

1 MAIN FLOOR PLAN - LIGHTING LAYOUT
E1.0 SCALE 1/8" = 1' 0"

MOTOR SCHEDULE								
NO.	DESCRIPTION	LOCATION	VOLTAGE	HP /W/MCA	C.B.	COND.	STARTER	NOTES
RH1,2,3	RADIANT HEATER	SEE SITE PLAN	120V-1PH	1.5A	15A-1P	#12	—	1
OAC	OFFICE AIR CONDITIONING UNIT	ROOF (OUTDOOR UNIT) OFFICE (INDOOR UNIT)	208V-1PH 208V-1PH	13MCA 1MCA	20A-2P 15A-2P	#12	—	1,5
AS	ANTI-STRATIFICATION FAN	SEE SITE PLAN	120V-1PH	—	—	#12	—	1
EF1	EXHAUST FAN	GARAGE	120V-1PH	1/3 HP	20A-1P	#12	MAGNETIC	1,2
EF2	EXHAUST FAN	GARAGE	208V-3PH	7.5 HP	70A-3P	#3	MAGNETIC	1,2
MD1	MOTORIZED DAMPER	GALLERY	120V-1PH	FRAC.	15A-1P	#12	—	1
GD1	CARBON MONOXIDE/NITROGEN DIOXIDE DETECTOR	SEE SITE PLAN	120V-1PH	—	15A-1P	#12	—	1

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 TERMINALS S1 AND S2 ON OUTDOOR UNIT.

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.

LUMINAIRE SCHEDULE				
TYPE	DESCRIPTION	MOUNTING	CATALOG NUMBER	LAMPS
A	1-BEAM LED, 16"x45", WITH 12,000 NOMINAL LUMENS, NARROW DISTRIBUTION, AND 4000K 70 CRI LEDS, DLC CERTIFIED	MOUNTED AT 17'	LITHONIA LIGHTING IBL-12L-ND-LP740DLC	125W LED
B	4' STRIPLIGHT WITH DIFFUSE LENS 5000LM 80CRI 4000K	MOUNTED AT 8.8'	LITHONIA LIGHTING ZL1N-L48-5000LM-FST-MVOLT-40K-80CRI-WH	43W LED
C	GTL 2"x4", 4800 NOMINAL LUMENS, A12 LENS, 4000K	MOUNTED AT 9'	LITHONIA LIGHTING 2GTL-4-48L-E21-LP840	47W LED
D	D-SERIES SIZE 2 LED WALL LUMINAIRE	WALL MOUNTED	DSXW2-LED-30C-700-40K-14M-MVOLT-DOBXD	71W LED
E	HIGH-PRESSURE HOSE-DOWN FHE LED	MOUNTED AT 17'	FHELED-12L-FST	152W LED

LUMINAIRE SCHEDULE NOTES:
1. ALL FLUORESCENT BALLAST TO BE ELECTRONIC. MB HYDRO "POWER SMART" APPROVED.
2. ALL FLUORESCENT LAMPS TO BE 3500K & 85 CRI, UNLESS OTHERWISE NOTED.
3. PROVIDE PHOTOCCELL CONTROL FOR ALL OUTDOOR LUMINAIRES.

HEATING SCHEDULE						
TYPE	WATTS	VOLTAGE	DESCRIPTION	MANUFACTURER	CATALOGUE NO.	NOTES
B	750	120	BASEBOARD	QUELLET	00B0752	1
C	1000	120	BASEBOARD	QUELLET	00B1002	1

SPECIFIC HEATING NOTES:

