ELECTRICAL SYMBOL NOTES

FL01 A-12b	THE LIGHTING FIXTURE TYPE IS INDICATED BY UPPER CASE LETTERS AND NUMBERS. THE CIRCUIT DESIGNATION IS INDICATED BY LETTERS AND NUMBERS SEPARATED BY DASH. THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER.
	EXAMPLE 1: LIGHTING FIXTURE TYPE "FL01" IS CONNECTED TO PANEL A, CIRCUIT 12 AND CONTROLLED BY SWITCH "b".
A-16	DEVICES. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. EXAMPLE: SPLIT DUPLEX RECEPTACLE IS CONNECTED TO PANEL A, CIRCUIT 16 AND ONE RECEPTACLE OUTLET IS CONTROLLED BY A SWITCH.
ED-1 A-1,3,5	SPECIAL CONNECTIONS. THE EQUIPMENT IS INDICATED BY THE TAG. SEE THE MOTOR AND EQUIPMENT SCHEDULE FOR THE LOAD DESCRIPTION AND TYPE OF CONNECTION. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER(S) ADJACENT TO THE SYMBOL. EXAMPLE: EQUIPMENT NO. 1; 3 PHASE CONNECTION TO PANEL A, CIRCUITS 1, 3, 5.
	SYMBOL NOTATIONS: UPPER CASE LETTERS ADJACENT TO SYMBOLS INDICATE A UNIT TYPE. SEE APPROPRIATE SCHEDULE OR SPECIFICATIONS.
LPN-102	PANELBOARDS. PANELBOARD DOORS MAY BE SHOWN TO INDICATE OPENING SIDE OF RECESSED PANELBOARDS. SEE PANELBOARD IDENTIFICATION FOR DESIGNATION CODES.
(TYP)	KEYNOTE. SEE THE KEYED NOTES ON THAT SHEET FOR THE NOTE NUMBER INDICATED. (TYP) INDICATES THAT THE NOTE IS TYPICAL OF THE APPLICATION.

ELECTRICAL SYMBOL LEGEND

HT AFF	SYMBOL	DESCRIPTION
		LIGHTING
AS NOTED		SURFACE LIGHT
		STRIP LIGHT(TYPE DENOTED)
		RECEPTACLES
		DUPLEX RECEPT
400mm		SPECIAL RECEPT(TYPE DENOTED)
		EQUIPMENT
		AUTOMATIC DOOR OPERATOR PUSHBUTTON
		DIRECT POWER CONNECTION
		GENERAL ELECTRIC
		LIGHT SYMBOL INDICATES EXISTING

HT AFF	SYMBOL	DESCRIPTION
		DASHED SYMBOL INDICATES REMOVED
		KEYED NOTE(SEE SCHEDULE)
		DEMOLITION NOTE(SEE SCHEDULE)
	##	REVISION TAG
		FIRE ALARM
2350mm**	HTRTfcd	FIRE ALARM HORN W/STROBE(CANDELAS)
200mm****		SMOKE DETECTOR(TYPE & CO DENOTED)
		SECURITY
AS NOTED		CCTV CAMERA

ALL DISTANCES ARE TO CENTER OF DEVICE OR EQUIPMENT UNLESS OTHERWISE NOTED. DEVICES INDICATED AT 1200mm MAY NOT BE INSTALLED WITH ANY OPERABLE PART HIGHER THAN 1200mm. DEVICES MAY BE INSTALLED IN CONCRETE MASONRY UNITS WITH THE TOP OF THE DEIVCE AT 1200mm.

