GENERAL NOTES

1. THE GENERAL CONTRACTOR SHALL VERIFY ALL PERMITS HAVE BEEN APPROVED BY APPROPRIATE AGENCIES PRIOR TO START OF CONSTRUCTION. NO CONSTRUCTION OR FABRICATION OF ANY ITEMS SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY DOCUMENTATION FROM ALL OF THE PERMITTING AND REGULATORY AUTHORITIES. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY AN REGULATORY AUTHORITY.

2. NO CHANGES, ALTERATIONS, OR MODIFICATIONS TO THE WORK AND/OR THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT WRITTEN APPROVAL OF OWNER / ARCHITECT. FAILURE TO OBTAIN APPROVAL SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATIONS OF THE WORK REQUIRED BY THE OWNER OR ANY REGULATORY AUTHORITY.

3. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY REGARDING ANY AND ALL QUESTIONS, ERRORS, DISCREPANCIES, OR OMISSIONS RELATED TO THESE DRAWINGS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS. COMMUNICATION WITH THE ARCHITECT'S CONSULTANTS, OR REGULATORY AGENCIES SHALL NOT BE CONSIDERED VALID AND ANY CHANGES IN WORK, ADDITIONAL COSTS, APPROVALS, OR NON APPROVALS DUE TO SUCH COMMUNICATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. SHOULD ADDITIONAL ENGINEERING OR INVESTIGATIVE WORK BE REQUIRED DUE TO SITE OR ENVIRONMENTAL CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY.

4. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AS HOLDER OF PERMITS TO NOTIFY THE BUILDING OFFICIAL WHEN WORK IS READY FOR INSPECTION. REQUESTS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING JURISDICTION. INSPECTORS SHALL HAVE COMPLETE ACCESS TO ALL WORK. RECORDS OF INSPECTIONS SHALL BE MAINTAINED ON THE JOB SITE IN ACCORDANCE WITH REQUIREMENTS AND FORMAT OF GOVERNING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES REQUIRED BY INSPECTIONS, EXCEPT FOR INSPECTIONS MADE BY OWNER OR IT'S AGENTS.

5. THE GENERAL CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS TO ALL SUBCONTRACTORS AND IS RESPONSIBLE FOR ALL COORDINATION BETWEEN SUB-CONTRACTORS, SUPPLIERS, AND VENDORS BASED ON THE ENTIRE SET OF DOCUMENTS. NO ADDITIONAL COMPENSATION WILL BE DUE TO A CONTRACTOR FOR ISSUES RESULTING FROM THE USE OF AN INCOMPLETE SET OF CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF INCONSISTENCIES OR DISCREPANCIES BETWEEN CONTRACT DOCUMENTS, DRAWINGS, SPECIFICATIONS, ETC.,

6. THESE DOCUMENTS ARE NOT TO BE SCALED. SHOULD IT BE DETERMINED A DIMENSION IS NOT SPECIFICALLY PROVIDED, CONTACT THE ARCHITECT.

7. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FULLY EXAMINE AND BECOME FAMILIAR WITH THE SITE BEFORE COMMENCING THE WORK. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AS WELL AS VERIFY THE CONDITIONS AND NATURE OF THE CONSTRUCTION, MATERIALS, AND AVAILABLE UTILITIES AND STRUCTURAL ELEMENTS AND TO NOTIFY THE ARCHITECT IN WRITING OF ANY AND ALL DISCREPANCIES BETWEEN THE SAID EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH REVISIONS AND CHANGE ORDERS SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. IT SHALL BE THE JOINT RESPONSIBILITY OF THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS AND SUPPLIERS OF MATERIALS TO SECURE ALL NECESSARY ADAPTATIONS TO SAME AS REQUIRED FOR THEIR RESPECTIVE WORK PRIOR TO ORDERING, FABRICATION, OR INSTALLATION OF ANY MATERIALS, EQUIPMENT, OR COMPONENTS WHICH ARE TO BE INTEGRATED INTO THE WORK OF THIS PROJECT.

8. PLANS REVIEWED AND APPROVED BY LANDLORD'S TENANT COORDINATOR MUST BE PRESENT ON THE JOB SITE AND BE ACCOMPANIED BY PLANS APPROVED FOR BUILDING PERMIT.

9. ANY DAMAGED TO LANDLORD'S PROPERTY DURING PROJECT DEMOLITION OR CONSTRUCTION WILL BE REPAIRED PER LANDLORD'S SPECIFICATIONS, AT CONTRACTOR'S EXPENSE.

10. ANY LANDLORD EQUIPMENT, COMPONENT, AND/OR SERVICE FEEDING OTHER TENANT(S) THAT IS EXISTING IN THE SPACE MUST REMAIN VISIBLE AND ACCESSIBLE TO THE LANDLORD. GC SHALL INSTALL ACCESS PANELS AS REQUIRED TO MAINTAIN ACCESS. ACCESS PANELS SHALL BE LABELED TO PROPERLY IDENTIFY SYSTEM, COORDINATE WITH MALL OPERATIONS.

CODE SUMMARY

CRITERIA	CONDITION(S)		CODE REFERENCE
OCCUPANCY CLASSIFICATION (BULDING)	M - MERCANTILE (GRADE LEVEL/FIRST FLOOR)		IBC SECTION 309
NUMBER OF STORIES (BULDING)	NO CHANGE - EXISTING SINGLE STORY TO REMAIN		IBC TABLE 504.4
TYPE OF CONSTRUCTION (BULDING)	NO CHANGE - EXISTING II-B, SPRINKLERED		IBC SECTION 602.2
INTERIOR FINISHES	REQUIRED	PROVIDED	IBC TABLE 803.13
CORRIDORS	C	C	
ROOMS AND ENCLOSED SPACES	C	C	
EXTENT OF WORK, AREA (SF)	LEASED DEFINED AREA GROSS AREA DISPLAY AREA ENTRY VESTIBULE SALES AREA BOH BOH HALLWAY TOILET RM	- 2,578 SF - 2,494 SF - 73 SF - 70 SF - 1,837 SF - 230 SF - 125 SF - 51 SF	---
MINIMUM PLUMBING FACILITIES	NUMBER OF OCCUPANTS (PER IBC) = 37 OCCUPANTS		IBC TABLE 2902.1 (MERCANTILE) * PER EXCEPTION 3 OF IBC 2902.2; SEPARATE FACILITIES SHALL NOT BE REQUIRED IN MERCANTILE OCCUPANCIES IN WHICH THE MAXIMUM OCCUPANT LOAD IS 100 OR LESS.
	REQUIRED	PROVIDED	
WATER CLOSETS	1 PER 500	1*	
LAVATORIES	1 PER 750	1*	
DRINKING FOUNTAIN	1 PER 1000	1 (HI-LO)	
OTHER	1 SERVICE SINK	1	

DRAWING SYMBOL LEGEND

DETAIL NUMBER / SHEET NUMBER DRAWN ON — DETAIL REFERENCE TAG

DETAIL NUMBER / SHEET NUMBER DRAWN ON — ELEVATION REFERENCE/ WALL SECTION

DETAIL NUMBER / SHEET NUMBER DRAWN ON — INTERIOR ELEVATION REFERENCE (4 WAY)

ROOM NAME
###
SQ FT
— ROOM TAG

XX | # — FIXTURE TAG

X | # — FINISH MATERIAL TAG

(#) — DOOR TAG

ABBREVIATIONS

ABV	-ABOVE	FIN	-FINISH	OPNG	-OPENING
AC	-AIR CONDITION(ING)	FIXT	-FIXTURE	OPP	-OPPOSITE
ACOUS	-ACOUSTICAL	FLR	-FLOOR	OH	-OPPOSITE HAND
ACT	-ACOUSTIC CEILING TILE	FLUOR	-FLUORESCENT	PAF	-POWDER ACTUATED FASTENER
ADJ	-ADJACENT	FR	-FRAME/ FIRE RETARDANT	PL	-PLATE
AFC	-ABOVE FINISH CEILING	FS	-FLOOR SINK	PLAM	-PLASTIC LAMINATE
AFS	-ABOVE FINISHED SLAB	FT	-FEET	PLYWD	-PLYWOOD
AFF	-ABOVE FINISHED FLOOR	FURR	-FURRING	PNL	-PANEL
ALT	-ALTERNATE	GA	-GAUGE	PNT	-PAINT
ALUM	-ALUMINUM	GALV	-GALVANIZED	PTD	-PAINTED
APPROX	-APPROXIMATE	GC	-GENERAL CONTRACTOR	PTN	-PARTITION
ARCH	-ARCHITECTURAL	GL	-GLASS	PVC	-POLYVINYL CHLORIDE
BD	-BOARD	GR	-GRADE	R	-RISER
BLK	-BLOCK	GSF	-GROSS SQUARE FEET	RA	-RETURN AIR
BLKG	-BLOCKING	GWB	-GYPSUM WALL BOARD	RAD	-RADIUS
BM	-BEAM	H	-HIGH	REFR	-REFRIGERATOR
BOT	-BOTTOM	HC	-HOLLOW CORE/ HANDICAPPED	REINF	-REINFORCE(D)
BRG	-BEARING	HDWD	-HARDWOOD	REQD	-REQUIRED
CAB	-CABINET	HDWR	-HARDWARE	RM	-ROOM
CJ	-CONTROL JOINT	HM	-HOLLOW METAL	SC	-SOLID CORE
CLR	-CLEAR	HORIZ	-HORIZONTAL	SCHED	-SCHEDULE
CLG	-CEILING	HR	-HOUR	SEC	-SECTION
CLO	-CLOSET	HT	-HEIGHT	SHT	-SHEET
CMU	-CONCRETE MASONRY UNIT	HVAC	-HEATING, VENTILATION & AIR CONDITIONING	SIM	-SIMILAR
CO	-CASED OPENING / CLEAN OUT			SQ	-SQUARE
COL	-COLUMN	HW	-HOT WATER	SS	-STAINLESS STEEL
CONC	-CONCRETE	ID	-INSIDE DIAMETER	STL	-STEEL
CONST	-CONSTRUCTION	INSUL	-INSULATION	STD	-STANDARD
CONT	-CONTINUOUS	JAN	-JANITOR	STOR	-STORAGE
CORR	-CORRIDOR	JT	-JOINT	STRUC	-STRUCTURAL
CPT	-CARPET	KDHM	-KNOCK DOWN HOLLOW METAL	SUSP	-SUSPENDED
CT	-CERAMIC TILE	LAM	-LAMINATE	SYM	-SYMMETRICAL
CW	-COLD WATER	LAV	-LAVATORY	TBD	-TO BE DETERMINED
DIA	-DIAMETER	LD	-LEASE DIMENSION	TEL	-TELEPHONE
DIAG	-DIAGONAL	LT	-LIGHT	TEMP	-TEMPERED
DIM	-DIMENSION	MAT	-MATERIAL	TG	-TEMPERED GLASS
DN	-DOWN	MAX	-MAXIMUM	THK	-THICK
DR	-DOOR	MECH	-MECHANICAL	TOM	-TOP OF MASONRY
DTL	-DETAIL	MIN	-MINIMUM	TYP	-TYPICAL
DWG	-DRAWING	MISC	-MISCELLANEOUS	UL	-UNDERWRITER'S LABORATORY
EA	-EACH	MO	-MASONRY OPENING	UNO	-UNLESS NOTED OTHERWISE
ELEV	-ELEVATION	MRGB	-MOISTURE RESISTANT GYPSUM WALLBOARD	VCT	-VINYL COMPOSITION TILE
ELEC	-ELECTRIC			VERT	-VERTICAL
EMER	-EMERGENCY	MTD	-MOUNTED	VIF	-VERIFY IN FIELD
EQ	-EQUAL	MTL	-METAL	W	-WIDE
EQUIP	-EQUIPMENT	NC	-NONCOMBUSTIBLE	WC	-WATER CLOSET
EXIST	-EXISTING	NIC	-NOT IN CONTRACT	WD	-WOOD
EXT	-EXTERIOR	NO	-NUMBER	WIN	-WINDOW
FD	-FLOOR DRAIN	NTS	-NOT TO SCALE	WO	-WINDOW OPENING
FE	-FIRE EXTINGUISHER	OCC	-OCCUPANCY	WHM	-WELDED HOLLOW METAL
FEC	-FIRE EXTINGUISHER CABINET	O/C	-ON CENTER	WWF	-WELDED WIRE FABRIC

FIRE / LIFE SAFETY NOTES

ILLUMINATED EXIT SIGNS SHALL BE PROVIDED THROUGHOUT THE BUILDING. ALL EXIT SIGNS SHALL HAVE BATTERY BACKUP.

EMERGENCY LIGHTING UNITS ARE TO BE WIRED INTO THE NORMAL LIGHTING CIRCUIT AND ARRANGED AS TO PROVIDE THE REQUIRED ILLUMINATION AUTOMATICALLY IN THE EVENT OF ANY INTERRUPTION OF NORMAL LIGHTING SUCH AS ANY FAILURE OF PUBLIC UTILITY OR OUTSIDE ELECTRICAL POWER SUPPLY, OPENING OF A CIRCUIT BREAKER OR FUSE, OR ANY MANUAL ACTS INCLUDING ACCIDENTAL OPENING OF SWITCH CONTROLLING NORMAL LIGHTING FACILITIES.

PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH NFPA 10, STANDARD FOR PORTABLE FIRE EXTINGUISHERS. FINAL, EXACT LOCATIONS ARE TO BE COORDINATED WITH TENANT CONSTRUCTION MANAGER, AND FIRE CHIEF.

DOORS SHALL BE ARRANGED TO BE OPENED READILY FROM THE EGRESS SIDE WHENEVER THE BUILDING IS OCCUPIED. LOCKS, IF PROVIDED, SHALL NOT REQUIRE THE USE OF A KEY, A TOOL, OR SPECIAL KNOWLEDGE OR EFFORT FOR OPERATION FROM THE EGRESS SIDE.

A LATCH OR OTHER FASTENING DEVICE ON A DOOR SHALL BE PROVIDED WITH A RELEASING DEVICE HAVING AN OBVIOUS METHOD OF OPERATION AND THAT IS READILY OPERATED UNDER ALL LIGHTING CONDITIONS. THE RELEASING MECHANISM FOR ANY LATCH SHALL BE NOT LESS THAN 34", AND NOT MORE THAN 48" ABOVE FINISH FLOOR. DOORS SHALL BE OPERABLE WITH NOT MORE THAN ONE RELEASING OPERATION.

ANY BATHROOM DOOR LOCK SHALL BE DESIGNED TO PERMIT OPENING OF THE LOCKED DOOR FROM THE OUTSIDE IN A EMERGENCY. THE OPENING DEVICE SHALL BE READILY ACCESSIBLE TO ANYONE OUTSIDE THE DOOR.

THE ELEVATION SHALL BE MAINTAINED ON BOTH SIDES OF THE DOORWAY FOR A DISTANCE NOT LESS THAN 44" OR THE WIDTH OF THE WIDEST LEAF. THRESHOLDS AT DOORWAYS SHALL NOT EXCEED 1/2" IN HEIGHT. RAISED THRESHOLDS AND FLOOR LEVEL CHANGES IN EXCESS OF 1/4" SHALL BE BEVELED WITH A SLOPE OF NOT STEEPER THAN 1 IN 2.

LOVESAC

SUMMIT FAIR

910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

PROJECT DIRECTORY

CLIENT/TENANT:
LOVESAC
2 LANDMARK SQUARE STE 300
STAMFORD, CT 06901
CONTACT: STAN MICHNOWICZ, SR MANAGER, FACILITY & CONSTRUCTION
TELEPHONE: (614) 832-7857

ARCHITECT OF RECORD:
ONYX CREATIVE
25001 EMERY RD, SUITE 400
CLEVELAND, OH 44128
CONTACT: DON ALEXANDER
TELEPHONE: (216) 223-3200

MECHANICAL ENGINEER OF RECORD:
BLUESTREAK CONSULTING
25001 EMERY RD, SUITE 400
CLEVELAND, OH 44128
CONTACT: BRIAN RICE
TELEPHONE: (216) 223-3200

ELECTRICAL ENGINEER OF RECORD:
BLUESTREAK CONSULTING
25001 EMERY RD, SUITE 400
CLEVELAND, OH 44128
CONTACT: PETER FITZGERALD
TELEPHONE: (216) 223-3200

PROPERTY OWNER/MANAGER:
RED SUMMIT FAIR, LLC
2502 E CAMELBACK ROAD, SUITE 200
PHOENIX, AZ 85016
CONTACT: DUSTIN CLEVELAND
TELEPHONE: (480) 684-0554

JURISDICTION:
CITY OF LEE'S SUMMIT
DEVELOPMENT SERVICES
220 SE GREEN
LEE'S SUMMIT, MO 64063
TELEPHONE: (816) 969-1200

PROJECT DATA

PROJECT NAME:	TENANT IMPROVEMENTS FOR LOVESAC AT SUMMIT FAIR
PROJECT ADDRESS:	910 NW BLUE PKWY, SUITE S, LEES SUMMIT, MO 64086
PARCEL #:	51-700-03-37-00-0-00-000
OCCUPANCY:	MERCANTILE + MERCANTILE: STORAGE, STOCK, SHIPPING AREAS (PROPOSED)
USE:	SALES SHOWROOM FOR MODULAR FURNITURE STORE, LIMITED STORAGE & OPERATIONS AT BACK OF HOUSE
SEISMIC ZONE:	D

SCOPE OF WORK

THE SCOPE OF WORK CONSISTS OF INTERIOR ALTERATIONS BY THE TENANT (FOR A MODULAR FURNITURE SHOP) WITHIN EXISTING SINGLE-STORY EXTERIOR SHOPPING CENTER AND SHALL INCLUDE NEW NON-LOAD BEARING INTERIOR PARTITIONS, INTERIOR DOORS, FINISHES AND FIXTURES. A NEW EXTERIOR ENTRY WILL BE PROVIDED.

NO CHANGES TO THE BUILDING'S HEIGHT, USE, NUMBER OF STORIES, AREA, OR FOOTPRINT ARE PROPOSED UNDER THIS PERMIT. THE PROPOSED WORK SHALL NOT DIMINISH THE BUILDING'S EGRESS.

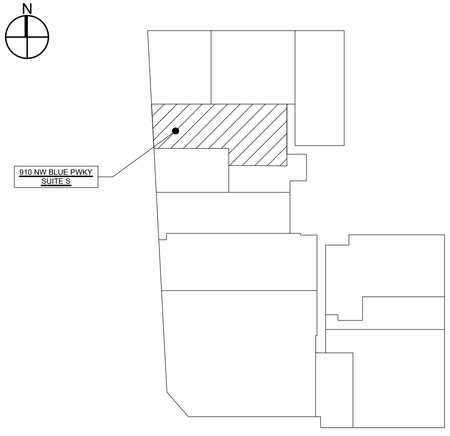
THE TENANT'S SIGNAGE AND ANY MODIFICATIONS TO THE FIRE PROTECTION/LIFE SAFETY SYSTEMS SHALL BE UNDER SEPARATE PERMITS.

APPLICABLE CODES

THE CITY OF LEE'S SUMMIT, MO ADOPTS & ENFORCES THE FOLLOWING CODES

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL EXISTING BUILDING CODE
- 2018 INTERNATIONAL PLUMBING CODE
- 2018 INTERNATIONAL ENERGY CONSERVATION CODE
- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 INTERNATIONAL FUEL GAS CODE
- 2018 INTERNATIONAL FIRE CODE
- 2017 NATIONAL ELECTRICAL CODE
- ICC/ANSI A117.1 2009 ACCESSIBLE AND USABLE BUILDING FACILITIES

KEY PLAN



DRAWING SHEET INDEX

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB

Date	Issue
07-10-25	Permit Set

G001

PROJECT INFORMATION

RESPONSIBILITY SCHEDULE

	PROVIDED BY				INSTALLED BY				NOTES
	EXISTING	LL	GC	LS/VENDOR	EXISTING	LL	GC	LS/VENDOR	
GENERAL									
PERMITS & FEES			●						
CERTIFICATE OF INSURANCE			●						
TEMPORARY UTILITIES			●				●		AS REQ'D
DUMPSTERS & TRASH BINS			●				●		AS REQ'D (COORDINATE WITH LANDLORD/ PROPERTY MANAGEMENT)
PROFESSIONAL CLEANING			●				●		CLEANED PRIOR TO MERCHANDISING AND OPENING
CERTIFICATE OF OCCUPANCY			●						
SITEWORK / DEMO									
BARRICADE / GRAPHICS OR WINDOW CLING GRAPHICS				●				●	VENDOR TO PROVIDE LANDLORD ARTWORK PROOFS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION
INTERIOR DEMO. / SALVAGE			●						
ENVELOPE OF LEASED PREMISES									
CONCRETE SLAB	●				●				GC TO VERIFY ACCEPTABLE CONDITIONS FOR FLOOR INSTALL AND TRENCH/PATCH AS REQUIRED
SLAB LEAVE OUT INFILL									N/A
DEMISING WALLS (FRAMING)	●				●				
DEMISING WALLS (GWB)	●				●				
ENTRY DOOR(S) AND HARDWARE			●				●		
BEST ACCESS SYS. CORE AND KEYS			●				●		PROVIDE (1) CONTROL KEY AND (8) OPERATING KEYS, TOTAL NUMBER OF OPERATING KEYS TO BE CONFIRMED WITH LOVESAC PROJECT MANAGER AT PROJECT START
GLAZING / MULLION SF SYSTEM	●		●				●		GC TO INSTALL NEW PORTION OF GLAZING SYSTEM TO MATCH EXISTING
REAR EXIT DOOR	●				●				
FIREPROOFING & PENETRATIONS	●		●				●		FIREPROOFING AS REQ'D BY LANDLORD/PROPERTY MANAGEMENT AND CODE. REFER TO MEP DRAWINGS FOR PENETRATION INFO
FRAMING / DRYWALL / MILLWORK									
INTERIOR PARTITIONS (FRAMING & GWB)			●				●		
SOFFITS AND CEILINGS (FRAMING & GWB)			●				●		
ACCESS PANELS			●				●		AS REQ'D
PLYWOOD BACKING			●				●		AS REQ'D FOR FIXTURES AND MONITORS
INTERIOR DOORS / FRAMES / HARDWARE	●		●				●		
WOOD TRIM / BASE			●				●		
FF | 1 STAGE PLATFORM			●				●		FREESTANDING STAGE FIXTURE FF/1 BY GC
FINISHES									
LIGHT PLANK FLOORING, DARK PLANK WALL & CEILING FINISH				●			●		PLANK FLOORING PROVIDED BY LOVESAC VENDOR
THIN BRICK				●			●		THIN BRICK PROVIDED BY BRICK MY WALLS
PAINT			●				●		
CUSTOM WALLPAPER				●			●		WALLPAPER PROVIDED BY LOVESAC VENDOR
METALS			●	●			●		SCHLUTER-INDEC STYLE TRIMS AND SCREEN RECESS TRIM PROVIDED BY VENDOR; ALL OTHER BASE, CHANNELS, ETC. PROVIDED BY GC; NO VISIBLE FASTENERS ALLOWED
VINYL FLOORING & RUBBER BASE			●				●		RUBBER BASE TO BE USED AT NON-CUSTOMER FACING AREAS ONLY
EXTERIOR PAVING	●		●				●		GC TO PATCH / REPAIR TO MAKE "LIKE NEW" AS REQUIRED
EXTERIOR NEUTRAL FINISHES	●				●				GC TO PATCH / REPAIR TO MAKE "LIKE NEW" AS REQUIRED
PREFINISHED FIXTURES / FURNISHINGS									
FF | 2-4, SB | 1-5, WF | 1-2, 4				●			●		CASHWRAP, BLOCKS TABLES, BUILT-IN SHELVING, BUILT TO LAST WALL, DESIGNED FOR LIFE WALL, AND ST WALL PROVIDED BY WOODTECH
WF | 3									N/A
DS | 1-4				●				●	SCREENS BY MOOD MEDIA - GC TO PROVIDE PLYWOOD BACKING, POWER, LOW VOLTAGE CONDUIT
GF | 1-7				●			●		FRAMES PROVIDED BY TESTRITE
FURNITURE (SACS, SACTIONALS, ETC.)				●				●	GC TO CONFIRM FURNITURE TO BE SET PRIOR/POST FINAL INSPECTION

RESPONSIBILITY SCHEDULE CONT.

	PROVIDED BY				INSTALLED BY				NOTES
	EXISTING	LL	GC	LS/VENDOR	EXISTING	LL	GC	LS/VENDOR	
MECHANICAL									
HVAC UNIT(S)		●				●			GC TO INSPECT AND SERVICE AS NECESSARY
DUCTWORK / DISTRIBUTION			●				●		
GRILLES / DIFFUSERS			●	●			●		LINEAR DIFFUSERS PROVIDED BY LOVESAC VENDOR (IF APPLICABLE), REMAINING BY GC
THERMOSTAT & CONTROL WIRING	●		●				●		GC TO COORDINATE THERMOSTAT AND SENSOR LOCATION WITH TENANT
AIR BALANCE & REPORT			●				●		
DUCT SMOKE DETECTORS			●				●		AS REQ'D BY CODE
SMOKE EVAC SYSTEM			●				●		AS REQ'D BY LANDLORD/PROPERTY MANAGEMENT AND CODE
ELECTRICAL									
MAIN UTILITY SERVICE & DISCONNECT / CONDUIT & FEEDERS TO PREMISES	●		●		●		●		ELECTRIC SERVICE IS EXG.; DISCONNECT, CONDUIT & FEEDERS TO SPACE BY GC
ELECTRICAL PANEL(S) & DISTRIBUTION			●				●		
TRANSFORMER			●				●		
CONDUIT & WIRING			●				●		
RECEPTACLES / SWITCHES			●				●		COORDINATE COLOR WITH SURROUNDING FINISH
LIGHTING				●			●		COORDINATE TRIM COLOR WITH SURROUNDING FINISH
TIME CLOCKS FOR SIGNAGE			●				●		AS REQ'D, GC TO COORDINATE WITH SIGN VENDOR
EXIT / EMERGENCY LIGHTS				●			●		
LOW VOLTAGE									
PHONE / DATA			●	●			●	●	CONDUIT, PULLS, WIRE/CAT6 BY GC, REFER TO IT GUIDE FOR TERMINATION RESPONSIBILITY; PHONE/DATA SERVICE BY VENDOR, COORDINATED BY LOVESAC
AUDIO / VIDEO WIRING/TRAFFIC COUNTING			●	●			●	●	CAT6 / HDMI BY LOVESAC VENDOR - GC TO COORD. PRE-WIRE WITH LOVESAC VENDOR PRIOR TO CLOSE UP; GC TO PROVIDE CONDUIT / PULLS FOR LOW VOLTAGE AS REQ'D BY LOCAL CODE
OVERHEAD SPEAKER SYSTEM				●				●	SPEAKERWIRE BY LOVESAC VENDOR - GC TO COORD. PRE-WIRE WITH LOVESAC VENDOR PRIOR TO CLOSE UP
POS EQUIPMENT SETUP				●				●	
PLUMBING									
SUPPLY, VENT, WASTE PIPING TO PREMISES	●				●				
SUPPLY, VENT, WASTE PIPING WITHIN PREMISES			●				●		
TOILET ROOM FIXTURES / EQUIPMENT			●				●		
DRINKING FOUNTAINS			●				●		
MOP SINK			●				●		
WATER HEATER			●				●		NEW ELECTRIC TANK WATER HEATER
FIRE PROTECTION									
SPRINKLER MAIN TO PREMISES	●								
SPRINKLER BRANCH LINES / DROPS / HEADS	●		●				●		
FIRE EXTINGUISHER / CABINET			●				●		AS REQ'D BY CODE
FIRE ALARM SYSTEM	●		●				●		AS REQ'D BY CODE
VISUAL ALARMS	●		●				●		AS REQ'D BY CODE
SMOKE DETECTORS	●		●				●		AS REQ'D BY CODE
SIGNAGE									
PRIMARY LOGO SIGNAGE				●				●	
BLADE SIGN				●				●	
ELECTRICAL / POWER			●				●		GC TO PROVIDE POWER FOR ILLUMINATED CHANNEL LETTERS AND BLADE SIGN
FABRIC AWNING(S)				●				●	
NON-ILLUMINATED ACRYLIC LOGO LETTERS				●				●	ACRYLIC LOGO LETTERS TO BE INSTALLED AT ENTRY SIDE WALL
MISC. ITEMS									
RECESSED WALKOFF MAT				●			●		CUSTOM LOGO GRAPHIC MAT PROVIDED BY VAN GELDER
UV FILM			●				●		GC TO INSTALL UV FILM AT INTERIOR SURFACE OF STOREFRONT GLAZING. UV FILM TO BE EDGE FILM TECHNOLOGIES PRISTINE CERAMIC 70.
ACOUSTIC CEILING TILES AND GRID			●				●		ACT TO BE INSTALLED AT BOH AREA(S) AS SHOWN AT RCP
LOW-HEIGHT GLASS DISPLAY ENCLOSURE WITH SWINGING GLASS ACCESS PANEL			●				●		

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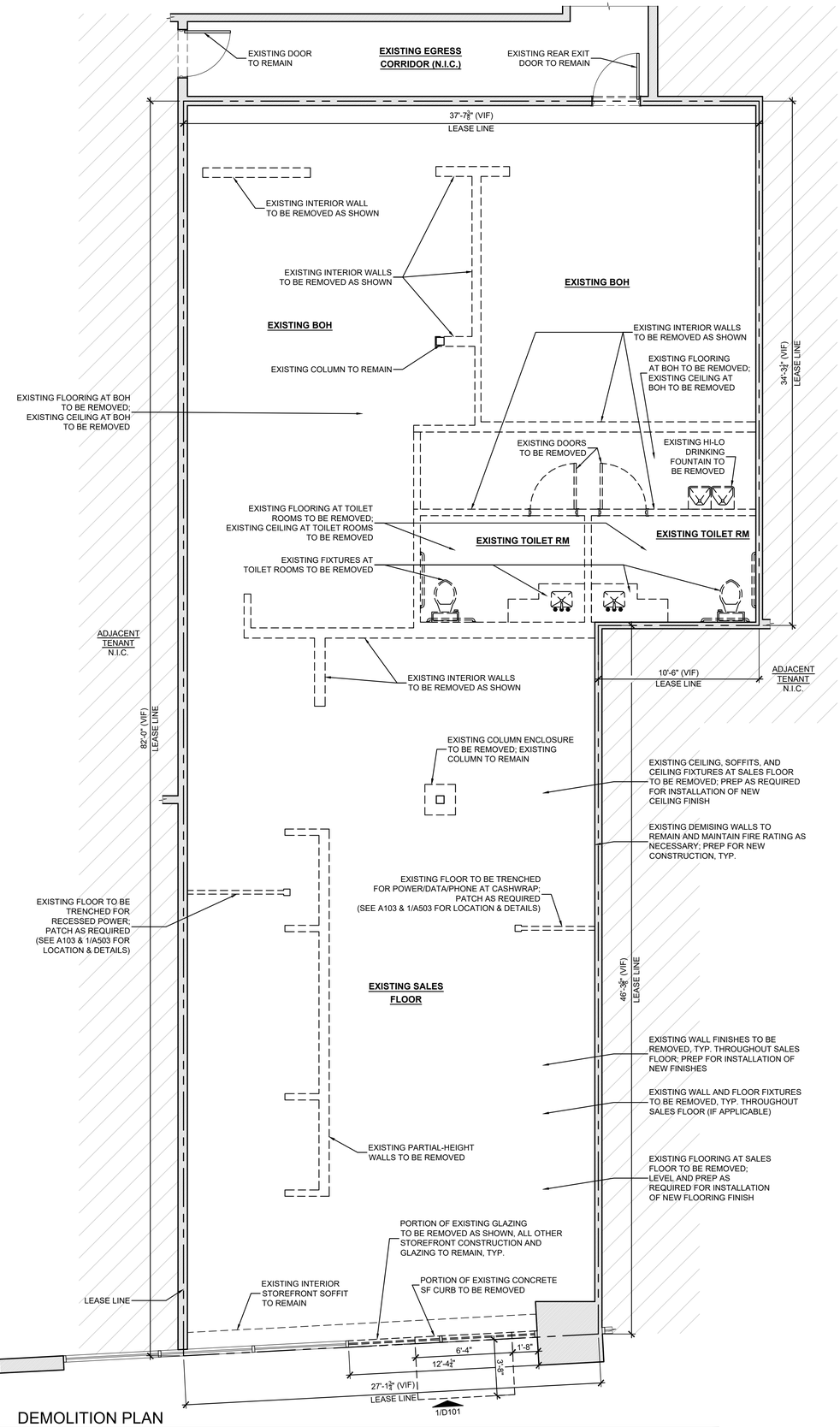
G002

RESPONSIBILITY MATRIX



1 DEMOLITION PLAN

D100 SCALE: 1/4"=1'-0"

WALL LEGEND

	EXISTING INTERIOR OR DEMISING WALLS TO REMAIN. V.I.F.
	EXISTING INTERIOR OR DEMISING WALLS TO BE DEMOLISHED

NOTES

ALL DEMOLITION TO BE DONE IN ACCORDANCE WITH LANDLORD RULES AND REGULATIONS.

SLAB REQUIREMENTS: G.C. MUST NOTIFY LL REP IN ADVANCE OF PENETRATING FLOOR SLAB. SCANNING OF PENETRATION AREA MAY BE REQUIRED TO MITIGATE RISK OF STRIKING REBAR, ELECTRICAL,COMMUNICATION CONDUITS, ETC. DURING CUTTING CORING OR DRILLING PROCESS.

ALL PLUMBING FIXTURES NOTED TO BE DEMOLISHED & REMOVED SHALL HAVE ASSOCIATED PLUMBING REMOVED TO BELOW SLAB OR BEHIND FACE OF WALL. CAP PIPE & PATCH/REPAIR SLAB & WALL.

SCOPE OF WORK TO INCLUDE:

1. FLOOR: EXISTING FLOOR FIXTURES FROM PREVIOUS TENANT TO BE REMOVED (IF APPLICABLE). EXISTING FLOOR FINISHES AT NEW SALES FLOOR AREA TO BE REMOVED; EXISTING FLOOR FINISHES AT NEW BOH AREA TO BE REMOVED; EXISTING FLOOR FINISHES AT TOILET ROOMS TO BE REMOVED. FLOOR LEVELING THROUGHOUT TO BE COMPLETED AS NECESSARY FOR INSTALLATION OF NEW FLOOR FINISHES, PREP FOR NEW FLOORING AS INDICATED ON FINISH PLAN (SEE A101). TRENCH AS NECESSARY FOR INSTALLATION OF POWER/DATA/PHONE AT FLOOR AS SHOWN ON POWER PLAN (SEE A103).

2. WALLS: EXISTING INTERIOR WALLS TO BE REMOVED AS SHOWN. EXISTING WALL FIXTURES AND EXISTING FINISHES TO BE REMOVED AS SHOWN. PREP THROUGHOUT FOR INSTALLATION OF NEW CONSTRUCTION (SEE A100) AND NEW FINISHES (SEE A101).

3. CEILING: EXISTING CEILING, SOFFITS, AND CEILING FIXTURES AT NEW SALES FLOOR AREA TO BE REMOVED; EXISTING CEILING AT BOH TO BE REMOVED; EXISTING CEILING AT TOILET ROOMS TO BE REMOVED. PREP THROUGHOUT FOR INSTALLATION OF NEW CONSTRUCTION AND NEW FINISHES AS INDICATED ON RCP (SEE A200).

4. STOREFRONT: PORTION OF EXISTING STOREFRONT GLAZING TO BE REMOVED AS SHOWN AND AS NECESSARY TO ENSURE NO TENANT FINISHES ARE INSTALLED BEYOND LEASE LINE. SEE D101 FOR MORE INFO (IF APPLICABLE). PREP FOR INSTALLATION OF NEW STOREFRONT CONSTRUCTION AND FINISHES AS INDICATED ON STOREFRONT DRAWINGS (SEE A300).

5. SERVICES: SEE NOTES AT PLAN FOR PLUMBING SCOPE OF WORK. EXISTING HVAC DUCTWORK TO BE REMOVED AS NECESSARY TO CONFORM TO RCP (SEE A200). EXISTING SPRINKLERS/FIRE ALARM TO BE RELOCATED AS NECESSARY TO CONFORM TO RCP (SEE A200). REMOVE/RELOCATE/ADD ELECTRICAL OUTLETS TO CONFORM TO POWER PLANS (SEE A103 AND A201). WHERE ANY SERVICE IS REMOVED, REMOVE TO POINT OF ORIGIN.

6. ANY SALVAGED OR REUSED ITEMS TO BE PATCHED AND REFURBISHED TO "LIKE NEW" CONDITION

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STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT

07/10/2025

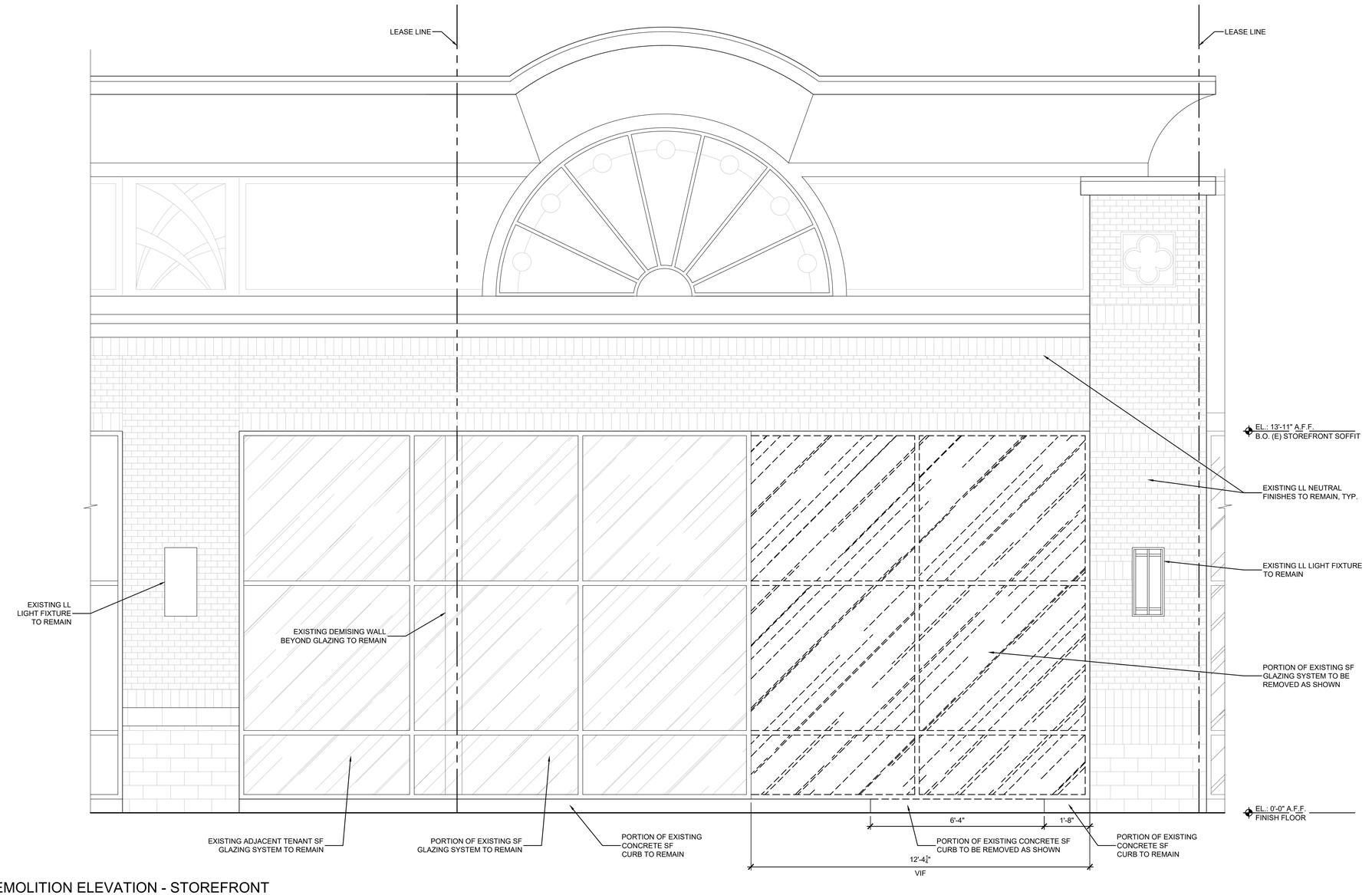
TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB

Date	Issue
07-10-25	Permit Set

D100

DEMOLITION PLAN



1 DEMOLITION ELEVATION - STOREFRONT

D101 SCALE: 1/2"=1'-0"

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DEMOLITION
STOREFRONT

DOOR SCHEDULE

KEY	LOCATION	SIZE	TYPE	FRAME	DOOR	HDWR	REMARKS
1	ENTRANCE	(2) 3'-0" x 10'-0"	A	ALUM.	GLASS/ALUMINUM	1	OFFSET PIVOT HINGES
2A	BOH HALLWAY	3'-0" x 7'-0"	B	HM	FLUSH SOLID CORE WOOD DOOR	2	PAINT DOOR P/2
2B	BOH	3'-0" x 7'-0"	B	HM	FLUSH SOLID CORE WOOD DOOR	2	PAINT DOOR P/2
3	TOILET ROOM	3'-0" x 7'-0"	B	HM	FLUSH SOLID CORE WOOD DOOR	3	PAINT DOOR P/3
4	DISPLAY ACCESS	2'-6" x 2'-6"	C	NONE	¼" TEMPERED GLASS	4	VERIFY WIDTH IN FIELD PRIOR TO FABRICATION
5	REAR EXIT	3'-0" x 7'-0"	D	E.T.R.	E.T.R.	5	EXISTING TO REMAIN, REPAIR TO "LIKE NEW"

HARDWARE SETS

HARDWARE SET #1 - TO BE COORDINATED WITH DOOR MFR. USE 3/4" OFFSET PIVOT HINGES. INSTALL NORTON 8501 (OR SIMILAR) DOOR CLOSER, (1) PER DOOR; COLOR TO BE EITHER 690 STATUARY BRONZE OR 689 ALUMINUM TO MATCH DOOR/STOREFRONT SYSTEM COLOR. INSTALL IVES FS410 CHROME DOOR STOP AT CEILING IF APPLICABLE, (1) PER DOOR. EACH DOOR LEAF TO INDEPENDENTLY LOCK IN BOTH OPEN AND CLOSED POSITIONS WITH RECESSED DUST PROOF STRIKES AT FLOOR, (1) LOCK CYLINDER PER DOOR LEAF AND (2) DUST PROOF STRIKES AT FLOOR PER DOOR LEAF (AT OPEN AND CLOSED POSITIONS). LOCK TO BE KEYED AT EXTERIOR (WHEN IN CLOSED POSITION) SIDE ONLY, INTERIOR (WHEN IN CLOSED POSITION) SALES FLOOR SIDE TO HAVE THUMB TURN OPERABLE WITHOUT USE OF KEY. LOCK TO BE COORDINATED WITH DOOR MFR AND MUST ACCEPT BEST INTERCHANGEABLE CORE (SEE NOTE 4).

HARDWARE SET #2
HINGES - STANLEY SELF-CLOSING SPRING SATIN CHROME HINGES (OR EQUAL); 3 PER DOOR
LOCKSET - SCHLAGE 'JAZZ' HALL AND CLOSET F10-JAZ-619 SATIN NICKEL CHROME NON-LOCKING LEVER (OR EQUAL)
KICK PLATE - ROCKWOOD K4125 8" HIGH X ½" THICK X DOOR WIDTH LESS 2" CLEAR PLEXI KICK PLATE (OR EQUAL); INSTALL AT PUSH SIDE
SILENCERS - IVES SR64 DOOR SILENCER (OR EQUAL); 3 PER DOOR
CLOSER - SEE 'HINGES' - DOOR TO HAVE SELF-CLOSING SPRING HINGES

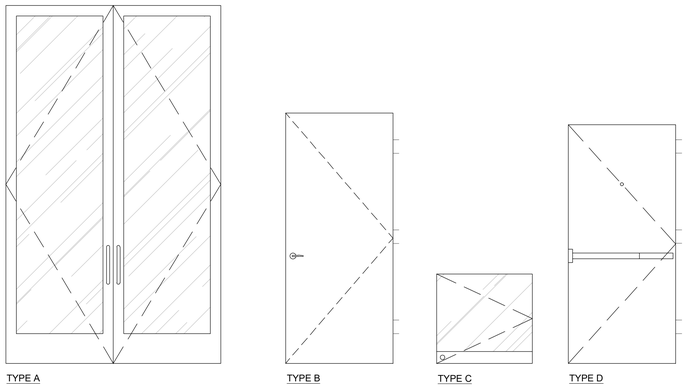
HARDWARE SET #3
HINGES - STANLEY 179 SATIN CHROME HINGES (OR EQUAL); 3 PER DOOR
LOCKSET - SCHLAGE 'JAZZ' BED AND BATH F40-JAZ-619 SATIN NICKEL PRIVACY LEVER (OR EQUAL)
WALL STOP - IVES WS404CVX SATIN CHROME WALL STOP (OR EQUAL)
SILENCERS - IVES SR64 DOOR SILENCER (OR EQUAL); 3 PER DOOR

HARDWARE SET #4 - CR LAURENCE #SWM1BN STAINLESS STEEL WALL-MOUNT FULL BACK PLATE SQUARE CORNER HINGE (OR EQUAL); 2 MIN. OR PER MANUFACTURER'S RECOMMENDATIONS. BOTTOM RAIL TO MATCH ADJACENT KNEE WALL GLAZING SHOE, WITH THUMB TURN LOCK AND DUST PROOF STRIKE AT SALES FLOOR SIDE AT FLOOR

HARDWARE SET #5 - EXISTING HARDWARE TO REMAIN; REPAIR TO "LIKE NEW" OR REPLACE EXISTING (OR PROVIDE NEW WHERE APPLICABLE) HINGES, DOOR CLOSER, LOCKSET, LATCH GUARD, DOOR STOP, THRESHOLD, PANIC HARDWARE, HEAD DRIP EDGE, WEATHER STRIPPING, AND DOOR SWEEP AS NECESSARY, AND TO CONFORM TO LL CRITERIA.

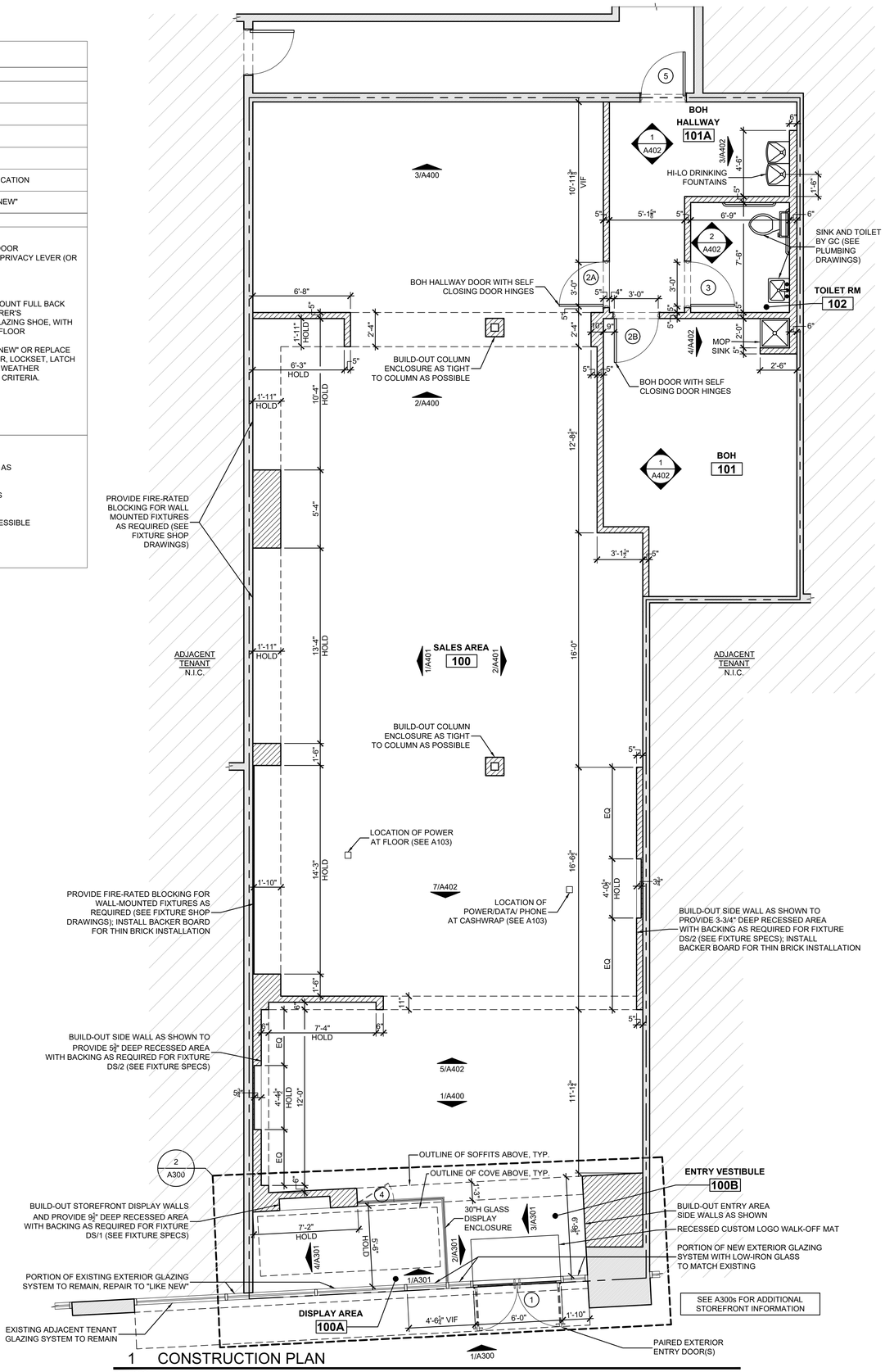
DOOR SCHEDULE NOTES

1. ALL HARDWARE SHALL BE FURNISHED AND INSTALLED BY G.C. UNLESS OTHERWISE NOTED. FURNISH ALL HARDWARE AS SPECIFIED IN THE HARDWARE GROUP AND AS NECESSARY TO RESULT IN A COMPLETE INSTALLATION.
2. G.C. RESPONSIBLE TO SIZE AND MOUNT HARDWARE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. REINFORCE THE MOUNTING SUBSTRATE AS REQUIRED FOR PROPER INSTALLATION.
3. ALL NEW EGRESS HARDWARE SHALL BE OPERABLE FROM THE INSIDE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT. OPERATING DEVICES REQUIRED TO BE ACCESSIBLE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST.
4. G.C. TO COORDINATE RE-KEYING OF CYLINDER LOCKS AT PERIMETER DOOR(S) WITH NEW BEST 7-PIN CORES UPON COMPLETION OF JOB.



2 DOOR TYPES

A100 SCALE: N.T.S.



1 CONSTRUCTION PLAN

A100 SCALE: 1/4"=1'-0"

WALL LEGEND

	EXISTING WALLS TO REMAIN. V.I.F.
	TYPICAL FULL HEIGHT METAL STUD NEW WALL CONSTRUCTION OR FURRING
	12'-0"H PARTIAL HEIGHT METAL STUD NEW WALL CONSTRUCTION OR FURRING

NOTES

SCOPE OF WORK TO INCLUDE:

1. STOREFRONT: REFER TO A300 FOR SCOPE OF WORK AT STOREFRONT.
2. FLOOR: INSTALLATION OF NEW FLOORING AS NOTED ON FINISH PLAN (SEE A101).
3. WALLS: CONSTRUCTION OF NEW INTERIOR DISPLAY/ENTRY WALLS (SEE A300). CONSTRUCTION AND FURRING OF NEW INTERIOR WALLS AS SHOWN ON CONSTRUCTION PLAN. INSTALLATION OF WALL FINISHES AS NOTED ON FINISH PLAN (SEE A101) AND INTERIOR ELEVATIONS.

   GC RESPONSIBLE FOR ENSURING SUFFICIENT FIRE-RATED BLOCKING IS INCLUDED AT ALL SHELVING AND WALL FIXTURE LOCATIONS AS SHOWN ON FIXTURE PLAN (SEE A102)
4. MILLWORK: INSTALLATION OF NEW WOOD DOOR(S) AS PER DOOR SCHEDULE AND AS SHOWN ON CONSTRUCTION PLAN. CONSTRUCTION OF FREESTANDING STAGE (FF/1) AT STOREFRONT DISPLAY. PROVIDE/INSTALL INTERIOR DOOR AND BASE TRIM AS SHOWN AT INTERIOR ELEVATIONS.
5. CEILING: REFER TO RCP (SEE A200) FOR SCOPE OF WORK AT CEILING.
6. FLOOR SET: INSTALLATION/PLACEMENT OF INTERIOR FIXTURES AND FURNITURE AS SHOWN ON FIXTURE PLAN (SEE A102).
7. PROVIDE/INSTALL SERVICES AS FOLLOWS:
   A. ELECTRICAL: REFER TO POWER PLANS (SEE A103 AND A201) AND ELECTRICAL SHEETS FOR ELECTRICAL SCOPE OF WORK.
   B. HVAC: REFER TO RCP (SEE A200) AND MECHANICAL SHEETS FOR HVAC SCOPE OF WORK.
   C. SPRINKLERS/FIRE ALARM: ANY MODIFICATIONS TO SPRINKLER SYSTEM SHALL BE MADE PER CODE AND LL CRITERIA, UNDER SEPARATE PERMIT. REFER TO RCP (SEE A200) FOR SPRINKLERS/FIRE ALARM SCOPE OF WORK.
8. THE OWNER'S REPRESENTATIVE IS AUTHORIZED TO INSPECT THE QUALITY AND ACCEPTABILITY OF INSTALLATION, WORKMANSHIP, AND FINISHES.

