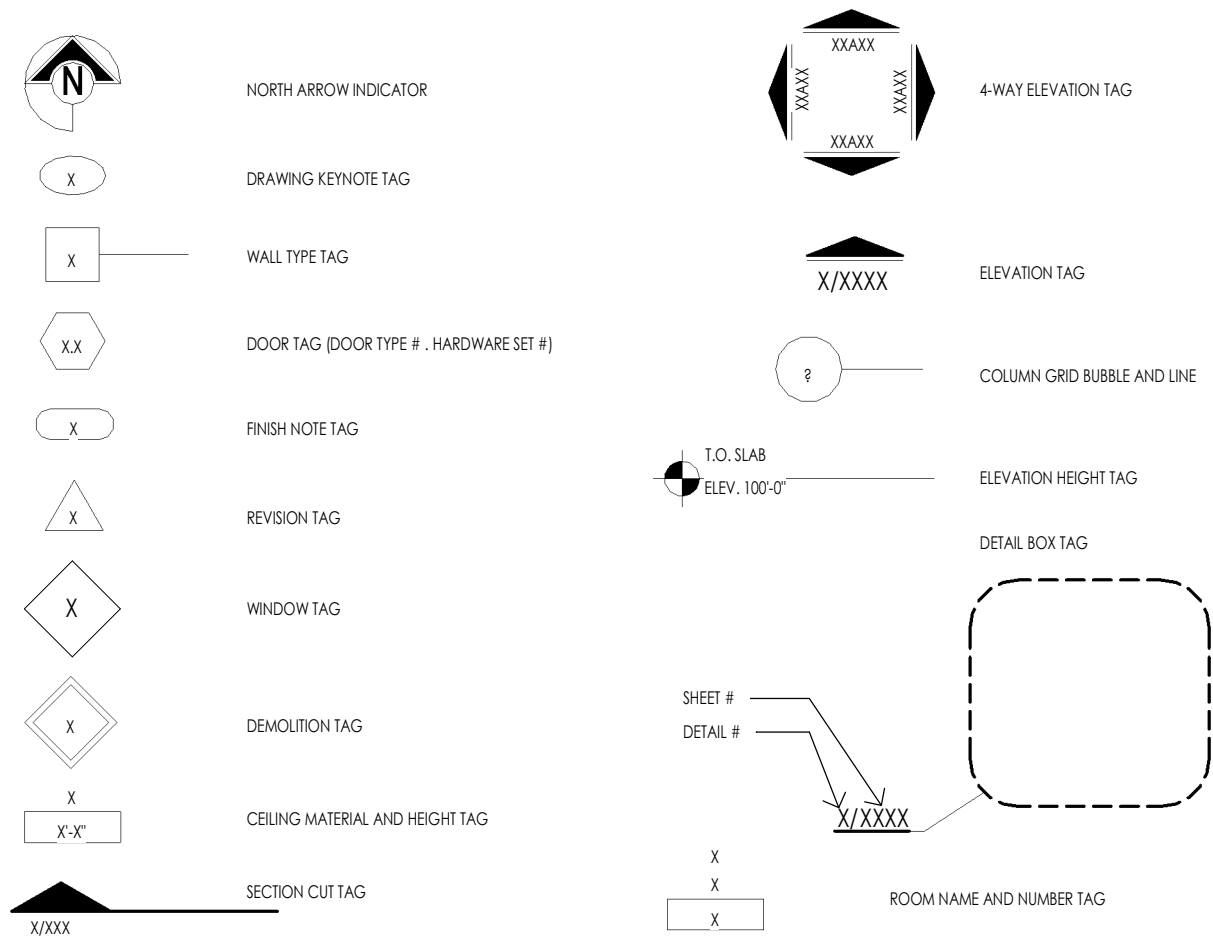


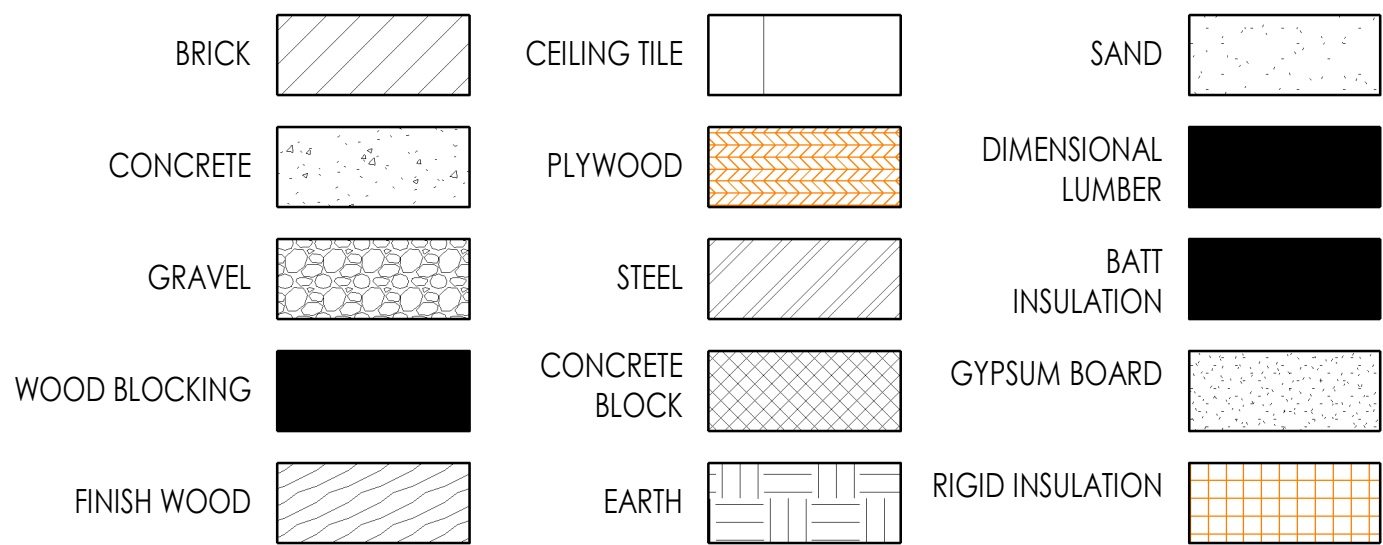
GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL LOCAL LAWS, CODES AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION. IN CASE OF CONFLICT BETWEEN REQUIREMENTS, THE MOST RESTRICTIVE SHALL APPLY.
- BIDDING CONTRACTORS SHALL VISIT THE JOBSITE AND VERIFY ALL FIELD CONDITIONS AS NECESSARY TO COMPLETE THE WORK AND COMPARE TO APPLICABLE CONSTRUCTION DOCUMENTS. REPORT DISCREPANCIES BETWEEN FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS TO ARCHITECT PRIOR TO SUBMITTING BID. FAILURE TO REPORT DISCREPANCIES DOES NOT RELIEVE CONTRACTOR OF THE RESPONSIBILITY TO PROVIDE FINISHED PRODUCT TO THE INTENT OF THE CONSTRUCTION DOCUMENTS AND SHALL NOT RESULT IN ADDITIONAL TIME OR COMPENSATION OVER AND ABOVE THE ESTABLISHED CONTRACT AMOUNTS.
- THE CONTRACTOR SHALL ADHERE TO THE CONSTRUCTION DOCUMENTS. SHOULD ANY ERROR OR INCONSISTENCY APPEAR REGARDING THE MEANING OR INTENT OF THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY REPORT SAME TO THE ARCHITECT WHO WILL MAKE ANY NECESSARY CLARIFICATION, OR REVISIONS AS REQUIRED.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL CONSTRUCTION AND DEVELOPMENT RELATED FEES, INCLUDING; BUT NOT LIMITED TO: CONSTRUCTION PERMIT FEES, HEALTH DEPARTMENT FEES, ETC. THE SELECTED QUALIFIED BIDDER WILL BE REQUIRED TO PROVIDE A COMPLETE LINE-ITEM LIST OF ALL FEES INCLUDED IN BID BASED ON APPROPRIATE SCHEDULES.
- CONTRACTOR AND HIS SUBCONTRACTORS AND AGENTS SHALL HOLD ALL APPLICABLE AND REQUIRED LICENSES FOR THE JURISDICTION WHERE THE WORK WILL BE PERFORMED.
- CONTRACTOR SHALL AQUAINT HIMSELF WITH ALL LANDLORD/DEVELOPER REQUIREMENTS AND SHALL COMPLY FULLY WITH SUCH.
- TO ENSURE COORDINATION BETWEEN DISCIPLINES, CONTRACTOR SHALL SUPPLY EACH SUBCONTRACTOR OR AGENT WITH A FULL SET OF CONSTRUCTION DOCUMENTS FOR THEIR USE.
- MAINTAIN SAFE EXITING AND APPROPRIATE FIRE PREVENTION PROCEDURES AT ALL TIMES DURING THE CONSTRUCTION PROCESS.
- ALL WORK LISTED, SHOWN OR IMPLIED IN THE CONSTRUCTION DOCUMENTS SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR EXCEPT WHERE OTHERWISE NOTED. THE CONTRACTOR SHALL CLOSELY COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS AND VENDORS TO ASSURE THAT ALL SCHEDULES ARE MET AND THAT ALL WORK IS DONE IN CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS.
- CONTRACTOR SHALL PROTECT THE EXISTING CONSTRUCTION AND REPAIR ANY DAMAGE OCCURRING AS A RESULT OF THEIR OPERATIONS AT NO COST TO THE TENANT OR LANDLORD. CONTRACTOR SHALL ALSO ENSURE THAT THEIR OPERATIONS DO NOT INTERFERE WITH THE OPERATION OF THE REMAINDER OF THE DEVELOPMENT/MALL. BARRIERS TO NOISE, DUST AND SECURITY BETWEEN CONSTRUCTION AREAS AND PUBLIC AREAS SHALL BE ERECTED, MAINTAINED AND REMOVED PER THE DEVELOPMENT CRITERIA BY THE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OF WORK, MATERIALS, FIXTURES, ETC. FROM LOSS, DAMAGE, FIRE, THEFT, ETC.
- CONTRACTOR SHALL VERIFY AND PROVIDE ALL UTILITY CONNECTIONS (PLUMBING, ELECTRICAL, GAS, ETC. IN THE FORM OF SUPPLY AND DRAIN PIPES, CONDUIT AND PULLING WIRES, ETC.) RELATED TO EQUIPMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING AND FITTING NECESSARY TO ACHIEVE THE INTENT OF THE CONSTRUCTION DOCUMENTS
- NEW WORK AT EXISTING CONDITIONS SHALL ALIGN WITH AND MATCH EXISTING WORK EXCEPT WHERE OTHERWISE DIMENSIONED OR DETAILED.
- CONTRACTOR SHALL NEVER SCALE DRAWINGS. LOCATIONS FOR ALL PARTITIONS, WALLS, CEILINGS, ETC. WILL BE DETERMINED BY DIMENSIONS ON THE DRAWINGS. ANY AREA OF THE PLANS MISSING REQUIRED DIMENSIONS MUST BE REPORTED TO THE ARCHITECT IMMEDIATELY.
- DIMENSIONS ARE TO FACE OF FINISHED MATERIAL UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL COORDINATE THE DELIVERY AND STORAGE OF EQUIPMENT WITH EQUIPMENT SUPPLIER AND TAKE MEASURES TO ENSURE THE PROTECTION OF EQUIPMENT FROM DAMAGE DURING THE CONSTRUCTION PHASE PRIOR TO AND AFTER EQUIPMENT INSTALLATION.
- CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES IN THE FIELD AND PROVIDE ADDITIONAL UTILITY SERVICE AS REQUIRED TO MEET THE SCOPE AND INTENT OF THE WORK.
- VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION START. ANY AND ALL LOSSES OF BUSINESS TO THE LANDLORD, DEVELOPER OR OTHER PARTY RESULTING FROM DAMAGE CAUSED BY CONTRACTOR OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED/REPLACED IMMEDIATELY AT THE SOLE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE DRAFT/FIRE STOPS, AS REQ'D BY GOVERNING CODES AND JURISDICTIONS. NEW AND EXISTING PENETRATIONS IN FIRE-RATED PARTITIONS OR DRAFT STOPS SHALL BE PROTECTED BY A SYSTEM LISTED BY A RECOGNIZED TESTING AGENCY.
- PROVIDE FIRE EXTINGUISHERS PER APPLICABLE CODES. VERIFY FINAL LOCATION WITH A.H.J.
- CONTRACTOR SHALL COORDINATE ALL WORK THAT AFFECTS THE ROOF WITH THE LANDLORD AND, IF REQUIRED BY THE LANDLORD, HIRE THE SHELL ROOFING SUBCONTRACTOR TO PERFORM ALL WORK OF PENETRATING THE ROOF FOR ANY AND ALL ITEMS ADDED ON THE ROOF AND PATCHING/SEALING OF SUCH PENETRATIONS DURING AND AFTER EQUIPMENT INSTALLATION.
- CONTRACTOR SHALL REVIEW THE DIMENSIONS OF ALL EQUIPMENT IN THE PROJECT REGARDLESS OF THE SOURCE AND COORDINATE ACCESS TO THE SPACE AND VERIFY CLEAR FLOOR SPACE IS PROVIDED AS REQUIRED TO ENSURE EASE OF INSTALLATION.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER CONTRACTORS AND VENDORS FURNISHING LABOR, MATERIALS, ETC. ON THE PROJECT TO ENSURE THE WORK AS A WHOLE SHALL BE EXECUTED AND COMPLETED WITHOUT CONFLICT OR DELAY.
- CONTRACTOR SHALL COORDINATE THE REQUIREMENTS OF ANY AND ALL DRAWINGS INCLUDING ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING; ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ARCHITECT PRIOR TO EXECUTION OF WORK.
- CONTRACTOR TO VERIFY THAT EQUIPMENT HAS APPROPRIATE CLEARANCES DURING INSTALLATION INCLUDING MAINTENANCE CLEARANCES; VERIFY THOSE WHICH INVOLVE CONFLICTING UTILITIES.
- PROVIDE AND INSTALL ALL NECESSARY IN-WALL FRAMING REQUIRED TO CARRY SHELF, HANGING, AND VALANCE LOADS, RAILINGS, ETC. AS PER PLANS.
- ALL JOINTS AND OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED IN ACCORDANCE WITH THE BUILDING CODE AND ENERGY CODE.
- ALL WOOD IN CONTACT WITH CONCRETE MASONRY SHALL BE PRESSURE TREATED, MOISTURE RESISTANT WOOD.
- ALL SURFACES WHICH ARE INDICATED TO BE FINISHED OR PAINTED SHALL BE PREPARED, SANDED, TREATED, AND PRIMED IN STRICT ACCORDANCE WITH COMMERCIAL QUALITY STANDARDS, AND IN STRICT ACCORDANCE WITH FINISH MATERIAL MANUFACTURER'S INSTRUCTIONS.
- ALL FINISH SURFACES PENETRATED SUCH AS CEILING TILES AND MILLWORK COUNTERS FOR ANY REASON MUST HAVE AN ASSOCIATED GROMMET APPROVED FOR THAT USE.
- APPLICATION OF MATERIAL OR EQUIPMENT INSTALLED BY OTHERS CONSTITUTES ACCEPTANCE OF THAT WORK, AND ASSUMPTION OF THE RESPONSIBILITY FOR SATISFACTORY INSTALLATION AND PERFORMANCE.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING TO STRUCTURE FOR INTERIOR PARTITIONS, SOFFITS, CEILINGS, PLATFORMS, ETC. WHETHER SHOWN ON THE DRAWINGS OR NOT.
- PROVIDE SILICONE SEALANT AT ALL JOINTS AND INTERFACES OF ALL COUNTERTOPS, EQUIPMENT, BOOTHS, WALLS, ETC.
- ALL WOOD TRIM OR OTHER PREFINISHED TRIM ITEMS SHALL BE CUT TO FIT AND RAW, EXPOSED SURFACES SHALL BE FINISHED TO MATCH ADJACENT FINISH MATERIALS
- ALL AREAS OF EXISTING LANDSCAPING DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION.
- GENERAL CONTRACTOR SHALL COMPLY AND FORCE THEIR SUBCONTRACTORS/VENDORS TO COMPLY WITH THE DEVELOPMENT'S RULES AND REGULATIONS.
- CONTRACTOR SHALL PROVIDE WOOD BLOCKING, BRACING AND NAILERS AS REQUIRED FOR MILLWORK, EQUIPMENT, SHELVING, ETC. COORDINATE WITH TENANT
- ALL WELDING SHALL HAVE FIRE WATCH.
- ANY PENETRATIONS IN INTERIOR WALLS MUST MAINTAIN THE REQUIRED FIRE RATING PER CODE.
- ANY MODIFICATIONS TO THE BUILDING FIRE ALARM SYSTEM MUST BE MADE BY THE LANDLORD'S REQUIRED ALARM CONTRACTOR.
- ANY ISSUES OR REVISIONS REGARDING BUILDING FIRE PROTECTION, PLUMBING SYSTEMS (INCLUDING GREASE INTERCEPTORS / TRAPS), MECHANICAL, ELECTRICAL SERVICE, OR THE BUILDING ENVELOPE SHALL BE COMMUNICATED TO THE LANDLORD AND PROPERLY NOTIFIED.

STANDARD DRAWING SYMBOLS



MATERIALS LEGEND



STANDARD ABBREVIATIONS

AFF	Above Finished Floor	FBO	Furnished by Others	OTS	Open to Structure
ACT	Acoustical Ceiling Tile	FD	Floor Drain	PAF	Powder Actuated Fasteners
ACOUST	Acoustical	FE	Fire Extinguisher	PBD	Particle Board
ADJ	Adjustable	FEC	Fire Extinguisher & Cabinet	PL	Plate
AHJ	Authority Having Jurisdiction	FFE	Furniture, Fixtures & Equipment	PLAM	Plastic Laminate
ALUM	Aluminum	FIN	Finish	PLYWD	Plywood
AMB	Air-moisture barrier	FLUOR	Fluorescent	PLUMB	Plumbing
ANC	Anchor	FLR	Floor	PNL	Panel
ANOD	Anodized	FRP	Fiberglass Reinforced Plastic	PR	Pail
ARCH	Architect[ural]	FRT	Fire Retardant Treated	PREP	Preparation
ASSY	Assembly	FS	Floor Sink	PREFIN	Prefinished
BD	Board	FSE	Food Service Equipment	PTD	Painted
BFG	Below Finished Grade	FT	Feet	QT	Quarry Tile
BFF	Below Finished Floor	FV	Field Verify	QTY	Quantity
BLDG	Building	GA	Gauge	RA	Return Air
BLK'G	Blocking	GALV	Galvanized	RAD	Radius
BM	Beam	GC	General Contractor	RCP	Reflected Ceiling Plan
BOT	Bottom	GL	Glass	REF	Reference
BRG	Bearing	GYP BD	Gypsum Board	RECP	Receptacle
BS	Both Sides	HC	Hollow Core	REFL	Reflected, Reflecting
BTWN	Between	HM	Hollow Metal	REINF	Reinforced, Reinforcing
CAB	Cabinet	HT	Height	RELOC	Relocate
CJ	Control Joint	HDWD	Hardwood	REQ'D	Required
CL	Center Line	HR	Hour	REV	Revised, Reversed
CLG	Ceiling	HVAC	Heating, Ventilation & Air Conditioning	RO	Rough Opening
CLO	Closet	IN	Inch	RTU	Roof Top Unit
CLR	Clear	INSUL	Insulation, Insulate	SC	Solid Core
CMU	Concrete Masonry Unit	INT	Interior	SF	Square Foot
COL	Column	JST	Joist	SHT	Sheet
CONC	Concrete	LAM	Laminated	SHTH	Sheathing
CONT	Continuous	LAV	Lavatory	SS	Stainless Steel
CONST	Construction, Construct	LLH	Long Leg Horizontal	SCHED	Schedule
CT	Ceramic Tile	LLV	Long Leg Vertical	SIM	Similar
DBL	Double	MANUF	Manufacturer	SIM	Sheet Metal
DEMO	Demolition	MAX	Maximum	SPEC'D	Specified
DIA	Diameter	MECH	Mechanical	STD	Standard
DN	Down	MEP	Mechanical, Electrical, & Plumbing	STL	Steel
DR	Door	MILL	Millwork	STRUCT	Structural
DS	Downspout	MIN	Minimum	SUSP	Suspended
DTL	Detail	MISC	Miscellaneous	TBD	To be determined
DWG	Drawing	MLD	Molding	TEMP	Tempered
EA	Each	MO	Masonry Opening	T&B	Top and Bottom
EIFS	Exterior Insulation & Finish System	MTD	Mounted	TYP	Typical
EF	Exhaust Fan	MTL	Metal	VCT	Vinyl Composition Tile
EJ	Expansion Joint	MUL	Mullion	VERT	Vertical
EL	Elevation	NIC	Not In Contract	VVC	Vinyl Wall Covering
ELEC	Electrical	NOM	Nominal	UNO	Unless Noted Otherwise
ELEV	Elevator	NTS	Not To Scale	W/	With
EQ	Equipment	OC	On Center	W/O	Without
EQUIP	Equipment	OD	Outside Diameter	WC	Water Closet
EW	Each Way	OFCl	Owner Furnished, Contractor Installed	WD	Wood
EWC	Electric Water Cooler	OH	Opposite Hand	WH	Water Heater
EXIST	Existing	OPNG	Opening	WDW	Window
EXP	Expansion	OPT	Optional	WP	Waterproofing
EXT	Exterior			WSC	Wainscot
FBD	Fiber Board			WT	Weight
				WWF	Welded Wire Fabric

SUMMIT FAIR

910 G NW BLUE PKWY

LEE'S SUMMIT, MO

LULULEMON TENANT INFILL

DEFERRED SUBMITTALS: (TO BE REVIEWED AND APPROVED UNDER SEPERATE COVER)
FIRE SPRINKLER/ALARM: MODIFIED SPRINKLER HEADS AND LINES AS REQUIRED DESIGN BUILD - DEFERRED
SIGNAGE: DEFERRED

DRAWING INDEX

SHEET #	SHEET TITLE	ISSUE DATE	REVISION #	REVISION DATE	SHEET #	SHEET TITLE	ISSUE DATE	REVISION #	REVISION DATE
	GENERAL					MEP			
G000	COVER SHEET	06.15.23	1	06.30.23	ME101	MECHANICAL AND ELECTRICAL - SYMBOLS AND ABBREVIATIONS	06.14.23		
G003	GENERAL ACCESSIBILITY	06.15.23			ME202	MECHANICAL AND ELECTRICAL - ROOF PLAN	06.14.23		
G004	INTERIOR ACCESSIBILITY	06.15.23			ME301	MECHANICAL AND ELECTRICAL - SCHEDULES AND DETAILS	06.14.23		
G015	LIFE SAFETY PLAN	06.15.23	1	06.30.23	ME401	MECHANICAL AND ELECTRICAL - SPECIFICATIONS	06.14.23		
G020	WALL TYPES	06.15.23			ME402	MECHANICAL AND ELECTRICAL - SPECIFICATIONS	06.14.23		
	DEMO								
D100	DEMO PLAN	06.15.23			DM101	HVAC PLAN - DEMOLITION	06.14.23		
D101	DEMO RCP	06.15.23			M101	HVAC PLAN - NEW WORK	06.14.23		
	ARCHITECTURE								
A100	FLOOR PLAN	06.15.23	1	06.30.23	DP101	PLUMBING PLAN - DEMOLITION	06.14.23		
A150	REFLECTED CEILING PLAN	06.15.23			P101	PLUMBING PLAN - NEW WORK	06.14.23		
A250	INTERIOR ELEVATIONS	06.15.23							
SP001	SPECIFICATIONS	06.15.23			DE101	LIGHTING PLAN - DEMOLITION	06.14.23		
SP002	SPECIFICATIONS	06.15.23			DE201	POWER PLAN - DEMOLITION	06.14.23		
SP003	SPECIFICATIONS	06.15.23							
SP104	SPECIFICATIONS	06.15.23			E101	LIGHTING PLAN - NEW WORK	06.14.23		
SP105	SPECIFICATIONS	06.15.23			E201	POWER PLAN - NEW WORK	06.14.23		
					E301	ELECTRICAL - SCHEDULES AND DETAILS	06.14.23		
					E302	ELECTRICAL - SCHEDULES AND DETAILS	06.14.23		

PROJECT CONTACTS

OWNER	ARCHITECT	MEP
RED DEVELOPMENT	KLOVER ARCHITECTS, INC.	SMITH & BOUCHER, INC.
ONE EAST WASHINGTON STREET, SUITE 300	8813 PENROSE LN, STE 400	25618 W 103RD ST.
PHOENIX, ARIZONA 85004	LENEXA, KS 66219	OLATHE, KS 66061
PH: 480-556-7732	PH: 913-649-8181	PH: 913-344-0047
POC: DUSTIN CLEVELAND	POC: ERIC HESSLER	POC: CHRIS ALBRIGHT

VICINITY MAP



SHEET NUMBERING SYSTEM

20 BOXES:

NOTE: DETAIL NUMBERS ARE DETERMINED BY THE BOTTOM RIGHT HAND BOX. PLEASE SEE SAMPLES ABOVE FOR DETERMINING DETAIL NUMBERS

(20)	(16)	(12)	(8)	(4)
(19)	(15)	(11)	(7)	(3)
(18)	(14)	(10)	(6)	(2)
(17)	(13)	(9)	(5)	(1)

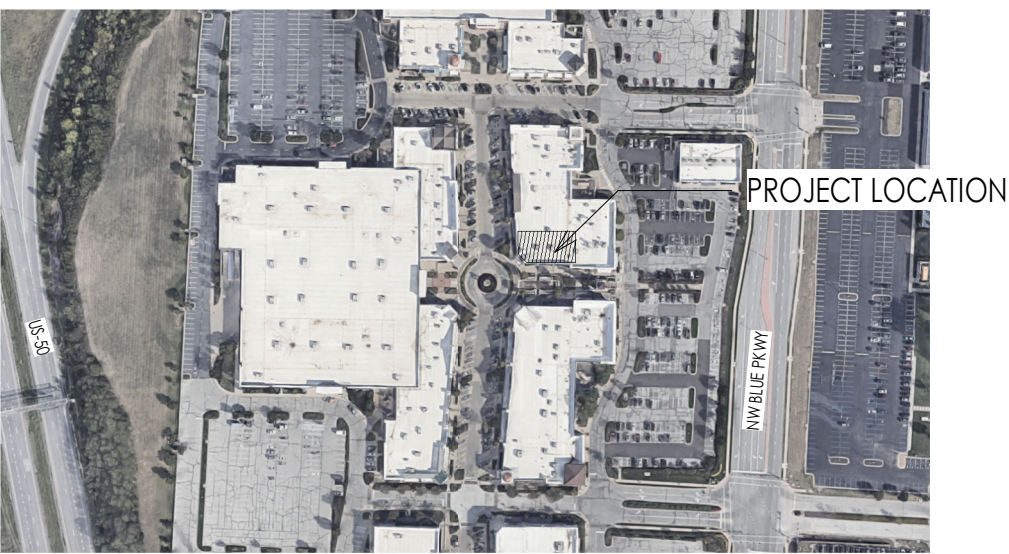
EXAMPLE DETAIL: # 414XXX

16 BOXES:

(16)	(12)	(8)	(4)
(15)	(11)	(7)	(3)
(14)	(10)	(6)	(2)
(13)	(9)	(5)	(1)

EXAMPLE DETAIL: # 914XXX

PROJECT AREA MAP



**RELEASED FOR
CONSTRUCTION**
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
07/06/2023

APPLICABLE CODES: ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS AND DRAWINGS, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS OF ALL GOVERNING BODIES INVOLVED. ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR INVOLVED. APPLICABLE CODES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

<u>CODE DATA:</u>	EDITION	YEAR
BUILDING + STRUCTURAL:	INTERNATIONAL BUILDING CODE	2018
PLUMBING:	INTERNATIONAL PLUMBING CODE	2018
MECHANICAL:	INTERNATIONAL MECHANICAL CODE	2018
FUEL:	INTERNATIONAL FUEL GAS CODE	2018
ELECTRICAL:	NATIONAL ELECTRICAL CODE	2017
FIRE/LIFE SAFETY:	INTERNATIONAL FIRE CODE	2018
ACCESSIBILITY CODE:	ICC ANSI A117.1	2009

OCCUPANCY GROUP:	M (MERCANTILE)
CONSTRUCTION TYPE:	(IIB)
SPRINKLED:	YES

OCCUPANCY LOAD					
Number	Name	Area	OCCUPANCY CLASSIFICATION	AREA PER OCCUPANT	Occupant Load
101	SALES	2690 SF	MERCANTILE: BASEMENT AND GRADE FLOOR AREAS	60 SF	45
102	STORAGE	609 SF	MERCANTILE: STORAGE, STOCK, SHIPPING AREAS	300 SF	3
103	MANAGER'S OFFICE	54 SF	BUSINESS AREAS	150 SF	1
104	CORRIDOR	206 SF	(none)		
Occupant Load					49

	REQUIRED	PROVIDED
WATER CLOSETS		
TOTAL OCCUPANT: 49 / 2 = 25		
MALE = 1/500	1	1
FEMALE = 1/500	1	1
LAVATORIES (MEN AND WOMEN)	1	2 (EACH)
MOP/SERVICE SINKS	1	1
DRINKING FOUNTAINS		1
* SEPARATE FACILITIES NOT REQUIRED PER IBC 2902.2 BUT PROVIDED		



RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

projectnumber

23036.0

drawing issuance

ISSUED FOR PERMIT

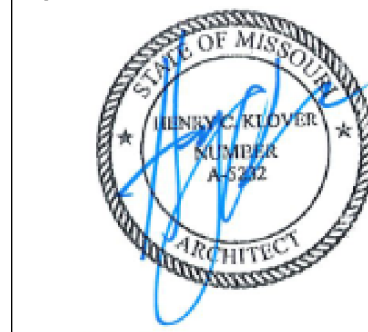
06/14/23

drawing revisions

No.	Description:
1	CITY COMMENTS

Date:
06/30/23

professional seal



Date Signed JUN 15 2023

DATE SIGNED: 7/3/2023 3:47:05 PM

drawing title

LIFE SAFETY PLAN

drawing number

LIFE SAFETY PLAN (1)
SCALE: 1/4" = 1'-0"

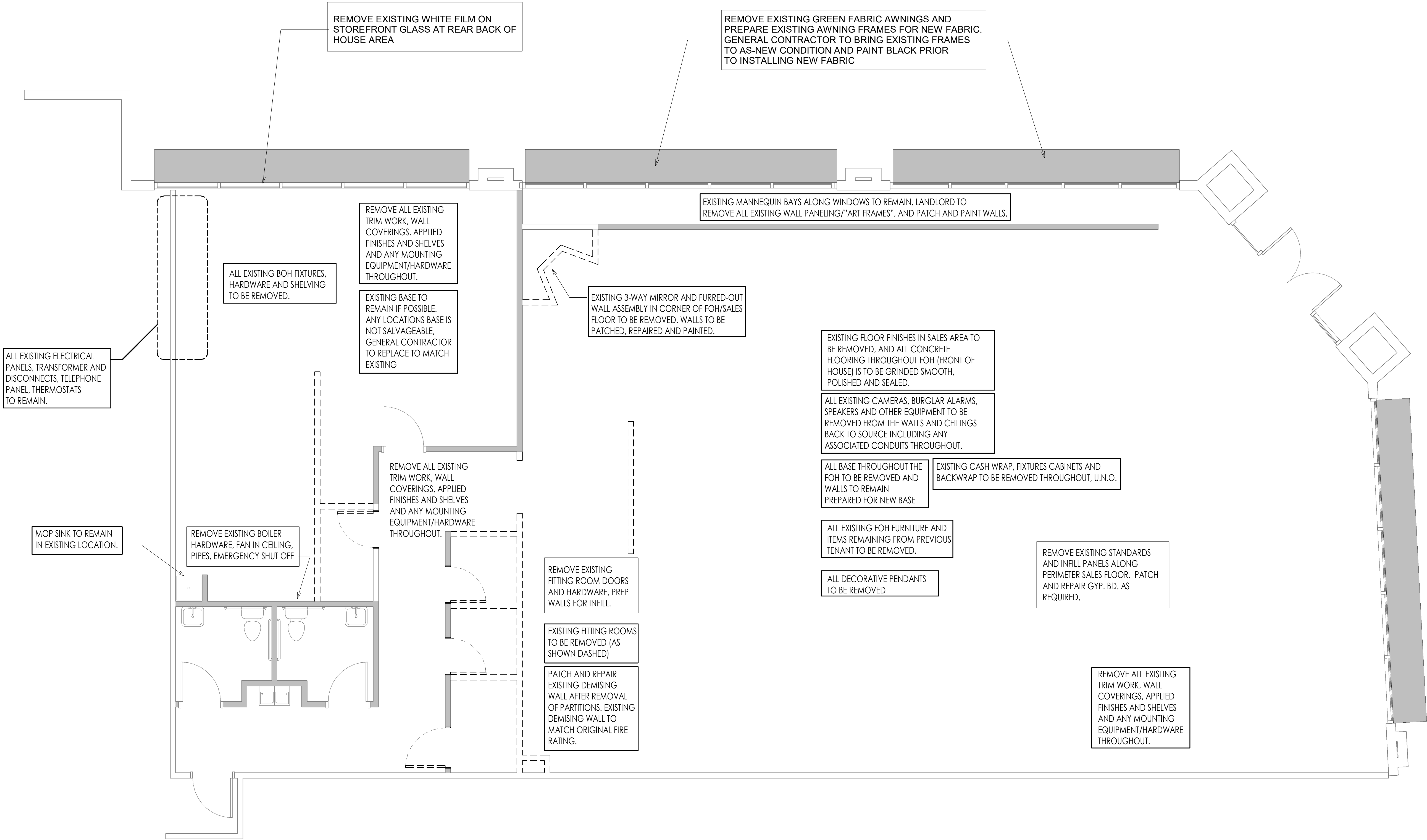
G015

WALL TYPES

E	EXISTING TO REMAIN
E1	EXISTING TO BE DEMO'D
E2	EXISTING TO BE MODIFIED
E3	
A	NEW
B	FITTING ROOM

GENERAL DEMOLITION NOTES

- DO NOT REMOVE STRUCTURAL MEMBERS UNLESS NOTED OTHERWISE.
- REFER TO OTHER SHEETS IN THIS SET FOR ADDITIONAL DEMOLITION REQUIREMENTS, WHICH SHALL BE BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
- REMOVE ALL EXISTING ELEMENTS WHICH CONFLICT WITH THE NEW WORK, WHETHER OR NOT SHOWN ON THE DRAWINGS.
- PATCH ALL EXISTING ELEMENTS DAMAGED BY DEMOLITION OPERATIONS TO RECEIVE NEW CONSTRUCTION/FINISH.
- DISPOSE OF ALL DEMOLITION DEBRIS LEGALLY.
- CONTRACTOR SHALL DESIGN AND PROVIDE SHORING TO SAFELY SUPPORT EXISTING CONSTRUCTION TO REMAIN DURING DEMOLITION OPERATIONS.
- SAFETY DURING DEMOLITION OPERATIONS SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY.
- PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH THE OWNER/LANDLORD'S CRITERIA. COORDINATE DEMOLITION WITH OWNER/LANDLORD'S REPRESENTATIVE AND CONTACT OWNER/LANDLORD IN ADVANCE OF ANY WORK INVOLVING CONNECTION TO OWNER'S/LANDLORD'S BUILDING SYSTEMS OR REQUIRING TEMPORARY SHUT DOWN OF UTILITIES.
- PATCH AND REPAIR EXISTING DRYWALL FOUND UNSUITABLE FOR INSTALLATION OF NEW FINISHES.
- WHERE INDICATED REMOVE EXISTING PARTITIONS, CEILINGS, SOFFITS AND ASSOCIATED FRAMING AND BRACING BACK TO STRUCTURE. PROTECT EXISTING STRUCTURAL ELEMENTS NECESSARY FOR THE BUILDING SHELL.
- PROVIDE AND COORDINATE TEMPORARY DUSTPROOF PARTITIONS AS REQUIRED.
- DEMOLITION PLAN SHOWS APPROXIMATE LAYOUT OF EXISTING BUILDING AND IS NOT INTENDED TO REPRESENT "AS-BUILT" CONDITIONS. VISIT SITE AND OTHERWISE BECOME FAMILIAR WITH ACTUAL CONDITIONS WHEN BIDDING THE WORK.
- WALLS, PARTITIONS, DOORS, FRAMES, AND OTHER ITEMS TO BE REMOVED ARE SHOWN DASHED. SERVICES WITHIN WALLS AND PARTITIONS SHALL ALSO BE REMOVED. EDGES OF WALLS SHOWN TO REMAIN SHALL BE SAWCUT OR CLEANLY TOOTHED TO ACCEPT NEW CONSTRUCTION. REPAIR AND PATCH EXISTING WALLS SHOWN TO REMAIN WHERE INTERSECTING WALLS, DOORS, FRAMES, ETC. ARE SHOWN TO BE REMOVED AND WHERE EXISTING CONSTRUCTION WILL NOW BE EXPOSED IN THE NEW CONSTRUCTION.



DEMO PLAN 1
SCALE: 1/4" = 1'-0"



THIS DRAWING has been prepared by the Architect, or prepared under its direct supervision as an instrument of service and is intended for use only on this project. All Drawings, Specifications, Ideas and design, including the overall layout, form, arrangement, and composition of space and elements portrayed, constitute the original unpublished Work of the Architect. Any reproduction, use, or disclosure of the information contained herein without the written consent of the Architect is strictly prohibited.

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project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

project number

23036.001

drawing issuance

ISSUED FOR PERMIT

06/14/23

drawing revisions

No.

Description:

Date:

professional seal



Date Signed JUN 15 2023

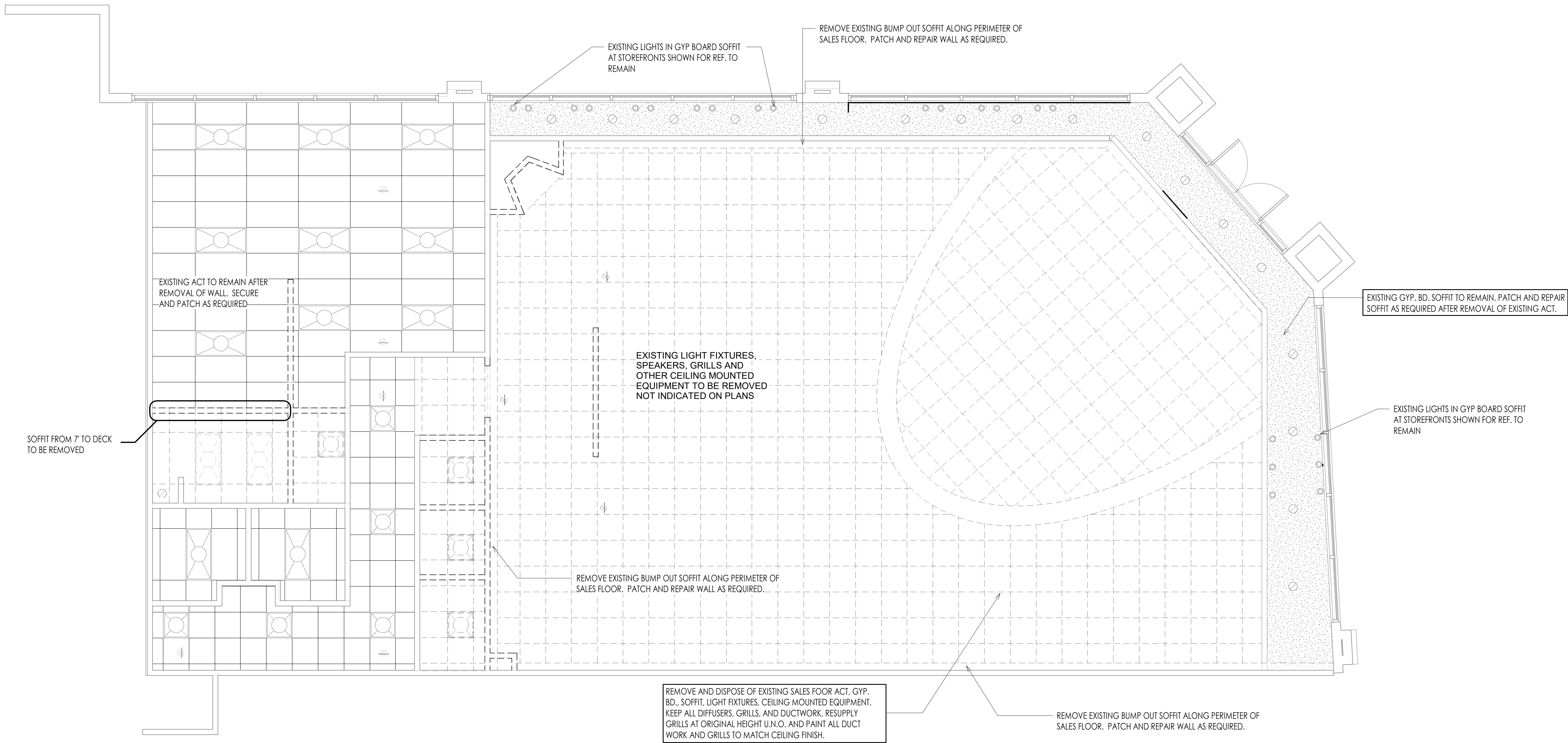
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drawing title

DEMO PLAN

drawing number

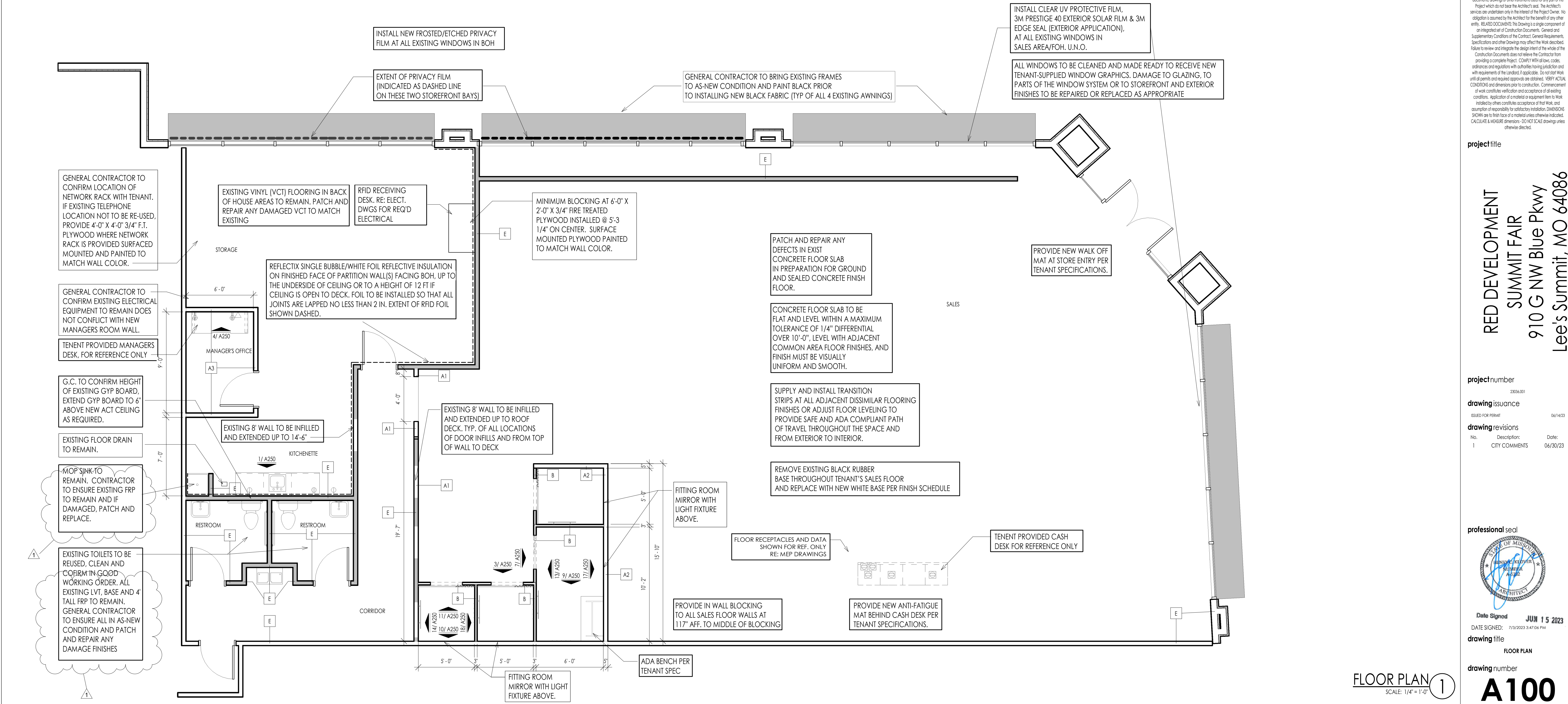
D100



FINISH SCHEDULE

AREA	LOCATION	MANUFACTURER	MODEL / LINE	COLOR	FINISH / SIZE	NOTES
FRONT OF HOUSE (SALES)	BASEBOARDS	TARKETT	JOHNSONITE	50 WHITE	MANDALAY 4 1/2"	OR SIMILAR
	WALLS	BENJAMIN MOORE		OC-53 HORIZON	EGGSHELL	
	OPEN CEILINGS	BENJAMIN MOORE		HC-179 PLATINUM GRAY	ULTRA FLAT (508)	DECKS 14' AFF OR LESS
	SOFFIT	BENJAMIN MOORE		OC-65 CHANTILLY LACE, ULTRA FLAT		14' H SOFFIT ALONG STOREFRONT
	DOORS/CASINGS/TRIMS	BENJAMIN MOORE	SCUFF X	HC-166 KENDALL CHARCOAL	SATIN (486)	
BACK OF HOUSE / CORRIDOR	FITTING ROOM WALLS	BENJAMIN MOORE	ULTRA SPEC SCUFF X	OC-53 HORIZON	MATTE (484)	
	WALLS	BENJAMIN MOORE	ULTRA SPEC SCUFF X	HC STONINGTON GRAY	SATIN (486)	
	CEILINGS	BENJAMIN MOORE		OC-65 CHANTILLY LACE	ULTRA FLAT	ALL EXST. DRYWALL /ACT CEILINGS
	DOORS/CASINGS/TRIMS	BENJAMIN MOORE	SCUFF X	HC-166 KENDALL CHARCOAL	SATIN (486)	
	BASEBOARDS	TARKETT	JOHNSONITE	40 BLACK	MANDALAY 4 1/2"	
	WALLS	BENJAMIN MOORE	ULTRA SPEC SCUFF X	HC STONINGTON GRAY	SATIN	
MANAGER'S OFFICE	CEILINGS	BENJAMIN MOORE		OC-65 CHANTILLY LACE	ULTRA FLAT	ALL EXST. DRYWALL /ACT CEILINGS
	DOORS/CASINGS/TRIMS	BENJAMIN MOORE	SCUFF X	HC-166 KENDALL CHARCOAL	SATIN (486)	
	BASEBOARDS	TARKETT	JOHNSONITE	40 BLACK	MANDALAY 4 1/2"	
	WALLS	BENJAMIN MOORE	ULTRA SPEC SCUFF X	HC STONINGTON GRAY	SATIN (486)	
KITCHENETTE	CEILINGS	BENJAMIN MOORE		OC-65 CHANTILLY LACE	ULTRA FLAT	ALL EXST. DRYWALL /ACT CEILINGS
	DOORS/CASINGS/TRIMS	BENJAMIN MOORE	SCUFF X	HC-166 KENDALL CHARCOAL	SATIN (486)	
	BASEBOARDS	TARKETT	JOHNSONITE	40 BLACK	MANDALAY 4 1/2"	
	WALLS	BENJAMIN MOORE	ULTRA SPEC SCUFF X	HC STONINGTON GRAY	SATIN (486)	
RESTROOMS	CEILINGS	BENJAMIN MOORE		OC-65 CHANTILLY LACE	ULTRA FLAT	ALL EXST. DRYWALL /ACT CEILINGS
	DOORS/CASINGS/TRIMS	BENJAMIN MOORE	SCUFF X	HC-166 KENDALL CHARCOAL	SATIN (486)	
	BASEBOARDS	TARKETT	JOHNSONITE	40 BLACK	MANDALAY 4 1/2"	

ALL PAINT SHALL NOT BE LOW VOC, SHOULD NOT CONTAIN ANY SILICONE, ACRYLIC ADDITIVES, OR ANTI-GRAFFITI/ANTI MOLD/ANTI SCUFF COMPONENTS U.N.O.



