LOCALITY MAP



MESA COUNTY CORRECTIONS - LAB REMODEL **GRAND JUNCTION, COLORADO**

OWNER

DRAWING LIST

SYMBOLS

MESA COUNTY FACILITIES 2785 U.S. Highway 50 Grand Junction, CO 81503	GENERAL	G001	COVER SHEET
(970) 244-3230	ARCHITECTU	IRAL	
		A101	DEMO PLAN, FLOOR PLAN, RCP, NOTES & WALL TYPE
DESIGN I EAM		A161	INTERIOR FINISH PLAN & FLOOR FRAMING PLAN - MEDICAL
		A401	INTERIOR ELEVATIONS
ARCHITECT:		A601	INTERIOR DETAILS
CHAMBERLIN ARCHITECTS 437 Main Street		A701	DOOR SCHEDULE, DOOR & FRAME TYPES, WINDOW TYPES & DETAILS
Grand Junction, CO 81501	MECHANICAL	_	
(970) 242-0804		M001	MECHANICAL COVER SHEET
		M101	MECHANICAL DEMO PLAN & MECHANICAL FLOOR PLAN
NECHANICAL / ELECTRICAL		M201	MECHANICAL DETAILS & SCHEDULES
BIGHORN CONSULTING ENGINEERS, INC 386 Indian Road		M301	MECHANICAL RECORD DRAWING (FOR REFERENCE ONLY)
Grand Junction, CO 81501			
(970) 241-8709	PLUMBING		
		P001	PLUMBING COVER SHEET
		P101	PLUMBING DEMO PLAN, PLUMBING FLOOR PLAN, PLUMBING DETAILS & SCHE
		P201	PLUMIBING RECORD DRAWING (FOR REFERENCE ONLY)
	ELECTRICAL		
		E001	ELECTRICAL COVER SHEET
		E201	ELECTRICAL DEMO PLAN, ELECTRICAL FLOOR PLAN, LIGHTING PLAN & SCHE
		E301	ELECTRICAL ONE-LINE DIAGRAM

1			1		I		I.		\frown	
	EIEQ	oxtorior incul finish sve	INCL	include (d) (ing)	OPG	oponing	спт	shoot	$\{ \}$	
			INCL	include (d) (ing)		opposite hand		sheet		REVISION
l floor		olovation	INSUL	interior		opposite	SING	similar		
				invert		oriented strand board		sinniai copitory popkin disposal	→ TOP OF WALL	
			IINV	Invert				sanitary napkin vender	1 00' 0"	
		elletrie weter eagler	ют	inint	013	open lo siluciule		samually hapkin vehuor		
	EVVC	electric water cooler	JS1 IT	joist		nortials board	SPEC	specification	\frown	
)	EWG		JI	joint		particle board	SPAR	speaker	(A)— — —	COLUMN GRID LOO
~	EQ	equal		longth onglo		periorate (d)	SQ	square		
9		existing		leminete (d)		perimeter	00 00T			
a station		exhaust				plastic laminate	001	standard	(101A)	DOOR NUMBER
y station		exposed		lavalory		plate		stalluaru		
		exterior		lineal fact		parier paint (ad)	STOP	sterage	AL HM	
	FRO	furnished by owner				paint (eu)		structural		WINDOW TYPE
		floor droip	LG	lineloum		pail		Structural		
		foundation		lindeum		projector, projection	303F	suspended	ፍ —— – ——	GENTER LINE
		fire extinguisher	LI	iigiit		pounds per square inch	т	trood		
aakar unit		fire extinguisher achinet	N40	match		pounds per square mon		towel ber		
		finished and papel		maconny		pressure treated		travel distance		LINE OF WALL ABC
		finished floor elevation	MATI	matorial		paper lower dispenser		tolophono		
		finish	MAY	maximum		partition polywipyl chlorido	TO	top of		
	FLC	flashing	MR	marker board		polyvinyi chionde	T.O.	top of concrete	\wedge	
onry unit	FLO	floor (ing)	MECH	mechanic (al)		pavement	TOC	top of steel		
only unit	FLIR	fluorescent	MER	manufacture (r) (d)		piywood	TOW	top of wall		
	FO	face of	MH	manhole	ОТ	quarry tile		toilet naner dispenser		
continue	FRMG	framing	MIN	minimum		quarry the	TS	tube steel		
continue	FRP	fiber reinforced plastic	MISC	miscellaneous	R	riser radius	TYP	typical	Room	
of earess travel	FT	foot (feet)	MICC	molding moulding	RB	rubber base	T&G	tongue and groove	101	
or egress traver	FTG	footing	MO	masonry opening	REC	recycling	100	tongue una groove	101	
	110	looting	MT	mount (ed) (ing)	RCMD	recommend (ed) (ations)	UNO	unless noted otherwise		
	GA	dade daude	MTI	metal	RF	reference			1	
	GAL	gallon		inotai	REF	refrigerator	VB	vapor barrier		
arid	GALV	galvanized	N	north	REIN	reinforce (d) (ing)	VCT	vinvl composition tile		INTERIOR WALL FL
3	GB	grab bar	N/A	not applicable	REQ	required	VERT	vertical	4 🖌 A101 🕨 2	REFERENCE DRAV
	GC	general contractor	NIC	not in contract	REV	revision (s), revised	VIF	verify in field		
molition	GI	glass, glazing	NOM	nominal	RD	roof drain	VM	vending machine	\checkmark	
ain	GWB	gypsum wallboard	NTS	not to scale	RFG	roofing	VNL	vinvl sheet	3	
	GYP	avpsum	NECY	necessarv	RH	robe hook	VTR	vent through roof		
	• • •	3)	_	,	RM	room			TYP	REFERENCED SEC
	HAS	headed anchor stud	OC	on center (s)	RO	rough opening	W	west. wide. width		SHEET NUMBER
	HB	hose bibb	OD	outside diameter	ROW	right of way	W/	with		
	HCP	handicap (ed)	OFCI	owner furnished,	RR	restroom	WB	wood base	AIUI	
	HDR	header		contractor installed	RTU	roof top unit	WC	watercloset		
	HDW	hardware	OFD	overflow drain	RUB	rubber	WD	wood		
	HM	hollow metal	OFOI	owner furnished,			WDW	window	<u> </u>	WALL TYPE
	HOR	horizontal		owner installed	S	south	WF	wide flange		
	HSS	hollow structural sections	OH	overhead	SAG	susp acoustic grid	WG	wire glass		
	HT	height	OL	occupant load	SC	shower curtain rod & hooks	W/O	without		
	HVAC	heating /ventilation /	OLF	occupant load factor	SCH	schedule	WP	waterproof (ing)	TYP	
ooler		air conditioning			SD	soap dispenser	WR	waste receptacle		REFERENCED DET
glazing	HWD	hardwood					WRB	weather resistive barrier	∖ A101 /	SHEET NUMBER
							WWM	welded wire mesh		



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EDULES

EDULE

OCATION

GENERAL NOTES

- 1. COMPLY WITH ALL MANUFACTURERS RECOMMENDATIONS AND INDUSTRY STANDARDS RELEVANT TO THE WORK HEREIN.
- 2. ALL DIMENSIONS ARE FROM FACE OF FINISH UNO.
- 3. ALL ALIGNMENTS ARE FACE OF FINISH UNO. 4. FIELD VERIFY ALL DIMENSIONS AND
- ROUGH OPENINGS PRIOR TO FABRICATION AND/OR INSTALLATION.

BOVE OR HIDDEN LINE

ELEVATION WING

ECTION NUMBER

TAIL NUMBER

permit set

MESA COUNTY CORRECTIONS FACILITY - LAB REMODEL

650 SOUTH AVENUE GRAND JUNCTION, COLORADO

COVER SHEET

NO:

ISSUED FOR:

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3 REFLECTED CEILING PLAN (RCP)



WALL TYPE EXISTING DECK ACOUSTICAL SEALANT - 3" DEEP-LEG TRACK MTL FRM'G NOT ATTACHED TO CLG TRACK 4 7/8" - 5/8" GYP BD, EA SIDE - SOUND ATTEN BATTS - 3 5/8" MTG FRM'G at 16" O.C.