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CONSTRUCTION PLAN

FINISH SCHEDULE

PAINT

KEY	FINISH / MATERIAL	COLOR / STYLE	FINISH	MANUFACTURER	LOCATION / REMARKS
P 1	2 COATS PAINT - OVER 1 COAT SW ALL PURPOSE LATEX PRIMER	SW SNOWBOUND 7004	WALL/TRIM - EGGSHELL CEILING - FLAT	SHERWIN WILLIAMS	INTERIOR WALLS AS NOTED, CEILING AS NOTED, INTERIOR TRIM ELEMENTS
P 2	2 COATS PAINT - OVER 1 COAT SW ALL PURPOSE LATEX PRIMER	SW PEPPERCORN 7674	WALL/TRIM - EGGSHELL CEILING - FLAT	SHERWIN WILLIAMS	CEILING TROUGH AS NOTED, BOH DOOR, BOH HALLWAY DOOR
P 3	2 COATS PAINT - OVER 1 COAT SW ALL PURPOSE LATEX PRIMER	SW SPLASHY 6942	WALL/TRIM - EGGSHELL CEILING - FLAT	SHERWIN WILLIAMS	SALES DIGITAL SCREEN RECESS AT WALLPAPER WALL, TOILET ROOM DOOR
P 4	2 COATS PAINT - OVER 1 COAT SW ALL PURPOSE LATEX PRIMER	SW ACCESSIBLE BEIGE 7036	WALL/TRIM - EGGSHELL CEILING - FLAT	SHERWIN WILLIAMS	NOT USED
P 5	2 COATS PAINT - OVER 1 COAT SW ALL PURPOSE LATEX PRIMER	SW TRICORN BLACK 6258	WALL/TRIM - EGGSHELL CEILING - FLAT	SHERWIN WILLIAMS	STOREFRONT DIGITAL SCREEN RECESS
P 6	2 COATS PAINT - OVER 1 COAT SW ALL PURPOSE LATEX PRIMER	SW STURDY BROWN 6097	WALL/TRIM - EGGSHELL CEILING - FLAT	SHERWIN WILLIAMS	NOT USED

METAL

KEY	FINISH / MATERIAL	COLOR / STYLE	FINISH	MANUFACTURER	LOCATION / REMARKS
M 1	16 GAUGE OR RIGID BACKED BRUSHED STAINLESS STEEL	CLEARCOAT	BRUSHED	---	NOT USED
M 2	ANODIZED ALUMINUM STOREFRONT	DARK BRONZE	ANODIZED	---	NOT USED
M 3	POWDERCOATED METAL	SW SPLASHY 6942	POWDERCOATED	---	EDGE TRIM AT STAGE AS NOTED, WALLPAPER SCREEN RECESS TRIM
M 4	POWDERCOATED METAL	BLACK	POWDERCOATED	---	STOREFRONT SCREEN RECESS TRIM, EDGE TRIM AT PLANK AS NOTED

WOOD

KEY	FINISH / MATERIAL	COLOR / STYLE	FINISH	MANUFACTURER	LOCATION / REMARKS
W 1	6½" WIDE X ⅜" THICK LIGHT COLOR ENGINEERED HARDWOOD PLANK	LOVESAC OAK 1089 HARBOR	PREFINISHED (REPEL WATER RESIST)	SHAW	USE STAGGERED END JOINTS; STAGE (FIXTURE FF/1)
W 2	6½" WIDE X ½" THICK DARK COLOR ENGINEERED HARDWOOD PLANK	LOVESAC HICKORY 7097 TRANQUILITY	PREFINISHED (REPEL WATER RESIST)	SHAW	INTERIOR DISPLAY/ENTRY WALLS AND SOFFIT

VINYL

KEY	FINISH / MATERIAL	COLOR / STYLE	FINISH	MANUFACTURER	LOCATION / REMARKS
V 1	12" X 12" X 2⅜" VINYL COMPOSITION TILE FLOORING	STANDARD EXCELON IMPERIAL TEXTURE DESERT BEIGE 51809	---	ARMSTRONG	BOH FLOORING, TOILET ROOM FLOORING
V 2	7" X 48" X 2" RESILIENT LUXURY VINYL FLR PLANK WITH CORK UNDERLAY	ADESA 1424V CABIN-V2 00100	PREFINISHED (EXOGUARD)	PATCRAFT	NOT USED

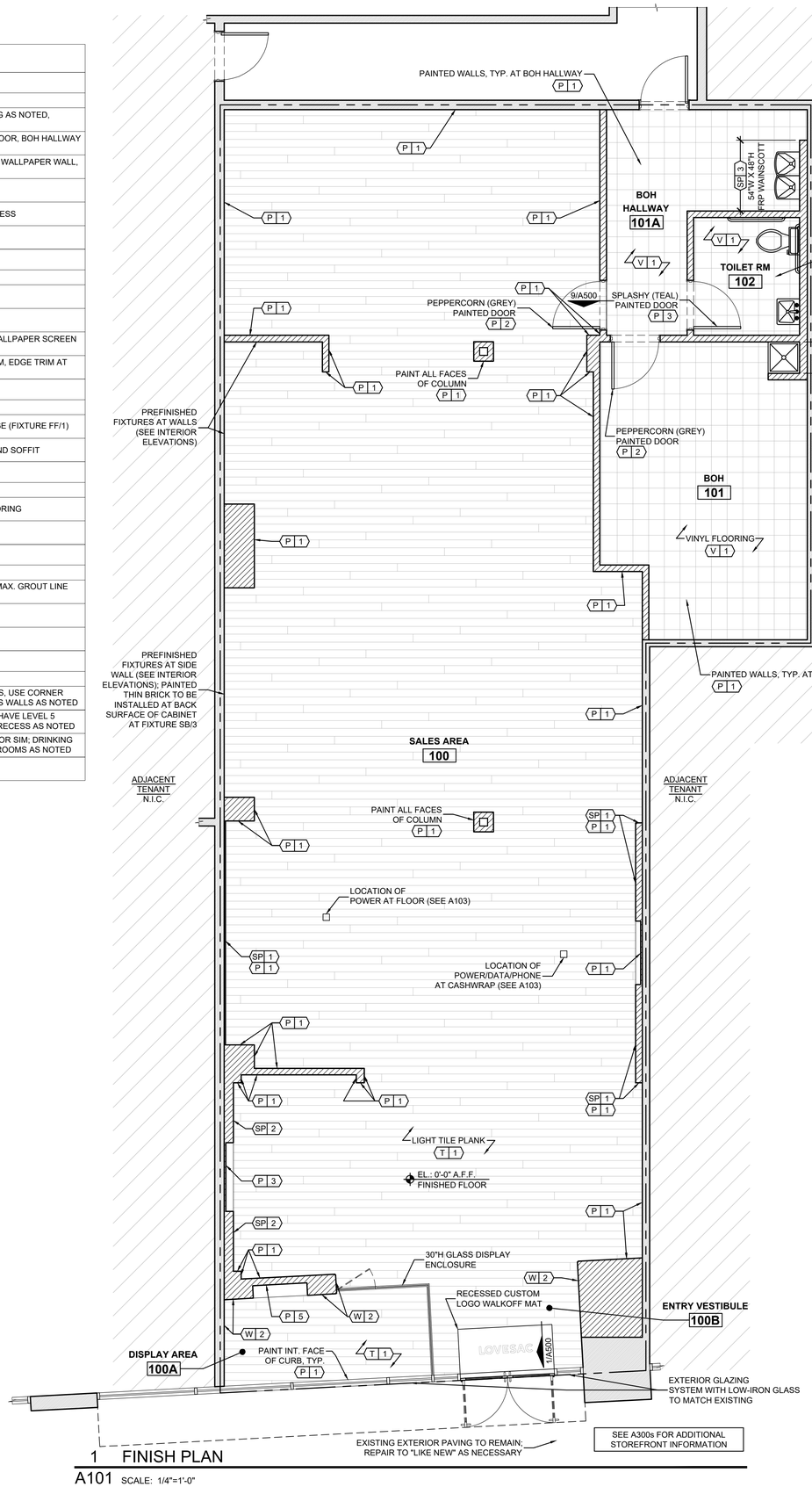
TILE

KEY	FINISH / MATERIAL	COLOR / STYLE	GROUT	MANUFACTURER	LOCATION / REMARKS
T 1	8" X 48" X ⅜" LIGHT COLOR WOOD GRAIN PLANK PORCELAIN TILE	CS50H WHITE OAK 00100	LATICRETE #90 (LIGHT PEWTER)	PATCRAFT	USE STAGGERED END JOINTS, 1/8" MAX. GROUT LINE BTWN JOINTS; SALES FLOORING
T 2	12" X 12" CERAMIC FLOOR TILE	BRIXTON BONE BX01	LATICRETE #23 (ANT. WHITE)	DALTILE	NOT USED
T 3	6" X 36" X ⅜" DARK COLOR WOOD GRAIN PLANK PORCELAIN TILE	CREEKWOOD LOVT3 WALNUT 0700	LATICRETE SPECTRALOCK PRO PREMIUM #60 (DUSTY GREY)	PATCRAFT	NOT USED

SPECIAL WALL FINISH

KEY	FINISH / MATERIAL	COLOR / STYLE	FINISH	MANUFACTURER	LOCATION / REMARKS
SP 1	½" THICK WHITE THIN BRICK	ANTIQUE BRICK 2920, PAINTED TO MATCH P/1	---	BRICK MY WALLS	3/8" MIN. GROUT JOINT BTWN BRICKS, USE CORNER BRICK AT OUTSIDE CORNERS; SALES WALLS AS NOTED
SP 2	CUSTOM GRAPHIC WALLPAPER	CUSTOM	VELVET	---	GWB BENEATH WALLCOVERING TO HAVE LEVEL 5 FINISH; SALES WALL WITH SCREEN RECESS AS NOTED
SP 3	⅛" THICK FRP WALL PANELING	SEQUENTIA EMBOSSED WHITE 1130	---	CRANE COMPOSITES	SEQUENTIA EMBOSSED WHITE FRP OR SIM; DRINKING FOUNTAINS, MOP SINKS, AND RESTROOMS AS NOTED

NOTE - FINISH SCHEDULE DOES NOT INCLUDE COMPLETE LIST OF FINISHES ON ITEMS FURNISHED WHOLE FROM INDEPENDENT FABRICATORS SUCH AS SIGNAGE AND FIXTURES. SEE FIXTURE SHOP DRAWINGS FOR FINISH DESCRIPTIONS AND ADDITIONAL INFORMATION.



1 FINISH PLAN

A101 SCALE: 1/4"=1'-0"

NOTES

1. REFER TO CONSTRUCTION PLAN (SEE A100) FOR CONSTRUCTION SCOPE OF WORK.
2. REFER TO STOREFRONT DRAWINGS (SEE A300s) FOR STOREFRONT FINISHES.
3. REFER TO INTERIOR ELEVATIONS (SEE A400s) FOR WALL AND MILLWORK FINISHES.
4. REFER TO RCP (SEE A200) FOR CEILING FINISHES.

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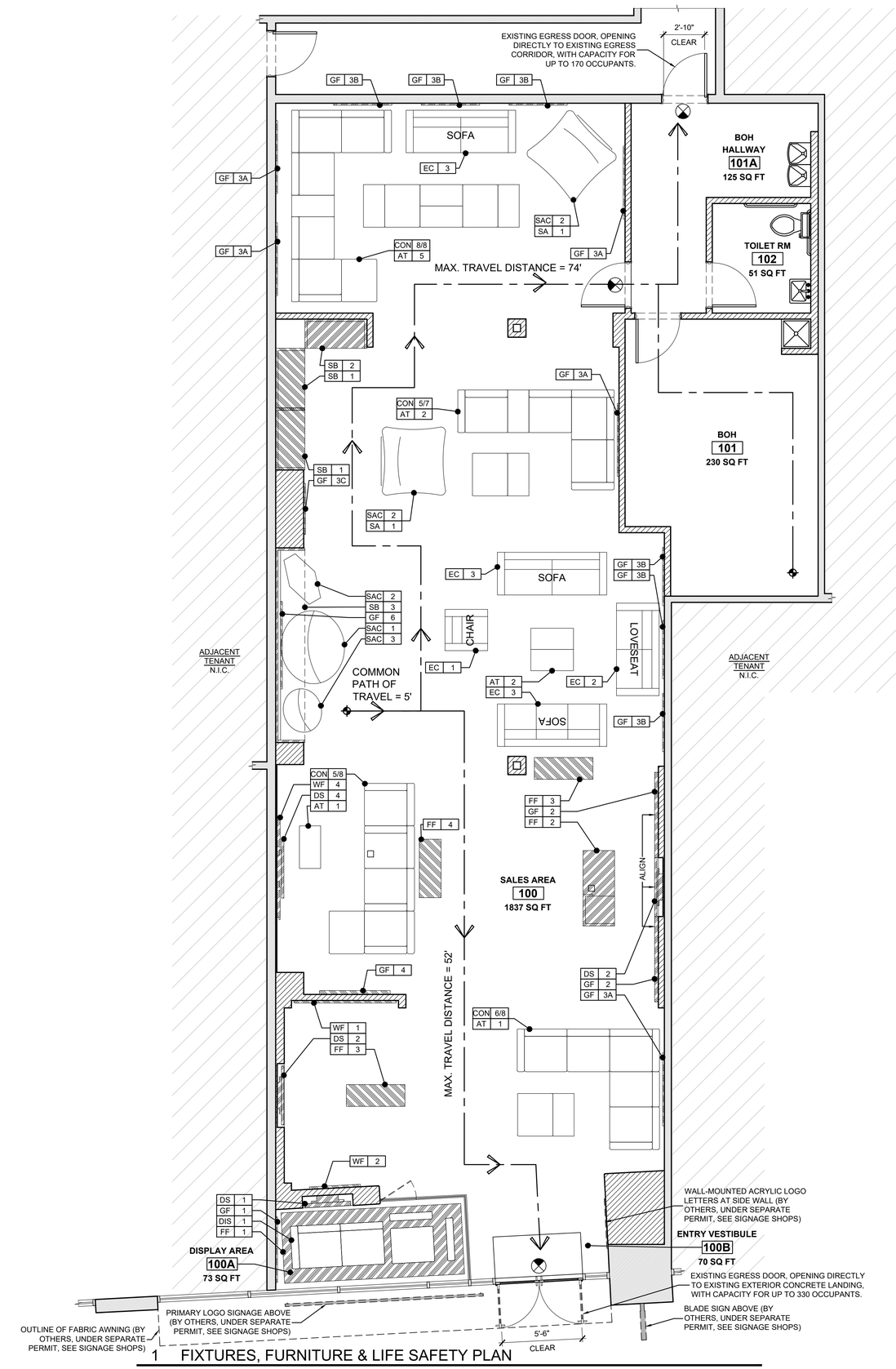
FINISH PLAN

OCCUPANT LOAD / EGRESS INFORMATION

CRITERIA	CONDITION(S)	CODE REFERENCE
LIFE SAFETY CALCULATIONS		
OCCUPANT LOAD		
MERCANTILE	2,061 SF	
M: STORAGE, STOCK, SHIPPING AREA	433 SF	
TOTAL SQUARE FOOTAGE	2,494 SF	
TOTAL OCCUPANTS		
SALES AREA: 2,061 SF / 60 SF PER OCCUPANT=	35 OCCUPANTS	IBC TABLE 1004.5
STOCKROOM AREA: 433 SF/ 300 SF PER OCCUPANT=	2 OCCUPANTS	IBC TABLE 1004.5
TOTAL OCCUPANT LOAD	37 OCCUPANTS	IBC TABLE 1004.5
EGRESS CAPACITY		
EGRESS WIDTH REQUIRED: 37 OCCUPANTS x 0.20" PER OCCUPANT =	7.4" REQUIRED	IBC SECTION 1005
EGRESS WIDTH PROVIDED: 1 DOOR x 66" CLEAR 1 DOOR x 34" CLEAR TOTAL =	100" PROVIDED (COMPLIANT)	
MEANS OF EGRESS	2 REQUIRED - 2 PROVIDED	IBC TABLE 1006.2.1
TRAVEL DISTANCE LIMIT - MAX. 250 FT SPRINKLERED	83'-0" PROVIDED (COMPLIANT)	IBC TABLE 1017.2

SIGNAGE FOR RESTROOMS SHALL BE RAISED AND BRAILLE CHARACTERS AND PICTORIAL SYMBOL SIGNS. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE TO THE LATCH SIDE OF THE DOOR, INCLUDING AT DOUBLE-LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL. MOUNTING HEIGHT SHALL BE 60 INCHES ABOVE THE FINISH FLOOR TO THE CENTERLINE OF THE SIGN ABOVE THE FINISH FLOOR TO THE CENTERLINE OF THE SIGN - SECTION 703 OF THE 2010 ADA STANDARD FOR ACCESSIBLE DESIGN



1 FIXTURES, FURNITURE & LIFE SAFETY PLAN

A102 SCALE: 1/4"=1'-0"

FIXTURE SCHEDULE

FIXTURE#	NAME
FF 1	FREESTANDING STAGE (12'-4"W x 4'-10"D x 7"H)
FF 2	CASHWRAP (LEFT-HANDED)
FF 3	MOBILE BLOCKS TABLE
FF 4	ST BLOCKS TABLE
SB 1	FABRIC HANGING SHELVING BAY AND FABRIC SWATCH DRAWERS
SB 2	MODIFIED FABRIC HANGING SHELVING BAY AND FABRIC SWATCH DRAWERS
SB 3	SACS SHELVING BAY
SB 4	BOH VESTIBULE SHELVING BAY (NOT USED)
SB 5	SACTIONALS SHELVING BAY (NOT USED)
DS 1	STOREFRONT SCREEN - 75" HIGH-BRIGHT PORTRAIT
DS 2	INTERIOR SCREEN - 55" LANDSCAPE
DS 3	INTERIOR SCREEN - 75" LANDSCAPE (NOT USED)
DS 4	ST SCREEN - 55" LANDSCAPE EDGE-LIT 4K UHD
WF 1	BUILT TO LAST WALL
WF 2	DESIGNED FOR LIFE WALL (8'-6"H THIN VERSION)
WF 3	NOT USED
WF 4	ST HALO-LIT WALL PANEL
GF 1	STOREFRONT GRAPHIC FRAME - SIZE E (54"W x 102"H)
GF 2	CASHWRAP LED GRAPHIC FRAME - SIZE B (70"W x 28"H)
GF 3A	SALES AREA GRAPHIC FRAME - SIZE J (60"W x 60"H)
GF 3B	SALES AREA GRAPHIC FRAME - SIZE K (48"W x 48"H)
GF 3C	SALES AREA GRAPHIC FRAME - SIZE L (42"W x 72"H)
GF 4	ST LED GRAPHIC FRAME - SIZE T (58"W x 90"H)
GF 5	DOUBLE-SIDED HANGING LED GRAPHIC FRAME (NOT USED)
GF 6	SACS AREA GRAPHIC FRAME - SIZE U (72"W x 36"H)

FURNITURE SCHEDULE

FIXTURE#	NAME
DIS 1	FLOATING SACTIONALS STOREFRONT DISPLAY
SAC 1	SUPERSAC
SAC 2	PILLOWSAC
SAC 3	CITYSAC
SAC 4	MOVIESAC (NOT USED)
SAC 5	BIG ONE (NOT USED)
SA 1	PILLOWSAC ACCENT CHAIR FRAME ACCESSORY
CON X/X	SACTIONALS CONFIGURATION WITH "X" SEATS BY "X" SIDES
AT X	ANYTABLE WITH "X" PIECES CONNECTED
EC 1	EC ARMCHAIR
EC 2	EC LOVESEAT
EC 3	EC COUCH

NOTES

1. GC RESPONSIBLE FOR INCLUDING SUFFICIENT FIRE-RATED BLOCKING AT ALL BUILT-IN WALL/CEILING FIXTURE LOCATIONS AS NECESSARY (SEE MILLWORK SHOPS).
2. SEE INT. ELEVATIONS FOR FIXTURE MOUNTING HEIGHTS.
3. ALL FURNITURE SCHEDULE ITEMS ARE CORE LOVESAC PRODUCT AND LOCATIONS SHOWN ARE IMPERMANENT AND MOBILE DUE TO NATURE OF PRODUCT. FINAL LOCATIONS TO ADHERE TO ADA GUIDELINES.
4. GC TO CLARIFY WITH INSPECTOR IN ADVANCE IF FLOOR TO BE SET WITH FURNITURE SCHEDULE ITEMS (CORE LOVESAC PRODUCT) PRIOR TO INSPECTION.

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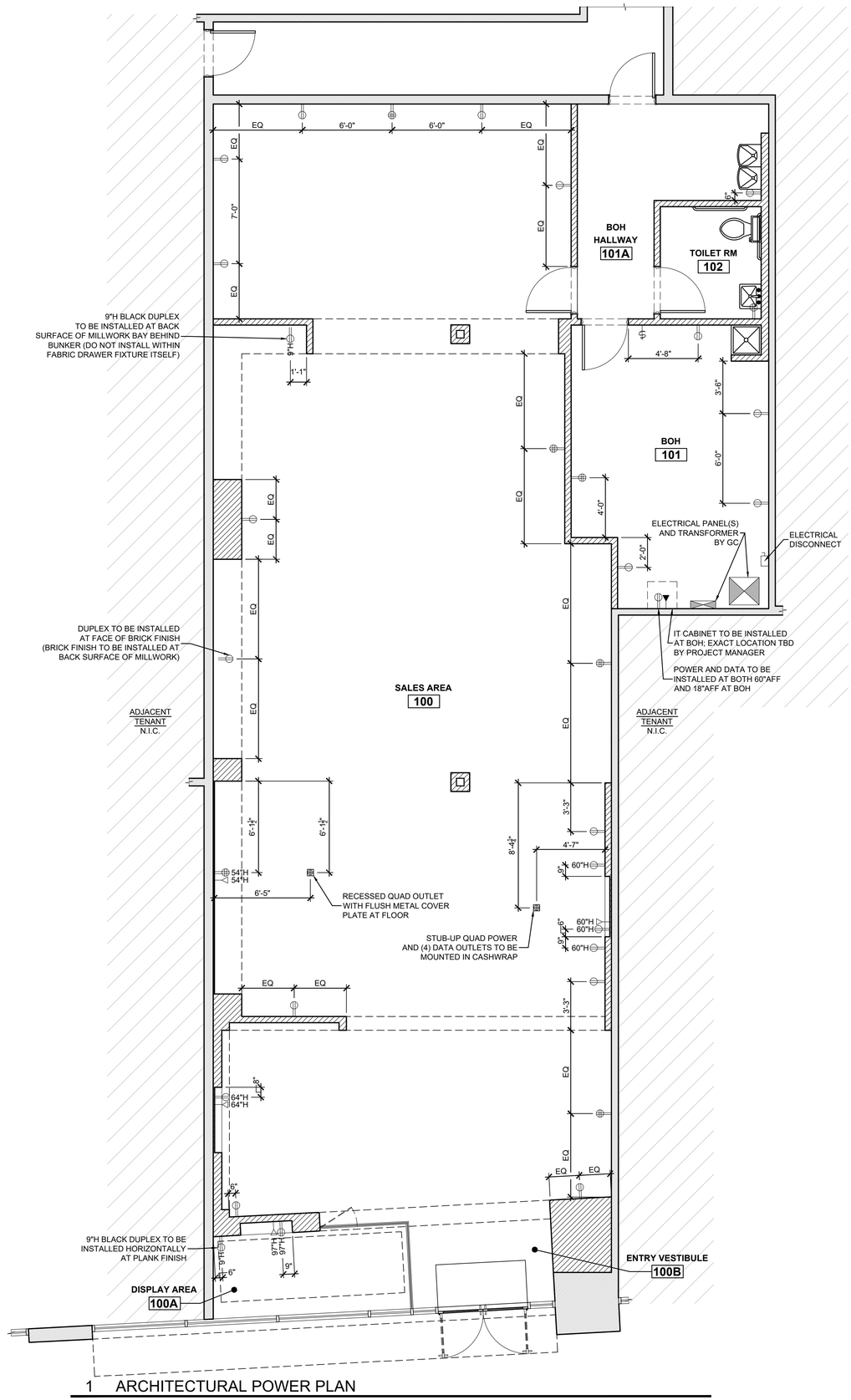
FIXTURES, FURNITURE & LIFE SAFETY PLAN



1 ARCHITECTURAL POWER PLAN

A103 SCALE: 1/4"=1'-0"

WALL LEGEND

	EXISTING WALLS TO REMAIN. V.I.F.
	TYPICAL FULL HEIGHT METAL STUD NEW WALL CONSTRUCTION OR FURRING
	12'-0"H PARTIAL HEIGHT METAL STUD NEW WALL CONSTRUCTION OR FURRING

ELECTRICAL SYMBOLS LEGEND

	TYP. DUPLEX RECEPTACLE, 18" AFF (TO CL)
X"H	ALT. HEIGHT DUPLEX RECEPTACLE, X" AFF (TO CL)
	TYP. QUAD RECEPTACLE, 18" AFF (TO CL)
X"H	ALT. HEIGHT QUAD RECEPTACLE, X" AFF (TO CL)
	CONDUIT/PULL TO BOH LOCATION, X" AFF (TO CL)
	PHONE AND DATA JACK, 18" AFF (TO CL) U.O.N.
	SWITCH BANK, 45" AFF (TO CL)

NOTES

SCOPE OF WORK TO INCLUDE:

1. FLOOR: INSTALL QUAD POWER AND (4) DATA OUTLETS AT CASHWRAP AS SHOWN ON POWER PLAN. INSTALL NEW RECESSED DUPLEX POWER WITH FLUSH METAL COVER PLATE(S) AT FLOOR AS SHOWN.
2. WALLS: RELOCATE/INSTALL NEW POWER AS INDICATED ON POWER PLAN. GC TO COORDINATE POWER AND EMPTY CONDUIT/PULL LOCATIONS AT ALL DIGITAL SCREENS WITH INTERIOR ELEVATIONS AND DIGITAL HARDWARE VENDOR. GC TO COORDINATE POWER LOCATIONS AT SB/2 AND LED FRAMES WITH INTERIOR ELEVATIONS.
3. CEILING: REFER TO REFLECTED CEILING POWER PLAN (SEE A201) FOR SCOPE OF WORK AT CEILING.
4. ALL NETWORK CABLES TO RUN TO IT DATA CAGE AT BOH AREA. GC TO REFER TO IT GUIDE FOR RESPONSIBLY OF CABLE TERMINATIONS. ALL PATCH PANELS AND NETWORK CABLES TO BE CAT6 OR ABOVE; ALL TERMINATIONS TO USE 568B STANDARD.

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STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT

07/10/2025

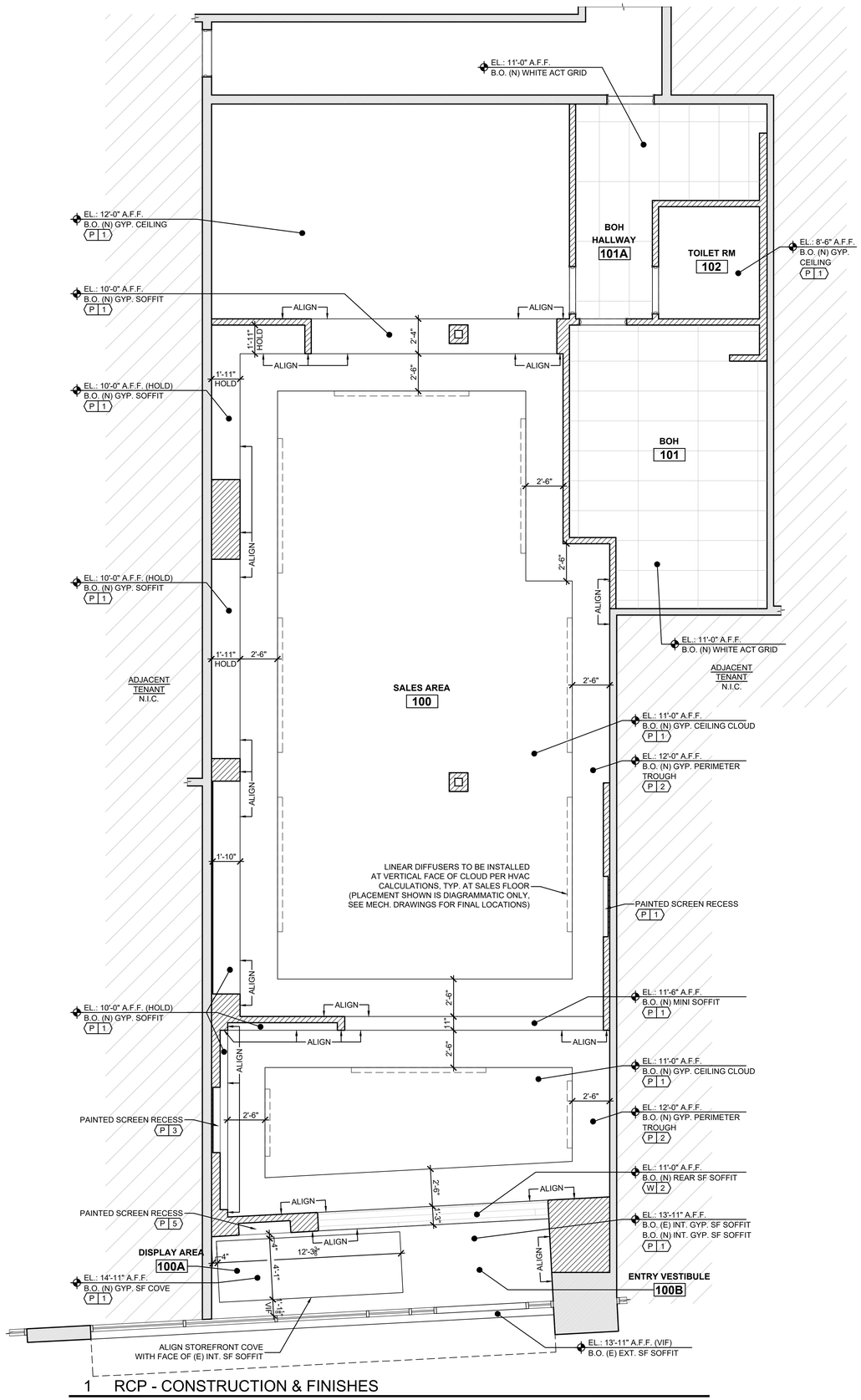
TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB

Date	Issue
07-10-25	Permit Set

A103

ARCHITECTURAL POWER PLAN



1 RCP - CONSTRUCTION & FINISHES

A200 SCALE: 1/4"=1'-0"

NOTES

SCOPE OF WORK TO INCLUDE:

1. CONSTRUCT NEW SOFFITS AND CEILINGS AS SHOWN ON RCP.
2. INSTALL CEILING FINISHES AS NOTED ON RCP AND FINISH SCHEDULE (SEE A101).
3. PROVIDE/INSTALL CEILING ACCESS PANELS AS REQUIRED. COORDINATE PANEL LOCATIONS WITH OWNER.
4. PROVIDE/INSTALL SERVICES AS FOLLOWS:
   - A. ELECTRICAL: REFER TO REFLECTED CEILING POWER PLAN (SEE A201) FOR ELECTRICAL WORK, INCLUDING LIGHT FIXTURES AND SIGNAGE.
   - B. HVAC: NEW DUCTWORK TO BE DESIGNED AND INSTALLED AS PER LL CRITERIA AND CODE TO SATISFY HEATING AND COOLING REQUIREMENTS FOR SPACE (SEE MECHANICAL DRAWINGS).
   - C. SPRINKLERS: INSTALL/RELOCATE SPRINKLER SYSTEM PER CODE AND LL CRITERIA. SPRINKLERS NECESSARY IN SALES AREA TO BE RECESSED WITH CONCEALED SPRINKLER CAPS COLORED BLACK OR WHITE FACTORY FINISH TO COORDINATE WITH ADJACENT PAINT FINISH.
   - D. LIFE SAFETY: REFER TO REFLECTED CEILING POWER PLAN (SEE A201) FOR NOTES ABOUT EMERGENCY LIGHTS, EXIT SIGNAGE, ETC.

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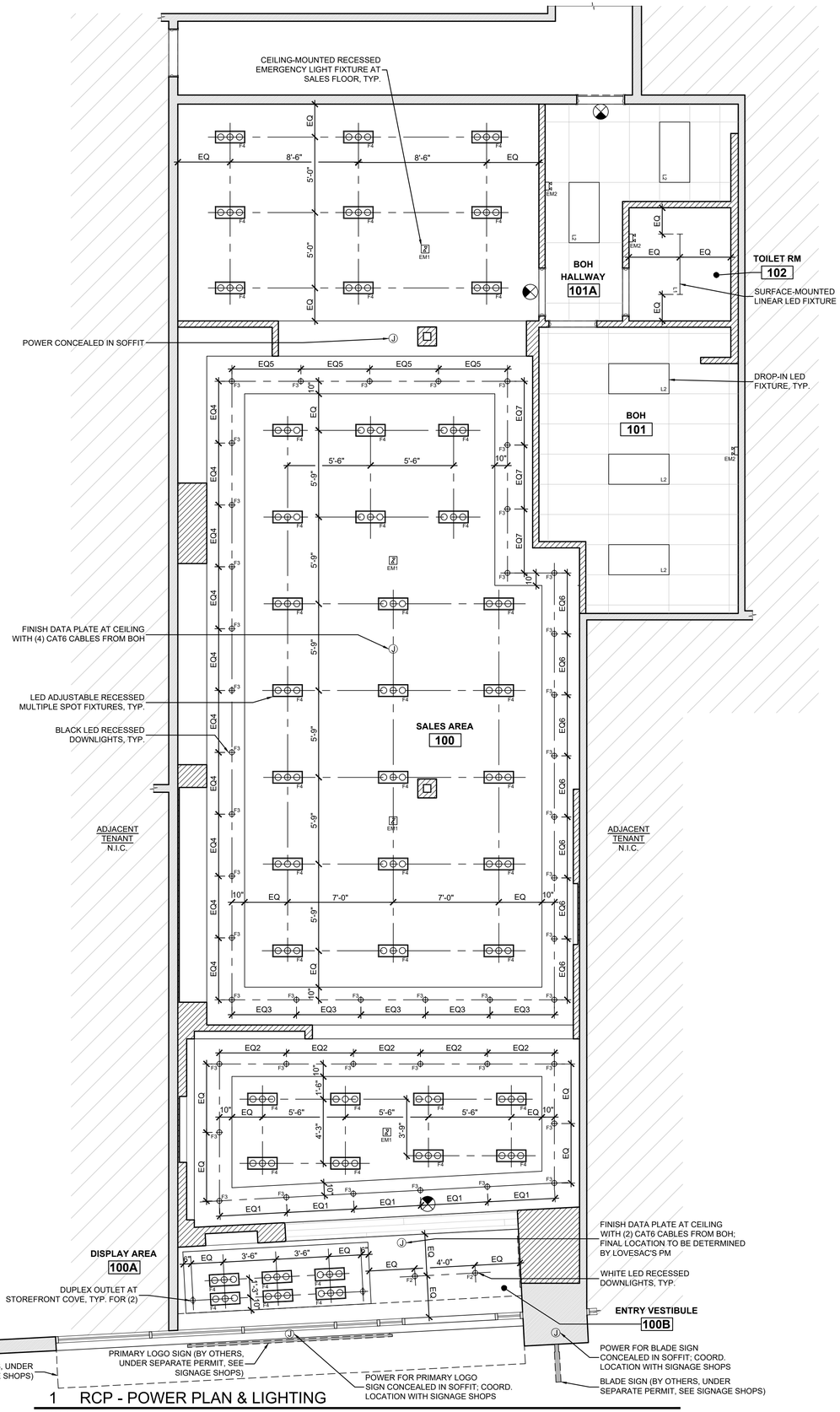
REFLECTED CEILING PLAN
CONSTRUCTION &
FINISHES



1 RCP - POWER PLAN & LIGHTING

A201 SCALE: 1/4"=1'-0"

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	MFR	COLOR
F1	CONTECH SINGLE CIRCUIT TRACK WITH CONTECH CTL603A UNIVERSAL SIDE SWIVEL SHORT NECK LAMPHOLDERS AND TCP LED12E26P30S30KNFL LED PAR 30 LAMPS	CONTECH LIGHTING/ TCP	TRACK: BLACK, LAMP HOLDER: BLACK, BULB HOUSING: BLACK
F2	HORNET HP RECESSED FIXED LED HDL-HP-R-NC-A17.T.18. 120.0-10V (HOUSING) HDL-HP-RD-A17.T.MWW.FL.309 (TRIM)	AMERLUX	TRIM: WHITE
F3	HORNET HP RECESSED FIXED LED HDL-HP-R-NC-A17.T.18. 120.0-10V (HOUSING) HDL-HP-RD-A17.T.MBB.FL.309 (TRIM)	AMERLUX	TRIM: BLACK
F4	RECESSED MULTIPLE PAR 30 SYSTEM NMRI-13N1075 (HOUSING); NMRT-13652WW (TRIM) LED12E26P30S30KNFL (LAMPS)	NORA LIGHTING	HOUSING: WHITE, TRIM: WHITE
L1	LED LINEAR FIXTURE LSA-4-4000-35K-HTA-U55-UNI	MERCURY LIGHTING	WHITE
L2	2X4 GRID LED FLAT PANEL FLP24-D53W35	ABOVE ALL LIGHTING	WHITE
EM1	APERION RECESSED RETRACTABLE LED EMERGENCY LIGHT APAL-WH-UI	EVENLITE	WHITE
EM2	MAXILUME LED EMERGENCY LIGHT ELM-LED-809-W	ELITE	WHITE
	EDGE-LIT EXIT SIGN REXASFREMC-P	CONTECH	WHITE

NOTES

SCOPE OF WORK TO INCLUDE:

1. LIGHT FIXTURES: INSTALL ALL LIGHT FIXTURES AS SHOWN. TRIMS TO BE WHITE OR BLACK TO MATCH ADJACENT FINISH, U.O.N.
2. ELECTRICAL OUTLETS: INSTALL DUPLEX RECEPTACLES AT CEILING AS SHOWN ON RCP. DEVICE COVER PLATES AT CEILING TO BE WHITE OR BLACK TO MATCH ADJACENT FINISH, U.O.N.
3. WIFI: PROVIDE CAT6 CABLES AS SPECIFIED FROM BOH TO NEAR CENTER OF CEILING AT SITE OF AEROHIVE DEVICE. COVER PLATE TO BE WHITE TO MATCH ADJACENT CEILING FINISH. EXACT LOCATION TO BE COORDINATED WITH OWNER'S REPRESENTATIVE.
4. SPEAKERS/AUDIO SYSTEM: GC TO COORDINATE WITH AUDIO VENDOR/LOVESAC (NOT SHOWN)
5. SHOPPERTRAK: PROVIDE POWER AND CAT6 CABLE AT SITE OF INSTALLATION (NOT SHOWN). LOCATION TO BE COORDINATED WITH OWNER'S REPRESENTATIVE.
6. LIFE SAFETY: EMERGENCY LIGHTS, EXIT SIGNAGE, ETC. TO BE INSTALLED AS PER CODE AND LL CRITERIA (SEE ENGINEERING DRAWINGS FOR ADDITIONAL INFO). EXIT FIXTURES IN SALES AREA TO BE CEILING-MOUNTED WITH RECESSED BASES, U.O.N.

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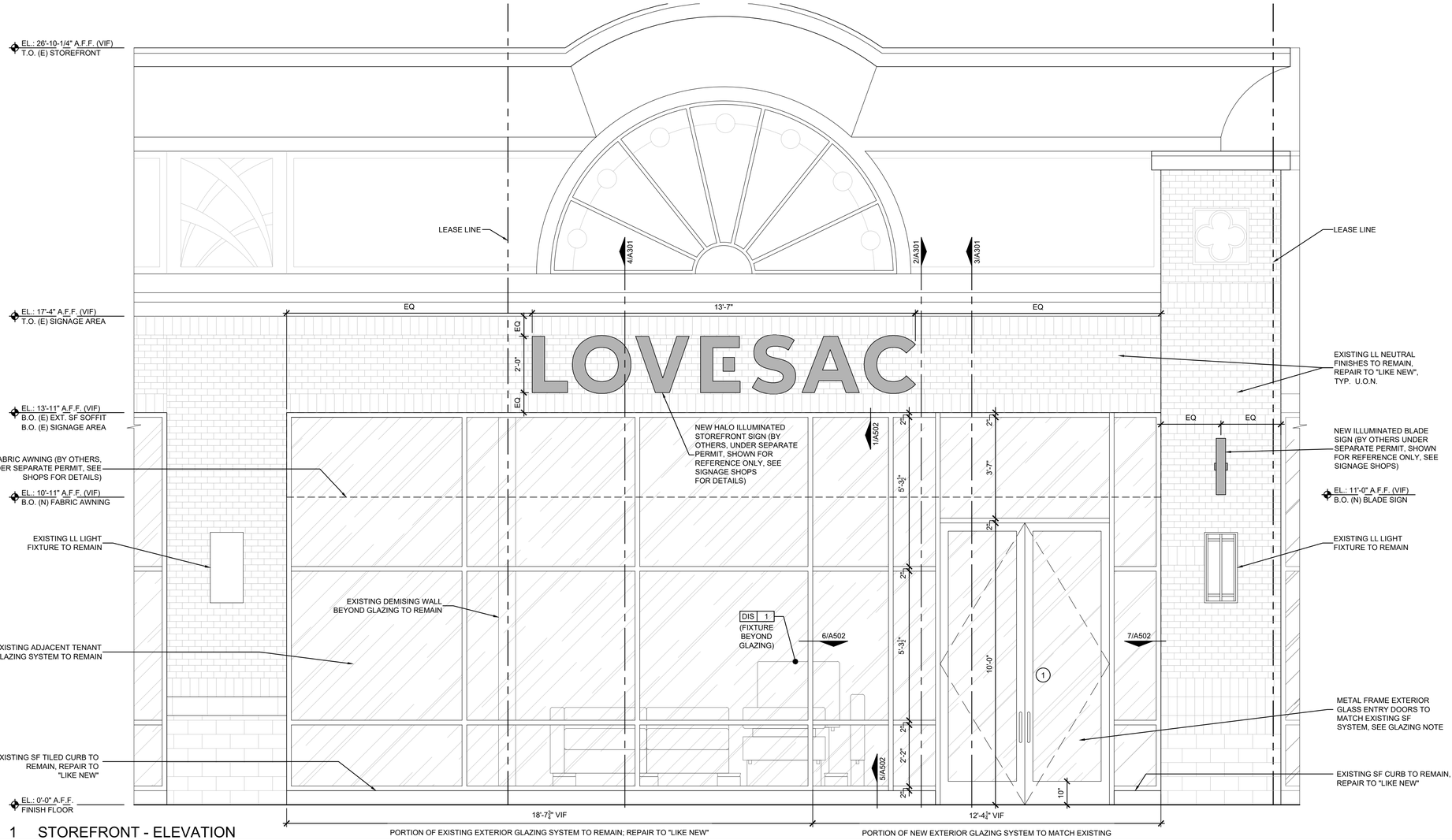
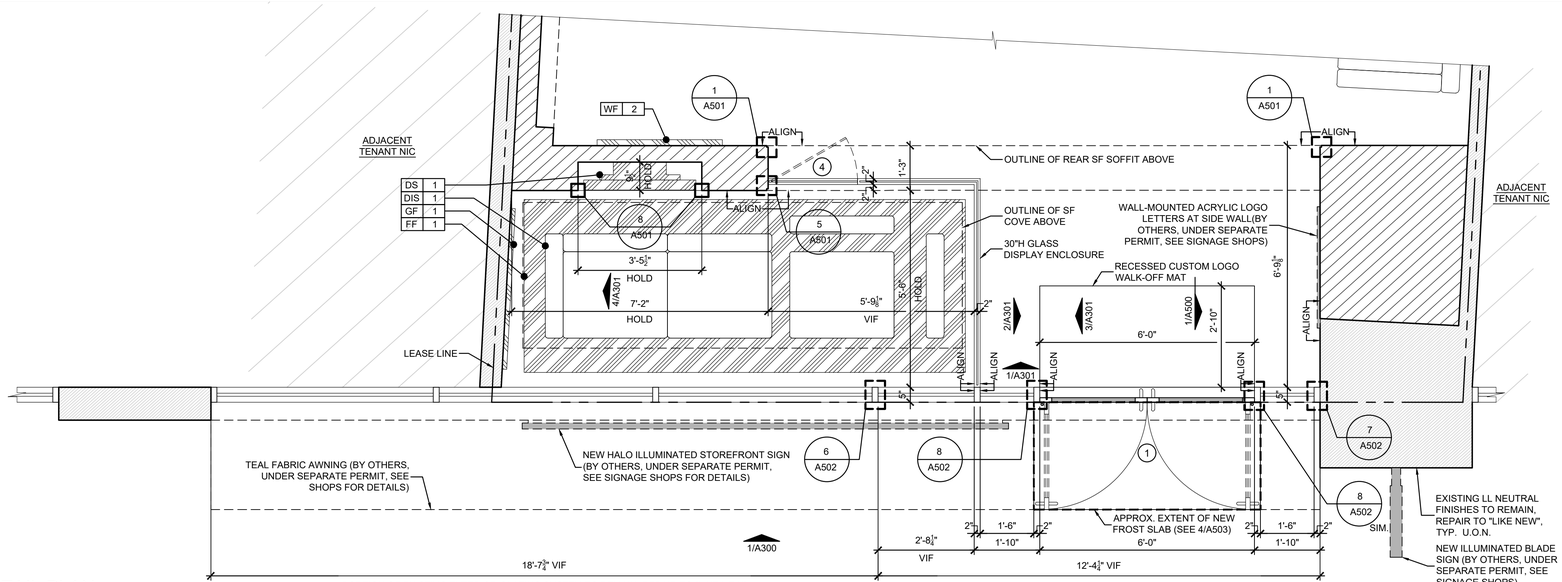
A201

REFLECTED CEILING PLAN
POWER PLAN & LIGHTING



1 STOREFRONT - ELEVATION

A300 SCALE: 1/2"=1'-0"



2 STOREFRONT - DETAIL PLAN

A300 SCALE: 1/2"=1'-0"

NOTES

ALL NEW EXTERIOR GLAZING SHALL BE INSULATED UNITS PER IECC TABLE C402.4

CLIMATE ZONE:4A
0.2 ≤ PF < 0.5

FIXED FENESTRATION	ENTRANCE DOORS
U-FACTOR = 0.38	U-FACTOR = 0.77
SHGC = 0.43	SHGC = 0.43

SCOPE OF WORK TO INCLUDE:

1. CONSTRUCTION: INSTALLATION OF NEW PORTION OF STOREFRONT GLAZING, ENTRY DOORS, AND FRAMING AS SHOWN.
2. FINISHES: INSTALLATION OF INTERIOR DISPLAY/ENTRY FINISHES AS NOTED (SEE A600 FOR FINISH SCHEDULE). NO TENANT FINISHES TO PROJECT BEYOND LEASE LINE. ANY FINISHES TO REMAIN TO BE RESTORED TO "LIKE NEW" CONDITION.
3. SIGNAGE:BY OTHERS, UNDER SEPARATE PERMIT & SHOWN FOR REFERENCE ONLY, WILL INCLUDE INSTALLATION OF HALO LIT CHANNEL LETTER SIGNAGE. INSTALLATION OF BLADE SIGN AT STOREFRONT. INSTALLATION OF WALL-MOUNTED ACRYLIC LOGO LETTERS AT ENTRY VESTIBULE. INSTALLATION OF FABRIC AWNINGS.
4. STOREFRONT FIXTURES:
   A. CONSTRUCTION/INSTALLATION OF FREESTANDING DISPLAY STAGE (FF/1).
   B. INSTALLATION OF DISPLAY AREA VIDEO SCREEN(S) (DS/1).
   C. INSTALLATION OF DISPLAY AREA GRAPHIC FRAME (GF/1).
5. UV FILM: GC TO REMOVE ANY EXISTING FILM AT GLAZING (IF APPLICABLE), REPAIR GLAZING TO "LIKE NEW" CONDITION, AND INSTALL NEW UV FILM (EDGE FILM TECHNOLOGIES PRISTINE CERAMIC 70) AT INTERIOR SURFACE OF ALL STOREFRONT GLAZING.

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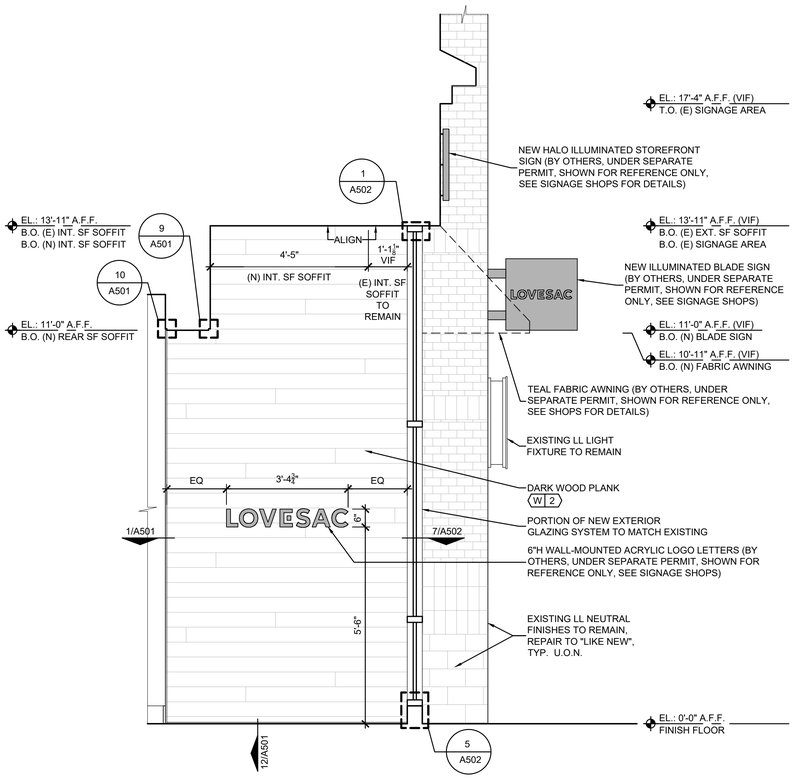
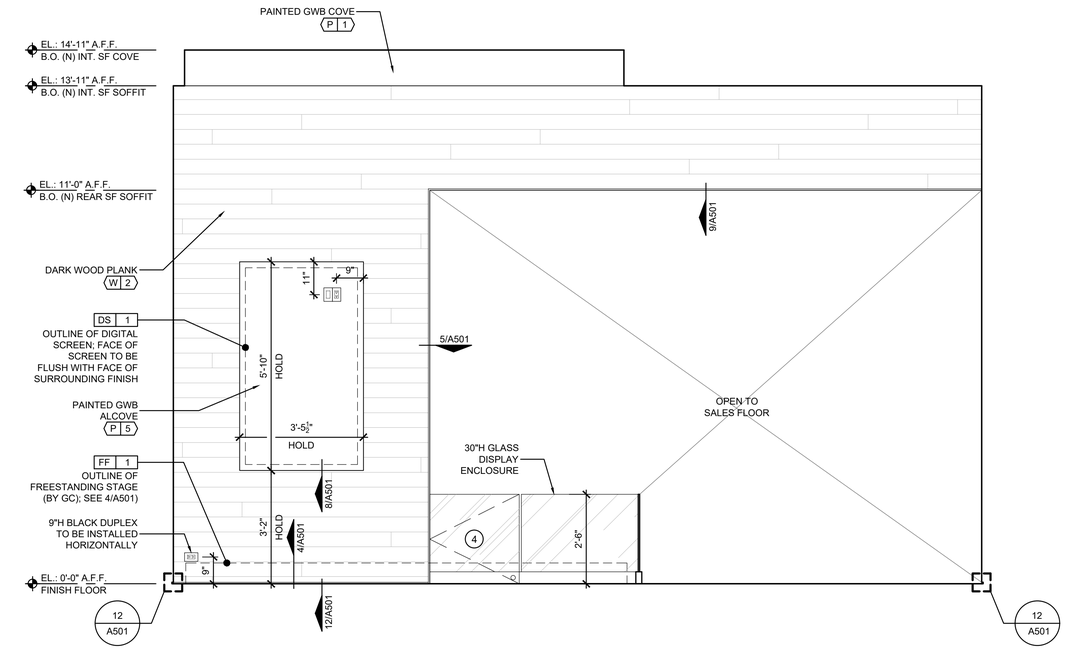
A300

STOREFRONT
ELEVATION & DETAIL PLAN



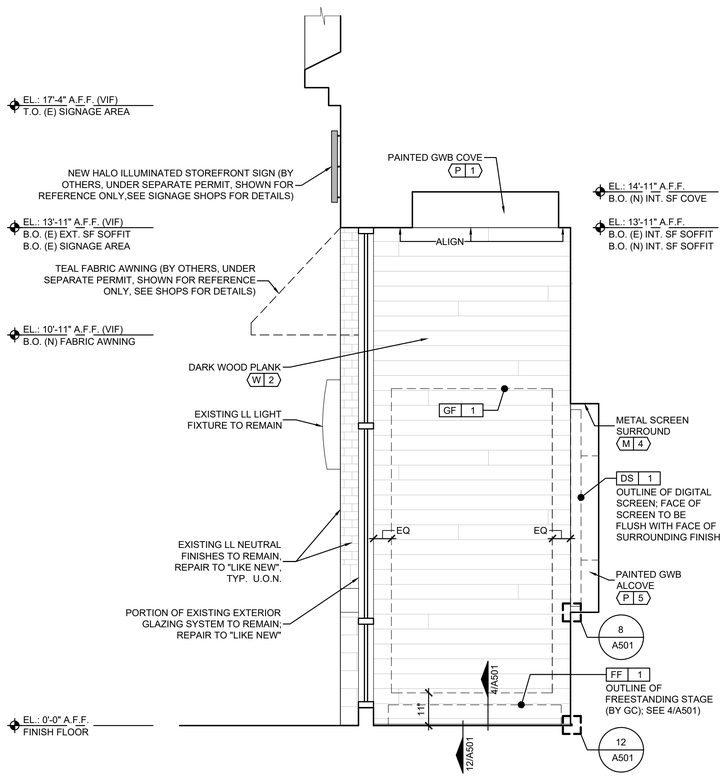
2 STOREFRONT - SIDE WALL AT ENTRY

A301 SCALE: 1/2"=1'-0"



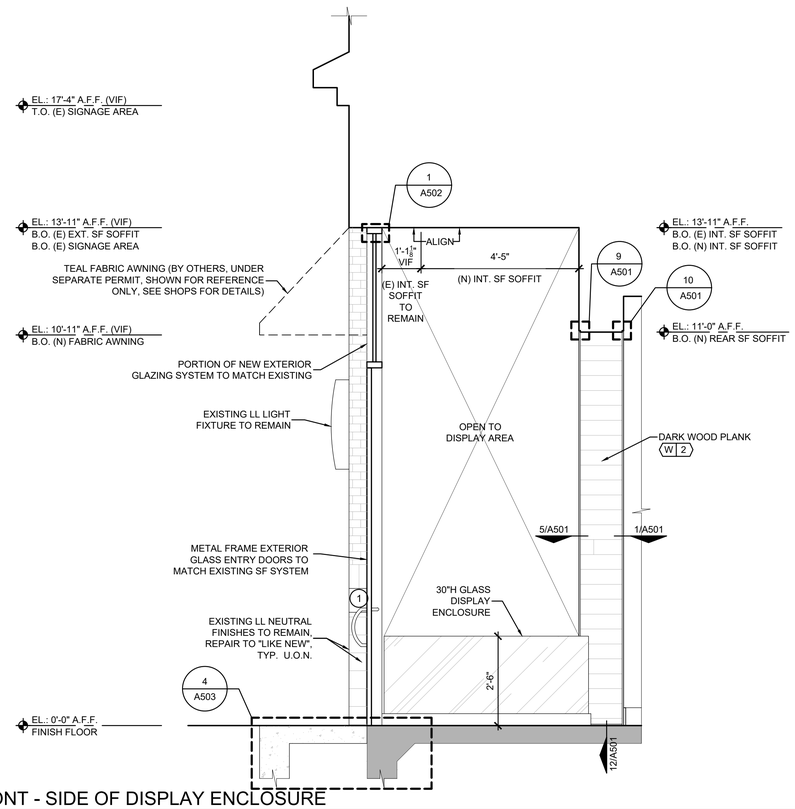
1 STOREFRONT - DISPLAY AREA REAR WALL

A301 SCALE: 1/2"=1'-0"



4 STOREFRONT - SIDE WALL AT DISPLAY AREA

A301 SCALE: 1/2"=1'-0"



3 STOREFRONT - SIDE OF DISPLAY ENCLOSURE

A301 SCALE: 1/2"=1'-0"

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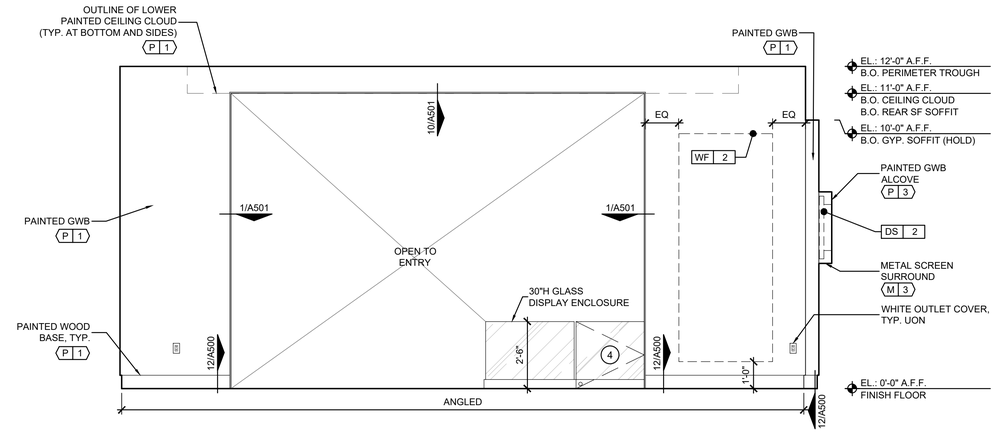
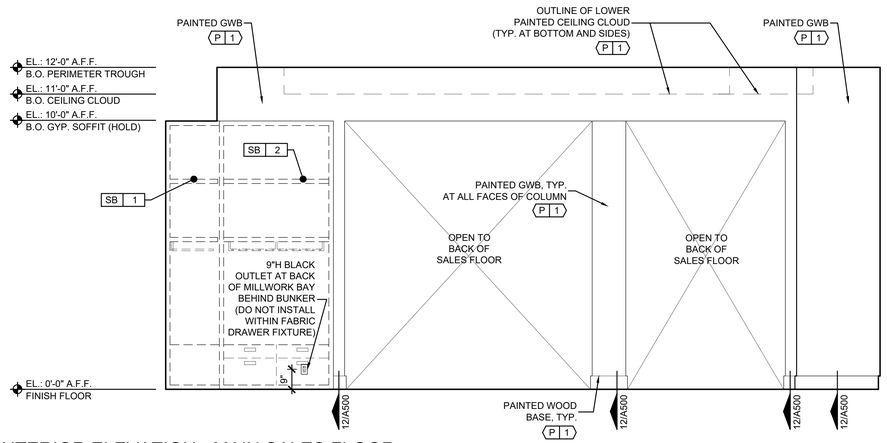
STOREFRONT SECTION



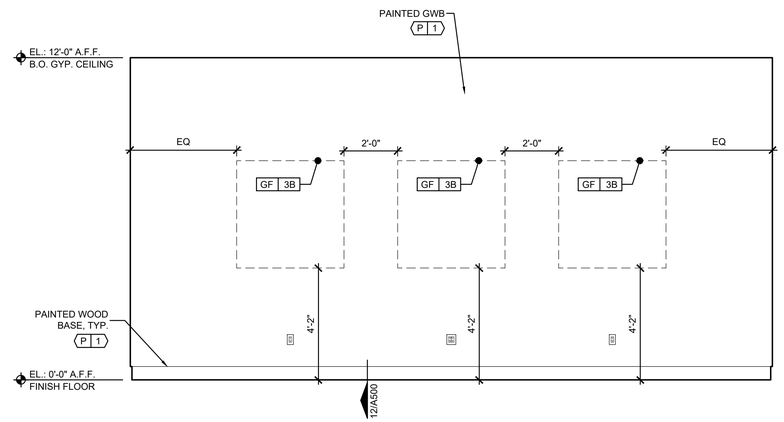
1 INTERIOR ELEVATION - MAIN SALES FLOOR

A400 SCALE: 3/8"=1'-0"



2 INTERIOR ELEVATION - MAIN SALES FLOOR

A400 SCALE: 3/8"=1'-0"



3 INTERIOR ELEVATION - MAIN SALES FLOOR

A400 SCALE: 3/8"=1'-0"

FIXTURE SCHEDULE

FIXTURE#	NAME
FF 1	FREESTANDING STAGE (12'-4"W x 4'-10"D x 7"H)
FF 2	CASHWRAP (LEFT-HANDED)
FF 3	MOBILE BLOCKS TABLE
FF 4	ST BLOCKS TABLE
SB 1	FABRIC HANGING SHELVING BAY AND FABRIC SWATCH DRAWERS
SB 2	MODIFIED FABRIC HANGING SHELVING BAY AND FABRIC SWATCH DRAWERS
SB 3	SACS SHELVING BAY
SB 4	BOH VESTIBULE SHELVING BAY (NOT USED)
SB 5	SACTIONALS SHELVING BAY (NOT USED)
DS 1	STOREFRONT SCREEN - 75" HIGH-BRIGHT PORTRAIT
DS 2	INTERIOR SCREEN - 55" LANDSCAPE
DS 3	INTERIOR SCREEN - 75" LANDSCAPE (NOT USED)
DS 4	ST SCREEN - 55" LANDSCAPE EDGE-LIT 4K UHD
WF 1	BUILT TO LAST WALL
WF 2	DESIGNED FOR LIFE WALL (8'-6"H THIN VERSION)
WF 3	NOT USED
WF 4	ST HALO-LIT WALL PANEL
GF 1	STOREFRONT GRAPHIC FRAME - SIZE E (54"W x 102"H)
GF 2	CASHWRAP LED GRAPHIC FRAME - SIZE B (70"W x 28"H)
GF 3A	SALES AREA GRAPHIC FRAME - SIZE J (60"W x 60"H)
GF 3B	SALES AREA GRAPHIC FRAME - SIZE K (48"W x 48"H)
GF 3C	SALES AREA GRAPHIC FRAME - SIZE L (42"W x 72"H)
GF 4	ST LED GRAPHIC FRAME - SIZE T (58"W x 90"H)
GF 5	DOUBLE-SIDED HANGING LED GRAPHIC FRAME (NOT USED)
GF 6	SACS AREA GRAPHIC FRAME - SIZE U (72"W x 36"H)

NOTES

1. GC RESPONSIBLE FOR INCLUDING SUFFICIENT FIRE-RATED BLOCKING AT ALL BUILT-IN WALL/CEILING FIXTURE LOCATIONS AS NECESSARY (SEE MILLWORK SHOP DRAWINGS).
2. SEE A101 FOR FINISH SCHEDULE.

