

POWER SINGLE LINE DIAGRAM SYMBOLS	
	CKT BREAKER, ### INDICATES TRIP SETTING, "I" INDICATES NUMBER OF POLES
	DRAW-OUT CKT BREAKER, ### INDICATES TRIP SETTING, "I" INDICATES NUMBER OF POLES
	FUSED SWITCH, ### INDICATES TRIP SETTING, "I" INDICATES NUMBER OF POLES
	ENCLOSED CIRCUIT BREAKER
	ENCLOSED NON-FUSED SWITCH
	ENCLOSED FUSED SWITCH
	KIRK KEY INTERLOCK
	AUTOMATIC TRANSFER
	SOLID STATE, ELECTRONIC ADJUSTABLE TRIP
	GROUND FAULT PROTECTION
	SURGE PROTECTIVE DEVICE
	DIGITAL MULTIMETER
	UTILITY METER
	AUTOMATIC/MANUAL TRANSFER SWITCH
	AUTOMATIC TRANSFER SWITCH, WITH BYPASS ISOLATION
	TRANSFORMER
	GENERATOR
	PANELBOARD
	PAD MOUNTED TRANSFORMER
	GROUND
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER

POWER DISTRIBUTION AND SMALL POWER			
	DUPLEX RECEPTACLE, WALL MOUNTED SUBSCRIPT "USE" INDICATES WITH TYPE A & C OUTLET		DOUBLE DUPLEX RECEPTACLE, WALL MOUNTED
	DUPLEX RECEPTACLE, ABOVE BACKPLASH OF CABINET, COUNTERTOP OR SINK		DOUBLE DUPLEX RECEPTACLE, ABOVE BACKPLASH OF CABINET, COUNTERTOP OR SINK
	DUPLEX RECEPTACLE, FLUSH MTD IN CEILING		DOUBLE DUPLEX RECEPTACLE, FLUSH MOUNTED IN CEILING
	HALF SWITCHED DUPLEX RECEPTACLE, WALL MOUNTED		SIMPLEX RECEPTACLE, WALL MOUNTED
	SPECIAL PURPOSE RECEPTACLE, WALL MOUNTED, NEMA CONFIGURATION AS NOTED ON PLANS		SPECIAL PURPOSE RECEPTACLE, CEILING MOUNTED, NEMA CONFIGURATION AS NOTED ON PLANS
	SHADING REPRESENTS RECEPTACLE ON LIFE SAFETY BRANCH		SHADING REPRESENTS RECEPTACLE ON NON-LIFE SAFETY BRANCH
	DISCONNECT SWITCH, REFER TO EQUIPMENT CONNECTION SCHEDULE FOR DISCONNECT TYPE, UON		
	COMBINATION MOTOR STARTER DISCONNECT		
	MOTOR STARTER		
	VARIABLE FREQUENCY DRIVE		
	DIRECT CONNECTION, WALL MOUNTED, SUBSCRIPT "X" INDICATES UNIQUE IDENTIFIER, REFER TO EQUIPMENT CONNECTION SCHEDULE		
	DIRECT CONNECTION, CEILING MOUNTED, SUBSCRIPT "X" INDICATES UNIQUE IDENTIFIER, REFER TO EQUIPMENT CONNECTION SCHEDULE		
	MOTOR, SUBSCRIPT "X" DENOTES MOTOR DESIGNATION, REFER TO EQUIPMENT CONNECTION SCHEDULE		
	GROUND BUS BAR		
	FURNITURE OUTLET, WALL MOUNTED		
	PANELBOARD		
	TRANSFORMER		
	FLOOR BOX, DUPLEX RECEPTACLE		SPECIAL FLOORBOX, "I" INDICATES UNIQUE FLOOR BOX TYPE
	FLOOR BOX, DOUBLE DUPLEX RECEPT		
	RECEPTACLE TYPE		
	NUMBER INDICATES BRANCH CIRCUIT NUMBER		
	FLOOR BOX, DUPLEX RECEPTACLE		FLOOR BOX, DOUBLE DUPLEX RECEPT
	FLOOR BOX, COMBINATION POWER/COMMUNICATIONS OUTLET		FLOOR BOX, COMBINATION POWER/COMMUNICATIONS/AV OUTLET
	SPECIAL FLOORBOX, "I" INDICATES UNIQUE FLOOR BOX TYPE		
	TYPE		
	NUMBER INDICATES BRANCH CIRCUIT NUMBER		
	FLOOR BOX, CONFIGURATION AS INDICATED, FLUSH MOUNTED, UNLESS OTHERWISE NOTED. NOTE: FOR ABOVE DEVICES, SUBSCRIPT "X" INDICATES: P- PEDESTAL MOUNTED FL- FLUSH MOUNTED PT- POKE THROUGH S- SURFACE MOUNTED		
	JUNCTION BOX, FLUSH MTD IN FLOOR		
	CLOCK		
	ELAPS CLOCK		
	NOTES 1. PROVIDE A 4-1/16" SQUARE BY 2-1/8" DEEP BACK BOX WITH A SINGLE GANG REDUCTION RING AT EACH LOCATION, UNO 2. PROVIDE A 1" CONDUIT ROUTED BETWEEN THE BACK BOX AND THE NEAREST CABLE PATHWAY, UNO.		

LIGHTING, LIGHTING SWITCHING & CONTROLS			
	UPPER CASE LETTERS INDICATE LIGHTING FIXTURE TYPE		
	NUMBER INDICATES CIRCUIT NUMBER, LOWER CASE LETTER INDICATES SWITCHED		
	LIGHTING FIXTURE ON NORMAL BRANCH POWER - CEILING MOUNTED		LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - CEILING MOUNTED
	LIGHTING FIXTURE ON NORMAL BRANCH POWER - WALL MOUNTED		LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - WALL MOUNTED
	STRIP LIGHTING FIXTURE ON NORMAL BRANCH POWER		STRIP LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST
	PENDANT LINEAR FIXTURE ON NORMAL BRANCH POWER		PENDANT LINEAR FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST
	DOWNLIGHT LIGHTING FIXTURE ON NORMAL BRANCH POWER - RECESSED MOUNTED		DOWNLIGHT LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - RECESSED MOUNTED
	PENDANT LIGHTING FIXTURE ON NORMAL BRANCH POWER		PENDANT LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST
	WALL WASH LIGHTING FIXTURE ON NORMAL BRANCH POWER - ARROW INDICATES DIRECTION OF BEAM		WALL WASH LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - ARROW INDICATES DIRECTION OF BEAM
	WALL SCONCE LIGHTING FIXTURE ON NORMAL BRANCH POWER - WALL MOUNTED		WALL SCONCE LIGHTING FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - WALL MOUNTED
	BOLLARD LIGHT FIXTURE ON NORMAL BRANCH POWER		BOLLARD LIGHT FIXTURE ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST
	SITE LIGHTING SINGLE HEAD ON NORMAL BRANCH POWER - POLE MOUNTED		SITE LIGHTING SINGLE HEAD ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - POLE MOUNTED
	SITE LIGHTING DUAL HEAD ON NORMAL BRANCH POWER - POLE MOUNTED		SITE LIGHTING DUAL HEAD ON EMERGENCY BRANCH POWER OR EMERGENCY BALLAST - POLE MOUNTED
	EXIT SIGN - SINGLE FACE - CEILING MOUNTED		EXIT SIGN - DUAL FACE - CEILING MOUNTED
	EXIT SIGN - SINGLE FACE - WALL MOUNTED		EXIT SIGN - DUAL FACE - WALL MOUNTED
	LOW LEVEL EXIT SIGN - SINGLE FACE - WALL OR DOOR MOUNTED		SINGLE REMOTE EMERGENCY LIGHT - WALL MOUNTED
	DUAL HEAD EMERGENCY LIGHT WITH INTEGRAL BATTERY PACK - WALL MOUNTED		DUAL REMOTE EMERGENCY LIGHT - WALL MOUNTED
	SPST SWITCH, WALL MOUNTED, "ab" INDICATES INDIVIDUAL, GANGED SWITCHES AND ASSOCIATED SWITCH LEGS CONTROLLED, SUBSCRIPT "X" INDICATES: 2 - DOUBLE POLE 3 - THREE WAY 4 - FOUR WAY D - WALL BOX DIMMER		K - KEY OPERATED LV - LOW VOLTAGE P - PILOT LIGHT T - WALL BOX TIMER WP - WEATHER PROOF
	OCCUPANCY SENSOR, CEILING MOUNTED		
	OCCUPANCY SENSOR, WALL MOUNTED		
	VACANCY SENSOR, CEILING MOUNTED		
	VACANCY SENSOR, WALL MOUNTED		
	DIMMING CONTROL PANEL, SUBSCRIPT "X" INDICATES TYPE		
	DIMMING CONTROL STATION, SUBSCRIPT "X" INDICATES TYPE OR UNIQUE IDENTIFIER		
	LIGHTING CONTROL PANEL		
	SHUNT TRIP PUSH BUTTON		
	TIME CLOCK, SUBSCRIPT "X" INDICATES UNIQUE IDENTIFIER		
	DAYLIGHT SENSOR, CEILING MOUNTED		
	PHOTOCCELL		

	OCCUPANCY SENSOR, CEILING MOUNTED
	OCCUPANCY SENSOR, WALL MOUNTED
	VACANCY SENSOR, CEILING MOUNTED
	VACANCY SENSOR, WALL MOUNTED
	DIMMING CONTROL PANEL, SUBSCRIPT "X" INDICATES TYPE
	DIMMING CONTROL STATION, SUBSCRIPT "X" INDICATES TYPE OR UNIQUE IDENTIFIER
	LIGHTING CONTROL PANEL
	SHUNT TRIP PUSH BUTTON
	TIME CLOCK, SUBSCRIPT "X" INDICATES UNIQUE IDENTIFIER
	DAYLIGHT SENSOR, CEILING MOUNTED
	PHOTOCCELL

FIRE ALARM SYSTEM			
	FIRE ALARM STROBE, WALL MOUNTED		FIRE ALARM STROBE, CEILING MOUNTED
	FIRE ALARM HORN, WALL MOUNTED		FIRE ALARM HORN, CEILING MOUNTED
	FIRE ALARM HORN/STROBE, WALL MOUNTED		FIRE ALARM HORN/STROBE, CEILING MOUNTED
	FIRE ALARM SPEAKER, WALL MOUNTED		FIRE ALARM SPEAKER, CEILING MOUNTED
	FIRE ALARM SPEAKER/STROBE, WALL MOUNTED		FIRE ALARM SPEAKER/STROBE, CEILING MOUNTED
	FIRE ALARM BELL, WALL MOUNTED		FIRE ALARM PULL STATION
	HEAT DETECTOR, WALL MOUNTED		HEAT DETECTOR, CEILING MOUNTED
	SMOKE DETECTOR, WALL MOUNTED		SMOKE DETECTOR, CEILING MOUNTED
	SMOKE DETECTOR, DUCT MOUNTED		FIRE/SMOKE DAMPER
	CARBON MONOXIDE DETECTOR		SMOKE DAMPER
	FIREFIGHTERS TELEPHONE OUTLET		SMOKE ALARM
	REMOTE INDICATOR LIGHT		COMBINATION SMOKE ALARM AND CARBON MONOXIDE DETECTOR
	FIRE ALARM CONTROL PANEL		TAMPER SWITCH
	FIRE ALARM REMOTE ANNUNCIATOR PANEL		REMOTE TEST STATION
	DATA GATHERING PANEL		FLOW SWITCH
	FIRE ALARM TERMINAL CABINET		SUPERVISORY VALVE
	FIRE ALARM TRANSPONDER PANEL		ELECTRO-MAGNETIC DOOR HOLDER

TAGS AND CALL OUT SYMBOLS	
	SECTION CALLOUT
	SECTION DESIGNATION SHEET NUMBER
	DETAIL CALLOUT
	DETAIL DESIGNATION SHEET NUMBER
	REVISION CALLOUT
	KEYNOTE CALLOUT

SECURITY SYSTEM			
<div> <div> <div>DEVICE LEGEND</div> <div> <div> <div>DEVICE TAG</div> <div> <div>AAA</div> <div>M</div> </div> </div> <div> <div>MOUNTING TAG</div> <div>SECONDARY ATTRIBUTE</div> </div> </div> </div> </div>			
ALL SECURITY SYSTEM DEVICES ARE WALL MOUNTED UNLESS OTHERWISE INDICATED BY MOUNTING TAG			
	ACCESS CONTROL PANEL		AUTO DOOR OPERATOR
	ALARM DEVICE		CARD READER (HID9 MULTICLASS SE8 RP40)
	CARD READER (HID9 MULTICLASS SE8 RP40)		OR BARCODE CODE CARD READER (AXIS A8207)
	DOOR CONTACT		DOOR CONTROLLER
	ELECTRIFIED LOCKSET		ELECTRIFIED PANIC HARDWARE
	ELECTRIC STRIKE		GLASS BREAK DETECTOR
	INTERCOM (MODEL: COMMAND IDS TD) DUR: OUTDOOR DURESS STATION (MODEL: CODE BLUE CS-24 OR EQUIVALENT) MASTER STATION (MODEL: MODEL: COMMAND IDS TD)		INTRUSION DETECTION DEVICE
	KEYPAD		KEY SWITCH
	MAGNETIC LOCK		MOTION SENSOR
	PANIC BUTTON		PANEL / CONTROLLER
	COLUMN SWITCH W/HANDS FREE PUSH BUTTON		POWER TRANSFER
	LOW FREQUENCY EXCITER		REQUEST TO EXIT DEVICE
	INFRARED READER		ALARM SENSOR
	REMOTE DISPLAY UNIT		SECURITY SYSTEM POWER SUPPLY
	LOCAL AREA RECEIVER		SERVER
	DIRECTIONAL PASSIVE TAG DETECTOR		SECURITY WORKSTATION
	INFRARED CURTAIN		CCTV CAMERA, WALL-MOUNTED
	RF READER		CCTV CAMERA, CEILING-MOUNTED CA1: AXIS P207-LV DOME CA2: AXIS F207-LV DOME CA3: AXIS P407-PLIVE CA4: AXIS P3737-PLI
	RF READER MASTER		"PRESS FOR EMERGENCY ASSISTANCE" SWITCH
	RF LONG RANGE READER		"ASSISTANCE REQUESTED" LED ANNUNCIATOR WITH SOUNDER
	RF ETHERNET READER		OCCUPANCY LAMP
<div>NOTE:</div> <div>1. PROVIDE A 1/2" CONDUIT ROUTED BETWEEN THE BACK BOX AND THE NEAREST CABLE PATHWAY, UNO.</div> <div>2. PANIC BUTTON SHALL BE SURFACE-MOUNTED TO UNDERSIDE OF COUNTER/DESK. MOUNT THE BACK BOX DIRECTLY BELOW THE COUNTER/DESK AND PROVIDE SURFACE-MOUNTED RACEWAY FROM THE BACK BOX TO THE PANIC BUTTON LOCATION.</div>			

DEMOLITION	
< R >	EXISTING TO BE REMOVED
< RL >	EXISTING TO BE RELOCATED
< EX >	EXISTING TO REMAIN
< NL >	EXISTING - NEW LOCATION
---	DEMOLITION CONDUIT
	DEMOLITION EQUIPMENT
	EXISTING TO REMAIN CONDUIT
	EXISTING TO REMAIN EQUIPMENT
	RELOCATED / NEW CONDUIT
	RELOCATED / NEW EQUIPMENT

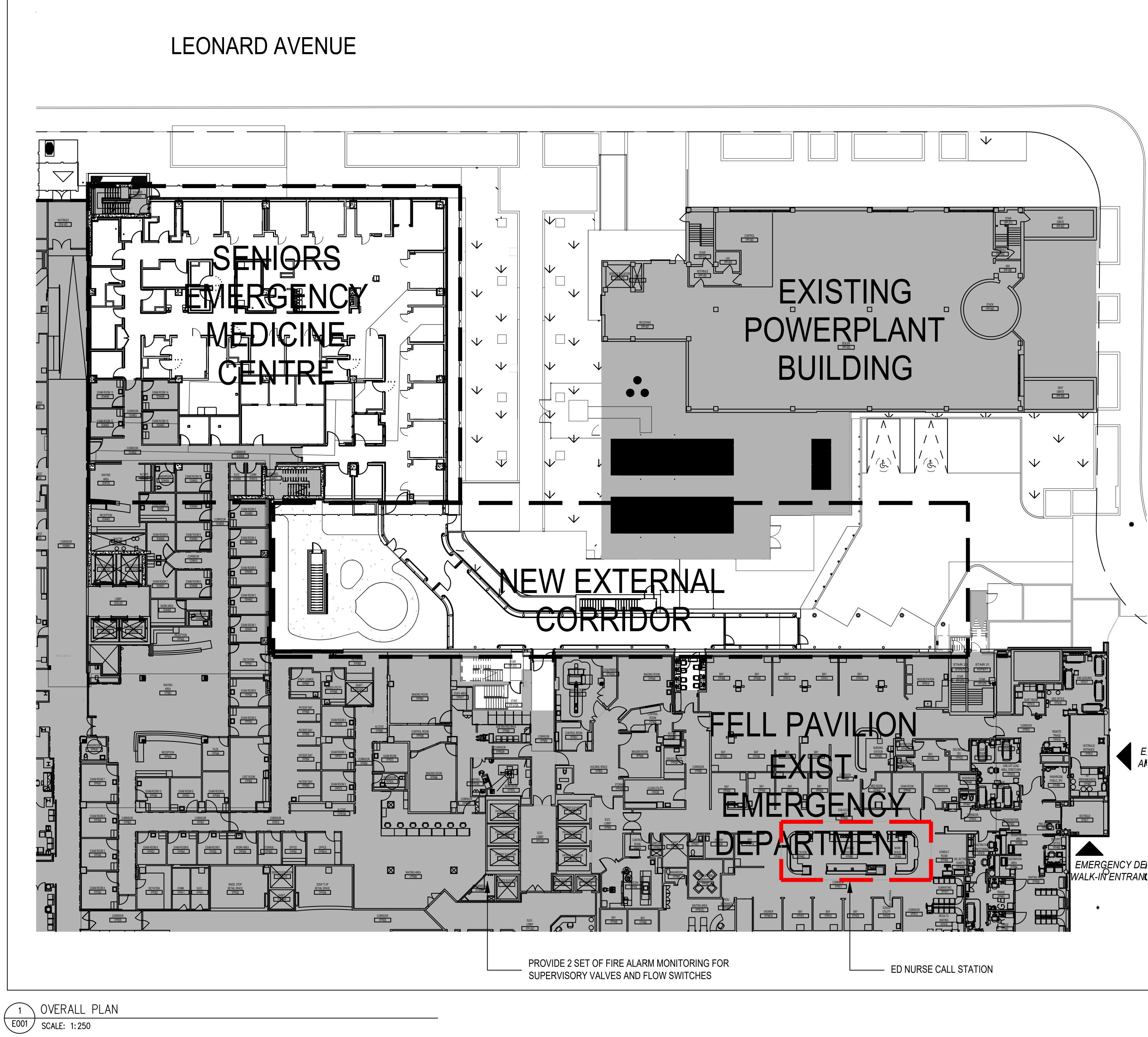
NURSE CALL SYSTEM	
	NURSE CALL CORRIDOR ZONE LIGHT
	NURSE CALL ROOM DOME LIGHT
	NURSE CALL CONSOLE
	NURSE CALL ANNUNCIATOR
	NURSE CALL ASSET TRACKING
	NURSE CALL CODE BLUE STATION
	NURSE CALL CODE BLUE STATION WITH STAFF ASSIST BUTTON
	NURSE CALL EMERGENCY PULL STATION
	NURSE CALL EMERGENCY PULL SHOWER STATION
	NURSE CALL GATEWAY
	NURSE CALL MASTER STATION
	NURSE CALL DUTY STATION
	NURSE CALL PATIENT STATION
	NURSE CALL STAFF ASSIST STATION
	NURSE CALL STAFF STATION

ABBREVIATIONS			
A	ANALOG	MCC	MAIN CIRCUIT BREAKER
AFCI	ARC FAULT CIRCUIT INTERRUPTOR	MCC	MOTOR CONTROL CENTER
AFF	ABOVE FINISHED FLOOR	MD	MOTORIZED DAMPER
ATS	AUTOMATIC TRANSFER SWITCH	MH	MOUNTING HEIGHT
CK	CLOCK HANGER	NC	NORMALLY CLOSED
CL	CEILING MOUNTED	NO	NORMALLY OPEN
EMT	ELECTRICAL METALLIC TUBING	OC	OVER THE COUNTER
EP	EXPLOSION PROOF	PTZ	PAN, TILT, ZOOM
F	FURNITURE OR MILLWORK MOUNTED	ST	SHUNT TRIP
FL	FLOOR MOUNTED	TP	TAMPER PROOF
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WP	WEATHER PROOF
GFI	GROUND FAULT INTERRUPTER		




CIRCUITING			
	BLOG-E1MDPHA.10		3#12 #120.21mmC
	CIRCUIT NUMBER PANEL DESIGNATION		CONDUIT SIZE GROUND CONDUCTOR QUANTITY AND SIZE CIRCUIT CONDUCTOR QUANTITY AND SIZE

TELECOMMUNICATIONS SYSTEM			
	WALL MOUNT IP PHONE VOICE DATA OUTLET		FLOOR MOUNT IP PHONE VOICE DATA OUTLET
	WALL MOUNT DATA/IP PHONE VOICE DATA OUTLET		FLOOR MOUNT DATA/IP PHONE VOICE DATA OUTLET
	CEILING MOUNT IP PHONE VOICE DATA OUTLET		WIRELESS ACCESS POINT WITH CEILING MOUNT DATA (WAPS SUPPLIED BY UHN AND INSTALLED BY THIS CONTRACTOR)
	CEILING MOUNT DATA OUTLET		JUNCTION BOX FOR AV SYSTEM
	CEILING MOUNT DATA/IP PHONE VOICE DATA OUTLET		
<div>DEVICE LEGEND</div> <div> <div> <div>NUMBER OF DATA JACKS</div> <div>XY</div> <div>NUMBER OF DATA/VOICE JACKS</div> </div> <div> <div>NUMBER OF VOICE JACKS</div> <div>Y</div> </div> </div> <div>NO SUBSCRIPT = (1) DATA/VOICE</div> <div>MOUNTING: OUTLET MOUNTING HEIGHTS TO BE COORDINATED WITH INTERIOR DESIGNER DURING 00 PHASE</div>			

