


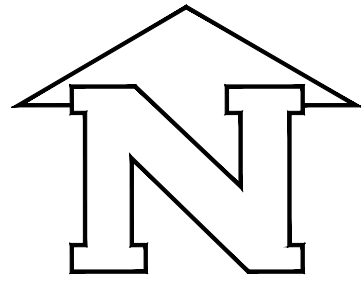


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MECHANICAL EQUIPMENT SCHEDULE																															
Q#	DESCRIPTION	EQUIPMENT LOCATION	LOAD			VOLTS	PHASE	UNIT			STARTER			DISC.			CONTROL					SUPPLY PANEL					WIRE & CONDUIT			NOTE	
			MCA	KW	HP			SUPPLY	MOUNT	CONNECT	SUPPLY	MOUNT	CONNECT	TYPE	SUPPLY	MOUNT	CONNECT	TYPE	FIRE ALARM	PANEL #	PANEL LOCATION	BREAKER			WIRE SIZE	NO.	CONDUIT SIZE (mm)				
																						AMPS	P	CCT NO'S							
P-1	BRINE PUMP	COMPRESSOR ROOM	-	-	40.0	480	3	M	M	E	M	M	E	VFD	E	E	E	M	M	E	VFD	-	MCC-1	-	100	3	-	4	3	35	-
P-5	UNDERFLOOR PUMP	COMPRESSOR ROOM	-	-	10.0	480	3	M	M	E	M	M	E	VFD	E	E	E	M	M	E	VFD	-	MCC-2	-	20	3	-	12	3	21	-
P-6	SNOW MELT PIT PUMP	-	-	-	2.0	480	3	M	M	E	M	M	E	VFD	E	E	E	M	M	E	VFD	-	MCC-3	-	15	3	-	12	3	21	-
GT-1	GLYCOL FEED TANK	COMPRESSOR ROOM	-	-	FR	120	1	M	M	E	E	E	E	HOA	E	E	E	M	M	-	-	-	-	-	15	1	-	12	2	21	3
UF-1	UNDERFLOOR HEATING	COMPRESSOR ROOM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
LEGEND															NOTES																
M = DENOTES BY MECHANICAL CONTRACTOR															1. ALL VARIABLE SPEED DRIVES TO HAVE A DEDICATED COPPER GROUND CONDUCTOR SIZED TO MATCH PHASE CONDUCTOR.																
E = DENOTES BY ELECTRICAL CONTRACTOR															2. CONFIRM FINAL MECHANICAL EQUIPMENT REQUIREMENTS WITH MECHANICAL CONTRACTORS SHOP DRAWINGS AND ADJUST CIRCUIT WIRING AND BREAKER RATING IF REQUIRED AT NO ADDITIONAL COST.																
HOA = MAGNETIC STARTER WITH HAND-OFF-AUTO SELECTOR															3. PROVIDE 120V POWER CONNECTION FROM SUITABLE LOCAL SOURCE WITH AVAILABLE SPACE FOR DEDICATED BREAKER.																
VFD = VARIABLE FREQUENCY DRIVE															4. EXISTING EQUIPMENT TO BE REMOVED.																

ELECTRICAL SYMBOL LEGEND	
ABBREVIATIONS	
NOTE	EQUIPMENT SHOWN DOTTED IS EXISTING AND TO REMAIN UNLESS INDICATED OTHERWISE
R	EXISTING DEVICE TO BE REMOVED
RR	EXISTING DEVICE TO BE REMOVED AND RELOCATED
RE	EXISTING DEVICE IN NEW RELOCATED POSITION
WP	DENOTES WEATHER PROOF DEVICE
POWER	
	MECHANICAL EQUIPMENT CONNECTION
	MECHANICAL MOTOR CONNECTION
	DISCONNECT SWITCH



PROJECT NORTH

PRODUCTION DRAWINGS BY:



1	ISSUED FOR TENDER	11/21/2025
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REV	DESCRIPTION	DATE
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PROJECT NAME:
Archie Browning Sports
Centre - Refrigeration
Upgrade

1151 Esquimalt Rd
Victoria, BC

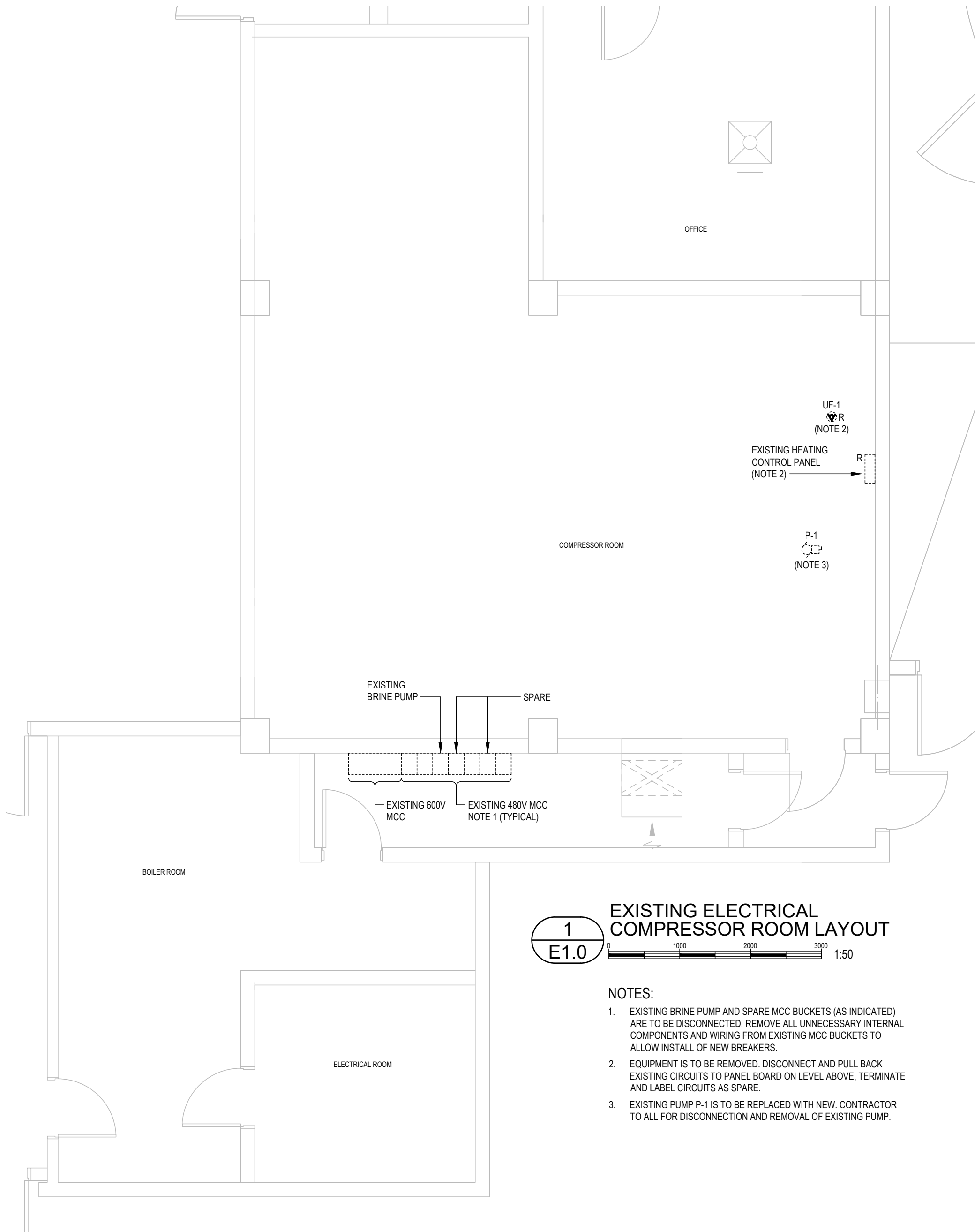
DRAWING TITLE:

