ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MW	MICROWAVE
AHU	AIR HANDLING UNIT	MGAP	MEDICAL GAS ALARM PANEL
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED
B	BED	NIC	NOT IN CONTRACT
BFC	BELOW FINISHED CEILING	NO	NORMALLY OPEN
BMS	BUILDING MANAGEMENT SYSTEM	PL	PATIENT LIFT
C	CONDUIT	R	REMOVE
C/W	COMES WITH OR COMPLETE WITH	RE	REMOVE FOR THE PURPOSE OF RELOCATION
CCT	CIRCUIT		
CM	CEILING MOUNTED	RL	EXISTING ITEM IN ITS RELOCATED POSITION
DR	DRYER	RR	REMOVE AND REINSTALL IN SAME LOCATION
DW	DISHWASHER		
E	EXISTING TO REMAIN	RTU	ROOFTOP UNIT
EC	EMPTY CONDUIT	ST	STOVE
EF	EXHAUST FAN	SWB	SWITCHBOARD
EMERG.	EMERGENCY	SWG	SWITCHGEAR
EMD	EMERGENCY MEDICAL	TPP	TRAP SEAL PRIMER PANEL
EQUIP.	EQUIPMENT	TR	TAMPER RESISTANT
EVC	ELEC. VEHICLE CHARGING STATION	TYP	TYPICAL
F	FUTURE	UPS	UNINTERRUPTIBLE POWER SUPPLY
FN	FURNITURE	VR	VANDAL RESISTANT
FCU	FAN COIL UNIT	WP	WEATHERPROOF
FR	FRIDGE	WS	WASHING MACHINE
GF	GROUND FAULT		
GFCI	GROUND FAULT CIRCUIT INTERRUPTER		
HF	HANDS-FREE FIXTURE		
HK	HOUSEKEEPING		
HT	HEAT TRACING		
HD	HAND DRYER		
HWT	HOT WATER TANK		
IG	ISOLATED GROUND		
MAU	MAKE-UP AIR UNIT		
MB	MOTORIZED BLINDS		
MCC	MOTOR CONTROL CENTRE		
MH	MOUNTING HEIGHT		

SPECIAL ELECTRICAL RECEPTACLE DESIGNATION

DESIGNATION	TYPE	DESCRIPTION
1	5-15R	120V, 15A, 1Ø, SINGLE RECEPTACLE
2	5-30R	120V, 30A, 1Ø, DUPLEX RECEPTACLE
3	5-40R	120V, 40A, 1Ø, DUPLEX RECEPTACLE
4	6-15R	250V, 15A, 1Ø, RECEPTACLE
5	6-20R	250V, 20A, 1Ø, RECEPTACLE
6	6-30R	250V, 30A, 1Ø, RECEPTACLE
7	6-50R	250V, 50A, 1Ø, RECEPTACLE
8	14-30R	125/250V, 30A, 1Ø, RECEPTACLE
9	14-50R	125/250V, 50A, 1Ø, RECEPTACLE
10	L5-15R	120V, 15A, 1Ø, TWIST LOCK RECEPTACLE
11	L5-20R	120V, 20A, 1Ø, TWIST LOCK RECEPTACLE
12	L6-15R	250V, 15A, 1Ø, TWIST LOCK RECEPTACLE
13	L6-20R	250V, 20A, 1Ø, TWIST LOCK RECEPTACLE
14	L6-30R	250V, 30A, 1Ø, TWIST LOCK RECEPTACLE
15	L6-50R	250V, 50A, 1Ø, TWIST LOCK RECEPTACLE
16	L21-30R	208/120V, 30A, 3Ø, TWIST LOCK RECEPTACLE

NOMINAL CONDUIT SIZES

mm	16	21	27	35	41	53	63	78	91	103
inch	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4

ELECTRICAL GENERAL LEGEND

(XXX-YY) OR XXX-YY	ELECTRICAL EQUIPMENT LABEL. 'XXX' DENOTES ITEM CATEGORY 'YY' DENOTES ITEM REFERENCE
	EXISTING ELECTRICAL EQUIPMENT OR SERVICE TO REMAIN.
	EXISTING ELECTRICAL EQUIPMENT OR SERVICE TO BE REMOVED.
RE	EXISTING ELECTRICAL EQUIPMENT OR SERVICE TO BE RELOCATED.
RL	NEW LOCATION OF RELOCATED ELECTRICAL EQUIPMENT OR SERVICE.
XX / YY	DEMARCATION POINT. ITEMS TO THE LEFT OF THE POINT IS BY DIVISION 'XX' ITEMS TO THE RIGHT OF THE POINT IS BY DIVISION 'YY'

FIRE ALARM LEGEND

	FIRE ALARM MANUAL PULL STATION.
X X	FIRE ALARM SMOKE DETECTOR. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT. 'X' = 'D' DENOTES DUAL CONTACT. 'X' = 'CO' DENOTES CARBON MONOXIDE DETECTOR 'X' = 'A' DENOTES SMOKE ALARM. 'X' = 'S' DENOTES C/W STROBE.
	FIRE ALARM HEAT DETECTOR. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
	HIGH TEMPERATURE FIRE ALARM HEAT DETECTOR. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
	FIRE ALARM DUCT MOUNTED SMOKE DETECTOR.
RA	REMOTE ALARM FOR DUCT MOUNTED SMOKE DETECTOR.
R	WALL MOUNTED FIRE ALARM BEAM DETECTOR AND RECEIVER.
S	FIRE ALARM EVAC SPEAKER. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
S S	FIRE ALARM EVAC SPEAKER WITH STROBE. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
S S	FIRE ALARM STROBE LIGHT. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
	FIRE ALARM HORN.
S	FIRE ALARM HORN WITH STROBE.
	FIRE ALARM BELL.
	SPRINKLER/STANDPIPE SYSTEM SUPERVISED VALVE.
FS	SPRINKLER/STANDPIPE SYSTEM FLOW SWITCH.
PS	SPRINKLER/STANDPIPE SYSTEM PRESSURE SWITCH.
MM	FIRE ALARM MONITORING MODULE.
CM	FIRE ALARM CONTROL MODULE.
EOL	FIRE ALARM END OF LINE RESISTOR.
FH	FIRE ALARM FIRE FIGHTERS HANDSET.
	FIRE ALARM ZONE BOUNDARY.
XXX XXX	FIRE ALARM PANEL. FLUSH MOUNTED SHOWN ON LEFT. SURFACE MOUNTED SHOWN ON RIGHT. 'XXX' = 'FATP' DENOTES FIRE ALARM TRANSPONDER PANEL. 'XXX' = 'FAA' DENOTES ANNUNCIATOR. 'XXX' = 'PA' DENOTES PRE-ACTION PANEL.
FDNE	WALL MOUNTED 'FIRE DO NOT ENTER' SIGN.
FDNE	CEILING MOUNTED 'FIRE DO NOT ENTER' SIGN.
	FIRE ALARM ASPIRATION SYSTEM PANEL.
	PIPE FOR FIRE ALARM ASPIRATION SYSTEM.
	LINEAR FIRE ALARM HEAT DETECTOR.

LIGHTING CONTROLS

$ XX	LIGHT SWITCH, TYPE AS NOTED. 'XX' = 'LV' DENOTES LOW VOLTAGE. 'XX' = 'D' DENOTES DIMMER SWITCH. 'XX' = 'T' DENOTES TIMER SWITCH. 'XX' = '3' DENOTES 3 WAY SWITCH. 'XX' = '4' DENOTES 4 WAY SWITCH. 'XX' = '3P' DENOTES 3 POSITION SWITCH (UP - RAISES, DOWN - LOWERS, CENTRE - STOPS). 'XX' = 'L' DENOTES ILLUMINATED SWITCH. 'XX' = 'K' DENOTES KEY OPERATED SWITCH. 'XX' = 'OS' DENOTES OCCUPANCY SENSOR.
XX OR XX	OCCUPANCY SENSOR. 'XX' = 'I' DENOTES INFRARED AND OCCUPANCY DUAL SENSOR.
APPLICABLE FOR LINE VOLTAGE LIGHTING CONTROL SYSTEMS	
XXX OR XXX	LIGHTING CONTROL PANEL. FLUSH MOUNTED SHOWN ON LEFT. SURFACE MOUNTED SHOWN ON RIGHT. 'XXX' = 'RLP' DENOTES RELAY PANEL. 'XXX' = 'LCP' DENOTES NETWORKED LIGHTING CONTROL PANEL.
ELI	EMERGENCY LIGHTING CONTROL INTERFACE. UL924 RELAY.
RC-X	ROOM CONTROLLER. 'X' = 'A', 'B', & 'C' DENOTES SINGLE, 2, & 3 ZONES RESPECTIVELY.
PP-X	POWER PACK. IF SHOWN, 'X' = 'A' DENOTES TO BE USED WITH PARTITION SENSOR. IF SHOWN, 'X' = 'B' DENOTES PACK TO BE USED WITH STANDALONE CEILING OCCUPANCY SENSOR.
SC	SCENE CONTROLLER. SCENES TO BE PROGRAMMED BY THE CONTROLS REPRESENTATIVE.
APPLICABLE FOR LUTRON LIGHTING CONTROL SYSTEMS	
GE	LUTRON GRAFIK EYE.
ESN	LUTRON ENERGI SAVR NODE.
ELC	LUTRON EMERGENCY LIGHTING CONTROL UNIT.
APPLICABLE FOR ENCELIUM LIGHTING CONTROL SYSTEMS	
WM	ENCELIUM WIRELESS MANAGER.
PoE	ENCELIUM POWER OVER ETHERNET INJECTOR.
WALC	ENCELIUM WIRELESS AREA LIGHTING CONTROLLER.
SSU	ENCELIUM SYSTEM SUPPORT UNIT.
APPLICABLE FOR GENERIC WATTSTOPPER/ACUITY LIGHTING CONTROL SYSTEMS	
PLC	RECEPTACLE LOAD CONTROLLER.
RC-X	ROOM CONTROLLER. 'X' = 'A', 'B', & 'C' DENOTES SINGLE, 2, & 3 ZONES RESPECTIVELY.
PP-X	POWER PACK. IF SHOWN, 'X' = 'A' DENOTES TO BE USED WITH PARTITION SENSOR. IF SHOWN, 'X' = 'B' DENOTES PACK TO BE USED WITH STANDALONE CEILING OCCUPANCY SENSOR.
ZC	ZONE CONTROLLER.
ELCU	EMERGENCY LIGHTING CONTROL UNIT. UL924 RELAY.
NC	NETWORK CONTROLLER.

