT HOT WIRE AND AHEAD OF ANY LOCAL CONTROL AND/OR SWITCH. PROVIDE LOCK-ON CLIP ON BRANCH CIRCUIT BREAKER AND 1400 LUMEN EMERGENCY BATTERY PACK.
3	ELECTRICAL CONTRACTOR SHALL PROVIDE JUNCTION BOX/VP CONNECTION FOR EXTERIOR BUILDING SIGNAGE, PROVIDED BY OWNER, ALL SIGNS ARE SUPPLIED WITH WITH FACTORY FURNISHED DISCONNECT SWITCH. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS. PROVIDE EMS CONTROL FOR ALL BUILDING SIGNS AS INDICATED ON SHEET E400. REFER TO EM DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE WITH SIGNAGE PROVIDER AND PROJECT MANAGER FOR EXACT LOCATION OF JUNCTION BOX PRIOR TO ROUGH-IN.
4	LIGHTING MOUNTING HEIGHTS SHALL BE AS FOLLOWS: ALL HIGH-BAY FIXTURES TO BE 18'-0" AFF; STRIP FIXTURES FOR MERCANTILE (A & B), WALL-WASH (C) AND BACKROOM SORTING, GRADING, AND WORKSTATION LIGHTING (F) TO BE 14'-6" AFF; STRIP FIXTURES FOR BACKROOM GENERAL LIGHTING (D & E) TO BE AS HIGH AS UNIFORMLY POSSIBLE (TO A MAXIMUM HEIGHT OF 16'-0" AFF). CONTRACTOR SHALL CONFIRM LIGHTING HEIGHTS AND CIRCUITING WITH THE SAVERS VALUE VILLAGE CM.
5	ALL LIGHTING CIRCUITS TO BE FED FROM PANEL 'H1P' UNLESS OTHERWISE NOTED. NUMBER ADJACENT TO FIXTURE INDICATES BRANCH CIRCUIT NUMBER.
6	FIXTURES TO BE CONTROLLED THROUGH EMS SYSTEM. REFER TO EMS DRAWINGS FOR ADDITIONAL INFORMATION.
7	DOCK LIGHT, PLUG-IN TYPE, SHOWN FOR COORDINATION, DUPLEX RECEPTACLE SERVING THIS AT MOUNTING HEIGHT SHOWN ON E300.



NOTE: ALL EXTERIOR LIGHTING TO BE RE-LAMPED WITH NEW LED BULBS AND SHALL BE MOVED TO SAVERS PANELS AND CONTROLLED VIA SAVERS LCP.

1 E200 FLOOR PLAN - LIGHTING
3/32" = 1'-0"

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
MICHAEL F. GLEASON
NUMBER PE-2012004213
PROFESSIONAL ENGINEER
07/31/2025

NO	DATE	REVISIONS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

savers

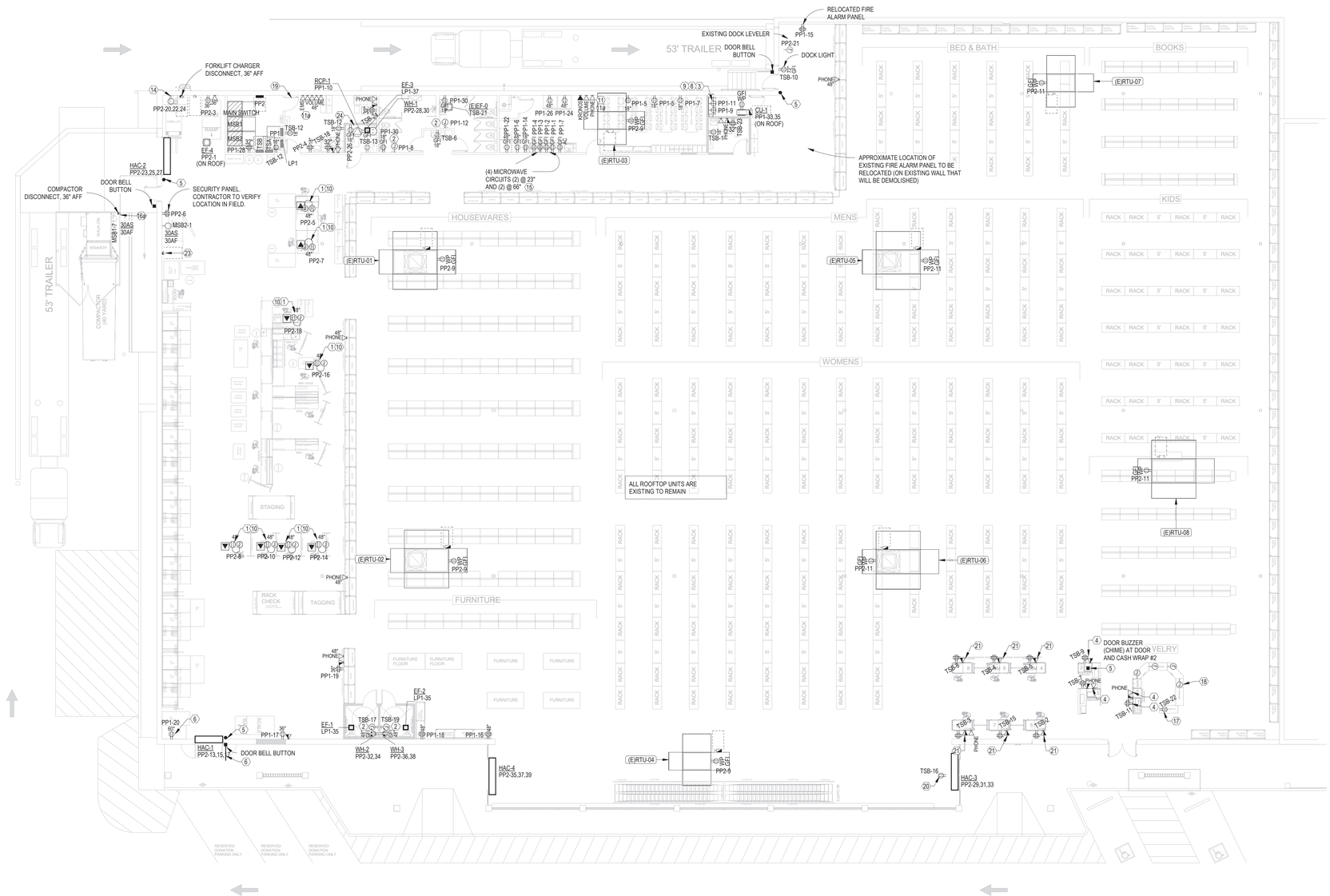
901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.014
DATE: 07.11.2025

E200
LIGHTING PLANS

CHECKED: MFG DRAWN: SLB

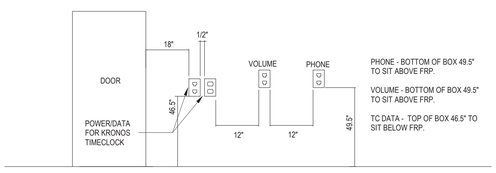
GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726



1 E300 ELECTRICAL POWER PLAN
3/32" = 1'-0"

ELECTRICAL POWER KEYED NOTES

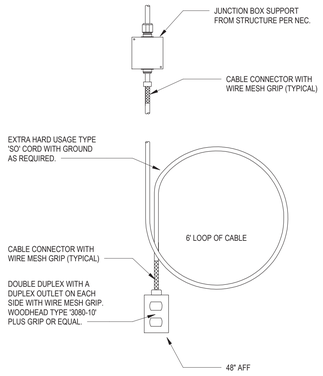
1	PROVIDE DROP OUTLET RECEPTACLE PER 4/E300. ELECTRICAL CONTRACTOR TO PROVIDE SHOP DRAWING OF DROP OUTLET ASSEMBLY FOR APPROVAL.
2	EXISTING HAND DRYER, MAINTAIN EXISTING CONNECTION.
3	PROVIDE A FULL SHEET (3/4"X4'X8') PLYWOOD BACKBOARD INSTALLED, TIGHT TO THE CORNER AND TOP EDGE 96" A.F.F. A) PROVIDE THREE (3) 3" CONDUITS FOR ROUTING OF SALES AND PRODUCTION AREA (LV/DATA/COMM) CABLING. CONDUITS SHALL BE MOUNTED AT 96" A.F.F., CENTERED LATERALLY TO AND EVEN WITH TOP EDGE OF THE PLYWOOD BACKBOARD. CONDUITS SHALL BE 9" APART ON CENTER AND SHOULD EXTEND FROM THIS POINT, VERTICALLY TO DECK ELEVATION AND TURN 90° INTO BACKROOM, AS SHOWN. B) PROVIDE ONE (1) 3" CONDUIT, ALSO MOUNTED AT 96" A.F.F., 9" ON CENTER APART FROM (3) ABOVE BUT WILL ONLY EXTEND 6" ABOVE THE OFFICE CEILING ROUTING OF OFFICE AREA (LV/DATA/COMM) CABLING. C) ADDITIONALLY, PROVIDE TWO (2) 3" SLEEVES THROUGH SALES FLOOR DEMISING WALL AT DECK ELEVATION ABOVE THE CLOSEST IMPACT DOOR AND ADJACENT TO A STRUCTURAL MEMBER. EXTEND INTO PRODUCTION AREA 24" (MIN.) FROM WALL. (ATTENTION: REQUIRED ONLY FOR PARTITION DEMISING WALLS, NOT REQUIRED FOR FIXTURE WALLS). PROVIDE BUSHINGS ON ALL OPEN ENDS OF CONDUITS. FIELD COORDINATE EXACT LOCATIONS WITH OWNER AND ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
4	PROVIDE AND INSTALL (1) LEGRAND/WIREMOLD MODEL 25DTC415 TELE-POWER POLE AT EACH CASH WRAP. PROVIDE A DEDICATED 20A. CIRCUIT AND RUN ELECTRICAL WIRING IN EMC WITH A 24' WHIP AT THE BOTTOM OF EACH POLE. PROVIDE A QUAD RECEPTACLE AT THE END OF THE EMC, WHICH IS TO BE FASTENED WITH SCREWS TO THE CASH WRAPS. EXTENSIONS FOR TELE-POWER POLE SHALL BE USED IF NECESSARY TO MEET THE CEILING DECK HEIGHT. THE SAVERS VALUE VILLAGE LOW VOLTAGE (LV) VENDOR WILL PROVIDE CABLING AT THE CEILING FOR ALL POWER POLES. AT THE TIME OF POWER POLE INSTALLATION, THE EC SHALL RUN THE LV CABLING THROUGH THE POWER POLE FOR THE LV VENDOR TO TERMINATE AT A LATER DATE.
5	PROVIDE AND INSTALL DOOR BUZZER BUTTON ON EXTERIOR WALL AT CDC DOOR. NUTONE LA201 AND BUTTON. THREE BUZZERS ARE TO BE INSTALLED. ONE BUZZER ON POWER POLE AT CASH WRAP #2 AND ANOTHER TO BE INSTALLED IN THE CDC ROOM AT 7'-0" AFF THAT ARE TO BE INSTALLED SUCH THAT BOTH SHALL SOUND WHEN CDC DOOR BUTTON IS PUSHED. THE OTHER BUZZER IS TO BE INSTALLED IN RECEIVING AND SHALL SOUND ONLY WHEN DOOR BUTTON AT LOCAL DOOR IS PUSHED.
6	PROVIDE AND INSTALL ONE 1-1/2" RIGID GALVANIZED CONDUIT UNDER SIDEWALK FOR AIR BELL HOSE. TERMINATE AT CDC DRIVE THRU CURB AND INSIDE THE CDC ROOM. INSTALL A PULL STRING IN THE CONDUIT. REFER TO ARCHITECTURAL PLANS FOR PATCHING REQUIREMENTS.
8	PROVIDE (1) 2" CONTINUOUS CONDUIT, STUBBED THROUGH WALLS, FROM SAVERS (4'X8') TELEPHONE BACKBOARD LOCATION FOR ROUTING CABLE AT SAME LOCATION AS (3) 3" CONDUITS (NOTED IN KEYNOTE-3). FIELD VERIFY EXACT LOCATION WITH OWNER.
9	PROVIDE 1-/2" CONDUIT FROM MAIN INCOMING TELEPHONE DEMARC TO SAVERS (4'x8') TELEPHONE BACKBOARD. FIELD COORDINATE EXACT LOCATION.
10	PROVIDE DEVICES FOR TICKET MACHINES (PROVIDED BY OWNER). DEVICES SHALL BE GANGED TOGETHER IN A COMMON BOX. FIELD COORDINATE MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS.
11	PROVIDE DEVICES FOR KRONOS TIME CLOCK (PROVIDED BY OWNER). FIELD COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS. REFER TO 3/E300.
11a	PROVIDE 3 1/2" DEEP BOX FOR ALL VOLUME CONTROL DEVICES.
14	PROVIDE HARD CONNECTION THRU 30A, 208V, 3Ø DISCONNECT FOR POWER TO FORKLIFT CHARGING STATION. EC SHALL FURNISH, INSTALL AND MAKE FINAL CONNECTION FROM A 208V. 3Ø POWER SOURCE. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION.
15	PROVIDE (4) DUPLEX RECEPTACLES AT SPECIAL MOUNTING HEIGHTS SHOWN FOR APPLIANCE SHELVES. COORDINATE WITH ARCHITECTURAL DETAIL 9/A900, BREAK ROOM CABINET ELEVATION PRIOR TO ROUGH-IN.
16a	PROVIDE WP DISCONNECT SWITCH AND NON-FUSED DISCONNECT SWITCH AS SHOWN AND ALL FINAL CONNECTIONS TO EQUIPMENT. COORDINATE WITH EQUIPMENT INSTALLATION AND EXACT LOCATION WITH EQUIPMENT SUPPLIER AND OWNER PRIOR TO INSTALLATION.
17	PROVIDE DEDICATED CIRCUIT AND EMS CONTROLLED RECEPTACLE FOR "LIT JEWELRY DISPLAY SHOWCASE". FIELD COORDINATE EXACT LOCATION OF RECEPTACLE WITH OWNER PRIOR TO INSTALLATION. PROVIDE ADDITIONAL CONTACTOR AT POWER SOURCE FOR EMS CONTROL OF RECEPTACLE. MATCH EMS CONTACTORS (ABB # A16-04-00-81 OR EQUAL) AND CONNECT (24 VAC) COIL IN PARALLEL WITH CONTACTOR (C2). THE "CUSTOMERSALES" LIGHTING CIRCUITS (REFER TO DETAIL 9/E300). EC MAY UTILIZE EXISTING CONTACTOR IF A SPARE IS AVAILABLE. COORDINATE WITH EMS VENDOR AND EM PLANS FOR MORE INFORMATION.
18	PROVIDE AND INSTALL ALL MALE & FEMALE PLUGS, AS REQUIRED, TO EXISTING WIRING PROVIDED WITH THE "LIT JEWELRY DISPLAY SHOWCASES" ENABLING THE CASES TO INTERCONNECT TO EACH OTHER AND TO PLUG INTO RECEPTACLE. FIELD COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
19	EC SHALL INSTALL EMS PANELS, FURNISHED BY OWNER, AS SHOWN ON THE PLANS. EC IS RESPONSIBLE FOR PROVIDING, INSTALLING AND TERMINATING THE EMS COMMUNICATION TRUNK IN A DAISY CHAIN FASHION TO EACH RTU/SIMPLESTAT CONTROLLER, AS SHOWN ON THE EMS PLANS. EC SHALL PROVIDE AND INSTALL HARDWIRED CAT-5 CABLE FOR ETHERNET ACCESS, CONNECTING EMS (eSC-280 CONTROLLER) TO ANY OPEN PORT (1-24) ON SAVERS SERVER, LOCATED IN THE MANAGER'S OFFICE. COORDINATE ALL ASPECTS OF THE EMS INSTALLATION WITH THE MECHANICAL CONTRACTOR, THE EMS VENDOR AND PLANS FOR SYSTEM SPECIFICATIONS & INSTALLATION DETAILS.
20	DOOR TRAFFIC COUNTER LOCATION - CONTRACTOR TO CONFIRM FINAL LOCATION WITH SAVERS CM PRIOR TO INSTALLATION.
21	(1) TELE-POWER POLE AT EACH CASH WRAP PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. E.C. TO PROVIDE A DEDICATED 20A. CIRCUIT AND RUN ELECTRICAL WIRING IN EMC WITH A 24' WHIP AT THE BOTTOM OF EACH POLE. PROVIDE A QUAD RECEPTACLE AT THE END OF THE EMC, WHICH IS TO BE FASTENED WITH SCREWS TO THE CASH WRAPS. EXTENSIONS FOR TELE-POWER POLE SHALL BE USED IF NECESSARY TO MEET THE CEILING DECK HEIGHT. THE SAVERS VALUE VILLAGE LOW VOLTAGE (LV) VENDOR WILL PROVIDE CABLING AT THE CEILING FOR ALL POWER POLES. AT THE TIME OF POWER POLE INSTALLATION, THE EC SHALL RUN THE LV CABLING THROUGH THE POWER POLE FOR THE LV VENDOR TO TERMINATE AT A LATER DATE.
23	PROVIDE DISCONNECT FOR BALER. DISCONNECT SHALL BE CLEARLY VISIBLE, MOUNTED 36" AFF AND A MINIMUM OF 24" AWAY FROM BALER ON MOTOR SIDE.
24	PROVIDE GFCI DUPLEX RECEPTACLE FOR SCRUBBER.



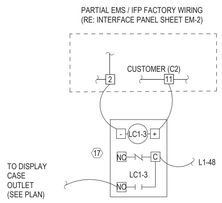
NOTES:

1. ALL TELEPHONE, DATA, LV BOXES SHALL BE MOUNTED VERTICALLY (NOT SIDEWAYS).
2. COORDINATE MOUNTING ORIENTATION (LEFT OR RIGHT SIDE OF DOOR) IN FIELD.
3. PROVIDE 3-1/2" " DEEP BOX FOR ALL VOLUME CONTROL DEVICES.