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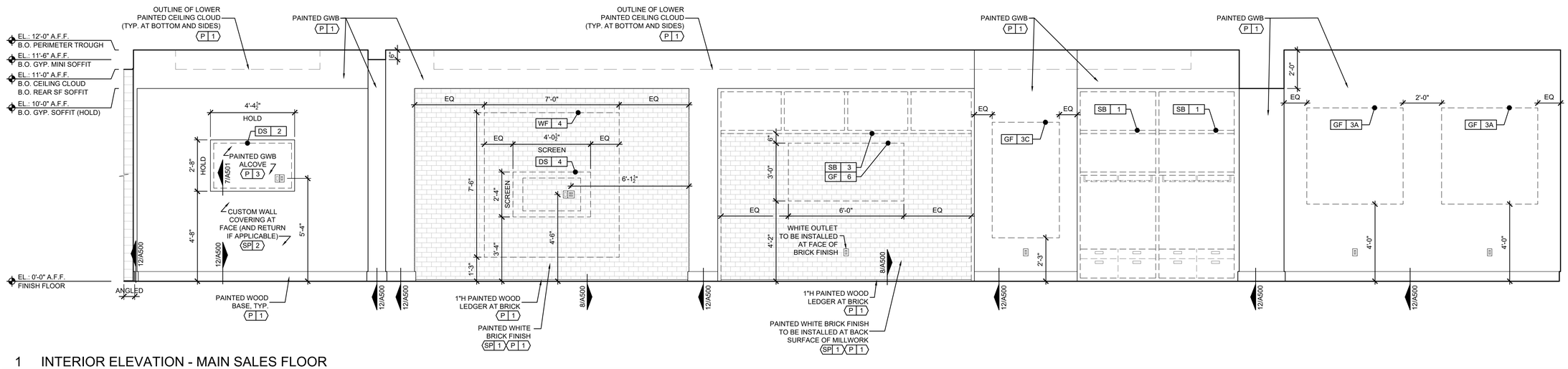
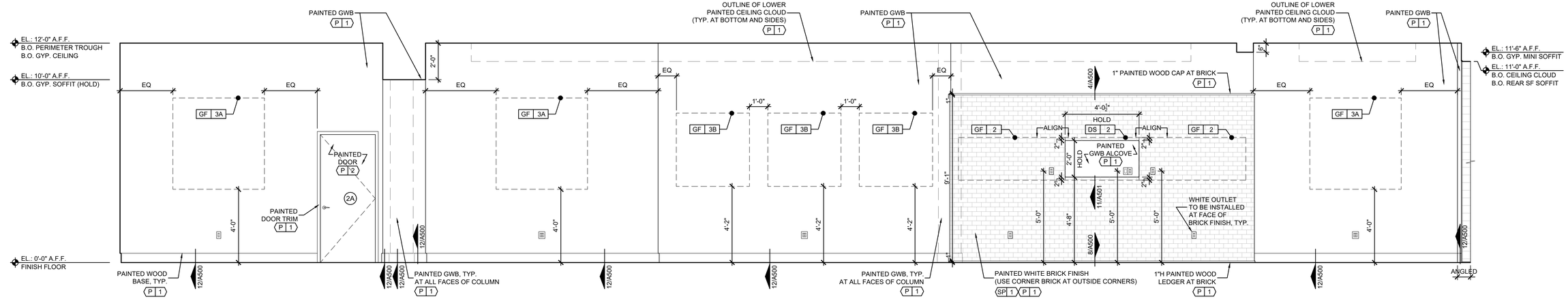
INTERIOR ELEVATIONS
SALES FLOOR



1 INTERIOR ELEVATION - MAIN SALES FLOOR

A401 SCALE: 3/8"=1'-0"



2 INTERIOR ELEVATION - MAIN SALES FLOOR

A401 SCALE: 3/8"=1'-0"

FIXTURE SCHEDULE

FIXTURE#	NAME
FF 1	FREESTANDING STAGE (12'-4"W x 4'-10"D x 7"H)
FF 2	CASHWRAP (LEFT-HANDED)
FF 3	MOBILE BLOCKS TABLE
FF 4	ST BLOCKS TABLE
SB 1	FABRIC HANGING SHELVING BAY AND FABRIC SWATCH DRAWERS
SB 2	MODIFIED FABRIC HANGING SHELVING BAY AND FABRIC SWATCH DRAWERS
SB 3	SACS SHELVING BAY
SB 4	BOH VESTIBULE SHELVING BAY (NOT USED)
SB 5	SACTIONALS SHELVING BAY (NOT USED)
DS 1	STOREFRONT SCREEN - 75" HIGH-BRIGHT PORTRAIT
DS 2	INTERIOR SCREEN - 55" LANDSCAPE
DS 3	INTERIOR SCREEN - 75" LANDSCAPE (NOT USED)
DS 4	ST SCREEN - 55" LANDSCAPE EDGE-LIT 4K UHD

FIXTURE SCHEDULE

FIXTURE#	NAME
WF 1	BUILT TO LAST WALL
WF 2	DESIGNED FOR LIFE WALL (8'-6"H THIN VERSION)
WF 3	NOT USED
WF 4	ST HALO-LIT WALL PANEL
GF 1	STOREFRONT GRAPHIC FRAME - SIZE E (54"W x 102"H)
GF 2	CASHWRAP LED GRAPHIC FRAME - SIZE B (70"W x 28"H)
GF 3A	SALES AREA GRAPHIC FRAME - SIZE J (60"W x 60"H)
GF 3B	SALES AREA GRAPHIC FRAME - SIZE K (48"W x 48"H)
GF 3C	SALES AREA GRAPHIC FRAME - SIZE L (42"W x 72"H)
GF 4	ST LED GRAPHIC FRAME - SIZE T (58"W x 90"H)
GF 5	DOUBLE-SIDED HANGING LED GRAPHIC FRAME (NOT USED)
GF 6	SACS AREA GRAPHIC FRAME - SIZE U (72"W x 36"H)

NOTES

1. GC RESPONSIBLE FOR INCLUDING SUFFICIENT FIRE-RATED BLOCKING AT ALL BUILT-IN WALL/CEILING FIXTURE LOCATIONS AS NECESSARY (SEE MILLWORK SHOP DRAWINGS).
2. SEE A101 FOR FINISH SCHEDULE.

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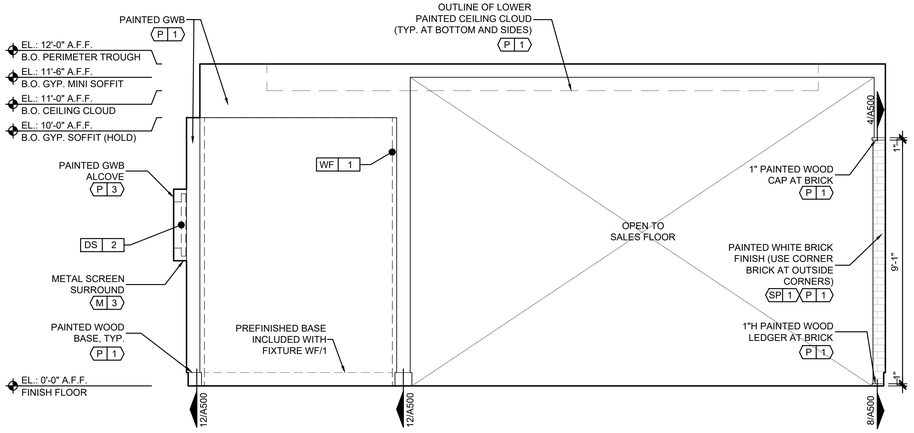
INTERIOR ELEVATIONS
SALES FLOOR

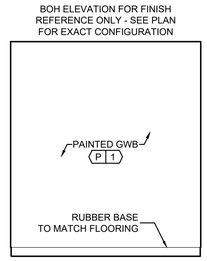


5 INTERIOR ELEVATION - SALES WF/1 WALL

A402 SCALE: 3/8"=1'-0"

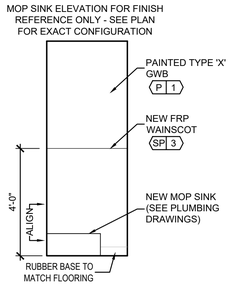
2 INT. ELEV - TYP. TOILET

A402 SCALE: 3/8"=1'-0"



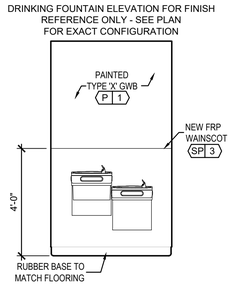
1 INT. ELEV - TYP. BOH AREAS

A402 SCALE: 3/8"=1'-0"



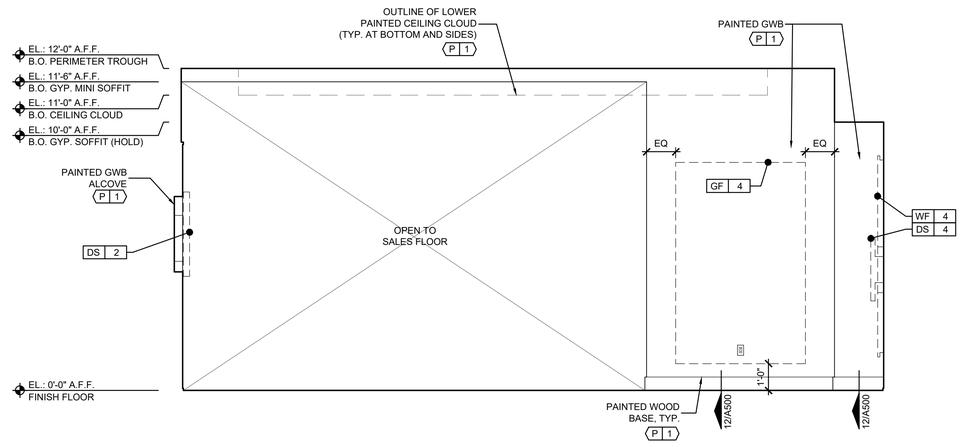
4 INT. ELEV - TYP. MOP SINK

A402 SCALE: 3/8"=1'-0"



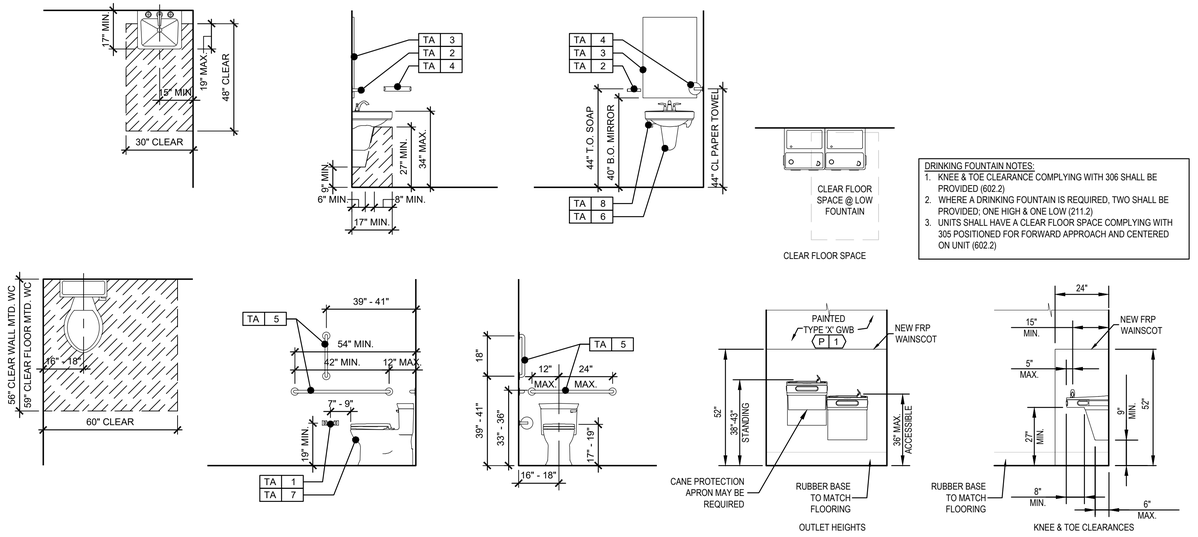
3 INT. ELEV - TYP. FOUNTAIN

A402 SCALE: 3/8"=1'-0"



7 INTERIOR ELEVATION - SALES GF/4 WALL

A402 SCALE: 3/8"=1'-0"



DRINKING FOUNTAIN NOTES:
1. KNEE & TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED (602.2)
2. WHERE A DRINKING FOUNTAIN IS REQUIRED, TWO SHALL BE PROVIDED: ONE HIGH & ONE LOW (211.2)
3. UNITS SHALL HAVE A CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR FORWARD APPROACH AND CENTERED ON UNIT (602.2)

6 ADA TOILET, LAV, AND DRINKING FOUNTAIN CLEARANCES

A402 SCALE: 3/8"=1'-0"

TOILET ACCS SCHEDULE

FIXTURE#	DESCRIPTION	MFR & MODEL	REMARKS
TA 1	SURFACE MOUNTED TOILET PAPER DISPENSER	FRANKLIN BRASS FUTURA DOUBLE POST CHROME (OR SIMILAR)	
TA 2	SURFACE MOUNTED SOAP DISH	FRANKLIN BRASS FUTURA CHROME (OR SIMILAR)	
TA 3	30" x 36" SURFACE MOUNTED MIRROR	GLACIER BAY 30" X 36" BEVELED EDGE (OR SIMILAR)	INSTALL MAX. 40" A.F.F.
TA 4	SURFACE MOUNTED ROLL PAPER TOWEL DISPENSER (NON-LOCKABLE)	INTERDESIGN FORMA SWIVEL IN STAINLESS STEEL (OR SIMILAR)	MUST HOLD STANDARD ROLL OF PAPER TOWELS
TA 5	36" & 42" GRAB BARS; 18" VERTICAL ONLY IF REQ. BY LOCAL CODE	BOBRICK 6806 (OR EQUAL)	MUST BE ADA COMPLIANT
TA 6	SAFETY COVERS FOR PIPES UNDER LAVATORY	TRUEBRO LAV GUARD 2 (OR EQUAL)	
TA 7	WATER CLOSET	COORDINATE WITH PLUMBING DRAWINGS IF REQ.	NEW
TA 8	LAVATORY	COORDINATE WITH PLUMBING DRAWINGS IF REQ.	NEW

NOTE - G.C. TO VERIFY IN FIELD THE EXISTENCE OF ACCESSORIES AND PROVIDE ONLY IF NOT EXISTING

NOTES

1. GC RESPONSIBLE FOR INCLUDING SUFFICIENT FIRE-RATED BLOCKING AT ALL BUILT-IN WALL/CEILING FIXTURE LOCATIONS AS NECESSARY (SEE MILLWORK SHOP DRAWINGS).
2. SEE A101 FOR FINISH SCHEDULE.
3. GC TO INSTALL A WATERPROOF MEMBRANE IN ALL WET AREAS OF THE SPACE, USING A 30-MIL POLYETHYLENE CLEAVAGE MEMBRANE (EQUAL TO NOBELSEAL TS) INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND ANSI A108, MEMBRANE MUST BE EXTENDED UP THE WALL A MINIMUM OF 4" OR EQUAL TO THE HEIGHT OF THE FLOOR BASE.

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STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT

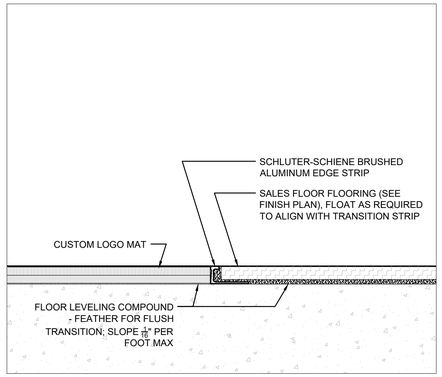
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB
Date	Issue
07-10-25	Permit Set

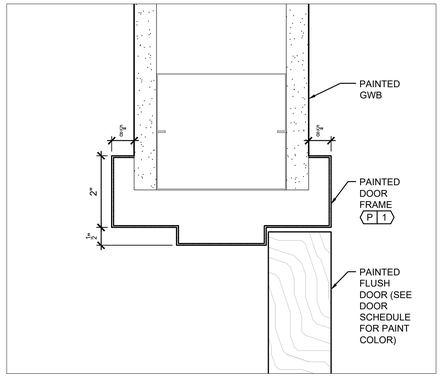
A402

INTERIOR ELEVATIONS
SALES FLOOR, BOH,
TOILET ROOM



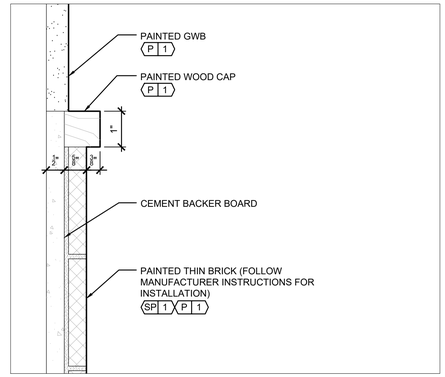
1 ENTRY MAT TO SALES FLR TRANSITION

A500 SCALE: 6"=1'-0"



3 TYP. INT. DOOR JAMB

A500 SCALE: 6"=1'-0"



4 INT. PTD BRICK FINISH AT CAP

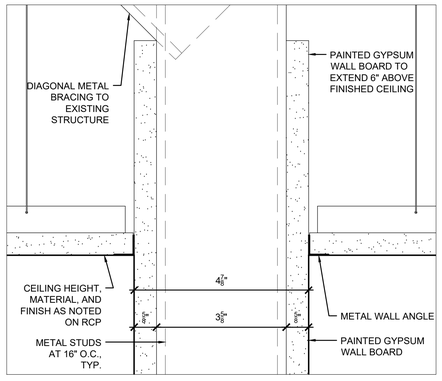
A500 SCALE: 6"=1'-0"

5 NOT USED

A500 SCALE: 6"=1'-0"

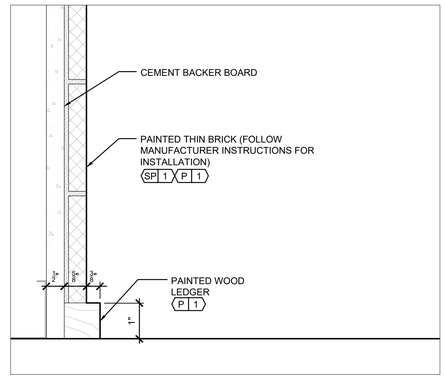
6 NOT USED

A500 SCALE: 6"=1'-0"



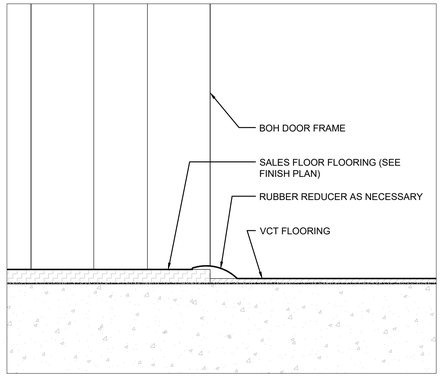
7 INT. WALL - 5"

A500 SCALE: 6"=1'-0"



8 INT. PTD BRICK FINISH AT BASE

A500 SCALE: 6"=1'-0"

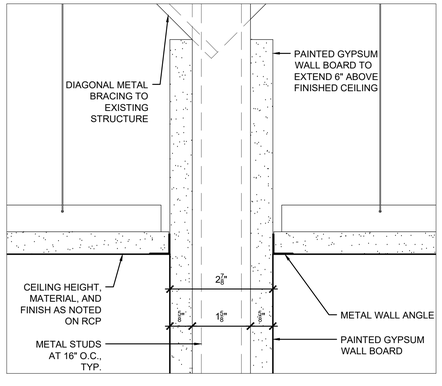


9 SALES FLOOR TO BOH VCT TRANSITION

A500 SCALE: 6"=1'-0"

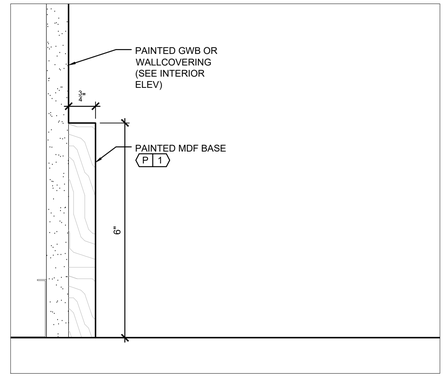
10 NOT USED

A500 SCALE: 6"=1'-0"



11 INT. THIN WALL - 3"

A500 SCALE: 6"=1'-0"



12 TYP. PAINTED WOOD BASE

A500 SCALE: 6"=1'-0"

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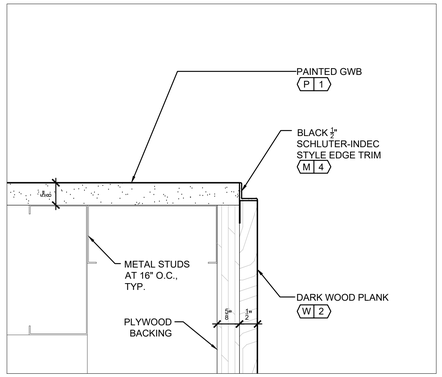
A500

DETAILS
INTERIOR FLOOR, WALL & DOOR DETAILS

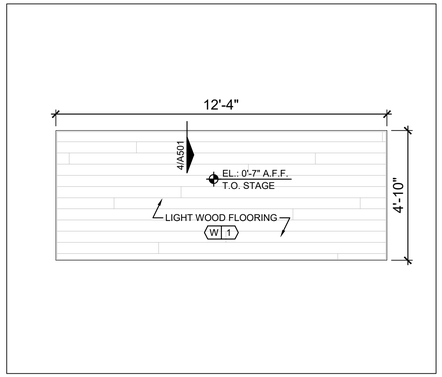


1 PLAN AT PLANK WALL/GWB CORNER

A501 SCALE: 6"=1'-0"

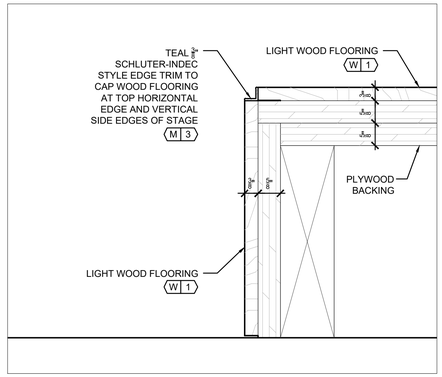
2 NOT USED

A501 SCALE: 6"=1'-0"



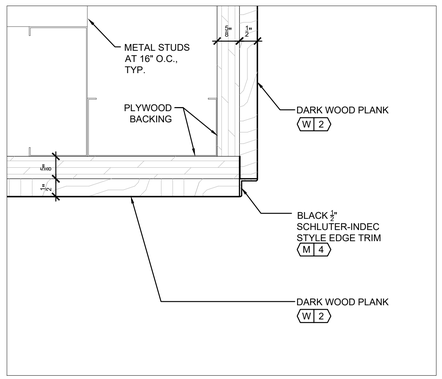
3 PLAN AT FREESTANDING STAGE (FF/1)

A501 SCALE: 3/8"=1'-0"



4 SECTION AT FREESTANDING STAGE (FF/1)

A501 SCALE: 6"=1'-0"

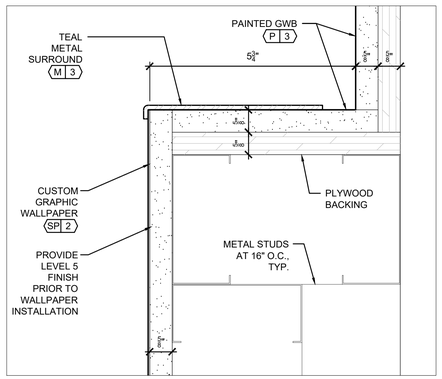


5 PLAN AT PLANK WALL OUTSIDE CORNER

A501 SCALE: 6"=1'-0"

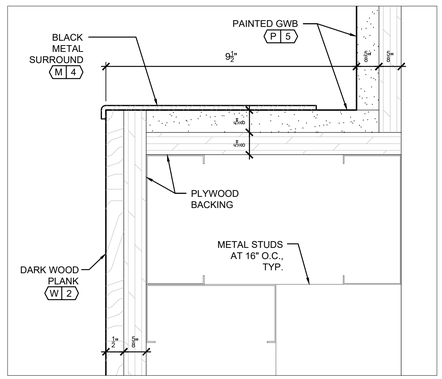
6 NOT USED

A501 SCALE: 6"=1'-0"



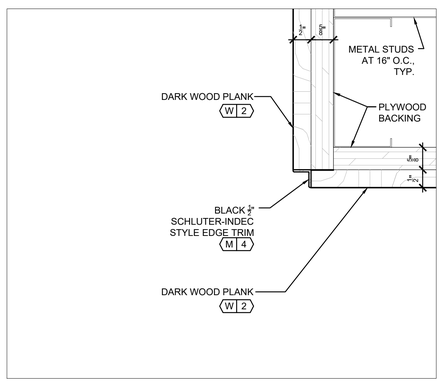
7 SECTION AT WALLPAPER SCREEN

A501 SCALE: 6"=1'-0"



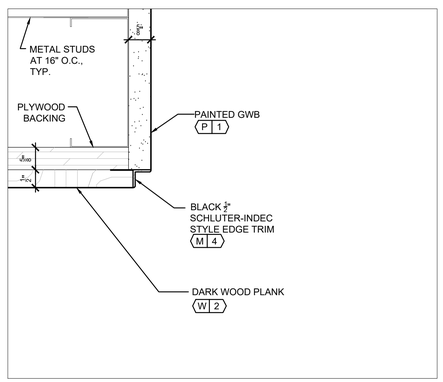
8 SECTION AT STOREFRONT SCREEN

A501 SCALE: 6"=1'-0"



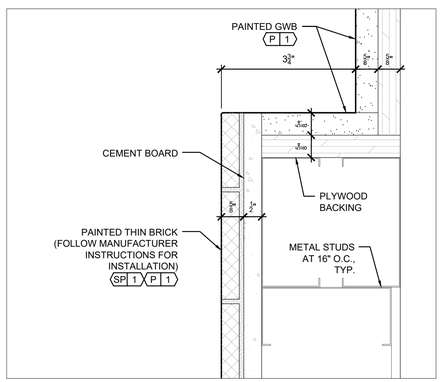
9 SECTION AT FACE OF SF REAR SOFFIT

A501 SCALE: 6"=1'-0"



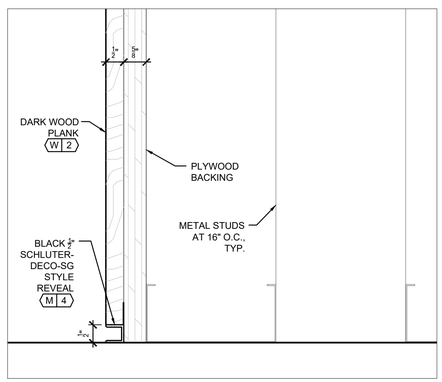
10 SECTION AT PLANK SOFFIT/GWB

A501 SCALE: 6"=1'-0"



11 SECTION AT CASHWRAP SCREEN

A501 SCALE: 6"=1'-0"



12 SECTION AT PLANK WALL BASE

A501 SCALE: 6"=1'-0"

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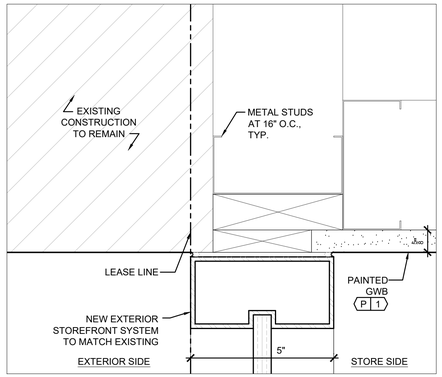
A501

DETAILS
INTERIOR PLANK &
SCREEN RECESS DETAILS



1 SECTION AT TOP OF GLAZING

A502 SCALE: 6"=1'-0"

2 NOT USED

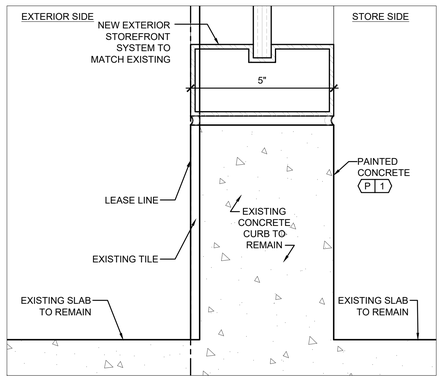
A502 SCALE: 6"=1'-0"

3 NOT USED

A502 SCALE: 6"=1'-0"

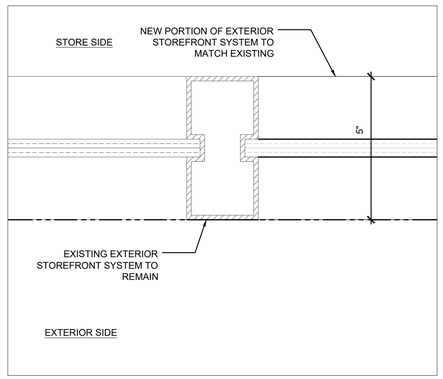
4 NOT USED

A502 SCALE: 6"=1'-0"



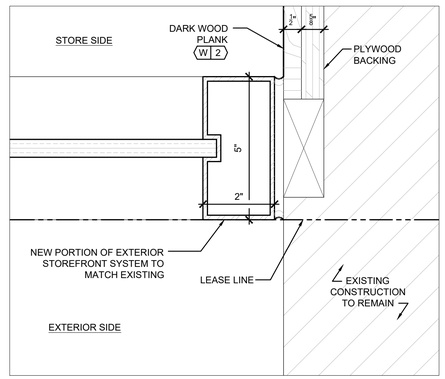
5 SECTION AT STOREFRONT CURB

A502 SCALE: 6"=1'-0"



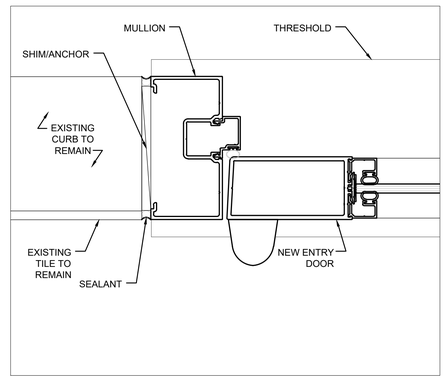
6 PLAN AT (E) TO (N) SF SYSTEM TRANSITION

A502 SCALE: 6"=1'-0"



7 PLAN AT RIGHT NEUTRAL PIER

A502 SCALE: 6"=1'-0"



8 PLAN AT LEFT CURB TO DOOR

A502 SCALE: 6"=1'-0"

9 NOT USED

A502 SCALE: 6"=1'-0"

10 NOT USED

A502 SCALE: 6"=1'-0"

11 NOT USED

A502 SCALE: 6"=1'-0"

12 NOT USED

A502 SCALE: 6"=1'-0"

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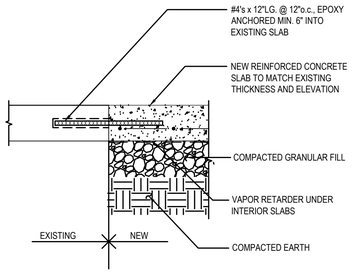
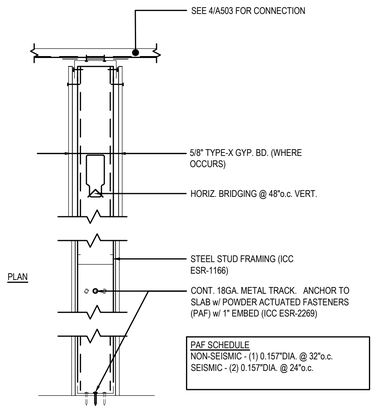
DETAILS
STOREFRONT DETAILS



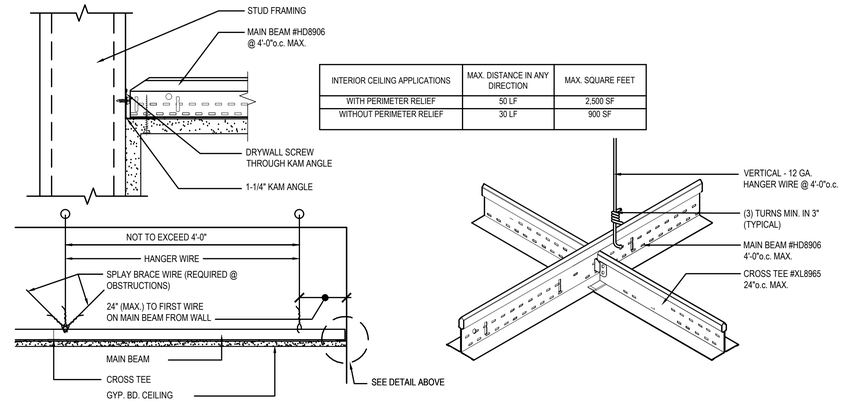
1 CONCRETE SLAB IN-FILL DETAIL

A503 SCALE: 1-1/2"=1'-0"



2 INTERIOR PARTITION DETAIL

A503 SCALE: 1"=1'-0"



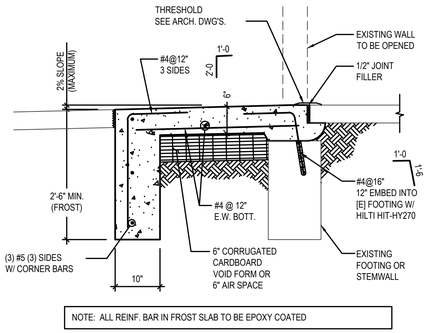
INTERIOR CEILING APPLICATIONS	MAX. DISTANCE IN ANY DIRECTION	MAX. SQUARE FEET
WITH PERIMETER RELIEF	50 LF	2,500 SF
WITHOUT PERIMETER RELIEF	30 LF	900 SF

SUSPENDED CEILING DETAIL @ WALL

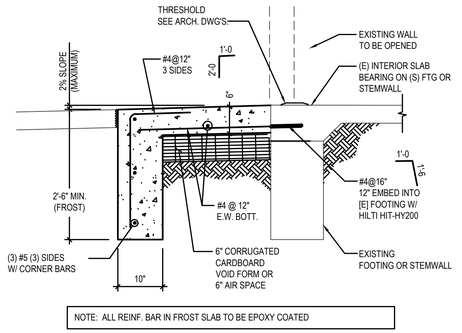
3 GYPSUM BOARD SUSPENDED CEILING SYSTEM

A503 SCALE: N.T.S.

USE THIS IF INTERIOR SLAB DOESNT TURN DOWN ON TOP OF SILL WALL

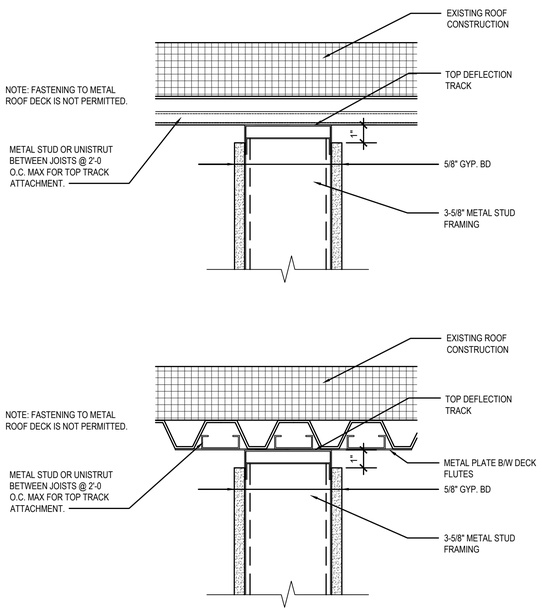


USE THIS IF INTERIOR SLAB TURNS DOWN ON TOP OF SILL WALL



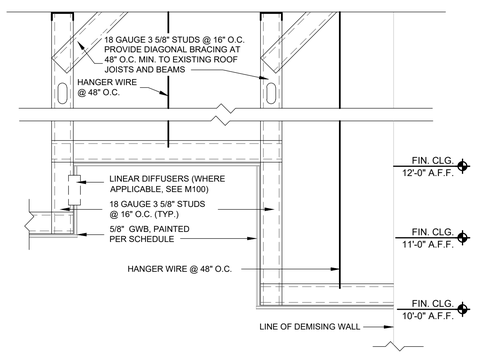
4 TYPICAL FROST SLAB AT EXISTING WALL

A503 SCALE: N.T.S.



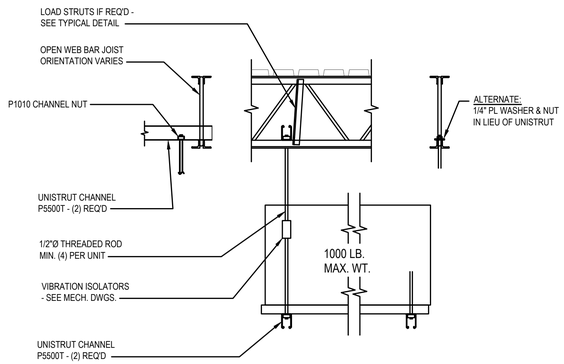
5 TYP FRAMING CONNECTION DETAIL

A503 SCALE: 1"=1'-0"



6 TYP SOFFIT/CLOUD DETAIL

A503 SCALE: 1"=1'-0"



7 TYP. FRAMING CONNECTION DETAIL

A503 SCALE: N.T.S.

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A503

DETAILS
CONSTRUCTION DETAILS

SECTION 00 7200 - GENERAL CONDITIONS

FORM OF GENERAL CONDITIONS

AIA Document A201, General Conditions of the Contract for Construction, 2017 Edition.

SECTION 01 2500 - SUBSTITUTION PROCEDURES

1.01 DEFINITIONS

A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials, products, assemblies, and equipment.
   1. Substitutions for Cause: Proposed due to changed Project circumstances beyond Contractor's control.
   2. Substitutions for Convenience: Proposed due to possibility of offering substantial advantage to the Project.
      a. Substitution requests offering advantages solely to the Contractor will not be considered.

3.01 GENERAL REQUIREMENTS

A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
   1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
   2. Agrees to provide the same warranty for the substitution as for the specified product.
   3. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
   4. Waives claims for additional costs or time extension that may subsequently become apparent.
   5. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.

B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.

C. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
   1. No specific form is required. Contractor's Substitution Request documentation must include the following:
      a. Substitution Request Information:
         1) Indication of whether the substitution is for cause or convenience.
         2) Issue date.
         3) Reference to particular Contract Document(s) specification section number, title, and article/paragraph(s).
         4) Description of Substitution.
         5) Reason why the specified item cannot be provided.
         6) Differences between proposed substitution and specified item.
         7) Description of how proposed substitution affects other parts of work.
      b. Comparative Data: Provide point-by-point, side-by-side comparison addressing essential attributes specified, as appropriate and relevant for the item:
         1) Physical characteristics.
         2) In-service performance.
         3) Expected durability.
         4) Visual effect.
         5) Warranties.
         6) Other salient features and requirements.
         7) Include, as appropriate or requested, the following types of documentation:
            (a)Product Data:
            (b)Samples.
            (c)Certificates, test, reports or similar qualification data.
            (d)Drawings, when required to show impact on adjacent construction elements.
      c. Impact of Substitution:
         1) Savings to Owner for accepting substitution.
         2) Change to Contract Time due to accepting substitution.

D. Limit each request to a single proposed substitution item.

3.02 SUBSTITUTION PROCEDURES DURING CONSTRUCTION

A. Architect will consider requests for substitutions only within 15 days after date of Agreement.

B. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.

C. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
   1. In addition to meeting general documentation requirements, document how the requested substitution benefits the Owner through cost savings, time savings, greater energy conservation, or in other specific ways.
   2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.
   3. Bear the costs engendered by proposed substitution of:
      a. Owner's compensation to the Architect for any required redesign, time spent processing and evaluating the request.

D. Substitutions will not be considered under one or more of the following circumstances:
   1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.
   2. Without a separate written request.

3.03 RESOLUTION

A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.

B. Architect will notify Contractor in writing of decision to accept or reject request.

3.04 ACCEPTANCE

A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

SECTION 01 3000 - ADMINISTRATIVE REQUIREMENTS

1.01 GENERAL ADMINISTRATIVE REQUIREMENTS

A. Comply with requirements of Section 01 7000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.

B. Make the following types of submittals to Architect through the General Contractor:
   1. Requests for Information (RFI).
   2. Requests for substitution.
   3. Shop drawings, product data, and samples.
   4. Test and inspection reports.
   5. Design data.
   6. Manufacturer's instructions and field reports.
   7. Applications for payment and change order requests.
   8. Progress schedules.
   9. Correction Punch List and Final Correction Punch List for Substantial Completion.
   10. Closeout submittals.

3.01 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at regular intervals, appropriate to the stage of Work.

B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.

C. Record minutes and distribute copies within two days after meeting to participants, with copies to Architect, Owner, participants, and those affected by decisions made.

3.02 CONSTRUCTION PROGRESS SCHEDULE

A. Within 10 days after date established in Notice to Proceed, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.

3.03 PROGRESS PHOTOGRAPHS

A. Submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.

3.04 REQUESTS FOR INFORMATION (RFI)

A. Definition: A request seeking one of the following:
   1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.
   2. A resolution to an issue which has arisen due to field conditions and affects design intent.

B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.

C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
   1. Prepare a separate RFI for each specific item.
      a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
      b. Do not forward requests which solely require internal coordination between subcontractors.
   2. The Architect and the architect's consultants will not accept Requests For Information directly from subcontractors and suppliers.

D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
   1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
   2. Unacceptable Uses for RFIs: Do not use RFIs to request the following::
      a. Approval of submittals.
      b. Approval of substitutions.
      c. Changes that entail change in Contract Time and Contract Sum.
      d. Different methods of performing work than those indicated in the Contract Drawings and Specifications.
   3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response, with an explanatory notation.
   4. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, Contract Documents, with no additional input required to clarify the question. They will be returned without a response, with an explanatory notation.
      a. The Owner reserves the right to assess the Contractor for the costs (on time-and-materials basis) incurred by the Architect, and any of its consultants, due to processing of such RFIs.

E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
   1. Official Project name and number, and any additional required identifiers established in Contract Documents.
   2. Discrete and consecutive RFI number, and descriptive subject/title.
   3. Issue date, and requested reply date.
   4. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
   5. Annotations: Field dimensions and/or description of conditions which have engendered the request.
   6. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.

F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.

G. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.

H. Review Time: Architect will respond and return RFIs to Contractor within 7 calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
   1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.

I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.
   1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.
   2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.
   3. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.
   4. Notify Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

3.05 SUBMITTALS FOR REVIEW

A. When the following are specified in individual sections, submit them for review:
   1. Product data, shop drawings, samples for selection and samples for verification.

B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.

C. Samples will be reviewed for aesthetic, color, or finish selection.

D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 7800 - Closeout Submittals.

3.06 SUBMITTALS FOR INFORMATION

A. When the following are specified in individual sections, submit them for information:
   1. Design data, certificates, test reports, inspection reports, manufacturer's instructions, manufacturer's field reports and other types indicated.

B. Submit for Architect's knowledge as contract administrator or for Owner. No action will be taken.

3.07 NUMBER OF COPIES OF SUBMITTALS

A. Documents for Information: Submit one copy electronically in .pdf format.

B. Documents for Project Closeout: Make one reproduction of submittal originally reviewed. Submit one extra of submittals for information.

C. Samples: Submit the number specified in individual specification sections, but not less than 3; one of which will be retained by Architect.

3.08 SUBMITTAL PROCEDURES

A. General Requirements:
   1. Use a separate transmittal for each item.
   2. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
      a. Submittals from sources other than the Contractor, or without Contractor's stamp will not be acknowledged, reviewed, or returned.
      b. Submittals not bearing the contractor's approval will be returned with no action taken.
   3. Send submittals in electronic format via email to Architect.
   4. Schedule submittals to expedite the Project, and coordinate submission of related items.
      a. For each submittal for review, allow 10 days excluding delivery time to and from the Contractor.
      b. For sequential reviews involving Architect's consultants, Owner, or another affected party, allow an additional 7 days.
   5. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
   6. Provide space for Contractor and Architect review stamps.
   7. When revised for resubmission, identify all changes made since previous submission.
   8. Distribute reviewed submittals. Instruct parties to promptly report inability to comply with requirements.
   9. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.
   10. Submittals not requested will not be recognized or processed.
   11. The Architect and the architect's consultants will not accept submittals from subcontractors and suppliers.
   12. Architect will return copies of submittals for review to the Contractor by e-mail.
   13. Architect will place copies of submittals for information into the project's electronic record.
   14. Make submittals that require field verification or field measurements only when progress of the work is complete to the point where verification and measurements can be performed and such information is included on the submittal.

B. Product Data Procedures:
   1. Submit only information required by individual specification sections.
   2. Collect required information into a single submittal.
   3. Do not submit (Material) Safety Data Sheets for materials or products.

C. Shop Drawing Procedures:
   1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
   2. Do not reproduce Contract Documents to create shop drawings.
   3. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.

D. Samples Procedures:
   1. Transmit related items together as single package.
   2. Identify each item to allow review for applicability in relation to shop drawings showing installation locations.

E. Transmitting Procedures:
   1. Transmit electronic submittals via e-mail. Include in the e-mail identification of the attachments as a submittal for review or for information. Do not include questions, comments, information or attachments pertaining to other than the submittal being sent in any submittal e-mail.
      a. Scans are to be of suitable resolution so as to be legible in all respects, but not less than 200 x 200 DPI
      b. Information originally in color is to be scanned and submitted in color.
      c. E-mail to the Architect's designated Project Architect.
   2. Transmit samples and other submittals that cannot be converted to electronic format with the Contractor's standard transmittal form.
      a. Deliver to the Architect at architect's business address.

3.09 SUBMITTAL REVIEW

A. Architect will place copies of submittals for information into the project's electronic record.

B. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate action.

C. Submittals for Information: Architect will acknowledge receipt and review. See below for actions to be taken.

D. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.
   1. Notations may be made directly on submitted items and/or listed on appended Submittal Review cover sheet.

E. Architect's and consultants' actions on items submitted for review:
   1. Authorizing purchasing, fabrication, delivery, and installation:
      a. "NO EXCEPTIONS TAKEN", or language with same legal meaning: Submittal is in compliance with project requirements.
      b. "EXCEPTIONS NOTED", or language with same legal meaning: Relatively minor changes and corrections are needed.
         1) At Contractor's option, submit corrected item, with review notations acknowledged and incorporated.
      c. "REVISE & RESUBMIT", or language with same legal meaning: Comments and corrections are so extensive as to require significant changes, and further review, in order to show the submittal is in compliance with project requirements.
   2. Not Authorizing fabrication, delivery, and installation:
      a. "REJECTED": Submittal is not in compliance with project requirements. In the Architect's opinion, the only reasonable course of action is a new submittal.
         1) Submit item complying with requirements of Contract Documents.

F. Architect's and consultants' actions on items submitted for information:
   1. Items for which no action was taken:
      a. "Received" - to notify the Contractor that the submittal has been received for record only.
   2. Items for which action was taken:
      a. "Reviewed" - no further action is required from Contractor.

SECTION 01 4000 - QUALITY REQUIREMENTS

1.01 SECTION INCLUDES

A. Submittals.
B. Quality assurance.
C. References and standards.
D. Testing and inspection agencies and services.
E. Control of installation.
F. Tolerances.
G. Manufacturers' field services.

1.02 SUBMITTALS

A. Design Data: Submit for project record, for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

B. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
   1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
   2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.

1.03 QUALITY ASSURANCE

A. Testing Agency Qualifications:
   1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
   2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
   3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.

1.04 REFERENCES AND STANDARDS

A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.

C. Obtain copies of standards where required by product specification sections.

D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.

E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.

F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

1.05 TESTING AND INSPECTION AGENCIES AND SERVICES

A. Owner will employ services of an independent testing agency to perform certain code required special testing and inspection.

B. Contractor shall employ and pay for services of an independent testing agency to perform other specified testing and inspection.

C. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

D. Contractor Employed Agency:
   1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM E699, ASTM C1021, ASTM C1077, ASTM C1093, and ASTM D3740.
   2. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
   3. Laboratory: Authorized to operate in the State in which the Project is located.
   4. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

3.01 CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.

D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Have work performed by persons qualified to produce required and specified quality.

F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances except where industry standard tolerances are more restrictive. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

3.03 TESTING AND INSPECTION

A. See individual specification sections for testing and inspection required.

B. Testing Agency Duties:
   1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
   2. Perform specified sampling and testing of products in accordance with specified standards.
   3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
   4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
   5. Perform additional tests and inspections required by Architect.
   6. Submit reports of all tests/inspections specified.

C. Limits on Testing/Inspection Agency Authority:
   1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
   2. Agency may not approve or accept any portion of the Work.
   3. Agency may not assume any duties of Contractor.
   4. Agency has no authority to stop the Work.

D. Contractor Responsibilities:
   1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
   2. Cooperate with laboratory personnel and provide access to the Work and to manufacturers' facilities.
   3. Provide incidental labor and facilities:
      a. To provide access to Work to be tested/inspected.
      b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
      c. To facilitate tests/inspections.
      d. To provide storage and curing of test samples.
   4. Provide testing and inspection agency sufficient notice prior to expected time for operations requiring testing/inspection services.
   5. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.

E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency.

F. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

3.04 MANUFACTURERS' FIELD SERVICES

A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.

B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.05 CORRECTION

A. Replace Work or portions of the Work not complying with specified requirements.

SECTION 01 5000 - TEMPORARY FACILITIES AND CONTROLS

1.01 TEMPORARY UTILITIES

A. Provide and pay for electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes.

B. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.02 TELECOMMUNICATIONS SERVICES

A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.

B. Telecommunications services shall include:
   1. Telephone service with a number dedicated for project use and with voice messaging capability.
   2. Internet Connections: Minimum of one; DSL modem or faster.
      a. Provide printer/copier/scanner or equivalent to allow for transfer of drawings and information to and from the field.

1.03 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.

B. Maintain daily in clean and sanitary condition.

1.04 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide barricades and covered walkways for public rights-of-way and to maintain safe public access to and egress from existing building.

C. Provide protection for plants designated to remain. Replace damaged plants.

D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.05 FENCING

A. Construction: Commercial grade chain link fence.

B. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.06 EXTERIOR ENCLOSURES

A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

B. When the project site or portions there-of is to be occupied during construction, provide temporary insulated weather tight closure consistent with the requirements of paragraph A above.

1.07 INTERIOR ENCLOSURES

A. Provide temporary partitions and ceilings as indicated to separate work areas from Owner-occupied areas, to prevent penetration of dust and moisture into Owner-occupied areas, and to prevent damage to existing materials and equipment.

B. Construction: Framing and gypsum board sheet materials with closed joints and sealed edges at intersections with existing surfaces, unless otherwise indicated on the drawings:
   1. Maximum flame spread rating of 25 in accordance with ASTM E84.

1.08 SECURITY

A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

1.09 VEHICULAR ACCESS AND PARKING

A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.

B. Coordinate access and haul routes with governing authorities and Owner.

C. Provide and maintain access to fire hydrants, free of obstructions.

D. Provide means of removing mud from vehicle wheels before entering streets.

E. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

1.10 WASTE REMOVAL

A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.

B. Provide containers with lids. Remove trash from site periodically.

C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.

D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.12 FIELD OFFICES

A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack, and drawing display table.

B. Provide space for Project meetings, with table and chairs to accommodate 10 persons.

1.13 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.

B. Clean and repair damage caused by installation or use of temporary work.

C. Restore existing facilities used during construction to original condition.

D. Restore new permanent facilities used during construction to specified condition.

SECTION 01 6000 - PRODUCT REQUIREMENTS

1.01 SUBMITTALS

A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

2.01 EXISTING PRODUCTS

A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.

B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.

C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.

2.02 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by Contract Documents.

B. Where other criteria are met, Contractor shall give preference to products that:
   1. If used on interior, have lower emissions, as defined in Section 01 6116.
   2. If wet-applied, have lower VOC content, as defined in Section 01 6116.
   3. Are extracted, harvested, and/or manufactured closer to the location of the project.
   4. Have longer documented life span under normal use.
   5. Result in less construction waste. See Section 01 7419
   6. Are made of vegetable materials that are rapidly renewable.

C. Provide interchangeable components of the same manufacture for components being replaced.

2.03 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

D. Specifications are, in general, written to be non-proprietary, however; where specific products are required, for example a certain size, color, texture, configuration or other characteristic, manufacturer and product information are provided on the drawings in the form of notes or schedules as appropriate.
   1. Substitutions for products so indicated will be considered in accordance with "Substitution Procedures" of this specification Section.

2.04 MAINTENANCE MATERIALS

A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.

B. Deliver and place in location as directed; obtain receipt prior to final payment.

3.01 SUBSTITUTION LIMITATIONS

A. See Section 01 2500 - Substitution Procedures.

3.02 OWNER-SUPPLIED PRODUCTS

A. Owner's Responsibilities:
   1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
   2. Arrange and pay for product delivery to site.
   3. Submit claims for transportation damage and replace damaged, defective, or deficient items.
   4. Arrange for manufacturers' warranties, inspections, and service.

B. Contractor's Responsibilities:
   1. Review Owner reviewed shop drawings, product data, and samples.
   2. Receive and unload products at site; inspect for completeness or damage and report damaged, defective, or deficient items to Owner.
   3. Handle, store, install and finish products.
   4. Repair or replace items damaged after receipt.

3.03 TRANSPORTATION AND HANDLING

A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.

B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.

C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

D. Transport and handle products in accordance with manufacturer's instructions.

E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.

H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.04 STORAGE AND PROTECTION

A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area.

B. Store and protect products in accordance with manufacturers' instructions.

C. Store with seals and labels intact and legible.

D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.

E. For exterior storage of fabricated products, place on sloped supports above ground.

F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.

G. Comply with manufacturer's warranty conditions, if any.

H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

I. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

J. Prevent contact with material that may cause corrosion, discoloration, or staining.

K. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

L. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB
Date	Issue
07-10-25	Permit Set

A900

SPECIFICATIONS

SECTION 01 7000 - EXECUTION REQUIREMENTS

1.01 SECTION INCLUDES
- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Starting of systems and equipment.
- H. Demonstration and instruction of Owner personnel.
- I. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- J. General requirements for maintenance service.

1.02 QUALIFICATIONS
- A. For demolition work, employ a firm specializing in the type of work required.
  1. Minimum of 5 years of experience.
- B. For survey work, employ a land surveyor registered in the State in which the Project is located.
- C. For field engineering, employ a professional engineer of the discipline required for specific service on Project, licensed in the State in which the Project is located. Employ only individual(s) trained and experienced in establishing and maintaining horizontal and vertical control points necessary for laying out construction work on project of similar size, scope and/or complexity.
- D. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.03 PROJECT CONDITIONS
- A. Comply with Safeguards During Construction requirements as outlined in the International Building Code, Chapter 33, edition as adopted at the project location.
- B. For demolition work comply with ANSI A10.6.
- C. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- D. Protect site from puddling or running water.
- E. Protect areas not undergoing alteration as specified for protection of installed work.
- F. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- G. Dust Control: Execute work by methods to minimize raising dust from demolition or construction operations. Provide positive means to prevent air-borne dust from dispersing into the atmosphere.
  1. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.
- H. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
  1. Minimize the amount of bare soil exposed at one time.
  2. Provide temporary measures such as berms, dikes, and drains, to manage water flow.
  3. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
  4. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- I. Noise Control: Provide methods, means, and facilities to minimize noise produced by demolition or construction operations. Comply with local requirements for noise control.
- J. Pest and Insect Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- K. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- L. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by demolition or construction operations.

1.04 COORDINATION
- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

2.01 PATCHING MATERIALS
- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

3.01 EXAMINATION
- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION
- A. Clean substrate surfaces prior to applying the next material or substance.
- B. Seal cracks or openings of substrate prior to applying the next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS
- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
  1. Review conditions of examination, preparation, and installation procedures.
  2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with one copy to Architect, Owner, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK
- A. Verify locations of survey control points prior to starting work.
- B. Do not scale drawings. Request clarifications from the Architect.
- C. Promptly notify Architect of any discrepancies discovered.
- D. Contractor shall locate and protect survey control and reference points.
- E. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- F. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to the Architect.
- G. Utilize recognized engineering survey practices.
- H. Establish elevations, lines, and levels. Locate and lay out by instrumentation and similar appropriate means:
  1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
  2. Grid or axis for structures.
  3. Building foundation, column locations, ground floor elevations.
- I. Periodically verify layouts by same means.
- J. Maintain a complete and accurate log of control and survey work as it progresses.

3.05 GENERAL INSTALLATION REQUIREMENTS
- A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.
- B. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to the necessity for replacement.
- C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- F. Make neat transitions between different surfaces, maintaining texture and appearance.
- G. Do not install products that are defective, including warped, bowed, dented, chipped, cracked or broken members, and members with damaged finishes.