ELECTRICAL SINGLE LINE DRAWING LEGEND

XA	FUSE. 'XA' DENOTES SIZE.
XA	SWITCH. 'XA' DENOTES SIZE.
XA	LOAD BREAK SWITCH. 'XA' DENOTES SIZE.
XA YYY	LOW VOLTAGE MOULDED CASE CIRCUIT BREAKER. 'XA' DENOTES BREAKER SIZE. 'YYY' DENOTES OPTIONAL SUPPLEMENTARY INFORMATION.
XA YYY	LOW VOLTAGE DRAW-OUT POWER CIRCUIT BREAKER. 'XA' DENOTES BREAKER SIZE. 'YYY' DENOTES OPTIONAL SUPPLEMENTARY INFORMATION.
XA	MEDIUM VOLTAGE DRAW-OUT POWER CIRCUIT BREAKER. 'XA' DENOTES BREAKER SIZE.
XA Y	SWITCH AND FUSE. 'XA' DENOTES SWITCH SIZE. 'Y' DENOTES FUSE SIZE.
YYY XXX	TRANSFER SWITCH. 'XXX' DENOTES TRANSFER SWITCH REFERENCE. 'YYY' DENOTES SUPPLEMENTARY INFORMATION.
XXX	DISTRIBUTION TRANSFORMER. 'XXX' = 'HMT' TO DENOTE HARMONIC MITIGATION / CANCELLATION. 'XXX' = 'K' TO DENOTE K-RATED.
	POTENTIAL TRANSFORMER.
	CURRENT TRANSFORMER.
	DELTA.
	WYE.
	ZIG-ZAG
X	MOTOR LOAD. 'X' = 'G' TO DENOTE GENERATOR. 'X' = 'FP' TO DENOTE FIRE PUMP.
	GROUND CONNECTION.
	SOLID GROUNDING.
XA	NEUTRAL RESISTANCE GROUNDING. 'XA' DENOTES AMPERAGE.
K	KEY INTERLOCK
	LIGHTNING ARRESTOR
SPD	SURGE PROTECTION DEVICE
M	METER
	BATTERY
LINV	LIGHTING INVERTER
	INVERTER/RECTIFIER. AC SIDE IS DENOTED BY "~", DC SIDE IS DENOTED BY "=".
	STATIC BYPASS SWITCH
	DRAW-OUT DEVICE. THE SHADED BOX WILL BE THE SYMBOL DENOTING WHICH DEVICE.

LIGHTING LEGEND

	HATCHED LUMINAIRES DENOTES HARDWIRED TO EMERGENCY POWER. TYPE AS NOTED.
	FILLED CIRCLE(S) WITHIN CEILING LUMINAIRE SYMBOLS INDICATE IT IS PENDANT TYPE.
	WALL MOUNTED LUMINAIRE. TYPE AS NOTED.
	CEILING MOUNTED DOWNLIGHT. TYPE AS NOTED. IF SHOWN, THE CHEVRON INDICATES LIGHT DIRECTION.
	STRIP LIGHT. TYPE AS NOTED.
	LINEAR SLOT / CHANNEL TAPE LUMINAIRE. TYPE AS NOTED.
	RECESSED WALL LINEAR LUMINAIRE. VERTICAL TYPE SHOWN ON LEFT. HORIZONTAL TYPE SHOWN ON RIGHT.
	300mm x 1200mm (1' x 4') LUMINAIRE. TYPE AS NOTED.
	600mm x 600mm (2' x 2') LUMINAIRE. TYPE AS NOTED.
	600mm x 1200mm (2' x 4') LUMINAIRE. TYPE AS NOTED.
	LUMINAIRE SHOWN IN RELOCATED POSITION.
	NEW LUMINAIRE.
	TRACK LIGHTING C/W NUMBER OF FIXTURES SHOWN. TYPE AS NOTED.
	EXTERIOR LIGHT STANDARD. QUANTITY OF HEADS AS SHOWN. TYPE AS NOTED.
	EXTERIOR LIGHTING BOLLARD. TYPE AS NOTED.
	EXIT SIGN WITH DIRECTIONAL ARROW AS INDICATED. TYPE AS NOTED. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
B	WALL MOUNTED EMERGENCY LIGHTING BATTERY UNIT. TYPE AS NOTED. 'XXX' DENOTES BATTERY UNIT NUMBER.
B	WALL MOUNTED EMERGENCY LIGHTING BATTERY UNIT C/W INTEGRAL HEADS. TYPE AS NOTED. 'XXX' DENOTES BATTERY UNIT NUMBER.
	EMERGENCY LIGHTING DOUBLE REMOTE HEAD. TYPE AS NOTED. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
	EMERGENCY LIGHTING SINGLE REMOTE HEAD. TYPE AS NOTED. WALL MOUNTED SHOWN ON LEFT. CEILING MOUNTED SHOWN ON RIGHT.
B	WALL MOUNTED EMERGENCY LIGHTING BATTERY UNIT C/W EXIT SIGN. TYPE AS NOTED. 'XXX' DENOTES BATTERY UNIT NUMBER.

ELECTRICAL POWER LEGEND

	120V, 1Ø DIRECT CONNECTION FOR EQUIPMENT AS NOTED.
	208V, 1Ø DIRECT CONNECTION FOR EQUIPMENT AS NOTED.
	208V, 3Ø DIRECT CONNECTION FOR EQUIPMENT AS NOTED.
	416V OR 480V, 3Ø DIRECT CONNECTION FOR EQUIPMENT AS NOTED.
	600V, 3Ø DIRECT CONNECTION FOR EQUIPMENT AS NOTED.
X	FLOOR MOUNTED POWER MONUMENT. 'X' DENOTES TYPE. 'PT' DENOTES POKE-THRU AT FLOOR
X	FLOOR MOUNTED COMBINATION POWER AND DATA MONUMENT. 'X' DENOTES TYPE.
X	FLOOR MONUMENT FOR POWER AND/OR SYSTEMS FURNITURE. 'X' DENOTES TYPE.
X	WALL MOUNTED POWER & DATA INPUT FOR SYSTEMS FURNITURE. 'X' DENOTES TYPE.
X	HEADWALL/SERVICE COLUMN. 'X' DENOTES TYPE.
SP	SERVICE POLE.
W W	SURFACE MOUNTED RACEWAY. TYPE AS SPECIFIED C/W TYPE AND QUANTITY OF DEVICES INDICATED.
	CONNECTRAC
XX	UN-FUSED DISCONNECT SWITCH. 'X' DENOTES DISCONNECT RATING.
XX	FUSED DISCONNECT SWITCH 'X' DENOTES DISCONNECT RATING. 'Y' DENOTES FUSE SIZE.
JB	JUNCTION BOX C/W BLANK COVER PLATE. SIZED FOR THE SERVICE/CONNECTION NOTED.
PB	PULL BOX C/W BLANK COVER PLATE. SIZED FOR THE SERVICE/CONNECTION AS NOTED.
XX	MOTOR CONTROLLER. 'XX' DENOTES TYPE.
XX	VARIABLE FREQUENCY DRIVE. 'XX' DENOTES TYPE.
	TRANSFORMER.
HF	HARMONIC FILTERS.
	ELECTRICAL PANEL. FLUSH MOUNTED SHOWN ON LEFT. SURFACE MOUNTED SHOWN ON RIGHT
	POWER PANEL. FLUSH MOUNTED SHOWN ON LEFT. SURFACE MOUNTED SHOWN ON RIGHT.
	SPLITTER
GND	COPPER GROUND BAR
	GROUND ROD
	GROUND ROD C/W GROUND PLATE
	LIGHTNING PROTECTION DOWNLEAD
	LIGHTNING PROTECTION WALL MOUNTED AIR TERMINAL
	LIGHTNING PROTECTION FLOOR MOUNTED AIR TERMINAL
Y	AV OUTLET PROVIDE 1.5" CONDUIT TO EACH AV OUTLET.
	DATA OUTLET PROVIDE 1" CONDUIT TO EACH DATA OUTLET
	BUS DUCT OR CABLE BUS AS NOTED
	BUS DUCT OR CABLE BUS ELBOW
	BUS DUCT OR CABLE BUS UP
	BUS DUCT OR CABLE BUS DOWN
	CABLE TRAY
	CABLE TRAY ELBOW
	CABLE TRAY TEE
	CABLE TRAY CROSSED TEE
	CABLE TRAY UP
	CABLE TRAY DOWN
C C	UNDER CARPET RACEWAY RECEPTACLE SYMBOL REPRESENTS THE MONUMENT OF THE SYSTEM

ELECTRICAL RECEPTACLE LEGEND

CEILING MOUNTED	WALL MOUNTED	EQUIPMENT / HEADWALL MOUNTED	MOUNTED ABOVE COUNTER HEIGHT	DESCRIPTION
				120V, 15A DUPLEX RECEPTACLE.
				120V, 15A SPLIT DUPLEX RECEPTACLE.
				120V, 15A GFCI DUPLEX RECEPTACLE
				120V, 20A T-SLOT DUPLEX RECEPTACLE. 'HK' DENOTES HOUSEKEEPING RECEPTACLE.
				120V, 20A T-SLOT GFCI DUPLEX RECEPTACLE. 'HK' DENOTES HOUSEKEEPING RECEPTACLE.
				120V, 20A T-SLOT DOUBLE DUPLEX RECEPTACLE
				120V, 15A EMERGENCY POWER DUPLEX RECEPTACLE.
				120V, 20A T-SLOT EMERGENCY POWER DUPLEX RECEPTACLE.
				SPECIAL RECEPTACLE. REFER TO SPECIAL RECEPTACLE DESIGNATION TABLE.
U	U	U	U	120V, 15A DUPLEX RECEPTACLE C/W USB CONNECTION.

