

www.collinsandwebb.com

816.249.2270

Missouri 64063 |

Summit,

ee's

St.

Market

# 618 SW 3RD STREET, SUITE E LEE'S SUMMIT, MO 64063

# PERMIT DOCUMENTS 12/21/2022 COLLINS WEBB #: 23010

GENERAL DESCRIPTION			GENERAL EXITIN	G REQUIREMENTS	TABLE/SECTION/REFERENCE
PROJECT NAME: JAZZERCISE LSMO PROJECT LOCATION: LEE'S SUMMIT, MISSOURI COUNTY: JACKSON COLLINS WEBB ARCHITECTURE 307B SW MARKET STREET			EXIT TRAVEL DISTANCE DEAD END CORRIDOR COMMON PATH OF TRAVEL MIN. CORRIDOR WIDTH	50 FEET 75' FEET, OR 100' IF OCC. ≤ 30	IBC TABLE 1017.2 IBC SECTION 1020.4 IBC TABLE 1006.2.1 IBC TABLE 1020.2
LEES SUMMIT, MISSOURI 64063			EXIT REQUIREME	ENTS	TABLE/SECTION/REFERENCE
INTERNATIONAL BUILDING CODE - 2018 ED. INTERNATIONAL PLUMBING CODE - 2018 ED. INTERNATIONAL MECHANICAL CODE - 2018 ED. INTERNATIONAL FUEL GAS CODE - 2018 ED. INTERNATIONAL FIRE CODE - 2018 ED. NATIONAL ELECTRICAL CODE - 2017 ED. ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES -	ICC/ANSI A117.1-2009		A. REQUIRED CAPACITY 1. OTHER COMPONENTS - 0.2" / PE B. MINIMUM NUMBER		IBC SECTION 1005.3.2
CODE INFORMATION		TABLE/SECTION/REFERENCE	1. OCCUPANT LOAD OF 1-500 PERS * 1 EXIT ALLOWED IF OCCUPANC		IBC TABLE 1006.3.2 IBC TABLE 1006.3.3(2)
BUILDING/PROJECT USE:	JAZZERCISE STUDIO	IBC SECTION 304.1	OCCUPANT LOAD	)	TABLE/SECTION/REFERENCE
CONSTRUCTION TYPE OCCUPANCY CLASSIFICATION	TYPE VB (EXISTING) NONSPRINKLED GROUP "B" BUSINESS LESS THAN 50 OCC. 1,552 SQ. FT.	IBC TABLE 601 IBC SECTION 304.1	EXERCISE AREA - 600 SF OFFICE AREA - 250 SF OCCUPANT LOAD THIS LEVEL	12 OCCEXERCISE ROOMS:50 SF/OCC2 OCCBUSINESS AREA:14 OCCUPANTS	IBC TABLE 1004.5 IBC TABLE 1004.5
			EXITS REQUIRED THIS LEVEL	1 EXIT	IBC TABLE 1006.3.2 & TABLE 1006.3.3(2)
FIRE RESISTIVE REQUIREME	INTS	TABLE/SECTION/REFERENCE	EXITS PROVIDED THIS LEVEL	2 EXITS	
PRIMARY FRAME0 HRNON-BEARING WALLS0 HRBEARING WALLS INT./ EXT.0 INTFLOOR CONSTRUCTION0 HRCEILING/ROOF0 HRCORRIDORS1 HR	S . / 0 EXT. HRS S S	IBC TABLE 601 IBC TABLE 601 IBC TABLE 601 IBC TABLE 601 IBC TABLE 601 IBC TABLE 1020.1	B OCC WATER CLOSETS	IRE REQUIREMENTS = 1 PER 25 FOR THE FIRST 50; 1 PER 50 FOR EXC	
FIRE EXTINGUISHERS			B OCC LAVATORIES B OCC DRINKING FOUNTAIN	= 1 PER 40 FOR THE FIRST 80; 1 PER 80 FOR EX( = 1/100 = 0. (NOT DECIDIE OCC. < 15)	CEEDING 80 OCCUPANTS
1. PROVIDE PORTABLE FIRE EXTINGUISHERS IN OCCU SEE PLANS FOR SUGGESTED LOCATIONS. NOTIFY A			B OCC SERVICE SINK <u>PLUMBING FIXTURES REQUIRED</u> WATER CLOSETS: LAVATORIES: DRINKING FOUNTAINS: SERVICE SINKS:	= 0 (NOT REQ'D IF OCC. ≤ 15) 14/25 = 1 REQUIRED 14/40 = 1 REQUIRED 14/100 = 1 REQUIRED = 0 REQUIRED	
1. ALL MEANS OF EGRESS TO HAVE A MINIMUM CEILING 2. OCCUPIED SPACES, HABITABLE SPACES AND CORRIE 3. BATHROOMS, TOILET ROOMS, AND STORAGE ROOMS		N 7'-6" A.F.F.	PLUMBING FIXTURES PROVIDED WATER CLOSETS: LAVATORIES: DRINKING FOUNTAINS: SERVICE SINKS:	= 2 PROVIDED = 2 PROVIDED = 1 PROVIDED = 0 PROVIDED	
INTERIOR FINISHES					
GROUP B MAX. FLAME SPREAD	TABLE/SECTIO	N/REFERENCE			
EXIT ENCLOSURES CLASS B	IBC TABLE 803	.13			
LOBBIES & CORRIDORS CLASS C	IBC TABLE 803	.13			
ALL OTHER SPACES CLASS C	IBC TABLE 803	.13			
TEXTILES CLASS C (76-200)	IBC 803.1.1, 803	3.5.1, 803.5.2			
SMOKE DEVELOPED 0-450	IBC 803.1.1				
NOTE: Decorative Materials and Trim (including plastics) must con	nply with IBC SECTION 806				

# OWNER

LSJZ, LLC DBA LEE'S SUMMIT JAZZERCISE 2909 SW MUIR DRIVE LEE'S SUMMIT, MO 64081 P: 816.679.4954

# JAZZERCISE LSMO

# ARCHITECT

COLLINS | WEBB ARCHITECTURE 307B SW MARKET STREET LEE'S SUMMIT, MISSOURI 64063 P: 816.249.2270 www.collinsandwebb.com

## CONTRACTOR

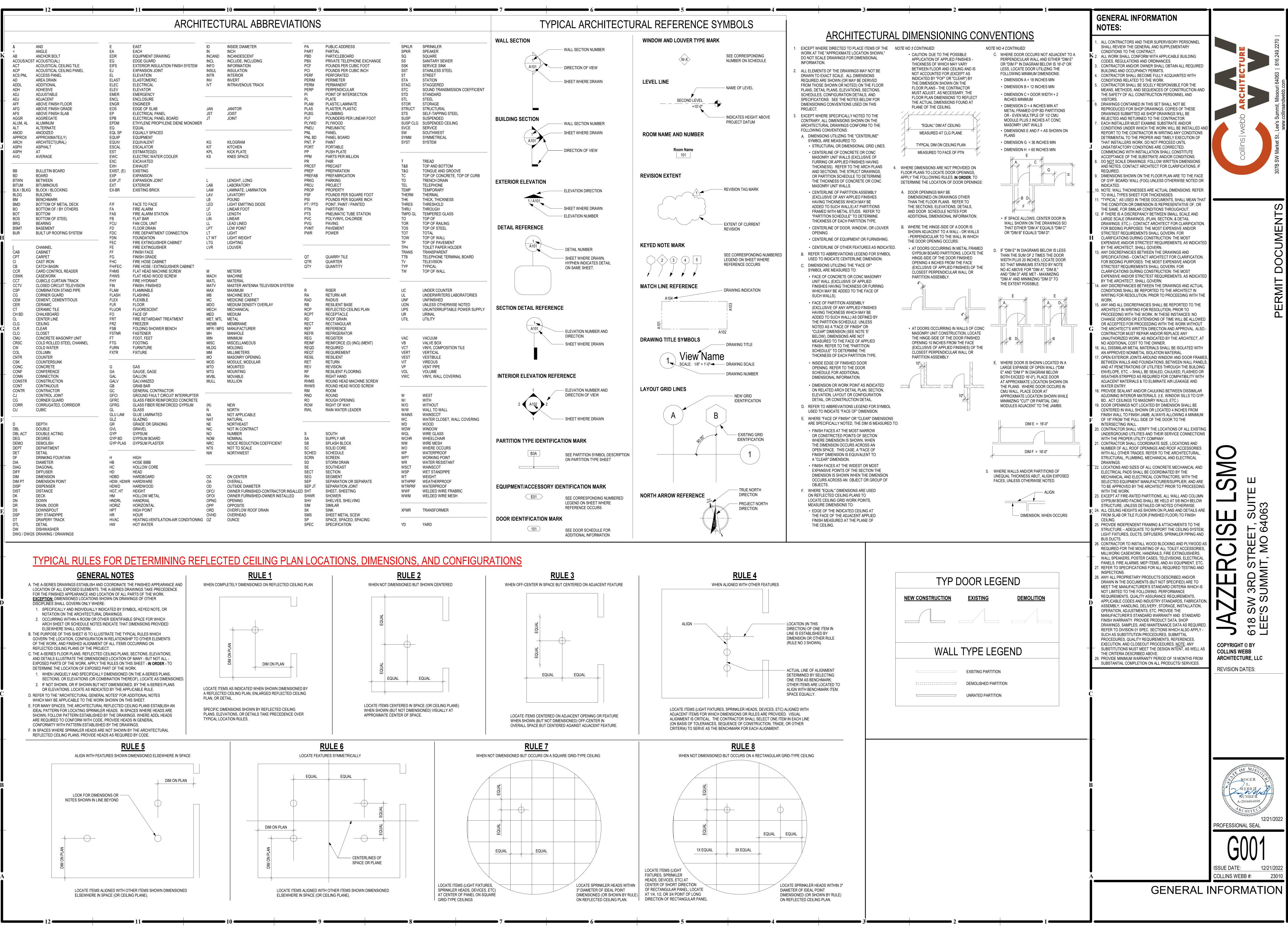
CAMM CONSTRUCTION, INC 344 NE CAPITAL DRIVE LEE'S SUMMIT, MO 64086 P: 816.918.5548 www.cammconstructioninc.com