EXISTING AND REVISED
ELECTRICAL LAYOUT
AND DETAILS

DATE:	NOVEMBER 2025
SCALE:	AS NOTED
DRAWN BY:	LS
CHECKED BY:	JH
JOB NUMBER:	0126.0020

DRAWING NUMBER:

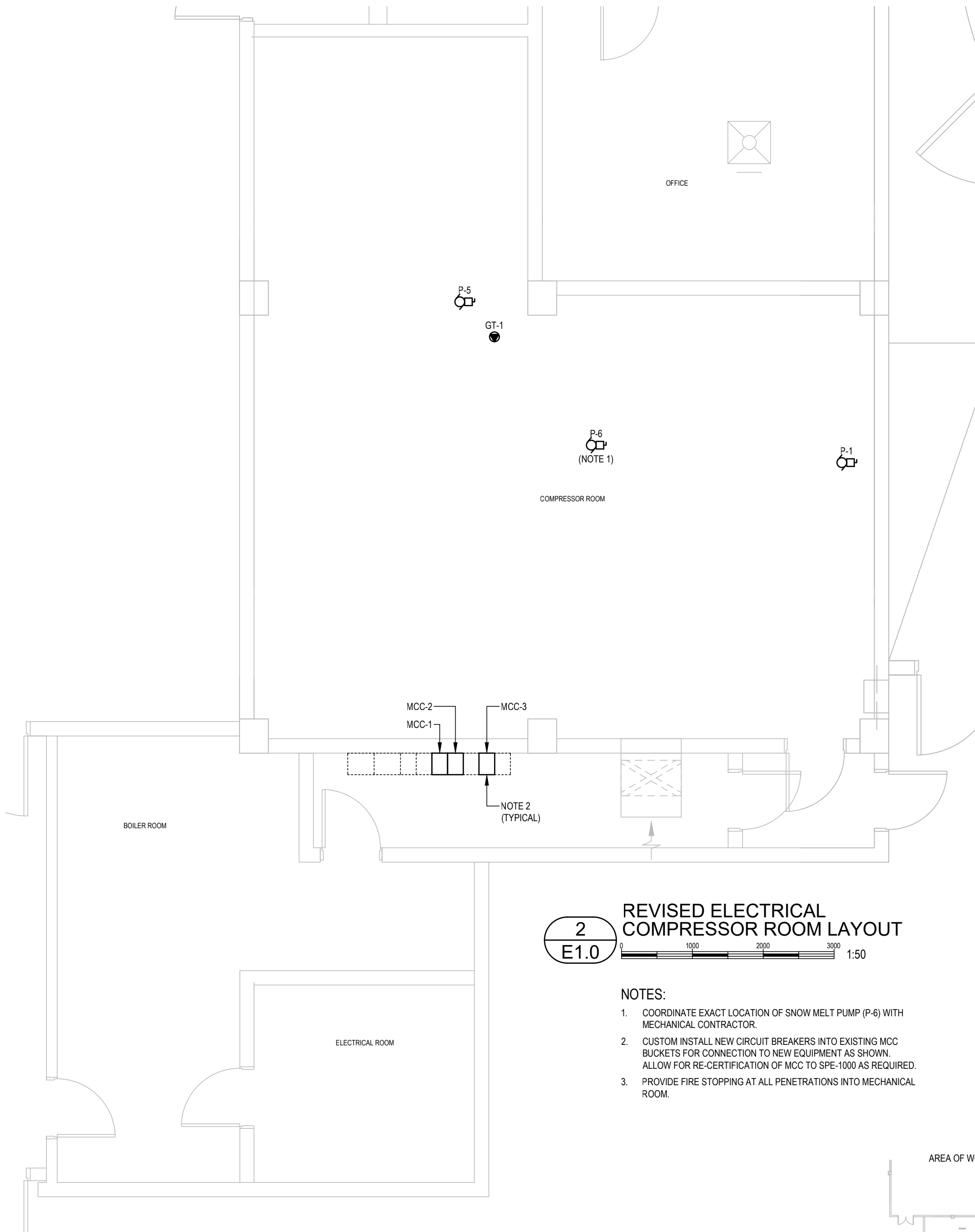
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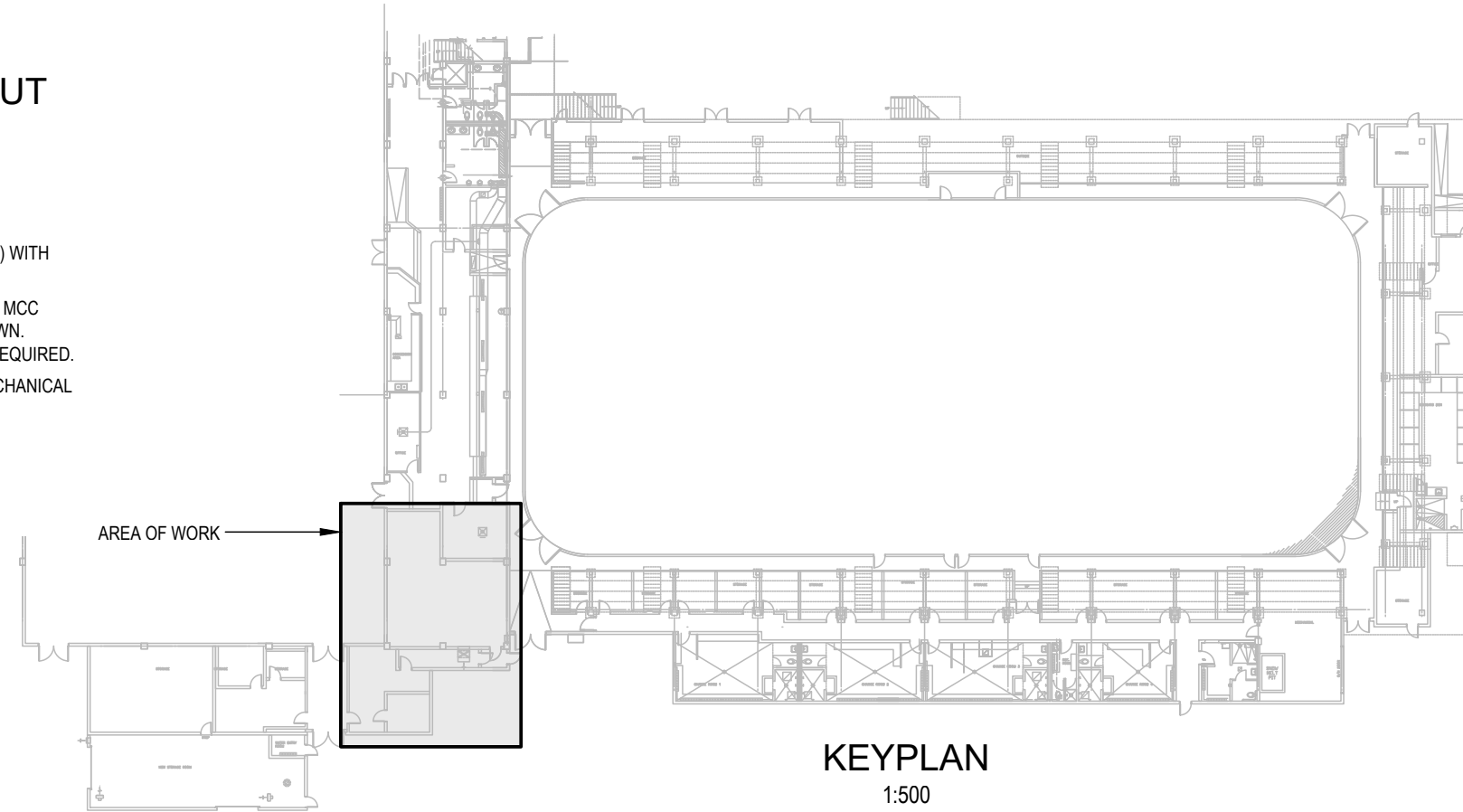
- EXISTING BRINE PUMP AND SPARE MCC BUCKETS (AS INDICATED) ARE TO BE DISCONNECTED. REMOVE ALL UNNECESSARY INTERNAL COMPONENTS AND WIRING FROM EXISTING MCC BUCKETS TO ALLOW INSTALL OF NEW BREAKERS.
- EQUIPMENT IS TO BE REMOVED. DISCONNECT AND PULL BACK EXISTING CIRCUITS TO PANEL BOARD ON LEVEL ABOVE. TERMINATE AND LABEL CIRCUITS AS SPARE.
- EXISTING PUMP P-1 IS TO BE REPLACED WITH NEW. CONTRACTOR TO ALL FOR DISCONNECTION AND REMOVAL OF EXISTING PUMP.



