

DRAWING NOTES:

- 1 REFEED RELOCATED HOT WATER TANK FROM ORIGINAL CIRCUIT.
- (2) CONFIRM THE LOCATION AND QUANTITIES OF POWER AND DATA OUTLETS IN R05. IN ADDITION TO THE OUTLETS SHOWN ON THIS DRAWING, REFER TO THE AUDIO-VISUAL DRAWINGS FOR AUDIO SPEAKER, CONDUIT AND COMMUNICATION WIRING REQUIREMENTS FOR THE OPERATIONS SYSTEMS.
- (3) RECEPTACLE IN CEILING FOR PROJECTOR.
- (4) PROVIDE FOUR 120V CIRCUITS. REFER TO AUDIO-VISUAL DRAWINGS FOR EXACT TABLE REQUIREMENTS.

5 CONFIRM POWER AND DATA REQUIREMENTS OF BENCHES AND STATIONS.

- (6) CARD READER SYSTEM TO BE INSTALLED BY OTHERS.
- (7) CONFIRM THE LOCATION AND QUANTITIES OF POWER AND DATA UTLETS IN R04. IN ADDITION TO THE OUTLETS SHOWN ON THIS DRAWING, REFER TO THE AUDIO-VISUAL DRAWINGS FOR AUDIO SPEAKER, CONDUIT AND COMMUNICATION WIRING REQUIREMENTS FOR THE SYSTEMS WITHIN THIS
- (8) IN ADDITION TO POWER AND DATA OUTLETS SHOWN ON THIS DRAWING, REFER TO AUDIO-VISUAL DRAWINGS FOR ADDITIONAL AUDIO SPEAKERS, CONDUIT AND WIRING REQUIRED IN R06.
- 9 REFER TO MILLWORK DRAWINGS FOR EXACT MICROWAVE AND COUNTER RECEPTACLE PLACEMENT.
- 10 IN DEMOLITION PHASE, REMOVE PANELS 100, P AND, IF NECESSARY, PP FROM THE EXISTING WALL TO ALLOW FOR RE-CONSTRUCTION OF THE WALL. PANELS AND WIRING TO BE TEMPORARILY SUPPORTED IN SUCH A WAY AS TO ALLOW FOR WORK ON THE WALL. RE-MOUNT PANELS, AND RE-CONNECT AFFECTED WIRING WHEN WALL IS COMPLETE.

- A. ENSURE THAT EXISTING WIRING EXPOSED OR AFFECTED DURING CONSTRUCTION IS REDONE OR REROUTED IN A PROPER MANNER. RE-USE CIRCUITS AND WIRING WHERE POSSIBLE. WHERE WIRING IS NOT RE-USED, STRIP BACK TO CLOSEST DISCONNECT OR PANEL.
- B. DISCONNECT EQUIPMENT TO BE REMOVED. REMOVE OR RELOCATE ANY ELECTRICAL DEVICES OR JUNCTION BOXES WHICH WILL BE RENDERED INACCESSIBLE BY FIXED-IN-PLACE CABINETRY MANY TO THE TOTAL TO THE TOTAL TOTAL
- C. PROVIDE 3/4" CONDUIT FROM EVERY DATA LOCATION TO ACCESSIBLE CEILING SPACE. RUN TWO CAT-5E FROM EACH DATA LOCATION TO SERVER LOCATION. RUN CABLE IN CONDUIT WHEN RUNNING ACROSS EXPOSED CEILINGS OR WALLS. IN ACCESSIBLE CEILING SPACES, RUN CABLES PARALLEL TO BUILDING LINES IN J-HOOKS WHICH ARE SIZED LARGE ENOUGH TO HAVE EXTRA CAPACITY AFTER INSTALLATION. INSTALL) JACKS, SWITCHES, BIX BLOCKS, PATCH PANELS AND ALL NECESSARY EQUIPMENT AND MAKE ALL CONNECTIONS TO ENSURE FULLY QPERATIONAL SYSTEMS.....
- D. FOR WALLS WHICH WILL BE TREATED TO INCREASE THEIR FIRE RATING, REMOVE ALL DEVICES, EXTEND BOXES AS NECESSARY, AND RE-INSTALL DEVICES WHEN WORK IS COMPLETE.
- E. WHERE A NEW RECEPTACLE IS SHOWN IN THE APPROXIMATE AREA ON AN EXISTING WALL WHERE A DEVICE ALREADY EXISTS, THE NEW DEVICE NEED NOT BE ADDED, PROVIDED THE EXISTING DEVICE IS IN PROPER WORKING CONDITION.
- F. ALL AV RECEPTACLES IN ROOMS R04, 5, AND 6 SHALL BE FED FROM THE SAME PANEL.
- G. CABLES AND CONDUIT PENETRATING A FIRE WALL SHALL BE FIRE CAULKED.

