SCOPE OF WORK

THE SCOPE OF WORK FOR THIS PROJECT INCLUDES THE SUPPLY AND INSTALLATION OF ALL ELECTRICAL EQUIPMENT, MATERIALS AND LABOUR FOR A COMPLETE, OPERATIONAL AND COMMISSIONED PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO:

- -60A DISCONNECT NEMA 3R ENCLOSURE
- -MOTOR STARTER DISCONNECT
- -CIRCUIT BREAKERS
- -ALL MOUNTING HARDWARE REQUIRED FOR INSTALLATION OF EQUIPMENT
- -JUNCTION BOXES
- -CABLING, CONDUIT, ETC.

SUPPLY AND INSTALL ALL WIRE AND CABLES.

SUPPLY AND INSTALL LAMACOID IDENTIFICATION ON ALL EQUIPMENT.

LAMACOID LABELS SHALL BE 1/4" WHITE TEXT ON BLACK BACKGROUND.

SUPPLY AND INSTALL ALL GROUNDING AND BONDING CONDUCTORS C/W ALL REQUIRED CONNECTORS, LUGS AND MECHANICAL PROTECTION.

COMPLETE ALL PRELIMINARY WORK PRIOR TO ANY POWER OUTAGES TO MINIMIZE DURATION OF OUTAGE.

TERMINATE AND TEST ALL POWER AND CONTROL CABLES.

MODIFY EXISTING ELECTRICAL DISTRIBUTION TO ACCOMMODATE NEW ELECTRICAL SYSTEM.

PROVIDE AS-BUILT DRAWINGS FOR BOTH NEW SYSTEM AND EXISTING SYSTEM AS MODIFIED.

OBTAIN, PAY FOR AND PROVIDE COPIES OF ALL NECESSARY PERMITS AND INSPECTIONS.

SUBMIT PRODUCT DATA FOR ALL EQUIPMENT SUPPLIED. ACCEPTABLE MATERIALS SHALL BE AS SPECIFIED, CODE APPROVED OR DEPARTMENTAL REPRESENTATIVE APPROVED. ALL MATERIAL SHALL BE NEW, UNLESS SPECIFIED OTHERWISE. CONTRACTOR MAY, ALTERNATES MAY BE CONSIDERED IN ACCORDANCE WITH B6. SUBMIT SHOP DRAWINGS FOR APPROVAL ON ALL CONTRACTOR PROVIDED EQUIPMENT. PROVIDE THREE (3) COPIES OF OPERATING AND MAINTENANCE MANUALS.

THE CONTRACTOR SHALL COORDINATE WITH THE TENANT FOR BOTH THE REMOVAL OF EXISTING CABLES AND CONDUITS DURING DEMOLITION AND THE INSTALLATION OF NEW CABLES AND CONDUITS DURING THE RENOVATIONS.

THE CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DEMOLITION/ RELOCATION AND SUPPLY REQUIREMENTS FOR THE RENOVATION OF THE NEW ARRANGEMENT.

CONTRACTOR SHALL UNFASTEN/REFASTEN AND/OR DISCONNECT/RECONNECT EQUIPMENT AND DEVICES AS REQUIRED DURING THE CONSTRUCTION.

THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL ELECTRICAL MATERIALS FOR THE NEW AND RELOCATED MECHANICAL EQUIPMENT. THESE INCLUDE BUT ARE NOT LIMITED TO CABLING, JUNCTION BOXES, ETC.

POWER WIRING SHALL BE MINIMUM #12 AWG. ALL 120V CIRCUITS. WHERE THE FINAL RUN EXTENDS THE CIRCUIT TO MORE THAN 150', THE GAUGE SHALL BE MADE A MINIMUM #10 AWG FOR THE ENTIRE LENGTH OF THE CIRCUIT.

CONTRACTOR SHALL VERIFY AND MAINTAIN CORRECT PHASING FOR ALL INSTALLATIONS. PROVIDE COLOUR CODED PHASE IDENTIFICATION ON ALL 3 PHASE CABLE INSTALLATIONS.

REFER TO MECHANICAL DRAWINGS FOR SCOPE OF WORK ASSOCIATED WITH THOSE TRADES.

SPECIFICATIONS

DRAWINGS ARE NOT TO BE SCALED.

THE INTENT OF THE DRAWINGS AND TECHNICAL PROVISIONS IS TO INCLUDE ALL LABOUR, PRODUCTS AND SERVICES NECESSARY TO COMPLETE WORK, TESTED AND READY FOR OPERATION.

RESPONSIBILITY TO DETERMINE WHICH DIVISION OR SECTION PROVIDES VARIOUS PRODUCTS AND WORK, RESTS WITH THE CONTRACTOR. ADDITIONAL COMPENSATION WILL NOT BE CONSIDERED BECAUSE OF DIFFERENCES IN INTERPRETATION OF TECHNICAL PROVISIONS.