DOOR HARDWARE

CR	CARD READER
ADO	AUTOMATIC DOOR OPERATOR
ES	ELECTRIC STRIKE
DO	DOOR OPERATOR
KP	KEYPAD
DC	DOOR CONTACT
RD	REQUEST TO EXIT DETECTOR

GENERAL NOTES
(NOTES AND NUMBERING BELOW PERTAINS TO ALL E-SERIES DRAWINGS.)

1. COORDINATE WITH OWNER FOR SYSTEM ISOLATION ACTIVITIES INCLUDING STAGES OF REMOVAL OF EXISTING EQUIPMENT AND INSTALLATION OF NEW EQUIPMENT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO SURFACES, FINISHES AND MATERIALS DUE TO WORK UNDER THIS CONTRACT AND SHALL INCUR ALL COSTS TO RECTIFY, REPAIR AND REPLACE SAME TO CONSULTANT'S SATISFACTION.
3. BE RESPONSIBLE FOR CUTTING, PAINTING AND PATCHING, AS REQUIRED, TO FACILITATE THE INSTALLATION OF NEW SERVICES. FIRESTOP AND CLOSE ANY OPENINGS IN WALLS OR CEILINGS THAT OCCUR DUE TO THE REMOVAL OF EXISTING SERVICES OR DUE TO INSTALLATION OF NEW SERVICES. FINISH TO MATCH EXISTING.
4. THE CONSULTANT DOES NOT WARRANT THE ACCURACY OF EXISTING BUILDING CONDITIONS, DIMENSIONS, OR MATERIALS REPRESENTED ON THE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE PLACE OF THE WORK AND SURROUNDINGS PRIOR TO SUBMITTING THE BID, TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS THAT WILL AFFECT THE WORK.
5. COORDINATE WORK WITH OTHER TRADES PRIOR TO THE ROUGH-IN OF ANY DEVICE INCLUDING COORDINATION WITH FURNITURE AND EQUIPMENT SUPPLIER.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES REFER TO LIGHTING SPECIFIACTION 26 50 00 FOR LUMINAIRE SCHEDULE.
7. ALL NEW ELECTRICAL EQUIPMENT SHALL HAVE SHORT-CIRCUIT RATINGS, INCLUDING WITHSTAND AND INTERRUPTING CAPACITIES, AS APPLICABLE, NOT LESS THAN THE AVAILABLE SHORT-CIRCUIT CURRENT AT THEIR RESPECTIVE POINTS OF INSTALLATION.
8. THE CONTRACTOR SHALL CONFIRM THE COLOUR AND FINISH OF ALL NEW RECEPTACLES, SWITCHES, DIMMERS, AND ASSOCIATED COVER PLATES WITH THE ARCHITECT PRIOR TO PROCUREMENT.

DRAWING LIST

E-000	ELECTRICAL LEGEND AND DRAWING LIST
E-201	LEVEL 7 NEW FLOOR PLAN - LIGHTING
E-301	LEVEL 7 NEW FLOOR PLAN - ELECTRICAL SYSTEMS
E-400	ELECTRICAL DETAILS
E-401	PANEL SCHEDULES
E-501	LEVEL 7 DEMO FLOOR PLAN - LIGHTING & ELECTRICAL SYSTEMS

COORDINATION NOTES
(NOTES AND NUMBERING BELOW PERTAINS TO ALL E-SERIES DRAWINGS.)

1. DIV 26 CONTRACTOR TO PROVIDE ELECTRICAL ROUGH-INS(INCLUDING CONDUITS AND BACK BOXES) FOR NEW COMMUNICATION, AV & SECURITY SYSTEMS. REFER TO THE COMMUNICATIONS AND SECURITY DRAWINGS UNDER THE SAME PROJECT FOR MORE DETAILS.

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Key Plan

Professional Seals

LICENSED PROFESSIONAL ENGINEER
J. LEE
100203359
PROVINCE OF ONTARIO

No.	Description	Date
01	ISSUED FOR 100% DD	08/21/2026
02	ISSUED FOR 60% CD	09/17/2026
03	ISSUED FOR 90% CD	10/08/2026
04	ISSUED FOR PERMIT/TENDER	10/29/2026

Project No: 2251005

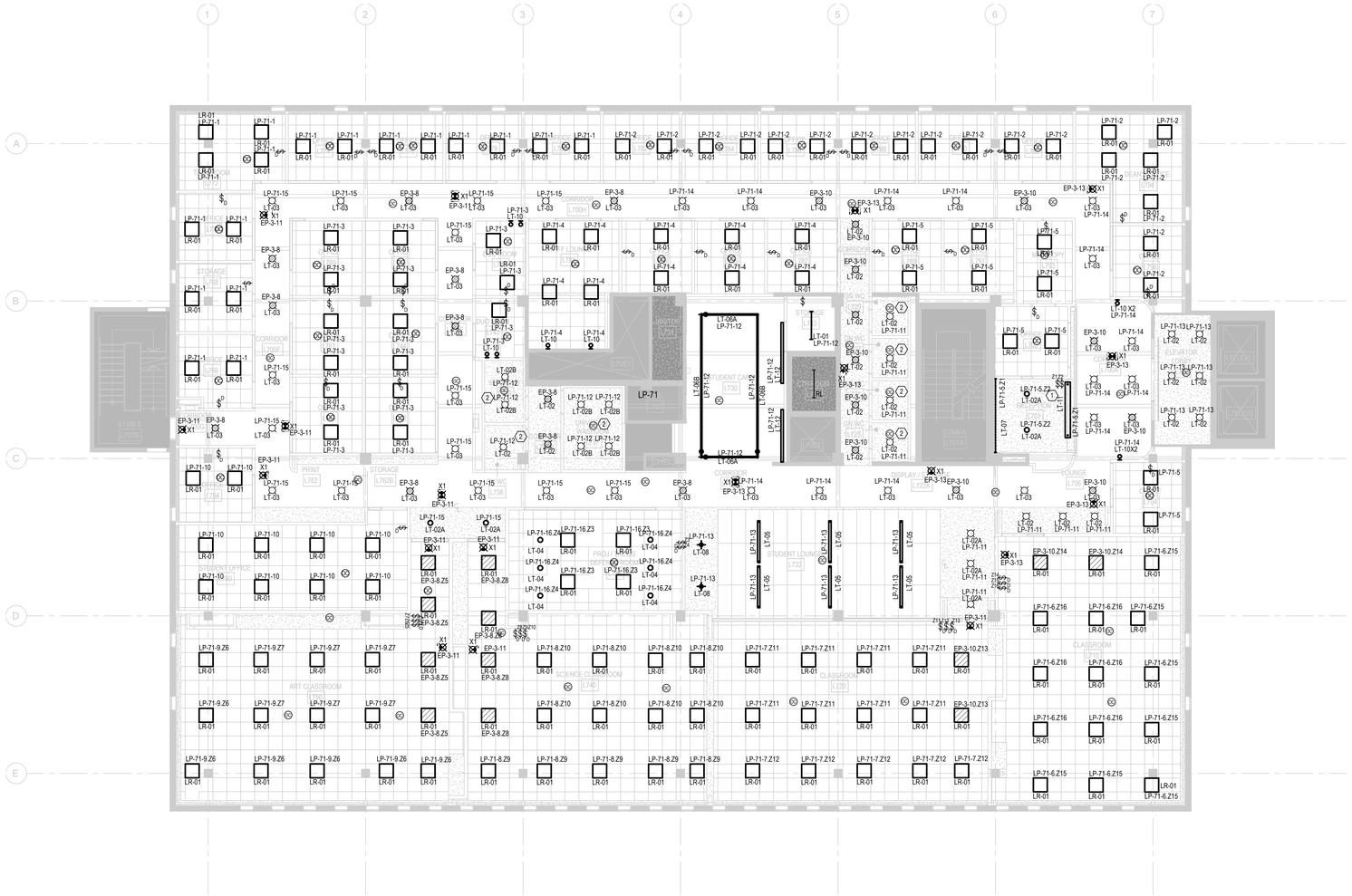
Sheet Title

ELECTRICAL LEGEND AND DRAWING LIST

Original is 42 x 30. Do not scale contents of this drawing.