3.06 ALTERATIONS AND SELECTIVE DEMOLITION
- A. Perform an engineering survey of building to determine whether demolition operations might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures.
- B. Drawings showing existing construction and utilities are based on existing record documents only.
  1. Verify that construction and utility arrangements are as indicated.
  2. Report discrepancies to Architect before disturbing existing installation.
  3. Beginning of alterations work constitutes acceptance of existing conditions.
- C. Keep areas in which alterations are being conducted separate from other areas that are still occupied.
  1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 5000.
- D. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
  1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
  2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- E. Remove existing work as indicated and as required to accomplish new work.
  1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
  2. Remove items indicated on drawings.
  3. Relocate items indicated on drawings.
  4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces to receive new finish; remove existing finish if necessary for successful application of new finish.
  5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces.
- F. Services (Including but not limited to Alarm systems, Alarm systems, Alarm systems, Alarm systems, Alarm systems, and Alarm systems): Remove, relocate, and extend existing systems to accommodate new construction.
  1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
  2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
  3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
     a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
     b. Coordinate timing of service interruptions and shut downs with the owner and affected occupants.
     c. Provide temporary connections to maintain existing systems in service.
  4. Verify that abandoned services serve only abandoned facilities.
  5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- G. Protect existing work to remain.
  1. Prevent movement of structure; provide shoring and bracing if necessary.
  2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  3. Repair adjacent construction and finishes damaged during removal work.
- H. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
  1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.
  2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
  3. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for Architect review and request instructions.
- I. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- J. Refinish existing surfaces as indicated:
  1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
  2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- K. Clean existing systems and equipment.
- L. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- M. Comply with all other applicable requirements of this section.

3.07 CUTTING AND PATCHING
- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
  1. Complete the work.
  2. Fit products together to integrate with other work.
  3. Provide openings for penetration of mechanical, electrical, and other services.
  4. Match work that has been cut to adjacent work.
  5. Repair areas adjacent to cuts to required condition.
  6. Repair new work damaged by subsequent work.
  7. Remove samples of installed work for testing when requested.
  8. Remove and replace defective and non-complying work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements; employ skilled and experienced installer to perform cutting for other sight exposed surfaces.
- F. Examine areas to be cut or core drilled for presence of concealed utilities and structural elements including piping, electrical distribution, reinforcing steel and post-tensioning cables. Utilize x-ray equipment where necessary.
- G. Cut rigid materials using masonry saw or core drill.
- H. Restore work with new products in accordance with requirements of Contract Documents.
- I. Fit work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- J. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to maintain fire rating.
- K. Patching:
  1. Finish patched surfaces to match the finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  2. Match color, texture, and appearance.
  3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
  4. When the finish cannot be matched, refinish entire surface to nearest intersections.

3.08 PROGRESS CLEANING
- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.09 PROTECTION OF INSTALLED WORK
- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.10 SYSTEM STARTUP
- A. Coordinate schedule for start-up of various equipment and systems.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- D. Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.

3.11 DEMONSTRATION AND INSTRUCTION
- A. Demonstrate operation and maintenance of products to Owner's personnel prior to date of Substantial Completion.
- B. Demonstrate start-up, operation, control, adjustment, troubleshooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- C. For equipment or systems requiring seasonal operation, perform demonstrations for other season within six months.
- D. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of Owner's personnel.
- E. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- F. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

3.12 ADJUSTING
- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.13 FINAL CLEANING
- A. Execute final cleaning.
  1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Replace filters of operating equipment.
- G. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- H. Clean site: sweep paved areas, rake clean landscaped surfaces.
- I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of it in legal manner; do not burn or bury.

3.14 CLOSEOUT PROCEDURES
- A. In addition to the requirements of AIA A201, General Conditions of the Contract for Construction, comply with the following:
  1. Make submittals that are required by governing or other authorities.
     a. Provide copies to Owner.
  2. Comply with requirements of Section 01780, Closeout Submittals.
  3. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
  4. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for review.
  5. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
  6. Complete items of work determined by final inspection.

3.15 MAINTENANCE
- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Furnish service and maintenance of components indicated in specification sections.
- D. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- E. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- F. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

SECTION 01 7800 - CLOSEOUT SUBMITTALS

1.01 SUBMITTALS
- A. Project Record Documents: Submit documents to Owner when submitting final application for payment.
- B. Operation and Maintenance Data: Submit two sets of final documents in final form.
- C. Warranties and Bonds: Submit prior to final Application for Payment.
- D. Certificate of Occupancy: Submit to owner when requesting Substantial Completion inspection

3.01 PROJECT RECORD DOCUMENTS
- A. Maintain on site one set of the following record documents; record actual revisions to the Work: including but not limited to, Drawings, Specifications, Addenda, Change Orders, and reviewed submittals.
- B. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction.

3.02 OPERATION AND MAINTENANCE DATA
- A. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. For Each Product, Applied Material, and Finish:
  1. Product data, with catalog number, size, composition, and color and texture designations.
  2. Information for re-ordering custom mixed or manufactured products.
  3. Manufacturer's instructions for Care and Maintenance.
- E. Moisture protection and weather-exposed products; Provide manufacturer recommendations for inspections, maintenance, and repair.
- F. For Each Item of Equipment and Each System, provide the manufacturer's installation, operation and maintenance manuals. Include test and balancing reports.

3.03 WARRANTIES AND BONDS
- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.

SECTION 03 3000 - CAST-IN-PLACE CONCRETE

1.01 SUBMITTALS
- A. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
  1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.
- B. Mix Design: Submit proposed concrete mix design.
  1. Indicate proposed mix design complies with requirements of ACI SPEC-301, Section 4 - Concrete Mixtures.
  2. Indicate proposed mix design complies with requirements of ACI CODE-318, Chapter 5 - Concrete Quality, Mixing and Placing.
  3. Indicate proposed mix design complies with fiber reinforcing manufacturer's written recommendations.
  4. Indicate proposed mix design complies with admixture manufacturer's written recommendations.
- C. Test Reports: Submit report for each test or series of tests specified.

1.02 QUALITY ASSURANCE
- A. Perform work of this section in accordance with ACI SPEC-301 and ACI CODE-318.
- B. Follow recommendations of ACI PRC-305 when concreting during hot weather.
- C. Follow recommendations of ACI PRC-306 when concreting during cold weather.

2.01 FORMWORK
- A. Formwork Design and Construction: Comply with guidelines of ACI PRC-347 to provide formwork that will produce concrete complying with tolerances of ACI SPEC-117.
- B. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
  1. Form Facing for Exposed Finish Concrete: Contractor's choice of materials that will provide smooth, stain-free final appearance.
  2. Form Coating: Release agent that will not adversely affect concrete or interfere with application of coatings.
  3. Form Ties: Cone snap type that will leave no metal within 1-1/2 inches of concrete surface.

2.02 REINFORCEMENT MATERIALS
- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
  1. Type: Deformed billet-steel bars.
  2. Finish: Unfinished, unless otherwise indicated.
- B. Steel Welded Wire Reinforcement (WWR): Galvanized, plain type, ASTM A1064/A1064M.
  1. Form: Flat Sheets.
  2. WWR Style: 6X6 - W2.1XW2.1.
- C. Reinforcement Accessories:
  1. Tie Wire: Annealed, minimum 16 gauge, 0.0508 inch.
  2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.

2.03 CONCRETE MATERIALS
- A. Cement: ASTM C150/C150M, Type I - Normal Portland type.
  1. Acquire cement for entire project from same source.
- B. Cement: ASTM C150/C150M, Type II - Moderate Portland type.
  1. Acquire cement for entire project from same source.
- C. Cement: ASTM C150/C150M, Type III - High Early Strength Portland type.
  1. Acquire cement for entire project from same source.
- D. Fine and Coarse Aggregates: ASTM C33/C33M.
  1. Acquire aggregates for entire project from same source.
- E. Fly Ash: ASTM C618, Class C or F.
- F. Ground Granulated Blast Furnace Slag: ASTM C989/C989M.
- G. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to concrete.
- H. Structural Fiber Reinforcement: ASTM C1116/C1116M.
  1. Fiber Length: 2.0 inch , nominal.

2.04 ADMIXTURES
- A. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.
- B. Air Entrainment Admixture: ASTM C260/C260M.
- C. High Range Water Reducing Admixture: ASTM C494/C494M Type F.
- D. Accelerating Admixture: ASTM C494/C494M Type C.
- E. Retarding Admixture: ASTM C494/C494M Type B.

2.05 ACCESSORY MATERIALS
- A. Underslab Vapor Retarder:
  1. Sheet Material: ASTM E1745, Class A; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. Single-ply polyethylene is prohibited.
  2. Accessory Products: Vapor retarder manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations.
- B. Non-Shrink Cementitious Grout: Premixed compound consisting of nonmetallic aggregate, cement, water reducing and plasticizing agents.
  1. Minimum Compressive Strength at 48 Hours: 2,000 pounds per square inch.
  2. Minimum Compressive Strength at 28 Days: 7,000 pounds per square inch.

2.06 BONDING AND JOINTING PRODUCTS
- A. Latex Bonding Agent: Non-redispersable acrylic latex, complying with ASTM C1059/C1059M, Type II.
- B. Slab Isolation Joint Filler: 1/2-inch thick, height equal to slab thickness, with removable top section forming 1/2-inch deep sealant pocket after removal.
  1. Material: ASTM D8139, semi-rigid, closed-cell polypropylene foam.

2.07 CURING MATERIALS
- A. Curing Compound, Naturally Dissipating: Clear, water-based, liquid membrane-forming compound; complying with ASTM C309.

2.08 CONCRETE MIX DESIGN
- A. Proportioning Normal Weight Concrete: Comply with ACI PRC-211.1 recommendations.
- B. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI SPEC-301.
  1. For trial mixtures method, employ independent testing agency acceptable to Architect for preparing and reporting proposed mix designs.
- C. Admixtures: Add acceptable admixtures as recommended in ACI PRC-211.1 and at rates recommended or required by manufacturer.
- D. Fiber Reinforcement: Add to mix at rate of 3 pounds per cubic yard, or as recommended by manufacturer for specific project conditions.
- E. Normal Weight Concrete:
  1. Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: As scheduled.
  2. Fly Ash Content: Maximum 15 percent of cementitious materials by weight.
  3. Cement Content: Minimum 520 lbs/cubic yd.
  4. Water-Cement Ratio: Maximum 48 percent by weight.
  5. Total Air Content: 3 percent, determined in accordance with ASTM C173/C173M.
     a. 5% minimum to 7% maximum for exterior concrete.
  6. Maximum Slump: 3-5 inches before water reducing admixture.
  7. Maximum Aggregate Size: 1 inch.

2.09 MIXING
- A. On Project Site: Mix in drum type batch mixer, complying with ASTM C685/C685M. Mix each batch not less than 1-1/2 minutes and not more than 5 minutes.
  1. Fiber Reinforcement: Batch and mix as recommended by manufacturer for specific project conditions.
- B. Transit Mixers: Comply with ASTM C94/C94M.
- C. Adding Water: If concrete arrives on-site with slump less than suitable for placement, do not add water that exceeds the maximum water-cement ratio or exceeds the maximum permissible slump.

3.01 EXAMINATION
- A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION
- A. Formwork: Comply with requirements of ACI SPEC-301. Design and fabricate forms to support all applied loads until concrete is cured and for easy removal without damage to concrete.
- B. Verify that forms are clean and free of rust before applying release agent.
- C. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.
- D. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning and applying bonding agent in according to bonding agent manufacturer's instructions.
  1. Use latex bonding agent only for non-load-bearing applications.
- E. Dowel new concrete to existing concrete. Drill 6 inch deep holes into existing concrete, insert 12 inch long #4 steel dowels, and install with adhesive anchor system per manufacturers recommendations. Space dowels 24" o.c., 12" o.c. for slabs greater than 4 inches thick.
- F. Interior Slabs on Grade: Install vapor retarder under interior slabs on grade. Comply with ASTM E1643. Lap joints minimum 6 inches. Seal joints, seams and penetrations watertight with manufacturer's recommended products and follow manufacturer's written instructions. Repair damaged vapor retarder before covering.

3.03 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS
- A. Comply with requirements of ACI SPEC-301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.
- B. Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions. Splice laps with tie wire.
  1. Locate reinforcement in top third of slab with 3/4 inch minimum cover.
  2. Lap reinforcement one wire space plus 2 inches minimum.
- C. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with concrete placement.

3.04 PLACING CONCRETE
- A. Place concrete in accordance with ACI PRC-304.
- B. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- C. Ensure reinforcement, inserts, waterstops, and embedded parts will not be disturbed during concrete placement.
- D. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting.

3.05 SLAB JOINTING
- A. Locate joints as indicated on drawings.
- B. Anchor joint fillers and devices to prevent movement during concrete placement.
- C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.
  1. Install wherever necessary to separate slab from other building members, including columns, walls, equipment foundations, footings, stairs, manholes, sumps, and drains.
- D. Saw Cut Contraction Joints: Saw cut joints before concrete begins to cool, within 1 to 4 hours after placing with an early-entry dry-cut saw; use 3/16 inch thick blade and cut 1 inch deep but not less than one quarter (1/4) the depth of the slab.

3.06 FLOOR FLATNESS AND LEVELNESS TOLERANCES
- A. Maximum Variation of Surface Flatness for interior floor slabs: 1/8 inch in 10 ft., unless indicated otherwise on drawings.
- B. Correct the slab surface if tolerances are less than specified.
- C. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

3.07 CONCRETE FINISHING
- A. Repair surface defects, including tie holes, immediately after removing formwork.
- B. Unexposed Form Finish: Rub down or chip off fins or other raised areas 1/4 inch or more in height.
- C. Exposed Form Finish: Rub down or chip off and smooth fins or other raised areas 1/4 inch or more in height. Provide finish as follows:
  1. Grout Cleaned Finish: Wet areas to be cleaned and apply grout mixture by brush or spray; scrub immediately to remove excess grout. After drying, rub vigorously with clean burlap, and keep moist for 36 hours.
- D. Concrete Slabs: Finish to requirements of ACI PRC-302.1 and as follows:
  1. Surfaces to Receive Thin Floor Coverings: "Steel trowel" as described in ACI PRC-302.1; thin floor coverings include carpeting, resilient flooring, seamless flooring, resinous matrix terrazzo, thin set quarry tile, and thin set ceramic tile.
  2. Other Surfaces to Be Left Exposed: Trowel as described in ACI PRC-302.1, minimizing burnish marks and other appearance defects.
- E. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains at 1:100 nominal.

3.08 CURING AND PROTECTION
- A. Comply with requirements of ACI PRC-308. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

3.09 FIELD QUALITY CONTROL
- A. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.
- B. Tests of concrete and concrete materials may be performed at any time to ensure compliance with specified requirements.
- C. Compressive Strength Tests: ASTM C39/C39M, for each test, mold and cure three concrete test cylinders. Obtain test samples for every 100 cubic yards or less of each class of concrete placed.
- D. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
- E. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C143/C143M.

3.10 DEFECTIVE CONCRETE
- A. Defective Concrete: Repair or replace concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.

3.11 SCHEDULE - CONCRETE TYPES AND FINISHES
- A. Foundations: 3,000 pounds per square inch 28 day concrete.
- B. Slab on Grade: 4,000 psi 28 day concrete, fiber reinforced, steel trowel finish.
- C. Light Pole Supports: 4,000 psi 28 day concrete, grout cleaned finish.

SECTION 03 5400 - SELF-LEVELING UNDERLAYMENT

1.01 SUBMITTALS
- A. Product Data: Provide manufacturer's data sheets documenting physical characteristics and product limitations of underlayment materials. Include information on surface preparation and environmental limitations.

1.02 QUALITY ASSURANCE
- A. Applicator Qualifications: Company specializing in performing the work of this section, and approved by manufacturer.

1.03 DELIVERY, STORAGE, AND HANDLING
- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Keep dry and protect from direct sun exposure, freezing, and ambient temperature greater than 105 degrees F.

1.04 FIELD CONDITIONS
- A. Do not install underlayment until floor penetrations and peripheral work are complete.
- B. During the curing process, ventilate spaces to remove excess moisture.

2.01 MATERIALS
- A. Cementitious Underlayment: Blended cement mix, that when mixed with water in accordance with manufacturer's directions will produce self-leveling underlayment with the following properties:
  1. Compressive Strength: Minimum 4000 pounds per square inch after 28 days, tested per ASTM C109/C109M.
- B. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to underlayment mix materials.
- C. Primer: Manufacturer's recommended type.
- D. Joint and Crack Filler: As recommended by manufacturer.

2.02 MIXING
- A. Site mix materials in accordance with manufacturer's instructions.
- B. Mix to self-leveling consistency without over-watering.

3.01 EXAMINATION
- A. Verify that substrate surfaces are clean, dry, unfrozen, do not contain petroleum byproducts, or other compounds detrimental to underlayment material bond to substrate.

3.02 PREPARATION
- A. Concrete: Mechanically prepare steel troweled concrete to create a textured surface necessary to achieve the best bond; acceptable methods include bead blasting and scarifying. Do not use acid etching.

3.03 APPLICATION
- A. Install underlayment in accordance with manufacturer's instructions.
- B. Place to indicated thickness, with top surface level to 1/8 inch in 10 ft.
- C. Place before partition installation.

3.04 CURING
- A. Once underlayment starts to set, prohibit foot traffic until final set has been reached.
- B. Air cure in accordance with manufacturer's instructions.

3.05 PROTECTION
- A. Protect against direct sunlight, heat, and wind; prevent rapid drying to avoid shrinkage and cracking.

Do not permit traffic over unprotected floor underlayment surfaces.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB
Date	Issue
07-10-25	Permit Set

A901

SPECIFICATIONS

SECTION 06 1000 - ROUGH CARPENTRY

1.01 SECTION INCLUDES

A. Sheathing.
B. Roofing nailers.
C. Preservative treated wood materials.
D. Fire retardant treated wood materials.
E. Communications and electrical room mounting boards.
F. Concealed wood blocking, nailers, and supports.

1.02 SUBMITTALS

A. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.

1.03 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.02 DIMENSION LUMBER

A. Sizes: Nominal sizes as indicated on drawings, S4S.
B. Moisture Content: S-dry or MC19.
C. Miscellaneous Blocking, Nailers, and Furring:
1. Lumber: S4S, No. 2 or Standard Grade.
2. Boards: Standard or No. 3.

2.03 CONSTRUCTION PANELS

A. Roof Sheathing: Any PS 2 type, rated Structural I Sheathing.
1. Bond Classification: Exterior.
2. Span Rating: 60.
3. Performance Category: 3/4 PERF CAT.
B. Wall Sheathing: Any PS 2 type.
1. Bond Classification: Exterior.
2. Grade: Structural I Sheathing.
3. Span Rating: 24.
4. Performance Category: 5/8 PERF CAT.
C. Wall Sheathing: Glass mat faced gypsum, ASTM C1177/C1177M, 5/8 inch Type X fire resistant.
1. At Assemblies Indicated with Fire-Rating: Use type required by indicated tested assembly.
D. Wall Sheathing: Extruded Polystyrene (XPS) board insulation, ASTM C578.
1. Board Edges: Tongue-and-groove.
2. Type and Thermal Resistance, R-value (RSI-value): Type IV, 5.0 (0.88) per 1 inch at 75 degrees F mean temperature using ASTM C177 test method.
E. Communications and Electrical Room Mounting Boards: PS 1 A-D plywood; 3/4 inch thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.

2.04 ACCESSORIES

A. Fasteners and Anchors:
1. Metal and Finish: Hot-dipped galvanized steel per ASTM A 153/A 153M for exterior, roof related and preservative-treated wood locations, unfinished steel elsewhere.

2.05 FACTORY WOOD TREATMENT

A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
B. Fire Retardant Treatment:
1. Exterior Type: AWPA U1, Category UCFB, Commodity Specification H, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D2898.
a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
b. Do not use treated wood in direct contact with the ground.
2. Interior Type A: AWPA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes.
a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
b. Treat rough carpentry items as indicated .
c. Do not use treated wood in applications exposed to weather or where the wood may become wet.

3.01 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.
B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.02 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.
C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
D. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.
E. Provide the following specific non-structural framing and blocking:
1. Handrails.
2. Grab bars.
3. Toilet room accessories.

3.03 ROOF-RELATED CARPENTRY

A. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.

3.04 INSTALLATION OF CONSTRUCTION PANELS

A. Roof Sheathing: Secure panels with long dimension perpendicular to framing members, with ends staggered and over firm bearing.
1. At long edges use sheathing clips where joints occur between roof framing members.
2. Screw panels to framing; staples are not permitted.
B. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using nails, screws, or staples.
C. Communications and Electrical Room Mounting Boards: Secure with screws to studs with edges over firm bearing; space fasteners at maximum 24 inches on center on all edges and into studs in field of board.
1. At fire-rated walls, install board over wall board indicated as part of the fire-rated assembly.
2. Where boards are indicated as full floor-to-ceiling height, install with long edge of board parallel to studs.
3. Install adjacent boards without gaps.

3.05 SITE APPLIED WOOD TREATMENT

A. Apply preservative treatment compatible with factory applied treatment at site-sawn cuts, complying with manufacturer's instructions.
B. Allow preservative to dry prior to erecting members.

3.06 TOLERANCES

A. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.07 CLEANING

A. Waste Disposal: Comply with the requirements of Section 01 7419 - Construction Waste Management and Disposal.
1. Comply with applicable regulations.
2. Do not burn scrap on project site.
3. Do not burn scraps that have been pressure treated.
4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or "waste-to-energy" facilities.
B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.
C. Prevent sawdust and wood shavings from entering the storm drainage system.

SECTION 06 2000 - FINISHED CARPENTRY

1.01 SECTION INCLUDES

A. Finish carpentry items.
B. Wood door frames, glazed frames.
C. Wood standing and running trim.
D. Plastic laminate panels.

1.02 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with plumbing rough-in, electrical rough-in, and installation of associated and adjacent components.
B. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

1.03 SUBMITTALS

A. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
1. Provide the information required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).
B. Samples: Submit two samples of wood trim 6 inch long.

1.04 QUALITY ASSURANCE

A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

2.01 FINISH CARPENTRY ITEMS

A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
B. Surface Burning Characteristics: Provide materials having fire and smoke properties as required by applicable code.

2.02 SHEET MATERIALS

A. Particleboard: ANSI A208.1; Composed of wood chips, sawdust, or flakes of medium density, made with waterproof resin binders; of grade to suit application; sanded faces.
B. Medium-Density Fiberboard (MDF): ANSI A208.2, Grade 130.

2.03 PLASTIC LAMINATE MATERIALS

A. Plastic Laminate: NEMA LD 3; color as indicated; finish as selected.
B. Laminate Adhesive: Type recommended by laminate manufacturer to suit application; not containing formaldehyde or other volatile organic compounds.

2.04 FASTENINGS

A. Adhesive for Purposes Other Than Laminate Installation: Suitable for the purpose; not containing formaldehyde or other volatile organic compounds.
B. Fasteners: Of size and type to suit application; use corrosion resistant fasteners for exterior locations.

2.05 ACCESSORIES

A. Lumber for Shimming and Blocking: Softwood lumber of any appropriate species.
B. Primer: Alkyd primer sealer.
C. Wood Filler: Solvent base, tinted to match surface finish color.

2.06 FABRICATION

A. Shop assemble work for delivery to site, permitting passage through building openings.
B. Cap exposed plastic laminate finish edges with material of same finish and pattern.
C. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.
D. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.
E. Apply laminate backing sheet to reverse face of plastic laminate finished surfaces.

2.07 SHOP FINISHING

A. Sand work smooth and set exposed nails and screws.
B. Apply wood filler in exposed nail and screw indentations.
C. On items to receive transparent finishes, use wood filler that matches surrounding surfaces and is of type recommended for the applicable finish.
D. Finish work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), Section 5 - Finishing for grade specified and as follows:
1. Transparent:
a. System - 12, Polyurethane, Water-based.
b. Stain: As indicated on drawings.
c. Sheen: As indicated on drawings.
2. Opaque:
a. System - 4, Latex Acrylic, Water-based.
b. Color: As indicated on drawings.
c. Sheen: As indicated on drawings.
E. Back prime woodwork items to be field finished, prior to installation.

3.01 EXAMINATION

A. Verify adequacy of backing and support framing.
B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

3.02 INSTALLATION

A. Install custom fabrications in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade indicated.
B. Set and secure materials and components in place, plumb and level.
C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.
D. Install trim with appropriate mechanical fasteners.
E. Install panels with concealed fasteners.

3.03 PREPARATION FOR SITE FINISHING

A. Set exposed fasteners. Apply wood filler in exposed fastener indentations. Sand work smooth.
B. Before installation, prime paint surfaces of items or assemblies to be in contact with cementitious materials.

3.04 TOLERANCES

A. Maximum Variation from True Position: 1/16 inch.
B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

SECTION 07 9200 - JOINT SEALANTS

1.01 SECTION INCLUDES

A. Nonsag gunnable joint sealants.
B. Self-leveling pourable joint sealants.
C. Joint backings and accessories.

1.02 SUBMITTALS

A. Product Data: Submit manufacturer's technical data sheets for each product to be used; include the following:
1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
2. List of backing materials approved for use with the specific product.
3. Backing material recommended by sealant manufacturer.
4. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
5. Substrates the product should not be used on.
6. Substrates for which use of primer is required.
B. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.
1. Where standard colors do not match color of adjacent materials, submit custom color.

1.03 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years experience.
B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of experience.
C. Field Adhesion Tests of Joints: Test for adhesion using most appropriate method in accordance with ASTM C1521, or another applicable method as recommended by manufacturer.

1.04 WARRANTY

A. Manufacturer Warranty: Provide 2-year manufacturer warranty for installed sealants and accessories that fail to achieve a watertight seal, exhibit loss of adhesion or cohesion, or do not cure. Complete forms in Owner's name and register with manufacturer.

2.01 JOINT SEALANT APPLICATIONS

A. Scope:
1. Exterior Joints:
a. Seal open joints except open joints indicated on drawings as not sealed.
b. Seal the following joints:
1) Wall expansion and control joints.
2) Joints between doors, windows, and other frames or adjacent construction.
3) Joints between different exposed materials.
2. Interior Joints:
a. Do not seal interior joints indicated on drawings as not sealed.
b. Do not seal gaps and openings in gypsum board, plaster, and suspended ceilings
c. Do not seal through-penetrations in sound-rated assemblies that are also fire-rated assemblies.
d. Seal the following joints:
1) Joints between door frames and window frames and adjacent construction.
2) In sound-rated wall and ceiling assemblies, gaps at electrical outlets, wiring devices, and piping penetrations.
3) In sound-rated wall and ceiling assemblies, seal joints between wall assemblies and ceiling assemblies; between wall assemblies and other construction; between ceiling assemblies and other construction.
3. Do Not Seal:
a. Intentional weep holes in masonry.
b. Joints indicated to be covered with expansion joint cover assemblies.
c. Joints where sealant is specified to be furnished and installed by manufacturer of product to be sealed.
d. Joints where sealant installation is specified in other sections.
e. Joints between suspended ceilings and walls.
B. Exterior Joints: Use nonsag non-staining silicone sealant, unless otherwise indicated.
1. Lap Joints in Sheet Metal Fabrications: Butyl rubber, non-curing.
2. Lap Joints between Manufactured Metal Panels: Butyl rubber, non-curing.
3. Control and Expansion Joints in Concrete Paving: Self-leveling polyurethane "traffic-grade" sealant.
C. Interior Joints: Use nonsag polyurethane sealant, unless otherwise indicated.
1. Wall and Ceiling Joints in Non-Wet Areas: Acrylic emulsion latex sealant.
2. Wall and Ceiling Joints in Wet Areas: Nonsag polyurethane sealant for continuous liquid immersion.
3. Floor Joints in Wet Areas: Nonsag polyurethane "nontraffic-grade" sealant suitable for continuous liquid immersion.
4. Joints between Fixtures in Wet Areas and Floors, Walls, and Ceilings: Mildew-resistant silicone sealant; white.
5. In Sound-Rated Assemblies: Acrylic emulsion latex sealant.
6. Narrow Control Joints in Interior Concrete Slabs: Self-leveling epoxy sealant.
7. Other Floor Joints: Self-leveling polyurethane "traffic-grade" sealant.
D. Interior Wet Areas: Bathrooms, restrooms, kitchens, food service areas, and food processing areas; fixtures in wet areas include plumbing fixtures, food service equipment, countertops, cabinets, and other similar items.
E. Sound-Rated Assemblies: Walls and ceilings identified as STC-rated, sound-rated, or acoustical.

2.02 NONSAG JOINT SEALANTS

A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 50 percent, minimum.
2. Nonstaining to Porous Stone: Nonstaining to light-colored natural stone when tested in accordance with ASTM C1248.
3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
4. Color: Match adjacent finished surfaces.
B. Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.
1. Color: Clear.
C. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multicomponent; not expected to withstand continuous water immersion or traffic.
1. Color: Match adjacent finished surfaces.
D. Polyurethane Sealant for Continuous Water Immersion: ASTM C920, Grade NS, Uses M and A; single or multicomponent; explicitly approved by manufacturer for continuous water immersion; suitable for traffic exposure when recessed below traffic surface .
1. Movement Capability: Plus and minus 35 percent, minimum.
2. Color: Match adjacent finished surfaces.
E. Acrylic Emulsion Latex: Water-based; ASTM C834, single component, non-staining, non-bleeding, non-sagging; not intended for exterior use.
1. Color: Standard colors matching finished surfaces, Type OP (opaque).
F. Non-Curing Butyl Sealant: Solvent-based; ASTM C1311; single component, nonsag, non-skinning, non-hardening, non-bleeding; vapor-impermeable; intended for fully concealed applications.

2.03 SELF-LEVELING JOINT SEALANTS

A. Self-Leveling Polyurethane Sealant: ASTM C920, Grade P, Uses M and A; single or multicomponent; explicitly approved by manufacturer for traffic exposure; not expected to withstand continuous water immersion .
1. Movement Capability: Plus and minus 25 percent, minimum.
2. Color: Gray or match adjacent finish.
B. Self-Leveling Polyurethane Sealant for Continuous Water Immersion: Polyurethane; ASTM C920, Grade P, Uses M and A; single or multicomponent; explicitly approved by manufacturer for traffic exposure and continuous water immersion.
1. Movement Capability: Plus and minus 25 percent, minimum.
2. Color: Gray.
C. Semi-Rigid Self-Leveling Epoxy Joint Filler: Epoxy or epoxy/polyurethane copolymer; intended for filling cracks and control joints not subject to significant movement; rigid enough to support concrete edges under traffic.
1. Composition: Multicomponent, 100 percent solids by weight.
2. Durometer Hardness: Minimum of 85 for Type A or 35 for Type D, after seven days when tested in accordance with ASTM D2240.
3. Color: Match adjacent finished surfaces.
4. Joint Width, Minimum: 1/8 inch.
5. Joint Width, Maximum: 1/4 inch.

2.04 ACCESSORIES

A. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
B. Masking Tape: Self-adhesive, nonabsorbent, nonstaining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
C. Joint Cleaner: Noncorrosive and nonstaining type, type recommended by sealant manufacturer; compatible with joint forming materials.
D. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

3.01 EXAMINATION

A. Verify that joints are ready to receive work.
B. Verify that backing materials are compatible with sealants.
C. Verify that backer rods are of the correct size.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.
B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
B. Provide joint sealant installations complying with ASTM C1193.
C. Install acoustical sealant application work in accordance with ASTM C919.
D. Install bond breaker backing tape where backer rod cannot be used.
E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.
H. Concrete Floor Joint Filler: After full cure, shave joint filler flush with top of concrete slab.

3.04 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements for additional requirements.
B. Perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article.
C. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

SECTION 08 1113 - HOLLOW METAL DOORS AND FRAMES

1.01 SUBMITTALS

A. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes.
B. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.

1.02 QUALITY ASSURANCE

A. Manufacturer Qualifications: Provide hollow metal doors and frames from SDI Certified manufacturer: www.steeldoor.org/sdicertified.php/#sle.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion and adverse effects on factory applied painted finish.

2.01 PERFORMANCE REQUIREMENTS

A. Requirements for Hollow Metal Doors and Frames:
1. Steel Sheet: Comply with one or more of the following requirements; galvannealed steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.
2. Accessibility: Comply with applicable accessibility standards.
3. Door Edge Profile: Manufacturers standard for application indicated.
4. Typical Door Face Sheets: Flush.
5. Glazed Lights: Non-removable stops on non-secure side; sizes and configurations as indicated on drawings. Style: Manufacturers standard.
6. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.02 HOLLOW METAL DOORS

A. Door Finish: Factory primed and field finished.
B. Exterior Doors: Thermally insulated.
1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
a. Level 3 - Extra Heavy-duty.
b. Physical Performance Level A, 1,000,000 cycles; in accordance with ANSI/SDI A250.4.
c. Model 2 - Seamless.
d. Door Face Metal Thickness: 16 gauge, 0.053 inch, minimum.
2. Door Core Material: Manufacturers standard core material/construction and in compliance with requirements.
3. Door Thermal Resistance: R-Value of 2.5.
4. Door Thickness: 1-3/4 inches, nominal.
5. Top Closures for Outswinging Doors: Flush with top of faces and edges.
6. Weatherstripping: Refer to Section 08 7100.
C. Interior Doors, Non-Fire Rated:
1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
a. Level 2 - Heavy-duty.
b. Physical Performance Level B, 500,000 cycles; in accordance with ANSI/SDI A250.4.
c. Model 1 - Full Flush.
d. Door Face Metal Thickness: 18 gauge, 0.042 inch, minimum.
2. Door Thickness: 1-3/4 inches, nominal.
D. Fire-Rated Doors:
1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
a. Level 2 - Heavy-duty.
b. Physical Performance Level B, 500,000 cycles; in accordance with ANSI/SDI A250.4.
c. Model 1 - Full Flush.
d. Door Face Metal Thickness: 18 gauge, 0.042 inch, minimum.
2. Fire Rating: As indicated on drawings, tested in accordance with UL 10C and NFPA 252 ("positive pressure fire tests").
a. Provide units listed and labeled by UL (DIR) or ITS (DIR).
b. Attach fire rating label to each fire rated unit.
c. Smoke and Draft Control Doors (as indicated on drawings): Self-closing or automatic closing doors in accordance with NFPA 80 and NFPA 105, with fire-resistance-rated wall construction rated the same or greater than the fire-rated doors, and the following;
1) Maximum Air Leakage: 3.0 cfm/sq ft of door opening at 0.10 inch w.g. pressure, when tested in accordance with UL 1784 at both ambient and elevated temperatures.
2) Gasketing: Provide gasketing or edge sealing as necessary to achieve leakage limit.
3) Label: Include the "S" label on fire-rating label of door.
3. Door Core Material: Manufacturers standard core material/construction in compliance with requirements.
4. Door Thickness: 1-3/4 inches, nominal.

2.03 HOLLOW METAL FRAMES

A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
B. Frame Finish: Factory primed and field finished.
C. Exterior Door Frames: Face welded type.
1. Galvanizing: Components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with A40/ZF120 coating.
2. Frame Metal Thickness: 16 gauge, 0.053 inch, minimum.
3. Weatherstripping: Separate, see Section 08 7100.
D. Interior Door Frames, Non-Fire Rated: Knock-down type.
1. Frame Metal Thickness: 16 gauge, 0.053 inch, minimum.
E. Door Frames, Fire-Rated: Knock-down type.
1. Fire Rating: Same as door, labeled.
2. Frame Metal Thickness: 16 gauge, 0.053 inch, minimum.
F. Provide mortar guard boxes for hardware cut-outs in frames to be installed in masonry or to be grouted.
G. Frames in Masonry Walls: Size to suit masonry coursing with head member 4 inches high to fill opening without cutting masonry units.
H. Frames Wider than 48 inches: Reinforce with steel channel fitted tightly into frame head, flush with top.

2.04 FINISHES

A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.
B. Bituminous Coating: Cold-applied asphalt mastic, compounded for 15 mil, 0.015 inch dry film thickness (DFT) per coat; provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.
1. Fire-Rated Frames: Comply with fire rating requirements indicated.

2.05 ACCESSORIES

A. Louvers: Roll formed steel with overlapping frame; finish same as door components; factory-installed.
1. In Fire-Rated Doors: UL (DIR) or ITS (DIR) listed fusible link louver, same rating as door.
2. Style: Standard straight slat blade.
3. Louver Free Area: 50 percent.
4. Fasteners: Concealed fasteners.
B. Glazing: As specified in Section 08 8000.
C. Removable Stops: Formed sheet steel, mitered corners; prepared for countersink style tamper proof screws.
D. Astragals for Double Doors: Specified in Section 08 7100.
1. Exterior Doors: 14GA Galvanized Steel, Flat.
E. Grout for Frames: Mortar grout complying with ASTM C476 with maximum slump of 4 inches as measured in accordance with ASTM C143/C143M for hand troweling in place; plaster grout and thinner pumpable grout are prohibited.
F. Silencers: Resilient rubber or vinyl, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.
G. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

3.01 EXAMINATION

A. Verify existing conditions before starting work.
B. Verify that opening sizes and tolerances are acceptable.
C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 PREPARATION

A. Coat inside of frames to be installed in masonry or to be grouted, with bituminous coating, prior to installation.

3.03 INSTALLATION

A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
B. Install fire rated units in accordance with NFPA 80.
C. Coordinate frame anchor placement with wall construction.
D. Install door hardware as specified in Section 08 7100.
E. Coordinate installation of electrical connections to electrical hardware items.

3.04 TOLERANCES

A. Clearances Between Door and Frame: Comply with related requirements of specified frame standards or custom guidelines indicated in accordance with SDI 117 or NAAMM HMMA 861.
B. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.05 ADJUSTING

A. Adjust for smooth and balanced door movement.
B. Adjust closers for full closure and applicable accessibility operating forces.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY., SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB
Date	Issue
07-10-25	Permit Set

A902

SPECIFICATIONS

SECTION 08 1416 - FLUSH WOOD DOORS

1.01 SECTION INCLUDES
A. Flush wood doors; flush and flush glazed configuration; fire-rated and non-rated.
1.02 SUBMITTALS
A. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.
B. Shop Drawings: Show doors and frames, elevations, sizes, types, swings, undercuts, beveling, blocking for hardware, factory machining, factory finishing, cutouts for glazing and other details.
C. Samples: Submit two samples of door veneer, 4 by 4 inches in size illustrating wood grain, stain color, and sheen.
1.03 QUALITY ASSURANCE
A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section, with not less than three years of documented experience.
1.04 DELIVERY, STORAGE, AND HANDLING
A. Package, deliver and store doors in accordance with specified quality standard.
B. Accept doors on site in manufacturer's packaging, and inspect for damage.
C. Protect doors with resilient packaging; do not store in damp or wet areas or areas where sunlight might bleach veneer; seal top and bottom edges with tinted sealer if stored more than one week, and break seal on site to permit ventilation.
1.05 WARRANTY
A. Manufacturer Warranty: Provide manufacturer's warranty on interior doors for the life of the installation. Complete forms in Owner's name and register with manufacturer.
1. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.
B. Interior Doors: Provide manufacturer's warranty for the following period:
1. Interior Hollow Core Doors: One (1) year.
2. Interior Solid Core Doors: Life of installation.

2.01 DOORS AND PANELS
A. Doors: See drawings for locations and additional requirements.
1. Quality Standard: Custom Grade, Heavy Duty performance, in accordance with AWI/AWMAC/WI (AWS), AWMAC/WI (NAAWS) or WDMA I.S. 1A.
2. Wood Veneer Faced Doors: 5-ply or 7-ply unless otherwise indicated.
3. Where plastic laminate (PLam) is indicated on door schedule, use either high pressure decorative laminate (HPDL) faced doors in compliance with AWI/AWMAC/WI (AWS), AWMAC/WI (NAAWS) or WDMA I.S. 1A, or low pressure decorative laminate (LPDL) faced doors in compliance with WDMA I.S. 1A.
B. Interior Doors: 1-3/4 inches thick unless otherwise indicated; flush construction.
1. Provide solid core doors at all locations, except as indicated on the door schedule.
2. Fire Rated Doors: Tested to ratings indicated on drawings in accordance with UL 10C - Positive Pressure; Underwriters Laboratories Inc (UL) or Intertek/Warnock Hersey (WHI) labeled without any visible seals when door is open.
2.02 DOOR AND PANEL CORES
A. Non-Rated Solid Core and 20 Minute Rated Doors: Type particleboard core (PC), plies and faces as indicated.
B. Core for Low Pressure Decorative Laminate (LPDL), Non-Rated and 20 Minute Rated Doors: ANSI A208.1 Grade M-2 particleboard, minimum, with no seams on faces; edges reinforced as required to pass performance grade specified.
C. Fire-Rated Doors: Mineral core type, with fire resistant composite core (FD), plies and faces as indicated above; with core blocking as required to provide adequate anchorage of hardware without through-bolting.
2.03 DOOR FACINGS
A. Veneer Facing for Transparent Finish: Red oak, veneer grade in accordance with quality standard indicated, plain sliced (flat cut), with book match between leaves of veneer, running match of spliced veneer leaves assembled on door or panel face.
1. Vertical Edges: Any option allowed by quality standard for grade.
2. "Pair Match" each pair of doors; "Set Match" pairs of doors within 10 feet of each other when doors are closed.
B. Veneer Facing for Opaque Finish: Medium density overlay (MDO), in compliance with indicated quality standard.
C. High Pressure Decorative Laminate (HPDL) Facing for Non-Fire-Rated Doors: NEMA LD 3, HGS; color(s) as indicated; refer to door schedule.
D. Low Pressure Decorative Laminate (LPDL) Facing: Provide matching PVC edges applied with polyurethane hot melt adhesive.
1. Color: As indicated on drawings.
2.04 DOOR CONSTRUCTION
A. Fabricate doors in accordance with door quality standard specified.
B. Cores Constructed with stiles and rails:
1. Provide solid blocks at lock edge and top of door for closer for hardware reinforcement.
a. Provide solid blocking for other throughbolted hardware.
C. Where supplementary protective edge trim is required, install trim after veneer facing has been applied full-width.
D. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.
E. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.
1. Exception: Doors to be field finished.
F. Provide edge clearances in accordance with the quality standard specified.
2.05 FINISHES - WOOD VENEER DOORS
A. Finish work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), Section 5 - Finishing for grade specified and as follows:
1. Transparent:
a. System - 12 Polyurethane Water-based.
b. Stain: As indicated on drawings.
c. Sheen: As indicated in drawings.
2. Opaque:
a. System - 4, Latex Acrylic, Water-based.
b. Color: As indicated on drawings.
c. Sheen: As indicated on drawings.
B. Factory finish doors in accordance with approved sample.
C. Seal door top edge with color sealer to match door facing.
2.06 ACCESSORIES
A. Wood Louvers:
1. Material and Finish: Species to match door facing.
2. Louver Blade: Flush louver.
3. Louver Free Area: As indicated on Mechanical Documents.
B. Metal Louvers:
1. Material and Finish: Roll formed steel; pre-painted finish to color as selected.
2. Louver Blade: Inverted V blade, sight proof.
3. Louver Free Area: As indicated on Mechanical Documents.
C. Glazing: See Section 08 8000.
D. Glazing Stops: Wood, of same species as door facing, mitered corners; prepared for countersink style tamper proof screws.
E. Astragals and Edges for Double Doors: Pairs of doors astragals, and door edge sealing and protection devices.
1. UL listed products in compliance with requirements of authorities having jurisdiction.
2. Provide surface mounted astragal to cover or fill space for full door height between pair of doors or door and adjacent jamb.

3.01 EXAMINATION
A. Verify existing conditions before starting work.
B. Verify that opening sizes and tolerances are acceptable.
C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.
3.02 INSTALLATION
A. Install doors in accordance with manufacturer's instructions and specified quality standard.
1. Install fire-rated doors in accordance with NFPA 80 requirements.
B. Factory-Finished and Fire Rated Doors: Do not field cut or trim; if fit or clearance is not correct, replace door.
C. Field-Finished Doors: Trimming to fit is acceptable.
1. Adjust width of non-rated doors by cutting equally on both jamb edges.
2. Trim maximum of 3/4 inch off bottom edges.
3. Trim fire-rated doors in strict compliance with fire rating limitations.
D. Use machine tools to cut or drill for hardware.
E. Coordinate installation of doors with installation of frames and hardware.
F. Coordinate installation of glazing.
G. Install door louvers plumb and level.
3.03 TOLERANCES
A. Comply with specified quality standard for fit and clearance tolerances.
B. Comply with specified quality standard for telegraphing, warp, and squareness.
3.04 ADJUSTING
A. Adjust doors for smooth and balanced door movement.
B. Adjust closers for full closure and applicable accessibility operating forces.

SECTION 08 4313 - ALUMINUM-FRAMED STOREFRONTS

1.01 ADMINISTRATIVE REQUIREMENTS
A. Coordinate with installation of other components that comprise the exterior enclosure.
1.02 SUBMITTALS
A. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, door hardware, and internal drainage details.
B. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint location and details, and field welding required.
1.03 QUALITY ASSURANCE
A. Manufacturer Qualifications: Company specializing in performing work of type specified and with at least three years of experience.
B. Installer Qualifications: Company specializing in performing work of type specified and with at least three years of experience.
1.04 DELIVERY, STORAGE, AND HANDLING
A. Handle products of this section in accordance with AAMA CW-10.
B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.
1.05 FIELD CONDITIONS
A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.
1.06 WARRANTY
A. Provide two year manufacturer warranty against defects in material and workmanship
B. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

2.01 ALUMINUM-FRAMED STOREFRONT
A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
1. Glazing Rabbet: For 1 inch insulating glazing.
2. Glazing Rabbet: For 1/4 inch monolithic glazing.
3. Glazing Position: Centered (front to back).
4. Vertical Mullion Dimensions: 2 inches wide by 4-1/2 inches deep, unless otherwise noted on drawings.
5. Finish: Class I natural anodized.
a. Factory finish all surfaces that will be exposed in completed assemblies.
b. Coat concealed metal surfaces that will be in contact with cementitious materials or dissimilar metals with bituminous paint.
6. Finish: TO MATCH EXISTING.
7. NOT USED.
8. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
9. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
10. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
11. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.
12. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.
13. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.
B. Performance Requirements:
1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
a. Design Wind Loads: Comply with requirements of ASCE 7.
b. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
2. Water Penetration Resistance on Manufactured Assembly: No uncontrolled water on interior face, when tested in accordance with ASTM E331 at pressure differential of 8 psf.
3. Air Leakage Laboratory Test: Maximum of 0.06 cu ft/min sq ft of wall area, when tested in accordance with ASTM E283 at 6.27 psf pressure differential across assembly.
2.02 COMPONENTS
A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
1. Framing members for interior applications need not be thermally broken.
2. Provide a compensating head receptor to allow vertical deflection at the head without deforming other framing components.
3. Glazing Stops: Flush.
4. Structurally Reinforced Members: Extruded aluminum with internal reinforcement of structural steel member.
B. Glazing: As specified in Section 08 8000.
C. Swing Doors: Glazed aluminum.
1. Thickness: 1-3/4 inches.
2. Top Rail: 4 inches wide.
3. Vertical Stiles: 4-1/2 inches wide.
4. Bottom Rail: 10 inches wide.
5. Glazing Stops: Square.
6. Finish: Same as storefront.
2.03 MATERIALS
A. Extruded Aluminum: ASTM B221 (ASTM B221M).
B. Sheet Aluminum: ASTM B209 (ASTM B209M).
C. Fasteners: Stainless steel.
D. Exposed Flashings: Aluminum sheet, 20 gauge, 0.032 inch minimum thickness; finish to match framing members.
E. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.
2.04 FINISHES
A. Class I Natural Anodized Finish: AAMA 611 AA-M12C22A41 Clear anodic coating not less than 0.7 mils thick.
B. Class I Color Anodized Finish: AAMA 611 AA-M12C22A42 Integrally colored anodic coating not less than 0.7 mils thick.
C. NOT USED.
D. Color: As indicated on drawings.
E. Touch-Up Materials: As recommended by coating manufacturer for field application.
2.05 HARDWARE
A. Door Hardware: As indicated on drawings.

3.01 EXAMINATION
A. Verify dimensions, tolerances, and method of attachment with other work.
B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section.
3.02 INSTALLATION
A. Install wall system in accordance with manufacturer's instructions.
B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
C. Provide alignment attachments and shims to permanently fasten system to building structure.
D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
E. Provide thermal isolation where components penetrate or disrupt building insulation.
F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.
G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.
H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
I. Set thresholds in bed of sealant and secure.
J. Install hardware using templates provided.
K. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.
3.03 TOLERANCES
A. Maximum Variation from Plumb: 0.06 inch per 3 feet non-cumulative or 0.06 inch per 10 feet, whichever is less.
B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.
3.04 ADJUSTING
A. Adjust operating hardware and sash for smooth operation.

SECTION 08 7100 - DOOR HARDWARE

1.01 ADMINISTRATIVE REQUIREMENTS
A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
B. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.
C. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
1.02 SUBMITTALS
A. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
B. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
1. Comply with DHI (H&S) using door numbers and hardware set numbers as indicated in construction documents.
2. List groups and suffixes in proper sequence.
3. Provide complete description for each door listed.
4. Provide manufacturer's and product names, and catalog numbers; include functions, types, styles, sizes and finishes of each item.
5. Include account of abbreviations and symbols used in schedule.
1.03 QUALITY ASSURANCE
A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of experience.
B. Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least three years of experience and approved by manufacturer.
1.04 DELIVERY, STORAGE, AND HANDLING
A. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.
1.05 WARRANTY
A. Warranty against defects in material and workmanship for period indicated, from Date of Substantial Completion.
1. Closers: Ten years, minimum.
2. Exit Devices: Three years, minimum.
3. Locksets and Cylinders: Three years, minimum.
4. Other Hardware: Two years, minimum.

2.01 DESIGN AND PERFORMANCE CRITERIA
A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
B. Provide individual items of single type, of same model, and by same manufacturer.
C. Provide door hardware products that comply with the following requirements:
1. Applicable provisions of federal, state, and local codes.
2. Accessibility: ADA Standards and ICC A117.1.
3. Applicable provisions of NFPA 101.
4. Fire-Rated Doors: NFPA 80, listed and labeled by qualified testing agency for fire protection ratings indicated, based on testing at positive pressure in accordance with NFPA 252 or UL 10C.
5. Hardware on Fire-Rated Doors: Listed and classified by UL (DIR), ITS (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for application indicated.
6. Hardware for Smoke and Draft Control Doors: Provide door hardware that complies with local codes, and requirements of assemblies tested in accordance with UL 1784.
7. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for the purpose specified.
D. Electrically Operated and/or Controlled Hardware: Provide necessary power supplies, power transfer hinges, relays, and interfaces as required for proper operation; provide wiring between hardware and control components and to building power connection in compliance with NFPA 70.
E. Lock Function: Provide lock and latch function numbers and descriptions of manufacturer's series. Refer to Door Hardware Schedule.
F. Fasteners:
1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
a. Aluminum fasteners are not permitted.
b. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.
2. Fire-Rated Applications: Comply with NFPA 80.
a. Provide wood or machine screws for hinges mortised to doors or frames, strike plates to frames, and closers to doors and frames.
b. Provide steel through bolts for attachment of surface mounted closers, hinges, or exit devices to door panels unless proper door blocking is provided.
2.02 HINGES
A. Hinges: Complying with BHMA A156.1.
1. Butt Hinges: Comply with BHMA A156.1 and BHMA A156.7 for templated hinges.
a. Provide hinge width required to clear surrounding trim.
2. Provide hinges on every swinging door.
3. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
4. Provide ball-bearing hinges at each door unless otherwise indicated.
5. Provide non-removable pins on exterior outswinging doors.
6. Provide following quantity of butt hinges for each door:
a. Doors From 60 inches High up to 90 inches High: Three hinges.
b. Doors 90 inches High up to 120 inches High: Four hinges.
2.03 EXIT DEVICES
A. Exit Devices: Comply with BHMA A156.3, Grade 1.
1. Lever design to match lockset trim.
2. Provide cylinder with cylinder dogging or locking trim.
3. Provide exit devices properly sized for door width and height.
4. Provide strike as recommended by manufacturer for application indicated.
5. Provide less bottom rod (LBR) at scheduled locations to eliminate use of floor mounted strikes.
6. Provide UL (DIR) listed exit device assemblies for fire-rated doors and panic device assemblies for non-fire-rated doors.
7. For electrical options, provide quick connect plug-in pre-wired connectors.
2.04 DELAYED-EGRESS ELECTROMAGNETIC LOCKS
A. Delayed-Egress Electromagnetic Locks: Comply with BHMA A156.24, Grade 1.
1. Delayed-Egress Timer: Upon depressing push bar provide 15 seconds delay before door egress permitted, in compliance with NFPA 101.
2. Holding Force: 600 lbs, minimum.
3. Voltage: 12 VDC, and provide power supplies by same manufacturer as locks.
4. Provide electromagnetic locks for fire-rated doors in compliance with UL 10C.
5. Mounting: Surface mounted to door and frame on secure side, with fasteners, brackets, and spacer bars as required for application.
2.05 LOCK CYLINDERS
A. Lock Cylinders: Provide key access on outside of each lock, unless otherwise indicated.
1. Provide cylinders from same manufacturer as locking device.
2. Provide cams and/or tailpieces as required for locking devices.
2.06 CYLINDRICAL LOCKS
A. Cylindrical Locks (Bored): Comply with BHMA A156.2, Grade 1, 4000 Series.
1. Bored Hole: 2-1/8 inch diameter.
2. Latchbolt Throw: 1/2 inch, minimum.
3. Backset: 2-3/4 inch unless otherwise indicated.
4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
a. Finish: To match lock or latch.
5. Provide a lock for each door, unless otherwise indicated that lock is not required.
6. Trim: Provide lever handle or pull trim on outside of each lock, unless otherwise indicated.
2.07 DOOR PULLS AND PUSH PLATES
A. Door Pulls and Push Plates: Comply with BHMA A156.6.
1. Pull Type: Straight, unless otherwise indicated.
2. Push Plate Type: Flat, with rounded corners, unless otherwise indicated.
a. Edges: Beveled, unless otherwise indicated.
3. Material: Stainless steel, unless otherwise indicated.
4. On solid doors, provide matching door pull and push plate on opposite faces.
2.08 CLOSERS
A. Closers: Comply with BHMA A156.4, Grade 1.
1. Type: Surface mounted to door unless otherwise indicated.
2. Provide door closer on each exterior door.
3. Provide door closer on each fire-rated and smoke-rated door.
a. Spring hinges are not an acceptable self-closing device, unless otherwise indicated.
4. Where an overlapping astragal is included on pairs of swinging doors, provide coordinator to ensure door leaves close in proper order.
5. At corridor entry doors, mount closer on room side of door.
6. At outswinging exterior doors, mount closer on interior side of door.
2.09 PROTECTION PLATES
A. Protection Plates: Comply with BHMA A156.6.
B. Metal Properties: Stainless steel.
1. Metal, Heavy Duty: Thickness 0.062 inch, minimum.
C. Edges: Beveled, on four sides unless otherwise indicated.
D. Fasteners: Countersunk screw fasteners.
E. Drip Guard: Provide at head of exterior doors unless covered by roof or canopy.
2.10 FLOOR STOPS
A. Floor Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
1. Provide floor stops when wall surface is not available; be cautious not to create a tripping hazard.
2. Material: Aluminum housing with rubber insert.
2.11 WALL STOPS
A. Wall Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
1. Provide wall stops to prevent damage to wall surface upon opening door.
2. Type: Bumper, concave, wall stop.
3. Material: Aluminum housing with rubber insert.
2.12 THRESHOLDS
A. Thresholds: Comply with BHMA A156.21.
1. Provide threshold at each exterior door, unless otherwise indicated.
2. Type: Flat surface.
3. Material: Aluminum.
4. Threshold Surface: Thermally broken.
5. Field cut threshold to profile of frame and width of door sill for tight fit.
6. Provide non-corroding fasteners at exterior locations.
2.13 WEATHERSTRIPPING AND GASKETING
A. Weatherstripping and Gasketing: Comply with BHMA A156.22.
1. Provide gasketing for smoke and draft control doors that complies with local codes, requirements of assemblies tested in accordance with UL 1784.
2. Provide weatherstripping on each exterior door at head, jambs, and meeting stiles of door pairs, unless otherwise indicated; .
3. Provide door bottom sweep on each exterior door, unless otherwise indicated.
2.14 VIEWER
A. Viewer: Provide at inside of door at eye level to see who is on outside of door.
1. Material: Brass.
2.15 FIRE DEPARTMENT LOCK BOX
A. Fire Department Lock Box:
1. Heavy-duty, surface mounted, solid stainless-steel box with hinged door and interior gasket seal; single drill resistant lock with dust covers and tamper alarm.
2. Capacity: Holds 2 keys.
3. Finish: Manufacturer's standard black.
2.16 FINISHES
A. Finishes: Identified in Door Hardware Schedule.

3.01 EXAMINATION
A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.
B. Verify that electric power is available to power operated devices and of correct characteristics.
3.02 INSTALLATION
A. Install hardware in accordance with manufacturer's instructions and applicable codes.
B. Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.
C. Install hardware for smoke and draft control doors in accordance with NFPA 105.
D. Use templates provided by hardware item manufacturer.
E. Do not install surface mounted items until application of finishes to substrate are fully completed.
F. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item. Mounting heights in compliance with applicable accessibility standards.
G. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.
3.03 ADJUSTING
A. Adjust hardware for smooth operation.
B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.
3.04 CLEANING
A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.
B. Clean adjacent surfaces soiled by hardware installation.
C. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

SECTION 08 8000 - GLAZING

1.01 SUBMITTALS
A. Product Data on Insulating Glass Unit and Glazing Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.
B. Certificate: Certify that products of this section meet or exceed specified requirements.
C. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
1.02 QUALITY ASSURANCE
A. Perform Work in accordance with GANA (GM), GANA (SM), GANA (LGRM), and IGMA TM-3000 for fabrication and installation.
B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum five years of experience.
C. Installer Qualifications: Company specializing in performing work of the type specified and with at least five years experience.
1.03 WARRANTY
A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
B. Insulating Glass Units: Provide a ten (10) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including replacement of failed units.
C. Laminated Glass: Provide a five (5) year manufacturer warranty to include coverage for delamination, including providing products to replace failed units.