PUBLIC ADDRESS SYSTEM			
<div> <div> <div>DEVICE LEGEND</div> <div> <div>DEVICE TAG</div> <div>AAA</div> <div>M</div> </div> </div> <div> <div>MOUNTING TAG</div> </div> </div>			
ALL PUBLIC ADDRESS SYSTEM DEVICES ARE WALL MOUNTED UNLESS OTHERWISE INDICATED BY MOUNTING TAG			
	PAGING SPEAKERS OR HORN		PAGING STATION



DRAWING LIST		
	DRAWING NAME	SCALE
E-001	LEGEND, ABBREVIATION AND DRAWING LIST	N.T.S
E-002	GENERAL NOTE AND LUMINAIRES SCHEDULES	N.T.S
E-003	SEPARATE PRICE PLAN	N.T.S
E-101	LEVEL 1 FLOOR PLAN - DEMO - LIGHTING	AS SHOWN
E-102	LEVEL 1 FLOOR PLAN - DEMO - ELECTRICAL	AS SHOWN
E-103	LEVEL 1 FLOOR PLAN - DEMO - POWER SYSTEMS	AS SHOWN
E-201	LEVEL 1 FLOOR PLAN - NEW WORK - LIGHTING	AS SHOWN
E-202	LEVEL 1 FLOOR PLAN - NEW WORK - ELECTRICAL AND POWER SYSTEMS	AS SHOWN
E-203	LEVEL 1 FLOOR PLAN - NEW WORK - EXAM ROOMS	AS SHOWN
E-204	BASEMENT - ELECTRICAL LAYOUT	AS SHOWN
E-205	PENTHOUSE & ROOF FLOOR PLAN - ELECTRICAL LAYOUT	AS SHOWN
E-301	BELOW GRADE FLOOR - ELECTRICAL LAYOUT	AS SHOWN
E-302	GROUND FLOOR PLAN - LIGHTING LAYOUT	AS SHOWN
E-303	GROUND FLOOR PLAN - POWER & SYSTEMS LAYOUT	AS SHOWN
E-401	ELECTRICAL DETAILS AND PANEL SCHEDULES	N.T.S
E-402	MECHANICAL EQUIPMENT SCHEDULES	N.T.S
E-501	ELECTRICAL RISER DIAGRAM	N.T.S
E101	GROUND FLOOR OVERALL PLAN - ELECTRICAL LAYOUT	AS SHOWN
E201	LEVEL 3 FLOOR PLAN - ELECTRICAL LAYOUT	AS SHOWN
E202	LEVEL 8 ROOF - ELECTRICAL LAYOUT & ENLARGED PLAN	AS SHOWN
E301	ELECTRICAL RISER DIAGRAM AND LUMINAIRE SCHEDULE	AS SHOWN

CLIENT:		
<div><div><div>UHN</div></div><div><div>University Health Network</div><div>Toronto Western Hospital</div><div>399 Bathurst Street</div><div>Toronto ON M5T 2S8</div><div>www.uhn.ca</div></div></div>		
ARCHITECT:		
<div><div><div>CUMULUS ARCHITECTS INC.</div></div><div><div>160 Pears Ave. - Suite 300</div><div>Toronto, ON M5R 3P6</div><div>416-539-0763</div><div>www.cumulusarch.com</div></div></div>		
CONSULTANT:		
<div><div><div>1-905-695-3217 1-905-695-0167</div><div>220 Commerce Valley Drive West, Suite 110</div><div>Markham, ON L3T 0A8</div><div>Canada</div><div>www.exp.com</div></div><div></div><div><div>• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •</div><div>• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •</div></div></div>		

GENERAL NOTES	
1. ALL DRAWINGS ARE DIAGRAMMATIC ONLY. THE ARRANGEMENTS OF EQUIPMENT SHOWN ARE APPROXIMATIONS ONLY AND MAY BE ALTERED BY THE ENGINEERS TO MEET THE REQUIREMENTS OF THE PROJECT. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, EQUIPMENT CONSULTANTS' MECHANICAL AND STRUCTURAL DRAWINGS FOR INSTALLATION OF ALL EQUIPMENT AND DEVICES.	25.2. IN FIRE RATED CONSTRUCTION, PACK & SEAL VOID BETWEEN OPENING & CONDUIT FOR LENGTH OF OPENING WITH ASBESTOS-FREE ELASTOMERIC ULC LISTED & LABELLED MATERIALS. INSTALL FIRESTOP & SMOKE SEAL MATERIALS IN ACCORDANCE TO ULC CERTIFICATION & MANUFACTURER'S REQUIREMENTS TO PROVIDE FIRESTOP RATINGS OF OPENINGS IN ACCORDANCE WITH GOVERNING BUILDING CODE REQUIREMENTS.
2. CONTRACTOR TO INCLUDE FOR PAYMENT OF REQUIRED PERMITS, FEES, LICENSES, CERTIFICATES OF INSPECTION ETC IF REQUIRED.	25.3. DO NOT CUT OR DRILL EXISTING WORK WITHOUT PRIOR OWNER'S APPROVAL. IN CONSULTATION WITH OWNER & PROVIDE PROFESSIONAL STRUCTURAL ENGINEER REPORT & SIGNOFF REQUIRED FOR LOCATIONS OF ALL CORING IN SLAB. DETERMINE PRESENCE OF EXISTING SERVICES & REINFORCING RODS CONCEALED BEHIND SURFACE TO BE CUT. ENSURE THAT AREAS OF BOTH SIDES OF THE SURFACE BEING CUT ARE PROTECTED FROM DEBRIS. NOTE: ELECTRICAL CONTRACTOR WILL BE HELD RESPONSIBLE FOR DAMAGE DONE TO EXISTING BUILDING & SERVICES CAUSED BY CUTTING OR DRILLING. CAREFULLY HAND CHISEL TO EXPOSE RE-BAR AND BURIED SERVICES AND CHISEL OUT REQUIRED OPENINGS. NO GRAY PERMITTED FOR SLAB SCANNING.
3. ALL OPENINGS, IF APPLICABLE, SHALL BE SEALED WITH APPROVED FIRE STOP MATERIAL TO MEET THE FRP OF THE ASSEMBLY. MAKE NOTE TO REFER TO ARCH DWGS. ANY FIREPROOFING MATERIAL REMOVED WILL BE REPLACED WITH A SUITABLE AND APPROVED FIREPROOFING MATERIAL AND SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS TO APPLICABLE BUILDING AND FIRE CODES.	26. DISCONNECTION, REMOVAL & RELOCATION WORK
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINISHING OF DAMAGED BUILDING AREAS AND FINISHES AFFECTED BY THE WORK AS OUTLINED UNDER SCOPE OF WORK OF THIS PROJECT. ASSUME FULL RESPONSIBILITY FOR ALL WORKS DONE. SHOULD ANY EXISTING SYSTEM OR PROPERTY BE DAMAGED BY THE CONTRACTOR, MAKE FULL REPAIR/REPLACEMENTS WITHOUT EXTRA COST, AND TO THE SATISFACTION OF CONSULTANT AND THE OWNER.	26.1. WHERE INDICATED ON DRAWINGS, & DETERMINED BY SITE VISIT, DISCONNECT & REMOVE ITEMS OF EXISTING OBSOLETE ELECTRICAL WORK & RELOCATE DEVICES. WHERE FIXTURES, SWITCHES, RECEPTACLES & OTHER DEVICES &/OR EQUIPMENT IS REMOVED, DISCONNECT AT POINT OF ELECTRICAL SUPPLY, REMOVE OBSOLETE WIRING, & MAKE SYSTEM SAFE. REVISE PANELBOARD DIRECTORIES ACCORDINGLY, IF AFFECTED BY WORK.
5. CONTRACTOR IS RESPONSIBLE FOR STORAGE AND PROTECTION OF ALL EXISTING ITEMS WHICH WILL BE RELOCATED/REUSED IN THIS PROJECT.	26.2. UNLESS OTHERWISE NOTED, OBSOLETE MATERIALS WHICH ARE DISCONNECTED & ARE NOT TO BE RELOCATED OR REUSED SHALL BE REMOVED FROM SITE & DISPOSED. OBTAIN FROM OWNER, LIST OF EXISTING ITEMS TO BE CAREFULLY REMOVED & TURNED OVER TO OWNER. SAID ITEMS WILL REMAIN PROPERTY OF OWNER.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND DISTRIBUTION OF TEMPORARY POWER AND LIGHTING WITHIN THE PREMISES DURING THE CONSTRUCTION PERIOD. EXPOSED ELECTRICAL CORDS OUTSIDE THE PREMISES SHALL NOT BE PERMITTED.	26.3. PROVIDE JUNCTION BOXES, OUTLET BOXES, WIRING, PLATES, ETC., AS NECESSARY FOR COMPLETE RELOCATION OF DEVICES.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL THE WORK WITH ALL OTHER TRADES, EXISTING SITE CONDITIONS, CONSULTANTS, AND THE OWNER TO AVOID INTERFERENCE WITH OTHER SERVICES. ALL WORK SHALL BE SCHEDULED AND CARRIED OUT BY THE CONTRACTOR IN A MANNER TO ENSURE CONTINUED AND NON-INTERRUPTED OPERATION OF EXISTING FACILITY.	26.4. WHERE EXISTING SERVICES PASS THROUGH OR ARE IN AN AREA TO SERVE ITEMS WHICH ARE TO REMAIN, MAINTAIN SERVICES. INCLUDE FOR REROUTING EXISTING SERVICES CONCEALED BEHIND FINISHES & WHICH BECOME EXPOSED DURING RENOVATION WORK, SO AS TO BE CONCEALED BEHIND FINISHES.
8. CONTRACTOR SHALL IDENTIFY AND LABEL CLEARLY ALL CIRCUITS, WIRING, SERVICES, JUNCTION BOXES, PULLBOXES, DEVICES, OUTLETS AND EQUIPMENT INSTALLED AND CONNECTED UNDER THE SCOPE OF WORK OF THIS PROJECT. IDENTIFICATION SHALL BE AS PER OWNER'S REQUIREMENTS AND ALL MARKINGS SHALL BE LAMACOD TYPE. COORDINATE ALL LABELING WITH THE OWNER AND CONSULTANT.	26.5. IN AREAS WHICH ARE NOT BEING ARCHITECTURALLY RENOVATED & WHICH ELECTRICAL CONTRACTOR MUST RUN SERVICES THROUGH, BE RESPONSIBLE FOR REMOVAL & REINSTALLATION OF ARCHITECTURAL CEILING TILES, MECHANICAL EQUIPMENT, SPRINKLERS, ETC., AS REQUIRED FOR INSTALLATION OF YOUR WORK. IF THE REQUIRED ELECTRICAL WORK IS REQUIRED TO ACCOMMODATE WORK OF OTHER TRADES, AND IF REMOVAL OF EXISTING CEILING TILES IS NOT THE RESPONSIBILITY OF OTHERS, BE RESPONSIBLE FOR ALL WORK TO GAIN ACCESS TO THOSE DEVICES THAT NEED TO BE WORKED ON, PRIOR TO REMOVAL OF CEILING TILES OR OTHER DEVICES, INSPECT FOR DAMAGES/WORKING ORDER AND REPORT ANY DEFICIENCIES TO OWNER PRIOR TO START OF WORK. PATCH & MAKE GOOD (INCLUDING PAINTING) SURFACES TO MATCH EXISTING.
9. NEW AND EXISTING ELECTRICAL WIRING AND CABLES EXPOSED WITHIN THE CEILING SPACES SHALL CONFORM TO THE PLENUM REQUIREMENTS OF ONTARIO BUILDING CODE SENTENCE 3.6.4.3. (1).	26.6. COMPLY WITH THE OWNER'S LATEST WASTE MANAGEMENT GUIDELINES WITH SPECIFIC REFERENCE TO WASTE SEGREGATION AND REMOVALS.
10. DURING CONSTRUCTION ENSURE ALL LUMINAIRES IN AND/OR OUT OF SCOPE OF WORK ARE FREE OF DUST AND DEBRIS. CONTRACTOR TO CLEAN LUMINAIRES AFFECTED BY CONSTRUCTION DUST AND/OR DEBRIS.	27. HAZARDOUS MATERIALS
11. EXISTING PANEL SCHEDULE SHALL BE UPDATED UPON PROJECT COMPLETION. BREAKERS THAT ARE NOT IN USE SHALL BE SWITCHED TO THE OFF POSITION AND MARKED AS SPARE UPON PROJECT COMPLETION. WHERE EXISTING CIRCUITS ON PANELS ARE NOT AFFECTED, THOSE CIRCUITS WILL BE INCLUDED IN THE NEW PANEL DIRECTORIES WHERE PANELS HAVE BEEN AFFECTED BY THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR UPDATING ANY AND ALL PANEL DIRECTORIES ALTERED BY THE SCOPE OF WORK AND PROVIDING PRINTED COPIES IN EACH, IN ADDITION TO PROVIDING UPDATED AND NEW PANEL DIRECTORIES IN AS-BUILT DRAWINGS, SEE NOTE 15.	27.1. IF AT ANY TIME DURING COURSE OF WORK ASBESTOS MATERIALS ARE ENCOUNTERED OR SUSPECTED, CEASE WORK IN AREA IN QUESTION & IMMEDIATELY REPORT, IN ACCORDANCE WITH ONTARIO REGULATION 654/RS (SECTION 7), TO CONSULTANT AND OWNER PROJECT MANAGER. DO NOT RESUME WORK IN AFFECTED AREA WITHOUT APPROVAL FROM CONSULTANT AND OWNER PROJECT MANAGER.
12. REWORK ALL EXISTING POWER SUCH THAT SURROUNDING AREAS REMAIN OPERATIONAL AND ARE NOT AFFECTED AS A RESULT OF BUILDING DEMOLITION.	28. EXISTING FIRE ALARM SYSTEM WORK
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND EXAMINING ALL CONDITION AFFECTING THE ELECTRICAL INSTALLATION. NO CONSIDERATION WILL BE GIVEN TO CLAIMS FOR EXTRA COSTS ARISING FROM FAILURE TO VISIT SITE.	28.1. WHERE NOTED ON DRAWINGS, DISCONNECT & REMOVE REQUIRED DEVICES. NEW WORK TO BE AN EXTENSION OF EXISTING SYSTEM. PERFORM WORK IN ACCORDANCE WITH LATEST EDITION OF CAN/ULC-5524. SEQUENCE OF OPERATION OF NEW WORK TO FUNCTION AS EXISTING SYSTEM. UNLESS OTHERWISE NOTED, CONNECT ADDITIONAL DEVICES TO EXISTING ZONES SERVING AREA & PROVIDE WIRING OF MINIMUM NO. 16 AWG IN CONDUIT & AS PER OESC REQUIREMENTS. ALARM INITIATING CIRCUITS SHALL BE RUN IN SEPARATE CONDUITS FROM ALARM SIGNALLING CIRCUITS.
14. THE WORD "PROVIDE" SHALL MEAN SUPPLY, INSTALL, CONNECT AND TEST.	28.2. DURING WORK TO THE EXISTING FIRE ALARM SYSTEM THE TIME & DURATION OF INTERRUPTION SHALL BE APPROVED BY THE OWNER & ONLY 1 ZONE SHALL BE INTERRUPTED AT ANY 1 TIME. IN ALL AREAS WHERE THE RENOVATION WORK REQUIRES SHUTDOWN OF ANY PART OF THE FIRE ALARM PROTECTION SYSTEM, PROVIDE MANUAL FIRE ALARM PROTECTION (FIRE WARDEN) BY MEANS OF SUPERVISING THE AREA AS APPROVED BY GOVERNING AUTHORITIES. AT NO TIME SHALL THE FIRE ALARM SYSTEM OR ANY 1 ZONE BE LEFT INOPERATIVE AFTER HOURS WITHOUT APPROPRIATE FIRE WATCH. PROVIDE ALL REQUIRED BYPASS WIRING & TEMPORARY WIRING AS MAY BE REQUIRED TO MAINTAIN ALL PARTS OF THE FIRE ALARM SYSTEM OPERATIVE DURING CONSTRUCTION & ALTERATIONS.
15. SUBMIT 'AS-BUILT' DRAWINGS. THESE DRAWINGS SHALL RECORD ALL CHANGES TO DESIGN.	28.3. PROVIDE FIRE ALARM PULL STATION AT LOCATIONS OF ELECTROMAGNETICALLY LOCKED DOORS. PULL STATIONS SHALL BE C/W AUXILIARY CONTACTS FOR CONNECTIONS TO SECURITY SYSTEM TO RELEASE MAGLOCKS UPON FIRE ALARM SYSTEM & PULL STATION ACTIVATION. PROVIDE WIRING & CONDUIT & REQUIRED INTERCONNECTIONS TO SECURITY SYSTEM. CO-ORDINATE WORK WITH SECURITY SYSTEM CONTRACTOR. PROVIDE OBC COMPLIANT MESSAGE SOUNGE WITH "PULLSTATION FOR EMERGENCY EXIT", ADJACENT PULL STATION.
16. LUMINAIRES SHALL BEAR THE APPROPRIATE ULC LABEL FOR LOCATION, MOUNTING POSITION AND OPERATING CONDITIONS IN WHICH IT IS INSTALLED.	28.4. WHEN FIRE ALARM SYSTEM WORK IS COMPLETE & READY FOR ACCEPTANCE, PROVIDE & ARRANGE FOR INDEPENDENT TESTING COMPANY VPOND AS APPROVED BY THE OWNER - EXISTING FIRE ALARM MAINTENANCE CONTRACTOR TO INSPECT, TEST & CERTIFY EQUIPMENT, INCLUDING INITIATING DEVICES, SIGNALING DEVICES, CONTROL DEVICES & WIRING. CONDUCT WORK IN ACCORDANCE WITH LATEST EDITIONS OF CAN/ULC-5536 & 5537. TESTS TO BE CONDUCTED IN PRESENCE OF OWNER &/OR CONSULTANT. CERTIFY SYSTEM AND PROVIDE 3 COPIES OF SIGNED VERIFICATION REPORT.
17. LUMINAIRES SHALL BE INSTALLED COMPLETE WITH ALL ACCESSORIES, GLASSWARE, CANOPIES, SOCKETS, REFLECTORS, OPTICS, WIRING DEVICES AND SUPPLIED WITH NEW LAMPS OF THE TYPE AND WATTAGE INDICATED ON DRAWINGS OR IN SPECIFICATIONS.	28.5. THE TESTING COMPANIES MUST EMPLOY TECHNICIANS CERTIFIED BY CANADIAN FIRE ALARM ASSOCIATION &/OR ONTARIO FIRE MARSHALL, AS APPLICABLE.
18. WALL MOUNTED LUMINAIRES AND JUNCTIONS BOXES SHALL BE RIGIDLY SUPPORTED TO STRUCTURE TO PROVIDE ADEQUATE SUPPORT DURING NORMAL OPERATION.	28.6. CONTRACTOR TO COORDINATE WITH EXISTING FIRE ALARM PROVIDER FOR WORK REQUIRED WITHIN SCOPE OF WORK.
19. CONTRACTOR SHALL PROVIDE ADDITIONAL JUNCTION BOXES AS REQUIRED WHERE CONDUCTORS EXCEED FACTORY PROVIDED JUNCTION BOX LIMITATIONS.	28.7. REFER TO ARCHITECTURAL DRAWINGS ADD04 FOR THE SEPARATE PRICE PLAN.
20. FIRE RATED CYPSON BOARD ENCLOSURES SHALL BE CONSTRUCTED AROUND ALL RECESSED LUMINAIRES THAT PENETRATE FIRE RATED AREAS AS DENIED BY ARCHITECTURAL.	
21. ANY ABANDONED CONDUITS AND FEEDERS SHALL NOT BE REUSED AND TO BE REMOVED WITHIN WITHIN THE AREA ARE OF RENOVATION.	
22. CONTRACTOR SHALL MAINTAIN A VOLTAGE DROP OF 3% FOR ALL BRANCH CIRCUITS.	
23. EXAMINATION OF SITE & DOCUMENTS	
23.1. PRIOR TO SUBMITTING BID, CAREFULLY EXAMINE CONDITIONS AT SITE WHICH WILL OR MAY AFFECT WORK, DRAWINGS, & SPECIFICATIONS, & BECOME FAMILIAR WITH BUILDING CONSTRUCTION, FINISHES & OTHER WORK ASSOCIATED WITH WORK IN ORDER THAT BID INCLUDES FOR EVERYTHING NECESSARY FOR COMPLETION OF WORK.	
24. INTERRUPTIONS TO & SHUT-DOWNS OF EXISTING SERVICES & SYSTEMS	
24.1. INCLUDE FOR COSTS OF PREMIUM TIME TO PERFORM WORK DURING NIGHTS, WEEKENDS OR OTHER TIME OUTSIDE OF NORMAL WORKING HOURS, AS NECESSARY TO MAINTAIN WORK IN OPERATION OR WITH MINIMUM INTERRUPTIONS & TO COMPLY WITH OWNER'S REQUIREMENTS. NOTE: WORK ASSOCIATED WITH SHUT-DOWNS & INTERRUPTIONS WILL BE CARRIED OUT AS CONTINUOUS OPERATIONS TO MINIMIZE SHUT-DOWN TIME & TO RENOVATE SYSTEMS AS SOON AS POSSIBLE. & PRIOR TO SHUT-DOWN, ENSURE MATERIALS & LABOUR REQUIRED TO COMPLETE WORK FOR WHICH SHUT-DOWN IS REQUIRED ARE AVAILABLE AT SITE. ANY REQUIRED SERVICE INTERRUPTIONS MUST BE COORDINATED WITH THE OWNER TWO WEEKS IN ADVANCE OF THE EXPECTED INTERRUPTION.	
25. CUTTING, PATCHING & CORE DRILLING	
25.1. DO CUTTING, PATCHING & CORE DRILLING OF EXISTING BUILDING REQUIRED FOR INSTALLATION OF WORK. PERFORM CUTTING IN NEAT & TRUE FASHION, WITH PROPER TOOLS & EQUIPMENT TO OWNER'S APPROVAL. PATCHING WILL EXACTLY MATCH EXISTING FINISHES & BE PERFORMED BY TRADESMEN	

LIGHT LEVEL REQUIREMENT	
ROOM TYPE	TARGET LIGHT LEVEL
CORRIDOR	500LUX (GENERAL LEVEL)
EXAM ROOM	500LUX (GENERAL LEVEL) EXAM MODE : 1000LUX (PATIENT BED LEVEL)
OFFICE	500LUX (TASK LEVEL)
STORAGE AREA	200LUX (GENERAL LEVEL)
WASHROOM	200LUX (GENERAL LEVEL)
STAIR	150LUX (GENERAL LEVEL)

NOTES:
1. CONTRACTOR SHALL SUBMIT THE PHOTOMETRIC FOR APPROVAL.