Sheet Number

E-001



GENERAL NOTES

(NOTES AND NUMBERING BELOW PERTAINS TO THIS DRAWING ONLY.)

1. ANY SWITCH, DIMMER, OR OCCUPANCY SENSOR CONTROLLING EMERGENCY LIGHTING FIXTURES SHALL BE EQUIPPED WITH A UL924 RELAY. UPON POWER OUTAGE, THE RELAY SHALL AUTOMATICALLY OVERRIDE LOCAL SWITCHING/DIMMING AND FORCE ALL CONNECTED EMERGENCY FIXTURES TO 100% ILLUMINANCE.
2. PANEL EP-3 IS LOCATIED ON PENTHOUSE.

REFERENCE NOTES

(NOTES AND NUMBERING BELOW PERTAINS TO THIS DRAWING ONLY.)

1. CONTRACTOR TO PROVIDE AND INSTALL A NEW LIGHTING SWITCH WITH A COLOR FINISH MATCHING THE RECEPTION PANEL.
2. DUAL-TECHNOLOGY OCCUPANCY SENSORS FOR WASHROOMS.

1 LEVEL 7 NEW FLOOR PLAN - LIGHTING
1/8" = 1'-0"

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Key Plan

Professional Seals

LICENSED PROFESSIONAL ENGINEER
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No.	Description	Date
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Project No: 2251005

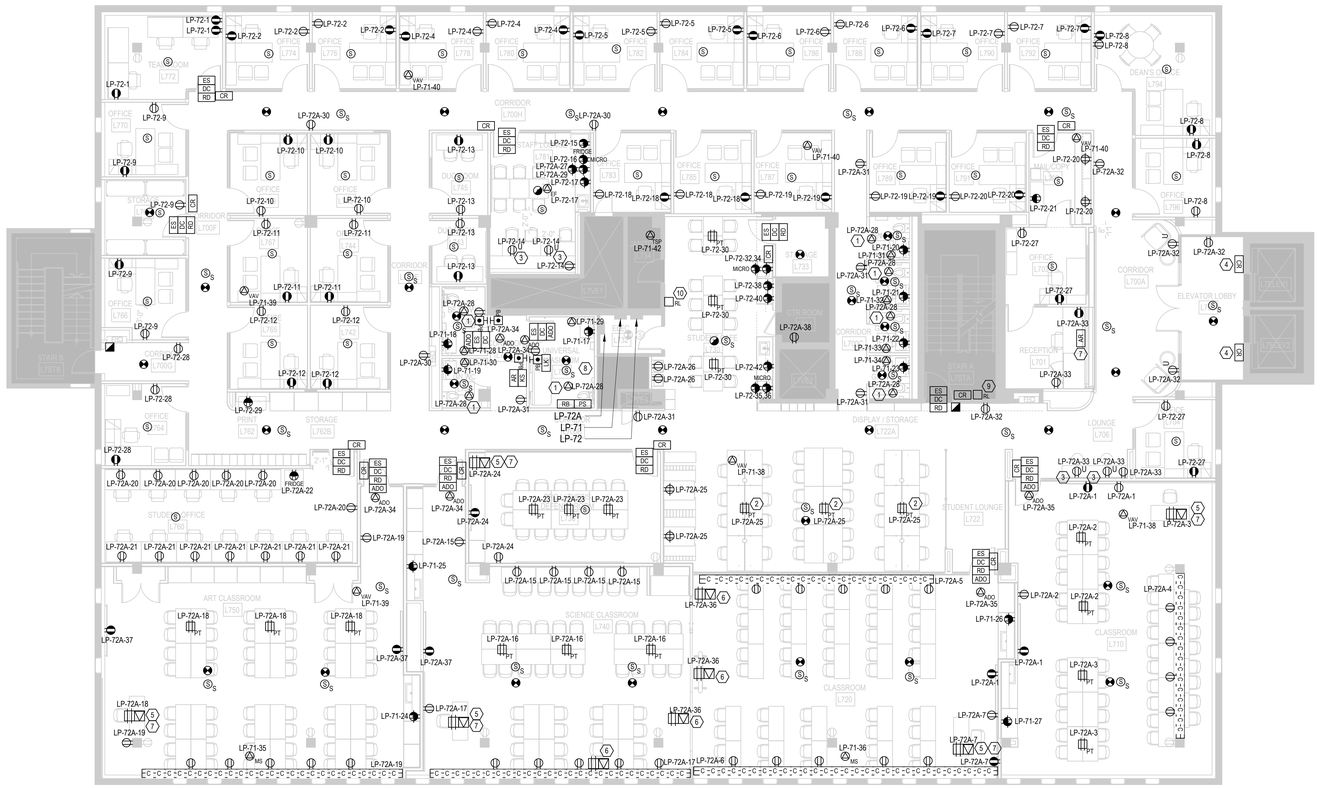
Sheet Title

LEVEL 7 NEW FLOOR PLAN - LIGHTING

Original is 42 x 30. Do not scale contents of this drawing.

Sheet Number

E-201



1 LEVEL 7 NEW FLOOR PLAN - ELECTRICAL & SYSTEMS
1/8" = 1'-0"

GENERAL NOTES

(NOTES AND NUMBERING BELOW PERTAINS TO THIS DRAWING ONLY.)

1. CONTRACTOR TO ENSURE AT LEAST 50% OF RECEPTACLE OF EACH ENCLOSED OFFICES AND CLASSROOMS ARE CONTROLLED BY OCCUPANCY SENSOR IN THE SAME PLACE.
2. DOOR HARDWARE DEVICES ARE SHOWN AS REFERENCE ONLY FOR THE ROUGH-IN REQUIREMENTS. REFER TO DETAIL #4 ON DRAWING E-400 FOR MORE DETAILS ON ROUGH-IN REQUIREMENT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK REQUIRED TO FULLY INTEGRATE THE NEW FIRE ALARM DEVICES INTO THE EXISTING BUILDING FIRE ALARM SYSTEM, INCLUDING ALL NECESSARY CONNECTIONS, PROGRAMMING, COORDINATION WITH THE EXISTING FIRE ALARM SERVICE PROVIDER, TESTING, AND VERIFICATION IN ACCORDANCE WITH CAN/ULC-S537, ALL EXISTING FIRE ALARM FUNCTIONS SHALL REMAIN OPERATIONAL AND UNAFFECTED BY THE MODIFICATIONS. INCLUDE ALL ASSOCIATED COSTS IN THE CONTRACT PRICE. PROVIDE A SEPARATE OPTIONAL PRICE FOR INTEGRATED SYSTEMS TESTING IN ACCORDANCE WITH CAN/ULC-S1001, SHOULD SUCH TESTING BE REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
4. IN ADDITION TO THE DEVICES SHOWN ON THE PLANS, ALLOW FOR THE INSTALLATION OF FIVE (5) NEW HEAT DETECTORS, FIVE (5) NEW SMOKE DETECTORS, FIVE (5) NEW COMBINATION FIRE ALARM HORNS/STROBES AND TWO (2) NEW FIRE ALARM PULL STATIONS C/W NEW WIRING AND CONDUITS.

REFERENCE NOTES

(NOTES AND NUMBERING BELOW PERTAINS TO THIS DRAWING ONLY.)

1. PROVIDE 120V,1P CIRCUIT TERMINATED IN JUNCTION BOX IN ACCESSIBLE LOCATION FOR PLUMBING LOW VOLTAGE DEVICES, COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION.
2. RECEPTACLE FOR FURNITURE POWER MODULE.
3. RECEPTACLE FOR MILLWORK POWER. CONTRACTOR TO COORDINATE WITH MILLWORK SUPPLIER.
4. PROVIDE SEPARATE PRICING FOR ROUGH-IN FOR ADDING CARD READERS TO THE ELEVATOR LOBBY.
5. FLUSH FLOOR MONUMENT WITH QUAD RECEPTACLE. DIV.26 CONTRACTOR TO COORDINATE WITH AV CONTRACTOR FOR THE ALL ROUGH-IN REQUIREMENTS INCLUDING CONDUIT AND BACK BOXES FOR AV CABLING.
6. FLUSH FLOOR MONUMENT WITH DUPLEX RECEPTACLE. DIV.26 CONTRACTOR TO COORDINATE WITH AV CONTRACTOR FOR THE ALL ROUGH-IN REQUIREMENTS INCLUDING CONDUIT AND BACK BOXES FOR AV CABLING.
7. DIV.26 CONTRACTOR TO REFER TO COMMUNICATION DRAWING FOR THE ROUGH-IN REQUIREMENT FOR THE REQUIRED COMMUNICATION WIRING.
8. REFER TO DETAIL#1 ON DRAWING E-400 FOR MORE DETAILS ON HARDWARE DEVICES ROUGH-IN REQUIREMENT IN UNIVERSAL WAHROOM.
9. RELOCATED LIGHTING KEY SWITCH.
10. RELOCATED CAMPUS SECURITY PHONE.