FLOOR PLAN 1
SCALE: 1/4" = 1'-0"

project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

project number

23036.001

drawing issuance

ISSUED FOR PERMIT

06/14/23

drawing revisions

No.

Description:

Date:

professional seal



Date Signed JUN 15 2023

DATE SIGNED: 6/15/2023 5:32:45 PM

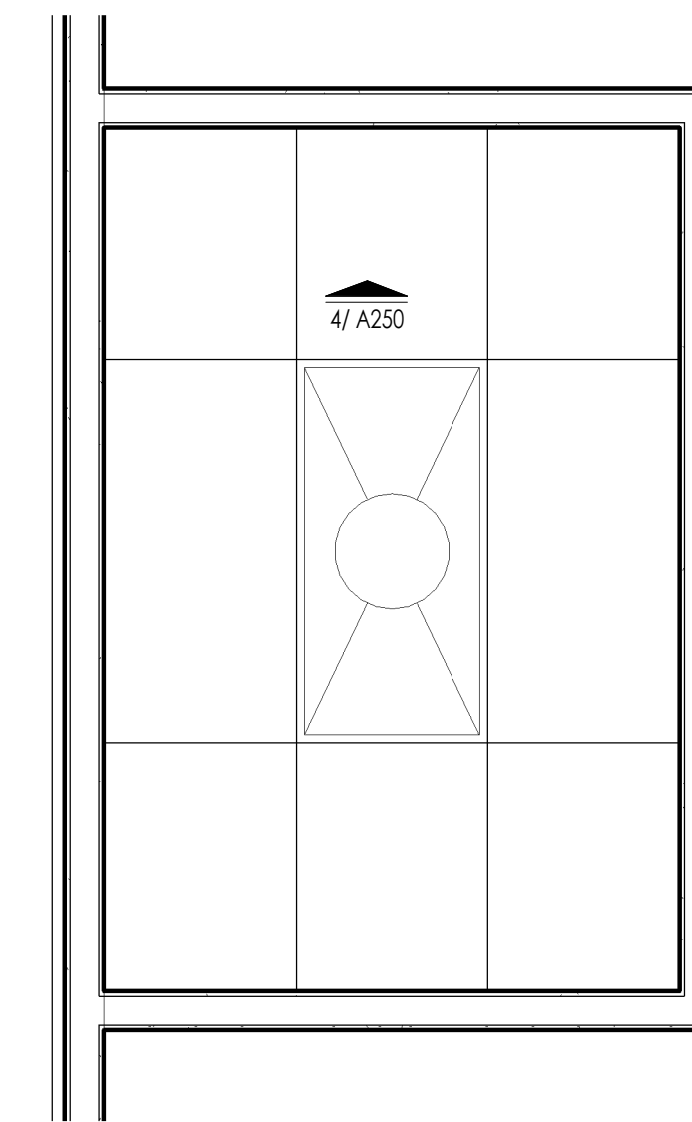
drawing title

REFLECTED CEILING PLAN

drawing number

A150

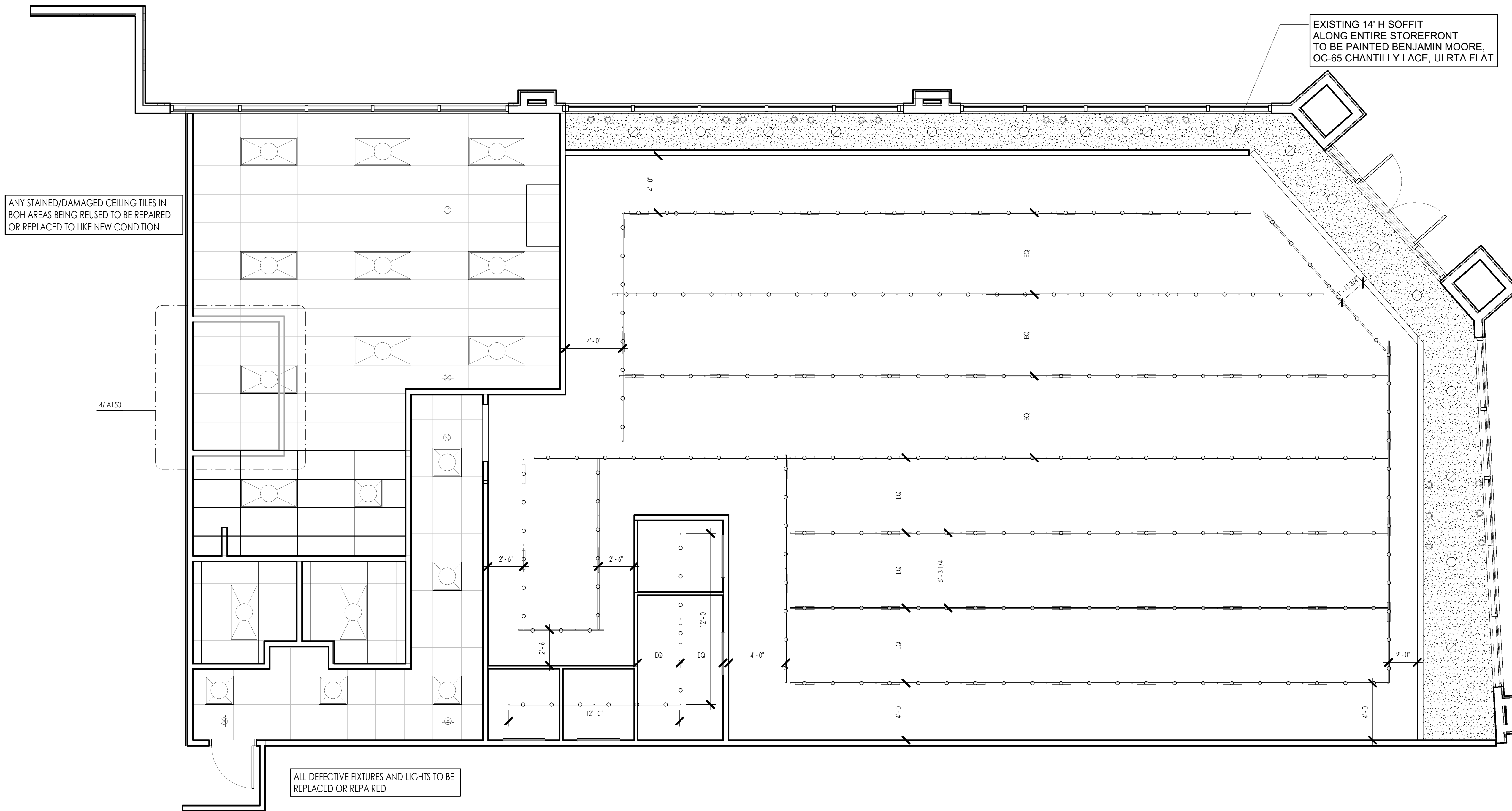
KEYNOTES
RCP KEY NOTES



MANAGER'S OFFICE NEW RCP

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

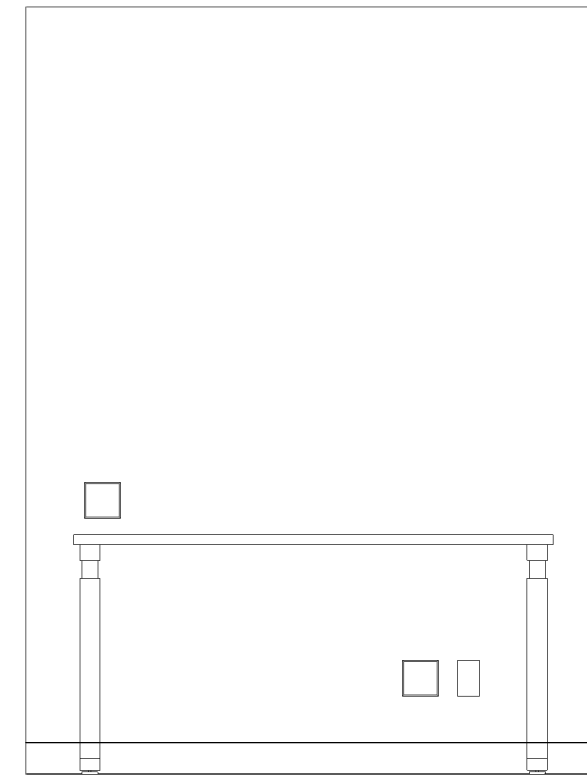
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REFLECTED CEILING PLAN

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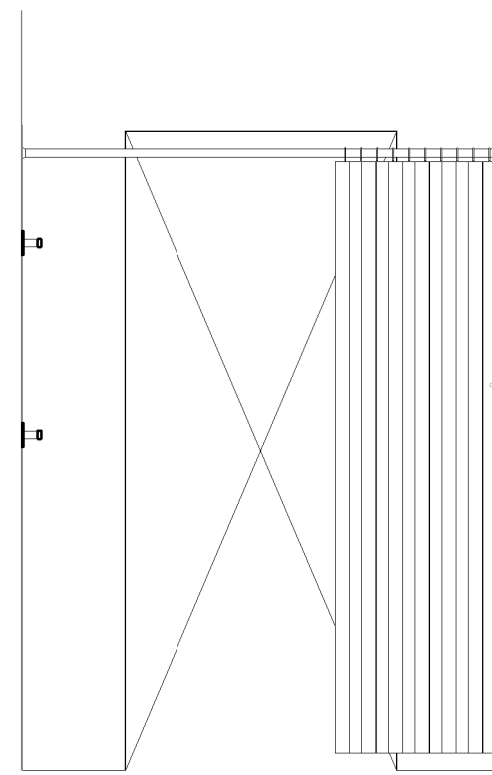
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MANAGER'S OFFICE

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

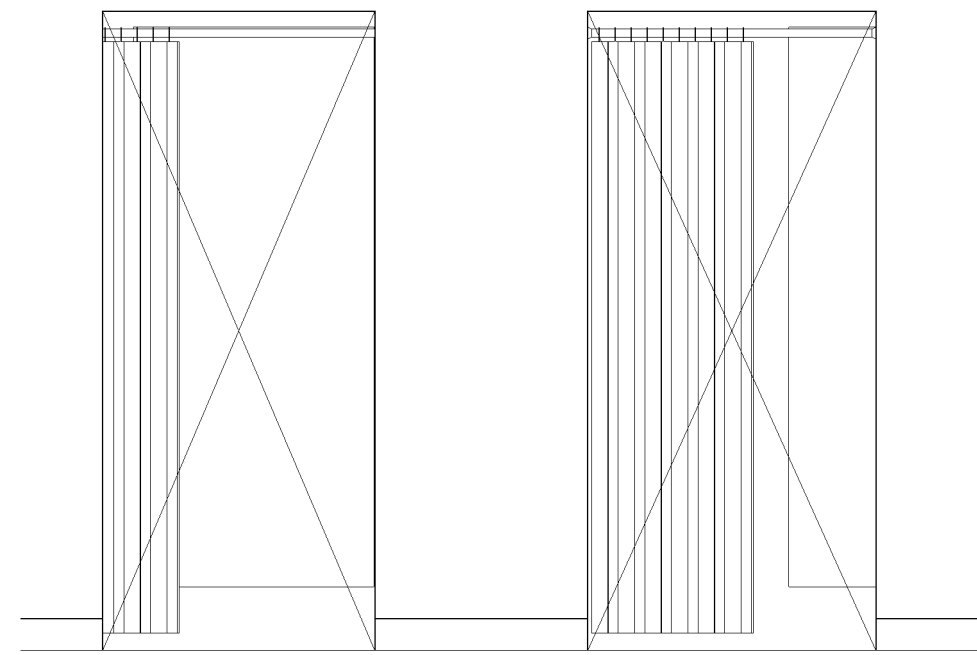
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FITTING ROOM FRONT

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

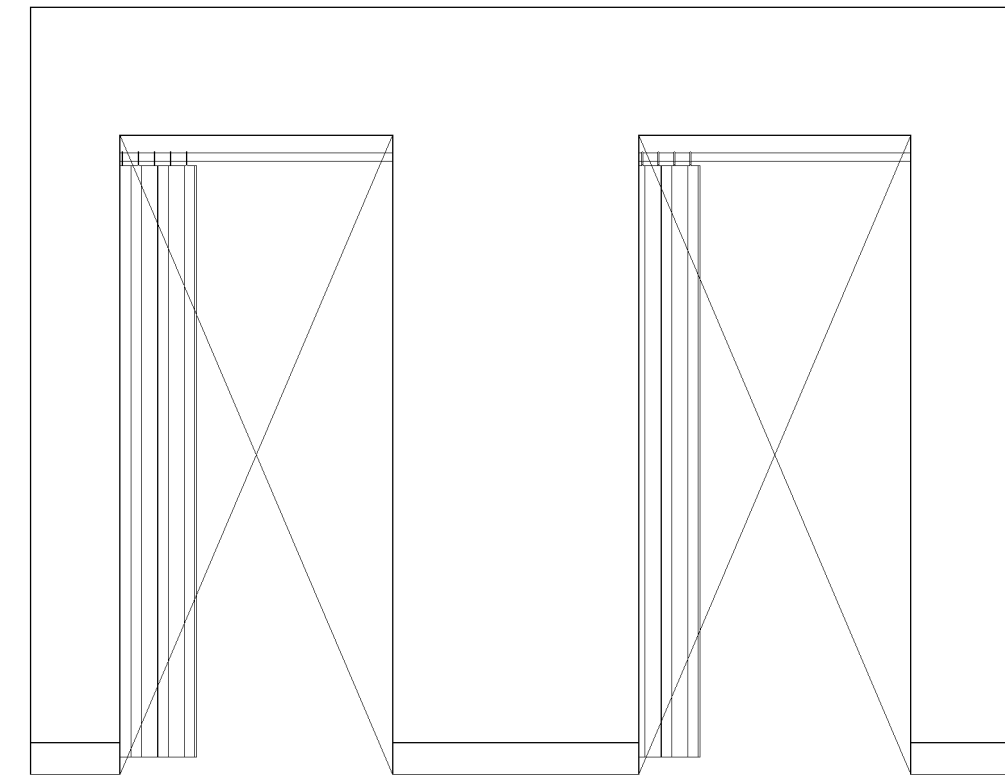
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FITTING ROOM EXT. 2

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

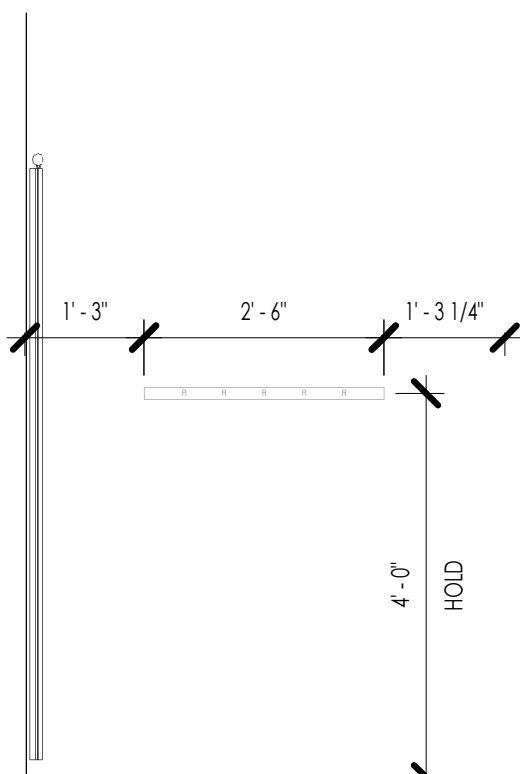
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FITTING ROOM EXT. 3

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

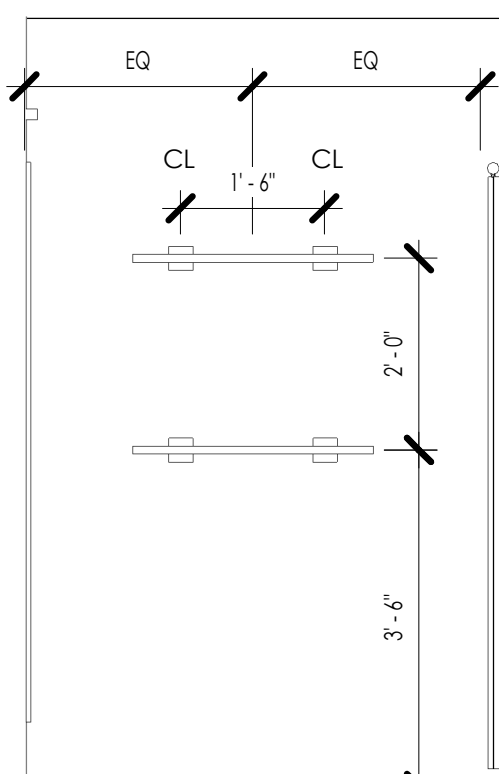
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FITTING ROOM SIDE 2

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

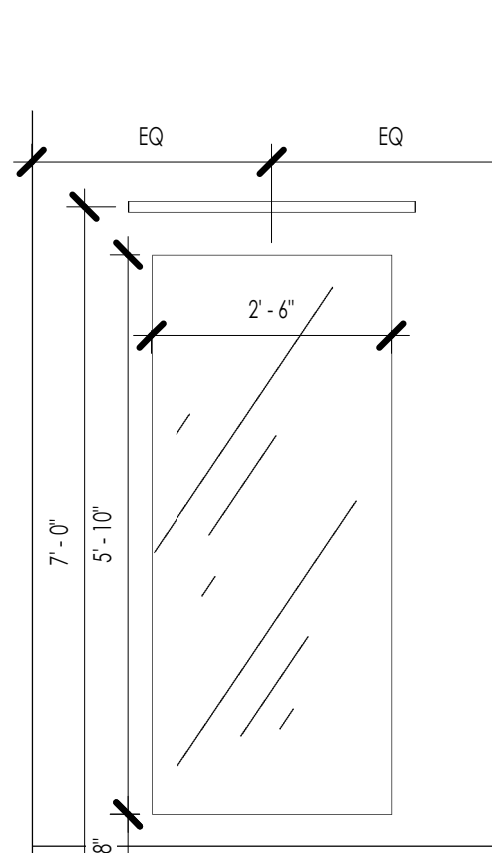
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FITTING ROOM SIDE 1

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

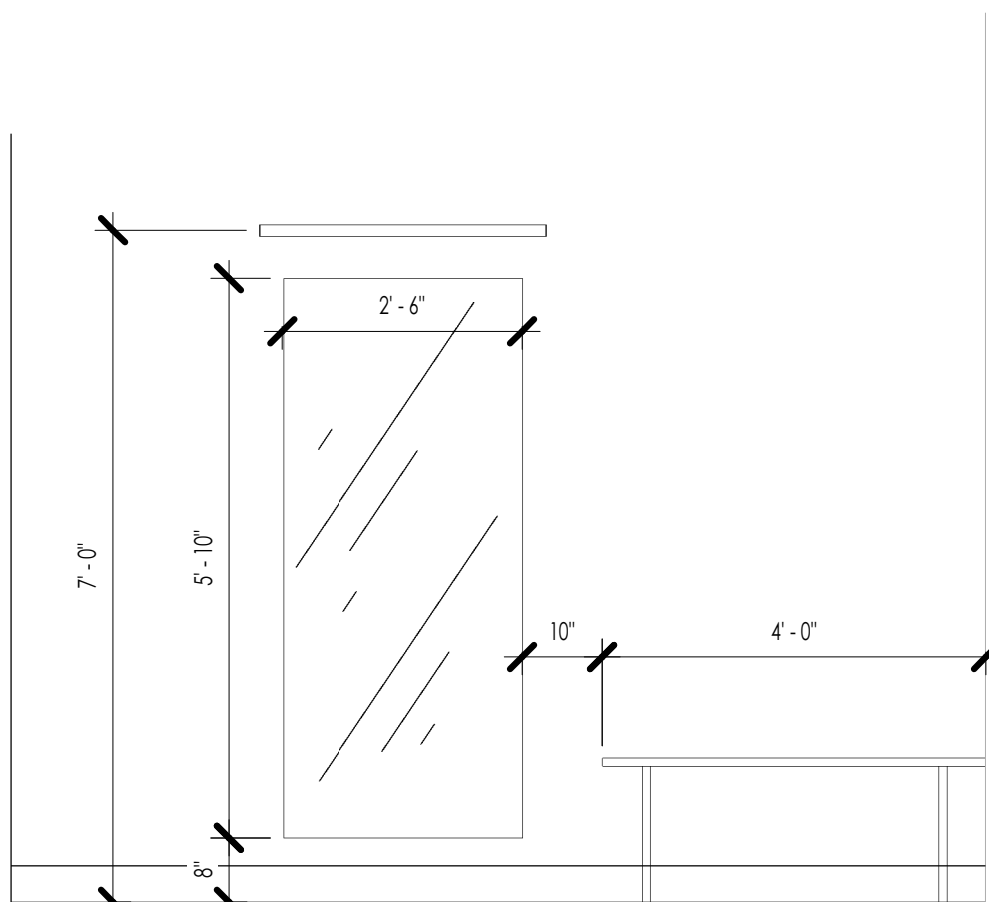
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FITTING ROOM BACK

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

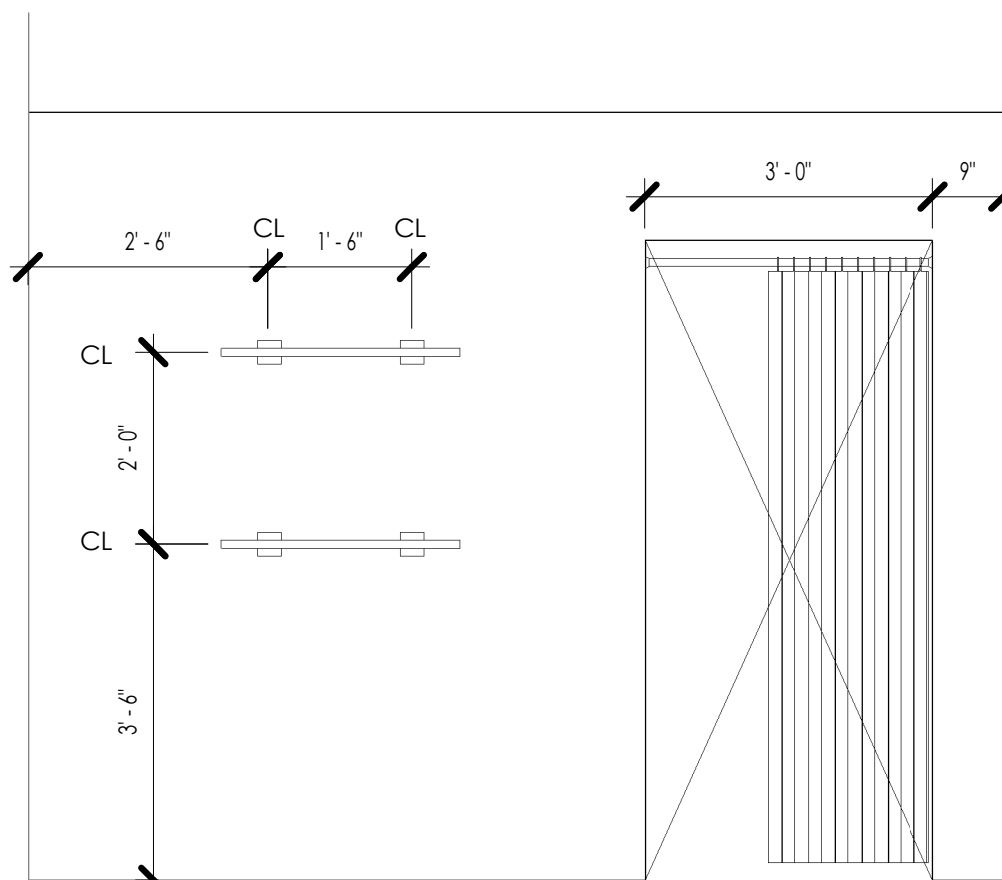
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ADA FITTING ROOM BACK

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

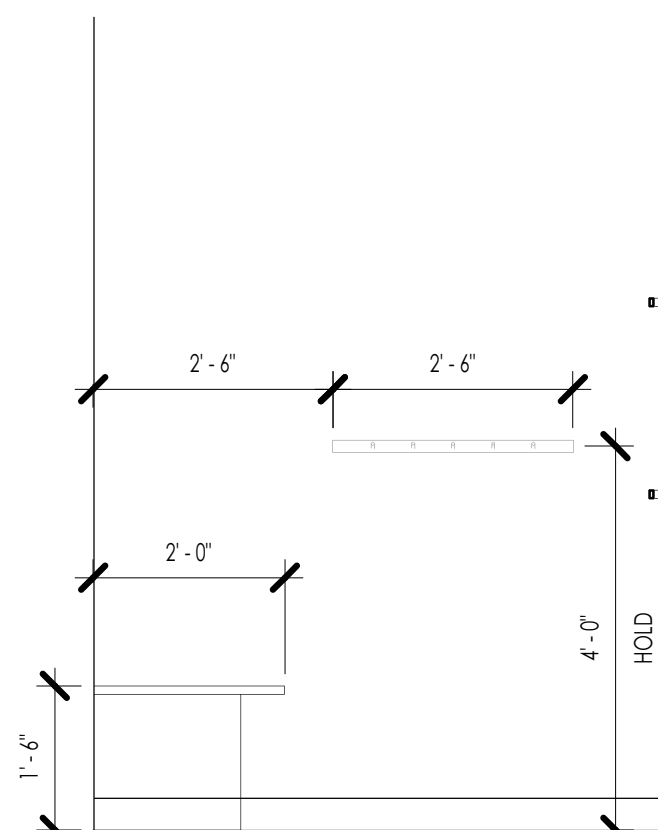
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ADA FITTING ROOM FRONT

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

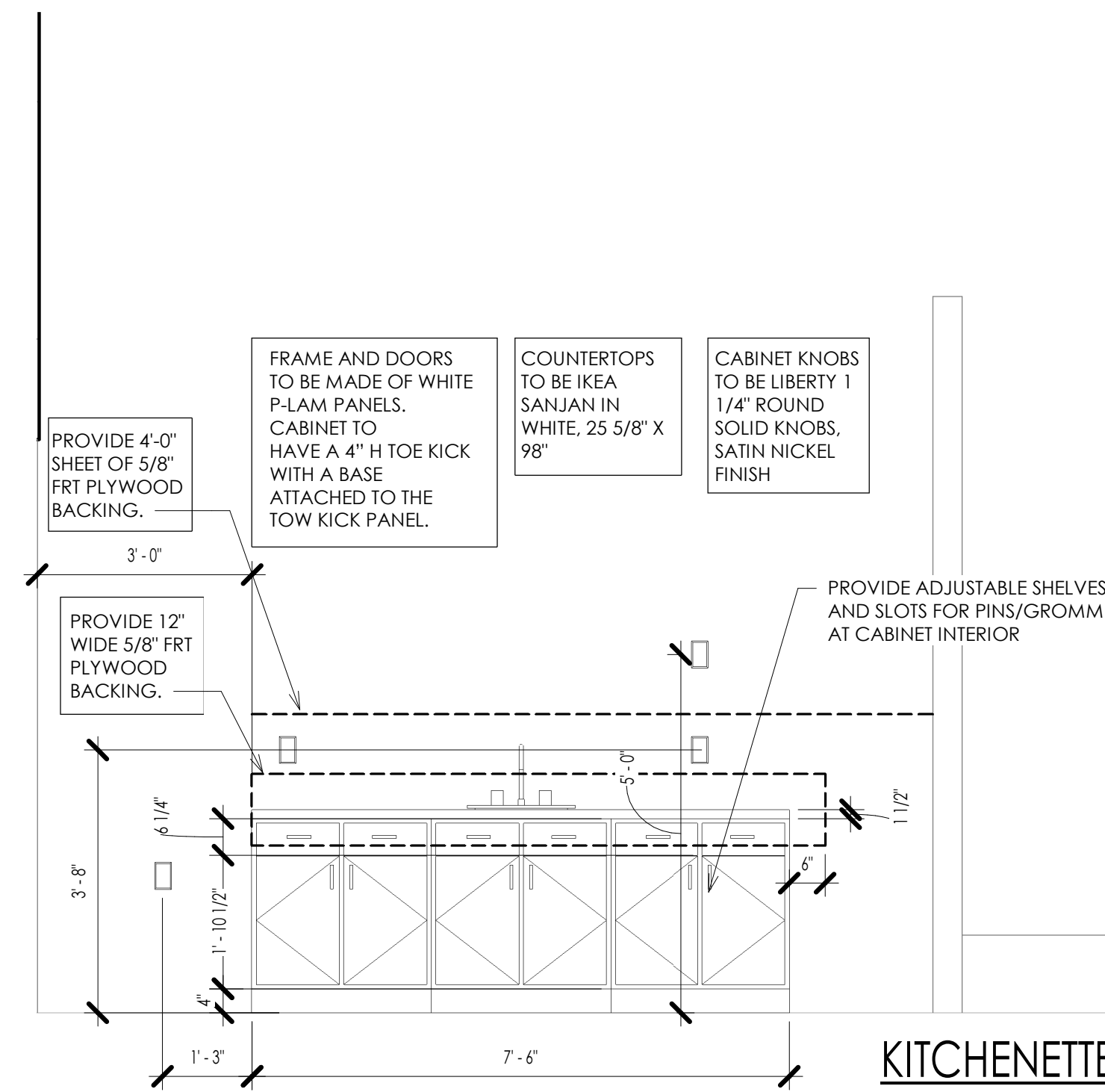
13



ADA FITTING ROOM SIDE

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

9



KITCHENETTE

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

1

PROVIDE 4'-0" SHEET OF 5/8" FRT PLYWOOD BACKING.

FRAME AND DOORS TO BE MADE OF WHITE PLAM PANELS. CABINET TO HAVE A 4" H TOE KICK WITH A BASE ATTACHED TO THE TOW KICK PANEL.

COUNTERTOPS TO BE IKEA SANJIAN IN WHITE, 25 5/8" X 98"

CABINET KNOBS TO BE LIBERTY 1 1/4" ROUND SOLID KNOBS, SATIN NICKEL FINISH

PROVIDE 12" WIDE 5/8" FRT PLYWOOD BACKING.

PROVIDE ADJUSTABLE SHELVES AND SLOTS FOR PINS/GROMMETS AT CABINET INTERIOR

project title

RED DEVELOPMENT
 SUMMIT FAIR
 910 G NW Blue Pkwy
 Lee's Summit, MO 64086

project number

2023A-001

drawing issuance

ISSUED FOR PERMIT

06/15/23

drawing revisions

No. Description:

Date:

professional seal



Date Signed JUN 15 2023

DATE SIGNED: 6/15/2023 8:38:06 AM

drawing title

SPECIFICATIONS

drawing number

SP001

SECTION 01 23 00 - ALTERNATIVES

PROVIDE alternative bid proposals to be added to or deducted from the amount of the Base Bid if the corresponding change in scope is accepted by the Owner, in accordance with requirements listed herein. Include within the alternative bid all costs, including materials, labor, equipment and fees required to complete the work item.

COORDINATE related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted alternate is complete and fully integrated into the Project. Immediately following Contract award, prepare and distribute to each party involved, notification of the status of each alternate. Indicate whether alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to alternates. Include as part of each alternate, miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation whether or not mentioned as part of the alternate.

ALTERNATE NO. 1: PROVIDE PERFORMANCE & LABOR/MATERIAL PAYMENT BONDS: Furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through usual sources and the cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to one hundred percent (100 %) of the Contract Sum. Deliver bonds to the Owner not later than three days following the date the Agreement is entered into, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished."

SECTION 01 26 13 - REQUESTS FOR INTERPRETATIONS (RFI'S)

SUBMIT REQUEST FOR INTERPRETATION (RFI's) after review of the Contract Documents and the field conditions immediately on discovery of the need for a clarification. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests on CSI Form 13.2A - "Request for Interpretation" or equivalent form approved for use in advance by the Architect. Submit RFI's only from the Contractor - RFI's from subcontractors or suppliers must be forwarded to, reviewed by, approved by, and submitted directly from the Contractor.

SUBMIT RFI'S ONLY AFTER a thorough review of ALL applicable Contract Documents and the field-conditions, and ONLY if the Contractor is still not able to resolve the problem or clarify the issue based on the information contained therein.

RESPONSIBILITY FOR ADDITIONAL COSTS: If the information requested by the Contractor is apparent from field observations, or is in fact contained within the Contract Documents, or is reasonably inferable from either, the Contractor will be responsible to the Owner for all reasonable costs expended by the Architect and/or the professional Consultants for the Additional Services required to provide such information.

RESPONSE TO RFI'S IS NOT AN AUTHORIZATION to proceed with additional or extra Work.

SECTION 01 29 00 - PAYMENT PROCEDURES

15 DAYS (MINIMUM) PRIOR TO SUBMITTAL OF THE INITIAL APPLICATION FOR PAYMENT, the following items shall be submitted: (1) listing of subcontractors and principal suppliers and fabricators, (2) the progress schedule, (3) preliminary schedule of values, (4) performance and/or payment bonds, if required, and (5) copies of acquired building permits for performance of the Work.

SCHEDULE OF VALUES: Provide a breakdown of the Contract Sum, as required by the General Conditions. Coordinate preparation and correlate line item breakdown with Specification Sections, and as required to facilitate continued evaluation of payment requests and progress reports. Break down principal subcontract amounts into several line items, to the approval of the Owner and/or Architect. Provide a separate line-item for each allowance, or for each unit-cost allowance as a product of the unit cost multiplied by the measured quantity. Indicate temporary facilities or other major cost items that are not a direct cost of actual work-in-place as separate line items. Show overhead and profit as a separate line item amount - to facilitate review of lien-waivers from sub-contractors and material suppliers. Round-off individual amounts to the nearest whole dollar, but with the total equal to the Contract Sum. Arrange the schedule with columns to indicate the generic name of the item, related specification sections, the subcontractor/supplier, manufacturer or fabricator, change orders (numbers) which have affected the value, the dollar value of the item, and the percentage of the Contract Sum to the nearest one-hundredth percent and adjusted to total 100 percent.

PRIOR TO INITIAL PAYMENT APPLICATION SUBMITTAL, the following are required:

List of subcontractors.
Schedule of Values.
Contractor's Construction Schedule.
Products list.
Schedule of unit prices.
Submittals Schedule.
List of Contractor's staff assignments, and principal consultants.
Copies of all applicable building permits (except for those obtained directly by the Owner)
Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
Initial progress report.
Report of preconstruction conference.
Certificates of Insurance (AIA G705) and evidence that Contractor's insurance has been secured.
Performance and payment bonds (if required).

APPLICATIONS FOR PAYMENTS: Use AIA Document G702 and AIA Document G703 Continuation Sheets or an equivalent document approved in advance. Complete every entry on the form, matching data on the Schedule of Values and correlated with the Contractor's Construction Schedule - using updated schedules if revisions have been approved. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Each Application shall be consistent with previous applications. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements. Include amounts of Change Orders and Construction Change Directives as separate line-items.
TIMING: Unless otherwise noted in the Agreement Form, the required date for submittal will be the tenth (10th) day of each month.

TIME PERIOD: Unless otherwise noted in the Agreement Form, the time-period covered by each Application for Payment starts on the first (1st) day of a month and ends on the last day of the same month.

SUBMIT an email and deliver THREE (3) notarized originals for receipt within 24 hours of the email ATTACHMENTS: Include a transmittal letter listing attachment and appropriate information regarding the Application, with an updated Schedule-of-Values and Construction Progress Schedule (if applicable) and partial lien-waivers (if required by Owner).

PAYMENT APPLICATION AT SUBSTANTIAL COMPLETION: After the Certificate of Substantial Completion is issued, submit an Application for Payment showing 100 percent completion. Provide a copy of the Certificate of Occupancy from the applicable AHJ indicating that the Project can be occupied by the Owner, and a current accounting statement showing all changes to the Contract Sum.

INCLUDE WITH THE FINAL PAYMENT APPLICATION the following: Unconditional lien-releases for all subcontractors and material suppliers Evidence of completion of Project closeout requirements. Insurance certificates for products and completed operations Proof that all taxes, fees, and similar obligations were paid. Updated final statement, accounting for final changes to the Contract Sum. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims." AIA Document G706A, "Contractor's Affidavit of Release of Liens." AIA Document G707, "Consent of Surety to Final Payment." (If Bonds are provided) Evidence that claims have been settled. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work. Final, liquidated damages settlement statement.

PARTIAL LIEN WAIVERS: At any time throughout the project, and concurrent with applications for Payment, the Owner reserves the right to require submittal of partial lien waivers indicating that lien rights are "unconditionally released" for all amounts previously paid by the Owner (less any retainage amounts), and "conditionally released" or contingent only upon receipt and bank clearance of the current payment-application amounts then due. The Owner reserves the right to designate which entities involved in the Work must submit waivers. Submit all waivers on the 1990 Edition of the "Waiver and Release of Lien" form as issued by the Construction Industry Affairs Council of Greater Kansas City, Inc. ("CICA") or other form provided or approved by the Owner, fully executed in a manner acceptable to Owner.

SUBMIT FINAL, UNCONDITIONAL LIEN RELEASES from all sub-contractors or material suppliers, with the application for Final Payment, together with the Contractor's final, conditional lien-release - contingent only upon receipt and bank clearance of the final-payment amount.

ELECTRONIC SUBMITTALS: In order to conserve paper, limit delivery/courier expenses, and to expedite the review process, forward electronic submittals to the greatest extent possible. Maintain one (1) set of printed, approved submittals at the Project Site, complete with applicable review and approval comments.

SHOP DRAWINGS: Submit three (3) full-size printed originals (one to be returned) in addition to electronic submittals. Make and distribute as many copies as necessary for records, coordination, construction operations.

TEMPORARY FACILITIES & CONTROLS

INCLUDE ALL COSTS for temporary utilities, temporary facilities and temporary controls within the Contract Sum. Connect to existing systems at the project site to provide for temporary water, electrical power, lighting and heat for construction operations, unless otherwise indicated.

PROVIDE TEMPORARY ELECTRICAL POWER including a grounded power distribution system with overload protection. Size system to accommodate use of power tools, electrical heating, lighting, and start-up testing of permanent electric-powered equipment prior to its permanent connection. Locate multiple outlets (minimum of 4-gang) spaced so that the construction area can be reached by power tools on a single extension cord of 50' maximum length.

PROVIDE TEMPORARY LIGHTING fixtures in areas where ceilings and existing fixtures are removed. Re-use existing lighting fixtures when possible and suspend from the existing structure. Remove temporary lighting fixtures when permanent fixtures are operational.

PROVIDE SANITARY FACILITIES including temporary toilets, wash facilities and drinking water dispensers for the use of all workers. Existing toilet facilities cannot be used by construction personnel. Provide separate facilities for male and female personnel when both sexes are working. Comply with all applicable codes and regulations and health department requirements for the type, number, location, operation and maintenance of fixtures and facilities. Provide toilet tissue, paper towels, paper cups and similar disposable materials for each facility.

PROVIDE TEMPORARY HEAT AND VENTILATION to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and proper curing of materials, to protect materials and finishes from damage due to temperature or humidity, and to prevent hazardous accumulations of dust, fumes, vapors or gases. Once new systems are operational, they may be used for temporary heating and cooling only if: (1) all registers diffusers and filters are cleaned before substantial completion, and (2) warranty periods remain unchanged, starting from the date of Substantial Completion.

PROVIDE TEMPORARY FIRE EXTINGUISHERS of type ABC at locations reasonably effective in extinguishing fires. Comply with NFPA No. 10. Post warning and quick-instructions at each extinguisher, and instruct personnel on proper use. Post fire department call number on each telephone at project site.

PROVIDE TEMPORARY COMMUNICATION SERVICE including local phone service (wired or wireless - 1 line minimum) with a phone handset. Provide either a separate "tax" phone line with fax machine or broadband internet service for instant contact for project coordination and communications. Allow use of communications equipment for the Owner, Architect and for sub-contractors, with long-distance costs to be paid for by the party making the calls.

PROVIDE TEMPORARY BARRIERS to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

PROTECT EXISTING CONSTRUCTION from damage by construction operations.

SCAFFOLDING: Provide all scaffolding and construction aids required, including guard rails, lights and platforms necessary for the completion of the Work, and for the protection of the workmen and the public.

ACCESS TO WORK: Repair all damage to existing property, corridors, roads and parking areas by job related vehicles or personnel at no cost to the Owner.

LIMIT PARKING for construction personnel to existing spaces approved for and/or designated for use by the Landlord.

PROGRESS CLEANING: At all times, keep the project site free from accumulation of waste materials or rubbish caused by construction operations. Provide suitable waste receptacles for trash and construction debris, and arrange for transportation and legal disposal of materials off site.

PROVIDE DUMPSTERS AND COLLECT WASTE from construction operations daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.

FIELD OFFICE: Maintain an area within the leased space for the management of the Work. Provide space to review project drawings, for project meetings, and storage of documents.

FIELD ENGINEERING

SURVEY THE EXISTING BUILDING FACILITY prior to the start of construction, to document any existing conditions such as cracks, sags, loose materials or other defects of the existing construction. This record shall serve as a basis for determination of subsequent damage resulting from the Contractor's operations at the site.

VERIFY existing horizontal and vertical control points, grades, elevations, dimensions, and other figures shown on the Drawings. Report inconsistencies to the Architect for resolution before commencing work.

WORK LAYOUT: Establish and maintain chalk-lines and other markers necessary to locate all elements of the project, including partitions, casework, electrical and plumbing connections and fixtures. Calculate and measure required dimensions.

DO NOT SCALE THE DRAWINGS to determine dimensions, unless directed to do so.

ESTABLISH & MAINTAIN new benchmarks and other markers to set lines and levels for the Work as needed to properly locate all elements of the Project. Calculate and measure required dimensions by instrumentation or other appropriate means. Do not scale the drawings to determine dimensions, unless directed by the Architect.

TAKE FIELD MEASUREMENTS as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

GENERAL PRODUCT REQUIREMENTS

PRODUCT OPTIONS - "OR EQUALS" ALLOWED UNLESS NOTED: When a material, article or piece of equipment is identified in the Drawings or in the Specifications, it is so identified for the purpose of establishing a standard of required function, availability, dimension, color, appearance, quality, performance, operation and maintenance. Unless that product is indicated as "no substitutions" or "no-options" within the Drawings or Specifications, the Contractor may substitute ANY product of other manufacturers or vendors which will perform adequately the duties imposed by the specified item, and which will not cause a delay in the construction schedule due to procurement of such item.

PRODUCTS IN QUANTITIES shall be alike and interchangeable. Where additional amounts of a product are likely to be needed by the Owner at a later date for maintenance and repair, provide standard, domestically produced products which are likely to be available to the Owner at such later date.

SUPPLY PRODUCTS COMPLETE with all standard devices, trim finish, and all accessories indicated in the latest edition of the manufacturer's catalog or brochure published at the date of the award of the Contract. Furnish such items complete with component parts necessary for the obvious and intended use and installation, whether or not descriptions or catalog numbers contain all supplemental information and/or numbers of such components.