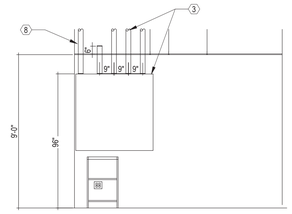
2 E300 BREAKROOM ELEVATION DETAIL
NOT TO SCALE



3 E300 TYPICAL DROP OUTLET DETAIL
NOT TO SCALE



4 E300 LIT DISPLAY CASE RECEPTACLE WIRING
NOT TO SCALE



5 E300 SERVER RACK ELEVATION - BACKBOARD & CONDUIT
NOT TO SCALE

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.014
DATE: 07.11.2025

E300

ELECTRICAL POWER PLANS

CHECKED: MFG DRAWN: SLB

GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726

Switchboard: MAIN SWITCH

Location:
Supply:
Mounting:
Enclosure:
Features & Modifications:

Voltage: 208 V, 3 Ø, 4 W
Horizontal Bus Rating: 2000 A
Neutral: 100%
Mains Type: MCB
Mains Rating: 2000 A
Mains FN/Note:
SCCR: 0 kA

Section Description	Load
MSB1	136
MSB2	339

Switchboard MAIN SWITCH Load Summary

Load Classification	Connected	Factor	Demand	Panel Totals	
Motor	37529 VA	107.77%	40446 VA	**Connected Load:**	475 kVA
Other	7197 VA	100.00%	7197 VA	**Connected Current:**	1318 A
Lighting - Interior	36021 VA	125.00%	45027 VA	**Demand Load:**	481 kVA
Receptacle - General	27060 VA	68.48%	18530 VA	**Demand Current:**	1336 A
Lighting - Exterior	4800 VA	125.00%	6000 VA		
Electric Water Heating	3000 VA	125.00%	3750 VA		
HVAC	3952 VA	125.00%	4940 VA		
Power	720 VA	100.00%	720 VA		
Existing Load	1520 VA	125.00%	1900 VA		
Heating	84400 VA	100.00%	84400 VA		
Spare	268497 VA	100.00%	268497 VA		

Notes:

Switchboard: MSB1

Location:
Supply: MAIN SWITCH
Mounting:
Enclosure:
Features & Modifications:

Voltage: 208 V, 3 Ø, 4 W
Bus Rating: 0 A
Neutral: 100%
Mains Type: MLO
Mains Rating: 2000 A
Mains FN/Note:
SCCR: 0 kA

Ckt	Description	Frame (A)	Trip (A)	Poles	FN/Note	Load
1	PANEL 'PP1' (EXISTING)	200	200	3		21887
2	PANEL 'LP1' (EXISTING)	200	200	3		41905
3	RTU-4 (EXISTING)	200	200	3		26659
4	SPARE	200	200	3		0
5	RTU-2 (EXISTING)	200	200	3		33504
6	SPARE	200	200	3		0
7	COMPACTOR	60	60	3		11670
8	EMS METER	60	60	3		0

Load Summary

Load Classification	Connected	Factor	Demand	Panel Totals	
Motor	16729 VA	117.44%	19646 VA	**Connected Load:**	136 kVA
Lighting - Interior	35521 VA	125.00%	44402 VA	**Connected Current:**	376 A
Receptacle - General	14460 VA	84.58%	12230 VA	**Demand Load:**	147 kVA
Lighting - Exterior	4800 VA	125.00%	6000 VA	**Demand Current:**	409 A
HVAC	3952 VA	125.00%	4940 VA		
Spare	60163 VA	100.00%	60163 VA		

Notes:

Switchboard: MSB2

Location:
Supply: MAIN SWITCH
Mounting:
Enclosure:
Features & Modifications:

Voltage: 208 V, 3 Ø, 4 W
Bus Rating: 2000 A
Neutral: 100%
Mains Type: MLO
Mains Rating: 2000 A
Mains FN/Note:
SCCR: 0 kA

Ckt	Description	Frame (A)	Trip (A)	Poles	FN/Note	Load
1	BALER	30	30	3		8200
2	RTU-8 (EXISTING)	60	60	3		19454
3	PANEL 'TSB' (EXISTING)	60	60	3		12440
4	RTU-6 (EXISTING)	60	60	3		33504
5	SPARE	100	100	3		0
6	PANEL 'TSA' (EXISTING)	400	400	3		19200
7	RTU-3 (EXISTING)	200	200	3		33504
8	RTU-1 (EXISTING)	200	200	3		33504
9	PANEL 'PP2' (NEW)	400	400	3		112257
10	RTU-7 (EXISTING)	100	100	3		33504
11	RTU-5 (EXISTING)	100	100	3		33504
12	SPARE	30	30	3		0
13	SPARE	50	50	3		0

Load Summary

Load Classification	Connected	Factor	Demand	Panel Totals	
Motor	20800 VA	109.86%	22850 VA	**Connected Load:**	339 kVA
Other	7197 VA	100.00%	7197 VA	**Connected Current:**	941 A
Lighting - Interior	500 VA	125.00%	625 VA	**Demand Load:**	341 kVA
Receptacle - General	12600 VA	89.68%	11300 VA	**Demand Current:**	947 A
Electric Water Heating	3000 VA	125.00%	3750 VA		
Power	720 VA	100.00%	720 VA		
Existing Load	1520 VA	125.00%	1900 VA		
Heating	84400 VA	100.00%	84400 VA		
Spare	208334 VA	100.00%	208334 VA		

Notes:

Panelboard: LP1

Location:
Supply: MSB1
Mounting: Surface
Enclosure: NEMA 1

Voltage: 208 V, 3Ø, 4W
Bus Rating: 200 A
Neutral: 100%
Feed-Thru Lugs: No
Features & Modifications:
-

Mains Type: MLO
Mains Rating: 200 A
Mains FN/Note: -
SCCR: 10 kA

Ckt	Description	Trip (A)	Poles	Wire Size	Phase A Load (VA)		Phase B Load (VA)		Phase C Load (VA)		Wire Size	Poles	Trip (A)	Description	Ckt
1	WALL LIGHTS	20	1	1-#12, 1-#12, 1-#12	1846	1893					1-#12, 1-#12, 1-#12	1	20	SALES FLOOR C1	2
3	WALL LIGHTS	20	1	1-#12, 1-#12, 1-#12			1895	1798			1-#12, 1-#12, 1-#12	1	20	SALES FLOOR C2	4
5	WALL LIGHTS	20	1	1-#12, 1-#12, 1-#12					1895	2082	1-#10, 1-#10, 1-#10	1	30	SALES FLOOR C1	6
7	WALL LIGHTS	20	1	1-#12, 1-#12, 1-#12	1373	1893					1-#12, 1-#12, 1-#12	1	20	SALES FLOOR C2	8
9	SPEED RAIL 1	20	1	1-#12, 1-#12, 1-#12			1421	2177			1-#10, 1-#10, 1-#10	1	30	SALES FLOOR C1	10
11	SPEED RAIL 2	20	1	1-#12, 1-#12, 1-#12					1421	1703	1-#12, 1-#12, 1-#12	1	20	SALES FLOOR C2	12
13	PRODUCTION 1	20	1	1-#12, 1-#12, 1-#12	1437	2177					1-#10, 1-#10, 1-#10	1	30	SALES FLOOR C1	14
15	PRODUCTION 2	20	1	1-#12, 1-#12, 1-#12			1326	1798			1-#12, 1-#12, 1-#12	1	20	SALES FLOOR C2	16
17	BACK OF HOUSE C3	20	1	1-#12, 1-#12, 1-#12					1373	899	1-#12, 1-#12, 1-#12	1	20	SALES FLOOR C1	18
19	BACK OF HOUSE C4	20	1	1-#12, 1-#12, 1-#12	758	756					1-#12, 1-#12, 1-#12	1	20	SALES FLOOR C2	20
21	OFFICE LIGHTS	20	1	1-#12, 1-#12, 1-#12			1085	1200			1-#12, 1-#12, 1-#12	1	20	SIGNAGE	22
23	NL/EM LIGHTS	20	1	1-#12, 1-#12, 1-#12					1137	1200	1-#12, 1-#12, 1-#12	1	20	SIGNAGE	24
25	NL/EM LIGHTS	20	1	1-#12, 1-#12, 1-#12	1049	1200					1-#12, 1-#12, 1-#12	1	20	SIGNAGE	26
27	NL/EM LIGHTS BOH	20	1	1-#12, 1-#12, 1-#12			46	1200			1-#12, 1-#12, 1-#12	1	20	SIGNAGE	28
29	EXTERIOR DOCK LIGHT	20	1	1-#12, 1-#12, 1-#12					46						30
31	**EXIT LIGHTS BOH	20	1	1-#12, 1-#12, 1-#12	66										32
33	**EXIT LIGHTS FOH	20	1	1-#12, 1-#12, 1-#12			172								34
35	EF-1 / EF-2	20	1	1-#12, 1-#12, 1-#12					1056						36
37	EF-3	20	1	1-#12, 1-#12, 1-#12	528										38
39															40
41															42
				Connected Load:	15 kVA		14 kVA		13 kVA						
				Connected Current:	126 A		119 A		107 A						

Load Classification	Connected	Factor	Demand
Motor	1584 VA	108.33%	1716 VA
Lighting - Interior	35521 VA	125.00%	44402 VA
Lighting - Exterior	4800 VA	125.00%	6000 VA

Panel Totals	
Connected Load:	42 kVA
Connected Current:	116 A
Demand Load:	52 kVA
Demand Current:	145 A

Notes:
** PROVIDE LOCAL APPROVED LOCK-OUT CIRCUIT BREAKER.

Panelboard: PP1

Location:
Supply: MSB1
Mounting: Surface
Enclosure: NEMA 1

Voltage: 208 V, 3Ø, 4W
Bus Rating: 200 A
Neutral: 100%
Feed-Thru Lugs: No
Features & Modifications:
-

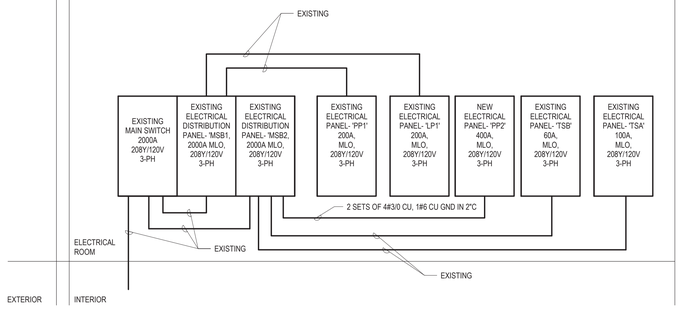
Mains Type: MLO
Mains Rating: 200 A
Mains FN/Note: -
SCCR: 10 kA

Ckt	Description	Trip (A)	Poles	Wire Size	Phase A Load (VA)		Phase B Load (VA)		Phase C Load (VA)		Wire Size	Poles	Trip (A)	Description	Ckt
1	RECEPTACLE - MICROWAVE	20	1	1-#12, 1-#12, 1-#12	1500	1500					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - MICROWAVE	2
3	RECEPTACLE - MICROWAVE	20	1	1-#12, 1-#12, 1-#12			1500	1500			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - MICROWAVE	4
5	RECEPTACLE - BREAKROOM	20	1	1-#12, 1-#12, 1-#12					360	900	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - REFRIGERATOR	6
7	RECEPTACLE - BREAKROOM	20	1	1-#12, 1-#12, 1-#12	360	1500					1-#12, 1-#12, 1-#12	1	20	MENS HAND DRYER	8
9	RECEPTACLE - IT CLOSET	20	1	1-#12, 1-#12, 1-#12			360	250			1-#12, 1-#12, 1-#12	1	20	EXISTING WATER HEATER/RCP	10
11	RECEPTACLE - IT CLOSET	20	1	1-#12, 1-#12, 1-#12					360	1500	1-#12, 1-#12, 1-#12	1	20	WOMENS HAND DRYER	12
13	RECEPTACLE - FRONT RESTROOMS	20	1	1-#12, 1-#12, 1-#12	360	720					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - WATER COOLER	14
15	FIRE ALARM CONTROL PANEL (EXISTING)	20	1				360	360			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DEDICATED SALES FLOOR	16
17	RECEPTACLE - SCALE	20	1	1-#12, 1-#12, 1-#12					360	360	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DEDICATED SALES FLOOR	18
19	RECEPTACLE - CDC WORKSTATION	20	1	1-#12, 1-#12, 1-#12	360	180					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE -CDC AIR BELL	20
21	SPARE	20	1	--			0	900			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - REFRIGERATOR	22
23	SPARE	20	1	--					0	720	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - VENDING MACHINE	24
25	SPARE	20	1	--	0	720					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - VENDING MACHINE	26
27	SPARE	20	1	--			0	360			1-#12, 1-#12, 1-#12	1	20	PHONE BOARD	28
29	SPARE	20	1	--					0	360	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - RESTROOM	30
31	SPARE	20	1	--	0	0					--	1	20	SPARE	32
33	DUCTLESS SPLIT SYSTEM (IT CLOSET)	20	2	2-#12, 1-#12, 1-#12			2088	0			--	1	20	SPARE	34
35									2088	0	--	1	20	SPARE	36
37	SPACE	--	1	--	--	--					--	1	--	SPACE	38
39	SPACE	--	1	--			--	--			--	1	--	SPACE	40
41	SPACE	--	1	--					--	--	--	1	--	SPACE	42
				Connected Load:	7 kVA		8 kVA		7 kVA						
				Connected Current:	60 A		64 A		58 A						

Load Classification	Connected	Factor	Demand
Motor	3475 VA	110.79%	3850 VA
Receptacle - General	14460 VA	84.58%	12230 VA
HVAC	3952 VA	125.00%	4940 VA

Panel Totals	
Connected Load:	22 kVA
Connected Current:	61 A
Demand Load:	21 kVA
Demand Current:	58 A

Notes:

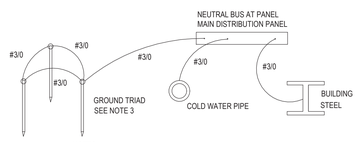


3 E400 ONE LINE DIAGRAM
NOT TO SCALE

LIGHTING CONTROL SCHEDULE

NUMBER	VOLTS	AMPS/POLES	CIRCUIT NUMBER (PANEL HYP)	REMARKS/NAMEPLATE	NOTES
C1	120	NOTE 3	LP:2,6,10,14,18	EMPLOYEE LIGHTS (SALES FLOOR 50%)	NOTE 2
C2	120	NOTE 3	LP:4,8,12,16,20	CUSTOMER LIGHTS (SALES FLOOR 50%)	NOTE 2
C3	120	NOTE 3	LP:17	BACK OF HOUSE LIGHTS (50%)	NOTE 2
C4	120	NOTE 3	LP:19	BACK OF HOUSE LIGHTS (50%)	NOTE 2
C5	120	NOTE 3	LP:1,3,5,7	WALL WASH LIGHTS	NOTE 2
C6	120	NOTE 3	LP:13	PRODUCTION LIGHTS 1 (BACK OF HOUSE 50%)	NOTE 2
C7	120	NOTE 3	LP:15	PRODUCTION LIGHTS 2 (BACK OF HOUSE 50%)	NOTE 2
C8	120	NOTE 3	LP:9,11	SPEED RAIL LIGHTS	NOTE 2
C9	120	NOTE 3	TSA:1,3,5/ 7,9,11/2,4	EXTERIOR LIGHTS	NOTE 1 & 2
C10	120	NOTE 3	LP:22,24,26,28	BUILDING SIGN/PYLON LIGHTS	NOTE 1 & 2

NOTES:
1. PROVIDE PHOTOCELL (FACING NORTH) FOR CONTROL OF EXTERIOR LIGHTING.
2. CONTACTORS SHOWN ARE PART OF ENERGY MANAGEMENT PLAN AND ARE LOCATED IN THE IFP. REFER TO EM DRAWINGS.
3. REFER TO EM DRAWINGS FOR CONTACTOR SIZES.
4. REFER TO EM DRAWINGS FOR WIRING INSTRUCTIONS OF SPARE CONTACTORS.



NOTES:
1. PROVIDE GROUND CLAMP FOR CONNECTION TO METAL COLD WATER PIPE.
2. PROVIDE CADWELD CONNECTIONS TO BUILDING STEEL AND GROUND RODS.
3. GROUND TRIAD SHALL HAVE (3) 3/4"X10' COPPER CLAD GROUND RODS DRIVEN VERTICALLY UNTIL TOP IS 2' BELOW GRADE. LOCATE RODS 10' APART AND 10' BEYOND THE BUILDING FOUNDATION.

2 E400 E400_GROUNDING DETAIL
NOT TO SCALE

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE ENGINEERING PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

07/31/2025

NO	DATE	REVISIONS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

savers

901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.014
DATE: 07.11.2025

E400

PANEL SCHEDULES AND ONE-LINE DIAGRAM

CHECKED: MFG DRAWN: SLB

GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726

Panelboard: PP2

Location:
Supply: MSB2
Mounting: Surface
Enclosure: NEMA 1

Voltage: 208 V, 3Ø, 4W
Bus Rating: 400 A
Neutral: 100%
Feed-Thru Lugs: No
Features & Modifications: -

Mains Type: MLO
Mains Rating: 400 A
Mains FN/Note: -
SCCR: 10 kA

Ckt	Description	Trip (A)	Poles	Wire Size	A		B		C		Wire Size	Poles	Trip (A)	Description	Ckt
1	EF-4	20	1	1-#12, 1-#12, 1-#12	1200	0					--	1	20	SPARE	2
3	RECEPTACLE - SCALE	20	1	1-#12, 1-#12, 1-#12			360	360			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DEMARC	4
5	RECEPTACLE - DROP OUTLET (TICKET)	20	1	1-#12, 1-#12, 1-#12					360	360		1	20	SECURITY PANEL (EXISTING)	6
7	RECEPTACLE - DROP OUTLET (TICKET)	20	1	1-#12, 1-#12, 1-#12	360	360					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DROP OUTLET (TICKET)	8
9	RECEPTACLE - ROOF	20	1	1-#12, 1-#12, 1-#12			900	360			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DROP OUTLET (TICKET)	10
11	RECEPTACLE - ROOF	20	1	1-#12, 1-#12, 1-#12					720	360	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DROP OUTLET (TICKET)	12
13					7033	360					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DROP OUTLET (TICKET)	14
15	HAC-1	70	3	3-#4, 1-#4, 1-#8			7033	360			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DROP OUTLET (TICKET)	16
17									7033	360	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DROP OUTLET (TICKET)	18
19	SPARE	20	1	--	0	2400									20
21	DOCK LEVELER (EXISTING)	20	1	1-#12, 1-#12, 1-#12			1520	2400			3-#8, 1-#8, 1-#10	3	40	BATTERY CHARGER	22
23									7033	2400					24
25	HAC-2	70	3	3-#4, 1-#4, 1-#8	7033	720					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - JANITOR'S SCRUBBER	26
27							7033	1500			2-#12, 1-#12, 1-#12	2	20	WH-1	28
29									7033	1500					30
31	HAC-3	35	3	3-#8, 1-#8, 1-#10	7033	1799					2-#12, 1-#12, 1-#12	2	20	WH-2	32
33							7033	1799							34
35									7033	1799	2-#12, 1-#12, 1-#12	2	20	WH-3	36
37	HAC-4	35	3	3-#8, 1-#8, 1-#10	7033	1799									38
39							7033	360			--	1	20	RECEPTACLE - EXISTING ROOF	40
41	SPARE	20	1	--					0	1080	--	1	20	RECEPTACLE - EXISTING ROOF	42
43	SPARE	20	1	--	0	0					--	1	20	SPARE	44
45	SPARE	20	1	--			0	0			--	1	20	SPARE	46
47	SPARE	20	1	--					0	0	--	1	20	SPARE	48
49	SPARE	20	1	--	0	0					--	1	20	SPARE	50
51	SPARE	20	1	--			0	0			--	1	20	SPARE	52
53	SPARE	20	1	--					0	0	--	1	20	SPARE	54
				Connected Load:	37 kVA		38 kVA		37 kVA						
				Connected Current:	310 A		317 A		309 A						

Load Classification	Connected	Factor	Demand
Motor	8400 VA	121.43%	10200 VA
Other	7197 VA	100.00%	7197 VA
Receptacle - General	6300 VA	100.00%	6300 VA
Electric Water Heating	3000 VA	125.00%	3750 VA
Existing Load	1520 VA	125.00%	1900 VA
Heating	84400 VA	100.00%	84400 VA
Spare	1440 VA	100.00%	1440 VA

Notes:

Panel Totals	
Connected Load:	112 kVA
Connected Current:	312 A
Demand Load:	115 kVA
Demand Current:	320 A

Panelboard: TSA

Location:
Supply: MSB2
Mounting: Surface
Enclosure: NEMA 1

Voltage: 208 V, 3Ø, 4W
Bus Rating: 100 A
Neutral: 100%
Feed-Thru Lugs: No
Features & Modifications: -