GENERAL NEW CONSTRUCTION NOTES

- 1. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT PRIOR TO CONTINUING CONSTRUCTION.
- 2. ITEMS NOT NOTED ON THE DRAWINGS SHALL BE CONSIDERED THE SAME AS NOTED ITEMS WHICH ARE
- GRAPHICALLY REPRESENTED IN THE SAME MANNER. 3. PROVIDE TREATED SOLID WOOD BLOCKING OR METAL STRAPPING FOR ALL WALL EQUIPMENT, TOILET ACCESSORIES, MILLWORK AND OTHER WALL MOUNTED ITEMS. SEE ELEVATIONS AND EQUIPMENT SPECIFICATIONS
- FOR ADDITIONAL INFORMATION. 4. CONTRACTOR SHALL CAULK AT THE INTERFACE OF INTERIOR FACES OF DOOR FRAMES WITH ADJACENT MATERIALS
- THOUGH JOINT MAY NOT BE VISIBLE. 5. WHERE EXISTING FINISHES ARE REQUIRED TO BE REMOVED TO INSTALL NEW FINISHES, PATCH AND REPAIR WALL SURFACES TO ACCEPT NEW FINISHES AND CONCEAL ALL TRANSITIONS.
- 6. MAINTAIN RATINGS OF EXISTING WALLS, PATCH AND REPAIR ANY NEW OR EXISTING OPENINGS IN RATED WALLS WITH UL ASSEMBLY APPROVED FOR PENETRATING ITEM AND WALL ASSEMBLY.
- 7. PROVIDE TRANSITION STRIPS BETWEEN FLOOR MATERIALS OF DISSIMILAR HEIGHTS. CENTER TRANSITION STRIPS UNDER DOORS OR OTHER PLACES OUT OF SIGHT.
- 8. NEW HM DOOR FRAMES SHALL MATCH EXISTING FOR PROFILE AND CONSTRUCTION. 9. RECONFIGURE SPRINKLER HEADS AS REQUIRED BY CODE.
- 10. RECONFIGURE FIRE ALARM DEVICES AS PER THE ELECTRICAL CODE OR AS INDICATED. PROVIDE NEW FIRE ALARM DEVICES IF EXISTING ARE NOT OPERATIONAL.
- 11. FINISHES SHALL MATCH EXISTING UNLESS OTHERWISE NOTED. 12. DUE TO SLAB CONSTRUCTION REUSE EXISTING WASTE PIPING IN FLOOR. CAP ALL UNUSED WASTE PIPING AT OR
- BELOW FLOOR LEVEL SO THAT FLOOR FINISHES CAN BE INSTALLED. 13. MAIN STRUCTURE IS EXISTING AND THE CONFIGURATION OF
- THE SUPPORTING FOUNDATIONS ARE UNKNOWN. CONTRACTOR SHALL MAKE MODIFICATIONS AS NEEDED TO THE UNDERSLAB PLUMBING ROUTING TO MAINTAIN THE INTEGRITY OF THE STRUCTURE, ALL MODIFICATIONS THAT IMPACT THE LOCATION OF PLUMBING FIXTURES MUST BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
- 14. PROVIDE POSITIVE SLOPE ON ALL FLOOR DRAINS, MINIMUM OF1/8" PER FOOT. SLOPE FLOOR ALL AROUND FROM ADJACENT WALLS TO FLOOR DRAINS, DO NOT DEPRESS ONLY THE AREA IMMEDIATELY AROUND THE DRAIN.
- 15. REFER TO THE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR THE LOCATIONS OF PIPING, VENTS, DUCTS, CURBS, FANS AND OTHER ITEMS WHICH PENETRATE THE ROOF PLANE.
- 16. DOOR JAMB LOCATION OFF FACE OF WALL IS 4", TYPICAL, UNLESS NOTED OTHERWISE.



2x4 ACG, CTR LAYOUT

IN ROOM (TYP)

GENERAL DEMOLITION NOTES THE DOCUMENTS SHOW THE OVERALL EXTENT OF DEMOLITION REQUIRED. ALTHOUGH EACH COMPONENT MAY NOT BE SHOWN OR REFERENCED, REMOVE ITEMS CONSISTENT WITH THE NATURE OF DEMOLITION INDICATED. 2. ALL CONDITIONS ARE EXISTING; IT SHALL BE THE

- CONTRACTORS RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT CONDITIONS. RECORD AND REPORT ALL DEVIATIONS TO THE ARCHITECT AS SOON AS POSSIBLE.
- 3. DO NOT DEMOLISH STRUCTURAL ELEMENTS WITHOUT APPROVAL FROM STRUCTURAL ENGINEER. PROVIDE TEMPORARY SHORING AND BRACING AS NEEDED TO MAINTAIN STRUCTURAL INTEGRITY
- 4. REMOVE LOOSE OR CRACKED MATERIAL AT AREAS ADJACENT TO INDICATED DEMOLITION IF DAMAGED BY DEMOLITION OPERATIONS. PATCH AREAS WITH MATCHING MATERIAL AND WORKMANSHIP.
- SLAB REMOVAL MAY BE REQUIRED IN ORDER TO INSTALL NEW PIPING BELOW EXISTING SLABS ON GRADE. REFER TO PLUMBING DRAWINGS FOR PIPE DEPTH AND SLOPE. EXACT LIMITS OF DEMOLITION SHALL BE DETERMINED BY CONTRACTOR FOR PIPE DEPTH AND WORKING ACCESS.
- PERIMETER STRUCTURAL CONDITIONS ARE UNKNOWN. CONTRACTOR IS TO COORDINATE ALL PLUMBING EXIT POINTS WITH STRUCTURAL ENGINEER PRIOR TO PENETRATING GRADE BEAMS.
- 7. AT WALLS, FLOORS AND CEILING AREAS INDICATED FOR DEMOLITION, REMOVE ALL INTEGRAL DEVICES AND EQUIPMENT PRESENT UNLESS OTHERWISE INDICATED.
- 8. WHERE EXISTING PLUMBING OR ELECTRICAL PIPING, TO BE ABANDONED, IS LOCATED IN THE EXISTING SLAB, CHIP AROUND THE PIPE OR FITTING A MINIMUM OF 2 INCHES, CAP THE PIPE A MINIMUM OF 4 INCHES BELOW THE FINAL FINISHED FLOOR ELEVATION AND FILL WITH CONCRETE. PREPARE CONCRETE TO RECEIVE NEW FINISHES.
- 9. ITEMS NOT NOTED FOR DEMOLITION ARE TO BE PROTECTED FROM DAMAGE AND PREPARED TO RECEIVE NEW WORK. SURFACES TO REMAIN THAT ARE DAMAGED DURING THE PERFORMANCE OF REQUIRED DEMOLITION SHALL BE PATCHED AND/OR PAINTED TO MATCH EXISTING TO REMAIN ADJACENT SURFACES UNLESS NOTED OTHERWISE.
- 10. RECYCLE MERCHANTABLE MATERIALS TO THE GREATEST EXTEND POSSIBLE, I.E. STEEL.



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EXISTING WALL TO BE DEMOLISHED

LEGEND - demo



EXISTING ITEM TO BE DEMOLISHED EXISTING WALL TO REMAIN EXISTING ITEM TO REMAIN LEGEND - new EXISTING WALL TO REMAIN

EXISTING ITEM TO REMAIN NEW WALL NEW ITEM

MESA COUNTY CORRECTIONS FACILITY - LAB REMODEL

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INTERIOR FINISH LEGEND



 WALL FINISH (NORTH, SOUTH, EAST, WEST) - CEILING FINISH FLOOR FINISH

BASE FINISH

FINISH NOTES

1. PATTERN AT WALLS, RE: INTERIOR ELEVATIONS A401

3. FLOORING SHALL EXTEND UNDER ALL CASEWORK

2. PATTERN AT CEILINGS, RE: REFLECTED CEILING PLAN A101

CEILNG FINISH

FLOOR FINISHES CPT - CARPET FLOOR TILE

LVT - LUXURY VINYL COMPOSTITION TILE

BASE FINISHES



1 INTERIOR FINISH PLAN A161 2' 4'

WALL FINISH P - CMU OR GYPSUM WALLBOARD W/ PAINT

RUB - RUBBER BASE.

APC - SUSPENDED ACOUSTICAL PANEL CEILING GRID AND TILE



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MESA COUNTY CORRECTIONS FACILITY - LAB REMODEL

650 SOUTH AVENUE GRAND JUNCTION, COLORADO

INTERIOR FINISH PLAN & FLOOR FRAMING PLAN -MEDICAL **ISSUED FOR:** NO:

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6 SUPPORT - NORTH INTERIOR ELEVATION



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MESA COUNTY CORRECTIONS FACILITY - LAB REMODEL

650 SOUTH AVENUE GRAND JUNCTION, COLORADO

INTERIOR **ELEVATIONS**



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MESA COUNTY CORRECTIONS FACILITY - LAB REMODEL

650 SOUTH AVENUE GRAND JUNCTION, COLORADO

INTERIOR DETAILS



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MESA COUNTY CORRECTIONS FACILITY - LAB REMODEL

650 SOUTH AVENUE GRAND JUNCTION, COLORADO



PROJECT STATUS: PERMIT SET

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HVAC & DUCTWORK SYMBOLS

- SECTION THROUGH RETURN DUCT
- SECTION THROUGH EXHAUST AIR DUCT SECTION THROUGH SUPPLY OR OUTSIDE AIR DUCT FIRE / SMOKE DAMPER SMOKE DAMPER SUPPLY OR OUTSIDE AIR DUCT ACCESS DOOR (BOTTOM OR SIDE) ACOUSTICALLY LINED DUCT FIRE DAMPER, SMOKE DAMPER, FIRE/SMOKE DAMPER MANUAL VOLUME DAMPER INCLINED DROP IN DIRECTION OF ARROW INCLINED RISE IN DIRECTION OF ARROW TRANSITION, RECTANGULAR TO ROUND FLEXIBLE DUCT
- IN-LINE FAN
- TRANSITION, RECTANGULAR
- SPIN-IN COLLAR INTO ADAPTER ON TOP OF DUCT
- CEILING SUPPLY AIR REGISTER/GRILLE
- SIDEWALL SUPPLY AIR REGISTER (SR)
- ELBOW TURNED DOWN
- ELBOW TURNED UP
- ELBOW, RADIUS TYPE
- ELBOW, SQUARE OR RECTANGULAR TYPE WITH AIRFOIL TURNING VANES
- CEILING RETURN AIR REGISTER (RR)
- SIDEWALL RETURN AIR REGISTER (RR)
- OPEN END DUCT