2
E1.0

NOTES:

- COORDINATE EXACT LOCATION OF SNOW MELT PUMP (P-6) WITH MECHANICAL CONTRACTOR.
- CUSTOM INSTALL NEW CIRCUIT BREAKERS INTO EXISTING MCC BUCKETS FOR CONNECTION TO NEW EQUIPMENT AS SHOWN. ALLOW FOR RE-CERTIFICATION OF MCC TO SPE-1000 AS REQUIRED.
- PROVIDE FIRE STOPPING AT ALL PENETRATIONS INTO MECHANICAL ROOM.



KEYPLAN
1:500

GENERAL REQUIREMENTS, INSTRUCTIONS TO BIDDERS, THIS SPECIFICATION AND ANY ADDENDA HERETO FORM PART OF THE CONTRACT DOCUMENTS. ALL SHALL BE READ IN CONJUNCTION WITH THEIR WORK TO INCLUDE THE FURNISHING OF ALL LABOR AND MATERIALS. UNLESS SPECIFIED OTHERWISE, TO COMPLETE AND PUT INTO OPERATING CONDITION ALL ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.

IF IT IS THE INTENT OF THE WORK TO PROVIDE COMPLETE, NEATLY FINISHED, AND OPERATIONAL SYSTEMS AND ANY LABOR, MATERIAL, PERMITS, LICENSES, APPROVALS AND INSPECTIONS REQUIRED FOR COMPLETION OF THE WORK, WHETHER SPECIFICALLY MENTIONED IN THE DRAWINGS OR SPECIFICATIONS OR NOT, ARE TO BE INCLUDED IN THE TENDERED PRICE.

RESPONSIBILITY AS TO WHICH TRADE PROVIDES REQUIRED ARTICLES OR MATERIALS RESTS SOLELY WITH THE GENERAL CONTRACTOR. EXTRAS WILL NOT BE CONSIDERED BASED ON GROUNDS OF DIFFERENCE OF INTERPRETATION OF SPECIFICATIONS AS TO WHICH TRADE INVOLVED SHALL PROVIDE CERTAIN SPECIALTIES OR MATERIALS.

THE DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE WORKS, INCLUDING ALL OF THOSE RELATED TO OTHER TRADES ARE TO BE EXAMINED BEFORE SUBMITTING TENDERS. ALL ELECTRICAL AND COMMUNICATIONS REQUIREMENTS INDICATED ARE TO BE INCLUDED IN THE SCOPE OF THE WORK.

CLEAN UP AND REMOVE ALL EXISTING WIRING AND CONDUITS.

REMOVE AND REINSTALL UNUSED DEVICES TO FACILITATE CONSTRUCTION AS REQUIRED.

CONFIRM OUTLET LOCATIONS AND MOUNTING HEIGHT WITH PROJECT COORDINATOR ON SITE PRIOR TO INSTALLATION.

APPLICABLE CODES AND STANDARDS

1. CANADIAN ELECTRICAL CODE - 2024 EDITION
2. BC BUILDING CODE - 2024 EDITION

DRAWINGS AND SPECIFICATIONS

DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO EACH OTHER AND WHAT IS CALLED FOR BY ONE IS TO BE BINDING AS IF CALLED FOR BY BOTH.

SHOULD ANY DISCREPANCY APPEAR BETWEEN DRAWINGS AND SPECIFICATIONS THAT LEAVES THE ELECTRICAL TRADE IN DOUBT AS TO TRUE INTENT AND MEANING, OBTAIN RULING FROM THE ENGINEER BEFORE SUBMITTING TENDER, OR ALLOW FOR THE MOST EXPENSIVE ALTERNATIVE.

