COLLBRAN CONGREGATIONAL CHURCH ADA RENOVATIONS

01/15/2021 04/07/2021



PROJECT DESIGN TEAM

ARCHITECTURE:



ABBREVIATIONS

ע חח		
		HVAC
HU		חו
1		
	ALTERNATE	INCI
.∟ T_X	ALTERNATE NO X	INSUI
M		INT
M-X		JT
RCH	ARCHITECT / ARCHITECTURAL	I
TTFN	ATTENUATION	L AV
VF	AVENUE	ЦН
VG	AVERAGE	IIV
10	BOTTOM OF	MAS
SIT	BITUMINOUS	MATI
SI DG	BUILDING	MAX
LKG	BLOCKING	MECH
:/L	CENTER LINE	MFR
EM	CEMENT / CEMENTITIOUS	MIN
J	CONTROL JOINT	MISC
LG	CEILING	MO
LR	CLEAR	MTD
CMU	CONCRETE MASONRY UNIT(S)	MTL
ONC	CONCRETE	NA
ONT	CONTINUOUS	NIC
PT	CARPET	NO.
т	CERAMIC TILE	NRC
TR	CENTER	NTS
)	DEEP / DEPTH	OC
BL	DOUBLE	OD
DEMO	DEMOLISH / DEMOLITION	OPNG
)EPT	DEPARTMENT	OPP
)F	DRINKING FOUNTAIN	PERF
DIA / Ø	DIAMETER	PLAM
DIM(S)	DIMENSION(S)	PLBG
N	DOWN	PLYWD
DTL	DETAIL	PNT
)W	DISHWASHER	PREFA
)WG	DRAWING	PREFIN
:A	EACH	PI
J	EXPANSION JOINT	QI
L	ELEVATION	QIY
LEC		R
		RB
ΔΔΒ		RES
	FIRE ALARM ANNUNCIATOR PANEL	RES
ACP		RO
BO		ROW
D	ELOOR DRAIN	RTU
DN	FOUNDATION	SC
E	FIRE EXTINGUISHER	SCHED
EC	FIRE EXTINGUISHER CABINET	SECT
F	FINISHED FLOOR	SF
RP	FIBERGLASS REINFORCED PLASTIC	SFT
TG	FOOTING	SIM
URN	FURNISHING / FURNITURE	SPEC
6A	GAGE	SQ
GALV	GALVANIZED	SS
SL.	GLAZING	SSM
SL-X	GLAZING TYPE X	STL
SWB	GYPSUM WALL BOARD	STN
ł	HIGH / HEIGHT	STRUC
IC	HANDICAPPED	T&G
IDW	HARDWARE	Т.О.
IDWD	HARDWOOD	TEMP
M	HOLLOW METAL	ΤV
IORIZ	HORIZONTAL	TYP

MATERIALS LEGEND

 \sim _____ =____ (SECTION) - ^- y - y - y NOTE: SOME MATERIALS SHOWN MAY NOT BE USED ON THIS PROJECT.

EXISTING CONSTRUCTION ASPHALT PAVING (SECTION) EARTH (PLAN & SECTION) GRANULAR FILL (SECTION) STRUCTURAL FILL (SECTION) SAND (SECTION) CONCRETE (PLAN & SECTION) BRICK VENEER (SECTION) CONCRETE MASONRY UNITS (CMU) (PLAN & SECTION) PRECAST CONCRETE (SECTION) MORTAR NET (SECTION) STEEL (SECTION) WOOD BLOCKING (CONTINUOUS) (SECTION) WOOD BLOCKING (INTERMITTENT) (SECTION) WOOD SHEATHING WOOD (FINISH) (SECTION & ELEVATION) INSULATION (FIBROUS) (PLAN & SECTION) INSULATION (RIGID) (PLAN & SECTION) STUCCO STUCCO (ELEVATION) GYPSUM WALL BOARD (GWB) (REFLECTED CEILING PLAN)

ROOM TAG DOOR TAG ASSEMBLY TAG NEW COLUMN GRID LIN EXISTING COLUMN GRID KEY NOTE WINDOW / FRAME TYPE DRAWING REFERENCE BUILDING SECTION INDI WALL SECTION INDICAT SIGN TAG ELEVATION INDICATOR DIMENSION LINES NEW CONTOUR EXISTING CONTOUR HIDDEN LINE OVERHEAD OBJECT CENTER LINE MATCH LINE LIMITS OF CONSTRUCT DEMOLISHED ITEMS

SYMBOLS

LEGEND	
	ROOM NAME A202A
	D220A
	27
ΙE	0
DLINE	0
Ξ	? <#>
	1 VIEW NAME A1-1 1/8" = 1'-0"
DICATOR	ELEVATION OR DETAL NUMBER SHEET THAT DETAL IS ON
TOR	ELEVATION OR DETAL NUMBER SHEET THAT DETAL IS ON
	 Type
R	Name Elevation
	1"
TION	

2003 HIGH STREET, COLLBRAN, CO 81624

BG+co. PROJECT # 2075

DESIGN DEVELOPMENT CONSTRUCTION DOCUMENTS

FOR CONSTRUCTION

ARCHITECTURAL / MECHANICAL / PLUMBING / ELECTRICAL

HVAC HEATING VENTILATING & AIR

CONDITIONING

LONG / LENGTH

LONG LEG HORIZONTAL LONG LEG VERTICAL

ILLUM ILLUMINATED

INTERIOR

LAVATORY

MASONRY

MATERIAL

MAXIMUM MECH MECHANICAL

MFR MANUFACTURER

MINIMUM

MISC MISCELLANEOUS

MOUNTED

METAL

NUMBER

PLAM PLASTIC LAMINATE

PREFAB PREFABRICATED

PREFIN PREFINISHED PT PORCELAIN TILE

QT QUARRY TILE

RB RUBBER BASE

REFR REFRIGERATOR

REQD REQUIRED

ROW RIGHT OF WAY

RTU ROOF TOP UNIT

SCHED SCHEDULE (D)

SECT SECTION

SQ SQUARE

STL STEEL

STN STAIN

T.O. TOP OF

TEMP TEMPORARY

TV TELEVISION

TYP TYPICAL

STRUCT STRUCTURAL

T&G TONGUE & GROOVE

SC SEALED CONCRETE

SQUARE FEET

STORE FRONT

SIMILAR

SS STAINLESS STEEL

SSM SOLID SURFACE MATERIAL

SPEC SPECIFICATION

RES RESILIENT

RCP REFLECTED CEILING PLAN

REF REFERENCE / REFER TO

RFS ROOM FINISH SCHEDULE

ROUGH OPENING

REINF REINFORCE (D) (ING)

QTY QUANTITY

R RADIUS

NTS NOT TO SCALE

OC ON CENTER OD OUTSIDE DIAMETER

OPNG OPENING

OPP OPPOSITE PERF PERFORATED

PLBG PLUMBING

PLYWD PLYWOOD

PNT PAINT

MASONRY OPENING

NOT APPLICABLE

NOT IN CONTRACT

NRC NOISE REDUCTION COEFFICIENT

JOINT

INCL INCLUDED INSUL INSULATION

INSIDE DIAMETER

MECHANICAL, PLUMBING AND ELECTRICAL ENGINEERING:

Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone: 970-241-8709

DRAWING INDEX

GENERAL INFORMATION SHEETS G0-1 TITLE SHEET

- ARCHITECTURAL SHEETS
- A-1 LOWER LEVEL FLOOR PLAN A-2 MAIN LEVEL FLOOR PLAN
- A-3 INTERIOR ELEVATIONS
- MECHANICAL SHEETS
- M0-1 MECHANICAL COVER SHEET MD1-1 MECHANICAL DEMOLITION PLAN
- M1-1 MECHANICAL PLANS
- ELECTRICAL SHEETS