EXAMINE THE SITE, BUILDING AND LOCAL CONDITIONS AFFECTING WORK OF THIS CONTRACT. EXAMINE STRUCTURAL, MECHANICAL AND ELECTRICAL CONDITIONS TO ENSURE WORK CAN BE PERFORMED WITHOUT CHANGES, AS SHOWN ON CONTRACT DRAWINGS. NO ALLOWANCE WILL BE MADE LATER FOR NECESSARY CHANGES, UNLESS IT HAS BEEN BROUGHT TO DEPARTMENTAL REPRESENTATIVE'S ATTENTION IN WRITING, PRIOR TO CLOSING OF BID OPPORTUNITY.

CONTRACTOR SHALL KEEP AN ONGOING SET OF "AS-BUILT" DRAWINGS ON SITE FOR REVIEW BY DEPARTMENTAL REPRESENTATIVE AT ANY TIME. DRAWINGS TO BE TURNED OVER UPON COMPLETION OF PROJECT. THIS INCLUDES AN AS-BUILT OF THE EXISTING ELECTRICAL SYSTEMS AS MODIFIED.

EXECUTE ALL WORK IN A FIRST-CLASS AND WORKMANLIKE MANNER.

INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS, THE SASKATCHEWAN ELECTRICAL SAFETY CODE AND ALL OTHER AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO ENSURE PROPER INSTALLATION.

FOLLOW APPROVED MANUFACTURER'S RECOMMENDATIONS FOR SAFETY. ALLOW EASY ACCESS FOR INSPECTION, MAINTENANCE AND REPAIRS.

LOCATE EQUIPMENT TO PERMIT READY MAINTENANCE AND DISASSEMBLY WITH MINIMUM DISTURBANCE TO ADJACENT EQUIPMENT AND WITHOUT INTERFERENCE WITH OTHER EQUIPMENT.

DISCREPANCIES OR IRREGULARITIES IN THE WORK OR DEFECTS ON DAMAGES TO THE EQUIPMENT, ATTRIBUTABLE TO FAULTY OR INCORRECT INSTALLATION, SHALL BE RECTIFIED BY THE CONTRACTOR AT THEIR OWN EXPENSE.

MAINTAIN THE WORK IN A TIDY CONDITION, FREE FROM ACCUMULATION OF WASTE PRODUCTS AND DEBRIS.

ALL WORK TO BE PERFORMED TO APPLICABLE CODES, BYLAWS AND STANDARDS GOVERNING THESE PROJECTS.

CONTRACTOR SHALL OBTAIN, PAY FOR AND PROVIDE COPIES OF ALL NECESSARY PERMITS AND INSPECTIONS.

DRAWING IS DIAGRAMMATIC ONLY, AND DOES NOT SHOW ALL DETAILS. INFORMATION INVOLVING ACCURATE MEASUREMENTS OF THE BUILDING, STRUCTURAL STEEL, EXISTING WALLS, ETC. IS TO BE TAKEN IN THE FIELD.

LEAVE PREMISES IN A CLEAN AND SATISFACTORY CONDITION ON COMPLETION OF ELECTRICAL WORK.

CONTRACTOR SHALL COORDINATE WITH ALL TRADES DURING THE DEMOLITION AND CONSTRUCTION PHASES OF THE WORK.

CONTRACTOR SHALL PROTECT ADJACENT FINISHES AGAINST DAMAGE.

DAMAGE TO ALL EXISTING FINISHES SHALL BE REPAIRED. COORDINATE WITH CONTRACTOR.

REMOVE ALL WASTE MATERIALS AND CLEAN UP TO DEPARTMENTAL REPRESENTATIVE'S SATISFACTION. AT COMPLETION OF WORK, CLEAN EQUIPMENT AND TOUCH UP FINISH TO RESTORE TO 'AS NEW' CONDITION.

CONTRACTOR SHALL IDENTIFY ALL EXISTING CIRCUITS AFFECTED BY THE WORK AND MARK UP AS-BUILT DRAWINGS ACCORDINGLY.

CONTRACTOR SHALL COORDINATE WITH DEPARTMENTAL REPRESENTATIVE OF ANY POWER OUTAGES NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST.

CONTRACTOR SHALL ENSURE COMPLETE & WORKING SYSTEMS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR ALL INSTALLATIONS.

CONTRACTOR SHALL COORDINATE WITH CONTRACTOR FOR ALL PENETRATIONS. PROVIDE ALL NECESSARY FIRESTOPPING.

BURIED GROUND CONNECTIONS SHALL BE BY THERMIT PROCESS. ABOVE GROUND CONNECTIONS SHALL BE COMPRESSION.

CONDUITS SHALL NOT HAVE MORE THAN ONE VOLTAGE LEVEL OF WIRING RUNNING WITHIN THEM.