EXAMINATION OF OTHER DRAWINGS

THE ELECTRICAL CONTRACTOR IS TO EXAMINE CAREFULLY STRUCTURAL, ARCHITECTURAL, AND MECHANICAL DRAWINGS, AND THE WORK OF OTHER TRADES AND ENSURE THAT THE WORK UNDER THIS CONTRACT CAN BE SATISFACTORILY CARRIED OUT WITHOUT CHANGES TO THE BUILDING AS SHOWN ON THE PLANS. SHOULD ANY DIFFICULTY ARISE SHOWING CONFLICT WITH, OR REQUIRING ADDITIONAL WORK BEYOND THE WORK OF THESE DRAWINGS, BRING THIS MATTER TO THE ATTENTION OF THE ENGINEER BEFORE SUBMITTING TENDER.

UNIFORMITY OF EQUIPMENT

UNLESS OTHERWISE SPECIFIED, UNIFORMITY OF MANUFACTURE IS TO BE MAINTAINED FOR ANY PARTICULAR ITEM THROUGHOUT.

STANDARDS OF MATERIAL AND WORK

ALL MATERIALS ARE TO BE NEW AND OF THE QUALITY SPECIFIED, AND SHALL BE APPROVED BY CSA OR EQUIVALENT AGENCY RECOGNIZED IN BRITISH COLUMBIA.

ALL WORK SHALL BE EXECUTED IN A NEAT AND TIDY MANNER BY QUALIFIED TRADESPEOPLE. THE ELECTRICAL CONTRACTOR SHALL KEEP A COMPETENT FOREPERSON AND NECESSARY ASSISTANTS ON THE SITE DURING THE PROGRESS OF THE WORK.

ALL MATERIAL AND INSTALLATION SHALL MATCH BUILDING STANDARD UNLESS IT IS NOTED OTHERWISE ON THE DRAWINGS.

RECORD PLANS

THE ENGINEER WILL FURNISH TO THE ELECTRICAL TRADE ONE SET OF DRAWINGS TO BE USED FOR RECORD PURPOSES. THE ELECTRICAL TRADE IS TO ACCURATELY RECORD ON THESE PRINTS ALL REVISIONS TO THE ORIGINAL PLANS THAT ARE MADE ON SITE DURING CONSTRUCTION.

ARRANGE AND PAY FOR THE RE-DRAWING OF THE ELECTRICAL TENDER PACKAGE INCLUDING ALL ADDENDA, COMMENTS AND SITE INSTRUCTION DURING BIDDING AND CONSTRUCTION. CONTRACTOR TO INCORPORATE ANY "AS-BUILT" CHANGES TO REPRODUCIBLE PLANS AND ISSUE THEM AS "RECORD DRAWINGS". THESE CHANGES SHALL BE OF A SIMILAR QUALITY OF PRESENTATION AS THE ORIGINAL PLANS. UPON COMPLETION A SET OF "PDF'S AND BOUND" DWG FILES ARE TO BE INCLUDED ON DISK OR USB DRIVE FOR FINAL SUBMISSION. NOTE: ALL PLANS WHETHER REQUIRING AS-BUILT CHANGES OR NOT, SHALL BE INCLUDED IN THIS SET.

SHOULD THE CONTRACTOR REQUIRE THE ELECTRICAL CONSULTANT TO PREPARE THE "RECORD DRAWINGS", THE COST WOULD BE \$350 PER SHEET, UNLESS MINIMAL CHANGES HAVE BEEN ACCRUED. A QUOTE FOR REVIEWING RECORD DRAWINGS COST MAY BE REQUESTED.

UPDATE COSTS FOR THE REVIT MODEL WILL BE DETERMINED BASED ON THE EXTENT OF THE WORK REQUIRED. CONTRACTOR TO CONFIRM THIS COST WITH THE CONSULTANT. REVIT RECORD DRAWINGS ARE TO BE SAVED IN "DWG FORMAT" UPON COMPLETION A SET OF "PDF'S, BOUND" DWG FILES AND A COPY OF THE REVIT FILE (WITH VERSION NOTED) ARE TO BE INCLUDED ON DISK OR USB DRIVE FOR FINAL SUBMISSION.

SHOP DRAWINGS

THE ELECTRICAL CONTRACTOR IS TO SUBMIT TO THE ENGINEER, FOR REVIEW, SHOP DRAWINGS OF MAJOR ELECTRICAL EQUIPMENT. SUCH EQUIPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO SWITCHGEAR, PANELBOARDS, SERIES-RATED BREAKER COMBINATIONS, FIXTURES AND FITTINGS NOT PROVIDED BY THE OWNER.

ALL DRAWINGS ARE TO BE SUBMITTED IN TRUE DIGITAL PDF FORMAT (NO SCANS) AND A REVISED COPY WILL BE RETURNED TO THE COORDINATING PROFESSIONS FOR DISTRIBUTION TO THE ELECTRICAL TRADE.

THE ENGINEER'S REVIEW OF SHOP DRAWINGS IS TO BE FOR GENERAL DESIGN ONLY AND WILL NOT RELIEVE THE ELECTRICAL TRADE OR SUPPLIERS FROM RESPONSIBILITY FOR ERRORS, PROPER FITTING, CONSTRUCTION OF WORK, AND FURNISHING OF MATERIALS. REVIEW WILL NOT BE CONSTRUED AS APPROVING DEPARTURES FROM CONTRACT DOCUMENT REQUIREMENTS IF SUCH DEPARTURES ARE NOT SPECIFICALLY NOTED. THE ELECTRICAL TRADE IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS.

PROVIDE SHOP DRAWINGS FOR THE FOLLOWING ELECTRICAL EQUIPMENTS:

1. POWER DISTRIBUTION EQUIPMENT
2. WIRING DEVICES
3. FIRE STOPPING SYSTEM

GARANTEEEE WARRANTY

THE ELECTRICAL TRADE SHALL FURNISH A WRITTEN GUARANTEE WARRANTY, SIGNED BY AUTHORIZED PERSONNEL, STATING:

1. THAT ALL WORK EXECUTED UNDER THIS CONTRACT WILL BE FREE FROM DEFECTS OF MATERIAL AND WORK FOR A PERIOD OF 1 YEAR FROM DATE OF FINAL ACCEPTANCE.
2. THE ABOVE PARTIES FURTHER AGREE TO, AT THEIR OWN EXPENSE, REPAIR AND REPLACE ALL SUCH DEFECTIVE WORK, AND OTHER WORK MANAGED THEREBY, WHICH FAILS OR BECOMES DEFECTIVE DURING THE TERM OF THE GUARANTEE WARRANTY PROVIDED THAT SUCH FAILURE IS NOT DUE TO IMPROPER USAGE.
3. THE PERIOD OF THE GUARANTEE SPECIFIED WILL IN NO WAY SUPPLANT ANY OTHER GUARANTEE OF A LONGER PERIOD BUT BE BINDING ON WORK NOT OTHERWISE COVERED.