1. C/W BUILT-IN THERMOSTAT OR WIRED TO REMOTE THERMOSTAT AS SHOWN ON DRAWINGS.

2. RECESSED UNLESS OTHERWISE INDICATED. C/W BUILT-IN THERMOSTAT UNLESS OTHERWISE INDICATED.

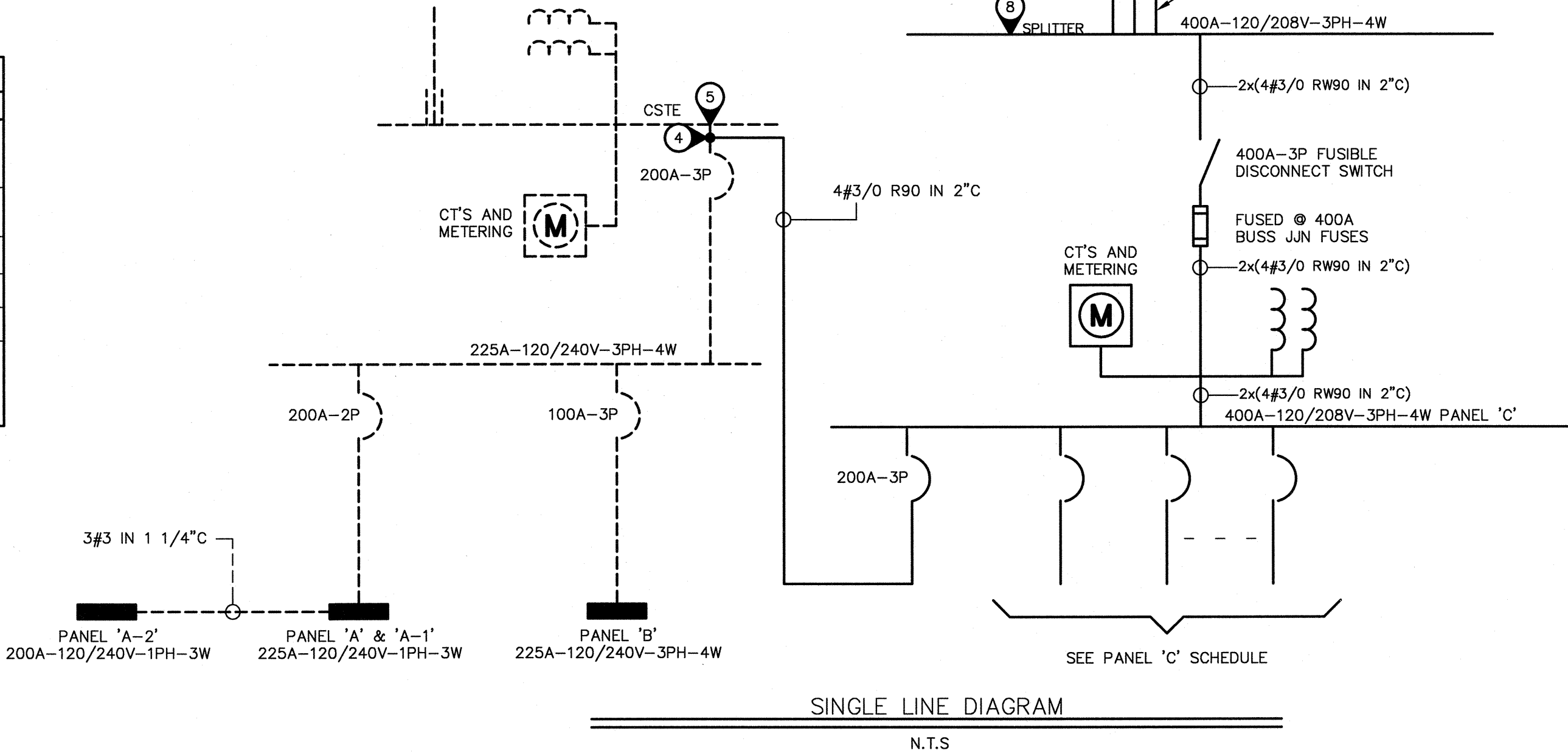
3. C/W BUILT-IN THERMOSTAT. MOUNT SECURELY WHERE INDICATED TO THE SATISFACTION OF THE ENGINEER.

GENERAL HEATING NOTES:

A. VOLTAGE TO BE AS INDICATED ABOVE UNLESS OTHERWISE NOTED ON DRAWINGS.

SPECIFIC ELECTRICAL NOTES

- RELOCATE EXISTING ELECTRICAL DEVICE TO LOCATION INDICATED. EXTEND, REROUTE WIRING AS REQUIRED.
- WIRE AND CONNECT OVERHEAD DOOR OPERATOR AS PER MANUFACTURERS RECOMMENDATIONS. CONFIRM EXACT REQUIREMENTS.
- BOND FIRE CABINET WIRE TO BUILDING GROUND.
- WIRE AND CONNECT EXISTING DISTRIBUTION TO NEW ELECTRICAL SERVICE. EXTEND, REROUTE WIRING AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING ELECTRICAL SERVICE ENTRANCE.
- WIRE AND CONNECT OWNERS EQUIPMENT AS PER MANUFACTURERS RECOMMENDATIONS. CONFIRM EXACT REQUIREMENTS ON SITE.
- WIRE AND CONNECT INDOOR UNIT TO OUTDOOR UNIT. REFER TO MECHANICAL.
- SEALABLE TO UTILITY'S SATISFACTION.