Mains Type: MLO
Mains Rating: 100 A
Mains FN/Note: -
SCCR: 10 kA

Ckt	Description	Trip (A)	Poles	Wire Size	Phase A Load (VA)		Phase B Load (VA)		Phase C Load (VA)		Wire Size	Poles	Trip (A)	Description	Ckt
1					2800	1200									2
3	EXISTING PARKING LOT LIGHTING	30	3	--			2800	1200			--	2	20	EXISTING PARKING LOT LIGHTING	4
5									2800						6
7	EXISTING PARKING LOT LIGHTING	30	3	--	2800										8
9							2800								10
11									2800						12
13															14
15															16
17															18
				Connected Load:	7 kVA		7 kVA		6 kVA						
				Connected Current:	58 A		58 A		47 A						

Load Classification	Connected	Factor	Demand
Spare	19200 VA	100.00%	19200 VA

Panel Totals	
Connected Load:	19 kVA
Connected Current:	53 A
Demand Load:	19 kVA
Demand Current:	53 A

Notes:

Panelboard: TSB

Location:
Supply: MSB2
Mounting: Surface
Enclosure: NEMA 1

Voltage: 208 V, 3Ø, 4W
Bus Rating: 60 A
Neutral: 100%
Feed-Thru Lugs: No
Features & Modifications: -

Mains Type: MLO
Mains Rating: 60 A
Mains FN/Note: -
SCCR: 10 kA

Ckt	Description	Trip (A)	Poles	Wire Size	Phase A Load (VA)		Phase B Load (VA)		Phase C Load (VA)		Wire Size	Poles	Trip (A)	Description	Ckt
1	RECEPTACLE - JUMP START OFFICE	20	1	1-#12, 1-#12, 1-#12	180	360					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - CASH WRAP	2
3	RECEPTACLE - CASH WRAP	20	1	1-#12, 1-#12, 1-#12			360	360			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - CASH WRAP	4
5	RECEPTACLE - CASH WRAP	20	1	1-#12, 1-#12, 1-#12					360	720	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DRINKING FOUNTAIN	6
7	RECEPTACLE - CASH WRAP	20	1	1-#12, 1-#12, 1-#12	360	360					1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - CASH WRAP	8
9	RECEPTACLE - CASH WRAP	20	1	1-#12, 1-#12, 1-#12			360	500			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - DOCK LIGHT	10
11	RECEPTACLE - CASH WRAP (JEWELRY)	20	1	1-#12, 1-#12, 1-#12					360	540	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - MANAGER OFFICE	12
13	RECEPTACLE - JANITOR (EXISTING)	20	1	1-#12, 1-#12, 1-#12	180	360									14
15	RECEPTACLE - CASH WRAP	20	1	1-#12, 1-#12, 1-#12			360	180			1-#12, 1-#12, 1-#12	1	20	TRAFFIC COUNTER	16
17	FRONT RESTROOM HANDRYER	20	1	1-#12, 1-#12, 1-#12					1500	360	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - MANAGER OFFICE	18
19	FRONT RESTROOM HANDRYER	20	1	1-#12, 1-#12, 1-#12	1500	360					--	1	20	RECEPTS - EXISTING ROOF	20
21	EF-0 (EXISTING)	20	1	1-#12, 1-#12, 1-#12			1200	900			1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - JEWELRY COUNTER	22
23	RECEPTACLE - JUMP START OFFICE	20	1	1-#12, 1-#12, 1-#12					360	360	1-#12, 1-#12, 1-#12	1	20	RECEPTACLE - MANAGER OFFICE	24
				Connected Load:	4 kVA		4 kVA		5 kVA						
				Connected Current:	31 A		36 A		39 A						

Load Classification	Connected	Factor	Demand
Motor	4200 VA	108.93%	4575 VA
Lighting - Interior	500 VA	125.00%	625 VA
Receptacle - General	6300 VA	100.00%	6300 VA
Power	720 VA	100.00%	720 VA
Spare	720 VA	100.00%	720 VA

Panel Totals	
Connected Load:	12 kVA
Connected Current:	35 A
Demand Load:	13 kVA
Demand Current:	36 A

Notes:

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.014
DATE: 07.11.2025

E401

ELECTRICAL PANEL SCHEDULES

CHECKED: MFG DRAWN: SLB

GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726

I. **GENERAL CONTRACTOR'S RESPONSIBILITIES:**
a. Read Brainbox AI Retail Inc. (BBAI) / Savers Inc. (Savers) Documentation Package.
b. Review all Savers drawings.
c. Contractor will contact the store manager immediately upon arriving onsite to:
i. Confirm permission to begin EMS installation
ii. Offer a brief overview of the installation process
iii. Serve as the BBAI point of contact for the manager and to help resolve all issues or questions that arise during the installation process.
d. Confirm BBAI Survey Form is completed and EMAILED to BBAI National Account Team at: retail.surveys@brainboxai.com or FAXED to (855) 224-0879.
e. Schedule remote EMS commissioning 24 hours prior to the requested commissioning date. Contact BBAI Brainbox AI Retail Inc. at (888) 211-6789 and submit survey for scheduling remote EMS commissioning.

II. **ELECTRICAL RESPONSIBILITIES:**

Power to all EMS equipment and devices must be OFF while terminations are made.

a. Provide all labor and installation material, as required, for a complete and operational EMS for this Savers store location.
b. Receive and store all BBAI material in a dry and secure place until the EMS installation is completed.
c. The EMS equipment will be supplied by BBAI and installed by an approved BBAI contractor.
d. Review the entire set of plans, perform a job site survey and inventory the BBAI equipment to ensure the proper equipment has been ordered and received for a complete and operational BBAI EMS.
e. If any material is missing or additional equipment is required, immediately call BBAI at (888) 211-6789 to request an order.
f. Approved Contractor shall verify number of controlled lighting circuits against the design, report discrepancies, which cannot be resolved in the field, to the BBAI National Account Support Team at (888) 211-6789 and wait for resolution instructions.
g. Coordinate the EMS installation with the Mechanical Contractor to avoid any interference that may delay progress during construction.
h. Perform all work in accordance with all National, State and Local Codes for this project.
i. All EMS cables are to be installed per National and Local Codes. It is the Electrical Contractor's responsibility to determine if National and Local Codes permit Class 2 cables to be installed exposed within the building structure or if a full conduit system is required.
j. EMT connectors and bushings are to be installed at the top of every conduit sleeve and threaded connector to protect EMS cables from abrasions.
k. All cables are to be clearly and distinctly labeled within one foot of both ends.
l. Furnish and install all required conduit, boxes, wire ways, fittings, straps, hangers and wiring for a complete and operational EMS as required.
m. Furnish and install a dedicated 120 VAC circuit with breaker lock for the eSCi and Contactor Interface Panel (IFP).
i. Label breaker: DO NOT TURN OFF / EMS
ii. Confirm wiring is completed as per this documentation package before applying power. Improper wiring will cause damage to equipment.
n. Mount the eSCi and IFP adjacent to one another and to the electrical panels.
o. Install an Ethernet cable from the eSCi RJ-45 jack located in the EMS panel to the network switch, located in the Manager's Office, as specified by the Savers networking team.
p. Install and terminate the BBAI BACnet communication trunk in a daisy chain fashion from the eSCi Controller to each of the Thermostat Controls. (see this documentation package for requirements)
q. Mount the contactor panel adjacent to the electrical panels. Install the lighting circuit home runs from the fixtures straight to the load side of the contactors. Install the circuits from the line side of the contactors to each breaker. The lighting zones and loads will be configured as follows:
i. Employee lights (C1): 50% of sales, with CDC if front of house
ii. Customer lights (C2): remaining 50% of sales
iii. Production lights 1 (C3): 50% of the production area
iv. Production lights 2 (C4): 50% of the production area, with CDC if back of house (Employee)
v. Exterior lights (C5): all exterior lighting and security lighting
vi. Wall Wash lights (C6): all interior wall wash lighting
vii. Speed Rail lights (C7): all lighting in the speed rail area
viii. Canopy / Signage (C8): all exterior canopy, pylon and sign lights (dusk to dawn lighting)
r. Mount and terminate the Outdoor Sensor Assembly (OSA) on the north/northeast side of the building. When installing, make sure enclosure is:
i. Weather-proofed
ii. Mounted with the while PVC sensor pointed downward
iii. Not mounted on any removable access door or HVAC Unit.
iv. Positioned to allow the Outdoor Light Sensor exposure to full ambient daylight but is not shadowed or exposed to any artificial illumination.
s. Mount and terminate the BACnet Energy Meter and meter enclosure. When installing, make sure enclosure/meter is:
i. Terminated to the BBAI Subnet 1 communication port.
ii. Communication Port 1 is addressed to 30.
iii. Installed and configured per included the OEM instructions.
iv. Configured for the proper CT amperage.
v. Permanently mounted in close proximity to the main utility power feed.
t. Mount and terminate the O/H Door monitoring switch as per the location specified by the Savers drawings and this documentation package.
i. Ensure that Door Contact is mounted out of the path of Delivery Vehicles.
ii. Label Door Contact with "EMS Monitored".
u. Mount and terminate the Override Button assembly as per the location specified by the Savers drawings and this documentation package.
v. Provide a technician, on site, for an approximate 2-hour remote telephone checkout with BBAI.
w. Coordinate with the Mechanical Contractor to verify HVAC control during the BBAI remote telephone checkout.
x. Upon completion of the installation and prior to scheduling the Remote Commissioning Checkout, the Electrical Contractor will:
i. Confirm the Mechanical Contractor has provided specific HAVC details (Make, Model, etc) for each unit.
ii. Confirm the Mechanical Contractor will be present during the BBAI Remote Commissioning Checkout.
iii. Fill in, completely, the EMS Survey forms below and either email them to: retail.surveys@brainboxai.com, or fax them to BBAI at (855) 224-0879.
iv. Contact BBAI to schedule a remote checkout at (888) 211-6789.

III. **MECHANICAL RESPONSIBILITIES:**

Power to all EMS equipment and devices must be OFF while terminations are made.

a. Provide labor and installation material, as required, for a complete and operational EMS for this Savers store location.
b. Verify number and type of HVAC units and unit heaters against the design, report discrepancies, which cannot be resolved in the field, to the BBAI National Account Support Team at (888) 211-6789 and wait for resolution instructions.
c. Perform all work in accordance with all National, State and Local Codes for this project.
d. Mount and terminate the SimpleSTAT module(s) as per the location(s) specified by the Savers drawings and this documentation package.
i. SimpleSTAT shall be mounted at 7' AFF.
e. Utilizing 18/8 cable between the SimpleSTAT module and HVAC unit.
i. Terminate C, R, G, Y1, Y2, W1 and W2 on the HVAC unit for control of fan, cooling and heating.
ii. Terminate the communications cables to the SimpleSTAT(s) as shown in this documentation package.
f. Set address on the SimpleSTAT module, as shown in the SimpleSTAT installation instructions. When communications to the EMS is in a failed state, the SimpleSTAT will operate 24/7 as a stand-alone STAT using the following temperature setpoints;
i. Default Cooling Setpoint = 72.0 °F
ii. Default Heating Setpoint = 68.0 °F
g. Mount and terminate the Down Rod and Remote Space Temperature Sensor(s) as per the location specified by the Savers drawings and this documentation package. Refer to BBAI Special Instructions for Down Rod / Remote Space Temperature Sensor(s) installation.
h. Mount and terminate the Remote Space Temperature Sensor(s) as per the location(s) specified by the Savers drawings and this documentation package.
ii. In close proximity to the zone return air grille and away from supply air drafts.
iii. Install and secure the Remote Temperature Sensor wire to the Thermostat Controller.
i. Provide Electrical Contractor with:
i. Roof plan layout, showing location of HVAC Units on the roof.
ii. EMS Survey Information (Make, Model, Serial Number, Zone Name, Heat/Cool Stage Count, etc.) for each HVAC unit.
j. Provide a technician, on site, for an approximate 2-hour remote telephone checkout with BBAI.
k. Coordinate with the Electrical Contractor to verify proper HVAC control during the BBAI Remote Commissioning Checkout.

IV. **BBAI COMMERCIAL ENERGY SOLUTIONS RESPONSIBILITIES:**
a. The following services will be supplied by BBAI:
i. Shipping of all contracted EMS components for the job.
ii. Programming and downloading of BBAI equipment and software.
iii. Provide telephone technical support at (888) 211-6789.
iv. Remote system checkout with installing contractor
b. Verification of proper operation of the following items by exercising the controlled load:
i. Timed operation of all applicable EMS lighting loads – Interior and Exterior.
ii. Outside light level control of all applicable EMS lighting loads – Interior and Exterior.
iii. Operation of HVAC heating stages, as indoor environment allows.
iv. Operation of HVAC cooling stages, as indoor and outdoor environments allow.
v. Verification of HVAC unit sensor readings – space and supply temperatures.
c. If any end unit (e.g. lighting, HVAC unit, supply air fan, unit heater, etc.) cannot be operated for mechanical or electrical reasons, BBAI will verify the proper operation of the control devices (e.g. contactors, discrete I/O) leading up to the unit.

DEVICE LEGEND

SYMBOL	DESCRIPTION
SSC	HVAC UNIT CONTROLLER (SIMPLESTAT)
TRC	HVAC UNIT CONTROLLER (TRC)
DTS	DUCT TEMPERATURE SENSOR
STS	SPACE TEMPERATURE SENSOR
OLS	OUTDOOR LIGHT SENSOR
OHS OTS	OUTDOOR TEMPERATURE & RELATIVE HUMIDITY SENSORS
RTS	REMOTE TEMPERATURE SENSOR
CO_2S	INDOOR CO_2 SENSOR
IHS	INDOOR RELATIVE HUMIDITY SENSOR
ILS	INDOOR LIGHT SENSOR
DOOR SENSOR	O/H DOOR SENSOR
DOOR SENSOR	MAIN DOOR SENSOR
SID	SECURITY INTERFACE DEVICE
eSCi	eBUILDING SYSTEM CONTROLLER
ROS	REMOTE OVERRIDE SWITCH
OCC	OCCUPANCY SENSOR

CABLE LEGEND

KEY	SIZE	TYPE	MFG.	MFG. PART #
10	18/2	SHIELDED PLENUM	WINDY CITY	# 002320-S
12	18/4	SHIELDED PLENUM	WINDY CITY	# 002340-S
14	18/8	NON SHIELDED PLENUM	WINDY CITY	# 002392-S
16	18/10	NON SHIELDED PLENUM	WINDY CITY	# 002393-S
18	24/8	CAT5 E PLENUM	WINDY CITY	# 5556140-S

WIRING LEGEND

FIELD WIRING
POSITIVE
NEGATIVE
OPTIONAL COMPONENT

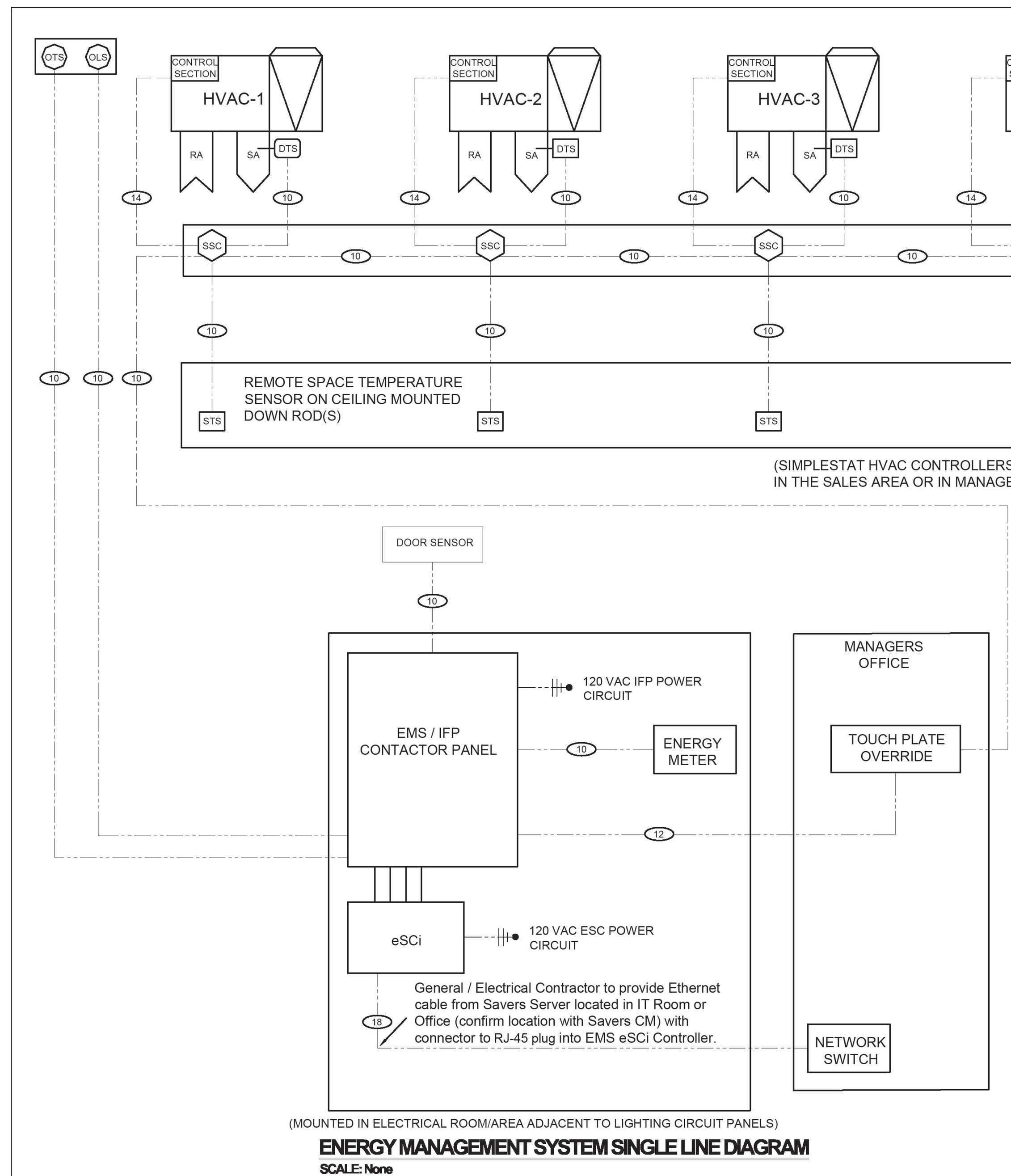
BRAINBOX AI®
77 Sundial Ave.
Suite 301 W
Manchester, NH 03103

SAVERS
DRAWING NOTES (FOR REFERENCE ONLY)

REVISION: 1.00	
DATE: 10/06/21	ECN#: 2364
REBRAND TO ABB ADD NEW eSCi REF ECN 2359	
REVISION: 1.10	
DATE: 06/21/24	ECN#: 2439
PUT METER ON SN2 FIX CR1 WIRING UPDATE EM2 ETHERNET NOTE	
REVISION: 1.20	
DATE: 3/21/25	ECN#: 2514
UPDATE EM3 F1 FUSE TO 2.5 AMP REBRAND TO BBAI	
REVISION:	
DATE:	ECN#:
DRAWN: WPC	ENGINEER: CGP
PART #: 94-355	OPTION: H

ENERGY MANAGEMENT PLAN

EM-1 of 4



SPACE TEMPERATURE SENSOR PLACEMENT INSTRUCTIONS

GENERAL INSTRUCTIONS:
- ON NEW CONSTRUCTION JOBS, INSTALL SENSORS ON DROP POLES, PER DETAIL.
- LOCATE SENSOR FULLY WITHIN THE ZONE OF THE UNIT IT CONTROLS.
- DO NOT PLACE A SENSOR ON AN OUTSIDE WALL OR TENANT COMMON WALL.
- DO NOT PLACE SENSORS NEAR DOORS, WINDOWS, OR OTHER SOURCES OF HEAT, COLD, OR DRAFTS.
- IF A SENSOR IS PLACED ON AN ARCHITECTURAL OR STRUCTURAL SURFACE (IE COLUMNS, ETC) IT MUST BE INSULATED FROM THE FINISHED SURFACE AND WIRE PENETRATIONS MUST BE MADE AIRTIGHT.
- DO NOT PLACE SENSORS HIGHER THAN 7'-0" AFF.