OPERATING AND MAINTENANCE MANUALS

SUBMIT THREE (3) SETS OF OPERATING AND MAINTENANCE MANUALS FOR ELECTRICAL SYSTEMS PROVIDED IN THIS CONTRACT. INCLUDE DESCRIPTIVE AND TECHNICAL DATA, ALL SHOP DRAWINGS, OPERATING PROCEDURES, ROUTINE AND PREVENTATIVE MAINTENANCE, WIRING DIAGRAMS, SPARE PARTS LIST, WARRANTIES, SERVICE COMPANIES, SUPPLIERS OF REPLACEMENT PARTS, TEST RESULTS, FIRE ALARM CERTIFICATE OF VERIFICATION, ELECTRICAL INSPECTION AUTHORITY CERTIFICATE, CONTRACT GUARANTEE, PROJECT PERSONNEL CONTACT LIST, COMMISSIONING TEST REPORTS AND PRODUCT SUPPORT CONTACT INFORMATION.

SUBMIT DOCUMENTATION IN GREEN COLOURED HEAVY DUTY THREE RING BINDERS, WITH LETTERING ON SPINE IDENTIFYING "OPERATING AND MAINTENANCE MANUAL". PROJECT TITLE AND SYSTEM NAMES AND ALSO SUBMIT ONE DIGITAL COPY ON A USB DRIVE AS PART OF PROJECT CLOSE-OUT.

SUBMIT ONE COPY FOR APPROVAL BY CONSULTANT PRIOR TO ASSEMBLY OF FINAL SETS.

SETTING OUT OF THE WORK

THE ELECTRICAL TRADE IS RESPONSIBLE FOR CORRECTING ALL WORK COMPLETED CONTRARY TO THE INTENT OF DRAWINGS AND SPECIFICATIONS AND SHALL BEAR ALL COSTS INVOLVED IN MAKING THE CORRECTIONS. WHERE INTENT OF DRAWINGS AND SPECIFICATIONS IS NOT CLEAR, OBTAIN CLARIFICATION FROM THE ENGINEER BEFORE PROCEEDING WITH WORK.

THE ELECTRICAL TRADE IS TO GIVE WORK THEIR PERSONAL SUPERVISION, LAY OUT THEIR OWN WORK. DO ALL NECESSARY LEVELING AND MEASURING OR EMPLOY A COMPETENT ENGINEER TO DO SO. FIGURES, FULL SIZE AND DETAIL DRAWINGS TO TAKE PRECEDENCE OVER SCALE MEASUREMENTS.

THE ELECTRICAL TRADE SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE OWNER OR ANY OTHER TRADE BY IMPROPER LOCATION OR CARRYING OUT OF THEIR WORK.

THE ELECTRICAL TRADE, IN THE SETTING OUT OF THEIR WORK, IS TO MAKE REFERENCE TO ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS. THEY SHALL CONSULT WITH ALL RELEVANT TRADES IN SETTING OUT LOCATIONS FOR CONDUIT RUNS, LIGHTING FIXTURES, PANEL ASSEMBLIES, AND ALL OTHER ELECTRICAL EQUIPMENT, SO THAT CONFLICTS ARE AVOIDED AND SYMMETRICAL SPACING IS MAINTAINED.

THE ELECTRICAL TRADE SHALL CONFIRM OUTLET LOCATIONS AND MOUNTING HEIGHTS WITH THE PROJECT COORDINATOR ON SITE PRIOR TO INSTALLATION.

WHERE RECEPTACLES ARE MOUNTED ABOVE COUNTERS, BENCHES, SPLASHBACKS, OR OTHER FIXTURES, THEIR LOCATIONS AND MOUNTING HEIGHTS ARE TO BE COORDINATED WITH THE BUILT-IN UNITS. REFER TO ARCHITECTURAL DETAILS. WHERE RECEPTACLES OCCUR IN OUTSIDE WALLS WHERE HEATING UNITS ALSO OCCUR, RECEPTACLE HEIGHT IS TO BE ADJUSTED TO COORDINATE WITH THE HEATING UNITS.

SWITCH MOUNTING HEIGHTS ARE TO BE COORDINATED WITH ARCHITECTURAL DETAILS AND SHALL BE ADJUSTED, IF REQUIRED, TO COORDINATE WITH PANELING, DADOS, MASONRY COURSE LINES, OR OTHER RELEVANT BUILDING FEATURES.

WHERE OUTLET BOXES OCCUR IN EXTERIOR WALLS, THE ELECTRICAL TRADE IS TO ENSURE THAT THERE IS INSULATION BEHIND THE OUTLET BOXES TO PREVENT CONDENSATION THROUGH THE BOXES.

ALLOW FOR WORK AFTER HOURS AS REQUIRED AND COORDINATE WITH OWNERTENANTS IF APPLICABLE.

CONTRACTOR TO COORDINATE ANY INTERRUPTIONS TO ADJOINING TENANTS IN ORDER TO AVOID ANY INCONVENIENCES TO SAID TENANT. IF NECESSARY CONTRACTOR TO DO ANY REQUIRED CONNECTIONS ON OFF HOURS.