1 LIGHT LEVEL REQUIREMENT
0002 SCALE: N.T.S.

LUMINAIRE SCHEDULE													
TYPE	BASE MANUFACTURER (AS SPECIFIED)	CATALOGUE NUMBER	CEILING MOUNTED		WALL MOUNTED			WATTAGE	COLOUR TEMP.	VOLTAGE		REMARKS	
			SURFACE	RECESSED	SUSPENDED	SURFACE	RECESSED			BRACKET	120V		347V
A1	PEERLESS ELECTRIC	SDL-3-1ACF-14G	●						3500K	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
A2	METALUMEN	S6-1LTUN-4-MB-SA-L3-1-T-1-90	●					6.1W/FT	3500K	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
A3	LIFESHIELD	OBX-C-14-G-0-S-PCH/OCD-DA-1-9-35-L040-ED-U	●					33W	3500K	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
B1	ACOLYTE	CHDACPSWSC-RB-90-AC12065					●	311 lm/W	3500K	●		FIXTURE LENGTH AS SHOWN ON LAYOUT COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
B2	CREE	LS4-40L-35K-10V-FD	●					40W	3500K	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
C1	PATHFINDER STEP LIGHTING	HNLS-13-3LONG-MVOLT-RED					●		AMBER	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
D1	AMICO LIGHTS CORPS	L-SDM-TW-120-A1E1-LED35 (AMBIENT & EXAM)	●					40W (AMBIENT) 30W (EXAM)	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
D2	AMICO LIGHTS CORPS	L-SDM-TW-120-A1E1-LED35 (AMBIENT ONLY)	●					40W (AMBIENT)	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
D3	PEELESS-ELECTRIC	LFR-4RD-M-15L35K8XW-DM1_LFR-4RD-T-S TUNABLE	●					20.5W	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
D3A	PEELESS-ELECTRIC	SAME AS D3 BUT 2" SIZE	●						TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
D4	AMICO LIGHTS CORPS	L-SKY-4-120-TW-2/2-LVD	●					20.5W	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
L1	PEERLESS-ELECTRIC	SL-14G-40-TW-12R-CT-W-MV	●						TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
L2	LITELINE	TP-1098-TW10-OCKIT-1				●		6W/m	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
L3	AMICO LIGHTS CORPS	L-SDM-120-A1E1-L30-B-G-LVD	●					30W	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
L4	AMICO LIGHTS CORPS	L-SDM-120-A1E1-L30-B-G-LVD	●					30W	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES. 600mm LENGTH ONLY	
L5	LITECONTROL	4L-NG-D-08-SOF-C1-2765T-D125-D01-1C-UNV	●					10.2W/FT	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
L6	LITECONTROL	SAME AS L5 BUT 4' LENGTH	●					10.2W/FT	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES. PROVIDE ALL NECESSARY ACCESSORIES, JOINING, HOUSING TO JOIN WITH L7.	
L7	LITECONTROL	SAME AS L5 BUT 3' LENGTH	●					10.2W/FT	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES. PROVIDE ALL NECESSARY ACCESSORIES, JOINING, HOUSING TO JOIN WITH L6.	
E1	ALPHABET	NU4-RD-20LM-40K-90-20D-CL-BK-BK-120V-DIM10	●					17W	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
E2	ALPHABET	NU4-RD-10LM-40K-90-20D-DL-BK-BK-120V-DIM10	●					9W	4000K	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
F2	LITECONTROL	WS2-DW-D-08-SOF-C1-2765T-D030-D01-1C-UNV	●					2.6W/FT	TUNABLE WHITE	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
W1	CURRENT	VPW1-24L-10-3K7-3-UNV-BLT					●	10W	4000K	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
W2	LIGMAN LIGHTING	UMV-30002-20W-W30-01-120/277V				●		20W	4000K	●		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
X1	EMERG-LITE	EA-3-A-ATN	●			●		2.5W		●		PICTOGRAM EXIT SIGN C/W EXTRUDED ALUMINUM HOUSING AND FACE PLATES AND WHITE LED LIGHT SOURCE. CEILING OR WALL MOUNTED WITH SINGLE OR DOUBLE FACE, WITH OR WITHOUT ARROWS AS SHOWN ON DRAWINGS. COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.	
Z1	LANDSCAPE FIXTURE											ELECTRICAL TO SUPPLY AND INSTALL LIGHTING FIXTURE AS SPECIFIED BY LANDSCAPE DESIGNER. PLEASE REFER TO LANDSCAPE DRAWING FOR THE DETAILS.	
BU1	LUMACELL	RGS1082LD1				●		2.5W		●		REMOTE HEAD WITH BUILT-IN 30 MINUTES BATTERY UNIT BU1, 120V AC INPUT, 6V OUTPUT, 108W WATTAGE.	
NOTES:													
1. ALL FINISHES, FLANGE AND PLASTER COLOURS TO BE CONFIRMED WITH ARCHITECT/DESIGNER PRIOR TO ORDERING LUMINAIRES.													
2. ALL LUMINAIRES SHALL BE CSA APPROVED.													
3. CONTRACTOR TO PROVIDE MOUNTING ACCESSORIES AND HARDWARE TO SUIT CEILING AND WALL FINISHES.													
4. PROVIDE APPROVED EQUAL FOR ENGINEER'S REVIEW DURING SHOP DRAWINGS REVIEW.													
5. PROVIDE SUITABLE STEP DOWN TRANSFORMER FOR ANY LOW VOLTAGE LIGHTING AS REQUIRED.													
6. TUNABLE WHITE COLOR TEMPERATURE RANGE FROM 2700K TO 6500K													
7. TUNABLE WHITE FIXTURE CCT SHALL BE CONTROLLED AUTOMATICALLY PER DEFAULT AUTOMATIC CCT CURVE. FIXTURE CCT SHALL BEGIN RAMPING FROM 2700 K STARTING 60 MINUTES BEFORE SUNRISE, COMPLETING THE RAMP UP TO 4000 K 120 MINUTES AFTER SUNRISE. FIXTURE CCT SHALL BEGIN RAMPING DOWN FROM 4000 K 120 MINUTES BEFORE SUNSET, COMPLETING THE RAMP DOWN TO 2700 K 60 MINUTES AFTER SUNSET. THE RAMP UP AND RAMP DOWN SHALL EACH CONSIST OF THE OPTIMAL NUMBER OF DISCRETE STEPS NEEDED TO ACHIEVE THE DEFAULT AUTOMATIC CCT CURVE. EACH FADE DURATION SHALL LAST 15 MINUTES. EXACT SETTING SHALL BE VERIFIED WITH USER BEFORE PROGRAMMING ON SITE.													



University Health Network
Toronto Western Hospital
399 Bathurst Street
Toronto ON M5T 2S8
www.uhn.ca

ARCHITECT:


CUMULUS ARCHITECTS INC. 160 Pears Ave. - Suite 300
Toronto, ON M5R 3P8
416-539-0703
www.cumulusarch.com

CONSULTANT:


exp.
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:
UHN PROJECT NO.: SAP #110022016

REVISIONS

NO	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 DD	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.08
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25
8	Issued for Tender Addendum No.2	2024.11.01

PROJECT:
UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

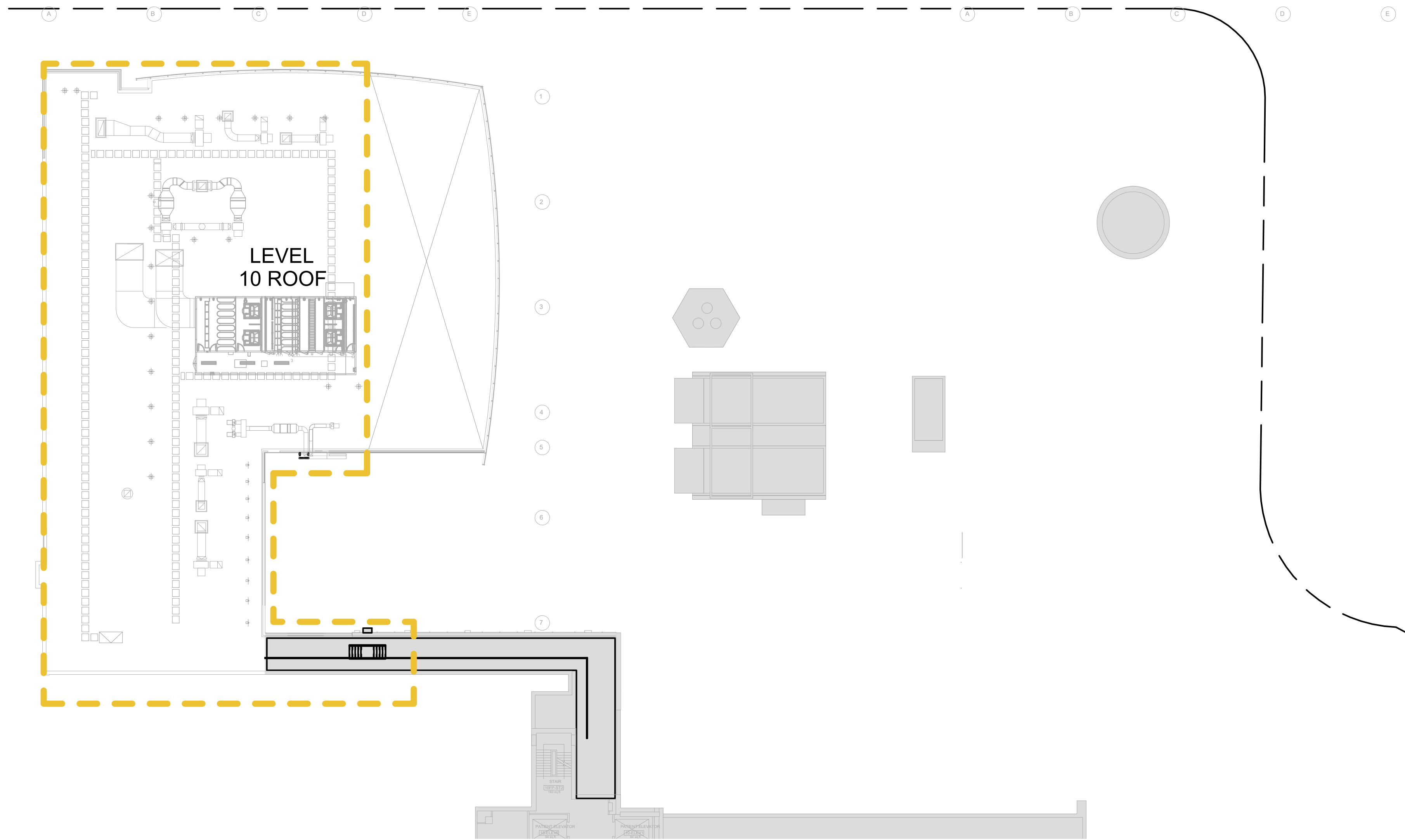
TITLE:
GENERAL NOTES AND LUMINAIRES SCHEDULES

PROJECT NO:
MRK-23004289
CHECKED:
M.S.

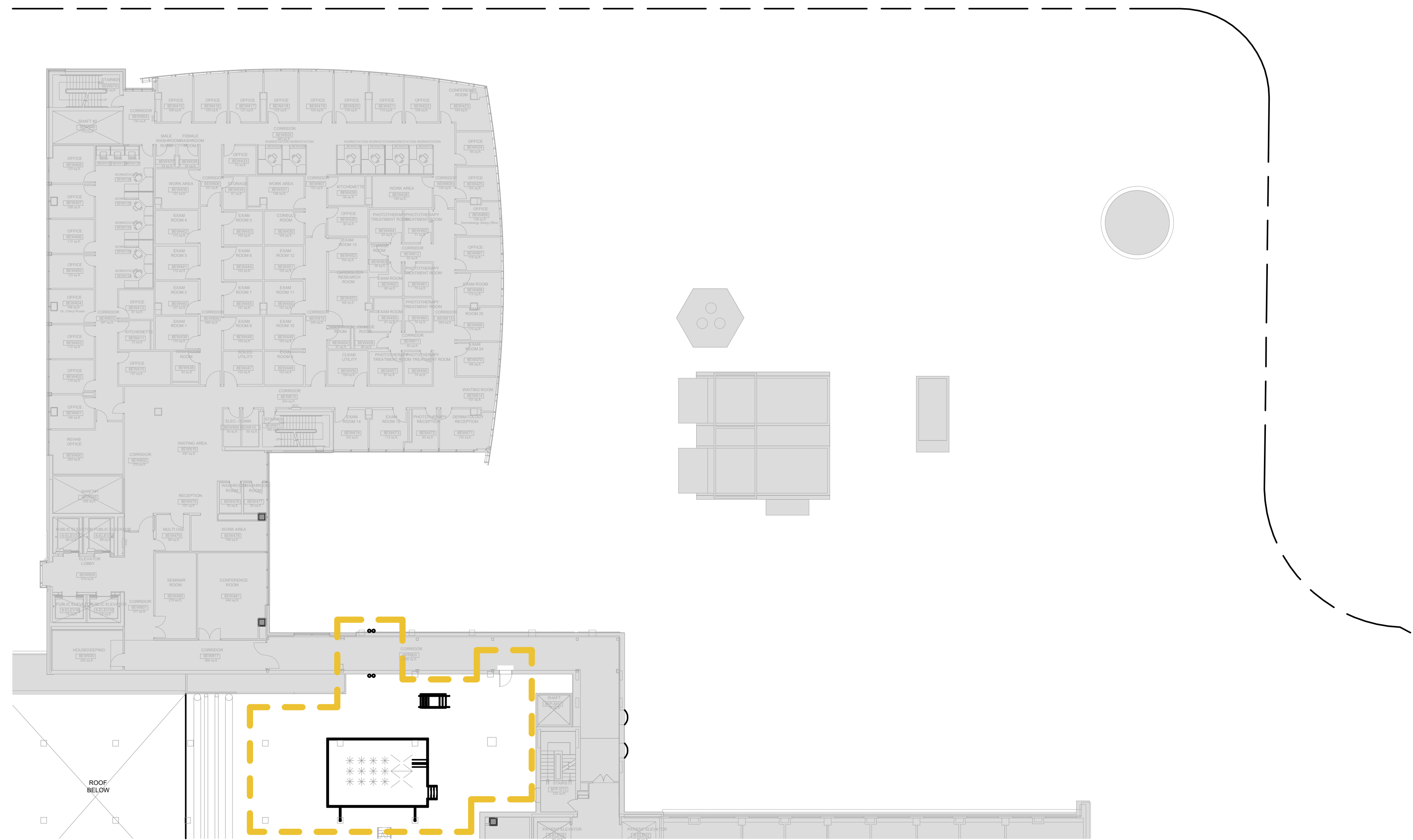
DRAWING NO:
E-002

GENERAL NOTES:
1. THIS DRAWING IS FOR REFERENCE ONLY. PLEASE REFER TO
ARCHITECTURAL DRAWING A004 FOR EXACT SEPARATE PRICE PLAN.

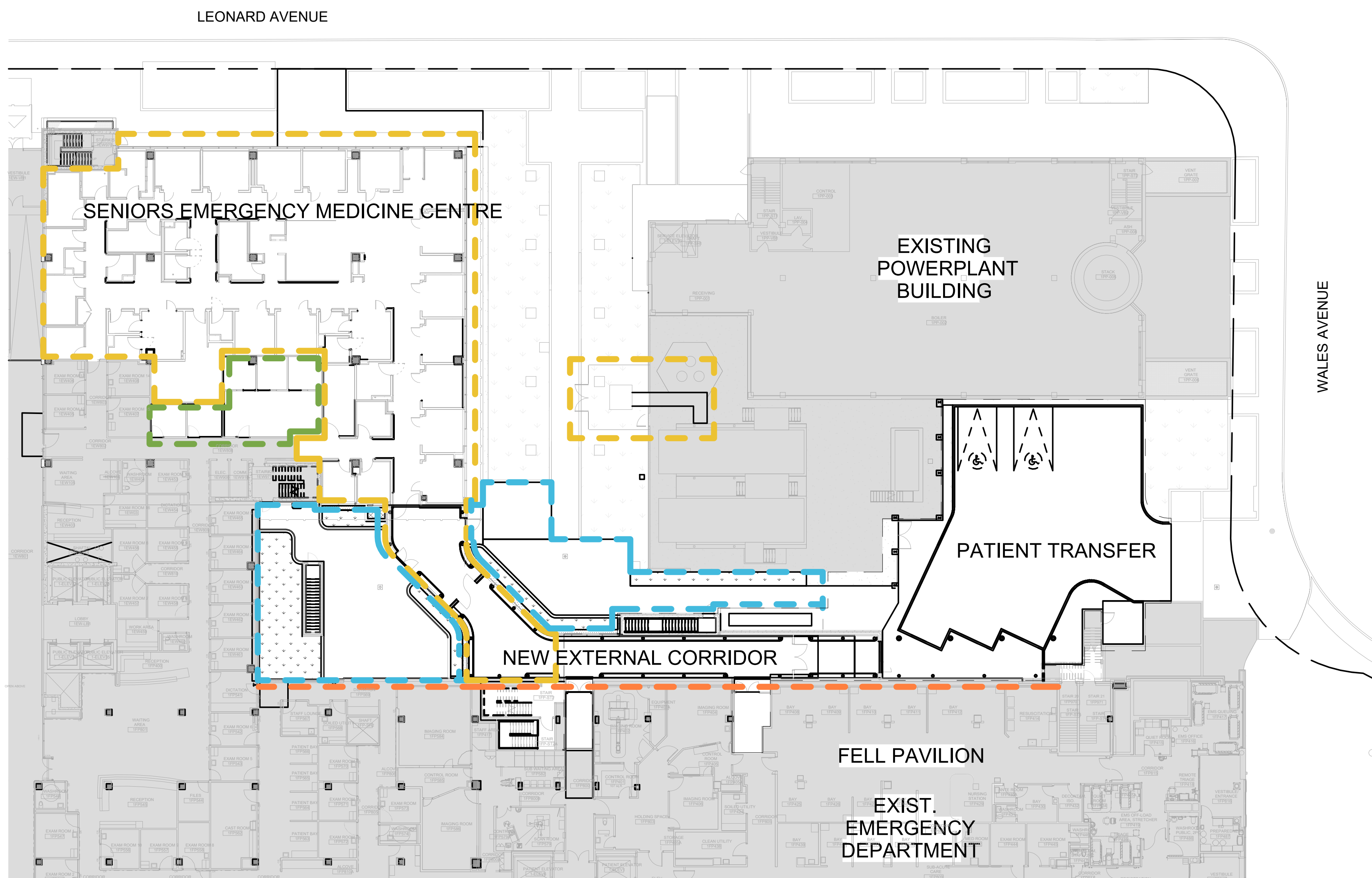
LEGEND - SEPERATE PRICE	
	PATIENT TRANSFER
	FELL REMEDIATION WATERPROOFING
	SAI TOUCHDOWN DAY AREA
	BELOW GRADE CRAWL SPACE
	COURTYARD LANDSCAPING - IRRIGATION & SNOW MELT
	SENIORS EMERGENCY MEDICINE CENTRE & CORRIDOR & CHILLER



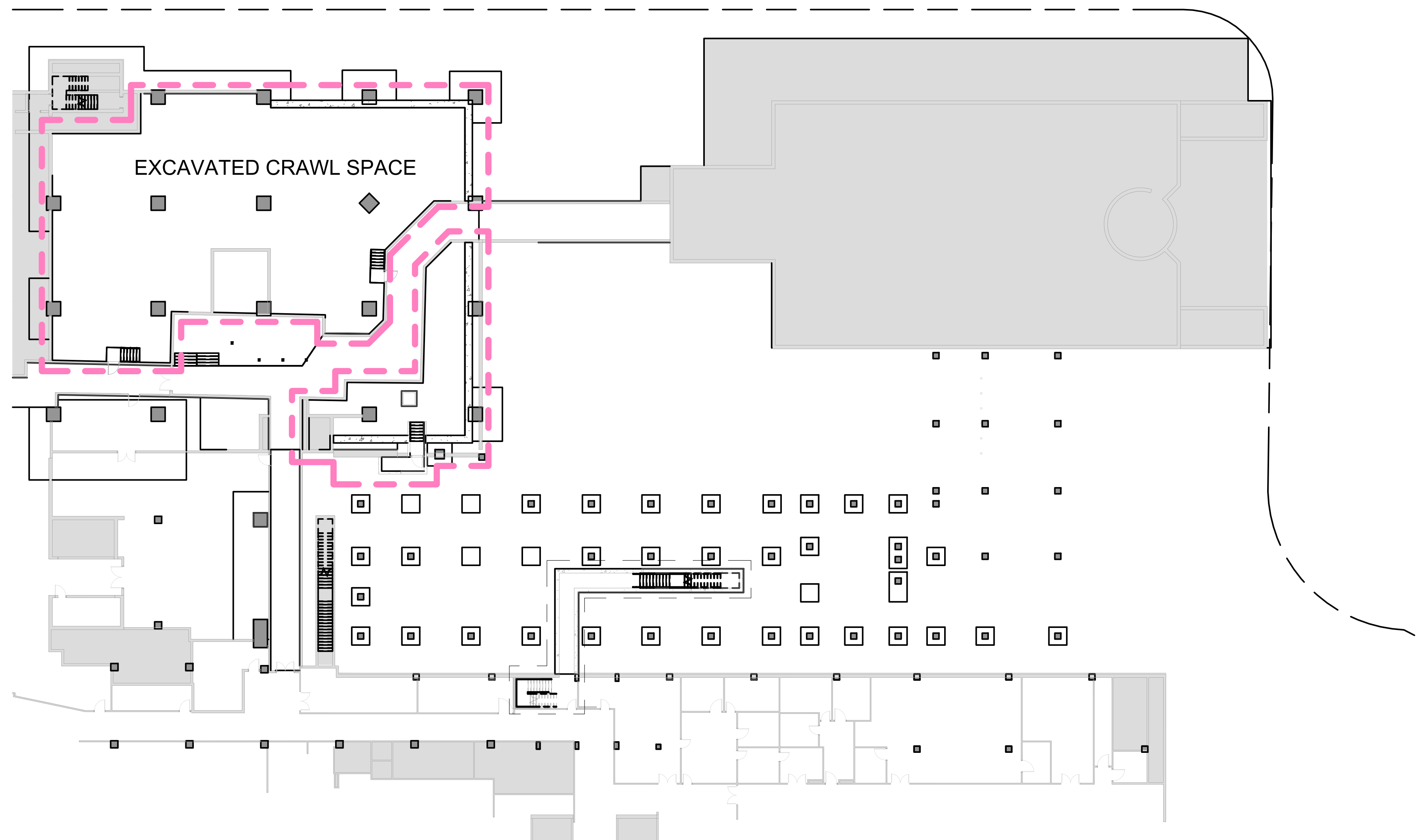
④ Separate Price - Level 10
1:250



③ Separate Price - Level 8
1:250



② Separate Price - Level 1
1:250



① Separate Price - Basement Plan
1:250

CLIENT:



ARCHITECT:



CONSULTANT:



PROJECT STATUS:

REVISIONS

NO.	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 DD	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25

PROJECT:

UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:

SEPARATE PRICE PLAN

PROJECT NO:

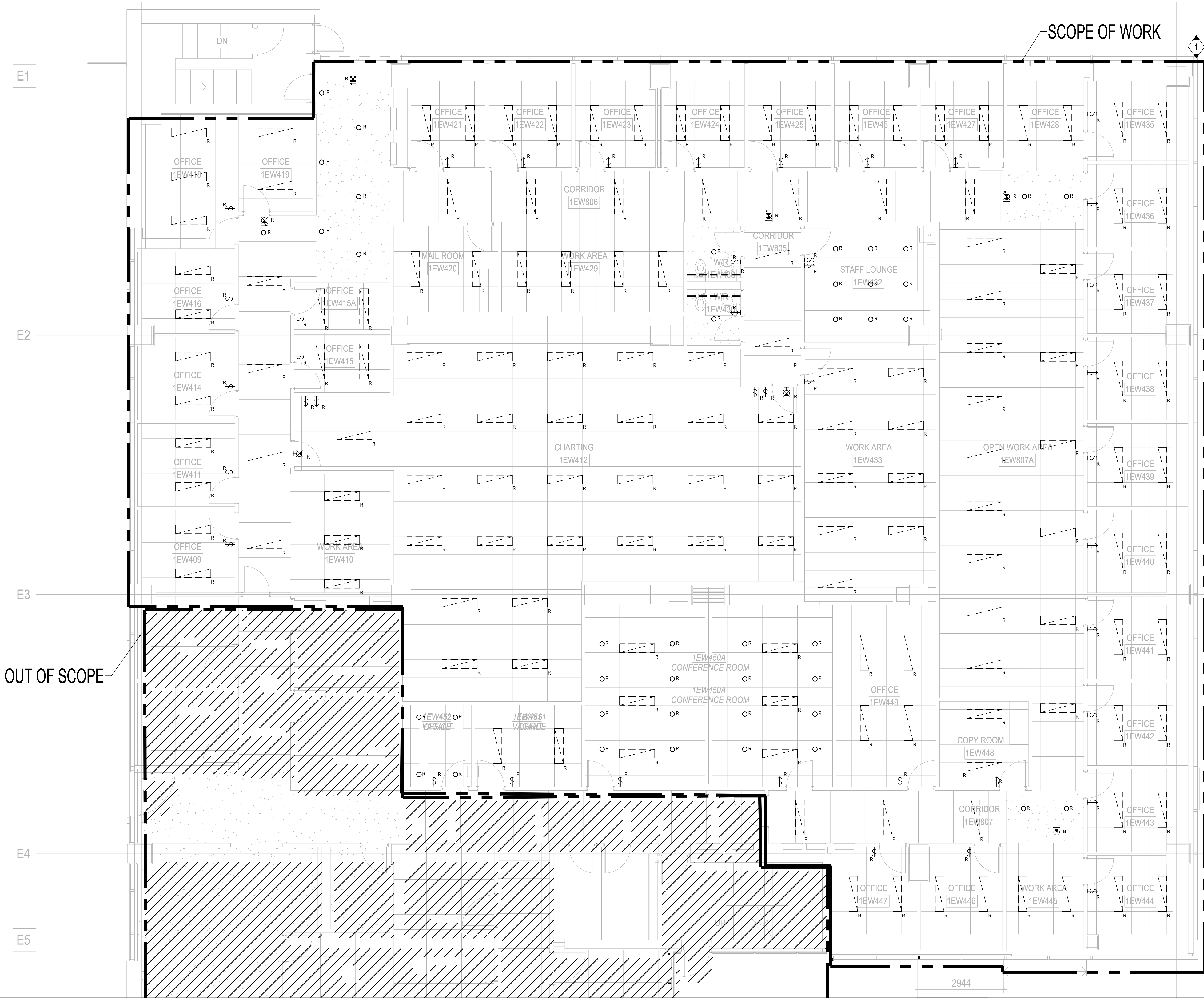
MRK-23004289

CHECKED:

M.S.

DRAWING NO:

E-003



GENERAL NOTES:

- ALL SERVICES SHOWN ARE DIAGNOSTIC ONLY. THE ARRANGEMENTS OF EQUIPMENT SHOWN ARE APPROXIMATE AND EXACT LOCATION AND QUANTITY SHALL BE VERIFIED ON-SITE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. ALL AREAS OF CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE CONSULTANT PRIOR TO COMMENCING WORK.
- ALL EQUIPMENT AND DEVICES ON THIS DRAWING ARE EXISTING TO BE DISCONNECTED AND REMOVED OR RELOCATED UNLESS NOTED OTHERWISE. CUT BACK AND REMOVE CONDUIT AND WIRING BACK TO THE SOURCE PANEL. ELECTRICAL CONTRACTOR TO NOTE THAT THE LAYOUTS AND DEVICES SHOWN ARE FROM AS-BUILT DRAWINGS AVAILABLE AT THE TIME OF DRAFTING AND NOT ALL DEVICES ARE SHOWN. ELECTRICAL CONTRACTOR TO SITE VERIFY EXACT QUANTITY OF DEVICES TO BE DEMOLISHED AND PERFORM DEMOLITION WORK ACCORDINGLY.
- FOLLOWING DEMOLITION AND REMOVAL OF EXISTING CEILINGS, THE CONTRACTOR SHALL REMOVE ALL EXISTING REDUNDANT AND UNUSED LINE VOLTAGE AND LOW VOLTAGE WIRING. EXISTING WIRING THAT IS REQUIRED TO REMAIN IN OPERATION SHALL BE PROPERLY FASTENED/SUSPENDED FROM THE CEILING. ANY EXISTING JUNCTION BOXES WITHOUT COVERS SHALL BE PROVIDED WITH SUITABLE COVER PLATES.
- ELECTRICAL CONTRACTOR TO ENSURE ALL ELECTRICAL, LIFE SAFETY SERVICES AND SERVICES FOR EXISTING EQUIPMENT THAT ARE REQUIRED TO REMAIN IN SERVICE SHALL REMAIN OPERATIONAL DURING ENTIRE CONSTRUCTION.
- WHERE EQUIPMENT OR DEVICES ARE REMOVED, CUT BACK AND REMOVE CONDUIT AND WIRING BACK TO SOURCE PANEL.
- WHERE REMOVED EQUIPMENT AFFECTS THE OPERATION OF EXISTING EQUIPMENT TO REMAIN, THE CONTRACTOR SHALL REPLACE/EXTEND BRANCH

WIRING AS REQUIRED TO ENSURE CONTINUITY OF OPERATION OF REMAINING EQUIPMENT.

- THE CONTRACTOR SHALL BE AWARE THAT NOT ALL EXISTING EQUIPMENT AND DEVICES REQUIRED TO BE REMOVED ARE NECESSARILY INDICATED ON THIS PLAN. THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR REMOVING ALL SUCH EQUIPMENT INCLUDING BUT NOT LIMITED TO WIRING AND CONDUITS AS REQUIRED TO FACILITATE THE COMPLETE DEMOLITION.
- ELECTRICAL CONTRACTOR TO ENGAGE THE BASE BUILDING FIRE ALARM CONTRACTOR FOR ANY FIRE ALARM WORK WITHIN THE SCOPE OF THIS PROJECT.
- SITE VERIFY EXISTING CUTOFF/LAB CONDUITS. REMOVE ALL CONDUITS AND CABLE BACK TO SOURCE. PROVIDE PROPER SEAL AND GRIND SMOOTH FOR THE OPENINGS.
- FIRE ALARM
- DURING WORK TO THE EXISTING FIRE ALARM SYSTEM THE TIME & DURATION OF INTERRUPTION SHALL BE APPROVED BY THE OWNER & ONLY 1 ZONE SHALL BE INTERRUPTED AT ANY 1 TIME. IN ALL AREAS WHERE THE RENOVATION WORK REQUIRES SHUTDOWN OF ANY PART OF THE FIRE ALARM PROTECTION SYSTEM, PROVIDE MANUAL FIRE ALARM PROTECTION (FIRE WARDEN) BY MEANS OF SUPERVISING THE AREA AS APPROVED BY GOVERNING AUTHORITIES. AT NO TIME SHALL THE FIRE ALARM SYSTEM OR ANY 1 ZONE BE LEFT NON-OPERATIVE OVERNIGHT. PROVIDE ALL REQUIRED BYPASS WIRING & TEMPORARY WIRING AS MAY BE REQUIRED TO MAINTAIN ALL PARTS OF THE FIRE ALARM SYSTEM OPERATIVE DURING CONSTRUCTION & ALTERATIONS.
- ALL EXISTING FIRE ALARM ZONES TO BE MAINTAINED.
- MAINTAIN EXISTING FIRE ALARM SYSTEM, PULL STATIONS, EXIT SIGNS AND EMERGENCY LIGHTS IN FULL OPERATION BEFORE INSTALLATION OF NEW DEVICES WHERE DISRUPTION TO LIFE SAFETY SYSTEM ARE REQUIRED. PROVIDE CONTINUOUS MONITORING DURING SHUT DOWN PERIOD AND ENSURE THAT ALL SYSTEMS ARE REACTIVATED PRIOR TO LEAVING THE
- WHEN FIRE ALARM SYSTEM WORK IS COMPLETE & READY FOR ACCEPTANCE, PROVIDE & ARRANGE FOR INDEPENDENT TESTING COMPANY VENDOR AS APPROVED BY THE OWNER. EXISTING FIRE ALARM MAINTENANCE CONTRACTOR TO INSPECT, TEST & CERTIFY EQUIPMENT, INCLUDING INITIATING DEVICES, SIGNALING DEVICES, CONTROL DEVICES & WIRING. CONDUIT WORK IN ACCORDANCE WITH LATEST EDITIONS OF CANULC-5538 & 5537. TESTS TO BE CONDUCTED IN PRESENCE OF OWNER & OR CONSULTANT. CERTIFY SYSTEM AND PROVIDE 3 COPIES OF SIGNED VERIFICATION REPORT.
- THE TESTING COMPANIES MUST EMPLOY TECHNICIANS CERTIFIED BY CANADIAN FIRE ALARM ASSOCIATION & OR ONTARIO FIRE MARSHALL, AS APPLICABLE.
- LIGHTING:
- EXISTING LUMINAIRES, WIRING & CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING LAYOUT. EXACT QUANTITY TO BE CONFIRMED ON-SITE BY ELECTRICAL CONTRACTOR.
- EXISTING LIGHTING SWITCHES, WIRING AND CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED.
- EXISTING EXIT SIGNAGE, WIRING AND CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED.
- ELECTRICAL CONTRACTOR TO VERIFY ALL THE DEVICE LOCATION AND QUANTITY ON-SITE AND PERFORM DEMOLITION WORK ACCORDINGLY.
- HATCHED AREA INDICATES EXISTING SERVICES WITHIN THIS SPACE TO REMAIN AS EXISTING AND TO BE OPERATIONAL FOR THE ENTIRE DURATION OF CONSTRUCTION.
- POWER:
- EXISTING POWER OUTLETS, FACEPLATES, BACKBOXES, WIRING AND CONDUITS (IF ANY) WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED.
- ELECTRICAL CONTRACTOR TO VERIFY ALL THE DEVICE LOCATION AND

SITE AT THE END OF EACH WORKING DAY.

KEY NOTES:

SCOPE OF WORK AREA. DEVICES THESE AREAS ARE EXISTING TO BE REMOVED REMAIN UNLESS NOTED OTHERWISE.

- ENSURE CIRCUIT INTEGRITY FOR ALL BRANCH CIRCUITS SERVING AREAS OUTSIDE OF SCOPE OF WORK. TRANSFER CIRCUITS TO EXISTING TO BE REMAINED PANELS AS REQUIRED TO KEEP OUT OF SCOPE SERVICES OPERATIONAL.

- IT, COMMUNICATIONS, ACCESS CONTROL, PAGING AND SECURITY:
- EXISTING DATA OUTLETS, JACKS, FACEPLATES, BACKBOXES, HORIZONTAL CABLEING, CONDUITS AND ASSOCIATED SUPPORTING WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE IN COMMS ROOM AND DISCARDED.
- WIRELESS ACCESS POINT DEVICES WITHIN SCOPE OF WORK TO BE DISCONNECTED SAFELY AND RETURNED TO OWNER. CONTRACTOR TO CONFIRM EXACT LOCATION AND QUANTITY OF WIRELESS ACCESS POINTS TO BE DEMOLISHED ON-SITE.
- ELECTRICAL CONTRACTOR TO VERIFY ALL THE DEVICE LOCATION AND QUANTITY ON-SITE AND PERFORM DEMOLITION WORK ACCORDINGLY.
- HATCHED AREA INDICATES EXISTING SERVICES WITHIN THIS SPACE TO REMAIN AS EXISTING AND TO BE OPERATIONAL FOR THE ENTIRE DURATION OF CONSTRUCTION.
- EXISTING PAGING SPEAKERS, CABLEING AND CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE. PROVIDE ALL NECESSARY TESTING TO ENSURE NOT AFFECTING EXISTING OPERATION OF OTHER FLOORS.
- NURSE CALL
- EXISTING NURSE CALL DEVICES AND ASSOCIATED WIRING, CONDUITS ETC. WITHIN AREA OF DEMOLITION TO BE DISCONNECTED AND REMOVED BACK TO THE SOURCE.
- MASTER CLOCK
- EXISTING MASTER CLOCK DEVICES AND ASSOCIATED WIRING, CONDUITS ETC. WITHIN AREA OF DEMOLITION TO BE DISCONNECTED AND REMOVED BACK TO THE SOURCE.

CLIENT:

UHN University Health Network
Toronto Western Hospital
399 Bathurst Street
Toronto ON M5T 2S8
www.uhn.ca

ARCHITECT:

CUMULUS ARCHITECTS INC. 160 Pears Ave. - Suite 300
Toronto, ON M5R 3P8
416-595-0763
www.cumulusarch.com

CONSULTANT:

exp.
1-800-695-3217 (T) 905-895-0167
220 Commerce Valley Drive West, Suite 110
Markham, ON L3T 0A6
Canada
www.exp.com
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:

REVISIONS

NO	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 CD	2024.05.10
3	Issued for 50% CD / Permit	2024.05.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11

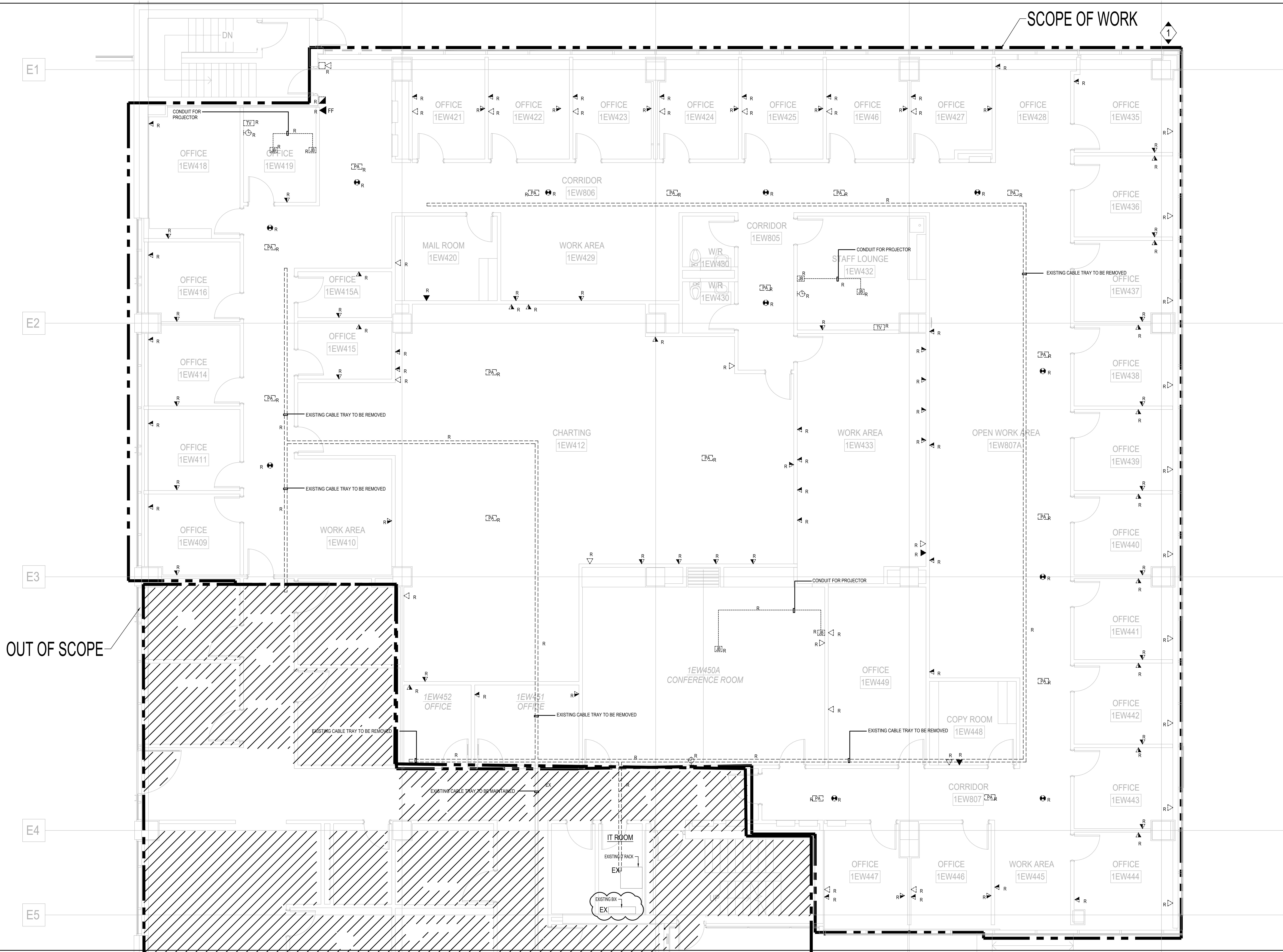
PROJECT:
UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:
LEVEL 1 FLOOR PLAN - DEMO - LIGHTING

PROJECT NO:
MRK-23004289

CHECKED:
M.S.

DRAWING NO:
E-101



GENERAL NOTES

- ALL SERVICES SHOWN ARE DIAGRAMMATIC ONLY. THE ARRANGEMENTS OF EQUIPMENT SHOWN ARE APPROXIMATE AND EXACT LOCATION AND QUANTITY SHALL BE VERIFIED ON SITE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. ALL AREAS OF CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE CONSULTANT PRIOR TO COMMENCING WORK.
- ALL EQUIPMENT AND DEVICES ON THIS DRAWING ARE EXISTING TO BE DISCONNECTED AND REMOVED OR RELOCATED UNLESS NOTED OTHERWISE. CUT BACK AND REMOVE CONDUIT AND WIRING BACK TO THE SOURCE PANEL. ELECTRICAL CONTRACTOR TO NOTE THAT THE LAYOUTS AND DEVICES SHOWN ARE FROM AS-BUILT DRAWINGS AVAILABLE AT THE TIME OF DRAFTING AND NOT ALL DEVICES ARE SHOWN. ELECTRICAL CONTRACTOR TO SITE VERIFY EXACT QUANTITY OF DEVICES TO BE DEMOLISHED AND PERFORM DEMOLITION WORK ACCORDINGLY.
- FOLLOWING DEMOLITION AND REMOVAL OF EXISTING CEILINGS, THE CONTRACTOR SHALL REMOVE ALL EXISTING REDUNDANT AND UN-USED LINE VOLTAGE AND LOW VOLTAGE WIRING. EXISTING WIRING THAT IS REQUIRED TO REMAIN IN OPERATION SHALL BE PROPERLY FASTENED/SUSPENDED FROM THE CEILING. ANY EXISTING JUNCTION BOXES WITHOUT COVERS SHALL BE PROVIDED WITH SUITABLE COVER PLATES.
- ELECTRICAL CONTRACTOR TO ENSURE ALL ELECTRICAL LIFE SAFETY SERVICES AND SERVICES FOR EXISTING EQUIPMENT THAT ARE REQUIRED TO REMAIN IN SERVICE SHALL REMAIN OPERATIONAL DURING ENTIRE CONSTRUCTION.
- WHERE EQUIPMENT OR DEVICES ARE REMOVED, CUT BACK AND REMOVE CONDUIT AND WIRING BACK TO SOURCE PANEL.
- WHERE REMOVED EQUIPMENT AFFECTS THE OPERATION OF EXISTING EQUIPMENT TO REMAIN, THE CONTRACTOR SHALL REPLACE/EXTEND BRANCH

WIRING AS REQUIRED TO ENSURE CONTINUITY OF OPERATION OF REMAINING EQUIPMENT.