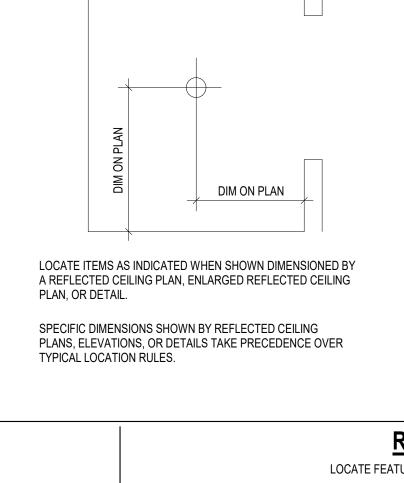
## MEP ENGINEER

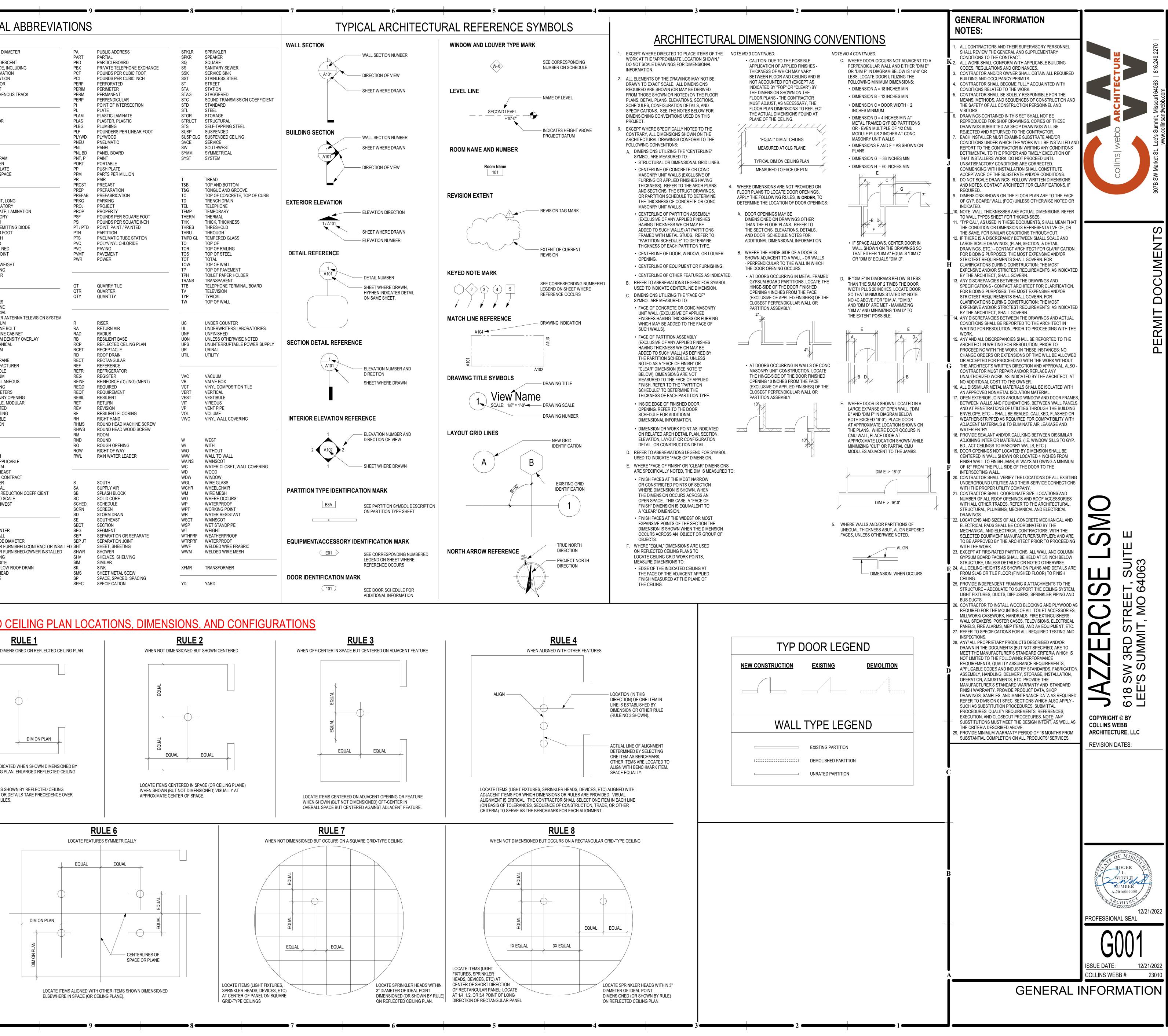
JSC ENGINEERS 1925 CENTRAL ST. KANSAS CITY, MO 64108 P: 816.272.5289 www.jscengineers.com

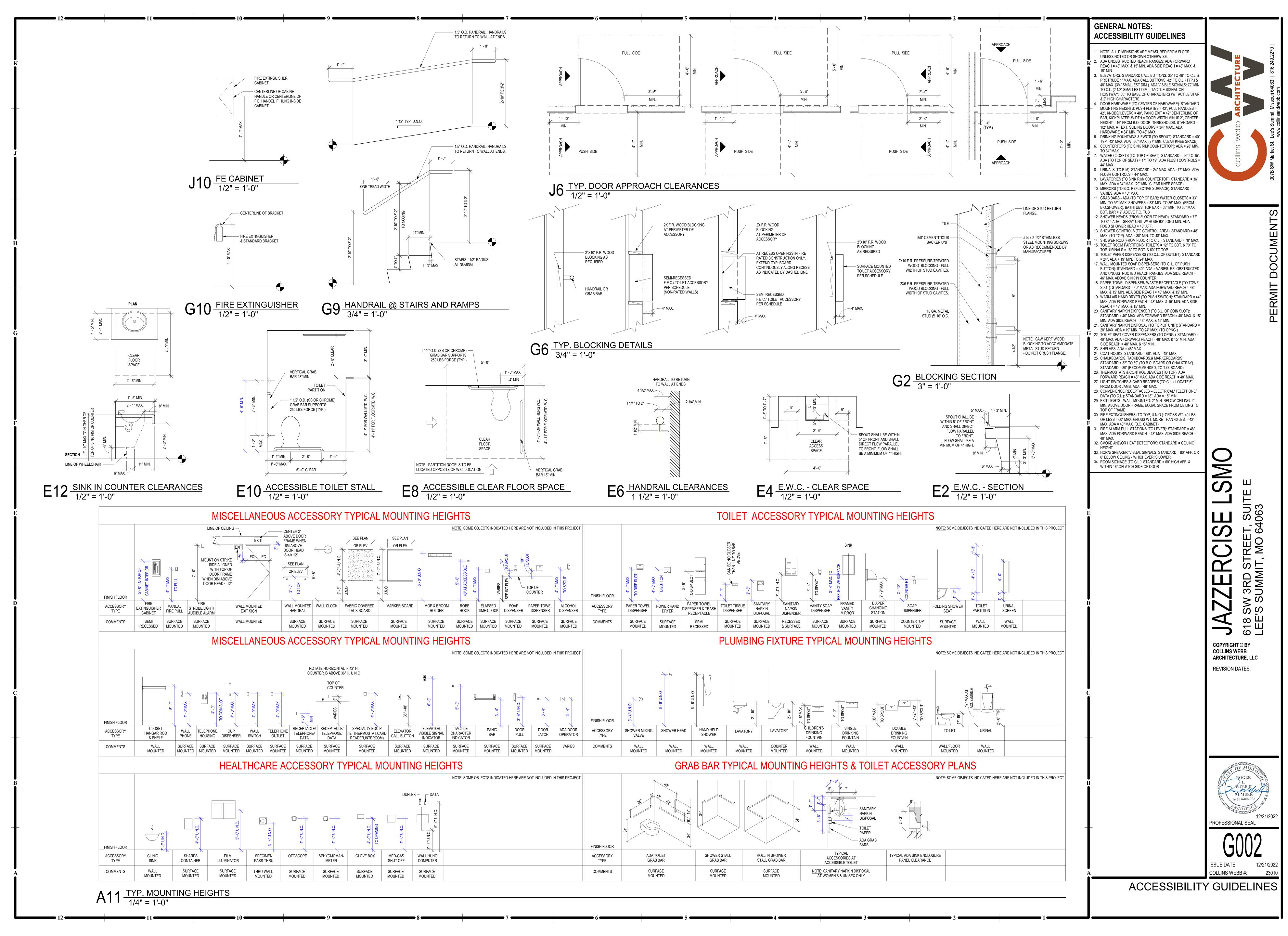
GENER	AL
SHEET NUMBER	SI
CS	COVER SHEET
G001	GENERAL INFORMATION
G002	ACCESSIBILITY GUIDELIN
	<b>FECTURAI</b>
SHEET NO.	S
A101	1ST FLOOR PLAN, FINISH
MEP	
SHEET NUMBER	S
M101	MECHANICAL PLANS, SPI
P101	PLUMBING PLANS, SPEC
E001	ELECTRICAL PLANS
E101	ELECTRICAL PLANS

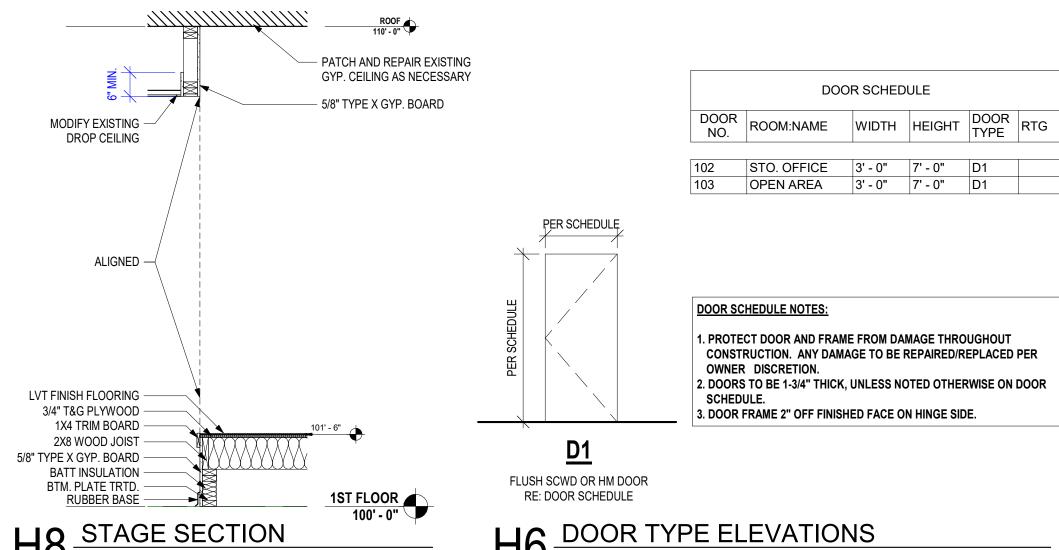
# HEET NAME SHEET NAME HES & SCHEDULES SHEET NAME PECS & SCHEDULES CS & SCHEDULES