* SIZE CIRCUIT BREAKER AND WIRING ACCORDING TO THE FINAL NAMEPLATE RATING ON THE EQUIPMENT.

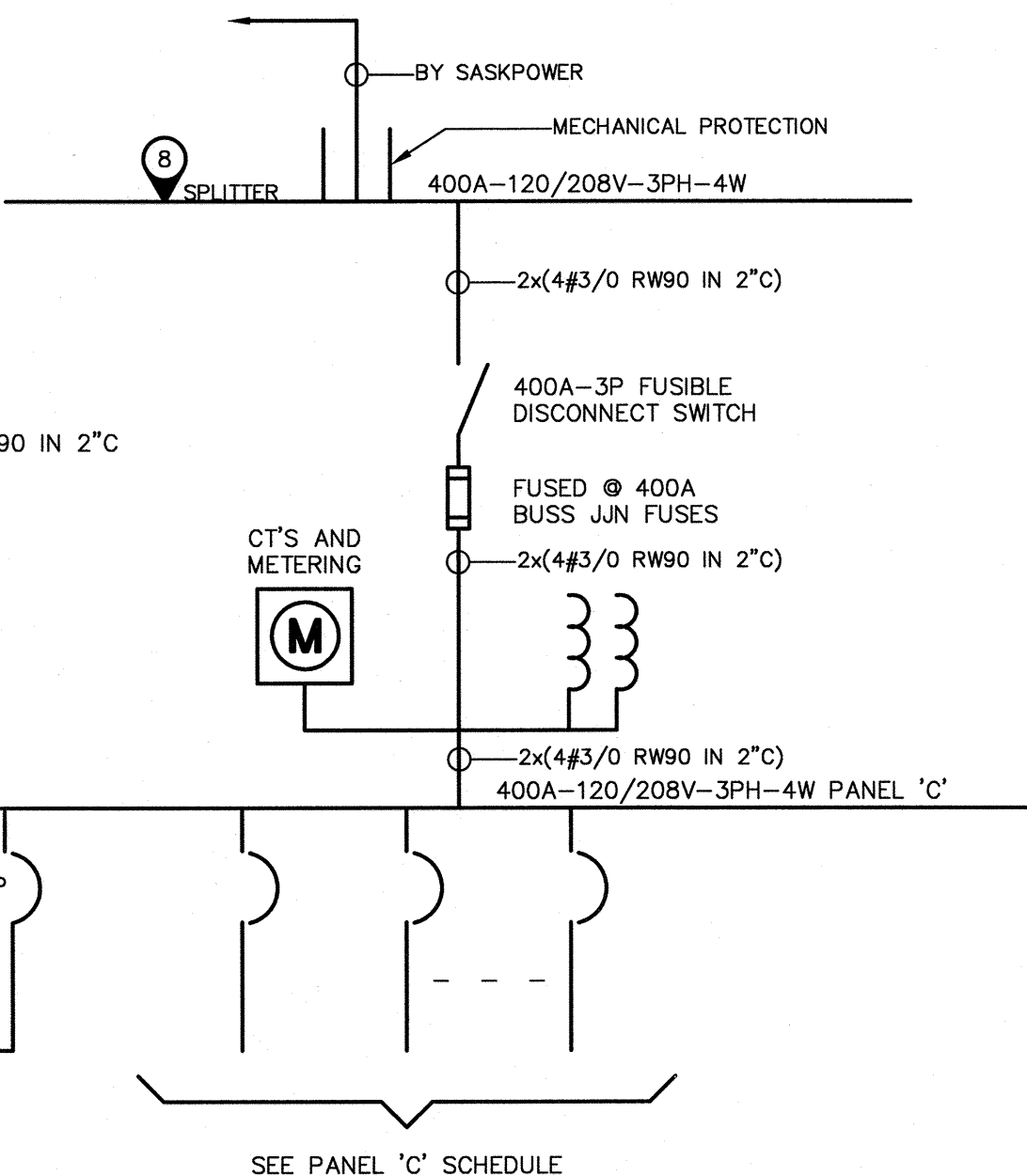
NOTE: DASHED INDICATES EXISTING.

