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Tag	Unit No.	Equipment				Explosion Proof	Drawing #	Power Requirements			Starter				Disconnect		Interlock		Control Device			Notes					
		Unit Description	Location	Serving				Units	Voltage	Phase	Emergency	Type (b)	Location	Supply By (a)	Install By (a)	Wiring By (a)	Control (c)	Aux. Contacts (d)	Supply By (a)	Install By (a)	Wiring By (a)		Equipment #	Install By (a)	Wiring By (a)	Type (e)	Supply By (a)
HVAC System Equipment																											
MUA	1	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																Single point connection; Vendor-provided self-contained controls; 0-10 VDC contacts for external unit on/off control
MUA	2	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																[Same as MUA-1]
MUA	3	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																[Same as MUA-1]
MUA	4	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																[Same as MUA-1]
MUA	5	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																[Same as MUA-1]
MUA	6	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																[Same as MUA-1]
MUA	7	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																[Same as MUA-1]
MUA	8	Gas-Fired Make-up Air Unit	Roof	Processing 101	N		5.00	MCA	575	3	No																[Same as MUA-1]
HRV	1	Heat Recovery Ventilator	Mezzanine Level of Processing 101	Ancillary Spaces	N		25.50	MCA	208	3	No																Single point connection; Vendor-provided self-contained controls; 0-10 VDC contacts for external unit on/off control
DH	1	Duct Heater, Electric	Mezzanine Level of Processing 101	HRV-1 S/A discharge airflow	N		40.00	kW	575	3	No																Single point connection; Vendor-provided self-contained controls, duct temperature sensor & remote thermostat
CF	1	Ceiling Fan	Processing 101	Processing 101	N		15.00	MCA	208	3	No	VFD															Vendor-provided VFD and remote controller c/w sensors
CF	2	Ceiling Fan	Processing 101	Processing 101	N		15.00	MCA	208	3	No	VFD															Vendor-provided VFD and remote controller c/w sensors
CF	3	Ceiling Fan	Processing 101	Processing 101	N		15.00	MCA	208	3	No	VFD															Vendor-provided VFD and remote controller c/w sensors
CF	4	Ceiling Fan	Processing 101	Processing 101	N		15.00	MCA	208	3	No	VFD															Vendor-provided VFD and remote controller c/w sensors
EF	1	Rooftop Exhaust Fan	Roof	Processing 101	N		5.00	HP	575	3	No	VFD															Vendor-provided VFD; 0-10 VDC contacts for external VFD control
EF	2	Rooftop Exhaust Fan	Roof	Processing 101	N		5.00	HP	575	3	No	VFD															[Same as EF-1]
EF	3	Rooftop Exhaust Fan	Roof	Processing 101	N		5.00	HP	575	3	No	VFD															[Same as EF-1]
EF	4	Rooftop Exhaust Fan	Roof	Processing 101	N		5.00	HP	575	3	No	VFD															[Same as EF-1]
EF	5	Rooftop Exhaust Fan	Roof	Processing 101	N		5.00	HP	575	3	No	VFD															[Same as EF-1]
EF	6	Rooftop Exhaust Fan	Roof	Processing 101	N		5.00	HP	575	3	No	VFD															[Same as EF-1]
IGH	1	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	2	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	3	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	4	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	5	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	6	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	7	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	8	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	9	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	10	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	11	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	12	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	13	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	14	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	15	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
IGH	16	Infrared Gas-Fired Heater	Processing 101	Processing 101	N		2.60	FLA	120	1	No																Unit c/w remote thermostat.
Electrical Equipment (Heaters, etc)																											
FFWH	1	Forced-Flow Wall Heater	Mechanical Room 102	Mechanical Room 102	N		0.50	kW	120	1	No																Unit c/w remote thermostat.
FFWH	2	Forced-Flow Wall Heater	Tools Room 103	Tools Room 103	N		0.50	kW	120	1	No																Unit c/w remote thermostat.
FFWH	3	Forced-Flow Wall Heater	Storage Room 104	Storage Room 104	N		0.50	kW	120	1	No																Unit c/w remote thermostat.
FFWH	4	Forced-Flow Wall Heater	Men's Washroom 106	Men's Washroom 106	N		0.50	kW	120	1	No																Unit c/w remote thermostat.
FFWH	5	Forced-Flow Wall Heater	Women's Washroom 106	Women's Washroom 106	N		0.50	kW	120	1	No																Unit c/w remote thermostat.
Plumbing Equipment																											
WH	1	Gas-Fired Tankless Water Heater	Mechanical Room 102	Plumbing Fixtures in Processing 101 & Washrooms	N		1.50	FLA	120	1	No																Single point connection; self-contained.
P	1	Domestic Hot Water Recirculation Pump	Mechanical Room 102	Domestic Hot Water Distribution	N		0.25	HP	120	1	No																Single-speed pump; on/off operation.
TP	1	Electric Trap Primer	Mechanical Room 102	Below-grade p-traps	N		2.00	MCA	120	1	No																Single point connection; self-contained.
FSH	1	Flow Switch High for Emergency Shower Station	Mechanical Room 102	Emergency Eyewash Station	N		3.00	FLA	120	1	No																Single point connection; self-contained visual and audible alarming.
Owner-Provided Equipment																											
CP	1	Air Compressor Package	Mechanical Room 102	Compressed Air Distribution	N		15.00	HP	575	3	No																O (Vendor)