FLEXIBLE CONNECTION

LINE DESIGNATION SYMBOLS

 · CHWR ———	CHILLED WATER RETURN
 CHWS ———	CHILLED WATER SUPPLY
 CA	COMPRESSED AIR
 CR	CONDENSER WATER RETURN
 - cs ———	CONDENSER WATER SUPPLY
 D	DRAIN
 HPR	HEAT PUMP RETURN
 HPS	HEAT PUMP SUPPLY
 HWR ———	HOT WATER RETURN
 HWS ———	HOT WATER SUPPLY
 G ———	NATURAL GAS
 RH	REFRIGERANT HIGH PRESSURE VAPOR
 R ———	REFRIGERANT LIQUID AND VAPOR LINE
 RS	REFRIGERANT SUCTION / VAPOR
 SMR	SNOWMELT RETURN
 SMS	SNOWMELT SUPPLY
 v ——	VENT PIPING
 • •	POINT OF CONNECTION OF NEW TO EXISTING

RESPONSIBLE DIVISION:

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHE IN PLACE AND WIRED AS FOLLOWS:

TEM	FURNISHED	SET	POWER WIRED	CONTROL WIRED
EQUIPMENT	23	23	26	
COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS, VFD'S AND CONTACTORS	23(1)	26	26(2)	23
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26	26	26	
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS (LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)		23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)		23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

SUBSCRIPT FOOTNOTES:

- 1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1)NC AUXILIARY CONTACT, AND "ON" AND "OFF" PILOT LIGHTS.
- 2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

ABBREVIATIONS:

44"		DIA	DIAMETER
		DIAG	DIAGRAM
AD	ACCESS DOOR	DIFF	DIFFERENTIAL
AAV	AIR ADMITTANCE VALVE	DISCH	DISCHARGE
ABV	ABOVE		
AC	AIR CONDITIONING UNIT	DS	
AC	ABOVE COUNTER	DWG	DRAWING
AD	AREA DRAIN (SEE SYMBOLS)	DX	DIRECT EXPANSION
A.F.C.	ABOVE FINISHED CEILING	(E)	EXISTING
A.F.G.	ABOVE FINISHED GRADE	EA	EXHAUST AIR GRILLE/REGISTER
	AMPERE INTERRUPTING	EAT	ENTERING AIR TEMPERATURE
AFCI	ARC FAULT CIRCUIT	EC	ELECTRICAL CONTRACTOR
INTER	RUPTERS	ECC	ECCENTRIC
A.F.F.	ABOVE FINISHED FLOOR		
		FI	ELEVEL ELEVELON
		ELEC	ELECTRIC
ATS	AUTOMATIC TRANSFER SWITCH	ELEV	ELEVATOR
AV	AUDIO / VIDEO	EM	EMERGENCY FUNCTION
AVG	AVERAGE	ENT	ENTERING
AWG	AMERICAN WIRE GAGE	EMT	ELECTRIC METALLIC TUBE
BAS	BUILDING AUTOMATION SYSTEM	EQ	EQUAL
BB	BASEBOARD	EQUIP	
BD	BACK DRAFT DAMPER	EQUIV	
BFP	BACK FLOW PREVENTOR	ES ESD	
BL	BOILER	FT	EXPANSION TANK
BLDG	BUILDING	EWC	ELECTRIC WATER COOLER
BOB	BOTTOM OF BEAM	EWT	ENTERING WATER
BOD	BOTTOM OF DUCT	TEMPE	RATURE
BOP	BOTTOM OF PIPE	EX	EXHAUST
BSMT	BASEMENT	EXPAN	EXPANSION
BTU	BRITISH THERMAL UNIT		
С	CHILLER	F FA	
CAFCI		FC	FAN COIL UNIT
CAP		FC	FOOTCANDLE
CB	CIRCUIT BREAKER	FCV	FLOW CONTROL VALVE
CBV	CIRCUIT BALANCING VALVE	FD	FIRE DAMPER
ССТ	CORRELATED COLOR	FD	FLOOR DRAIN
	TEMPERATURE	FIN	FINISHED
CKI		FLA	FULL LOAD AMPS
		FLEX	FLEXIBLE
CHWR	CHILLED WATER RETURN	FOR	
CHWS	CHILLED WATER SUPPLY	FOT	FLAT ON TOP
CI	CAST IRON	FP	FIRE PROTECTION
CL	CENTER LINE	FP	FIRE PUMP
CLG	CEILING	FPM	FEET PER MINUTE
CMU	CONCRETE MASONRY UNIT	FPS	FEET PER SECOND
CO	CLEAN OUT	FS	FLOW SWITCH
COL	COLUMN	FSD	FIRE/SMOKE DAMPER
COMP	COMPRESSOR		
COND	CONDENSATE		
CONN	CONNECTION	GA	GAUGE
CONT	CONTINUATION	GAL	GALLON
CONTR	R CONTRACTOR	GALV	GALVANIZED
CRI	COLOR RENDERING INDEX	GEC	GROUND ELECTRODE
СТ	COOLING TOWER	CONDU	
СТ	CURRENT TRANSFORMER		GET GROUND FAULT CIRCUIT
CU	CONDENSING UNIT	GC	GENERAL CONTRACTOR
CU		GPH	GALLONS PER HOUR
		GPM	GALLONS PER MINUTE
CWR	CONDENSER WATER RETURN	GRS/LE	3 GRAINS PER POUND
CWS	CONDENSER WATER SUPPLY	H 20	WATER
DB	DRY BULB	HB	HOSE BIBB
DEPT	DEPARTMENT	ни Нр	HEAD (SEE SCHEDULES)
DF	DRINKING FOUNTAIN	1.11	

SUBSTITUTIONS:

SHED, SET	
TROL ED	
2)	

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCUR ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION I GENERAL REQUIREMENTS.

A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.

EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:

B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING, AND ENERGY CONSERVATION CODES. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.

HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HTR	HEATER
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
HX	HEAT EXCHANGER
HZ	HERTZ
ID IC	
IN INV	INVERT
JBOX	
K	KELVIN
KW	KILOWATT
KVA	KILO VOLT - AMPS
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LV	LAVATORY
LB	POUND
LD	LINEAR DIFFUSER
LF	LINEAR FEET
LIN	LINEAR
LIQ	
LVG	LEAVING
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSANDS OF BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MED	MEDIUM
MFR	MANUFACTURER
MIN	
MIO	
MOCP	
PROT	ECTION
MTD	MOUNTED
MUA	MAKE-UP AIR UNIT
Ν	NEUTRAL
NC	NORMALLY CLOSED
NEG	NEGATIVE
NIC	
NOT S	WITCH
NO	NORMALLY OPEN
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
000	
OZ	OUNCE
PBD	PARALLEL BLADE DAMPER
PD	PRESSURE DROP
PH	PHASE
POS	POSITIVE PRESSURE
POS	POINT OF SALES
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH

PT PRESSURE TRANSMITTER

	PACKAGED TERMINAL AIR
PV	PI UG VAI VE
PVC	
QTY	QUANTITY
RA	RETURN AIR GRILLE / REGISTER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REL	RELIEF
REQD	REQUIRED
RF	RETURN FAN
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RLA	RATED LOAD AMPS
RPM	
SA SC	
SCA	SHORT CIRCUIT AVAILABLE
SCCR	SHORT CIRCUIT CURRENT
RATING	
SCH	SCHEDULE
SD	SMOKE DAMPER
SEF	SMOKE EXHAUST FAN
SF	SUPPLY FAN
SH	SENSIBLE HEAT
SH	SHOWER
SP	STATIC PRESSURE
SPD	SURGE PROTECTION DEVICE
SPEC	SPECIFICATION
SS	STAINI ESS STEEL
SS	SAFETY SHOWER
STD	STANDARD
STL	STEEL
SYS	SYSTEM
TEMP	TEMPERATURE
TR	TRANSFER GRILLE / REGISTER
TR	TAMPER RESISTANT
TT	TEMPERATURE TRANSMITTER
тх	TRANSFORMER
UC	UNDERCUT DOOR
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UNOCC	UNOCCUPIED
UR	URINAL
V	VOLTS
VA	VOLT AMPERE
VA	VALVE
VAV	VARIABLE AIR VOLUME UNIT
VFD	VARIABLE FREQUENCY DRIVE
VRF	VARIABLE REFRIGERANT FLOW
VOLI	VOLTAGE
VV \\/	WATTS
W/	WITH
W/O	WITHOUT
WB	WET BULB
WC	WATER COLUMN
WC	WATER CLOSET
WG	WATER GAUGE
WP	WEATHERPROOF
WPIU	WEATHERPROOF IN-USE
WSR	WITHSTAND RATING
XFMR	TRANSFORMER









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

NORTH

GENERAL MECHANICAL NOTES 1. RECTANGULAR DUCT TO BE GALVANIZED STEEL, LINED & SEALED.