11.	EXAMINATION OF THE SITE
1.	PRIOR TO SUBMITTING TENURE, THE ELECTRICAL TRADE SHALL CAREFULLY EXAMINE THE SITE AND ASCERTAIN ALL CONDITIONS WHICH MAY AFFECT THEIR TRADE. NO ADDITIONAL MONEY WILL BE ALLOWED FOR WORK RESULTING FROM CONDITIONS THAT SHOULD HAVE BEEN NOTICED AND ACCOUNTED FOR DURING A THOROUGH EXAMINATION OF THE SITE.
12.	CUTTING AND PATCHING
1.	THE GENERAL TRADE WILL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR ELECTRICAL INSTALLATION. STRUCTURAL MEMBERS MUST NOT BE CUT WITHOUT CONSENT OF THE ENGINEER.
2.	WHERE WORK DONE BY THE ELECTRICAL TRADE DAMAGES THE WORK OF OTHER TRADES, THE ELECTRICAL TRADE SHALL REPAIR AND MAKE GOOD SUCH DAMAGE TO THE SATISFACTION OF EACH TRADE CONCERNED AND THE ENGINEER.
3.	ALL PENETRATIONS SHALL BE SEALED WITH AN APPROVED FIRE STOP SYSTEM WITH APPROVED FIRE STOP MATERIALS LISTED BY THE SYSTEM SPECIFICALLY EMPLOYED ON THE PROJECT.
13.	CLEANUP
1.	THE ELECTRICAL TRADE AND THEIR SUBTRADES ARE TO KEEP THE SITE FREE DURING CONSTRUCTION OF DEBRIS, BOXES, PACKING, AND OTHER MATERIALS ASSOCIATED WITH THE WORK OF THIS TRADE. ALL WASTE MATERIAL IS TO BE DISPOSED OF IN A SAFE AND ENVIRONMENTALLY RESPONSIBLE MANNER.
2.	UPON COMPLETION OF WORK, THE ELECTRICAL INSTALLATION SHALL BE LEFT IN A CLEAN AND FINISHED CONDITION TO THE SATISFACTION OF THE ENGINEER.
14.	ACCESS DOORS
1.	THE ELECTRICAL TRADE IS TO SUPPLY AND INSTALL RATED ACCESS DOORS AS REQUIRED FOR PROPER SERVICING OF ALL ELECTRICAL WORK. ACCESS DOORS SHALL BE COMPLETE WITH NECESSARY FRAMES AND HINGED DOORS LEFT CLOSED WITH CAPTIVE STUDS. ACCESS PANEL TO BE OF NOT LESS THAN 14 GAUGE STEEL, PRIME COAT FINISHED AND PAINTED ON THE JOB TO MATCH THE WALL OR CEILING FINISH.
2.	THE NUMBER OF ACCESS DOORS SHALL BE KEPT TO A MINIMUM.
3.	THE ELECTRICAL TRADE SHALL PROVIDE ACCESS PANELS IN THE DRYWALL CEILINGS FOR ALL ELECTRICAL JUNCTION BOXES AND EQUIPMENT IN ACCORDANCE WITH APPLICABLE CODES.
15.	CODES, PERMITS AND INSPECTION
1.	THE ENTIRE INSTALLATION, INCLUSIVE OF MATERIAL AND LABOR, IS TO COMPLY WITH ALL THE REQUIREMENTS OF ALL BUILDING CODES AND AUTHORITIES HAVING JURISDICTION, THE CANADIAN ELECTRICAL CODE, AND REGULATIONS OF THE LOCAL INSPECTION DEPARTMENT.
2.	THE ELECTRICAL TRADE IS TO OBTAIN ALL PERMITS REQUIRED FOR EACH STAGE OF WORK, AND AFTER COMPLETION OF THE ENTIRE INSTALLATION FURNISH TO THE ENGINEER A CERTIFICATE OF FINAL INSPECTION AND APPROVAL FROM THE ELECTRICAL INSPECTION DEPARTMENT.
16.	MECHANICAL EQUIPMENT AND EQUIPMENT SUPPLIED BY OTHERS
1.	UNLESS SPECIFIED OTHERWISE, THE ELECTRICAL CONTRACTOR IS TO SUPPLY AND INSTALL ALL REQUIRED CONDUIT, WIRING, ELECTRICAL FITTINGS AND CONNECTIONS FOR ALL MOTORS AND OTHER MECHANICAL EQUIPMENT, EVEN THOUGH SUCH MOTORS AND OTHER MECHANICAL EQUIPMENT MAY BE SUPPLIED BY OTHERS, WHERE REQUIRED BY THE DRAWINGS OR APPLICABLE REGULATIONS. DISCONNECT SWITCHES, STARTERS, OVERLOAD RELAYS AND OTHER NECESSARY PROTECTIVE DEVICES ARE TO BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. MOTORS AND CONTROLS SHALL BE FURNISHED BY THE SUPPLIER OF THE DRIVEN EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL INCLUDE ALL WORK AND CONNECTIONS REQUIRED TO MAKE THE SYSTEM COMPLETE AND OPERATIONAL. EQUIPMENT SUPPLIED BY OTHERS SHALL BE APPROVED AND BEAR LABEL MEETING THE REQUIREMENTS OF THE CANADIAN ELECTRICAL CODE FOR THE USE IN CANADA OR AS REQUIRED BY LOCAL AUTHORITY FOR PROJECTS OUTSIDE OF CANADA.
2.	EQUIPMENT SUPPLIED BY OTHERS MAY INCLUDE BUT NOT BE LIMITED TO SUCH ITEMS AS GRILLE MOTORS AND INTERLOCKS, STOREFRONT AND INTERIOR SIGNAGE, STARTING DEVICES, MOTOR CONTROLLERS, FLOAT SWITCHES, ALARM DEVICES OR SYSTEMS, PUSH BUTTONS, EXHAUST FANS, DATA SYSTEMS, INTERCOMS AND STEREO SYSTEMS.
3.	THE ELECTRICAL CONTRACTOR IS TO CONFIRM MOTOR (OR OTHER EQUIPMENT) LOCATION AND SIZES WITH THE TRADE SUPPLYING THE MOTOR (OR OTHER EQUIPMENT) BEFORE COMMENCING ANY ASSOCIATED ELECTRICAL WORK.
4.	WHETHER INDICATED ON THE DRAWINGS OR NOT, ALL MECHANICAL EQUIPMENT IS TO HAVE A MINIMUM SHORT CIRCUIT CURRENT RATING (SCCR) TO MATCH THE PANEL TO WHICH IT IS CONNECTED.