UNO UNLESS NOTED OTHERWISE

VERIFY IN FIELD

VWC VINYL WALL COVERING

WIDE / WIDTH

VINYL COMPOSITION TILE

VCT

VFY

VIF

W/

VERT VERTICAL

VERIFY

WITH

WD WOOD WOM WALK OFF MAT

W/O WITHOUT

- E0-1 ELECTRICAL COVER SHEET ED2-1 ELECTRICAL DEMOLITION PLAN
- E2-1 ELECTRICAL PLANS

VICINITY MAP





	r			r	
	1 HR FIRE SEPARATION			BG-	60
	CONSTRUCTION CAPABLE OF RESISTING THE PASSAGE OF SMOKE OCCUPANCY GROUP BOUND/ CONTINUATION O	ARY		Architecture Interior Design Project Managemen	t
	EGRESS ROUTE	ESS -		Grand Junction, CO 970-242-1058 office	81501
	MATCH LINE LIMIT OF CONSTRUCTION	-	· · · · · ·	BLYTHE GROUP + co).
	EXIT LOAD				
	FIRE EXTINGUISHER EXIT ARROW				
	EMERGENCY EXIT LIGHT	$\vdash \bigotimes$			
	EXIT LOAD	8 1.6" 0.00"	DIRECTION OF TRAVEL		
	ACTUAL WIDTH (INCHES))' 20'		
	EGRESS TRAVEL EXIT ACCESS TRAVEL DISTANCE	EAID = IS	32		
	OCCUPANCY GROUP	-S-2 -STORAG - 250 100	CCCUPANT LOAD	COLLBRAN CONGREG	ATIONAL ATIONS
	AREANOTE: SOME SYMBOLS SHOW	WN MAY NOT BE USE	OCCUPANT LOAD FACTOR ED ON THIS		
SCOPE OF WORK S THIS PROJECT WILL NOT CHANGE T AREA, TYPE OF CONSTRUCTION, FIR REQUIREMENTS, EGRESS PATHS, O	PROJECT. SUMMARY HE CURRENT OCCUPANCY CLAS RE AND SMOKE PROTECTION, O RENERGY COMPLIANCE	SSIFICATION, BUILDI OCCUPANT LOAD, EGI	NG HEIGHTS OR RESS	2003 HIGH STRE COLLBRAN CO 8 ⁻	ET 1624
THE PROJECT IS LIMITED TO THE FO • REPLACEMENT OF INTERIOR FI ADDITION OF MECHANICAL EXH 1. REPLACEMENT OF INTERIO REQUIRED PER IBC 2018 S 2. RELOCATION OF LIGHTING CURRENT ELECTRICAL AND • REPLACEMENT OF INTERIOR FI 2018 SECTION 105.2.7).	ULLOWING SCOPE OF WORK: NISHES, PLUMBING FIXTURES, A AUST FANS IN 3 RESTROOMS. IR FINISHES AND PLUMBING FIX ECTION 105.2.7). AND ADDITION OF MECHANICA MECHANICAL CODES. NISHES IN ONE HALLWAY. (PERI IDING A SINK AND RELOCATION	AND RELOCATION OF KTURES (PERMITS AF IL EXHAUST FANS IS MITS ARE NOT REQU	E LIGHTING AND RE NOT GOVERNED BY JIRED PER IBC		
OUTLETS. 1. CASEWORK (PERMITS ARE 2. PLUMBING AND ELECTRICA CODES. • RECONFIGURATION OF 1 RESTI ACCESSIBILITY REQUIREMENTS COMPLIANCE METHOD FOR ALT	NOT REQUIRED PER IBC 2018 S LIS GOVERNED BY CURRENT E ROOM TO PROVIDE A UNI-SEX R THIS WORK IS GOVERNED BY ERATIONS (SECTION 503).	SECTION 105.2.7). ELECTRICAL AND ME RESTROOM MEETING THE 2018 IEBC PRES	CHANICAL CURRENT SCRIPTIVE	LIFE SAFETY P	LAN
GENERAL The International Building Code requ	res that special inspections be perf	formed to verify that the	e materials and		
construction methods used comply w MINIMUM REQUIRED SPECIAL INSPE NONE REQUIRED FOR THE SCOP	ith the construction documents and CTIONS E OF WORK	l applicable standards.		FOR CONSTRUCT	
	NALYSIS				
<u>CODE JURISDICTION</u> : 2018 IEBC (PRESCRIPTIVE COM <u>OCCUPANCY</u> :	PLIANCE)				
OCCUPANT LOADS: A-3 = 365 : B = 6 (UNCHANGED)					
CONSTRUCTION TYPE: CONSTRUCTION TYPICAL OF TY AUTOMATIC SPRINKLER SYSTEM:	PE V-B. (UNCHANGED)			REV. DESC.	DATE:
BUILDING AREA: ACTUAL TOTAL BUILDING: ALLOWED [IBC 506.1]	" 7,123 SF - FIRST FLOOR (UNCH 4,550 SF - LOWER LEVEL (UNCH 9,129 SF - PER FLOOR WITH FR	IANGED) HANGED) RONTAGE INCREASE			
BUILDING HEIGHT: ACTUAL HEIGHT: 22' +/- AFF, 1 ALLOWABLE HEIGHT: 40' ABOVE	STORY (UNCHANGED) GRADE PLANE 1 STORY [IBC 50	04]			
FIRE RESISTANCE RATING REQUIRE (FOR TYPE V-B CONSTRUCTION) [IBC STRUCTURAL FRAME: 0 HRS BEARING WALLS, EXTERIOR: 0 HRS BEARING WALLS, INTERIOR: 0 HRS NON-BEARING WALLS, EXTERIOR: 0 *1 HR IF < 10 FT FIRE SEPARATI NON-BEARING WALLS, INTERIOR: 0 FLOOR CONSTRUCTION: 0 HRS ROOF CONSTRUCTION: 0 HRS	<u>MENTS</u> : C TABLE 601] HRS* DN DISTANCE [IBC TABLE 602] HRS				
EXIT TRAVEL DISTANCE: FOR A-3 AND B OCCUPANCY: COMMON PATH OF EGRES EXIT ACCESS TRAVEL DIST	S TRAVEL: 75 FT WITHOUT SPR ANCE: 200 FT WITHOUT SPRINI	RINKLER SYSTEM, IBC KLER SYSTEM, IBC TA	CTABLE 1006.2.1 ABLE 1017.2	DATE: ΩΔ/Ω7/21	
PLUMBING FIXTURE COUNT: (UNCHA	NGED) WC'S LA	V DF	SS	PROJECT #: 2075	
OCCUPANCY TYPE OCC LD MEI ASSEMBLY (A-3) 365 182 BUSINESS (B) 6 3	REQ'D RE WOMEN M/W/U M/ 183 1.2/2.4/0 0.9 3 0.1/0.1/0 0.1	EQ'D REQ'D /W/U 9/1.2/0 1 1/0.1/0 1	REQ'D 1 1	SHEET #:	
TOTAL REQUIRED (M/W/U) TOTAL PROVIDED (M/W/U)	2/3/0 1/ 1/2/1 1/	2/0 1 2/1 1	1	G1-1	



roject Team:



	KEYNOTE LEGEND	
	02-2 COAT HOOKS TO REMAIN 08-1 NEW 5 PANEL DOOR IN EXISTING FRAME.	BG-co
	09-1 2X2 FURRING AND GWB FLOOR TO CEILING 09-2 INFILL DOOR OPENING WITH STUDS AND GWB 09-3 STUD AND GWB PARTITION 09-4 RE-INSTALL SALVAGED WOOD CEILING PANELS AFTER MECH DUCT INSTALLATION IN JOIST SPACE 09-5 NEW LVT FLOORING 09-6 PAINT ALL WALLS IN THIS AREA 09-7 PAINT CEILING IN THIS AREA 09-8 SKIM COAT EXISTING GWB CEILING AND PAINT 09-9 INSTALL 4" RUBBER BASE	Architecture Interior Design Project Management 622 Rood Avenue Grand Junction, CO 81501 970-242-1058 office
	09-1 PATCH AND REPAIR EXISTING GWB CEILING AT AREA OF 09-1 REMOVED WALL 09-1 INSTALL FLOOR TRANSITION 1	BLYTHE GROUP + co.
	10-4SANITARY NAPKIN DISPOSALD1REMOVE PLUMBING FIXTURE [REF MECHANICAL]D2REMOVE SHEET VINYL FLOOR COVERINGD5REMOVE MIRRORD6REMOVE CUP DISPENSERD8REMOVE PAPER TOWEL DISPENSERD9REMOVE DOOR LEAF. FRAME TO REMAIND13REMOVE DOOR AND FRAMED14REMOVE STUD WALLD15REMOVE COUNTER AND LAVATORY [REF PLUMBING]	
	D16 REMOVE GRAB BAR D18 REMOVE WALLPAPER FULL HEIGHT D19 REMOVE CEILING TEXTURE D20 SALVAGE WOOD CEILING PANELS FOR RE-INSTALLATION. COORDINATE LOCATION AND EXTENTS WITH MECHANICAL. [REF MECHANICAL] D21 PREPARE PAINTED CONCRETE FLOOR FOR NEW FLOOR COVERING D22 REMOVE WOOD CROWN MOLDING	COLLBRAN CONGREGATIONAL CHURCH ADA RENOVATIONS
±		2003 HIGH STREET COLLBRAN CO 81624
		LOWER LEVEL FLOOR PLAN
		FOR CONSTRUCTION
ALL 09-9 22 01 25	LEGEND EXIST WALL NEW WALL	REV. DESC. DATE:
	EXIST DOOR NEW DOOR	
	 ALL NEW INTERIOR PARTITIONS ARE 2X4 WOOD STUDS @ 16" O.C. AND 5/8" TYPE X GWB EA SIDE UNO. INTERIOR DIMENSIONS AT NEW WALLS ARE TO F.O. STUD, UNO. DIMENSIONS TO EXISTING WALLS ARE TO FINISH FACE, UNO. ALL ITEMS ARE NEW UNLESS NOTED AS EXISTING. KEY PLAN - LOWER LEVEL	
		DATE: 04/07/21 PROJECT #: 2075 SHEET #:
		A-1



	RG+
02-1 WOOD BASEBOARD TO REMAIN 08-2 INSTALL WINDOW FILM ON DOOR GLAZING	СО.
09-5 NEW LVT FLOORING 09-6 PAINT ALL WALLS IN THIS AREA	Architecture Interior Design
09-12 INSTALL NEW ACOUSTIC LAY-IN GRID CEILING @ 9'-0" AFF 09-13 48" PVC WAINSCOT WITH PVC CAP AND BASE MOLDING	Project Management
10-2 PAPER TOWEL DISPENSER 10-3 TOILET PAPER DISPENSER	Grand Junction, CO 81501 970-242-1058 office
D1 REMOVE PLUMBING FIXTURE [REF MECHANICAL] D2 REMOVE SHEET VINYL FLOOR COVERING D3 PEMOVE LIGHT EIXTURE	BLYTHE GROUP + co.
D4 REMOVE CHAIR RAIL D5 REMOVE MIRROR	
D6 REMOVE CUP DISPENSER D7 REMOVE TOILET PAPER DISPENSER	
D8 REMOVE PAPER TOWEL DISPENSER D10 REMOVE SURFACE MOUNTED ELECTRICAL [REF ELECTRICAL] D11 REMOVE 36" +/- WOOD PANELING WAINSCOT	
D12 REMOVE WOOD BASEBOARD D17 REMOVE 49" +/- WALLPAPER WAINSCOT	
	COLLBRAN CONGREGATIONAL CHURCH ADA RENOVATIONS
	2003 HIGH STREET COLLBRAN CO 81624
	MAIN LEVEL FLOOR PLAN
LEGEND	
EXIST WALL NEW WALL	FOR CONSTRUCTION
EXIST DOOR EXIST DOOR NEW DOOR	
INDICATES NO	
ARCHITECTURAL RENOVATION WORK	
GENERAL NOTES	
 ALL NEW INTERIOR PARTITIONS ARE 2X4 WOOD STUDS @ 16" O.C. AND 5/8" TYPE X GWB EA SIDE UNO. INTERIOR DIMENSIONS AT NEW WALLS ARE TO E O. STUD. UNIO 	REV. DESC. DATE:
 DIMENSIONS TO EXISTING WALLS ARE TO FINISH FACE, UNO. ALL ITEMS ARE NEW UNLESS NOTED AS EXISTING. 	
KEY PLAN - MAIN LEVEL	
}	
	DATE: 04/07/21
	PROJECT #: 2075
	SHEET #:
	A-2



++++++++++	EXISTING EQUIPMENT OR PIPE TO BE REMOVED.		RELIEF/SAFETY VALVE	$ \times$ ^A $-$	ANCHOR
	GATE VALVE		GAS COCK	G EJ	GUIDE
	GLOBE VALVE		AUTOMATIC FILL VALVE		EXPANSION JOINT
☆	PLUG VALVE	н> MV	MANUAL AIR VENT	FS	FLOW SWITCH
- [BUTTERFLY VALVE		AUTOMATIC AIR VENT (EXTEND	L m	TEMPERATURE TRANSMITTER
-6	BALL VALVE		DISCHARGE TO DRAIN)	PT/PS	PRESSURE TRANSMITTER OR
	SWING CHECK VALVE		FLOW METER-VENTURI	П тн	PRESSURE SWITCH
	LIFT CHECK VALVE	1¦	FLOW METER-ORIFICE	<u> </u>	THERMOMETER
<u></u>	GATE VALVE, ANGLE	R D			GAUGE WITH GAUGE COCK & SYPHON (STEAM)
	GLOBE VALVE, ANGLE		DROP		AQUASTAT
	DIAPHRAGM VALVE		STRAINER WITH BLOW		GAS PRESSURE
\leftarrow	BALANCING VALVE		OFF VALVE		
СВУ	CIRCUIT SETTING	O		•	CONTROL VALVE
	THREE WAY CONTROL VALVE				STEAM TRAP
			ECCENTRIC REDUCER		EXPANSION LOOP
- × S]			UNION - SCREWED OR FLANGED	N LVB	
	SOLENOID VALVE		STEAM LEAK DETECTOR		THERMOSTAT
	PRESSURE REDUCING VALVE (PRV)	FSD	FIRE SMOKE DAMPER		DIGITAL SENSOR
	TEMPERATURE/PRESSURE		CARBON MONOXIDE	(5) (5) OR	PUMP
	RELIEF VALVE	, ,		(FEX)	HEAT EXCHANGER





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

RESPONSIBLE DIVISION:

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

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

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:

14" FINISH	MOUNTING HEIGHT ABOVE ED FLOOR TO CENTER OF DEVICE	DIFF DISCH	DIFFERENTIAL DISCHARGE
A 	AMPS	DIV	DIVISION
A.D.	ACCESS DOOR	DN	DOWN
4AV	AIR ADMITTANCE VALVE	DS	DUCT SILENCER
ABV	ABOVE	DWG	DRAWING
AC	AIR CONDITIONING UNIT	DX	DIRECT EXPANSION
٩C	ABOVE COUNTER	(A)	FXISTING
٩D	AREA DRAIN (SEE SYMBOLS)		
A.F.C.	ABOVE FINISHED CEILING		
A F G	ABOVE FINISHED GRADE		
		EC	ELECTRICAL CONTR
	ITY	ECC	ECCENTRIC
A.F.F.	ABOVE FINISHED FLOOR	EF	EXHAUST FAN
анн анн		EFF	EFFICIENCY
		EL	ELEVATION
		ELEC	ELECTRIC
ΑP	ACCESS PANEL OR DOOR	ELEV	ELEVATOR
ATS	AUTOMATIC TRANSFER SWITCH	EM	EMERGENCY FUNC
٩V	AUDIO / VIDEO	ENT	ENTERING
AVG	AVERAGE		
AWG	AMERICAN WIRE GAGE		
BAS	BUILDING AUTOMATION SYSTEM	EQ	EQUAL
BB	BASEBOARD	EQUIP	EQUIPMENT
הצ		EQUIV	EQUIVALENT
		ES	END SWITCH
369	BACK FLOW PREVENTOR	ESP	EXTERNAL STATIC F
3L	BOILER	ET	EXPANSION TANK
BLDG	BUILDING	EWC	ELECTRIC WATER C
BLW	BELOW		
BOB	BOTTOM OF BEAM	TEMPE	RATURE
BOD	BOTTOM OF DUCT	FX	FXHALIST
BOP	BOTTOM OF PIPE		
SMT	BASEMENT	EXPAN	EXPANSION
		EXI	EXTERNAL
510		F	DEGREES FAHRENH
ر ر	CHILLER	FA	FREE AREA
CAP	CAPACITY	FC	FAN COIL UNIT
СВ	CIRCUIT BREAKER	FC	FOOTCANDLE
CBV	CIRCUIT BALANCING VALVE	FCV	FLOW CONTROL VA
ССТ	CORRELATED COLOR	FD	FIRE DAMPER
FEMPE	RATURE	FD	FLOOR DRAIN
СКТ	CIRCUIT		
CFH	CUBIC FEET PER HOUR		
CFM	CUBIC FEET PER MINUTE	FLA	
CHWR	CHILLED WATER RETURN	FLEX	FLEXIBLE
CHWS	CHILLED WATER SUPPLY	FLR	FLOOR
יייי רו		FOB	FLAT ON BOTTOM
		FOT	FLAT ON TOP
JL		FP	FIRE PROTECTION
CLG	CEILING	FP	FIRE PUMP
CMU	CONCRETE MASONRY UNIT	FPM	FEET PER MINUTE
0	CLEAN OUT	FDS	
COL	COLUMN	FF 3	
COMP	COMPRESSOR	FS	
CONC	CONCRETE	FSD	FIRE/SMOKE DAMPE
	CONDENSATE	FT	FEET
		FXC	FLEXIBLE CONNECT
		GND	GROUND
JONT	CONTINUATION	GA	GAUGE
CONTR	CONTRACTOR	GAL	GALLON
CRI	COLOR RENDERING INDEX	GALV	GAI VANIZED
СТ	COOLING TOWER	CEC	
СТ	CURRENT TRANSFORMER		ICTOR
CU	CONDENSING UNIT	GECL	
CU	COPPER	INTERF	RUPTER
		GC	GENERAL CONTRAC
J∧R		GPH	GALLONS PER HOU
CWR	CONDENSER WATER RETURN	GPM	GALLONS PER MINU
CWS	CONDENSER WATER SUPPLY	GRS/LE	GRAINS PER PC
DВ	DRY BULB	H 20	WATER
DEPT	DEPARTMENT	HB	HOSE BIBB
)F	DRINKING FOUNTAIN	HD	HEAD (SEE SCHEDU
DIA	DIAMETER	HP	HEAT PUMP
	DIAGRAM	HP	HORSFPOWER
0710			

386 Indian Road Grand Junction, CO 81501/ Phone: (970) 241-8709

101 W 11th Street #109-C

Phone: (970) 422-7676

John I

- Er

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

Durango, CO 81301



NTIAL	HR	HOUR
GE	ΗТ	HEIGHT
	HTR	HEATER
	HWR	HEATING WATER RETURN
ENCER	HWS	HEATING WATER SUPPLY
	нх	HEAT EXCHANGER
XPANSION	HZ	HERTZ
	חו	
JAIR TEIMFERATURE		
CAL CONTRACTOR		
RIC	JBOX	
FAN	K	KELVIN
CY	KW	KILOWATT
DN	KVA	KILO VOLT - AMPS
	L	LENGTH
R	LAT	LEAVING AIR TEMPERATURE
NCY FUNCTION	LV	LAVATORY
G	LB	POUND
C METALLIC TUBE	LD	LINEAR DIFFUSER
	LF	LINEAR FEET
NT	LIN	LINEAR
	LIG	
L STATIC PRESSURE		
	LV	LOUVER
C WATER COOLER	LVG	
G WATER	LWT	LEAVING WATER TEMPERATURE
	MBH	THOUSANDS OF BTU PER HOUR
	MC	MECHANICAL CONTRACTOR
NSION	MCA	MINIMUM CIRCUIT AMPACITY
L	MCB	MAIN CIRCUIT BREAKER
S FAHRENHEIT	MD	MOTORIZED DAMPER
EA	MDP	MAIN DISTRIBUTION PANEL
UNIT	MED	MEDIUM
IDLE	MFR	MANUFACTURER
NTROL VALVE	MIN	MINIMUM
IPER	MISC	MISCELLANEOUS
RAIN	MIO	
1	MOCP	
D AMPS	PROTE	CTION
	MTD	MOUNTED
	MUA	MAKE-UP AIR UNIT
POTTOM	N	
	NC	
TECTION	NEG	NEGATIVE
P	NIC	
RMINUTE	NL NOT SI	NIGHT / SECURITY LIGHT - DO
RSECOND	NO NO	
/ITCH	NOM	
OKE DAMPER	NUM	
	NIS	NOT TO SCALE
CONNECTION	OA	OUTSIDE AIR
	OBD	OPPOSED BLADE DAMPER
	OC	ON CENTER
	000	OCCUPIED
ZED	OCP	OVER CURRENT PROTECTION
ELECTRODE	OD	OUTSIDE DIAMETER
	OL	OVERLOAD
UND FAULT CIRCUIT	ORD	OVERFLOW ROOF DRAIN
	ΟZ	OUNCE
CONTRACTOR	PBD	PARALLEL BLADE DAMPER
PER HOUR	PD	PRESSURE DROP
PER MINUTE	PH	PHASE
NS PER POUND	POS	POSITIVE PRESSURE
	POS	
B	1 UO	
E SCHEDULES)		
иР	P5	PRESSURE SWIICH
)WER	121	POUNDS PER SQUARE INCH
···		

UNTIL THE RECOMMENDATIONS RECOMMENDATIONS CAN BE CA	S ARE REC AUSE FOR	EIVED. FAILURE TO FURNISH THESE REJECTION OF THE MATERIAL.
UR	рт	PRESSURE TRANSMITTED
IGHT	PTAC	PACKAGED TERMINAL AIR
ATER	CONDI	TIONER
ATING WATER RETURN	PV	PLUG VALVE
ATING WATER SUPPLY	PVC	POLYVINYL CHLORIDE
AT EXCHANGER		
	RCP	REFLECTED CEILING PLAN
	RD	ROOF DRAIN
CHES	REL	RELIEF
/ERT	REQD	REQUIRED
NCTION BOX	RF	RETURN FAN
LVIN	RH	
OWATT		
O VOLT - AMPS	RM	ROOM
	RPM	REVOLUTIONS PER MINUTE
/ATORY	SA	SUPPLY AIR GRILLE / REGISTER
UND	SC	SHORT CIRCUIT
EAR DIFFUSER	SCA	SHORT CIRCUIT AVAILABLE
EAR FEET	SCCR RATING	SHORT CIRCUIT CURRENT
EAR	SCH	SCHEDULE
UID	SD	SMOKE DAMPER
	SEF	SMOKE EXHAUST FAN
	SF	SUPPLY FAN
AVING	SH	SENSIBLE HEAT
AVING WATER TEMPERATURE	SH	SHOWER
OUSANDS OF BTU PER HOUR	SP	
CHANICAL CONTRACTOR	SPEC	SPECIFICATION
IMUM CIRCUIT AMPACITY	SQ	SQUARE
	SS	STAINLESS STEEL
	SS	SAFETY SHOWER
	STD	STANDARD
NUFACTURER	STL	STEEL
IIMUM	SYS	SYSTEM
SCELLANEOUS	TEMP	
IN LUG ONLY	TR	TAMPER RESISTANT
	TT	TEMPERATURE TRANSMITTER
UNTED	TTB	TELECOMMUNICATIONS
KE-UP AIR UNIT	TERMI	NAL BACKBOARD
UTRAL		
RMALLY CLOSED		
GATIVE	UH	UNIT HEATER
	UNO	UNLESS NOTED OTHERWISE
CH	UNOCO	C UNOCCUPIED
RMALLY OPEN	UR	URINAL
MINAL	V	VOLTS
T TO SCALE	VA \/A	
	VA VAV	
CENTER	VFD	VARIABLE FREQUENCY DRIVE
CUPIED	VRF	VARIABLE REFRIGERANT FLOW
ER CURRENT PROTECTION	VOLT	VOLTAGE
TSIDE DIAMETER	VTR	VENT THROUGH ROOF
ERLOAD	W	WIDTH
ERFLOW ROOF DRAIN	W	WATTS
	₩/Ω	WITHOUT
	WB	WET BULB
ESSURE DRUP ASF	WC	WATER COLUMN
SITIVE PRESSURE	WC	WATER CLOSET
INT OF SALES	WG	WATER GAUGE
ESSURE REDUCING VALVE	WP	WEATHERPROOF
ESSURE SWITCH	WPIU	WEATHERPROOF IN-USE
UNDS PER SQUARE INCH	WSR	