- 2. ROUND DUCT TO BE GALVANIZED STEEL, SNAP LOCK OR INSULATED FLEXIBLE DUCT.
- 3. S/A & R/A G.R.D. NECK SIZE TO MATCH BRANCH DUCT SIZE. 4. ANY DUCTWORK PENETRATING A FIRE AND/OR SMOKE RATED WALL SHALL BE PROVIDE WITH AN APPROPRIATE FIRE AND/OR SMOKE DAMPER.
- FLAG NOTES 1. DUCTWORK WITH HATCH SHALL BE DEMOLISHED, TYPICAL.
 - SEE M3-1 FOR RECORD DRAWINGS/AS BUILT REFERENCE.
 RELOCATE THERMOSTATS AS INDICATED, TYPICAL. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
 - ROUTE CONDENSATE TO NEAREST FLOOR SINK. CONTRACTOR TO COORDINATE ROUTE.
 CU-1 TO BE MOUNTED ON LOW ROOF ABOVE LAB SPACE. CONTRACTOR TO COORDINATE FINAL INSTALLATION LOCATION WITH ARCHITECT.

MECHANICAL DEMO - FLOOR PLAN



Indoor Units:			1/1to1				
Capacity:			12/6 to 1	2 (100.0%)			PUY-A1
* Connectable ca	pacity is no	t actual capacity.			52		
Total Pipe Lengt		6705-96779°°°9996376 14954949	78.9 / 165.0	fett:			
Correction Facto	ITS		30 03455055655655655655				
Temperature:	1.01					1 <u>.</u> • کام با ختی ا	
Piping Length:	0.92						75.04
User Derate:	1.00					의왕 의 (사용의 동네 () - 분홍분 - 분홍분	i karishi di
Total Derate:	0.78						
Additional Refric	jerant:	0.06 ІЬ					
Total Refrigerant	, Amount	: 4.49 ІЬ					
Conditions (°F Cooling Indoor DB 80. Outdoor DB 96.) 0 Humid 0	dity 51.3% Inc	loor WB 67.0				
Heating	18:15						
Indoor DB /0.							
Outdoor DB 2.0	fi Hum k k Humk	dity /2.8% Ou	itdoor WB- 12				



DUCTLESS SPLIT AIR CONDITIONING SYSTEM SCHEDULE										
		COOLING		SEED2	ELECTRICAL					
EQUIPMENT NO.	SERVICE	CAPACITY (MBH)	CFM	(EFFICIENCY)	MCA (A)	MOCP (A)	V./PH./HZ.	MANUFACTURER	MODEL	OPTIONS/ACCESSORIES
AC-1	LAB	12	490	26.9	1	SEE CU-1	208/1/60	MITSUBISHI	PLA-A12EA8	SEE NOTE 1
CU-1	AC-1	12	1590	26.9	11	28	208/1/60	MITSUBISHI	PUY-A12NKA7	SEE NOTE 2
NOTES:										
1. PROVIDE WITH THERMOSTAT, CONDENSATE PUMP, DISCONNECT SWITCH, AND FILTERS.										
2. PROVIDE WITH	WIND/HAIL C	GUARDS, 18" TA	ALL MO	UNTING STAND, AN	ND REFRIGEF	RANT PIPING L	INESET PER I	MANUFACTURER REQU	IREMENTS. PROVIDE	LINE SHACK MODEL LS BY SBC
INDUSTRIES OR F	ROVIDE ROO	OF CURB WITH	AIREX	TSS SERIES WITH T	TITAN OUTLE	T.				

	Address/Group / Room / Tag Ref
PLA-A12EA7R1.TH	9,322 BTU/h (9,322 BTU/h) Est. Cooling Discharge Air Temp: 60.8



This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor and/or designer of record Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.

1.25mm²(16 AWG) : 1.25mm²(16 AWG) or more. 0.75mm²(20 AWG) : between 0.5mm²(24 AWG) and 0.75m²(20 AWG).



NOT TO SCALE



GRILLE-REGISTER-DIFFUSER SCHEDULE									
EQUIPMENT NO.	SIZE	MODEL	MANUFACTURER	FINISH	OPTIONS/ACCESSORIES				
SC-1	24"X24"	SPD	PRICE	PER ARCH	SEE NOTE 1				
RC-1	24"X24"	SPD	PRICE	PER ARCH	SEE NOTE 2				
EC-1	24"X24"	SPD	PRICE	PER ARCH	SEE NOTE 1				
NOTES:									
1. COORDINATE ALL MOUNTING WITH CEILINGS. NECK SIZE TO MATCH DUCT BRANCH SIZE.									
2. COORDINATE ALL MOUNTING WITH CEILINGS. PROVIDE WITH 14" NECK SIZE. PROVIDE									
WITH SOUND BO	OOT (SEE D	ETAILS).							

_ ו Consulting Engineers, ממומה בכביין ממומה בכביין oad on, CO 81501) 241-8709 unctic (970) P ∎ σ \succ FACIL⁻ E. ORADO CORRECTIONS NLS 650 E. SOUTH AVI GRAND JUNCTION, COL MECHANICALDETA 00 MESA DATE: ISSUED FOR: 07/19/2024 FINAL REVIEW 09/27/2024 UPDATE 10/02/2024 PERMIT 59005 Rolect Lucch 10/02/2024 DATE: 10/02/2024 JOB NO: 24-203 DRAWN BY: RL CHECKED BY: BCE SCALE: SHEET NUMBER: M201 September 30, 2024 - 9:41:17am

DO NOT REPRODUCE THESE DRAWINGS AN

DO NOT REPRODUCE THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER THE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF THE SERVICE AND SHALL REMAIN THE PROPERTY OF THE DESIGNER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY OTHER PROJECTS FOR ADDITIONS TO THIS PROJECT BY OTHERS EXCEPT BY THE EXPRESSED WRITTEN DERMISSION OF THE DESIGNER

PERMISSION OF THE DESIGNER.





September 30, 2024 - 9:41:18am

PLUMBING	PIPE DESIGNATIONS
LINE TYPE	DESCRIPTION
140	HIGH TEMPERATURE (140°) WATER PIPE
	COLD WATER PIPE (CW)
CA	COMPRESSED AIR
DC	DECONTAMINATION PIPING
DER	DEIONIZED WATER RETURN
DES	DEIONIZED WATER SUPPLY
DIS	DISTILLED WATER SUPPLY
DIR	DISTILLED WATER RETURN
CD	EQUIPMENT CONDENSATE DRAIN
——— FP ———	FIRE MAIN
GW	GREASE WASTE PIPE
HE	HELIUM
HPS	HIGH PRESSURE STEAM
HPC	HIGH PRESSURE CONDENSATE
	HOT WATER RECIRCULATION (HWR)
	HOT WATER PIPE (HW)
——— H2 ———	HYDROGEN
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
——— MA ———	MEDICAL AIR
G	NATURAL GAS PIPE
N2	NITROGEN
N2O	NITROUS OXIDE
ORD	OVERFLOW STORM WATER PIPE
O2	OXYGEN
PG	PROPANE GAS
RD	ROOF DRAIN PIPE
	SOIL OR WASTE PIPE
S/O	SOIL / OIL WASTE PIPE
TWR	TOWER WATER RETURN
TWS	TOWER WATER SUPPLY
VAC	VACUUM
	VENT PIPE (V)

LINE TYPE
PRV 60 PSI
₹ -
[
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T ta
X
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+++++++++
WH
(M)
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	PLUMBING ELEMENTS / VALVING					
	DESCRIPTION		LINE TYPE	DESCRIPTION		
			O	PIPE RISING UP		
				PIPE DROPPING DOWN		
	VALVE (PRV)			UNION - SCREWED OR FLANGED		
	GATE VALVE		PT/PS	PRESSURE TRANSMITTER OR		
	GLOBE VALVE		Π	PRESSURE SWITCH		
	PLUG VALVE			THERMOMETER/TEMPERATURE		
	BUTTERFLY VALVE			GAUGE WITH GAUGE COCK/ PRESSURE INDICATOR		
	BALL VALVE	-X				
	SWING CHECK VALVE	-X		(REDUCED ZONE) BACKFLOW PREVENTOR (DOUBLE CHECK VALVE ASSEMBLY)		
	LIFT CHECK VALVE		^{SA}	WATER HAMMER ARRESTER		
	GATE VALVE, ANGLE	-	$-\!$	CIRCUIT SETTING		
_	GLOBE VALVE, ANGLE					
		НВ	$\langle + $	HOSE BIBB		
	TEMPERATURE AND PRESSURE RELIEF VALVE	RD	0	ROOF DRAIN		
	RELIEF/SAFETY VALVE	FD		FLOOR DRAIN		
	GAS COCK	AD		AREA DRAIN		
	GAS PRESSURE REGULATOR			FLOOR CLEAN OUT		
	STRAINER		FS FS	FLOOR SINK		
	STRAINER WITH			CLEAN OUT TO GRADE		
	BLOW OFF VALVE	Ł				
	WATER HEATER			WALL CLEAN OUT		
				FLEXIBLE-CONNECTION		
				CHECK VALVE		
	PRESSURE GAGE		$\hat{\mathbf{A}}$			
	TEMPERATURE GAGE		_			

RESPONSIBLE DIVISION:

UNLESS OTHERWISE INDICATED ALL H AND OTHER MECHANICAL EQUIPMENT IN PLACE AND WIRED AS FOLLOWS:	HEATING, VENTI T, MOTORS, ANE	LATING, A CONTRC	IR CONDITION	NING, PLUMBING FURNISHED, SE
ITEM	FURNISHED	SET	POWER WIRED	CONTROL WIRED
EQUIPMENT	23	23	26	
COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS, VFD'S AND CONTACTORS	23(1)	26	26(2)	23
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26	26	26	
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS (LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)		23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)		23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

SUBSCRIPT FOOTNOTES: 1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1)NC

AUXILIARY CONTACT, AND "ON" AND "OFF" PILOT LIGHTS.