CONTRACTOR SHALL COORDINATE WITH DEPARTMENTAL REPRESENTATIVE FOR ALL TEMPORARY ELECTRICAL CONNECTIONS REQUIRED DURING THE DEMOLITION AND CONSTRUCTION PHASES OF THE WORK.

COORDINATE AND OBTAIN APPROVAL FOR ALL REQUIRED POWER OUTAGES WITH DEPARTMENTAL REPRESENTATIVES. CONTRACTOR SHALL PROVIDE A MINIMUM TWO WEEK NOTICE REQUEST PRIOR TO ANY SHUTDOWN.

COORDINATE ALL CONTROL CABLING TERMINATION REQUIREMENTS WITH DEPARTMENTAL REPRESENTATIVE.

CONTRACTORS SHALL CO-ORDINATE WHERE REQUIRED WITH OTHER TRADES TO DETERMINE REQUIREMENTS FOR COMPLETE AND OPERABLE SYSTEMS. COMPENSATIONS SHALL NOT BE MADE FOR COSTS RESULTING FROM A LACK OF CO-ORDINATION.

CONTRACTOR SHALL VERIFY AND IDENTIFY ALL EXISTING CIRCUITS AFFECTED BY THE WORK AND REUSE AS REQUIRED

ALL NEW RECEPTACLES SHALL BE COMMERCIAL SPECIFICATION GRADE.

ALL COVER PLATES SHALL BE BRUSHED STAINLESS STEEL.

CONTRACTOR SHALL SUPPLY AND INSTALL ALL ELECTRICAL EQUIPMENT SHOWN ON DRAWINGS.

CONTRACTOR SHALL COORDINATE WITH DEPARTMENTAL REPRESENTATIVE FOR THE ELECTRICAL PANELS TO BE UTILIZED FOR THE INSTALLATION OF DEVICES. CONTRACTOR SHALL ENSURE NOT TO EXCEED THE AMPACITY OF THE ELECTRICAL PANELS TO BE USED. CONTRACTOR SHALL ACCURATELY UPDATE ALL PANEL SCHEDULES AFFECTED BY THE WORK.

DEMOLITION NOTES

CONTRACTOR SHALL DISCONNECT, REMOVE AND DISPOSE OF ALL ABANDONED CABLING AND CONDUIT FOR 3 UNIT HEATERS. 1 MUA UNIT AND 1 EXHAUST FAN.

CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ABANDONED EQUIPMENT AND COORDINATE DISPOSAL OF REMOVED EQUIPMENT WITH DEPARTMENTAL REPRESENTATIVE.

REFER TO MECHANICAL DRAWING M01 FOR DEMOLITION.

THESE DRAWINGS SHALL NOT BE SCALED.

THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY ONESELF ALL DIMENSIONS, DATUM, AN DETAILED INFORMATION SHOWN ARE CORRECT.

THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH FLOORS. WALLS, AND CEILINGS FOR DUCT, PIPE & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOW!

ALL OPENINGS THROUGH FIRE ASSEMBLIES ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION, AND PROVIDE A SMOKE-TIGHT BARRIER.

ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE CODES.

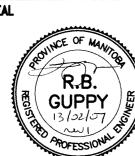
THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING THE PART OF THE

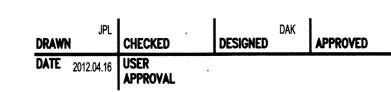
WHERE NEW FLOORING AND BASE IS TO BE INSTALLED IN EXISTING AREAS (REFER TO FLOOR UNLESS OTHERWISE NOTED. ALL FLOOR SURFACES SHALL BE PREPARED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF NEW FLOOR.

WHERE PAINTING OF EXISTING WALLS IS INDICATED ON THE ROOM SCHEDULE, THESE WALLS MUST BE CLEANED OF ANY EXISTING WALL COVERING, PATCHED & PREPARED TO ACCEPT NEW MATERIAL, UNLESS OTHERWISE NOTED.

DRAWING LIST					
SHEET No:	SHEET TITLE				
E01	NORTH SHOP - SINGLE LINE DIAGRAM				
E02	NORTH SHOP - ELECTRICAL POWER PLAN				
E03	NORTH SHOP - ELECTRICAL PROJECT SPECIFICATION				

	ło.	REVISION/DESCRIPTION	BY	DATE
0)	ISSUED FOR TENDER	RBG	2012 07/17
1	l	ISSUED FOR CONSTRUCTION	RBG	2013 02/08







THE CITY OF WINNIPEG PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT MUNICIPAL ACCOMMODATIONS DIVISION 3-65 GARRY STREET, R3C 4K4

NORTH SHOP 2170 MAIN STREET HVAC UPGRADE

SHEET TITLE ELECTRICAL PROJECT SPECIFICATIONS

PROJECT No: 12-0107-003 AS SHOWN