ELECTRICAL SPECIFICATIONS:

GENERAL
SUPPLY ALL LABOUR, EQUIPMENT & MATERIALS NECESSARY AND REASONABLY IMPLIED FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK AS SHOWN ON THE PLANS AND/OR SPECIFIED. DETERMINE WHETHER THE ELECTRICAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE ANY OF THE FOLLOWING: HVAC CONTROLS, SECURITY, AUDIO, OR ENTRY/ DOOR CONTROLS.

2. CODES, PERMITS, AND FEES
ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE, PROVINCIAL, MUNICIPAL, AND OTHER CODES, RULES AND REGULATIONS. OBTAIN AND PAY FOR ALL PERMITS AND LICENSES REQUIRED TO EXECUTE THE

3. <u>VERIFICATION</u>
THE ELECTRICAL SUB-CONTRACTOR SHALL CAREFULLY EXAMINE ALL DRAWINGS AND SPECIFICATIONS RELATING TO THE WORK TO BE CERTAIN THAT THE WORK UNDER THIS CONTRACT CAN BE SATISFACTORILY CARRIED OUT. PRIOR TO THE SUBMISSION OF BID OPPORTUNITY, THE CONTRACTOR SHALL REPORT AT ONCE TO THE CONTRACT ADMINISTRATOR, ANY DEFECT, DISCREPANCY, OMISSION, OR INTERFERENCE AFFECTING THE WORK OF THIS SECTION OR THE GUARANTEE OF THE SAME. REFER TO MECHANICAL DRAWINGS FOR CONTROL WIRING AND EQUIPMENT LOCATIONS.

4. <u>MATERIALS</u>
ALL MATERIALS SUPPLIED SHALL BE NEW (OR AS NOTED) AND OF THE QUALITY INDICATED IN THE SPECIFICATIONS AND SHALL CONFORM TO THE STANDARDS OF THE C.S.A. IN THE EVENT THAT A MATERIAL SPECIFIED DOES NOT BEAR C.S.A. OR EQUIVALENT APPROVAL, THE CONTRACTOR IS TO OBTAIN THE APPROVAL OF THE LOCAL INSPECTION AUTHORITY AND MAKE ANY MODIFICATIONS REQUIRED AT NO ADDITIONAL EXPENSE TO THE CITY OF WINNIPEG.

EQUIPMENT AND MATERIAL SHALL BE INSTALLED AS SPECIFIED. REQUESTS FOR EQUAL STATUS SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR 7 DAYS PRIOR TO CLOSE OF BID OPPORTUNITY IN ACCORDANCE WITH B7.

FOLLOW EXISTING WIRING METHODS AND STANDARDS. ALL WORK TO BE DONE IN A NEAT AND PROFESSIONAL MANNER. CABLE AND CONDUIT RUNS TO BE RUN PARALLEL TO BUILDING LINES. WALL DEVICES AND EQUIPMENT TO BE INSTALLED SQUARE AND PLUMB. CEILING DEVICES AND LIGHTS TO BE CENTERED OF SPACE AND IN LINE UNLESS SHOWN OTHERWISE ON DRAWINGS.

ALL NEW POWER WIRING, INCLUDING WIRING CONCEALED IN WALLS, SHALL BE IN CONDUIT. DROPS TO LIGHTS AND DEVICES IN SUSPENDED CEILING SHALL BE IN AC-90. PROVIDE ALL WIRING AND TERMINATIONS FOR DATA TO ENSURE COMPLETE AND OPERATING SYSTEM UNLESS NOTED OTHERWISE.

EXIT SIGNS SHALL BE PROVIDED WITH DC POWER FROM THE NEAREST BATTERY UNIT. ALL CONDUCTORS TO BE COPPER UNLESS SPECIFIED OTHERWISE AND OF A MINIMUM SIZE OF #12 AWG. ALL CONDUCTORS TO BE SIZED TO KEEP VOLTAGE DROP WITHIN ALLOWABLE LIMITS. ALL WIRE RUN IN RETURN AIR SPACES SHALL BE FT6 RATED. SMOKE ALARMS TO BE LINE VOLTAGE AND INTERCONNECTED.

SWITCHES, COUNTER RECEPTACLES, PULL STATIONS, AND CONTROLS SHALL BE MOUNTED 1200mm (47") TO TOP ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED ON DRAWINGS. RECEPTACLES SHALL BE MOUNTED 400mm (16") TO TOP A.F.F. ALL DEVICES AND CONTROLS LOCATED IN AN AREA DESIGNATED AS BARRIER-FREE SHALL BE MOUNTED BETWEEN 400mm (16") TO BOTTOM AND 1200mm (47") TO TOP ABOVE FINISHED FLOOR.