SENSOR LOCATION TEST:
1. RUN ALL UNITS IN FAN MODE.
2. TEST ALL SENSOR LOCATIONS TO DETERMINE IF ANY ARE GETTING HIT BY AIR FROM A SUPPLY DIFFUSER. (TISSUE, BALLOON OR SMOKE TEST)
3. IF SO, RELOCATE SENSOR (PREFERRED) OR OFFENDING DIFFUSER.
4. STOCKROOM SENSOR PLACEMENT SHALL BE OVER STOCKROOM DOOR WITH IN STOCKROOM AREA.

FOR SYSTEMS WITH CONCENTRIC DIFFUSERS, SENSORS SHALL BE PLACED:
- A MINIMUM OF 15'-0" FROM DIFFUSERS (10-TON SYSTEMS OR SMALLER)
- A MINIMUM OF 20'-0" FROM DIFFUSERS (SYSTEMS LARGER THAN 10-TONS)

FOR SYSTEMS WITH DUCTED RETURNS, SENSORS SHALL BE PLACED:
- AS CLOSE TO THE RETURN AIR GRILL AS POSSIBLE.

FOR SYSTEMS WITH NON-DUCTED (PLENUM) RETURNS, SENSORS SHALL BE PLACED:
- PLACE AT LEAST ONE (1) EGG CRATE RETURN GRILL OVER EACH SENSOR LOCATION.

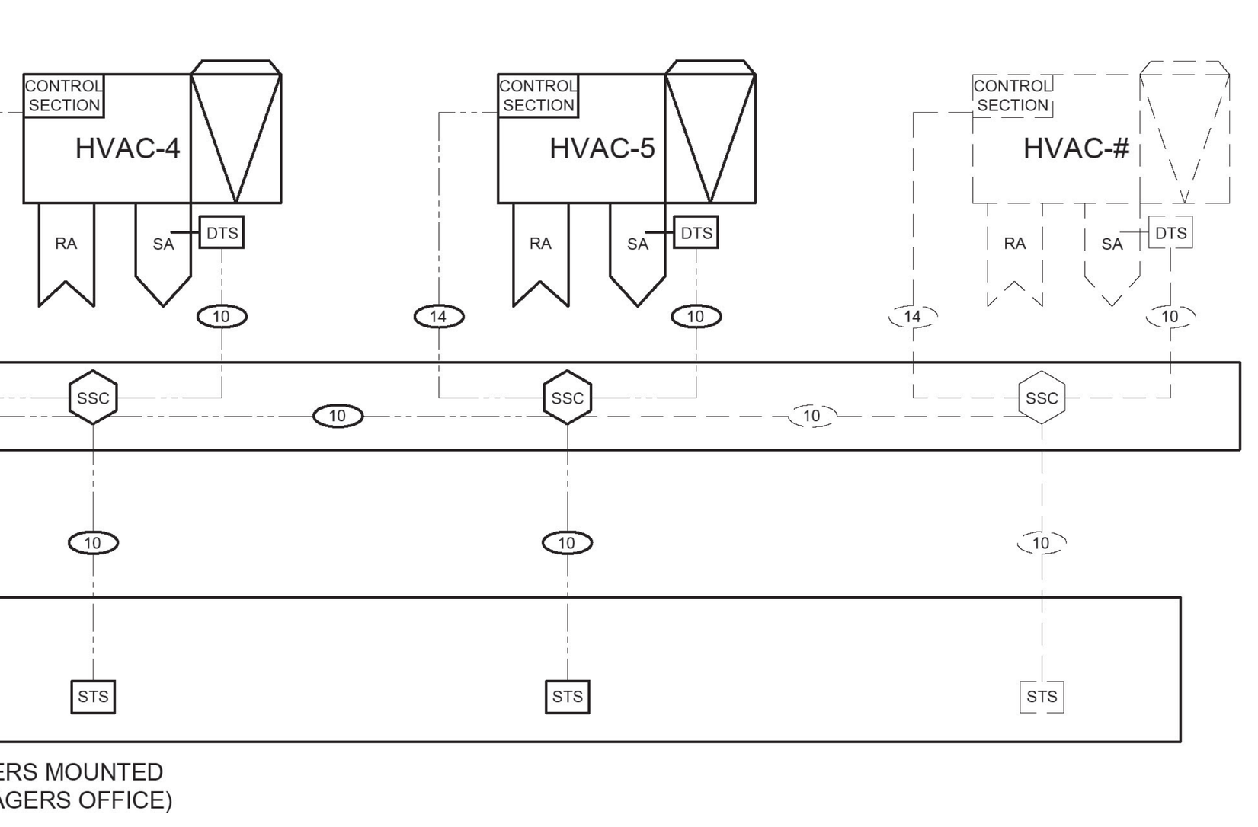
WIRING LEGEND
FIELD WIRING
POSITIVE
NEGATIVE
OPTIONAL COMPONENT

BRAINBOX AI®
77 Sundial Ave.
Suite 301 W
Manchester, NH 03103

SAVERS
LINE DIAGRAM (FOR REFERENCE ONLY NOT TO SCALE)

ENERGY MANAGEMENT PLAN

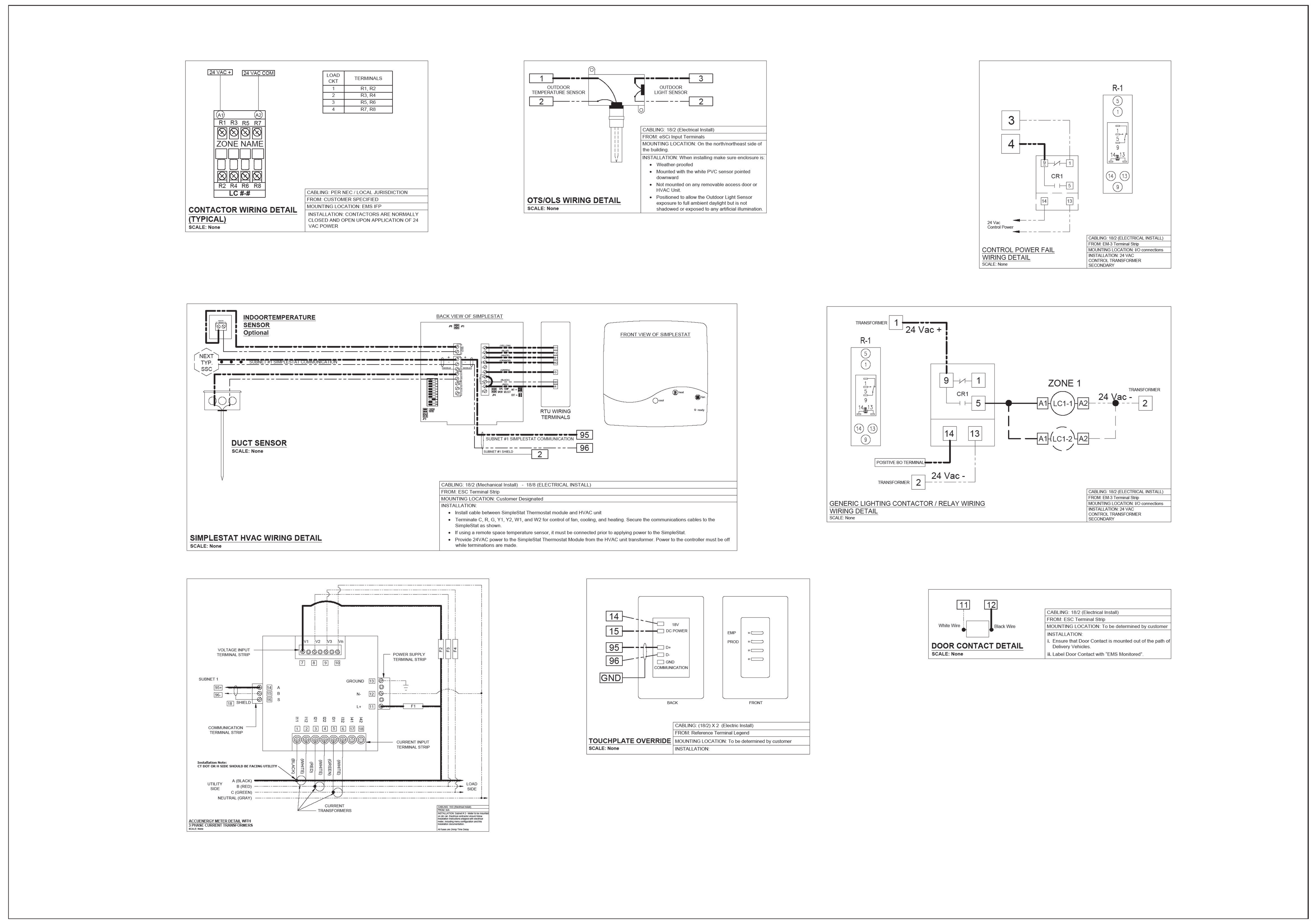
EM-2 of 4

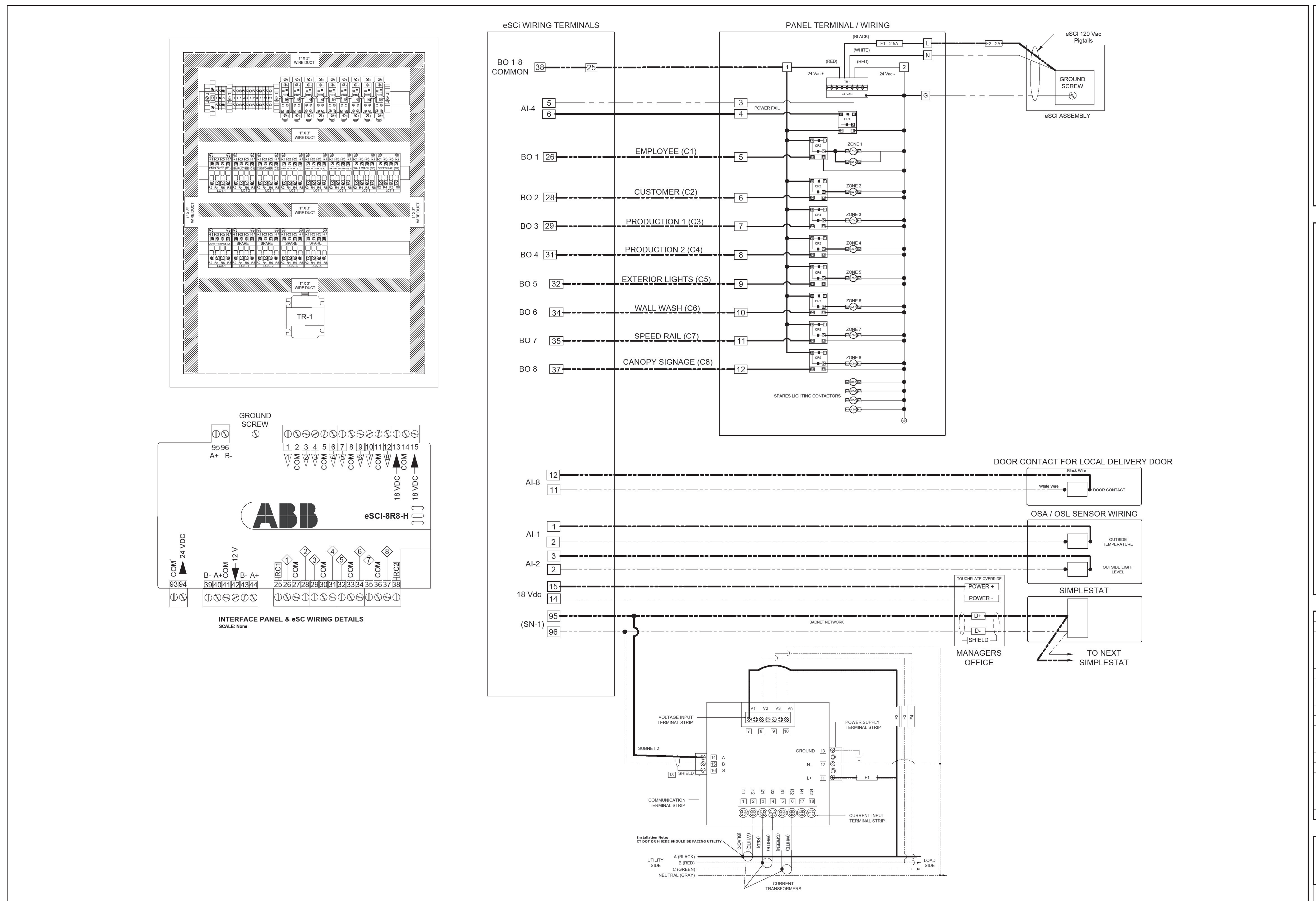


SAVERS
FIELD WIRING (FOR REFERENCE ONLY NOT TO SCALE)

ENERGY MANAGEMENT PLAN

EM-3 of 4





SAVERS
EQUIPMENT DETAILS (FOR REFERENCE ONLY NOT TO SCALE)

ENERGY MANAGEMENT PLAN

EM-4 of 4

GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726

INTERPLAN
INTERPLAN LLC
ARCH COA #2015008774
ENG COA #2005026904
ARCHITECTURE
ENGINEERING
PERMITTING
1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

07/31/2025

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.014
DATE: 07.11.2025

EMS
ENERGY MANAGEMENT PLAN (REFERENCE ONLY)
CHECKED: MFG DRAWN: MFG

MECHANICAL SPECIFICATIONS

GENERAL PROVISIONS:

PART I - GENERAL

1.01 CODES, RULES AND REGULATIONS

A. COORDINATE WITH ON-SITE COORDINATION TEAMS.

B. ALL WORK AND MATERIALS SHALL CONFORM TO THE LOCAL AND STATE CODES AND ALL STATE AND OTHER APPLICABLE LAWS AND REGULATIONS.

C. WHENEVER INDICATED, MATERIAL, WORKMANSHIP, ARRANGEMENT OR CONSTRUCTION IS OF HIGHER QUALITY OR CAPACITY THAN THAT REQUIRED BY THE ABOVE CODES, THE DRAWINGS AND/OR SPECIFICATIONS SHALL GOVERN.

D. SHOULD THERE BE ANY DIRECT CONFLICT BETWEEN CODES AND THE DRAWINGS AND/OR SPECIFICATIONS, THE CODES, LAWS OR REGULATIONS SHALL GOVERN.

E. ALL MATERIAL, EQUIPMENT INSTALLATION AND OPERATION SHALL BE IN FULL COMPLIANCE WITH ARCHITECTURAL MANUFACTURER'S SPECIFICATION AND REQUIREMENTS.

1.02 WORKING DRAWINGS

A. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR MECHANICAL WORK SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL DRAWINGS.

B. WHERE EQUIPMENT IS SHOWN, DIMENSIONS HAVE BEEN TAKEN FROM TYPICAL EQUIPMENT OF THE CLASS INDICATED. CAREFULLY CHECK THE DRAWINGS TO SEE THAT THE EQUIPMENT UNDER CONSIDERATION FOR INSTALLATION WILL FIT THE SPACE PROVIDED AND THAT ALL CONNECTIONS MAY BE MADE THERE TO WITHOUT IMPAIRMENT OF AREA AND HEIGHT REQUIREMENTS AND OF CODE REQUIRED CLEARANCES.

1.03 RECCORD DRAWINGS

A. RECORD DRAWINGS, SHOWING DIMENSIONS, LOCATIONS, AND DEPTHS OF ALL BURIED AND CONCEALED PIPING AND EQUIPMENT SHALL BE KEPT UP TO DATE. MASTER COPY SHALL BE KEPT ON THE JOB. NO BACKFILLING OF TRENCHES WILL BE PERMITTED UNTIL RECORD DRAWINGS ARE APPROVED AS UP TO DATE BY THE OWNER'S REPRESENTATIVE. NO PLUMBING PROGRESS PAYMENTS WILL BE APPROVED UNLESS RECORD DRAWINGS ARE UP TO DATE. DEPTH OF SEWERS SHALL BE FROM A PERMANENT BENCHMARK AS SHOWN ON CONTRACT DRAWINGS.

1.04 GUARANTEES

A. FURNISH WRITTEN GUARANTEE (FOR NEWLY INSTALLED EQUIPMENT) TO OWNER FOR A PERIOD OF ONE YEAR FROM DATE OF C.O. COVERING ALL DEFECTS IN MATERIAL AND WORKMANSHIP. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO DEFECTIVE MATERIALS OR FAULTY WORKMANSHIP, THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR AND MATERIAL AND CORRECT THE TROUBLE PROMPTLY AND WITHOUT ANY ADDITIONAL COST TO THE OWNER.

1.05 PERMITS

A. UNLESS OTHERWISE DISTINCTLY HEREIN SPECIFIED, THIS CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION OVER HIS WORK.

1.06 VISITING THE PREMISES

A. THE CONTRACTOR, BEFORE SUBMITTING HIS BID ON THE WORK, MUST VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS. AS A RESULT OF HAVING VISITED THE PREMISES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE WORK AS IT RELATES TO SUCH VISIBLE EXISTING CONDITIONS.

B. THE SUBMISSION OF A BID WILL BE CONSIDERED AN ACKNOWLEDGMENT ON THE PART OF THE BIDDER OF HIS VISITATION TO THE SITE.

1.07 PRODUCT DELIVERY HANDLING AND STORAGE

A. STORE MATERIALS OFF THE GROUND.

B. MANUFACTURER'S LABEL REQUIRED ON EACH STORAGE CONTAINER.

C. PROTECT FROM WEATHER AND DAMAGE.

PART 2 - PRODUCTS

2.01 MATERIAL

A. ALL MATERIALS AND PRODUCTS USED FOR CONSTRUCTION SHALL BE NEW, OF THE BEST GRADE AND THE LATEST PRODUCTS AS LISTED IN PRINTED CATALOG DATA. ALL ARTICLES OF A KIND SHALL BE THE STANDARD PRODUCT OF A SINGLE MANUFACTURER. TRADE NAMES AND MANUFACTURER'S NAMES DENOTE THE CHARACTER AND QUALITY OF EQUIPMENT DESIRED AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. EQUIPMENT TO BE U.L. APPROVED WHERE REQUIRED.

PART 3 - EXECUTION

3.01 SITE OBSERVATION

A. ALL WORK AND MATERIALS SUBJECT TO FIELD OBSERVATION AT ANY AND ALL TIMES BY OWNER'S REPRESENTATIVE.

B. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE A MINIMUM OF TWO WORKING DAYS PRIOR TO TESTING ANY PIPING SYSTEM WHICH MUST BE WITNESSED AND APPROVED BEFORE IT IS COVERED UP OR ENCLOSED.

