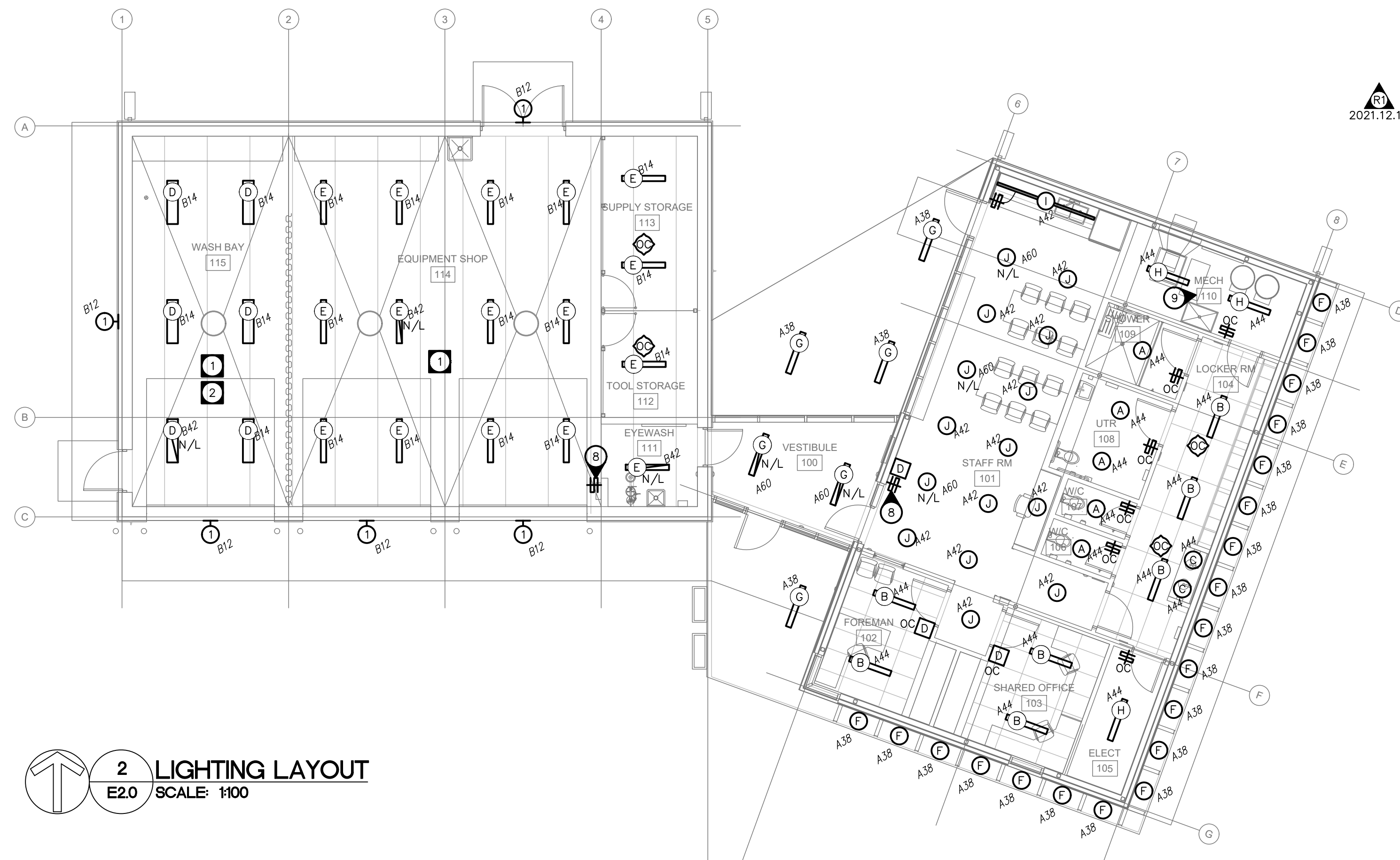




1 POWER AND SYSTEMS LAYOUT
E2.0 SCALE: 1/100



2 LIGHTING LAYOUT
E2.0 SCALE: 1/100

SPECIFIC ELECTRICAL NOTES

- 1 WIRE AND CONNECT OVERHEAD DOOR OPERATOR AND ALL RELATED CONTROLS. CONFIRM EXACT REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.
- 2 WIRE AND CONNECT POWER DOOR OPERATOR AND ALL RELATED CONTROLS. CONFIRM EXACT REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.
- 3 WIRE AND CONNECT AUTOMATIC FAUCET LOW VOLTAGE TRANSFORMER AND ALL RELATED CONTROLS. REFER TO MECHANICAL.
- 4 WIRE AND CONNECT AUTOMATIC FLUSH LOW VOLTAGE TRANSFORMER AND ALL RELATED CONTROLS. REFER TO MECHANICAL.
- 5 WIRE AND CONNECT MECHANICAL GAS DETECTION UNIT. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH MECHANICAL PRIOR TO ROUGH-IN.
- 6 WIRE AND CONNECT OWNER SUPPLIED AIR COMPRESSOR, COMPRESSOR AND ALL RELATED CONTROLS. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH OWNER PRIOR TO ROUGH-IN. SIZE CIRCUIT BREAKER AND WIRE ACCORDING TO FINAL NAME PLATE RATING ON EQUIPMENT.