WET AND HAZARDOUS LOCATION ELECTRICAL NOTES

- 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 1.
- ALL WIRING IN WET LOCATION TO BE IN COMPLIANCE WITH C.E.C. 22-002 CATEGORY 1.
- ALL LIGHTING TO BE LENSED. CONFIRM PRIOR TO ORDERING.

GENERAL ELECTRICAL NOTES

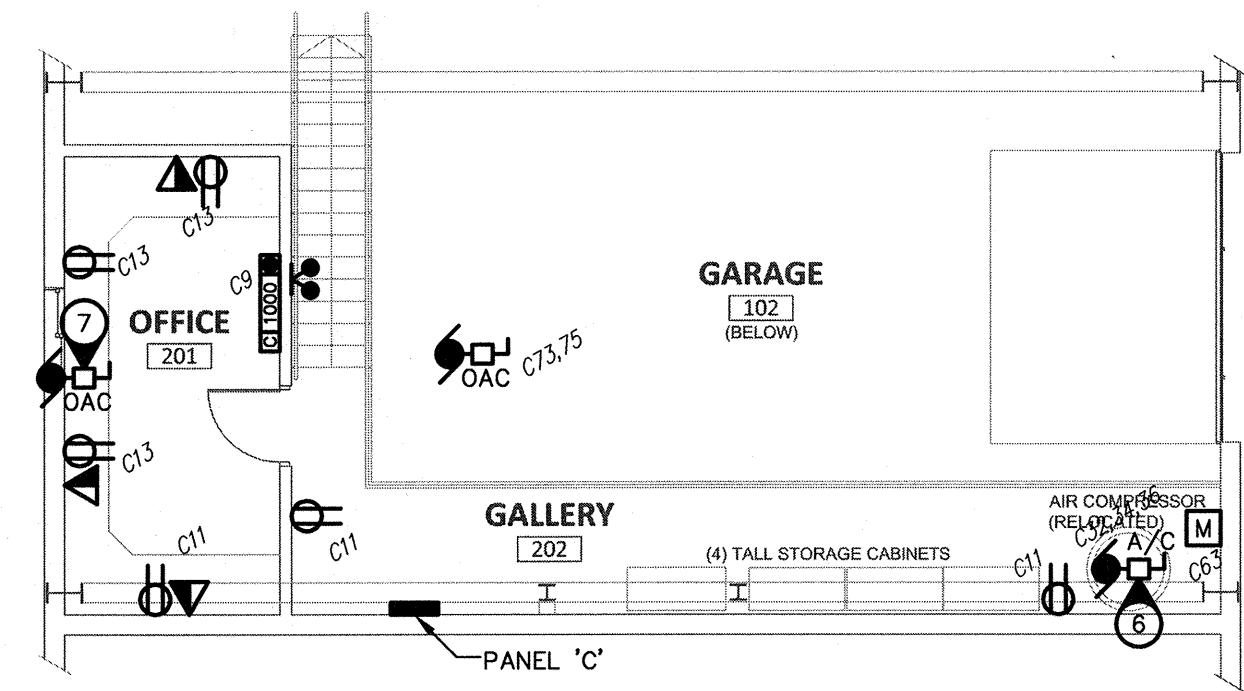
- SECURITY WIRING BY OWNER.