C. IF OBSERVER FINDS ANY MATERIAL OR WORK NOT CONFORMING TO THESE SPECIFICATIONS. THE CONTRACTOR SHALL WITHIN THREE WORKING DAYS AFTER BEING NOTIFIED, REMOVE MATERIALS FROM THE PREMISES. IF THE MATERIAL HAS BEEN INSTALLED. THE ENTIRE EXPENSE OF REMOVING AND REPLACING WILL BE BORNE BY CONTRACTOR.

3.02 WORKMANSHIP AND SUPERVISION

A. CONSTANTLY SUPERVISE WORK COVERED BY THESE SPECIFICATIONS. VERIFY ALL CONDITIONS ON JOB SITE AND LAY OUT WORK ACCORDINGLY.

3.03 PROTECTION OF EXISTING UTILITIES

A. LOCATE AND CAREFULLY PROTECT EXISTING UTILITIES AND BUILDING SERVICES TO PREVENT DAMAGE TO SUCH INSTALLATIONS. WHERE NECESSARY, REROUTE, REMODEL OR DIVERT SUCH INSTALLATIONS SO THEIR USE WILL BE UNINTERRUPTED. IF ANY DAMAGE OCCURS, REPAIR TO ORIGINAL CONDITION AT NO COST TO OWNER. HAND EXCAVATE WHERE REQUIRED.

3.04 COMPLETION REQUIREMENTS

A. UPON COMPLETION OF THE WORK AND ADJUSTMENT OF ALL EQUIPMENT, ALL SYSTEMS SHALL BE TESTED BY THE CONTRACTOR TO DEMONSTRATE TO THE OWNER'S REPRESENTATIVE THAT ALL EQUIPMENT FURNISHED AND INSTALLED OR CONNECTED UNDER THE PROVISIONS OF THESE SPECIFICATIONS FUNCTIONS MECHANICALLY IN THE MANNER REQUIRED. AT THE TIME OF THIS DEMONSTRATION, THE CONTRACTOR SHALL DELIVER TO THE OWNER'S REPRESENTATIVE FOUR BOUND COPIES OF THE FOLLOWING MATERIALS.

1. CATALOG DESCRIPTION OF EACH ITEM OF EQUIPMENT ACTUALLY INSTALLED ON THE JOB.

2. SPARE PARTS LIST OF MANUFACTURER'S RECOMMENDED REPLACEMENT PARTS FOR EACH FIXTURE AND ITEM OF EQUIPMENT.

3. OPERATING AND MAINTENANCE INSTRUCTIONS FOR EACH ITEM OF EQUIPMENT REQUIRING INSPECTION, LUBRICATION OR SERVICE, DESCRIBING AND SCHEDULING THE PERFORMANCE OF SUCH MAINTENANCE.

AIR DISTRIBUTION:

PART I - GENERAL

1.1 SHOP DRAWINGS
PROVIDE SHOP DRAWINGS FOR THE FOLLOWING EQUIPMENT.
A. EXHAUST FANS
B. DIFFUSERS AND GRILLES
C. DAMPERS.

PART 2-PRODUCTS

2.1 DIFFUSERS AND GRILLES

A. DIFFUSER SIZING BASED ON AIR BEING INTRODUCED AT 20°F. TEMPERATURE DIFFERENTIAL AND AIR BEING DIFFUSED AT THE FIVE FOOT LEVEL TO A VELOCITY NOT GREATER THAN 50 FPM. DIFFUSERS SELECTED SO AS NOT TO EXCEED THE NC-33 CURVE WHEN THE VOLUME DAMPER IS 50% OPEN. MANUFACTURE SHALL GUARANTEE TO MEET THE ABOVE PERFORMANCE FACTORS OR REPLACE ALL DIFFUSERS WHERE REQUIRED. SEE SCHEDULE ON DRAWINGS FOR MANUFACTURER AND MODELS.

2.2 DAMPERS

A. SPIN-IN FITTINGS: RUN-OUTS TO DIFFUSERS CONNECT TO MAINS WITH SPIN-IN FITTINGS WITH AIR SCOOP AND VOLUME DAMPER.
B. EXTRACTORS: PROVIDE AT ALL RIGHT ANGLE SUPPLY BRANCHES.
C. VOLUME DAMPERS (VD): PROVIDE IN SUPPLY, EXHAUST AND RETURN DUCTS AS REQUIRED FOR BALANCING AND CONSTRUCT OF GALVANIZED SHEETS NOT LIGHTER THAN 18 GAUGE, REINFORCED TO PREVENT VIBRATION, EQUIPPED AT BOTH ENDS WITH BRASS BEARING MOUNTS AND OF SUFFICIENT LENGTH TO COMPLETELY PASS THROUGH CONSTRUCT OF DUCT. PROVIDE EACH DAMPER WITH OPERATORS AS SPECIFIED. MANUFACTURERS: VENT PRODUCTS, GREENHECK OR RUSKIN ONLY.
D. PROVIDE EACH DAMPER WITH ADJUSTMENT AND LOCKING QUADRANT DEVICES AS MANUFACTURED BY YOUNG REGULATOR CO., NO. 403 OPERATOR FOR ACCESSIBLE LOCATIONS AND NO. 315 IN CHROME-PLATED FINISH FOR INACCESSIBLE LOCATIONS.

2.3 DUCT CONSTRUCTION

A. LOW PRESSURE DUCTWORK. CONSTRUCTED FROM GALVANIZED SHEET METAL TO CONFORM TO SMACNA MANUAL. LOCAL CODE AND ASHRAE GUIDE TABLE, LATEST EDITION.
B. FLEXIBLE DUCTS. GALVANIZED SPRING STEEL WIRE HELIX COVERED WITH CONTINUOUS LINER AND ATTACHED TO LINER WITH SPRAY COATING, 1 INCH THICKNESS OF FIBERGLASS INSULATION, PLASTIC VAPOR BARRIER JACKET SEALED AT BOTH ENDS. 0.25 K FACTOR AT 75°F MEAN TEMPERATURE RATED FOR CONTINUOUS SERVICE AT 1.5 INCH S.P. ALL JOINTS MADE WITH 1/2 INCH WIDE POSITIVE LOCKING STEEL STRAPS. UL APPROVED PER UL. 181. MAXIMUM LENGTH OF FIVE FEET ON SUPPLY DUCTS. GENFLEX, THERMAFLEX, CLEAVAFLEX.
C. A CERTIFIED NEBB AIR BALANCE REPORT SHALL BE SUBMITTED TO THE OWNER.
D. DUCT SIZES SHOWN ARE THE INSIDE CLEAR DIMENSIONS OF THE SHEET METAL. INCREASE DUCT SIZE AS NECESSARY TO ACCOMMODATE THE THICKNESS OF THE DUCT LINER.

2.4 EXHAUST FANS

A. ALL FANS SHALL BE AMCA CERTIFIED FOR PERFORMANCE AND SOUND AND SHALL BEAR THE AMCA LABEL.
B. FANS SHALL BE OF THE CAPACITY, SIZE, ACCESSORIES AND ARRANGEMENT AS SCHEDULED. THE FAN'S DESIGN IS BASED ON THE MANUFACTURER AND MODEL SPECIFIED AND/OR SCHEDULED. FANS SHALL BE FURNISHED WITH GUARDS, DISCONNECT SWITCH, BIRD SCREENS, DAMPERS, ISOLATORS, MOTORS, CURB FLASHING AND OR ACCESSORIES AS SPECIFIED AND/ OR SCHEDULED AND SHALL BE COMPLETELY OPERABLE AFTER INSTALLATION. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL WHEN MOTOR SIZES ARE DIFFERENT FROM THOSE SCHEDULED. MANUFACTURERS: COOK, ACME, AND GREENHECK.
C. EQUIVALENT FAN SELECTION SHALL NOT INCREASE MOTOR HORSEPOWER, NOISE LEVEL, OR TIP SPEED BY MORE THAN 10%, OR INCREASE INLET AIR VELOCITY BY MORE THAN 20%, FROM THAT SPECIFIED.
D. CENTRIFUGAL ROOF VENTILATOR. FANS SHALL BE OF CENTRIFUGAL ROOF MOUNTED WITH AN ALL WELDED FLASHING TYPE CURB BASE, BELT OR DIRECT DRIVEN TYPE AS SCHEDULED. THE FANS SHALL BE U.L. LISTED. WHEELS SHALL BE STATICALLY AND DYNAMICALLY BALANCED TO ASSURE SMOOTH AND VIBRATION FREE OPERATION. ENTIRE DRIVE ASSEMBLY SHALL BE MOUNTED ON VIBRATION ISOLATORS. MOTORS SHALL BE OF THE HEAVY DUTY TYPE WITH PERMANENTLY LUBRICATED, SEALED BALL BEARINGS. FANS SHALL BE PROVIDED WITH BIRDSCREENS, BACK DRAFT DAMPER, DISCONNECT SWITCH AND ROOF CURB. AN ELECTRICAL CONDUIT SHALL BE PROVIDED THROUGH THE FAN BASE INTO MOTOR COMPARTMENT TO FACILITATE WIRING.

PART 3 - EXECUTION

3.1 DUCTWORK

A. ERECT ALL DUCTWORK IN A FIRST-CLASS AND WORKMANLIKE MANNER, TRUE TO DIMENSIONS INDICATED, STRAIGHT AND SMOOTH ON INSIDE WITH NEATLY FINISHED JOINTS LAPPED IN THE DIRECTION OF AIR TRAVEL. PROPERLY BRACE AND REINFORCE ALL DUCTS WITH STEEL ANGLES OR OTHER MEMBERS.
B. ELBOWS. STANDARD CENTERLINE RADIUS SHALL EQUAL 1-1/2 TIMES THE WIDTH OF THE DUCT.
C. SQUARE TURNS SHALL BE PROVIDED WITH AIR FOIL TYPE TURNING VANES.
D. DUCT SIZES SHOWN ON THE DRAWINGS ARE THE NET INSIDE DIMENSIONS.
E. ACCESS DOORS IN DUCTWORK SHALL BE LOCATED AS REQUIRED FOR SERVICE OF FIRE DAMPERS, AUTOMATIC DAMPERS AND OTHER ITEMS REQUIRING MAINTENANCE OR INSPECTION. VENT PRODUCT MINIMUM SIZE 12x12 OR EQUIVALENT AREA.
F. DUCT HANGERS AND SUPPORTS: HANG GALVANIZED DUCTS UNDER 36 INCHES DIAMETER OR MAXIMUM SIDE DIMENSION WITH GALVANIZED STRIPS OF NO. 16 U.S.S. GAUGE STEEL ONE INCH WIDE AND ALL LARGER DUCTS WITH STEEL ANGLES AND ADJUSTABLE HANGER RODS SIMILAR TO PIPING HANGERS. ANCHOR ALL DUCTS SECURELY TO BUILDING IN SUCH MANNER AS TO PREVENT TRANSMISSION OF VIBRATION TO STRUCTURE.
G. SEAL ALL JOINTS IN DUCTS WITH 3M CO. OR JOHNS-MANVILLE CO. INDUSTRIAL GRADE PRESSURE SENSITIVE TAPE.

3.2 FANS

A. SUPPLY AND INSTALL SHEAVES AS NECESSARY FOR FINAL AIR BALANCING.
B. SET ROOF MOUNTED FANS ON CURBS. PROVIDE ACOUSTIC INSULATION ON DUCT TO BELOW ROOF LINE AND ON FAN INLET PLENUM AND DRIP PAN FOR COLLECTING CONDENSATION. APPROVED BEFORE IT IS COVERED UP OR ENCLOSED.

INSULATION:

PART 1 - GENERAL

1.1 QUALITY ASSURANCE

A. QUALIFICATION OF WORKMEN. USE PROFICIENT INSULATORS AND SUPERVISORS IN THE EXECUTION OF THIS PORTION OF THE WORK TO ENSURE PROPER AND ADEQUATE INSTALLMENT OF INSULATION THROUGHOUT.
B. COMPLIANCE WITH SPECIFICATIONS
1. WHENEVER REQUIRED DURING PROGRESS OF THE WORK FURNISH PROOF ACCEPTABLE TO THE OWNER THAT ITEMS INSTALLED EQUAL OR EXCEED ALL REQUIREMENTS SPECIFIED FOR THIS WORK.
2. IN THE EVENT SUCH PROOF IS NOT AVAILABLE, OR IS NOT ACCEPTABLE TO THE OWNER, THE OWNER MAY REQUIRE THE CONTRACTOR TO REMOVE THE ITEM OR ITEMS AND REPLACE WITH MATERIAL MEETING THE SPECIFIED REQUIREMENTS AND TO REPAIR ALL DAMAGE CAUSED IN THE REMOVAL AND REPLACEMENT, ALL AT NO ADDITIONAL COST TO THE OWNER.

1.2 SUBMITTALS

A. PRODUCT DATA, BEFORE INSULATING MATERIALS ARE DELIVERED TO THE JOB SITE, SUBMIT COMPLETE DATA SHOWING INSULATION MATERIALS PROPOSED TO BE FURNISHED AND INSTALLED.

1.3 PRODUCT HANDLING

A. PROTECTION. USE ALL MEANS NECESSARY TO PROTECT INSULATION MATERIALS BEFORE, DURING, AND AFTER INSTALLATION.
B. REPLACEMENTS: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY.

1.4 1.4-FIRE HAZARD CLASSIFICATION

A. MAXIMUM FIRE HAZARD CLASSIFICATION OF THE COMPOSITE INSULATION CONSTRUCTION AS INSTALLED SHALL BE NOT MORE THAN A FLAME SPREAD OF 25. FUEL CONTRIBUTED OF 50 AND SMOKE DEVELOPED OF 50.
B. PIPE INSULATION SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF U.L. PIPE AND EQUIPMENT COVERINGS R5583 400 8.15".
C. DUCT INSULATION SHALL BE TESTED IN ACCORDANCE WITH ASTM E84 AND BEAR THE U.L. LABEL. 1.5 ACCEPTABLE MANUFACTURERS: OWENS-CORNING, MANVILLE CO., JOHNS, PPC, KNAUF, ARMSTRONG.

PART 2 - PRODUCTS

2.1 2.1-MATERIAL

A. DUCT LINING
1. 1. ACOUSTICAL DUCT LINER WITH THERMAL CONDUCTIVITY OF 0.26 BTU-IN. PER SQUARE FOOT PER HOUR PER °F. AT 75°F. MEAN TEMPERATURE. MINIMUM DENSITY OF 1.5 POUNDS PER CUBIC FOOT.
2. 2. BASED ON A NO. 6 MOUNTING IN ACCORDANCE WITH TEST METHOD ASTM-C-423, LINER SHALL HAVE SOUND ABSORPTION COEFFICIENTS AS FOLLOWS:

A. DUCT WRAP. FIBERGLASS DUCT INSULATION TYPE 150, 1-1/2" THICK OF R=6.0 W SQ.FT. F/ BTUH AT 75°F. MEAN TEMPERATURE MIN. DENSITY OF 1.5 POUNDS PER CUBIC FOOT. FACTORY APPLIED FLAME RETARDANT FOIL REINFORCED KRAFT VAPOR BARRIER FACING. FLAME SPREAD NOT TO EXCEED 25 AND SMOKE DEVELOPED NOT TO EXCEED 50.

PART 3- EXECUTION

3.1 INSULATION THICKNESS

A. DUCTWORK: LINE ALL SUPPLY AND RETURN AIR DUCTS WITHIN 20 FT. OF AC UNIT OR AS INDICATED ON OTHERWISE WITH 1 INCH DUCT LINER.
B. SUPPLY AND RETURN DUCTS, NOT INTERNALLY LINED, ABOVE CEILINGS, COVER WITH 1-1/2' FIBERGLASS DUCTWRAP.

3.2 INSTALLATION

A. INSTALLATION SHALL BE CONTINUOUS THROUGH WALLS, FLOORS, PARTITIONS EXCEPT WHERE NOTED OTHERWISE.
B. DUCT LINERS. APPLY WITH FIRE RESISTANT ADHESIVE TO FLAT SHEET WITH 100 PERCENT COVERAGE. FOR WIDTHS OVER 20 INCHES, ADDITIONALLY SECURE THE LINER WITH MECHANICAL FASTENERS AT 15 INCH CENTERS. COAT EXPOSED AND LEADING EDGES OF TRANSVERSE JOINTS WITH SUITABLE FIRE RESISTANT ADHESIVE.
C. DUCT WRAP: COVER SUPPLY AND RETURN AIR DUCTS EXCEPT DUCTS INTERNALLY LINED. WRAP TIGHTLY WITH ALL CIRCUMFERENTIAL JOINTS BUTTED AND LONGITUDINAL JOINTS OVERLAPPED MINIMUM OF TWO INCHES. ADHERE INSULATION WITH FOUR INCH STRIPS OF INSULATING BENDING ADHESIVE AT EIGHT INCHES ON CENTER. ON DUCTS OVER 24 INCHES WIDE, ADDITIONALLY SECURE INSULATION WITH SUITABLE MECHANICAL FASTENERS AT 18 INCHES ON CENTER. CIRCUMFERENTIAL AND LONGITUDINAL JOINTS STAPLED WITH FLARE STAPLES ON SIX INCH CENTERS AND COVERED WITH

PLUMBING SPECIFICATIONS

PART 1 - GENERAL

1.01 DESCRIPTION

A. THE WORK INCLUDES PROVIDING NEW MATERIALS, FITTINGS, AND ACCESSORIESNECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION.

B. HOOK UP CHARGES, PERMITS AND ALL OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING PLUMBING SYSTEM ARE INCLUDED AS PART OF THIS SECTION.

C. COORDINATE ALL WORK WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

1.02 FIXTURES AND PLUMBING SPECIALTIES

A. ALL PLUMBING FIXTURES AND PLUMBING SPECIALTIES ARE AS INDICATED ON THESE DRAWINGS. NO SUBSTITUTIONS ALLOWED.

B. PROVIDE PLUMBING TRIM AND ACCESSORIES FROM THE FOLLOWING:

1. TRIM (P-TRAPS, STOPS, SUPPLIES, ETC); BRASSCRAFT; MCGUIRE; JAMECO.

2. FIXTURE SEATS: BEMIS; BENEKE; CHURCH; CENTOCO; OLSONITE.

3. FIXTURE CARRIERS: J.R. SMITH; JOSAM; WADE.

EXTRA STOCK:

FURNISH SPECIAL WRENCHES AND OTHER DEVICES NECESSARY FOR SERVICING PLUMBING FIXTURES AND TRIM TO OWNER WITH RECEIPT. FURNISH ONE (1) DEVICE FOR EVERY FORTY (40) UNITS, BUT IN NO CASE LESS THAN TWO (2) DEVICES.

PART 2 - PRODUCTS

2.01 DOMESTIC WATER SYSTEM

A. A. PROVIDE COMPLETE SYSTEMS OF COLD AND HOT PIPING AND ACCESSORIES SO THAT EVERY PIECE OF WATER USING EQUIPMENT WILL BE FURNISHED WITH A WATER SUPPLY. EXTEND TO POINTS INDICATED ON THE DRAWINGS.

B. PIPING AND FITTINGS:

1. PIPE AND FITTINGS SHALL BE AS LISTED HEREIN AND SHALL BE USED ON THE SERVICES INDICATED.

2. TYPE "L" HARD DRAWN COPPER TUBING, ASTM B 88 WITH SOLDERED JOINTS AND WROUGHT COPPER SOCKET FITTINGS FOR ALL ABOVE GROUND WATER PIPING 3" IN SIZE AND UNDER.