2.01 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES
A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.
1. Design Pressure: Calculated in accordance with ASCE 7.
2. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
3. Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
4. Glass thicknesses listed are minimum.
B. Vapor Retarder and Air Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure vapor retarder and air barrier.
1. In conjunction with vapor retarder and joint sealer materials described in other sections.
C. Thermal and Optical Performance: Provide exterior glazing products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
3. Solar Optical Properties: Comply with NFRC 300 test method.
2.02 GLASS MATERIALS
A. Float Glass: Provide float glass based glazing unless otherwise indicated.
1. Annealed Type: ASTM C1036, Type I - Transparent Flat, Class 1 - Clear, Quality - Q3.
2. Fully Tempered Safety Glass: Complies with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations.
3. Impact Resistant Safety Glass: Complies with ANSI Z97.1 and 16 CFR 1201 criteria; Class A/Category II.
B. Laminated Glass: Float glass laminated in accordance with ASTM C1172.
1. Laminated Safety Glass: Complies with ANSI Z97.1 - Class B or 16 CFR 1201 - Category I impact test requirements.
2.03 INSULATING GLASS UNITS
A. Insulating Glass Units: Types as indicated.
1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
2. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
3. Spacer Color: Black.
4. Edge Seal:
a. Dual-Sealed System: Provide polyisobutylene sealant as primary seal applied between spacer and glass panes, and silicone, polysulfide, or polyurethane sealant as secondary seal applied around perimeter.
b. Color: Black.
5. Purge interpane space with dry air, hermetically sealed.
B. Insulating Glass Units: Vision glass, double glazed.
1. Applications: Exterior glazing unless otherwise indicated.
2. Space between lites filled with argon.
3. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
a. Tint: Clear.
b. Coating: Low-E, on #2 surface.
4. Inboard Lite: Annealed float glass, 1/4 inch thick, minimum.
a. Tint: Clear.
5. Total Thickness: 1 inch.
6. Thermal Transmittance (U-Value), Summer - Center of Glass: 0.77, maximum.
7. Solar Heat Gain Coefficient (SHGC): 0.43 percent, maximum.
C. Insulating Glass Units: Spandrel glazing.
1. Applications: Exterior spandrel glazing unless otherwise indicated.
2. Space between lites filled with air.
3. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
a. Tint: Clear.
b. Coating: Same as on vision units, on #2 surface.
4. Inboard Lite: Heat-strengthened float glass, 1/4 inch thick.
a. Tint: Clear.
b. Opacifier: Ceramic frit, on #4 surface.
c. Opacifier Color: As indicated drawings.
5. Total Thickness: 1 inch.
D. Insulating Glass Units: Safety glazing.
1. Applications:
a. Glazed lites in exterior doors.
b. Glazed sidelights and panels next to doors.
c. Other locations required by applicable federal, state, and local codes and regulations.
d. Other locations indicated on drawings.
2. Space between lites filled with argon.
3. Glass Type: Same as other vision glazing except use fully tempered or laminated float glass for both outboard and inboard lites.
4. Total Thickness: 1 inch.
5. Thermal Transmittance (U-Value), Summer - Center of Glass: 0.38, maximum.
6. Solar Heat Gain Coefficient (SHGC): 0.43, maximum.
2.04 GLAZING UNITS
A. Monolithic Interior Vision Glazing:
1. Applications: Interior glazing unless otherwise indicated.
2. Glass Type: Annealed float glass.
3. Tint: Clear.
4. Thickness: 1/4 inch, nominal.
B. Monolithic Interior Safety Glazing:
1. Applications:
a. Glazed lites in doors.
b. Glazed sidelights to doors.
c. Other locations required by applicable federal, state, and local codes and regulations.
d. Other locations indicated on drawings.
2. Glass Type: fully tempered or laminated safety glass as specified.
3. Tint: Clear.
4. Thickness: 1/4 inch, nominal. Unless noted otherwise.

3.01 VERIFICATION OF CONDITIONS
A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.
B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.
C. Proceed with glazing system installation only after unsatisfactory conditions have been corrected.
3.02 PREPARATION
A. Clean contact surfaces with appropriate solvent and wipe dry immediately before glazing. Remove coatings that are not tightly bonded to substrates.
B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.
3.03 INSTALLATION, GENERAL
A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.
B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.
C. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.
D. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.
E. Set glass lites in proper orientation so that coatings face exterior or interior as indicated.
F. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.
3.04 FIELD QUALITY CONTROL
A. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.
B. Monitor and report installation procedures and unacceptable conditions.
3.05 CLEANING
A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.
B. Remove non-permanent labels immediately after glazing installation is complete.
C. Clean glass and adjacent surfaces after sealants are fully cured.
D. Clean glass on both exposed surfaces just prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.
3.06 PROTECTION
A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.
B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.: 25.0796
Drawn By: SCB

Date	Issue
07-10-25	Permit Set

A903

SPECIFICATIONS

SECTION 09 0561
COMMON WORK RESULTS FOR FLOORING PREPARATION

1.01 SECTION INCLUDES
- A. This section applies to floors identified in Contract Documents that are receiving floor coverings
- B. Removal of existing floor coverings.
- C. Preparation of new and existing concrete floor slabs for installation of floor coverings.
- D. Testing of concrete floor slabs for moisture and alkalinity (pH).
- E. Remediation of concrete floor slabs due to unsatisfactory moisture or alkalinity (pH) conditions.
  1. Contractor shall perform all specified remediation of concrete floor slabs. If such remediation is indicated by testing agency's report and is due to a condition not under Contractor's control or could not have been predicted by examination prior to entering into the contract, a contract modification will be issued.
- F. Patching compound.
- G. Remedial floor coatings.

1.02 ADMINISTRATIVE REQUIREMENTS
- A. Coordinate scheduling of cleaning and testing, so that preliminary cleaning has been completed for at least 24 hours prior to testing.

1.03 SUBMITTALS
- A. Visual Observation Report: For existing floor coverings to be removed.
- B. Floor Covering and Adhesive Manufacturers' Product Literature: For each specific combination of substrate, floor covering, and adhesive to be used; showing:
  1. Moisture and alkalinity (pH) limits and test methods.
  2. Manufacturer's required bond/compatibility test procedure.
- C. Remedial Materials Product Data: Manufacturer's published data on each product to be used for remediation.
- D. Testing Agency's Report:
  1. Description of areas tested; include floor plans and photographs if helpful.
  2. Summary of conditions encountered.
  3. Moisture and alkalinity (pH) test reports.
  4. Copies of specified test methods.
  5. Recommendations for remediation of unsatisfactory surfaces.
  6. Product data for recommended remedial coating.
  7. Submit report to Architect.
  8. Submit report not more than two business days after conclusion of testing.
- E. Adhesive Bond and Compatibility Test Report.
- F. Floor Moisture Testing Technician Certificate: International Concrete Repair Institute (ICRI) Concrete Slab Moisture Testing Technician- Grade I certificate.

1.04 QUALITY ASSURANCE
- A. Moisture and alkalinity (pH) testing shall be performed by an independent testing agency employed and paid by Contractor.
- B. Contractor may perform adhesive and bond test with Contractor's own personnel or hire a testing agency.
- C. Testing Agency Qualifications: Independent testing agency experienced in the types of testing specified.
  1. Submit evidence of experience consisting of at least 3 test reports of the type required, with project Owner's project contact information.
- D. Contractor's Responsibility Relating to Independent Agency Testing:
  1. Provide access for and cooperate with testing agency.
  2. Confirm date of start of testing at least 10 days prior to actual start.
  3. Allow at least 4 business days on site for testing agency activities.
  4. Achieve and maintain specified ambient conditions.
- E. Floor Moisture Testing Technician Qualifications: International Concrete Repair Institute (ICRI) Concrete Slab Moisture Testing Technician Certification- Grade I.
- F. Remedial Coating Installer Qualifications: Company specializing in performing work of the type specified in this section, trained by or employed by coating manufacturer, and able to provide at least 3 project references showing at least 3 years' experience installing moisture emission coatings.

1.05 DELIVERY, STORAGE, AND HANDLING
- A. Deliver, store, handle, and protect products in accordance with manufacturer's instructions and recommendations.
- B. Deliver materials in manufacturer's packaging; include installation instructions.
- C. Keep materials from freezing.

1.06 FIELD CONDITIONS
- A. Maintain ambient temperature in spaces where concrete testing is being performed, and for at least 48 hours prior to testing, at not less than 65 degrees F or more than 85 degrees F.
- B. Maintain relative humidity in spaces where concrete testing is being performed, and for at least 48 hours prior to testing, at not less than 40 percent and not more than 60 percent.

2.01 MATERIALS
- A. Patching Compound: Floor covering manufacturer's recommended product, suitable for conditions, and compatible with adhesive and floor covering. In the absence of any recommendation from flooring manufacturer, provide a product with the following characteristics:
  1. Cementitious moisture-, mildew-, and alkali-resistant compound, compatible with floor, floor covering, and floor covering adhesive, and capable of being feathered to nothing at edges.
  2. Compressive Strength: 3000 psi, minimum, after 28 days, when tested in accordance with ASTM C109/C109M or ASTM C472, whichever is appropriate.
- B. Alternate Flooring Adhesive: Floor covering manufacturer's recommended product, suitable for the moisture and pH conditions present; low-VOC. In the absence of any recommendation from flooring manufacturer, provide a product recommended by adhesive manufacturer as suitable for substrate and floor covering and for conditions present.
- C. Remedial Floor Coating, Two-Component: Single-layer coating resistant to water vapor transmission meeting flooring manufacturer's emission limits, resistant to alkalinity (pH) level found, and suitable for flooring adhesion without further treatment.
  1. Material: Comply with ASTM F3010.
  2. Thickness: As required for application and in accordance with manufacturer's installation instructions.
- D. Remedial Floor Coating, Single Component: Single-layer coating resistant to water vapor transmission meeting flooring manufacturer's emission limits, resistant to alkalinity (pH) level found, and suitable for flooring adhesion without further treatment.
  1. Material: Comply with ASTM F3513.
  2. Thickness: As required for application and in accordance with manufacturer's installation instructions.

3.01 CONCRETE SLAB PREPARATION
- A. Perform following operations in the order indicated:
  1. Existing concrete slabs (on-grade and elevated) with existing floor coverings:
     a. Visual observation of existing floor covering, for adhesion, water damage, alkaline deposits, and other defects.
     b. Removal of existing floor covering.
  2. Existing concrete slabs with coatings or penetrating sealers/hardeners/dustproofers:
     a. Do not attempt to remove coating or penetrating material.
     b. Do not abrade surface.
     c. Remove existing coatings and curing agents from surface according to recommendations of remedial coating manufacturer.
     d. Prepare surface according to recommendations of remedial coating manufacturer and according to ASTM D4259.
  3. Preliminary cleaning.
  4. Moisture vapor emission tests; 3 tests in the first 1000 square feet and one test in each additional 1000 square feet, unless otherwise indicated or required by flooring manufacturer.
  5. Internal relative humidity tests; in same locations as moisture vapor emission tests, unless otherwise indicated.
  6. Alkalinity (pH) tests; in same locations as moisture vapor emission tests, unless otherwise indicated.
  7. Specified remediation, if required.
  8. Patching, smoothing, and leveling, as required.
  9. Other preparation specified.
  10. Adhesive bond and compatibility test.
  11. Protection.
- B. Remediations:
  1. Active Water Leaks or Continuing Moisture Migration to Surface of Slab: Correct this condition before doing any other remediation; re-test after correction.
  2. Excessive Moisture Emission or Relative Humidity: If an adhesive that is resistant to the level of moisture present is available and acceptable to flooring manufacturer, use that adhesive for installation of the flooring; if not, apply remedial floor coating or remedial sheet membrane over entire suspect floor area.
  3. Excessive Alkalinity (pH): If remedial floor coating is necessary to address excessive moisture, no additional remediation is required; if not, if an adhesive that is resistant to the level present is available and acceptable to the flooring manufacturer, use that adhesive for installation of the flooring; otherwise, apply a skim coat of specified patching compound over entire suspect floor area.

3.02 REMOVAL OF EXISTING FLOOR COVERINGS
- A. Comply with local, State, and federal regulations and recommendations of RFCI (RWP), as applicable to floor covering being removed.
- B. Dispose of removed materials in accordance with local, State, and federal regulations and as specified.

3.03 PRELIMINARY CLEANING
- A. Clean floors of dust, solvents, paint, wax, oil, grease, asphalt, residual adhesive, adhesive removers, film-forming curing compounds, sealing compounds, alkaline salts, excessive laitance, mold, mildew, and other materials that might prevent adhesive bond.
- B. Do not use solvents or other chemicals for cleaning.

3.04 MOISTURE VAPOR EMISSION TESTING
- A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.
- B. Where this specification conflicts with the referenced test method, comply with the requirements of this section.
- C. Test in accordance with ASTM F1869 and as follows.
- D. Plastic sheet test and mat bond test may not be substituted for the specified ASTM test method, as those methods do not quantify the moisture content sufficiently.
- E. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if test values exceed 3 pounds per 1000 square feet per 24 hours.
- F. Report: Report the information required by the test method.

3.05 INTERNAL RELATIVE HUMIDITY TESTING
- A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.
- B. Where this specification conflicts with the referenced test method, comply with the requirements of this section.
- C. Test in accordance with ASTM F2170 Procedure A and as follows.
- D. Testing with electrical impedance or resistance apparatus may not be substituted for the specified ASTM test method, as the values determined are not comparable to the ASTM test values and do not quantify the moisture content sufficiently.
- E. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if any test value exceeds 75 percent relative humidity.
- F. Report: Report the information required by the test method.

3.06 ALKALINITY TESTING
- A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.
- B. The following procedure is the equivalent of that described in ASTM F710, repeated here for the Contractor's convenience.
  1. Use a wide range alkalinity (pH) test paper, its associated chart, and distilled or deionized water.
  2. Place several drops of water on a clean surface of concrete, forming a puddle approximately 1 inch in diameter. Allow the puddle to set for approximately 60 seconds, then dip the alkalinity (pH) test paper into the water, remove it, and compare immediately to chart to determine alkalinity (pH) reading.
  3. Use of a digital pH meter with probe is acceptable; follow meter manufacturer's instructions.
- C. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if alkalinity (pH) test value is over 10.

3.07 PREPARATION
- A. See individual floor covering section(s) for additional requirements.
- B. Comply with requirements and recommendations of floor covering manufacturer.
- C. Fill and smooth surface cracks, grooves, depressions, control joints and other non-moving joints, and other irregularities with patching compound.
- D. Do not fill expansion joints, isolation joints, or other moving joints.

3.08 ADHESIVE BOND AND COMPATIBILITY TESTING
- A. Comply with requirements and recommendations of floor covering manufacturer.

3.09 APPLICATION OF REMEDIAL FLOOR COATING
- A. Comply with requirements and recommendations of coating manufacturer.

SECTION 09 2116 - GYPSUM BOARD ASSEMBLIES

1.01 SECTION INCLUDES
- A. Performance criteria for gypsum board assemblies.
- B. Metal stud wall framing.
- C. Metal channel ceiling framing.
- D. Resilient sound isolation clips.
- E. Acoustic insulation.
- F. Gypsum sheathing.
- G. Backing board.
- H. Gypsum wallboard.
- I. Joint treatment and accessories.

1.02 SUBMITTALS
- A. Product Data:
  1. Provide data on metal framing, gypsum board, accessories, and joint finishing system.
  2. Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.
- B. Shop Drawings: Indicate special details associated with fireproofing and acoustic seals.

1.03 QUALITY ASSURANCE
- A. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of experience.

2.01 GYPSUM BOARD ASSEMBLIES
- A. Provide completed assemblies complying with ASTM C840 and GA-216.
- B. Shaft Walls at HVAC Shafts: Provide completed assemblies with the following characteristics:
  1. Air Pressure Within Shaft: Sustained loads of 5 lbf/sq ft with maximum mid-span deflection of L/240.
  2. Acoustic Attenuation: STC of 35-39 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.
- C. Shaft Walls at Elevator Shafts: Provide completed assemblies with the following characteristics:
  1. Air Pressure Within Shaft: Intermittent loads of 5 lbf/sq ft with maximum mid-span deflection of L/240.
  2. Acoustic Attenuation: STC of 35-39 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.
- D. Fire-Resistance-Rated Assemblies: Provide completed assemblies with the following characteristics:
  1. UL Assembly Numbers: Provide construction equivalent to that listed for the particular assembly in the current UL (FRD).

2.02 METAL FRAMING MATERIALS
- A. Steel Sheet: ASTM A1003/A1003M, subject to the ductility limitations indicated in AISI S220 or equivalent.
- B. Non-Loadbearing Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/240 at 5 psf.
  1. Studs: C-shaped.
  2. Runners: U shaped, sized to match studs.
  3. Ceiling Channels: C-shaped.
  4. Resilient Furring Channels: 1/2 inch depth, for attachment to substrate through one leg only.
  5. Security Barriers: Type II, expanded and flattened, Class 1 carbon steel mesh complying with ASTM F1267 in gauge indicated; applied between studs and gypsum board where indicated.
- C. Shaft Wall Studs and Accessories: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 and specified performance requirements.
- D. Partition Head to Structure Connections: Provide mechanical anchorage devices that accommodate deflection and prevent rotation of studs while maintaining structural performance of partition.
  1. Structural Performance: Maintain lateral load resistance and vertical movement capacity required by applicable code, when evaluated in accordance with AISI S100.
  2. Material: ASTM A653/A653M steel sheet, SS Grade 50/340, with G60/Z180 hot-dipped galvanized coating.
- E. Preformed Top Track Firestop Seal:
  1. Provide components UL-listed for use in UL-listed fire-resistance-rated head of partition joint systems indicated on drawings.
- F. Non-structural Framing Accessories:
  1. Ceiling Hangers: Type and size as specified in ASTM C754 for spacing required.
  2. Partial Height Wall Framing Support: Provides stud reinforcement and anchored connection to floor.
     a. Materials: ASTM A36/A36M formed sheet steel support member with factory-welded ASTM A1003/A1003M steel plate base.
  3. Framing Connectors: ASTM A653/A653M G90 galvanized steel clips; secures cold rolled channel to wall studs for lateral bracing.
  4. Flexible Wood Backing: Fire-retardant-treated wood with sheet steel connectors.
  5. Sheet Metal Backing: 18 gauge, 0.042 inch thick, galvanized, 6" wide.
- G. Grid Suspension Systems: Steel grid system of main tees and support bars connected to structure using hanging wire.

2.03 BOARD MATERIALS
- A. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
  1. Application: Use for vertical surfaces, unless otherwise indicated.
  2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
     a. Mold-resistant board is required whenever board is being installed before the building is enclosed and conditioned.
     b. Mold resistant board is required in toilet room and janitor closet walls and where indicated in drawings.
  3. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
  4. Thickness:
     a. Vertical Surfaces: 5/8 inch unless otherwise indicated or required by tested assembly.
- B. Backing Board For Wet Areas:
  1. Application: Surfaces behind tile in wet areas including tub and shower surrounds and shower ceilings.
  2. Glass Mat Faced Board: Coated glass mat water-resistant gypsum backing panel as defined in ASTM C1178/C1178M.
     a. Fire-Resistance-Rated Type: Type X core, thickness 5/8 inch.
- C. Backing Board For Non-Wet Areas: Water-resistant gypsum backing board as defined in ASTM C1396/C1396M; sizes to minimum joints in place; ends square cut.
  1. Application: Vertical surfaces behind thinset tile, except in wet areas.
  2. Type X Thickness: 5/8 inch.
  3. Edges: Tapered.
- D. Ceiling Board: Special sag resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
  1. Application: Ceilings, unless otherwise indicated.
  2. Thickness: 1/2 inch, unless otherwise indicated.
  3. Edges: Tapered.
- E. Exterior Sheathing Board: Sizes to minimize joints in place; ends square cut.
  1. Application: Exterior sheathing, unless otherwise indicated.
  2. Glass Mat Faced Sheathing: Glass mat faced gypsum substrate as defined in ASTM C1177/C1177M.
  3. Regular Board Thickness: 5/8 inch unless otherwise indicated.
  4. Edges: Square.
- F. Exterior Soffit Board: Exterior gypsum soffit board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
  1. Application: Ceilings and soffits in protected exterior areas, unless otherwise indicated.
  2. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X.
  3. Regular Type Thickness: 1/2 inch, unless otherwise indicated.
  4. Edges: Tapered.
- G. Shaftwall and Coreboard: Type X; 1 inch thick by 24 inches wide, beveled long edges, ends square cut.
  1. Paper-Faced Type: Gypsum shaftliner board or gypsum coreboard as defined ASTM C1396/C1396M; water-resistant faces.

2.04 GYPSUM BOARD ACCESSORIES
- A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: 3 inch or as indicated on drawings.
- B. Water-Resistive Barrier: See Section 07 2500.
- C. Finishing Accessories: ASTM C1047, extruded aluminum alloy (6063 T5) or galvanized steel sheet ASTM A924/A924M G90, unless noted otherwise.
  1. Types: As detailed or required for finished appearance.
  2. Special Shapes: In addition to conventional corner bead and control joints, provide U-bead at exposed panel edges.
- D. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
  1. Joint Compound: Drying type, vinyl-based, ready-mixed.
- E. Finishing Compound: Surface coat and primer, takes the place of skim coating.
- F. High Build Drywall Surfacer: Vinyl acrylic latex-based coating for spray application, designed to take the place of skim coating and separate paint primer in achieving Level 5 finish.
- G. Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.
- H. Exterior Soffit Vents: One piece, perforated, ASTM B221 6063 T5 alloy aluminum, with edge suitable for direct application to gypsum board and manufactured especially for soffit application. Provide continuous vent.

3.01 EXAMINATION
- A. Verify that project conditions are appropriate for work of this section to commence.

3.02 SHAFT WALL INSTALLATION
- A. Shaft Wall Framing: Install in accordance with manufacturer's installation instructions.
  1. Install studs at spacing required to meet performance requirements.
- B. Shaft Wall Liner: Cut panels to accurate dimensions and install sequentially between special friction studs.

3.03 FRAMING INSTALLATION
- A. Metal Framing: Install in accordance with ASTM C1007AISI S220 and manufacturer's instructions.
- B. Suspended Ceilings and Soffits: Space framing and furring members as indicated.
  1. Laterally brace entire suspension system.
  2. Install bracing as required at exterior locations to resist wind uplift.
- C. Studs: Space studs as indicated.
  1. Extend partition framing to height indicated on drawings.
  2. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.
  3. Partitions Penetrating Ceiling, not Terminating at Structure: Brace top track securely to structure at 48 inches on center, unless otherwise indicated.
  4. Partitions Terminating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and connect studs to track using specified mechanical devices in accordance with manufacturer's instructions; verify free movement of top of stud connections; do not leave studs unattached to track.
- D. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.
- E. Standard Wall Furring: Install at concrete and masonry walls scheduled to receive gypsum board, not more than 4 inches from floor and ceiling lines and abutting walls. Secure in place on alternate channel flanges at maximum 24 inches on center.
  1. Orientation: Vertical.
  2. Spacing: As indicated.
- F. Blocking: Use sheet metal backing secured to studs. Provide blocking for support of wall cabinets, toilet accessories, hardware, opening frames, and other wall mounted items requiring secure attachment.
  1. Use wood blocking secured to studs for plumbing fixtures, toilet partitions, grab bars, handrails and other items indicated on the drawings to be supported with wood blocking.

3.04 ACOUSTIC ACCESSORIES INSTALLATION
- A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

3.05 BOARD INSTALLATION
- A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
  1. Exception: Tapered edges to receive joint treatment at right angles to framing.
- C. Double-Layer, Nonrated: Use gypsum board for first layer, placed parallel to framing or furring members, with ends and edges occurring over firm bearing. Use glass mat faced gypsum board at exterior walls and at other locations as indicated. Place second layer perpendicular to framing or furring members. Offset joints of second layer from joints of first layer.
- D. Fire-Resistance-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.
- E. Exterior Sheathing: Comply with ASTM C1280. Install sheathing vertically, with edges butted tight and ends occurring over firm bearing.
  1. Paper-Faced Sheathing: Immediately after installation, protect from weather by application of water-resistive barrier.
- F. Exterior Soffits: Install exterior soffit board perpendicular to framing, with staggered end joints over framing members or other solid backing.
- G. Cementitious Backing Board: Install over steel framing members and wood framing members where indicated, in accordance with ANSI A108.11 and manufacturer's instructions.
- H. Installation on Metal Framing: Use screws for attachment of gypsum board except face layer of nonrated double-layer assemblies, which may be installed by means of adhesive lamination.
- I. Installation on Wood Framing: For rated assemblies, comply with requirements of listing authority. For nonrated assemblies, install as follows:
  1. Single-Layer Applications: Screw attachment.
  2. Double-Layer Application: Install base layer using screws or nails. Install face layer using screws.
- J. Curved Surfaces: Apply gypsum board to curved substrates in accordance with GA-226.
- K. Moisture Protection: Treat cut edges and holes in moisture resistant gypsum board and exterior gypsum soffit board with sealant.

3.06 INSTALLATION OF TRIM AND ACCESSORIES
- A. Control Joints: Place control joints consistent with lines of building spaces and as follows:
  1. Space in accordance with ASTM C840 and as indicated.
  2. Not more than 30 feet apart on walls and ceilings over 50 feet long.
  3. At exterior soffits, not more than 30 feet apart in both directions.
  4. Where partition, wall or ceiling traverses a construction joint (expansion, seismic, or building control element) in the base building structure.
  5. Where floor supported partition adjoins ceiling supported structures.
- B. Corner Beads: Install at external corners, using longest practical lengths.
- C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.
- D. Exterior Soffit Vents: Install according to manufacturer's written instructions and in locations indicated on drawings. Provide vent area specified.

3.07 JOINT TREATMENT
- A. Glass Mat Faced Gypsum Board and Exterior Glass Mat Faced Sheathing: Use fiberglass joint tape, embed and finish with setting type joint compound.
- B. Paper Faced Gypsum Board: Use paper joint tape, embed with setting type joint compound and finish with drying type joint compound.
- C. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
  1. Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated.
  2. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
  3. Level 3: Walls to receive textured wall finish.
  4. Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.
  5. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction.
- D. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
  1. Feather coats of joint compound so that camber is maximum 1/32 inch.
- E. Where Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.
- F. Fill and finish joints and corners of cementitious backing board as recommended by manufacturer.

3.08 TOLERANCES
- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

SECTION 09 3000 - TILING

1.01 ADMINISTRATIVE REQUIREMENTS
- A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by affected installers.

1.02 SUBMITTALS
- A. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
- B. Samples: Mount tile and apply grout on two plywood panels, minimum 18 by 18 inches in size illustrating pattern, color variations, and grout joint size variations.
- C. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  1. See Section 01 6000 - Product Requirements, for additional provisions.
  2. Extra Tile: 2 percent of each size, color, and surface finish combination, but not less than 10 sq. ft. of each type.

1.03 QUALITY ASSURANCE
- A. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum 5 years of experience.
- B. Installer Qualifications:
  1. Company specializing in performing tile installation, with minimum of five years of documented experience.

2.01 TILE
- A. Tile : ANSI A137.1 and as scheduled in the drawings.

2.02 TRIM AND ACCESSORIES
- A. Tile Trim: Provide tile shapes in sizes coordinated with field tile unless otherwise indicated.
  1. Applications:
     a. Open Edges: Bullnose.
     b. Inside Corners: Jointed.
     c. Floor to Wall Joints: Straight base.
  2. Manufacturers: Same as for tile.
- B. Non-tile Trim: Finish, style and dimensions to suit application unless otherwise indicated, for setting using tile mortar or adhesive.
  1. Applications: Use in the following locations, whether indicated or not:
     a. Open edges of wall tile.
     b. Open edges of floor tile.
     c. Transition between floor finishes of different heights.
     d. Expansion and control joints, floor and wall.

2.03 SETTING MATERIALS
- A. Latex-Portland Cement Mortar Bond Coat: ANSI A118.4.
  1. Applications: Use this type of bond coat where indicated, and where no other type of bond coat is indicated.

2.04 GROUTS
- A. High Performance Polymer Modified Grout: ANSI A118.7 polymer modified cement grout.
  1. Applications: Use this type of grout where indicated and where no other type of grout is indicated.
  2. Use sanded grout for joints 1/8 inch wide and larger; use unsanded grout for joints less than 1/8 inch wide.
  3. Color(s): As indicated on drawings.

2.05 MAINTENANCE MATERIALS
- A. Grout Sealer: Liquid-applied, moisture and stain protection for existing or new Portland cement grout.
  1. Composition: Water-based colorless silicone.
- B. Tile Sealer: Stain protection for natural stone and concrete tile.
- C. Grout Release: Temporary, water-soluble pre-grout coating.

2.06 ACCESSORY MATERIALS
- A. Concrete Floor Slab Crack Isolation Membrane: Material complying with ANSI A118.12; not intended as waterproofing.
  1. Crack Resistance: No failure at 1/8 inch gap, minimum.
  2. Fluid or Trowel Applied Type:
     a. Material: Synthetic rubber or Acrylic.
     b. Thickness: 20 mils, maximum.
- B. Waterproofing Membrane: Specifically designed for bonding to cementitious substrate under thick mortar bed or thin-set tile; complying with ANSI A118.10.
  1. Crack Resistance: No failure at 1/16 inch gap, minimum; comply with ANSI A118.12.
  2. Fluid or Trowel Applied Type:
     a. Material: Synthetic rubber or Acrylic.
     b. Thickness: 25 mils, minimum, dry film thickness.
- C. Backer Board: Cementitious type complying with ANSI A118.9; high density, glass fiber reinforced, 1/2 inch thick; 2 inch wide coated glass fiber tape for joints and corners.
- D. Backer Board: Coated glass mat type complying with ASTM C1178/C1178M; inorganic fiberglass mat on both surfaces and integral acrylic coating vapor retarder.
- E. Mesh Tape: 2 inch wide self-adhesive fiberglass mesh tape.
- F. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement-based product provided by manufacturer of tile-setting materials.

3.01 EXAMINATION
- A. Verify that subsurface and preparations by others are in accordance with ANSI A108.01
- B. Verify that subfloor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.
- C. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.
- D. Verify that subfloor surfaces are dust free and free of substances that could impair bonding of setting materials to subfloor surfaces.
- E. Cementitious Subfloor Surfaces: Verify that substrates are ready for tiling installation by testing for moisture and alkalinity (pH).
  1. Test in accordance with Section 09 0561.
2. Obtain instructions if test results are not within limits recommended by tiling material manufacturer and setting material manufacturer.
3. Follow moisture and alkalinity remediation procedures in Section 09 0561.
- F. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION
- A. Protect surrounding work from damage.
- B. Vacuum clean surfaces and damp clean.
- C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- D. Install backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of setting material to a feather edge.

3.03 INSTALLATION - GENERAL
- A. Install tile and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and TCA Handbook recommendations.
- B. Lay tile to pattern indicated. Do not interrupt tile pattern through openings.
- C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints.
- D. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.
- E. Form internal angles square and external angles bullnosed.
- F. Install non-ceramic trim in accordance with manufacturer's instructions.
  1. Install tile expansion joints at 16 to 20 foot intervals, unless otherwise noted.
- G. Sound tile after setting. Replace hollow sounding units.
- H. Keep control and expansion joints free of mortar, grout, and adhesive.
- I. Prior to grouting, allow installation to completely cure; minimum of 48 hours.
- J. Grout tile joints unless otherwise indicated. Use standard grout unless otherwise indicated.
- K. At changes in plane and tile-to-tile control joints, use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding.

3.04 INSTALLATION - FLOORS - THIN-SET METHODS
- A. Over interior concrete substrates, install in accordance with TCNA (HB) Method F113, dry-set or latex-Portland cement bond coat, with standard grout, unless otherwise indicated.
  1. Where waterproofing membrane is indicated, install in accordance with TCNA (HB) Method F122, with latex-Portland cement grout.
  2. Where crack suppression membrane is required by this section, install in accordance with TCNA Handbook Method F125.

3.05 INSTALLATION - WALL TILE
- A. Over exterior Concrete and Masonry - Previously coated or otherwise unsuitable for direct application: Metal Lath and Two-coat application; TCNA W201.
- B. On exterior walls install in accordance with TCNA (HB) Method W244, thin-set over cementitious backer units, with waterproofing membrane.
- C. Over cementitious backer units install in accordance with TCNA (HB) Method W223, organic adhesive.
- D. Over coated glass mat backer board on studs, install in accordance with TCNA (HB) Method W245.
- E. Over gypsum wallboard on wood or metal studs install in accordance with TCNA (HB) Method W243, thin-set with dry-set or latex-Portland cement bond coat, unless otherwise indicated.
- F. Over interior concrete and masonry install in accordance with TCNA (HB) Method W202, thin-set with dry-set or latex-Portland cement bond coat.

3.06 CLEANING
- A. Clean tile and grout surfaces.

3.07 PROTECTION
- A. Do not permit traffic over finished floor surface until mortar and grout have adequately cured.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB

Date	Issue
07-10-25	Permit Set

A904

SPECIFICATIONS

SECTION 09 5100 - ACOUSTICAL CEILINGS

1.01 ADMINISTRATIVE REQUIREMENTS
- A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Do not install acoustical units until after interior wet work is dry.

1.02 SUBMITTALS
- A. Product Data: Provide data on suspension system components and acoustical units.
- B. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  1. See Section 01 6000 - Product Requirements, for additional provisions.
  2. Extra Acoustical Units: Quantity equal to 5 percent of total installed.

1.05 QUALITY ASSURANCE
- A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years experience.
- B. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years experience.

1.06 FIELD CONDITIONS
- A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

2.01 PERFORMANCE REQUIREMENTS
- A. Seismic Performance: Ceiling systems designed to withstand the effects of earthquake motions determined according to ASCE 7 for Seismic Design Category D, E, or F and complying with the following:
  1. Local authorities having jurisdiction.

2.02 ACOUSTICAL UNITS
- A. Acoustical Units - General: ASTM E 1264, Class A. Refer to drawings for products.

2.03 SUSPENSION SYSTEM(S)
- A. Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with stabilizer bars, clips, splices, perimeter moldings, and hold down clips as required. Refer to drawings for products.

2.04 ACCESSORIES
- A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.
- B. Hanger Wire: 12-gauge 0.08 inch galvanized steel wire.
- C. Hold-Down Clips: Manufacturer's standard clips to suit application.
- D. Seismic Clips: Manufacturer's standard clips for seismic conditions and to suit application.
- E. Perimeter Moldings: Same metal and finish as grid.
  1. Size: As required for installation conditions and specified Seismic Design Category.
- F. Touch-up Paint: Type and color to match acoustical and grid units.

3.01 EXAMINATION
- A. Verify existing conditions before starting work.
- B. Verify that layout of hangers will not interfere with other work.

3.02 PREPARATION
- A. Install after major above-ceiling work is complete.
- B. Coordinate the location of hangers with other work.

3.03 INSTALLATION - SUSPENSION SYSTEM
- A. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions and as supplemented in this section.
- B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
- C. Lay out system to a balanced grid design with edge units no less than 50 percent of acoustical unit size, unless otherwise indicated on drawings.
- D. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
  1. Use longest practical lengths.
  2. Overlap and rivet corners.
- E. Suspension System, Non-Seismic: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- F. Seismic Suspension System, Seismic Design Category C: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Maintain a 3/8 inch clearance between grid ends and wall.
- G. Seismic Suspension System, Seismic Design Categories D, E, F: Hang suspension system with grid ends attached to the perimeter molding on two adjacent walls; on opposite walls, maintain a 3/4 inch clearance between grid ends and wall.
- H. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- I. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- J. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.
- K. Do not eccentrically load system or induce rotation of runners.

3.04 INSTALLATION - ACOUSTICAL UNITS
- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Fit border trim neatly against abutting surfaces.
- D. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- E. Cutting Acoustical Units:
  1. Make field cut edges of same profile as factory edges.
  2. Double cut and field paint exposed reveal edges.
- F. Where round obstructions occur, provide preformed closures to match perimeter molding.
- G. Install hold-down clips on panels in entrance vestibules, within 20 ft of an exterior door, and where indicated.

3.05 TOLERANCES
- A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.
- B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

SECTION 09 6500 - RESILIENT FLOORING

1.01 SECTION INCLUDES
- A. Resilient tile flooring.
- B. Resilient base.
- C. Resilient stair accessories.
- D. Installation accessories.

1.02 SUBMITTALS
- A. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- B. Concrete Subfloor Test Report: Submit a copy of the moisture and alkalinity (pH) test reports.
- C. Certification: Prior to installation of flooring, submit written certification by flooring manufacturer and adhesive manufacturer that condition of subfloor is acceptable.
- D. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  1. Extra Flooring Material: 12 square feet of each type and color.
  2. Extra Wall Base: 8 linear feet of each type and color.

1.03 QUALITY ASSURANCE
- A. Manufacturer Qualifications: Company specializing in manufacturing specified flooring with minimum three years experience.
- B. Installer Qualifications: Company specializing in installing specified flooring with minimum three years experience and approved by flooring manufacturer.
- C. Testing Agency Qualifications: Independent firm specializing in performing concrete slab moisture testing and inspections of the type specified in this section.

1.04 DELIVERY, STORAGE, AND HANDLING
- A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run numbers.
- B. Store all materials off of the floor in an acclimatized, weather-tight space.
- C. Maintain temperature in storage area between 55 degrees F and 90 degrees F.
- D. Protect roll materials from damage by storing on end.
- E. Do not double stack pallets.

1.05 FIELD CONDITIONS
- A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

2.01 TILE FLOORING
- A. Vinyl Composition Tile: Homogeneous, with color extending throughout thickness.
  1. Minimum Requirements: Comply with ASTM F1066, of Class corresponding to type specified.
  2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E 648, NFPA 253, ASTM E 648, or NFPA 253.
  3. Size: 12 by 12 inch.
  4. Thickness: 0.125 inch.
  5. Pattern & Color: as indicated on the drawings.
  6. Color: As indicated on drawings.
- B. Vinyl Tile: Printed film type, with transparent or translucent wear layer.
  1. Minimum Requirements: Comply with ASTM F1700, Class III.
  2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648.
  3. Tile Size: As indicated on drawings.
  4. Wear Layer Thickness: 0.020 inch minimum.
  5. Total Thickness: 0.20 inch.
  6. Total Thickness: As indicated on drawings.
  7. Color: As indicated on drawings.
- C. Rubber Tile: Homogeneous, color and pattern throughout thickness.
  1. Minimum Requirements: Comply with ASTM F1344, of Class corresponding to type specified.
  2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E 648, NFPA 253, ASTM E 648, or NFPA 253.
  3. Size: As indicated on drawings nominal.
  4. Total Thickness: 0.125 inch.
  5. Total Thickness: As indicated on drawings.
  6. Texture: As indicated on drawings.
  7. Color: As indicated on drawings.
- D. Feature Strips: Of same material as tile, as indicated on drawings.

2.02 STAIR COVERING
- A. Stair Treads: Rubber; full width and depth of stair tread in one piece; tapered thickness.
  1. Minimum Requirements: Comply with ASTM F2169.
  2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E 648, NFPA 253, ASTM E 648, or NFPA 253.
  3. Nominal Thickness: 0.1875 inch.
  4. Nosing, Striping and Texture: As indicated on drawings.
  5. Color: As indicated on drawings.
- B. Stair Treads with Integral Risers: Rubber; full height of riser, full width and depth of tread in one piece; tapered thickness.
  1. Minimum Requirements: Comply with ASTM F2169.
  2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
  3. Nominal Thickness: 0.1875 inch.
  4. Nosing, Striping and Tread Texture: As indicated on drawings.
  5. Color: As indicated on drawings.
- C. Stair Stringers: Full height in one piece and in maximum available lengths, matching treads in material and color.
  1. Nominal Thickness: 0.080 inch.
- D. Stair Nosings: 1-1/2 inch horizontal return minimum, 1-1/8 inch vertical return minimum, full width of stair tread in one piece.
  1. Material: Rubber.
  2. Nominal Thickness: 0.125 inch.
  3. Color: As indicated on drawings.

2.03 RESILIENT BASE
- A. Resilient Base: ASTM F1861, as indicated on drawings; top set.
  1. Height, Color, and Finish : As indicated on the drawings.
  2. Thickness: 0.125 inch.
  3. Length: Roll.
  4. Accessories: Premolded external corners and internal corners.

2.04 ACCESSORIES
- A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer.
- B. Primers, Adhesives, and Seam Sealer: Waterproof; types recommended by flooring manufacturer.
  1. Provide only products having lower VOC content than allowed by local regulation.
- C. Moldings, Transition and Edge Strips: As indicated on the drawings.
- D. Sealer and Polish: Types recommended by flooring manufacturer.

3.01 EXAMINATION
- A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive resilient base.
- C. Cementitious Subfloor Surfaces: Verify that substrates are ready for resilient flooring installation by testing for moisture and alkalinity (pH).
  1. Test in accordance with Section 09 0561.
  2. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
  3. Follow moisture and alkalinity remediation procedures in Section 09 0561.
- D. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION
- A. Prepare floor substrates for installation of flooring in accordance with Section 09 0561.
- B. Prohibit traffic until filler is fully cured.
- C. Clean substrate.
- D. Apply primer as required to prevent "bleed-through" or interference with adhesion by substances that cannot be removed.

3.03 INSTALLATION - GENERAL
- A. Starting installation constitutes acceptance of subfloor conditions.
- B. Install in accordance with manufacturer's written instructions.
- C. Adhesive-Applied Installation:
  1. Spread only enough adhesive to permit installation of materials before initial set.
  2. Fit joints and butt seams tightly.
  3. Set flooring in place, press with heavy roller to attain full adhesion.
- D. Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring under centerline of door.
- E. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
  1. Metal Strips: Attach to substrate before installation of flooring using stainless steel screws.
  2. Resilient Strips: Attach to substrate using adhesive.
- F. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- G. Install flooring in recessed floor access covers, maintaining floor pattern.
- H. Install feature strips where indicated.

3.04 INSTALLATION - TILE FLOORING
- A. Mix tile from container to ensure shade variations are consistent when tile is placed, unless otherwise indicated in manufacturer's installation instructions.
- B. Pattern: As indicated on drawings.
- C. Install feature strips and floor markings where indicated. Fit joints tightly.

3.05 INSTALLATION - RESILIENT BASE
- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.
- B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.
- C. Install base on solid backing. Bond tightly to wall and floor surfaces.
- D. Scribe and fit to door frames and other interruptions.

3.06 INSTALLATION - STAIR COVERINGS
- A. Install stair coverings in one piece for full width and depth of tread.
- B. Install stringers configured tightly to stair profile.
- C. Adhere over entire surface. Fit accurately and securely.

3.07 CLEANING
- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's written instructions.

3.08 PROTECTION
- A. Prohibit traffic on resilient flooring for 48 hours after installation.

SECTION 09 9123 - INTERIOR PAINTING

1.01 SECTION INCLUDES
- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
  1. Prime surfaces to receive wall coverings.
  2. Mechanical and Electrical:
     a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.
     b. In finished areas, paint shop-primed items.
- D. Do Not Paint or Finish the Following Items:
  1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
  2. Items indicated to receive other finishes.
  3. Items indicated to remain unfinished.
  4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
  5. Floors, unless specifically indicated.
  6. Glass.
  7. Concealed pipes, ducts, and conduits.

1.02 SUBMITTALS
- A. Product Data: Provide complete list of products to be used, with the following information for each:
  1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
  2. MPI product number (e.g. MPI #47).
  3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
- B. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
  1. Where sheen is specified, submit samples in only that sheen.
  2. Where sheen is not specified, discuss sheen options with Architect before preparing samples, to eliminate sheens definitely not required.
- C. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  1. See Section 01 6000 - Product Requirements, for additional provisions.
  2. Extra Paint and Finish Materials: 1 gallon of each color, type, and sheen; from the same product run, store where directed.
  3. Label each container with color, type, texture, and room locations in addition to the manufacturer's label.

1.03 QUALITY ASSURANCE
- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum three years experience.

1.04 DELIVERY, STORAGE, AND HANDLING
- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.05 FIELD CONDITIONS
- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

2.01 MANUFACTURERS
- A. Provide paints and finishes from the same manufacturer to the greatest extent possible.
  1. Substitution of other products by the same manufacturer is preferred over substitution of products by a different manufacturer.
  2. Substitution of a different paint system using MPI-approved products by the same manufacturer will be considered.

2.02 PAINTS AND FINISHES - GENERAL
- A. Paints and Finishes: Ready mixed, unless intended to be a field-catalyzed paint.
  1. Where MPI paint numbers are specified, provide products listed in Master Painters Institute Approved Product List, current edition available at www.paintinfo.com, for specified MPI categories, except as otherwise indicated.
  2. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
  3. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
  4. Supply each paint material in quantity required to complete entire project's work from a single production run.
  5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B. Volatile Organic Compound (VOC) Content:
  1. Provide paints and finishes that comply with the most stringent requirements specified in the following:
     a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
  2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
- C. Flammability: Comply with applicable code for surface burning characteristics.
- D. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.
- E. Colors: As indicated on drawings.
  1. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.

2.03 PAINT SYSTEMS - INTERIOR
- A. Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete, concrete masonry units, brick, wood, plaster, uncoated steel, shop primed steel, galvanized steel, and aluminum.
  1. Two top coats and one coat primer.
  2. Top Coat(s): Interior Latex; MPI #43, 44, 52, 53, 54, or 114.
  3. Top Coat Sheen, unless noted otherwise on drawings:
     a. Flat: MPI gloss level 1; use this sheen for ceilings and other overhead surfaces.
     b. Eggshell: MPI gloss level 3; use this sheen at all locations.
  4. Primer: As recommended by top coat manufacturer for specific substrate.
- B. Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including metals and wood:
  1. Medium duty applications include doors, door frames, railings, handrails, guardrails, and balustrades.
  2. Two top coats and one coat primer.
  3. Top Coat(s): High Performance Architectural Interior Latex; MPI #139, 140, or 141.
  4. Top Coat Sheen:
     a. Semi-Gloss: MPI gloss level 5; use this sheen unless noted otherwise.
  5. Primer: As recommended by top coat manufacturer for specific substrate.
- C. Dry Fall: Metals; exposed structure and overhead-mounted services or as indicated on drawings, including shop primed steel deck, structural steel, metal fabrications, galvanized ducts, galvanized conduit, and galvanized piping.
  1. Shop primer by others.
  2. One top coat .
  3. Top Coat: Latex Dry Fall; MPI #118, 155, or 226.
  4. Top Coat Sheen:
     a. Flat: MPI gloss level 1; use this sheen unless noted otherwise.
- D. Transparent Finish on Concrete Floors, unless noted otherwise.
  1. 2 coats sealer.
  2. Sealer: Water Based Sealer for Concrete Floors; MPI #99.
  3. Sealer Sheen:
     a. Eggshell: MPI gloss level 3; use this sheen unless noted otherwise.
- E. Wood, Opaque, Latex, 3 Coat:
  1. One coat of latex primer sealer.
  2. Semi-gloss: Two coats of latex enamel; MPI #54,unless noted otherwise.
- F. Concrete/Masonry, Opaque, Latex, 3 Coat:
  1. One coat of block filler.
  2. Flat: Two coats of latex enamel; MPI #53, unless noted otherwise.
- G. Ferrous Metals, Unprimed, Latex, 3 Coat:
  1. One coat of latex primer.
  2. Semi-gloss: Two coats of latex enamel; MPI #153, unless noted otherwise.
- H. Ferrous Metals, Primed, Latex, 2 Coat:
  1. Touch-up with latex primer.
  2. Semi-gloss: Two coats of latex enamel; MPI #153, unless noted otherwise.
- I. Galvanized Metals, Latex, 3 Coat:
  1. One coat galvanize primer.
  2. Semi-gloss: Two coats of latex enamel; MPI #153, unless noted otherwise.
- J. Fabrics/Insulation Jackets, Alkyd, 3 Coat:
  1. One coat of alkyd primer sealer.
  2. Flat: Two coats of alkyd enamel; MPI #49, unless noted otherwise.

2.04 PRIMERS
- A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
  1. Interior/Exterior Latex Block Filler; MPI #4.
  2. Interior Latex Primer Sealer; MPI #50.
  3. Interior Water Based Primer for Galvanized Metal; MPI #134.
  4. Latex Primer for Interior Wood; MPI #39.

2.05 ACCESSORY MATERIALS
- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

3.01 EXAMINATION
- A. Do not begin application of paints and finishes until substrates have been properly prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- D. Test shop-applied primer for compatibility with subsequent cover materials.
- E. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
  1. Gypsum Wallboard: 12 percent.
  2. Plaster and Stucco: 12 percent.
  3. Masonry, Concrete, and Concrete Masonry Units: 12 percent.
  4. Interior Wood: 15 percent, measured in accordance with ASTM D4442.
  5. Concrete Floors and Traffic Surfaces: 8 percent.

3.02 PREPARATION
- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or repair existing paints or finishes that exhibit surface defects.
- D. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- E. Seal surfaces that might cause bleed through or staining of topcoat.
- F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- G. Concrete:
  1. Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
  2. Clean concrete according to ASTM D4258. Allow to dry.
  3. Prepare surface as recommended by top coat manufacturer and according to SSPC-SP 13.
- H. Masonry:
  1. Remove efflorescence and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces or if alkalinity of mortar joints exceed that permitted in manufacturer's written instructions. Allow to dry.
  2. Prepare surface as recommended by top coat manufacturer.
- I. Concrete Floors and Traffic Surfaces: Remove contamination, acid etch, and rinse floors with clear water. Verify required acid-alkali balance is achieved. Allow to dry.
- J. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.
- K. Plaster: Fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.
- L. Insulated Coverings: Remove dirt, grease, and oil from canvas and cotton.
- M. Aluminum: Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
- N. Copper: Remove contamination by steam, high pressure water, or solvent washing.
- O. Galvanized Surfaces:
  1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
  2. Prepare surface according to SSPC-SP 2.
- P. Ferrous Metal:
  1. Solvent clean according to SSPC-SP 1.
  2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
  3. Remove rust, loose mill scale, and other foreign substances using using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.
- Q. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.
- R. Wood Doors to be Field-Finished: Seal wood door top and bottom edge surfaces with clear sealer.
- S. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION
- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- C. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
- D. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- E. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- F. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply as many coats as necessary for complete hide.
- G. Sand wood and metal surfaces lightly between coats to achieve required finish.
- H. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- I. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 PROTECTION
- A. Protect finishes until completion of project.
- B. Touch-up damaged finishes after Substantial Completion.

SECTION 10 2800 - TOILET, BATH & LAUNDRY ACCESSORIES

1.01 SECTION INCLUDES
- A. Commercial toilet accessories.
- B. Under-lavatory pipe supply covers.
- C. Diaper changing stations.
- D. Utility room accessories.

1.02 ADMINISTRATIVE REQUIREMENTS
- A. Coordinate the work with the placement of internal wall reinforcement and reinforcement of toilet partitions to receive anchor attachments.

1.03 SUBMITTALS
- A. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.

2.01 MATERIALS
- A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.
  1. Grind welded joints smooth.
  2. Fabricate units made of metal sheet of seamless sheets with flat surfaces.
- B. Keys: Provide two keys for each accessory to Owner; master key lockable accessories.
- C. Stainless Steel Sheet: ASTM A666, Type 304.
- D. Stainless Steel Tubing: ASTM A269/A269M, Grade TP304 or TP316.
- E. Mirror Glass: Annealed float glass, ASTM C1036 Type I, Class 1, Quality Q2, with silvering, protective and physical characteristics complying with ASTM C1503.
- F. Adhesive: Contact type, waterproof.
- G. Fasteners, Screws, and Bolts: Hot dip galvanized; tamper-proof; security type.
- H. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.02 FINISHES
- A. Stainless Steel: Satin finish, unless otherwise noted.
- B. Galvanizing for Items Other than Sheet: Comply with ASTM A123/A123M; galvanize ferrous metal and fastening devices.

2.03 COMMERCIAL TOILET ACCESSORIES
- A. As scheduled on the drawings.

2.04 UNDER-LAVATORY PIPE AND SUPPLY COVERS
- A. Under-Lavatory Pipe and Supply Covers:
  1. Insulate exposed drainage piping, including hot, cold, and tempered water supplies under lavatories or sinks to comply with ADA Standards.
  2. Exterior Surfaces: Smooth non-absorbent, non-abrasive surfaces.
  3. Construction: 1/8 inch flexible PVC.
     a. Surface Burning Characteristics: Flame spread index of 25 or less and smoke developed index of 450 or less, when tested in accordance with ASTM E84.
  4. Color: White.

2.05 DIAPER CHANGING STATIONS
- A. Diaper Changing Station: Wall-mounted folding diaper changing station for use in commercial toilet facilities, meeting or exceeding ASTM F2285.
  1. Material: Polyethylene.
  2. Mounting: Surface.
  3. Color: As indicated on drawings.

2.06 UTILITY ROOM ACCESSORIES
- A. Combination Utility Shelf/Mop and Broom Holder: 0.05 inch thick stainless steel, Type 304, with 1/2 inch returned edges, 0.06 inch steel wall brackets.
  1. Drying rod: Stainless steel, 1/4 inch diameter.
  2. Hooks: Two, 0.06 inch stainless steel rag hooks at shelf front.
  3. Mop/broom holders: Three spring-loaded rubber cam holders at shelf front.
  4. Length: Manufacturer's standard length for number of holders/hooks.

3.01 EXAMINATION
- A. Verify existing conditions before starting work.
- B. Verify exact location of accessories for installation.
- C. For electrically-operated accessories, verify that electrical power connections are ready and in the correct locations.
- D. See Section 06 1000 - Rough Carpentry for installation of blocking, reinforcing plates, and concealed anchors in walls.

3.02 PREPARATION
- A. Deliver inserts and rough-in frames to site for timely installation.
- B. Provide templates and rough-in measurements as required.

3.03 INSTALLATION
- A. Install accessories in accordance with manufacturers' instructions in locations indicated on drawings.
- B. Install plumb and level, securely and rigidly anchored to substrate.
- C. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.

3.04 PROTECTION

Protect installed accessories from damage due to subsequent construction operations.

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811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

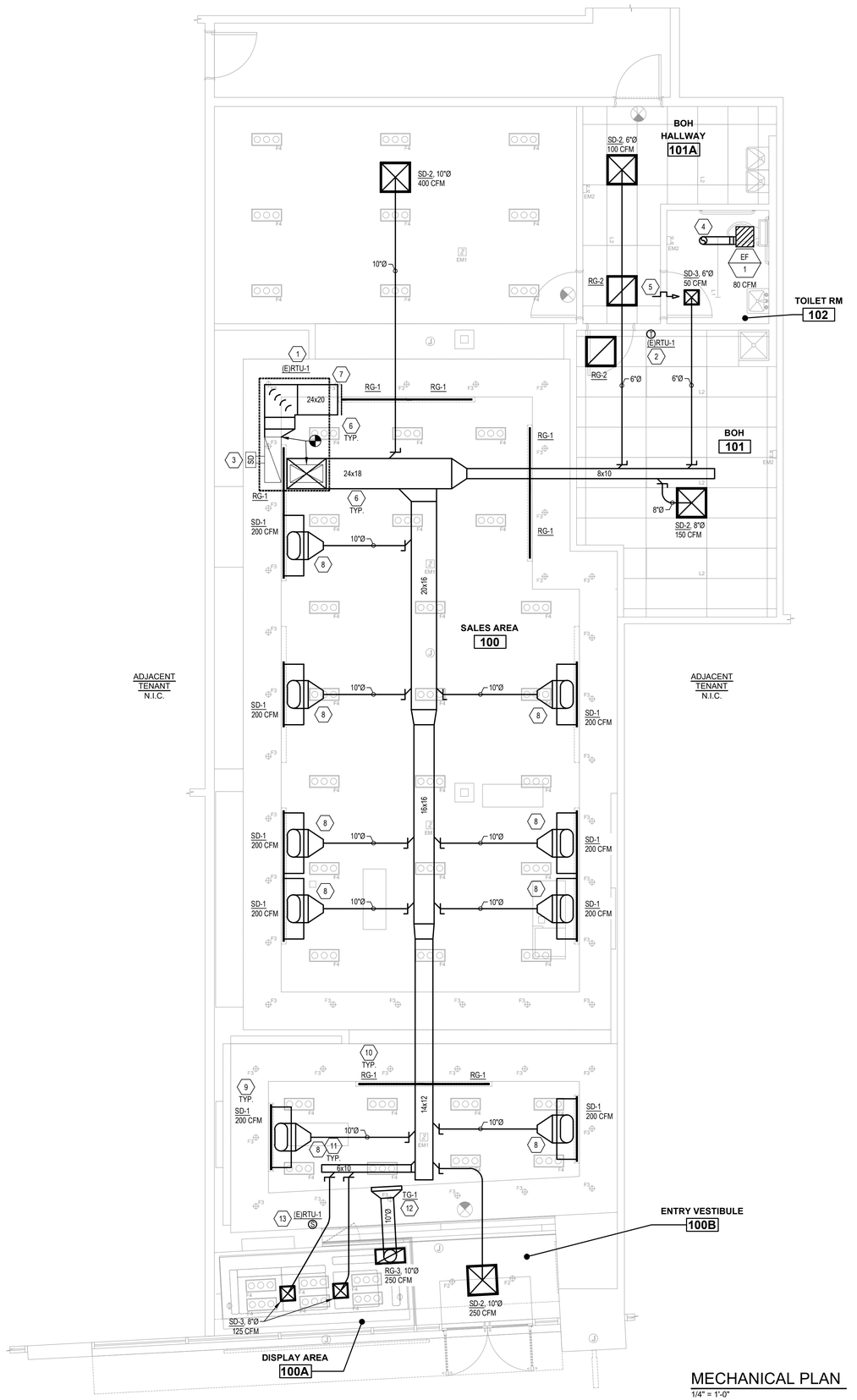
STATE OF MISSOURI
DONALD W. ALEXANDER
NUMBER A-2024019161
ARCHITECT
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	SCB
Date	Issue
07-10-25	Permit Set

A905

SPECIFICATIONS



MECHANICAL PLAN
1/4" = 1'-0"

MECHANICAL GENERAL NOTES:

A. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT TO INSTALL A COMPLETE AND OPERATION HEATING AND COOLING SYSTEM.