* DISTANCE ABOVE TOP OF DOOR FRAME ** DISTANCE TO TOP OF EQUIPMENT OR DEVICE **** DISTANCE BELOW CEILING

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)
A	AMPERE
AC	AIR CONDITIONER
ADO	AUTOMATIC DOOR OPENER
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ALUMINUM
AMP	AMPERE
ARCH	ARCHITECT, ARCHITECTURAL
AWG	AMERICAN WIRE GAUGE
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
COMB	COMBINATION
CMPR	COMPRESSOR
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUATION OR CONTINUOUS
CONTR	CONTRACTOR
CU	COPPER
C/W	COMPLETE WITH
DET	DETAIL
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRIC, ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EXIST	EXISTING
HRV	HEAT RECOVERY VENTILATION
HTG	HEATING
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
LOC	LOCATE OR LOCATION
LT	LIGHT
LTG	LIGHTING
LV	LOW VOLTAGE
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MEC	MECHANICAL CONTRACTOR
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MT	MOUNT
MTD	MOUNTED
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
PH	PHASE
PNL	PANEL
PT	POTENTIAL TRANSFORMER
PWR	POWER
QP	QUADPLEX RECEPTACLE
R	RELOCATED
RCPT	RECEPTACLE
RM	ROOM
SC	SURFACE CONDUIT
SEC	SECONDARY
SPEC	SPECIFICATION

GENERAL ELECTRICAL NOTES

A. THE GENERAL NOTES AS DESCRIBED HEREIN, APPLY TO ALL DRAWINGS IN THIS PACKAGE WHERE APPLICABLE.

B. PENETRATIONS IN WALLS OR SEPARATIONS, REQUIRING PROTECTED OPENINGS SHALL BE FIRESTOPPED WITH AN APPROVED MATERIAL. REFER TO ARCHITECTURAL SPECIFICATIONS FOR PRODUCT REQUIREMENTS.

C. EXPOSED WIRING SHALL NOT BE PERMITTED. WIRING SHALL BE RECESSED IN WALL, OR WHERE WALLS ARE NOT ACCESSIBLE DUE TO WALL CONSTRUCTION (CONCRETE BLOCK, CONCRETE, BRICK, ETC), PROVIDE CONDUIT AS REQUIRED TO CONCEAL SAME.

D. REFER TO ARCHITECTURAL FLOOR PLANS, ELEVATIONS AND DETAILS, AND SHOP DRAWINGS FOR COORDINATION OF ELECTRICAL DEVICE LOCATIONS, METHOD OF INSTALLATION & MOUNTING HEIGHTS. ARCHITECTURAL FLOOR PLANS, ELEVATIONS AND DETAILS TAKE PRECEDENCE OVER LOCATIONS SHOWN ON ELECTRICAL DRAWINGS.

E. EQUIPMENT SHUTDOWN AND THE INTERRUPTION OF ANY SERVICES SHALL BE COORDINATED IN ADVANCE WITH THE BUILDING END USER AND SHALL BE KEPT TO A MINIMUM.

F. UNLESS NOTED OTHERWISE, THE CIRCUITING INDICATED ON THE DRAWINGS IS REPRESENTATIONAL ONLY. CONFIRM CIRCUITING REQUIREMENTS ON SITE.

G. CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING AND VOLTAGE DROP REQUIREMENTS, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.

H. MINIMUM CONDUIT SIZE SHALL BE 21mm (3/4") UNLESS NOTED OTHERWISE.

I. EMPTY CONDUIT SHALL BE C/W PULL WIRE AND PLASTIC BUSHINGS.

J. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASES OF DEMOLITION AND CONSTRUCTION. COORDINATE WITH GENERAL CONTRACTOR.

K. ALL LIFE-SAFETY SYSTEMS SHALL BE MAINTAINED AND OPERABLE AT ALL TIMES DURING CONSTRUCTION.

L. AS INDICATED IN THE GENERAL NOTES, DEMOLITION NOTES, AND KEYNOTES IN THIS DRAWING PACKAGE, UNLESS NOTED OTHERWISE, THE TERM "DEMOLISH" SHALL INCLUDE THE COMPLETE REMOVAL OF THE EXISTING ITEM IDENTIFIED, C/W ASSOCIATED WIRING, CONDUIT AND JUNCTION BOXES BACK TO LAST REMAINING DEVICE OR SOURCE. CIRCUITS FREED UP FROM DEMOLISHED ELECTRICAL, SHALL BECOME SPARE. REFER TO THE RENOVATION DRAWING KEY NOTES FOR FURTHER REQUIREMENTS.