3. TYPE "K" HARD DRAWN COPPER TUBING, ASTM B 88, WITH BRAZED JOINTS AND WROUGHT COPPER SOCKET FITTING FOR ALL BELOW GROUND COPPER PIPING.

A. JOINTS:

1. SOLDER JOINTS FOR TYPE "L" COPPER TUBING SHALL BE MADE USING 95-5 TIN-ANTIMONY SOLDER WITH A COMPATIBLE FLUX.

2. BRAZED JOINTS SHALL USE A BCuP-5 BRAZING ALLOY WITH A COMPATIBLE FLUX.

3. SOLDER FOR POTABLE WATERPIPING SHALL BE LEAD FREE.

A. DIELECTRIC ADAPTERS:

1. 1. DIELECTRIC ADAPTERS SHALL BE PROVIDED BETWEEN COPPER AND IRON PIPE CONNECTIONS AND BETWEEN FERROUS AND NON-FERROUS PIPING OR EQUIPMENT.

2.02 SANITARY, WASTE, VENT AND STORM SYSTEMS:

A. PROVIDE COMPLETE SYSTEM OF SANITARY, WASTE, VENT AND STORM PIPING TO POINTS INDICATED ON THE DRAWINGS.

B. BASIC PIPE TUBE AND FITTINGS:

a. ABOVEGROUND PIPING: NO-HUB CAST IRON SOIL PIPE, CISPI 301.

- PIPE CLASS: SERVICE WEIGHT (SW).
- FITTINGS: NO-HUB CAST IRON SOIL PIPE FITTINGS, WITH STAINLESS STEEL CLAMPS AND NEOPRENE GASKETS.
- GASKETS: NEOPRENE GASKET JOINTS, ASTM C-564.
- COUPLINGS: "HUSKY" HEAVY DUTY STAINLESS STEEL CLAMPS FROM ANAHEIM FOUNDRY COMPANY. NO COUPLING SHALL HAVE LESS THAN 4 CLAMP RINGS.

b. UNDERGROUND BUILDING DRAIN PIPING: CAST IRON HUB AND SPIGOT SOIL PIPE, ASTM A-74.

- PIPE CLASS: SERVICE WEIGHT (SW).
- FITTINGS: CAST IRON, HUB AND SPIGOT SOIL PIPE FITTINGS.
- GASKETS: NEOPRENE COMPRESSION GASKET JOINTS, ASTM C-564.

c. WHERE ALLOWED BY LOCAL OR STATE CODE INTERIOR PIPING MAY BE SCHEDULE 40 PVC WITH DRAINAGE PATTERN FITTINGS AND SOLVENT CEMENTED JOINTS AND EXTERIOR PIPING MAY BE PVC WITH GASKETED JOINTS, SDR-35 MINIMUM WALL THICKNESS.

C. C. JOINTS:

a. JOINTS FOR CAST IRON PIPE BELOW THE FLOOR SHALL BE NEOPRENE COMPRESSION GASKETS OR BE MADE WITH A MIXTURE OF GRAPHITE AND OIL OAKUM AND MOLTEN LEAD.

b. JOINTS FOR CAST IRON PIPE ABOVE THE FLOOR SHALL HAVE NEOPRENE GASKETS AND 24 GA. STAINLESS STEEL BANDS AND CLAMPS. TORQUE 125 IN. BS., 150 IN. LBS. FOR VANDAL PROOF.

c. THREADED JOINTS FOR STEEL PIPE SHALL BE MADE WITH A MIXTURE OF GRAPHITE AND OIL APPLIED TO MALE THREADS ONLY. AFTER CUTTING, BUT PRIOR TO THREADING, PIPE SHALL BE REAMED AND HAVE BURRS REMOVED.

d. JOINTS FOR PVC INTERIOR PIPING SHALL BE SOLVENT CEMENTED. EXTERIOR PVC PIPING SHALL BE GASKETED.

D. DRAINS:

a. FLOOR DRAINS SHALL BE SET FLUSH WITH THE FLOOR. ALL FLOOR DRAINS SHALL BE VANDAL PROOF.

2.03 NATURAL GAS PIPING

A. A. PROVIDE A COMPLETE SYSTEM OF GAS PIPING FROM THE OUTLET OF THE GAS METER TO ALL EQUIPMENT REQUIRING GAS AS INDICATED ON THE DRAWINGS.

B. B. PIPING SHALL BE SCHEDULE 40 BLACK STEEL ASTM A-53 WITH X-HEAVY BLACK MALLEABLE IRON BANDED SCREWED OR WELD PATTERN FITTINGS AS APPLICABLE (ASME-B16.3).

C. C. ALL PIPING AND FITTINGS LOCATED OUTDOORS AND ABOVE GRADE SHALL BE CLEANED FREE OF RUST AND PAINTED WITH TWO (2) COATS OF EPOXY ALUMINUM II PAINT.

D. D. APPLY TWO COATS OF ASPHALTUM BASE PAINT TO PIPING BURIED UNDERGROUND.

E. E. EACH PIECE OF EQUIPMENT SHALL BE PROVIDED WITH LUBRICATED PLUG VALVE WITH A HANDLE, UNION AND DRIP LEG AT THE UNIT CONNECTION.

2.04 PLUMBING SYSTEMS VALVES

A. VALVES SHALL HAVE THE NAME OR TRADEMARK OF THE MANUFACTURER AND THE WORKING PRESSURE STAMPED OR CAST ON THE VALVE BODY.

B. SHUTOFF VALVES, WITH UNIONS SHALL BE PROVIDED TO EACH PLUMBING FIXTURE, OR OTHER EQUIPMENT ITEM, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. VALVES SHALL BE EQUAL TO JENKINS #902-T BALL VALVE, CHROME-FINISHED BRONZE, TEFLON SEATS AND PACKING, 400 LB W.O.G. SOLDER END.

C. DOMESTIC WATER SYSTEM:

1. BALL VALVES 3" IN SIZE AND SMALLER SHALL HAVE BRONZE BODY AND BONNET, 2-PIECE CONSTRUCTION, CHROME-PLATED BRASS BALL WITH CONVENTIONAL FULL PORT; BLOWOUT PROOF; BRONZE OR BRASS STEM; TEFLON SEATS AND SEALS; THREADED OR SOLDERED END CONNECTIONS; VINYL-COVERED STEEL LEVER HANDLE OPERATOR. VALVES SHALL BE CRANE NO 9323 SERIES.

2. GATE VALVES 3" IN SIZE AND SMALLER SHALL HAVE BRONZE BODY, NON-RISING STEM, SOLID WEDGE, AND SOLDER ENDS FOR 200 POUNDS W.O.G. VALVES SHALL BE CRANE NO. 1324.

3. CHECK VALVES 3" IN SIZE AND SMALLER SHALL BE HORIZONTAL SWING TYPE WITH BRONZE BODY, COMPOSITION DISC, AND SOLDER ENDS FOR 200 POUND W.O.G. VALVES SHALL BE CRANE NO. 1342.

4. GLOBE VALVES SHALL HAVE BRONZE BODY, RISING STEM, COMPOSITION DISC AND SOLDER ENDS FOR 200 POUND W.O.G. VALVES SHALL BE CRANE NO. 1310.

D. VALVES FOR NATURAL GAS SYSTEMS

1. LOW PRESSURE GAS STOPS, 2" AND SMALLER; AGA-CERTIFIED DESIGN FOR 2 PSIG OR LESS NATURAL GAS WITH AGA STAMP; PLUG OR BALL TYPE, BRONZE BODY AND BRONZE PLUG OR CHROME-PLATED BRASS BALL, INCLUDE FLAT HEAD, SQUARE HEAD OR LEVEL HANDLE AND THREADED ENDS. VALVES SHALL BE CRANE N0 9203.

2. LUBRICATED PLUG VALVES 3" IN SIZE AND LARGER SHALL BE THE SEMI-STEEL TYPE WITH CAST IRON BODY, LUBRICATED CAST IRON PLUG, FLANGED ENDS, AND WRENCH OPERATED FOR 175# WOG. VALVES SHALL BE WALWORTH 1797F.

3. LUBRICATED PLUG VALVES (2-1/2" IN SIZE AND SMALLER) SHALL HAVE BRONZE BODY AND PLUG, THREADED ENDS, AND SQUARE HEAD FOR 125# WOG. VALVES SHALL BE CRANE NO. 250.

4. LUBRICATED PLUG VALVES SHALL BE LUBRICATED AT THE FACTORY AND SEALANT SHALL BE SUITABLE FOR NATURAL GAS. PROVIDE SIX (6) STICKS OR TUBES OF SEALANT UTILIZED AND TURN SUCH OVER TO THE OWNER S REPRESENTATIVE.

5. PROVIDE ONE (1) VALVE WRENCH FOR EACH SIZE AND TYPE OF VALVE HEAD AND TURN SUCH WRENCHES OVER TO THE OWNER'S REPRESENTATIVE.

2.05 CONDENSATE DRAINAGE

A. BASIC PIPE, TUBE AND FITTINGS:

1. PIPING AND FITTINGS INSIDE AND OUTSIDE SHALL BE COPPER DWV WITH SOLDER JOINTS.

2.06 PLUMBING SYSTEM INSULATION

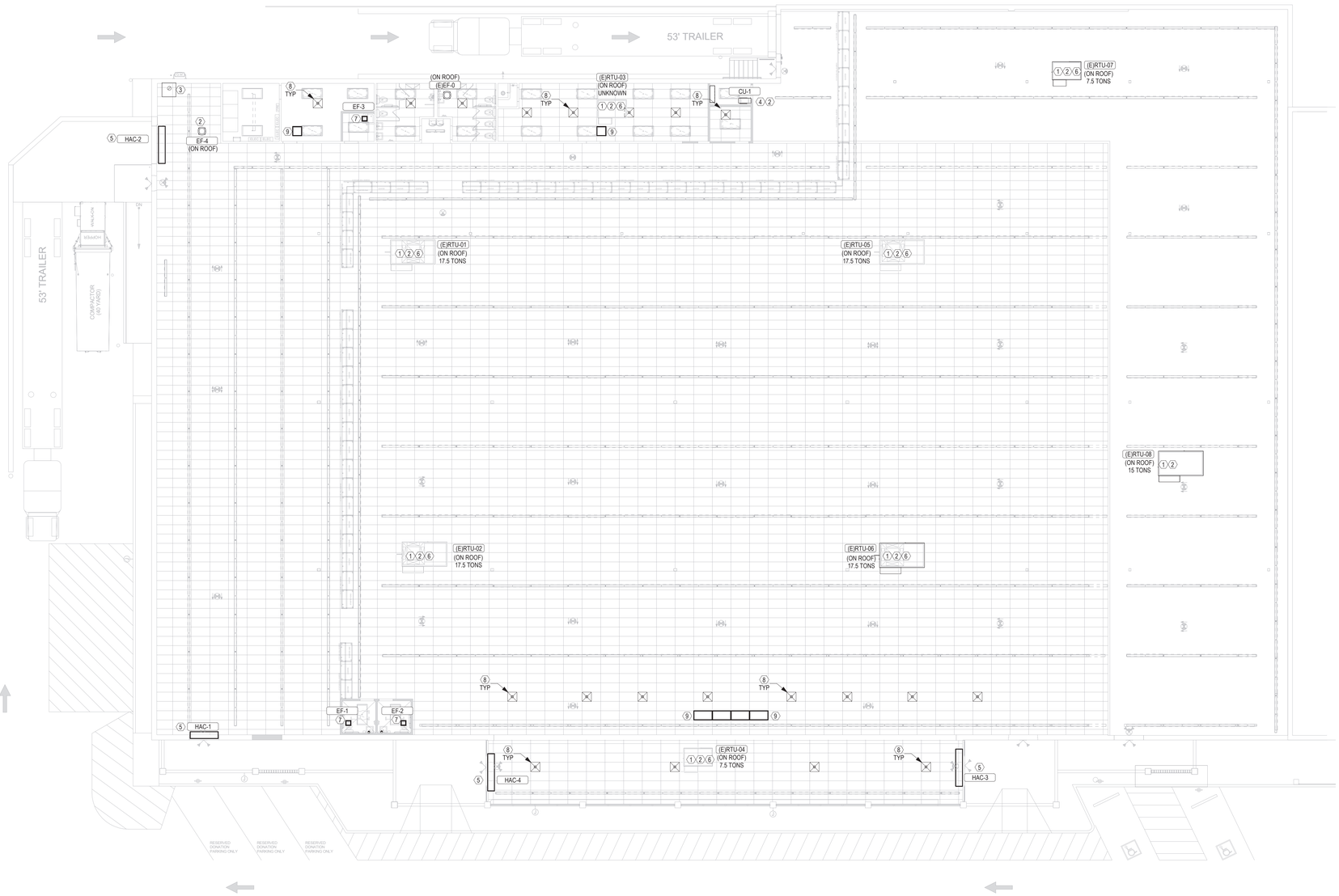
A. ALL INSULATION SHALL BE APPLIED IN A NEAT AND WORKMANLIKE MANNER. REMOVE AND REPLACE ALL INSULATION NOT APPLIED IN STRICT ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS OR NOT PRESENTING A NEAT APPEARANCE. INSULATION SHALL BE CONTINUOUS THROUGH WALL AND CEILING OPENINGS AND SLEEVES. ALL INSULATION SHALL BE APPLIED BY CONTRACTOR SPECIALIZED IN INSULATION APPLICATION, IN ACCORDANCE WITH BEST TRADE DIRECTIONS.

B. WORK INCLUDED: PIPE COVERING FOR DOMESTIC HOT WATER, COLD WATER, INTERIOR ROOF DRAIN PIPING AND INTERIOR CONDENSATE PIPING.

C. MATERIALS AND INSTALLATION: NO PIPE INSULATION SHALL BE APPLIED UNTIL PIPING HAS BEEN PRESSURE TESTED AND APPROVED. ALL INSULATION SHALL BE APPLIED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ONLY MATERIALS MANUFACTURED BY JOHNS MANVILLE, FIBERGLASS PHILLIP CAREY, OR ARMSTRONG WILL BE ACCEPTABLE. ALL INSULATION ON INDOOR WORK SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE NFPA 255 NOT EXCEEDING: FLAME SPREAD 25, FUEL CONTRIBUTED 50, SMOKE DEVELOPED 50. ACCESSORIES SUCH AS ADHESIVES, MASTICS, CEMENTS, TAPES AND CLOTH FOR FITTING, SHALL HAVE THE SAME COMPONENT RATINGS AS LISTED ABOVE. INSULATION SHALL HAVE AN AVERAGE THERMAL CONDUCTIVITY NOT TO EXCEED 0.25 BTU/INCH OF THICKNESS PER SQUARE FOOT PER 1 DEGREE F. AT A MEAN TEMPERATURE OF 75 DEGREES F.

D. DOMESTIC HOT WATER PIPING: ALL DOMESTIC HOT WATER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS PIPE INSULATED WITH FOIL-KRAFT LAMINATE VAPOR BARRIER FASTENED WITH PRESSURE SENSITIVE TAPE AND LAPPED 12" MINIMUM. ALL FITTINGS, VALVES, FLANGES, ETC. SHALL BE COVERED WITH PVC FITTING COVER, TAPE AND TACKED FASTENED.

E. COLD WATER LINES: ALL DOMESTIC COLD WATER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS INSULATED WITH FOIL KRAFT LAMINATED VAPOR BARRIER FASTENED WITH PRESSURE SENSITIVE TAPE AND LAPPED 12" MINIMUM. ALL FITTINGS, VALVES, STRAINERS, FLANGES, ETC. SHALL BE COVERED WITH PVC



1 M100 First Floor Mechanical Plan
3/32" = 1'-0"

MECHANICAL KEYED NOTES

1	EXISTING RTU TO BE PROVIDED TO TENANT IN OPERATIONAL CONDITION. NOTIFY TENANT OF ANY DISCREPANCIES.
2	PROVIDE IDENTIFICATION ON ALL ROOFTOP EQUIPMENT. PROVIDE STENCIL WITH A MINIMUM OF 6" HIGH BLACK SPRAY-PAINTED LETTERS INDICATING RTU NUMBER ON EQUIPMENT ON ROOF. TAGS SHOWN ON PLANS ARE FOR REFERENCE ONLY AND MAY NOT MATCH ACTUAL FIELD LABELING. CONTRACTOR SHALL VERIFY ALL TAGS MATCH.
3	PROVIDE 36"x36" MINIMUM FIELD FABRICATED HOOD OVER FORK LIFT BATTERY CHARGING AREA. ROUTE DUCT UP TO ROOFTOP EXHAUST FAN. FAN TO RUN CONTINUOUSLY. FAN TO BE SIZED FOR 1CFM PER SQ FOOT OF CHARGING AREA (200SF).
4	NEW CONDENSING UNIT FOR IT ROOM LOCATED ON ROOF INSTALLED ON FACTORY ROOF RAILS (12" MINIMUM). CONDENSING UNIT SHALL PROVIDE POWER TO INDOOR UNIT. ROUTE POWER AND REFRIGERANT PIPING THROUGH PIPE PORTAL.
5	NEW HEATED AIR CURTAIN. PROVIDE HOA SWITCH AND MOUNT AT 48" AFF.
6	EXISTING DUCTWORK AND DISTRIBUTION TO REMAIN UN ALTERED. ALL DUCTWORK TO BE CLEANED, INSPECTED AND REPAIR FOR A COMPLETE SYSTEM.
7	PROVIDE 6" E/A DUCT UP THRU ROOF FROM EXHAUST FAN. TERMINATE WITH A GOOSENECK AT ROOF.
8	REPLACE EXISTING DIFFUSER WITH TYPE S-2. VERIFY AND MATCH EXISTING NECK SIZE IN FIELD.
9	REPLACE EXISTING DIFFUSER WITH TYPE R-1 RETURN GRILLE. VERIFY AND MATCH EXISTING NECK SIZE IN FIELD.