5.	CONFIRM REQUIREMENTS FOR MECHANICAL EQUIPMENT WITH MECHANICAL TRADE PRIOR TO ROUGH-IN. ADJUST BREAKER SIZES, FEEDER SIZES, DISCONNECTS AND STARTERS WHERE APPLICABLE, AT NO ADDITIONAL COST.
17.	TESTS
1.	ALL PORTIONS OF ELECTRICAL WORK ARE TO BE TESTED FOR SATISFACTORY OPERATION.
2.	BEFORE ENERGIZING ANY PORTION OF THE ELECTRICAL SYSTEM, THE ELECTRICAL TRADE SHALL PERFORM MEGGER TESTS ON ALL FEEDERS AND BRANCH CIRCUITS. ANY PROBLEMS DISCOVERED BY SUCH TESTING ARE TO BE CORRECTED BY THE ELECTRICAL TRADE AND THE CIRCUITS IN QUESTION RETESTED. THE RESULTS OF ALL FINAL TESTING SHALL BE PROVIDED TO THE ENGINEER IN REPORT FORM.
3.	UPON PROJECT COMPLETION, AND IMMEDIATELY PRIOR TO FINAL INSPECTION AND TAKEOVER, THE ELECTRICAL TRADE SHALL CHECK THE LOAD BALANCE ON ALL FEEDERS AND AT DISTRIBUTION CENTRES, LOAD CENTRES, AND PANELS. THESE CHECKS ARE TO BE CARRIED OUT BY TURNING ON ALL LOADS AND CHECKING LOAD CURRENT BALANCE. IF LOAD UNBALANCE EXCEEDS 15%, THE CIRCUITS ARE TO BE RECONFIGURED AS NECESSARY TO BALANCE THE LOADS.
18.	PAINING AND FINISHES
1.	ALL ELECTRICAL FITTINGS, SUPPORTS, HANGER RODS, PULLBOXES, CHANNEL FRAMES, CONDUIT RACKS, OUTLET BOXES, BRACKETS, AND CLAMPS ARE TO HAVE A GALVANIZED FINISH OR A PAINT FINISH OVER CORROSION-RESISTANT PRIMER.
2.	ALL PANELS ARE TO BE FACTORY-FINISHED WITH SPRAY-ON AIR DRY ENAMEL. ALL ENAMEL TO BE APPLIED OVER CORROSION-RESISTANT PRIMER. MATTE OR FLAT TYPE FINISH PAINT WILL NOT BE ACCEPTED. ALL PANELS OR SIMILAR FACTORY-FINISHED UNITS THAT ARE SCRATCHED OR MARKED DURING INSTALLATION ARE TO BE TOUCHED UP WITH MATCHING SPRAY-ON AIR DRY LAQUER AND, IF REQUIRED TO PROVIDE A SATISFACTORY JOB, TO BE COMPLETELY REFINISHED.
3.	ALL 120/208V PANELBOARDS, PULLBOXES, AND OTHER ELECTRICAL CABINETS AND BOXES ARE TO BE FINISHED IN GREY ENAMEL.
19.	CONDUIT AND EMT
1.	WHERE REQUIRED BY THE CANADIAN ELECTRICAL CODE, ALL WIRE AND CABLE IS TO BE INSTALLED IN CONDUIT OR EMT. WHERE APPROVED BY THE OWNER AND ENGINEER, AC90 OR TEC90 MAY BE USED.
2.	UNLESS OTHERWISE NOTED, CONDUIT AND EMT ARE TO BE CONCEALED IN ALL FINISHED AREAS. IN SERVICE AREAS, CONDUIT AND EMT SHALL BE RUN ON SURFACE UNLESS INDICATED OTHERWISE.
3.	SURFACE MOUNTED CONDUIT AND EMT ARE TO BE INSTALLED PARALLEL TO STRUCTURAL LINES, AND, WHERE BENDS OCCUR IN PARALLEL RUNS, THEY SHALL BE CONCENTRIC.
4.	RACEWAYS ARE TO BE INSTALLED FREE FROM DENTS AND BRUISES AND SHALL HAVE THEIR ENDS CAPPED, PLUGGED, OR SEALED AS NECESSARY TO PREVENT ENTRANCE OF DIRT OR MOISTURE.
5.	IN ALL AREAS SUBJECT TO MOISTURE, RAIN TIGHT FITTINGS MUST BE USED.
6.	ALL RACEWAY, EXCEPT WHERE OTHERWISE INDICATED, SHALL BE SIZED IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. MINIMUM CONDUIT SIZE TO BE 21mm.
7.	TEC90 OR SEAL TIGHT FLEXIBLE CONDUIT IS TO BE UTILIZED FOR CONNECTIONS TO MOTORS AND MOTOR CONTROLLERS.
20.	EXPANSION JOINTS
1.	WHERE CONDUITS ARE INSTALLED IN CONCRETE SLABS OR CROSS STRUCTURAL EXPANSION JOINTS, AN APPROVED EXPANSION FITTING SHALL BE INSTALLED.
21.	WIRE AND CABLE
1.	ALL BUILDING WIRING IS TO BE COPPER, EXCEPT WHERE NOTED OTHERWISE.
2.	A MINIMUM CONDUCTOR SIZE OF #12 AWG COPPER IS TO BE USED, EXCEPT WHERE NOTED OTHERWISE.
3.	ALL CONDUCTORS ARE TO BE COLOR CODED THROUGHOUT THE INSTALLATION AS FOLLOWS:
-	BONDING CONDUCTOR - GREEN
-	NEUTRAL CONDUCTOR - WHITE
-	120/208V PHASE WIRES - RED, BLACK, AND BLUE
-	GROUND WIRE - BARE GREEN
22.	WIRING DEVICES & BOXES
1.	ALIGN ALL DEVICES AND PLATES PLUMB AND LEVEL WITH BUILDING STRUCTURAL LINES.
2.	ALL OUTLET BOXES ARE TO BE FLUSH MOUNTED AND INSTALLED WITHIN 6mm OF FINISH WITHOUT THE USE OF EXTENSION SLEEVES EXCEPT WHERE BOXES ARE LOCATED IN COMBUSTIBLE MATERIALS WHERE EXTENSION SLEEVES MAY BE USED.
23.	LOCATION OF OUTLETS
1.	THE ENGINEER RESERVES THE RIGHT TO CHANGE THE LOCATION OF OUTLETS TO WITHIN 3 METRES OF POINTS INDICATED ON PLANS WITHOUT EXTRA CHARGE, PROVIDED THE ELECTRICAL CONTRACTOR IS ADVISED BEFORE INSTALLATION IS MADE.
2.	ELECTRICAL TRADE TO REFER TO ARCHITECTURAL ROOM ELEVATIONS FOR POSITIONS, AND MOUNTING HEIGHTS OF ALL OUTLETS, SWITCHES, INTERCOMMUNICATION, TELEPHONES, SPEAKERS, CLOCKS, ETC. POSITIONS SHOWN ON ARCHITECTURAL PLANS TO TAKE PRECEDENCE OVER POSITIONS OR MOUNTING HEIGHTS SHOWN ON ELECTRICAL PLANS.