ADD to subparagraph 3.7.1 the following: "3.7.1.1 The Contractor shall pay for all hook-up charges, "tap-in" fees, permit-fees and other related expenses related to agency review and approval of the construction, as required for full connection or hook-up of all utilities. Impact- or use-fees charged by public agencies or utilities related to the Owner's increased use of such utilities will be paid directly by the Owner."

ADD to Paragraph 3.10 the following: "3.10.4 If the Contractor fails to adhere to the Construction Schedule, the Contractor will furnish additional labor and/or services, or work sufficient overtime as may be necessary to make construction progress conform to the Construction Schedule. Failure to adhere to the schedule, or failure to take steps to regain the schedule, shall constitute default within the terms of the Contract."

ARTICLE 4 - ADMINISTRATION OF THE CONTRACT

REVISE Article 4 from Paragraph 4.2, through Paragraph 4.6 inclusive, by substituting the word "Owner", wherever the word "Architect" is used, as the Owner will administer the Construction Contract.

ADD to Paragraph 4.3.7.1 the following: "Notice of the Contractor's intent to make a claim for additional time must be received by the Owner within seven (7) days of commencement of the event or condition forming the basis for the claim."

ARTICLE 9 - PAYMENT AND COMPLETION

"9.3.1.1 Unless otherwise indicated in the Owner - Contractor Agreement Form, The Owner will retain ten percent (10%) of the amount of each progress payment application until final payment."

ARTICLE 11 - INSURANCE & BONDS

ADD to Subparagraph 11.1.1 the following: "11.1.4 Liability insurance shall include all major divisions of coverage and shall be on a comprehensive basis with specified limits listed below maintained specifically for this project. Coverages shall include: Personal Injury Liability with Employment Exclusion deleted, Contractual, including specified provisions for Contractor's obligation under Paragraph 3.18. Owned, non-owned and hired motor vehicles, and Broad Form Property Damage coverage. Premises-Operations, Independent Contractor's Protective, Products and Completed Operations, Owner's & Designers Protective Liability, and Broad Form Property Damage coverage. Property Damage Liability coverage shall provide X, C, and U coverages, with Completed Operations and Products Liability coverage maintained for two (2) years after final payment. The following minimum limits are applicable to each incident occurrence as well as for the total annual aggregates - which shall be dedicated specifically for this project only. Minimum coverage amounts shall be as listed below, or as required by law, whichever is greater.

Worker's Compensation:	Statutory
General Employer's Liability:	\$ 1,000,000.00
Comprehensive General Liability, Contractual Liability, Owners & Contractor's Protective Liability, and Independent Contractors Protective Liability:	
Property damage:	\$ 1,000,000.00
Contractual Liability:	\$ 1,000,000.00
Property Damage:	\$ 1,000,000.00
Bodily injury:	\$ 1,000,000.00
Comprehensive Automobile Liability:	
Property Damage:	\$ 1,000,000.00
Bodily injury:	\$ 1,000,000.00
Umbrella Excess Liability Insurance:	\$ 2,000,000.00

ADD to Subparagraph 11.1.3, the following: "11.1.3.1 All certificates of insurance required herein shall name the Owner, the Landlord (as applicable) and the Architect as additional insured."

DELETE Paragraph 11.3 - Project Management Protective Liability Insurance, in its entirety.

DELETE Subparagraph 11.5.1 from Paragraph 11.5 - Performance Bond and Payment Bond, and ADD the following:

"11.5.1 BONDS are not required by the Owner, however Performance and Payment Bonds may be required by the Landlord. When applicable, review the Landlord's requirements and provide bonds complying therewith. If required, submit notarized bond forms to the Owner and Landlord prior to start of construction. Costs for bonds, if required, shall be included in the Contract Sum."

GENERAL REQUIREMENTS

THE WORK consists of limited demolition and new interior tenant-finish construction as indicated in the Construction Documents. Perform all work required for completion of the Project, except as otherwise indicated herein.

USE OF EXISTING BUILDING: Limit construction activities to occur within the Project Site, or within other areas designated or approved for use by the Owner or Landlord. If not within the project site, make connections to existing utilities in the most expeditious manner possible. Perform the Work so that it will not interfere with adjacent facilities.

MAINTAIN THE EXISTING BUILDING in a safe and weather tight condition. Do not install combustible materials above finished ceilings or in any other concealed spaces. Repair damage caused by construction operations. Take all precautions to protect the existing building and its occupants. Keep public areas such as hallways, stairs, and existing toilet rooms free from accumulation of waste material, rubbish or construction debris.

PROJECT COORDINATION & ADMINISTRATION:

SCHEDULE AND COORDINATE THE WORK of the complete Project to assure an efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later. Prepare general coordination drawings, schedules, and control site utilization, from beginning of construction throughout project close-out. Coordinate space requirements and installation of mechanical and electrical Work which are indicated diagrammatically on the Drawings. Follow routing shown for pipes, ducts, and conduits, as closely as practical; make runs parallel with lines of the building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs. Conceal pipes, conduits and similar elements whenever possible within the new construction, in finished areas.

MAINTAIN A RECORD-SET of Construction Documents indicating differences between Construction Documents and the actual installed Work. Mark revisions made during construction with colored pencil - do not conceal any Work before revisions have been recorded. Note actual routing of under-slab plumbing and utility lines, if different from design drawings.

DO NOT construct or install any portion of the Work related to these drawings at any time without such drawings being available at the site.

SUBMITTALS

COORDINATE submittals with related submittals and other activities that require sequential action. Group transmittal of different kinds of submittals for the same unit of work so that information is available for checking each item when it is received. Consecutively number all submittals - when an item is resubmitted for any reason, transmit under a new letter of transmittal and with a new transmittal number.

SUBMITTALS SHALL CONTAIN the date of submission; the Project Title; the Contractor's name, the name of the sub-contractor, supplier or manufacturer, as applicable; identification of the product being submitted; clear identification of field dimensions, verified by the Contractor; relation to adjacent or critical features of the Work; applicable standards; identification of deviations from the Contract Documents; and a clear space for the Contractor's and the Architect's review stamps.

STAMP & APPROVE ALL submittals with an approval stamp, dated, and initialed or signed, certifying approval of the submittal, verification of the product being submitted, and verification that the product submitted complies with the requirements of the Contract Documents. Failure to properly verify conformance and conditions at the job site will not relieve the Contractor of the responsibility to properly install the Work.

SECTION 00 22 13 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS:

AIA DOCUMENT A701-1997 "INSTRUCTIONS TO BIDDERS" is included as a part of these documents by this reference. Copies are available from The American Institute of Architects, 1735 New York Avenue N. W., Washington, D. C. 20006, or the local AIA office. Note that Paragraph 2.1.3 requires that each bidder visit the site prior to submitting a bid/proposal.

THE FOLLOWING PARAGRAPHS modify, delete from, and/or add to the above referenced Instructions to Bidders, as if originally written therein. Where any Article of the Instructions is modified, or where any Paragraph, Subparagraph or clause thereof is modified or deleted by the following Supplementary Instructions, the unaltered provisions shall remain in effect.

ADD the following paragraph to Article 1 - Definitions: "1.10 STIPULATED SUM amounts shall include all costs to the Contractor for materials, labor, equipment, testing and any and all items of expense (including phone calls), fees, taxes, overhead and profit for the Contractor's full and complete performance of the Work as set forth in the Contract Documents."

REPLACE Paragraph 2.1.4 to read as follows: "Any deviations from or exceptions to the Specifications, Drawings, Terms and Conditions and/or any other Bid Document must be clearly defined and set forth in the Bidder's Proposal. If no exceptions are shown in the proposal, none will be considered at the time of Contract Award."

REPLACE Paragraph 3.3.2 to read as follows: "3.3.2 Substitutions proposed by a Bidder are not to be included in the Base Bid, but may be appropriately itemized on the Bid Form or as an attachment thereto as a "Contractor's Voluntary Alternate" with the corresponding add or deduct amount included."

ADD New Paragraph: 4.1.8 as follows: "4.1.8 Bids shall remain in effect for a period of no less than THIRTY (30) days after submittal. The proposed price(s) shall include all costs to the Contractor for materials, labor, equipment, testing and any and all items of expense (including phone calls), fees, taxes, overhead and profit for the Contractor's full and complete performance of the work as set forth in the Contract Documents."

ADD New Paragraph: 4.1.9 as follows: "4.1.9 Provide a complete line-item breakdown of all development or construction related fees included within the proposed Contract Sum, either on the Bid Form, or as a separate attachment if necessary. "

DELETE Paragraph 4.2 in its entirety - no bid security will be required.

ADD Paragraph: 5.3.3 as follows: "5.3.3 Bidders are hereby advised that Proposals for this Work are being invited from other bidders."

DELETE subparagraph 7.1.1 and ADD the following: "7.1.1 Costs for Performance and Labor and Material Payment Bonds shall be indicated as an alternate cost on the Bid Form, and shall not be included within the Base Bid amount. The Owner reserves the right to require such bonds to be furnished upon execution of the Contract (or subsequent to contract execution as a change order) in the amount specified on the Bid Form.

ADD the following Paragraph 8.1 - Form of Agreement: "8.1 Form of Agreement: The Agreement form may be either AIA Document A101, or on an equivalent non-standard form with similar language acceptable to both the Owner and to the Contractor. If approval by both parties cannot be reached on the format of the non-standard form, then AIA Document A101 will be used."

SECTION 00 73 00 - SUPPLEMENTARY CONDITIONS

GENERAL CONDITIONS: AIA Document A 201-1997 Edition: "General Conditions of the Contract for Construction" is included as a part of the Contract Documents by reference. Participation in the Work of this Project is considered acknowledgement of the participants understanding of, and agreement with, all requirements of the Contract for Construction.

THE FOLLOWING "SUPPLEMENTARY CONDITIONS" modify the "General Conditions" as if originally written therein. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in full effect.

ARTICLE 1 - CONTRACT DOCUMENTS

ADD to paragraph 1.1, DEFINITIONS, the following: "1.1.8 "FURNISH": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

1.1.9 "INSTALL": Operations at the Project Site including but not limited to unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

1.1.10 "PROVIDE": Furnish and install, complete and ready for the intended use.

ADD to paragraph 1.2. CORRELATION AND INTENT ... the following: "1.2.4 THE INTENT OF THE CONSTRUCTION DOCUMENTS is to include all items required for completion of the Work. Although the Drawings have been prepared with due care and diligence, design and construction is complex. Consequently, the Drawings are often diagrammatic - as every potential condition or contingency cannot be anticipated or fully indicated, and all components required for complete installation may not be fully indicated.

1.2.5 Notes written in the imperative mood refer to action(s) to be performed by the Contractor, the words "the Contractor shall" are always implied, unless otherwise noted within the Construction Documents.

1.2.6 Figured dimensions and marked data shall take precedence over scaled measurements, and details shall take precedence over smaller scale general drawings.

1.2.7 In case of conflict in or between contract requirements (General and Supplementary Conditions), General Requirements (Division-1 Specification Sections), Drawings, Specifications or manufacturer's product requirements, the Contractor will be deemed to have submitted on, and agreed to provide, the greater quantity and better quality of materials and Work."

REPLACE Paragraph 1.5.2 with the following: "1.5.2 Execution of the Contract by the Contractor is a representation that the Contractor has carefully examined and understands the intent of the Contract Documents, that the Contractor has visited the project site and has reviewed the conditions under which the Work will be performed (including but not necessarily limited to labor availability, codes and regulations, hazards, procedures, construction means and methods necessary and weather conditions), and that he/she has correlated his/her personal observations with the requirements of the Contract Documents. No claims will be approved for additional time or costs resulting from the Contractor's lack of familiarization of the requirements of the Construction Contract."

ADD to Paragraph 1.6 the following: "1.6.2 Electronic media files are considered 'Instruments of Service' of the Architect, who retains all common law, statutory law and other rights, including the copyright. No representation is made regarding the accuracy or completeness of electronic media data. If electronic media files are transferred from the Architect to the Contractor, the Contractor will not use the Electronic Media data for any purpose other than preparation of shop drawings, coordination drawings, or for Record Drawings of this Project. The Contractor agrees not to transfer the electronic media data to any entity not involved in the construction Work without the prior written consent of the Architect. The Contractor further agrees to waive all claims against the Owner and the Architect, resulting in any way from any use of the use of the electronic media data. Use of electronic media data does not reduce or minimize in any way the Contractor's responsibility to take field measurements, check dimensions, and to coordinate with other construction work at the Project Site."

ARTICLE 3 - CONTRACTOR

ADD to Paragraph 3.5 the following: "3.5.2 It is hereby understood that the failure of any piece of equipment, material, or service provided in this Contract to fail approval by any public authority constitutes a default in performance and that the Contractor will correct such failure as expeditiously as possible in a manner acceptable to such authorities and to the Owner. If the Contractor does not provide corrections within thirty (30) days of discovery of the default condition, the Owner may provide the corrections and charge the Contractor for all costs incurred plus a ten percent (10%) administrative fee or \$500, whichever is greater."