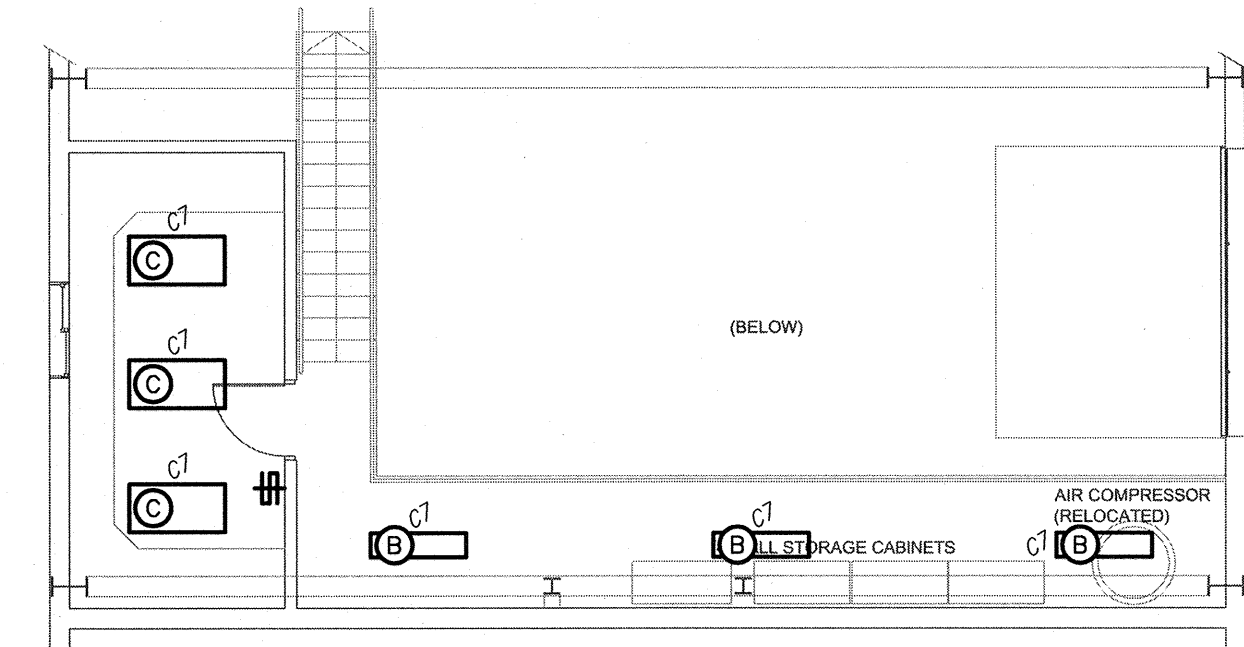
SINGLE LINE DIAGRAM

N.T.S

NOTE: DASHED INDICATES EXISTING.



3 MEZZANINE POWER AND SYSTEMS LAYOUT
E1.0 SCALE 1/8" = 1' 0"



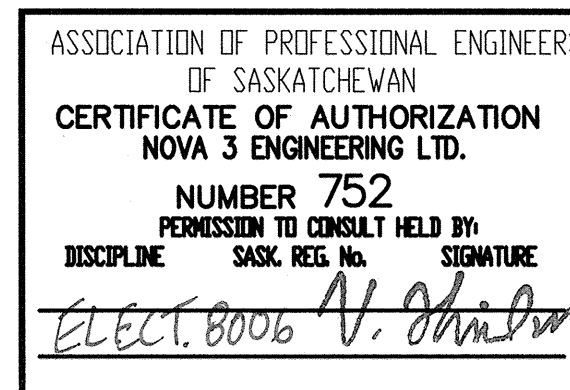
4 MEZZANINE LIGHTING LAYOUT
E1.0 SCALE 1/8" = 1' 0"

SYMBOL SCHEDULE

- Linear luminaire, 'B1-a' denotes panel circuit # and switch.
 - Night light luminaire.
 - Wall mounted luminaire. 'A' denotes type.
 - Single pole switch.
 - Single pole switches in multiple.
 - Photocell by electrical contractor.
 - Duplex receptacle.
 - Duplex receptacle on separate circuit. Provide lamacode label indicating "SC".
 - Duplex receptacle weather proof.
 - 30A-2P dryer receptacle, verify location.
 - Ground fault duplex receptacle.
 - 15A-2P split wired receptacle.
 - Combination voice/data outlet c/w cover plate. Run one(1) 3/4" conduit to accessible ceiling space or crawlspace.
 - Motor. Refer to mechanical for exact location. For roof mounted equipment, supply and install wire and connect a separate circuit (GF) receptacle in accordance with C.E.C. rule 26-704.
 - Disconnect switch to suit application. By electrical contractor.
 - Motorized damper control wiring by mechanical contractor, 120V power supply by electrical contractor.
 - Junction box.
 - Electric heater, "C" denotes type, see electric heating schedule. "1000" denotes watts.
 - denotes heater c/w built in thermostat. • denotes heater controlled by remote thermostat. Provide low voltage relays if required. Refer to mechanical for details.
 - LED Emergency double head fixture c/w two(2) 6W (540 lumen) LED heads. Wire to battery bank. Lumacell.
 - Combination LED pictogram egress sign/emergency double head fixture c/w two(2) 6W (540 lumen) LED lamps and integral battery backup (minimum 30 minutes). Lumacell.
 - Underground service point. Co-ordinate location with SaskPower prior to rough-in. Run main feeders to utility preferred location. Provide weatherproof customer service termination enclosure, protection shield, trenching, backfilling, etc. Obtain utility contribution charges from utility for owner.
- Note:
'E' indicates existing to remain.
'R' indicates existing electrical device relocated to new location indicated.