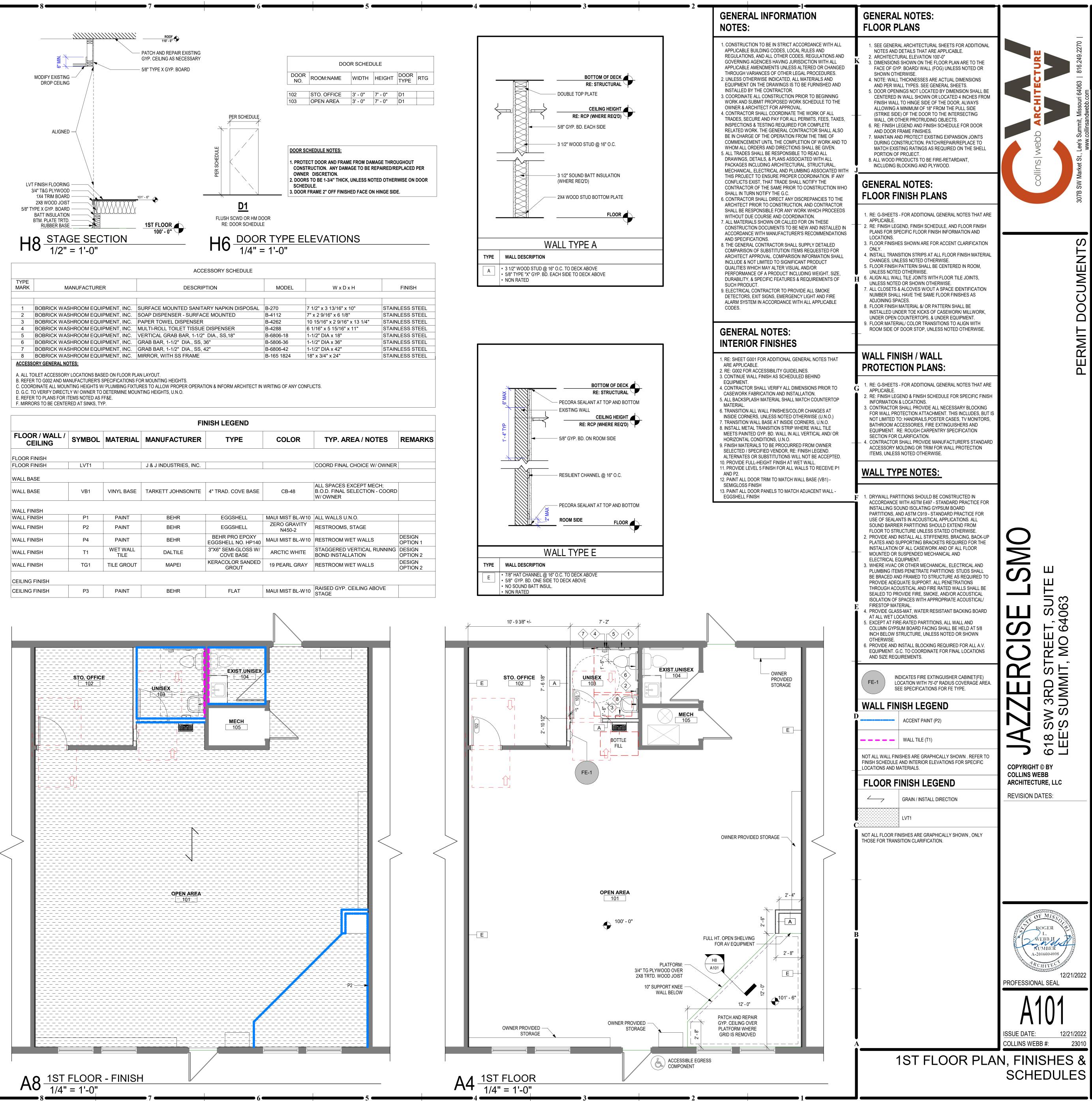






		ACCESSORY SCHEDULE			
TYPE MARK	MANUFACTURER	DESCRIPTION	W x D x H	FINISH	
1	BOBRICK WASHROOM EQUIPMENT, INC.	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL	B-270	7 1/2" x 3 13/16" x 10"	STAINLESS STEEL
2	BOBRICK WASHROOM EQUIPMENT, INC.	SOAP DISPENSER - SURFACE MOUNTED	B-4112	7" x 2 9/16" x 6 1/8"	STAINLESS STEEL
3	BOBRICK WASHROOM EQUIPMENT, INC.	PAPER TOWEL DISPENSER	B-4262	10 15/16" x 2 9/16" x 13 1/4"	STAINLESS STEEL
4	BOBRICK WASHROOM EQUIPMENT, INC.	MULTI-ROLL TOILET TISSUE DISPENSER	B-4288	6 1/16" x 5 15/16" x 11"	STAINLESS STEEL
5	BOBRICK WASHROOM EQUIPMENT, INC.	VERTICAL GRAB BAR, 1-1/2" DIA., SS,18"	B-6806-18	1-1/2" DIA x 18"	STAINLESS STEEL
6	BOBRICK WASHROOM EQUIPMENT, INC.	GRAB BAR, 1-1/2" DIA., SS, 36"	B-5806-36	1-1/2" DIA x 36"	STAINLESS STEEL
7	BOBRICK WASHROOM EQUIPMENT, INC.	GRAB BAR, 1-1/2" DIA., SS, 42"	B-6806-42	1-1/2" DIA x 42"	STAINLESS STEEL
8	BOBRICK WASHROOM EQUIPMENT, INC.	MIRROR, WITH SS FRAME	B-165 1824	18" x 3/4" x 24"	STAINLESS STEEL
ACCESS	ORY GENERAL NOTES:				

			FI	NISH LEGEND			
FLOOR / WALL / CEILING			MANUFACTURER	TYPE	COLOR	TYP. AREA / NOTES	REMARKS
FLOOR FINISH							
FLOOR FINISH	LVT1		J & J INDUSTRIES, INC.			COORD FINAL CHOICE W/ OWNER	
WALL BASE							
WALL BASE	VB1	VINYL BASE	TARKETT JOHNSONITE	4" TRAD. COVE BASE	CB-48	ALL SPACES EXCEPT MECH; B.O.D. FINAL SELECTION - COORD W/ OWNER	
WALL FINISH							
WALL FINISH	P1	PAINT	BEHR	EGGSHELL	MAUI MIST BL-W10	ALL WALLS U.N.O.	
WALL FINISH	P2	PAINT	BEHR	EGGSHELL	ZERO GRAVITY N450-2	RESTROOMS, STAGE	
WALL FINISH	P4	PAINT	BEHR	BEHR PRO EPOXY EGGSHELL NO. HP140	MAUI MIST BL-W10	RESTROOM WET WALLS	DESIGN OPTION 1
WALL FINISH	T1	WET WALL TILE	DALTILE	3"X6" SEMI-GLOSS W/ COVE BASE	ARCTIC WHITE	STAGGERED VERTICAL RUNNING BOND INSTALLATION	DESIGN OPTION 2
WALL FINISH	TG1	TILE GROUT	MAPEI	KERACOLOR SANDED GROUT	19 PEARL GRAY	RESTROOM WET WALLS	DESIGN OPTION 2
CEILING FINISH	I				1		
CEILING FINISH	P3	PAINT	BEHR	FLAT	MAUI MIST BL-W10	RAISED GYP. CEILING ABOVE STAGE	



# MECHANICAL SPECIFICATIONS

#### 1. GENERAL PROVISIONS

- A, PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE MECHANICAL SYSTEMS OUTLINED. B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR
- APPROVAL AS REQUIRED BY AUTHORITIES.
- C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
- D. ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.
- E. DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, PIPE, DUCT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.
- F. PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED. G. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECT FOR A PERIOD OF ONE
- YEAR FROM FINAL ACCEPTANCE. H. INSPECTION OF THE SITE: THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MEP
- DRAWINGS, SPECIFICATIONS, DETAIL, AND THE SITE. THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SPECIAL OR UNUSUAL PROBLEMS, CONFLICTS, OR OBSTRUCTIONS THAT AFFECT HIS BID. I. FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE MECHANICAL AND PLUMBING DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES.
- J. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS OR WITH CODE REQUIREMENTS, THE NOTE OR CODE WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR HIGHER STANDARD SHALL PREVAIL.
- K. INSTALL MATERIALS AND SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SUBMITTALS. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH UNIFORM APPEARANCE FOR EXPOSED WORK. COORDINATE WITH WORK OF OTHER SECTIONS. COMPLY WITH APPLICABLE REGULATIONS AND CODE REQUIREMENTS. PROVIDE PROPER CLEARANCES FOR SERVICING.

#### <u>2. MOTORS:</u>

A. PROVIDE THERMAL OVERLOAD PROTECTION FOR EACH MOTOR PROVIDED BY THIS WORK.

#### B. DUCTWORK:

- A. ALL DUCTWORK UNLESS OTHERWISE INDICATED SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL COMPLYING WITH ASTM A 527, LOCKFORMING QUALITY, WITH G60 ZINC COATING IN ACCORDANCE WITH ASTM A 525, AND MILL PHOSPHATIZED FOR EXPOSED LOCATIONS.
- B. DUCTWORK METAL GAUGES, REINFORCING, ETC SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION FOR A 2" WATER GAUGE STATIC PRESSURE.
- C. ALL FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION.

#### 9. FLEXIBLE DUCT:

A. ATCO #086 (R-6), OR EQUAL. B. FACTORY APPLIED INSULATION AND VAPOR BARRIER, 1-1/2" THICK.

#### 13. REMODELING WORK:

- A. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING CONDITIONS.
- B. CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON THE WORK POTENTIAL. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN THE BID ALL COSTS REQUIRED TO MAKE THE WORK MEET EXISTING CONDITIONS.
- C. PROTECT ADJACENT MATERIALS INDICATED TO REMAIN. INSTALL AND MAINTAIN DUST AND NOISE BARRIERS TO KEEP DIRT, DUST, AND NOISE FROM BEING TRANSMITTED TO ADJACENT AREAS. REMOVE PROTECTION AND BARRIERS AFTER REMODELING OPERATIONS ARE COMPLETE.

MECHANICA		SYMBO
THIS IS A MASTER LEGEND AND NECESSARILY USED		
HVAC EQUIPMEN	T&[	DUCTWORK
SPIN-IN FITTING WI	45°R	ECTANGLE-ROUND
<ul> <li>FD FIRE DAMPER</li> <li>FSD FIRE SMOKE DAMPER</li> <li>SD SMOKE DAMPER</li> <li>MD MOTORIZED DAMPER</li> <li>BD BACKDRAFT DAMPER</li> <li>VD VOLUME DAMPER</li> </ul>	E     E       E     E       E     E	CARBON DIOXIDE HUMIDITY SENSOF STATIC PRESSURE TEMPERATURE SE HUMIDISTAT THERMOSTAT
		<ul> <li>CEILING DIFFUSE DUCT (SEE SPEC NECK S (INCHES</li> <li>AIRFLOW (CFM)</li> <li>RETURN GRILLE</li> <li>EXHAUST GRILL</li> </ul>
ABBREVIATIONS		
AFFABOVE FINISHED FLOORBASBUIDLING AUTOMATION SYSTEMBDBACKDRAFTCFMCUBIC FEET PER MINUTEDDCDIRECT DIGITAL CONTROLDXDIRECT EXPANSIONEAEXHAUST AIRFFAFROM FLOOR ABOVEFFBFROM FLOOR BELOWGPMGALLONS PER MINUTEIN WCINCHES OF WATER COLUMNMAXMAXIMUMMBH1000 BTU PER HOUR	MC MIN NC OA RA SD TFA TFB TYP UNO W/ W/O	MECHANICAL CO MINIMUM NOISE CRITERIA OUTSIDE AIR RETURN AIR SUPPLY AIR SMOKE DUCT DE TO FLOOR ABOV TO FLOOR ABOV TO FLOOR BELO TYPICAL UNLESS NOTED WITH WITHOUT
STANDARD MOUNTING HEIGHTS		
(AFF, UNLESS NOTES OTHERWISE) THERMOSTATS (USER ADJUSTABLE) (TOP CONTROLS (TOP OF DEVICE)	OF DE	EVICE)
ANNOTATION		
# PLAN WORK NOTE RTU MECHANICAL EQUIPMENT DESIG AND INSTALLED UNLESS NOTE		
CONNECTION POINT OF NEW V	WORK T	O EXISTING



				EXHAUST F	AN SCH	IEDULE					
									ELECT	RICAL	
MARK	AREA SERVED	MANUFACTURER	MODEL	MOUNTING / TYPE	CFM	ESP (IN)	DRIVE	POWER	VOLTS	PHASE	WEIG
EF-1	NEW RESTROOM 103	PANASONIC	FV-0511VQ1	CEILING / CABIENT	110	0.1	DIRECT	10.6w	120	1	12
NOTES:											
A.	PROVIDE INTERNAL CABINE			RILLE, ALL THREAD ROD	IS AND VI	BRATION IS	OLATORS.				
В. С.	INTERLOCK FAN OPERATION PROVIDE WITH SPEED CONT		Η								