B. CONTRACTOR SHALL PROVIDE ALL REQUIRED HVAC PERMITS.

C. THE CONTRACTOR SHALL COMPLY WITH NFPA-90A AND ALL APPLICABLE CODES.

D. ALL HVAC WORK TO BE PERFORMED SHALL BE IN COMPLIANCE WITH ALL STATE AND LOCAL CODES.

E. FLEXIBLE DUCT SHALL COMPLY WITH SMACNA. ALL LOCAL CODES, U.L. RATING, AND NOT EXCEED FIVE FEET IN LENGTH, SHEET METAL DUCT, WHERE REQUIRED BY LOCAL CODES, SHALL BE LINED WITH 1" MATT FACED DUCTLINER IN THE FIRST 10 (TEN) FEET OF THE RETURN AND SUPPLY DUCT STARTING FROM THE HVAC UNIT. AFTER THE FIRST 10 (TEN) FEET THE USE OF 1" DUCT WRAP SHALL BE ACCEPTABLE WORK MATERIAL TO BE VERIFIED WITH CEILING ACCESSIBILITY RATING.

F. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL SWITCHES, DISCONNECTS, AND CONTROL WIRING.

G. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS, ALLOW FOR DUCT INSULATION.

H. THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE THAT SHALL WARRANT ALL WORKMANSHIP AND MATERIALS FOR ONE (1) YEAR FROM THE FINAL WORK ACCEPTANCE BY THE OWNER AND A FIVE YEAR WARRANTY ON THE COMPRESSOR.

I. FILTERS SHALL BE OF THE DISPOSABLE TYPE AND SHALL BE MERV-8, PROVIDE TWO SETS, ONE DURING CONSTRUCTION AND ONE FOR USE AFTER OCCUPANCY.

J. CONTRACTORS SHALL INSTALL ALL NECESSARY OFFSETS, BENDS, AND TRANSITIONS REQUIRED TO PROVIDE A COMPLETE SYSTEM AT NO ADDITIONAL COST TO THE OWNER.

K. COORDINATE LOCATION OF ALL CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH THE ELECTRICIAN TO PREVENT CONFLICT WITH LIGHTS AND ARCHITECTURAL ELEMENTS.

L. ALL WORK OF THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID ANY INTERFERENCES THAT MAY DELAY PROGRESS DURING CONSTRUCTION.

M. THE MECHANICAL CONTRACTOR SHALL TEST AND BALANCE TO THE AIR QUANTITIES ON THE PLAN AND PROVIDE A T&B REPORT.

N. CONTRACTOR SHALL INSTALL A THERMOSTAT IN ACCORDANCE WITH THERMOSTAT SPECS.

O. CONTRACTOR SHALL INSTALL MANUAL BALANCING DAMPERS AT ALL SUPPLY AIR BRANCH DUCTWORK RUN OUTS.

P. CONTRACTOR SHALL INSTALL TURNING VANES AT ALL DUCTWORK TEES AND 90 DEGREE ELBOWS.

Q. CONTRACTOR SHALL CONFIRM THE PRESENCE OF A FACTORY INSTALLED DUCT-TYPE MOUNTED SMOKE DETECTOR FOR UNIT SHUTDOWN IN THE RETURN AIR DUCTWORK PLENUM AT ROOFTOP UNITS. THE CONTRACTOR SHALL VERIFY THE COMPATIBLE TYPE OF DETECTION DEVICE TO USE WITH THE BUILDING OPERATIONS MANAGER.

R. ALL SHEET METAL DUCTWORK SHALL COMPLY WITH SMACNA STANDARDS. ALL DUCTWORK JOINTS SHALL BE TAPED AND SEALED.

S. CONTRACTOR SHALL PROVIDE EQUIPMENT OF THE SCHEDULED CAPACITIES DESIGNED.

(X) MECHANICAL CODED NOTES:

1. LANDLORD PROVIDED ROOFTOP UNIT AT EXISTING UNIT LOCATION. PROVIDE WITH CURB ADAPTOR AS NECESSARY. FIELD VERIFY EXISTING CONDITIONS AND FINAL LOCATION PRIOR TO STARTING WORK. REFER TO SHEET M200 FOR ADDITIONAL INFORMATION. CONNECT NEW SUPPLY AND RETURN DUCT MAINS TO EXISTING SUPPLY AND RETURN DUCT DROPS.
2. PROVIDE NEW 7-DAY PROGRAMMABLE THERMOSTAT WITH REMOTE TEST STATION AT 48" A.F.F. PROVIDE WITH CLEAR LOCKABLE COVER. FIELD VERIFY FINAL LOCATION.
3. FACTORY INSTALLED RETURN AIR SMOKE DETECTOR.
4. ROUTE 6" EXHAUST AIR DUCTWORK UP THRU ROOF AND PROVIDE WITH EXHAUST ROOF CAP ACCESSORY. MECHANICAL CONTRACTOR TO ENSURE EXHAUST IS A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKES. FIELD VERIFY FINAL LOCATION PRIOR TO STARTING WORK.
5. UNDERCUT DOOR 1".
6. INSTALL DUCTWORK AS HIGH AS POSSIBLE. TYP.
7. MECHANICAL CONTRACTOR SHALL TERMINATE RETURN DUCT MAIN WITH A 1/2" WIRE MESH GRILLE IN PLENUM SPACE.
8. PROVIDE ROUND TO 10" FLAT OVAL DUCT TRANSITION TO CONNECT DUCT TO SD-1 PLENUM BOX. PROVIDE YOUNG REGULATOR OR SIMILAR REMOTE DAMPER WITH ACCESS AT LINEAR DIFFUSER FACE.
9. LINEAR DIFFUSER AND PLENUM BOX FURNISHED BY LOVESAC, INSTALLED BY CONTRACTOR. LINEAR DIFFUSER IN SOFFIT TO DISCHARGE HORIZONTALLY. COORDINATE WITH REFLECTED CEILING PLAN. TYP.
10. LINEAR RETURN AIR GRILLE FURNISHED BY LOVESAC SHALL BE INSTALLED IN FACE OF ARCHITECTURAL SOFFIT. COORDINATE WITH REFLECTED CEILING PLAN. TYP.
11. OWNER PROVIDED MODULINEAR PLENUM ADAPTER (MPI) MANUFACTURED BY TITUS. TYP.
12. INSTALL TRANSFER GRILLE AS HIGH AS POSSIBLE IN VERTICAL FACE OF SOFFIT.
13. FURNISH AND INSTALL A HONEYWELL REMOTE SENSOR FOR THERMOSTAT, WHERE INDICATED. GC TO FURNISH AND INSTALL PLENUM RATED CONTROL WIRING FROM SENSOR TO THERMOSTAT AND CONNECT PER MANUFACTURES INSTRUCTIONS.

NOTE:

EXACT ROOFTOP UNIT LOCATION COULD NOT BE CONFIRMED AT TIME OF SURVEY. LOCATION OF ROOFTOP UNIT SHOWN ON PLAN IS AN APPROXIMATE LOCATION. FIELD VERIFY EXACT LOCATION OF ROOFTOP UNIT PRIOR TO STARTING WORK.

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811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
NUMBER
PE-2010031345
MECHANICAL ENGINEER
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	REK

Date	Issue
07-10-25	Permit Set

M100

MECHANICAL PLAN

LANDLORD PROVIDED ROOFTOP UNIT SCHEDULE (ELECTRIC HEAT)

MARK	MANUFACTURER	MODEL	NOMINAL TONS	SUPPLY AIR (CFM)	MIN. OUTDOOR AIR (CFM)	ESP ("WC)	HP	ELECTRIC HEAT (KW)	HEATING EAT/LAT (°F)	TOTAL COOLING CAPACITY (MBH)	SENSIBLE COOLING CAPACITY (MBH)	COOLING STAGES	AMBIENT TEMPERATURE (°F)	COOLING EAT DB/WB (°F)	EER / IEER	ELECTRICAL				OPERATING WEIGHT (LBS)	REMARKS
																MCA	MOCP	VOLT	PHASE		
(E)RTU-1	DAIKIN	DHC0903L000047C	7.5	3,000	763	0.5	2.4	30	55 / 86.2	90.1	69.7	2	95	80 / 67	12.5 / 17.5	88.2	90	208	3	1,589	1-15

REMARKS
1. ROOF CURB ADAPTOR.
2. INTEGRATED ECONOMIZER WITH DIFFERENTIAL ENTHALPY.
3. BAROMETRIC RELIEF DAMPER.
4. NON-FUSED DISCONNECT.
5. 120V UNPOWERED CONVENIENCE OUTLET WITH WEATHER COVER.
6. MERV-8 FILTERS.
7. STAGED AIR VOLUME SUPPLY FAN.
8. HINGED ACCESS PANELS.
9. THRU BASE ELECTRICAL CONNECTION.
10. HIGH AND LOW PRESSURE SWITCHES.
11. CONDENSATE OVERFLOW SWITCH.
12. RETURN AIR TEMPERATURE SENSOR.
13. FACTORY INSTALLED RETURN AIR SMOKE DETECTOR.
14. HAIL GUARD.
15. CONFIRM EXISTING MANUFACTURER AND MODEL. CONTACT KEVIN QUAST Kevin.Quast@daikincomfort.com FOR ADDITIONAL QUESTIONS/INFO.

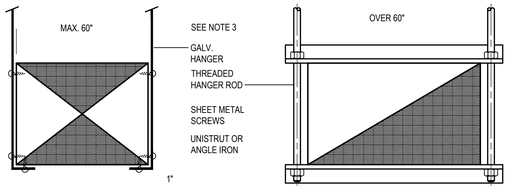
FAN SCHEDULE

MARK	MANUFACTURER	MODEL	CFM	RPM	ESP ("WC)	MOTOR POWER (WATTS)	ELECTRICAL		REMARKS
							VOLT	PHASE	
EF-1	GREENHECK	SP-AP0511W-1	80	817	0.125	8	115	1	1,2

REMARKS
1. PROVIDE BACKDRAFT DAMPER
2. FACTORY INTEGRAL DISCONNECT

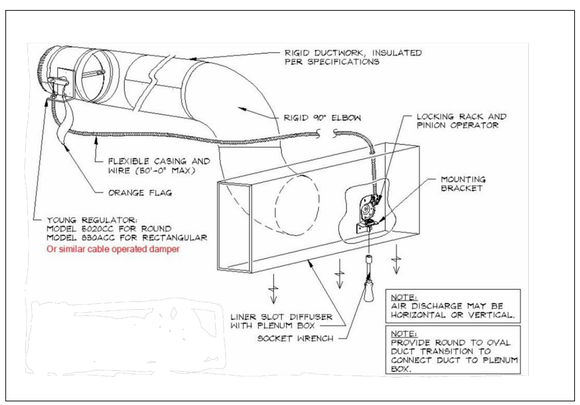
VENTILATION SCHEDULE based on Missouri Modular Mechanical Code 2021

Zone Identification	Occupancy Category	Zone Floor Area A_z (ft^2)	Area Outdoor Airflow Rate R_a (CFM/ft^2)	People Outdoor Airflow Rate R_p (CFM/person)	Occupant Density (#/1000ft^2)	Zone Population P_z (People)	Zone Air Effective-ness E_z	Breathing Zone Outdoor Airflow V_{bz} (CFM)	Exhaust Rate (CFM/ft^2)	Required Exhaust Airflow (CFM)	Actual Provided Airflow (CFM)	Actual Provided Outdoor Airflow (CFM)	Actual Provided Exhaust Airflow (CFM)	Mechanical Unit
100 - Sales	Sales	1857	0.12	7.5	15	28	0.80	540	0	0	2200	550	0	RTU-1
100A - Display Area	Occupiable Storage Rooms for Dry Materials	74	0.06	5	2	0	0.80	6	0	0	250	62.5	0	RTU-1
100B - Entry Vestibule	Main Entry Lobbies	56	0.06	5	10	1	0.80	8	0	0	250	75	0	RTU-1
101 - BOH	Occupiable Storage Rooms for Dry Materials	234	0.06	5	2	0	0.80	20	0	0	150	37.5	0	RTU-1
101A - BOH Hallway	Corridors	121	0.06	0	0	0	0.80	9	0	0	100	25	0	RTU-1
102 - Toilet Room	Toilets - Private	51	0	0	0	0	0.80	0	25/50 Per Fixture	50	50	12.5	80	RTU-1
Total:											3000	762.5	80	

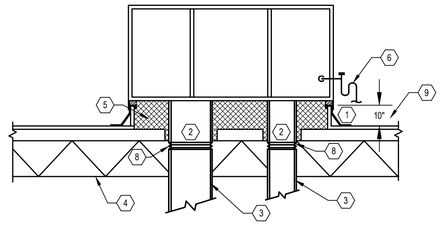


NOTES:
1. ON DUCTS OVER 48" WIDE, BOTTOM SHALL BE BRACED BY ANGLE. FOR CROSS SECTION AREA MORE THAN 8 SQ FT, DUCT SHALL BE BRACED BY ANGLES ON ALL FOUR SIDES.
2. CUTTING AND PATCHING SHALL BE LIMITED TO A MINIMUM AS REQUIRED FOR PROPER INSTALLATION.
3. SUPPORTS SHALL BE SPACED AND SIZED AS PER SMACNA.

1 | DUCT HANGER SUPPORT
N.T.S.



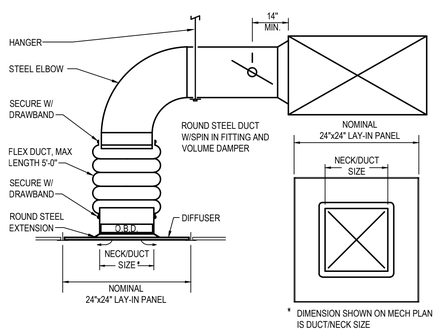
3 | CABLE OPERATED MANUAL VOLUME DAMPER DETAIL
N.T.S.



KEY NOTES:

1. SET ROOF CURB ON STRUCTURAL STEEL - SHIM DEAD LEVEL. SECURE ROOF CURB TO METAL DECK AND A/C UNIT TO ROOF CURB.PROVIDE KORFUND RUBBER ISOLATOR ON COMPLETE PERIMETER OF CURB.
2. TRANSITION TO CONNECTION SIZES IN DUCT RISE, REFER TO PLANS FOR SIZES.
3. 1" ACOUSTIC LINER. DUCT SIZES INDICATED ON PLAN ARE INTERIOR DIMENSIONS AND DO NOT INCLUDE LINING. PAINT DUCTWORK TO MATCH CEILING. REFER TO ARCHITECTURAL DRAWINGS FOR PAINT SPEC.
4. REFER TO STRUCTURAL DRAWINGS FOR JOIST LOCATIONS, SIZES, AND DIRECTION.
5. INSULATED ROOF CURB.
6. CONDENSATE DRAIN WITH CLEAN OUT AND 4" DEEP SEAL TRAP. SEE PLAN FOR CONTINUATION.
7. NOT USED.
8. FLEXIBLE CONNECTION - TYPICAL.
9. RTU TO BE A MINIMUM OF 10" ABOVE ROOF INSULATION. ADJUST CURB SIZE AS NECESSARY TO ACHIEVE THIS HEIGHT.

2 | ROOFTOP UNIT DETAIL
N.T.S.



4 | LAY-IN DIFFUSER DETAIL
N.T.S.

DIFFUSERS AND GRILLES

MARK	MANUFACTURER	MODEL	MATERIAL	FRAME	MAX NC	NOTES
SD-1	TITUS	ML-39 / MPI-39	ALUMINUM	48"X5" 2-SLOT 1" SLOT WIDTH W/ PLENUM BOX	39	1-7
SD-2	TITUS	TMS	STEEL	24"x24" LAY-IN	25	1,2,4,7
SD-3	TITUS	TMS	STEEL	12"x12" SURFACE	25	1,2,4,7
RG-1	TITUS	MLR-39	ALUMINUM	48"X5" 2-SLOT 1" SLOT WIDTH	34	1,2,4,5,6,7
RG-2	TITUS	50F	ALUMINUM	24"x24" LAY-IN	25	4,7,8
RG-3	TITUS	50FF	ALUMINUM	24"X12" SURFACE	25	4,7,8
TG-1	TITUS	50F	ALUMINUM	24"X12" SURFACE	25	9,10

NOTES:
1. OPPOSED BLADE DAMPER
2. PROVIDE VOLUME DAMPER IN BRANCH DUCT RUNOUT WHERE CEILING IS ACCESSIBLE. O.B. DAMPER BEHIND GRILLE OR DIFFUSER IS REQUIRED WHERE DUCT BRANCH IS INACCESSIBLE.
3. INSTALL SUPPLY PLENUM AS PROVIDED BY OWNER.
4. CONTRACTOR SHALL CONFIRM EXACT LOCATION OF GRILLES WITH GENERAL CONTRACTOR TENANT & ARCHITECT PRIOR TO ANY WORK. PAINT GRILLES WITH WHITE.
5. FURNISHED BY LOVESAC, INSTALLED BY CONTRACTOR.
6. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL YOUNG REGULATOR FOR LINEAR DIFFUSER/GRILLE.
7. NECK SIZE INDICATED ON DRAWING.
8. PAINT INTERIOR OF DUCTWORK BEHIND GRILLES AND DIFFUSERS FLAT BLACK IF VISIBLE THROUGH DEVICE.
9. PROVIDE WITH RAPID MOUNT FRAME FOR GRILLE INSTALLED IN WALL.
10. MOUNT GRILLE HIGH ON VERTICAL SOFFIT WITH BLADES FACING UP.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
NUMBER PE-2010031244
MECHANICAL ENGINEER
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.: 25.0796
Drawn By: REK

Date	Issue
07-10-25	Permit Set

M200

MECHANICAL SCHEDULES AND DETAILS

Mechanical
General Information

A. General
1. Conform to all general and special conditions of contract as specified by architect, tenant and owner.
2. Specifications are applicable to all contractors and subcontractors for mechanical and electrical systems
3. Contractor shall comply with owner's standards, facility specifications, rules and regulations. All owner's criteria shall be complied with and included in this bid. Check other plans and specifications and fully coordinate with other trades and architect's requirements.
4. Visit site, check facilities and conditions, and verify all utility company requirements and connection points in field prior to starting work. Take all items into consideration in bid.
5. Systems are to be complete and workable in all respects, placed in operation and properly adjusted.
6. Each contractor shall provide for his own clean-up, removal and legal disposal of all rubbish daily.
7. The contractor shall be solely responsible for construction means, methods, and sequences of construction and the safety of workmen. comply with all OSHA regulations.
8. No piping, ductwork, controls, etc., shall be installed or routed above electrical panels and equipment or through elevator rooms or shafts.
9. The mechanical and electrical contractors shall coordinate the electrical characteristics of all mechanical equipment prior to ordering of equipment. No additional payment will be made for lack of contractor coordination of electrical characteristics.
10. All mechanical and electrical system components shall be routed tight to underside of structure and through joists or trusses where possible. Coordinate installation to preserve headroom, equipment access, and architectural clearances for finishes, including ceiling heights. Coordinate with all other trades and do not conflict with the architectural requirements for the finished construction. Provide offsets where required to coordinate with other trades.
11. Refer to architectural reflected ceiling plans for locations of all grilles and diffusers.
12. Operation and maintenance manuals: three (3) bound sets of the operation and maintenance manuals shall be provided to the construction representative at turnover, and are required for final acceptance.
13. As built drawings: the HVAC subcontractor shall progressively record all HVAC drawing changes which shall be available at all times for review by the construction representative. An AutoCAD copy of the final as-built drawings shall be provided to the construction representative at turnover. This AutoCAD as-built is required for final acceptance of the project.

B. Codes, standards and regulations
1. Conform to all applicable codes, government regulations, utility company requirements, and national electrical code.
2. Obtain permits and pay all fees. Arrange for all required inspections and approvals.

C. Related work specified elsewhere
1. Openings and chases, when shown on architectural drawings.

D. Drawings
1. The systems as shown on the contract drawings are diagrammatic.
2. The intent is for complete and workable systems. The drawings and these notes are to be used together as a basis of showing and/or describing the system requirements for the facility.
3. Verify all dimensions and clearances by field measurement and check for interferences prior to starting work.

E. Base equipment and materials and substitutions
1. All equipment and materials shall be new, free of defects and U.L. labeled.
2. Submit shop drawings for all equipment, fixtures, etc., including all accessories to be furnished. Base bid manufacturers and models are included in specifications or listed in schedule on drawing. Any other manufacturer or model is a substitution.
3. Substitutions are subject to the approval of the owner and shall be listed on the form of proposal for the owner's consideration prior to contract award. If substitution is submitted, it is the contractor's responsibility to evaluate it and certify that the substitution is equivalent in all respects to the base specifications.
4. If substitutions are approved, notify all other contractors, subcontractors or trades affected by substitution and fully coordinate. Any costs resulting from substitution, whether by contractor or others, shall be responsibility of and paid for by substituting contractor.
5. All equipment shall be installed in full accordance with the manufacturer's installation instructions. It is this contractor's responsibility to check and conform to these requirements prior to starting work.

F. Check, test, start, adjust, balance and instructions
1. After installation, check all equipment, and perform start up in accordance with the manufacturer's instructions.
2. All piping shall be tested and free of leaks.
3. Balance all systems, calibrate controls, check for proper operating sequence under all conditions, and make all necessary adjustments.
4. All wiring shall be fully tested and made free of grounds and short circuits.
5. Instruct owner in operation of systems and submit operating and maintenance manual on all equipment and systems.
6. Provide engraved labels and identification tags for all piping systems, valves and equipment.
7. Provide typed panel directories and engraved labels for all panels and equipment.

G. Cutting, patching and drilling
1. All cutting and chasing of the building construction required for this work shall be by this contractor unless shown on architectural drawings and confirmed as to size and location prior to new construction. Cutting shall be in a neat and workmanlike manner.
2. Neatly saw cut all rectangular openings, set sleeve through opening, and finish patch or provide trim flange around opening.
3. Core drill and sleeve all round openings.
4. Cut and patch existing building walls as required for duct installation. Provide steel lintel above opening wider than 10". See structural drawings for sizes. Provide escutcheons or 2" wide sheet metal flanges around all exposed penetrations.
5. Do not cut any structural components without architect's approval.
6. Patch and finish to match adjacent areas that have been cut, damaged or modified to install equipment for this project.
7. Cutting of roof, installation of curbs, and patching of roof shall be by a certified roofing contractor, approved by building owner, and paid for by this contractor.
8. Fire stop all penetrations of fire rated construction in a code approved manner, using UL listed fire rated materials.
9. All contractors shall confirm with owner, prior to bid, times available for noise producing work such as cutting and core drilling of floors, walls, etc., as well as times for work which require access into adjoining areas. Include any premium time required in bid.
10. Exact location of roof top mechanical units shall be approved by owner's structural engineer. Mechanical contractor shall furnish and install all supplemental support steel for units and roof duct penetrations after approval of structural engineer.

H. Warranty
1. Fully warrant all materials, equipment and workmanship for one (1) year from date of acceptance.
2. Extend all manufacturer's warranties to owner, including five (5) year compressor and ten (10) year heat exchanger extended warranty on HVAC equipment.
3. Repair or replace without charge to the owner all items found defective during the warranty period.

SECTION 23 0553
IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Nameplates.
B. Tags.
C. Stencils.

PART 2 PRODUCTS

2.01 IDENTIFICATION APPLICATIONS
A. Air Handling Units: Nameplates.
B. Automatic Controls: Tags. Key to control schematic.
C. Small-sized Equipment: Tags.
D. Thermostats: Nameplates.

2.02 NAMEPLATES
A. Letter Color: White.
B. Letter Height: 1/4 inch (6 mm).
C. Background Color: Black.

2.03 TAGS
A. Plastic Tags: Laminated three-layer plastic with engraved black letters on light contrasting background color. Tag size minimum 1-1/2 inch (40 mm) diameter.
B. Metal Tags: Brass with stamped letters; tag size minimum 1-1/2 inch (40 mm) diameter with smooth edges.

2.04 STENCILS
A. Stencils: With clean cut symbols and letters of following size:
1. Equipment: 2-1/2 inch (65 mm) high letters.

PART 3 EXECUTION

3.01 PREPARATION
A. Degrease and clean surfaces to receive adhesive for identification materials.

3.02 INSTALLATION
A. Install nameplates with corrosive-resistant mechanical fasteners, or adhesive. Apply with sufficient adhesive to ensure permanent adhesion and seal with clear lacquer.

END OF SECTION

SECTION 23 0593
TESTING, ADJUSTING, AND BALANCING FOR HVAC

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Testing, adjustment, and balancing of air systems.
B. Measurement of final operating condition of HVAC systems.

1.02 SUBMITTALS
A. TAB Plan: Submit a written plan indicating the testing, adjusting, and balancing standard to be followed and the specific approach for each system and component.
1. Include at least the following in the plan:
a. List of all air flow, water flow, sound level, system capacity and efficiency measurements to be performed and a description of specific test procedures, parameters, formulas to be used.
b. Copy of field checkout sheets and logs to be used, listing each piece of equipment to be tested, adjusted and balanced with the data cells to be gathered for each.
c. Final test report forms to be used.
d. Procedures for formal deficiency reports, including scope, frequency and distribution.
B. Final Report: Indicate deficiencies in systems that would prevent proper testing, adjusting, and balancing of systems and equipment to achieve specified performance.
1. Revise TAB plan to reflect actual procedures and submit as part of final report.
2. Submit draft copies of report for review prior to final acceptance of Project. Provide final copies for Architect and for inclusion in operating and maintenance manuals.
3. Include actual instrument list, with manufacturer name, serial number, and date of calibration.
4. Form of Test Reports: Where the TAB standard being followed recommends a report format use that; otherwise, follow ASHRAE Std 111.
5. Units of Measure: Report data in I-P (inch-pound) units only.
6. Include the following on the title page of each report:
a. Name of Testing, Adjusting, and Balancing Agency.
b. Address of Testing, Adjusting, and Balancing Agency.
c. Telephone number of Testing, Adjusting, and Balancing Agency.
d. Project name.
e. Project location.
f. Project Architect.
g. Project Engineer.
h. Project Contractor.
i. Project altitude.
j. Report date.
C. Project Record Documents: Record actual locations of flow measuring stations and balancing valves and rough setting.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS
A. Perform total system balance in accordance with one of the following:
1. AABC (NSTSB), AABC National Standards for Total System Balance.
2. ASHRAE Std 111, Practices for Measurement, Testing, Adjusting and Balancing of Building Heating, Ventilation, Air-Conditioning, and Refrigeration Systems.
3. SMACNA (TAB).
B. Begin work after completion of systems to be tested, adjusted, or balanced and complete work prior to Substantial Completion of the project.
C. Where HVAC systems and/or components interface with life safety systems, including fire and smoke detection, alarm, and control, coordinate scheduling and testing and inspection procedures with the authorities having jurisdiction.
D. TAB Agency Qualifications:
1. Company specializing in the testing, adjusting, and balancing of systems specified in this section.
2. Having minimum of three years documented experience.
3. Certified by one of the following:
a. AABC, Associated Air Balance Council: www.aabc.com/#sle; upon completion submit AABC National Performance Guaranty.
b. NEBB, National Environmental Balancing Bureau: www.nebb.org/#sle.
c. TABB, The Testing, Adjusting, and Balancing Bureau of National Energy Management Institute: www.tabbcertified.org/#sle.
E. TAB Supervisor and Technician Qualifications: Certified by same organization as TAB agency.

3.02 EXAMINATION
A. Verify that systems are complete and operable before commencing work. Ensure the following conditions:
1. Systems are started and operating in a safe and normal condition.
2. Temperature control systems are installed complete and operable.
3. Proper thermal overload protection is in place for electrical equipment.
4. Final filters are clean and in place. If required, install temporary media in addition to final filters.
5. Duct systems are clean of debris.
6. Fans are rotating correctly.
7. Volume dampers are in place and open.
8. Air coil fins are cleaned and combed.
9. Access doors are closed and duct end caps are in place.
10. Air outlets are installed and connected.
11. Duct system leakage is minimized.
B. Submit field reports. Report defects and deficiencies that will or could prevent proper system balance.
C. Beginning of work means acceptance of existing conditions.

3.03 ADJUSTMENT TOLERANCES
A. Air Handling Systems: Adjust to within plus or minus 10 percent of design for supply systems and plus or minus 10 percent of design for return and exhaust systems.
B. Air Outlets and Inlets: Adjust total to within plus 10 percent and minus 10 percent of design to space. Adjust outlets and inlets in space to within plus or minus 10 percent of design.

3.04 RECORDING AND ADJUSTING
A. Field Logs: Maintain written logs including:
1. Running log of events and issues.
2. Discrepancies, deficient or uncompleted work by others.
3. Contract interpretation requests.
4. Lists of completed tests.
B. Ensure recorded data represents actual measured or observed conditions.
C. Permanently mark settings of valves, dampers, and other adjustment devices allowing settings to be restored. Set and lock memory stops.
D. Mark on drawings the locations where traverse and other critical measurements were taken and cross reference the location in the final report.
E. After adjustment, take measurements to verify balance has not been disrupted or that such disruption has been rectified.
F. Leave systems in proper working order, replacing belt guards, closing access doors, closing doors to electrical switch boxes, and restoring thermostats to specified settings.

3.05 AIR SYSTEM PROCEDURE
A. Adjust air handling and distribution systems to provide required or design supply, return, and exhaust air quantities at site altitude.
B. Make air quantity measurements in ducts by Pitot tube traverse of entire cross sectional area of duct.
C. Measure air quantities at air inlets and outlets.
D. Adjust distribution system to obtain uniform space temperatures free from objectionable drafts and noise.
E. Use volume control devices to regulate air quantities only to extend that adjustments do not create objectionable air motion or sound levels. Effect volume control by duct internal devices such as dampers and splitters.
F. Vary total system air quantities by adjustment of fan speeds. Provide drive changes required. Vary branch air quantities by damper regulation.
G. Measure static air pressure conditions on air supply units, including filter and coil pressure drops, and total pressure across the fan. Make allowances for 50 percent loading of filters.
H. Adjust outside air automatic dampers, outside air, return air, and exhaust dampers for design conditions.
I. Measure temperature conditions across outside air, return air, and exhaust dampers to check leakage.
J. Where modulating dampers are provided, take measurements and balance at extreme conditions. Balance variable volume systems at maximum air flow rate, full cooling, and at minimum air flow rate, full heating.
K. Measure building static pressure and adjust supply, return, and exhaust air systems to provide required relationship between each to maintain approximately 0.05 inches (12.5 Pa) positive static pressure near the building entries.

3.06 SCOPE
A. Test, adjust, and balance the following:
1. Packaged Roof Top Heating/Cooling Units.
2. Air Coils.
3. Fans.
4. Air Inlets and Outlets.

3.07 MINIMUM DATA TO BE REPORTED
A. Electric Motors:
1. Manufacturer.
2. Model/Frame.
3. HP/BHP.
4. Phase, voltage, amperage; nameplate, actual, no load.
5. RPM.
6. Service factor.
7. Starter size, rating, heater elements.
8. Sheave Make/Size/Bore.
C. Cooling Coils:
2. Identification/number.
3. Location.
4. Service.
5. Manufacturer.
6. Air flow, design and actual.
7. Entering air DB temperature, design and actual.
8. Entering air WB temperature, design and actual.
9. Leaving air DB temperature, design and actual.
10. Leaving air WB temperature, design and actual.
11. Air pressure drop, design and actual.
D. Heating Coils:
1. Identification/number.
2. Location.
3. Service.
4. Manufacturer.
5. Air flow, design and actual.
6. Entering air temperature, design and actual.
7. Leaving air temperature, design and actual.
8. Air pressure drop, design and actual.
F. Air Moving Equipment:
5. Location.
6. Manufacturer.
7. Model number.
8. Serial number.
9. Air flow, specified and actual.
10. Return air flow, specified and actual.
11. Outside air flow, specified and actual.
12. Total static pressure (total external), specified and actual.
13. Inlet pressure.
14. Discharge pressure.
15. Sheave Make/Size/Bore.
16. Number of Belts/Make/Size.
17. Fan RPM.
G. Return Air/Outside Air:
1. Identification/location.
2. Design air flow.
3. Actual air flow.
4. Design return air flow.
5. Actual return air flow.
6. Design outside air flow.
7. Actual outside air flow.
8. Return air temperature.
9. Outside air temperature.
H. Exhaust Fans:
1. Location.
2. Manufacturer.
3. Model number.
4. Serial number.
5. Air flow, specified and actual.
6. Total static pressure (total external), specified and actual.
7. Inlet pressure.
8. Discharge pressure.
9. Sheave Make/Size/Bore.
10. Number of Belts/Make/Size.
11. Fan RPM.
I. Duct Leak Tests:
1. Description of ductwork under test.
2. Duct design operating pressure.
3. Duct design test static pressure.
4. Duct capacity, air flow.
5. Maximum allowable leakage duct capacity times leak factor.
6. Test apparatus:
a. Blower.
b. Orifice, tube size.
c. Orifice size.
d Calibrated.
7. Test static pressure.
8. Test orifice differential pressure.
9. Leakage.
K. Air Distribution Tests:
1. Air terminal number.
2. Room number/location.
3. Terminal type.
4. Terminal size.
5. Area factor.
6. Design velocity.
7. Design air flow.
8. Test (final) velocity.
9. Test (final) air flow.
L. Sound Level Reports:
1. Location.
2. Octave bands - equipment off.
3. Octave bands - equipment on.

END OF SECTION

SECTION 23 0713
DUCT INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Duct insulation.
B. Duct liner.

1.02 SUBMITTALS
A. Product Data: Provide product description, thermal characteristics, list of materials and thickness for each service, and locations.

1.03 DELIVERY, STORAGE, AND HANDLING
A. Accept materials on site in original factory packaging, labeled with manufacturer's identification, including product density and thickness.
B. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS
A. Surface Burning Characteristics: Flame spread index/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84 or UL 723.

2.02 GLASS FIBER, FLEXIBLE
A. Insulation: ASTM C553; flexible, noncombustible blanket.
1. K (Ksi) value: 0.36 at 75 degrees F (0.052 at 24 degrees C), when tested in accordance with ASTM C518.
2. Maximum Service Temperature: 1200 degrees F (649 degrees C).
3. Maximum Water Vapor Absorption: 5.0 percent by weight.
B. Vapor Barrier Jacket:
1. Kraft paper with glass fiber yarn and bonded to aluminized film.
2. Moisture Vapor Permeability: 0.02 perm inch (0.029 ng/Pa s m), when tested in accordance with ASTM E96/E96M.
3. Secure with pressure sensitive tape.
C. Vapor Barrier Tape:
1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.
D. Indoor Vapor Barrier Mastic:
1. Vinyl emulsion type acrylic or mastic, compatible with insulation, black color.

2.03 GLASS FIBER, RIGID
A. Insulation: ASTM C612; rigid, noncombustible blanket.
1. K (Ksi) Value: 0.24 at 75 degrees F (0.036 at 24 degrees C), when tested in accordance with ASTM C518.
2. Maximum Service Temperature: 450 degrees F (232 degrees C).
3. Maximum Water Vapor Absorption: 5.0 percent.
4. Maximum Density: 8.0 lb/cu ft (128 kg/cu m).
B. Vapor Barrier Jacket:
1. Kraft paper with glass fiber yarn and bonded to aluminized film.
2. Moisture Vapor Permeability: 0.02 perm inch (0.029 ng/Pa s m), when tested in accordance with ASTM E96/E96M.
3. Secure with pressure sensitive tape.
C. Vapor Barrier Tape:
1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.
D. Indoor Vapor Barrier Finish:
1. Vinyl emulsion type acrylic, compatible with insulation, black color.

2.04 FLEXIBLE ELASTOMERIC CELLULAR INSULATION
A. Insulation: Preformed flexible elastomeric cellular rubber insulation complying with ASTM C534/C534M Grade 1, in sheet form.
1. Minimum Service Temperature: Minus 40 degrees F (Minus 40 degrees C).
2. Maximum Service Temperature: 180 degrees F (82 degrees C).
3. Connection: Waterproof vapor barrier adhesive.
B. Elastomeric Foam Adhesive: Air dried, contact adhesive, compatible with insulation.

2.05 DUCT LINER
A. Elastomeric Foam Adhesive: Air dried, contact adhesive, compatible with insulation. Comply with ASTM C916.
B. Liner Fasteners: Galvanized steel, self-adhesive pad with integral head.

PART 3 EXECUTION

3.01 EXAMINATION
A. Test ductwork for design pressure prior to applying insulation materials.
B. Verify that surfaces are clean, foreign material removed, and dry.

3.02 INSTALLATION
A. Install in accordance with manufacturer's instructions.
B. Install in accordance with NAIMA National Insulation Standards.
C. Insulated Ducts Conveying Air Below Ambient Temperature:
1. Provide insulation with vapor barrier jackets.
2. Finish with tape and vapor barrier jacket.
3. Continue insulation through walls, sleeves, hangers, and other duct penetrations.
4. Insulate entire system, including fittings, joints, flanges, fire dampers, flexible connections, and expansion joints.
D. Insulated Ducts Conveying Air Above Ambient Temperature:
1. Provide with or without standard vapor barrier jacket.
2. Insulate fittings and joints. Where service access is required, bevel and seal ends of insulation.
E. Ducts Exposed in Mechanical Equipment Rooms or Finished Spaces: Finish with canvas jacket sized for finish painting.
F. Duct and Plenum Liner Application:
1. Adhere insulation with adhesive for 90 percent coverage.
2. Secure insulation with mechanical liner fasteners. Refer to SMACNA (DCS) for spacing.
3. Seal and smooth joints. Seal and coat transverse joints.
4. Seal liner surface penetrations with adhesive.
5. Duct dimensions indicated are net inside dimensions required for air-flow. Increase duct size to allow for insulation thickness.

3.03 SCHEDULES
A. Exhaust Ducts Within 15 ft (3 m) of Exterior Openings: 1 inch
B. Outside Air Intake Ducts: 1 1/2 inch
C. Plenums: 1 1/2 inch
D. Supply Ducts: 1-1/2 inch

END OF SECTION

SECTION 23 0913
INSTRUMENTATION AND CONTROL DEVICES FOR HVAC

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Pressure independent valves and actuators.
B. Dampers.
C. Damper Operators:
1. Electric operators.
D. Humidistats:
1. Room humidistats.
E. Input/Output Sensors:
1. Temperature sensors.
2. Humidity sensors.
3. Static pressure (air pressure) sensors.
4. Equipment operation (current) sensors.
5. Damper position indicators.
6. Carbon dioxide sensors.
F. Thermostats:
1. Electric room thermostats.
2. Low-limit temperature cutout switch (freezestat)
3. Line voltage thermostats.
4. Room thermostat accessories.
G. Time clocks.
H. Energy Metering:
1. Hydronic BTU (J) meters.
J. Level Switches:
9. Float Sensors:
a. Float switch.
b. Top mount float type level control.
c. Free-floating level switch.

1.02 SUBMITTALS
A. Product Data: Provide description and engineering data for each control system component. Include sizing as requested. Provide data for each system component and software module.

END OF SECTION

SECTION 23 3100
HVAC DUCTS AND CASINGS

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Metal ductwork.
B. Casings and plenums.
C. Duct cleaning.

1.02 QUALITY ASSURANCE
A. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum three years of documented experience, and approved by manufacturer.

1.03 FIELD CONDITIONS
A. Do not install duct sealants when temperatures are less than those recommended by sealant manufacturers.
B. Maintain temperatures within acceptable range during and after installation of duct sealants.

PART 2 PRODUCTS

2.01 DUCT ASSEMBLIES
A. Regulatory Requirements: Construct ductwork to comply with NFPA 90A standards.
B. Ducts: Galvanized steel, unless otherwise indicated.
C. Low Pressure Supply (Heating Systems): 1 inch wg (250 Pa) pressure class, galvanized steel.
D. Low Pressure Supply (System with Cooling Coils): 1 inch wg (250 Pa) pressure class, galvanized steel.
E. Return: 1 inch wg (250 Pa) pressure class, galvanized steel.
F. General Exhaust: 1 inch wg (250 Pa) pressure class, galvanized steel.
G. Transfer Air and Sound Boots: 1/2 inch wg (125 Pa) pressure class, galvanized steel.

2.02 MATERIALS
A. Galvanized Steel for Ducts: Hot-dipped galvanized steel sheet, ASTM A653/A653M FS Type B, with G60/Z180 coating.
B. Un-Galvanized Steel for Ducts: ASTM A1008/A1008M Designation CS (commercial steel), cold-rolled.
C. Aluminum for Ducts: ASTM B209 (ASTM B209M); aluminum sheet, alloy 3003-H14. Aluminum Connectors and Bar Stock: Alloy 6061-T651 or of equivalent strength.
D. Stainless Steel for Ducts: ASTM A666, Type 304.
E. Joint Sealers and Sealants: Non-hardening, water resistant, mildew and mold resistant.
1. Type: Heavy mastic or liquid used alone or with tape, suitable for joint configuration and compatible with substrates, and recommended by manufacturer for pressure class of ducts.
2. VOC Content: Not more than 250 g/L, excluding water.
3. Surface Burning Characteristics: Flame spread index of zero and smoke developed index of zero, when tested in accordance with ASTM E84.
F. Gasket Tape: Provide butyl rubber gasket tape for a flexible seal between transfer duct connector (TDC), transverse duct flange (TDF), applied flange connections, and angle rings connections.
G. Hanger Rod: ASTM A36/A36M; steel, galvanized; threaded both ends, threaded one end, or continuously threaded.
H. Hanger Fasteners: Attach hangers to structure using appropriate fasteners, as follows:
1. Concrete Wedge Expansion Anchors: Complying with ICC-ES AC193.
2. Masonry Wedge Expansion Anchors: Complying with ICC-ES AC01.
3. Concrete Screw Type Anchors: Complying with ICC-ES AC193.
4. Masonry Screw Type Anchors: Complying with ICC-ES AC106.
5. Concrete Adhesive Type Anchors: Complying with ICC-ES AC308.

2.03 DUCTWORK FABRICATION
A. Fabricate and support in accordance with SMACNA (DCS) and as indicated.
B. No variation of duct configuration or size permitted except by written permission. Size round duct installed in place of rectangular ducts in accordance with ASHRAE (FUND) Handbook - Fundamentals.
C. Duct systems have been designed for metal duct. At the Contractor's option, fibrous glass duct may be substituted for metal duct.
D. Provide duct material, gauges, reinforcing, and sealing for operating pressures indicated.
E. Construct T's, bends, and elbows with radius of not less than 1-1/2 times width of duct on centerline. Where not possible and where rectangular elbows must be used, provide air foil turning vanes of perforated metal with glass fiber insulation.
F. Provide turning vanes of perforated metal with glass fiber insulation when acoustical lining is indicated.
G. Increase duct sizes gradually, not exceeding 15 degrees divergence wherever possible; maximum 30 degrees divergence upstream of equipment and 45 degrees convergence downstream.
H. Fabricate continuously welded round and oval duct fittings in accordance with SMACNA (DCS).

2.04 MANUFACTURED DUCTWORK AND FITTINGS
B. Spiral Ducts: Round spiral lockseam duct with galvanized steel outer wall.
1. Manufacture in accordance with SMACNA (DCS).
C. Round Ducts: Round lockseam duct with galvanized steel outer wall.
1. Manufacture in accordance with SMACNA (DCS).
D. Flexible Ducts: Black polymer film supported by helically wound spring steel wire.
1. UL labeled.
2. Insulation: Fiberglass insulation with polyethylene vapor barrier film.
3. Pressure Rating: 4 inches wg (1000 Pa) positive and 0.5 inches wg (175 Pa) negative.
4. Maximum Velocity: 4000 fpm (20.3 m/sec).
5. Temperature Range: Minus 20 degrees F to 175 degrees F (Minus 28 degrees C to 79 degrees C).

2.05 CASINGS AND PLENUMS
A. Fabricate casings in accordance with SMACNA (DCS) and construct for operating pressures indicated.
B. Reinforce door frames with steel angles tied to horizontal and vertical plenum supporting angles. Install hinged access doors where indicated or required for access to equipment for cleaning and inspection.
C. Fabricate acoustic casings with reinforcing turned inward. Provide 16 gauge, 0.0598 inch (1.52 mm) sheet steel back facing and 22 gauge, 0.0299 inch (0.76 mm) perforated sheet steel front facing with 3/32 inch (2.4 mm) diameter holes on 5/32 inch (4 mm) centers. Construct panels 3 inches (75 mm) thick packed with 4.5 lb/cu ft (72 kg/cu m) minimum glass fiber insulation media, on inverted channels of 16 gauge, 0.0598 inch (1.52 mm) sheet steel.

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Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
NUMBER
PE-2010031344
MECHANICAL ENGINEER
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.: 25.0796
Drawn By: REK

Date	Issue
07-10-25	Permit Set

M300

MECHANICAL
SPECIFICATIONS

PART 3 EXECUTION

3.01 INSTALLATION

A. Install, support, and seal ducts in accordance with SMACNA (DCS).

B. Install in accordance with manufacturer's instructions.

C. During construction provide temporary closures of metal or taped polyethylene on open ductwork to prevent construction dust from entering ductwork system.

D. Flexible Ducts: Connect to metal ducts with mechanical fastener.

E. Duct sizes indicated are inside clear dimensions. For lined ducts, maintain sizes inside lining.

F. Provide openings in ductwork where required to accommodate thermometers and controllers. Provide pilot tube openings where required for testing of systems, complete with metal can with spring device or screw to ensure against air leakage. Where openings are provided in insulated ductwork, install insulation material inside a metal ring.

G. Locate ducts with sufficient space around equipment to allow normal operating and maintenance activities.

H. Use crimp joints with or without bead for joining round duct sizes 8 inch (200 mm) and smaller with crimp in direction of air flow.

I. Use double nuts and lock washers on threaded rod supports.

3.02 CLEANING

A. Clean duct system and force air at high velocity through duct to remove accumulated dust. To obtain sufficient air, clean half the system at a time. Protect equipment that could be harmed by excessive dirt with temporary filters, or bypass during cleaning.

END OF SECTION

SECTION 23 3300
AIR DUCT ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Air turning devices/extractors.

B. Backdraft dampers - metal..

C. Duct access doors.

D. Duct test holes.

E. Flexible duct connectors.

F. Volume control dampers.

1.02 SUBMITTALS

A. Product Data: Provide for shop fabricated assemblies including volume control dampers. Include electrical characteristics and connection requirements.

B. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

1. Extra Fusible Links: One of each type and size.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Protect dampers from damage to operating linkages and blades.

PART 2 PRODUCTS

2.01 AIR TURNING DEVICES/EXTRACTORS

A. Multi-blade device with radius blades attached to pivoting frame and bracket, steel construction, with push-pull operator strap.

2.02 BACKDRAFT DAMPERS - METAL

A. Gravity Backdraft Dampers, Size 12x12 inches (300x300 mm) or Smaller, Furnished with Air Moving Equipment: Air moving equipment manufacturer's standard construction.

B. Multi-Blade, Parallel Action Gravity Balanced Backdraft Dampers: Galvanized steel, with center pivoted blades of maximum 6 inch (150 mm) width, with felt or flexible vinyl sealed edges, linked together in rattle-free manner with 90 degree stop, steel ball bearings, and plated steel pivot pin; adjustment device to permit setting for varying differential static pressure.

2.04 DUCT ACCESS DOORS

A. Fabricate in accordance with SMACNA (DCS) and as indicated.

B. Access doors with sheet metal screw fasteners are not acceptable.

2.05 DUCT TEST HOLES

A. Temporary Test Holes: Cut or drill in ducts as required. Cap with neat patches, neoprene plugs, threaded plugs, or threaded or twist-on metal caps.

B. Permanent Test Holes: Factory fabricated, air tight flanged fittings with screw cap. Provide extended neck fittings to clear insulation.

2.07 FLEXIBLE DUCT CONNECTORS

A. Fabricate in accordance with SMACNA (DCS) and as indicated.

B. Flexible Duct Connections: Fabric crimped into metal edging strip.

1. Fabric: UL listed fire-retardant neoprene coated woven glass fiber fabric to NFPA 90A, minimum density 30 oz per sq yd (1.0 kg/sq m).

2. Metal: 3 inches (75 mm) wide, 24 gauge, 0.0239 inch (0.61 mm) thick galvanized steel.

2.09 VOLUME CONTROL DAMPERS

A. Fabricate in accordance with SMACNA (DCS) and as indicated.

B. Splitter Dampers:

1. Material: Same gauge as duct to 24 inches (600 mm) size in either direction, and two gauges heavier for sizes over 24 inches (600 mm).

2. Blade: Fabricate of double thickness sheet metal to streamline shape, secured with continuous hinge or rod.

3. Operator: Minimum 1/4 inch (6 mm) diameter rod in self aligning, universal joint action, flanged bushing with set screw.

C. Single Blade Dampers:

1. Fabricate for duct sizes up to 6 by 30 inch (150 by 760 mm).

2. Blade: 24 gauge, 0.0239 inch (0.61 mm), minimum.

D. Multi-Blade Damper: Fabricate of opposed blade pattern with maximum blade sizes 8 by 72 inch (200 by 1825 mm). Assemble center and edge crimped blades in prime coated or galvanized channel frame with suitable hardware.

1. Blade: 18 gauge, 0.0478 inch (1.21 mm), minimum.

E. Quadrants:

1. Provide locking, indicating quadrant regulators on single and multi-blade dampers.

2. On insulated ducts mount quadrant regulators on stand-off mounting brackets, bases, or adapters.

3. Where rod lengths exceed 30 inches (750 mm) provide regulator at both ends.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install accessories in accordance with manufacturer's instructions, NFPA 90A, and follow SMACNA (DCS).

B. Provide backdraft dampers on exhaust fans or exhaust ducts nearest to outside and where indicated.

C. Provide duct access doors for inspection and cleaning before and after filters, coils, fans, automatic dampers, and elsewhere as indicated. Provide 4 by 4 inch (100 by 100 mm) for balancing dampers only. Review locations prior to fabrication.

D. Provide duct test holes where indicated and required for testing and balancing purposes.

E. At fans and motorized equipment associated with ducts, provide flexible duct connections immediately adjacent to the equipment.

F. At equipment supported by vibration isolators, provide flexible duct connections immediately adjacent to the equipment.

G. Provide balancing dampers at points on supply, return, and exhaust systems where branches are taken from larger ducts as required for air balancing. Install minimum 2 duct widths from duct take-off.

H. Use splitter dampers only where indicated.

END OF SECTION

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M301

MECHANICAL
SPECIFICATIONS

PLUMBING FIXTURE SCHEDULE

MARK	ITEM	MAKE	NAME	MODEL	TRIM	TRAP	STOPS	CW	HW	SAN	VENT	REMARKS
LAV-1	LAVATORY	AMERICAN STANDARD	LUCERNE	0355.012	MONTERREY 7545.170-002 V05 POLISHED CHROME	NOTE #2	NOTE #3	1/2"	1/2"	2"	1-1/2"	TWO-HANDLE GOOSENECK FAUCET, DRAIN, P-TRAP & JAY R SMITH 700 SERIES FLOOR MOUNTED WALL SUPPORT. INSULATE TRAP AND HOT WATER SUPPLY. 0.5 GALLONS PER MINUTE. NOTES #4 & 5.
WC-1	WATER CLOSET	AMERICAN STANDARD	CADET FLOWISE	2467.100	TANK TYPE	INTEGRAL	INTEGRAL	1/2"	-	4"	2"	FLOOR MOUNTED, FLUSH TANK, WITH #5257A65MT SEAT OR APPROVED EQUAL ADA COMPLIANT, FLUSH HANDLE MOUNTED ON WIDE SIDE OF TOILET
MR-1	MOP RECEPTOR	FIAT	MOLDED STONE	MSB-2424	CHICAGO 897	3"	NOTE #3	3/4"	3/4"	3"	1-1/2"	WITH HOSE AND BRACKET, MOP HOOK, BUMPER GUARD AND 12" HIGH STAINLESS STEEL WALL GUARD
EWC-1	ELECTRIC WATER COOLER	HALSEY TAYLOR	-	HTHB-HACD8BLSS-WF	-	1-1/2"	-	1/2"	-	2"	1-1/2"	WALL HUNG, 'BI-LEVEL', 8.0 GPH @ 50° TEMPERATURE DIFFERENCE. WITH BOTTLE FILLER. 115V/60HZ
FD-1	FLOOR DRAIN	SMITH	-	2005 SERIES	CAST IRON	3"	-	-	-	3"	1-1/2"	CAST IRON BODY WITH FLASHING COLLAR, NICKEL BRONZE ADJUSTABLE STRAINER SECURED GRATE TOP AND TRAP SEAL. W/ TPV-1.
TPV-1	TRAP PRIMER	PRECISION PRODUCTS	-	P2-500	-	-	-	1/2"	-	-	-	PRESSURE ACTIVATED TRAP PRIMER, BRASS CONSTRUCTION, ADJUSTMENT FOR VARIABLE PRESSURES, INSTALL TRAP PRIMER A MINIMUM OF 12' ABOVE THE TRAP BEING SERVED, PROVIDE AIR GAP FITTING WITH 1/2" MALE NPT INLET FITTING AND 1/2" FEMALE OUTLET FITTING, ONE TRAP APPLICATION

NOTES:
1. INSTALL SERVICE, SHUTOFF & CHECK VALVES, COCKS, STOPS, AIR CUSHIONS, VACUUM BREAKERS, AND SAFETY DEVICES WHERE REQUIRED BY CODE, SPECIFICATIONS OR DRAWINGS.
2. EXPOSED P-TRAPS TO BE 17 GA. CHROME PLATE WITH CLEANOUT AND ESCUTCHEON PLATE.
3. STOPS TO BE CHROME PLATED 1/2" ANGLE VALVE WITH CHROME PLATED 12" LONG, 1/2" O.D. FLEXIBLE RISER AND ESCUTCHEON PLATE.
4. ALL DRAINS AND WATER SUPPLY PIPING TO LAVATORIES TO BE INSULATED WITH 'HANDI LAV-GUARD' INSULATION KIT BY TRUEBRO.
5. THERMOSTATIC MIXING VALVE UNDER LAVATORY REFER TO DETAIL ON THIS DRAWING.