NORTH

1. REMOVE EXISTING PLUMBING FIXTURES, TRAPS, AND FIXTURE WATER SUPPLY HOSES.

2. REMOVE EXISTING CEILING MOUNTED EXHAUST FAN.

____I -UP · Ľ



MECHANICAL - FIRST FLOOR DEMOLITION I

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

	RG
	СО.
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	CONSTRUCTION DOCUMENTS
ц	
	REV. DESC. DATE.
	DATE: 2/9/2021
PLAN	PROJECT #: 20-227
	JHEI #.





NORTH



FLAG NOTES:

- 1. NEW PLUMBING FIXTURE. CONNECT TO EXISTING WASTE LINE WITH NEW TRAP. CONNECT TO EXISTING DOMESTIC COLD AND HOT WATER PIPING WITH NEW SUPPLY RISERS.
- NEW EXHAUST FAN IN CEILING. ROUTE EXHAUST DUCT AS SHOWN. COORDINATE WITH EXISTING SYSTEMS. TERMINATE DUCT AT SIDEWALL.
- NEW EXHAUST FAN IN NEW CEILING. REUSE THE EXISTING VENTILATION OPENING. ROUTE NEW 6"Ø DUCT UP THROUGH ROOF TO ROOF CAP.
- 4. ROUTE NEW WASTE, DOMESTIC COLD, AND DOMESTIC HOT WATER LINES IN BASEMENT TO AREA NEAR THE EXISTING RESTROOM AND CONNECT TO EXISTING PIPING IN THIS AREA. PROVIDE STUDOR VENT AT NEW SINK. CONFIRM LOCATION OF EXISTING PLUMBING LINES IN CRAWLSPACE.
- TERMINATE EXHAUST DUCTS AT EXTERIOR WALL. CORE DRILL CONCRETE WALL FOR THE TWO, 6"Ø DUCTS. TURN DUCTS DOWN AND TERMINATE DUCTS WITH BIRD SCREEN.

GYMNASIUM



SANCTUARY



MECHANICAL - FIRST FLOOR PLAN

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

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CONSTRUCTION DOCUMENTS
REV. DESC. DATE:
DATE: 2/9/2021 PROJECT #: 20-227
SHEET #:
M1-1

MECHANICAL PROVISIONS

1. SCOPE OF WORK

- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER
- SPECIFIED OR IMPLIED. B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.
- C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY EFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
- D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ENGINEER OR ARCHITECT.

2. PERMITS

- A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.
- 3. SHOP DRAWINGS
- A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ARCHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.

4. FLEXIBLE DUCT WORK

- A. FLEXIBLE TYPE DUCT SHALL BE OF TWO ELEMENT SPIRAL CONSTRUCTION COMPOSED OF A CORROSION RESISTANT METAL SUPPORTING SPIRAL AND COATED FABRIC WITH A MINERAL BASE. FLEXIBLE DUCT CONNECTORS SHALL BE LISTED BY U.L., CLASS 1 DUCTS, AND SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE DEVELOPED
- RATING NOT EXCEEDING 50. B. USE OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO NO MORE THAN 6 LINEAR FEET PER RUN.
- C. CONTRACTOR SHALL BE CAREFUL SO AS NOT TO KINK OR COLLAPSE FLEXIBLE DUCT.

5. REFRIGERANT

- A. PIPING CONTRACTOR SHALL PROVIDE AND INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A WAY AS TO BE INCONSPICUOUS AND FREE FROM ANY
- POSSIBLE CONDENSATION. B. INSULATE REFRIGERANT LINES WITH ARMOUR-FLEX TYPE INSULATION, SHALL BE TYPE "K" COPPER TUBING, WITH WROUGHT COPPER SOLDER TYPE FITTINGS SUITABLE FOR CONNECTION WITH SILVER SOLDER.

6. DUCTWORK

- A. THE DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE
- WITH THE "SMACNA" APPLICABLE MANUALS. B. ALL DUCTWORK SHALL BE THE LOW VELOCITY TYPE, UNLESS SPECIFIED OTHERWISE
- C. CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED FIRE DAMPERS AND ACCESS PANELS IN ANY AND ALL DUCTWORK WHICH PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON DRAWINGS.
- D. ALL BRANCH DUCTS TO HAVE VOLUME DAMPERS, SMOOTH TURN RADIUS DUCTWORK OR TURNING VANES SHALL BE USED THROUGHOUT WHERE FLOW EXCEEDS 150 CFM.
- E. ALL DUCT JOINTS TO BE SEALED IN ACCORDANCE WITH "SMACNA"
- STANDARDS AND ACCEPTED GOOD PRACTICE. F. ALL DUCT DIMENSIONS SHOWN ARE NET INSIDE VALUES.DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED.
- G. ALL CONCEALED DUCTWORK SHALL BE INSULATED WITH 1-1/2" FIBERGLASS INSULATING BLANKET WITH ALUMINUM FOIL FACING.
- H. ALL SUPPLY AND RETURN DUCTWORK 15 FEET DOWNSTREAM OF THE HVAC UNIT SHALL BE INTERNALLY LINED WITH A 1/2" ACOUSTICAL DUCT LINER UNLESS OTHERWISE NOTED ON THE DRAWINGS.

7. DRAINAGE PIPING

A. (CONDENSATE) SHALL BE SCHEDULE 40 PVC PIPE WITH SOLVENT JOINTS. PITCH HORIZONTAL LINES 1" IN 10'-0". CONDENSATE DRAINS SHALL BE ROUTED TO FLOOR DRAIN, ROOF DRAIN OR INDIRECT WASTE DRAIN.

8. HVAC CONTROLS

A. CONTRACTOR TO SUPPLY AND INSTALL ALL CONTROL WIRING AND THERMOSTATS AS REQUIRED.

9. ELECTRICAL

A. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR LOCATION OF WIRING FOR EACH HVAC UNIT.

10. PIPE SUPPORTS

A. ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE OR METAL STRAP TO SUPPORT PIPES WILL NOT BE PERMITTED SPACING OF PIPE SUPPORTS SHALL NOT EXCEED 8 FEET FOR ALL PIPING. PLASTIC PIPING TO BE SUPPORTED EVERY 4 FEET.

11. GAS PIPING

- A. PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON
- FITTINGS. WHERE GAS PIPE CONNECTS TO EQUIPMENT, IT SHALL BE PROVIDED WITH A DRIP LEG THE FULL SIZE OF THE RUNOUT, A 100% SHUT-OFF VALVE AND A UNION. GAS PIPING CONTAINING PRESSURE GREATER THAN 9" W.G. SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH WELDED JOINTS.