- 7 WIRE AND CONNECT OWNER SUPPLIED PRESSURE WASHER. COORDINATE EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH-IN. SIZE CIRCUIT BREAKER AND WIRE ACCORDING TO FINAL NAME PLATE RATING ON EQUIPMENT.
- 8 2 HOUR OVERRIDE SWITCH FOR LIGHTING TIME CLOCKS.
- 9 COORDINATE SUSPENSION OF LIGHTS WITH MECHANICAL DUCTING PRIOR TO ROUGH-IN.
- 10 RECEPTACLE MOUNTED HORIZONTALLY IN MILLWORK. RECEPTACLE COVER PLATES TO BE BLACK. REFER TO ARCHITECTURAL DETAIL 8/A8.0 FOR INSTALLATION LOCATION. FEED POWER FROM NEAREST WALL.
- 11 RUN 1/2" EMT FROM LEFT HAND SIDE OF TOP OF DOOR FRAME (FOR REQUEST TO EXIT DEVICES) BACK TO ELECTRICAL 105. PRE-DRILL AND TAP FRAME FOR REQUEST TO EXIT MOUNT.
- 12 RUN 3/4" EMT DOWN THE INSIDE ON LOCK SIDE OF DOOR FRAME (FOR ELECTRIC STRIKE & DOOR CONTACT & CARD ACCESS CONTACTS) AND BACK TO ELECTRICAL 105.
- 13 CARD ACCESS READER MOUNTED ON OUTSIDE WALL AT 900mm A.F.F.. RUN 1/2" EMT FROM READER TO ELECTRICAL 105.
- 14 RUN 3/4" EMT DOWN THE INSIDE OF DOOR FRAME (FOR DOOR CONTACT) AND BACK TO MECHANICAL ROOM 106.
- 15 REFER TO 3/E.3.0 FOR ELECTRICAL IN MECH 110.