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Key Plan

Professional Seals

LICENSED PROFESSIONAL ENGINEER
J. LEE
100203359
PROVINCE OF ONTARIO

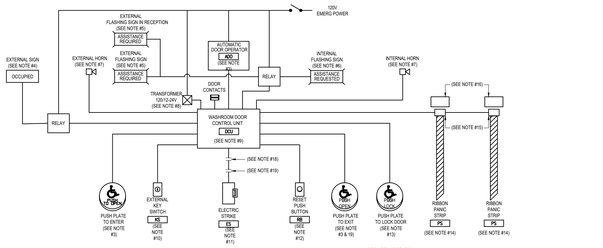
No.	Description	Date
01	ISSUED FOR 100% DD	08/21/2026
02	ISSUED FOR 60% CD	09/17/2026
03	ISSUED FOR 90% CD	10/08/2026
04	ISSUED FOR PERMIT/TENDER	10/29/2026

Project No: 2251005
Sheet Title

LEVEL 7 NEW FLOOR PLAN - ELECTRICAL SYSTEMS

Original is 42 x 30. Do not scale contents of this drawing.
Sheet Number

E-301



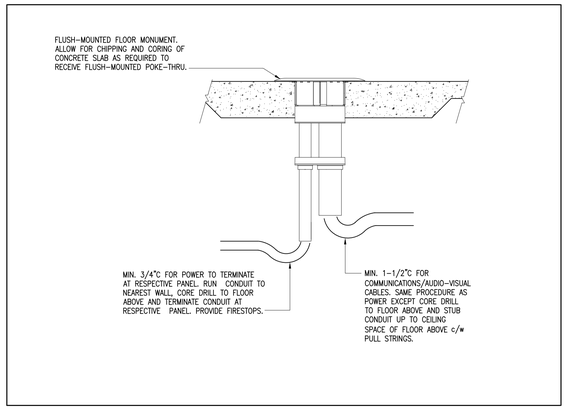
NOTES:

1. DEVICES & WIRING BY ELECTI/SECURITY CONTRACTOR EXCEPT WHERE INDICATED OTHERWISE.
2. LOCATE DEVICES IN ACCORDANCE WITH ARCHITECTURAL AND ELECTRICAL DRAWINGS.
3. BY DOOR HARDWARE DIVISION.
4. "OCCUPIED" SIGN TO MATCH EXIT SIGNS USED ON THE PROJECT.
5. FLASHING "ASSISTANCE REQUIRED" SIGN TO MATCH EXIT SIGNS USED ON THE PROJECT.
6. SAME AS "ASSISTANCE REQUIRED" SIGN BUT SHOWING "ASSISTANCE REQUESTED".
7. 24V HORN, SCHLAGE #1910 OR ACCEPTABLE ALTERNATIVE.
8. CONTROL TRANSFORMER: SIZE TO SUIT TOTAL CONNECTED LOAD OF THE DEVICES USED, BUT NOT LESS THAN 100VA. LOCATE IN ACCESSIBLE CEILING SPACE, PROVIDE ACCESS PANEL WHERE THE CEILING IS NOT LAY-IN TILE. SECURE THE TRANSFORMER USING RESILIENT MOUNTS TO PREVENT TRANSMISSION OF NOISE AND VIBRATION.
9. DOOR CONTROL UNIT (DCU), CAMDEN MODEL CX-EMF-2 OR ACCEPTABLE ALTERNATIVE. LOCATE IN ACCESSIBLE CEILING SPACE, PROVIDE ACCESS PANEL WHERE THE CEILING IS NOT LAY-IN TILE.
10. KEY SWITCH: MOMENTARY CONTACT WITH STAINLESS STEEL MORTISE CYLINDER AND SINGLE (GANG STAINLESS STEEL FACEPLATE WMK MODEL #LKF. CAMDEN MODEL CM-1200 OR ACCEPTABLE ALTERNATIVE. MOUNT AT 1200mm ABOVE FLOOR TO CENTERLINE. KEY ALL KEY SWITCHES ALIKE AND PROVIDE 6 DUPLICATE KEYS EACH CHI A LAMICOID FOB STATING "UNIVERSAL WR".
11. ELECTRIC STRIKE COMPLETE WITH RECTIFIER AND POWER REDUCTION FEATURE FOR CONTINUOUS OPERATION. STRIKE TO LOCK WHEN ENERGIZED AND TO FAIL SAFE (OPEN).
12. INTERIOR MOMENTARY CONTACT SYSTEM RESET SWITCH. PROVIDE LAMICOID PLATE WITH 6mm (1/4") HIGH LETTERING, BLACK LETTERS ON A WHITE BACKGROUND STATING:
    "EMERGENCY RESET
    PUSH TO RESET SYSTEM".
    MOUNT SWITCH AT 1000mm ABOVE FINISHED FLOOR TO CENTERLINE.
13. INTERIOR PUSH PLATE TO LOCK DOOR, WMK MODEL #6R-3 WITH CUSTOM ENGRAVING.
    "PUSH TO LOCK"
    OR ACCEPTABLE ALTERNATIVE.
    MOUNT AT 1500mm ABOVE FINISHED FLOOR TO CENTERLINE.
14. RIBBON PANIC STRIP, TAPESWITCH TYPE "PASS" OR ACCEPTABLE ALTERNATIVE. ACTIVE SWITCH AREA NOT LESS THAN 900mm IN LENGTH WITH BOTTOM OF ACTIVE SWITCH AREA 150mm ABOVE FINISHED FLOOR.
15. WIRE MOLD BOX SERIES 500.
16. LAMICOID PLATE WITH 25mm HIGH RED LETTERING ON A WHITE BACKGROUND STATING:
    "IN THE EVENT OF AN EMERGENCY DEPRESS STRIP. AN AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE".
    MOUNT ONE PLATE ABOVE EACH RIBBON PANIC STRIP.
17. CO-ORDINATE DEVICE RATINGS AND FUNCTIONS WITH HARDWARE DIVISION.
18. FIRE ALARM CONTACT TO OPEN UPON ACTIVATION OF A FIRE ALARM (2ND STAGE WHERE APPLICABLE).
19. AUXILIARY CONTACT ON PUSH PLATE TO EXIT (CO-ORDINATE REQUIREMENTS WITH HARDWARE DIVISION).

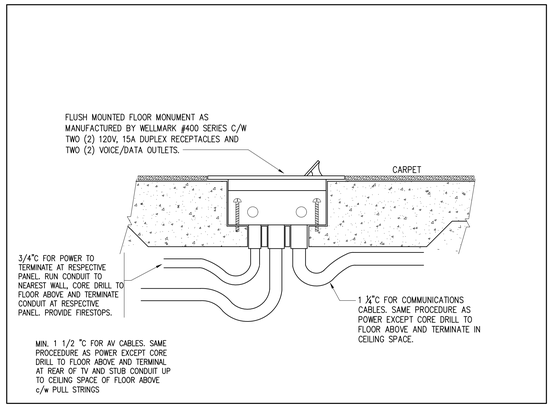
REQUIRED OPERATION:

1. WHEN NOT IN USE, SIGNS ARE NOT ILLUMINATED. HORNS ARE OFF AND DOOR IS NOT LOCKED.
2. A PERSON CAN ENTER BY OPENING THE DOOR MANUALLY OR BY DEPRESSING THE MOMENTARY CONTACT "PUSH TO OPEN" STATION, IN WHICH CASE THE DCU PICKS UP AND DOOR OPENS AUTOMATICALLY.
3. ONCE INSIDE, A PERSON DEPRESSES THE MOMENTARY CONTACT "PUSH TO LOCK" STATION, IN WHICH CASE THE DCU PICKS UP AND LATCHES IN THE DCU ACTIVATES THE ELECTRIC STRIKE LOCKING THE DOOR AND ILLUMINATES THE "OCCUPIED" SIGN.
4. TO EXIT, A PERSON DEPRESSES THE MOMENTARY CONTACT "PUSH TO OPEN" STATION. THE DCU RELEASES THE ELECTRIC STRIKE, OPENS THE DOOR AND TURNS OFF THE "OCCUPIED" SIGN.
5. SHOULD THE PERSON REQUIRE ASSISTANCE, THE PERSON DEPRESSES THE MOMENTARY CONTACT PANIC STRIP. THE DCU PICKS UP AND LATCHES IN. THE "ASSISTANCE REQUIRED" AND "ASSISTANCE REQUESTED" SIGNS ILLUMINATE AND FLASH AT A RATE OF ONCE PER SECOND. THE HORNS SOUND.
6. A RESPONDER TO THE ASSISTANCE REQUIRED SIGNAL OPERATES THE KEY SWITCH WHICH RELEASES THE ELECTRIC STRIKE ALLOWING ENTRY TO THE WASHROOM.
7. ONCE INSIDE, THE RESPONDER CAN DEPRESS THE RESET BUTTON, THE HORNS AND THE FLASHING SIGNS TURN OFF. THE "OCCUPIED" SIGN REMAINS ILLUMINATED, UNTIL THE PUSH PLATE TO EXIT IS DEPRESSED.

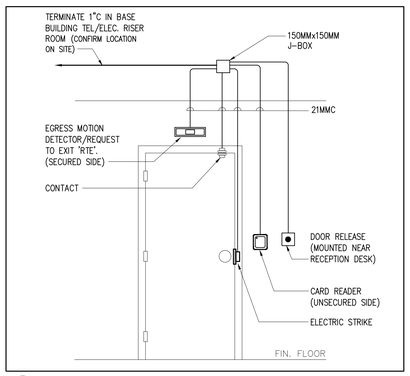
2 E400 UNIVERSAL WASHROOM DOOR CONTROL & SIGNALLING, ELECTRICAL SCHEMATIC – SINGLE LINE



1 E400 TYPICAL FLOOR MONUMENT MOUNTING DETAIL:
SYMBOL: N.T.S.



3 E400 DETAIL OF POWER & COMMUNICATIONS FLUSH FLOOR MONUMENT:
SYMBOL: N.T.S.



4 E400 TYPICAL SECURITY ROUGH-IN FOR ELECTRIC STRIKE DOOR:
SYMBOL: N.T.S.

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Key Plan

Professional Seals



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03	ISSUED FOR 90% CD	10/08/2026
04	ISSUED FOR PERMIT/TENDER	10/29/2026

Project No: 2251005

Sheet Title

ELECTRICAL DETAILS

Orginal is 42 x 30. Do not scale contents of this drawing.