MECHANICAL GENERAL NOTES

1. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE HVAC SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES AND CONTROLS COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL MECHANICAL EQUIPMENT AND INSTALLATIONS SHALL CONFORM WITH THE REQUIREMENTS OF ALL STATE BUILDING CODES, THE NFPA 90A, 101 AND ALL LOCAL AUTHORITIES AND THESE CONTRACT DOCUMENTS. THESE ITEMS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE OWNER. THE WORD "PROVIDE" SHALL MEAN FURNISH AND INSTALL. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
2. PRIOR TO PURCHASING ANY MATERIALS OR STARTING ANY WORK, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DUCTWORK SIZES AND LOCATIONS, EQUIPMENT, ETC. SHOWN ON THE DRAWINGS OR AFFECTING THIS WORK AND SHALL REPORT ANY DEVIATIONS TO THE ARCHITECT.
3. CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT OR SUBMITTING SHOP DRAWINGS, AND SHALL FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN.
4. ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE (FUSED OR NON-FUSED) WITH EQUIPMENT CHARACTERISTICS, MANUFACTURER'S RECOMMENDATIONS AND ELECTRICAL DRAWINGS.
5. ALL REQUIRED CONTROL WIRING NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK.
6. UNLESS NOTED OTHERWISE, STARTERS, SMOKE DETECTORS, TRANSFORMERS, CONTROLS AND CONTROL WIRING REQUIRED FOR ALL MECHANICAL SYSTEMS SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
7. ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
8. ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER CERTIFICATE OF OCCUPANCY.
9. EXHAUST DUCTWORK SHALL BE SHEET METAL AND SHALL NOT BE INSULATED UNLESS NOTED OTHERWISE.
10. ALL DUCTWORK SHALL BE SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE. DUCT SUPPORTS AND ATTACHMENT TO STRUCTURE SHALL BE AS PER SMACNA STANDARDS.
11. FLEXIBLE DUCTWORK SHALL BE SIZED TO MATCH DEVICE NECK, PROVIDE ROUND GALVANIZED STEEL DUCT RUNOUTS TO MAINTAIN MAXIMUM FLEXIBLE DUCT OF 5'-0" LONG. FLEXIBLE DUCTWORK SHALL BE INSTALLED AS STRAIGHT AS POSSIBLE, AND SHALL BE ROUTED AND SUPPORTED WITHOUT FORMING CRIMPS OR OTHER AIR FLOW RESTRICTIONS. PROVIDE SQUARE TO ROUND ADAPTERS OR BOOTS TO CONNECT TO AIR DEVICE NECK WHEN REQUIRED.
12. ROUND AND FLEXIBLE DUCTWORK SHALL BE CONNECTED TO MAIN DUCTS WITH SPIN-IN FITTINGS WITH AIR EXTRACTORS AND BALANCING DAMPERS.
13. PORTIONS OF DUCTWORK VISIBLE THROUGH AIR DISTRIBUTION DEVICES IN FINISHED AREAS SHALL BE PAINTED FLAT BLACK.
14. DUCTWORK DIMENSIONS SHOWN ON THE DRAWINGS ARE INSIDE CLEAR DIMENSIONS. CONTRACTOR SHALL ADJUST DUCT DIMENSIONS WHERE DUCT LINER IS USED TO MAINTAIN INSIDE CLEAR DIMENSIONS SHOWN ON DRAWINGS.
15. AFTER CONSTRUCTION, THE ENTIRE HVAC SYSTEM SHALL BE TESTED, ADJUSTED, AND BALANCED TO DELIVER THE AIR QUANTITIES SHOWN ON THE DRAWINGS. SUBMIT CERTIFIED TEST AND BALANCE REPORT TO ARCHITECT FOR APPROVAL.
16. ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE OWNER TO SUIT HIS OPERATING CONDITIONS.
17. ANY WALL, FLOOR, OR CEILING SURFACE THAT IS DISTURBED DURING THE COURSE OF THE HVAC WORK SHALL BE REPAIRED TO MATCH NEW AND/OR EXISTING.
18. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT, DUCTWORK, ETC. TO FIT WITHIN THE SPACE ALLOWED BY THE ARCHITECTURAL AND STRUCTURAL CONDITIONS. CUTTING OR OTHERWISE ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.
19. MOUNT THERMOSTATS IN SALES AT 84" A.F.F. PROVIDE CLEAR LOCKING COVER ASSEMBLIES FOR ALL THERMOSTATS. MOUNT ON BACKSIDE OF COLUMN.
20. LOCATIONS OF GRILLES, REGISTERS, & DIFFUSERS SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE EXACT LOCATIONS WITH LIGHTS, CEILING GRID, SPRINKLER HEADS ETC.
21. PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILINGS AND IN WALL STRUCTURE TO ALLOW ADEQUATE ROOM FOR MAINTENANCE OF EQUIPMENT AND BALANCING OF SYSTEM.
22. ALL DUCTWORK SHALL BE GALVANIZED AND SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA LOW-PRESSURE DUCT CONSTRUCTION STANDARDS. DUCT HANGERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH SMACNA RECOMMENDATIONS.
23. ALL RTU FILTERS SHALL BE REPLACED AT THE END OF CONSTRUCTION.
24. CONTRACTOR TO COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH ELECTRICAL CONTRACTOR BEFORE ORDERING EQUIPMENT.
25. ALL CEILING DIFFUSERS TO BE 4-WAY THROW UNLESS SHOWN OTHERWISE ON DRAWINGS.
26. COORDINATE THE LOCATION OF ALL PENETRATIONS OF THE STRUCTURE WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
27. EXISTING SMOKE DETECTORS IN EXISTING RTU'S TO REMAIN. OR PROVIDE AND INSTALL SMOKE DETECTORS IN ACCORDANCE WITH STATE/LOCAL REQUIREMENTS.
28. MECHANICAL SUBCONTRACTOR TO REFER TO EMS DRAWINGS FOR RESPONSIBILITIES WITH REGARD TO EMS CONTROLS, COORDINATION AND COMMISSIONING.
29. MECHANICAL CONTRACTOR SHALL REVIEW THE EMS REQUIREMENTS AS DESCRIBED ON SHEETS EM1-EM4 AND SHALL COORDINATE THESE REQUIREMENTS WITH THE MECHANICAL WORK.

NEW THERMOSTATS/SYSTEM CONTROLLERS FOR EXISTING ROOFTOP UNITS, FANS NOT BEING REMOVED SHALL BE PROVIDED BY OWNER'S EMS CONTRACTOR. PROVIDE LOCKING COVERS AND MOUNT AT 84" A.F.F. COORDINATE INSTALLATION WITH EMS CONTRACTOR. REFER TO EM DRAWINGS FOR ADDITIONAL INFORMATION.

CONTRACTOR SHALL CLEAN ALL DIFFUSER / REGISTERS / GRILLES AND DROP BOXES. PROVIDE NEW RTU FILTERS AT END OF CONSTRUCTION.

ALL EXISTING HVAC EQUIPMENT AND PLUMBING FIXTURES TO REMAIN SHALL BE CLEAN, INSPECTED, AND REPAIRED AS NEEDED TO ENSURE PROPER FUNCTIONALITY BY GC.

SPRINKLER SYSTEM SHALL BE COMPLETELY INSPECTED AND TESTED TO INCLUDE OBSTRUCTION VISUAL AND FLUSHING. A CURRENT WATER FLOW TEST (2" DRAIN TEST) SHALL BE CONDUCTED TO VERIFY CURRENT WATER SUPPLY INFORMATION. SYSTEM DESIGN SHALL BE VALIDATED FOR THE HAZARD PROPOSED INCLUDING ANY MODIFICATIONS OR UPGRADES TO THE SYSTEM NECESSARY FOR STORAGE UP TO 16'-0" IN THE PALLET RACKING AREAS. GENERAL CONTRACTOR IS RESPONSIBLE FOR MAKING ANY AND ALL MODIFICATIONS, REPAIRS, ADJUSTMENTS, CLEANING, AND TESTING TO THE ENTIRE FIRE SPRINKLER SYSTEM. FIRE SPRINKLER SYSTEM SHALL COMPLY WITH STATE, LOCAL, AND ALL APPLICABLE CODES.

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
MICHAEL F. GLEASON
NUMBER PE-2012004213
PROFESSIONAL ENGINEER

07/31/2025

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.014
DATE: 07.11.2025

M100

MECHANICAL FLOOR PLAN

CHECKED: SLB DRAWN: MFG

GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726

PACKAGED GAS ROOFTOP AIR CONDITIONER SCHEDULE

DESIGNATION	(E) RTU-1	(E) RTU-2	(E) RTU-3	(E) RTU-4	(E) RTU-5	(E) RTU-6	(E) RTU-7	(E) RTU-8
AREA SREVED								
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE
MODEL N0.	YSD210	YSD210	UNKNOWN	YSC092	YSD210	YSD210	YSC092	YSD180
NOMINAL TONS	17.5	17.5	UNKNOWN	7.5	17.5	17.5	7.5	15
SUPPLY AIRFLOW (CFM)	7000	7000	UNKNOWN	3000	7000	7000	3000	6000
O/A AIRFLOW (CFM)	1400	1400	100	700	1400	1400	600	1200
EXT. STATIC PRESSURE. (IN. W.G.)	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
UNIT MIN. CIRC. AMPACITY (MCA)								
MAX. FUSE SIZE (AMPS)								
VOLTAGE/PHASE								
GROSS TOTAL COOLING (BTU/H)								
GROSS SENSIBLE COOLING (BTU/H)								
ENTERING AIRTEMP. (DB/WB)								
UNIT EER/IEER								
NATURAL GAS HEATING INPUT/OUTPUT (MBH)								
STEADY - STATE EFFICIENCY (%)								
UNIT WEIGHT (LBS.)								
REMARKS	1	1	1	1	1	1	1	1

NOTES:

1. EXISTING - VERIFY MANUFACTURER, MODEL AND PERFOMANCE IN FIELD

IMC 2018 VENTILATION SCHEDULE

System Name: RTU-1,2,5,6,7,8

Ev (System Efficiency)	0.9	Az	Zone Floor Area	Voz	Zone Outdoor Air Rate
Ps (Max Population)	429	Pz	Zone Population	Zp	Primary Outdoor Air Fraction
D (Occupant Diversity)	0.8	Rp	People Outdoor Rate	Vpz	Primary Air Flow
Rp * Pz	3245	Ra	Area Outdoor Rate	Ev	System Efficiency
Ra * Az	3961.44	Vbz	Breathing Zone Airflow		
Vou (Uncorrected OA)	6557.44	Ez	Zone Air Distribution Effectiveness		
Vot (Corrected OA)	7287				

Room Number	Room Name	Occupancy Category	Az Area (s.f.)	People Density per 1,000s.f.	Pz People	Rp	Ra	Viz	Ze (air distribution effectiveness)	Voz	Zp	Vpz Supply Air flow (cfm)	Ev
	SALES FLOOR	Sales	27816	15	418	7.5	0.12	6472.92	0.8	8091.15	0.26	31000	0.8
	PRODUCTION/SHIPPING	Shipping and receiving	5196	2	11	10	0.12	733.52	1.8	407.51	0.07	6000	1
			33012		429							37000	

Notes:

1.) All rooms and dimensions are from architectural drawing .
2.) All Occupancy categories and variables from IMC 2018 Table 404.3
3.) All people counts are based on ventilation variables unless seating counts are provided on architectural plans.

IMC 2018 VENTILATION SCHEDULE

System Name: RTU-3

Ev (System Efficiency)	0.9	Az	Zone Floor Area	Voz	Zone Outdoor Air Rate
Ps (Max Population)	7	Pz	Zone Population	Zp	Primary Outdoor Air Fraction
D (Occupant Diversity)	1	Rp	People Outdoor Rate	Vpz	Primary Air Flow
Rp * Pz	35	Ra	Area Outdoor Rate	Ev	System Efficiency
Ra * Az	52.08	Vbz	Breathing Zone Airflow		
Vou (Uncorrected OA)	87.08	Ez	Zone Air Distribution Effectiveness		
Vot (Corrected OA)	97				

Room Number	Room Name	Occupancy Category	Az Area (s.f.)	People Density per 1,000s.f.	Pz People	Rp	Ra	Viz	Ze (air distribution effectiveness)	Voz	Zp	Vpz Supply Air flow (cfm)	Ev
	ELECTRICAL ROOM	Storage	152	0	0	0	0	0	0.8	0.00	0.00	150	1
	OFFICE	Office spaces	203	5	2	5	0.06	22.18	0.8	27.73	0.09	300	1
	JANITORS CLOSET	Toilet rooms and bathrooms	40	—	---	—	—	---	8	---	---	0	---
	TOILET ROOM	Toilet rooms and bathrooms	140	—	---	—	—	---	0.8	---	---	175	---
	TOILET ROOM	Toilet rooms — public	140	—	---	—	—	---	0.8	---	---	175	---
	BREAKROOM	Office spaces	560	5	3	5	0.06	48.6	0.8	60.75	0.09	700	1
	IT ROOM	Office spaces	40	5	1	5	0.06	7.4	0.8	9.25	---	0	---
	OFFICE	Office spaces	65	5	1	5	0.06	8.9	0.8	11.13	0.11	100	1
			1340		7							1600	

Notes:

1.) All rooms and dimensions are from architectural drawing .
2.) All Occupancy categories and variables from IMC 2018 Table 404.3
3.) All people counts are based on ventilation variables unless seating counts are provided on architectural plans.

IMC 2018 VENTILATION SCHEDULE

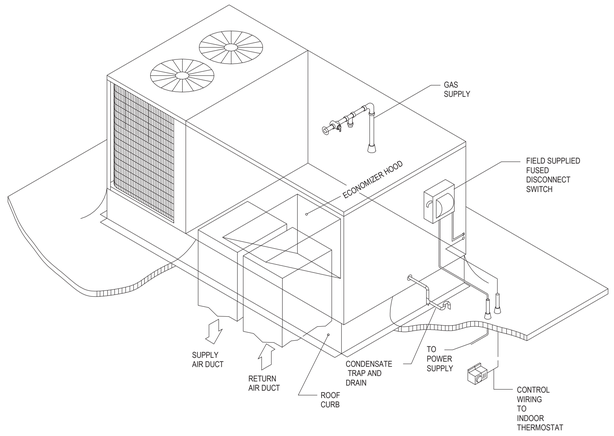
System Name: RTU-4

Ev (System Efficiency)	0.9	Az	Zone Floor Area	Voz	Zone Outdoor Air Rate
Ps (Max Population)	41	Pz	Zone Population	Zp	Primary Outdoor Air Fraction
D (Occupant Diversity)	1	Rp	People Outdoor Rate	Vpz	Primary Air Flow
Rp * Pz	307.5	Ra	Area Outdoor Rate	Ev	System Efficiency
Ra * Az	321	Vbz	Breathing Zone Airflow		
Vou (Uncorrected OA)	628.5	Ez	Zone Air Distribution Effectiveness		
Vot (Corrected OA)	699				

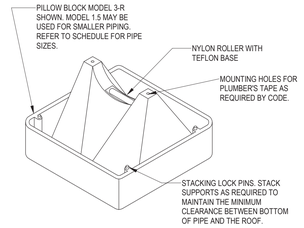
Room Number	Room Name	Occupancy Category	Az Area (s.f.)	People Density per 1,000s.f.	Pz People	Rp	Ra	Viz	Ze (air distribution effectiveness)	Voz	Zp	Vpz Supply Air flow (cfm)	Ev
	VESTIBULE/SALES FLOOR	Sales	2675	15	41	7.5	0.12	628.5	0.8	785.63	0.26	3000	0.8
	TOILET ROOM	Toilet rooms — public	49	—	---	—	—	---		---	---	0	---
	TOILET ROOM	Toilet rooms — public	49	—	---	—	—	---		---	---	0	---
			2773		41							3000	

Notes:

1.) All rooms and dimensions are from architectural drawing .
2.) All Occupancy categories and variables from IMC 2018 Table 404.3
3.) All people counts are based on ventilation variables unless seating counts are provided on architectural plans.

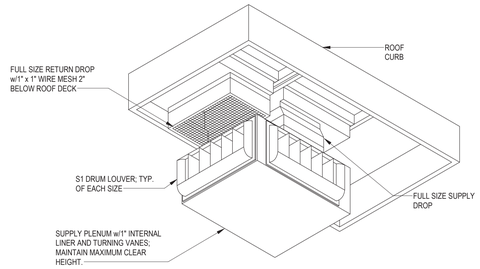


ROOFTOP PACKAGED HVAC UNIT DETAIL

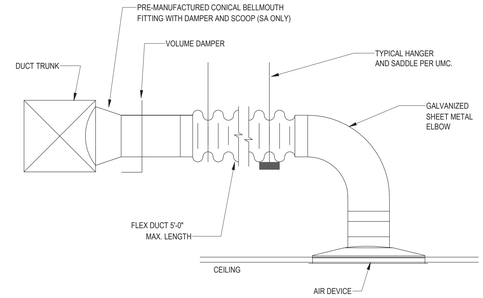


NOTE:
1) PIPE SUPPORTS SHALL BE SPACED AS SPECIFIED IN THE SPECIFICATIONS.
2) DO NOT ATTACH SUPPORTS TO ROOF. PROVIDE PROTECTIVE MEMBRANE BETWEEN ROOF AND SUPPORT PER ROOFING MANUFACTURER'S RECOMMENDATIONS. PROVIDED AND INSTALLED BY THE PLUMBING CONTRACTOR.
3) FOR PILLOW BLOCK PIPE STAND INFORMATION, CONTACT MIRO IND. OF UTAH (800) 768-6978.

PIPE SUPPORT ON ROOF



DRUM LOUVER DETAIL



TYPICAL DIFFUSER CONNECTION

DIFFUSER, REGISTER AND GRILLE SCHEDULE

ID	MANUFACTURER	MODEL	DAMPER	DESCRIPTION	NOTES
S-1	TITUS	DL	OBD	STEEL, SIDEWALL.	1,2,3,4,6,7
S-2	TITUS	TMSA	OBD	STEEL. CEILING.	1,2,3,4,5,6
S-3	TITUS	300 RL	OBD	DOUBLE DEFLECTION, STEEL SUPPLY GRILLE	1,2,3,4,5,6
R-1	TITUS	50F	NONE	ALUMINUM, 24X24 RETURN GRILLE.	1,2,3,4,5,6
TR-1	TITUS	350	OBD	STEEL, SIDEWALL.	1,2,3,4,5,6

1. FLEXIBLE DUCTS CONNECTING THE DIFFUSERS SHALL BE FULL SIZE OF NECK DIAMETER.
2. BAKED ENAMEL FINISH, COLOR TO BE WHITE.
3. DIFFUSERS SHALL BE 4-WAY BLOW UNLESS OTHERWISE INDICATED ON PLANS .
4. MOUNTING FRAME TYPE SHALL BE COORDINATED WITH CEILING CONSTRUCTION TYPE.
5. NECK DIAMETER SHALL BE AS SCHEDULED IN TABLE 1.
6. DIFFUSERS, REGISTERS AND GRILLES SHALL BE MANUFACTURED BY TITUS
7. NECK DIAMETER SHALL BE AS SCHEDULED IN TABLE 2.

TABLE 1:
ROUND NECK SIZE SCHEDULE-RUN OUT TO MATCH NECK
UP TO 130 CFM - 6" DIAMETER
135 TO 245 CFM - 8" DIAMETER
250 TO 340 CFM - 10" DIAMETER
345 TO 470 CFM - 12" DIAMETER
475 TO 700 CFM - 14" DIAMETER

TABLE 2: DRUM LOUVER NECK SIZE SCHEDULE
UP TO 400 CFM - 12" X 6"
401 TO 649 CFM - 24" X 6"
650 TO 900 CFM - 20" X 10"
1250 CFM - 20" X 12"

DUCTLESS SPLIT SYSTEM SCHEDULE

MARK	MANUFACTURER	MODEL	NOMINAL TONS	SUPPLY AIR (CFM)	MOTOR FLA	TOTAL COOLING CAPACITY (MBH)	REFRIGERANT TYPE	EER/SEER	WEIGHT (LBS)	ELECTRICAL				NOTES
										MCA	MOCP	VOLT.	PH.	
CU-1	MITSUBISHI	PUY-A24NHA7	2	-	-	24	R410A	12.2/21.4	150	19	25	208	1	1,4
DS-1	MITSUBISHI	PKA-A24KA7	-	700	0.36	-	R410A	-	50	1	-	-	-	1,2,3,4

INDOOR UNIT IS POWERED BY OUTDOOR UNIT

NOTES :
1. PROVIDE WITH DISCONNECT SWITCH.
2. PROVIDE WITH PROGRAMMABLE THERMOSTAT
3. PROVIDE WITH CONDENSATE PUMP.
4. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER RECOMMENDATIONS.