GENERAL ELECTRICAL NOTES

1. CONFIRM LOCATION AND REQUIREMENTS OF ACCESS CONTROL SYSTEM DEVICES PRIOR TO ROUGH-IN.
2. CO-ORDINATE LOCATION OF ALL HARDWIRED PLUMBING FIXTURE WITH LOCATION OF GRAB BARS AND OTHER WASHROOM ACCESSORIES.
3. CITY OF WINNIPEG TO SUPPLY ONE(1) MERCURY LP1502 CONTROLLER TO CONTROL ONE(1) DOOR (BY JOHNSON CONTROLS), INSTALLED BY E.C. CABINET/ENCLOSURE TO BE ALTRONIX TROVE 2M2 SUPPLIED AND INSTALLED BY E.C.
4. PROVIDE ALTRONIX EFLOW 6NB V & ACM8CB POWER SUPPLY TO POWER CONTROLLER(S), CARD ACCESS READERS, ELECTRIC STRIKES (24V) AND DOOR CONTACTS. POWER SUPPLIES TO BE MOUNTED IN TROVE 2M2 CABINET/ENCLOSURE.
5. INSTALL CONTROLLER(S) IN ALTRONIX TROVE 2M2 CABINET/ENCLOSURE AND INTERLOCK WITH POWER SUPPLIES WITH EMT SLEEVES. CONTROLLER(S) AND POWER SUPPLIES TO BE LOCATED IN ELECTRICAL 105 WHERE SPACE PROVIDES. SYSTEM TO BE PROGRAMMED AND COMMISSIONED BY THE CITY OF WINNIPEG FST SHOP.
6. DOOR DEVICES AND SENSORS ARE TO BE CONNECTED WITH HONEYWELL MULTI-CONDUCTOR PROFUSION 3195 CABLE HOME-RUNS (NO SPLICES).
7. CONFIRM LOCATION AND REQUIREMENTS OF SECURITY SYSTEM DEVICES PRIOR TO ROUGH-IN WITH CONTRACT ADMINISTRATOR. COORDINATE ROUGH-IN WALK-THROUGH WITH CONTRACT ADMINISTRATOR, CITY OF WINNIPEG AND ELECTRICAL ENGINEER WHEN WARRANTED.
8. ALL SECURITY SYSTEM WIRING IN OPEN CEILING TO BE IN CONDUIT. ALL WIRING IN DROP CEILING CAN BE RUN USING J-HOOKS.
9. PROVIDE ONE(1) BOSCH B95126 SECURITY SYSTEM PANEL C/W ENCLOSURE LOCATED IN ELECTRICAL 105 FOR CONNECTION OF SECURITY SYSTEM DEVICES.
10. COORDINATE SECURITY AND CARD ACCESS SYSTEM REQUIREMENTS AND INSTALLATION WITH CITY OF WINNIPEG REPRESENTATIVE.

WET AND HAZARDOUS LOCATION ELECTRICAL NOTES

- 1 ALL WIRING IN SERVICE AREAS INDICATED TO COMPLY WITH C.E.C. 20-102. AREA FROM FINISHED FLOOR TO 50mm ABOVE FINISHED FLOOR TO BE HAZARDOUS AREA CLASS 1 ZONE 2. AREA BELOW FLOOR TO BE HAZARDOUS AREA CLASS 1 ZONE 2. ALL EQUIPMENT ABOVE THIS AREA SHALL BE IN COMPLIANCE WITH CANADIAN ELECTRICAL CODE 20-110.
- 2 ALL WIRING AND ELECTRICAL EQUIPMENT IN WET LOCATION TO BE IN COMPLIANCE WITH C.E.C. 22-002 CATEGORY 1.

MOTOR SCHEDULE								
NO.	DESCRIPTION	LOCATION	VOLTAGE	HP/W/MCA	C.B.	COND.	STARTER	NOTES
HWT-1,2	HOT WATER TANK	MECH 110	240V-1PH	9 KW	50A-2P	#8	-	1
RCP-1	RECIRC PUMP	MECH 110	120V-1PH	FRAC.	15A-1P	#12	-	1
HRV-1	HEAT RECOVERY VENT.	MECH 110	120V-1PH	5.5 MCA	15A-1P	#12	PACKAGED	1
AH-1	AIR HANDLER UNIT	MECH 110	240V-1PH	49.3 MCA	80A-2P	#4	PACKAGED	1
PHC-1	PREHEAT COIL	MECH 110	240V-1PH	6 KW	35A-2P	#8	-	1
RHC-1	REHEAT COIL	STAFF RM 101	240V-1PH	23 KW	125A-2P	#1	-	1
EF-1	EXHAUST FAN	EQUIPMENT SHOP 114	120V-1PH	1/2 HP	20A-1P	#12	MAGNETIC	1,2

SPECIFIC NOTES

1. WIRE AND CONNECT AS REQUIRED. REFER TO MECHANICAL.
2. MAGNETIC STARTER BY ELECTRICAL CONTRACTOR.
3. MANUAL STARTER BY ELECTRICAL CONTRACTOR.
4. COORDINATE INSTALLATION OF PATHWAYS TO PIT FOR SUMP PUMP WIRING.
5. WIRE AND CONNECT INDOOR UNIT TO OUTDOOR UNIT TERMINALS, AS PER MANUFACTURER'S RECOMMENDATIONS. REFER TO MECHANICAL.