24. PULL BOXES

- 1 THE ELECTRICAL TRADE SHALL SUPPLY AND INSTALL PULLBOXES AS REQUIRED TO SUIT JOB CONDITIONS. PULLBOXES SHALL CONFORM TO CANADIAN ELECTRICAL CODE REQUIREMENTS. PULLBOXES TO BE FINISHED IN ENAMEL OVER CORROSION-RESISTANT PRIMER WITH SCREW-ON OR HINGED COVER. IN REMOVABLE CEILING AREAS, PULLBOXES ARE TO BE INSTALLED ABOVE THE CEILING.

25. SUPPORTS

- 1 ALL CONDUIT, RACEWAYS, AND OTHER ELECTRICAL EQUIPMENT SHALL BE SECURELY AND ADEQUATELY SUPPORTED, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE AND THE LOCAL BUILDING CODE REQUIREMENTS.
- 2 WHERE INSERTS ARE REQUIRED IN CONCRETE, EXPANSION INSERTS, LEAD INSERTS OR PLASTIC INSERTS ARE TO BE USED IN DRILLED HOLES. SHOT DRIVEN PINS MAY BE USED IN STRUCTURAL CONCRETE ONLY WITH THE PERMISSION OF THE ENGINEER.

26. GROUNDING AND BONDING

- 1 ALL METAL PARTS NOT CARRYING CURRENT, INCLUDING BUT NOT LIMITED TO, SECONDARY FEEDER CIRCUITS, EQUIPMENT AND PANELBOARD ENCLOSURES, METAL RACEWAYS, PULL AND JUNCTION BOXES, SHALL BE PROPERLY BONDED. METAL RACEWAYS SHALL UTILIZE DOUBLE LOCKNUTS AND OTHER FITTINGS WHERE NECESSARY TO PROVIDE BONDING CONTINUITY.

27. FIRE STOPPING

- 1 THE CONTRACTOR SHALL RETAIN AND PAY FOR THE SERVICES OF A QUALIFIED FIRE STOPPING INSTALLER WHO IS:
 - 1 FM APPROVED IN ACCORDANCE WITH STANDARD 4991 - APPROVAL OF FIRE STOP CONTRACTORS.
 - 2 FOIA MEMBER IN GOOD STANDING.
 - 3 LICENSED BY THE PROVINCE OF LOCAL AUTHORITY WHERE APPLICABLE.
- 2 CONTRACTOR SHALL PROVIDE COMPLETE FIRE STOPPING INSTALLATION IN COMPLIANCE WITH THE CURRENT EDITION OF THE BC BUILDING CODE, REFER TO ARCHITECTURAL DOCUMENTATION FOR LOCATIONS AND RATINGS OF ALL FIRE RATED ASSEMBLIES AND MEMBRANES.
- 3 SUPPORTING FIRE-STOPPING CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD COMPLETE DESIGN DOCUMENTATION, COPIES OF REVIEWED SHOP DRAWING AND SUBMITTALS RELATED TO FIRE STOPPING INSTALLATIONS, AND COMPLETE FIELD REVIEWS, INCLUDING SUITABLE PHOTOGRAPHS. CONTRACTOR TO ENSURE ALL SHOP DRAWINGS REVIEWS, FIELD REVIEWS ETC SHALL BE PERFORMED IN A TIMELY FASHION AND ALL SUPPORTING DOCUMENTATION PROVIDED TO THE ENGINEER OF RECORD AS REQUIRED DURING THE COURSE OF THE PROJECT (FOR EXAMPLE, TO COMPLY WITH THE REQUIREMENTS OF BUILDING INSPECTION DEPARTMENT).
- 4 ALL DOCUMENTATION PROVIDED BY THE FIRE-STOPPING CONTRACTOR SHALL BE INCLUDED IN OPERATION AND MAINTENANCE MANUALS.

28. SEISMIC PROTECTION

- 1 THE ELECTRICAL TRADE SHALL PROVIDE SEISMIC RESTRAINT AND ANCHORAGE FOR ALL EQUIPMENT AND SERVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE B.C. BUILDING CODE, AND ALL APPLICABLE BUILDING BYLAWS.
- 2 PROVIDE CERTIFIED PROFESSIONALLY SEALED SHOP AND PLACEMENT DRAWINGS WHERE APPLICABLE FOR ALL ELECTRICAL EQUIPMENT AND EQUIPMENT ASSEMBLIES SHOWING THE METHODS OF ATTACHMENT TO THE PARTICULAR STRUCTURE FOR EACH PIECE OF EQUIPMENT AND ASSEMBLY AND PROVIDE ANCHORAGE/ATTACHMENT DETAILS APPROVED AND SEALED BY A BC REGISTERED PROFESSIONAL ENGINEER.
- 3 INCLUDE IN THE TENDERED PRICE ALL SERVICES OF THE PROFESSIONAL ENGINEER INCLUDING BUT NOT LIMITED TO PROVIDING LETTERS OF ASSURANCE FOR THE PROJECT IN RESPECT OF THE SEISMIC RESTRAINT OF ALL ELECTRICAL MATERIALS AND EQUIPMENT, CONDUCTING THE NECESSARY SITE REVIEWS AND PROVIDING A LETTER AT THE CONCLUSION OF THE PROJECT, CONFIRMING THAT ALL SEISMIC RESTRAINTS FOR THE ELECTRICAL WORKS HAVE BEEN INSTALLED IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.

29. IDENTIFICATION

- 1 IDENTIFY ALL MAJOR PIECES OF EQUIPMENT, INCLUDING BUT NOT LIMITED TO PANELBOARDS, ELECTRICAL CABINETS, AND BREAKERS IN PANELBOARDS WITH ENGRAVED LAMACOID LABELS, BLACK LETTERING ON WHITE BACKGROUND.
- 2 PROVIDE TYPEWRITTEN DIRECTORIES IN ALL PANELS.
- 3 PROVIDE LAMACOID NAMEPLATE ON EACH PANEL COVER TO IDENTIFY PANEL NAME, NUMBER OF PHASES, VOLTAGE, CURRENT RATING AND SOURCE OF FEEDER.
- 4 IDENTIFY BRANCH CIRCUIT WIRES TO MEET CODE REQUIREMENTS.

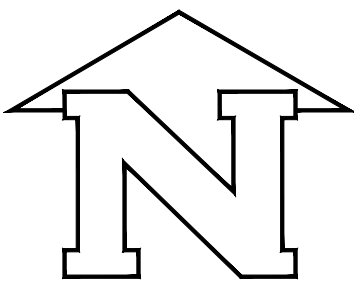
30. ALTERNATE SEPARATE PRICE

- 1 ALL REQUESTS FOR ALTERNATES SHALL BE SUBMITTED TO THE ENGINEER NOT LESS THEN 5 DAYS PRIOR TO THE CLOSE OF TENDER.
- 2 THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ENSURING THAT ALTERNATE PRODUCTS MEET ALL SPACE, WEIGHT, CONNECTION, POWER, WIRING, AND PERFORMANCE REQUIREMENTS.

Contractor must check and verify all dimensions and conditions on site and report any discrepancies to designer and/or engineer prior to proceeding with work

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PROJECT NORTH

PRODUCTION DRAWINGS BY:



1	ISSUED FOR TENDER	11/21/2025
REV	DESCRIPTION	DATE

PROJECT NAME:

Archie Browning Sports Centre - Refrigeration Upgrade

1151 Esquimalt Rd
Victoria, BC

DRAWING TITLE:

ELECTRICAL SPECIFICATIONS

DATE:	NOVEMBER 2025
SCALE:	AS NOTED
DRAWN BY:	LS
CHECKED BY:	JH
JOB NUMBER:	0126.0020

DRAWING NUMBER

E1.1