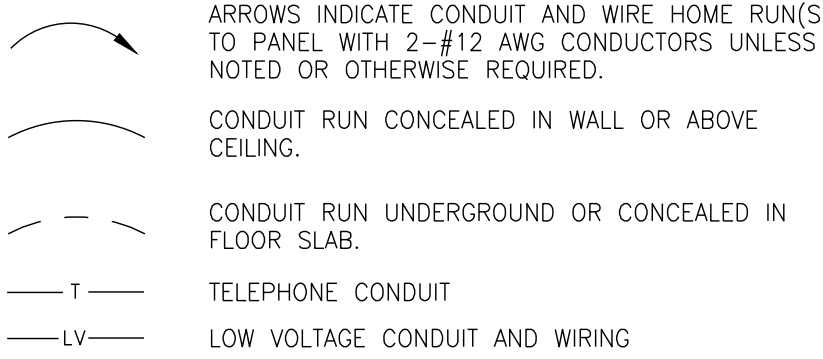
<p>POLLUTION CONTROL</p> <p>Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level.</p> <p>SELECTIVE DEMOLITION OPERATIONS:</p> <p>DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:</p> <p>NEATLY CUT OPENINGS AND HOLES plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain</p> <p>CUT OR DRILL FROM THE EXPOSED OR FINISHED SIDE into concealed surfaces to avoid marring existing finished surfaces. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations. Maintain adequate ventilation when using cutting torches</p> <p>REMOVE DECAYED, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.</p> <p>RETURN ELEMENTS OF CONSTRUCTION AND SURFACES TO REMAIN to condition existing before start of selective demolition operations.</p> <p>DEMOLISH CONCRETE AND MASONRY in small sections. Cut concrete and masonry at joints with construction to remain, using power-driven masonry saw or hand tools; do not use power-driven impact tools.</p> <p>PATCHING AND REPAIRS</p> <p>PROMPTLY PATCH AND REPAIR holes and damaged surfaces caused to adjacent construction by selective demolition operations. Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.</p> <p>RESTORE EXPOSED FINISHES of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.</p> <p>PATCH AND REPAIR FLOOR AND WALL SURFACES in the new space where demolished walls or partitions extend one finished area into another. Provide a flush and even surface of uniform color and appearance. Closely match texture and finish of existing adjacent surface. Patch with durable seams that are as invisible as possible.</p> <p>WHERE PATCHING SMOOTH PAINTED SURFACES, extend final paint coat over entire unbroken surface containing the patch after the surface has received primer and second coat</p> <p>DISPOSAL OF DEMOLISHED MATERIALS</p> <p>PROMPTLY DISPOSE of demolished materials. Do not allow demolished materials to accumulate on-site. Do not burn demolished materials.</p> <p>TRANSPORT DEMOLISHED MATERIALS off the Owner's property and legally dispose of them.</p> <p>SECTION 03 30 00 - CAST-IN-PLACE CONCRETE</p> <p>WORK INCLUDED: Provide cast-in-place concrete, as indicated on the drawings, as specified herein, and as required for a complete and proper installation.</p> <p>REFERENCED STANDARDS: Comply with applicable provisions of the following codes, specifications and standards, except where more stringent requirements are shown or specified.</p> <p>ACI 318: "Manual of Standard Practice"</p> <p>ACI 347: "Recommended Practice for Concrete Formwork"</p> <p>ACI 301: "Specifications for Structural Concrete for Buildings"</p> <p>ACI 302: "Floor and Slab Construction"</p> <p>ACI 304: "Measuring, Mixing and Placing Concrete"</p> <p>ACI 305: "Hot Weather Concrete"</p> <p>ACI 306: "Cold Weather Concrete"</p> <p>ACI 315: "Reinforcement Detailing"</p> <p>CRSI's "Manual of Standard Practice"</p> <p>A TESTING LABORATORY will be retained to perform material evaluation tests and to design concrete mixes. Materials and installed work may require testing and retesting, as directed by Owner, at anytime during progress of Work. Allow free access to material stockpiles and facilities. Remove and replace work found to be defective and provide new acceptable work.</p> <p>ONLY KNOWLEDGEABLE PERSONS shall be employed who are thoroughly trained and experienced in skills necessary for completion of the Work of this Section. In installation use adequate numbers of skilled workmen to ensure installation in strict accordance with the requirements of the Contract Documents.</p> <p>SUBMIT PRODUCT DATA for proprietary materials and items, including reinforcement and forming accessories, admixtures, curing compounds, and other items specified herein.</p> <p>SUBMIT REINFORCEMENT SHOP DRAWINGS for fabrication, bending, and placement of reinforcement. Comply with ACI 315 "Manual of Standard Practice for Detailing Reinforced Concrete Structures" showing bar schedules, stirrup spacing, diagrams of bent bars, arrangement of concrete reinforcement. Include special reinforcement required and openings through concrete structures.</p> <p>SUBMIT LABORATORY TEST REPORTS for concrete materials and mix design tests.</p> <p>FORM MATERIALS:</p> <p>FURNISH IN LARGEST PRACTICABLE SIZES to minimize joints, and to conform to joints shown on drawings. Provide material with sufficient thickness to withstand pressure of newly-placed concrete without bow or deflection.</p> <p>FORMS FOR UNEXPOSED CONCRETE: Plywood, lumber, metal or other material. Provide lumber dressed on at least 2 edges and one side for tight fit.</p> <p>FORMS FOR EXPOSED CONCRETE: Plywood, metal, metal-faced plywood panels, or other acceptable smooth faced undamaged panel-type material, to provide continuous, straight, smooth, exposed surfaces.</p> <p>FORM COATINGS: Commercial formulation form-coating compounds that will not bond with, stain nor adversely affect concrete surfaces, and will not impair subsequent treatments of concrete surfaces.</p> <p>REINFORCING MATERIALS:</p> <p>REINFORCING BARS: ASTM A-615, Grade 60, deformed.</p> <p>ANCHOR BOLTS: ASTM A-307, Grade A bolts with standard heads, in length and projections indicated on the drawings.</p> <p>STEEL WIRE: ASTM A-82, plain, cold-drawn.</p> <p>WELDED WIRE FABRIC: ASTM A-85, welded steel.</p> <p>REINFORCEMENT SUPPORTS: Bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire fabric in place. Use wire bar type supports complying with CRSI specifications, unless otherwise acceptable. For slabs-on-grade, use supports with sand plates or horizontal runners where base material will not support chair.</p> <p>CONCRETE MATERIALS:</p> <p>PORTLAND CEMENT: ASTM C-150, Type I, low alkali. Use only one brand of cement throughout project.</p> <p>NORMAL WEIGHT AGGREGATES: ASTM C-33, crushed limestone, granite or equivalent material from a single source. Maximum aggregate sizes shall be not larger than one-fifth of the narrowest dimension between sides of forms, one-third of the depth of slabs, or three-fourths of the minimum clear spacing between individual reinforcing bars or bundles of bars.</p> <p>FINE AGGREGATES: Natural washed hard sand varying from fine to particles passing a 3/8" screen, of which at least 12 % shall pass a 50 - mesh screen.</p> <p>WATER: Clean, drinkable, and free from foreign matter.</p>	<p>PROVIDE ADMIXTURES CERTIFIED BY MANUFACTURER to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material and to be compatible with other admixtures and cementitious materials. Do not use admixtures containing calcium chloride.</p> <p>AIR-ENTRAINING ADMIXTURE: ASTM C 260.</p> <p>WATER-REDUCING ADMIXTURE: ASTM C 494, Type A.</p> <p>HIGH-RANGE, WATER-REDUCING ADMIXTURE: ASTM C 494, Type F.</p> <p>WATER-REDUCING AND ACCELERATING ADMIXTURE: ASTM C 494, Type E.</p> <p>WATER-REDUCING AND RETARDING ADMIXTURE: ASTM C 494, Type D.</p> <p>STRIP-TOP EXPANSION JOINT FILLER: Preformed strips of Asphalt saturated fiberboard, complying with ASTM D-1751, with pre-cut or perforated, removable top edge for installation of sealant material.</p> <p>CURING/SEALING COMPOUND: ASTM C-309, Type ID, Products which may be used include: "Super Floor Coat" or "Super Plioreure" by Euclid Chemical Company, "MasterKure CR" by Master Builders, and "Surfaseal" by L&M Construction Chemicals.</p> <p>MOISTURE-RETAINING COVER: Waterproof paper, or polyethylene film, or polyethylene-coated burlap, meeting ASTM C-171.</p> <p>PROPORTIONING AND DESIGN OF MIXES:</p> <p>PREPARE DESIGN MIXES for each type and strength of concrete by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method is used, use an independent testing facility for preparing and reporting proposed mix designs.</p> <p>MIX ADJUSTMENTS may be made by the Contractor, at no additional cost to the Owner. Laboratory test data for revised mix design and strength results must be submitted to and accepted by the Owner before using in the Work. At Contractor's option, withhold up to 2-1/2 gallons of water per cubic yard of concrete. Add withheld water immediately prior to discharge but only after five (5) minutes of mixing time has elapsed.</p> <p>AGGREGATE PROPORTIONING: The volume of fine aggregate shall not be less than 35% of the total volume of fine and coarse aggregates when measured in loose dry volumes before being combined.</p> <p>DESIGN MIXES to provide normal weight concrete with the following properties:</p> <p>FOOTINGS, GRADE BEAMS, & FOUNDATION WALLS: 4000 PSI compressive strength [28 Days], maximum water/cement ratio = 0.52 and 4 inch +/- 1 inch natural slump or 8 inches maximum slump for concrete with high-range water-reducing admixture added to 2- to 4-inch natural slump concrete.</p> <p>EXTERIOR CURBS, GUTTERS AND PAVEMENT: 4000 PSI compressive strength [at 28 Days], maximum water/cement ratio = 0.50 and 4 inch +/- 1 inch natural slump or 8 inches maximum slump for concrete with high-range water-reducing admixture added to 2- to 4-inch natural slump concrete, and with 6% air entrainment.</p> <p>GROUT FOR FILLING MASONRY CELLS at vertical reinforcing: 2000 psi @ 28 day compression strength, with 8" to 10" slump.</p> <p>CONCRETE EXPOSED TO DEICERS: LIMIT CEMENTITIOUS MATERIALS other than Portland cement by percentage of weight according to ACI 301 requirements.</p> <p>AIR CONTENT: Provide air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content as follows within a tolerance of plus 1 or minus 1.5 percent, to provide 6 percent air content for 1-inch- nominal maximum aggregate size. Do not air entrain concrete on trowel-finished interior floors and suspended slabs. Do not allow entrapped air content to exceed 3 percent.</p> <p>INSTALLATION:</p> <p>EXAMINATION & INSPECTION: Examine areas and conditions under which the Work of this Section will be performed. Do not proceed if conditions exist that are detrimental to proper and timely completion. Commencement of this Work will be construed as acceptance of existing conditions or prior work by others, and assumption of responsibility for satisfactory installation.</p> <p>FORM CONSTRUCTION:</p> <p>DESIGN, ERECT, SUPPORT, BRACE AND MAINTAIN formwork so that it will safely support vertical and lateral loads that might be applied, until such loads can be supported by the concrete structure. Design formwork to be readily removable without impact, shock or damage to cast-in-place concrete surfaces and adjacent materials.</p> <p>CONSTRUCT FORMS to sizes, shapes, lines and dimensions shown, and to obtain accurate alignment, location, grades, level and plumb work in finished structures. Provide for openings, offsets, sinkages, keyways, recesses, moldings, rustications, reglets, chamfers, blocking, screeds, bulkheads, anchorages and inserts, and other features required in work. Use selected materials to obtain required finishes. Solidly butt joints and provide back- up at joints to prevent leakage of cement paste.</p> <p>EARTH FORMS: Side forms for footings may be omitted and concrete poured directly against excavation only when requested by the Contractor and accepted by the Owner. When omission of forms is accepted, provide additional concrete 1" thick on each side of the minimum design profile of sides and dimensions shown.</p> <p>FABRICATE FORMS FOR EASY REMOVAL without hammering or prying against surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces. Kerf wood inserts for forming keyways, knockout panels recesses and the like to prevent swelling and for easy removal.</p> <p>PROVIDE wedges, jacks, or camber strips to facilitate vertical adjustments. Carefully inspect formwork during and after concrete placement operations to determine abnormal deflection or signs of failure; make necessary adjustments to produce Work of required dimensions.</p> <p>CHAMFER EXPOSED CORNERS and edges, using wood, metal, PVC or rubber chamfer strips. Chamfers shall be 1" x 1" strips, accurately formed and surfaced to produce uniformly straight lines and tight edge joints on exposed concrete.</p> <p>PROVISIONS FOR OTHER TRADES: Provide openings in concrete formwork to accommodate work of other trades. Determine size and location of openings, recesses and chases from trades providing such items. Accurately place and securely support items built into forms.</p> <p>INSTALLATION OF EMBEDDED ITEMS: Set and build into work anchorage devices, rustication strips, chamfers, and other embedded items such as sleeves, mechanical suspension devices, conduit, electrical boxes, switches.</p> <p>CLEANING AND TIGHTENING: Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before concrete is placed. Realign forms immediately after concrete placement as required to eliminate mortar leaks, and to maintain proper alignment.</p> <p>PLACING REINFORCEMENT:</p> <p>COMPLY with CRSI's recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports.</p> <p>CLEAN REINFORCEMENT of loose rust and mill scale, earth, and other materials which reduce or destroy bond with concrete.</p> <p>POSITION, SUPPORT, AND SECURE reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by ties, spacers, chairs or hangers as required.</p> <p>PLACE REINFORCEMENT to obtain the minimum coverage for concrete protection. Arrange, space and secure tie bars and bar supports together with 16 gage wire to hold reinforcement accurately in position during concrete placement operations. Set wire ties so twisted ends are away from exposed surfaces.</p> <p>INSTALL WELDED WIRE FABRIC in as long lengths as practicable. Lap adjoining pieces at least one full mesh unit and lace laps with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.</p>	<p>JOINTS:</p> <p>CONSTRUCTION JOINTS: Locate and install construction joints as indicated or, if not indicated, locate so as not to impair strength and appearance of the structure, as acceptable to the Owner.</p> <p>PROVIDE KEYWAYS at least 1-1/2" deep or as otherwise noted, where indicated in the drawings.</p> <p>PLACE CONSTRUCTION JOINTS perpendicular to main reinforcement. Continue reinforcement across construction joints.</p> <p>ISOLATION JOINTS IN SLAB-ON-GRADE: Construct at points of contact between slabs and vertical surfaces, such as column pedestals, foundation walls, grade beams and elsewhere as indicated. Provide removable-top type expansion joint material for installation of sealant, where exposed to view in completed work.</p> <p>CONTRACTION [CONTROL] JOINTS IN SLAB-ON-GRADE: Construct to form panels to divide slab into controlled areas of concrete pour as indicated on the Drawings. Use premolded plastic control joint former, inserted into fresh concrete until top surface of strip is flush with slab surface. Remove pull-top stiffener, and finish concrete flat over joint.</p> <p>SAWN CONTRACTION JOINTS may be provided in lieu of premolded units, as soon as possible after slab finishing as may be safely done without dislodging aggregate. Saw cut not less than 1/4 the slab thickness.</p> <p>INSTALLATION OF EMBEDDED ITEMS:</p> <p>SET AND BUILD INTO WORK anchorage devices and other embedded items required for other work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of items to be attached thereto.</p> <p>EDGE FORMS AND SCREED STRIPS FOR SLABS: Set edge forms or bulkheads and intermediate screed strips for slabs to obtain required elevations and contours in finished slab surface. Provide and secure units sufficiently strong to support types of screed strips by use of strike-off templates or accepted compacting type screeds.</p> <p>PREPARATION OF FORM SURFACES:</p> <p>CLEAN re-used forms of concrete matrix residue, repair and patch as required to return forms to acceptable surface condition. Rust-stained steel formwork is not acceptable.</p> <p>COAT CONTACT SURFACES with form-coating compound before reinforcement is placed. Do not allow excess form-coating material to accumulate in forms or to come into contact with in-place concrete against which fresh concrete will be placed.</p> <p>CONCRETE PLACEMENT:</p> <p>INSPECT and complete formwork installation, reinforcing steel, and items to be embedded or cast-in-place. Notify other crafts to</p>
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<div>SECTION 05 40 00 – COLD-FORMED METAL FRAMING</div> <div>RELATED DOCUMENTS: The Drawings, and general provisions of the Contract, including the General and Supplementary Conditions, and Division-1 Sections of the Specifications, apply to this Section.</div> <div>WORK INCLUDED: Provide cold-formed metal framing where indicated on the Drawings; as specified herein, and as necessary for complete installation. Types of applications include but are not limited to the following:</div> <div>DESIGN / BUILD: In addition to providing cold-formed metal framing, provide Professional Engineering Services for the following:</div> <div>Miscellaneous structural framing appurtenances attached to the primary structural frame(s).</div> <div>DEFINITIONS</div> <div>MINIMUM UNCOATED STEEL THICKNESS: Minimum uncoated thickness of cold-formed framing delivered to the Project site shall be not less than 95 percent of the thickness used in the cold-formed framing design. Lesser thicknesses shall be permitted at bends due to cold forming.</div> <div>PERFORMANCE REQUIREMENTS:</div> <div>PROVIDE COLD-FORMED METAL FRAMING capable of withstanding design loads within limits and under conditions as indicated in the Drawings at miscellaneous elements and assemblies.</div> <div>Design framing systems to provide for movement of framing members without damage or overstressing, sheathing failure, connection failure, undue strain on fasteners and anchor, or other detrimental effects when subject to a maximum ambient temperature change of 120 deg F.</div> <div>Design framing system to maintain clearances at openings, to allow for construction tolerances, and to accommodate live load deflection of the primary building structure not to exceed 1/2 inch maximum for upward or downward movement.</div> <div>Design exterior non-load-bearing curtain-wall framing to accommodate horizontal deflection without regard for contribution of sheathing materials.</div> <div>DEFLECTION LIMITS: Design framing systems to withstand design loads without deflections greater than the following:</div> <div>Exterior Load-Bearing Wall Framing: Horizontal deflection of 1/360 of the wall height minimum</div> <div>Exterior Non-Load-Bearing Framing at brick veneer: Horizontal deflection of 1/600 of the wall</div> <div>Exterior Non-Load-Bearing Framing without brick veneer: Horizontal deflection of 1/360 of the wall</div> <div>Roof Rafter Framing: Horizontal deflection of 1/360 of the horizontally projected span.</div> <div>Ceiling Joist Framing: Vertical deflection of 1/240 of the span.</div> <div>SUBMITTALS</div> <div>PRODUCT DATA: For each type of cold-formed metal framing product and accessory indicated.</div> <div>SHOP DRAWINGS: Show layout, spacings, sizes, thicknesses, and types of cold-formed metal framing; fabrication; and fastening and anchorage details, including mechanical fasteners. Show reinforcing channels, opening framing, supplemental framing, strapping, bracing, bridging, splices, accessories, connection details, and attachment to adjoining Work.</div> <div>SUBMIT STRUCTURAL ANALYSIS DATA for framing indicated to comply with design loads, and provide shop drawings signed and sealed by the qualified Professional Engineer responsible for their preparation.</div> <div>MILL CERTIFICATES signed by steel sheet producer indicating steel sheet complies with requirements. Provide test reports from a qualified independent testing agency if required by authorities having jurisdiction.</div> <div>WELDING CERTIFICATES: Copies of certificates for welding procedures and personnel.</div> <div>QUALIFICATION DATA: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.</div> <div>RESEARCH/EVALUATION REPORTS: Evidence of cold-formed metal framing's compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.</div> <div>QUALITY ASSURANCE</div> <div>INSTALLER QUALIFICATIONS: An experienced installer who has completed cold-formed metal framing similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.</div> <div>PROFESSIONAL ENGINEER QUALIFICATIONS: A professional, registered/licensed "Structural Engineer" legally qualified to practice in the state in which the Project is located, experienced in providing engineering services of the kind required herein. Engineering services are defined as those performed for installations of structural work similar to Work specified in this Section in material, design, and extent. Provide certificate indicating compliance with Division-1 requirements for Professional Liability Insurance before submitting shop drawings for review.</div> <div>MILL CERTIFICATES signed by steel sheet producer indicating steel sheet complies with requirements, including uncoated steel thickness, yield strength, tensile strength, total elongation, chemical requirements, and galvanized-coating thickness.</div> <div>AISI SPECIFICATIONS: Comply with AISI's "Specification for the Design of Cold-Formed Steel Structural Members" for calculating structural characteristics of cold-formed metal framing:</div> <div>CCFSS Technical Bulletin: "AISI Specification Provisions for Screw Connections."</div> <div>HEADER DESIGN: AISI's "Standard for Cold-Formed Steel Framing - Header Design."</div> <div>DELIVERY, STORAGE, AND HANDLING</div> <div>PROTECT COLD-FORMED METAL FRAMING from corrosion, deformation, and other damage during delivery, storage, and handling. Store cold-formed metal framing, protect with a waterproof covering, and ventilate to avoid condensation.</div> <div>PRODUCTS</div> <div>MANUFACTURERS: All products to be manufactured by current members of the Steel Stud Manufacturers Association (SSMA). Subject to compliance with requirements, manufacturers offering cold-formed metal framing that may be incorporated into the Work include, but are not limited to, the following:</div> <div><div><div>Allied American Studco, Inc.</div><div>California Expanded Metal Products Co.</div><div>Clark Steel Framing Industries.</div><div>Consolidated Systems, Inc.</div><div>Design Shapes in Steel.</div><div>Knorr Steel Framing Systems.</div><div>Scafco Corp.</div><div>Steel Developers, LLC.</div><div>Studio of Hawaii, Inc.</div><div>Unimast, Inc.</div><div>Western Metal Lath.</div></div><div><div>Angeles Metal Systems.</div><div>California Metal Systems, Inc.</div><div>Consolidated Fabricators Corp.</div><div>Date Industries, Inc.</div><div>Dietrich Industries, Inc.</div><div>MarinoWare; Div. of Ware Industries, Inc.</div><div>Steel Construction Systems.</div><div>Steeler, Inc.</div><div>Super Stud Building Products, Inc.</div><div>United Metal Products, Inc.</div></div></div> <div>STEEL MATERIALS</div> <div>STEEL SHEET: ASTM A 653, structural steel, zinc coated, of grade and coating as follows:</div>	<div>Grade: 33 for minimum uncoated steel thickness of 0.0428 inch (18-gage) and less; 50, Class 1 or 2 for minimum uncoated steel thickness of 0.0538 inch (16-gage) and greater.</div> <div>COATING: G60.</div> <div>STEEL SHEET: ASTM A 570, hot rolled or ASTM A 611, cold rolled; cleaned, pretreated, and primed with manufacturer's baked-on, lead- and chromate-free, rust-inhibitive primer complying with performance requirements in F5 TT-P-664, of grade as follows:</div> <div>Grade: 33 or C, Type 1 or 2, for minimum uncoated steel thickness of 0.0428 inch and less; 40 or D, Type 1 or 2, for minimum uncoated steel thickness of 0.0538 inch (16-gage) and greater.</div> <div>LOAD AND NON-LOAD-BEARING COLD-FORMED METAL FRAMING</div> <div>Minimum base-metal thickness (all components typical): 0.0428 inch (18 gage)</div> <div>STRUCTURAL-STEEL FRAMING (STEEL STUDS): Manufacturer's standard C-shaped steel studs, of web depths and strength/section modulus indicated on Drawings, punched, with stiffened flanges, complying with ASTM C 955.</div> <div>STRUCTURAL-STEEL TRACK: Manufacturer's standard U-shaped steel track, of web depths indicated on the Drawings, 1-1/4 inch flange-width, unpunched, with unstiffened flanges, complying with ASTM C 955, of same metal thickness as associated structural-steel framing units</div> <div>STEEL BOX OR BACK-TO-BACK HEADERS: Manufacturer's standard C-shapes used to form header beams, of web depths and strength/section modulus as indicated on the Drawings with 1-3/8 inch minimum flange width, with stiffened flanges</div> <div>Steel Double-L Headers: Manufacturer's standard L-shapes used to form header beams, of web depths and strength/section modulus as indicated on the Drawings with 1-1/2 inch minimum flange width, with stiffened flanges</div> <div>SINGLE DEFLECTION TRACK (ONLY AT NON-LOAD BEARING FRAMING): Manufacturer's single, deep-leg, U-shaped steel track, 2 inch minimum flange-width, unpunched, with unstiffened flanges, of depth required to contain framing units while allowing free vertical movement, with flanges designed to support horizontal and lateral loads</div> <div>DOUBLE DEFLECTION TRACKS (ONLY AT NON-LOAD BEARING FRAMING): Manufacturer's double element, deep-leg, U-shaped steel tracks, consisting of nested inner and outer tracks; unpunched, with unstiffened flanges.</div> <div>OUTER TRACK: Of web depth to allow free vertical movement of inner track, with 2 inch minimum width flanges designed to support horizontal and lateral loads</div> <div>INNER TRACK: Of web depth indicated, of minimum 3-1/2 inch flange width</div> <div>Vertical Deflection Clips: Manufacturer's standard bypass clips, capable of accommodating upward and downward vertical displacement of primary structure.</div> <div>ROOF-RAFTER FRAMING</div> <div>STEEL RAFTERS: Manufacturer's standard C-shaped steel sections, of 0.0428 inch (18 gage) minimum base-metal thickness, of web depths and strength/section modulus indicated on Drawings, unpunched, with stiffened flanges, complying with ASTM C 955</div> <div>FRAMING ACCESSORIES</div> <div>Fabricate steel-framing accessories of the same material and finish used for framing members, with a minimum yield strength of 33,000 psi.</div> <div>Provide accessories of manufacturer's standard thickness and configuration, unless otherwise indicated, as follows:</div> <div>Supplementary framing.</div> <div>Bracing, bridging, and solid blocking.</div> <div>Web stiffeners.</div> <div>End clips.</div> <div>Stud kickers, knee braces, and girts.</div> <div>Joist hangers and end closures.</div> <div>Hole reinforcing plates.</div> <div>Backer plates.</div> <div>ANCHORS, CLIPS, AND FASTENERS</div> <div>Steel Shapes and Clips: ASTM A 36, zinc coated by hot-dip process according to ASTM A 123.</div> <div>EXPANSION ANCHORS: Fabricated from corrosion-resistant materials, with capability to sustain, without failure, a load equal to 5 times design load, as determined by testing per ASTM E 488 conducted by a qualified independent testing agency.</div> <div>Power-Actuated Anchors: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with capability to sustain, without failure, a load equal to 10 times design load, as determined by testing per ASTM E 1190 conducted by a qualified independent testing agency.</div> <div>Mechanical Fasteners: Corrosion-resistant-coated, self-drilling, self-threading steel drill screws.</div> <div>HEAD TYPE: Low-profile head beneath sheathing, manufacturer's standard elsewhere.</div> <div>WELDING ELECTRODES: Comply with AWS standards.</div> <div>MISCELLANEOUS MATERIALS</div> <div>GALVANIZING REPAIR PAINT: SSPC-Paint 20 or DOD-P-21035.</div> <div>CEMENT GROUT: Portland cement, ASTM C 150, Type I; and clean, natural sand, ASTM C 404. Mix at ratio of 1 part cement to 2-1/2 parts sand, by volume, with minimum water required for placement and hydration.</div> <div>Nonmetallic, Nonshrink Grout: Premixed, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands. Portland cement, shrinkage-compensating agents, and plasticizing and water-reducing agents, complying with ASTM C 1107, with fluid consistency and 30-minute working time.</div> <div>FABRICATE COLD-FORMED METAL FRAMING AND ACCESSORIES plumb, square, and true to line, and with connections securely fastened, according to manufacturer's written recommendations and requirements in this Section. Fabricate framing assemblies using jigs or templates. Cut framing members by sawing or shearing; do not torch cut.</div> <div>FASTEN COLD-FORMED METAL FRAMING MEMBERS by welding or screw fastening, as standard with fabricator. Wire tying of framing members is not permitted.</div> <div>COMPLY WITH AWS D1.3 REQUIREMENTS and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.</div> <div>LOCATE MECHANICAL FASTENERS and install according to Shop Drawings, with screw penetrating joined members by not less than three exposed screw threads. Fasten other materials to cold-formed metal framing by welding, bolting, or screw fastening, according to Shop Drawings.</div> <div>REINFORCE, STIFFEN, AND BRACE FRAMING ASSEMBLIES to withstand handling, delivery, and erection stresses. Lift fabricated assemblies to prevent damage or permanent distortion.</div> <div>FABRICATION TOLERANCES: Fabricate assemblies level, plumb, and true to line to a maximum allowable tolerance variation of 1/8 inch in 10 feet and as follows:</div> <div>Spacing: Space individual framing members no more than plus or minus 1/8 inch from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.</div> <div>Squareness: Fabricate each cold-formed metal framing assembly to a maximum out-of-square tolerance of 1/8 inch.</div> <div>EXECUTION</div> <div>EXAMINE SUPPORTING SUBSTRATES and abutting structural framing for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.</div> <div>PREPARATION</div> <div>GROUT BEARING SURFACES UNIFORM and level to ensure full contact of bearing flanges or track webs on supporting concrete or masonry construction.</div> <div>COLD-FORMED FRAMING INSTALLATION:</div> <div>COMPLY WITH ASTM C 1007, unless more stringent requirements are indicated. Shop or field fabricate, or field assemble.</div>	<div>SECURELY ANCHOR to supporting structure. Bolt or weld wall panels at horizontal and vertical junctures to produce flush, even, true-to-line joints with maximum variation in plane and true position between fabricated panels not exceeding 1/16 inch.</div> <div>INSTALL FRAMING AND ACCESSORIES PLUMB, square, and true to line, and with connections securely fastened, according to manufacturer's written recommendations and requirements in this Section. Cut framing members by sawing or shearing; do not torch cut. Fasten cold-formed metal framing members by welding or screw fastening, as standard with fabricator. Wire tying of framing members is not permitted. Comply with AWS D1.3 requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work. Locate mechanical fasteners and install according to Shop Drawings, with screw penetrating joined members by not less than three exposed screw threads.</div> <div>INSTALL FRAMING MEMBERS IN ONE-PIECE LENGTHS, unless splice connections are indicated for track or tension members.</div> <div>INSTALL TEMPORARY BRACING AND SUPPORTS to secure framing and support loads comparable in intensity to those for which structure was designed. Maintain braces and supports in place, undisturbed, until entire integrated supporting structure has been completed and permanent connections to framing are secured.</div> <div>DO NOT BRIDGE BUILDING EXPANSION AND CONTROL JOINTS with cold-formed metal framing. Independently frame both sides of joints.</div> <div>INSTALL INSULATION IN BUILT-UP EXTERIOR FRAMING MEMBERS, such as headers, sills, boxed joists, and multiple studs at openings, that are inaccessible on completion of framing work.</div> <div>FASTEN HOLE REINFORCING PLATE over web penetrations that exceed size of manufacturer's standard punched openings.</div> <div>ERECTION TOLERANCES: Install cold-formed metal framing level, plumb, and true to line to a maximum allowable tolerance variation of 1/8 inch in 10 feet. Space individual framing members no more than plus or minus 1/8 inch from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.</div> <div>LOAD-BEARING WALL INSTALLATION</div> <div>INSTALL CONTINUOUS TOP AND BOTTOM TRACKS sized to match studs. Align tracks accurately and securely anchor at corners and ends, at spacings indicated on the Drawings.</div> <div>SQUARELY SEAT LOAD-BEARING FRAMING against top and bottom tracks with gap not exceeding 1/8 inch between the end of wall framing member and the web of track.</div> <div>Fasten both flanges of framing to top and bottom tracks. Space units as indicated on the Drawings. Set units plumb, except as needed for diagonal bracing or required for non-plumb walls or warped surfaces and similar configurations. Align units vertically where floor framing interrupts wall-framing continuity. Where framing units cannot be aligned, continuously reinforce track to transfer loads.</div> <div>ALIGN FLOOR AND ROOF FRAMING over wall framing units. Where framing cannot be aligned, continuously reinforce track to transfer loads.</div> <div>ANCHOR FRAMING ABUTTING STRUCTURAL COLUMNS or walls, including masonry walls, to supporting structure as indicated.</div> <div>INSTALL HEADERS over wall openings wider than framing unit spacings. Locate headers above openings as indicated. Fasten top and bottom flanges of headers to wall framing and transfer load to supporting framing, complete with clip-angle connectors, web stiffeners, or gusset plates. Frame wall openings with not less than a doubled-unit at each jamb of frame. Fasten jamb members together to uniformly distribute loads. Install runner tracks and jack studs above and below wall openings. Anchor tracks to jamb studs with clip angles or by welding, and space jack studs same as full-height wall framing units.</div> <div>INSTALL SUPPLEMENTARY FRAMING, blocking, and bracing in wall framing indicated to support fixtures, equipment, services, casework, heavy trim, furnishings, and similar work requiring attachment to framing. If type of supplementary support is not indicated, comply with wall-framing manufacturer's written recommendations and industry standards in each case, considering weight or load resulting from item supported.</div> <div>INSTALL HORIZONTAL BRIDGING in stud system, spaced 48 inches minimum or as otherwise indicated on the Drawings, and fasten at each wall framing unit intersection. Provide a combination of flat, taut, steel sheet straps of width and thickness indicated and stud-track type solid units of width and thickness to match wall framing typically. Fasten flat straps to wall-framing unit flanges and secure solid blocking to framing-unit webs or flanges.</div> <div>INSTALL STEEL SHEET DIAGONAL BRACING STRAPS to both framing-unit flanges, terminate at and fasten to reinforced top and bottom tracks. Fasten clip-angle connectors to multiple framing-units at ends of bracing and anchor to structure.</div> <div>INSTALL MISCELLANEOUS FRAMING AND CONNECTIONS, including supplementary framing, web stiffeners, clip angles, continuous angles, anchors, and fasteners, to provide a complete and stable wall-framing system.</div> <div>NON-LOAD-BEARING CURTAIN-WALL INSTALLATION</div> <div>INSTALL CONTINUOUS TRACKS sized to match studs. Align tracks accurately and securely anchor to supporting structure as indicated. Fasten both flanges of studs to top and bottom track, unless otherwise indicated. Space studs as indicated.</div> <div>SET STUDS PLUMB, except as needed for diagonal bracing or required for non-plumb walls or warped surfaces and similar requirements.</div> <div>ISOLATE NON-LOAD-BEARING STEEL FRAMING from building structure to prevent transfer of vertical loads while providing lateral support. Connect vertical deflection clips to bypassing studs and anchor to primary building structure.</div> <div>INSTALL HORIZONTAL BRIDGING in curtain-wall studs, spaced in rows indicated on Shop Drawings but not more than 48 inches apart. Fasten at each stud intersection. Provide horizontal bridging of the following type:</div> <div>Cold-rolled steel channel, welded or mechanically fastened bridging, or to a webs of punched studs.</div> <div>Combination of flat, taut, steel sheet straps of width and thickness indicated and stud-track solid blocking of width and thickness to match studs. Fasten flat straps to stud flanges and secure solid blocking to stud webs or flanges.</div> <div>Top Bridging for Single Deflection Track: Install row of horizontal bridging within 12 inches of single deflection track. Install a combination of flat, taut, steel sheet straps of width and thickness indicated and stud or stud-track solid blocking of width and thickness matching studs. Fasten flat straps to stud flanges and secure solid blocking to stud webs or flanges.</div> <div>INSTALL MISCELLANEOUS FRAMING AND CONNECTIONS, including stud kickers, web stiffeners, clip angles, continuous angles, anchors, fasteners, and stud girts, to provide a complete and stable curtain-wall-framing system.</div> <div>JOIST INSTALLATION</div> <div>INSTALL PERIMETER JOIST TRACK sized to match joists. Align and securely anchor or fasten track to supporting structure at corners, ends, and spacings indicated on Shop Drawings.</div> <div>INSTALL JOISTS BEARING ON SUPPORTING FRAME, level, straight, and plumb; adjust to final position, brace, and reinforce. Fasten joists to both flanges of joist track. Install joists over supporting frame with a minimum end bearing of 1-1/2 inches. Reinforce ends and bearing points of joists with web stiffeners, end clips, joist hangers, steel clip angles, or steel-stud sections as indicated on Shop Drawings.</div> <div>SPACE JOISTS not more than 2 inches from abutting walls, and as indicated.</div> <div>FRAME OPENINGS WITH BUILT-UP JOIST HEADERS consisting of joist and joist track, nesting joists, or another combination of connected joists if indicated.</div> <div>INSTALL JOIST REINFORCEMENT at interior supports with single, short length of joist section located directly over interior support, with lapped joists of equal length to joist reinforcement, or as indicated. Install web stiffeners to transfer axial loads of walls above.</div> <div>SECURE JOISTS to load-bearing interior walls to prevent lateral movement of bottom flange.</div> <div>INSTALL MISCELLANEOUS JOIST FRAMING AND CONNECTIONS, including web stiffeners, closure pieces, clip angles, continuous angles, hold-down angles, anchors, and fasteners, to provide a complete and stable joist-framing assembly.</div>	<div>FIELD QUALITY CONTROL</div> <div>OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AGENCY to perform field quality-control testing. Testing agency will report test results promptly and in writing to Contractor and Architect. Testing will be performed for:</div> <div>Field and shop welds</div> <div>REMOVE AND REPLACE WORK that does not comply with specified requirements. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of corrected Work with specified requirements.</div> <div>REPAIRS AND PROTECTION</div> <div>GALVANIZING REPAIRS: Prepare and repair damaged galvanized coatings on fabricated and installed cold-formed metal framing with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.</div> <div>TOUCHUP PAINTING: Wire brush, clean, and paint scarred areas, welds, and rust spots on fabricated and installed prime-painted, cold-formed metal framing. Paint framing surfaces with same type of shop paint used on adjacent surfaces.</div> <div>PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS, in a manner acceptable to manufacturer and installer, that ensure cold-formed metal framing is without damage or deterioration at time of Substantial Completion.</div> <div>SECTION 05 50 00 - METAL FABRICATIONS</div> <div>PROVIDE metal fabrications where shown on the drawings and as specified herein.</div> <div>FIELD MEASUREMENTS: Check actual locations of walls and other construction to which metal fabrications must fit, by accurate field measurements before fabrication; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of work.</div> <div>MATERIALS: provide steel plate, shapes and bars meeting ASTM a36, steel pipe meeting ASTM a53, grade a schedule 40, and steel tube meeting ASTM a500. For materials that will be exposed to view, provide materials that are free from surface blemished, pitting, rolled trade names, and roughness.</div> <div>Fasteners shall be zinc-coated fasteners for exterior use or when built into exterior walls as follows:</div> <div>BOLTS AND NUTS: regular hexagon head type, ASTM A-307, grade a.</div> <div>LAG BOLTS: square head type, fs ff-b-541.</div> <div>MACHINE SCREWS: cadmium plated steel, fs ff-s-92.</div> <div>PLAIN WASHERS: round carbon steel fs ff-w-92.</div> <div>TOGGLE BOLTS: tumble wing type, fs ff-b-588, type, class and style as required.</div> <div>LOCK WASHERS: helical spring type carbon steel, fs ff-w-84.</div> <div>DRILLED-IN EXPANSION ANCHORS: expansion anchors complying with fs ff-s-325, group viii (anchors, expansion, [bracketed]), type i (internally threaded tubular expansion anchor) and machine bolts complying with fs ff-b-575, grade 5.</div> <div>ROUGH HARDWARE: furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels and other miscellaneous steel and iron shapes as required for framing, supporting or anchoring.</div> <div>SHOP PRIMER: manufacturer's standard rust-inhibiting primer; compatible with finish coats of paint. Coordinate selection of metal primer with finish paint requirements specified in division 9.</div> <div>FABRICATION AND INSTALLATION shall conform to the latest AISC specifications. Form work true to line and level with accurate angles and surfaces. Ease exposed edges to a radius of approx. 1/4" unless otherwise shown. Weld corners and seams continuously, coping connections, unless otherwise indicated. Grind exposed welds smooth and flush to match and blend with adjoining surfaces. Provide shop coat of red oxide primer and touchup at project site as required. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of type shown or, if not shown, Phillips flat-headed (countersunk) screws or bolts.</div> <div>PROTECT finishes of metalwork during construction period by use of temporary protective coverings. Remove protective covering at time of substantial completion. Restore finishes damaged during installation and construction period so that no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit or provide new units.</div> <div>ISOLATE non-load bearing metal framing to structure with double, deep-leg u-shaped nested steel tracks typically.</div> <div>SECTION 06 16 00 - SHEATHING</div> <div>WORK INCLUDED: Provide sheathing materials, including joint and penetration treatment, where indicated on the Drawings, as specified herein, and as necessary for complete installation.</div> <div>GLASS-MAT GYPSUM SHEATHING & SOFFITS: Provide material in compliance with ASTM C 1177 with glass mats both sides and on long edges, with water-resistant treated core. Provide "Dens-Glass Gold" by G-P Gypsum Corporation, in 1/2 inch thick minimum, or as otherwise indicated on the Drawings x 48 inch wide by maximum height feasible (up to 120 inches) to minimize horizontal joints.</div> <div>GLASS-MAT GYPSUM PRIMED ROOF-BOARD SHEATHING: (provide on back side of parapets in contact with roofing): Provide material in compliance with ASTM C 1177 with glass mats both sides and on long edges, with water-resistant treated core. Provide "Dens-Deck Prime" by G-P Gypsum Corporation, in 1/2 inch thick minimum, or as otherwise indicated on the Drawings x 48 inch wide by maximum height feasible to minimize horizontal joints.</div> <div>FASTENERS:</div> <div>PROVIDE FASTENERS in size and type that comply with requirements specified in this Article for material and manufacture, with hot-dip zinc coating complying with ASTM A 153 typically, and as follows:</div> <div>Nails, Brads, and Staples: ASTM F 1667.</div> <div>Power-Driven Fasteners: NES NER-272.</div> <div>Wood Screws: ASME B18.6.1.</div> <div>SCREWS FOR FASTENING WOOD SHEATING: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened. Provide screws with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117.</div> <div>SCREWS FOR FASTENING GYPSUM SHEATHING TO METAL FRAMING: Type S-12 bugle head self-tapping steel drill screws with fine thread for heavy-steel gage, in length recommended by sheathing manufacturer for thickness of sheathing board to be attached, with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117. For steel framing from 0.033 to 0.112 inch thick, attach sheathing to comply with ASTM C 954.</div> <div>JOINT SEALANT FOR GLASS-MAT GYPSUM SHEATHING: Silicone emulsion sealant complying with ASTM C 834, compatible with sheathing tape and sheathing, and recommended by tape and sheathing manufacturers for use with glass-fiber sheathing tape and for covering exposed fasteners. Provide Dow Corning 795, Pecosr 895, GE Silicone Silpruf Sealant, or Tremco Dymonic</div> <div>SHEATHING TAPE FOR GLASS-MAT GYPSUM SHEATHING: Self-adhering glass-fiber quick-tape, minimum 2 inches wide, 10 by 10 threads/inch, of type recommended by sheathing and tape manufacturers for use with silicone emulsion sealant in sealing joints in glass-mat gypsum sheathing board and with a history of successful in-service use.</div> <div>JOINT TREATMENT FOR GLASS-MAT GYPSUM SOFFITS: "G-P" Gypsum setting-type joint compound with 2" wide 10 x 10 glass mesh.</div> <div>DO NOT USE MATERIALS WITH DEFECTS that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement.</div> <div>CUT SHEATHING MATERIALS AT ALL PENETRATIONS, edges, and other obstructions of work; fit tightly against abutting construction, unless otherwise indicated.</div>	<div>SECURELY ATTACH to substrate by fastening as indicated, complying with the following: NES NER-272 for power-driven fasteners.</div> <div>Table 2304.9.1, "Fastening Schedule," in ICC's "International Building Code."</div> <div>COORDINATE SHEATHING INSTALLATION with flashing and joint-sealant installation requirements so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.</div> <div>WOOD SHEATHING PANEL INSTALLATION: Comply with applicable recommendations in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial," for types of structural-use panels and applications indicated. Comply with "Code Plus" installation provisions in guide referenced in paragraph above. Apply a continuous bead of glue to framing members at edges of wall sheathing panels. Screw to framing. Space panels 1/8 inch apart at edges and ends.</div> <div>GYPSUM SHEATHING & SOFFIT INSTALLATION:</div> <div>COMPLY WITH GA-253 and with manufacturer's written instructions. Fasten gypsum sheathing to cold-formed metal framing with screws. Install boards with a 3/8-inch gap where non-load-bearing construction abuts structural elements. Install boards with a 1/4-inch gap where they abut masonry or similar materials that might retain moisture, to prevent wicking. Apply fasteners so heads bear tightly against face of sheathing boards but do not cut into facing.</div> <div>INSTALL WITH VERTICAL EDGES of boards centered over studs to minimize horizontal joints to the greatest extent feasible. Abut ends and edges of each board with those of adjacent boards. Attach boards at perimeter and within field of board to each stud.</div> <div>SPACE FASTENERS approximately 8 inches o.c., and set back a minimum of 3/8 inch from edges and ends of boards. For sheathing under self-furring metal lath, boards may be initially lapped in place with screws if overlying metal lath is screw-attached through sheathing to studs immediately after sheathing is installed.</div> <div>SHEATHING JOINT-AND-PENETRATION TREATMENT</div> <div>COMPLY WITH MANUFACTURER'S written instructions for installation of joint and penetration treatment.</div> <div>GLASS-MAT GYPSUM SHEATHING: Apply glass-fiber sheathing joint tape to glass-mat gypsum sheathing board joints, and apply and trowel silicone emulsion sealant to embed entire face of tape in sealant. Apply sealant to all fastener heads with a trowel so fasteners are completely covered. Seal other penetrations and openings.</div> <div>FINISH GLASS-MAT GYPSUM SOFFITS by applying joint tape over all joints and embed tape in setting-type joint compound as recommended by the manufacturer. Skim-coat the full exposed soffit area with setting-type joint compound for a smooth, flat, finish, ready for painting.</div>	<div>THIS DRAWING has been prepared by the Architect, or prepared under his direct supervision and on behalf of the Architect, and is intended for use only on this project. All Drawings, Specifications, Ideas and design, including the overall layout form, arrangement, and composition of spaces and elements portrayed, constitute the original unpublished Work of the Architect. Any reproduction, use, or disclosure of the information contained herein without the written consent of the Architect is strictly prohibited.</div> <div>© KLOVER ARCHITECTS, INC.</div> <div>THE ARCHITECT DISCLAIMS responsibility for the existing building structure, the conditions, existing construction elements, or any documents, drawings or other information used for any part of this Project which do not bear the Architect's seal. The Architect's services are undertaken only in the interest of the Project Owner. No obligation is assumed by the Architect for the benefit of any other entity. RELATED DOCUMENTS: This Drawing is a single component of an integrated set of Construction Documents. General and Supplementary Conditions of the Contract, General Requirements, Specifications and other Drawings may also be referenced. Failure to review and integrate the design intent of the whole of the Construction Documents does not relieve the Contractor from providing a complete Project. COMPLY WITH all laws, codes, ordinances and regulations with authority having jurisdiction and with requirements of the Landlord, if applicable. Do not start Work until all permits and required approvals are obtained. VERIFY ALL CONDITIONS and dimensions prior to construction. Completion of Work constitutes verification and acceptance of all existing conditions. Application of a material or equipment item in Work installed by others constitutes acceptance of that Work, and assumption of responsibility for satisfactory installation. DIMENSIONS SHOWN are to finish face of a material unless otherwise indicated. CALCULATE & MEASURE dimensions - DO NOT SCALE drawings unless otherwise directed.</div> <div>project title</div> <div>project number</div> <div>23034.001</div> <div>drawing issuance</div> <div>ISSUED FOR PERMIT 06/15/23</div> <div>drawing revisions</div> <div>No. Description: Date:</div> <div>professional seal</div> <div></div> <div>Date Signed JUN 15 2023</div> <div>DATE SIGNED: 6/16/2023 8:38:08 AM</div> <div>drawing title</div> <div>SPECIFICATIONS</div> <div>drawing number</div> <div>SP004</div>
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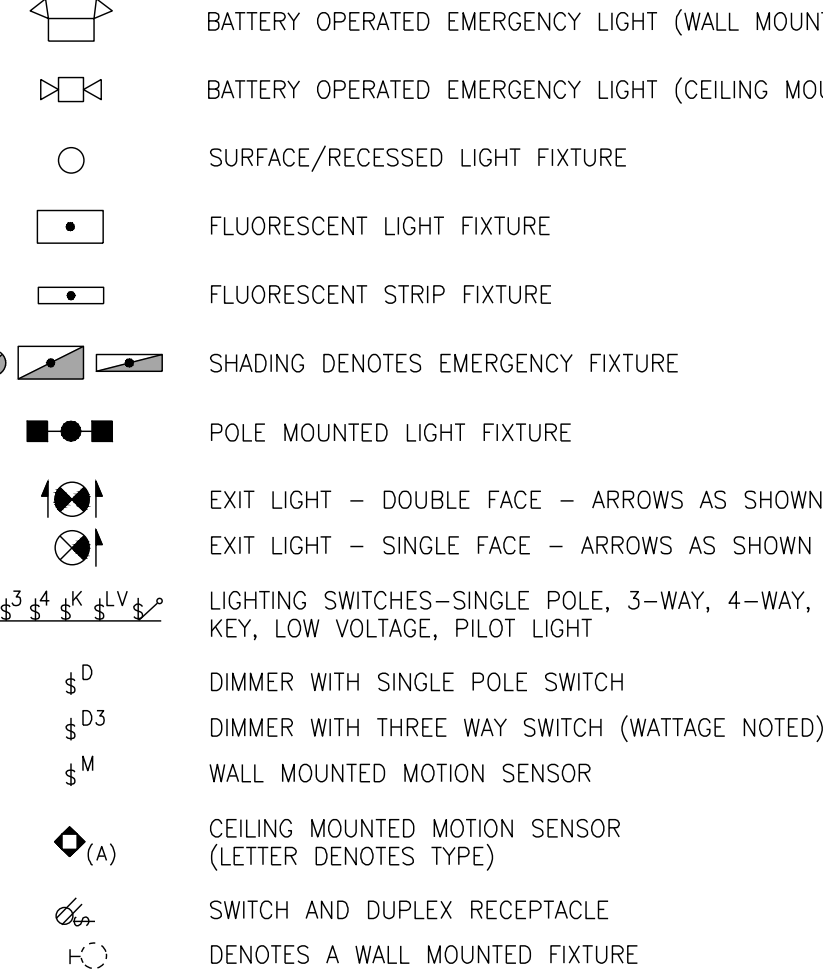
<div>SECTION 09 21 16 - GYPSUM BOARD ASSEMBLIES</div> <div>PROVIDE SCREW-TYPE GYPSUM DRYWALL WITH METAL FRAMING SYSTEM(S) WHERE INDICATED ON THE DRAWINGS, AS SPECIFIED HEREIN, AND AS NEEDED TO MEET THE REQUIREMENTS OF THE CONSTRUCTION SHOWN IN THE CONTRACT DOCUMENTS.</div> <div>METAL STUD FRAMING: PROVIDE ASTM C 445 metal studs of 0.015 minimum steel thickness with double-helix ribbing (dieflich ultrassteel) or 0.0179 inch thickness (25 gage) for typical flat-sheet steel units x 3-5/8" depth unless otherwise noted. Provide runners matching studs, of type recommended by stud manufacturer for floor and ceiling support of studs, and for vertical abutment of drywall work at other work.</div> <div>TOP-OF-WALL DEFLECTION TRACK: provide deflection track assembly at all interior partitions to prevent compression of stud framing or cracking of gypsum board resulting from deflection of the structure above. Provide astm c 445 steel-sheet top-runner units of base metal thickness matching stud thickness with minimum 2-inch deep flange legs or other equivalent system.</div> <div>TYPICAL GYPSUM WALLBOARD: ASTM C 1396 compliant type x (fire resistant) with tapered long edges, 5/8" thickness, except where otherwise indicated, in maximum length available which will minimize end joints.</div> <div>WATER-RESISTANT GLASS-MAT GYPSUM BACKING BOARD (BEHIND ALL WALL TILE AND TILE BASE): 5/8" thick "denshield" fireguard by georgia-pacific in 4 foot wide panels by maximum length possible, complying with astm c 1396 and mold-resistant per astm d 3273, with glass mats both sides and tapered on long edges, with water-resistant treated core. Provide type s-12, bugle head, self-tapping, rust-resistant, fine thread panel anchors.</div> <div>JOINT TREATMENT AT WATER-RESISTANT BACKING BOARD: "dow corning" 795, "pecora" 895, "ge" silicone slipruf sealant, or "tremco" dymonic joint sealer with 2" wide 10 x 10 glass mesh quick tape or equivalent, and finish with "g-p" gypsum setting-type joint compound</div> <div>TRIM ACCESSORIES: provide manufacturer's standard trim accessories of types indicated for drywall work, formed of galvanized steel unless otherwise indicated, with either knurled and perforated or expanded flanges for nailing and beaded for concealment of flanges in joint compound. Provide corner beads, l-type edge trim-beads, u-type edge trim-beads, special l-kerf-type edge trim-beads. Stapling of trim accessories will not be permitted.</div> <div>CONTROL JOINTS: provide 2 - standard l-type edge trim beads, in lieu of manufacturer's standard one-piece control joint beads.</div> <div>JOINT COMPOUND: ASTM C 475; on interior work provide single, multi-purpose grade, ready-mixed vinyl-type, with perforated type paper joint tape.</div> <div>GYPSUM BOARD FASTENERS: gypsum board screws: ASTM C 1002.</div> <div>MISCELLANEOUS MATERIALS: provide auxiliary materials for gypsum drywall work of the type and grade recommended by the manufacturer gypsum boards.</div> <div>INSTALLATION</div> <div>PREPARATION FOR METAL SUPPORT SYSTEMS: coordinate work with structural ceiling work to ensure that inserts and other structural anchorage provisions have been installed to receive ceiling hangers. Furnish steel deck hanger clips and similar devices to other trades for installation well in advance of time needed for coordination with other work.</div> <div>INSTALLATION OF WALL/PARTITION SUPPORT SYSTEMS: install supplementary framing, blocking and bracing to support fixtures, equipment, services, heavy trim, furnishings and similar work which cannot be adequately supported on gypsum board alone.</div> <div>Isolate stud system from transfer of structural loading to system, both horizontally and vertically. Provide slip or cushioned type joints to attain lateral support and avoid axial loading. Install runner tracks at floors, ceilings and structural walls and columns where gypsum drywall stud system abuts other work, except as otherwise indicated. Terminate partition stud system at ceilings, except where indicated to be extended to structural support or substrate above.</div> <div>Space studs 16" o.c., except as otherwise indicated. Provide runner tracks of same material thickness as jamb studs. Space jack studs same as partition studs.</div> <div>AT DOOR OPENINGS, frame with 2 each 0.0329 inch (20 gage) studs extending to structural support above at both jambs, securely attached by screws either directly to door frames or to jamb anchor clips on door frame. Install runner track sections (for jack studs) at head and secure to jamb studs.</div> <div>FRAME OPENINGS OTHER THAN DOOR OPENINGS in same manner as required for door openings; and install framing below sills of openings to match framing required above door heads.</div> <div>INSTALL supplementary framing, runners, furring, blocking and bracing at opening and terminations in the work, and at locations required to support fixtures, equipment, services, heavy trim, furnishings and similar work which cannot be adequately supported directly on gypsum board alone.</div> <div>INSTALL exterior gypsum sheathing in accordance with manufacturer's instructions and applicable instructions in g-253 and ASTM c 1280, with "gold" side out. Use maximum lengths possible to minimize number of joints. Attach sheathing to metal framing with screws spaced 8" o.c. at perimeter where there are framing supports; and 8" o.c. along intermediate framing in field. Drive fasteners to bear tight against and flush with surface of sheathing. Do not countersink. Locate fasteners minimum 3/8" from edges and ends of sheathing panels. Seal all fasteners and all joints with sealant, and apply reinforcing mesh over all joints with additional sealant applied over mesh.</div> <div>GENERAL GYPSUM BOARD INSTALLATION REQUIREMENTS:</div> <div>INSTALL insulation where indicated, prior to gypsum board unless readily installed after board has been installed. Locate exposed end-butt joints as far from center of walls and ceilings as possible, and stagger not less than 1'-0" in alternate courses of board. Install ceiling boards in the direction and manner which will minimize the number of end-butt joints, and which will avoid end joints in the central area of each ceiling. Stagger end joints at least 1'-0".</div> <div>INSTALL WALL/PARTITION BOARDS vertically to avoid end-butt joints wherever possible. At stairwells and similar high walls, install boards horizontally with end joints staggered over studs.</div> <div>INSTALL EXPOSED GYPSUM BOARD WITH FACE SIDE OUT. Do not install imperfect, damaged or damp boards. Butt boards together for a light contact at edges and ends with not more than 1/16" open space between boards. Do not force into place.</div> <div>LOCATE either edge or end joints over supports, except in horizontal applications or where intermediate supports or gypsum board black-blocking is provided behind end joints. Position boards so that both tapered edge joints abut, and mill-cut or field-cut end joints abut. Do not place tapered edges against cut edges or ends. Stagger vertical joints over different studs on opposite sides of partitions.</div> <div>ATTACH gypsum board to framing and blocking as required for additional support at openings and cutouts. Form control joints and expansion joints with space between edges of boards, prepared to receive trim accessories. Cover both faces of steel stud partition framing with gypsum board in concealed spaces (above ceilings, etc.), except in chase walls which are properly braced internally.</div> <div>Isolate perimeter of non-load-bearing drywall partitions at structural abutments. Provide 1/4" to 1/2" space and trim edge with j-type semi-finishing edge trim. Seal joints with acoustical sealant. Do not fasten drywall directly to stud system runner tracks.</div> <div>Space fasteners in gypsum boards in accordance with referenced standards and manufacturer's recommendations. On partitions/walls apply gypsum board vertically (parallel), unless otherwise indicated, and provide sheet lengths which will minimize end joints. Fasten gypsum board supports with screws.</div> <div>DIRECT-BONDING TO SUBSTRATE: where necessary to install gypsum board adhered directly to a substrate (other than studs, joints, furring members or base layer of gypsum board), comply with gypsum board manufacturers recommendations, and temporarily brace or fasten gypsum board until fastening adhesive has set.</div>	<div>INSTALLATION of drywall trim accessories: where feasible, use the same fasteners to anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges by nailing in accordance with manufacturer's instructions and recommendations. Install metal corner beads at external corners of drywall work.</div> <div>INSTALL METAL EDGE TRIM whenever edge of gypsum board would otherwise be exposed or semi-exposed. Provide type with face flange to receive joint compound. Install l-type trim where work is tightly abutted to other work, and install special kerf-type where other work is kerfed to receive long leg of l-type trim. Install u-type where edge is exposed, revealed, gasketed, or sealant-filled (including expansion joints).</div> <div>INSTALL METAL CONTROL JOINTS above both sides of all door frames, and as otherwise required not to exceed a 30'-0" maximum uninterrupted surface.</div> <div>INSTALLATION OF DRYWALL FINISHING: apply treatment of gypsum board joints (both directions), flanges of trim accessories, penetrations, fasteners heads, surface defects and elsewhere as required to prepare work for decoration. Prefill open joints and rounded or beveled edges, using type of compound recommended by manufacturer. Apply joint tape at joints between gypsum boards, except where a trim accessory is indicated. Apply joint compound in three (3) coats (not including prefill of openings in base), and sand between last two (2) coats and after last coat. At water-resistant gypsum board base for ceramic tile, tape and finish joints with two (2) coats water-resistant joint material.</div> <div>PARTIAL FINISHING: omit third coat (if specified) and sanding on concealed drywall work which is indicated for drywall finishing or which requires finishing to achieve fire resistance rating, sound rating or to act as air or smoke barrier. Refer to sections on painting, coating and wall-coverings in division 9 for decorative finishes to be applied to drywall work.</div> <div>FINISH GYPSUM BOARD TO LEVELS INDICATED BELOW, ACCORDING TO ASTM C 840, FOR LOCATIONS INDICATED:</div> <div>LEVEL 1 FINISH (TYPICAL AT CONCEALED AREAS): EMBED TAPE AT JOINTS IN CEILING PLENUM OR OTHER CONCEALED AREAS</div> <div>LEVEL 4: (TYPICAL EXPOSED GYPSUM-BOARD FINISH): EMBED TAPE AND APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES AT PANEL SURFACES THAT WILL BE EXPOSED TO VIEW, UNLESS OTHERWISE INDICATED. FINISH WATER-RESISTANT, GLASS-MAT GYPSUM BACKING BOARD TO COMPLY WITH GYPSUM BOARD MANUFACTURER'S DIRECTIONS</div> <div>PROTECTION OF WORK: installer shall advise contractor of required procedures for protecting gypsum drywall work from damage and deterioration during remainder of construction period.</div> <div>SECTION 09 91 00 - PAINTING</div> <div>WORK INCLUDES surface preparation and painting or finishing of interior exposed to view, throughout the Project and in accordance with requirements herein. Except where a natural finish or a material is specifically noted as a surface not to be painted, paint all exposed surfaces whether or not painting is designated in the drawings. Where items or surfaces are not specifically mentioned, paint the same as similar adjacent materials or areas.</div> <div>PAINTING NOT REQUIRED: Unless otherwise indicated, painting is not required on plastic laminate, prefinished sheet metal, plumbing fixtures, electrical equipment (excluding exposed distribution cabinet(s) or electrical devices. Painting is not required on surfaces such as walls or ceilings in concealed or inaccessible areas. Metal surfaces of anodized aluminum, stainless steel, chromium plate and similar finished materials will not require finish painting, except as otherwise indicated in the finish hardware schedule. Do not paint over code-required labels or equipment identification labels.</div> <div>PROVIDE PRIMERS and undercoat paints produced by the same manufacturer as the finish coats. Use only thinners approved by paint manufacturer, and use only within recommended limits.</div> <div>PREPARE surfaces and apply coatings in strict accordance with the coating manufacturer's recommendations.</div> <div>USE ONLY SKILLED painters for mixing and applying paint. Quality workmanship is required. In the acceptance or rejection of finish painting, no allowance will be made for the painter's lack of skill or inadequate lighting during painting operations.</div> <div>JOB CONDITIONS: Apply paints only when temperature of surfaces to be painted and surrounding air temperatures are within recommended range permitted by the paint manufacturer's printed instructions. Do not apply paint when relative humidity exceeds 85%, or to damp or wet surfaces.</div> <div>PRODUCT STANDARDS & QUALITY: Comply with Master Painters Institute (MPI) standards indicated and provide products as listed in "MPI Approved Products List" available at www.paintinfo.com. Provide best quality grade of various types of coatings indicated as regularly manufactured by listed paint materials manufacturers. Materials not displaying manufacturers identification as a standard, best-grade product will not be acceptable.</div> <div>SURFACE PREPARATION: Clean surfaces of dirt, rust, scale, grease, moisture, or other conditions otherwise detrimental to formation of a durable paint film. Perform preparation and cleaning procedures in accordance with paint manufacturer's printed instructions for each particular substrate condition.</div> <div>REMOVE hardware, accessories, plates, lighting fixtures, and similar items in place and not to be finish-painted, or provide surface-applied protection prior to surface preparation and painting operations. Remove, if necessary, for complete painting of items and adjacent surfaces. Following completion of painting of each space or area, reinstall removed items.</div> <div>CLEAN NONGALVANIZED FERROUS-METAL SURFACES that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council.</div> <div>TOUCH UP SHOP-APPLIED PRIME COATS that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.</div> <div>MATERIALS PREPARATION: Carefully mix and prepare paint materials in accordance with manufacturer's directions. Maintain containers used in mixing and application of paint in a clean condition, free of foreign materials and residue. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using. Use only thinners approved by the paint manufacturer, and only within recommended limits.</div> <div>APPLICATION: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied. Use applicators and techniques best suited for substrate and type of material being applied. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.</div> <div>SCHEDULING: Apply first-coat material to surfaces that have been cleaned, pretreated or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.</div> <div>APPLY PAINT to completely cover previously painted surfaces, to provide an opaque, smooth surface of uniform finish, color, appearance and coverage. Cloudiness, spotting, holidays, lap marks, brush marks, runs, sags, ropiness or other surface imperfections will not be acceptable.</div> <div>THE NUMBER OF COATS and film thickness required is the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce an even smooth surface in accordance with the manufacturer's directions.</div>	<div>APPLY ADDITIONAL PAINT coats when undercoats, stains or other conditions show through final coat of paint, until paint film is of uniform finish, color and appearance. Give special attention to insure that surfaces, including edges, corners, crevices, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.</div> <div>MINIMUM COATING THICKNESS: Apply materials at not less than the manufacturer's recommended spreading rate. Provide a total dry film thickness of the entire system as recommended by the manufacturer.</div> <div>PRIME COATS: Before application of finish coats, apply a prime coat of material as recommended by the manufacturer to material that is required to be painted or finished and has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to assure a finish coat with no burn through or other defects due to insufficient sealing.</div> <div>FIELD QUALITY CONTROL: The Owner reserves the right to engage the services of an independent testing laboratory to sample the paint material being used. Samples of material delivered to the project may be taken, identified, sealed, and certified in the presence of the Contractor. The testing laboratory will perform appropriate tests as required by the Owner. If test results show material being used does not comply with specified requirements, the Contractor may be directed to stop painting, remove noncomplying paint, pay for testing, repaint surfaces coated with rejected paint, and remove rejected paint from previously painted surfaces if, upon repainting with specified paint, the two coatings are noncompatible.</div> <div>CLEAN-UP: During the progress of the Work, remove from site discarded paint materials, rubbish, cans and rags at end of each work day. Upon completion of painting Work, clean window glass and other paint-spattered surfaces. Remove spattered paint or otherwise damage finish surfaces. Touchup and restore all damaged or defaced painted surfaces after completion of Work of other trades.</div> <div>PROTECT work of other trades, whether to be painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Owner. Provide "wet paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.</div> <div>PAINT MATERIALS SCHEDULE: (RE: www.paintinfo.com <http://www.paintinfo.com> for MPI's "Approved Product List")</div> <div>EXTERIOR PAINT FINISHES:</div> <div>EXTERIOR DRYWALL SOFFITS: FLAT ACRYLIC LATEX: Primer: MPI # 6 2 Finish Coats: MPI # 10</div> <div>EXTERIOR ZINC-COATED METAL: SEMI-GLOSS ALKYD ENAMEL: Primer: MPI # 134 2 Finish Coats: MPI # 47</div>	<div>THIS DRAWING has been prepared by the Architect, or prepared under its direct supervision and on instrument of service and is intended for use only on this project. All Drawings, Specifications, ideas and design, including the overall layout, form, arrangement, and composition of spaces and elements portrayed, constitute the original unpublished Work of the Architect. Any reproduction, use, or disclosure of the information contained herein without the written consent of the Architect is strictly prohibited.</div> <div>© KLOVER ARCHITECTS, INC.</div> <div>THE ARCHITECT DISCLAIMS responsibility for the existing building structure, site conditions, existing construction elements, or any documents, drawings or other instruments used to any part of this Project which do not bear the Architect's seal. The Architect's services are undertaken only in the interest of the Project Owner. No obligation is assumed by the Architect for the benefit of any other entity. REBID DOCUMENTS: This drawing is a single component of an integrated set of Construction Documents. General and Supplementary Conditions of the Contract, General Requirements, Specifications and other Drawings may affect the work described. Failure to review and integrate the design intent of the whole of the Construction Documents does not relieve the Contractor from providing a complete Project. COMPLY WITH all laws, codes, ordinances and regulations with authority having jurisdiction and with requirements of the Landlord, if applicable. Do not start Work until all permits and required approvals are obtained. VERIFY ACTUAL CONDITIONS and dimensions prior to construction. Commencement of work constitutes verification and acceptance of all existing conditions. Application of a material or equipment item to Work initiated by others constitutes acceptance of that Work, and assumption of responsibility for subsequent installation. DIMENSIONS SHOWN are to finish face of a material unless otherwise indicated. CALCULATE & MEASURE dimensions - DO NOT SCALE drawings unless otherwise directed.</div> <div>project title</div> <div>project number</div> <div>202304001</div> <div>drawing issuance</div> <div>ISSUED FOR PERMIT</div> <div>06/15/2023</div> <div>drawing revisions</div> <div>No. Description: Date:</div> <div>professional seal</div> <div><div>STATE OF MISSOURI</div><div>ARCHITECT</div><div>SEAL</div></div> <div>Date Signed</div> <div>JUN 15 2023</div> <div>DATE SIGNED: 6/15/2023 5:32:51 PM</div> <div>drawing title</div> <div>SPECIFICATIONS</div> <div>drawing number</div> <div>SP005</div>