HANDICAP PUSH BUTTONS TO BE MOUNTED AT 235mm (9") TO CENTER A.F.F. RECEPTACLES ON OPPOSITE SIDES OF A WALL SHALL BE STAGGERED. DO NOT MOUNT BACK TO

THE ELECTRICAL SUB-CONTRACTOR SHALL WARRANTY THE SATISFACTORY OPERATION OF ALL

WORK AND MATERIALS INCLUDED AND INSTALLED UNDER THIS SECTION OF THE SPECIFICATION

FOR A PERIOD OF ONE YEAR AFTER THE FINAL ACCEPTANCE OF THE COMPLETE BUILDING.

SUBMIT ONE SET OF CORRECTED 'AS-BUILT' DRAWINGS OR CORRECTED DRAWINGS IN DWG FORMAT TO THE CITY OF WINNIPEG. CONFIRM REQUIREMENTS PRIOR TO COMPLETION.

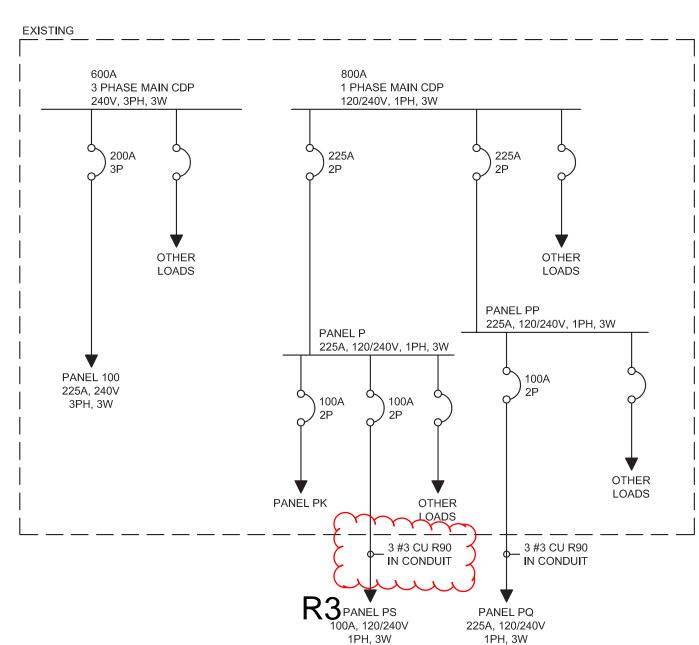
11. CERTIFICATE OF APPROVAL
UPON COMPLETION AND BEFORE FINAL PAYMENT IS MADE, PRESENT TO THE CONTRACT ADMINISTRATOR A CERTIFICATE OF APPROVAL OR VERIFICATION FOR ALL ELECTRICAL WORK FROM THE INSPECTION DEPARTMENT HAVING JURISDICTION. R3



APEGII **Certificate of Authorization** Jorey Electric Ltd.

No. 4600 Date: 14 July 2015

SINGLE LINE DIAGRAM



		SYMBOL SCHEDULE
	\Rightarrow	DUPLEX RECEPTACLE "GF" DENOTES GFI RECEPTACLE "20A" DENOTES 20A RECEPTACLE "X4" DENOTES 4 DEVICES
	\bigoplus	240V RECEPTACLE "R" DENOTES RANGE RECEPTACLE "D" DENOTES DRYER RECEPTACLE
	 	4-PLEX RECEPTACLE
	\$	SWITCH "3" DENOTES 3-WAY "D" DENOTES DIMMER SWITCH "OS" DENOTES OCCUPANCY SENSOR
	\$	GANGED SWITCH LINES DENOTE NUMBER OF SWITCHES
	(3)	CEILING-MOUNT OCCUPANCY SENSOR
	∇	DATA JACK EACH LOCATION REQUIRES 2 CAT5E DROPS.
		"X2" DENOTES 2 DOUBLE DROPS.
	0	CO ALARM - KIDDE SILHOUETTE OR EQUIVALENT
	© S	CO ALARM - KIDDE SILHOUETTE OR
	© S PDO	CO ALARM - KIDDE SILHOUETTE OR EQUIVALENT
	CO S PDO PB	CO ALARM - KIDDE SILHOUETTE OR EQUIVALENT SMOKE ALARM
		CO ALARM - KIDDE SILHOUETTE OR EQUIVALENT SMOKE ALARM POWER DOOR OPERATOR
	PB	CO ALARM - KIDDE SILHOUETTE OR EQUIVALENT SMOKE ALARM POWER DOOR OPERATOR HANDICAP PUSH BUTTON

CEILING LUMINAIRE

WALL LUMINAIRE

DENOTES EXISTING

DENOTES FLOOR PEDESTAL

LINEAR LUMINAIRE

R3

-ISSUED FOR TENDER TRANSPORTATION MANAGEMENT CENTRE RENOVATIONS 821 ELGIN AVE., WINNIPEG, MANITOBA

MAIN FLOOR POWER PLAN SINGLE LINE DIAGRAM SYMBOL SCHEDULE ELECTRICAL SPECIFICATIONS

1 JUN 2015 E-2/R-3