- THE CONTRACTOR SHALL BE AWARE THAT NOT ALL EXISTING EQUIPMENT AND DEVICES REQUIRED TO BE REMOVED ARE NECESSARILY INDICATED ON THIS PLAN. THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR REMOVING ALL SUCH EQUIPMENT INCLUDING BUT NOT LIMITED TO WIRING AND CONDUITS AS REQUIRED TO FACILITATE THE COMPLETE DEMOLITION.
- ELECTRICAL CONTRACTOR TO ENGAGE THE BASE BUILDING FIRE ALARM CONTRACTOR FOR ANY FIRE ALARM WORK WITHIN THE SCOPE OF THIS PROJECT.
- SITE VERIFY EXISTING OUTFLOOR/SIAL CONDUITS. REMOVE ALL CONDUITS AND CABLE BACK TO SOURCE. PROVIDE PROPER SEAL AND GRAND SMOOTH FOR THE OPENINGS.
- FIRE ALARM
- DURING WORK TO THE EXISTING FIRE ALARM SYSTEM THE TIME & DURATION OF INTERRUPTION SHALL BE APPROVED BY THE OWNER & ONLY 1 ZONE SHALL BE INTERRUPTED AT ANY TIME. IN ALL AREAS WHERE THE RENOVATION WORK REQUIRES SHUTDOWN OF ANY PART OF THE FIRE ALARM PROTECTION SYSTEM, PROVIDE MANUAL FIRE ALARM PROTECTION (FIRE WARDEN) BY MEANS OF SUPERVISING THE AREA AS APPROVED BY GOVERNING AUTHORITIES. AT NO TIME SHALL THE FIRE ALARM SYSTEM OR ANY 1 ZONE BE LEFT INOPERATIVE OVERNIGHT. PROVIDE ALL REQUIRED BYPASS WIRING & TEMPORARY WIRING AS MAY BE REQUIRED TO MAINTAIN ALL PARTS OF THE FIRE ALARM SYSTEM OPERATIVE DURING CONSTRUCTION & ALTERATIONS.
- ALL EXISTING FIRE ALARM ZONES TO BE MAINTAINED.
- MAINTAIN EXISTING FIRE ALARM SYSTEM PULL STATIONS, EXIT SIGNS AND EMERGENCY LIGHTS IN FULL OPERATION BEFORE INSTALLATION OF NEW DEVICES. WHERE DISRUPTION TO LIFE SAFETY SYSTEM ARE REQUIRED, PROVIDE CONTINUOUS MONITORING DURING SHUT DOWN PERIOD AND ENSURE THAT ALL SYSTEMS ARE REACTIVATED PRIOR TO LEAVING THE

SITE AT THE END OF EACH WORKING DAY.

- WHEN FIRE ALARM SYSTEM WORK IS COMPLETE & READY FOR ACCEPTANCE, PROVIDE & ARRANGE FOR INDEPENDENT TESTING COMPANY (VENDOR) AS APPROVED BY THE OWNER. EXISTING FIRE ALARM MAINTENANCE CONTRACTOR TO INSPECT, TEST & CERTIFY EQUIPMENT INCLUDING INITIATING DEVICES, SIGNALING DEVICES, CONTROL DEVICES & WIRING. CONDUCT WORK IN ACCORDANCE WITH LATEST EDITIONS OF CANULC 558 & 553. TESTS TO BE CONDUCTED IN PRESENCE OF OWNER & OR CONSULTANT. CERTIFY SYSTEM AND PROVIDE 3 COPIES OF SIGNED VERIFICATION REPORT.
- THE TESTING COMPANIES MUST EMPLOY TECHNICIANS CERTIFIED BY CANADIAN FIRE ALARM ASSOCIATION & OR ONTARIO FIRE MARSHALL, AS APPLICABLE.
- LIGHTING
- EXISTING LUMINAIRES, WIRING & CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING LAYOUT. EXACT QUANTITY TO BE CONFIRMED ON SITE BY ELECTRICAL CONTRACTOR.
- EXISTING LIGHTING SWITCHES, WIRING, AND CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED.
- EXISTING EXIT SIGNAGE, WIRING AND CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED.
- ELECTRICAL CONTRACTOR TO VERIFY ALL THE DEVICE LOCATION AND QUANTITY ON SITE AND PERFORM DEMOLITION WORK ACCORDINGLY.
- HATCHED AREA INDICATES EXISTING SERVICES WITHIN THIS SPACE TO REMAIN AS EXISTING AND TO BE OPERATIONAL FOR THE ENTIRE DURATION OF CONSTRUCTION.
- POWER
- EXISTING POWER OUTLETS, FACEPLATES, BACKBOXES, WIRING AND CONDUITS (IF ANY) WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE AND DISCARDED.
- ELECTRICAL CONTRACTOR TO VERIFY ALL THE DEVICE LOCATION AND QUANTITY ON SITE AND PERFORM DEMOLITION WORK ACCORDINGLY.

- ENSURE CIRCUIT INTEGRITY FOR ALL BRANCH CIRCUITS SERVING AREAS OUTSIDE OF SCOPE OF WORK. TRANSFER CIRCUITS TO EXISTING TO BE REMAINED PANELS AS REQUIRED TO KEEP OUT OF SCOPE SERVICES OPERATIONAL.
- IT, COMMUNICATIONS, ACCESS CONTROL, PAGING AND SECURITY
- EXISTING DATA OUTLETS, JACKS, FACEPLATES, BACKBOXES, HORIZONTAL CABLING, CONDUITS AND ASSOCIATED SUPPORTING WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE IN COMM. ROOM (13M402) AND DISCARDED.
- WIRELESS ACCESS POINT DEVICES WITHIN SCOPE OF WORK TO BE DISCONNECTED SAFELY AND RETURNED TO OWNER. CONTRACTOR TO CONFIRM EXACT LOCATION AND QUANTITY OF WIRELESS ACCESS POINTS TO BE DEMOLISHED ON SITE.
- ELECTRICAL CONTRACTOR TO VERIFY ALL THE DEVICE LOCATION AND QUANTITY ON SITE AND PERFORM DEMOLITION WORK ACCORDINGLY. HATCHED AREA INDICATES EXISTING SERVICES WITHIN THIS SPACE TO REMAIN AS EXISTING AND TO BE OPERATIONAL FOR THE ENTIRE DURATION OF CONSTRUCTION.
- EXISTING PAGING SPEAKERS, CABLING AND CONDUITS WITHIN AREA OF DEMOLITION TO BE REMOVED BACK TO THE SOURCE. PROVIDE ALL NECESSARY TESTING TO ENSURE NOT AFFECTING EXISTING OPERATION OF OTHER FLOORS.
- NURSE CALL
- EXISTING NURSE CALL DEVICES AND ASSOCIATED WIRING, CONDUITS ETC. WITHIN AREA OF DEMOLITION TO BE DISCONNECTED AND REMOVED BACK TO THE SOURCE.
- MASTER CLOCK
- EXISTING MASTER CLOCK DEVICES AND ASSOCIATED WIRING, CONDUITS ETC. WITHIN AREA OF DEMOLITION TO BE DISCONNECTED AND REMOVED BACK TO THE SOURCE.

KEY NOTES

SCOPE OF WORK AREA. DEVICES THESE AREAS ARE EXISTING TO BE REMOVED REMAIN UNLESS NOTED OTHERWISE.

CLIENT:

UHN University Health Network
Toronto Western Hospital
399 Bathurst Street
Toronto ON M5T 2S8
www.uhn.ca

ARCHITECT:

CUMULUS ARCHITECTS INC.
160 Pears Ave. - Suite 300
Toronto, ON M5R 3P8
416-538-0763
www.cumulusarch.com

CONSULTANT:

exp.
1-800-695-3217 / 1-800-695-0167
220 Commerce Valley Drive West, Suite 110
Markham, ON L3T 0A6
Canada
www.exp.com
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:

REVISIONS

NO	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 CD	2024.05.10
3	Issued for 50% CD / Permit	2024.05.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25
8	Issued for Tender Addendum No.4	2024.11.12

PROJECT:
UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:
LEVEL 1 FLOOR PLAN - DEMO - POWER SYSTEM

PROJECT NO:
MRK-23004289

CHECKED:
M.S.

DRAWING NO:
E-103

KEY NOTES:

- EXAM ROOMS: EACH LIGHTING ZONE FOR EXAM ROOM, TUNABLE WHITE WITH LIGHT SWITCH OVERRIDE (AT DOORWAY AND HEAD WALL), CORRIDORS AND EXAM ROOM ARE UNDER THE COLOR TEMPERATURE AND DIMMING LEVEL, UNLESS OVERRIDE BY SWITCHES IN ROOM.
- PATIENT CORRIDORS: TUNABLE WHITE DIMMER AND WARMER IN PM, BRIGHTER IN AM. PROGRAMMED TO TUNE LIGHT THROUGHOUT THE DAY AND DIM AUTOMATICALLY AT NIGHT (TO APPROX 50% BRIGHTNESS). STAFF HAVE CONTROL AT CARE STATION TO TURN ON FULL BRIGHTNESS AT ANY TIME.
- ALCOVES: FOLLOW CORRIDOR BRIGHTNESS AND COLOR TEMPERATURE UNTIL AT NIGHT. TURN OFF AT NIGHT AND BE ABLE TO BRING THE FIXTURES TO 75% BRIGHTNESS WHEN OCCUPANCY SENSOR IS ACTIVATED.
- CARE TEAM STATION 100% BRIGHTNESS WITH DIMMABLE CONTROLS
- SWITCH ON + VACANCY SENSOR, 100% BRIGHTNESS IE. STAFF WILL NEED TO TURN ON LIGHT TO ENTER, WILL TURN OFF AUTOMATICALLY WHEN EMPTY
- STAFF CORRIDORS: FOLLOW CORRIDOR SETTING AND SENSOR BE ABLE TO BRING THE ZONE FIXTURES TO 75% OUTPUT FOR 5 MINUTES AND BACK TO CORRIDOR SETTING.
- OCCUPANCY SENSOR (AUTO ON WHEN DOOR IS OPENED, 30-MINUTE TIMER AUTO-OFF)
- STAFF WC + SHOWER: OCCUPANCY SENSOR (AUTO ON, 30-MINUTE TIMER AUTO-OFF)
- NIGHT LIGHT: TIMER CONTROL, SUNSET TO SUNRISE

REMARKS:

BEFORE PROGRAMMING THE LIGHTING SCENES ON-SITE, CONTRACTOR SHALL VERIFY WITH ENGINEER AND USER FOR FINAL SETTING AND SUIT WITHOUT COST IMPLICATION.

OUT OF SCOPE

REFER TO DRAWING EX-2 SECTION 1 FOR CONTINUOUS

PROJECT STATUS:

REVISIONS

NO	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 DD	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25
8	Issued for Tender Addendum No.2	2024.11.01

PROJECT:

UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:

LEVEL 1 FLOOR PLAN - NEW WORK -
LIGHTING LAYOUT

PROJECT NO:

MRK-23004289

CHECKED:

M.S.

DRAWING NO:

E-201

CLIENT:



ARCHITECT:



CONSULTANT:



BUILDINGS • EARTH & ENVIRONMENT • ENERGY • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY

- GENERAL NOTES:
- FOR EXISTING ALL THE DATA CABLE, PROVIDE NEW "J" HOOKS TO SUPPORT.
 - ALL NEW AND EXISTING ELECTRICAL PANELS TO BE REMAINED ARE TO BE PAINTED IN GREY AND RED. FOR NORMAL/ EMERGENCY POWER, REFER TO UHN STANDARDS FOR PAINT CODE CODE. PREP SURFACE FOR NEW FINISH ON EXISTING PANEL AND NEW PANELS TO BE FACTORY APPLIED.
 - PROVIDE NEW LAMACORDS FOR NEW AND EXISTING ELECTRICAL PANELS. REFER TO UHN'S STANDARDS.
 - PLEASE REFER TO ARCHITECTURE DRAWINGS FOR THE TYPICAL RECEPTACLES AND DATA POINTS HEIGHT.
 - CAMERA PLACEMENT AND VIEW ANGLE TO BE CONFIRMED AND SET WITH UHN SECURITY TEAM
 - MOUNTING HEIGHT OF ELECTRICAL DEVICES/ROUGH-INS FOR AV EQUIPMENT:
 - MONITOR VARIES. PLEASE REFER TO ARCH DRAWING FOR DETAILS AND COORDINATE WITH UHN ON-SITE.
 - CONTROL PANEL - SAME AS LIGHTING SWITCH
 - COMPUTER STATION - REFER TO ARCHITECTURAL LAYOUT
 - PLEASE REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT MOUNTING HEIGHT OF DATA OUTLETS AND RECEPTACLES

- KEY NOTES:
- THE CCTV IMAGE FOR THREE CAMERAS TO BE SHOWN ON THE MONITOR.
 - UNDER DESK RELEASE BUTTONS WITH LABELING AT NURSE STATION FOR TWO ENTRANCE DOORS. (SDC MODEL D15-2 OR EQUIVALENT)
 - PROVIDE PHOTOCCELL CONTROL FOR THE CIRCUIT. LOCATION AS SHOWN.
 - CONTRACTOR SHALL PROVIDE ELECTRICAL INFRASTRUCTURE INCLUDING CONNECTIONS, CONDUITS, BACKBOXES ETC. COORDINATE WITH UHN AND AV CONTRACTOR ON-SITE FOR THE EXACT ROUGH-INS AND POWER REQUIREMENTS. REFER TO ARCH DRAWING FOR DETAILS. ALL CONDUITS FOR AV EQUIPMENT TO BE 3/4" UNLESS SPECIFIED.
 - PROVIDE POWER POLE FOR POWER AND DATA FROM CEILING AND WORK STATION. COORDINATE WITH FURNITURE SUPPLIER FOR CONNECTION DETAILS.
 - PROVIDE ELECTRICAL WHIP FOR SYSTEM FURNITURE. CONTRACTOR TO COORDINATE WITH NEW WHIP LOCATION COLUMN FRONT TO FACE. SITE VERIFY WITH UHN.

TOTAL 12 NOS OF 16-30R FROM PANEL RP-1-1A-1, RP-1-1A-1.2, RP-1-1A-2.4, RP-1-1A-7.8, RP-1-1A-8.10, RP-1-1A-13.15, RP-1-1A-14.16.

PROVIDE 4 POLE RACK RESERVED FOR FOR MEDICAL ENGINEERING AND NURSE CALL PROVIDE TWO(2) 4 POLE IT SERVER RACKS

PROJECT STATUS:

REVISIONS

NO	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 DD	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25
8	Issued for Tender Addendum No.4	2024.11.12

PROJECT:

UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:

LEVEL 1 FLOOR PLAN - NEW WORK - ELECTRICAL AND POWER SYSTEMS

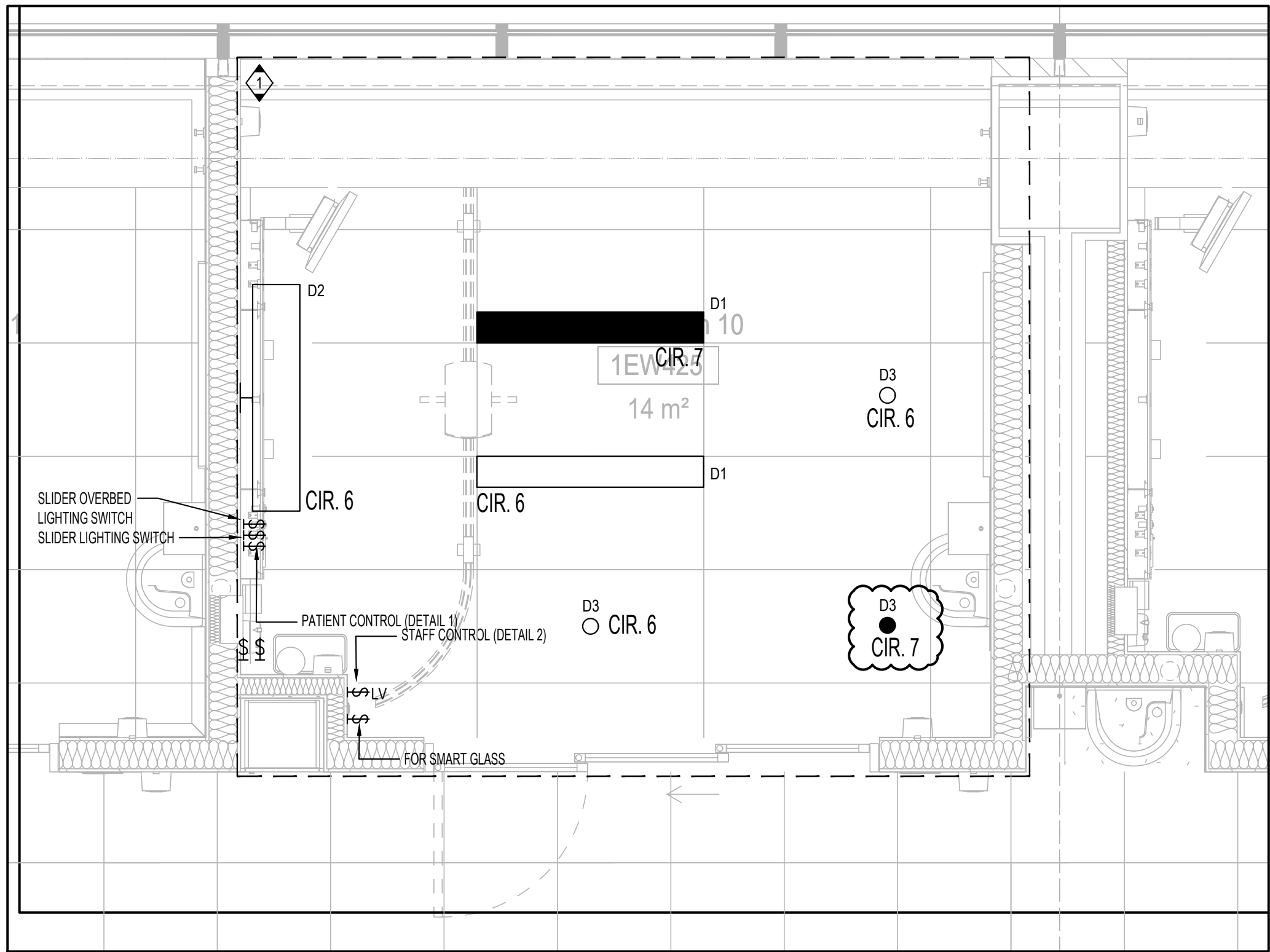
PROJECT NO:

MRK-23004289

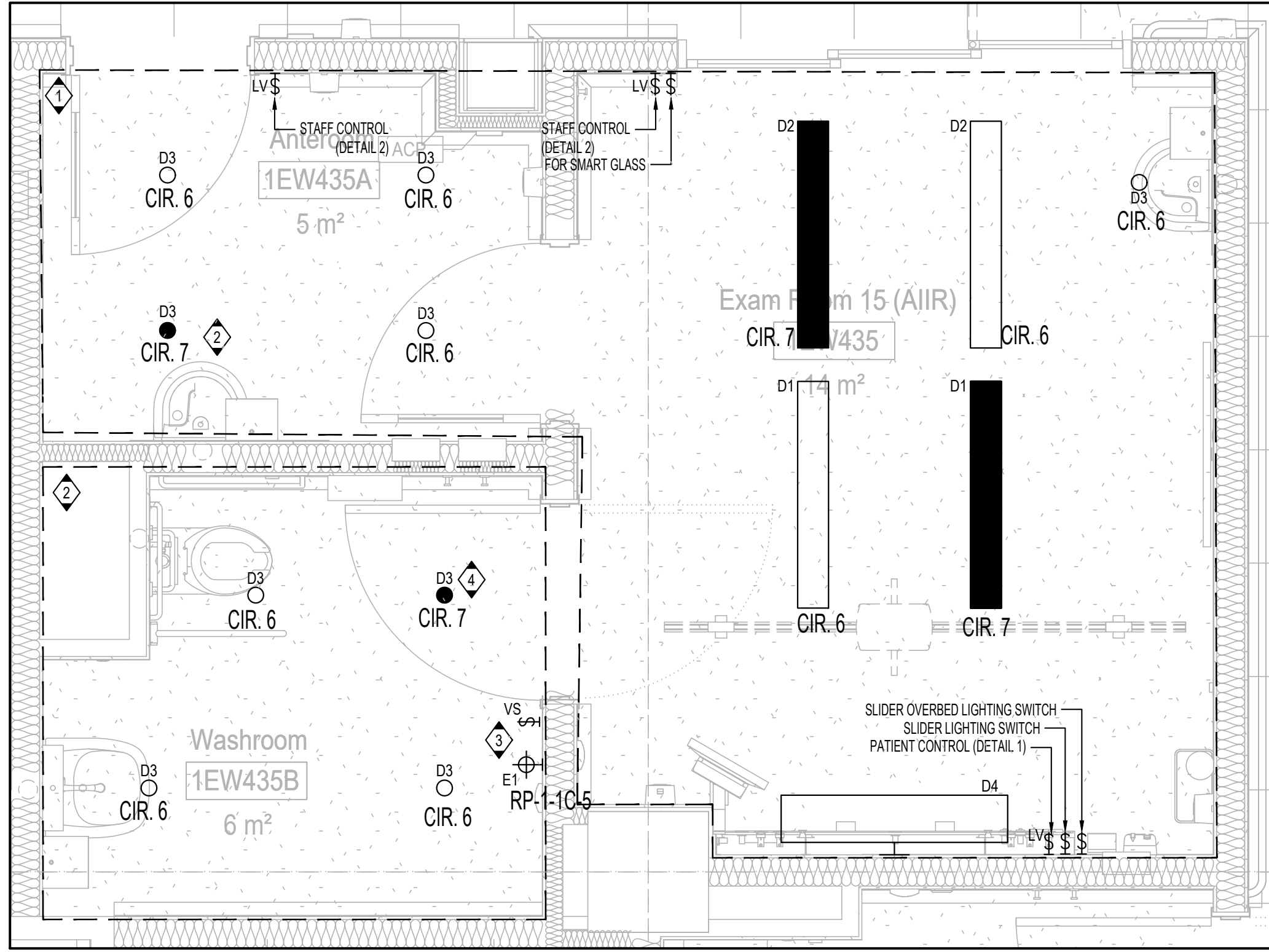
DRAWING NO:

CHECKED:

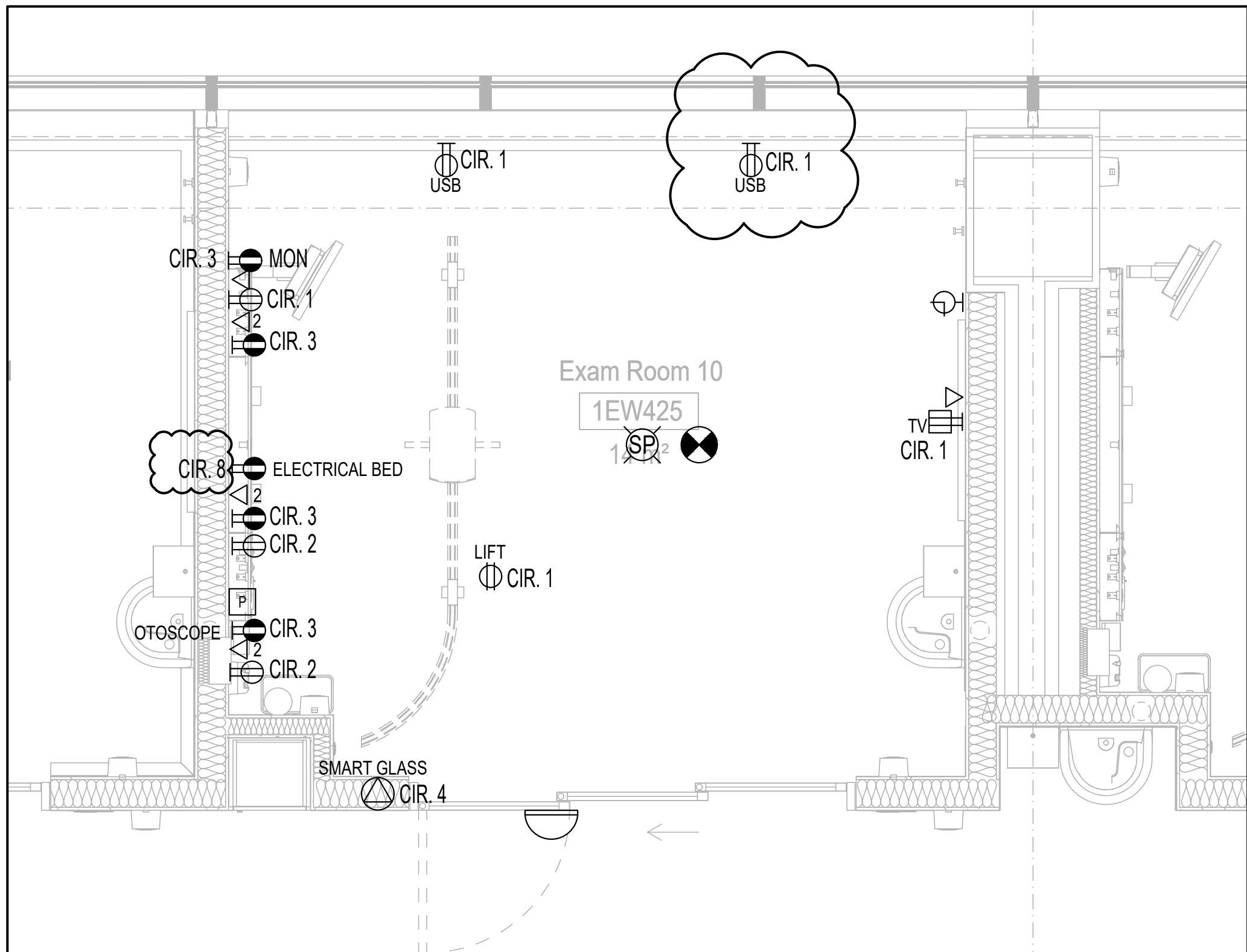
M.S.



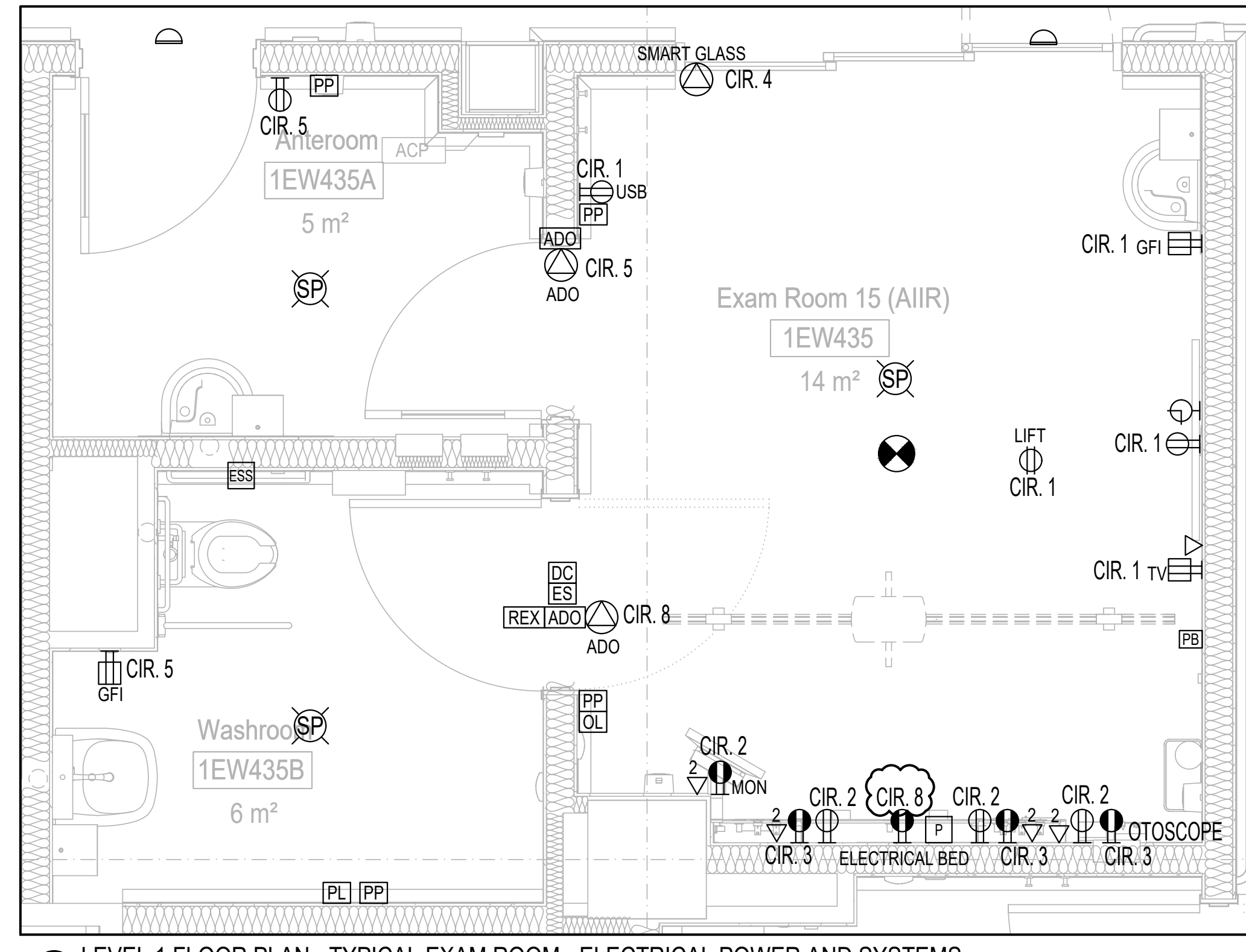
1 LEVEL 1 FLOOR PLAN - TYPICAL EXAM ROOM - LIGHTING
1:25



2 LEVEL 1 FLOOR PLAN - TYPICAL EXAM ROOM - LIGHTING
1:25



3 LEVEL 1 FLOOR PLAN - TYPICAL EXAM ROOM - ELECTRICAL POWER AND SYSTEMS
1:25

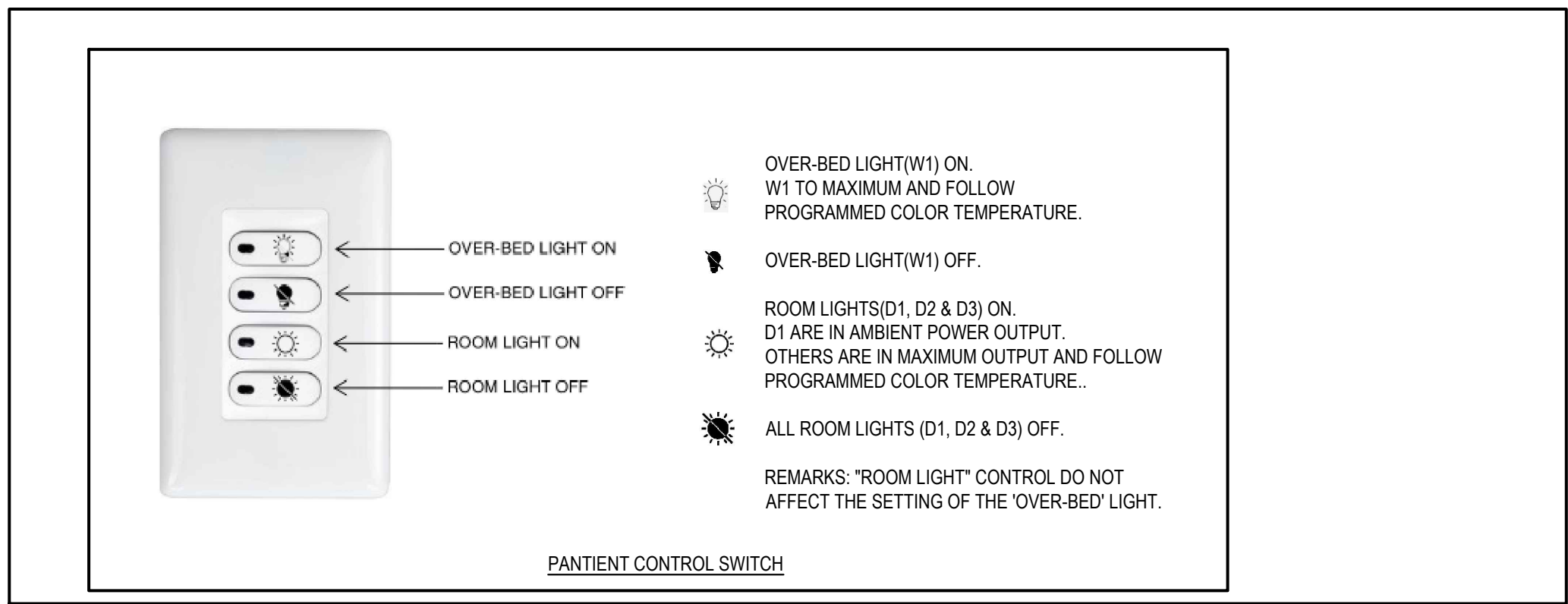


4 LEVEL 1 FLOOR PLAN - TYPICAL EXAM ROOM - ELECTRICAL POWER AND SYSTEMS
1:25

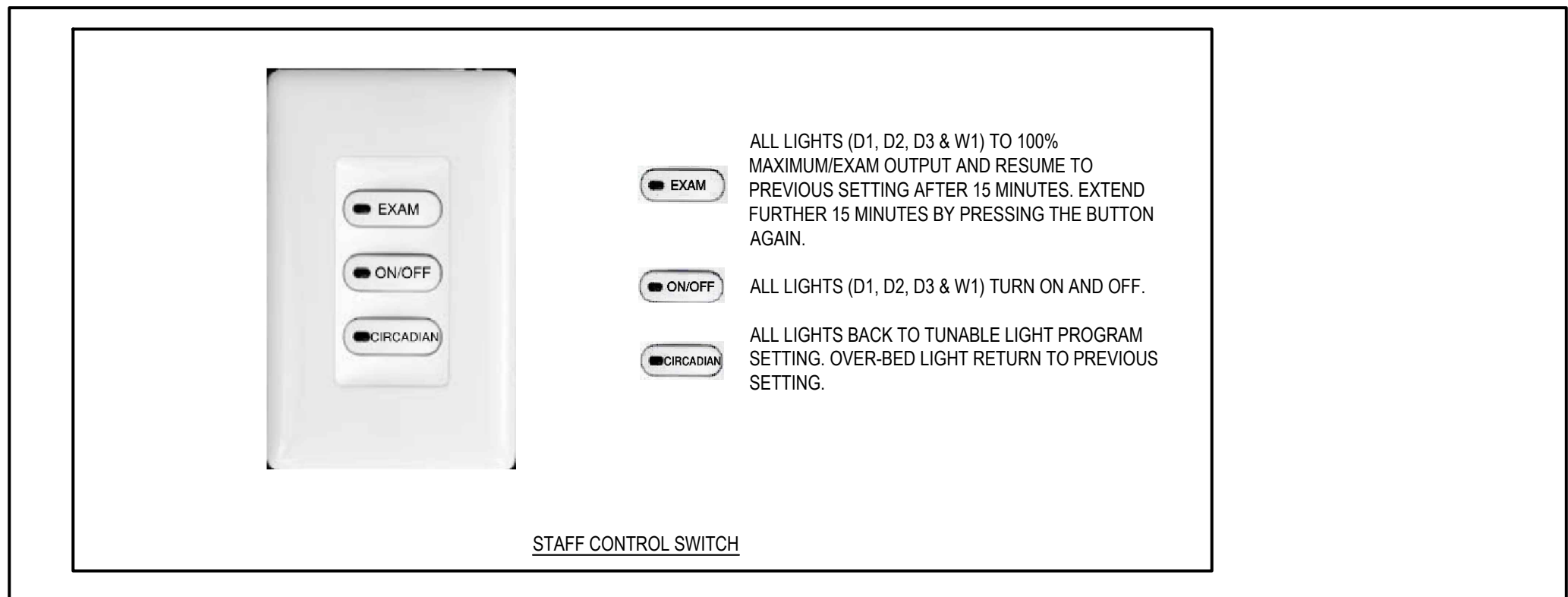
KEY NOTES:

- 1 LIGHTING CONTROL - TUNABLE WHITE WITH LIGHT SWITCH OVERRIDE (AT DOORWAY AND HEAD WALL)
- 2 LIGHTING CONTROL - OCCUPANCY SENSOR (AUTO ON, 30-MINUTE TIMER AUTO-OFF)
- 3 LIGHTING CONTROL - NIGHT LIGHT: TIMER CONTROL, SUNSET TO SUNRISE
- 4 PROVIDE UL-924 RELAY FOR EMERGENCY LIGHTING.

	CIR.1	CIR.2	CIR.3	CIR.4	CIR.5	CIR.6	CIR.7	CIR.8
EXAM ROOM 1	RP-1-B-38	RP-1-B-46	RP-1-2EA-9	RP-1-B-49		LP-1-1A-23	LP-1-1EA-9	RP-1-2EA-9
EXAM ROOM 2	RP-1-B-40	RP-1-B-46	RP-1-2EA-9	RP-1-B-49		LP-1-1A-23	LP-1-1EA-9	RP-1-2EA-9
EXAM ROOM 3	RP-1-B-42	RP-1-B-47	RP-1-2EA-10	RP-1-B-49		LP-1-1A-23	LP-1-1EA-9	RP-1-2EA-10
EXAM ROOM 4	RP-1-B-43	RP-1-B-47	RP-1-2EA-10	RP-1-B-49		LP-1-1A-24	LP-1-1EA-10	RP-1-2EA-10
EXAM ROOM 5	RP-1-B-44	RP-1-B-48	RP-1-2EA-11	RP-1-B-49		LP-1-1A-24	LP-1-1EA-10	RP-1-2EA-11
EXAM ROOM 6	RP-1-B-45	RP-1-B-48	RP-1-2EA-11	RP-1-B-49		LP-1-1A-24	LP-1-1EA-10	RP-1-2EA-11
EXAM ROOM 7	RP-1-C-41	RP-1-C-50	RP-1-2EA-45	RP-1-C-50		LP-1-1A-25	LP-1-1EA-11	RP-1-2EA-50
EXAM ROOM 8	RP-1-C-42	RP-1-C-50	RP-1-2EA-46	RP-1-C-50		LP-1-1A-25	LP-1-1EA-11	RP-1-2EA-50
EXAM ROOM 9	RP-1-C-43	RP-1-C-51	RP-1-2EA-46	RP-1-C-50		LP-1-1A-25	LP-1-1EA-11	RP-1-2EA-51
EXAM ROOM 10	RP-1-C-44	RP-1-C-51	RP-1-2EA-46	RP-1-C-50		LP-1-1A-26	LP-1-1EA-12	RP-1-2EA-51
EXAM ROOM 11	RP-1-C-45	RP-1-C-52	RP-1-2EA-47	RP-1-C-50		LP-1-1A-26	LP-1-1EA-12	RP-1-2EA-52
EXAM ROOM 12 (AIR ROOM)	RP-1-C-46	RP-1-C-52	RP-1-2EA-47	RP-1-C-51	RP-1-C-52	LP-1-1A-26	LP-1-1EA-12	RP-1-2EA-52
EXAM ROOM 13	RP-1-C-47	RP-1-C-53	RP-1-2EA-48	RP-1-C-51		LP-1-1A-27	LP-1-1EA-13	RP-1-2EA-53
EXAM ROOM 14	RP-1-C-48	RP-1-C-53	RP-1-2EA-48	RP-1-C-51		LP-1-1A-27	LP-1-1EA-13	RP-1-2EA-53
EXAM ROOM 15 (AIR ROOM)	RP-1-C-49	RP-1-C-54	RP-1-2EA-49	RP-1-C-51	RP-1-C-53	LP-1-1A-27	LP-1-1EA-13	RP-1-2EA-54



5 DETAIL 1 - LIGHTING SWITCH
N.T.S.



6 DETAIL 2 - LIGHTING SWITCH
N.T.S.

CLIENT:

UHN University Health Network
Toronto Western Hospital
399 Bathurst Street
Toronto ON M5T 2S8
www.uhn.ca

ARCHITECT:

CUMULUS ARCHITECTS INC.
160 Pears Ave. - Suite 300
Toronto, ON M5R 3P8
416-538-0763
www.cumulusarch.com

CONSULTANT:

exp.
1-800-695-3217 (F: 800-695-0167)
220 Concession Valley Drive West, Suite 110
Markham, ON L3T 0A8
Canada
www.exp.com
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:

REVISIONS

NO.	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 CD	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25

PROJECT:

UHN TWIH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:

LEVEL 1 FLOOR PLAN - NEW WORK - EXAM ROOMS

PROJECT NO:

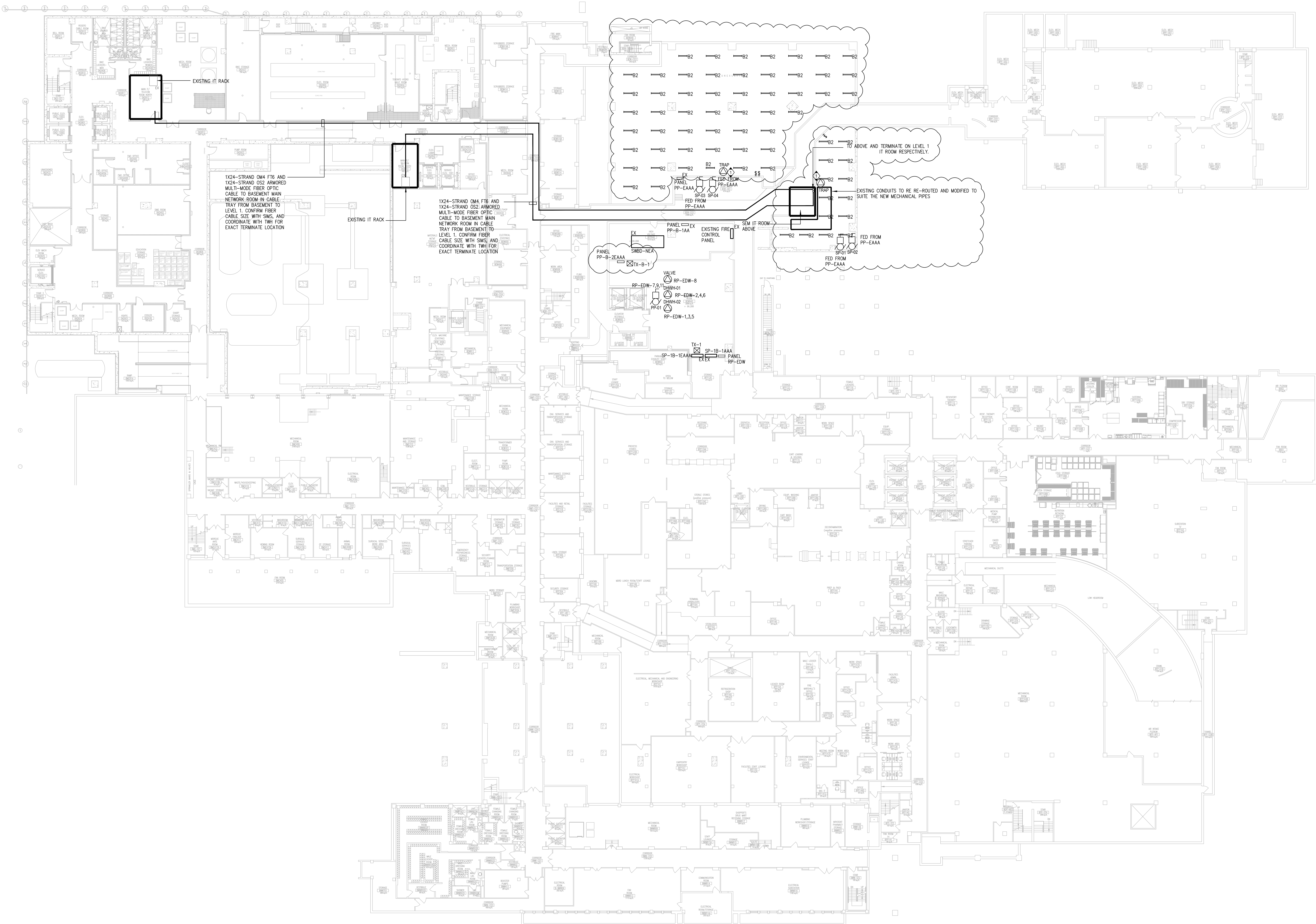
MRK-23004289

CHECKED:

M.S.