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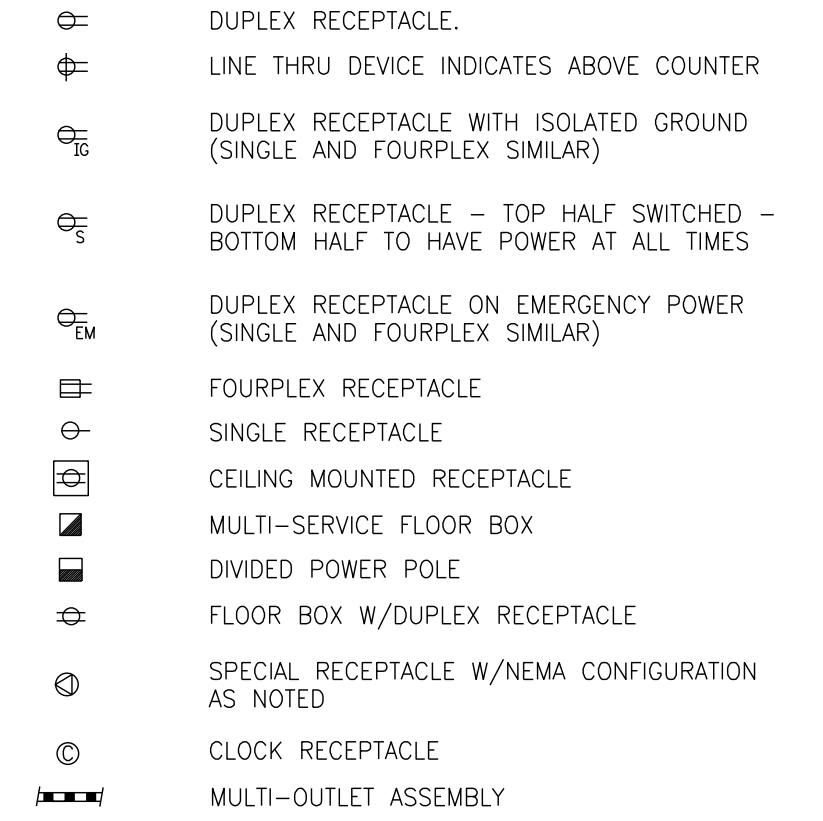
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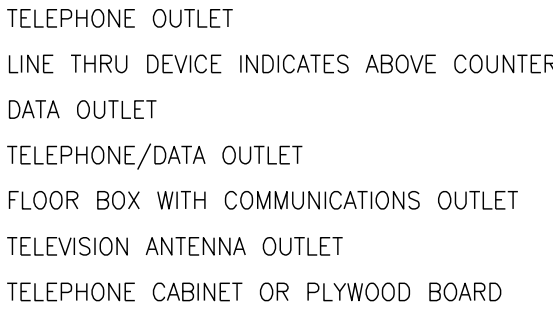
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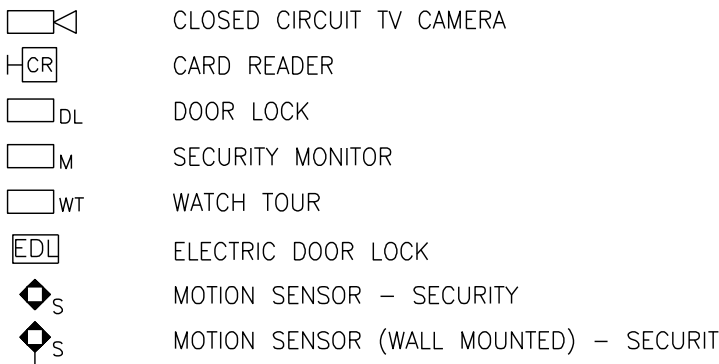
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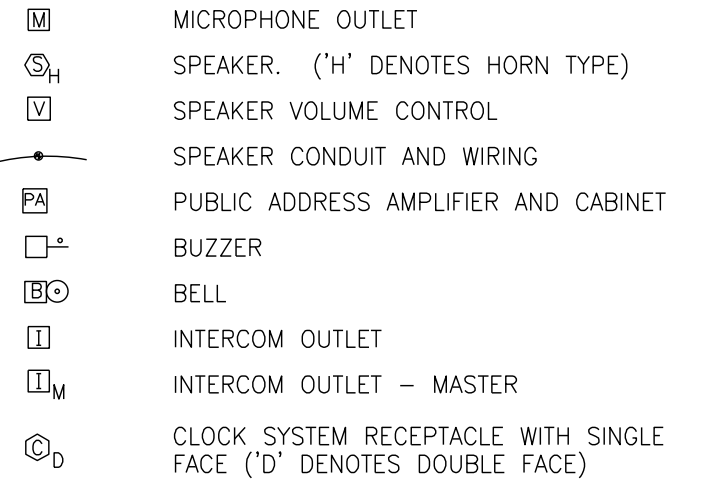
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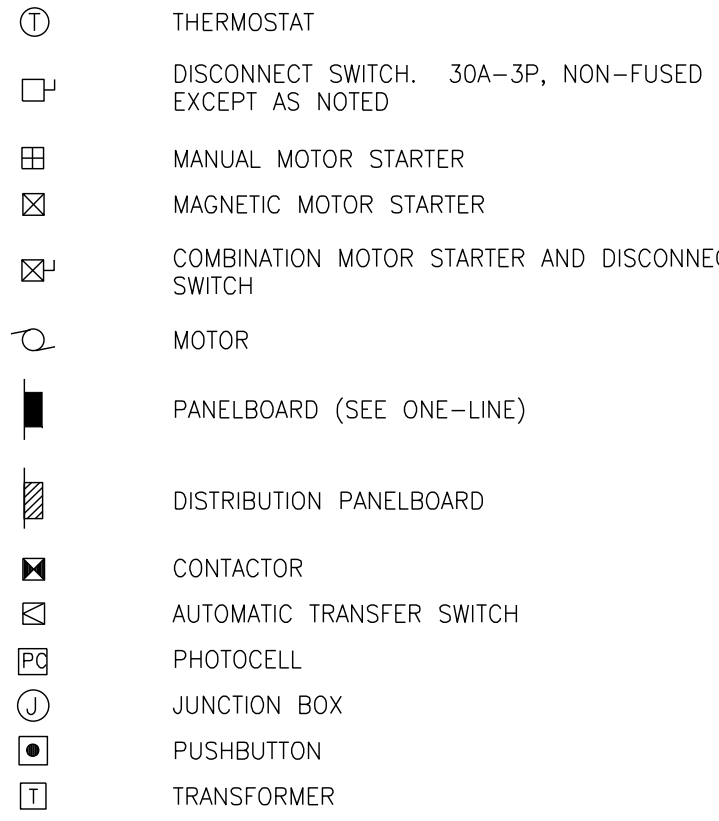
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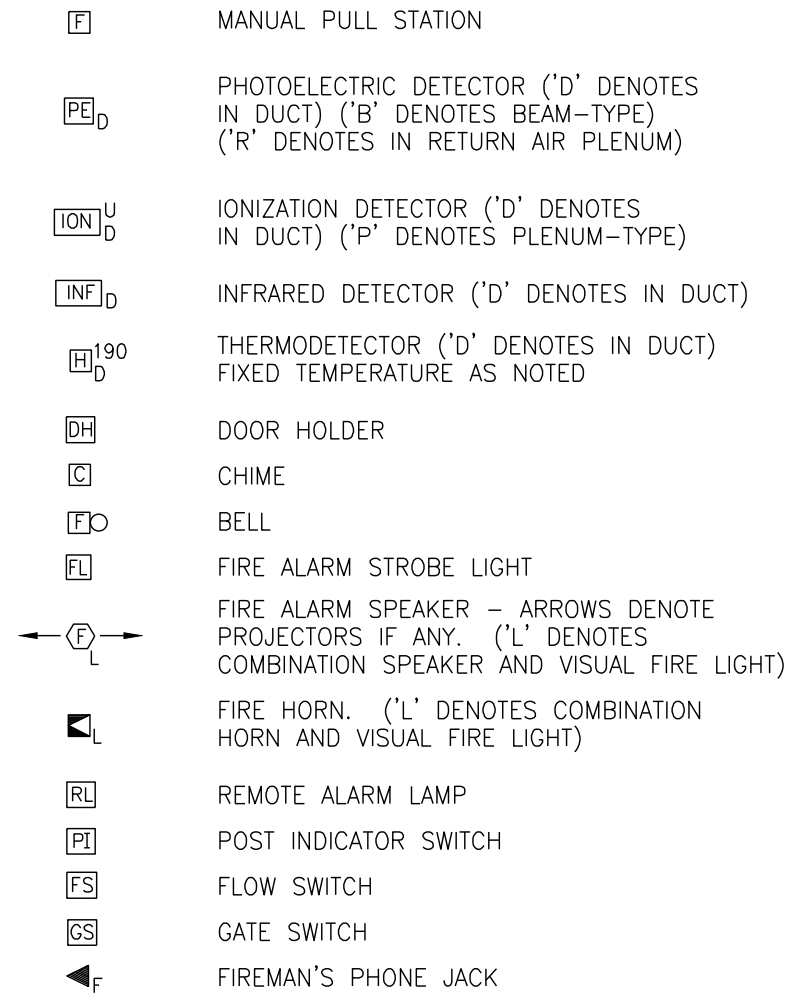
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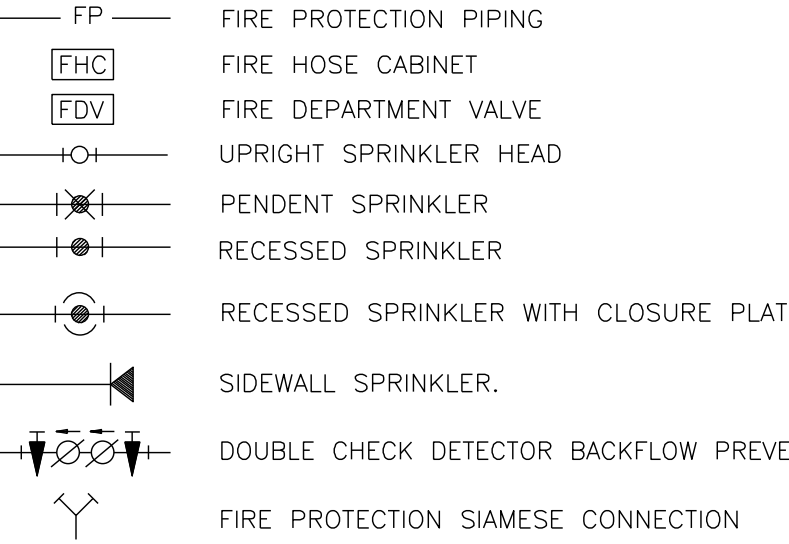
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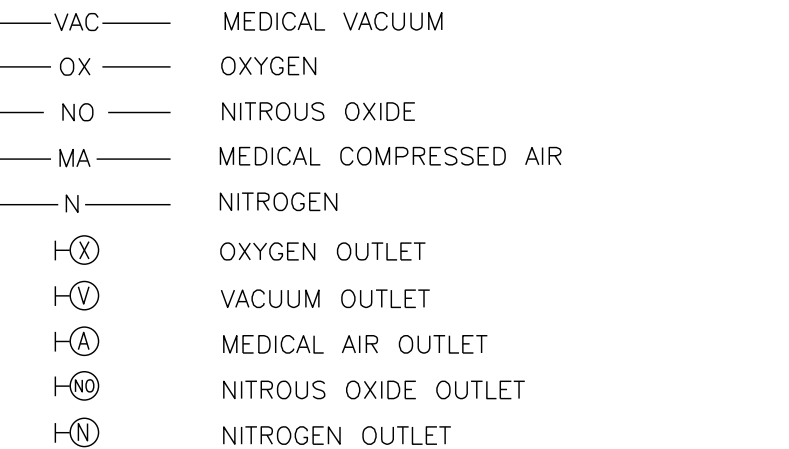
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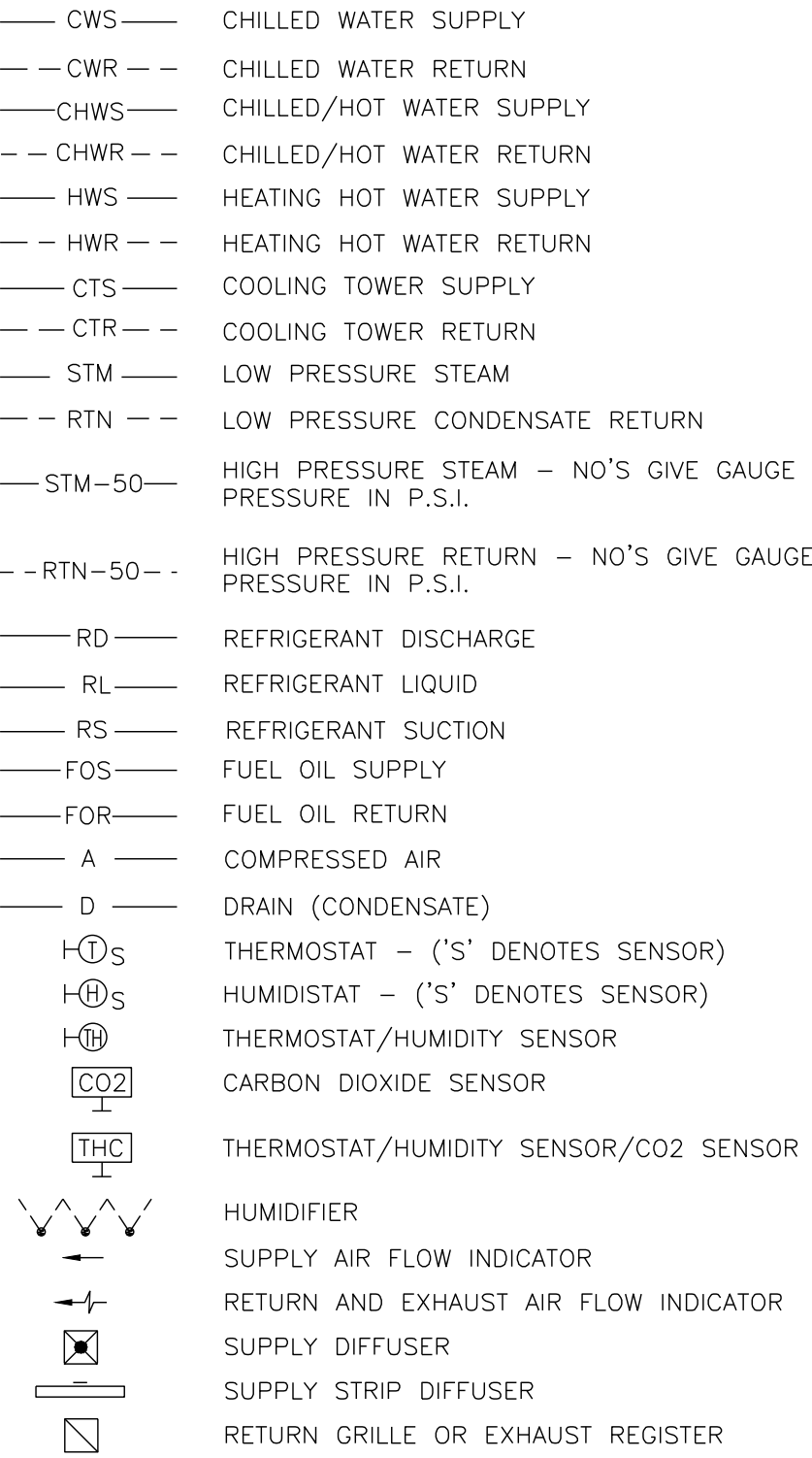
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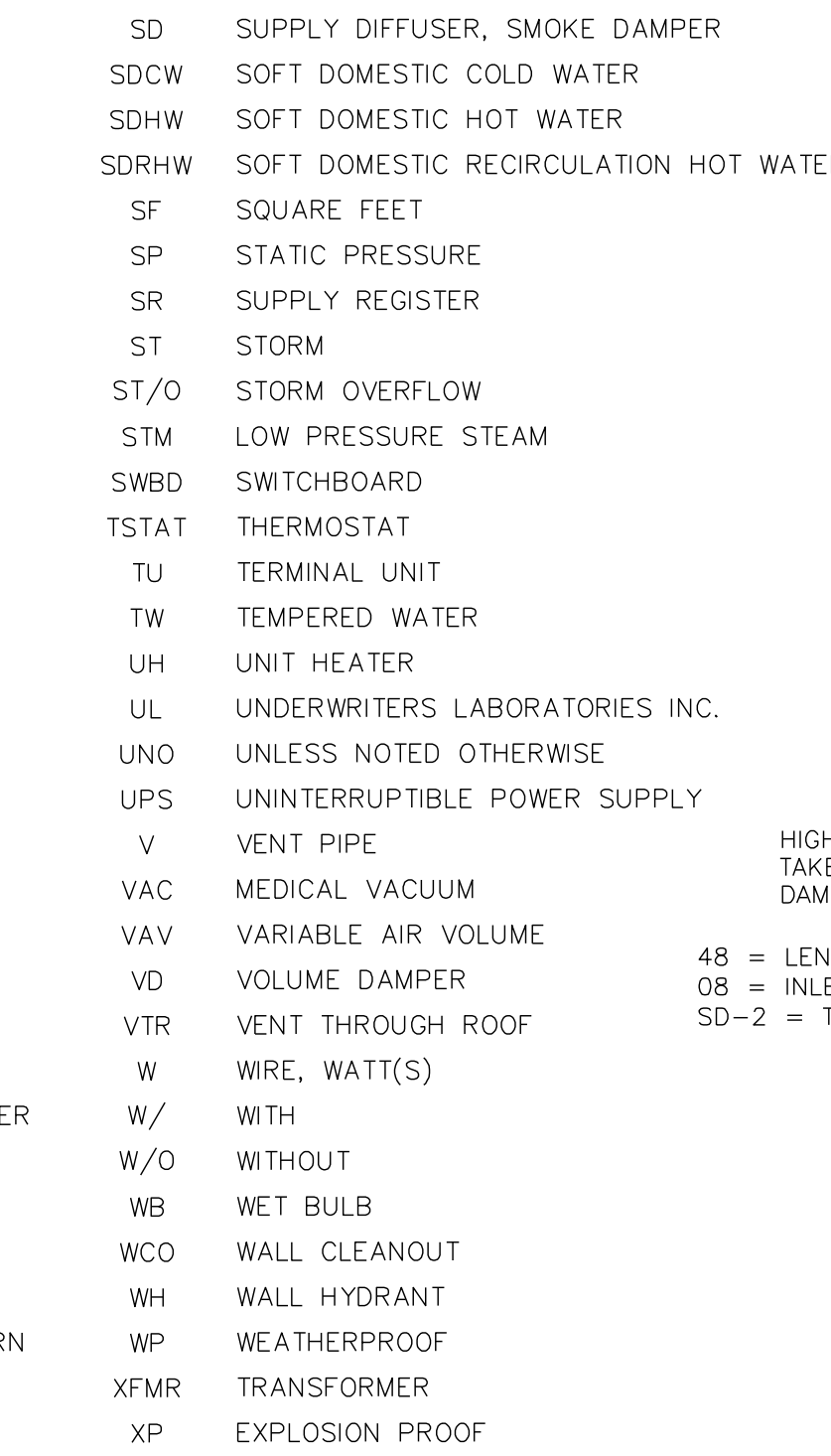
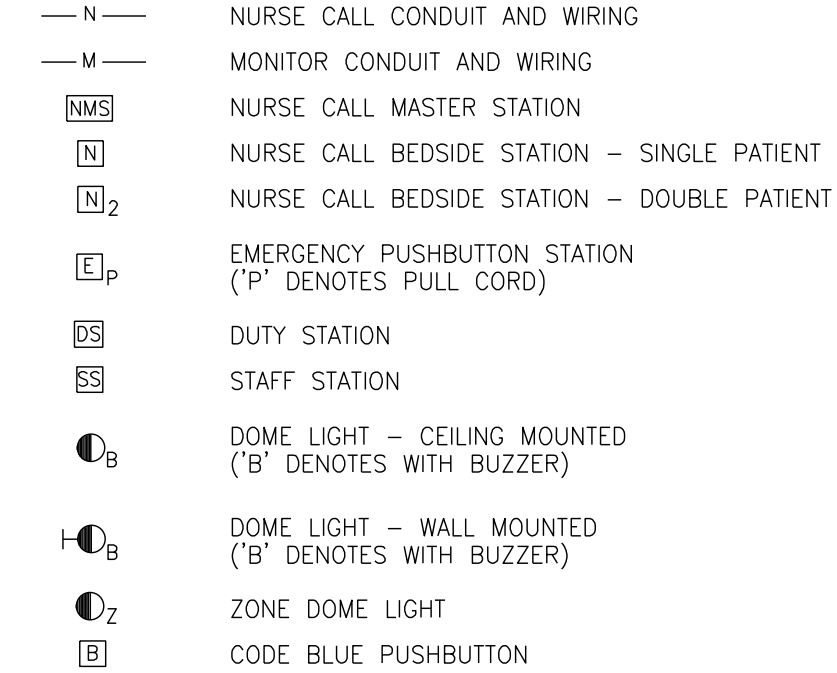
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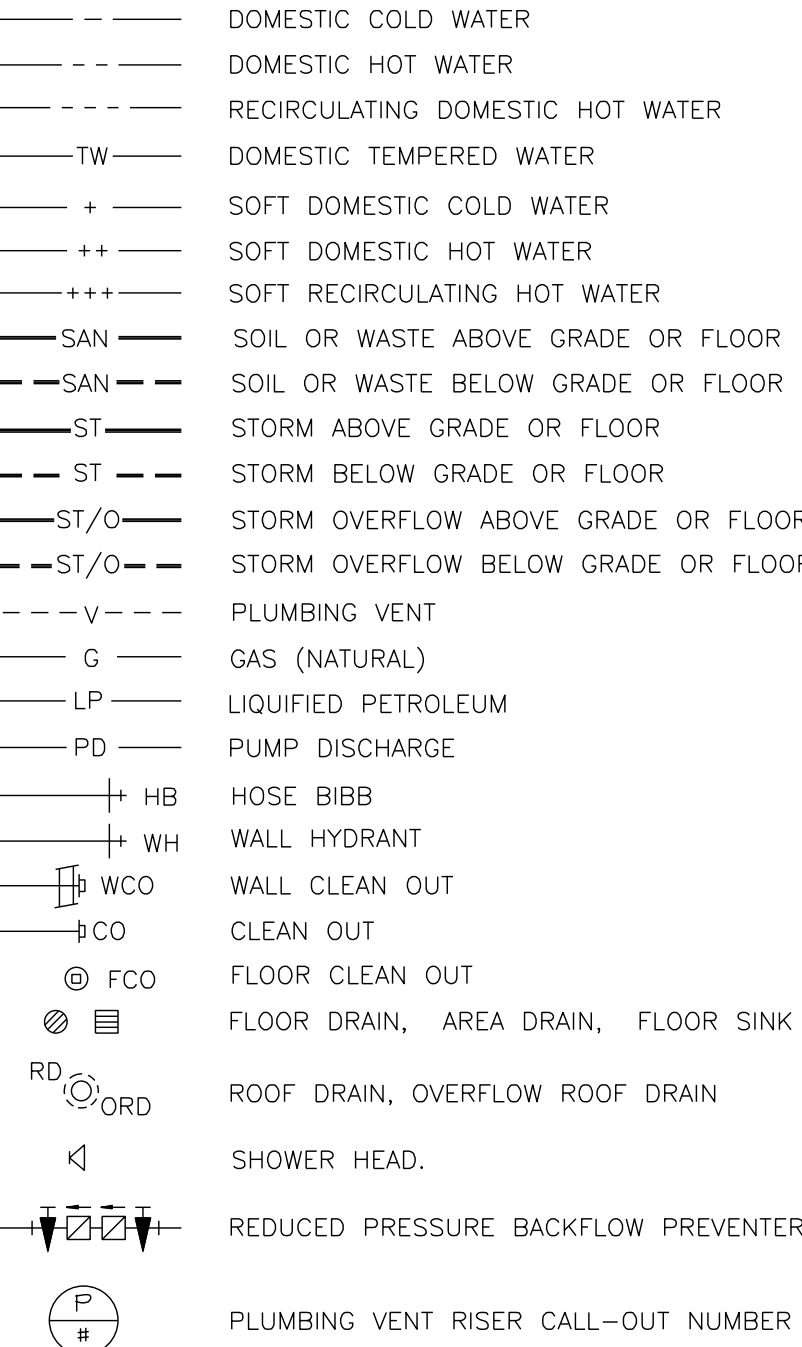
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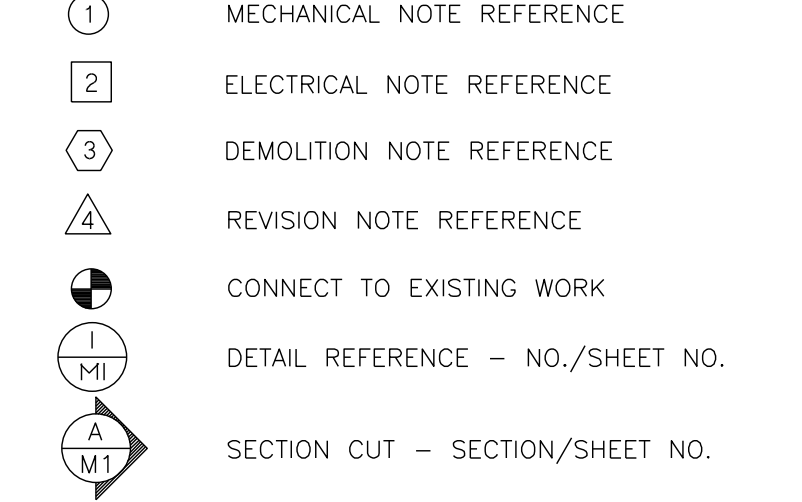
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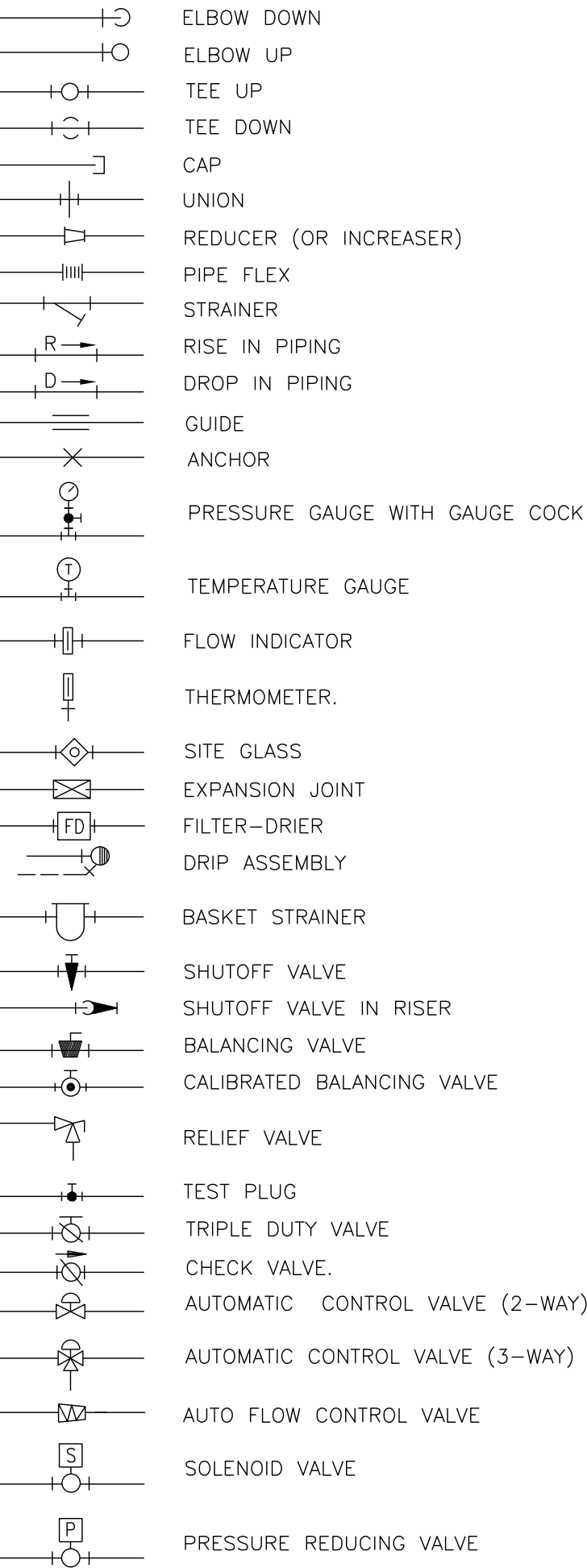
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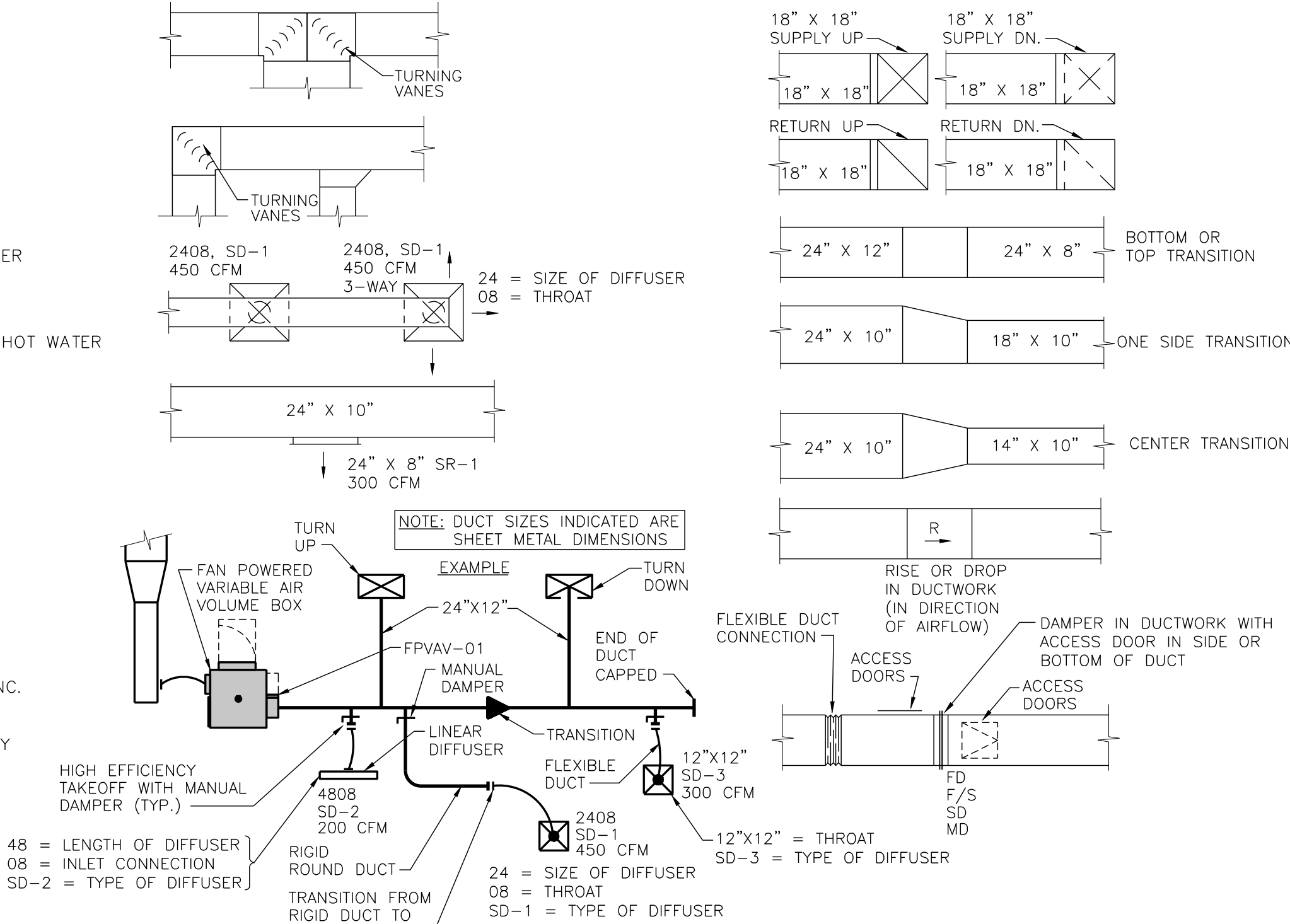
GENERAL



PIPING



DUCTWORK



MECHANICAL AND ELECTRICAL SYMBOLS AND ABBREVIATIONS

"SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED. REFER TO FLOOR PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

project number

Project Number

drawing issuance

Permit Set

06/14/23

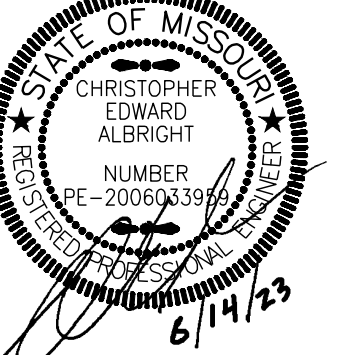
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DATE SIGNED: 06/14/2023

drawing title

drawing number

ME101



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project title

RED DEVELOPMENT
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Lee's Summit, MO 64086

project number

Project Number

drawing issuance

Permit Set

06/14/23

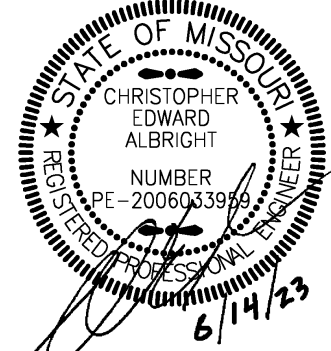
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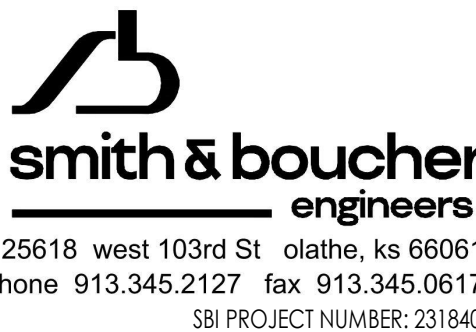
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drawing title

MECHANICAL AND ELECTRICAL - ROOF PLAN

drawing number

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MECHANICAL AND ELECTRICAL ROOF PLAN

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PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER/ MODEL	DESCRIPTION	FITTINGS		PIPING CONNECTIONS				
			MANUFACTURER/ MODEL	DESCRIPTION	NOTES	CW	HW	SAN	VENT
S-1	ELKAY LWSB252264N	ADA COMPLIANT SINGLE BOWL, UNDERMOUNT, 16 GAUGE, TYPE 304 STAINLESS STEEL, 30-1/2" X 18-1/2" X 8" DEEP, REAR CENTER DRAIN	MOEN 87912SRS	HIGH ARC SPOUT, REFLEX PULLDOWN FAUCET WITH BRAIDED HOSE, SWING FAUCET SPOUT, SINGLE HOLE FAUCET DECK MOUNTED WITHOUT PLATE.	1, 2, 3, 4	1/2"	1/2"	2"	1-1/2"

NOTES:


- 1: PROVIDE CHROME PLATED BRASS TAILPIECE AND GRID DRAIN.
2: PROVIDE CHROME PLATED BRASS P-TRAP.
3: PROVIDE 1/4 TURN SHUT OFF VALVES AND FLEXIBLE RISERS.
4: INSULATE EXPOSED TAILPIECE, P-TRAP, AND WATER RISERS. COVER TAILPIECE, P-TRAP, AND ANY EXPOSED WASTE AND VENT PIPING WITH CROME COVER. REFER TO SPECIFICATIONS FOR INSULATION METHODS.

PIPING MATERIAL SCHEDULE - PLUMBING

APPLICATION	SIZE	LOCATION	PIPE MATERIAL
DOMESTIC WATER	2" AND SMALLER	ABOVE GROUND	HARD COPPER TUBE, ASTM B88, TYPE L; CAST OR WROUGHT COPPER SOLDER-JOINT FITTINGS; AND BRAZED JOINTS. OR CPVC PIPE; CPVC SOCKET FITTINGS; AND SOLVENT-CEMENTED JOINTS. OR PEX-A PIPE AND FITTINGS (FOR USE INSIDE DWELLING UNITS ONLY; NOT INTENDED FOR BUILDING MAINS). PEX-B PIPE AND FITTINGS NOT ALLOWED.
SOIL/WASTE/VENT	ALL SIZES	BELOW GROUND	HUBLESS, CAST-IRON SOIL PIPE AND FITTINGS; HEAVY-DUTY CAST-IRON HUBLESS- PIPING COUPLINGS; AND COUPLED JOINTS. OR SOILD WALL SCHEDULE 40 PVC PIPE; PVC SOCKET FITTINGS, AND SOLVENT- CEMENTED JOINTS.
SOIL/WASTE/VENT	ALL SIZES	ABOVE GROUND	HUBLESS, CAST-IRON SOIL PIPE AND FITTINGS; HEAVY-DUTY CAST-IRON HUBLESS- PIPING COUPLINGS; AND COUPLED JOINTS. OR SOILD WALL SCHEDULE 40 PVC PIPE; PVC SOCKET FITTINGS, AND SOLVENT- CEMENTED JOINTS. PVC SHALL NOT BE INSTALLED WITHIN RETURN AIR PLENUMS UNLESS FULLY ENCAPSULATED WITH PLENUM RATED MATERIAL.

PIPE INSULATION SCHEDULE - PLUMBING

SERVICE	PIPE SIZE	INSULATION
DOMESTIC COLD WATER	1/2" - 2"	1/2" FIBERGLASS, ASJ
DOMESTIC HOT WATER	ALL	1" FIBERGLASS, ASJ
RECIRCULATING HOT WATER		
TEMPERED WATER		



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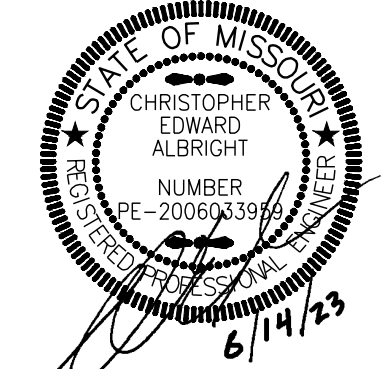
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PART 1 - GENERAL REQUIREMENTS - HVAC AND PLUMBING

1.1 SUMMARY OF WORK

- A. THE CONTRACT DOCUMENTS REQUIRE THE FURNISHING AND INSTALLING OF COMPLETE FUNCTIONING MECHANICAL SYSTEMS, AND EACH ELEMENT THEREOF, AS SPECIFIED OR INDICATED IN THE CONTRACT DOCUMENTS OR REASONABLY INFERRED, TO COMPLETELY CONSTRUCT AND LEAVE READY FOR OPERATION THE SYSTEMS AS SHOWN ON THE DRAWINGS AND HEREIN DESCRIBED, INCLUDING EVERY ARTICLE, DEVICE OR ACCESSORY, WHETHER OR NOT SPECIFICALLY CALLED FOR BY ITEM. ELEMENTS OF THE WORK INCLUDE MATERIALS, LABOR, SUPERVISION, SUPPLIES, EQUIPMENT, TRANSPORTATION, AND UTILITIES.
- B. SPECIFICATIONS AND DRAWINGS ARE COMPLEMENTARY AND WHAT IS CALLED FOR IN ONE SHALL BE AS BINDING AS IF CALLED FOR BY BOTH.
- C. ALL WORK PERFORMED UNDER THIS SECTION SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER BY EXPERIENCED MECHANICS OF THE PROPER TRADE.

1.2 COORDINATION, MEASUREMENTS AND LAYOUTS

- A. THE CONTRACTOR SHALL INSPECT THE SITE WHERE THIS WORK IS TO BE PERFORMED AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS RELATED TO THIS PROJECT.
- B. THE CONTRACTOR SHALL EMPLOY A COMPETENT FOREMAN ON THE JOB TO SEE THAT WORK IS DONE IN ACCORDANCE WITH THE BEST PRACTICES AND IN A SATISFACTORY AND WORKMANLIKE MANNER. THE FOREMAN SHALL KEEP INFORMED AS TO THE WORK OF OTHER TRADES ENGAGED IN THE CONSTRUCTION OF THE PROJECT, AND SHALL EXECUTE HIS WORK IN SUCH A MANNER AS NOT TO INTERFERE WITH OR DELAY THE WORK OF OTHER TRADES.
- C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. WHERE LOCAL CONDITIONS NECESSITATE A REARRANGEMENT, THE CONTRACTOR SHALL PREPARE, AND SUBMIT FOR APPROVAL, DRAWINGS OF THE PROPOSED REARRANGEMENT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING ALL OF HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, FURNISHING SUCH OFFSETS, FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSION.

1.3 PERMITS AND FEES

- A. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES AND SHALL MAKE ALL DEPOSITS AND PAY ALL FEES REQUIRED FOR THE PERFORMANCE OF WORK UNDER THIS SECTION, OTHER THAN THOSE DEPOSITS OR FEES WHICH ARE FULLY REFUNDABLE TO THE OWNER.

1.4 SUBMITTALS, MATERIALS AND EQUIPMENT

- A. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE SPECIFIED HEREIN, FREE FROM DEFECTS AND OF THE BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE.
- B. AS SOON AS POSSIBLE AFTER THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT FOR REVIEW SIX COPIES OF SHOP DRAWINGS FOR ALL EQUIPMENT TO BE FURNISHED FOR THIS PROJECT. SUBMITTALS SHALL INCLUDE MANUFACTURER'S NAME, MODEL NUMBER, DESCRIPTIVE ENGINEERING DATA AND ALL NECESSARY INFORMATION AS TO FINISH, MATERIAL GAUGES AND ACCESSORIES. AFTER SUCH SHOP DRAWINGS ARE PROCESSED, THREE COPIES WILL BE RETURNED TO THE CONTRACTOR. THE CONTRACTOR SHALL, UPON RECEIPT OF REVIEWED SHOP DRAWINGS PROCEED WITH THE PROCUREMENT AND INSTALLATION OF SUCH EQUIPMENT.

1.5 CODES, LAWS, AND STANDARDS

- A. ALL WORK SHALL BE INSTALLED IN COMPLIANCE WITH ALL GOVERNING CODES, APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES OR STATUTES OF REGULATORY BODIES HAVING JURISDICTION. THE WORK SHALL BE EXECUTED IN ACCORDANCE WITH SAID LAWS, REGULATIONS, ORDINANCES, STATUTES OR CODES, WITHOUT INCREASED COST TO THE OWNER. ANY POINT IN QUESTION SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL. WORK INDICATED ON THE DOCUMENTS THAT IS IN EXCESS OF CODE REQUIREMNTS SHALL NOT BE REDUCED IN QUALITY AND/OR QUANTITY.
- B. COMPLY WITH RULES AND REGULATIONS OF PUBLIC UTILITIES AND MUNICIPAL DEPARTMETNS AFFECTED BY CONNECTIONS OF SERVICES.

1.6 RECORD DOCUMENTS

- A. THIS CONTRACTOR SHALL PREPARE A COMPLETE "AS-BUILT" SET OF DRAWINGS INCORPORATING ALL CHANGES MADE DURING CONSTRUCTION. LOCATION OF UNDERGROUND PIPING SHALL BE LOCATED BY DIMENSION FROM COLUMN LINES.
- B. THIS CONTRACTOR SHALL PREPARE AND SUBMIT TO THE OWNER'S REPRESENTATIVE FIVE BOUND SETS OF OPERATING AND MAINTENANCE MANUALS INCLUDING FINAL COPIES OF EQUIPMENT SHOP DRAWINGS, MANUFACTURER'S LITERATURE FOR ALL EQUIPMENT INSTALLED ON THE PROJECT SHOWING ALL DETAILS OF EQUIPMENT, REPLACEMENT PART DATA AND MAINTENANCE AND OPERATING INSTRUCTIONS. MANUALS SHALL INCLUDE COPIES OF ALL EQUIPMENT WARRANTIES.

1.7 GUARANTEES AND WARRANTIES

- A. THE CONTRACTOR SHALL GUARANTEE COMPLETE SYSTEM OPERATION AND THAT THE MATERIAL AND EQUIPMENT FURNISHED AND INSTALLED WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND WILL GIVE SATISFACTORY SERVICE UNDER THE SPECIFIED OPERATING CONDITIONS. THE CONTRACTOR AGREES TO REPLACE, WITHOUT EXPENSE TO THE OWNER, ANY PART OF THE APPARATUS WHICH PROVES OR BECOMES DEFECTIVE WITHIN ONE YEAR AFTER THE SYSTEM IS ACCEPTED. NO EQUIPMENT WARRANTY OR GUARANTEE SHALL START UNTIL THE TIME OF BUILDING ACCEPTANCE.
- B. ALL WARRANTIES ISSUED BY EQUIPMENT MANUFACTURERS SHALL BE FILLED OUT IN THE OWNER'S NAME AND GIVEN TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF WORK PERFORMED UNDER THIS SECTION.

1.8 FINAL INSPECTION

- A. AFTER COMPLETION OF THE ENTIRE PROJECT THE CONTRACTOR SHALL REQUEST FINAL INSPECTION OF THIS PROJECT IN WRITTEN FORM ADDRESSED TO THE ARCHITECT ALONG WITH A STATEMENT TO THE EFFECT THAT ALL INSTALLATIONS HAVE BEEN COMPLETED, CHECKED, ADJUSTED AND BALANCED IN ACCORDANCE WITH REQUIREMENTS OF THIS PROJECT. UPON RECEIPT OF WRITTEN NOTIFICATION OF COMPLETION AND REQUEST FOR FINAL INSPECTION THE ENGINEER WILL PERFORM A FINAL INSPECTION OF THIS WORK AND, IF ALL INSTALLATIONS ARE AS REPRESENTED BY THE CONTRACTOR, THE ENGINEER WILL SUBMIT WRITTEN RECOMMENDATION OF ACCEPTANCE.

1.9 CLEANING

- A. DIRT AND REFUSE RESULTING FROM THE PERFORMANCE OF THE WORK SHALL BE REMOVED TO KEEP THE PREMISES REASONABLE CLEAN AT ALL TIMES.
- B. AFTER COMPLETION OF THE WORK DESCRIBED IN THIS SPECIFICATION AND SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED SURFACES AND EQUIPMENT, REMOVE ALL DIRT, DEBRIS, CRATING, CARTONS, ETC., AND LEAVE ALL INSTALLATIONS FINISHED AND READY FOR OPERATION.

1.10 OPENINGS AND SLEEVES

- A. IN FIRE RATED WALLS: CAULKING SHALL BE A PURE CERAMIC FIBER MADE OF ALUMINA-SILICA, "CERAFIBER-FS" BY JOHNS-MANVILLE. SEALANT SHALL BE GUN GRADE, AN ACRYLIC 2-PART GUN APPLIED, FIRE RETARDANT ELASTIC SEALANT, "DYMERIC" BY TREMCO OR EQUAL BY PERMATITE NO. 1113FR.
1. LIMIT THE SIZE OF THE SPACE BETWEEN THE WALL OR FLOOR AND THE OUTSIDE OF THE PIPE OR DUCT TO 1 INCH MAXIMUM. THIS SPACE IS SUFFICIENT TO ALLOW SOME MOVEMENT OF THE PIPES OR DUCT WITHOUT CRACKING THE CAULKING OR SEALANT.
2. FOR OPENINGS IN WALLS, THE CAULKING SHALL BE APPLIED TO A MINIMUM OF 3 INCH TOTAL DEPTH. SEALANT SHALL THEN BE APPLIED ON BOTH SIDES OF THE WALL OPENING A MINIMUM OF 1/2 INCH IN DEPTH, FINISHED FLUSH WITH THE WALL. D.

1.11 CUTTING AND PATCHING

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CUTTING OF WALLS, FLOORS, CEILINGS AND ROOFS REQUIRED FOR PERFORMANCE OF HIS WORK.
- B. NO STRUCTURAL MEMBER SHALL BE CUT WITHOUT PERMISSION FROM THE ARCHITECT.
- C. PATCH ALL OPENINGS TO MATCH ADJACENT CONSTRUCTION IN BOTH MATERIAL AND FINISH.
- D. ALL CUTTING OF EXISTING CONCRETE FLOORS/SLABS ON GRADE IN THE INTERIOR OF THE BUILDING SHALL BE PERFORMED BY "SAW CUTTING" AND SHALL BE PERFORMED BY THIS CONTRACTOR.

1.12 DEMOLITION AND NEW WORK

- A. THE CONTRACTOR SHALL DO ALL DEMOLITION, ALTERATIONS AND REWORK INDICATED AND/OR REQUIRED TO MAINTAIN THE OPERATION OF ALL EXISTING HVAC SYSTEMS AND TO INTEGRATE THE NEW SYSTEMS IN THE RENOVATED BUILDING AS REQUIRED. THE CONTRACTOR SHALL INCLUDE ALL WORK WHICH MAY BE REQUIRED TO ALTERATIONS AND DEMOLITION WORK. THIS SHALL INCLUDE ALL REMOVAL, RELOCATION AND REWORKING OF PIPING, ITEMS OF HVAC EQUIPMENT, ETC. EXISTING SYSTEMS AND NEW SYSTEMS SHALL BE COMPLETELY INTEGRATED AS INTENDED AND AS INDICATED ON THE PLANS AND IN THE SPECIFICATIONS.
- B. THE CONTRACTOR SHALL REMOVE FROM THE PREMISES AND DISPOSE OF PROPERLY ALL EXISTING MATERIAL AND EQUIPMENT WHICH NO LONGER SERVES A PURPOSE IN ALTERED AREAS. THE CONTRACTOR SHALL REMOVE UNUSED DUCTWORK AND PIPING. REMOVE PIPING CONNECTED TO EQUIPMENT BACK TO MAIN AND CAP. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN SERVICES TO ALL EXISTING AREAS REQUIRING SUCH SERVICES. THE CONTRACTOR SHALL REROUTE AS REQUIRED SUCH SERVICES WHEN ARE DISRUPTED DUE TO ARCHITECTURAL CHANGES IN THE EXISTING STRUCTURE. ANY EQUIPMENT WHICH IS DESIGNATED TO BE REUSED AND WHICH IS DAMAGED IN THE PROCESS SHALL BE REPLACED BY THE CONTRACTOR WITH NEW EQUIPMENT OF LIKE KIND AT NO COST TO THE OWNER.

1.13 INTERRUPTION OF SERVICES

- A. THE CONTRACTOR SHALL SCHEDULE ANY SERVICE INTERRUPTIONS TO THE EXISTING BUILDING WITH THE OWNER'S REPRESENTATIVE. SUCH INTERRUPTIONS SHALL BE PLANNED SO AS TO BE AT TIMES TO CAUSE THE LEAST INCONVENIENCE AND INTERRUPTION TO THE FACILITY'S SCHEDULE.

1.14 EXISTING CONDITIONS

- ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS FOR THIS PROJECT HAVE BEEN DETERMINED FROM AVAILABLE DRAWINGS AND FIELD INVESTIGATIONS. CONTRACTORS MAKING PROPOSALS FOR THIS WORK SHALL INVESTIGATE ALL EXISTING CONDITIONS AND BASE THEIR PROPOSALS ON THEIR OBSERVATIONS TO PROVIDE COMPLETE AND FUNCTIONING INSTALLATIONS IN ACCORDANCE WITH THE INTENT OF THE DRAWING AND SPECIFICATIONS FOR THIS PROJECT AND ALL APPLICABLE GOVERNING CODES, RULES, REGULATIONS AND ORDINANCES. FAILURE TO DETERMINE EXISTING CONDITIONS WHICH CAUSE ADDITIONAL WORK WILL NOT CONSTITUTE GROUNDS FOR ADDITIONAL COMPENSATION.

PART 2 - HEATING, VENTILATING AND AIR CONDITIONING

2.1 GENERAL REQUIREMENTS

- A. SEE PART 1 FOR GENERAL REQUIREMENTS.

2.2 SHEET METAL DUCTWORK

- A. SHEET METAL DUCTS AND CONNECTIONS SHALL BE CONSTRUCTED OF G90 GALVANIZED SHEETS OF MILD STEEL. THE DUCTS SHALL BE CONSTRUCTED TO THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) STANDARDS. SEE PLANS FOR DUCTWORK SCHEDULE.
- B. DUCT SECTIONS SHALL BE JOINED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION AND REQUIREMENTS OF THE BUILDING CODE HAVING JURISDICTION.
- C. DUCT DIMENSIONS SHOWN ARE SHEET METAL DIMENSIONS AND DO NOT NEED TO BE ADJUSTED FOR INSULATION/LINING.
- D. CURVED ELBOWS SHALL BE CONSTRUCTED WITH INSIDE RADIUS NOT LESS THAN THE DUCT WIDTH IN THE SAME PLANE. SQUARE ELBOWS SHALL HAVE TURNING VANES. TURNING VANES SHALL BE DESIGNED IN ACCORDANCE WITH ASHRAE RECOMMENDATIONS. MANUFACTURED VANES SHALL BE BY ITTUS OR APPROVED EQUAL.
- E. CROSSBREAK ALL DUCTWORK SURFACES OVER 18 INCHES IN WIDTH.
- F. FULL AREAS SHALL BE MAINTAINED IN TRANSITIONS WHERE A CHANGE IN THE CONFIGURATION OF THE DUCT OCCURS. ALL TAPERING JOINTS SHALL BE REDUCED GRADUALLY.
- G. JOINTS IN DUCTS SHALL BE MADE PRACTICALLY AIRTIGHT AND ANY OPEN CORNER SHALL BE NEATLY PATCHED AND SOLDERED TIGHT. DUCT TAPE WILL NOT BE ACCEPTED AS A JOINT PATCH. LOW PRESSURE SYSTEM DUCT LEAKAGE SHALL NOT EXCEED 2%.
- H. CONCEALED ROUND DUCTS SHALL BE CONSTRUCTED TO SMACNA 2" W.G. STANDARDS WITH GROOVED LONGITUDINAL SEAMS AND SLEEVED TYPE TRANSVERSE JOINTS.
- I. EXPOSED ROUND DUCTS SHALL BE CONSTRUCTED TO SMACNA 10" W.G. STANDARDS, SPIRAL LOCK SEAM DUCT AND FITTINGS.

2.3 FLEXIBLE DUCT

- A. FLEXIBLE DUCTS SHALL BE UL181 CLASS THERMAFLEX M-KE, OR APPROVED EQUAL, SHALL NOT BE LONGER THAN 8 FEET AND SHALL NOT HAVE ANY AIR FLOW OBSTRUCTION.

2.4 DUCTWORK SUPPORTS

- A. ALL HORIZONTAL DUCTS SHALL BE SUPPORTED WITH HANGERS SPACED NOT MORE THAN 8'-0" APART. HANGERS FOR DUCTS SMALLER THAN 31 INCHES SHALL CONSIST OF 22 GAUGE GALVANIZED STEEL STRAPS SECURELY FASTENED TO THE DUCT AND THE BUILDING CONSTRUCTION. DUCTS OVER 31 INCHES IN WIDTH SHALL BE HUNG WITH 1/4 INCH STEEL ANGLE ON THE BOTTOM OF THE DUCT SUPPORTED WITH STEEL RODS OF APPROPRIATE SIZE SECURELY FASTENED TO THE BUILDING STRUCTURE. ALL SUPPORTS TO MEET SMACNA STANDARDS.