Sheet Number

E-400

TOTAL # OF CIRCUITS: 66		PANEL LP-71 FED FROM 150KVA TXFMR										120/208V, 3PH, 4W						MAIN BREAKER:225A 3P/4W	
LOAD	NO OF	NO OF	BRKR	LOAD PER PHASE			CCT	PHASE			CCT	LOAD PER PHASE			BRKR	NO OF	NO OF	LOAD
DESCRIPTION	REC.	FIXT	SIZE	A	B	C	NO	A	B	C	NO	A	B	C	SIZE	FIXT	REC.	DESCRIPTION
LIGHTING - OFFICE		17	15A	459	-	-	1				2	513	-	-	15A	19		LIGHTING - OFFICE
LIGHTING - OFFICE		15	15A	-	405	-	3				4	-	391	-	15A	13		LIGHTING - OFFICE & STAFF LOUNGE
LIGHTING - OFFICE&RECEPTION		14	15A	-	-	322	5				6	-	-	324	15A	12		LIGHTING - CLASSROOM L710
LIGHTING - CLASSROOM L720		12	15A	324	-	-	7				8	324	-	-	15A	12		LIGHTING - CLASSROOM L740
LIGHTING - CLASSROOM L750		12	15A	-	324	-	9				10	-	270	-	15A	10		LIGHTING - STUDENT OFFICE & OFFICE
LIGHTING W/C & CORRIDOR L700C		8	15A	-	-	160	11				12	-	-	680	15A	15		LIGHTING- W/C AND STUDENT CAFE
LIGHTING - STUDENT LOUNGE &ELEVATOR LOBBY		14	15A	410	-	-	13				14	310	-	-	15A	16		LIGHTING - CORRIDOR
LIGHTING - CORRIDOR		13	15A	-	182	-	15				16	-	253	-	15A	11		LIGHTING - PROJECT ROOM L736
RECEPTACLE - UWC		1	20A	-	-	300	17				18	-	-	300	20A	1		RECEPTACLE - BF WC
RECEPTACLE - WC		1	20A	300	-	-	19				20	300	-	-	20A	1		RECEPTACLE - WC
RECEPTACLE - WC		1	20A	-	300	-	21				22	-	300	-	20A	1		RECEPTACLE - WC
RECEPTACLE - WC		1	20A	-	-	300	23				24	-	-	300	20A	1		RECEPTACLE - SINK NEAR L750
RECEPTACLE - SINK NEAR L740		1	20A	300	-	-	25				26	300	-	-	20A	1		RECEPTACLE - SINK NEAR L720
RECEPTACLE - SINK NEAR L710		1	20A	-	300	-	27				28	-	1000	-	20A	1		HAND DRYER- BFWC
HAND DRYER- UWC		1	20A	-	-	1000	29				30	-	-	1000	20A	1		HAND DRYER- WC
HANDDRYER - WC		1	20A	1000	-	-	31				32	1000	-	-	20A	1		HANDDRYER - WC
HANDDRYER - WC		1	20A	-	1000	-	33				34	-	1000	-	20A	1		HANDDRYER - WC
MOTORIZED SHADES- L750		2	15A	-	-	-	35				36	-	-	-	15A	2		MOTORIZED SHADES- L740,L720
							37				38				15A	3		POWER- VAV
POWER - VAV		2	15A	-	-	-	39				40	-	-	-	15A	2		POWER- VAV
POWER - EF		1	15A	-	-	-	41				42	-	-	-	15A	1		POWER- TSP
							43				44							
				-	-	-	45				46	-	-	-				
				-	-	-	47				48	-	-	-				
						-	49				50			-				
						-	51				52			-				
						-	53				54							
						-	55				56			-				
				-	-	-	57				58	-	-	-				
				-	-	-	59				60	-	-	-				
				-	-	-	61				62	-	-	-				
				-	-	-	63				64	-	-	-				
				-	-	-	65				66	-	-	-				
SUB-TOTAL WATTS		2793		2511	2082							2747	3114	2604	SUB-TOTAL WATTS			
TOTAL PER PHASE	PHASE A	5540	WATTS								15.851	KW TOTAL LOAD						LTG - Lighting Loads
	PHASE B	5625	WATTS								43.998	AMPS						REC - Receptacle Loads
	PHASE C	4686	WATTS															MTR-Motor Loads

TOTAL # OF CIRCUITS: 42		PANEL LP-72A FED FROM LP-72										120/208V, 3PH, 4W						MAIN BREAKER:125A 3P/4W	
LOAD	NO OF	NO OF	BRKR	LOAD PER PHASE			CCT	PHASE			CCT	LOAD PER PHASE			BRKR	NO OF	NO OF	LOAD
DESCRIPTION	REC.	FIXT	SIZE	A	B	C	NO	A	B	C	NO	A	B	C	SIZE	FIXT	REC.	DESCRIPTION
RECEPTACLE - CLASSROOM L710		7	15A	1400	-	-	1				2	400	-	-	15A	2		POWER - CLASSROOM L710
POWER - CLASSROOM L710		2	15A	-	400	-	3				4	-	800	-	15A	4		UNDER CARPET RACEWAY - CLASSROOM L710
UNDER CARPET RACEWAY-CLASSROOM L720		5	15A	-	-	1000	5				6	-	-	1000	15A	5		UNDER CARPET RACEWAY - CLASSROOM L720
RECEPTACLE - CLASSROOM L720		3	15A	800	-	-	7				8	1440	-	-	15A			Column south receptacle
Column south receptacle			15A	-	1440	-	9				10	-	1440	-	15A			Column south receptacle
Column south receptacle			15A	-	-	1440	11				12	-	-	1440	15A			Column south receptacle
Column south receptacle			15A	1440	-	-	13				14	1440	-	-	15A			Column south receptacle
RECEPTACLE - CLASSROOM L740		5	15A	-	1000	-	15				16	-	1000	-	15A	5		FLOOR BOX - CLASSROOM L740
UNDER CARPET RACEWAY - CLASSROOM L740		6	15A	-	-	1200	17				18	-	-	600	15A	3		FLOOR BOX - CLASSROOM L750
UNDER CARPET RACEWAY - CLASSROOM L750		7	15A	1400	-	-	19				20	1000	-	-	15A	5		RECEPTACLE - STUDENT OFFICE
RECEPTACLE - STUDENT OFFICE		7	15A	-	1400	-	21				22	-	100	-	20A			FRIDGE - STUDENT OFFICE
FLOOR BOX - PROJECT ROOM L736		3	15A	-	-	600	23				24	-	-	600	15A	3		RECEPTACLE - PROJECT ROOM L736
FLOOR BOX- STUDENT LOUNGE		3	15A	600	-	-	25				26	30	-	-	15A			BOTTLE REFILL STATION & STORAGE REC.
STAFF LOUNGE - FOR KITCHEN			20A	-	300	-	27				28	-	200	-	15A			PLUMBLING LV DEVICE-W/C
STAFF LOUNGE - FOR KITCHEN			20A	-	-	300	29				30	-	-	600	15A	3		RECEPTACLE -CORRIDOR
RECEPTACLE -CORRIDOR		5	15A	1000	-	-	31				32	1000	-	-	15A	5		RECEPTACLE -CORRIDOR & RECEPTION
RECEPTACLE LOUNGE & RECEPTION		5	15A	-	1000	-	33				34	-	800	-	15A	4		ADO - W/C&CLASSROOM
ADO - CALSSROOM		2	15A	-	-	400	35				36	-	-	600	15A			MONUMENT - CLASSROOM
RECEPTACLE - AV TV		6	15A	600	-	-	37				38			-	15A	1		For Security Panel
				-	-	-	39				40	-	-	-				
				-	-	-	41				42	-	-	-				
SUB-TOTAL WATTS		7240		5540	4940							5310	4340	4840	SUB-TOTAL WATTS			
TOTAL PER PHASE	PHASE A	12550	WATTS								32.210	KW TOTAL LOAD						LTG - Lighting Loads
	PHASE B	9880	WATTS								89.406	AMPS						REC - Receptacle Loads
	PHASE C	9780	WATTS															MTR-Motor Loads