DRAWING NO:

E-203



REMARKS:
1. CONTRACTOR RESPONSIBLE TO FIND THE BEST ROUTE THROUGH CORRIDORES AND FLOORS. ALL CABLE CONTAINMENT AND CABLING WORKS SHALL BE AFTER HOURS.
2. REWORK CEILING SPACE IF REQUIRED TO ACCOMMODATE THE ADDITIONAL ROUTING OF THE IT FIBRE.
KEYNOTE:
◇ PROVIDE ONE 15A-1P BREAKER IN PANEL PP-B-1AA AND CONNECT TO THE TRAP SEAL PRIMER.

CLIENT:
**University Health Network**
Toronto Western Hospital
399 Bathurst Street
Toronto ON M5T 2S8
www.uhn.ca

ARCHITECT:
**CUMULUS ARCHITECTS INC.**
160 Pears Ave - Suite 300
Toronto, ON M5R 3P8
416-598-0763
www.cumulusarch.com

CONSULTANT:
**exp.**
1-800-695-3217 | F: 905-895-0167
220 Concession Valley Drive West, Suite 110
Markham, ON L3T 0A6
Canada
www.exp.com
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

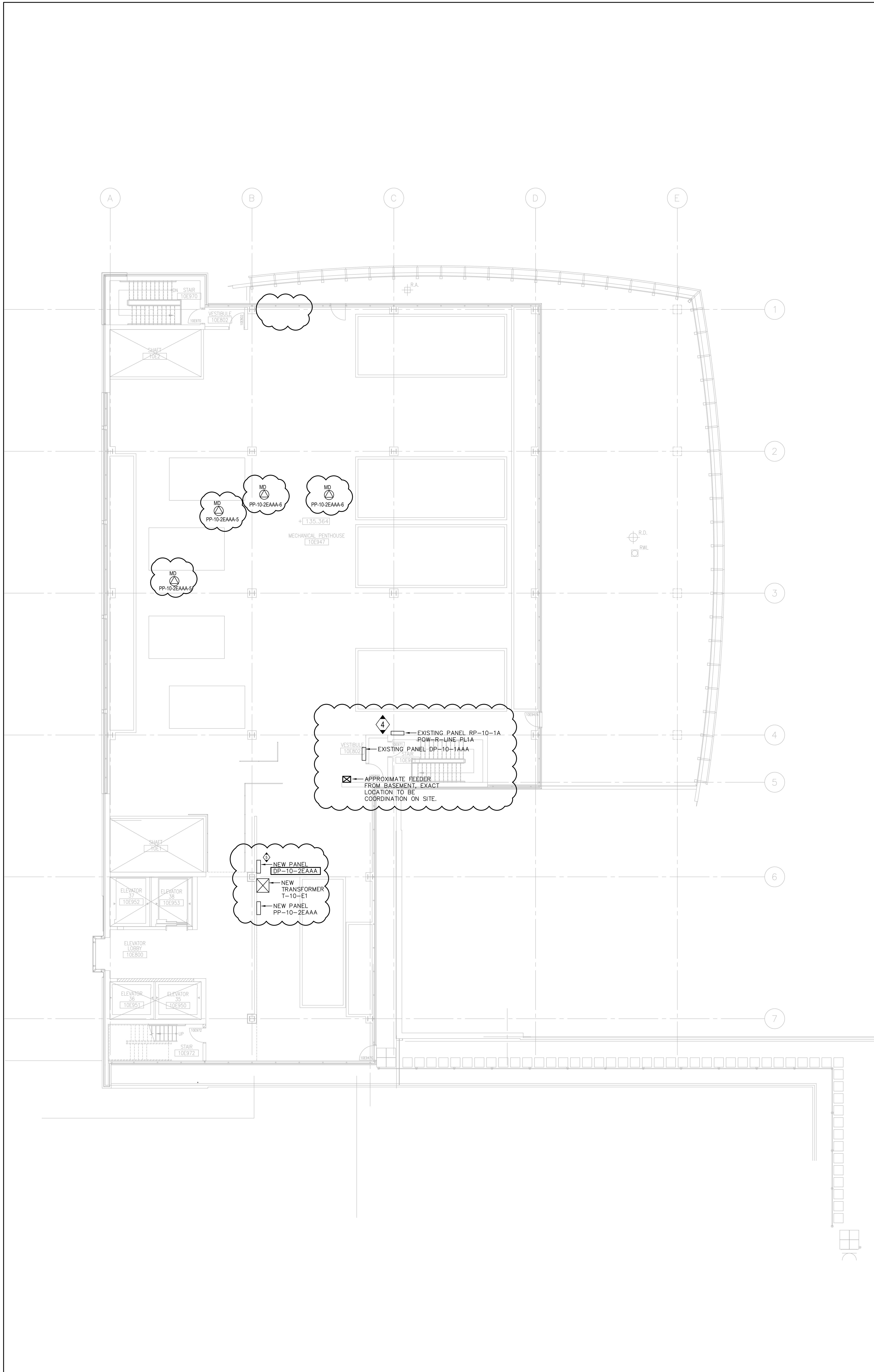
PROJECT STATUS:

REVISIONS		
NO	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 CD	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25
8	Issued for Tender Addendum No.4	2024.11.12

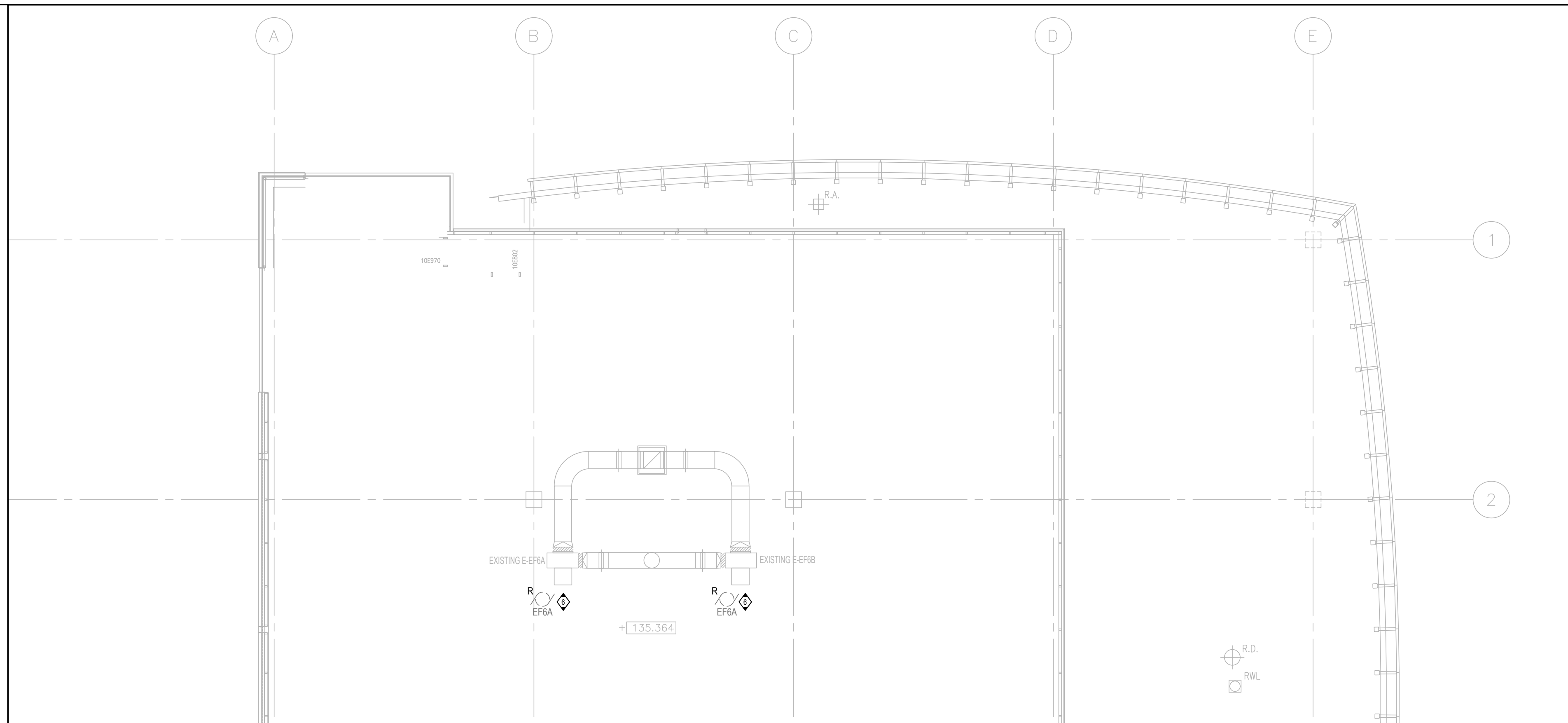
PROJECT:
UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:
BASEMENT FLOOR PLAN

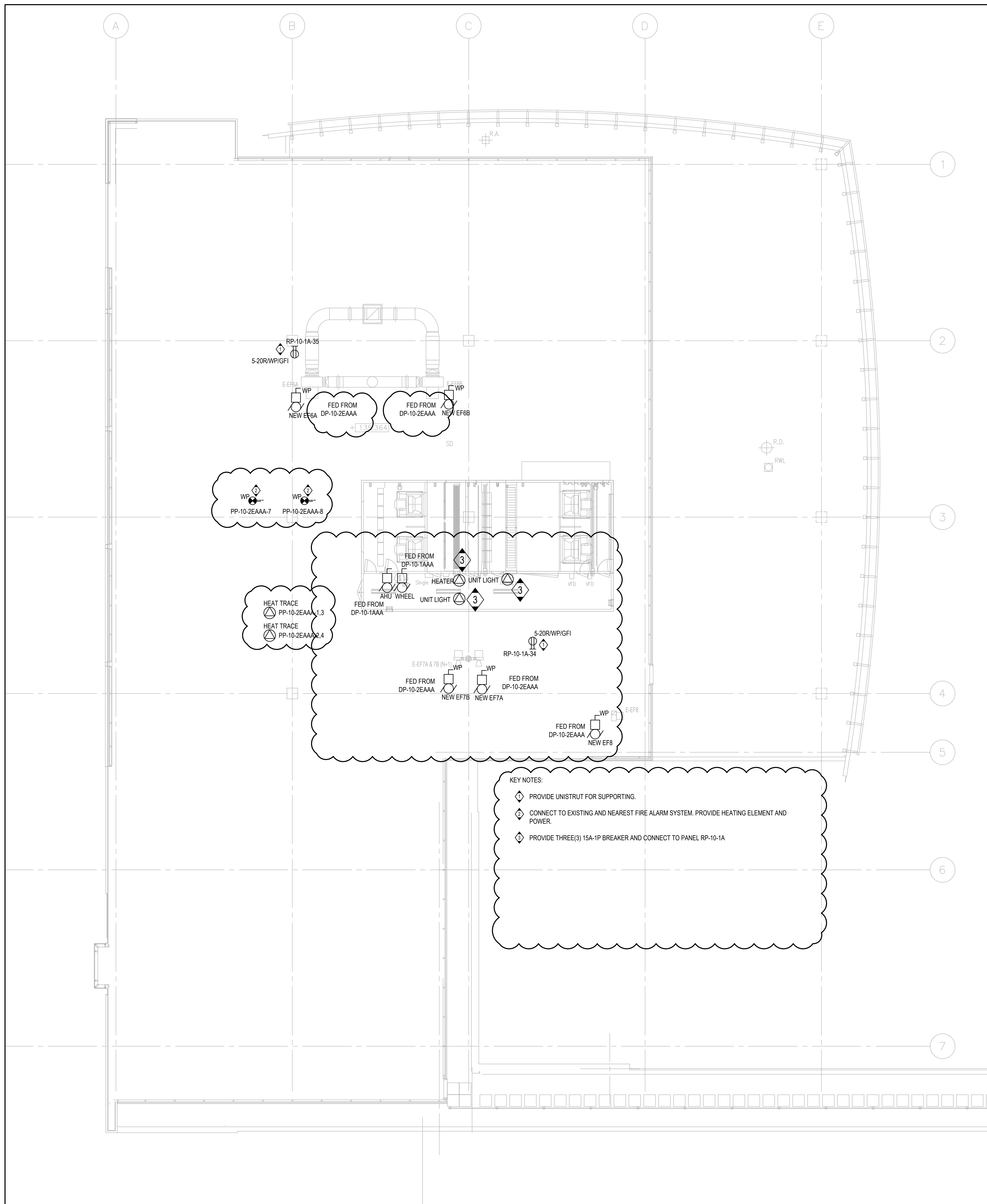
PROJECT NO: MRK-23004289	DRAWING NO: E-204
CHECKED: M.S.	



1 PENTHOUSE FLOOR PLAN - ELECTRICAL NEW WORK
1:100



2 ROOF FLOOR PLAN - ELECTRICAL DEMOLITION
1:100



3 ROOF FLOOR PLAN - ELECTRICAL NEW WORK
1:100

CLIENT:
UHN University Health Network
Toronto Western Hospital
399 Bathurst Street
Toronto ON M5T 2S8
www.uhn.ca

ARCHITECT:
CUMULUS ARCHITECTS INC.
160 Pears Ave. - Suite 300
Toronto, ON M5R 3P8
416-595-0763
www.cumulusarch.com

CONSULTANT:
exp.
1 800 695 3217 | F: 905 695 0167
220 Commerce Valley Drive West, Suite 110
Markham, ON L3T 0A8
Canada
www.exp.com
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:

REVISIONS

NO.	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100% CD	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum No.2	2024.11.01
7	Issued for Tender Addendum No.4	2024.11.12

PROJECT:
UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:
PENTHOUSE & ROOF FLOOR PLAN -
ELECTRICAL LAYOUT

PROJECT NO:
MRK-23004289

DRAWING NO:
E-205

CHECKED:
M.S.

MECHANICAL EQUIPMENT SCHEDULE(BY OTHERS)

AIR HANDLING UNIT SCHEDULE - 1 of 2																																																						
SYSTEM REFERENCE TAG	DESCRIPTION	LOCATION	MANUFACTUR.	MODEL	AIR FLOW (CFM)	AIR FLOW (L/S)	OPERATION	AIRFLOW FRESH AIR %	SUPPLY FAN E.S.P. (Pa)	RETURN FAN E.S.P. (Pa)	PRE-HEATING COIL (GLYCOL 30% PG)							COOLING COIL							RE-HEATING COIL (GLYCOL 30% P)							HUMIDIFICATION-STEAM		WHEEL ENERGY..		ELECTRICAL			ECONOMIZE R (YN)	EMERGENCY POWER (YN)	FIRE SHUT DOWN (YN)	SILENCER INLET (YN)	SILENCER OUTLET (YN)	UNIT WEIGHT (KG)	REMARKS									
											TOTAL CAP (KW)	EAT DB (°C)	LAT DB (°C)	EGT (°C)	PD (KPA)	FLOW (L/S)	TOTAL (KW)	SENSIBLE (KW)	EAT DB (°C)	EAT WB (°C)	LAT DB (°C)	LAT WB (°C)	EGT (°C)	LGT (°C)	PD (KPA)	FLOW (L/S)	TOTAL CAP (KW)	EAT DB (°C)	LAT DB (°C)	EGT (°C)	LGT (°C)	PD (KPA)	FLOW (L/S)	TYPE	PRESSURE (PSI)	CAPACITY (KG/H)	SUMMER (KW)	WINTER (KW)								POWER (V/PHHZ)	MCA (A)	MOP (A)						
EW-AHU01B	EAST WING UNIT SERVING SEM CENTRE (L1, L2, L3 & L5)	ROOF	HAAKON	AFK	28605	13500	UNITS RUNNING IN PARALLEL (NORMAL MODE)	33%	672	374	87.0	-20.0	-14.7	51.7	25.3	1.2	0.83	253.3	209.8	24.3	17.7	12.2	12.1	8.3	17.2	12.6	7.6	52.9	10.0	14.1	51.7	32.2	0.3	0.8	LPS	10.0	94.0	258	622	575/3/60	188	225	Y	N	TO MATCH EXISTING	Y	Y	41364	AHU CW VESTIBULE IS DESIGNED WITH LADDER, PLATFORM FOR ACCESS BY THE MANUFACTURER					
					28605	13500	UNITS RUNNING IN PARALLEL (PANDEMIC MODE)	100%			3061.5	209.3	25.2	18.7	12.1	12.0	8.3	17.2	16.7	8.9	459.1	-14.7	13.1	51.7	37.8	22.1	8.2	10.0	13.1	51.7	32.2	1.2	1.7	13.8																12.8	51.7	33.1	22.1	8.2
					57210	27000	EXISTING UNIT OUT OF SERVICE (NORMAL MODE)	33%			518.0	518.0	24.3	17.7	12.2	12.1	8.3	17.2	43.6	15.14	125.1	10.0	13.8	51.7	32.2	1.2	1.7	13.8	12.8	51.7	33.1	22.1	8.2																					
					57210	27000	EXISTING UNIT OUT OF SERVICE (PANDEMIC MODE)	100%			3061.5	-	31.1	23.3	TBD WITH ENERGY RECOVERY							459.1	-	22.2	12.8	51.7	33.1	22.1	8.2																									
					57210	27000	INTERNAL CATASTROPHIC MODE (PANDEMIC MODE)	0%			3061.5	-	23.9	-	15.0	-	8.3	17.2	-	15.14	-	22.2	12.8	51.7	33.1	22.1	8.2																											
NOTES: 1. OUTDOOR UNIT C/W VESTIBULE SHALL BE SUPPORTED ON STRUCTURAL SUPPORT AND SHALL BE COORDINATED ON SITE 2. VFD TO BE SUPPLIED AND BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR 3. UNIT SIZED WITH ECONOMIZER MODE 4. PROVIDE 25-50MM MINIMUM RUBBERNEOPRENE PADS TO APPROVED BY THE UNIT MANUFACTURER 5. PROVIDE MERV 14 MIN. FINAL FILTERS AND MERV 8 PRE-FILTERS 6. PROVIDE 1500 SILENCER FOR AIR INTAKE AND EXHAUST WITH 25% FREE AREA. 7. PROVIDE MIN. 2300MM WIDE VESTIBULE FOR THE AHU FOR MAINTENANCE C/W LOUVER AND HEATER TO BE SIZED BY THE MANUFACTURER. VESTIBULE SHALL BE HEATED. ELECTRICAL TO PROVIDE SEPARATE POWER FOR THE VESTIBULE. 8. DUAL SUPPLY FANS @50HP EACH; DUAL RETURN FANS @30HP EACH 9. 2HP WHEEL MOTOR WITH VFD 10. DEDICATED POWER FEED FOR AHU INCLUDING WHEEL 11. DEDICATED POWER FEED FOR UNIT LIGHTS 12. DEDICATED POWER FEED FOR VESTIBULE LIGHTS 13. DEDICATED POWER FEED FOR VESTIBULE HEATER 14. UNIT OPERATION AT 57210 CFM @100% O/A WILL ACCOUNT FOR HEAT WHEEL. DESIGN FOR COILS IS FOR 3 MAIN SCENARIOS.																																																						

FORCE FLOW HEATER SCHEDULE																			
EQUIPMENT TAG	LOCATION	DESCRIPTION	MANUFACTURER	MODEL	AIRFLOW (L/S)	HEATING CAPACITY (KW)	FLUID			PRESSURE DROP (kPa)	ELECTRICAL		EMERGENCY POWER (Y/N)	REMOTE THERMOSTAT (Y/N)	DIMENSIONS			WEIGHT (KG)	REMARKS
							EWIT (°C)	LWT (°C)	FLOW (L/S)		MOTOR (KW)	POWER (V/Ph/RhZ)			LENGTH (MM)	WIDTH (MM)	HEIGHT (MM)		
EW-FFH-01	EXIT 1EW346 (SEM CENTRE)	WALL MOUNTED	SIGMA	SFF-A-02	104	4	66	54	0.1	0.07	0.075	120/160	N	N	660	241	660	34.0	
FP-FFH-01	EXIT DOOR AT FP ROOF & STAIR	CEILING MOUNTED	SIGMA	SFF-A-02	104	4	66	54	0.1	0.71	0.075	120/160	N	N	660	241	660	34.0	
FP-UH0101	LOWER LEVEL	CEILING MOUNTED	SIGMA	015H	132	4	66	54	0.18	2.09	0.037	120/160	N	N	483	368	343	13.2	
NOTES: 1. CWL LOCALISED PACKAGED CONTROLS.																			