GENERAL NOTES

- A. MANUAL STARTERS TO BE C/W OVERCURRENT PROTECTION.
- B. ALL DISCONNECT SWITCHES TO BE SUPPLIED BY ELECTRICAL CONTRACTOR.
- C. ELECTRICAL CONTRACTOR TO PROVIDE CIRCUIT BREAKERS AND WIRING ACCORDING TO THE FINAL NAMEPLATES OF ALL THE MECHANICAL EQUIPMENT.
- D. ALL LOW VOLTAGE CONTROL WIRING BY MECHANICAL CONTRACTOR.
- E. ALL LINE VOLTAGE CONTROL WIRING BY ELECTRICAL CONTRACTOR - REFER TO MECHANICAL SECTION. CO-ORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR.

HEATING SCHEDULE						
TYPE	WATTS	VOLTAGE	DESCRIPTION	MANUFACTURER	CATALOGUE NO.	NOTES
C	1000	120	BASEBOARD	OUELLET	ODIA1002	1
FF-6	6000	240	FORCE FLOW	OUELLET	OAC06000	2
UH-1	25000	240	UNIT HEATER	OUELLET	OAS25000AM	3
UH-2	10000	240	UNIT HEATER	OUELLET	OWD10000	3,4

SPECIFIC HEATING NOTES:

1. C/W BUILT-IN THERMOSTAT OR WIRE TO REMOTE THERMOSTAT AS SHOWN ON DRAWINGS.
2. C/W BUILT-IN THERMOSTAT UNLESS OTHERWISE INDICATED. HEATER TO BE RECESSED. COORDINATE WALL CONSTRUCTION WITH G.C. TO ENSURE ADEQUATE SPACE IS PROVIDED. ORDER HEATER IN SEMI-GLOSS BLACK FINISH.
3. C/W BUILT-IN THERMOSTAT. MOUNT SECURELY WHERE INDICATED TO THE SATISFACTION OF THE ENGINEER.
4. WET LOCATION RATED.

GENERAL HEATING NOTES:

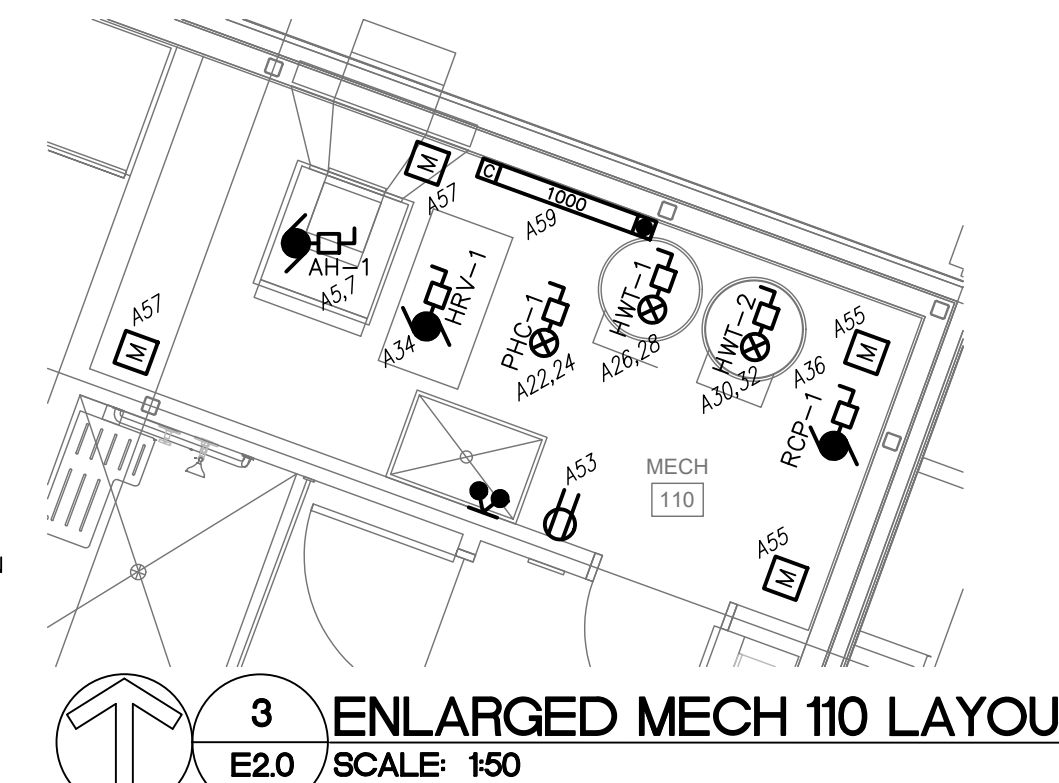
- A. VOLTAGE TO BE AS INDICATED ABOVE UNLESS OTHERWISE NOTED ON DRAWINGS.
- B. HEATER SHALL BE FED FROM GFCI PROTECTED CIRCUIT IF INSTALLED WITHIN 1m OF A SINK, TUB, SHOWER (CEC 62-132). CONTROLS FOR HEATERS SHALL BE NO CLOSER THAN 500mm FROM SINK, TUB, SHOWER (CEC 62-130).