2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

ABBREVIATIONS:

44"	MOUNTING HEIGHT ABOVE	DIA	DIAMETER
FINISH	IED FLOOR TO CENTER OF DEVICE	DIAG	DIAGRAM
A A D		DIFF	DIFFERENTIAL
A.D.		DISCH	DISCHARGE
ABV	ABOVE		DIVISION
AC	AIR CONDITIONING UNIT	DN	DUCT SILENCER
AC	ABOVE COUNTER	DWG	DRAWING
AD	AREA DRAIN (SEE SYMBOLS)	DX	DIRECT EXPANSION
A.F.C.	ABOVE FINISHED CEILING	(E)	EXISTING
A.F.G.	ABOVE FINISHED GRADE	EA	EXHAUST AIR GRILLE/REGISTER
		EAT	ENTERING AIR TEMPERATURE
AFCI	ARC FAULT CIRCUIT	EC	ELECTRICAL CONTRACTOR
INTER	RUPTERS	ECC	ECCENTRIC
A.F.F.	ABOVE FINISHED FLOOR	EF FFF	
AHU			
			ELECTRIC
	AUTOMATIC TRANSFER SWITCH	ELEV	ELEVATOR
AV		EM	EMERGENCY FUNCTION
AVG	AVERAGE	ENT	ENTERING
AWG	AMERICAN WIRE GAGE	EMT	ELECTRIC METALLIC TUBE
BAS	BUILDING AUTOMATION SYSTEM	EQ	EQUAL
BB	BASEBOARD	EQUIP	EQUIPMENT
BD	BACK DRAFT DAMPER	EQUIV	EQUIVALENT
BFP	BACK FLOW PREVENTOR	ES	END SWITCH
BL	BOILER	ESP	EXTERNAL STATIC PRESSURE
BLDG	BUILDING	EI	
BLW	BELOW		
BOB	BOTTOM OF BEAM	TEMPE	ERATURE
BOD	BOTTOM OF PIPE	EX	EXHAUST
BSMT	BASEMENT	EXPAN	EXPANSION
BTU	BRITISH THERMAL UNIT	EXT	EXTERNAL
С	CHILLER	F	
CAFCI	COMBINATION ARC FAULT	FA	
		FC	
CAP		FCV	
CBV		FD	FIRE DAMPER
CCT	CORRELATED COLOR	FD	FLOOR DRAIN
	TEMPERATURE	FIN	FINISHED
CKT	CIRCUIT	FLA	FULL LOAD AMPS
CFH	CUBIC FEET PER HOUR	FLEX	FLEXIBLE
CFM		FLR	FLOOR
CHWR		FOB	FLAT ON BOTTOM
CHWS		FOI	
CI		FP FD	
CLG	CEILING	FPM	
CMU	CONCRETE MASONRY UNIT	FPS	FEET PER SECOND
СО	CLEAN OUT	FS	FLOW SWITCH
COL	COLUMN	FSD	FIRE/SMOKE DAMPER
COMP	COMPRESSOR	FT	FEET
CONC	CONCRETE	FXC	FLEXIBLE CONNECTION
COND	CONDENSATE	GND	GROUND
CONN		GA	GAUGE
CONT		GALV	
CRI	COLOR RENDERING INDEX	GEC	GROUND ELECTRODE
СТ	COOLING TOWER	COND	UCTOR
СТ	CURRENT TRANSFORMER	GFCI /	GFI GROUND FAULT CIRCUIT
CU	CONDENSING UNIT		
CU	COPPER	СЪН СЪН	
CUH	CABINET UNIT HEATER	GPM	GALLONS PER MINUTF
CVB	CONSTANT VOLUME BOX	GRS/L	B GRAINS PER POUND
CWR	CONDENSER WATER RETURN	H 20	WATER
		HB	HOSE BIBB
DEDT	DEPARTMENT	HD	HEAD (SEE SCHEDULES)
DF		HP	HEAT PUMP

SUBSTITUTIONS:

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCUR ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION I GENERAL REQUIREMENTS.

EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:

A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.

B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING, AND ENERGY CONSERVATION CODES. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.

HP	HORSEPOWER
HR	HOUR
ΗТ	HEIGHT
HTR	HEATER
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
ΗХ	HEAT EXCHANGER
HZ	HERTZ
ID	INSIDE DIAMETER
IG	ISOLATED GROUND
IN	INCHES
INV	INVERT
JBOX	JUNCTION BOX
К	KELVIN
KW	KILOWATT
KVA	KILO VOLT - AMPS
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LV	LAVATORY
LB	POUND
LD	LINEAR DIFFUSER
LF	LINEAR FEET
LIN	LINEAR
LIQ	LIQUID
LM	LUMEN
LRA	LOCKED ROTOR AMPS
LV	LOUVER
LVG	LEAVING
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSANDS OF BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MED	MEDIUM
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUG ONLY
MOCP	MAXIMUM OVERCURRENT
PROT	ECTION
MTD	MOUNTED
MUA	MAKE-UP AIR UNIT
Ν	NEUTRAL
NC	NORMALLY CLOSED
NEG	NEGATIVE
NIC	
NL NOT S	NIGHT / SECURITY LIGHT - DO
NO	
NOM	NOMINAI
NTS	NOT TO SCALE
OA	
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
000	OCCUPIED
OCP	OVER CURRENT PROTECTION
OD	OUTSIDE DIAMETER
OL	OVERLOAD
ORD	OVERFLOW ROOF DRAIN
ΟZ	OUNCE
PBD	PARALLEL BLADE DAMPER
PD	PRESSURE DROP
PH	PHASE
POS	POSITIVE PRESSURE
POS	POINT OF SALES
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH

PT PRESSURE TRANSMITTER

PTAC PACKAGED TERMINAL AIR CONDITIONER PV PLUG VALVE PVC POLYVINYL CHLORIDE QTY QUANTITY RA RETURN AIR GRILLE / REGISTER RCP REFLECTED CEILING PLAN RD ROOF DRAIN REL RELIEF REQD REQUIRED RF RETURN FAN RH RELATIVE HUMIDITY RHC REHEAT COIL RLA RATED LOAD AMPS RM ROOM RPM REVOLUTIONS PER MINUTE SA SUPPLY AIR GRILLE / REGISTER SC SHORT CIRCUIT SCA SHORT CIRCUIT AVAILABLE SCCR SHORT CIRCUIT CURRENT RATING SCH SCHEDULE SD SMOKE DAMPER SEF SMOKE EXHAUST FAN SF SUPPLY FAN SH SENSIBLE HEAT SH SHOWER SP STATIC PRESSURE SPD SURGE PROTECTION DEVICE SPEC SPECIFICATION SQ SQUARE SS STAINLESS STEEL SS SAFETY SHOWER STD STANDARD STL STEEL SYS SYSTEM TEMP TEMPERATURE TR TRANSFER GRILLE / REGISTER TR TAMPER RESISTANT TT TEMPERATURE TRANSMITTER TTB TELECOMMUNICATIONS TERMINAL BACKBOARD TYP TYPICAL TX TRANSFORMER UC UNDERCUT DOOR UH UNIT HEATER UNO UNLESS NOTED OTHERWISE UNOCC UNOCCUPIED UR URINAL V VOLTS VA VOLT AMPERE VA VALVE VAV VARIABLE AIR VOLUME UNIT VFD VARIABLE FREQUENCY DRIVE VRF VARIABLE REFRIGERANT FLOW VOLT VOLTAGE VTR VENT THROUGH ROOF W WIDTH W WATTS W/ WITH W/O WITHOUT WB WET BULB WC WATER COLUMN WC WATER CLOSET WG WATER GAUGE WP WEATHERPROOF WPIU WEATHERPROOF IN-USE WSR WITHSTAND RATING XFMR TRANSFORMER





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

трім	PIPING CONNECTIONS				OPTIONS-ACCESSORIES			
	S/W	VENT	C.W.	HW	OF HONS-ACCESSORIES			
	SEE PLANS	2"	-	-	PROVIDE WITH QUADCLOSE TRAP SEAL.			
	SEE PLANS	2"	T	-	PROVIDE WITH QUADCLOSE TRAP SEAL.			

NOTE: INDIRECT WASTE PIPING EXCEEDING 5'

FLOOR SINK DETAIL

NOT TO SCALE

IN LENGTH SHALL BE TRAPPED WITH THE EXCEPTION OF CLEAR WATER WASTES.