TOTAL # OF CIRCUITS: 42		PANEL LP-72 FED FROM 150KVA TXFMR										120/208V, 3PH, 4W						MAIN BREAKER:250A 3P/4W	
LOAD	NO OF	NO OF	BRKR	LOAD PER PHASE			CCT	PHASE			CCT	LOAD PER PHASE			BRKR	NO OF	NO OF	LOAD
DESCRIPTION	REC.	FIXT	SIZE	A	B	C	NO	A	B	C	NO	A	B	C	SIZE	FIXT	REC.	DESCRIPTION
RECEPTACLE - Team room		6	15A	1200	-	-	1				2	1200	-	-	15A	6		RECEPTACLE - Office
RECEPTACLE - TELEROOM (EXISTING)			15A	-	-	-	3				4	-	1200	-	15A	6		RECEPTACLE - Office
RECEPTACLE - Office		6	15A	-	-	1200	5				6	-	-	-	15A			RECEPTACLE - Office
RECEPTACLE - Office		6	15A	1200	-	-	7				8	1600	-	-	15A	8		RECEPTACLE - Office
RECEPTACLE - Office & Storage		7	15A	-	1400	-	9				10	-	1200	-	15A	6		RECEPTACLE - Office
RECEPTACLE - Office		6	15A	-	-	1200	11				12	-	-	1200	15A	6		RECEPTACLE - Office
RECEPTACLE - DUO Room		6	15A	1200	-	-	13				14	800	-	-	15A	4		STAFF LOUNGE RECEPTACLE
STAFF LOUNGE - FRIDGE		1	20A	-	100	-	15				16	-	1250	-				STAFF LOUNGE - MICROWAVE
STAFF LOUNGE - FOR KITCHEN		1	20A	-	-	300	17				18	-	-	1200	15A	6		RECEPTACLE - Office
RECEPTACLE - Office		6	15A	1200	-	-	19				20	1000	-	-	15A	5		RECEPTACLE - Office &COPY ROOM
COPY ROOM PRINTER		1	20A	-	300	-	21				22	-	1440	-	15A			COLUMN EAST RECEPTACLE
COLUMN WEST RECEPTACLE			15A	-	-	1440	23				24	-	-	1441	15A			COLUMN CENTRE RECEPTACLE
COLUMN WEST RECEPTACLE			15A	1440	-	-	25				26	1440	-	-	15A			COLUMN CENTRE RECEPTACLE
RECEPTACLE - Office		6	15A	-	1200	-	27				28	-	800	-	15A	4		RECEPTACLE - OFFICE & COORIDOR
PRINTER - PRINT AREA		1	20A		-	300	29				30	-	-	600	15A	3		FLOOR BOX- STUDENT CAFÉ L730
BUILDING AUTOMATION			15A	1440			31				32	1250	-	-	20A			MIRCOWAVE - STUDENT CAFÉ L730
LIGHTING CONTACTOR CONTROL			15A		1440	-	33				34	-	1250	-	20A			MIRCOWAVE - STUDENT CAFÉ L730
MIRCOWAVE - STUDENT CAFÉ L730			20A	-	-	1250	35				36	-	-	1250	20A			MIRCOWAVE - STUDENT CAFÉ L730
PANEL 72A			EXISTING	12550	-	-	37				38	300	-	-	20A			KITCHEN -STUDENT CAFÉ L730
PANEL 72A			EXISTING	-	9880	-	39				40	-	300	-	20A			KITCHEN -STUDENT CAFÉ L730
PANEL 72A			EXISTING	-	-	9780	41				42	-	-	300	20A			KITCHEN -STUDENT CAFÉ L730
SUB-TOTAL WATTS				20230	14320	15470							7590	7440	5991	SUB-TOTAL WATTS		
TOTAL PER PHASE	PHASE A	27820	WATTS									71.041	KW TOTAL LOAD					LTG - Lighting Loads
	PHASE B	21760	WATTS									197.190	AMPS					REC - Receptacle Loads
	PHASE C	21461	WATTS															MTR-Motor Loads

TOTAL # OF CIRCUITS: 42		PANEL EP-3 FED FROM EM-T1										120/208V, 3PH, 4W						MAIN BREAKER:100A 3P/4W	
LOAD	NO OF	NO OF	BRKR	LOAD PER PHASE			CCT	PHASE			CCT	LOAD PER PHASE			BRKR	NO OF	NO OF	LOAD
DESCRIPTION	REC.	FIXT	SIZE	A	B	C	NO	A	B	C	NO	A	B	C	SIZE	FIXT	REC.	DESCRIPTION
EXISTING			EXISTING		-	-	1				2		-	-	EXISTING			EXISTING
EXISTING			EXISTING	-		-	3				4	-		-	EXISTING			EXISTING
EXISTING			EXISTING	-	-		5				6	-	-		EXISTING			EXISTING
EXISTING			EXISTING		-	-	7				8		-	-				LIGHTING - 7TH FLOOR
EXISTING			EXISTING	-		-	9				10	-		-				LIGHTING - 7TH FLOOR
EXIT LIGHTS - 7TH FLOOR			15A	-	-		11				12	-	-		EXISTING			EXISTING
EXIT LIGHTS - 7TH FLOOR			15A		-	-	13				14		-	-	EXISTING			EXISTING
					-	-	15				16	-		-	EXISTING			EXISTING
				-	-		17				18	-	-					SPARE
EXISTING			EXISTING		-	-	19				20		-	-	EXISTING			EXISTING
EXISTING			EXISTING	-		-	21				22	-		-	EXISTING			EXISTING
EXISTING			EXISTING	-	-		23				24	-	-		EXISTING			EXISTING
EXISTING			EXISTING		-	-	25				26		-	-				
EXISTING			EXISTING	-		-	27				28	-		-				
EXISTING			EXISTING	-	-		29				30	-	-					
					-	-	31				32		-	-	EXISTING			EXISTING
					-	-	33				34	-		-				SPARE
				-	-		35				36	-	-					SPARE
					-	-	37				38		-	-	EXISTING			PANEL EP-2
						-	39				40	-		-	EXISTING			PANEL EP-2
					-	-	41				42	-	-		EXISTING			PANEL EP-2
SUB-TOTAL WATTS		0		0	0							0	0	0	SUB-TOTAL WATTS			
TOTAL PER PHASE	PHASE A	0	WATTS									0.000	KW TOTAL LOAD					LTG - Lighting Loads
	PHASE B	0	WATTS									0.000	AMPS					REC - Receptacle Loads
	PHASE C	0	WATTS															MTR-Motor Loads

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SPECTECH Technology Consulting and Project Management
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Newmarket, ON L3Y 7R6

Key Plan

Professional Seals

LICENSED PROFESSIONAL ENGINEER
J. LEE
100203359
October 28, 2025
PROVINCE OF ONTARIO

No.	Description	Date
01	ISSUED FOR 100% DD	08/21/2026
02	ISSUED FOR 60% CD	09/17/2026
03	ISSUED FOR 90% CD	10/08/2026
04	ISSUED FOR PERMITTENDER	10/29/2026

Project No: 2251005

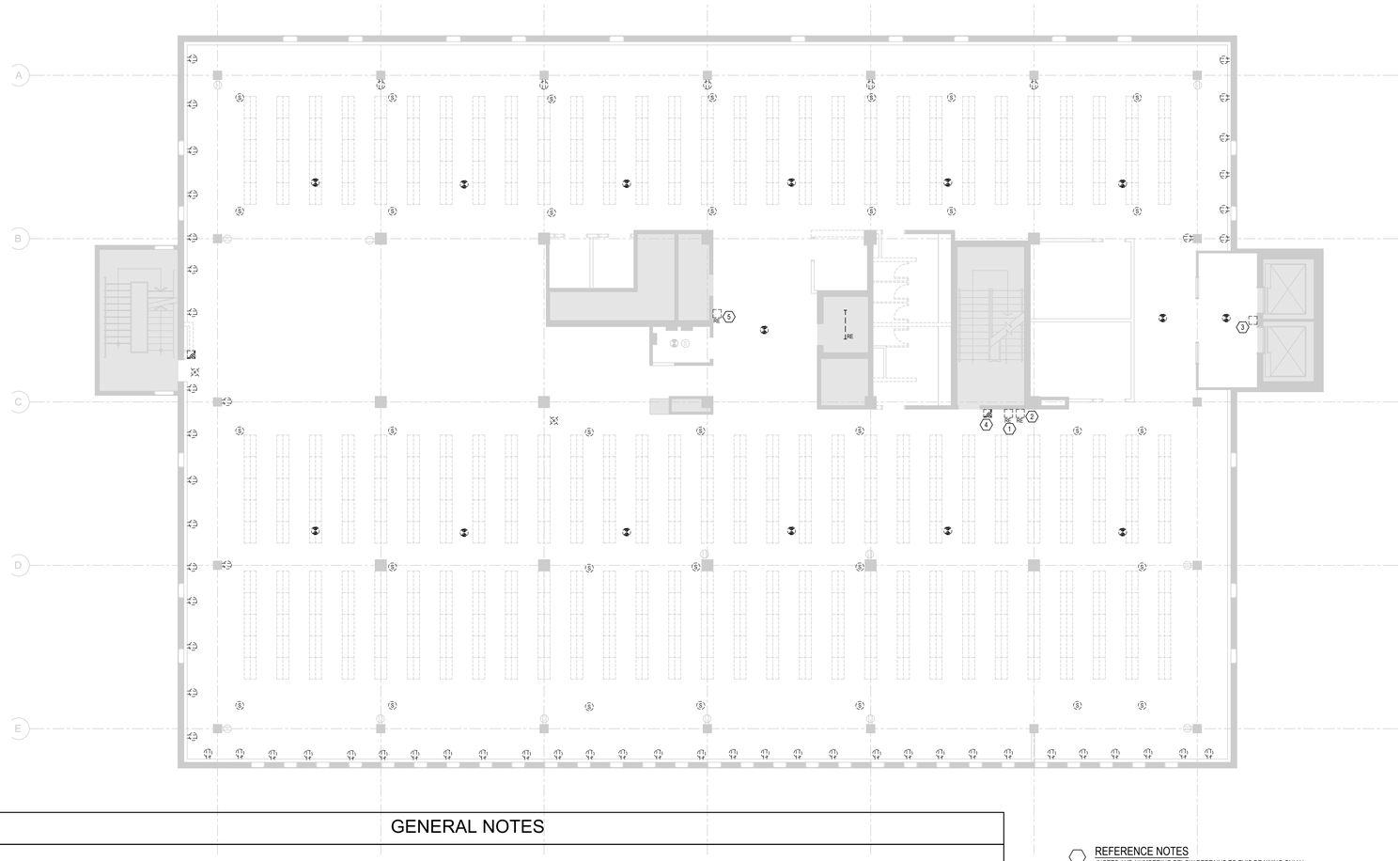
Sheet Title

PANEL SCHEDULE

Orginal is 42 x 30. Do not scale contents of this drawing.