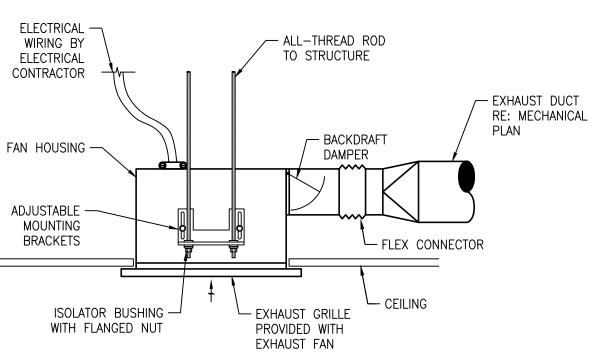
ONTRACTOR

DETECTOR

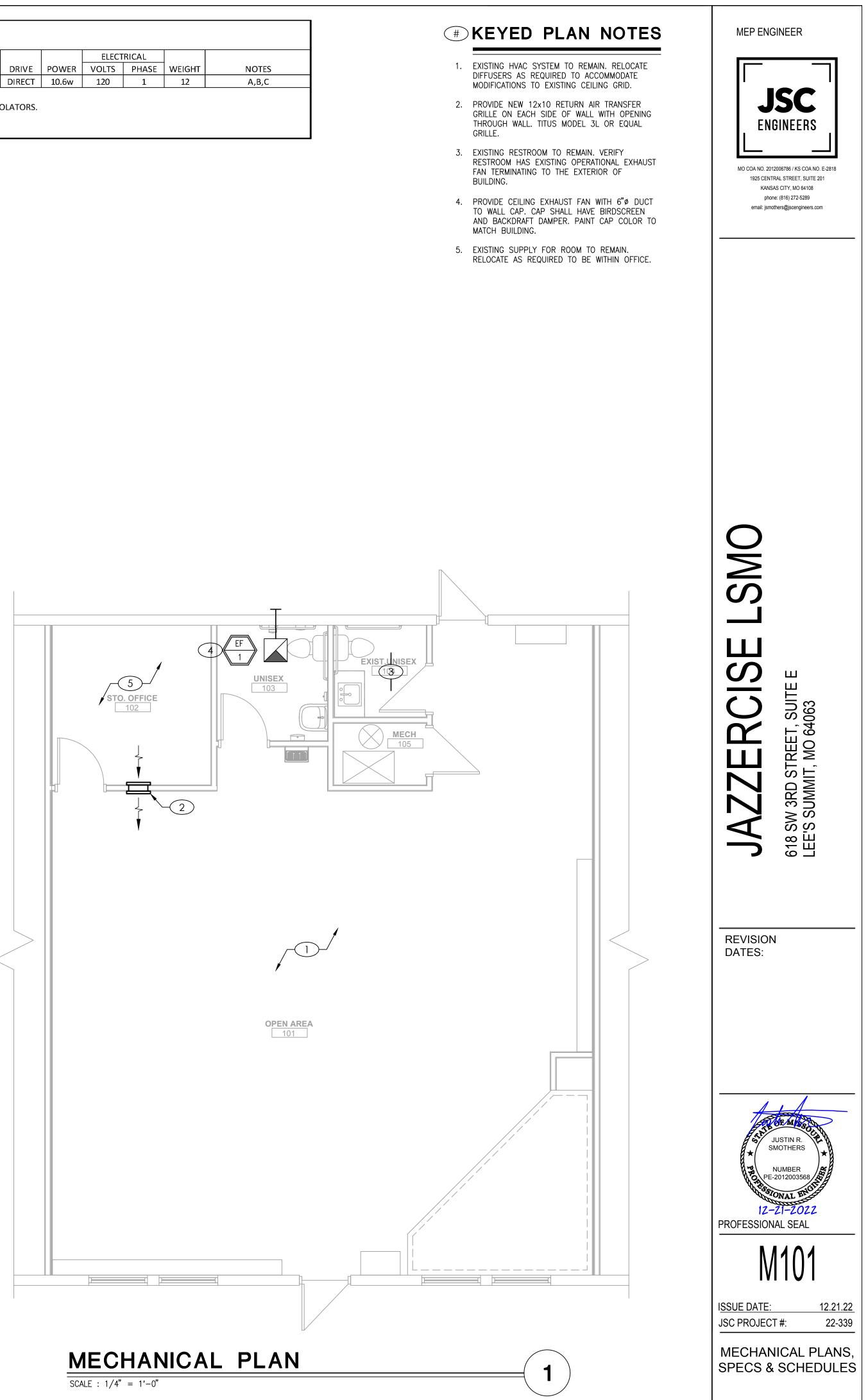
OTHERWISE

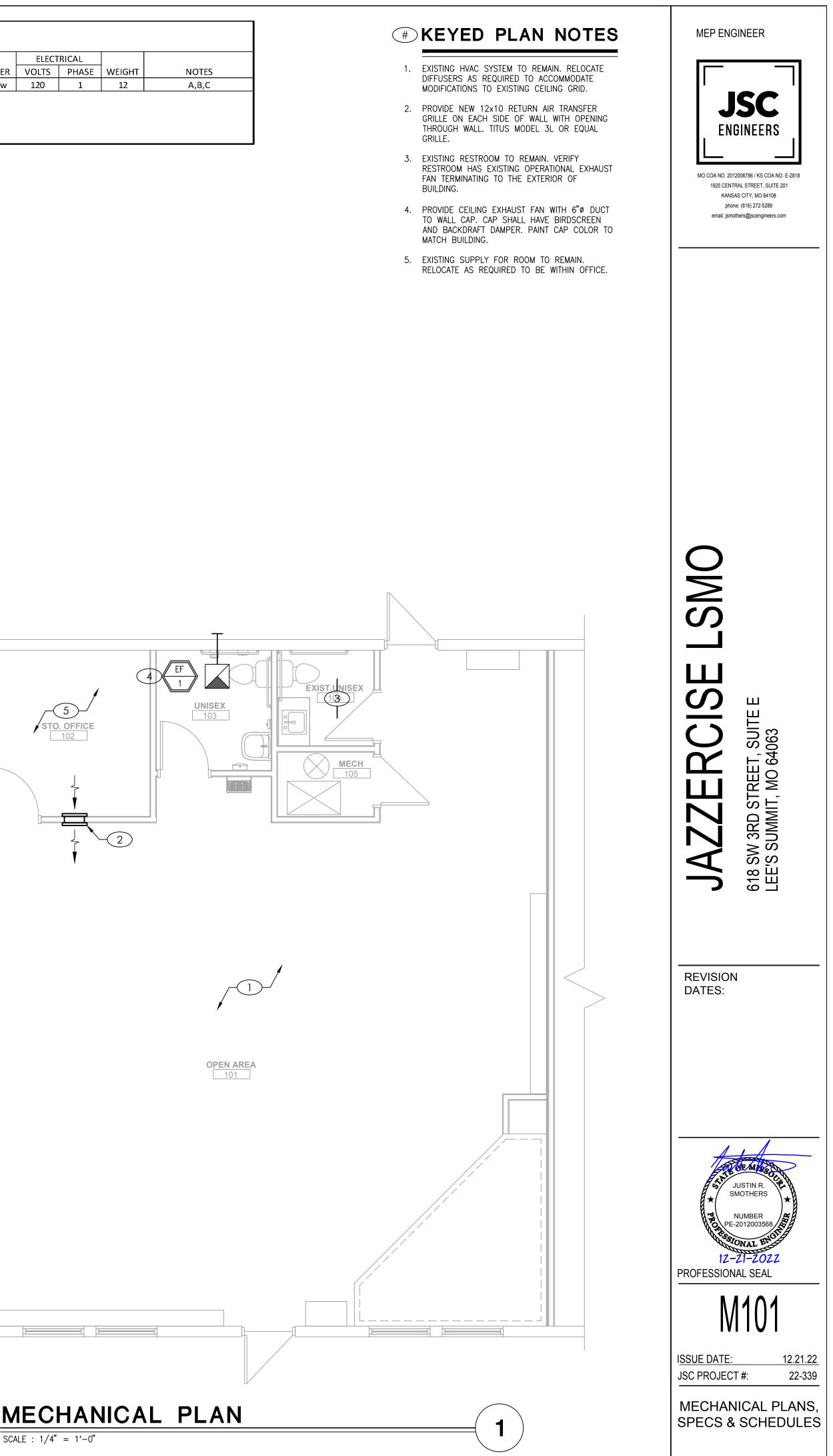
48" 48"

URNISHED



# CEILING MOUNTED EXHAUST FAN 2





# **PLUMBING SPECIFICATIONS**

#### GENERAL PROVISIONS

- A. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE PLUMBING SYSTEMS OUTLINED. B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR
- APPROVAL AS REQUIRED BY AUTHORITIES.
- C. ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK. D. PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED.
- E. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECT FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE. F. INSPECTION OF THE SITE: THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MEP
- DRAWINGS, SPECIFICATIONS, DETAIL, AND THE SITE. THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SPECIAL OR UNUSUAL PROBLEMS, CONFLICTS, OR OBSTRUCTIONS THAT AFFECT HIS BID. G. FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE PLUMBING DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE DRAWINGS AND IN
- 2. PLUMBING:
- A. PROVIDE AN APPROVED WATER HAMMER ARRESTOR FOR EACH PLUMBING FIXTURE SUPPLY AS REQUIRED BY FIXTURE MANUFACTURER.

THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES.

- B. ALL EXPOSED PIPE IN FINISHED AREAS SHALL BE CHROME PLATED BRASS PIPE, NO FERROUS PIPE. C. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND TRAPS.
- D. ALL SEWER PIPING LOCATED INSIDE THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES. 1. INSTALL 2-1/2" AND SMALLER PIPE AT 1/4" PER FOOT FALL.
- 2. INSTALL 3" AND LARGER PIPE AT 1/8" PER FOOT FALL.

#### 3. PIPING

- A. DOMESTIC COLD AND HOT WATER (ABOVEGROUND).
- TYPE L HARD DRAWN COPPER TUBING, ASTM B-88 WITH WROUGHT BRONZE SOLDERED FITTINGS. BALL VALVE: CRANE #932 OR EQUAL. PEX, HIGH DENSITY CROSS-LINKED POLYETHYLENE TUBING IS PERMITTED FOR USE. TUBING SHALL
- BE MANUFACTURED TO THE REQUIREMENTS OF ASTM F876 AND MEET THE STANDARD GRADE HYDROSTATIC PRESSURE RATING FROM THE PLASTIC PIPE INSTITUTE IN ACCORDANCE WITH TR-4/03. PEX MECHANICAL, CRIMP/INSERT FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PIPE SIZE SHOW ON THE DRAWINGS ARE NOMINAL COPPER PIPE SIZES. INCREASE PEX PIPING SIZE AS REQUIRED TO EQUAL OR EXCEED COPPER PIPE SIZE INSIDE DIAMETER.
- B. SANITARY SEWER AND VENTS (UNDERGROUND, INTERIOR TO BUILDING). WASTE, DRAIN AND VENT PIPE AND FITTINGS, THROUGHOUT THE BUILDING BELOW THE BASE SLAB TO THE LOCATIONS NOTED OUTSIDE OF THE BUILDING SHALL BE ASTM D2665 POLYVINYL
- CHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT.
- 2. SEWER LINES SHALL BE LOCATED IN GENERAL AS SHOWN ON THE DRAWINGS. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN SUCH A MANNER AS TO MAINTAIN PROPER CLEARANCES AND SUFFICIENT SLOPE TO ENSURE DRAINAGE. C. ALL PIPE HANGERS AND SUPPORTS SHALL BE STANDARD PRODUCTS OF GRINNELL, FEE AND MASON,
- OR ANVIL. HANGER SPACING SHALL BE IN ACCORDANCE WITH MSS-SP-69. D. PROVIDE CHROME PLATED ESCUTCHEONS ON ALL PIPE ENTERING FINISHED AREAS.
- 4. INSULATION:
- A. ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A FLAME SPREAD RATING OF NOT OVER 25, A FUEL CONTRIBUTION RATING OF NOT OVER 50, AND A SMOKE DEVELOPMENT RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA.
- B. PIPE INSULATION (ABOVE GRADE): 1. THE PIPE INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 BTU PER IN/HR\*SQ-FT\*°F OR LESS.
- FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION, UNSLIT OR PRESLIT WITH PRESSURE SENSITIVE ADHESIVE SYSTEM FOR CLOSURE AND VAPOR SEALING, EQUAL TO ARMSTRONG AP ARMAFLEX OR ARMAFLEX 2000.