September 30, 2024 - 9:41:24am

	FIRE ALARM EQUIPMENT LEGEND
FACP	FIRE ALARM CONTROL PANEL
F	FIRE ALARM PULL STATION
	FIRE ALARM HORN
\boxtimes	FIRE ALARM STROBE
	FIRE ALARM HORN/STROBE
\bigtriangledown	CEILING MOUNTED SPEAKER
D	DUCT DETECTOR
R	REMOTE LAMP
(S) ^b	SMOKE DETECTOR - PHOTOELECTRIC
(H) _{135°}	135° STANDARD HEAT DETECTOR
PIR	PIR DETECTOR
DH	DOOR HOLD - MAGNETIC HOLD
(FS)	FLOW SWITCH
∕ TS	TAMPER SWITCH

COMMUNICATION LEGEND

0	
Q	CLOCK ONLY
00	CLOCK / PA SPEAKER WALL MOUNTED
S	ROUND CEILING MOUNTED SPEAKER
S	SQUARE SPEAKER
НC	INTERCOM PUSH TO CALL SWITCH
WAP Å	WIRELESS ACCESS POINT ABOVE THE CEILING
	ABOVE THE CEILING PROJECTOR CONNECTION
	WALL MOUNTED HDMI
\bigtriangledown	PLAIN DATA OUTLET
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	PLAIN DATA OUTLET WITH MOUNTING HEIGHT
\mathbf{V}	COMBINATION DATA/TELEPHONE
\mathbf{V}	FLOOR MOUNTED COMBINATION DATA/TELEPHONE
\mathbf{v}	CEILING MOUNTED COMBINATION DATA/TELEPHONE
\Leftarrow	TELEVISION OUTLET

SECURITY SYSTEM LEGEND

HC	
DS	
CR	

SECURITY CAMERA

- ADA DOOR OPERATOR PUSH BUTTON ELECTRIC DOOR STRIKE
- CARD READER FOR DOOR OPERATOR

LIGHTING LEGEND

SYMBOLS SHOWN ARE STANDARD, VARIATION AND/OR COMBIN THE PLANS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL M PROJECT DRAWINGS; HOWEVER, WHEREVER THE SYMBOL ON OCCUR, THE ITEM SHALL BE PROVIDED AND INSTALLED. VARIATION AND/OR COMBINATION MAY BE USED ON THE PLANS

NOTES:

A NUMBER NEXT TO A RECEPTACLE OR DEVICE INDICATES A C AN UPPER CASE LETTER NEXT TO A SWITCH INDICATES THE FU LOWER CASE LETTER INDICATES THE SWITCH CIRCUIT.

AN UPPER CASE LETTER NEXT TO A LIGHT FIXTURE INDICATES REFER TO THE LUMINAIRE SCHEDULE FOR FIXTURE SPECIFICATION LETTER NEXT TO A LIGHT CORRESPONDS TO THE SWITCH DES

SWITCHES \$ SINGLE POLE SWITCH TWO POLE SWITCH THREE-WAY SWITCH FOUR-WAY SWITCH \$ DIMMER SWITCH \$3D 3 WAY DIMMER SWITCH - (4D INDICATES A 4WAY DIMM \$_{DR} DOOR ACTIVATED SWITCH SWITCH \$_{LV} LOW VOLTAGE LIGHT SWITCH \$_{TO} MANUAL MOTOR STARTER \$ PILOT LIGHT SWITCH \$_{OS} AUTO ON / AUTO OFF LIGHT SWITCH \$MO DUAL TECHNOLOGY MOTION / OCCUPANCY SENSOR I \$^D_MA_MANUAL ON / AUTO OFF DIMMING LIGHT SWITCH \$ KEY OPERATED LIGHT SWITCH \$_T MANUAL ON - TIMED OFF LIGHT SWITCH (OS)(OS) CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY MAX (MA) CEILING MOUNTED DUAL TECHNOLOGY MANUAL ON / DS CEILING MOUNTED DAYLIGHT HARVESTING SENSOR \$_{SC} SCENE CONTROL STATION \$_{MS} UNIT LIGHTING MANAGEMENT CONTROL STATION, LIGHT FIXTURES

A 	1'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FIX FLANGE OR SURFACE MOUNTED
A	2'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FIX FLANGE OR SURFACE MOUNTED
A	2'x2' LED TROFFER OR DIRECT/INDIRECT TYPE FIX FLANGE OR SURFACE MOUNTED
⊢_ ©	OPEN STRIP FIXTURE
	WALL BRACKET LINEAR FIXTURE
Аф	WALL MOUNTED SCONCE LIGHT FIXTURE
а ф	RECESSED DOWNLIGHT CAN FIXTURE
а-ф-	SURFACE CEILING OR PENDANT MOUNTED FIXTU
EX2	DOUBLE FACE EXIT SIGN, WALL AND CEILING MOU
EX1 😢	SINGLE FACE EXIT SIGN, WALL AND CEILING MOUI
ЕМО́́С	WALL MOUNTED EMERGENCY LIGHT
EMR 🖁	EMERGENCY EXTERIOR EGRESS FIXTURE

GENERAL ELECTRICAL NOTES

- 1. ALL ELECTRICAL WORK TO COMPLY WITH LATEST EDITION OF NEC, IECC AND ALL APPLICABLE GOVERNING CODES
- 2. FIELD COORDINATION DURING CONSTRUCTION IS IMPERATIVE. CONTRACTORS BIDDING THIS
- WORK MUST MAKE REASONABLE ALLOWANCES FOR UNFORESEEN CONTINGENCIES. 3. ELECTRIC UTILITY TO ADVISE OWNER AND/OR THE ELECTRICAL ENGINEER PRIOR TO SERVICE MODIFICATION REQUIRING COST TO THE OWNER.

- WIRING: 1. ALL WIRING IS SHOWN DIAGRAMMATICALLY ON DRAWING, FIELD VERIFY ALL CONDITIONS PRIOR TO ROUGH-IN.
- 2. ALL CONDUITS AND CONVEYANCES SHALL BE CONCEALED. IN THE EVENT THAT A NEW DEVICE IS BEING INSTALLED IN AN EXISTING DRYWALL PARTITION, PROVIDE A CUT IN TYPE BOX AND FISH FLEXIBLE CONDUIT DOWN INSIDE THE WALL FROM ABOVE THE CEILING AND REPAIR THE DRYWALL AROUND THE CONDUIT. TRANSITION TO EMT ONCE ABOVE THE CEILING.
- 3. SIZES OF WIRE AND CABLES ARE BASED UPON COPPER CONDUCTORS, UNLESS OTHERWISE INDICATED. ALL CIRCUITS SHALL CONTAIN (2) #12 AWG WITH (1) #12 GND IN 1/2" CONDUIT UNLESS NOTED OTHERWISE. 4. ALL BRANCH CIRCUITS WITH HOME RUNS OVER 50 FEET, WILL BE SIZED ONE SIZE LARGER.
- 5. ALL PENETRATIONS IN OR THROUGH FIRE RATED PARTITIONS SHALL BE FIRE STOPPED IN SUCH A WAY THAT THE PENETRATION MATCHES THE FIRE RATING OF THE WALL.
- 6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION BETWEEN THE
- APPROPRIATE DISCIPLINES AND CONTRACTORS. 7. COORDINATE ALL DEVICE, FIXTURE AND HARDWARE COLOR SELECTIONS WITH THE ARCHITECT
- PRIOR TO MAKING SHOP DRAWING SUBMITTALS.
- 8. COORDINATE THE MOUNTING HEIGHTS OF ALL RECEPTACLES MOUNTED ABOVE COUNTERS, CASEWORK AND APPLIANCE RECEPTACLES WITH ARCHITECTURAL ELEVATIONS.
- 9. BRANCH CIRCUIT AND SPECIAL SYSTEMS WIRING FOR DEVICES ON WALLS IN FINISHED AREAS
- WHICH CANNOT BE CONCEALED SHALL BE INSTALLED IN SURFACE MOUNTED RACEWAY. 10. ALL EXPOSED CONDUITS, BOXES, ETC. IN ROOMS TO BE PAINTED SHALL BE PAINTED TO MATCH
- THE SURROUNDING SURFACE, EXPOSED CONDUITS, BOXES, ETC, IN ROOMS WHICH ARE NOT
- PAINTED MAY BE LEFT UN-PAINTED. EXPOSED CONDUIT, BOXES, ETC. ON THE EXTERIOR OF
- BUILDINGS SHALL BE PAINTED TO MATCH THE SURROUNDING SURFACE AS CLOSELY AS POSSIBLE. 11. THE CONTRACTOR IS RESPONSIBLE FOR PATCHING, PAINTING, REPAIRING OR REPLACEMENT OF
- ALL WALLS, CEILING OR OTHER BUILDING ELEMENTS WHICH ARE DISTURBED AS PART OF THE DEMOLITION AND/OR INSTALLATION OF ELECTRICAL WORK.
- 12. PROVIDE ELECTRICAL CONNECTION TO ALL FIRE, SMOKE, AND FIRE / SMOKE DAMPERS INCLUDING POWER AND FIRE ALARM. VERIFY EXACT SIZE AND FINAL LOCATION OF ALL DAMPERS WITH THE MECHANICAL CONTRACTOR, ALL ROOFTOP UNITS RATED AT MORE THAN 2000 CFM WILL BE OUTFITTED WITH A DUCT DETECTOR IN THE RETURN DUCT. ALL ROOFTOP UNITS RATED AT MORE THAN 15000 CFM WILL BE OUTFITTED WITH A DUCT DETECTOR IN BOTH THE SUPPLY AND RETURN DUCT AT ROOFTOP LEVEL AND IN THE RETURN DUCT AT EVERY LEVEL THAT IS SERVED. ELECTRICAL
- CONTRACTOR WILL PROVIDE A REMOTE TEST STATION AND ALL WIRING NECESSARY TO COMPLETE INSTALLATION.
- 13. REFER TO THE MECHANICAL EQUIPMENT SCHEDULE FOR ADDITIONAL REQUIREMENTS ASSOCIATED WITH PLUMBING AND HVAC EQUIPMENT AND OWNER/GENERAL CONTRACTOR FURNISHED EQUIPMENT.