2.5 DUCTWORK INSULATION

- A. SEE PLANS FOR DUCTWORK INSULATION SCHEDULE. ALL INSULATED DUCTWORK SHALL BE INSULATED WITH 1-1/2 INCH THICK, 1.5 POUND PER CUBIC FOOT DENSITY, CERTAIN-TEED DUCT WRAP INSULATION FACED ON ONE SIDE WITH .002 INCH ALUMINIUM FOIL WITH A 2 INCH TAB, OR EQUAL PRODUCTS BY MANVILLE, KNAUF INSULATION, OR OWENS CORNING UNLESS NOTED OTHERWISE ON THE DRAWINGS. INSULATION SHALL BE APPLIED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- B. ALL INSULATION SHALL BE UL LISTED; FLAME SPREAD/FUEL CONTRIBUTED/SMOKE DEVELOPED RATING OF 25/50/50 OR LESS IN ACCORDANCE WITH ASTM E84, NFPA 255 AND UL 723.

2.6 GRILLES, REGISTERS, DIFFUSERS AND LOUVERS

- A. FURNISH AND INSTALL ALL GRILLES, REGISTERS, DIFFUSERS AND LOUVERS AS SHOWN AND DESCRIBED ON THE DRAWINGS OR COMPARABLE PRODUCTS OF TITUS OR PRICE.
- B. THE CONTRACTOR SHALL INFORM THE GENERAL CONTRACTOR OF THE REQUIREMENTS FOR OPENING SIZES AND FRAMING FOR ALL EQUIPMENT AND SHALL COORDINATE THE INSTALLATION OF ALL SUCH EQUIPMENT WITH THE STRUCTURAL REQUIREMENTS OF THIS PROJECT.

2.7 START-UP/TESTING, ADJUSTING, BALANCING

- A. THE CONTRACTOR SHALL COMPLETE ALL EQUIPMENT INSTALLATIONS, CHECK ALL CONTROL WIRING, START UP AND ADJUST ALL EQUIPMENT AND PLACE ALL SYSTEMS IN OPERATION.
- B. AFTER COMPLETION AND START-UP OF ALL SYSTEMS THE CONTRACTOR SHALL ARRANGE FOR TESTING, ADJUSTING AND BALANCING OF ALL AIR SYSTEMS.
- C. TESTING, ADJUSTING AND BALANCING OF ALL AIR SYSTEMS SHALL BE PERFORMED IN COMPLETE ACCORDANCE WITH NEBB OR SMACNA STANDARDS.
- D. UPON COMPLETION OF TESTING, ADJUSTING AND BALANCING, A COMPLETE REPORT OF ALL FINDINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE OF THIS PROJECT. THREE COPIES OF THE REPORT SHALL BE PROVIDED.

2.8 DAMPERS

- A. VOLUME BALANCING DAMPERS SHALL BE RUSKIN CD-35/CDR-25 OR APPROVED EQUAL. THE DAMPERS SHALL BE CONSTRUCTED OF 16 GAUGE GALVANIZED STEEL, 6 INCH WIDE OPPOSED BLADES AND THE LINKAGE CONCEALED IN FRAME.

2.9 PAINTING: (SEE ARCHITECTURAL SECTION "PAINTING")

- A. PAINTING, EXCEPT AS SPECIFIED HEREIN, SHALL BE DONE BY OTHERS.
- B. EQUIPMENT WHICH HAS DAMAGED FINISH SHALL BE REPAINTED TO MATCH THE ORIGINAL FACTORY FINISH.
- C. ALL EXPOSED FERROUS METAL FURNISHED UNDER THIS CONTRACT, SUCH AS HANGERS, STRUTS, STRUCTURAL STEEL, ETC., SHALL BE GIVEN ONE COAT OF TNEEC GRAY PRIMER.

PART 3 - PLUMBING

3.1 GENERAL REQUIREMENTS

- A. SEE PART 1 FOR GENERAL REQUIREMENTS.

3.2 PIPING INSTALLATION

- A. ENDS OF PIPE SHALL BE REAMED AND ALL BURRS REMOVED BEFORE INSTALLATION. PIPING SHALL BE CUT ACCURATELY TO MEASUREMENTS TAKEN ON THE JOB AND SHALL BE INSTALLED WITH AMPLE CLEARANCE FOR INSTALLATION OF COVERINGS.
- B. AT LEAST ONE PIPE UNION SHALL BE INSTALLED ADJACENT TO ALL VALVES THAT ARE SCREWED. HOT AND COLD SUPPLIES TO EACH FIXTURE AND WATER HEATER SHALL BE VALVED SEPARATELY AT THE FIXTURE. ALL SUPPLY PIPES TERMINATING AT VALVES OR FIXTURES SHALL BE PROVIDED WITH A WATER HAMMER ARRESTOR OF SUFFICIENT CAPACITY TO PREVENT WATER HAMMER.
- C. ALL HOT AND COLD WATER BRANCH LINES SHALL BE VALVED IN AN ACCESSIBLE LOCATION.

3.3 PIPING JOINTS

- A. THREADED JOINTS SHALL BE CUT FULL AND CLEAN, WITH NOT MORE THAN THREE THREADS EXPOSED BEYOND FITTINGS. JOINTS SHALL BE MADE UP TIGHT WITH GRAPHITE BASE PIPE JOINT COMPOUND APPLIED TO MALE THREADS ONLY. EXPOSED THREADS OF FERROUS PIPE SHALL BE PAINTED WITH ACID-RESISTING PAINT AFTER PIPING HAS BEEN TESTED AND PROVEN TIGHT. NO CAULKING, LAMP WICK OR OTHER MATERIAL WILL BE ALLOWED FOR CORRECTION OF DEFECTIVE JOINTS.
- B. SWEAT OR SOLDERED JOINTS IN COPPER WATER PIPING SHALL BE MADE BY THE APPROPRIATE USE OF APPROVED BRASS WATER FITTINGS PROPERLY SWEATED OR SOLDERED TOGETHER. FLARED JOINTS WHERE SPECIFIED FOR SOFT COPPER TUBING SHALL BE MADE WITH FITTINGS MEETING APPROVED STANDARDS. SURFACES TO BE SOLDERED OR SWEAT SHALL BE CLEANED BRIGHT, PROPERLY FLUXED WITH APPROVED NONCORROSIVE PASTE TYPE FLUX AND MADE WITH 95-5 OR 94-6 SOLDER. THE USE OF SELF-CLEANING FLUXES, 50-50 SOLDER OR PASTE TYPE SOLDER IS PROHIBITED. FLARED JOINTS SHALL BE MADE BY EXPANDING THE TUBE WITH A PROPER FLARING TOOL. ALL TUBES SHALL BE PROPERLY REAMED.

3.4 DOMESTIC HOT AND COLD WATER PIPING

- A. ALL DOMESTIC HOT AND COLD WATER PIPING WITHIN THE BUILDING SHALL BE COPPER. UNDERGROUND WATER SERVICE OUTSIDE OF THE BUILDING MAY BE TYPE "K" SOFT TEMPER COPPER OR DUCTILE IRON OR CAST IRON PIPE WITH SUPER BELL-TITE, MECHANICAL OR FLANGED JOINTS.
- B. COPPER PIPING INSTALLED UNDERGROUND SHALL BE SOFT TEMPER TYPE "K" AND INSTALLED WITHOUT JOINTS.
- C. ALL OTHER COPPER PIPING SHALL BE HARD TEMPER TYPE "L". ALL COPPER PIPING SHALL CONFORM TO ASTM-B-88 REQUIREMENTS. SERVICE PIPING OF CAST IRON OF DUCTILE IRON PIPE SHALL CONFORM TO USASI, AWWA AND FEDERAL SPECIFICATIONS.
- D. FITTINGS FOR USE WITH TYPE "K" AND "L" COPPER PIPING SHALL BE WROUGHT COPPER SOLDER-JOINT. UNIONS SHALL BE GROUND JOINT TYPE AND SHALL BE INSTALLED WHERE NECESSARY TO PROVIDE EASE OF DISCONNECTION OF THE PIPING SYSTEM. PRESS FITTINGS FOR COPPER WATER PIPING ARE ACCEPTABLE WHERE PERMITTED BY GOVERNING CODES.

3.5 VALVES FOR DOMESTIC WATER

- A. FOR PIPING 1/2" - 2": MILWAUKEE BA-150 BALL VALE, BRONZE, TEFLON SEATS AND PACKING, 400 LBS W.O.G., SOLDER END.

3.6 INSULATION

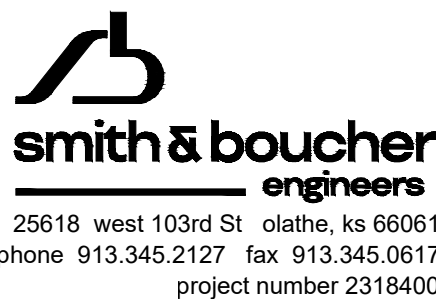
- A. ALL COLD AND HOT WATER PIPING SHALL BE INSULATED WITH CERTAIN-TEED GLASS FIBER PIPE INSULATION IN MOLDED SECTIONS WITH FACTORY APPLIED ALL SERVICE VAPOR BARRIER JACKET OR APPROVED EQUAL. THE END JOINT STRIPS AND OVERLAP SEAMS SHALL BE SEALED WITH A VAPOR BARRIER MASTIC AND STAPLED WITH OUTWARD CLINCHING STAPLES SPACED NOT TO EXCEED 4" CENTERS. STAPLES AND SEAMS SHALL BE SEALED WITH A COAT OF VAPOR BARRIER MASTIC. JOINTS SHALL BE COVERED BY JOINT TAPE.
- B. ALL PIPING SURFACES TO BE INSULATED SHALL BE CLEAN AND DRY AND PIPING SHALL HAVE BEEN TESTED AND APPROVED BEFORE THE INSULATION IS APPLIED.
- C. ALL VALVES, FITTINGS AND FLANGES SHALL BE INSULATED WITH CERTAIN-TEED GLASS FIBER PIPE INSULATION, OR APPROVED EQUAL. INSULATION SHALL BE SECURELY HELD IN PLACE AND COVERED WITH ZESTON PRE-MOLDED PVC FITTING COVERS. FITTING COVERS MAY BE PROVIDED WITH FIBERGLASS INSULATION INSERTS.
- D. ALL PIPE INSULATION SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER BY AN INSULATION CONTRACTOR REGULARLY ENGAGED IN INSULATION WORK.

3.7 PIPE HANGERS AND SUPPORTS

- A. ALL NON-INSULATED COPPER PIPING SHALL BE SUPPORTED BY ANVIL FIGURE CT65 COPPER PLATED CARBON STEEL HANGERS.
- B. NON-INSULATED STEEL PIPING 2" AND SMALLER SHALL BE SUPPORTED BY ANVIL FIGURE 108 SPLIT PIPE RING HANGER WITH FIGURE 114 TURNBUCKLE ADJUSTER. NON-INSULATED STEEL PIPING 2-1/2" AND LARGER SHALL BE SUPPORTED BY ANVIL 260 HANGERS WITH TURNBUCKLE ADJUSTERS.
- C. ALL INSULATED PIPING SHALL BE PROVIDED WITH ANVIL FIGURE 260 ADJUSTABLE CLEVIS HANGER WITH #168 SHIELD. HANGER SHALL BE INSTALLED EXTERIOR TO INSULATION UNLESS OTHERWISE NOTED OR SPECIFIED.
- D. ALL HANGERS SHALL UTILIZE THREADED RODS. NO PERFORATED STRAP IRON HANGERS OR WIRE HANGERS WILL BE ALLOWED.
- E. HANGERS AND SUPPORTS SHALL BE SPACES AS FOLLOWS:
1. COPPER PIPE: 1-1/4" AND SMALLER - 6 FEET, 1-1/2" AND LARGER - 10 FEET.
2. STEEL PIPE: 1" AND SMALLER - 8 FEET, 1-1/4" AND LARGER - 10 FEET.
- F. PROVIDE ANVIL FIGURE CT-121 RISER CLAMP FOR COPPER PIPING UP THROUGH 4". PROVIDE VERTICAL SUPPORT EVERY 10 FEET.
- G. STEEL AND CAST IRON PIPE PROVIDE ANVIL FIGURE 261 RISER CLAMP FOR PIPING 1-1/2" AND SMALLER AND FIGURE 40 RISER CLAMP FOR PIPING ABOVE 2". PROVIDE VERTICAL SUPPORT EVERY 15 FEET.

3.8 TESTING

- A. ALL PLUMBING SYSTEMS INSTALLED UNDER THIS SECTION OF THESE SPECIFICATIONS SHALL BE TESTED AND APPROVED AS HEREIN DESCRIBED AND AS REQUIRED BY THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION.
- B. THE WATER SYSTEM TEST PROCEDURE SHALL CONSIST OF CHARGING THE ENTIRE SYSTEM TO OPERATING PRESSURE AND THEN ISOLATING THE SYSTEM FROM ITS SOURCE. THE SYSTEM SHALL REMAIN CLOSED FOR A PERIOD OF 24 HOURS WITH NO FIXTURE BEING USED. THE PRESSURE DIFFERENTIAL FOR THIS 24-HOUR PERIOD SHALL NOT EXCEED 5 PSIG.
- C. THE INSPECTION AUTHORITY HAVING JURISDICTION AND THE ARCHITECT SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO PERFORMANCE OF ALL TESTS SO THAT THE TESTS MAY BE WITNESSED IF DEEMED NECESSARY.



project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

project number

Project Number

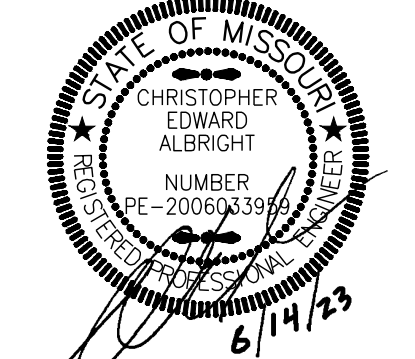
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PART 1 - GENERAL REQUIREMENTS - ELECTRICAL

1.1 SUMMARY OF WORK

- A. THE CONTRACT DOCUMENTS REQUIRE THE FURNISHING AND INSTALLING OF COMPLETE FUNCTIONING ELECTRICAL SYSTEMS, AND EACH ELEMENT THEREOF, AS SPECIFIED OR INDICATED IN THE CONTRACT DOCUMENTS OR REASONABLY INFERRED, TO COMPLETELY CONSTRUCT AND LEAVE READY FOR OPERATION THE SYSTEMS AS SHOWN ON THE DRAWINGS AND HEREIN DESCRIBED, INCLUDING EVERY ARTICLE, DEVICE OR ACCESSORY, WHETHER OR NOT SPECIFICALLY CALLED FOR BY ITEM. ELEMENTS OF THE WORK INCLUDE MATERIALS, LABOR, SUPERVISION, SUPPLIES, EQUIPMENT, TRANSPORTATION, AND UTILITIES.
- B. SPECIFICATIONS AND DRAWINGS ARE COMPLEMENTARY AND WHAT IS CALLED FOR IN ONE SHALL BE AS BINDING AS IF CALLED FOR BY BOTH.
- C. ALL WORK PERFORMED UNDER THIS SECTION SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER BY EXPERIENCED MECHANICS OF THE PROPER TRADE.

1.2 COORDINATION, MEASUREMENTS AND LAYOUTS

- A. THE CONTRACTOR SHALL INSPECT THE SITE WHERE THIS WORK IS TO BE PERFORMED AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS RELATED TO THIS PROJECT.
- B. THE CONTRACTOR SHALL EMPLOY A COMPETENT FOREMAN ON THE JOB TO SEE THAT WORK IS DONE IN ACCORDANCE WITH THE BEST PRACTICES AND IN A SATISFACTORY AND WORKMANLIKE MANNER. THE FOREMAN SHALL KEEP INFORMED AS TO THE WORK OF OTHER TRADES ENGAGED IN THE CONSTRUCTION OF THE PROJECT, AND SHALL EXECUTE HIS WORK IN SUCH A MANNER AS NOT TO INTERFERE WITH OR DELAY THE WORK OF OTHER TRADES.
- C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. WHERE LOCAL CONDITIONS NECESSITATE A REARRANGEMENT, THE CONTRACTOR SHALL PREPARE, AND SUBMIT FOR APPROVAL, DRAWINGS OF THE PROPOSED REARRANGEMENT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING ALL OF HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, FURNISHING SUCH OFFSETS, FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSION.

1.3 PERMITS AND FEES

- A. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES AND SHALL MAKE ALL DEPOSITS AND PAY ALL FEES REQUIRED FOR THE PERFORMANCE OF WORK UNDER THIS SECTION, OTHER THAN THOSE DEPOSITS OR FEES WHICH ARE FULLY REFUNDABLE TO THE OWNER.

1.4 SUBMITTALS, MATERIALS AND EQUIPMENT

- A. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE SPECIFIED HEREIN, FREE FROM DEFECTS AND OF THE BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE.
- B. AS SOON AS POSSIBLE AFTER THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT FOR REVIEW SIX COPIES OF SHOP DRAWINGS FOR ALL EQUIPMENT TO BE FURNISHED FOR THIS PROJECT. SUBMITTALS SHALL INCLUDE MANUFACTURER'S NAME, MODEL NUMBER, DESCRIPTIVE ENGINEERING DATA AND ALL NECESSARY INFORMATION AS TO FINISH, MATERIAL GAUGES AND ACCESSORIES. AFTER SUCH SHOP DRAWINGS ARE PROCESSED, THREE COPIES WILL BE RETURNED TO THE CONTRACTOR. THE CONTRACTOR SHALL, UPON RECEIPT OF REVIEWED SHOP DRAWINGS PROCEED WITH THE PROCUREMENT AND INSTALLATION OF SUCH EQUIPMENT.

1.5 CODES, LAWS, AND STANDARDS

- A. ALL WORK SHALL BE INSTALLED IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE, THE NATIONAL BOARD OF FIRE UNDERWRITERS, THE NATIONAL ELECTRICAL SAFETY CODE, AND ALL GOVERNING CODES, APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES OR STATUTES OF REGULATORY BODIES HAVING JURISDICTION. THE WORK SHALL BE EXECUTED IN ACCORDANCE WITH SAID LAWS, REGULATIONS, ORDINANCES, STATUTES OR CODES, WITHOUT INCREASED COST TO THE OWNER. ANY POINT IN QUESTION SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL. WORK INDICATED ON THE DOCUMENTS THAT IS IN EXCESS OF CODE REQUIREMENTS SHALL NOT BE REDUCED IN QUALITY AND/OR QUANTITY.
- B. COMPLY WITH RULES AND REGULATIONS OF PUBLIC UTILITIES AND MUNICIPAL DEPARTMENTS AFFECTED BY CONNECTIONS OF SERVICES.

1.6 RECORD DOCUMENTS

- A. THIS CONTRACTOR SHALL PREPARE A COMPLETE "AS-BUILT" SET OF DRAWINGS INCORPORATING ALL CHANGES MADE DURING CONSTRUCTION. LOCATION OF UNDERGROUND CONDUIT SHALL BE LOCATED BY DIMENSION FROM COLUMN LINES.
- B. THIS CONTRACTOR SHALL PREPARE AND SUBMIT TO THE OWNER'S REPRESENTATIVE FIVE BOUND SETS OF OPERATING AND MAINTENANCE MANUALS INCLUDING FINAL COPIES OF EQUIPMENT SHOP DRAWINGS, MANUFACTURER'S LITERATURE FOR ALL EQUIPMENT INSTALLED ON THE PROJECT SHOWING ALL DETAILS OF EQUIPMENT, REPLACEMENT PART DATA AND MAINTENANCE AND OPERATING INSTRUCTIONS. MANUALS SHALL INCLUDE COPIES OF ALL EQUIPMENT WARRANTIES.

1.7 GUARANTEES AND WARRANTIES

- A. THE CONTRACTOR SHALL GUARANTEE COMPLETE SYSTEM OPERATION AND THAT THE MATERIAL AND EQUIPMENT FURNISHED AND INSTALLED WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND WILL GIVE SATISFACTORY SERVICE UNDER THE SPECIFIED OPERATING CONDITIONS. THE CONTRACTOR AGREES TO REPLACE, WITHOUT EXPENSE TO THE OWNER, ANY PART OF THE APPARATUS WHICH PROVES OR BECOMES DEFECTIVE WITHIN ONE YEAR AFTER THE SYSTEM IS ACCEPTED. NO EQUIPMENT WARRANTY OR GUARANTEE SHALL START UNTIL THE TIME OF BUILDING ACCEPTANCE.
- B. ALL WARRANTIES ISSUED BY EQUIPMENT MANUFACTURERS SHALL BE FILLED OUT IN THE OWNER'S NAME AND GIVEN TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF WORK PERFORMED UNDER THIS SECTION.

1.8 FINAL INSPECTION

- A. AFTER COMPLETION OF THE ENTIRE PROJECT THE CONTRACTOR SHALL REQUEST FINAL INSPECTION OF THIS PROJECT IN WRITTEN FORM ADDRESSED TO THE ARCHITECT ALONG WITH A STATEMENT TO THE EFFECT THAT ALL INSTALLATIONS HAVE BEEN COMPLETED, CHECKED, ADJUSTED AND BALANCED IN ACCORDANCE WITH REQUIREMENTS OF THIS PROJECT. UPON RECEIPT OF WRITTEN NOTIFICATION OF COMPLETION AND REQUEST FOR FINAL INSPECTION THE ENGINEER WILL PERFORM A FINAL INSPECTION OF THIS WORK AND, IF ALL INSTALLATIONS ARE AS REPRESENTED BY THE CONTRACTOR, THE ENGINEER WILL SUBMIT WRITTEN RECOMMENDATION OF ACCEPTANCE.

1.9 CLEANING

- A. DIRT AND REFUSE RESULTING FROM THE PERFORMANCE OF THE WORK SHALL BE REMOVED TO KEEP THE PREMISES REASONABLE CLEAN AT ALL TIMES.
- B. AFTER COMPLETION OF THE WORK DESCRIBED IN THIS SPECIFICATION AND SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED SURFACES AND EQUIPMENT, REMOVE ALL DIRT, DEBRIS, CRATING, CARTONS, ETC., AND LEAVE ALL INSTALLATIONS FINISHED AND READY FOR OPERATION.

1.10 OPENINGS AND SLEEVES

- A. ALL PIPING THROUGH EXTERIOR OR FOUNDATION WALLS SHALL PASS THROUGH SCHEDULE 40 GALVANIZED STEEL SLEEVES WHICH SHALL BE LARGE ENOUGH TO ALLOW FOR PIPE SEAL MATERIAL. SLEEVES IN NEW CONSTRUCTION SHALL HAVE A MINIMUM 2 INCH WATERSTOP IN THE CENTER OF THE SLEEVE. NO SLEEVES ARE PERMITTED THROUGH CONCRETE STRUCTURAL MEMBERS.
1. SPACE BETWEEN PIPE AND SLEEVE IN EXTERIOR UNDERGROUND WALLS SHALL BE SEALED WITH LINK-SEAL, FLEXICRAFT OR METRAFLEX LINK STYLE PIPE SEALS.
2. IN ABOVE GRADE EXTERIOR WALLS PACK THE SPACE BETWEEN PIPE AND SLEEVE WITH MINERAL WOOL AND THEN COMPLETE SEAL WITH APPROVED CAULKING COMPOUND FLUSH WITH FINISHED SURFACE. PROVIDE PIPE COLLAR ON INTERIOR SIDE OF WALL.
- B. ALL PIPING THROUGH FLOORS SHALL BE PROVIDED WITH SCHEDULE 40 GALVANIZED STEEL PIPE SLEEVES, EXTENDING 1 INCH ABOVE THE FLOOR.

- C. IN FIRE RATED WALLS: CAULKING SHALL BE A PURE CERAMIC FIBER MADE OF ALUMINA-SILICA, "CERAFIBER-FS" BY JOHNS-MANVILLE. SEALANT SHALL BE GUN GRADE. AN ACRYLIC 2-PART GUN APPLIED, FIRE RETARDANT ELASTIC SEALANT, "DYMERIC" BY TREMCO OR EQUIVALENT BY PERMATITE NO. 1113FR.

1. LIMIT THE SIZE OF THE SPACE BETWEEN THE WALL OR FLOOR AND THE OUTSIDE OF THE PIPE OR DUCT TO 1 INCH MAXIMUM. THIS SPACE IS SUFFICIENT TO ALLOW SOME MOVEMENT OF THE PIPES OR DUCT WITHOUT CRACKING THE CAULKING OR SEALANT.
2. FOR OPENINGS IN WALLS, THE CAULKING SHALL BE APPLIED TO A MINIMUM OF 3 INCH TOTAL DEPTH. SEALANT SHALL THEN BE APPLIED ON BOTH SIDES OF THE WALL OPENING A MINIMUM OF 1/2 INCH IN DEPTH, FINISHED FLUSH WITH THE WALL. D.
- FOR OPENINGS IN FLOORS, THE CAULKING SHALL BE APPLIED FROM THE UPPER SIDE TO A MINIMUM OF 3 INCH TOTAL DEPTH RECESSED 1/2 INCH BELOW THE FINISHED FLOOR. THIS 1/2 INCH RECESS SHALL THEN BE FILLED WITH SEALANT TO FLUSH WITH FINISHED FLOOR.

1.11 CUTTING AND PATCHING

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CUTTING OF WALLS, FLOORS, CEILINGS AND ROOFS REQUIRED FOR PERFORMANCE OF HIS WORK.
- B. NO STRUCTURAL MEMBER SHALL BE CUT WITHOUT PERMISSION FROM THE ARCHITECT.
- C. PATCH ALL OPENINGS TO MATCH ADJACENT CONSTRUCTION IN BOTH MATERIAL AND FINISH.
- D. ALL CUTTING OF EXISTING CONCRETE FLOORS/SLABS ON GRADE IN THE INTERIOR OF THE BUILDING SHALL BE PERFORMED BY "SAW CUTTING" AND SHALL BE PERFORMED BY THIS CONTRACTOR.

1.12 EXCAVATION AND BACKFILL

- A. ALL EXCAVATION AND BACKFILL REQUIRED FOR THE INSTALLATION OF THE WORK SHALL BE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR.
- B. NO EXCAVATION AND BACKFILL SHALL BE DONE WITHIN DRIP LINE OF TREES TO REMAIN. NO TREE SHALL BE REMOVED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.
- C. CONTRACTOR SHALL PROVIDE PROTECTION FOR TREES WITHIN 15 FEET OF UTILITY EXCAVATION.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL TRENCH AREAS AND MAINTAINING A DRY EXCAVATION. ANY DEWATERING OF TRENCHES/EXCAVATION SHALL BE PROVIDED PRIOR TO INSTALLING ANY MATERIAL.
- E. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ALL NECESSARY BARRICADES, FENCING, BRACING, SHEET PILING, SHORING, WARNING SIGNS, PUMPS, ETC., FOR THE PROTECTION OF WORKERS, GENERAL PUBLIC, AND PROPERTIES. EXCAVATION WORK SHALL COMPLY WITH ASA STANDARD A10.2 "SAFETY CODE FOR BUILDING CONSTRUCTION" AND AGC STANDARD "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" AND THE DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH (OSHA) STANDARDS.
- F. LOCATE EXISTING UNDERGROUND UTILITIES IN AREAS OF EXCAVATION WORK. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING EXCAVATION, CONSULT UTILITY OWNER IMMEDIATELY FOR DIRECTIONS.
- G. ALL TRENCHES SHALL BE UNIFORMLY GRADED AND BE FREE OF SOFT SPOTS AND STONE. PROVIDE A 4 INCH SAND BED.
- H. BACKFILL SHALL NOT BEGIN UNTIL INSTALLATION HAS BEEN TESTED AND INSPECTED. CONTRACTOR SHALL CONSULT WITH THE AUTHORITY HAVING JURISDICTION AND THE ARCHITECT/ENGINEER PRIOR TO BACKFILLING.
1. INITIAL BACKFILL SHALL BE SAND TO A POINT 6 INCHES ABOVE TOP OF INSTALLED WORK.
2. FINAL BACKFILL SHALL BE INSTALLED IN LAYERS NOT EXCEEDING 12 INCHES. FILL SHALL BE WELL TAMPED BEFORE ADDITIONAL BACKFILL MATERIAL IS PLACED. BACKFILL SHALL CONSIST OF EARTH OR SAND FREE OF STONE, BRICKS, OR FOREIGN MATTER.
- I. ALL EXCESS EARTH AND OTHER MATERIAL RESULTING FROM THE EXCAVATION SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR OR MAY BE PILED AT A LOCATION DESIGNATED AND APPROVED BY THE OWNER. ALL DEBRIS, ROCK AND TRASH SHALL NOT BE ALLOWED TO ACCUMULATE AND SHALL BE REMOVED FROM THE SITE. STREETS, ROADWAYS AND PRIVATE PROPERTY SHALL BE KEPT IN A CLEAN CONDITION.
- J. WHEN THE EXCAVATION IS WITHIN THE AREA WHERE FINISHED SITE WORK IS TO BE DONE UNDER THE GENERAL CONTRACT WORK, BACKFILL TO THE HEIGHT OF ROUGH GRADE. FINAL SURFACING WILL BE UNDER GENERAL CONTRACT WORK.
- K. WHEN THE EXCAVATION IS BEYOND THE AREA OF GENERAL CONSTRUCTION WORK, FINAL SURFACE AND ADJACENT DISTURBED AREAS SHALL BE RESTORED TO MATCH THE ORIGINAL CONDITION BY SODDING, SEEDING, ASPHALT PAVING, CONCRETE, ETC., AS REQUIRED. WORK SHALL CONFORM TO APPLICABLE SECTIONS OF THESE SPECIFICATIONS.
- L. WHEN THE EXCAVATION IS ON PUBLIC PROPERTY, RESTORATION OF SURFACE CONDITIONS SHALL MEET THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
- M. WHEN SERVICES ARE TO BE RUN SIDE-BY-SIDE, A COMMON TRENCH MAY BE USED PROVIDING THE REQUIRED VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE VARIOUS SERVICES ARE MAINTAINED AND PROVIDING THE METHODS OF BEDDING AND BACKFILL MEET THE APPROVAL OF THE ENGINEER. CONTRACTORS INVOLVED SHALL MAKE THEIR OWN AGREEMENT AS TO THE SHARING OF THE COST OF THE COMMON TRENCHING AND BACKFILL WORK.

1.13 TEMPORARY HEAT

- A. THE CONTRACTOR SHALL COOPERATE WITH THE GENERAL CONTRACTOR TO PROVIDE TEMPORARY HEAT AS SOON AS POSSIBLE FOR USE DURING CONSTRUCTION IF TEMPORARY HEAT IS REQUIRED. AIR HANDLING EQUIPMENT SHALL NOT BE OPERATED AT ANY TIME WITHOUT FILTERS IN PLACE AND ALL EQUIPMENT SHALL BE PROTECTED FROM DAMAGE. OPERATING THE EQUIPMENT FOR TEMPORARY HEAT SHALL NOT START THE WARRANTY PERIOD OF THE EQUIPMENT USED.

1.14 DEMOLITION AND NEW WORK

- A. THE CONTRACTOR SHALL DO ALL DEMOLITION, ALTERATIONS AND REWORK INDICATED AND/OR REQUIRED TO MAINTAIN THE OPERATION OF ALL EXISTING ELECTRICAL SYSTEMS AND TO INTEGRATE THE NEW SYSTEMS IN THE RENOVATED BUILDING AS REQUIRED. THE CONTRACTOR SHALL INCLUDE ALL WORK WHICH MAY BE REQUIRED TO ALTERATIONS AND DEMOLITION WORK. THIS SHALL INCLUDE ALL REMOVAL, RELOCATION AND REWORKING OF WIRE AND CONDUIT, OUTLET BOXES, JUNCTION BOXES, ETC. EXISTING SYSTEMS AND NEW SYSTEMS SHALL BE COMPLETELY INTEGRATED AS INTENDED AND AS INDICATED ON THE PLANS AND IN THE SPECIFICATIONS.
- B. THE CONTRACTOR SHALL REMOVE FROM THE PREMISES AND DISPOSE OF PROPERLY ALL EXISTING MATERIAL AND EQUIPMENT WHICH NO LONGER SERVES A PURPOSE IN ALTERED AREAS. THE CONTRACTOR SHALL REMOVE CONNECTIONS TO EQUIPMENT BACK TO PANEL OR JUNCTION BOX. MAINTAIN CIRCUIT CONNECTIVITY. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN SERVICES TO ALL EXISTING AREAS REQUIRING SUCH SERVICES. THE CONTRACTOR SHALL REROUTE AS REQUIRED SUCH SERVICES WHERE ARE DISRUPTED DUE TO ARCHITECTURAL CHANGES IN THE EXISTING STRUCTURE. ANY EQUIPMENT WHICH IS DESIGNATED TO BE REUSED AND WHICH IS DAMAGED IN THE PROCESS SHALL BE REPLACED BY THE CONTRACTOR WITH NEW EQUIPMENT OF LIKE KIND AT NO COST TO THE OWNER.

1.15 INTERRUPTION OF SERVICES

- A. THE CONTRACTOR SHALL SCHEDULE ANY SERVICE INTERRUPTIONS TO THE EXISTING BUILDING WITH THE OWNER'S REPRESENTATIVE. SUCH INTERRUPTIONS SHALL BE PLANNED SO AS TO BE AT TIMES TO CAUSE THE LEAST INCONVENIENCE AND INTERRUPTION TO THE FACILITY'S SCHEDULE.

1.16 EXISTING CONDITIONS

- ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS FOR THIS PROJECT HAVE BEEN DETERMINED FROM AVAILABLE DRAWINGS AND FIELD INVESTIGATIONS. CONTRACTORS MAKING PROPOSALS FOR THIS WORK SHALL INVESTIGATE ALL EXISTING CONDITIONS AND BASE THEIR PROPOSALS ON THEIR OBSERVATIONS TO PROVIDE COMPLETE AND INSTALLING INSTALLATIONS IN ACCORDANCE WITH THE INTENT OF THE DRAWING AND SPECIFICATIONS FOR THIS PROJECT AND ALL APPLICABLE GOVERNING CODES, RULES, REGULATIONS AND ORDINANCES. FAILURE TO DETERMINE EXISTING CONDITIONS WHICH CAUSE ADDITIONAL WORK WILL NOT CONSTITUTE GROUNDS FOR ADDITIONAL COMPENSATION.

PART 2 - ELECTRICAL

2.1 GENERAL REQUIREMENTS

- A. SEE PART 1 FOR GENERAL REQUIREMENTS.

2.2 IDENTIFICATION OF SWITCHES AND APPARATUS

- A. ALL CABINETS, SAFETY SWITCHES, AND OTHER APPARATUS USED FOR OPERATION AND CONTROL OF CIRCUITS, APPLIANCES, AND EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY IDENTIFIED BY MEANS OF ENGRAVED PLASTIC PLATES EITHER BLACK WITH WHITE LETTERS OR WHITE WITH BLACK LETTERS.

2.3 GROUNDING

- A. ALL CONDUCTORS, MOTOR FRAMES, RACEWAYS, CABINETS, ETC., THAT REQUIRE GROUNDING SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, THOSE OF THE SERVING UTILITY AND LOCAL AUTHORITIES HAVING JURISDICTION.

2.4 SAFETY SWITCHES

- A. SAFETY SWITCHES, AS MANUFACTURED BY GENERAL ELECTRIC, CROUSE-HINDS, CUTLER-HAMMER, SQUARE D, SIEMENS, OR APPROVED EQUAL, SHALL BE FURNISHED AND INSTALLED (WHERE NOT FURNISHED BY OTHERS) WHEREVER SHOWN ON THE DRAWINGS SPECIFIED, OR REQUIRED BY THE NATIONAL ELECTRICAL CODE.
- B. SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE, UNDERWRITERS' LABORATORIES SHORT CIRCUIT LABELED FOR AT LEAST 100,000 AMPERES WITH CLASS R REJECTION FUSEHOLDERS SO AS TO COMPLY WITH NEC 100-9. SWITCHES INSIDE OF BUILDING SHALL BE FURNISHED IN NEMA 1 GENERAL PURPOSE ENCLOSURES. SWITCHES OUTSIDE OF BUILDING SHALL BE FURNISHED IN NEMA 3R ENCLOSURES UNLESS OTHERWISE SPECIFIED.
- C. EACH MOTOR SHALL BE PROVIDED WITH A DISCONNECTING MEANS IN ACCORDANCE WITH REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.

2.5 FUSES

- A. THIS CONTRACTOR SHALL FURNISH AND INSTALL CARTRIDGE AND PLUG TYPE FUSES AS MANUFACTURED BY THE BUSSMAN MANUFACTURING COMPANY, GOULD/SHAWMUT, CEFECO, OR APPROVED EQUAL. IN ALL FIXTURE EQUIPMENT, TIME-DELAY TRILONIC OR FUSETRON FUSES, UL CLASS RK5, SHALL BE INSTALLED ON ALL MOTOR CIRCUITS. NON TIME-DELAY AMP-TRAP (A2K OR A6K) OR BUSSMAN LIMITRON (KTN OR KTS), UL CLASS RK1 SHALL BE INSTALLED ON CIRCUITS FEEDING PANELBOARDS. ALL OTHER CIRCUITS SHALL BE PROTECTED BY FAULT-TRAP, UL CLASS RK5, FUSES OR APPROVED EQUAL. CLASS K FUSES ARE NOT ACCEPTABLE.

2.6 CONDUIT

- A. ALL ELECTRICAL WIRING, INCLUDING LOW VOLTAGE WIRING, SHALL BE INSTALLED IN CONDUIT AS HEREIN SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH NOMINAL SIZE SHALL BE USED BELOW GRADE; NO LESS THAN 1/2 INCH NOMINAL SIZE SHALL BE USED ABOVE GRADE.
- B. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 EPC-40-PVC. ALL CONDUITS SHALL BE INSTALLED WITH MINIMUM 24 INCH COVER.
- C. CONDUIT INSTALLED IN CONCRETE SLABS OR ABOVE GROUND SHALL BE GALVANIZED RIGID STEEL OR EPC-40-PVC.
- D. WHEN PVC CONDUITS PENETRATE CONCRETE FLOOR CONSTRUCTION, CONTRACTOR SHALL USE RIGID STEEL OR IMC ELBOWS AND EXTENSION. PVC CONDUIT/FITTINGS SHALL NOT BE PERMITTED TO BE EXPOSED ABOVE THE FLOOR.
- E. THINWALL TUBING SHALL BE E.M.T.
- F. ALL FITTINGS SHALL BE OF THE COMPRESSION TYPE AND WATERTIGHT FOR UNDERGROUND AND IN SLAB LOCATIONS. COMPRESSION OR SCREWED FITTINGS FOR INDOOR.
- G. CONDUIT FOR INTERIOR WIRING, IN GENERAL, SHALL BE THINWALL TUBING UNLESS OTHERWISE NOTED.
- H. RACEWAYS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND FITTING TO FITTING. A RUN OF CONDUIT BETWEEN OUTLETS OR FITTINGS SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER-BENDS INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE OUTLET OR FITTING. THE RADIUS OF BENDS SHALL NEVER BE SHORTER THAN THAT OF THE CORRESPONDING TRADE ELBOW. THE SYSTEM SHALL BE COMPLETE WITH OUTLETS, DISTRIBUTION BOXES, ETC., SMOOTH INSIDE AND MECHANICALLY SECURE IN PLACE. APPROVED STRAPS, HANGERS, OR SUPPORTS SHALL BE USED TO SECURE CONDUITS IN PLACE. CONDUITS SHALL, IN GENERAL, BE SUPPORTED AT INTERVALS NOT EXCEEDING 10'-0" AND WITHIN 3'-0" OF EACH OUTLET BOX, JUNCTION BOX, CABINET OR FITTING.

- I. CONDUITS SHALL BE PROTECTED DURING CONSTRUCTION; PLUG AND KEEP CLEAN AND DRY. CONDUIT ENDS SHALL BE BUTTED IN CENTERS OF COUPLINGS. NO CRACKS OR FLATTENED SECTIONS WILL BE PERMITTED AT BENDS OR ELSEWHERE. ALL ENDS OF CONDUIT SHALL BE REAMED TO REMOVE ROUGH EDGES. RUNNING THREADS WILL NOT BE PERMITTED.
- J. CONDUITS SHALL BE CONCEALED WITHIN THE WALLS, CEILINGS, AND FLOORS WHERE POSSIBLE AND UNLESS OTHERWISE NOTED. EXPOSED CONDUIT SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE BUILDING LINES.

2.7 WIRE AND CABLE

- A. WIRE AND CABLE SHALL BE COPPER.
- B. ALL CONDUCTORS SHALL BE COPPER.
- C. NO. 10 AWG AND SMALLER CONDUCTORS SHALL BE SOLID WITH TYPE THHN INSULATION AND NO. 8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED WITH TYPE THHN INSULATION EXCEPT THAT CONDUCTORS WITHIN 3 INCHES OF LIGHT FIXTURE BALLASTS SHALL HAVE RHH, THHN, OR EQUAL INSULATION RATED FOR 90 DEGREES C. APPLICATION.

2.8 LOCATIONS OF OUTLETS AND EQUIPMENT

- A. ELECTRICAL OUTLETS AND EQUIPMENT ARE SO LOCATED ON THE DRAWINGS TO SHOW INTENT OF DESIGN. MINOR VARIATIONS IN THESE LOCATIONS MAY BE MADE BY THIS CONTRACTOR TO COMPLY WITH STRUCTURAL AND OTHER REQUIREMENTS AS DETERMINED IN THE COURSE OF CONSTRUCTION. IT SHALL BE THE DUTY OF THIS CONTRACTOR TO TAKE HIS OWN MEASUREMENTS AND BE RESPONSIBLE FOR SAME. THIS CONTRACTOR SHALL ALSO REVIEW THE ARCHITECTURAL DRAWINGS AND THOSE DRAWINGS USED BY OTHER CONTRACTORS IN ORDER TO DETERMINE EXACT LOCATIONS FOR ELECTRICAL OUTLETS AND EQUIPMENT. DO NOT SCALE DRAWINGS FOR OUTLET LOCATIONS.

B. EQUIPMENT MOUNTING HEIGHTS:

1. INTERIOR RECEPTACLES:
(A) FLOOR TO BOTTOM: 16".
2. EXTERIOR RECEPTACLES:
(A) FLOOR TO CENTERLINE: 24".
3. TELEPHONE OUTLETS:
(A) FLOOR TO BOTTOM: 16".
4. SWITCHES:
(A) FLOOR TO TOP: 48".
5. RECEPTACLES ABOVE COUNTERS: CENTERLINE 10-INCHES ABOVE COUNTER AND HORIZONTAL.

2.9 WALL PLATES

- A. GROUPS OF SWITCHES, OUTLETS OR SWITCH AND OUTLET COMBINATIONS SHALL BE MOUNTED UNDER ONE GANG-PLATE.
- B. WALL PLATES SHALL FIT AND COVER PROPERLY THE DEVICE AND WALL OPENING. NO OPEN OR UNFINISHED SURFACES SHALL SHOW AFTER INSTALLATION OF THE WALL PLATES.
- C. WALL PLATES SHALL BE SET VERTICAL AND SHALL FINISH FLUSH WITH ALL SURROUNDING SURFACES.
- D. WALL PLATES FOR ALL DEVICES AND TELEPHONE OUTLETS SHALL MATCH THE EXISTING DEVICES.

2.10 WIRING DEVICES

- A. SINGLE-POLE WALL TUMBLER SWITCHES FOR GENERAL USE SHALL BE SPECIFICATION GRADE HUBBELL NO. 1121, OR APPROVED EQUAL, MECHANICALLY SILENT TYPE WITH PLASTIC HANDLES, RATED 20 AMPERES AC, 120/277 VOLTS. GENERAL USE SWITCHES INDICATED ON PLANS AS DOUBLE POLE, 3-WAY, 4-WAY OR LOCK TYPE WITH KEY GUIDE SHALL BE THE SAME SERIES AS THE SINGLE-POLE SWITCHES. DEVICE COLOR SHALL MATCH EXISTING.
- B. CONVENIENCE OUTLETS IN FINISHED SPACES SHALL BE SPECIFICATION GRADE HUBBELL NO. 5362, OR APPROVED EQUAL, DUPLEX GROUNDING TYPE RECEPTACLES RATED 20 AMPERES AC, 120 VOLT. DEVICE COLOR SHALL MATCH EXISTING.
- C. RECEPTACLES DESIGNATED WITH GROUND FAULT PROTECTION SHALL BE HUBBELL NO. GF-5362, OR APPROVED EQUAL, 120 VOLT, 20 AMP GROUND FAULT INTERRUPTER TYPE. DEVICE COLOR SHALL MATCH EXISTING.

2.11 TELEPHONE

- A. FURNISH AND INSTALL TELEPHONE OUTLETS AS NOTED ON THE DRAWINGS WITH 3/4 INCH CONDUIT TO ABOVE LAY-IN CEILINGS WITH END BUSHINGS.
- B. PROVIDE PULL WIRES IN ALL TELEPHONE CONDUITS.
- C. FURNISH AND INSTALL COVER PLATES SUITABLE FOR USE WITH THE EQUIPMENT TO BE CONNECTED.