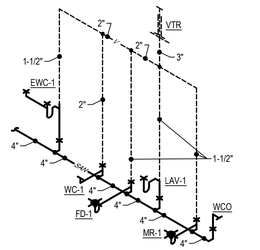
WATER HEATER SCHEDULE

MARK	LOCATION	MAKE	MODEL	TANK SIZE	FUEL	INPUT	RECOVERY	OPERATING TEMPERATURE	ELECTRIC	WEIGHT (LBS)	REMARKS
EWH-1	SHELF MOUNTED	A.O. SMITH	DEL-20	20 GAL	ELECTRIC	1.5 kW	8 GPH @ 80°F	130 °F	120/1/60	73	T&P RELIEF VALVE WATTS NO. 100XL-4-125

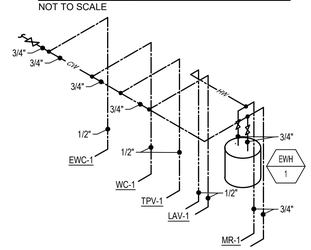
PLUMBING SYMBOLS/ABBREVIATION LEGEND

SYMBOL	DESCRIPTION
	EXIST. PIPING OR FIXTURE TO REMAIN
	DOMESTIC HOT WATER
	DOMESTIC COLD WATER
	SANITARY VENT
	SANITARY SEWER
	SHUT OFF VALVE
	END OF CONTRACT, CONNECT TO EXISTING
	CONDENSATE
M	WATER METER
	PIPE DROP
	PIPE RISE
	PIPE CONNECTION FROM BOTTOM
	PIPE BREAK
NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS MAY APPLY	

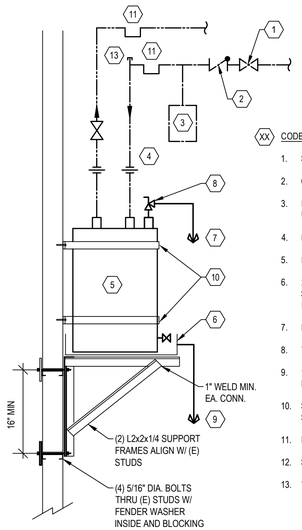
ABBREVIATION	DESCRIPTION
A.F.F.	ABOVE FINISH FLOOR
EWH	ELECTRIC WATER HEATER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FPC	FIRE PROTECTION CONTRACTOR
GC	GENERAL CONTRACTOR
PC	PLUMBING CONTRACTOR
V.T.R.	VENT THRU ROOF
WCO	WALL CLEANOUT



SANITARY RISER DIAGRAM
NOT TO SCALE



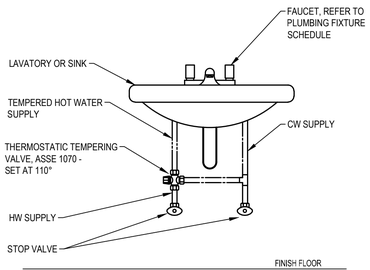
WATER RISER DIAGRAM
NOT TO SCALE



XX CODED NOTES:

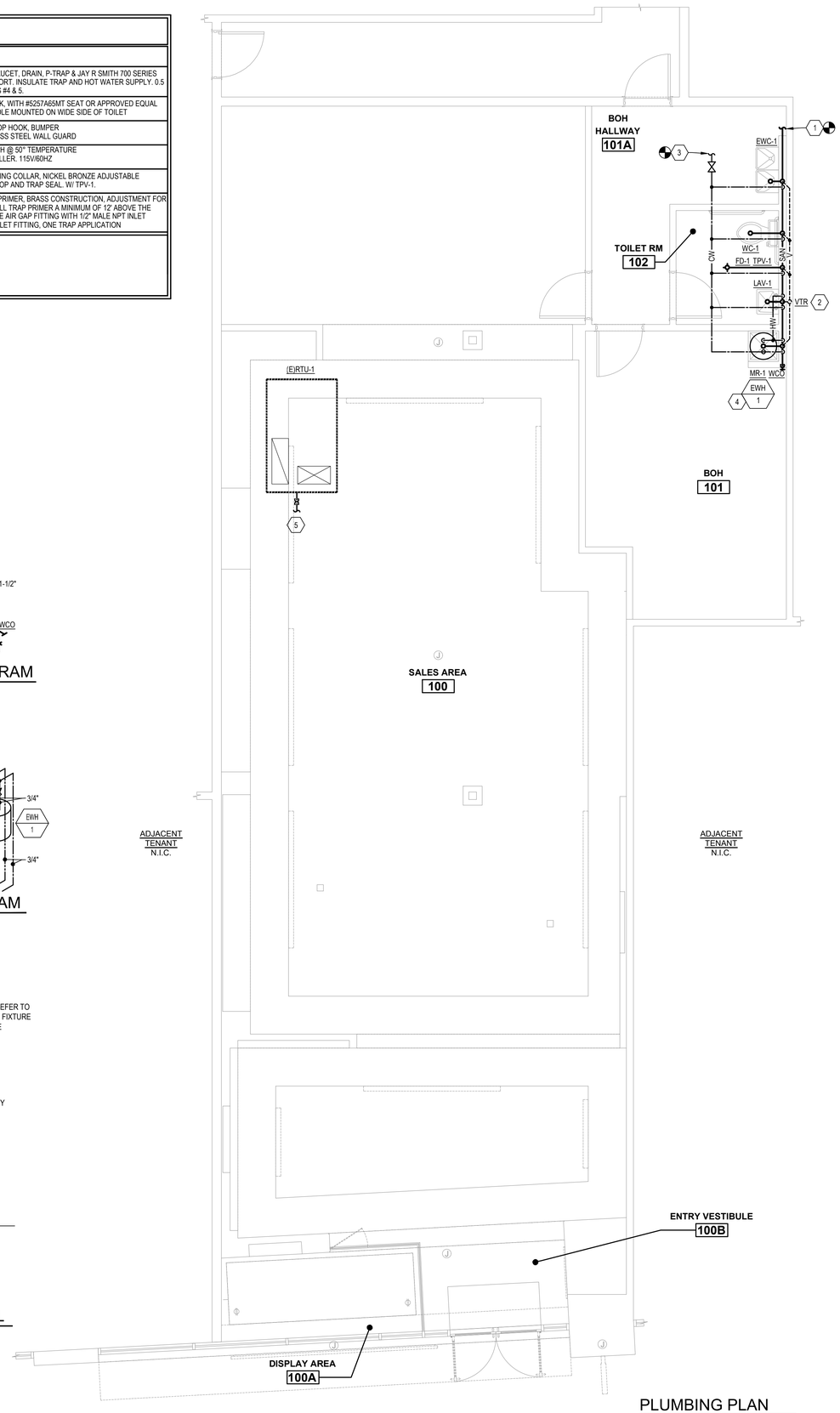
1. SHUT OFF VALVE - TYPICAL
2. CHECK VALVE
3. EXPANSION TANK, AMTROL NO. ST-5 WITH UNION CONNECTION
4. DIELECTRIC UNION - TYPICAL
5. ELECTRIC WATER HEATER
6. 2" DEEP GALV. STEEL DRAIN PAN WITH SOLDERED SEAMS AND 2 COATS OF RUST INHIBITING PAINT
7. PIPE RELIEF DRAIN FULL SIZE TO MOP BASIN
8. T & P RELIEF
9. 1" PAN DRAIN, INDIRECT WASTE TO MOP BASIN
10. STRAP TO WALL WITH 1" WIDE x 18 GA GALV. STEEL STRAP (SEISMIC RESTRAINT)
11. HEAT TRAP
12. SHELF MOUNTING HEIGHT AT 6'-6" A.F.F.
13. VACUUM RELIEF VALVE

1 WALL BRACKETED
WATER HEATER DETAIL
N.T.S.



NOTE:
INSULATE ALL EXPOSED WASTE AND SUPPLY PIPING UNDER LAVATORIES WITH THE HANDI-LAV GUARD INSULATION KIT BY TRUEBRO OR EQUAL.

2 LAVATORY/ SINK
TEMPERING VALVE DETAIL
N.T.S.



PLUMBING PLAN
1/4" = 1'-0"

PLUMBING GENERAL NOTES:

A. PLUMBING CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATIONS AND SIZES OF ALL UTILITIES, INCLUDING THE DEPTHS OF ALL BELOW GRADE SANITARY SEWERS, PRIOR TO START OF WORK. THIS DRAWING IS NOT INTENDED TO INDICATE ALL EXISTING UTILITIES.

B. CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID AND FIELD VERIFY EXISTING CONDITIONS TO ENSURE THAT THE WORK REPRESENTED ON THE DRAWINGS AND IN THESE SPECIFICATIONS CAN BE INSTALLED AS INDICATED. CONTRACTOR SHALL TAKE ALL INTERFERENCES INTO CONSIDERATION. IDENTIFY POTENTIAL INTERFERENCES WITH NEW WORK AND REPORT TO ARCHITECT IMMEDIATELY. PROVIDE ALL NECESSARY OFFSETS TO SUIT FIELD CONDITIONS AS REQUIRED.

C. CONTRACTOR SHALL VERIFY AND COORDINATE ALL UTILITY CONNECTION POINTS, INCLUDING SIZES AND INVERTS WITH EXISTING FIELD CONDITION PRIOR TO START OF WORK.

D. MAKE ALL UTILITY CONNECTIONS AND INSTALLATIONS IN FULL ACCORDANCE WITH ALL UTILITY REGULATIONS. PROVIDE ALL ADDITIONAL APPURTENANCES AS REQUIRED BY UTILITY COMPANY. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

E. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS RELATED TO THE INSTALLATION OF THE WORK.

F. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS AND ALL AUTHORITIES HAVING JURISDICTION AND LANDLORD'S CRITERIA.

G. MAINTAIN ALL MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES FOR ALL FIXTURES AND EQUIPMENT. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF PLUMBING FIXTURES.

H. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS BEFORE COMMENCING ANY WORK.

I. SLEEVE AND SEAL ALL PIPE PENETRATIONS OF WALLS AND FLOORS. APPLY INTUMESCENT FIRE SAFING COMPOUND AT PENETRATIONS OF FIRE-RATED WALLS AND FLOORS, MAINTAINING INTEGRITY AND RATING OF FIRE SEPARATION. SLEEVES THROUGH FLOORS SHALL EXTEND 2" ABOVE FLOOR, BE GROUTED INTO PLACE AND WATERPROOFED. PIPING THROUGH EXTERIOR WALLS SHALL BE SLEEVED AND SEALED WEATHER TIGHT WITH SILICONE CAULK.

J. ALL DOMESTIC COLD AND HOT WATER PIPING TO BE INSULATED WITH RIGID FIBERGLASS INSULATION WITH TYPE 'ASJ' JACKET. COLD WATER PIPES AND TO HAVE 1/2" THICK INSULATION. DOMESTIC HOT WATER PIPES TO HAVE 1" THICK INSULATION.

K. WHEN SUBMITTING SHOP DRAWINGS FOR PLUMBING FIXTURES, PLUMBING CONTRACTOR TO PROVIDE SEPARATE WATER CLOSET FIXTURE CUTS SHOWING FLUSH HANDLES ON APPROPRIATE SIDES OF TANK FOR ADA ACCESS.

L. PVC PIPING IS NOT ALLOWED EXCEPT FOR UNDERGROUND SANITARY LINES.

FIRE PROTECTION NOTES:

A. PROVIDE COVERAGE PER NFPA 13 REQUIREMENTS.

B. PROVIDE AND INSTALL DESIGN-BUILD SYSTEM TO MEET CODE REQUIREMENTS. PREPARE HYDRAULIC CALCULATIONS AND DESIGN DRAWINGS. OBTAIN ALL PERMITS, INSPECTIONS AND APPROVALS.

C. PROVIDE FIRE STOPPING AT WALL PENETRATIONS, REFER TO ARCHITECTURAL PLANS FOR LOCATIONS.

D. PROVIDE AND INSTALL RECESSED SPRINKLER TYPES IN ALL AREAS WITH FINISHED CEILINGS AND UPRIGHT SPRINKLER HEADS FOR AREAS WITHOUT CEILINGS.

E. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, MECHANICAL PLANS, LIGHTING PLANS, ETC. FOR COORDINATION AND PLACEMENT OF SPRINKLER HEADS AND PIPING. LIGHTING WILL HAVE HIGHEST PRIORITY.

F. SPRINKLER HEADS THAT ARE LOCATED IN THE ACOUSTICAL PANELS OF THE CEILING GRID SHALL BE IN THE CENTER OF THE PANEL. THE EXACT LOCATION OF THE SPRINKLER HEADS SHALL BE DETERMINED AFTER CEILING GRID IS INSTALLED. DO NOT USE THE CEILING GRID PLANS TO DETERMINE THE LOCATION OF THE SPRINKLER HEADS.

G. HYDRANT TEST DATA TO BE DETERMINED BY FIRE PROTECTION CONTRACTOR. FIRE PROTECTION CONTRACTOR IS RESPONSIBLE TO DETERMINE IF A FIRE PUMP WILL BE REQUIRED, AND PROVIDE AND INSTALL AS NECESSARY.

H. SEE CIVIL DRAWINGS FOR DOMESTIC AND FIRE PROTECTION WATER SERVICE ENTRY LOCATION.

I. THE COMPLETE INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH ALL STATE, LOCAL AND NATIONAL CODES, ALL APPLICABLE SECTIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, AND DIVISION 13 SPECIAL CONSTRUCTION. NOTE: THE MOST STRINGENT SPECIFICATION REQUIREMENTS APPLY

J. ALL ELECTRICAL CIRCUITS REQUIRED FOR EACH FIRE DETECTION SYSTEM, WATER FLOW ALARM AND VALVE SUPERVISION WIRING SHALL BE CHECKED BY THE FIRE PROTECTION CONTRACTOR TO ENSURE PROPER OPERATION. SPRINKLER SUPERVISORY DEVICES WILL BE COMPATIBLE WITH THE ALARM EQUIPMENT PANEL. COORDINATE WITH FIRE ALARM CONTRACTOR.

X PLUMBING CODED NOTES:

1. CONNECT TO EXISTING 4" SANITARY MAIN. CONTRACTOR SHALL CONFIRM EXACT LOCATION, DIRECTION, AND INVERT. FIELD VERIFY EXACT ROUTING OF NEW HORIZONTAL SANITARY TO ENSURE ROUTING, SLOPE AND CONNECTION TO EXISTING SANITARY CAN BE ACHIEVED PER CODE. CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, CLEANOUTS ETC. REQUIRED FOR CODE COMPLIANCE INSTALLATION. IF A CLOSER CONNECTION POINT IS CONFIRMED TO THE EXISTING SANITARY SYSTEM MINIMIZING THE HORIZONTAL RUNS, CONTRACTOR SHALL SUBMIT PROPOSED SKETCH OF SIZING, ROUTING ETC. FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
2. PROVIDE NEW 3" VTR IF NONE PREVIOUSLY EXISTING. PLUMBING CONTRACTOR TO ENSURE VTR IS A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKE. PIPE PENETRATION THRU ROOF SHALL BE SEALED WEATHER TIGHT. FIELD VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK.
3. CONNECT NEW 3/4" CW TO EXISTING 1" CW LINE OR LARGER. FIELD LOCATE AND VERIFY POINT OF CONNECTION. PROVIDE WITH NEW SHUT-OFF VALVE AND SUB METER WITH REMOTE READER AT POINT OF CONNECTION IF NONE PRESENT. PLUMBING CONTRACTOR TO VERIFY THAT TENANT'S DEDICATED DOMESTIC LINE HAS AN ASSOCIATED BACKFLOW PREVENTER. IF NONE IS PREVIOUSLY EXISTING, PLUMBING CONTRACTOR SHALL PROVIDE A NEW BACKFLOW PREVENTION DEVICE. FIELD VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK.
4. MOUNT WATER HEATER ABOVE MOP SINK. REFER TO DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION.
5. ROUTE CONDENSATE PIPING FROM LANDLORD PROVIDED ROOFTOP UNIT TO SPLASHBLOCK ON ROOF.

NOTE:

EXACT ROOFTOP UNIT LOCATION COULD NOT BE CONFIRMED AT TIME OF SURVEY. LOCATION OF ROOFTOP UNIT SHOWN ON PLAN IS AN APPROXIMATE LOCATION. FIELD VERIFY EXACT LOCATION OF ROOFTOP UNIT PRIOR TO STARTING WORK.

onyx creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
NUMBER
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MECHANICAL ENGINEER
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Project No.:	25.0796
Drawn By:	REK

Date	Issue
07-10-25	Permit Set

P100

PLUMBING PLAN

Plumbing and Fire Protection
General Information

A. General
1. Conform to all general and special conditions of contract as specified by architect, tenant and owner.
2. Specifications are applicable to all contractors and subcontractors for plumbing and electrical systems
3. Contractor shall comply with owner's standards, facility specifications, rules and regulations. All owner's criteria shall be complied with and included in this bid. Check other plans and specifications and fully coordinate with other trades and architect's requirements.
4. Visit site, check facilities and conditions, and verify all utility company requirements and connection points in field prior to starting work. Take all items into consideration in bid.
5. Systems are to be complete and workable in all respects, placed in operation and properly adjusted.
6. Each contractor shall provide for his own clean-up, removal and legal disposal of all rubbish daily.
7. The contractor shall be solely responsible for construction means, methods, and sequences of construction and the safety of workmen. comply with all OSHA regulations.
8. No piping, controls, etc., shall be installed or routed above electrical panels and equipment or through elevator rooms or shafts.
9. The plumbing and electrical contractors shall coordinate the electrical characteristics of all plumbing equipment prior to ordering of equipment. No additional payment will be made for lack of contractor coordination of electrical characteristics.
10. All plumbing and electrical system components shall be routed tight to underside of structure and through joists or trusses where possible. Coordinate installation to preserve headroom, equipment access, and architectural clearances for finishes, including ceiling heights. Coordinate with all other trades and do not conflict with the architectural requirements for the finished construction. Provide offsets where required to coordinate with other trades.
11. Operation and maintenance manuals: three (3) bound sets of the operation and maintenance manuals shall be provided to the construction representative at turnover, and are required for final acceptance.
12. As built drawings: the plumbing subcontractor shall progressively record all plumbing drawing changes which shall be available at all times for review by the construction representative. An AutoCAD copy of the final as-built drawings shall be provided to the construction representative at turnover. This AutoCAD as-built is required for final acceptance of the project.

B. Codes, standards and regulations
1. Conform to all applicable codes, government regulations, utility company requirements, and national electrical code.
2. Obtain permits and pay all fees. Arrange for all required inspections and approvals.

C. Related work specified elsewhere
1. Openings and chases, when shown on architectural drawings.

D. Drawings
1. The systems as shown on the contract drawings are diagrammatic.
2. The intent is for complete and workable systems. The drawings and these notes are to be used together as a basis of showing and/or describing the system requirements for the facility.
3. Verify all dimensions and clearances by field measurement and check for interferences prior to starting work.

E. Base equipment and materials and substitutions
1. All equipment and materials shall be new, free of defects and U.L. labeled.
2. Submit shop drawings for all equipment, fixtures, etc., including all accessories to be furnished. Base bid manufacturers and models are included in specifications or listed in schedule on drawing. Any other manufacturer or model is a substitution.
3. Substitutions are subject to the approval of the owner and shall be listed on the form of proposal for the owner's consideration prior to contract award. If substitution is submitted, it is the contractor's responsibility to evaluate it and certify that the substitution is equivalent in all respects to the base specifications.
4. If substitutions are approved, notify all other contractors, subcontractors or trades affected by substitution and fully coordinate. Any costs resulting from substitution, whether by contractor or others, shall be responsibility of and paid for by substituting contractor.
5. All equipment shall be installed in full accordance with the manufacturer's installation instructions. It is this contractor's responsibility to check and conform to these requirements prior to starting work.

F. Check, test, start, adjust, balance and instructions
1. After installation, check all equipment, and perform start up in accordance with the manufacturer's instructions.
2. All piping shall be tested and free of leaks.
3. Balance all systems, calibrate controls, check for proper operating sequence under all conditions, and make all necessary adjustments.
4. All wiring shall be fully tested and made free of grounds and short circuits.
5. Instruct owner in operation of systems and submit operating and maintenance manual on all equipment and systems.
6. Provide engraved labels and identification tags for all piping systems, valves and equipment.
7. Provide typed panel directories and engraved labels for all panels and equipment.

G. Cutting, patching and drilling
1. All cutting and chasing of the building construction required for this work shall be by this contractor unless shown on architectural drawings and confirmed as to size and location prior to new construction. Cutting shall be in a neat and workmanlike manner.
2. Neatly saw cut all rectangular openings, set sleeve through opening, and finish patch or provide trim flange around opening.
3. Neatly saw cut floors for sewer installation and patch floor to match existing, including floor covering.
4. Core drill and sleeve all round openings.
5. Do not cut any structural components without architect's approval.
6. Patch and finish to match adjacent areas that have been cut, damaged or modified to install equipment for this project.
7. Cutting of roof, installation of curbs, and patching of roof shall be by a certified roofing contractor, approved by building owner, and paid for by this contractor.
8. Fire stop all penetrations of fire rated construction in a code approved manner, using UL listed fire rated materials.
9. All contractors shall confirm with owner, prior to bid, times available for noise producing work such as cutting and core drilling of floors, walls, etc., as well as times for work which require access into adjoining areas. Include any premium time required in bid.

H. Warranty
1. Fully warrant all materials, equipment and workmanship for one (1) year from date of acceptance.
2. Extend all manufacturer's warranties to owner.
3. Repair or replace without charge to the owner all items found defective during the warranty period.

SECTION 21 0500
COMMON WORK RESULTS FOR FIRE SUPPRESSION

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Pipe, fittings, sleeves, escutcheons, seals, and connections for sprinkler systems.

1.02 SUBMITTALS
A. Product Data: Provide manufacturer's catalog information. Indicate valve data and ratings.
B. Shop Drawings: Indicate pipe materials used, jointing methods, supports, and floor and wall penetration seals. Indicate installation, layout, weights, mounting and support details, and piping connections.
C. Operation and Maintenance Data: Include installation instructions and spare parts lists.

PART 2 PRODUCTS

2.01 FIRE PROTECTION SYSTEMS
A. Sprinkler Systems: Comply with NFPA 13.
B. Welding Materials and Procedures: Comply with ASME BPVC-IX.

2.02 BURIED PIPING
A. Steel Pipe: ASTM A53/A53M Schedule 40, ASTM A135/A135M Schedule 10, ASTM A795/A795M Standard Weight, or ASME B36.10M Schedule 40, black, with AWWA C105/A21.5 polyethylene jacket, or double layer, half-lapped polyethylene tape.
B. Ductile Iron Pipe: AWWA C151/A21.51.

2.03 ABOVE GROUND PIPING
A. Steel Pipe: ASTM A53 Schedule 40, black.
1. Cast Iron Fittings: ASME B16.1, flanges and flanged fittings and ASME B16.4, threaded fittings.
2. Malleable Iron Fittings: ASME B16.3, threaded fittings and ASTM A47/A47M.
3. Mechanical Grooved Couplings: Malleable iron housing clamps to engage and lock, "C" shaped elastomeric sealing gasket, steel bolts, nuts, and washers; galvanized for galvanized pipe.

2.04 PIPE SLEEVES
A. Vertical Piping:
1. Sleeve Length: 1 inch (25 mm) above finished floor.
2. Provide sealant for watertight joint.
B. Pipe Passing Through Below Grade Exterior Walls:
1. Zinc-coated or cast-iron pipe.
2. Provide watertight space with link rubber or modular seal between sleeve and pipe on both pipe ends.
C. Clearances:
1. Provide allowance for insulated piping.
2. Wall, Floor, Floor, Partitions, and Beam Flanges: 1 inch (25 mm) greater than external; pipe diameter.
3. Rated Openings: Caulked tight with firestopping material complying with ASTM E814 to prevent the spread of fire, smoke, and gases.

2.05 ESCUTCHEONS
A. Material:
1. Metals and Finish: Comply with ASME A112.18.1.
B. Construction:
1. One-piece for mounting on chrome-plated tubing or pipe and one-piece or split-pattern type elsewhere.
2. Internal spring tension devices or setscrews to maintain a fixed position against a surface.

PART 3 EXECUTION

3.01 INSTALLATION
A. Install sprinkler system and service main piping, hangers, and supports in accordance with NFPA 13.

END OF SECTION

SECTION 21 1300
FIRE-SUPPRESSION SPRINKLER SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Wet-pipe sprinkler system.
B. Dry-pipe sprinkler system.
C. Fire department connections.

1.02 SUBMITTALS
A. Product Data: Provide data on sprinklers, valves, and specialties, including manufacturers catalog information. Submit performance ratings, rough-in details, weights, support requirements, and piping connections.
B. Shop Drawings:
1. Submit preliminary layout of finished ceiling areas indicating only sprinkler locations coordinated with ceiling installation.
2. Indicate hydraulic calculations, detailed pipe layout, hangers and supports, sprinklers, components, and accessories. Indicate system controls.
3. Submit shop drawings to Authorities Having Jurisdiction for approval. Submit proof of approval to Architect.

1.03 DELIVERY, STORAGE, AND HANDLING
A. Store products in shipping containers and maintain in place until installation. Provide temporary inlet and outlet caps. Maintain caps in place until installation.

PART 2 PRODUCTS

2.01 SPRINKLER SYSTEM
A. Sprinkler System: Provide coverage for building areas noted.
B. Water Supply: Determine volume and pressure from water flow test data.
C. Interface system with building control system.
D. Provide fire department connections where indicated.
E. Storage Cabinet for Spare Sprinklers and Tools: Steel, located adjacent to alarm valve.
F. Pipe Hanger Fasteners: Attach hangers to structure using appropriate fasteners, as follows:
1. Concrete Wedge Expansion Anchors: Complying with ICC-ES AC193.
2. Masonry Wedge Expansion Anchors: Complying with ICC-ES AC01.
3. Concrete Screw Type Anchors: Complying with ICC-ES AC193.
4. Masonry Screw Type Anchors: Complying with ICC-ES AC106.
5. Concrete Adhesive Type Anchors: Complying with ICC-ES AC308.
6. Other Types: As required.

2.02 SPRINKLERS
A. Suspended Ceiling Type: Semi-recessed pendant type with matching push on escutcheon plate.
1. Response Type: Quick.
2. Coverage Type: Standard.
3. Finish: Brass.
4. Escutcheon Plate Finish: Antique Brass.
5. Fusible Link: Fusible solder link type temperature rated for specific area hazard.
B. Exposed Area Type: Pendant type with guard.
1. Response Type: Quick.
2. Coverage Type: Standard.
3. Finish: Brass.
4. Fusible Link: Fusible solder link type temperature rated for specific area hazard.
C. Sidewall Type: Semi-recessed horizontal sidewall type with matching push on escutcheon plate.
1. Response Type: Quick.
2. Coverage Type: Standard.
3. Finish: Brass.
4. Escutcheon Plate Finish: Brass.
5. Fusible Link: Fusible solder link type temperature rated for specific area hazard.
D. Dry Sprinklers: Concealed pendant type with matching push on escutcheon plate.
1. Response Type: Quick.
2. Coverage Type: Standard.
3. Finish: Brass.
4. Cover Plate Finish: Brass.
5. Fusible Link: Fusible solder link type temperature rated for specific area hazard.
E. Storage Sprinklers: Pendant type with guard.
1. Response Type: Standard.
2. Coverage Type: Standard.
3. Finish: Chrome plated.
4. Fusible Link: Fusible solder link type temperature rated for specific area hazard.
F. Guards: Finish to match sprinkler finish.
G. Spray Nozzles: Brass with solid cone discharge, 30 degrees of arc with blow-off dust cap.
1. Finish: Brass.
H. Flexible Drop System: Stainless steel, multiple use, open gate type.
1. Application: Use to properly locate sprinkler heads.
2. Include all supports and bracing.
3. Provide braided type tube as required for the application.

PART 3 EXECUTION

3.01 INSTALLATION
A. Install in accordance with referenced NFPA design and installation standard.
B. Place pipe runs to minimize obstruction to other work.
C. Hydrostatically test entire system.
D. Require test be witnessed by Authority Having Jurisdiction.

END OF SECTION

SECTION 22 0553
IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Pipe markers.

PART 2 PRODUCTS

2.01 IDENTIFICATION APPLICATIONS
A. Piping: Pipe markers.

2.02 PIPE MARKERS
A. Plastic Pipe Markers: Factory fabricated, flexible, semi- rigid plastic, preformed to fit around pipe or pipe covering; minimum information indicating flow direction arrow and identification of fluid being conveyed.
B. Plastic Tape Pipe Markers: Flexible, vinyl film tape with pressure sensitive adhesive backing and printed markings.
C. Color code as follows:
1. Potable, Cooling, Boiler, Feed, Other Water: Green with white letters.
2. Fire Quenching Fluids: Red with white letters.
3. Toxic and Corrosive Fluids: Orange with black letters.
4. Flammable Fluids: Yellow with black letters.
5. Combustible Fluids: Brown with white letters.
6. Compressed Air: Blue with white letters.

PART 3 EXECUTION

3.01 PREPARATION
A. Degrease and clean surfaces to receive adhesive for identification materials.

3.02 INSTALLATION
A. Install plastic pipe markers in accordance with manufacturer's instructions.
B. Install plastic tape pipe markers complete around pipe in accordance with manufacturer's instructions.

END OF SECTION

SECTION 22 0719
PLUMBING PIPING INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Piping insulation.
B. Jackets and accessories.

1.02 SUBMITTALS
A. Product Data: Provide product description, thermal characteristics, list of materials and thickness for each service, and locations.

1.03 DELIVERY, STORAGE, AND HANDLING
A. Accept materials on site, labeled with manufacturer's identification, product density, and thickness.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS
A. Surface Burning Characteristics: Flame spread index/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84 or UL 723.

2.02 GLASS FIBER
A. Insulation: ASTM C547 and ASTM C795; rigid molded, noncombustible.
1. K (Ksi) Value: ASTM C177, 0.24 at 75 degrees F (0.035 at 24 degrees C).
2. Maximum Service Temperature: 850 degrees F (454 degrees C).
3. Maximum Moisture Absorption: 0.2 percent by volume.
B. Insulation: ASTM C547 and ASTM C795; rigid molded, noncombustible, with wicking material to transport condensed water to the outside of the system for evaporation to the atmosphere.
1. K (Ksi) Value: ASTM C177, 0.23 at 75 degrees F (0.034 at 24 degrees C).
2. Maximum Service Temperature: 220 degrees F (104 degrees C).
3. Maximum Moisture Absorption: 0.2 percent by volume.
C. Vapor Barrier Jacket: White Kraft paper with glass fiber yarn, bonded to aluminized film; moisture vapor transmission when tested in accordance with ASTM E96/E96M of 0.02 perm-inches (0.029 ng/Pa s m).
D. Vapor Barrier Lap Adhesive: Compatible with insulation.

2.03 FLEXIBLE ELASTOMERIC CELLULAR INSULATION
A. Insulation: Preformed flexible elastomeric cellular rubber insulation complying with ASTM C534/C534M Grade 1; use molded tubular material wherever possible.
1. Minimum Service Temperature: Minus 40 degrees F (Minus 40 degrees C).
2. Maximum Service Temperature: 220 degrees F (104 degrees C).
3. Connection: Waterproof vapor barrier adhesive.

2.04 JACKETS
A. PVC Plastic.
1. Jacket: One piece molded type fitting covers and sheet material, off-white color.
a. Minimum Service Temperature: 0 degrees F (Minus 18 degrees C).
b. Maximum Service Temperature: 150 degrees F (66 degrees C).
c. Moisture Vapor Permeability: 0.002 perm inch (0.0029 ng/Pa s m), maximum, when tested in accordance with ASTM E96/E96M.
d. Thickness: 10 mil (0.25 mm).
e. Connections: Brush on welding adhesive.
2. Covering Adhesive Mastic: Compatible with insulation.

PART 3 EXECUTION

3.01 EXAMINATION
A. Verify that piping has been tested before applying insulation materials.
B. Verify that surfaces are clean and dry, with foreign material removed.

3.02 INSTALLATION
A. Install in accordance with manufacturer's instructions.
B. Install in accordance with North American Insulation Manufacturers Association (NAIMA) National Insulation Standards.
C. Exposed Piping: Locate insulation and cover seams in least visible locations.
D. Insulated pipes conveying fluids below ambient temperature: Insulate entire system including fittings, valves, unions, flanges, strainers, flexible connections, pump bodies, and expansion joints.
E. Glass fiber insulated pipes conveying fluids below ambient temperature:
1. Provide vapor barrier jackets, factory-applied or field-applied. Secure with self-sealing longitudinal laps and butt strips with pressure sensitive adhesive. Secure with outward clinch expanding staples and vapor barrier mastic.
2. Insulate fittings, joints, and valves with molded insulation of like material and thickness as adjacent pipe. Finish with glass cloth and vapor barrier adhesive or PVC fitting covers.
F. For hot piping conveying fluids 140 degrees F (60 degrees C) or less, do not insulate flanges and unions at equipment, but bevel and seal ends of insulation.
G. For hot piping conveying fluids over 140 degrees F (60 degrees C), insulate flanges and unions at equipment.
H. Glass fiber insulated pipes conveying fluids above ambient temperature:
1. Provide standard jackets, with or without vapor barrier, factory-applied or field-applied. Secure with self-sealing longitudinal laps and butt strips with pressure sensitive adhesive. Secure with outward clinch expanding staples.
2. Insulate fittings, joints, and valves with insulation of like material and thickness as adjoining pipe. Finish with glass cloth and adhesive or PVC fitting covers.
I. Inserts and Shields:
1. Application: Piping 1-1/2 inches (40 mm) diameter or larger.
2. Shields: Galvanized steel between pipe hangers or pipe hanger rolls and inserts.
3. Insert Location: Between support shield and piping and under the finish jacket.
4. Insert Configuration: Minimum 6 inches (150 mm) long, of same thickness and contour as adjoining insulation; may be factory fabricated.
J. Continue insulation through walls, sleeves, pipe hangers, and other pipe penetrations. Finish at supports, protrusions, and interruptions.
K. Pipe Exposed in Mechanical Equipment Rooms or Finished Spaces (less than 10 feet (3 meters) above finished floor): Finish with PVC jacket and fitting covers.
L. Exterior Applications: Provide vapor barrier jacket. Insulate fittings, joints, and valves with insulation of like material and thickness as adjoining pipe, and finish with glass mesh reinforced vapor barrier cement. Cover with aluminum jacket with seams located on bottom side of horizontal piping.
M. Heat Traced Piping: Insulate fittings, joints, and valves with insulation of like material, thickness, and finish as adjoining pipe. Size large enough to enclose pipe and heat tracer. Cover with aluminum jacket with seams located on bottom side of horizontal piping.

3.03 SCHEDULES
A. Plumbing Systems:
1. Domestic Hot Water Supply:
a. Glass Fiber Insulation:
1) Pipe Size Range: 1 1/2 inch and larger.
2) Thickness: 1 1/2 inch.
b. Glass Fiber Insulation:
1) Pipe Size Range: 1 1/4 inch and smaller .
2) Thickness: 1 inch.
c. Cellular Foam Insulation:
1) Pipe Size Range: 1 1/4 inch and smaller.
2) Thickness: 1 inch.
2. Domestic Cold Water: Glass Fiber 1 inch
3. Plumbing Vents Within 10 Feet (3 Meters) of the Exterior: Glass Fiber 1 inch
B. Other Systems:
1. Piping Exposed to Freezing with Heat Tracing: Glass Fiber 1 inch

END OF SECTION

SECTION 22 1005
PLUMBING PIPING

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Pipe, pipe fittings, specialties, and connections for piping systems.
1. Sanitary sewer and Vent piping.
2. Domestic water.
3. Flanges, unions, and couplings.
4. Pipe hangers and supports.
5. Valves.

1.02 SUBMITTALS
A. Product Data: Provide data on pipe materials, pipe fittings, valves, and accessories. Provide manufacturers catalog information. Indicate valve data and ratings.

1.03 FIELD CONDITIONS
A. Do not install underground piping when bedding is wet or frozen.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS
A. Potable Water Supply Systems: Provide piping, pipe fittings, and solder and flux (if used), that comply with NSF 61 and NSF 372 for maximum lead content; label pipe and fittings.

2.02 SANITARY SEWER PIPING, BURIED WITHIN 5 FEET (1500 MM) OF BUILDING
A. Cast Iron Pipe: CISPI 301, hubless.
1. Fittings: Cast iron.
2. Joints: CISPI 310, neoprene gasket and stainless steel clamp and shield assemblies.
B. PVC Pipe: ASTM D2665 or ASTM D3034.
1. Fittings: PVC.
2. Joints: Solvent welded, with ASTM D2564 solvent cement.

2.03 SANITARY SEWER PIPING AND VENT PIPING, ABOVE GRADE
A. Cast Iron Pipe: CISPI 301, hubless, service weight. Required in plenum ceiling space.
1. Fittings: Cast iron.
2. Joints: CISPI 310, neoprene gaskets and stainless steel clamp-and-shield assemblies.

2.05 DOMESTIC WATER PIPING, ABOVE GRADE
A. Copper Tube: ASTM B88 (ASTM B88M), Type K (A), Drawn (H).
1. Fittings: ASME B16.18, cast copper alloy or ASME B16.22, wrought copper and bronze.
2. Joints: ASTM B32, alloy Sn95 solder.
3. Mechanical Press Sealed Fittings: Double-pressed type, NSF 61 and NSF 372 approved or certified, utilizing EPDM, nontoxic, synthetic rubber sealing elements.

2.10 FLANGES, UNIONS, AND COUPLINGS
A. Unions for Pipe Sizes 3 Inches (80 mm) and Under:
1. Ferrous Pipe: Class 150 malleable iron threaded unions.
2. Copper Tube and Pipe: Class 150 bronze unions with soldered joints.
B. Flanges for Pipe Size Over 1 Inch (25 mm):
1. Ferrous Pipe: Class 150 malleable iron threaded or forged steel slip-on flanges; preformed neoprene gaskets.
2. Copper Tube and Pipe: Class 150 slip-on bronze flanges; preformed neoprene gaskets.
C. Mechanical Couplings for Grooved and Shouldered Joints: Two or more curved housing segments with continuous key to engage pipe groove, circular C-profile gasket, and bolts to secure and compress gasket.
1. Dimensions and Testing: In accordance with AWWA C606.
2. Housing Material: Provide ASTM A47/A47M malleable iron or ductile iron, galvanized.
3. Gasket Material: EPDM suitable for operating temperature range from minus 30 degrees F (minus 34 degrees C) to 230 degrees F (110 degrees C).
4. Bolts and Nuts: Hot dipped galvanized or zinc-electroplated steel.
5. When pipe is field grooved, provide coupling manufacturer's grooving tools.
D. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.

2.11 PIPE HANGERS AND SUPPORTS
A. Provide hangers and supports that comply with MSS SP-58.
1. If type of hanger or support for a particular situation is not indicated, select appropriate type using MSS SP-58 recommendations.
2. Overhead Supports: Individual steel rod hangers attached to structure or to trapeze hangers.
a. Cold and Hot Pipe Sizes 6 Inches (150 mm) and Over: Double hangers.
3. Trapeze Hangers: Welded steel channel frames attached to structure.
4. Vertical Pipe Support: Steel riser clamp.

2.12 BALL VALVES
A. Construction, 4 Inches (100 mm) and Smaller: MSS SP-110, Class 150, 400 psi (2760 kPa) CWP, bronze or ductile iron body, 304 stainless steel or chrome plated brass ball, regular port, Teflon seats and stuffing box ring, blow-out proof stem, lever handle with balancing stops, threaded or grooved ends with union.

PART 3 EXECUTION

3.01 EXAMINATION
A. Verify that excavations are to required grade, dry, and not over-excavated.

3.02 PREPARATION
A. Ream pipe and tube ends. Remove burrs. Bevel plain end ferrous pipe.
B. Remove scale and dirt, on inside and outside, before assembly.
C. Prepare piping connections to equipment with flanges or unions.

3.03 INSTALLATION
A. Install in accordance with manufacturer's instructions.
B. Provide non-conducting dielectric connections wherever jointing dissimilar metals.
C. Route piping in orderly manner and maintain gradient. Route parallel and perpendicular to walls.
D. Install piping to maintain headroom, conserve space, and not interfere with use of space.
E. Group piping whenever practical at common elevations.
F. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
G. Provide clearance in hangers and from structure and other equipment for installation of insulation and access to valves and fittings.
H. Provide access where valves and fittings are not exposed.
I. Establish elevations of buried piping outside the building to ensure not less than local requirements for cover depth.
J. Install vent piping penetrating roofed areas to maintain integrity of roof assembly.
K. Where pipe support members are welded to structural building framing, scrape, brush clean, and apply one coat of zinc-rich primer to welding.
L. Provide support for utility meters in accordance with requirements of utility companies.
M. Prepare exposed, unfinished pipe, fittings, supports, and accessories for finish painting.
N. Install bell and spigot pipe with bell end upstream.
O. Install valves with stems upright or horizontal, not inverted.
P. Install water piping to ASME B31.9.
Q. Copper Pipe and Tube: Make soldered joints in accordance with ASTM B828, using specified solder, and flux meeting ASTM B813; in potable water systems use flux also complying with NSF 61 and NSF 372.
R. PVC Pipe: Make solvent-welded joints in accordance with ASTM D2855.
S. Sleeve pipes passing through partitions, walls, and floors.
T. Inserts:
1. Provide inserts for placement in concrete formwork.
2. Provide inserts for suspending hangers from reinforced concrete slabs and sides of reinforced concrete beams.
3. Provide hooked rod to concrete reinforcement section for inserts carrying pipe over 4 inches (100 mm).
4. Where concrete slabs form finished ceiling, locate inserts flush with slab surface.
5. Where inserts are omitted, drill through concrete slab from below and provide through-bolt with recessed square steel plate and nut above slab.
U. Pipe Hangers and Supports:
1. Install in accordance with ASME B31.9.
2. Support horizontal piping as indicated.
3. Install hangers to provide minimum 1/2 inch (15 mm) space between finished covering and adjacent work.
4. Place hangers within 12 inches (300 mm) of each horizontal elbow.
5. Use hangers with 1-1/2 inch (40 mm) minimum vertical adjustment. Design hangers for pipe movement without disengagement of supported pipe.
6. Support vertical piping at every other floor. Support riser piping independently of connected horizontal piping.
7. Where several pipes can be installed in parallel and at same elevation, provide multiple or trapeze hangers.
8. Provide copper plated hangers and supports for copper piping.
9. Prime coat exposed steel hangers and supports. Hangers and supports located in crawl spaces, pipe shafts, and suspended ceiling spaces are not considered exposed.
10. Provide hangers adjacent to motor-driven equipment with vibration isolation.
11. Support cast iron drainage piping at every joint.
V. When installing more than one piping system material, ensure system components are compatible and joined to ensure the integrity of the system. Provide necessary joining fittings. Ensure flanges, union, and couplings for servicing are consistently provided.

3.04 APPLICATION
A. Use grooved mechanical couplings and fasteners only in accessible locations.
B. Install unions downstream of valves and at equipment or apparatus connections.
C. Install brass male adapters each side of valves in copper piped system. Solder adapters to pipe.
D. Install ball valves for shut-off and to isolate equipment, part of systems, or vertical risers.
E. Install ball valves for throttling, bypass, or manual flow control services.

3.05 DISINFECTION OF DOMESTIC WATER PIPING SYSTEM
A. Disinfect water distribution system.
B. Prior to starting work, verify system is complete, flushed, and clean.
C. Bleed water from outlets to ensure distribution and test for disinfectant residual at minimum 15 percent of outlets.
D. Maintain disinfectant in system for 24 hours.
E. Flush disinfectant from system until residual equal to that of incoming water or 1.0 mg/L.

3.07 SCHEDULES
A. Pipe Hanger Spacing:
1. Metal Piping:
a. Pipe Size: 1/2 inches (15 mm) to 1-1/4 inches (32 mm):
1) Maximum Hanger Spacing: 6.5 ft (2 m).
2) Hanger Rod Diameter: 3/8 inches (9 mm).
b. Pipe Size: 1-1/2 inches (40 mm) to 2 inches (50 mm):
1) Maximum Hanger Spacing: 10 ft (3 m).
2) Hanger Rod Diameter: 3/8 inch (9 mm).
c. Pipe Size: 2-1/2 inches (65 mm) to 3 inches (75 mm):
1) Maximum Hanger Spacing: 10 ft (3 m).
2) Hanger Rod Diameter: 1/2 inch (13 mm).
d. Pipe Size: 4 inches (100 mm) to 6 inches (150 mm):
1) Maximum Hanger Spacing: 10 ft (3 m).
2) Hanger Rod Diameter: 5/8 inch (15 mm).
2. Plastic Piping:
a. All Sizes:
1) Maximum Hanger Spacing: 6 ft (1.8 m).
2) Hanger Rod Diameter: 3/8 inch (9 mm).

END OF SECTION

SECTION 22 4000
PLUMBING FIXTURES

PART 1 GENERAL: - NOT USED

PART 2 PRODUCTS: - Refer to Plumbing Fixture Schedule

PART 3 EXECUTION

3.01 PREPARATION
A. Rough-in fixture piping connections in accordance with minimum sizes indicated in fixture rough-in schedule for particular fixtures.

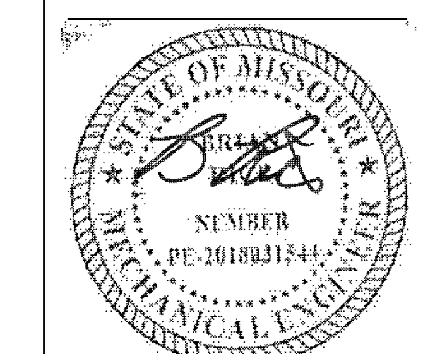
3.02 INSTALLATION
A. Install each fixture with trap, easily removable for servicing and cleaning.
B. Provide chrome plated rigid or flexible supplies to fixtures with loose key stops, reducers, and escutcheons.
C. Install components level and plumb.

3.03 INTERFACE WITH WORK OF OTHER SECTIONS
A. Review millwork shop drawings. Confirm location and size of fixtures and openings before rough-in and installation.

3.04 ADJUSTING
A. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.

END OF SECTION

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com



07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	REK
Date	Issue
07-10-25	Permit Set

P200

PLUMBING SPECIFICATIONS

PANEL: A						MAIN:	150 AMP MAIN BREAKER			VOLTAGE:	120/208		
						PHASE:	3	WIRE:	4	BUS AMPS:	225	AIC:	42,000
MOUNTING:	SURFACE	LOCATION:	BACK OF HOUSE			FEED THRU LUGS:	NO			ISOLATED GROUND BUS:		NO	

CKT	NOTE	BKR	LOAD DESCRIPTION	KVA	AØ	BØ	CØ	KVA	LOAD DESCRIPTION	BKR	NOTE	CKT
1		20/1	ROOFTOP RECEPTACLE	0.2	0.4			0.2	TIME CLOCK	20/1		2
3		20/1	TELEPHONE BOARD RECEPT.	0.2		1.4		1.2	STOREFRONT SIGNS	20/1	C	4
5		20/1	EWH-1	1.5			2.2	0.7	SALES LIGHTING	20/1	C	6
7		20/1	FLOOR RECEPTS. - SALES	0.4	1.1			0.7	SALES LIGHTING	20/1	C/L	8
9	GFI	20/1	EWC	0.6		1.4		0.8	FLOOR DISPLAY DOWNLIGHTS	20/1	C	10
11		20/1	RECEPTS - B.O.H.	1.0			1.4	0.4	SALES LIGHT BOXES	20/1	C	12
13		20/1	RECEPTS - B.O.H.	1.0	1.4			0.4	SHOW WINDOW RECEPTS	20/1	C	14
15		20/1	DISPLAY RECEPT	0.2		0.4		0.2	SHOW WINDOW LIGHTING	20/1	C	16
17		20/1	DISPLAY RECEPT	0.4			0.6	0.2	RESTROOM/STOCK LIGHTING	20/1	L	18
19		20/1	DISPLAY RECEPT	0.2	0.2			0.0	SPARE	20/1		20
21		20/1	DISPLAY RECEPT	0.2		0.2		0.0	SPARE	20/1		22
23		20/1	DISPLAY RECEPT	0.2			0.2	0.0	SPARE	20/1		24
25		20/1	P.O.S. RECEPTACLES	0.4	0.4			0.0	SPARE	20/1		26
27		20/1	SALES RECEPTS	1.4		1.4		0.0	SPARE	20/1		28
29		20/1	SALES RECEPTS	1.4			1.4	0.0	SPARE	20/1		30
31		20/1	SALES RECEPTS	1.4	1.4			0.0	SPARE	20/1		32
33		20/1	SPARE	0.0		0.0		0.0	SPARE	20/1		34
35		20/1	SPARE	0.0			0.0	0.0	SPARE	20/1		36
37				8.6	8.6			0.0	SPARE	20/1		38
39		90/3	RTU-1	8.6		8.6		0.0	SPARE	20/1		40
41				8.6			8.6	0.0	SPARE	20/1		42
			TOTAL KVA PER PHASE:		13.5	13.4	14.4					
					TOTAL KVA:		41.3					
					TOTAL AMPS:		114.6					

NOTES:
- L HANDLE LOCK
- GFI GROUND FAULT INTERRUPTING
- AFI ARC FAULT INTERRUPTING
- C ROUTE THROUGH LIGHTING CONTACTOR
- H HACR RATED

SERVICE SUMMARY - PANEL A

PANEL	LIGHTING	RECEPTACLE	MOTOR	HVAC	WATER HTR	MISC.
A	4.2	8.2	-	25.8	1.5	1.6
TOTAL	4.2	8.2	-	25.8	1.5	1.6

LOAD	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
LIGHTING	4.2	125%	5.3
RECEPTACLE	8.2	SEE NOTES	8.2
MOTOR	-	SEE NOTES	-
HVAC	25.8	100%	25.8
WATER HEATER	1.5	125%	1.9
MISC.	1.6	100%	1.6
TOTAL	41.3		42.8

NOTES
RECEPTACLE:
FIRST 10.0 KVA @ 100% + REMAINDER @ 50%

MOTOR:
PLUS ADDITIONAL 25% OF LARGEST MOTOR.

DEMAND LOAD:	118.8 AMPS
SERVICE SIZE:	150 AMPS

NOTE: THESE LOADS ARE THE SAME ON THE 277/480V SERVICE, THE DEMAND LOAD IN AMPS ON THE 277/480V SIDE WOULD BE: 51.5 AMPS

ELECTRICAL SYMBOL/ABBREVIATION LEGEND

SYMBOL	DESCRIPTION	MTG. HGT. (U.N.O.)
$	LIGHT SWITCH / TOGGLE DISCONNECT	48"
$OS	OCCUPANCY SENSOR	48"
$M	MOMENTARY CONTACT SWITCH	
J	JUNCTION BOX	
	DUPLEX RECEPTACLE	18"
	DOUBLE DUPLEX RECEPTACLE	18"
GFI	RECEPTACLE WITH GROUND FAULT PROTECTION	18"
C	CEILING MOUNTED RECEPTACLE WITHIN 18" OF TOP OF SHOW WINDOW	
	FLOOR BOX WITH DOUBLE DUPLEX RECEPTACLE	
	FLOOR BOX FOR POWER CONNECTION TO CASHWRAP RECEPTACLES	
	TELEPHONE JACK, PROVIDE BOX WITH 1/2" CONDUIT TO CEILING SPACE	18"
	DATA JACK, PROVIDE BOX WITH 3/4" CONDUIT TO CEILING SPACE	18"
	FLOOR BOX FOR ROUTING OF CABLES TO CASHWRAP DEVICES	

EX - EXISTING TO REMAIN

ONE LINE DIAGRAM NOTES:

A. COORDINATE ALL WORK WITH POWER COMPANY REQUIREMENTS PRIOR TO BIDDING & INCLUDE THE COST OF ALL ASSOCIATED LABOR, MATERIALS, & CHARGES IN BID.

B. VERIFY THE AVAILABLE FAULT CURRENT WITH THE UTILITY COMPANY PRIOR TO BIDDING AND PROVIDE EQUIPMENT RATED ACCORDINGLY. SUBMIT FAULT CURRENT CALCULATIONS WITH SHOP DRAWING SUBMITTAL.

C. PROVIDE FULL LENGTH VERTICAL BUSSING IN ALL PANELS.

D. ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.

E. ALL INTERIOR WALL-MOUNTED EQUIPMENT SHALL BE MOUNTED ON 3/4" FIRE RATED BACKBOARD.

F. COORDINATE SPACE W/ ALL OTHER TRADES TO MAINTAIN ALL CODE-REQUIRED CLEARANCES.

G. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

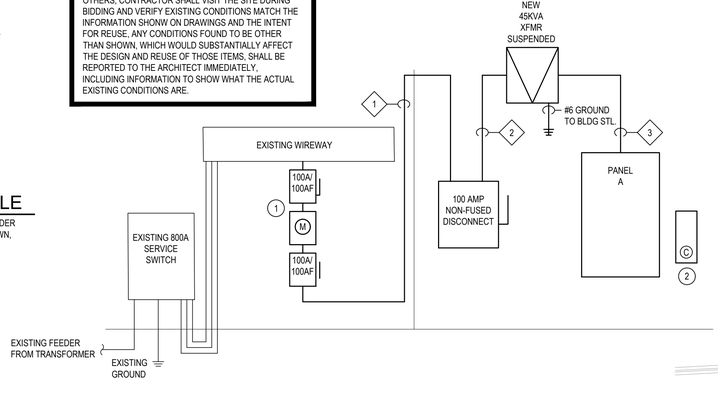
(X) ONE-LINE KEYED NOTE SCHEDULE

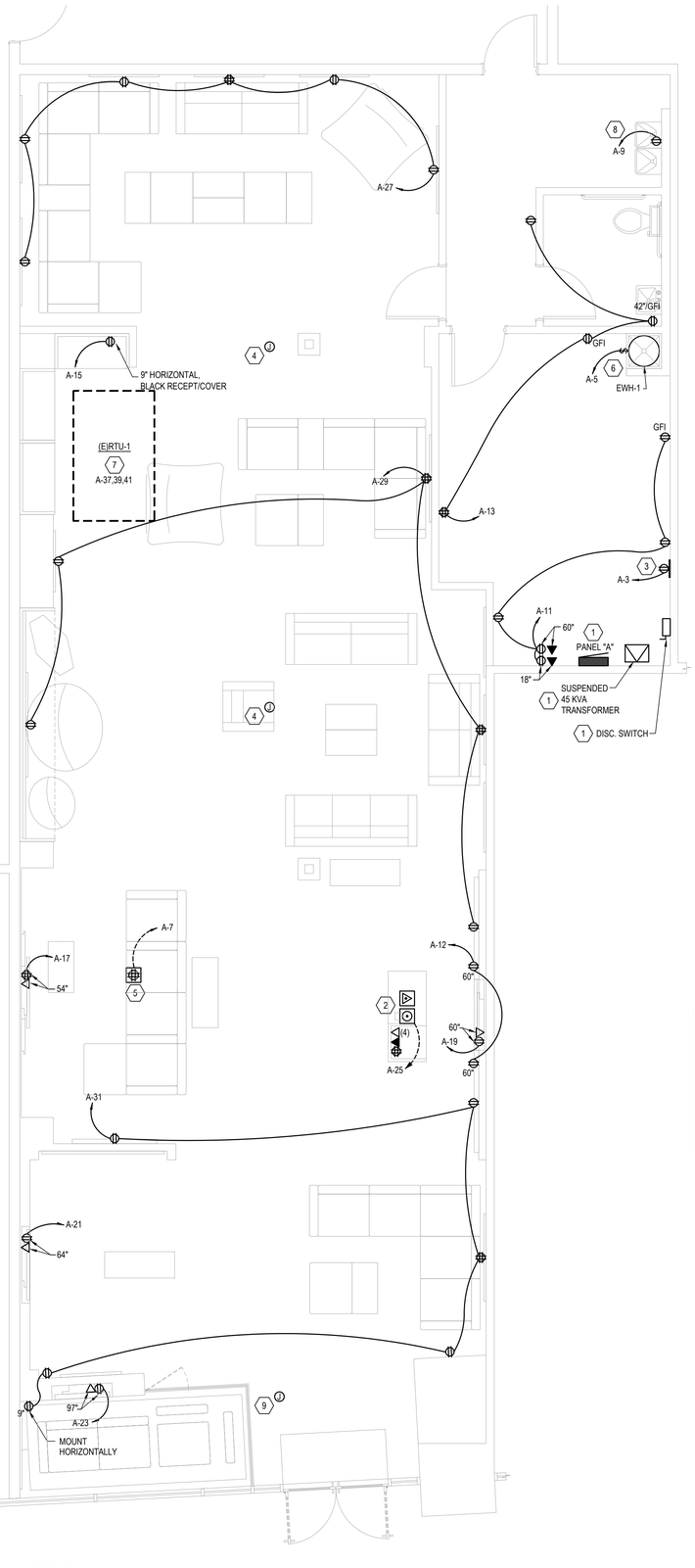
1. REMOVE EXISTING C/T CABINET AND 600-AMP DISCONNECT AND TENANT FEEDER FROM PREVIOUS TENANT. PROVIDE NEW TENANT 100-AMP SERVICE AS SHOWN, COORDINATE ROUTING OF FEEDER TO TENANT SPACE WITH LANDLORD.
2. REFER TO DRAWING E200 FOR LIGHTING CONTACTOR CONTROL DIAGRAM.

(X) ONE-LINE FEEDER SIZING:

1. (4) #3 & (1) #8 GROUND IN A 1 1/4" CONDUIT.
2. (3) #3 & (1) #8 GROUND IN A 1 1/4" CONDUIT.
3. (4) #1/0 (1) #6 GROUND IN A 2" CONDUIT.

NOTE: ITEMS SHOWN AS EXISTING ARE BASED ON EXISTING DRAWINGS AND INFORMATION PROVIDED BY OTHERS, CONTRACTOR SHALL VISIT THE SITE DURING BIDDING AND VERIFY EXISTING CONDITIONS MATCH THE INFORMATION SHONW ON DRAWINGS AND THE INTENT FOR REUSE, ANY CONDITIONS FOUND TO BE OTHER THAN SHOWN, WHICH WOULD SUBSTANTIALLY AFFECT THE DESIGN AND REUSE OF THOSE ITEMS, SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY, INCLUDING INFORMATION TO SHOW WHAT THE ACTUAL EXISTING CONDITIONS ARE.





POWER PLAN
1/4" = 1'-0"

(X) KEYED NOTE SCHEDULE

1. MAIN DISCONNET, TRANSFORMER AND PANEL "A". REFER TO ONE-LINE DIAGRAM & PANEL SCHEDULES FOR ADDITIONAL INFORMATION. SEE 7/A503 FOR SUSPENDED TRANSFORMER MOUNTING DETAILS.
2. E.C. TO PROVIDE AND INSTALL (1) DEDICATED QUAD RECEPTACLE (1) TELEPHONE OUTLET AND (4) DATA OUTLET IN CASHWRAP MILLWORK, COORDINATE LOCATIONS WITH TENANT AND/OR ARCHITECT PRIOR TO INSTALLATION. COORDINATE STYLE AND COLOR OF DEVICE AND COVER PLATE WITH OWNER AND ARCHITECT AND WITH FINISH FLOOR MATERIAL. PROVIDE FLOOR BOXES FOR POWER FEED/WHIP AND FOR ROUTING OF TELE/DATA CABLES TO DEVICES. CORE DRILL FLOOR AS REQUIRED, COORDINATE ALL CORE DRILLING REQUIREMENTS WITH LANDLORD, INCLUDING IMAGING OF FLOOR, IF REQUIRED.
3. PLYWOOD BACKBOARD AND RECEPTACLE FOR TELEPHONE SERVICE EQUIPMENT, CIRCUIT TO RECEPTACLE TO REMAIN AS SHOWN. PROVIDE 2" CONDUIT TO UTILITY COMPANY CONNECTION POINT ON SITE, COORDINATE WITH UTILITY COMPANY FOR LOCATION AND INSTALLATION OF PHONE SERVICE.
4. JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR DATA WITH FINISHED DATA PLATE AT CEILING. RUN (4) CAT6 CABLES FROM BOX TO AREA IN BACK OF HOUSE AS DESIGNATED BY TENANT'S REPRESENTATIVE. COORDINATE EXACT MOUNTING LOCATION WITH TENANT'S REPRESENTATIVE PRIOR TO ROUGH-IN.
5. E.C. TO PROVIDE AND INSTALL (1) DEDICATED DOUBLE DUPLEX RECEPTACLE IN FLOOR BOX AS SHOWN, REFER TO ARCHITECTURAL DRAWING FOR DIMENSIONS TO LOCATE BOX. COORDINATE STYLE AND COLOR OF DEVICE AND COVER PLATE WITH OWNER AND ARCHITECT AND WITH FINISH FLOOR MATERIAL. TRENCH FLOOR AS REQUIRED.
6. NEW WATER HEATER, PROVIDE DISCONNECT AS SHOWN. CONNECT RE-CIRCULATION PUMP TO SAME CIRCUIT AS WATER HEATER.
7. ROOF TOP UNIT WITH INTEGRAL DISCONNECT SWITCH, AND NON-POWERED CONVENIENCE RECEPTACLE. CONNECT 120 VOLT CIRCUIT, A-1 TO RECEPTACLE, ROUTE BRANCH CIRCUIT THROUGH ROOF CURB OPENING. RTU TO BE CONNECTED TO 90A, 3-POLE BREAKER, FEEDER SIZE TO BE (3) #3 & (1) #8 GROUND IN A 1 1/4" CONDUIT.
8. PROVIDE RECESSED RECEPTACLE FOR DRINKING FOUNTAIN, COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH EQUIPMENT BEING PROVIDED PRIOR TO ROUGH-IN. CIRCUIT TO BE PROTECTED WITH GFCI TYPE BREAKER.
9. JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR DATA WITH FINISHED DATA PLATE AT CEILING. RUN (2) CAT6 CABLES FROM BOX TO AREA IN BACK OF HOUSE AS DESIGNATED BY TENANT'S REPRESENTATIVE. COORDINATE EXACT MOUNTING LOCATION WITH TENANT'S REPRESENTATIVE PRIOR TO ROUGH-IN.