Sheet Number

E-401



GENERAL NOTES

1. THE CONSULTANT DOES NOT WARRANT THE ACCURACY OF EXISTING BUILDING CONDITIONS, DIMENSIONS, OR MATERIALS REPRESENTED ON THE DRAWINGS. IT IS ASSUMED THAT THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF HIS CONTRACTS HAS VISITED THE PLACE OF THE WORK AND SURROUNDS AND HAS MADE A THOROUGH INVESTIGATION OF AS-BUILT CONDITIONS PRIOR TO SUBMITTING HIS TENDER BY VIRTUE OF THE EXECUTED CONTRACT WITH THE OWNER. IT IS ASSUMED THAT HIS PRE-CONTRACT INVESTIGATION OF EXISTING SITE CONDITIONS SHALL HAVE BEEN TO THE EXTENT NECESSARY TO FULLY FAMILIARIZE HIMSELF WITH ALL APPARENT CONDITIONS AFFECTING THE WORK, INCLUDING ANY ABOVE CEILING CONDITIONS ETC. WHERE ACCESS WOULD BE CONSIDERED REASONABLE. AS SUCH, THE CONTRACTOR MAY NOT RELY ON THE CONTRACT DRAWINGS TO LIMIT THE SCOPE OF DEMOLITION WORK REQUIRED.
2. REMOVE ALL OUTLETS, DEVICES, ETC., INCLUDING BUT NOT LIMITED TO THE ONE SHOWN ON FLOOR PLAN UNLESS OTHERWISE NOTED. CONTRACTOR SHALL VERIFY EXACT QUANTITIES ON SITE. ALL CABLING TO BE RUN IN EMT CONDUIT WHERE FEASIBLE WHEN RUNNING IN SPACE ABOVE. REFER TO ARCHITECTURAL DRAWINGS FOR PATCH, REPAIR AND REFINISH SCOPE, ASSOCIATED TO ALL DEVICES REMOVAL.
3. ENSURE THAT CONTINUITY OF WIRING TO ALL REMAINING OUTLETS AND DEVICES SHALL BE MAINTAINED WITH SAME SIZE WIRE AS EXISTING. ENSURE OPERATION OF FIRE ALARM SYSTEMS AT ALL TIMES.
4. CLEAN OUT AND DISPOSE OF ALL ELECTRICAL WIRING IN CONDUIT MADE REDUNDANT WITH THIS DEMOLITION.
5. IN AREAS WHERE EXISTING DEVICES ARE TO BE REMOVED, THE CONTRACTOR SHALL ENSURE THAT ANY PORTION OF THE EXISTING SYSTEM THAT IS TO REMAIN IS LEFT SAFE AND A WORKING SYSTEM IS MAINTAINED.
6. ANY EXISTING DEVICE TO BE REUSED AND/OR RELOCATED SHALL BE REMOVED, REFURBISHED AND RE-INSTALLED. IF RELOCATED THE ELECTRICAL CONTRACTOR SHALL EXTEND EXISTING CONDUIT AND WIRE TO SUIT.
7. THE ELECTRICAL CONTRACTOR SHALL MAINTAIN CONTINUITY FOR EXISTING SERVICES WHICH PASS THROUGH THE AREA BUT WHICH FEED ITEMS NOT LOCATED IN THE RENOVATED AREA. RE-ROUTE WHERE NECESSARY. RE-WIRE DEVICES WHICH REMAIN.
8. POWER AND SYSTEMS SHUTDOWN MUST BE ARRANGED WITH AND AT A TIME CONVENIENT TO THE WLU, PROVIDE SEVEN DAYS WRITTEN NOTICE FOR POWER SHUTDOWNS.
9. WHEN WORKING ON ANY ELECTRICAL CIRCUIT FED FROM ANY POWER PANEL OR LIGHTING PANEL PROVIDE THE FOLLOWING:
   - SUITABLE LOCK-OFF DEVICES, PADLOCK FOR LARGE SWITCHES ETC. OR LOCK-OFF DEVICES FOR LIGHTING PANEL BREAKERS.
   - SUITABLE, CLEAR WARNING SIGNS.
   - HANDWRITTEN INFORMATION SHEET IDENTIFYING NAME OF CONTRACTOR, DATE, LOCATION OF WORK AND ANTICIPATED TIME OF COMPLETION. DISPLAY THIS IN A VISIBLE LOCATION AND REMOVE ONLY WHEN THE CIRCUIT IS RE-ENERGIZED.
10. ELECTRICAL EQUIPMENT OR DEVICES THAT ARE TO BE REUSED, OR TO REMAIN SHALL BE PROTECTED SO THAT THEY ARE NOT DAMAGED OR DISTURBED DURING DEMOLITION OF EXISTING WALLS AND/OR CEILING.
11. ELECTRICAL FEEDERS AND RISERS FEEDING EQUIPMENT ON FLOORS ABOVE, SHALL BE PROTECTED DURING DEMOLITION AND/OR REROUTED.
12. WHERE NECESSARY PROVIDE SUITABLE SUPPORT FOR ANY EXISTING COMMUNICATIONS WIRING THAT IS LAYING ON CEILING.
13. MAKE GOOD ALL OPENINGS INTO EXISTING SWITCHBOARDS OR PANELS TO REMAIN AFTER REMOVAL OF CONDUITS AND WIRE. COVER OPENINGS WITH A 14 GAUGE SHEET METAL PAINTED TO MATCH EXISTING COMPLETE WITH WATERTIGHT GASKETS AND SECURELY FASTENED WITH SCREWS. REVISE BREAKER DESIGNATION ON THE SWBD/PANEL WITH A LAMACOID NAMEPLATE INDICATING "SPARE".
14. FIRESTOP AND CLOSE ALL OR ANY OPENINGS IN WALLS, FLOORS OR CEILINGS THAT OCCUR DUE TO THE REMOVAL OF EXISTING SERVICES TO THE AREA BEING DEMOLISHED. FINISH TO MATCH EXISTING.
15. EXISTING FLOOR CONDUITS WHERE SYSTEMS ARE TO BE REMOVED, THIS ELECTRICAL CONTRACTOR SHALL REMOVE ALL ASSOCIATED CONDUIT AND WIRING TO SOURCE (NOT IN CEILING SPACE OF FLOOR(S) BELOW). ALLOW FOR PREMIUM TIME AS TO WORK OUTSIDE THE MINIMUM NOISE RESTRICTIONS OR OTHER TIMES SUITABLE TO TENANT & LANDLORD.
16. LIGHTING FIXTURES THAT ARE REMOVED SHALL BE DISPOSED OF OFF SITE, INCLUDING BASE BUILDING LIGHT FIXTURES THAT ARE REMOVED SHALL BE TURNED OVER TO OWNER. ALL EQUIPMENT BEING REMOVED SHALL BE REVIEWED AT SITE WITH THE BUILDING'S MAINTENANCE DEPARTMENT.
17. DEMOLISH ALL EXISTING FIRE ALARM SYSTEM DEVICES WITHIN AREA OF SCOPE AND ASSOCIATED WIRING. DEMOLISHED RETAIL UNITS TO BE DECOMMISSIONED AND CUT BACK TO FIRE ALARM CONTROL PANEL. UPDATE FIRE ALARM CONTROL PANEL ZONES AND UPDATE FIRE ALARM PASSIVE GRAPHIC. ENSURE THAT THE FIRE ALARM SYSTEMS BOUNDED BY AREA UNDER RENOVATION REMAINS INTACT DURING AND AFTER COMPLETION OF CONSTRUCTION.
18. DEMOLISH ALL EXISTING LOCAL PUBLIC ADDRESS/ AUDIO SPEAKERS AND ASSOCIATED WIRING.

REFERENCE NOTES

(NOTES AND NUMBERING BELOW PERTAINS TO THIS DRAWING ONLY.)

1. LIGHTING KEY SWITCH TO BE RELOCATED TO INSIDE THE STAIRCASE.
2. TWO STAIR SMOKE JUNCTION BOX TO BE SHIFT UPWARDS TO ABOVE 9'-0" AFF.
3. EXISTING ELEVATOR CALL BUTTONS TO BE REMOVED AND REINSTALLED TO ACCOMMODATE NEW WALL FINISH BEHIND. ADJUST MOUNTING DEPTH / EXTENSION AS REQUIRED TO SUIT NEW FINISH FACE.
4. EXISTING FIRE ALARM PULL STATION TO BE REMOVED. INCLUDE COSTS TO CONCEAL SURFACE MOUNTED CONDUIT AND ASSOCIATED JUNCTION BOX. COORDINATE EXACT FINISH REQUIREMENTS AND ROUTING WITH ARCHITECT PRIOR TO INSTALLATION.

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Sheet Title

LEVEL 7 DEMO FLOOR PLAN - LIGHTING & ELECTRICAL SYSTEMS

Original is 42 x 30. Do not scale contents of this drawing.

Sheet Number

E-501