2.12 LIGHTING FIXTURES

- A. THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHTING FIXTURES AND LAMPS AS INDICATED ON THE DRAWINGS AND HEREIN DESCRIBED. MATERIAL, EQUIPMENT, OR SERVICES NECESSARY TO COMPLETE THE INSTALLATION OF THESE FIXTURES, BUT NOT SPECIFICALLY MENTIONED, SHALL BE FURNISHED AS THOUGH SPECIFIED. ALL FIXTURES AND LAMPS SHALL BE PROPERLY CLEANED AND ADJUSTED AFTER INSTALLATION.
- B. ALL ADJUSTABLE LIGHTING FIXTURES SHALL BE CAREFULLY POSITIONED BY THIS CONTRACTOR IN THE PRESENCE OF THE ARCHITECT OR HIS REPRESENTATIVE.
- C. LAMPS SHALL BE AS MANUFACTURED BY GENERAL ELECTRIC, SYLVANIA OR PHILLIPS.
- D. BALLASTS SHALL BE AS NOTED IN FIXTURE SCHEDULE. BALLASTS IN FIXTURES DESIGNATED FOR EMERGENCY LIGHTING MUST BE COMPATIBLE WITH THE EMERGENCY UNIT USED WITH MINIMUM LEAKAGE.
- E. THIS CONTRACTOR SHALL FURNISH AND INSTALL FIXTURES HEREIN SPECIFIED OR AS SHOWN ON THE DRAWINGS.
- F. LIGHT FIXTURES SHALL BE SUPPORTED FROM ROOF STRUCTURE PER UBC 47-18.
- G. GENERAL CONTRACTOR SHALL PROVIDE ALL FIRE-RATED ENCLOSURES FOR LIGHT FIXTURES INSTALLED IN FIRE-RATED CEILINGS.

2.13 IDENTIFICATION OF EQUIPMENT

- A. ALL SERVICE ENTRANCE EQUIPMENT, DISCONNECT SWITCHES, PANELBOARDS, RELAYS, MOTOR STARTERS, CONTACTORS, TELEPHONE TERMINAL CABINETS, TV EQUIPMENT AND RISER JUNCTION BOXES, AND OTHER ELECTRICAL EQUIPMENT UNDER THIS CONTRACT, SHALL BE PROVIDED WITH PROPER IDENTIFICATION. IDENTIFICATION SHALL BE BY THE USE OF ENGRAVED COLOR CODED PLASTIC NAMEPLATES WITH WHITE LETTERING SCREWED TO THE COVER OF THE EQUIPMENT. USE OF EMBOSSED PLASTIC "TAPE" LABELS AS PREPARED BY "TYPEWRITER" TYPE EQUIPMENT SHALL NOT BE USED. COLOR CODING SHALL BE AS FOLLOWS:

1. EQUIPMENT CONNECTED TO A NORMAL POWER SOURCE SHALL BE BLACK WITH WHITE LETTERS.

2.14 FIRE ALARM SYSTEM

- A. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT, WIRE, CONDUIT AND ENGINEERING SERVICES NECESSARY TO INSURE A COMPLETE AND FUNCTIONAL FIRE ALARM SYSTEM AS DESCRIBED HEREIN AND AS SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MATERIAL AND EQUIPMENT COMPATIBLE TO THE SYSTEM SUPPLIED. ANY EQUIPMENT NOT SPECIFICALLY MENTIONED IN THIS SPECIFICATION OR NOT SHOWN ON THE DRAWINGS BUT REQUIRED FOR THE PROPER OPERATION OF THE FIRE ALARM SYSTEM SHALL BE FURNISHED AND INSTALLED.
- B. ALL EQUIPMENT AND COMPLETED INSTALLATION SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE, NFPA, LOCAL CODES, THESE SPECIFICATIONS AND AUTHORITIES HAVING JURISDICTION WITH THE STRICTER REQUIREMENTS GOVERNING IN CASE OF POSSIBLE VARIANCES. ALL COMPONENTS OF THE SYSTEM SHALL BE STANDARD OF THE MANUFACTURER, LISTED BY UNDERWRITERS' LABORATORIES, INC. AND BEAR THEIR MARK.
- C. THE FIRE ALARM EQUIPMENT SHALL BE THAT OF THE GE-EST COMPANY OR COMPARABLE SYSTEMS BY PYROTRONICS, NOTIFIER OR SIMPLEX. THE ALARM CONTRACTOR SHALL PROVIDE, AT THE REQUEST OF THE OWNER, MEANS BY WHICH THE SYSTEM CAN BE SERVICED, MAINTAINED AND MONITORED BY COMPETENT QUALIFIED INDIVIDUALS.
- D. THE SYSTEM SHALL BE ADDRESSABLE, ELECTRICALLY SUPERVISED AND UTILIZE 2-WIRE, CLASS B CIRCUITS FOR ALL ALARM INITIATION ZONES AND SIGNAL CIRCUITS. THE SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FIRE ALARM CONTROL PANEL, MANUAL AND AUTOMATIC ALARM INITIATING DEVICES AND AUDIBLE/VISUAL ALARM INDICATING DEVICES. THE SYSTEM SHALL HAVE THE CAPABILITY OF BEING MONITORED VIA AN OUTSIDE PHONE LINE PROVIDED BY THE OWNER.

- E. ACTUATION OF ANY MANUAL OR AUTOMATIC INITIATING DEVICE SHALL CAUSE THE FOLLOWING:

1. ALL AUDIBLE INDICATING DEVICES TO SOUND.
2. VISUAL INDICATING DEVICES TO FLASH.
3. SHUTDOWN ALL AIR HANDLING UNITS.

- F. FIRE ALARM AUDIBLE/VISUAL UNITS SHALL BE GE-EST AND G1R SERIES FLUSH-MOUNTED COMBINATION HORN AND FLASHING LIGHT. HORN SHALL BE RED VIBRATING TYPE OPERATING AT 24VDC. THE FLASHING LIGHT SHALL BE XENON STROBE AND OPERATE AT GREATER THAN 1000 CANDLEPOWER. THE UNIT SHALL FLASH AT APPROXIMATELY TWO FLASHES PER SECOND. A FLASH RATE OF GREATER THAN TWO FLASHES PER SECOND IS NOT ACCEPTABLE. BOTH THE HORN AND STROBE SHALL OPERATE ON 24VDC SUPPLIED FROM THE CONTROL PANEL.

- G. POWER LIMITED CIRCUIT CABLES SHALL BE UL LISTED AND AS MANUFACTURED BY GE., WEST PENN OR BELDON. CONDUCTORS SHALL BE SOLID GAUGES #18 (FOR PULL STATIONS AND SMOKE DETECTOR) AND #16 FOR HORNS, LIGHTS AND DOOR HOLDERS). CABLES SHALL BE TWISTED PAIRS TO REDUCE SUSCEPTIBILITY TO TRANSIENT NOISE. ALL FIRE ALARM WIRING SHALL BE INSTALLED IN CONDUIT UNLESS NOTED OTHERWISE.

project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

project number

Project Number

drawing issuance

Permit Set

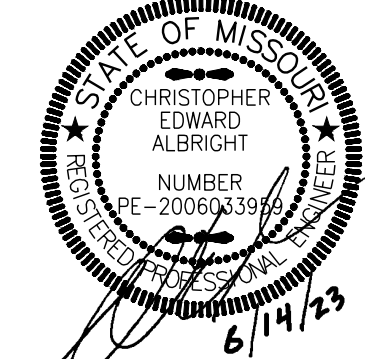
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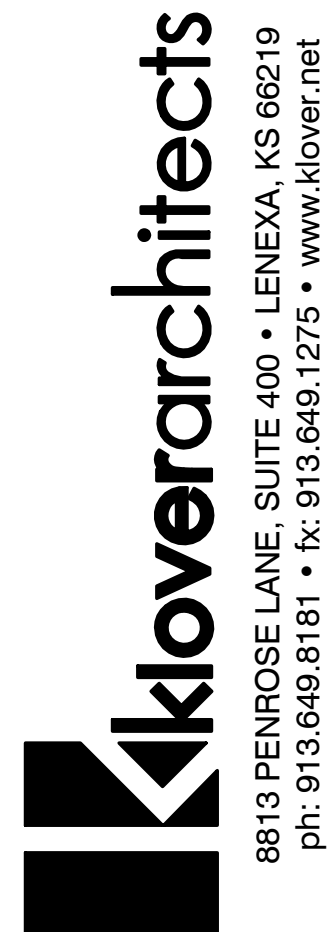
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MECHANICAL AND ELECTRICAL - SPECIFICATIONS

drawing number

ME402



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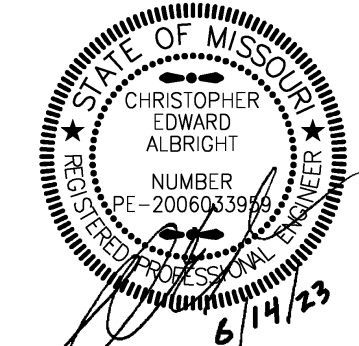
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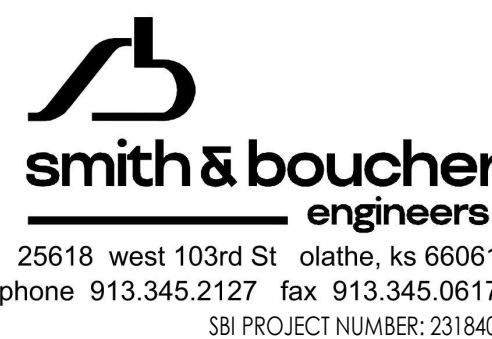
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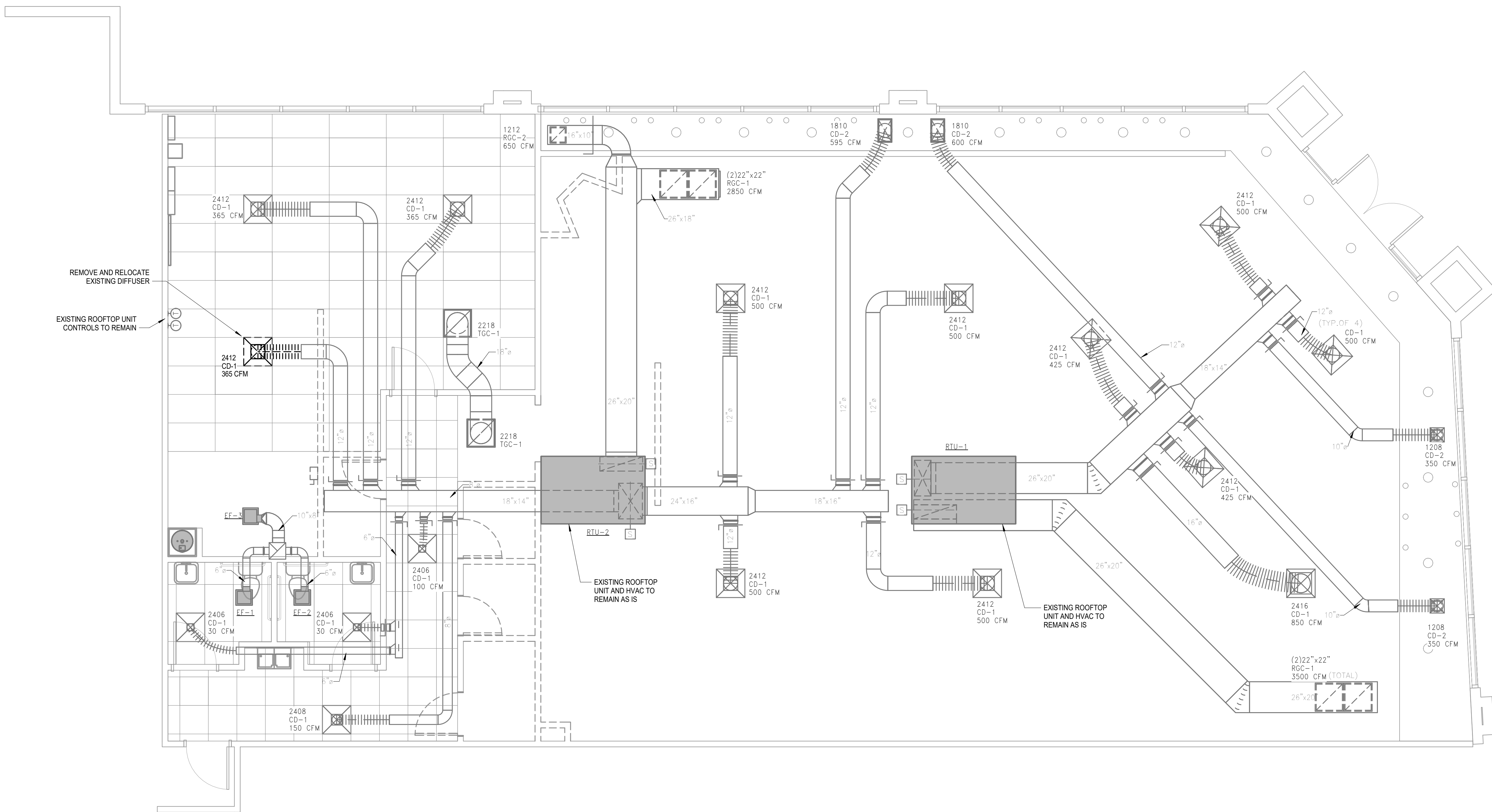
HVAC PLAN - DEMOLITION

drawing number

DM101



HVAC PLAN - DEMOLITION ①
SCALE: 1/4" = 1'-0"



project title

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Project Number

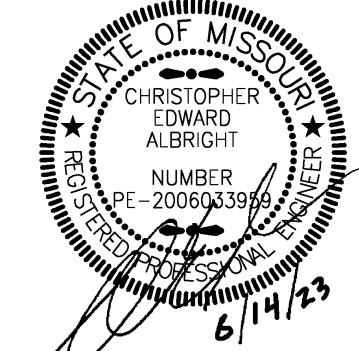
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HVAC PLAN - NEW WORK

drawing number

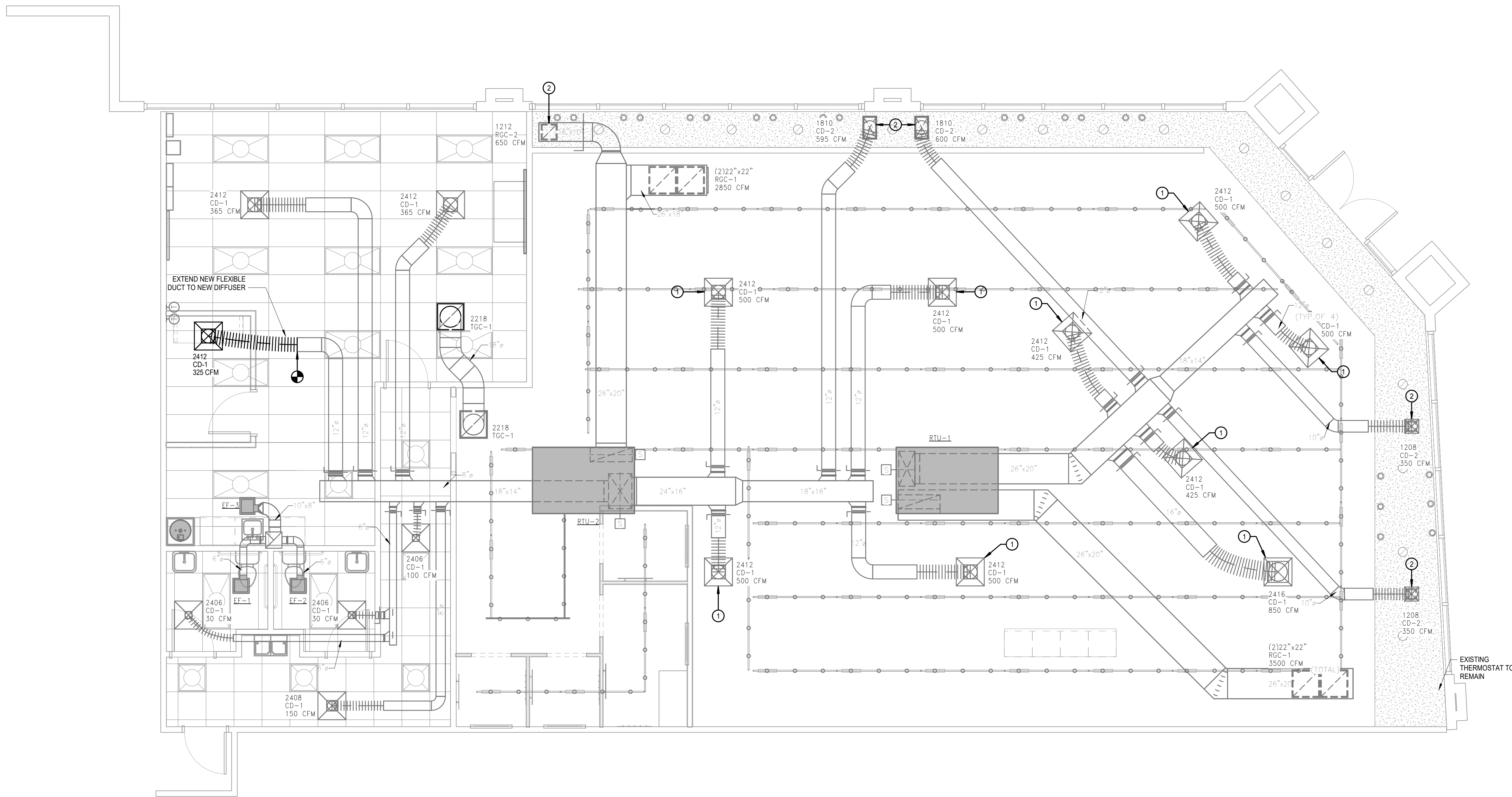
M101

GENERAL NOTES:

1. EXISTING HVAC SYSTEM TO REMAIN INTACT AND BE REUSED. CLEAN AND WIPE DOWN ALL DIFFUSERS AND GRILLES.
2. PROVIDE NEBB OR AABC CERTIFIED TAB OF THE DIFFUSERS AND GRILLES. TEST EXISTING ROOFTOP UNIT FOR FULL AIRFLOW (RTU-1 AT 4000CFM SUPPLY AND 900CFM OUTSIDE AIR, RTU-2 AT 3405CFM SUPPLY AND 900CFM OF OUTSIDE AIR).

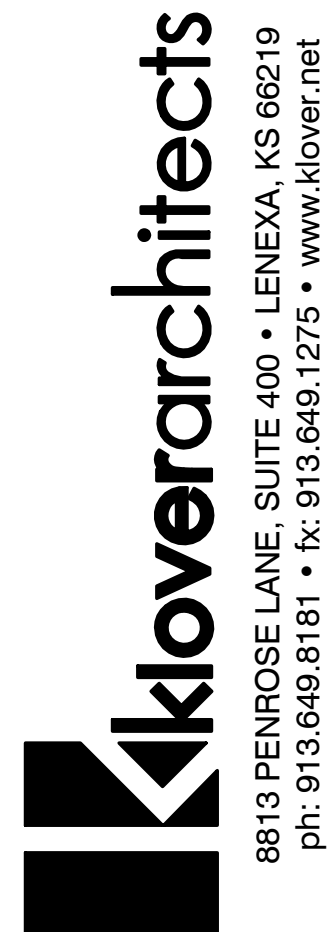
PLAN NOTES:

- ① ADJUST LOCATION OF EXISTING SUPPLY DIFFUSER TO ACCOMMODATE NEW CEILING AND LIGHTING.
- ② TEMPORARILY REMOVE EXISTING DIFFUSERS AND REINSTALL TO ACCOMMODATE SOFFIT WORK.



HVAC PLAN - NEW WORK
SCALE: 1/4" = 1'-0" ①

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SBI PROJECT NUMBER: 2318400



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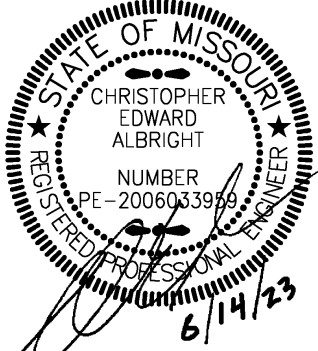
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PLUMBING PLAN - DEMOLITION

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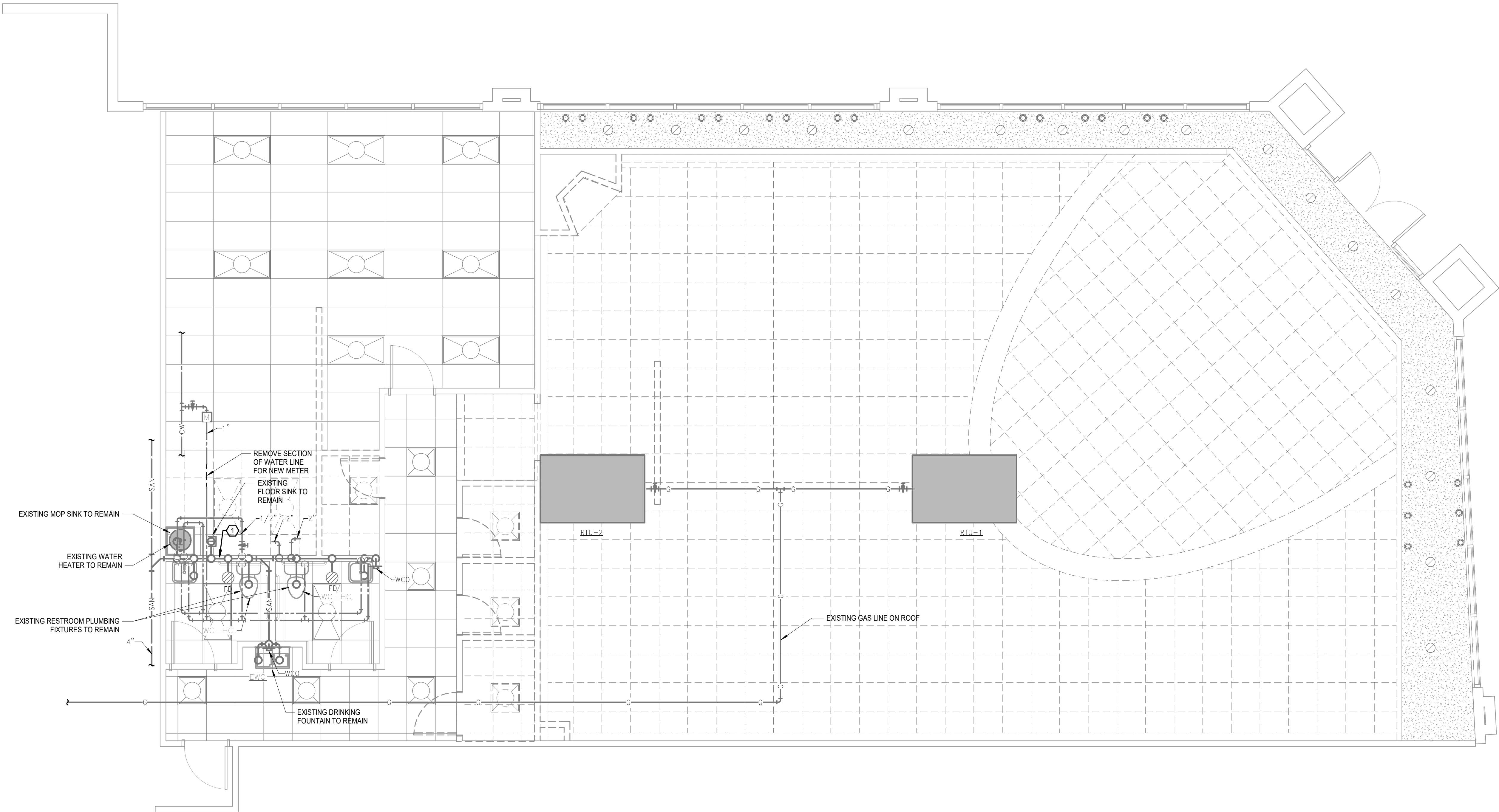
DP101

DEMOLITION PLAN NOTES:

- DISCONNECT AND REMOVE EXISTING BACKFLOW PREVENTER AND COLD WATER LINE. ADJUST AS REQUIRED FOR NEW WORK.

PLUMBING PLAN - DEMOLITION 1
SCALE: 1/4" = 1'-0"

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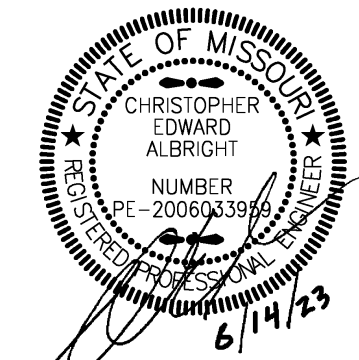
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PLUMBING PLAN - NEW WORK

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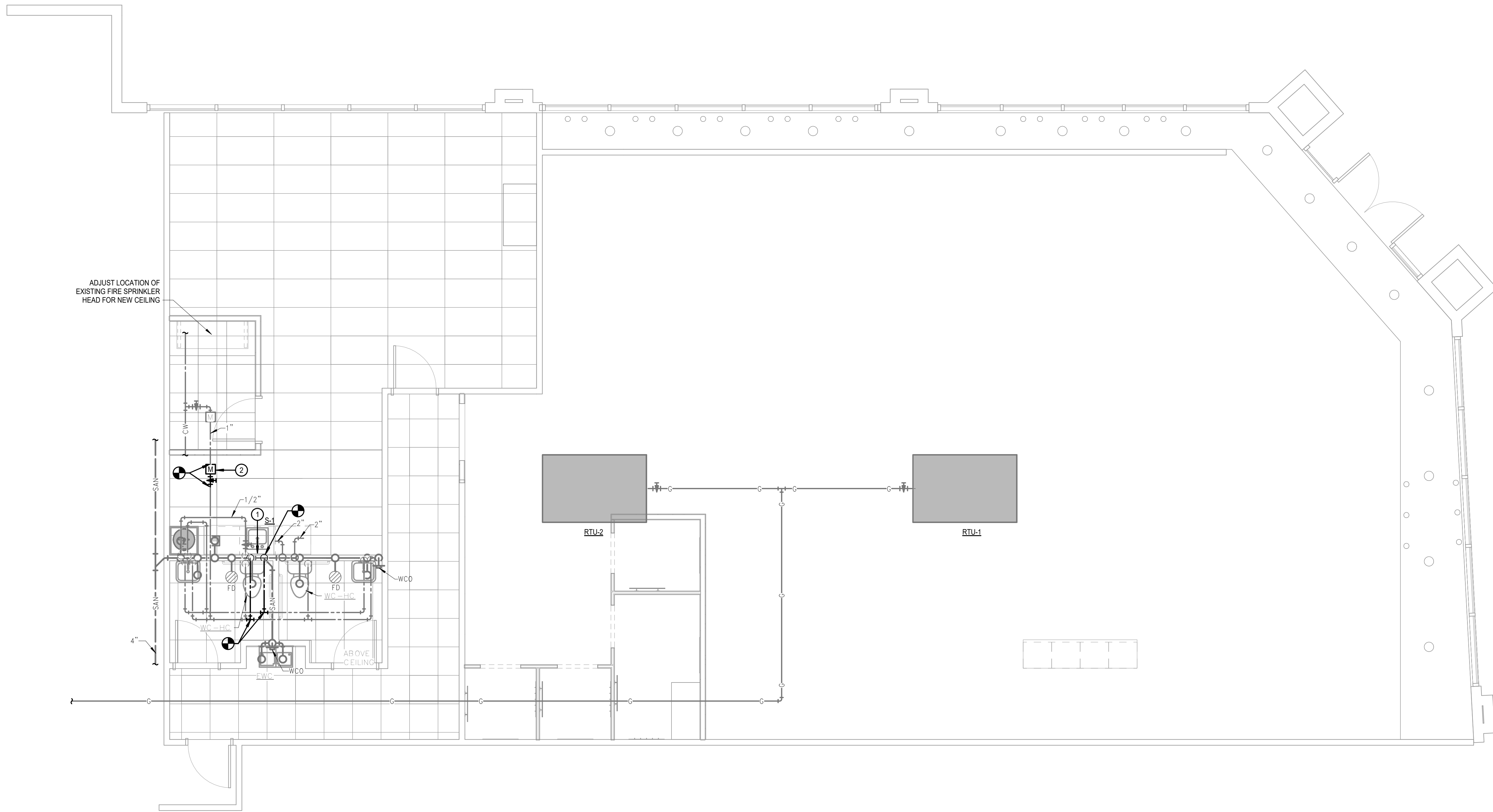
P101

FIRE PROTECTION GENERAL NOTES:

1. THE EXISTING FIRE SPRINKLER SYSTEM IS TO REMAIN AND BE REUSED. ADJUST OR MODIFY ANY HEAD LOCATIONS AS A RESULT OF NEW CONSTRUCTION (WALLS, LIGHTING, ETC.).

PLUMBING PLAN NOTES:

- ① CONNECT 1/2" COLD WATER, 1/2" HOT WATER, 2" SANITARY AND 1-1/2" VENT TO NEW BREAKROOM SINK. MODIFY SANITARY AND VENT PIPING IN CHASE TO CONNECT TO EXISTING PIPING IN THE WALL.
- ② PROVIDE AND INSTALL NEW TENANT WATER SUB-METER AND ISOLATION VALVE. METER TO BE A NEPTUNE T-10 (OR EQUAL).



PLUMBING PLAN - NEW WORK
SCALE: 1/4" = 1'-0"

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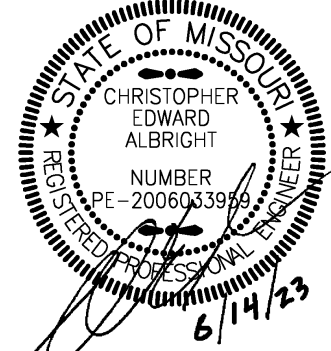
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LIGHTING PLAN - DEMOLITION

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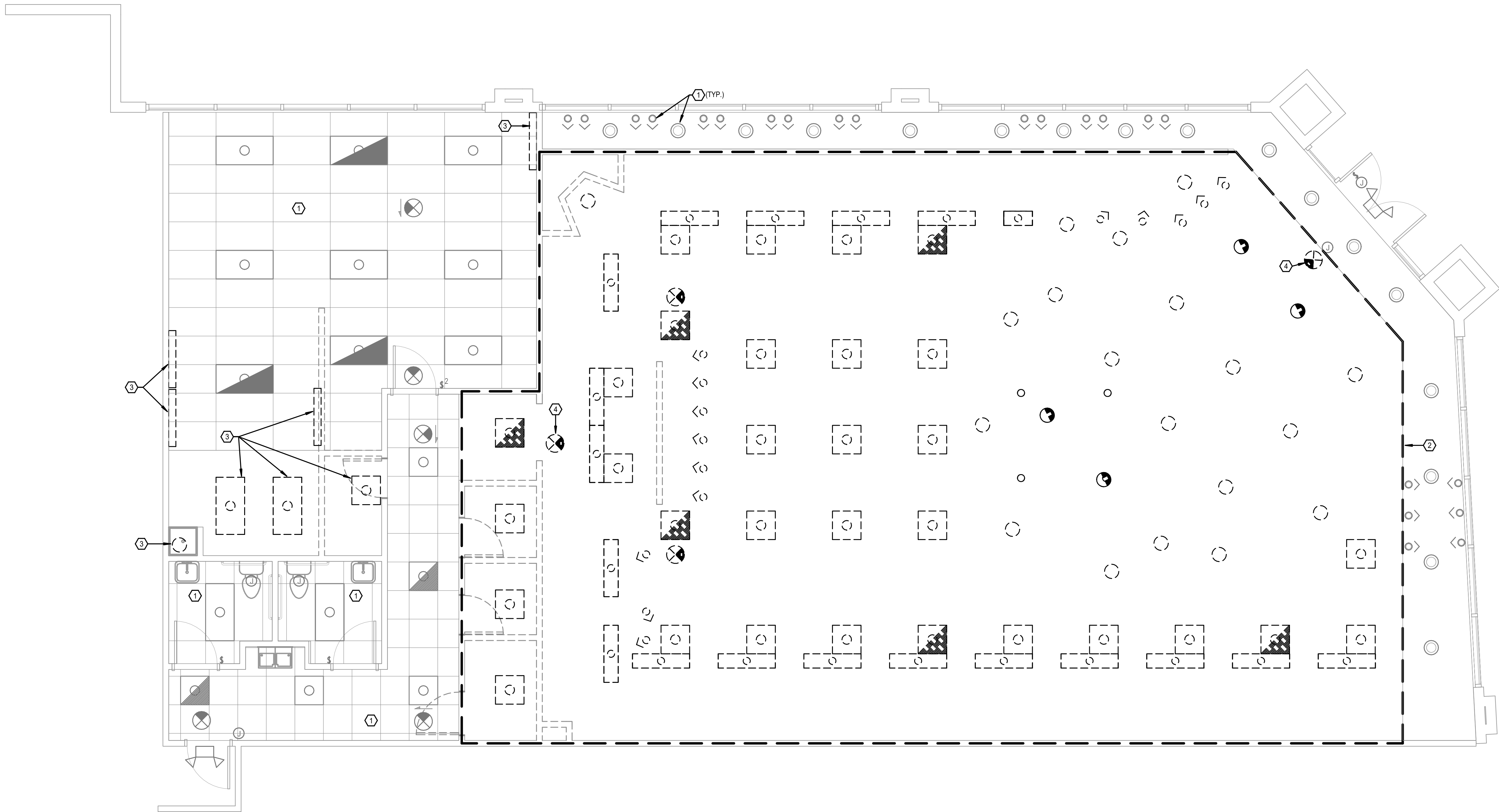
DE101

GENERAL DEMOLITION NOTES:

1. UNLESS NOTED OTHERWISE, SERVICES AND EQUIPMENT SHOWN FULL TONE ARE NEW WORK, HALF TONE ARE EXISTING TO REMAIN, AND FULL TONE AND DASHED ARE EXISTING TO BE DEMOLISHED.
2. THE EXISTING CONDITIONS INDICATED ON THE DRAWINGS ARE TAKEN FROM THE BEST INFORMATION AVAILABLE AND ARE NOT TO BE CONSTRUED AS "AS BUILT" CONDITIONS. THE INFORMATION IS SHOWN TO HELP ESTABLISH THE EXTENT OF THE NEW WORK. VERIFY ALL ACTUAL EXISTING CONDITIONS AT THE PROJECT SITE AND PERFORM WORK AS REQUIRED TO MEET THE EXISTING CONDITIONS AND THE EXTENT OF THE WORK INDICATED.
3. DISCONNECT AND REMOVE ALL CIRCUITRY, DISCONNECTS, CONTROLLERS AND CONDUIT THAT BECOMES UNNECESSARY AS A RESULT OF THE REMOVAL OF FIXTURES, DEVICES OR EQUIPMENT INDICATED TO BE REMOVED. LABEL ALL CIRCUIT BREAKERS IN EXISTING PANELBOARDS NO LONGER IN USE AS SPARE. CAP ALL UNUSED CONDUIT AND WIRING BEYOND THE FLOOR LINE OR WALL LINE TO FACILITATE RESTORATION OF FINISH.
4. VERIFY AND RESTORE CONTINUITY OF ALL EXISTING CIRCUITRY INDICATED TO REMAIN IN USE. WHERE REMOVAL OF EXISTING WIRING INTERRUPTS ELECTRICAL CONTINUITY OF CIRCUITS WHICH ARE TO REMAIN, FURNISH AND INSTALL ALL REQUIRED CIRCUITRY, CONDUIT, JUNCTION BOXES, ETC. TO INSURE CONTINUED ELECTRICAL CONTINUITY.
5. RELOCATE AND RECONNECT ANY MECHANICAL EQUIPMENT AND ANY ELECTRIC FIXTURES, DEVICES OR EQUIPMENT THAT MUST BE RELOCATED IN ORDER TO ACCOMPLISH THE REVISIONS INDICATED ON THE DRAWINGS OR INDICATED IN THE SPECIFICATIONS OR TO MEET NEC CODE REQUIRED CLEARANCES.
6. ELECTRIC CONTRACTOR TO FURNISH AND INSTALL BLANK JUNCTION BOX COVERS ON ALL EXISTING JUNCTION BOXES WITHIN THE CONSTRUCTION AREA THAT ARE NOT BEING DEMOLISHED.

DEMOLITION PLAN NOTES:

- 1 EXISTING FIXTURE TO REMAIN. UNLESS NOTED OTHERWISE.
- 2 ALL FIXTURES TO BE DEMOLISHED. MAINTAIN CIRCUIT CONTINUITY OF ANY DOWNSTREAM DEVICE.
- 3 FIXTURE TO BE DEMOLISHED.
- 4 TEMPORARILY REMOVE EXIT SIGNS AND REINSTALL DURING NEW WORK. REFER TO NEW WORK PLANS FOR ADDITIONAL INFORMATION.



LIGHTING PLAN - DEMOLITION

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

1

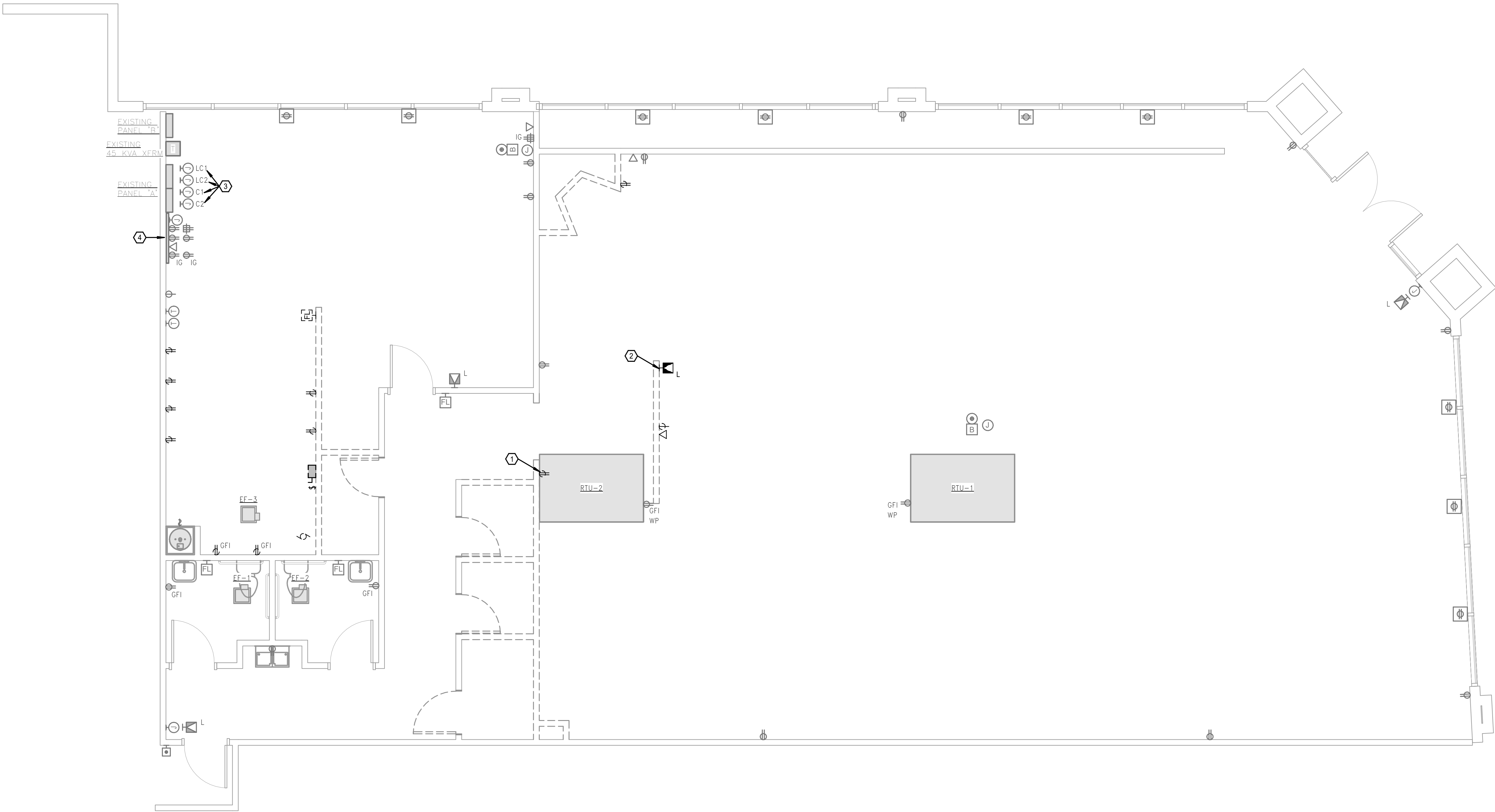
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5. RELOCATE AND RECONNECT ANY MECHANICAL EQUIPMENT AND ANY ELECTRIC FIXTURES, DEVICES OR EQUIPMENT THAT MUST BE RELOCATED IN ORDER TO ACCOMPLISH THE REVISIONS INDICATED ON THE DRAWINGS OR INDICATED IN THE SPECIFICATIONS OR TO MEET NEC CODE REQUIRED CLEARANCES.
6. ELECTRIC CONTRACTOR TO FURNISH AND INSTALL BLANK JUNCTION BOX COVERS ON ALL EXISTING JUNCTION BOXES WITHIN THE CONSTRUCTION AREA THAT ARE NOT BEING DEMOLISHED.

DEMOLITION PLAN NOTES:

- 1 RECEPTACLE TO BE DEMOLISHED. MAINTAIN CONTINUITY FOR ANY DOWNSTREAM CIRCUITS.
- 2 EXISTING FIRE ALARM DEVICE TO BE TEMPORARY REMOVED AND RELOCATED DURING NEW WORK.
- 3 EXISTING LIGHTING CONTACTORS AND TIMER CONTROLS.
- 4 EXISTING LOW-VOLTAGE EQUIPMENT FOR SECURITY/TELECOM AND OTHERS. REMOVE ALL UN-USED OLD EQUIPMENT AFTER VERIFYING WITH OWNER TO MAKE ROOM FOR LULULEMONS EQUIPMENT. MAINTAIN ALL OUTLETS FOR RE-USE DURING NEW WORK.



POWER PLAN - DEMOLITION 1
SCALE: 1/4" = 1'-0"

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project number

Project Number

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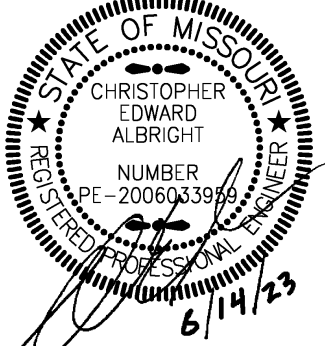
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POWER PLAN - DEMOLITION

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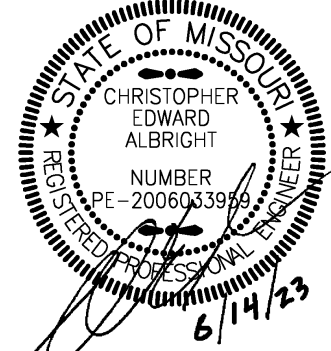
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LIGHTING PLAN - NEW WORK

drawing number

E101

GENERAL NOTES:

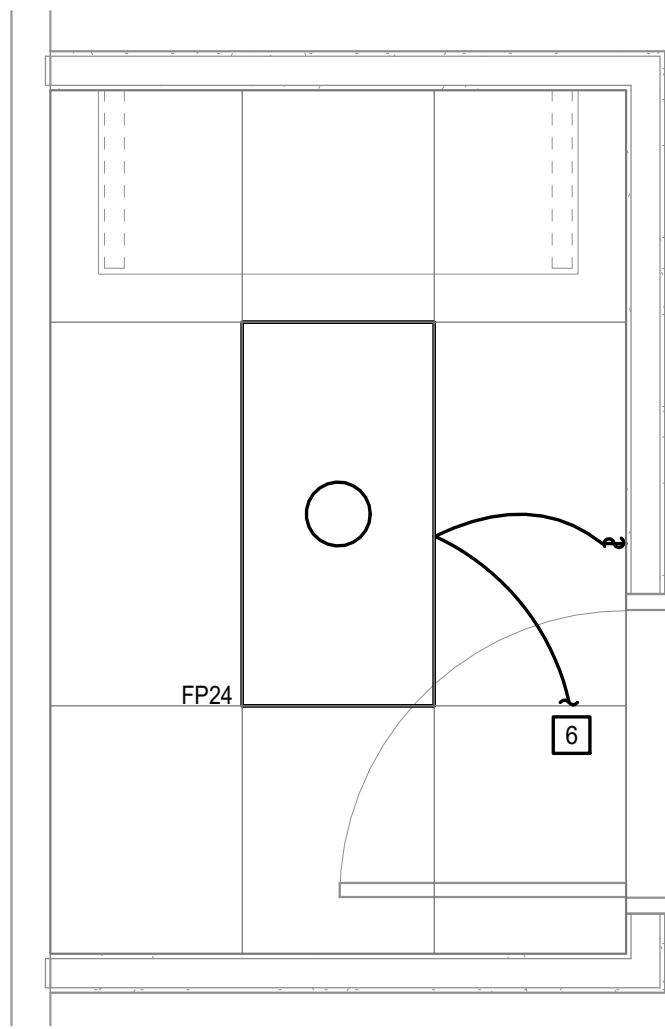
1. CIRCUIT ALL EMERGENCY DRIVERS AND EXIT SIGNS WITH AN UNSWITCHED HOT CONDUCTOR FROM LOCAL ROOM CIRCUIT.
2. REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS FOR EXACT MOUNTING HEIGHTS/LOCATIONS FOR EXTERIOR BUILDING LIGHTING.
3. PROVIDE LOW VOLTAGE WIRING BETWEEN OCCUPANCY SENSOR AND TO CORRESPONDING POWER PACKS WITHIN EACH ROOM UNLESS NOTED OTHERWISE. REFER TO WIRING DIAGRAMS ON DETAILS SHEET FOR MORE INFORMATION.
4. REFER TO ARCHITECTURAL FLOORING PLANS AND REFLECTED CEILING PLANS OF EXACT MOUNTING LOCATIONS OF ALL LIGHT FIXTURES AND WALL MOUNTED ELECTRICAL DEVICES.
5. PATCH AND REPAIR ALL OPENINGS CREATED THAT PENETRATE FIRE RATED WALLS, FLOORS AND CEILING USING UL APPROVED METHODS AND MATERIALS CONSISTENT WITH THE RATING OF THE SURFACE PENETRATED.
6. 120V BRANCH CIRCUITTING SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:

0-100' = #12 AWG
101'-150' = #10 AWG
151'-250' = #8 AWG

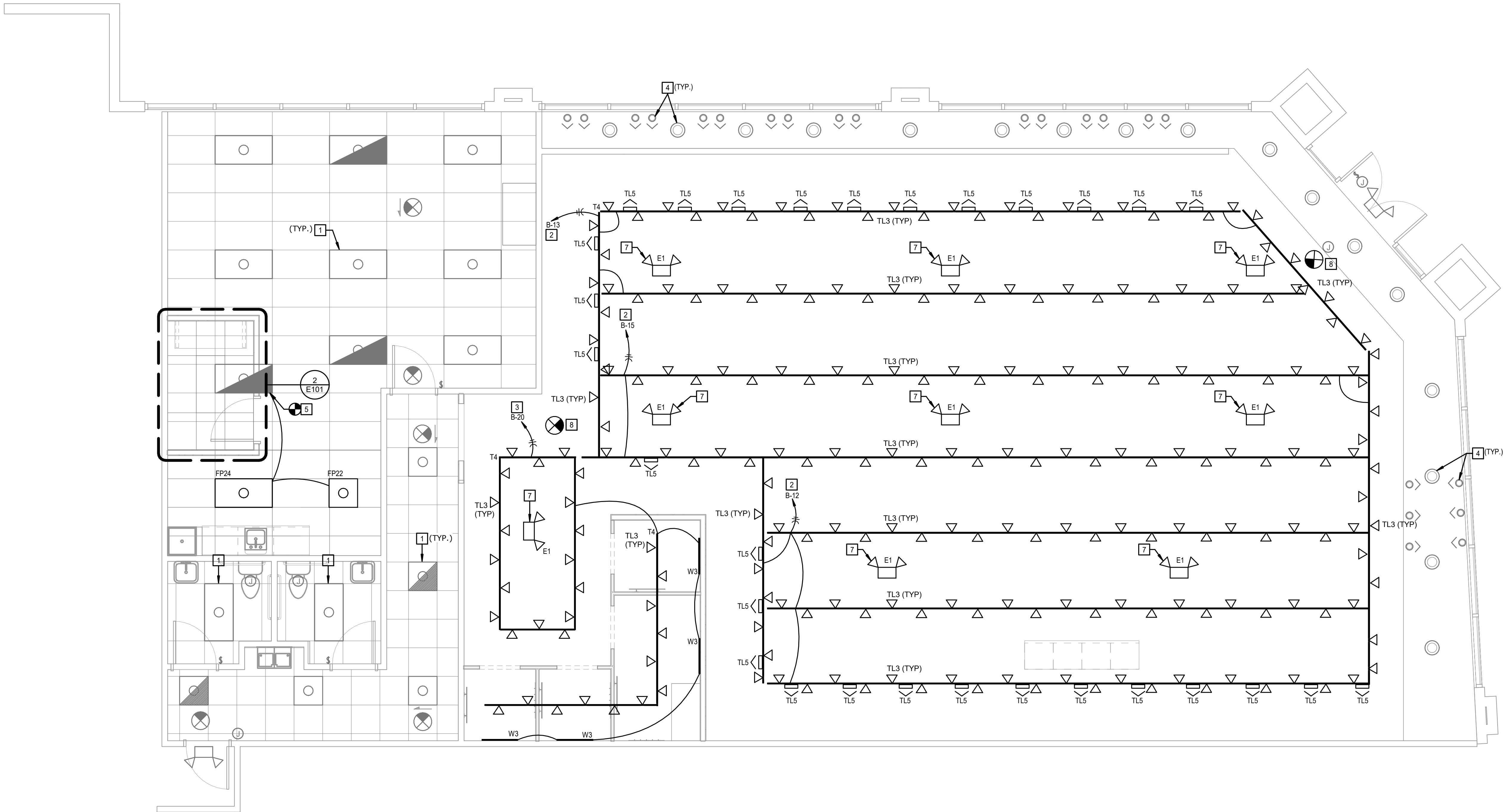
GROUND CONDUCTOR AND RACEWAYS SHALL BE INCREASED AS REQUIRED.