	ELECTRICAL EQUIPMENT LEGEND	RESPONSIBLE DIVISION:				
	BRANCH CIRCUIT PANELBOARD		TING, VENTI	LATING, AIR CO		ING, PLUMBING
VATIONS MAY BE USED ON	TELEPHONE TERMINAL BOARD	IN PLACE AND WIRED AS FOLLOWS:	IUTORS, ANL	CONTROLS SH	ALL DE	FURNISHED, SE
		ITEM	FURNISHED	SET PC	OWER	CONTROL
THE PROJECT DRAWINGS	F FUSED SAFETY SWITCH / DISCONNECT COMBINATION			W	IRED	WIRED
S.	4X MOTOR STARTER		23	23 2	26	
IRCUIT NUMBER.	CONTACTOR	COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC				
JNCTION OF THE SWITCH. A	LA-7 CIRCUITRY HOMERUN: PANEL LA - CIR. #7	MOTOR STARTERS, VFD'S AND	23(1)	26 2	06(2)	23
	CONDUIT OR WIRE CONCEALED IN WALL/CLG. (SOLID LINE TYPE)		23(1)	20 2	20(2)	25
THE TYPE OF FIXTURE. TIONS. A LOWER CASE IGNATION.	CONDUIT OR WIRE UNDERFLOOR/UNDERGND. (CENTER LINE TYPE)	DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26	26 2	26	
	MAIN DISTRIBUTION GEAR	MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26 2	26	26
		CONTROLS. RELAYS.				
		TRANSFORMERS	23	23 2	26	23
		THERMOSTATS (LOW VOLTAGE)	23	23 2	26	23
	FUSED DISCONNECT 100A = AMP RATING	THERMOSTATS (LINE VOLTAGE)	23	23 2	26	26
	100 A 2P = NUMBER OF POLES		23	23 2	26	23
/IER)	FUSED DISCONNECT		25	20 2		25
		DAMPER MOTORS, PE & EP		00(0)		00(0)
JTO OFF VACANCY SENSOR	ELECTRICAL METER SHOWN ON ONE-LINE DIAGRAMS	SWITCHES	23	- 23(2)	-	23(2)
		PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2) -	-	23(2)
	Control Contro	HEATING, COOLING,				
	225A MLO = MAIN LUG OR BREAKER SIZE 120/208V = PANEL VOLTAGE	VENTILATION AND AIR	23	23 2	26	23
LIGHT SWITCH	3PH, 4 WIRE = PANEL PHASE, DISTRIBUTION TYPE		23	25 2		23
	PP1 PP1		23	20 2	20	23(2)
AUTO OFT VACANCT SENSOR	ELECTRICAL DEVICE LEGEND	FACTORY MOUNTED ON EQUIPMENT VOLTAGE FURNISH AND SET UNDER	OR ATTACH DIVISION 23,	ED TO PIPING O CONNECT UND	R DUCT ER DIVI	S AND USING LI SION 26.
	CEILING JUNCTION BOX - SURFACE/FLUSH	ABBREVIATIONS:				
	()-(WALL JUNCTION BOX - SURFACE/FLUSH	44" MOUNTING HEIGHT ABOVE	DIA	DIAMETER		
		FINISHED FLOOR TO CENTER OF DEVICE	DIAG	DIAGRAM		
	FLOOR MOUNTED RECEPTACLE	A AMPS A.D. ACCESS DOOR	DIFF	DIFFERENTIAL		
XTURE GRID,	SPLIT WIRED DUPLEX RECEPTACLE	AAV AIR ADMITTANCE VALVE	DISCH	DISCHARGE		
	CEILING MOUNTED DUPLEX RECEPTACLE	ABV ABOVE	DN	DOWN		
XTURE GRID,		AC AIR CONDITIONING UNIT	DS	DUCT SILENCE	R	
		AD AREA DRAIN (SEE SYMBOLS)	DWG DX	DRAWING DIRECT EXPAN	ISION	
XTURE GRID,	APPLIANCE RECEPTACLE - 3 WIRE DUPLEX RECEPTACLE -	A.F.C. ABOVE FINISHED CEILING	(E)	EXISTING		
			EA	EXHAUST AIR (GRILLE/I	REGISTER
		CAPACITY	EAT			RATURE
	ABBREVIATIONS PERTAIN TO ALL DUPLEX AND FOURPLEX RECEPTACLES:	AFCI ARC FAULT CIRCUIT	ECC	ECCENTRIC		
	AC GF ABOVE COUNTER - GROUND FAULT CIRCUIT INTERRUPTER	A.F.F. ABOVE FINISHED FLOOR	EF	EXHAUST FAN		
	AF ARC FAULT PROTECTED	AHU AIR HANDLING UNIT	EFF	EFFICIENCY		
	AF GF ARC FAULT WITH GROUND FAULT CIRCUIT INTERRUPTER	ALUM ALUMINUM	EL			
	D DEDICATED RECEPTACLE D USB DEDICATED RECEPTACLE WITH USB PORT	AP ACCESS PANEL OR DOOR	ELEC	ELECTRIC		
UNTED	EMI RECEPTAGLE CIRCUITED TO THE EMERGENCY PANEL WITH RED COVER PLATE	AV AUDIO / VIDEO	EM	EMERGENCY F	UNCTIC	N
INTED	GF GROUND FAULT CIRCUIT INTERRUPTER GF WP WEATHER PROOF GROUND FAULT CIRCUIT INTERRUPTER	AVG AVERAGE	ENT	ENTERING		
	PL PLUG LOAD 72" GENERAL PURPOSE WITH MOUNTING HEIGHT.	AWG AMERICAN WIRE GAGE	EMT FO	ELECTRIC MET	ALLIC T	UBF
	ELECTRIC HAND DRYER	BAS BUILDING AUTOMATION SYSTEM BB BASFROARD	EQUIP	EQUIPMENT		
		BD BACK DRAFT DAMPER	EQUIV	EQUIVALENT		
		BFP BACK FLOW PREVENTOR	ES	END SWITCH		
		BL BOILER	ESP	EXTERNAL STA		SSURE
		BLUG BUILDING BLW BELOW	EWC	ELECTRIC WAT	TER COO	DLER
	100 ROOM DESIGNATION	BOB BOTTOM OF BEAM	EWT	ENTERING WA	TER	
		BOD BOTTOM OF DUCT		ERATURE		
		BOP BOTTOM OF PIPE		EXPANSIO	N	
		BSMT BASEMENT	EXT	EXTERNAL		

- LUMINAIRES, SWITCHES WITH THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND ALL OTHER TRADES AS REQUIRED. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS
- FOR DIMENSIONAL LOCATION OF LIGHT FIXTURES. 2. LIGHTING FIXTURES SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE AND SHALL NOT BE SUPPORTED FROM THE T-BAR CEILING GRID.
- 3. THE ELECTRICAL CONTRACTOR IS TO CONFIRM THE LIGHT FIXTURES ORDERED WILL BE COMPATIBLE WITH THE CEILING TYPES AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING THE FIXTURES.

1. COORDINATE THE LOCATION OF ALL LIGHTING EQUIPMENT INCLUDING BUT NOT LIMITED TO THE

- 4. VERIFY LUMINAIRE MOUNTING REQUIREMENTS AND OVERALL HEIGHT OF ALL PENDANT MOUNTED FIXTURES PRIOR TO ORDERING.
- 5. ALL LIGHT FIXTURES NEED TO BE COMPATIBLE WITH THE SWITCHES AND CONTROLS BEING PROVIDED.
- 6. THE LIGHTING PACKAGE SHALL BE APPROVED BY BOTH THE ARCHITECT AND ENGINEER AS APPROVED EQUAL BEFORE BID. NO LIGHT FIXTURE SHALL BE ORDERED UNTIL THE LIGHT FIXTURE SUBMITTAL PACKAGE HAS BEEN APPROVED IN WRITING BY THE ARCHITECT, GENERAL CONTRACTOR AND ELECTRICAL ENGINEER.
- 7. COORDINATE LUMINAIRE MOUNTING REQUIREMENTS PRIOR TO PLACING ORDER.

SUBSTITUTIONS:

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCUR ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION I GENERAL REQUIREMENTS.

EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:

A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.

B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING, AND ENERGY CONSERVATION CODES. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.