AIR CURTAIN

ID	MANUFACTURER	MODEL NO.	CFM	ELECTRIC HEAT	MOTORS	HP	VOLTAGE	PHASE	AMPS	LENGTH	WEIGHT	NOTES
HAC-1	POWERED AIRE	CED 2-72E	2159/1936	20 KW	2	1/2	208	3	60	72"	172 lbs	1,2
HAC-2	POWERED AIRE	CED 2-96E	2159/1936	20 KW	2	1/2	208	3	60	96"	172 lbs	1,2
HAC-3	POWERED AIRE	CED 2-96E	2159/1936	20 KW	2	1/2	208	3	60	96"	172 lbs	1,2
HAC-4	POWERED AIRE	CED 2-96E	2159/1936	20 KW	2	1/2	208	3	60	96"	172 lbs	1,2

NOTES:
1. PROVIDE HOA SWITCH AND MOUNT AT 48" AFF.
2. FACTORY INSTALLED DISCONNECT SWITCH.

EXHAUST FAN SCHEDULE

ID	MANUFACTURER	MODEL NO.	CFM	AREA SERVED	ELECTRICAL		OPERATING	NOTES
					H.P.	VOLT/PH/HZ	WT (LB)	
(E) EF-0	EXISTING			RESTROOMS				
EF-1	LOREN COOK	GC-148	75	RESTROOM	42 WATTS	120/1/60	15	1,2,3
EF-2	LOREN COOK	GC-148	75	RESTROOM	42 WATTS	120/1/60	15	1,2,3
EF-3	LOREN COOK	GC-148	75	JANITOR	42 WATTS	120/1/60	15	1,2,3
EF-4	LOREN COOK	101 ACED OR60	200	FORKLIFT	0.625	120/1/60	50	1,2,4

NOTES:

1. PROVIDE FACTORY INSTALLED DISCONNECT SWITCH AND BACKDRAFT DAMPER. INTERLOCK WITH LIGHT SWITCH.
2. PROVIDE WITH BIRD SCREEN.
3. SUPPORT FAN FROM STRUCTURE AND PROVIDE WITH RUBBER ISOLATORS.
4. PROVIDE WITH ROOF CURB.

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE
ENGINEERING
PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

07/31/2025

NO	DATE	REVISIONS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

savers

901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

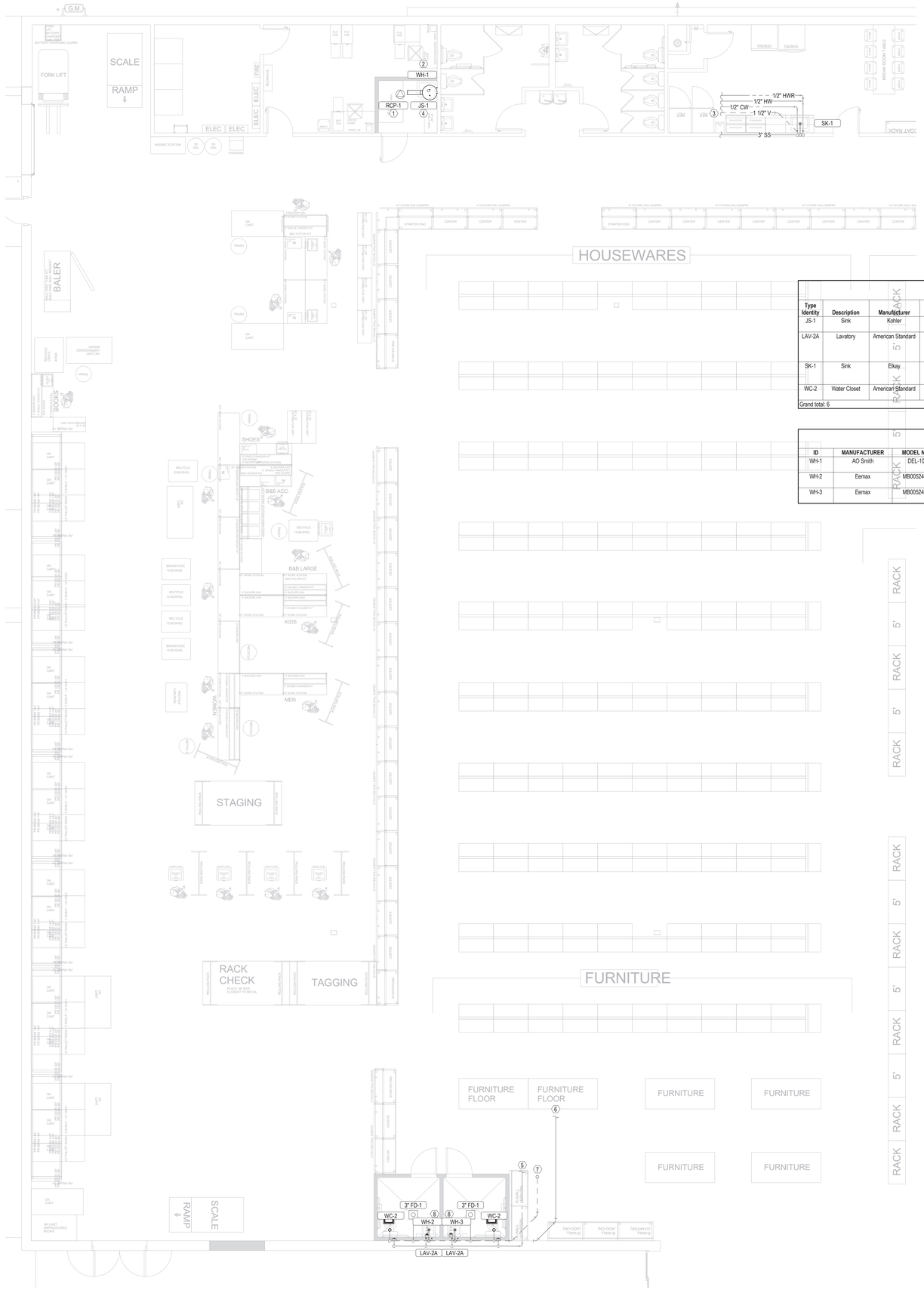
PROJECT NO: 2025.014
DATE: 07.11.2025

M200

MECHANICAL SCHEDULES AND DETAILS

CHECKED: SLB DRAWN: MFG

GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726



2 P100 First Floor Plumbing Plan
3/16" = 1'-0"

PLUMBING KEYED NOTES

1	HOT WATER RETURN PUMP. MOUNT CLOSE TO WATER HEATER AND TIE INTO WATER HEATER COLD WATER FEED. ALL PUMP CONTROLS SHALL MEET OR EXCSED ALL IECC ENERGY CODE REQUIREMENTS.
2	NEW ELECTRIC WATER HEATER TO BE INSTALLED ON PLATFORM ABOVE JANITOR'S SINK. PROVIDE COMPLETE WITH DRAINS, RELIEFS, EXPANSION TANK AND RECIRCULATION PUMP. TIE INTO EXISTING HW, CW, AND HWR LINES IN THIS AREA.
3	EXTEND AND CONNECT NEW 1/2" HW/CW & HWR, 3" W AND 2" VENT TO EXISTING PLUMBING MAINS IN THIS AREA FOR NEW SINK.
4	EXTEND AND RECONNECT EXISTING HW/CW AND WASTE LINES FROM DEMO'D SINK IN THIS ARE FOR NEW JANITOR'S SINK.
5	EXTEND NEW 3/4" CW LINE FROM EXISTING MAINS NEAR EXISTING RESTROOM TO THE (2) NEW RESTROOMS.
6	EXTEND AND CONNECT NEW 4" WASTE FROM NEW RESTOOMS TO EXISTING MAIN NEAR EXISTING BATHROOM GROUP. VERIFY IN FIELD ROUTING, DEPTH AND SAW CUTTING REQUIREMENTS.
7	ROUTE NEW 3" VENT FROM BATHROOMS UP THROUGH 4" VENT THRU ROOF.
8	NEW INSTANTANEOUS WATER HEATER MOUNTED BELOW SINK.

PLUMBING FIXTURE SCHEDULE

Type Identity	Description	Manufacturer	Model	Product Type	Trim Manufacturer M/N	Product Specification
JS-1	Sink	Kohler	Whitby	Janitor	Kohler K-838t80-4A	MODEL K-6710, CAST IRON ENAMEL, KOHLER TWO HANDLE FAUCET MODEL K-838T80-4A, NON REMOVEABLE 3" STRAINER, P-TRAP, RIM GUARD. CONNECT TO EXISTING PIPING.
LAV-2A	Lavatory	American Standard	Lucerne	Wall Hung ADA	Chicago Faucets / 116.976.Ab.1	Wall Hung Lavatory With Backsplash, Faucet Holes On 4" Centers. Deck-Mounted Faucet With Sensor, Water Turbine Power With Vandal Resistant Spray, External Asse 1070 Compliant Thermostatic Mixing Valve, Grid Drain, Loose Key Angle Stops And Supplies. Insulate Water And Waste With Ada Insulation Kit. Mount At Ada Compliant Height.
SK-1	Sink	Elkay	GECR2521	Single Bowl	Chicago Faucets/ W4D-GN3AE35-317AB	STAINLESS STEEL 2-HOLE SINK ELKAY CELEBRITY MODEL GECR2521 AND DRAIN FITTING ELKAY LK35L. CHICAGO FAUCETS MODEL W4D-GN3AE35-317AB BRASS TWO HANDLE WORKBOARD SINK FAUCET WITH 1.5 GPM AERATOR.
WC-2	Water Closet	American Standard	Cadet	Tank ADA		Elongated Floor Mounted Tank Type Water Closet, With Church 295Ct Elongated Open Front Seat. Provide A 1/4" Brass Ball Valve At Wall Connection. Install At Ada Compliant Height.

Grand total: 6

ELECTRIC WATER HEATER SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	MCA	OCP Amps	REMARKS
WH-1	AO Smith	DEL-10	Storage	18 A	20 A	10 GALLON ELECTRIC, 3.0KW, 208V/1PH, TANK TYPE WATER HEATER. PROVIDE EXTERNAL ASSE 1017 COMPLIANT MIXING VALVE, EXPANSION TANK
WH-2	Eemax	MB005240T	Tankless	17 A	20 A	ELECTRIC, 3.6KW, 208V/1PH, INSTANTANEOUS WATER HEATER. PROVIDE AN INTEGRAL ASSE 1070 RATED MIXING VALVE IN THE UNIT SET TO 105DEG F.
WH-3	Eemax	MB005240T	Tankless	17 A	20 A	ELECTRIC, 3.6KW, 208V/1PH, INSTANTANEOUS WATER HEATER. PROVIDE AN INTEGRAL ASSE 1070 RATED MIXING VALVE IN THE UNIT SET TO 105DEG F.

PLUMBING GENERAL NOTES

1. PROVIDE CONNECTION TO EXISTING WATER SERVICE. PROVIDE WATER METER AND RPZ VALVE OR BFP. COORDINATE METER REQUIREMENTS WITH LOCAL UITILITY. CONNECT TO EXISTING SANITARY STUB IN AS INDICATED, PROVIDE CLEAN OUTS, VERIFY EXACT LOCATIONS IN FIELD.

2. PROVIDE GAS CONNECTION TO EXISTING METER. FIELD VERIFY EXACT LOCATION. PROVIDE CONNECTION TO ROOF MOUNTED EQUIPMENT AS INDICATED ON DRAWING. PROVIDE SHUT-OFF VALVES AT ALL POINTS OF CONNECTION.

ALL WORK WITHIN THIS SCOPE OF WORK SHALL COMPLY WITH ALL CITY, STATE AND NATIONAL PLUMBING CODES. ALL WORK SHALL CONFORM TO BUILDING STANDARDS.

PIPING:

WATER PIPING ABOVE GRADE SHALL BE TYPE "L" COPPER TUBING WITH WROUGHT COPPER AND BRONZE SOLDER JOINTS. SOLDER SHALL BE SILVER 95-5.

SANITARY SEWER PIPING ABOVE GRADE SHALL BE CAST IRON, ASTM A74 OR CLSP 30, SERVICE WEIGHT. FITTINGS SHALL BE CAST IRON. JOINTS SHALL BE HUB AND SPIGOT COMPRESSION TYPE WITH NEOPRENE GASKETS OR STAINLESS STEEL CLAMP AND SHIELD ASSEMBLIES WITH NEOPRENE GASKET. PVC AS ALLOWED BY LOCAL CODE.

VENT PIPING SHALL BE GALVANIZED STEEL ASTM A53 SCHEDULE 40, OR PVC AS ALLOWED BY LOCAL CODE.

FLANGES UNIONS COUPLINGS:

FOR PIPE UNDER 2" USE 150 PSIG MALLEABLE IRON UNIONS FOR THREADED PIPE. BRONZE UNIONS FOR COPPER PIPE. FOR PIPES OVER 2" USE 150 PSIG STEEL FLANGES FOR FERROUS PIPE, BRONZE FLANGES FOR COPPER PIPE.
DIELECTRIC CONNECTORS SHALL BE MADE WITH GALVANIZED STEEL THREAD END AND COPPER SOLDERED END WITH WATER IMPERVIOUS INSULATION BARRIER. PIPE AND COUPLING SHALL BE MALLEABLE IRON WITH CLAMPS TO EMBENGAGE AND LOCK, DESIGNED TO PERMIT SOME ANGULAR DEFLECTION, CONTRACTION AND EXPANSION.

VALVES:

GATE VALVES UP TO 2"- SHALL BE BRONZE BODY, NON-RISING STEM AND HAND WHEEL WITH EDGE AND DISK THREADED OR SOLDERED ENDS. BOLL VALVES SHALL BE BRONZE BODY. STAINLESS STEEL BALL, TEFLON SEATS, LEVER HANDLE. SOLDER OR THREADED ENDS. CRANE, POWELL AND STOCKHAM ARE APPROVED MANUFACTURERS. PROVIDE VALVES AS REQUIRED TO ISOLATE ALL FIXTURES AND EQUIPMENT.

PIPE INSTALLATION:

SLOPE ALL PIPING FOR APPROPRIATE DRAINAGE AT LOW POINTS. ALLOW FOR EXPANSION AND CONTRACTOR WITH STRESSING PIPE. PROVIDE NON-CONDUCTING DIELECTRIC FITTINGS WHEN JOINING DISSIMILAR METALS. PROVIDE ACCESS TO ALL VALVES AND CLEAN OUTS. SUPPORT ALL PIPING PROPERTLY. EXPAND CLEAN OUT TO FINISH FLOOR OR WALL SURFACE. ROUTE PIPING IN AN ORDERLY MANNER TO CONSERVE SPACE. ALL PIPING SHALL BE PROPERTLY AND INDEPENDENTLT SUPPORTED FROM STRUCTURE USING CLEVIS TYPE PIPE HANGERS.

INSULATION:

PROVIDE 1" FIBERGLASS INSULATION WITH VAPOR BARRIER ON ALL CW, HW, AND DRAINAGE PIPING. INSULATION SHALL INCLUDE ALL VALVES AND FITTINGS.

SAWCUTTING & CORING:

SAWCUT AND/OR CORE EXISTING FLOOR AS REQUIRED FOR INSTALLATION OF NEW SANITARY PIPING AND CLEAN OUTS. FLOOR TO BE RESTORED TO ORIGINAL CONDITION UPON COMPLETION OF WORK. PROVIDE SLEEVES WHENEVER PIPING PASSES THROUGH WALLS AND FLOORS.

FLOOR DRAINS:

COORDINATE LOCATION AND SIZE OF FLOOR DRAINS AND CLEAN OUTS WITH ARCHITECTURAL DRAWINGS AND GENERAL CONTRACTOR. DRAINS AND CLEAN OUTS BY J.R. SMITH, WADE, JOSAM, OR ZURN ONLY.

CLEANING AND TESTING:

CONTRACTOR SHALL FLUSH AND CLEAN OUT ALL DOMESTIC WATER PIPING IN ACCORDANCE WITH AWWA STANDARDS AND ALL LOCAL CODES. SANITARY AND VENT PIPING SHALL BE TESTED PRIOR TO BEING PLACED IN SERVICES.

AIR TEST:

FILL PIPE SYSTEM WITH AIR AND MAINTAIN 5PSI FOR 15 MINUTES WITHOUT ADDITIONAL AIR.

WATER TEST:

MAINTAIN WATER PRESSURE OF AT LEAST TEN FEET OF HEAD AT ALL POINTS OF SYSTEM FOR AT LEAST 15 MINUTES.

EXISTING FIRE, DOMESTIC WATER AND GAS SERVICES AND MAINS TO REMAIN. ALL GAS PIPING TO RTUS AND UNIT HEATERS TO REMAIN.

CAP ALL DOMESTIC WATER PIPING THAT IS SERVING A PLUMBING FIXTURE THAT IS BEING DEMOLISHED.

ALL EXISTING PLUMBING FIXTURES TO REMAIN SHALL BE INSPECTED, CLEANED, AND REPAIRED AS NEEDED TO ENSURE PROPER FUNCTIONALITY BY THE CONTRACTOR.

SPRINKLER SYSTEM SHALL BE COMPLETELY INSPECTED AND TESTED TO INCLUDE OBSTRUCTION VISUAL AND FLUSHING. A CURRENT WATER FLOW TEST (2" DRAIN TEST) SHALL BE CONDUCTED TO VERIFY CURRENT WATER SUPPLY INFORMATION. SYSTEM DESIGN SHALL BE VALIDATED FOR THE HAZARD PROPOSED.

GENERAL CONTRACTOR IS RESPONSIBLE FOR MAKING ANY AND ALL MODIFICATIONS, REPAIRS, ADJUSTMENTS, CLEANING, AND TESTING TO THE ENTIRE FIRE SPRINKLER SYSTEM. FIRE SPRINKLER SYSTEM SHALL COMPLY WITH STATE, LOCAL, AND ALL APPLICABLE CODES.

ENTIRE EXISTING SEWER SYSTEM SHALL BE INSPECTED WITH A CAMERA DURING THE FIRST WEEK OF CONSTRUCTION. THE GENERAL CONTRACTOR SHALL PROVIDE A CD OF THE CAMERA FOOTAGE TO THE SAVERS CM, AND SHALL NOTE THE DATE OF THE INSPECTION IN THE PROJECT WEEKLY REPORT. FOR STANDALONE SITES, THE INSPECTION SHALL CONTINUE UNTIL THE FIRST OFF-SITE CONNECTION POINT OR PUBLIC LINE. FOR INLINE SITES, THE INSPECTION SHALL CONTINUE UNTIL THE FIRST CONNECTION POINT OUTSIDE OF THE BUILDING. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR UNCLOGGING ANY AND ALL BLOCKAGE IN THE EXISTING SEWER SYSTEM PIPING TO ENSURE PROPER DRAINAGE, AND SHALL NOTIFY THE SAVERS CM OF ANY CONCERNS WITH THE EXISTING PIPING, I.E. PIPE DEGRADATION, LACK OF ADEQUATE FALL, ETC.

INTERPLAN
INTERPLAN LLC

ARCH COA #2015008774
ENG COA #2005026904

ARCHITECTURE ENGINEERING PERMITTING

1 EAST 22ND STREET, SUITE 400
LOMBARD, IL 60148
630.932.2336

SEAL:

STATE OF MISSOURI
MICHAEL F. GLEASON
NUMBER PE-2012004213
PROFESSIONAL ENGINEER
07/31/2025

NO	DATE	REMARKS
1	08.01.25	PLAN REVIEW COMMENTS
	07.11.25	ISSUE FOR PERMIT

REVISIONS

savers

901 EAST LANGSFORD RD.
LEE'S SUMMIT, MO
64063

PROJECT NO: 2025.014
DATE: 07.11.2025

P100

PLUMBING FLOOR PLAN

CHECKED: SLB DRAWN: MFG

GLEASON ENGINEERING
630-946-6679 (O)
www.gleasonengr.com
Design Firm # 24726