PLAN NOTES:

- 1 REPLACE ALL EXISTING 2X4 & 2X2 BULBS WITH LED EQUIVALENTS. EXISTING CONDITIONS SHOW THEY USE F32T8 FOR 2X4 AND F17T8 FOR 2X2. VERIFY IN FIELD EXACT BULB TYPES PRIOR TO INSTALL.
- 2 VERIFY IN FIELD EXISTING LIGHTING CONTACTOR CIRCUITS AND RE-USE EXISTING SALES FLOOR LIGHTING CIRCUITS ON CONTACTOR IF DIFFERENT FROM WHAT'S CALLED OUT ON PLAN. INTENT IS TO RE-USE EXISTING LIGHTING CONTACTOR AND CIRCUITS FOR SALES FLOOR LIGHTING.
- 3 CONNECT CIRCUIT THROUGH EXISTING LIGHTING CONTACTOR NEXT TO PANEL. VERIFY IN FIELD EXISTING SPARE AND CONTROL THROUGH EXISTING TIMER.
- 4 REPLACE ALL BULBS WITH LED EQUIVALENT. EXISTING CONDITIONS SHOW THEY USE A GX24 BASE FOR THE DOWNLIGHTS AND GX5.3 FOR THE ADJUSTABLE DOWNLIGHTS. VERIFY IN FIELD EXACT BULB TYPES PRIOR TO INSTALL.
- 5 CONNECT LIGHTING TO EXISTING CIRCUIT.
- 6 CONNECT TO EXISTING CIRCUIT BACK OF HOUSE LIGHTING CIRCUIT A-7.
- 7 EMERGENCY FIXTURES TO BE PENDANT MOUNTED FROM CEILING AT SAME HEIGHT AS TRACK FIXTURES. COORDINATE HEIGHTS IN FIELD. CONNECT LIGHTING CIRCUIT FROM PANEL A: 277V PANEL. THIS MAY BE CONNECTED TO CIRCUIT A-5 AS IT RELATES TO OTHER EMERGENCY FIXTURES. VERIFY IF CIRCUIT IS LOADED; PUT ON NEW 20A-1P SPARE FROM PANEL A, IF SO.
- 8 EXISTING EXIT SIGNS TO BE RE-INSTALLED FROM TEMPORARY REMOVAL. EXIT SIGNS TO BE PENDANT MOUNT EXIT SIGNS AS REQUIRED TO BE INSTALLED DURING NEW CEILING WORK.



ENLARGED LIGHTING PLAN - MANAGER'S OFFICE 2
SCALE: 1/2" = 1'-0"



LIGHTING PLAN - NEW WORK 1
SCALE: 1/4" = 1'-0"

project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

project number

Project Number

drawing issuance

Permit Set

06/14/23

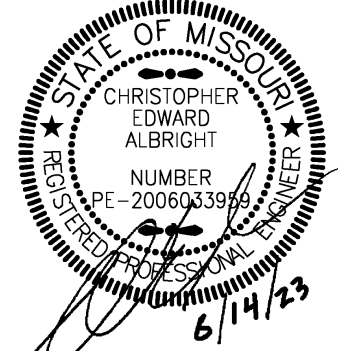
drawing revisions

No.

Description:

Date:

professional seal



DATE SIGNED: 06-14-23

drawing title

POWER PLAN - NEW WORK

drawing number

E201

GENERAL NOTES:

1. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT MOUNTING LOCATIONS OF ALL CEILING, FLOOR, AND WALL MOUNTED ELECTRICAL DEVICES.
2. REFER TO M/E SCHEDULES AND DETAILS FOR MECHANICAL EQUIPMENT CIRCUITING INFORMATION.
3. SPECIAL MOUNTING HEIGHTS NOTED ON PLANS ARE TO CENTER OF JUNCTION BOX.
4. 120V BRANCH CIRCUITING SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE.

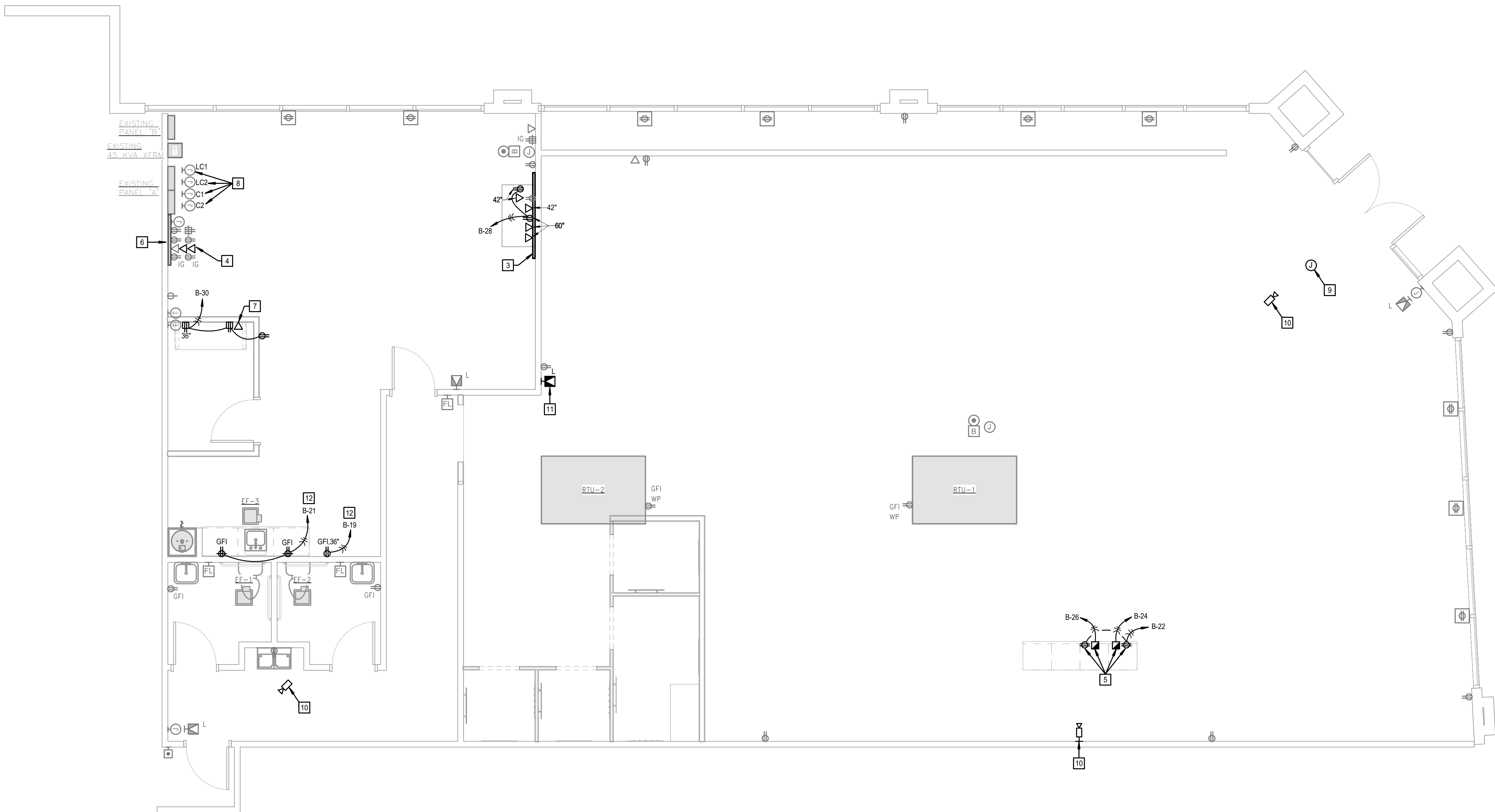
0-100' = # 12AWG.
101-150' = # 10AWG.
151-250' = # 8AWG.

GROUND CONDUCTOR AND RACEWAY SHALL BE INCREASED AS REQUIRED.

5. ALL ELECTRICAL CONDUIT AND INFRASTRUCTURE THAT PENETRATES A RATED WALL, FLOOR, OR CEILING ARE TO BE SEALED WITH UL APPROVED METHODS AND MATERIALS CONSISTENT WITH THE RATING OF THE ASSEMBLY PENETRATED.

PLAN NOTES:

- 1 PROVIDE 2'-0" WHIP WITH A QUAD THAT WILL ATTACH INSIDE THE MILLWORK BY OTHERS. TRENCH AS REQUIRED TO BRING THE CONDUITS UNDER THE CASHWRAP LOCATION. REFER TO LULULEMONS CONSTRUCTION STANDARDS & SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 2 PROVIDE (1) DEDICATED QUAD RECEPTACLE & (1) DUPLEX RECEPTACLE (IN-GROUND) AT "POS" LOCATION. COORDINATE WITH ARCHITECT/OWNER EXACT LOCATION OF "POS" PRIOR TO ROUGH-IN. ALSO PROVIDE 1" CONDUIT FOR RUNNING (3) CAT6 CABLING BY OTHERS PER TILL AT THE LOCATION SHOWN. REFER TO LULULEMONS CONSTRUCTION STANDARDS & SPECIFICATIONS FOR ADDITIONAL INFORMATION. TRENCH AS REQUIRED FOR BRINGING POWER & CONDUIT TO THE TILL LOCATIONS.
- 3 6'-0"x2'-0"x3/4" FIRE RATED PLYWOOD INSTALLED AT 5'-3 1/4" ON CENTER FOR RFID RECEIVING DESK. SURFACE MOUNTED PLYWOOD TO BE PAINTED TO MATCH THE COLOUR OF THE WALL. REFER TO LULULEMONS CONSTRUCTION STANDARDS & SPECIFICATIONS FOR ADDITIONAL INFORMATION. TRENCH AS REQUIRED FOR BRINGING POWER & CONDUIT TO THE TILL LOCATIONS. COORDINATE EXACT LOCATION WITH LULULEMON & ARCHITECT.
- 4 RE-USE EXISTING OUTLETS FOR REQUIRED LULULEMON TELECOM & NETWORKING RACK ON EXISTING PLYWOOD BACKBOARD. PROVIDE ADDITIONAL (2) DATA OUTLET ROUGH-IN ON AVAILABLE SPACE. REFER TO REFER TO LULULEMONS CONSTRUCTION STANDARDS & SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 5 PROVIDE (1) DEDICATED QUAD RECEPTACLE, (3) DATA OUTLETS & (1) DUPLEX RECEPTACLE (IN-GROUND) AT "POS" LOCATION. COORDINATE WITH ARCHITECT/OWNER EXACT LOCATION OF "POS" PRIOR TO ROUGH-IN. ALSO PROVIDE 1" CONDUIT FOR RUNNING (3) CAT6 CABLING BY OTHERS PER TILL AT THE LOCATION SHOWN. REFER TO LULULEMONS CONSTRUCTION STANDARDS & SPECIFICATIONS FOR ADDITIONAL INFORMATION. TRENCH AS REQUIRED FOR BRINGING POWER & CONDUIT TO THE TILL LOCATIONS.
- 6 VERIFY IN FIELD IF EXISTING FOR (3) 3/4" CONDUIT ON TOP OF PLYWOOD FOR SECURITY, MAIN PHONE LINE & OTHER FUTURE CONDUIT FOR FUTURE USES ROUTED UP TO DECK. IF THIS DOESN'T EXIST, PROVIDE MISSING CONDUITS. REFER TO LULULEMONS CONSTRUCTION STANDARDS & SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 7 PROVIDE (1) 1" CONDUIT TO A LARGER JUNCTION TO ACCOMMODATE A FACE PLATE FOR (6) DATA OUTLETS BY OTHERS. REFER TO LULULEMONS CONSTRUCTION STANDARDS & SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 8 EXISTING LIGHTING CONTACTORS AND TIMER CONTROLS.
- 9 LOCATION REFERENCE FOR TRAFFIC COUNTER. WORK TO BE COMPLETED BY TENANT.
- 10 LOCATION REFERENCE FOR SECURITY CAMERA. WORK TO BE COMPLETED BY TENANT.
- 11 EXISTING FIRE ALARM DEVICE RELOCATED. RE-CONNECT TO EXISTING FIRE ALARM SYSTEM AS REQUIRED.
- 12 VERIFY IN FIELD IF CIRCUIT CAN BE UTILIZED. IF CIRCUIT IS NOT AVAILABLE, CIRCUIT TO SPARE 20A-1P BREAKER ON PANEL B.



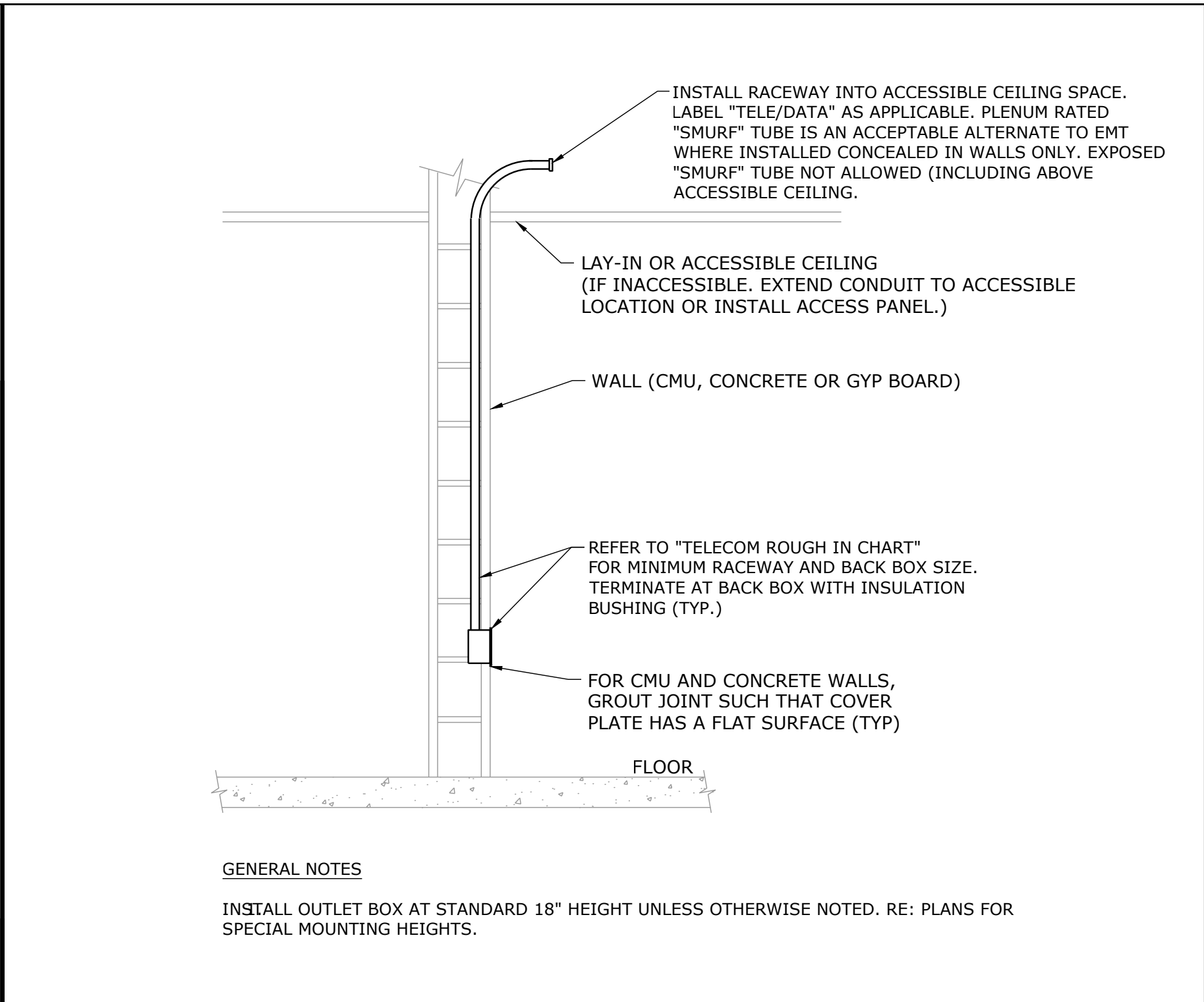
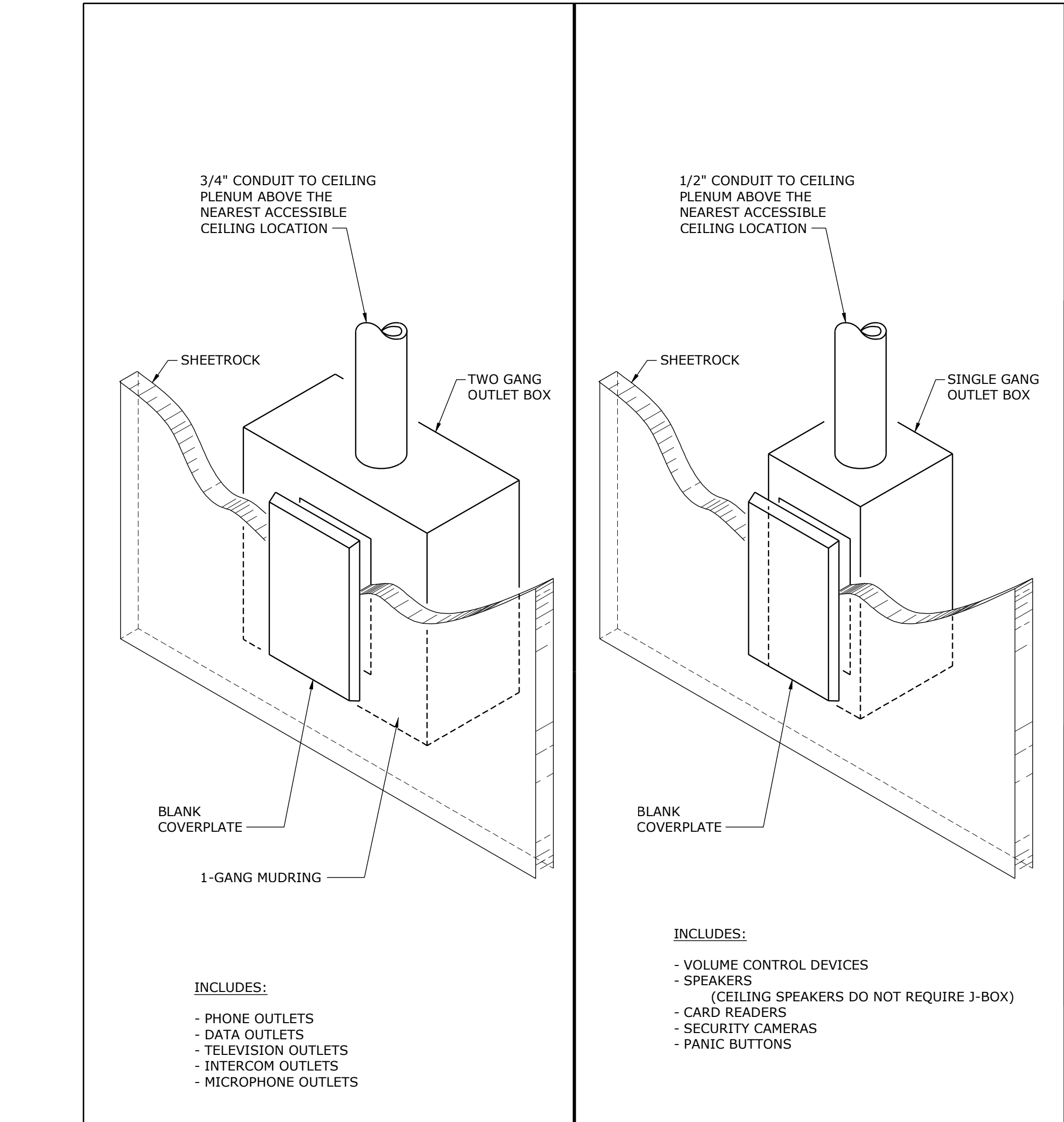
POWER PLAN - NEW WORK

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

1

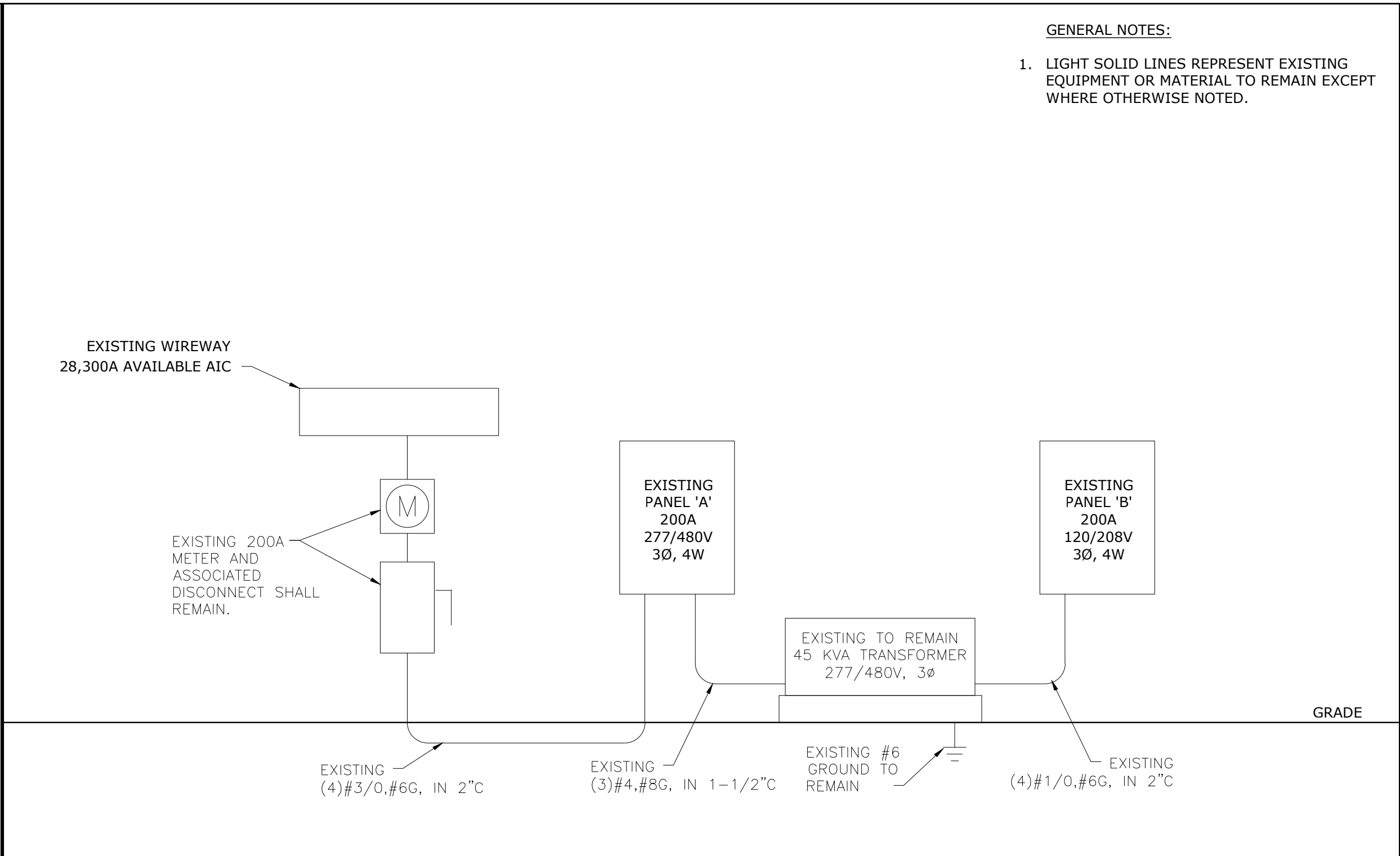
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PLOTTED BY: Wednesday, June 14, 2023 10:16:28 AM
Bleed Botly Charles

XXXXXX
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AUTOCAD FILE LOCATION: X:\2\3\23184\Drawings\06-2318400_E301.dwg
LAST CORRECTION BY: Tuesday, June 13, 2023 10:39:59 AM
PLOTTED BY: Wednesday, June 14, 2023 10:16:28 AM
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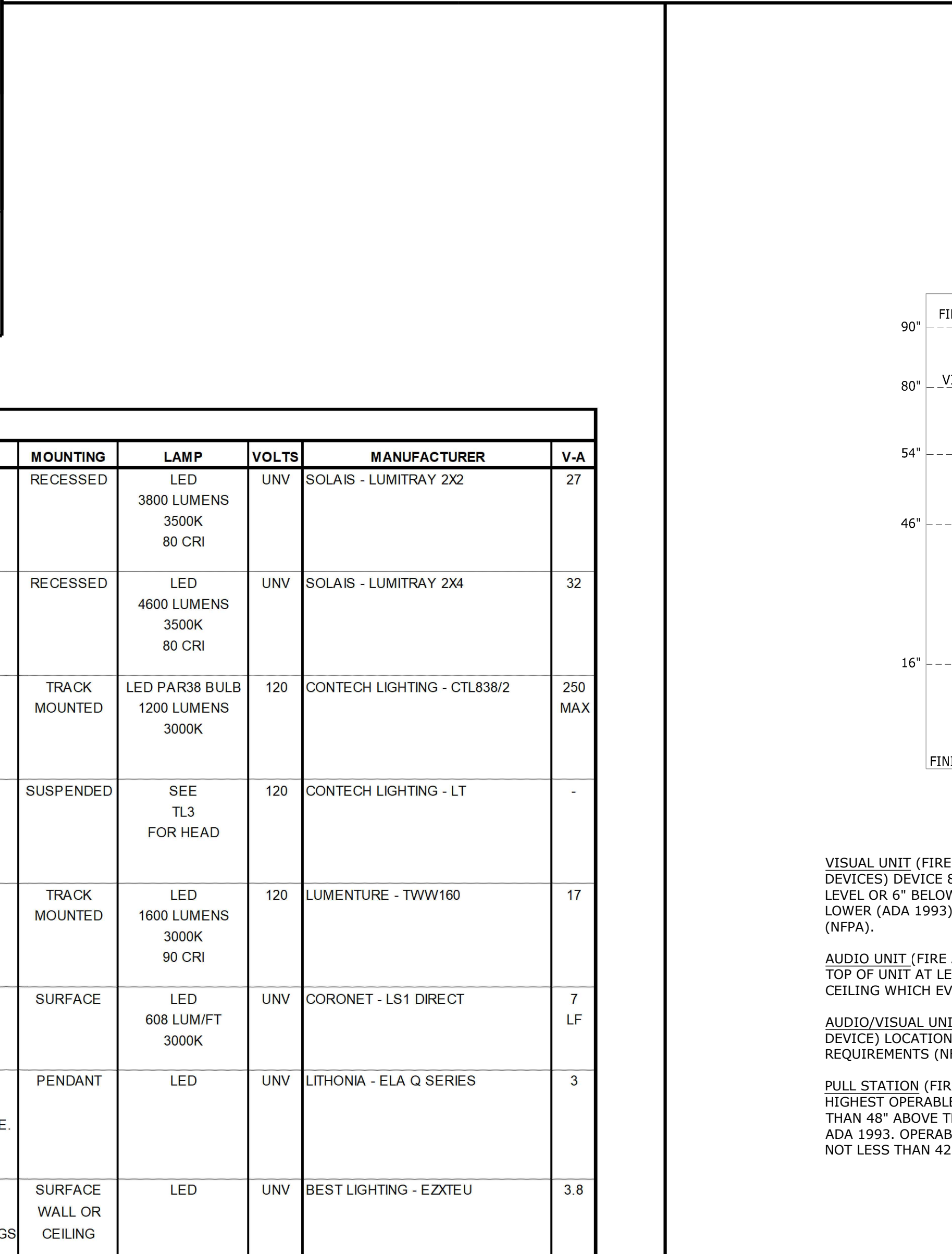
COMMUNICATIONS CONDUIT STUB UP

SCALE: NO SCALE (SYMBOLS ▽)



EXISTING ELECTRICAL RISER DIAGRAM

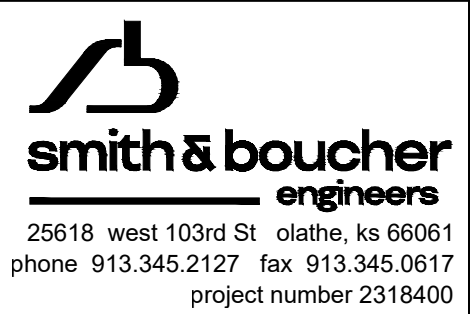
NO SCALE



WALL MOUNTED DEVICES: MOUNTING HEIGHTS

NO SCALE

INTERIOR FIXTURE SCHEDULE						
TYPE	DESCRIPTION	MOUNTING	LAMP	VOLTS	MANUFACTURER	V-A
FP22	2X2 LED FIELD SELECTABLE CCT & OUTPUT FLAT PANEL. MID OUTPUT. INTEGRAL 0-10V DIMMING DRIVER.	RECESSED	LED 3800 LUMENS 3500K 80 CRI	UNV	SOLAIS - LUMITRAY 2X2	27
FP24	2X4 LED FIELD SELECTABLE CCT & OUTPUT FLAT PANEL. MID OUTPUT. INTEGRAL 0-10V DIMMING DRIVER.	RECESSED	LED 4600 LUMENS 3500K 80 CRI	UNV	SOLAIS - LUMITRAY 2X4	32
TL3	SLIM STYLE GIMBAL LINE VOLTAGE TRACK FIXTURE HEAD. INTEGRAL ON/OFF SWITCH. E26 MEDIUM SKIRTED BASE. BLACK FINISH. PHILLIPS 17W LED PAR38 BULB.	TRACK MOUNTED	LED PAR38 BULB 1200 LUMENS 3000K	120	CONTECH LIGHTING - CTL838/2	250 MAX
T4	SINGLE CIRCUIT LINE VOLTAGE TRACK. COORDINATE EXACT LENGTHS WITH DRAWINGS. PROVIDE NECESSARY CONNECTORS. BLACK FINISH. MAX 1920W PER CIRCUIT, PER NEC 80% CAPACITY RULE.	SUSPENDED	SEE TL3 FOR HEAD	120	CONTECH LIGHTING - LT	-
TL5	TRACK WALL WASHER. TRIAC, ELV DIMMING. BLACK FINISH. J-TYPE MOUNTING.	TRACK MOUNTED	LED 1600 LUMENS 3000K 90 CRI	120	LUMENTURE - TWV160	17
W3	2" WIDTH LED LINEAR FIXTURE. 3'-0" LENGTH. MEDIUM OUTPUT. STANDARD 0-10V 1% DIM. BLACK FINISH. FLAT DIFFUSER.	SURFACE	LED 608 LUM/FT 3000K	UNV	CORONET - LS1 DIRECT	7 LF
E1	EMERGENCY TWIN BUG EYE LED FIXTURE. BLACK FINISH. PROVIDE NECESSARY BATTERY TO POWER ALL ELA Q SERIES FIXTURE. BATTERY CAPABLE OF 90 MINUTES OF EMERGENCY OPERATION.	PENDANT	LED	UNV	LITHONIA - ELA Q SERIES	3
EX3	LED EXIT SIGN WITH THERMOPLASTIC HOUSING. WHITE FINISH AND RED LETTERING. PROVIDE ARROWS AS NOTED ON DRAWINGS, AND SINGLE OR DOUBLE SIDED AS NEEDED AND SHOWN ON DRAWINGS PROVIDE TOP, BACK, OR SIDE MOUNT HARDWARE AS REQUIRED BY ARCHITECTURAL CONDITIONS. BATTERY CAPABLE OF 90 MINUTES OF EMERGENCY OPERATION.	SURFACE WALL OR CEILING	LED	UNV	BEST LIGHTING - EZXEU	3.8



RELEASED FOR CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
07/06/2023

Kloverarchitects
8813 PENROSE LANE, SUITE 400 • LENEXA, KS 66219
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project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

project number

drawing issuance

drawing revisions

professional seal

STATE OF MISSOURI
CHRISTOPHER EDWARD ALBRIGHT
NUMBER
PE-200603396
DATE SIGNED: 06/14/23
drawing title
ELECTRICAL - SCHEDULES AND DETAILS
drawing number
E301

PROJECT NAME: X:\2\3\23184\2318400\Drawings\06-2318400_E302.dwg
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LAST CORRECTION BY • DATE • TIME: Blee
PLOTTED BY • DATE • TIME: Botly Charles Wednesday, June 14, 2023 10:16:42 AM

PANEL B (EXISTING DEMO WORK)									
MAIN BUS AMPS: 200 A		AIC: 22,000 A		EQUIPMENT GROUND BUS					
MAIN BREAKER: 150 A		SECTIONS: 1 - 42 SPACE							
VOLTAGE: 208Y/120 V		MOUNTING: SURFACE							
PHASES/WIRES: 3 PH / 4 W		ENCLOSURE TYPE: NEMA 1							
CIRCUIT DESCRIPTION		POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION	
BATHROOM/WATER FOUNTAIN		1	20	1	2	20	1	BACK ROOM RECEPTS	
SHOW WINDOW RECEPTS		1	20	3	4	20	1	BACK ROOM RECEPTS	
SHOW WINDOW RECEPTS		1	20	5	6	20	1	BACK ROOM RECEPTS	
LTG: CANS S WINDOW		1	20	7	8	20	1	SALES FLOOR RECEPTS	
LTG: CANS W WINDOW		1	20	9	10	20	1	SALE	
LTG : CANS W WINDOW		1	20	11	12	20	1	LTG: CANS SALES	
LTG: CANS SALES FL		1	20	13	14	20	1	CASH WRAP	
LTG: CANS		1	20	15	16	20	1	CASH WRAP	
AMPLIFIER RECEPT		1	20	17	18	20	1	CASH WRAP	
REFRIGERATOR		1	20	19	20	20	1	TAYLOR SHOP RECEPTS	
MICROWAVE		1	20	21	22	20	1	TAYLOR SHOP RECEPTS	
SECURITY RECEPT		1	20	23	24	20	1	TAYLOR SHOP RECEPTS	
BACK ROOM RECEPTS		1	20	25	26	20	1	TAYLOR SHOP RECEPTS	
TAYLOR SHOP RECEPTS		1	20	27	28	20	1	TAYLOR SHOP RECEPTS	
TAYLOR SHOP RECEPTS		1	20	29	30	20	1	TAYLOR SHOP RECEPTS	
TAYLOR SHOP RECEPTS		1	20	31	32	20	1	SALES FLOOR RECEPTS	
TELEPHONE/DATA RECEPT		1	20	33	34	20	1	SALES FLOOR RECEPTS	
EMS		1	20	35	36	20	1	SALES FLOOR RECEPTS	
SPACE ONLY		1		37	38	20	1	SPARE	
SPACE ONLY		1		39	40	20	1	SPARE	
SPACE ONLY		1		41	42	20	1	WATER HEATER	
ITALIC - EXISTING BOLD - DEMO									

PANEL B (EXISTING NEW WORK)									
MAIN BUS AMPS: 200 A		AIC: 22,000 A		EQUIPMENT GROUND BUS					
MAIN BREAKER: 150 A		SECTIONS: 1 - 42 SPACE							
VOLTAGE: 208Y/120 V		MOUNTING: SURFACE							
PHASES/WIRES: 3 PH / 4 W		ENCLOSURE TYPE: NEMA 1							
CIRCUIT DESCRIPTION	POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION		
BATHROOM/WATER FOUNTAIN	1	20	1	2	20	1	BACK ROOM RECEPTS		
SHOW WINDOW RECEPTS	1	20	3	4	20	1	BACK ROOM RECEPTS		
SHOW WINDOW RECEPTS	1	20	5	6	20	1	BACK ROOM RECEPTS		
LTG: CANS S WINDOW	1	20	7	8	20	1	SALES FLOOR RECEPTS		
LTG: CANS W WINDOW	1	20	9	10	20	1	SALE		
LTG : CANS W WINDOW	1	20	11	12	20	1	*LTG: SALES FLOOR TRACK		
*LTG: SALES FLOOR TRACK	1	20	13	14	20	1	CASH WRAP		
*LTG: SALES FLOOR TRACK	1	20	15	16	20	1	CASH WRAP		
AMPLIFIER RECEPT	1	20	17	18	20	1	CASH WRAP		
REFRIGERATOR	1	20	19	20	20	1	LTG: SALES FLOOR TRACK		
MICROWAVE	1	20	21	22	20	1	REC - POS #1 - DUPLEX		
SECURITY RECEPT	1	20	23	24	20	1	REC - POS #2 - QUADS		
BACK ROOM RECEPTS	1	20	25	26	20	1	REC - POS #3 - QUADS		
SPARE	1	20	27	28	20	1	REC - RFID EQUIPMENT		
SPARE	1	20	29	30	20	1	REC - MANAGERS OFFICE		
SPARE	1	20	31	32	20	1	SALES FLOOR RECEPTS		
TELEPHONE/DATA RECEPT	1	20	33	34	20	1	SALES FLOOR RECEPTS		
EMS	1	20	35	36	20	1	SALES FLOOR RECEPTS		
SPACE ONLY	1		37	38	20	1	SPARE		
SPACE ONLY	1		39	40	20	1	SPARE		
SPACE ONLY	1		41	42	20	1	WATER HEATER		
ITALIC - EXISTING BOLD - NEW UPDATE PANEL SCHEDULE PER NEW WORK *CIRCUIT TO BE RE-USED WITH NAME CHANGE IN SCHEDULE.									

PANEL A (EXISTING DEMO WORK)									
MAIN BUS AMPS:		200 A		AIC:		22,000 A		EQUIPMENT GROUND BUS	
MAIN BREAKER:		200 A		SECTIONS:		1 - 42 SPACE			
VOLTAGE:		480Y/277 V		MOUNTING:		SURFACE			
PHASES/WIRES:		3 PH / 4 W		ENCLOSURE TYPE:		NEMA 1			
CIRCUIT DESCRIPTION		POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION	
LTG: SALES AREA		1	20	1	2		1	LTG - WALL WASHERS	
LTG: SALES AREA		1	20	3	4		1	LTG - WALL WASHERS	
LTG: NL/EXIT/EMERG.		1	20	5	6		1	SPACE ONLY	
LTG: TAYLOR SHOP/STOCK EM		1	20	7	8		1	SPACE ONLY	
SIGNS		1	20	9	10		1	SPACE ONLY	
SPACE ONLY		1		11	12		1	SPACE ONLY	
SPACE ONLY		1		13	14		1	SPACE ONLY	
SPACE ONLY		1		15	16		1	SPACE ONLY	
SPACE ONLY		1		17	18		1	SPACE ONLY	
SPACE ONLY		1		19	20		1	SPACE ONLY	
SPACE ONLY		1		21	22		1	SPACE ONLY	
SPACE ONLY		1		23	24		1	SPACE ONLY	
SPACE ONLY		1		25	26		1	SPACE ONLY	
SPACE ONLY		1		27	28		1	SPACE ONLY	
SPACE ONLY		1		29	30		1	SPACE ONLY	
RTU #2		3	30	31	32	30	3	RTU-2	
				33	34				
				35	36				
RTU #1		3	30	37	38	70	3	PANEL 'B' - 45KVA XFRM	
				39	40				
				41	42				
ITALIC - EXISTING BOLD - DEMO									

PANEL A (EXISTING NEW WORK)							
MAIN BUS AMPS: 200 A		AIC: 22,000 A		EQUIPMENT GROUND BUS			
MAIN BREAKER: 200 A		SECTIONS: 1 - 42 SPACE					
VOLTAGE: 480Y/277 V		MOUNTING: SURFACE					
PHASES/WIRES: 3 PH / 4 W		ENCLOSURE TYPE: NEMA 1					
CIRCUIT DESCRIPTION	POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION
LTG: SALES AREA	1	20	1	2		1	LTG - WALL WASHERS
LTG: SALES AREA	1	20	3	4		1	LTG - WALL WASHERS
LTG: NL/EXIT/EMERG.	1	20	5	6		1	SPACE ONLY
LTG: TAYLOR SHOP/STOCK EM	1	20	7	8		1	SPACE ONLY
SIGNS	1	20	9	10		1	SPACE ONLY
SPACE ONLY	1		11	12		1	SPACE ONLY
SPACE ONLY	1		13	14		1	SPACE ONLY
SPACE ONLY	1		15	16		1	SPACE ONLY
SPACE ONLY	1		17	18		1	SPACE ONLY
SPACE ONLY	1		19	20		1	SPACE ONLY
SPACE ONLY	1		21	22		1	SPACE ONLY
SPACE ONLY	1		23	24		1	SPACE ONLY
SPACE ONLY	1		25	26		1	SPACE ONLY
SPACE ONLY	1		27	28		1	SPACE ONLY
SPACE ONLY	1		29	30		1	SPACE ONLY
RTU #2	3	30	31	32	30	3	RTU-2
			33	34			
			35	36			
RTU #1	3	30	37	38	70	3	PANEL 'B' - 45KVA XFRM
			39	40			
			41	42			
ITALIC - EXISTING BOLD - NEW UPDATE PANEL SCHEDULE PER NEW WORK							

project title

RED DEVELOPMENT
SUMMIT FAIR
910 G NW Blue Pkwy
Lee's Summit, MO 64086

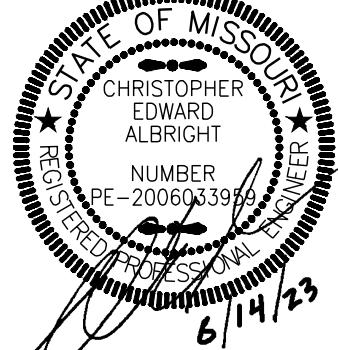
project number

drawing issuance

drawing revisions

No. Description: Date:

professional seal



DATE SIGNED: 06/14/2023

drawing title

ELECTRICAL - SCHEDULES AND DETAILS

drawing number

E302