1/2"

- INSULATION SCHEDULE: a. DOMESTIC COLD WATER:
- b. DOMESTIC HOT WATER:
- 5. TESTING, BALANCING AND CLEANING: A. ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR
- COVERED WITH INSULATION. B. SEWER AND VENT PIPING SHALL BE HYDROSTATICALLY TESTED WITH NO LESS THAN 10 FEET OF HEAD
- FOR A PERIOD OF NOT LESS THAN 15 MINUTES, PER THE LOCAL PLUMBING CODE, WITH NO LEAKS. C. DOMESTIC WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 60 PSI, FOR A PERIOD OF NOT LESS THAN 2 HOURS, WITH NO LEAKS.
- 6. REMODELING WORK:
- A. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING CONDITIONS.
- B. CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON THE WORK POTENTIAL. CONTRACTOR SHALL REPORT DISCREPANCIES TO THE ARCHITECT AND INCLUDE IN THE BID ALL COSTS REQUIRED TO MAKE THE WORK MEET EXISTING CONDITIONS.
- C. REMOVE ALL PIPING TO BE DEMOLISHED BACK TO PIPE MAIN OR EDGE OF PROJECT AREA AND CAP PIPE.
- D. PIPING EMBEDDED IN FLOORS, WALLS, AND CEILINGS MAY REMAIN IF SUCH MATERIALS DO NOT INTERFERE WITH NEW INSTALLATIONS. PIPING TO REMAIN SHALL BE APPROVED BY THE ARCHITECT. REMOVE MATERIALS ABOVE ACCESSIBLE CEILINGS. DRAIN AND CAP PIPING ALLOWED TO REMAIN ABOVE CEILING OR BELOW FLOOR, CONCEALED FROM VIEW, EXCEPT AS OTHERWISE NOTED. PATCH FLOOR TO MATCH EXISTING.
- E. PIPE SHALL BE CONCEALED WITH NEW OR EXISTING CONSTRUCTION WHENEVER POSSIBLE, UNLESS INDICATED OTHERWISE. F. DEMOLITION: DISCONNECT, DEMOLISH, AND REMOVE ABANDONED MECHANICAL AND PLUMBING
- MATERIALS AND EQUIPMENT INDICATED TO BE REMOVED AND NOT INDICATED TO BE SALVAGED OR REMAIN. ALL WORK SHOWN DASHED IS TO BE DEMOLISHED. WORK SHOWN LIGHT IS EXISTING TO REMAIN. REFER TO ARCHITECTURAL PLANS FOR FURTHER EXTENT OF DEMOLITION REQUIRED.

# PLUMBING SYMBOLS

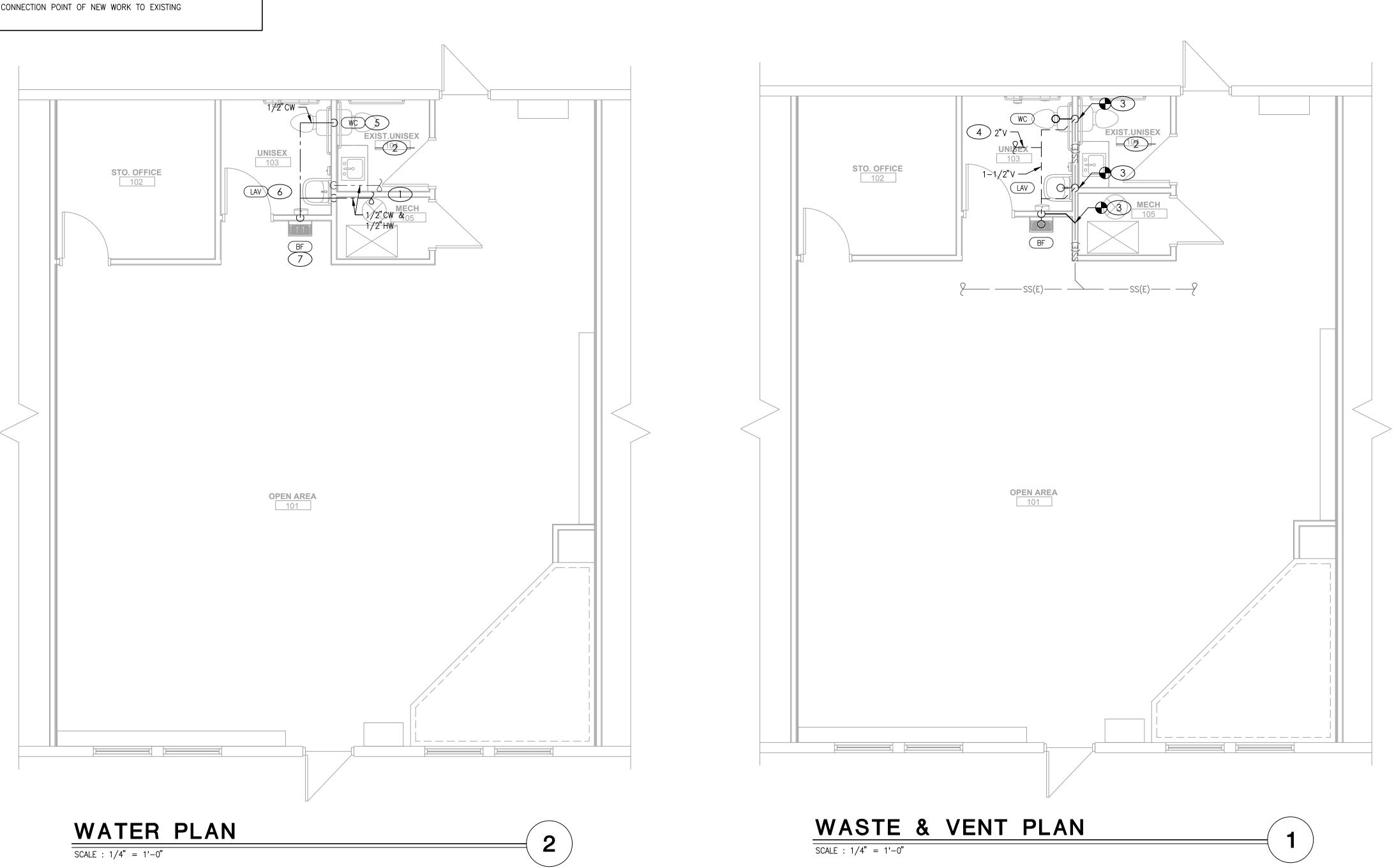
<u>SYMBOL</u> \_\_\_\_\_\_SS\_\_\_\_\_\_ \_\_\_\_\_GW\_\_\_\_\_ \_\_\_\_\_CD\_\_\_\_\_ - — — -V— — — — — – — CW — – — \_\_\_\_СА\_\_\_\_ \_\_\_\_\_\_ 

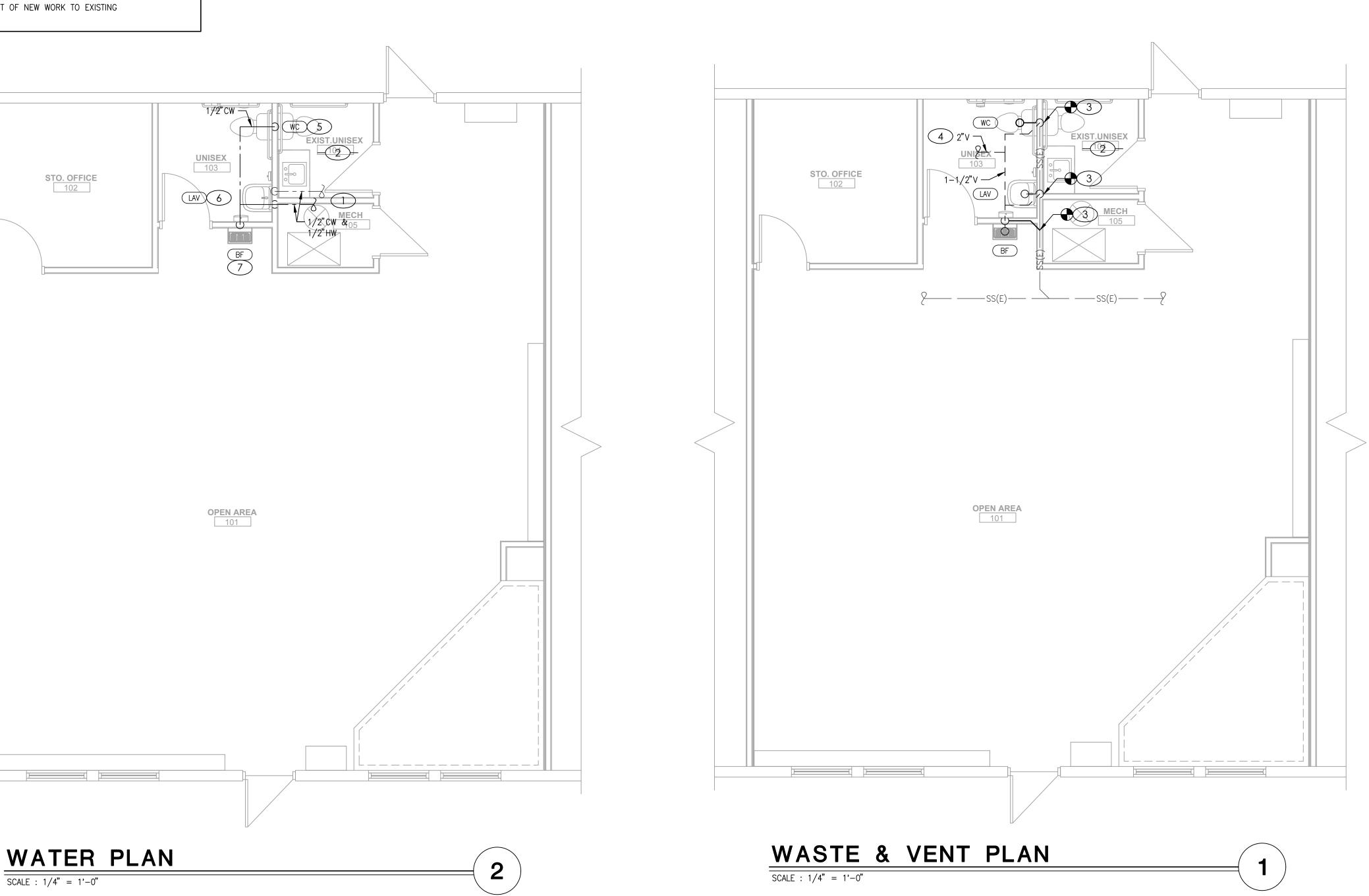
DESCRIPTION
SANITARY SEWER (ABOVE GRA
SANITARY SEWER (BELOW GR
GREASE WASTE (BELOW GRAD
CONDENSATE DRAIN
VENT PIPING
COLD WATER PIPING
HOT WATER PIPING
RECIRCULATING HOT WATER
COMPRESSED AIR
PIPE ELBOW DOWN
PIPE ELBOW UP
GATE VALVE
FLOOR CLEANOUT (FCO)
CLEANOUT AT GRADE (GCO)
WALL CLEANOUT (WCO)
WALL CLEANOUT (WCO)

#### ANNOTATION



- MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- ) PLUMBING FIXTURE DESIGNATION
- CONNECTION POINT OF NEW WORK TO EXISTING





/E GRADE)

OW GRADE) GRADE)

	PLUMBING FIXTURE SCHEDULE
BASIS OF DESIGN	: CONFIRM ALL SELECTIONS WITH OWNER AND ARCHITECT PRIOR TO PURCHASE.
	BOTTLE FILLING STATION: ELKAY EZ8WS, ADA COMPLIANT, NON-FILTERED,
BF	ANTIMICROBIAL, STAINLESS STEEL, TOUCHLESS SENSOR ACTIVATION, 8 GPH, 115V, 5
	FLA.
	WALL MOUNT LAVATORY: AMERICAN STANDARD 0355.012, THREE FAUCET HOLE, 4"
	CENTERS, 20.5"X18.25" D-SHAPED BOWL, VITREOUS CHINA, MOUNT AT ADA HEIGHT,
LAV	WITH DUAL HANDLE FAUCET (DELTA 2523LF-SSMPU). PROVIDE FLEXIBLE SS RISERS WITH
	CHROME PLATED STOP VALVES, P-TRAP WITH CLEANOUT AND ESCUTCHEONS. INSULATE
	WITH "HANDI-LAV-GUARD" MODEL 102, OR EQUAL.
	FLOOR-MOUNTED ADA WATER CLOSET: KOHLER K-3519-TR-0, HANDICAP ACCESSIBLE,
	VITREOUS CHINA, 1.0 GPF, ELONGATED BOWL, FLOOR MOUNTED W/ 17.125" BOWL
WC	HEIGHT, WHITE, VITREOUS CHINA TANK AND COVER CONTAINING FLUSH VALVE, WHITE
	OPEN-FRONT SEAT, CHROME STOPS, C.P. FLEXIBLE RISER TUBE, BOLT CAPS AND
	ESCUTCHEON.