12. MISCELLANEOUS

- A. ALL EXTERIOR OPENINGS TO BE PROPERLY CAULKED AND SEALED WITH A SEALANT OF HIGH QUALITY AND LONG LIFE, TO PREVENT INFILTRATION OF OUTSIDE AIR INTO CONDITIONED SPACE. COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION.
- B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS.
- C. VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE. D. THE MECHANICAL PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURE'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT.
- E. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE
- SPACE D. PEX TUBING, IF PEX TUBING IS USED AS AN APPROVED ALTERNATE FOR APPLICATIONS
- WHERE METALLIC PIPING IS THE BASIS OF DESIGN. THE PEX MANUFACTURER SHALL SUBMIT SHOP DRAWINGS CLEARLY INDICATING THAT THE DESIGN HAS BEEN ANALYZED AND MODIFIED, AS REQUIRED TO MAINTAIN SCHEDULED HYDRONIC SYSTEM PARAMETERS. ANY DESIGN RESULTING IN INCREASED SYSTEM PRESSURE DROP AS A RESULT OF IMPROPER PEX SIZING OR DESIGN SHALL NOT BE PERMITTED.

13. TESTING AND BALANCING

A. THE HVAC SYSTEM SHALL BE TESTED AND AND BALANCED BY AN INDEPENDENT AGENCY, UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. A SEALED TYPE WRITTEN REPORT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.

14. GUARANTEE

- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE(1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S FXPFNSF.
- B. FOR THE SAME PERIOD, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

				PLUMBING FIXTURE SCHEDULE					
	D. DESCRIPTION MANUFACTURER MODEL	MODEL	TDIM	PIPING CONNECTIONS					
FIXTURE NO.		MANOFACTURER	MODEL		S/W	VENT	C.W.	нพ	
LV-1	COUNTER MOUNTED BATHROOM SINK, ADA	KOHLER	K-2196-1	INSIGHT FAUCET # K-13461	1 1/2"	1 1/2"	1/2"	1/2"	G
LV-2	PEDESTAL MOUNTED BATHROOM SINK, ADA	AMERICAN STANDARD	555.801	#7022801.002 FAUCET ADA	1-1/2"	1-1/2"	1/2"	1/2"	G
SK-1	1 COMPARTMENT SINK, ADA	JUST	SL-1815-A-GR	FAUCET MODEL # JBF-1600	1 1/2"	1 1/2"	1/2"	1/2"	SI
WC-1	ADA WATER CLOSET- TANK TYPE	AMERICAN STANDARD	211AA.104	1.28 GPF FLUSH TANK	4"	2"	1-1/2"	-	PF

PLUMBING SPECIFICATION

1. SCOPE OF WORK

A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.

B. ALL WORK IS TO BE PREFORMED IN STRICT COMPLIANCE WITH THE INTERNATIONAL PLUMBING CODE (LATEST EDITION), ALL LOCAL CODES AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.

C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY AFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.

D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED AS EQUAL" BY THE ENGINEER OR ARCHITECT.

2. PERMITS

A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.

3. SHOP DRAWINGS

A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ARCHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.

4. DOMESTIC WATER SUPPLY PIPING

A. UNDERGROUND: PROVIDE TYPE "K" SOFT DRAWN COPPER TUBING WITH BRAZED CONNECTIONS.

B. ABOVE GROUND: PROVIDE TYPE "L" HARD DRAWN COPPER TUBING WITH 125 PSI SOLDER JOINTS, COPPER OR BRASS FITTINGS. ALL SOLDER TO BE "NO LEAD" TYPE.

C. ALL HOT WATER PIPING TO BE INSULATED WITH 1" FIBERGLASS INSULATION.

D. ALL COLD WATER PIPING TO BE INSULATED WITH $\frac{1}{2}$ " FOAM INSULATION.

5. SANITARY/STORM DRAINAGE AND VENT PIPING

A. ABOVE GRADE:

-2" BELOW: SCHEDULE 40 GALV. STEEL PIPE WITH SCREWED ENDS OR SOLID CORE SCHEDULE 40 PVC WITH SOLVENT JOINTS OR DWV COPPER WITH SOLDER JOINTS. ALL SOLDER TO BE "NO LEAD" TYPE.

-3" AND ABOVE: SERVICE WT. CAST IRON WITH NO-HUB OR BELL AND SPIGOT JOINTS; OR SOLID CORE SCHEDULE 40 PVC WITH SOLVENT JOINTS.

B. BELOW GRADE: SERVICE WT. CAST IRON WITH NO-HUB OR BELL AND SPIGOT JOINTS; OR SOLID CORE SCHEDULE 40 PVC WITH SOLVENT JOINTS.

C. PVC PIPING SHALL NOT BE USED IN AIR PLENUM CEILINGS AND SHALL NOT CROSS FIRE RATED WALLS, CEILINGS, OR FLOORS.

D. DRAINAGE PIPING SHALL BE RUN AS STRAIGHT AS POSSIBLE AND SHALL HAVE LONG TURN FITTINGS.

E. DRAINAGE PIPING 3" SIZE AND SMALLER SHALL RUN AT A UNIFORM GRADE OF AT LEAST $\frac{1}{4}$ " PER FOOT. AND PIPING LARGER THAN 3" SHALL BE RUN AT A GRADE OF NO LESS THAN $\frac{1}{8}$ " PER FOOT.

F. ALL VENT PIPING SHALL BE SLOPED TO DRAIN BACK TO FIXTURES.

G. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FLASHING OF THE VENT PIPING RUN THROUGH THE ROOF.

H. PVC USED TO BE SOLID CORE TYPE SCHEDULE 40 PVC.

7. PIPE SUPPORTS

A. ABOVE GRADE: ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE AND PERFORATED METAL TO SUPPORT PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS SHALL BE A S SPECIFIED IN INTERNATIONAL PLUMBING CODE (LATEST EDITION).

B. BELOW GRADE: EARTH SHALL BE EXCAVATED TO A MINIMUM DEPTH WITH AN EVEN SURFACE TO INSURE SOLID BEARING OF PIPE FOR ITS ENTIRE LENGTH.

-INTERIOR: THE PIPE SHALL BE INSTALLED (UNLESS OTHERWISE SPECIFIED) A MINIMUM OF 4 INCHES BELOW THE BOTTOM OF THE SLAB AND SHALL NOT BE IN ANY DIRECT CONTACT WITH THE CONCRETE AT ANY POINT.

-EXTERIOR: THE WATER PIPE SHALL HAVE A MINIMUM OF 60" OF COVER AND THE SANITARY WASTE PIPE SHALL HAVE A MINIMUM OF 24" OF COVER.

8. MISCELLANEOUS

A. COORDINATE INSTALLATION OF ALL ROOFS FLASHING AT ROOF PENETRATIONS. B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS AND DIMENSIONS AT THE JOB SITE.

C. THE PLUMBING PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION. THE EXACT DIMENSIONS OR ALL THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT THE AVAILABLE SPACE.

9. TESTING

A. PLUMBING SYSTEM SHALL BE FLOW AND PRESSURE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE (LATEST EDITION). **10 GUARANTEE**

A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTORS EXPENSE.

B. FOR THE SAME PERIOD THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

EQUIPMENT NO.	SERVICE	LOCATION	CFM	EXTERNAL S PRESS (IN.	
EF-1	RESTROOM	CEILING	120	0.5	
NOTES: 1. PROVIDE WITH SPEED CONTROL, BACKDRAFT DAMPER, ROOF CAP, AND					

OPTIONS-ACCESSORIES RID DRAIN, MIXING VALVE, BATTERY OPERATED FAUCET RID DRAIN, MIXING VALVE, PEDESTAL SINK STRAINER, MIXING VALVE ROVIDE SEAT AND LID. EXHAUST FAN SCHEDULE MOTOR STATIC MANUFACTURER & MODEL **OPTIONS/ACCESSORIES** W.G.) WATTS | HP | RPM | VOLT/PH/HZ

GREENHECK, SP-B150

NOTE 1

VIBRATION ISOLATORS.