EXTERIOR LUMINAIRE SCHEDULE				
TYPE	DESCRIPTION	MOUNTING	CATALOG NUMBER	LAMPS
1	LED WALL PACK	WALL MOUNTED @ 7.5' A.F.G.	LITHONIA LIGHTING - WDG1 LED P1 40K 80CRI VF MVOLT SRM DBLXD	4W LED
2	LED POLE MOUNTED LUMINAIRE	20' POLE MOUNTED	LITHONIA LIGHTING - RSX1 LED P4 40K R3 C/W PRARIE POLE RTA 20CBB4-01	133.2W LED

LUMINAIRE SCHEDULE				
LETTER	DESCRIPTION	MOUNTING	CATALOG NUMBER	LAMPS
A	6" LED DOWNLIGHT	RECESSED IN DRYWALL	LITHONIA LIGHTING - 6BPMW LED 30K 90CRI	10.3W LED
B	1'x4' LED LINEAR	RECESSED IN T-BAR	LITHONIA LIGHTING - BLT4 30L ADSM G210 LPB35	23.2W LED
C	4' LED DOWNLIGHT	RECESS IN DRYWALL	LITHONIA LIGHTING - 4BPMW LED	11.2W LED
D	4' LED STRIP (WET LOCATION RATED)	SURFACE MOUNTED	LITHONIA LIGHTING - FEM L48 8000LM LPAFL WD 80CRI 40K	50.5W LED
E	4' LED STRIP	SURFACE MOUNTED TO UNDERSIDE OF HOLLOW CORE	LITHONIA LIGHTING - ZLN L48 7000LM FST MVOLT 40K 80CRI	52.1W LED
F	4' LED DOWNLIGHT	RECESSED IN SOFFIT	JUNO LIGHTING - WFA REG SWWS 90CRI 35K	9W LED
G	6"x4' LED LINEAR	RECESSED IN WOOD SLAT CEILING	LUMENWERX - VIAWET-TMG+HLO-LED-80-500-35-4FT	22.5W LED
H	4' LED STRIP	SUSPENDED @ 8' A.F.F.	LITHONIA LIGHTING - CSS L48 ALO3 MVOLT SWW3 80CRI (3000LM 40K)	24.3W LED
I	LED TAPE LIGHT IN ALUMINUM CHANNEL	SURFACE MOUNTED TO UNDERSIDE OF CABINET	DIFFUSION LIGHTING - SL1 9"6" 24V 4100K C/W ALL ASSOCIATED CONNECTORS, CABLES, DRIVERS AND ALUMINUM PROFILE	24W LED
J	4" LED DOWNLIGHT	RECESSED IN DRYWALL/T-BAR	LITHONIA LIGHTING - LDN4 35/15 L04AR LD	17.5W LED

LUMINAIRE SCHEDULE NOTES:

1. UNLESS OTHERWISE NOTED, ALL LEDS TO BE 3500K & 80 CRI.
2. PROVIDE PHOTOCELL CONTROL FOR ALL OUTDOOR LUMINAIRES.
3. CONTACT ANDY KENNETH AT RD SALES FOR FURTHER CATALOG INFORMATION/FIXTURE DETAILS.



3 ENLARGED MECH 110 LAYOUT
E2.0 SCALE: 1/50

R1 2021.12.14 - Security/Access Control Revision
0 2021.11.01 - Issued for Construction

NO.	DATE	REVISION / ISSUANCE

Architect
Engineer

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Project
ST. VITAL PARK MAINTENANCE FACILITY
190 RIVER ROAD

Sheet Title
ELECTRICAL - LIGHTING POWER AND SYSTEM LAYOUT

Project No. 20105
Date 2021.12.14

Sheet
E2.0R1