FIXTURE	BRANCH CO	NNECTION	SCHEDULE	
FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
BOTTLE FILLING STATION	1/2"	-	1-1/2"	1-1/2"
LAVATORY	1/2"	1/2"	1-1/2"	1-1/2"
WATER CLOSET (FLUSH TANK)	1/2"	-	4"	2"
NOTE:	PIPE SIZES SHOWN	ARE MINIMUM.	MINIMUM SANITAR	Y SIZE
	UNDERGROUND IS	52".		

### **# KEYED PLAN NOTES**

- 1. CONNECT NEW 1/2"CW AND 1/2"HW PIPING TO DOMESTIC WATER PIPING SERVING EXISTING RESTROOM. FIELD VERIFY EXACT LOCATION PRIOR TO START OF WORK.
- 2. NO WORK IN EXISTING RESTROOM. FIXTURES SHOWN FOR REFERENCE ONLY.
- 3. CONNECT NEW SANITARY SEWER LINE TO SANITARY SEWER SERVING EXISTING RESTROOM. FIELD VERIFY EXACT LOCATION, SIZE, FLOW DIRECTION AND ADEQUATE INVERT DEPTH PRIOR TO START OF WORK. CAMERA EXISTING SEWER PIPING AS REQUIRED IN ORDER TO LOCATE CONNECTION POINT.
- 4. CONNECT NEW 2"V TO EXISTING 2" OR GREATER VENT OVERHEAD SERVING EXISTING RESTROOM. FIELD VERIFY LOCATION PRIOR TO START OF WORK.
- 5. 1/2"CW DOWN IN WALL TO WATER CLOSET.
- 6. 1/2"HW AND 1/2"CW DOWN IN WALL TO LAVATORY. PROVIDE THERMOSTATIC MIXING VALVE EQUAL TO LEONARD MODEL 170. SET HOT WATER SUPPLY WATER TEMPERATURE TO 110°F.
- 7. 1/2"CW DOWN IN WALL TO BOTTLE FILLING STATION.



#### MEP ENGINEER

JSC

ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818

1925 CENTRAL STREET, SUITE 201

KANSAS CITY, MO 64108

ROUNDING

<u>P</u> /	ART I – GENERAL	I. COOPERATION WITH 1. COOPERATE WITH
<u>A.</u> 1.	CONDITIONS FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO, THESE MAJOR ITEMS. A. LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON THE PLANS. B. ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC., FOR ALL OUTLETS AND EQUIPMENT. C. TELEPHONE, TELEVISION, AND FIRE ALARM. OUTLETS AND CONDUIT AS INDICATED.	EQUIPMENT WILL LOCATIONS SHALI STEEL, BEAMS, C 2. CAREFULLY VE DISTURBED DURIN 3. COORDINATE THE SERVICES WITH T
2.	OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFLECTED CEILING PLAN, INTERIOR AND EXTERIOR ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAWINGS. COORDINATE INSTALLATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH—IN.	4. COORDINATE HVA CONTRACTORS.
3.	OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRADES AND EQUIPMENT TO COORDINATE INSTALLATION ACCORDINGLY.	<u>PART II – PRODUCTS</u>
4.	INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND GOVERNING AGENCIES HAVING JURISDICTION.	<ol> <li>ALL MATERIALS S MUST CARRY THE ARE USED, IN AI REGULATIONS.</li> </ol>
5.	FIRE ALARM SYSTEM, IF REQUIRED PER IBC, SHALL BE DESIGN-BUILD BY OWNER'S/GC'S FIRE ALARM CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFPA 72. FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDIBILITY OF THE FIRE ALARM SYSTEM MEETS A MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD HORNS WHERE REQUIRED TO MAINTAIN MINIMUM LEVELS.	<u>C. SYSTEM GROUNDIN</u> 1. GROUNDING SHAL METALLIC PARTS GROUNDING CONI RACEWAYS, AND
6.	PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RATED WALLS. METHOD OF FIRE STOP SHALL MEET WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS. THIS CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AROUND ALL ROUGH-IN BOXES, PANELS, ETC. THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE CAULK ALL OPENINGS IN RATED ASSEMBLIES.	<u>D. WIRE</u> 1. CONDUCTOR SIZE SPECIFIED, ALL V AWG, TYPE THHN BRANCH CIRCUIT
<u>C</u> 1. 2.	<ul> <li>CODES, REGULATIONS, AND STANDARDS</li> <li>THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS INSTALLATION.</li> <li>THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE MINIMUM REQUIREMENTS:         <ul> <li>A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS.</li> <li>B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS.</li> <li>C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS.</li> <li>D. AMERICAN NATIONAL STANDARDS INSTITUTE.</li> <li>E. INTERNATIONAL BUILDING CODE.</li> </ul> </li> </ul>	2. THE WIRES SHAL REQUIRED BY LO 120V-WHITE, ANI AND BLUE (PHAS 3. ALL CONDUCTORS 4. PROVIDE SOLID C 5. NO WIRE SHALL MINERALAC NO. CONDUCTORS IN 6. MC CABLE WITH
1. 2.	INSPECTION OF SITE PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES, AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE WITH THIS CONDITION AFTER BIDDING. ELECTRICAL INSTALLATION SHALL MEET THE EXISTING CONDITIONS.	E. CONDUIT 1. ALL WIRING SHAL RGS, WITH A 20 INDOOR LOCATION CONTACT WITH E USED IN OR BEL FOR INDOOR FIN, FLEXIBLE STEEL
<u>H</u> 1.		48". 2. WHERE CONDUIT COMPRESSION CO OR INSULATED TH EXPOSED CONDU T & B OR APPL

ELECTRIC SERVICE SINGLE LINE DIAGRAM IS EXISTING TO REMAIN. NO MODIFICATIONS ARE BEING MADE TO THE SEQUENCE OFELECTRICAL SERVICE DISTRIBUTION EQUIPMENT IN THIS SCOPE.

		ELECTRIC		GHTING S	CHEDULE (OR EQUAL. VE	ERIFY ALL SELECTIONS AND FINISHES WITH OWNER AND ARCHITECT PRIOR TO ORDERING).	
FIXTURE		MANUFACTURER	VOLT	MOUNTING	LAMP TYPE	REMARKS	VOLT
TYPE	NAME	SERIES	AMPS				
А	VISCOR	LRTA2X4-LED835049LUNV-B02	35	RECESSED	INCLUDED LED	2'X4' DIMMABLE LED TROFFER- 3500K - 4900LM	MVOLT
TR	ELCO LIGHTING	ET62630DW EP008W	13/FIXT	TRACK	INCLUDED LED	LED SINGLE CIRCUIT TRACK & FIXTURE - CONFIRM SPECIFICATION, FIXTURE QUANTITY, AND FINISH WITH OWNER	120
ØH	EMERGI-LITE	LUX-RAY SERIES	5	SURFACE	INCLUDED LED	OUTDOOR EMERGENCY REMOTE EGRESS LIGHTING UNIT - BLACK	MVOLT
	EMERGI-LITE	PREMIER SERIES	5	SURFACE	INCLUDED LED	EMERGENCY EXIT EGRESS COMBO LIGHTING UNIT WITH RED FACE EXIT SIGN AND 90 MIN. BATTERY PACK	MVOLT
	EMERGI-LITE	THERMOPLASTIC COMPACT BATTERY SERIES	5	SURFACE	INCLUDED LED	EMERGENCY LIGHTING UNIT WITH 90 MIN. BATTERY PACK	MVOLT

# **ELECTRICAL SPECIFICATIONS**

#### ON WITH OTHER CONTRACTORS

ATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND IENT WILL BE PROPERLY COORDINATED. CONDUIT, LIGHTING FIXTURES, AND OTHER FOULPMENT ONS SHALL BE VERIFIED WITH OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, BEAMS, OR OTHER OBSTRUCTIONS.

EFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT BEEN BED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES. NATE THE LOCATION OF THE TRENCHES AND CONDUITS FOR ELECTRICAL AND TELEPHONE UTILITY

ES WITH THE GENERAL CONTRACTOR. NATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING

#### RODUCTS AND EXECUTION

TERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY SED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND

DING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT. METALLIC RACEWAY SYSTEMS. METALLIC CABLE ARMOR. DING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC AYS, AND GROUNDED CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.

CTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE ED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4 YPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL CIRCUIT WIRING SHALL BE COPPER.

IRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE RED BY LOCAL ORDINANCES GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE VHITE, AND LIVE WIRES 208Y/120V AND 120/240 SHALL BE BLACK (PHASE A), RED (PHASE B), UE (PHASE C). CIRCUIT SHALL BE LABELED IN EACH J-BOX.

NDUCTORS SHALL BE RATED 600 VOLT. SOLID CONDUCTOR FOR 12 AWG AND SMALLER.

SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE LAC NO. 100 OR EQUIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE

TORS IN THE CONDUIT SYSTEM. BLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

RING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER SECTIONS. VITH A 20 MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY BE USED IN LOCATIONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN WITH EARTH, NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED DOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED 72". LIQUID-TIGHT STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED

CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, ESSION CONNECTORS, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS SULATED THROAT CONNECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN D CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, OR APPLETON, OR EQUAL).

- FITTINGS AND CONDUIT BODIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED.
- WIRING, CONDUITS, AND OUTLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTOR AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED
- ON THE DRAWINGS. CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT.
- CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

#### . OUTLET, PULL, AND JUNCTION BOXES

- EACH SWITCH, LIGHT, RECEPTACLE OR OTHER OUTLET, INSTALLED IN RESIDENTIAL UNITS, SHALL BE PROVIDED WITH A CODE SIZED, PLASTIC OUTLET BOX. JUNCTION AND PULL BOXES SHALL BE CODE SIZED, PLASTIC OR METAL OUTLET BOX. ALL OTHER OUTLET BOXES SHALL BE STEEL
- BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH WATERTIGHT GASKETED COVERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.
- .3 BOXES INSTALLED FOR THE ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVER PLATES. BOXES FOR TELEPHONE, COMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE MINIMUM 2-1/8" DEEP.