I, (1) NO AND (1)NC

VISION 26. WHERE CTS AND USING LINE

HP	HORSEPOWER
HR	HOUR
нт	HEIGHT
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
HX	HEAT EXCHANGER
НZ	HERTZ
חו	
IG	ISOLATED GROUND
IN	INCHES
INV	INVERT
JBOX	JUNCTION BOX
к	KEI VIN
ĸw	
KVA	
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LV	LAVATORY
LB	POUND
חו	LINEAR DIFFUSER
LIN	LINEAR
LIQ	LIQUID
LM	LUMEN
LRA	LOCKED ROTOR AMPS
IV	
LVG	LEAVING
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSANDS OF BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MED	MEDIUM
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
IVILO	
MOCP	
PRUIE	
MTD	MOUNTED
MUA	MAKE-UP AIR UNIT
Ν	NEUTRAL
NC	NORMALLY CLOSED
NEG	NEGATIVE
NIC	
	WITCH
NOTO	
NO	NORMALLY OPEN
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
00	
00	
000	OCCOPIED
OCP	OVER CURRENT PROTECTION
OD	OUTSIDE DIAMETER
OL	OVERLOAD
ORD	OVERFLOW ROOF DRAIN
07	OUNCE
חפס	
PD	PRESSURE DRUP
PH	PHASE
POS	POSITIVE PRESSURE
POS	POINT OF SALES
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
. U Dei	
1.01	

PT PRESSURE TRANSMITTER

DEGREES FAHRENHEIT

FCV FLOW CONTROL VALVE

FA FREE AREA

FC FAN COIL UNIT

FC FOOTCANDLE

FD FIRE DAMPER

FD FLOOR DRAIN

FLA FULL LOAD AMPS

FOB FLAT ON BOTTOM

FP FIRE PROTECTION

FPM FEET PER MINUTE

FPS FEET PER SECOND

FSD FIRE/SMOKE DAMPER

FXC FLEXIBLE CONNECTION

GEC GROUND ELECTRODE

GFCI / GFI GROUND FAULT CIRCUIT

GC GENERAL CONTRACTOR

GPH GALLONS PER HOUR

GPM GALLONS PER MINUTE

GRS/LB GRAINS PER POUND

HD HEAD (SEE SCHEDULES)

FS FLOW SWITCH

FT FEET

GND GROUND

GA GAUGE

GAL GALLON

CONDUCTOR

INTERRUPTER

H 20 WATER

HB HOSE BIBB

HP HEAT PUMP

GALV GALVANIZED

FOT FLAT ON TOP

FP FIRE PUMP

FIN FINISHED

FLEX FLEXIBLE

FLR FLOOR

F

C CHILLER

CAP CAPACITY

CKT CIRCUIT

CI CAST IRON

CLG CEILING

CO CLEAN OUT

COMP COMPRESSOR

COND CONDENSATE

CONN CONNECTION

CONT CONTINUATION

CONTR CONTRACTOR

CT COOLING TOWER

CU CONDENSING UNIT

CUH CABINET UNIT HEATER

CVB CONSTANT VOLUME BOX

CWR CONDENSER WATER RETURN

CWS CONDENSER WATER SUPPLY

CU COPPER

DB DRY BULB

DEPT DEPARTMENT

DF DRINKING FOUNTAIN

CRI COLOR RENDERING INDEX

CT CURRENT TRANSFORMER

CONC CONCRETE

COL COLUMN

CL CENTER LINE

CB CIRCUIT BREAKER

CAFCI COMBINATION ARC FAULT

CBV CIRCUIT BALANCING VALVE

CCT CORRELATED COLOR

TEMPERATURE

CFH CUBIC FEET PER HOUR

CFM CUBIC FEET PER MINUTE

CHWR CHILLED WATER RETURN

CHWS CHILLED WATER SUPPLY

CMU CONCRETE MASONRY UNIT

CIRCUIT INTERRUPTERS

PTAC PACKAGED TERMINAL AIR CONDITIONER PV PLUG VALVE PVC POLYVINYL CHLORIDE QTY QUANTITY RA RETURN AIR GRILLE / REGISTER RCP REFLECTED CEILING PLAN RD ROOF DRAIN REL RELIEF REQD REQUIRED RF RETURN FAN RH RELATIVE HUMIDITY RHC REHEAT COIL RLA RATED LOAD AMPS RM ROOM RPM REVOLUTIONS PER MINUTE SA SUPPLY AIR GRILLE / REGISTER SC SHORT CIRCUIT SCA SHORT CIRCUIT AVAILABLE SCCR SHORT CIRCUIT CURRENT RATING SCH SCHEDULE SD SMOKE DAMPER SEF SMOKE EXHAUST FAN SF SUPPLY FAN SH SENSIBLE HEAT SH SHOWER SP STATIC PRESSURE SPD SURGE PROTECTION DEVICE SPEC SPECIFICATION SQ SQUARE SS STAINLESS STEEL SS SAFETY SHOWER STD STANDARD STL STEEL SYS SYSTEM TEMP TEMPERATURE TR TRANSFER GRILLE / REGISTER TR TAMPER RESISTANT TT TEMPERATURE TRANSMITTER TTB TELECOMMUNICATIONS TERMINAL BACKBOARD TYP TYPICAL TX TRANSFORMER UC UNDERCUT DOOR UH UNIT HEATER UNO UNLESS NOTED OTHERWISE UNOCC UNOCCUPIED UR URINAL V VOLTS VA VOLT AMPERE VA VALVE VAV VARIABLE AIR VOLUME UNIT VFD VARIABLE FREQUENCY DRIVE VRF VARIABLE REFRIGERANT FLOW VOLT VOLTAGE VTR VENT THROUGH ROOF W WIDTH W WATTS W/ WITH W/O WITHOUT WB WET BULB WC WATER COLUMN WC WATER CLOSET WG WATER GAUGE WP WEATHERPROOF WPIU WEATHERPROOF IN-USE WSR WITHSTAND RATING XFMR TRANSFORMER











ELECTRICAL - DEMOLITION FLOOR PLAN

STORAGE PP1-39 SUPPORT PP1-41 30cd X

 $\langle 1 \rangle$



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

1. EXISTING DEVICE TO BE REMOVED, EXISTING CIRCUIT TO BE PRESERVED ABOVE CEILING FOR USE IN NEW FLOOR PLAN.

ELECTRICAL PLANS KEYED NOTED

- PANEL HAS 31.2 AMPS AVAILABLE, NEW SYSTEM HAS A MCA OF 11 AMPS AT 208V 1P, PROVIDE 25 AMP BREAKER. E.C. TO FILD VERIFY IF SERVICE RECEPTACLE IS WITHIN 25', IF NOT PROVIDE NEW AND CONNECT TO PP1, USING NEAREST CORRIDOR RECEPTACLE CIRCUIT.
- 4. ELECTRICAL CONTRACTOR TO COORDINATE LOCATION OF CONDENSING UNIT ON ROOF WITH M.C., HP-1 IS POWERED FROM ROOF MOUNTED UNIT. PROVIDE DISCONNECTING MEANS AT UNIT FOR SERVICE. CONNECT TO PANEL PP1, PER PREVIOUS DESIGN,
- 2. DISCONNECT RECEPTACLE FROM CIRCUIT ABOVE CEILING AND CONNECT TO ADJACENT RECEPTACLE CIRCUIT. 3. EXTEND/SHORTEN/ROUTE EXISTING CIRCUIT TO NEW LOCATION.

LUMINAIRE MANUFACTURER VOLTAGE MANUFACTURER TYPE CATALOG NO. ALTERNATE MOUNTING APPROVED COOPER METALUX 120V EQUIVALENT A 24ARS-L3C3-UNV GRID COOPER METALUX APPROVED 120V EQUIVALENT B 14ARS-L3C3-UNV GRID NOTES: 1. OWNER/ARCHITECT TO SELECT ALL COLORS AND FINISHES.

ESCHEDULE			
	DRIVER LAMP SPECIFICATION		
	0-10V LED DIMMING 6254LM, 4000K, 80CRI 45.5W	2'X4' LED TROFFER, INITIAL SETTING TO BE MEDIUM COLOR OF 4K AND HIGH LUMEN OUTPUT, UL LISTED	
	0-10V LED DIMMING 4647LM, 4000K, 80CRI 32.9W	1'X4' LED TROFFER, INITIAL SETTING TO BE MEDIUM COLOR OF 4K AND HIGH LUMEN OUTPUT, UL LISTED	

PROVIDE ALL APPURTENANCES REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM.
 WAITING/ENTRY TO BE CONTROLLED VIA CEILING MOUNTED OCCUPANCY SENSOR, WITH DIMMER SWITCH LOCATED IN ADJACENT MEDICAL ROOM.

ELECTRICAL - FLOOR PLAN



October 02, 2024 - 9:12:41am





EQUATES TO AMPS (208V, 3Ø)

205.1

DO NOT REPRODUCE THESE DRAWINGS AN SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER. THE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF THE SERVICE AND SHALL REMAIN THE PROPERTY OF THE DESIGNER WHETHER THE PROJECT FOR WHICH THE DESIGNER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY OTHER PROJECTS FOR ADDITIONS TO THIS PROJECT BY OTHER'S EXCEPT BY THE EXPRESSED WRITTEN DEFINISION OF THE DESIGNER PERMISSION OF THE DESIGNER. lnc ו Consulting Engineers, I Danical & Electrical Engineers .oad on, CO 81501) 241-8709 Junctic : (970) <u>n</u> p ighori Mec ____ FACIL E. .ORADO CORRECTIONS - DETAILS 650 E. SOUTH AVI GRAND JUNCTION, COL ELECTRICAL . 00 MESA
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 ISSUED FOR:

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 09/27/2024
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