GENERAL NOTES:

A. ALL DEVICES, EQUIPMENT, FIXTURES, ETC. MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR. MECHANICAL/ELECTRICAL BONDS OF THE METALLIC RACEWAY SYSTEM SHALL ALSO BE MAINTAINED.

B. CIRCUITS MAY BE COMBINED IN CONDUIT PROVIDED WIRE IS PROPERLY DERATED AND CONDUIT SIZED PER CODE. UNDER NO CIRCUMSTANCES SHALL MORE THAN NINE (9) CURRENT CARRYING CONDUCTORS BE RUN IN A SINGLE CONDUIT.

C. ALL CONDUITS SHALL CONTAIN A GROUND WIRE SIZED PER N.E.C.

D. EXPOSED CONDUITS, WHERE PERMITTED, SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES TO BUILDING STRUCTURAL MEMBERS.

E. COORDINATE ALL DEVICE AND COVER PLATE COLORS WITH ARCHITECT PRIOR TO ORDERING. REFER TO ARCHITECTURAL DRAWINGS.

FIRE ALARM NOTE:
CONTRACTOR SHALL UTILIZE LANDLORD'S REQUIRED FIRE ALARM CONTRACTOR, IF REQUIRED, OR CONTRACT WITH THEIR OWN, FOR THE DESIGN, MODIFICATIONS, INSTALLATION AND ALL REQUIRED PERMITTING SUBMITTALS OF THE FIRE ALARM SYSTEM. COORDINATE REQUIREMENTS WITH LANDLORD AND INCLUDE ALL COSTS IN BID.

PROVIDE DEFERRED SUBMITTAL OF FIRE ALARM SHOP DRAWINGS FOR REVIEW WHICH ARE TO INCLUDE RISER DIAGRAM, VOLTAGE DROP CALCULATIONS, OPERATIONAL MATRIX AND FIRE ALARM EQUIPMENT SPECIFICATIONS.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
PETER J. FITZGERALD
NUMBER
PE 2007027333
PROFESSIONAL ENGINEER
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	PJF

Date	Issue
07-10-25	Permit Set
04-02-25	Permit Comments

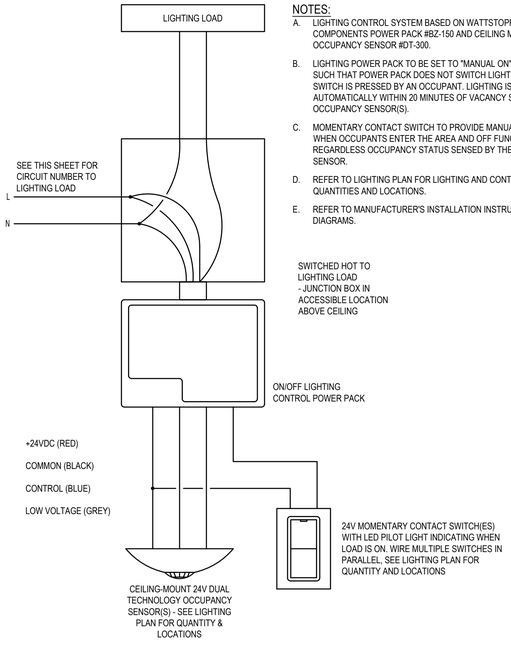
E100

POWER PLAN

LIGHT FIXTURE SCHEDULE

MARK	SYMBOL	MANUFACTURER CATALOG NO.	MOUNTING	LAMPS	FIXTURE WATTS	VOLTAGE	DESCRIPTION	NOTES
L1		MERCURY LIGHTING LSA-4-3300-35K-HTA	SURFACE	LED	26	120	SURFACE MOUNTED LED STRIP FIXTURE WITH ACRYLIC WRAP AROUND LENS	
L2		MERCURY LIGHTING LR35-24G-4200-35K-9A.125	RECESSED	LED	37	120/208	RECESSED LAY-IN 2x4 LED FIXTURE WITH ACRYLIC LENS	
F2		AMERLUX HOUSING:HDL-HP-R-NC-A17-T-18-120-0-10V TRIM: HDL-HP-RA-A17-T-MBB-FL-309	RECESSED	LED	18	120	RECESSED ADJUSTABLE LED DOWNLIGHT	
F3		AMERLUX HOUSING:HDL-HP-R-NC-A17-T-18-120-0-10V TRIM: HDL-HP-RD-A17-T-MBB-FL-309	RECESSED	LED	18	120	RECESSED FIXED LED DOWNLIGHT	
F4		NORA LIGHTING HOUSING: NMRI-13-N1-075 TRIM: NMRT-13652WW LAMPS: LED12E26P30S30KNFL	RECESSED	LED	36	120	RECESSED MULTIPLE PAR 30 SYSTEM. REFER TO NOTES FOR LABELING REQUIREMENTS.	1
EX		CONTECH LIGHTING REXASFREMC-P	WALL/CEILING	LED	3	120	EDGE-LIT EXIT SIGN, SINGLE SIDED	
EM1		EVENLITE "APERION" APAL-WH-UI	RECESSED	INCLUDED	25	120	SALES AREA RECESSED EMERGENCY LIGHT	
EM2		CONTECH LIGHTING EL2HALEDEM-P	WALL/CEILING	LED	4	120	WHITE, THERMOPLASTIC EMERGENCY LIGHT	

NOTES:
1. FIXTURE MUST BE PROVIDED FROM THE MANUFACTURER WITH LABELING TO INDICATE THE MAXIMUM LAMP WATTAGE IS 12W, FOR A FIXTURE TOTAL OF 36 WATTS.



NOTES:
A. LIGHTING CONTROL SYSTEM BASED ON WATTSTOPPER SYSTEM COMPONENTS POWER PACK #BZ-150 AND CEILING MOUNTED OCCUPANCY SENSOR #DT-300.

B. LIGHTING POWER PACK TO BE SET TO "MANUAL ON" OPERATION, SUCH THAT POWER PACK DOES NOT SWITCH LIGHTING ON UNLESS SWITCH IS PRESSED BY AN OCCUPANT. LIGHTING IS TO TURN OFF AUTOMATICALLY WITHIN 20 MINUTES OF VACANCY SENSED BY THE OCCUPANCY SENSOR(S).

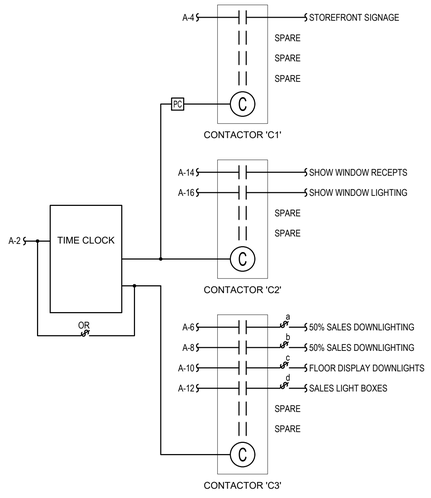
C. MOMENTARY CONTACT SWITCH TO PROVIDE MANUAL ON FUNCTION WHEN OCCUPANTS ENTER THE AREA AND OFF FUNCTION REGARDLESS OCCUPANCY STATUS SENSED BY THE OCCUPANCY SENSOR.

D. REFER TO LIGHTING PLAN FOR LIGHTING AND CONTROL DEVICE QUANTITIES AND LOCATIONS.

E. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS/WIRING DIAGRAMS.

2 | ACCESSORY LIGHTING CONTROL DETAIL

N.T.S.



1 | LIGHT CONTROL SCHEMATIC

N.T.S.

NOTES:
A. LIGHTING CONTACTORS TO BE MECHANICALLY HELD WITH 2-WIRE CONTROL MODULE, 120V COIL AND 20AMP FULLY RATED CONTACTS.

B. TIMECLOCK TO BE DIGITAL, ASTRONOMIC, 2-CHANNEL.

C. PROVIDE 2-HOUR OVERRIDE SWITCH, VERIFY SWITCH LOCATION WITH TENANT PROJECT MANAGER.

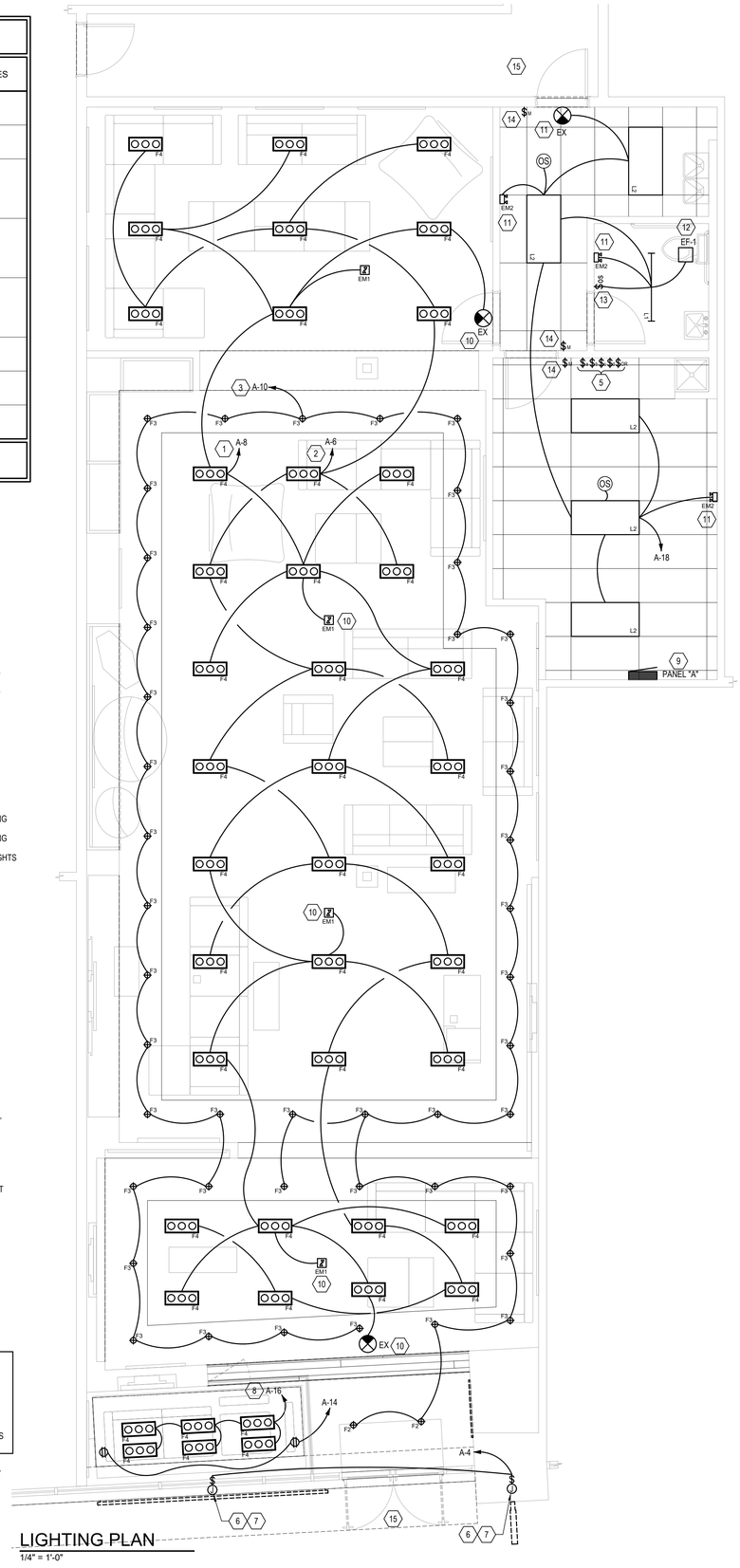
D. PROVIDE AN INTERMATIC DAYLIGHT SENSOR PHOTOCELL MOUNTED ON OR ADJACENT TO ROOFTOP INIT FACING NORTH.

LIGHTING CONTROL LEGEND:

C1/C2 STOREFRONT SIGNAGE
SHOW WINDOW LIGHTING
SHOW WINDOW RECEPTS
C3/a 50% SALES DOWNLIGHTS
C3/b 50% SALES DOWNLIGHTS
C3/c FLOOR DISPLAY DOWNLIGHTS
C3/e SALES LIGHT BOXES

MASTER LIGHTING SWITCH BANK

	'd' A-12	'c' A-10	'b' A-8	'a' A-6
	SALES LIGHT BOXES	FLOOR DISPLAY DOWNLIGHTS	50% SALES DOWNLIGHTS	50% SALES DOWNLIGHTS
2-HOUR OVERRIDE	SPST W/ PILOT LIGHT	SPST W/ PILOT LIGHT	SPST W/ PILOT LIGHT	SPST W/ PILOT LIGHT



LIGHTING PLAN

1/4" = 1'-0"

KEYED NOTE SCHEDULE

1. LIGHTING CIRCUIT - ZONE 'a' :
   CONNECT CIRCUIT THROUGH SINGLE POLE SWITCH CONTROLLED BY CONTACTOR AS SHOWN IN LIGHTING CONTROL SCHEMATIC ON THIS SHEET. REFER TO CODED NOTE 5 FOR SWITCH LOCATION.
2. LIGHTING CIRCUIT - ZONE 'b' :
   CONNECT CIRCUIT THROUGH SINGLE POLE SWITCH CONTROLLED BY CONTACTOR AS SHOWN IN LIGHTING CONTROL SCHEMATIC ON THIS SHEET. REFER TO CODED NOTE 5 FOR SWITCH LOCATION.
3. LIGHTING CIRCUIT - ZONE 'c' :
   CONNECT CIRCUIT THROUGH SINGLE POLE SWITCH CONTROLLED BY CONTACTOR AS SHOWN IN LIGHTING CONTROL SCHEMATIC ON THIS SHEET. REFER TO CODED NOTE 5 FOR SWITCH LOCATION.
4. NOT USED.
5. MASTER LIGHTING SWITCHBANK:
   PROVIDE GANGED SWITCH LOCATION FOR LOCAL LIGHTING SWITCHES. PROVIDE UNDER COMMON FACEPLATE OR MULTIPLE FACEPLATES OF EQUAL WIDTHS. SEE 'LIGHTING CONTROL SCHEMATIC' ON THIS SHEET. ALL SWITCHES TO BE PILOT LIGHT TYPE. LIGHT ON WHEN SWITCH IS ON, TO INDICATE STATUS OF THE CONTROLLED LIGHTING.
6. STOREFRONT:
   PROVIDE JUNCTION BOX AND TOGGLE TYPE DISCONNECT SWITCH (IF NOT ALREADY EXISTING), WITH MINIMUM 12" WHIP FOR CONNECTION TO THE STORE FRONT SIGN. LOCATE AT SOFFIT IN ACCESSIBLE LOCATION. COORDINATE EXACT REQUIREMENTS WITH SIGN VENDOR.
7. EXTERIOR LIGHTING AND SIGN CONTROL:
   HOME RUN THROUGH CONTACTOR CONTROLLED BY TIMECLOCK AND PHOTOCELL AS SHOWN IN LIGHTING CONTROL SCHEMATIC ON THIS SHEET.
8. SHOW WINDOW LIGHTING CONTROL:
   HOME RUN THROUGH CONTACTOR CONTROLLED BY TIMECLOCK AS SHOWN IN LIGHTING CONTROL SCHEMATIC ON THIS SHEET.
9. TIMECLOCK AND CONTACTORS:
   CONTRACTOR TO PROVIDE AND INSTALL TIMECLOCK (TORK DZS200BP OR EQUAL). COORDINATE TIMECLOCK SCHEDULE WITH LANDLORD AND TENANT. MOUNT TIMECLOCK/CONTACTORS ADJACENT TO PANELBOARD.
10. SALES AREA EMERGENCY/NIGHT LIGHT/EXIT CIRCUIT:
    ALL SALES NIGHT LIGHTS AND EXIT SIGNS SHALL BE CONNECTED TO UNSWITCHED LEG OF LOCAL GENERAL LIGHTING CIRCUIT. FIXTURES ARE TO PROVIDE CONTINUOUS EGRESS AND EMERGENCY ILLUMINATION PER NEC 700.16 AND 700.17 AND LIFE SAFETY CODES. PROVIDE SCREW TYPE, LOCK ON DEVICE AT BREAKER.
11. NON-SALES AREA EMERGENCY/NIGHT LIGHT/EXIT CIRCUIT:
    ALL NON-SALES AREA EMERGENCY LIGHTS AND EXIT LIGHTS SHALL BE CONNECTED TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT. FIXTURES ARE TO PROVIDE CONTINUOUS EGRESS AND EMERGENCY ILLUMINATION PER NEC 700.16 AND 700.17 AND LIFE SAFETY CODES. PROVIDE SCREW TYPE, LOCK ON DEVICE AT BREAKER.
12. EXHAUST FAN:
    PROVIDED WITH INTEGRAL DISCONNECT. TO BE CONTROLLED WITH ROOM LIGHTING AS SHOWN.
13. PROVIDE WALL MOUNTED, DUAL TECHNOLOGY, OCCUPANCY SENSORSWITCH FOR CONTROL OF LIGHTING AS SHOWN. SENSOR TO TURN LIGHTING ON WHEN ENTERING THE ROOM AND OFF AUTOMATICALLY AFTER 20 MINUTES OF VACANCY.
14. PROVIDE ON/OFF SWITCHING POWER PACK AND ASSOCIATED 24V CEILING MOUNTED OCCUPANCY SENSORS AND MONETARY CONTACT SWITCHES FOR CONTROL OF B.O.H. LIGHTING AS SHOWN. REFER TO DETAIL '2' ON THIS SHEET FOR MORE INFORMATION AND SEQUENCE OF OPERATION.
15. EXTERIOR EMERGENCY EXIT DISCHARGE LIGHTING AT STOREFRONT IS EXISTING TO REMAIN, PROVIDED UNDER SHELL BUILDING AND CONNECTED TO BUILDING POWER. REAR EXIT LEADS TO MALL SERVICE CORRIDOR, EMERGENCY LIGHTING IN THAT AREA IS PART OF MALL LIGHTING SYSTEM.

GENERAL NOTES:

A. ALL DEVICES, EQUIPMENT, FIXTURES, ETC. MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR. MECHANICAL/ELECTRICAL BONDS OF THE METALLIC RACEWAY SYSTEM SHALL ALSO BE MAINTAINED.

B. CIRCUITS MAY BE COMBINED IN CONDUIT PROVIDED WIRE IS PROPERLY DERATED AND CONDUIT SIZED PER CODE. UNDER NO CIRCUMSTANCES SHALL MORE THAN NINE (9) CURRENT CARRYING CONDUCTORS BE RUN IN A SINGLE CONDUIT.

C. ALL CONDUITS SHALL CONTAIN A GROUND WIRE SIZED PER N.E.C.

D. EXPOSED CONDUITS, WHERE PERMITTED, SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES TO BUILDING STRUCTURAL MEMBERS. PAINT TO MATCH ADJACENT SURFACES.

E. COORDINATE ALL DEVICE AND COVER PLATE COLORS WITH ARCHITECT PRIOR TO ORDERING. REFER TO ARCHITECTURAL DRAWINGS.

F. REFER TO ARCHITECT'S DRAWING, A201, FOR DIMENSION PLAN FOR FIXTURE LOCATIONS.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
PETER J. FITZGERALD
NUMBER PE 2007021335
PROFESSIONAL ENGINEER
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	PJF

Date	Issue
07-10-25	Permit Set

E200

LIGHTING PLAN

SECTION 26 0519
LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 GENERAL

1.01 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
1. Coordinate sizes of raceways, boxes, and equipment enclosures installed under other sections with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop.
2. Coordinate with electrical equipment installed under other sections to provide terminations suitable for use with the conductors to be installed.

PART 2 PRODUCTS

2.01 CONDUCTOR AND CABLE APPLICATIONS

A. Do not use conductors and cables for applications other than as permitted by NFPA 70 and product listing.
B. Provide single conductor building wire installed in suitable raceway unless otherwise indicated, permitted, or required.
C. Metal-clad cable is permitted only as follows:
1. Where not otherwise restricted, may be used:
a. Where concealed above accessible ceilings for final connections from junction boxes to luminaires.
2. In addition to other applicable restrictions, may not be used:
a. Unless approved by Owner.
b. Where exposed to damage.
c. For damp, wet, or corrosive locations, unless provided with a PVC jacket listed as suitable for those locations.

2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

A. Provide products that comply with requirements of NFPA 70.
B. Provide products listed, classified, and labeled as suitable for the purpose intended.
C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.
D. Conductor Material:
1. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M unless otherwise indicated.
E. Minimum Conductor Size:
1. Branch Circuits: 12 AWG.
a. Exceptions:
1) 20 A, 120 V circuits longer than 75 feet: 10 AWG, for voltage drop.
2) 20 A, 120 V circuits longer than 150 feet: 8 AWG, for voltage drop.
3) 20 A, 277 V circuits longer than 150 feet: 10 AWG, for voltage drop.
2. Control Circuits: 14 AWG.
F. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
G. Conductor Color Coding:
1. Color code conductors as called for within the NEC or otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.

2.03 SINGLE CONDUCTOR BUILDING WIRE

A. Description: Single conductor insulated wire.
B. Conductor Stranding:
1. Feeders and Branch Circuits:
a. Size 10 AWG and Smaller: Solid or stranded.
b. Size 8 AWG and Larger: Stranded.
C. Insulation Voltage Rating: 600 V.
D. Insulation:
1. Copper Building Wire: Type THHN/THWN or THHN/THWN-2, except as indicated below.
a. Size 4 AWG and Larger: Type XHHW-2.
b. Installed Underground: Type XHHW-2.

2.04 WIRING CONNECTORS

A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL 486C as applicable.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that raceways, boxes, and equipment enclosures are installed and are properly sized to accommodate conductors and cables in accordance with NFPA 70.

3.02 INSTALLATION

A. Circuiting Requirements:
1. Unless dimensioned, circuit routing indicated is diagrammatic.
2. When circuit destination is indicated without specific routing, determine exact routing required.
3. Arrange circuiting to minimize splices.
4. Maintain separation of Class 1, Class 2, and Class 3 remote-control, signaling, and power-limited circuits in accordance with NFPA 70.
5. Maintain separation of wiring for emergency systems in accordance with NFPA 70.
6. Common Neutrals: Unless otherwise indicated, sharing of neutral/grounded conductors among up to three single phase branch circuits of different phases installed in the same raceway is not permitted. Provide dedicated neutral/grounded conductor for each individual branch circuit.
B. Installation in Raceway:
1. Tape ends of conductors and cables to prevent infiltration of moisture and other contaminants.
2. Pull all conductors and cables together into raceway at same time.
3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.
C. Paralleled Conductors: Install conductors of the same length and terminate in the same manner.
D. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems.
1. Installation Above Suspended Ceilings: Do not provide support from ceiling support system. Do not provide support from ceiling grid or allow conductors and cables to lay on ceiling tiles.
2. Installation in Vertical Raceways: Provide supports where vertical rise exceeds permissible limits.
E. Install conductors with a minimum of 12 inches of slack at each outlet.
F. Where conductors are installed in enclosures for future termination by others, provide a minimum of 5 feet of slack.
G. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 8400.
H. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.

SECTION 26 0526
GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 PRODUCTS

1.01 GROUNDING AND BONDING REQUIREMENTS

A. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.
B. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
C. Bonding and Equipment Grounding:
1. Provide bonding for equipment grounding conductors, equipment ground busses, metallic equipment enclosures, metallic raceways and boxes, device grounding terminals, and other normally non-current-carrying conductive materials enclosing electrical conductors/equipment or likely to become energized as indicated and in accordance with NFPA 70.
2. Provide insulated equipment grounding conductor in each feeder and branch circuit raceway. Do not use raceways as sole equipment grounding conductor.
3. Where circuit conductor sizes are increased for voltage drop, increase size of equipment grounding conductor proportionally in accordance with NFPA 70.
4. Provide bonding for interior metal piping systems in accordance with NFPA 70. This includes, but is not limited to:
a. Metal water piping where not already effectively bonded to metal underground water pipe used as grounding electrode.
b. Metal gas piping.

1.02 GROUNDING AND BONDING COMPONENTS

A. General Requirements:
1. Provide products listed, classified, and labeled as suitable for the purpose intended.
2. Provide products listed and labeled as complying with UL 467 where applicable.
B. Connectors for Grounding and Bonding:
1. Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467.
2. Unless otherwise indicated, use exothermic welded connections for underground, concealed and other inaccessible connections.
C. Unless otherwise indicated, use mechanical connectors, compression connectors, or exothermic welded connections for accessible connections.

SECTION 26 0529
HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 PRODUCTS

1.01 SUPPORT AND ATTACHMENT COMPONENTS

A. General Requirements:
1. Provide all required hangers, supports, anchors, fasteners, fittings, accessories, and hardware as necessary for the complete installation of electrical work.
2. Where support and attachment component types and sizes are not indicated, select in accordance with manufacturer's application criteria as required for the load to be supported. Include consideration for vibration, equipment operation, and shock loads where applicable.
B. Conduit and Cable Supports: Straps, clamps, etc. suitable for the conduit or cable to be supported.
C. Outlet Box Supports: Hangers, brackets, etc. suitable for the boxes to be supported.
D. Metal Channel (Strut) Framing Systems: Factory-fabricated continuous-slot metal channel (strut) and associated fittings, accessories, and hardware required for field-assembly of supports.
E. Hanger Rods: Threaded zinc-plated steel unless otherwise indicated.
F. Anchors and Fasteners:
1. Unless otherwise indicated and where not otherwise restricted, use the anchor and fastener types indicated for the specified applications.

PART 2 EXECUTION

2.01 INSTALLATION

A. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
B. Unless specifically indicated or approved by Architect, do not provide support from suspended ceiling support system or ceiling grid.
C. Unless specifically indicated or approved by Architect, do not provide support from roof deck.
D. Do not penetrate or otherwise notch or cut structural members without approval of Structural Engineer.

SECTION 26 0533.13
CONDUIT FOR ELECTRICAL SYSTEMS

PART 1 PRODUCTS

1.01 CONDUIT APPLICATIONS

A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70 and product listing.
B. Unless otherwise indicated and where not otherwise restricted, use the conduit types indicated for the specified applications. Where more than one listed application applies, comply with the most restrictive requirements. Where conduit type for a particular application is not specified, use galvanized steel rigid metal conduit.
C. Underground:
1. Use galvanized steel rigid metal conduit, PVC-coated galvanized steel rigid metal conduit, or rigid PVC conduit.
D. Concealed: Use galvanized steel rigid metal conduit, intermediate metal conduit (IMC), or electrical metallic tubing (EMT).
E. Exposed, Interior, Not Subject to Physical Damage: Use galvanized steel rigid metal conduit, intermediate metal conduit (IMC), or electrical metallic tubing (EMT).
F. Exposed, Exterior: Use galvanized steel rigid metal conduit or intermediate metal conduit (IMC).
G. Connections to Luminaires Above Accessible Ceilings: Use flexible metal conduit.
1. Maximum Length: 6 feet.
H. Connections to Vibrating Equipment:
1. Dry Locations: Use flexible metal conduit.
2. Damp, Wet, or Corrosive Locations: Use liquidtight flexible metal conduit.
3. Maximum Length: 6 feet unless otherwise indicated.

1.02 CONDUIT REQUIREMENTS

A. Existing Work: Where existing conduits are indicated to be reused, they may be reused only where they comply with specified requirements, are free from corrosion, and integrity is verified by pulling a mandrel through them.
B. Provide all conduit, fittings, supports, and accessories required for a complete raceway system.
C. Provide products listed, classified, and labeled as suitable for the purpose intended.
D. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

PART 2 EXECUTION

2.01 INSTALLATION

A. Conduit Routing:
1. Conceal all conduits unless specifically indicated to be exposed.
2. Conduits in the following areas may be exposed, unless otherwise indicated:
a. Electrical rooms.
b. Mechanical equipment rooms.
c. Within joists in areas with no ceiling.
3. Conduits installed underground or embedded in concrete may be routed in the shortest possible manner unless otherwise indicated. Route all other conduits parallel or perpendicular to building structure and surfaces, following surface contours where practical.
B. Conduit Support:
1. Secure and support conduits in accordance with NFPA 70 and Section 26 0529 using suitable supports and methods approved by the authority having jurisdiction.
2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
C. Connections and Terminations:
1. Use suitable adapters where required to transition from one type of conduit to another.
2. Provide insulating bushings or insulated throats at all conduit terminations to protect conductors.
3. Secure joints and connections to provide maximum mechanical strength and electrical continuity.
D. Penetrations:
1. Seal interior of conduits entering the building from underground at first accessible point to prevent entry of moisture and gases.
2. Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane.
3. Make penetrations for roof-mounted equipment within associated equipment openings and curbs where possible to minimize roofing system penetrations. Where penetrations are necessary, seal as indicated or as required to preserve integrity of roofing system and maintain roof warranty. Include proposed locations of penetrations and methods for sealing with submittals.
4. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 8400.
E. Condensation Prevention: Where conduits cross barriers between areas of potential substantial temperature differential, provide sealing fitting or approved sealing compound at an accessible point near the penetration to prevent condensation.
F. Provide grounding and bonding in accordance with Section 26 0526.

SECTION 26 0533.16
BOXES FOR ELECTRICAL SYSTEMS

PART 1 PRODUCTS

1.01 BOXES

A. General Requirements:
1. Do not use boxes and associated accessories for applications other than as permitted by NFPA 70 and product listing.
2. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
3. Provide products listed, classified, and labeled as suitable for the purpose intended.
4. Where box size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
5. Provide grounding terminals within boxes where equipment grounding conductors terminate.
B. Outlet and Device Boxes Up to 100 cubic inches, Including Those Used as Junction and Pull Boxes:
1. Use raised covers suitable for the type of wall construction and device configuration where required.
2. Use shallow boxes where required by the type of wall construction.
3. Boxes for Supporting Luminaires and Ceiling Fans: Listed as suitable for the type and weight of load to be supported; furnished with fixture stud to accommodate mounting of luminaire where required.
4. Boxes for Ganged Devices: Use multigang boxes of single-piece construction. Do not use field-connected gangable boxes unless specifically indicated or permitted.
5. Minimum Box Size, Unless Otherwise Indicated:
a. Wiring Devices (Other Than Communications Systems Outlets): 4 inch square by 1-1/2 inch deep (100 by 38 mm) trade size.
C. Cabinets and Enclosures, Including Junction and Pull Boxes Larger Than 100 cubic inches:
1. Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E, or UL 508A.
2. NEMA 250 Environment Type, Unless Otherwise Indicated:
3. Junction and Pull Boxes Larger Than 100 cubic inches:
a. Provide screw-cover or hinged-cover enclosures unless otherwise indicated.
D. Floor Boxes:
1. Description: Floor boxes compatible with floor box service fittings provided in accordance with Section 26 2726; with partitions to separate multiple services; furnished with all components, adapters, and trims required for complete installation.

PART 2 EXECUTION

2.01 INSTALLATION

A. Box Locations:
1. Locate boxes to be accessible. Provide access panels in accordance with Section 08 3100 as required where approved by the Architect.
2. Do not install flush-mounted boxes on opposite sides of walls back-to-back. Provide minimum 6 inches horizontal separation unless otherwise indicated.
3. Fire Resistance Rated Walls: Install flush-mounted boxes such that the required fire resistance will not be reduced.
B. Install boxes plumb and level.
C. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 8400.
D. Close unused box openings.
E. Install blank wall plates on junction boxes and on outlet boxes with no devices or equipment installed or designated for future use.

SECTION 26 0553
IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 PRODUCTS

1.01 IDENTIFICATION REQUIREMENTS

A. Identification for Equipment:
1. Use identification nameplate to identify each piece of electrical distribution and control equipment and associated sections, compartments, and components.
2. Service Equipment:
a. Use identification nameplate to identify each service disconnecting means.
b. For buildings or structures supplied by more than one service, or any combination of branch circuits, feeders, and services, use identification nameplate or means of identification acceptable to authority having jurisdiction at each service disconnecting means to identify all other services, feeders, and branch circuits supplying that building or structure. Verify format and descriptions with authority having jurisdiction.
3. Available Fault Current Documentation: Use identification label to identify the available fault current and date calculations were performed at locations requiring documentation by NFPA 70 including but not limited to the following.
a. Service equipment.
b. Industrial control panels.
c. Motor control centers.
d. Elevator control panels.
e. Industrial machinery.
B. Identification for Conductors and Cables:
1. Color Coding for Power Conductors 600 V and Less: Comply with Section 26 0519.

1.02 IDENTIFICATION NAMEPLATES AND LABELS

A. Identification Labels:
1. Materials: Use self-adhesive laminated plastic labels; UV, chemical, water, heat, and abrasion resistant.
2. Text: Use factory pre-printed or machine-printed text. Do not use handwritten text unless otherwise indicated.

1.03 UNDERGROUND WARNING TAPE

A. Materials: Use non-detectable type polyethylene tape suitable for direct burial, unless otherwise indicated.
B. Exception: Use foil-backed detectable type tape where required by serving utility or where directed by Owner.

SECTION 26 0583
WIRING CONNECTIONS

PART 1 PRODUCTS

1.01 MATERIALS

A. Cords and Caps: NEMA WD 6; match receptacle configuration at outlet provided for equipment.
1. Colors: Comply with NEMA WD 1.
2. Cord Construction: NFPA 70, Type SJO, multiconductor flexible cord with identified equipment grounding conductor, suitable for use in damp locations.
3. Size: Suitable for connected load of equipment, length of cord, and rating of branch circuit overcurrent protection.

1.02 EQUIPMENT CONNECTIONS

A. As indicated in equipment schedules on drawings or as indicated on plans.:

PART 2 EXECUTION

2.01 ELECTRICAL CONNECTIONS

A. Make conduit connections to equipment using flexible conduit. Use liquidtight flexible conduit with watertight connectors in damp or wet locations.
B. Connect heat producing equipment using wire and cable with insulation suitable for temperatures encountered.
C. Provide receptacle outlet to accommodate connection with attachment plug.
D. Provide cord and cap where field-supplied attachment plug is required.
E. Install suitable strain-relief clamps and fittings for cord connections at outlet boxes and equipment connection boxes.
F. Install disconnect switches, controllers, control stations, and control devices to complete equipment wiring requirements.
G. Install interconnecting conduit and wiring between devices and equipment to complete equipment wiring requirements.
H. Coolers and Freezers: Cut and seal conduit openings in freezer and cooler walls, floor, and ceilings.

SECTION 26 0923
LIGHTING CONTROL DEVICES

PART 1 PRODUCTS

1.01 LIGHTING CONTROL DEVICES - GENERAL REQUIREMENTS

A. Provide products listed, classified, and labeled as suitable for the purpose intended.

1.02 OCCUPANCY SENSORS

A. All Occupancy Sensors:
1. Description: Factory-assembled commercial specification grade devices for indoor use capable of sensing both major motion, such as walking, and minor motion, such as small desktop level movements, according to published coverage areas, for automatic control of load indicated.
2. Sensor Technology:
a. Passive Infrared (PIR) Occupancy Sensors: Designed to detect occupancy by sensing movement of thermal energy between zones.
b. Ultrasonic Occupancy Sensors: Designed to detect occupancy by sensing frequency shifts in emitted and reflected inaudible sound waves.
c. Passive Infrared/Ultrasonic Dual Technology Occupancy Sensors: Designed to detect occupancy using a combination of both passive infrared and ultrasonic technologies.
d. Passive Infrared/Acoustic Dual Technology Occupancy Sensors: Designed to detect occupancy using a combination of both passive infrared and audible sound sensing technologies.
3. Provide LED to visually indicate motion detection with separate color LEDs for each sensor type in dual technology units.
4. Operation: Unless otherwise indicated, occupancy sensor to turn load on when occupant presence is detected and to turn load off when no occupant presence is detected during an adjustable turn-off delay time interval.
5. Compatibility (Non-Dimming Sensors): Suitable for controlling incandescent lighting, low-voltage lighting with electronic and magnetic transformers, fluorescent lighting with electronic and magnetic ballasts, and fractional motor loads, with no minimum load requirements.
B. Wall Switch Occupancy Sensors:
1. All Wall Switch Occupancy Sensors:
a. Description: Occupancy sensors designed for installation in standard wall box at standard wall switch mounting height with a field of view of 180 degrees, integrated manual control capability, and no leakage current to load in off mode.
b. Manual-Off Override Control: When used to turn off load while in automatic-on mode, unit to revert back to automatic mode after no occupant presence is detected during the delayed-off time interval.
C. Ceiling Mounted Occupancy Sensors:
1. All Ceiling Mounted Occupancy Sensors:
a. Description: Low profile occupancy sensors designed for ceiling installation.
D. Power Packs for Low Voltage Occupancy Sensors:
1. Description: Plenum rated, self-contained low voltage class 2 transformer and relay compatible with specified low voltage occupancy sensors for switching of line voltage loads.
2. Provide quantity and configuration of power and slave packs with all associated wiring and accessories as required to control the load indicated on drawings.

1.03 TIME SWITCHES

A. Digital Electronic Time Switches:
1. Description: Factory-assembled solid state programmable controller with LCD display, listed and labeled as complying with UL 916 or UL 917.
2. Schedule Capacity: Not less than 16 programmable on/off operations.
3. Provide automatic daylight savings time and leap year compensation.
4. Provide power outage backup to retain programming and maintain clock.
5. Manual override: Capable of overriding current schedule both permanently and temporarily until next scheduled event.

1.04 OUTDOOR PHOTO CONTROLS

A. Stem-Mounted Outdoor Photo Controls:
1. Description: Direct-wired photo control unit with threaded conduit mounting stem and field-adjustable swivel base, listed and labeled as complying with UL 773A.
B. Button Type Outdoor Photo Controls
1. Description: Direct-wired photo control unit complying with ANSI C136.24 with weatherproof gasketed wall plate where required or indicated, listed and labeled as complying with UL 773A.

PART 2 EXECUTION

2.01 INSTALLATION

A. Coordinate locations of outlet boxes provided under Section 26 0533.16 as required for installation of lighting control devices provided under this section.
B. Install lighting control devices in accordance with manufacturer's instructions.
C. Outdoor Photo Control Locations:
1. Where possible, locate outdoor photo controls with photo sensor facing north. If north facing photo sensor is not possible, install with photo sensor facing east, west, or down.
2. Locate outdoor photo controls so that photo sensors do not face artificial light sources, including light sources controlled by the photo control itself.

2.02 FIELD QUALITY CONTROL

A. Test occupancy sensors to verify proper operation, including time delays and ambient light thresholds where applicable. Verify optimal coverage for entire room or area. Record test results in written report to be included with submittals.
B. Test time switches to verify proper operation.
C. Test outdoor photo controls to verify proper operation, including time delays where applicable.
D. Correct wiring deficiencies and replace damaged or defective lighting control devices.

2.03 ADJUSTING

A. Adjust occupancy sensor settings to minimize undesired activations while optimizing energy savings, and to achieve desired function as indicated or as directed by Architect.
B. Adjust time switch settings to achieve desired operation schedule as indicated or as directed by Architect. Record settings in written report to be included with submittals.

SECTION 26 2200
LOW-VOLTAGE TRANSFORMERS

PART 1 PRODUCTS

1.01 MANUFACTURERS

A. ABB/GE; www.geindustrial.com/#sle.
B. Eaton Corporation; www.eaton.com.
C. Schneider Electric; Square D Products: www.schneider-electric.us/#sle.
D. Siemens Industry, Inc; www.usa.siemens.com/#sle.

1.02 TRANSFORMERS - GENERAL REQUIREMENTS

A. Description: Factory-assembled, dry type transformers for 60 Hz operation designed and manufactured in accordance with NEMA ST 20 and listed, classified, and labeled as suitable for the purpose intended.
B. Core: High grade, non-aging silicon steel with high magnetic permeability and low hysteresis and eddy current losses. Keep magnetic flux densities substantially below saturation point, even at 10 percent primary overvoltage. Tightly clamp core laminations to prevent plate movement and maintain consistent pressure throughout core length.

1.03 GENERAL PURPOSE TRANSFORMERS

A. Description: Self-cooled, two winding transformers listed and labeled as complying with UL 506 or UL 1561; ratings as indicated on the drawings.
B. Insulation System and Allowable Average Winding Temperature Rise:
1. Less than 15 kVA: Class 180 degrees C insulation system with 115 degrees C average winding temperature rise.
2. 15 kVA and Larger: Class 220 degrees C insulation system with 150 degrees C average winding temperature rise.
C. Coil Conductors: Continuous aluminum windings with terminations brazed or welded.
D. Winding Taps:
1. 3 kVA through 15 kVA: Two 5 percent full capacity primary taps below rated voltage.
2. 15 kVA through 300 kVA: Two 2.5 percent full capacity primary taps above and four 2.5 percent full capacity primary taps below rated voltage.
3. 500 kVA and Larger: Two 2.5 percent full capacity primary taps above and two 2.5 percent full capacity primary taps below rated voltage.
E. Energy Efficiency: Comply with 10 CFR 431, Subpart K.
F. Mounting Provisions:
1. Less than 15 kVA: Suitable for wall mounting.
2. 15 kVA through 75 kVA: Suitable for wall, floor, or trapeze mounting.
a. Larger than 75 kVA: Suitable for floor mounting.

SECTION 26 2416
PANELBOARDS

PART 1 PRODUCTS

1.01 MANUFACTURERS

A. ABB/GE; www.geindustrial.com/#sle.
B. Eaton Corporation; www.eaton.com/#sle.
C. Schneider Electric; Square D Products; www.schneider-electric.us/#sle.
D. Siemens Industry, Inc; www.usa.siemens.com/#sle.

1.02 PANELBOARDS - GENERAL REQUIREMENTS

A. Short Circuit Current Rating:
1. Provide panelboards with listed short circuit current rating as indicated on the drawings.
2. Listed series ratings are acceptable, except where not permitted by motor contribution according to NFPA 70.
3. Label equipment utilizing series ratings as required by NFPA 70.
B. Panelboards Used for Service Entrance: Listed and labeled as suitable for use as service equipment according to UL 869A.
C. Mains: Configure for top or bottom incoming feed as indicated or as required for the installation.
D. Bussing: Sized in accordance with UL 67 temperature rise requirements.
1. Provide solidly bonded equipment ground bus in each panelboard, with a suitable lug for each feeder and branch circuit equipment grounding conductor.
2. Provide separate isolated/insulated ground bus where indicated or where isolated grounding conductors are provided.
E. Conductor Terminations: Suitable for use with the conductors to be installed.
F. Enclosures: Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E.
1. Environment Type per NEMA 250: Unless otherwise indicated, as specified for the following installation locations:
2. Boxes: Galvanized steel unless otherwise indicated.
a. Provide wiring gutters sized to accommodate the conductors to be installed.
3. Lockable Doors: All locks keyed alike unless otherwise indicated.
G. Future Provisions: Prepare all unused spaces for future installation of devices including bussing, connectors, mounting hardware and all other required provisions.
H. Multi-Section Panelboards: Provide enclosures of the same height, with feed-through lugs or sub-feed lugs and feeders as indicated or as required to interconnect sections.
I. Load centers are not acceptable.
J. Provide the following features and accessories where indicated or where required to complete installation:
1. Feed-through lugs.
2. Sub-feed lugs.

1.03 OVERCURRENT PROTECTIVE DEVICES

A. Molded Case Circuit Breakers:
1. Description: Quick-make, quick-break, over center toggle, trip-free, trip-indicating circuit breakers listed and labeled as complying with UL 489, and complying with FS W-C-375 where applicable; ratings, configurations, and features as indicated on the drawings.
2. Interrupting Capacity:
a. Provide circuit breakers with interrupting capacity as required to provide the short circuit current rating indicated.
b. Fully Rated Systems: Provide circuit breakers with interrupting capacity not less than the short circuit current rating indicated.
3. Multi-Pole Circuit Breakers: Furnish with common trip for all poles.
4. Provide the following circuit breaker types where indicated:
a. Ground Fault Circuit Interrupter (GFCI) Circuit Breakers: Listed as complying with UL 943, class A for protection of personnel.
b. Ground Fault Equipment Protection Circuit Breakers: Designed to trip at 30 mA for protection of equipment.
c. Arc-Fault Circuit Interrupter (AFCI) Circuit Breakers: Combination type listed as complying with UL 1699.
d. 100 Percent Rated Circuit Breakers: Listed for application within the panelboard where installed at 100 percent of the continuous current rating.
e. Current Limiting Circuit Breakers: Without using fusible elements, designed to limit the let-through energy to a value less than the energy of a one-half cycle wave of the symmetrical prospective current when operating within its current limiting range.
5. Do not use tandem circuit breakers.
6. Do not use handle ties in lieu of multi-pole circuit breakers.
7. Provide multi-pole circuit breakers for multi-wire branch circuits as required by NFPA 70.
8. Provide the following features and accessories where indicated or where required to complete installation:
a. Shunt Trip: Provide coil voltage as required for connection to indicated trip actuator.
b. Handle Pad-Lock Provision: For locking circuit breaker handle in OFF position.

PART 2 EXECUTION

2.01 INSTALLATION

A. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
B. Mount panelboards such that the highest position of any operating handle for circuit breakers or switches does not exceed 79 inches above the floor or working platform.
C. Provide minimum of six spare 1 inch trade size conduits out of each flush-mounted panelboard stubbed into accessible space above ceiling and below floor.
D. Install all field-installed branch devices, components, and accessories.
E. Provide filler plates to cover unused spaces in panelboards.
F. Provide circuit breaker lock-on devices to prevent unauthorized personnel from de-energizing essential loads where indicated. Also provide for the following:
1. Emergency and night lighting circuits.
2. Fire detection and alarm circuits.
3. Communications equipment circuits.
4. Intrusion detection and access control system circuits.
c. Video surveillance system circuits.

SECTION 26 2726 WIRING DEVICES

PART 1 PRODUCTS

1.01 WIRING DEVICE APPLICATIONS

A. Provide wiring devices suitable for intended use and with ratings adequate for load served.
B. For single receptacles installed on an individual branch circuit, provide receptacle with ampere rating not less than that of the branch circuit.
C. Provide weather resistant GFCI receptacles with specified weatherproof covers for receptacles installed outdoors or in damp or wet locations.
D. Provide GFCI protection for receptacles installed within 6 feet of sinks.
E. Provide GFCI protection for receptacles serving electric drinking fountains.
F. Provide isolated ground receptacles for receptacles serving computers and electronic cash registers.

1.02 WALL SWITCHES

A. Wall Switches - General Requirements: AC only, quiet operating, general-use snap switches with silver alloy contacts, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 20 and where applicable, FS W-S-896; types as indicated on the drawings.
1. Wiring Provisions: Terminal screws for side wiring and screw actuated binding clamp for back wiring with separate ground terminal screw.
B. Standard Wall Switches: Commercial specification grade, 20 A, 120/277 V with standard toggle type switch actuator and maintained contacts; single pole single throw, double pole single throw, three way, or four way as indicated on the drawings.
C. Momentary Contact Wall Switches: Commercial specification grade, 20 A, 120/277 V with toggle type three position switch actuator and momentary contacts; single pole double throw, off with switch actuator in center position.

1.03 RECEPTACLES

A. Receptacles - General Requirements: Self-grounding, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 498, and where applicable, FS W-C-596; types as indicated on the drawings.
1. Wiring Provisions: Terminal screws for side wiring or screw actuated binding clamp for back wiring with separate ground terminal screw.
B. Convenience Receptacles:
1. Standard Convenience Receptacles: Commercial specification grade, 20A, 125V, NEMA 5-20R; single or duplex as indicated on the drawings.
C. GFCI Receptacles:
1. GFCI Receptacles - General Requirements: Self-testing, with feed-through protection and light to indicate ground fault tripped condition and loss of protection; listed as complying with UL 943, class A.

1.06 WALL PLATES

A. Wall Plates: Comply with UL 514D.
1. Configuration: One piece cover as required for quantity and types of corresponding wiring devices.

PART 2 EXECUTION

2.01 EXAMINATION

A. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate devices and conductors in accordance with NFPA 70.

2.02 PREPARATION

A. Provide extension rings to bring outlet boxes flush with finished surface.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
PETER J. FITZGERALD
NUMBER PE 2007021333
PROFESSIONAL ENGINEER
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	PJF
Date	Issue
07-10-25	Permit Set

E300

ELECTRICAL SPECIFICATIONS

2.03 INSTALLATION

A. Coordinate locations of outlet boxes provided under Section 26 0533.16 as required for installation of wiring devices provided under this section.
   1. Where multiple receptacles, wall switches, or wall dimmers are installed at the same location and at the same mounting height, gang devices together under a common wall plate.
   2. Locate wall switches on strike side of door with edge of wall plate 3 inches from edge of door frame. Where locations are indicated otherwise, notify Architect to obtain direction prior to proceeding with work.
B. Where required, connect wiring devices using pigtails not less than 6 inches long. Do not connect more than one conductor to wiring device terminals.
C. Provide GFCI receptacles with integral GFCI protection at each location indicated. Do not use feed-through wiring to protect downstream devices.
D. Do not share neutral conductor on branch circuits utilizing wall dimmers.
E. Install vertically mounted receptacles with grounding pole on top and horizontally mounted receptacles with grounding pole on left.
F. Install blank wall plates on junction boxes and on outlet boxes with no wiring devices installed or designated for future use.

SECTION 26 2813 FUSES

PART 1 PRODUCTS

1.01 APPLICATIONS

A. Service Entrance:
   1. Fusible Switches up to 600 Amperes: Class RK1, time-delay.
   2. Fusible Switches Larger Than 600 Amperes: Class L, time-delay.
B. Feeders:
   1. Fusible Switches up to 600 Amperes: Class RK1, time-delay.
   2. Fusible Switches Larger Than 600 Amperes: Class L, time-delay.
C. General Purpose Branch Circuits: Class RK1, time-delay.

SECTION 26 2816.16 ENCLOSED SWITCHES

PART 1 PRODUCTS

1.01 ENCLOSED SAFETY SWITCHES

A. Description: Quick-make, quick-break enclosed safety switches listed and labeled as complying with UL 98; heavy duty; ratings, configurations, and features as indicated on the drawings.
B. Enclosed Safety Switches Used for Service Entrance: Listed and labeled as suitable for use as service equipment according to UL 869A.
C. Provide safety interlock to prevent opening the cover with the switch in the ON position with capability of overriding interlock for testing purposes.

SECTION 26 5100 INTERIOR LIGHTING

PART 1 GENERAL

1.01 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Coordinate the installation of luminaires with mounting surfaces installed under other sections or by others. Coordinate the work with placement of supports, anchors, etc. required for mounting. Coordinate compatibility of luminaires and associated trims with mounting surfaces at installed locations.
   2. Coordinate the placement of luminaires with structural members, ductwork, piping, equipment, diffusers, fire suppression system components, and other potential conflicts installed under other sections or by others.
   3. Coordinate the placement of exit signs with furniture, equipment, signage or other potential obstructions to visibility installed under other sections or by others.
   4. Notify Architect of any conflicts or deviations from Contract Documents to obtain direction prior to proceeding with work.

PART 2 PRODUCTS

2.01 LUMINAIRE TYPES

A. Furnish products as indicated in luminaire schedule included on the drawings.

2.02 LUMINAIRES

A. Provide products listed, classified, and labeled as suitable for the purpose intended.
B. Unless otherwise indicated, provide complete luminaires including lamp(s) and all sockets, ballasts, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.
C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, supports, trims, accessories, etc. as necessary for a complete operating system.
D. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.
E. LED Luminaires:
   1. Tested in accordance with IES LM-79 and IES LM-80.
H. Track Lighting Systems: Provide track compatible with specified track heads, with all connectors, power feed fittings, dead ends, hangers and canopies as necessary to complete installation.
I. Luminaires Mounted in Continuous Rows: Provide quantity of units required for length indicated, with all accessories required for joining and aligning.

2.03 EMERGENCY LIGHTING UNITS

A. Description: Emergency lighting units complying with NFPA 101 and all applicable state and local codes, and listed and labeled as complying with UL 924.
B. Operation: Upon interruption of normal power source or brownout condition exceeding 20 percent voltage drop from nominal, solid-state control automatically switches connected lamps to integral battery power for minimum of 90 minutes of rated emergency illumination, and automatically recharges battery upon restoration of normal power source.
C. Battery:
   1. Sealed maintenance-free lead calcium unless otherwise indicated.
   2. Size battery to supply all connected lamps, including emergency remote heads where indicated.
E. Diagnostics: Provide power status indicator light and accessible integral test switch to manually activate emergency operation.
F. Provide low-voltage disconnect to prevent battery damage from deep discharge.
G. Self-Diagnostics: Provide units that self-monitor functionality and automatically perform testing required by NFPA 101 where indicated; provide indicator light(s) to report test and diagnostic status.

2.04 EXIT SIGNS

A. Description: Internally illuminated exit signs with LEDs unless otherwise indicated; complying with NFPA 101 and all applicable state and local codes, and listed and labeled as complying with UL 924.
   1. Number of Faces: Single or double as indicated or as required for the installed location.
   2. Directional Arrows: As indicated or as required for the installed location.
B. Self-Powered Exit Signs:
   1. Operation: Upon interruption of normal power source or brownout condition exceeding 20 percent voltage drop from nominal, solid-state control automatically switches connected lamps to integral battery power for minimum of 90 minutes of rated emergency illumination, and automatically recharges battery upon restoration of normal power source.
   2. Battery: Sealed maintenance-free nickel cadmium unless otherwise indicated.
   3. Diagnostics: Provide power status indicator light and accessible integral test switch to manually activate emergency operation.
   4. Provide low-voltage disconnect to prevent battery damage from deep discharge.
   5. Self-Diagnostics: Provide units that self-monitor functionality and automatically perform testing required by NFPA 101 where indicated; provide indicator light(s) to report test and diagnostic status.
D. Accessories:
   1. Provide compatible accessory high impact polycarbonate vandal shields where indicated.
   2. Provide compatible accessory wire guards where indicated.

PART 3 EXECUTION

3.01 INSTALLATION

A. Coordinate locations of outlet boxes provided under Section 26 0533.16 as required for installation of luminaires provided under this section.
B. Install products in accordance with manufacturer's instructions.
C. Install luminaires securely, in a neat and workmanlike manner, as specified in NECA 500 (commercial lighting) and NECA 502 (industrial lighting).
D. Provide required support and attachment in accordance with Section 26 0529.
E. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.
F. Suspended Ceiling Mounted Luminaires:
   1. Do not use ceiling tiles to bear weight of luminaires.
   2. Do not use ceiling support system to bear weight of luminaires unless ceiling support system is certified as suitable to do so.
   3. Secure lay-in luminaires to ceiling support channels using listed safety clips at four corners.
   4. In addition to ceiling support wires, provide two galvanized steel safety wire(s), minimum 12 gauge, connected from opposing corners of each recessed luminaire to building structure.
   5. See appropriate Division 9 section where suspended grid ceiling is specified for additional requirements.
G. Recessed Luminaires:
   1. Install trims tight to mounting surface with no visible light leakage.
   2. Non-IC Rated Luminaires: Maintain required separation from insulation and combustible materials according to listing.
   3. Luminaires Recessed in Fire-Rated Ceilings: Install using accessories and firestopping materials to meet regulatory requirements for fire rating.
H. Suspended Luminaires:
   1. Unless otherwise indicated, specified mounting heights are to bottom of luminaire.
   2. Install using the suspension method indicated, with support lengths and accessories as required for specified mounting height.
   3. Provide minimum of two supports for each luminaire equal to or exceeding 4 feet nominal length, with no more than 4 feet between supports.
   4. Install canopies tight to mounting surface.
   5. Unless otherwise indicated, support pendants from swivel hangers.
I. Wall-Mounted Luminaires: Unless otherwise indicated, specified mounting heights are to center of luminaire.
J. Install accessories furnished with each luminaire.
K. Bond products and metal accessories to branch circuit equipment grounding conductor.
L. Emergency Lighting Units:
   1. Unless otherwise indicated, connect unit to unswitched power from same circuit feeding normal lighting in same room or area. Bypass local switches, contactors, or other lighting controls.
   2. Install lock-on device on branch circuit breaker serving units.
M. Exit Signs:
   1. Unless otherwise indicated, connect unit to unswitched power from same circuit feeding normal lighting in same room or area. Bypass local switches, contactors, or other lighting controls.
   2. Install lock-on device on branch circuit breaker serving units.
N. Remote Ballasts: Install in accessible location as indicated or as required to complete installation, using conductors per manufacturer's recommendations not exceeding manufacturer's recommended maximum conductor length to luminaire.
O. Identify luminaires connected to emergency power system in accordance with Section 26 0553.
P. Install lamps in each luminaire.

3.02 ADJUSTING

A. Aim and position adjustable luminaires to achieve desired illumination as indicated or as directed by Architect. Secure locking fittings in place.
B. Aim and position adjustable emergency lighting unit lamps to achieve optimum illumination of egress path as required or as directed by Architect or authority having jurisdiction.
C. Exit Signs with Field-Selectable Directional Arrows: Set as indicated or as required to properly designate egress path as directed by Architect or authority having jurisdiction.

onyx | creative
811 Cromwell Park Drive, Suite 113
Glen Burnie, Maryland 21061
410.863.1302 onyxcreative.com

STATE OF MISSOURI
PETER J. FITZGERALD
NUMBER PE 2007021335
PROFESSIONAL ENGINEER
07/10/2025

TENANT IMPROVEMENTS FOR
LOVESAC
SUMMIT FAIR
910 NW BLUE PKWY, SUITE S
LEES SUMMIT, MO 64086

Project No.:	25.0796
Drawn By:	PJF

Date	Issue
07-10-25	Permit Set

E301

ELECTRICAL SPECIFICATIONS