#### <u>G WIRING DEVICES</u>

- WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE. NEMA5-20R, 20 AMPERE, 120VOLT GROUNDED TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE GROUND DOWN.
- DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE
- WHITE, UNLESS OTHERWISE NOTED. RECEPTACLES IN OUTDOOR AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET 4 COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, EQUAL TO TAYMAC SPECIFICATION GRADE.

#### . PANELBOARDS

- CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. UNLESS INDICATED OTHERWISE, ALL PANELS SHALL HAVE PANEL HAVE PANEL BOARD TYPE CONSTRUCTION WITH BOLT-ON CIRCUIT BREAKERS FOR 30 PANELS MANUFACTURERS SHALL BE GENERAL ELECTRIC. SQUARE D. SEIMENS. CUTLER-HAMMER WITH VOLTAGE. SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
- THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE, DOUBLE-POLE, AND THREE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAN TERMINALS SHALL BE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.

#### LIGHTING FIXTURES

PROVIDE ALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR EACH LOCATION. PROVIDE LAMPS FOR ALL FIXTURES. THE LAMPS SHALL BE BY THE SAME MANUFACTURER. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS. PROVIDE PLASTER FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE, AND BALLASTS TO MEET THE EXISTING CEILING CONDITION.

#### M. LIGHTING CONTROL

- FURNISH AND INSTALL TIME SWITCHES, PHOTOCELLS, CONTRACTORS AND FULL LIGHTING CONTROL SYSTEMS AS REQUIRED FOR LIGHTING CONTROLS INDICATED ON THE DRAWINGS. TIME SWITCHES SHALL BE EQUAL TO PARAGON, GENERAL ELECTRIC, TORK, OR INTERMATIC AND SHALL
- HAVE SIZE AND NUMBER OF POLES AS REQUIRED.
- PHOTOCELLS SHALL BE EQUAL TO TORK OR INTERMATIC WITH VOLTAGE AS INDICATED.

GUARANTEE

GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

LOADCENTER: P BUS AMPS: 100A MAIN SIZE/TYPE: MLO VOLTS/PHASE: 120/240V, 1	•	TING)			AIC F SERV MOU	ROM: ATING ÆS: JA	B: NZZI SU	ERC IRF#	DO FUL	utili" Ly Ra				LINE-SIDE LUGS: MECH EQUIPMENT GROU	
SECTION: 1 CKT DESCRIPTIO	DN			/IPS/PHASE		ATION:			BKR	WRF	VOLTAM	PS/PHASE		DESCRIPTION	
NO.			A	В		AMP			AMP		A	В			
1 UNUSABLE SPACE							1	1					UNUSAE	BLE SPACE	
3 UNUSABLE SPACE							1	1					UNUSAE	BLE SPACE	
5 COMPUTER RECEPT			500		EX	20	1	1 2	20/20	ΕX	500		AIR CON	<i>I</i> PRESSOR	
7 LTG - GENERAL				800	12	20	1	1 2	20/20	ΕX		500	AIR CON	<i>I</i> PRESSOR	
9 PLUGS			500		EX	20	1	1	20	12	180		RCPT - C	CHECK-IN	
11 PLUGS	IGS			500	EX	20	1	1	20	12		180	RCPT - S	STAGE AV EQUIPMENT	
13 LIGHTS			500		EX	20	1	1	20	ΕX	500			EMERGENCY	
15 PLUGS				500	EX	20	1	2	40	EX		3,000	AIR CON	NDITIONER	
17 UNLABELED			500		EX	20	1				3,000				
19 TELEPHONE PLUG				500	EX	20	1		15	EX		500	UNLABE		
21 GENERAL PLUGS			500		EX	20	1		20	12	800		RCPT - F		
23 FURNACE				500	EX	15/15	1	1	20	12		200	(GF)RCF	PT - BOTTLE FILLER	
SUBTOTAL	-		2,500	2,800							4,980	4,380		SUBTOTAL	
TOTAL PHASE A - VA	7,480	LOAD		CONN. V	Ά	DF		LOA	Ð		(	CONN. VA	DF		
AMPS	62	COOLIN				1.00			RIG				1.00		
TOTAL PHASE B - VA	7,180	HEATIN	_			0		- · - ·	N/DIS				1.25		
AMPS	60	LIGHTIN		800		1.25			CHEN				1.00		
TOTAL PNLBD - VA	,	RECEP		1,360		1.0/.5			STING			12,500	1.00		
AMPS	61	MOTOR				1.00			G MOT				1.25	TOTAL DEMAND	
		SUPP H				1.00				NDW			1.25	14,860	
		MISC EC	JUIP			1.00		LTG	GTRA	CK			1.00	6	62 A

DESCRIPTION IN ITALICS = EXISTING LABELED LOAD TO REMAIN.

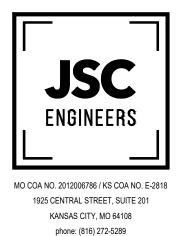
(GF) = GFCI-TYPE BREAKER

# SYMBOLS LEGEND

#### NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.

LIGHTING FIXTURES - SYMBOL/LETTER INDICATES LIGHT FIXTURE AS INDICATED ON FIXTURE SCHEDULE LED FIXTURE (SEE LIGHTING FIXTURE SCHEDULE) **├**───┤ FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT マロ TRACK LIGHT OWNLIGHT FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT ØН WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT Ø PENDANT MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT 0 DOWNLIGHT FIXTURE Ю WALL MOUNTED FIXTURE Ø PENDANT MOUNTED FIXTURE WALL WASHER SINGLE FACE EXIT SIGN - UNIVERSAL MOUNTED SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS - $\otimes$ UNIVERSAL MTD DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS -UNIVERSAL MTD DUAL HEADED EMERGENCY UNIT COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT LIGHTING CONTROLS SINGLE POLE SWITCH @ +48" UNLESS NOTED Sabe SWITCH BANK @ +48" UNLESS NOTED, LOWER CASE LETTER INDICATES FIXTURE CONTROLLED. S3 3-WAY SWITCH @ +48" UNLESS NOTED S4 4-WAY SWITCH @ +48" UNLESS NOTED Sd DIMMER SWITCH - SIZE AS REQUIRED @ +48" UNLESS NOTED SM MANUAL MOTOR STARTER WALL SWITCH WITH OCCUPANCY SENSOR. DIGITAL LOW VOLTAGE WALL SWITCH. SWITCH @ Sos +48" UNLESS NOTED. Sd TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH ◎ +48" UNLESS NOTED. PROVIDE EXTRA CONTROL CABLES NEEDED TO FIXTURE CONTROLLED. (0S) LIGHTING CONTROLS CEILING MOUNT OCCUPANCY SENSOR PP LIGHTING CONTROLS POWER PACK LC LIGHTING CONTACTOR TC TIMECLOCK POWER DISTRIBUTION 120/240V, 1 PHASE, 3 WIRE PANELBOARD, UNO Т TRANSFORMER POWER DEVICES SPECIAL HEAVY DUTY RECEPTACLE - SIZE AS NOTED. @ +18" UNLESS NOTED ← 1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED • FIRE RATED POKE THRU WITH TYPE INDICATED • FLUSH FLOOR BOX WITH TYPE INDICATED ⊖ SINGLE RECEPTACLE @ +18" UNLESS NOTED ➡ DUPLEX RECEPTACLE @ +18" UNLESS NOTED DOUBLE DUPLEX RECEPTACLE @ +18" UNLESS NOTED DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP GFCI-RATED DUPLEX RECEPTACLE  $\ominus_{-}$  ARC FAULT RATED DUPLEX RECEPTACLE ← TAMPER RESISTANT RATED DUPLEX RECEPTACLE DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE WP @ 18" UNLESS NOTED JUNCTION BOX DISCONNECT SWITCH - SIZE AND TYPE NOTED COMBINATION FUSED STARTER DISCONNECT SWITCH FUSE SIZE AS INDICATED, STARTER SIZE '1' AUXILIARY SYSTEMS MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN TELEPHONE OUTLET@ +18" UNLESS NOTED DATA OUTLET @ +18" UNLESS NOTED  $\triangleright$ COMBINATION TELEPHONE/DATA OUTLET @ +18" UNLESS NOTED TV TELEVISION OUTLET @ +60" UNLESS NOTED  $\mathbf{O}$ SMOKE DETECTOR  $(\mathbf{I})$ HEAT DETECTOR DUCT SMOKE DETECTOR RT REMOTE TEST STATION WITH INDICATING LIGHT. MOUNT AT 48" AFF UNO. AUXILIARY SYSTEM TERMINAL CABINET <u>GENERAL</u> CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING ------ CONDUIT RUN BELOW FLOOR OR GRADE > HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD 5 S INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS. (1) PHASE, (1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE. (E) OR ETR: DENOTES EXISTING ITEM/EQUIPMENT TO REMAIN