M. AS INDICATED IN THE GENERAL NOTES, DEMOLITION NOTES, AND KEYNOTES IN THIS DRAWING PACKAGE, UNLESS NOTED OTHERWISE, THE TERM "REMOVE & REPLACE" SHALL INCLUDE THE COMPLETE REMOVAL & REPLACEMENT OF THE EXISTING ITEM IDENTIFIED IN ITS CURRENT LOCATION, WITH A NEW ITEM, UTILIZING THE EXISTING OUTLET BOX AND WIRING. REFER TO THE RENOVATION DRAWING KEY NOTES FOR FURTHER REQUIREMENTS.

N. AS INDICATED IN THE GENERAL NOTES, DEMOLITION NOTES AND KEY NOTES, UNLESS NOTED OTHERWISE, THE TERM "RELOCATE" SHALL INCLUDE THE COMPLETE RELOCATION OF THE EXISTING ITEM IDENTIFIED IN ITS CURRENT LOCATION ON THE DEMOLITION DRAWINGS, TO THE NEW LOCATION AS INDICATED ON THE RENOVATION DRAWINGS. INCLUDE ALL LABOUR AND MATERIALS TO REROUTE/EXTEND/REFEED THE EXISTING CIRCUITRY AS REQUIRED TO ACCOMMODATE THE RELOCATION. REFER TO THE RENOVATION DRAWING KEY NOTES FOR FURTHER REQUIREMENTS.

O. SITE CONFIRM ANY ELECTRICAL WITHIN AREAS OF RENOVATION REQUIRING RELOCATION TO ACCOMMODATE THE RENOVATION.

P. PROVIDE WIRE AND CONDUIT AS REQUIRED FOR CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.

Q. PROVIDE CONDUIT AND/OR COMMUNICATIONS/DATA WIRING AS NECESSARY FOR CONTINUITY OF ANY COMMUNICATIONS/DATA SYSTEMS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY COMMUNICATIONS/DATA EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.

R. PROVIDE BLANK COVERPLATES OVER ALL EXISTING UNUSED OPENINGS.

SPECIFIC CODE NOTES

FIRE PROTECTION REQUIREMENTS

A. PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED MATERIAL.

1. CONDUITS MAY PENETRATE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRE-STOPPED.

2. OUTLET BOXES THAT PENETRATE OPPOSITE SIDES OF A WALL ASSEMBLY SHALL BE OFFSET WHERE NECESSARY TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION.

B. LIGHT FIXTURES AND OTHER APPARATUS INSTALLED IN AN ACOUSTICAL CEILING GRID SHALL BE INDEPENDENTLY SUPPORTED.

C. RECESSED LIGHTING FIXTURES INSTALLED IN FIRE RATED CEILING ASSEMBLIES SHALL BE FIRE RATED FIXTURES BEARING THE ULC FIRE RATED LABEL. FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE ULC FIRE RESISTANCE DIRECTORY, AND SHALL INCLUDE A FIRE RATED ENCLOSURE INSTALLED OVER THE FIXTURE THAT MEETS THE REQUIREMENTS OF THE ULC FIRE RESISTANCE DIRECTORY.

ELECTRICAL DRAWINGS

SYMBOLS & ABBREVIATIONS
E0.1 ELECTRICAL SYMBOLS AND ABBREVIATIONS

LIGHTING PLANS
EL2.1 NORTH WALKWAY - LIGHTING PLAN
EL2.2 SOUTH WALKWAY - LIGHTING PLAN

POWER PLANS
EP2.1 NORTH WALKWAY - POWER PLAN
EP2.2 SOUTH WALKWAY - POWER PLAN

SCHEDULES
E6.1 ELECTRICAL SCHEDULES

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A.O. SOWUNMI
Member
43015
2021-05-04
REGISTERED PROFESSIONAL ENGINEER

Project

CARLTON STREET WALKWAY UPGRADES
155 + 185 Carlton Street / Winnipeg, MB

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ELECTRICAL SYMBOLS AND ABBREVIATIONS

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