PANEL MOUNTING LOCATION	'C' SURFACE LOCATION	VOLTAGE MAIN BUS	120/208V-3PH-4W 400A C/W DOOR
DESCRIPTION	BKR	CIRCUIT	DESCRIPTION
EXTERIOR LIGHTING	15	1	20 DRILL *
LIGHTING	15	3	4
LIGHTING	15	5	6 15 BANDSAW *
LIGHTING	15	7	8 30 HOIST *
BASEBOARD HEATER	15	9	10 #10 WIRE
RECEPTACLES	15	11	12 50 PLASMA CUTTING STATION *
RECEPTACLES	15	13	14 #8 WIRE
RECEPTACLES	15	15	16 20 DRILL *
RECEPTACLES	15	17	18
SPLIT WIRED RECEPTACLE	15	19	20 30 LATHE *
SPLIT WIRED RECEPTACLE	15	21	22 #10 WIRE
SPLIT WIRED RECEPTACLE	15	23	24
SPLIT WIRED RECEPTACLE	15	25	26 15 MILLING MACHINE *
SPLIT WIRED RECEPTACLE	15	27	28
SPLIT WIRED RECEPTACLE	15	29	30
SC RECEPTACLE	15	31	32 30 AIR COMPRESSOR *
SC RECEPTACLE	15	33	34 #10 WIRE
SC RECEPTACLE	15	35	36
SC RECEPTACLE	15	37	38 15 HAUSSFELD BENDER *
SC RECEPTACLE	15	39	40
SC RECEPTACLE	15	41	42
SC RECEPTACLE	15	43	44 15 IRON FABRICATION TOOL *
WP GF RECEPTACLE	15	45	46
O/H DOOR *	15	47	48
O/H DOOR *	15	49	50 15 50T SHOP PRESS *
O/H DOOR *	15	51	52
O/H DOOR *	15	53	54
O/H DOOR *	15	55	56 15 GRINDER *
O/H DOOR *	15	57	58
O/H DOOR *	15	59	60 15 FILTER CRUSHER *
MD1	15	61	62
GD1	15	63	64 15 POWER WASHER (FUTURE) *
RH1	15	65	66
RH2	15	67	68 30 DRYER
RH3	15	69	70 #10 WIRE
OAC	15	71	72 15 SC RECEPTACLE
EF1	20	73	74 200 EXISTING SHOP DISTRIBUTION
EF2	20	75	76 4#3/0 R90 IN 2"C
#3 WIRE	20	77	78
SPARE	20	79	80 15 AS (x2)
SPARE	20	81	82 15 SPARE
SPARE	20	83	84 15 NIGHT LIGHTING/EMERGENCY LIGHTING
SPARE	20	85	86 - SPACE
SPARE	20	87	88 - SPACE
SPARE	20	89	90 - SPACE

* SIZE CIRCUIT BREAKER AND WIRING ACCORDING TO THE FINAL NAMEPLATE RATING ON THE EQUIPMENT.



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Issue Record:
YY.MM.DD/Issued For/Issued To/Issued By

Revisions:
R# Brief Description/YY.MM.DD/Revised By

ELECTRICAL - LIGHTING, POWER AND SYSTEMS

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Drawn By: EC Date: MAY 2015

Checked By: VJT Date: 2015.06.01

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E1.0

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