Notes		(a) Supply, Install and Wiring	(b) Starter Type	(c) Starter Control Type
1.	Line voltage thermostats for unit heaters, etc. to be supplied and installed by Div. 15. Refer to Div. 15 drawings for locations.	E = Electrical	Ma = Manual c/w Pilot Light	SS = Start / Stop
2.	Include fire alarm signals, such as sprinkler flow switches, monitored valves, pressure switches, etc.	M = Mechanical	Mp = Magnetic	On = Off / Auto
3.	Heat tracing to be supplied and installed by Div. 15. Div. 15 to specify requirements (padding, pipe size & temperature). Heat traced equipment & piping insulation by Div. 15.	C = Controls	TS = Two speed (double winding)	HOA = Hand / Off / Auto
4.	Div. 15 to provide unswitchable disconnect switch at unit unless unit supplied with factory installed disconnect switch (to be specified).	Ex = Existing	MMS = Manual motor switch c/w relay (for single phase motor)	
5.	For double speed motors, always specify double winding. Div. 15 to provide two separate power feeds to motor and install appropriate starters to suit.	EXR = Existing (relocated)	RL = Relay	
6.	Pressure switch for sprinkler excess pressure pump to be supplied and installed by Div. 15 and wired by Div. 16.	O = Others (specify)	VFD = Variable Frequency Drive	
7.	Provide a separate 120V/1ph circuit for marine lights and service plugs inside air handling units.	Fr = Fractal		
8.	For package units, such as chillers, compressors, heat pumps, fire pumps, etc. which are c/w its own integral starter/control, send copy of electrical data to Div. 16.	(d) Specify no. of aux. contacts.	(e) Control Device	(f) Electrical data to be provided by Electrical Engineer
9.	Duct smoke detectors to be provided by Div. 16 at locations as directed by Div. 15.	P = Pressure Switch	I = Interlock	
10.	Electric heaters to be supplied and installed by Div. 16. Capacities to be specified by Div. 15.	F = Float Switch	M = Manual	
11.	Provide 120V/1ph power supply to CO and other gas detection/monitoring system.	C = Time Clock	CO = CO detector	
12.	Provide 120V/1ph power supply to each time clock.	T = Thermostat	O = Other (specify)	
13.	Confirm requirement and location of control transformer.	BAS=Building Automation System (DDC)		
14.	Confirm voltage and circuit requirements of boiler controls, power for induced/forced draft fans.			
15.	Div. 16 to provide manual control switches for manually controlled exhaust fans. Refer to Div. 15 drawings for locations.			
16.	Provide 120V/1ph power supply to all field control panels. Div. 15 to indicate location.			
17.	For cooling tower, provide power supply for sump heaters, spray pump and heat tracing. Provide separate power supply for pony motor.			

Lighting Fixture Schedule											
Type Mark	Count	Type	Description	Manufacturer	Catalogue Number	Voltage	Lamp	Lamp Type	Wattage	Mounting	
A	11	Visioneering - 2 Lamp 180W LED 4000K - 120V	2x4 LED LUMINARE	LITHONIA LIGHTING	ZBLT4-40L-ADP-EZ1-LP840	120 V	LED	LED	30 W	RECESSED	
B	210	Lighting-High-Bay-Cooper-Metalux-UHB-LED	LED Round High Bay	Cooper Lighting		347 V	LED		9 W		
C	25	Lighting-Wall-Cooper-Lumark-WPLLED	Wall Mount Luminaire	Cooper Lighting		120 V	LED		16 W		

Grand total: 246

No.	Date	REVISION	Dr'n	Ch'd
B	2021-10-27	FINAL SUBMISSION FOR PDR	SN	IG
A	2021-09-21	DRAFT FINAL SUBMISSION ISSUED FOR REVIEW	SN	IG

PRELIMINARY

 DO NOT USE FOR CONSTRUCTION

LEAD CONSULTANT



DESIGN BY	IG	ANNACIS AUTO TERMINAL LIGHTING AND MECHANICAL SCHEDULES	
DRAWN BY	SN		
APPROVED	TH		
DATE	2021-10-27		
SCALE	1 : 1		
PMV SITE	365-039	SIZE DWG.	365-039- E-009
		SHEET	REV