128.00

925

115/1/60



CEILING EXHAUST FAN DETAIL

NOT TO SCALE

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

COMMUNICATION LEGEND

CLOCK ONLY
CLOCK / PA SPEAKER WALL MOUNTED
ROUND CEILING MOUNTED SPEAKER
SQUARE SPEAKER
INTERCOM PUSH TO CALL SWITCH
WIRELESS ACCESS POINT ABOVE THE CEILING
ABOVE THE CEILING PROJECTOR CONNECTION
WALL MOUNTED HDMI
PLAIN DATA OUTLET
PLAIN DATA OUTLET WITH MOUNTING HEIGHT
COMBINATION DATA/TELEPHONE
FLOOR MOUNTED COMBINATION DATA/TELEPHONE
CEILING MOUNTED COMBINATION DATA/TELEPHONE
TELEVISION OUTLET

SECURITY SYSTEM LEGEND

	SECURITY CAMERA
HC	ADA DOOR OPERATOR PUSH BUTTON
DS	ELECTRIC DOOR STRIKE
CR	CARD READER FOR DOOR OPENERATOR

LIGHTING LEGEND NOTES: SYMBOLS SHOWN ARE STANDARD. VARIATION AND/OR COMBINATIONS MAY BE USED ON THE PLANS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS; HOWEVER, WHEREVER THE SYMBOL ON THE PROJECT DRAWINGS OCCUR, THE ITEM SHALL BE PROVIDED AND INSTALLED. VARIATION AND/OR COMBINATION MAY BE USED ON THE PLANS. A NUMBER NEXT TO A RECEPTACLE OR DEVICE INDICATES A CIRCUIT NUMBER. AN UPPER CASE LETTER NEXT TO A SWITCH INDICATES THE FUNCTION OF THE SWITCH. A LOWER CASE LETTER INDICATES THE SWITCH CIRCUIT. AN UPPER CASE LETTER NEXT TO A LIGHT FIXTURE INDICATES THE TYPE OF FIXTURE. REFER TO THE LUMINAIRE SCHEDULE FOR FIXTURE SPECIFICATIONS. A LOWER CASE LETTER NEXT TO A LIGHT CORRESPONDS TO THE SWITCH DESIGNATION. SWITCHES \$ SINGLE POLE SWITCH TWO POLE SWITCH THREE-WAY SWITCH \$₄ FOUR-WAY SWITCH \$ DIMMER SWITCH \$3D 3 WAY DIMMER SWITCH - (4D INDICATES A 4WAY DIMMER) \$DR DOOR ACTIVATED SWITCH \$LV LOW VOLTAGE LIGHT SWITCH \$_{TO} MANUAL MOTOR STARTER \$ PILOT LIGHT SWITCH \$_{OS} AUTO ON / AUTO OFF LIGHT SWITCH \$MO DUAL TECHINOLOGY MOTION / OCCUPANCY SENSOR LIGHT SWITCH \$D MANUAL ON / AUTO OFF DIMMING LIGHT SWITCH \$_K KEY OPERATED LIGHT SWITCH \$_T MANUAL ON - TIMED OFF LIGHT SWITCH (OS)(OS) CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH MA CEILING MOUNTED DUAL TECHNOLOGY MANUAL ON / AUTO OFF VACUITY SENSOR \$_{SC} SCENE CONTROL STATION \$_{MS} UNIT LIGHTING MANAGEMENT CONTROL STATION,

LIGHT FIXTURES

A 1'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FLANGE OR SURFACE MOUNTED
A 2'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FLANGE OR SURFACE MOUNTED
A 2'x2' LED TROFFER OR DIRECT/INDIRECT TYPE FLANGE OR SURFACE MOUNTED
← Ø OPEN STRIP FIXTURE
WALL BRACKET LINEAR FIXTURE
A 🔶 WALL MOUNTED SCONCE LIGHT FIXTURE
A CHARLESSED DOWNLIGHT CAN FIXTURE
A SURFACE CEILING OR PENDANT MOUNTED FI
EX2 DOUBLE FACE EXIT SIGN, WALL AND CEILING
EX1 SINGLE FACE EXIT SIGN, WALL AND CEILING N
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.
- 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.

- 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
- 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.

- FIXTURE GRID,
- FIXTURE GRID,
- FIXTURE GRID,
- XTURE MOUNTED MOUNTED

- 2. FIELD COORDINATION DURING CONSTRUCTION IS IMPERATIVE. CONTRACTORS BIDDING THIS WORK
- PAINTED MAY BE LEFT UN-PAINTED. EXPOSED CONDUIT. BOXES. ETC. ON THE EXTERIOR OF

- ELECTRICAL EQUIPMENT LEGEND BRANCH CIRCUIT PANELBOARD
- TELEPHONE TERMINAL BOARD
- ✓ ELECTRIC MOTOR
- F FUSED SAFETY SWITCH / DISCONNECT COMBINATION 4 MOTOR STARTER
- CONTACTOR
- LA-7____CIRCUITRY HOMERUN: PANEL LA CIR. #7
- CONDUIT OR WIRE CONCEALED IN WALL/CLG. (SOLID LINE TYPE) CONDUIT OR WIRE UNDERFLOOR/UNDERGND. (CENTER LINE TYPE)

MAIN DISTRIBUTION GEAR

CIRCUIT BREAKER IN A PANEL BOARD PAD MOUNTED UTILITY TRANSFORMER FUSED DISCONNECT o _____o 100A = AMP RATING 2P = NUMBER OF POLES 100 A 2 POLE FUSED DISCONNECT

(M)

- ELECTRICAL METER SHOWN ON ONE-LINE DIAGRAMS
- ELECTRICAL POWER PANEL WITH MAIN LUG OR MAIN BREAKER PP1= PANEL NAME 225A MLO = MAIN LUG OR BREAKER SIZE 120/208V = PANEL VOLTAGE 3PH, 4 WIRE = PANEL PHASE, DISTRIBUTION TYPE
- PP1 PP1 225A MCB 225A MLO 120/208V 120/208V 3PH, 4W 3PH, 4W

FI ECTRICAL DEVICE LEGEND

0	CEILING JUNCTION BOX - SURFACE/FLUSH
ЭH	WALL JUNCTION BOX - SURFACE/FLUSH
⇔	DUPLEX RECEPTACLE
Φ	FLOOR MOUNTED RECEPTACLE
O	SPLIT WIRED DUPLEX RECEPTACLE
\bigcirc	CEILING MOUNTED DUPLEX RECEPTACLE
₽	FOURPLEX RECEPTACLE
\bigoplus	FLOOR MOUNTED FOURPLEX RECEPTACLE
ŧ	APPLIANCE RECEPTACLE - 3 WIRE
Φ_{GFCI}	GROUND FAULT CIRCUIT INTERRUPTER
Фusв	RECEPTACLE WITH USB CHARGING CAPABILITES
Φ_{AC}	RECEPTACLE MOUNTED ABOVE COUNTER
Фcw	RECEPTACLE MOUNTED IN CASEWORK
\odot	ELECTRIC HAND DRYER
()	THERMOSTAT
	OPEN/CLOSE/STOP PUSH BUTTON
$\langle 1 \rangle$	DRAWING KEY NOTES
ROOM 100	ROOM DESIGNATION
GFCI WP	GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE WITH A WEATHER PROOF COVER
GFCI 44"	GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE MOUNTED AT 44" ABOVE FINISHED FLOOR

LUMINAIRES

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

EMERGENCY AND EXIT LIGHTS:

- 1. PROVIDE EMERGENCY AND EXIT SIGNS AS PER ALL GOVERNING CODES. 2. EXIT SIGNS CONNECTED TO A REMOTE EMERGENCY HEAD REQUIRE EXTRA BATTERY CAPACITY TO
- OPERATE THE REMOTELY LOCATED EMERGENCY HEAD FOR EGRESS AWAY FROM THE BUILDING. 3. REFER TO THE PLANS FOR THE NUMBER OF FACES REQUIRED AT EACH EXIT. FIELD ADJUST THE
- LOCATION OF THE EXIT SIGNS AND NUMBER OF FACES FOR THE BEST VISIBILITY POSSIBLE. 4. ALL LIGHTING FIXTURES DENOTED WITH "EM" SHALL BE PROVIDED WITH AN ENGINEER APPROVED EMERGENCY LED DRIVER OR INVERTER TO OPERATE THE FIXTURE IN AN EMERGENCY MODE TO MEET ALL CURRENT GOVERNING CODES AND WILL BE CIRCUITED TO THE UNSWITCHED SIDE OF THE LIGHTING CIRCUIT.
- 5. ALL LIGHT FIXTURES DESIGNATED WITH "EM" OR SPECIFIED WITH AN EMERGENCY FUNCTION SHALL BE PROVIDE WITH ONE OF THE FOLLOWING. a. INTEGRAL TEST SWITCH
- b. REMOTE INFRARED HANDHELD DEVICE
- c. INTEGRAL ELECTRONIC DEVICE THAT AUTOMATICALLY PERFORMS CODE REQUIRED TESTS. 6. ALL STAIRWELLS AND PATHS OF EGRESS TO THE EXTERIOR DOORS AND THE EXTERIOR PATH OF EGRESS AWAY FROM THE BUILDING SHALL RECEIVE EMERGENCY LIGHTING PER CODE.

RESPONSIBLE DIVISION:

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

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

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"		DIFF	DIFFERENTIAL
-INISH ^	ED FLOOR TO CENTER OF DEVICE	DISCH	DISCHARGE
ч 4 П	ACCESS DOOR	DIV	DIVISION
AAV		DN	DOWN
ABV	ABOVE	DS	
AC	AIR CONDITIONING UNIT	DWG	
AC	ABOVE COUNTER		
AD	AREA DRAIN (SEE SYMBOLS)		
A.F.C.	ABOVE FINISHED CEILING		
A.F.G.	ABOVE FINISHED GRADE	EC.	
AIC	AMPERE INTERRUPTING	FCC	ECCENTRIC
CAPAC	ITY	FF	EXHAUST FAN
A.F.F.	ABOVE FINISHED FLOOR	EFF	EFFICIENCY
AHU	AIR HANDLING UNIT	EL	ELEVATION
ALUM	ALUMINUM	ELEC	ELECTRIC
AP	ACCESS PANEL OR DOOR	ELEV	ELEVATOR
ATS		EM	EMERGENCY FUNCTION
AV		ENT	ENTERING
AVG		EMT	ELECTRIC METALLIC TUBE
AWG		EQ	EQUAL
		EQUIP	EQUIPMENT
םכ חכ		EQUIV	EQUIVALENT
		ES	END SWITCH
		ESP	EXTERNAL STATIC PRESS
		ET	EXPANSION TANK
		EWC	ELECTRIC WATER COOLER
		EWT	ENTERING WATER
		TEMPE	RATURE
SOP		EX	EXHAUST
BSMT	BASEMENT	EXPAN	EXPANSION
		EXT	EXTERNAL
~		F	DEGREES FAHRENHEIT
		FA	FREE AREA
		FC	FAN COIL UNIT
		FC	FOOTCANDLE
ССТ		FCV	FLOW CONTROL VALVE
TEMPE	RATURE	FD	
СКТ	CIRCUIT		
CFH	CUBIC FEET PER HOUR		
CFM	CUBIC FEET PER MINUTE		
CHWR	CHILLED WATER RETURN		
CHWS	CHILLED WATER SUPPLY		
CI	CAST IRON	FOD	
CL	CENTER LINE		
CLG	CEILING		
CMU	CONCRETE MASONRY UNIT		
00	CLEAN OUT		
COL	COLUMN	FF3	
COMP	COMPRESSOR	FSD	
CONC	CONCRETE	FJD	
COND	CONDENSATE	EVC	
CONN	CONNECTION		
CONT	CONTINUATION	GND	GAUGE
CONTR	CONTRACTOR		GALLON
CRI	COLOR RENDERING INDEX	GALV	
СТ	COOLING TOWER	GALV	
СТ	CURRENT TRANSFORMER	CONDU	JCTOR
CU	CONDENSING UNIT	GFCI /	GFI GROUND FAULT CIRC
CU	COPPER	INTERF	RUPTER
CUH	CABINET UNIT HEATER	GC	GENERAL CONTRACTOR
CVB	CONSTANT VOLUME BOX	GPH	GALLONS PER HOUR
CWR	CONDENSER WATER RETURN	GPM	GALLONS PER MINUTE
CWS	CONDENSER WATER SUPPLY	GRS/LE	GRAINS PER POUND
DВ	DRY BULB	H 20	WATER
DEPT	DEPARTMENT	HB	HOSE BIBB
DF	DRINKING FOUNTAIN	HD	HEAD (SEE SCHEDULES)
DIA	DIAMETER	HP	HEAT PUMP
DIAG	DIAGRAM	HP	HORSEPOWER

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SUBSTITUTIONS:

CONTROL

WIRED

23

23

23(2)

23(2)

23

23(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.

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.

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.

	HR	HOUR
	ΗT	HEIGHT
	HTR	HEATER
	HWR	HEATING WATER RETURN
	HWS	
	HX	HEAT EXCHANGER
	HZ	
	ID	
	IN	INCHES
)R	INV	INVERT
	JBOX	JUNCTION BOX
	K	KELVIN
	KW	KILOWATT
	KVA	KILO VOLT - AMPS
	L	LENGTH
	LAT	LEAVING AIR TEMPERATURE
	LV	LAVATORY
	LB	POUND
E	LD	LINEAR DIFFUSER
	LF	LINEAR FEET
	LIN	LINEAR
	LIQ	LIQUID
	LM	
SURE	LRA	
:R		
	MBH	THOUSANDS OF BTU PER HOU
	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	
	MTD	
	MUA	MAKE-UP AIR UNIT
	N	NEUTRAL
	NC	NORMALLY CLOSED
	NEG	NEGATIVE
	NIC	NOT IN CONTRACT
	NL	NIGHT / SECURITY LIGHT - DO
	NOT S	WITCH
	NO	
	NOM	
	04	
	OBD	
	OC	ON CENTER
	OCC	OCCUPIED
	OCP	OVER CURRENT PROTECTION
	OD	OUTSIDE DIAMETER
	OL	OVERLOAD
CUIT	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		
CONDI	TIONER		
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			
SCU			
зоп 90			
SEE			
SE			
ог			
SH	SHOWER		
SP			
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		
TYP			
тх	TRANSFORMER		
UC	UNDERCUT DOOR		
UH	UNIT HEATER		
UNO	UNLESS NOTED OTHERWISE		
UNOC	C 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			
WC	WATER CLOSET		
WG			
WP			
	TRANSFORMER		
231 10113			

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COLLBRAN CONGREGATIONAL CHURCH ADA RENOVATIONS
2003 HIGH STREET COLLBRAN CO 81624
CONSTRUCTION DOCUMENTS
REV. DESC. DATE:
DATE: 2/9/2021
PROJECT #: 20-227
E0-1









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

ELECTRICAL - FIRST FLOOR DEMOLITION

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	2003 HIGH STREET COLLBRAN CO 81624
	CONSTRUCTION DOCUMENTS
	REV. DESC. DATE:
PLAN	DATE: 2/9/2021 PROJECT #: 20-227 SHEET #:
	ED2-1





GYMNASIUM





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

ELECTRICAL - FIRST FLOOR PLAN

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	COLLBRAN CONGREGATIONAL
	CHURCH ADA RENOVATIONS
	2003 HIGH STREET COLLBRAN CO 81624
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_ NEW GHTS	
	REV. DESC. DATE:
	DATE: 2/9/2021
	PROJECT #: 20-227
	SHEET #:
	F2-1