MEP ENGINEER



email: jsmothers@jscengineers.com

# SW 3RD STF SUMMIT, I $\triangleleft$ 618 LEE' REVISION DATES:

Š

S

S

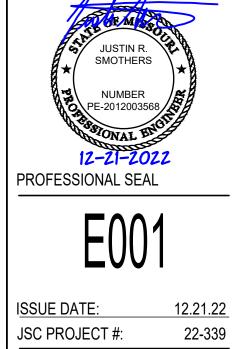
 $\mathbf{\gamma}$ 

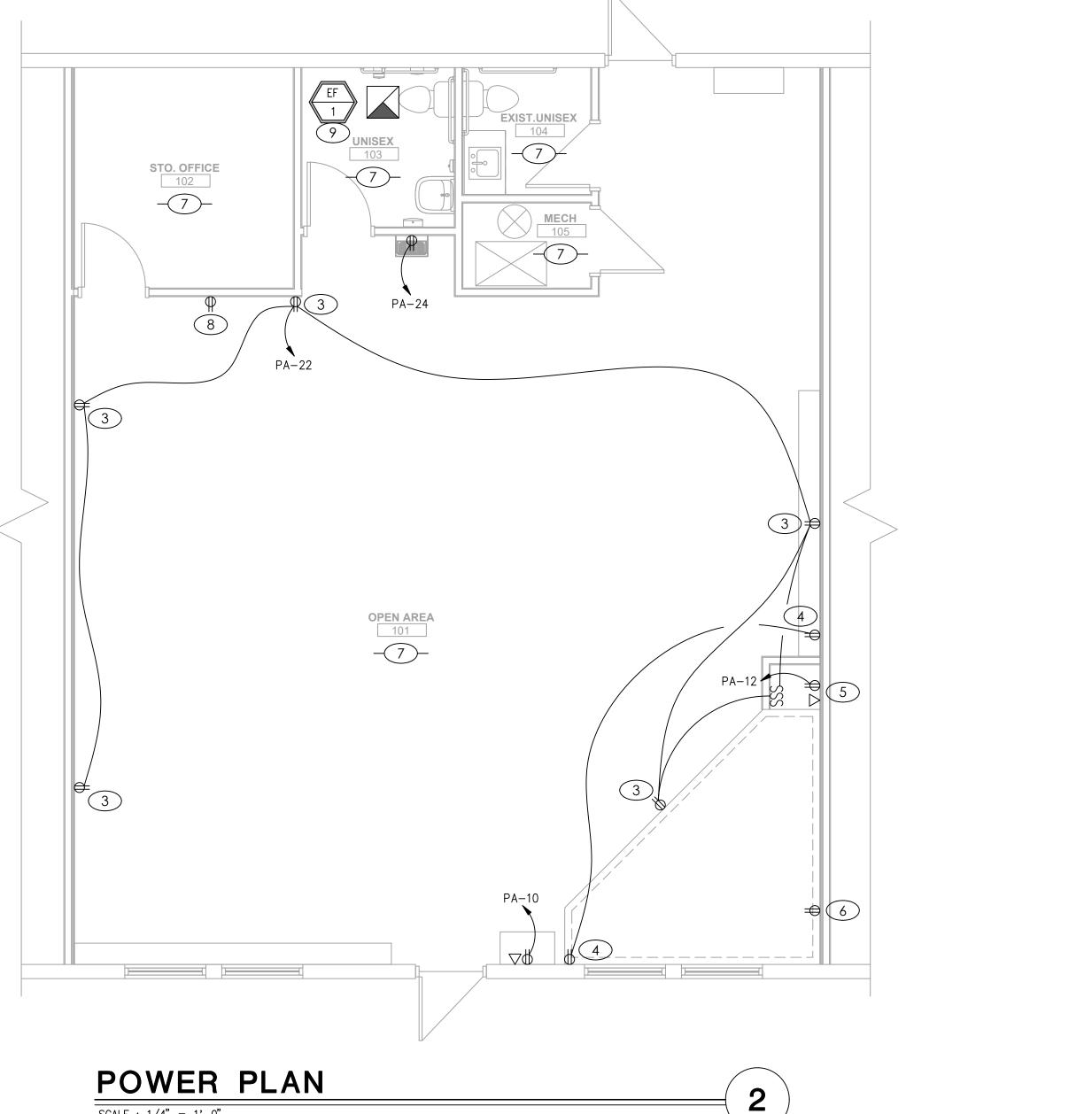
Ш

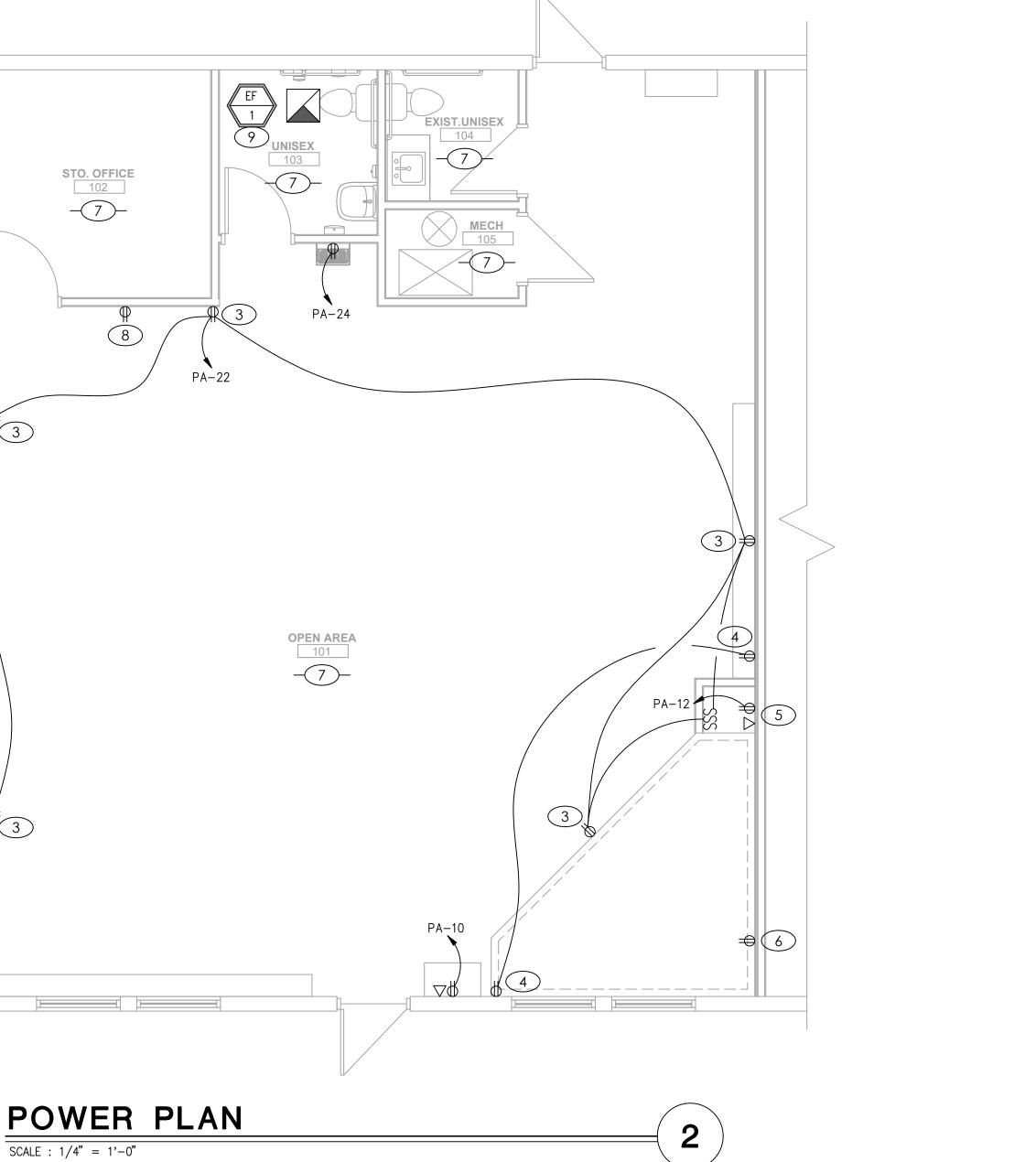
ш ш

SUI 063

Н, 4

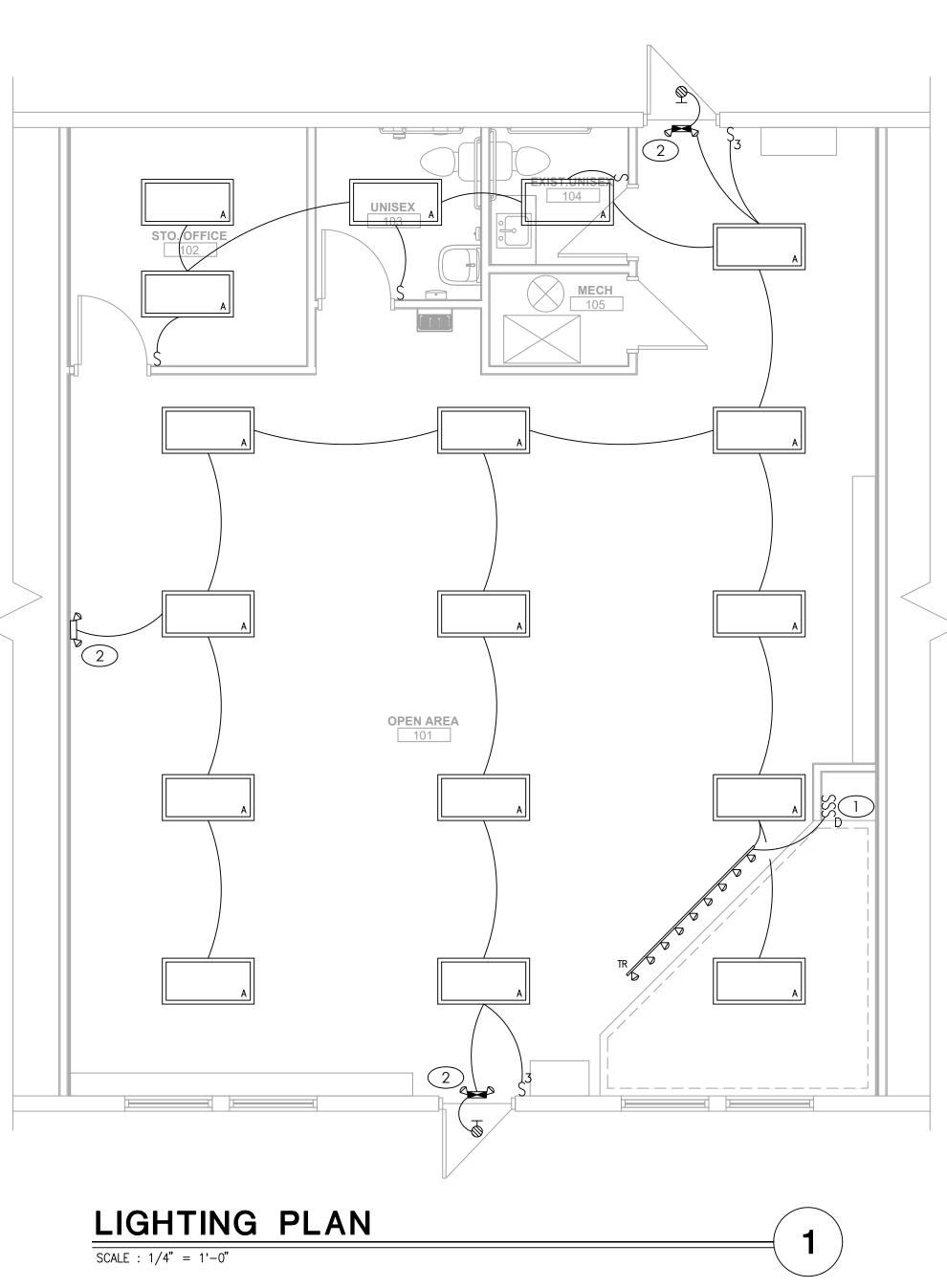






## GENERAL NOTES

- A. REFER TO LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES AND REQUIREMENTS.
- B. CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.
- C. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT COORDINATION AND CONFLICT ISSUES BE RESOLVED PRIOR TO INSTALLATION OF LIGHT FIXTURES.
- D. ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.
- E. THROUGH WIRING OF RECESSED LIGHT FIXTURES, IN SUSPENDED CEILINGS, IS NOT PERMITTED. CONNECT EACH LIGHT FIXTURE BY A WHIP TO A JUNCTION BOX. PROVIDE CABLE WHIPS OF SUFFICIENT LENGTH TO ALLOW FOR RELOCATING EACH LIGHT FIXTURE WITHIN A 5-FOOT RADIUS OF ITS INSTALLED LOCATION, BUT NOT EXCEEDING 6 FEET IN UNSUPPORTED LENGTH.



MEP ENGINEER

## **# KEYED PLAN NOTES**

- 1. THREE-GANG SWITCH. (1) FOR TRACK LIGHITNG, (1) FOR OPEN AREA FANS & (1) FOR STAGE FAN. COORDINATE DIMMING SWITCH STYLE WITH ASSOCIATED TRACK FIXTURE. COORDINATE EXACT GANGED SWITCH LOCATION WITH OWNER PRIOR TO CONSTRUCTION.
- 2. MAKE CONNECTION TO EMERGENCY/EXIT LIGHT VIA UNSWITCHED HOT CONDUCTOR.
- 3. RECEPTACLE FOR OWNER-SUPPLIED FAN. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO CONSTRUCTION.
- 4. RECEPTACLE FOR OWNER-SUPPLIED SPEAKER. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO CONSTRUCTION.
- 5. RECEPTACLE FOR OWNER-SUPPLIED AUDIO-VISUAL EQUIPMENT. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO CONSTRUCTION.
- 6. RELOCATE EXISTING RECEPTACLE TO 18" ABOVE PLATFORM LEVEL.
- 7. EXISTING POWER/DATA DEVICES IN THIS ROOM ARE TO REMAIN UNLESS NOTED OTHERWISE ON DEVICE.
- 8. CONNECT NEW RECEPTACLE TO CIRCUIT SERVING GENERAL CONVENIENCE RECEPTACLE CIRCUIT IN ROOM.
- 9. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT ACCORDING TO MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS. WIRE SO THAT ON/OFF OPERATION OF EXHAUST FAN COORDINATES WITH LIGHTING IN ROOM.