FAN SCHEDULE																REMARKS
SYSTEM REFERENCE TAG	DESCRIPTION	LOCATION	MANUFACTURER	MODEL	AIR FLOW (CFM)	AIR FLOW (US)	FAN E.S.P. (Pa)	MIN OUTLET VELOCITY (M/S)	ELECTRICAL		FAN EFFICIENCY %	EMERGENCY POWER (Y/N)	FIRE SHUT DOWN (Y/N)	UNIT WEIGHT (KG)		
									POWER (V/Hz/Ph)	FLA (A)						
EW-EF-14	WASHROOM EXH.	ROOF	PENNBARRY	D10	700	330	374	8	575/80/3	0.9	1.18	Y	N	13.6		
EW-EF-13A & 13B	ISOLATION EXH.	ROOF	PENNBARRY	D08	850	401	747	8	575/80/3	2.4	99.00	Y	N	16.8		
EW-EF-6A & 6B	EXISTING TB EXHAUST SYSTEM	ROOF	PENNBARRY	VCR-SWSI-AF 22	7842	3,701	1643	8	575/80/3	17.0	1.26	Y	N	90.7	EXISTING FANS TO BE REPLACED WITH NEW FANS TO ADD HEPA FILTERS IN THE...	
NOTES:																
1. ALL ROOF MOUNTED FANS OW 450 MM HIGH ROOF CURB.																
2. DIRECT DRIVE WITH EC-MOTOR.																
3. PROVIDE WEATHER PROOF DISCONNECTS FOR ALL OUTDOOR FANS.																
4. PROVIDE LOCAL DISCONNECTS FOR CEILING/ROOF MOUNTED FANS.																
5. PROVIDE VFDS FOR ALL FANS IN THE PENTHOUSE AND LOCAL DISCONNECT. COORDINATE EXACT LOCATION ON SITE																
6. EXHAUST STACK SHOULD BE MINIMUM 3M ABOVE ANY NEARBY AIR INTAKE (EW-AHU-01b)																
7. FAN/STACK SUPPORTS SHALL BE PROVIDED																

FAN COIL UNIT SCHEDULE (2P CHILLED WATER)																					
SYSTEM REFERENCE TAG	DESCRIPTION	LOCATION	MANUFACTURER	MODEL	AIR FLOW (CFM)	AIR FLOW (L/S)	UNIT E.S.P. (Pa)	COOLING COIL				ELECTRICAL				EMERGENCY POWER (Y/N)	FIRE SHUT DOWN (Y/N)	UNIT WEIGHT (KG)	REMARKS		
								TOTAL (KW)	SENSIBLE (KW)	EWT (°C)	LWT (°C)	FLOW (L/S)	PD (KPA)	FLA (A)	MCA (A)					MROPD (A)	POWER (V/Hz/PH)
EW-FCU-01	IT ROOM COOLING UNIT	IT ROOM	IEC	HYL16	1230	581	50	10.79	10.55	5.6	12.2	0.38	13.45	8.4	9.45	15	115/60/1	N	Y	102.06	
NOTES: 1. FAN COIL UNIT TO BE COMPLETE WITH 2" (50MM) MERV 13 FILTER SECTION. 2. PROVIDE ECM MOTOR. 3. FAN COIL UNIT TO HAVE BOTTOM ACCESS FOR SERVICE. 4. FCU IS COMPLETE WITH DRAIN PAN AND DRAIN PUMP.																					


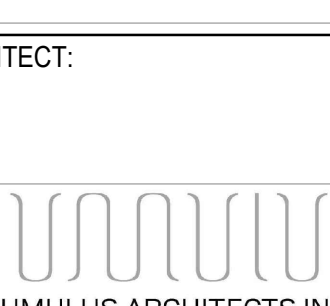
ENERGY RECOVERY VENTILATOR SCHEDULE (ERV)																
SYSTEM REFERENCE TAG	DESCRIPTION	LOCATION	MANUFACTURER	MODEL	AIR FLOW (CFM)	AIR FLOW (L/S)	HEATING COIL (ELEC)		ELECTRICAL (UNIT AND ELEC. HEATER)				EMERGENCY POWER (Y/N)	FIRE SHUT DOWN (Y/N)	UNIT WEIGHT (KG)	REMARKS
							TOTAL (KW)	FLA (A)	MCA (A)	MROPO (A)	POWER (V/KHz/HP)					
FP-AH12ERV-1	ENERGY RECOVERY	CEILING MOUNTED	OXYGEN 8	A16IN	500	236	2.00	14.9	18.3	20	208/60/1	N	Y	200.0		
FP-AH14ERV-1	ENERGY RECOVERY	CEILING MOUNTED	OXYGEN 8	A16IN	500	236	2.00	14.9	18.3	20	208/60/1	Y	N	200.0		
NOTES:																
1. ERV DESIGNED WITH FAN AND ELEC. HEATER FOR PRE HEAT																
2. PROVIDE ECM MOTOR																
3. ALL UNITS TO HAVE BOTTOM ACCESS FOR SERVICE.																
4. MERV 13/8 FILTERS																
5. MAIN POWER WILL FEED THE ELEC. HEATER AND ELECTRICAL CONTRACTOR TO PROVIDE WIRING FROM HEATER TO THE UNIT																
6. MAINTAIN CLEARANCE AS REQUIRED, UNIT TO BE INSTALLED SUCH A WAY THAT IT CAN BE DROPPED FOR MAINTENANCE WITHOUT PIPING REWORK.																

AIR COOLED CONDENSING UNIT SCHEDULE												REMARKS
SYSTEM REFERENCE TAG	AC INDOOR UNIT REFERENCE	LOCATION	MANUFACTURER	MODEL	NOMINAL		ELECTRICAL		EMERGENCY POWER (Y/N)	FIRE ALARM SHUT DOWN (Y/N)	WEIGHT (KG)	
					COOLING CAPACITY (KW)	MOP AMPS	MCA AMPS	VOLTAGE V/PH/Hz				
FP-AH12-CU	FP-AH12	OUTDOOR	REFPLUS	OEZ-050-1H1-SD	15.94	40	26.38	208/60/3	N	N	172	
FP-AH13-CU	FP-AH13	OUTDOOR	REFPLUS	OEZ-050-1H1-SD	15.94	40	26.38	208/60/3	N	N	172	
FP-AH14-CU	FP-AH14	OUTDOOR	REFPLUS	OEZ-050-1H1-SD	15.94	40	26.38	208/60/3	Y	N	172	
NOTES:												
1. REFRIGERANT SHALL BE R410A OR ANY LATEST REF. AVAILABLE AS LONG AS THE UNIT CAPACITY AND SIZING IS MET.												
2. CONTRACTOR TO COORDINATE ON SITE FOR THE REFRIGERANT PIPING SIZE AND INSTALLATION BASED ON MANUFACTURER RECOMMENDATION.												
3. MECHANICAL CONTRACTOR TO COORDINATE WALL, CEILING AND ROOF PENETRATIONS AND ELECTRICAL REQUIREMENTS ON SITE.												
4. REFER TO ASSOCIATED INDOOR UNIT SCHEDULE FOR COMPLETE SYSTEM INFORMATION.												
5. UNITS COMPLETE WITH LOW-AMBIENT KIT. FINAL LOCATION AND ENCLOSURE TO BE COORDINATED WITH ARCH. DRAWINGS												

CEILING MOUNTED VENTILATION UNIT SCHEDULE																													
SYSTEM REFERENCE TAG	DESCRIPTION	LOCATION	MANUFACTURER	MODEL	AIR FLOW		UNIT E.S.P. (Pa)	COOLING COIL (DX)				HEATING COIL (30% P GLY)							SILENCER		ELECTRICAL		POWER (V/Hz/PH)	EMERGENCY (Y/N)	FIRE SHUT DOWN (Y/N)	UNIT WEIGHT (KG)	REMARKS		
					(CFM)	(L/S)		TOTAL (KW)	SENSIBLE (KW)	EAT DB (°C)	EAT WB (°C)	LAT DB (°C)	LAT WB (°C)	TOTAL (KW)	EAT DB (°C)	LAT DB (°C)	EWI (°C)	LWT (°C)	FLOW (L/S)	PD (KPA)	INLET (Y/N)	DISCHARGE (Y/N)						MCA (A)	MROPD (A)
FP-ACH12	CORRIDOR VENT.	CORRIDOR CEILING MOUNTED	DAIKIN	BCHD0161	1500	708	124	16	13	26.7	18.3	12.0	11.7	5	21.10	27.3	50.7	37.8	0.10	0.81	N	N	19.8	25	115/60/1	N	N	216	
FP-ACH13	CORRIDOR VENT.	CORRIDOR CEILING MOUNTED	DAIKIN	BCHD0161	1500	708	124	16	13	26.7	18.3	12.0	11.7	5	21.10	27.3	50.7	37.8	0.10	0.81	N	N	19.8	25	115/60/1	N	N	216	
FP-ACH14	CORRIDOR VENT.	CORRIDOR CEILING MOUNTED	DAIKIN	BCHD0161	1500	708	124	16	13	26.7	18.3	12.0	11.7	5	21.10	27.3	50.7	37.8	0.10	0.81	N	N	19.8	25	115/60/1	Y	N	216	
NOTES: 1. UNITS TO BE COMPLETE WITH 2" (50MM) MERV 13 FILTER SECTION. 2. PROVIDE ECM MOTOR. 3. ALL UNITS TO HAVE BOTTOM ACCESS FOR SERVICE AND INSTALLED IN SUCH A WAY THAT THE UNIT CAN BE DROPPED DOWN FOR MAINTENANCE WITHOUT THE PIPING REWORK. 4. REFER TO FLOOR PLANS FOR LOCATIONS AND PROVIDE REQUIRED CLEARANCE AS PER THE MANUFACTURER RECOMMENDATION 5. REFER TO CONDENSING UNIT SCHEDULE FOR OUTDOOR UNITS. 6. FCUS ARE COMPLETE WITH DRAIN PAN AND LEAK DETECTION																													

PLUMBING & DRAINAGE PUMPS													
REFERENCE TAG	SERVICE	LOCATION	TYPE	FLOW RATE L/S	HEAD PRESSURE KPA	RPM	MANUFACTURER-MODEL	MOTOR SIZE KW (HP)	ELECTRICAL POWER SUPPLY (V/PHHZ)	STARTER TYPE	WEIGHT (KG)	EMERGENCY POWER(Y/N)	COMMENTS
PP-01	DHW RECIRCULATION	LEVEL 0	RECIRCULATION	1.30	110	3450	TACO - VR15H	0.9	208/1/60	-	14	NO	
SP-1	SANITARY	FOUNDATION	SUBMERSIBLE	4.7	105	3450	ZOELLER - 6294	1.11 kW	208/3/60	-	44	YES	DUTY C/W GUIDE RAIL Z-RAIL 39-0129 STEP DOWN TRANSFORMER (600V/208V) TO BE SUPPLIED BY MANUFACTURER.
SP-2	SANITARY	FOUNDATION	SUBMERSIBLE	4.7	105	3450	ZOELLER - 6294	1.11 kW	208/3/60	-	44	YES	STAND-BY C/W GUIDE RAIL Z-RAIL 39-0129 STEP DOWN TRANSFORMER (600V/208V) TO BE SUPPLIED BY MANUFACTURER.
SP-3	SANITARY	FOUNDATION	SUBMERSIBLE	4.7	120	3450	ZOELLER - J6294	1.11 kW	208/3/60	-	44	YES	DUTY C/W GUIDE RAIL Z-RAIL 39-0129 STEP DOWN TRANSFORMER (600V/208V) TO BE SUPPLIED BY MANUFACTURER.
SP-4	SANITARY	FOUNDATION	SUBMERSIBLE	4.7	120	3450	ZOELLER - J6294	1.11 kW	208/3/60	-	44	YES	STAND-BY C/W GUIDE RAIL Z-RAIL 39-0129 STEP DOWN TRANSFORMER (600V/208V) TO BE SUPPLIED BY MANUFACTURER.
NOTES:													

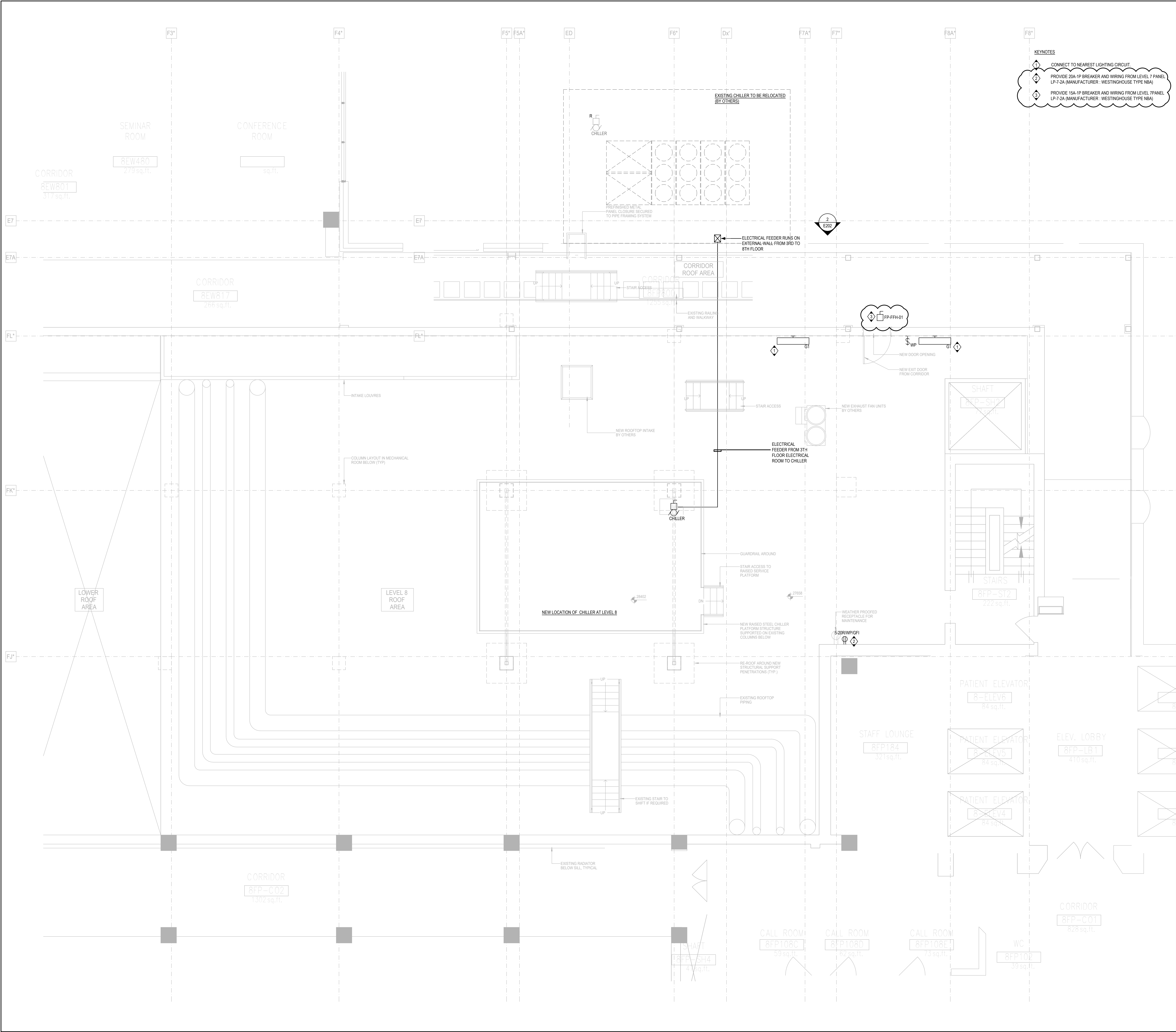
ELECTRIC HEAT TRACING SCHEDULE								
REFERENCE TAG	MANUFACTURER	MODEL	DESCRIPTION	LENGTH (M)	REQUIRED OUTPUT (W/M)	ELECTRIC...	EMERGENCY POWER (V/N)	REMARKS
					V/PH/Hz			
ETC-01	RAYCHEM	5XL2-CR	SERVING CORRIDOR CANOPY	32.6	10	208/1/60	Y	CONTROLLER C910-485 RAYCHEM
NOTES:	1. PROVIDE CABLE SEGMENTS AS REQUIRED TO COMPLETELY TRACE PIPING RUN AS INDICATED ON DRAWINGS.							
	2. PROVIDE RANGLC (OR EQUIVALENT) POWERED AND UN-POWERED CONNECTIONS AND SUPPORTS AS REQUIRED TO PROVIDE COMPLETE SYSTEM.							
	3. PICK-UP DRY CONTACTS AT EACH CONTROLLER TO ALARM BAS ON ANY TROUBLE SIGNAL.							
	4. COMMUNICATIONS CABLE IS REQUIRED TO BE EXTENDED FROM PIPE MOUNTED RTD BACK TO CONTROLLER. ALLOW FOR SUFFICIENT CONTROLS CABLING AND CONDUIT.							
	5. CONTROLS CABLE TO BE IN CONDUIT							
	6. HEAT TRACING AND PIPE SYSTEMS ARE DESIGNED FOR: 23°C (101°F) AMBIENT TEMPERATURE.							
	7. THIS SCHEDULE IS TO BE READ IN CONJUNCTION WITH SPECIFICATION 20 05 25 REGARDING STANDARDS FOR PIPE INSULATION.							

	<p>University Health Network Toronto Western Hospital 399 Bathurst Street Toronto ON M6J 2S8 www.uhn.ca</p>
	<p>160 Pears Ave. • Suite 300 220 Commerce Valley Drive West, Suite 110 Markham, ON L3T 0A8 www.cumulusarch.com</p>

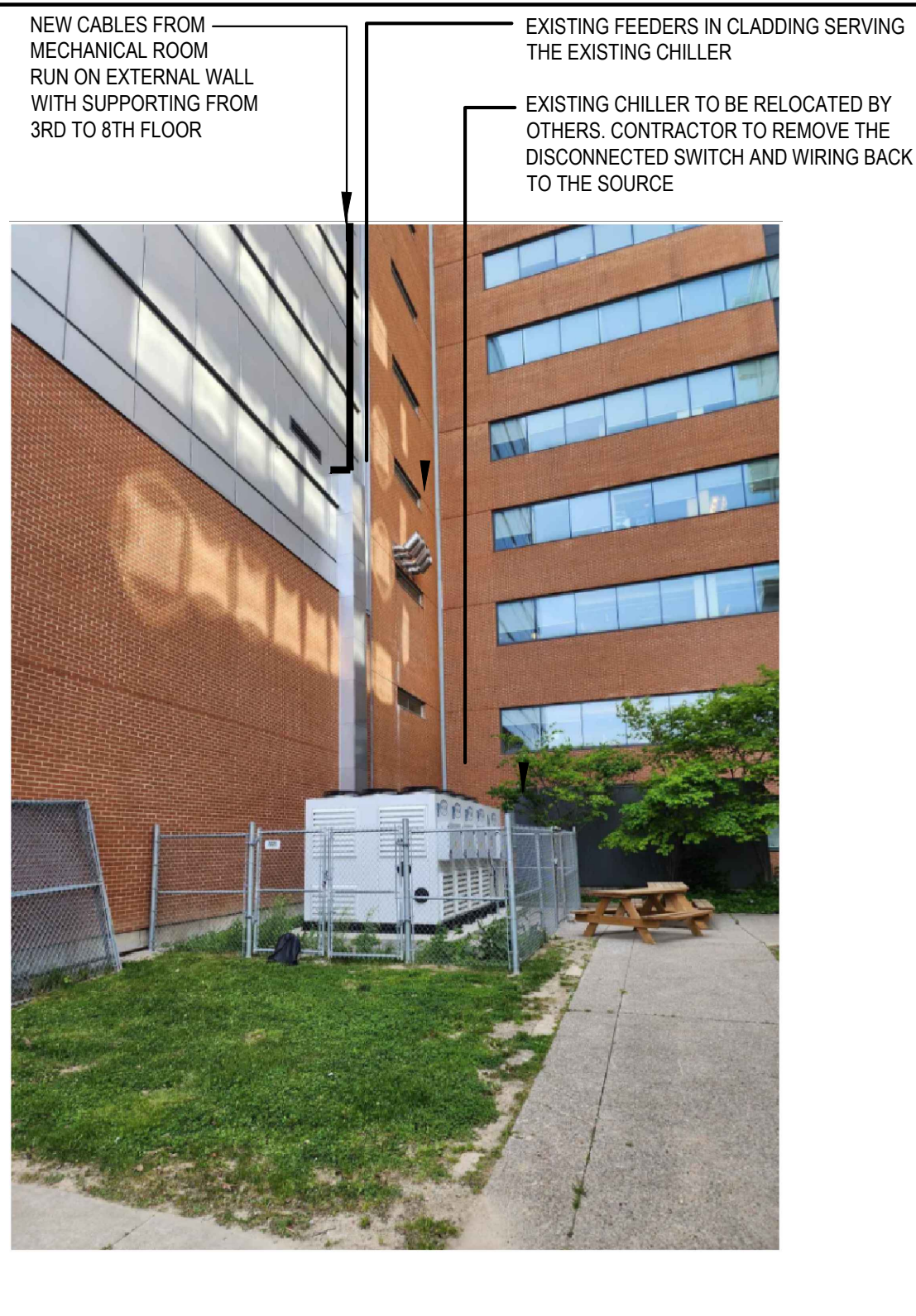
CONSULTANT:

- 1 905.895.3217 / 1 905.895.0167
- 220 Commerce Valley Drive West, Suite 110
- Markham, ON L3T 0A8
- www.exp.com
- BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
- INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:		
REVISIONS		
NO	DESCRIPTION	DATE
1	Issued for Design Development Progress	2024.04.05
2	Issued for 100 D0	2024.05.10
3	Issued for 50% CD / Permit	2024.08.02
4	Issued for 90% CD	2024.09.06
5	Issued for 100% CD	2024.09.27
6	Issued for Tender	2024.10.11
7	Issued for Tender Addendum	2024.10.25
PROJECT:	UHN TWH - Seniors Emergency Medicine Centre 360 Bathurst Street, Toronto ON M5T 2S6 UHN PROJECT NO. - SAP#110022016	



1 LEVEL 8 ROOF PLAN - ELECTRICAL LAYOUT
1:50



2 SITE PHOTO
NTS

CLIENT:

UHN University Health Network
Toronto Western Hospital
399 Bathurst Street
Toronto ON M5T 2S8
www.uhn.ca

ARCHITECT:

CUMULUS ARCHITECTS INC. 160 Pears Ave., Suite 300
Toronto, ON M5R 3P8
416-538-0763
www.cumulusarch.com

CONSULTANT:

exp.
1: 905-695-3217 | F: 905-695-0167
220 Commerce Valley Drive West, Suite 110
Markham, ON L3T 0A6
Canada
www.exp.com
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:

REVISIONS

NO.	DESCRIPTION	DATE
1	Issued for Permit	2024.04.05
2	Issued for Permit Comment	2024.07.29
3	Issued for 90% CD / Permit	2024.09.06
4	Issued for 100% CD	2024.09.27
5	Issued for Tender	2024.10.11
6	Issued for Tender Addendum	2024.10.25

PROJECT:

UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:

LEVEL 8 ROOF - ELECTRICAL LAYOUT &
ENLARGED PLAN

PROJECT NO:

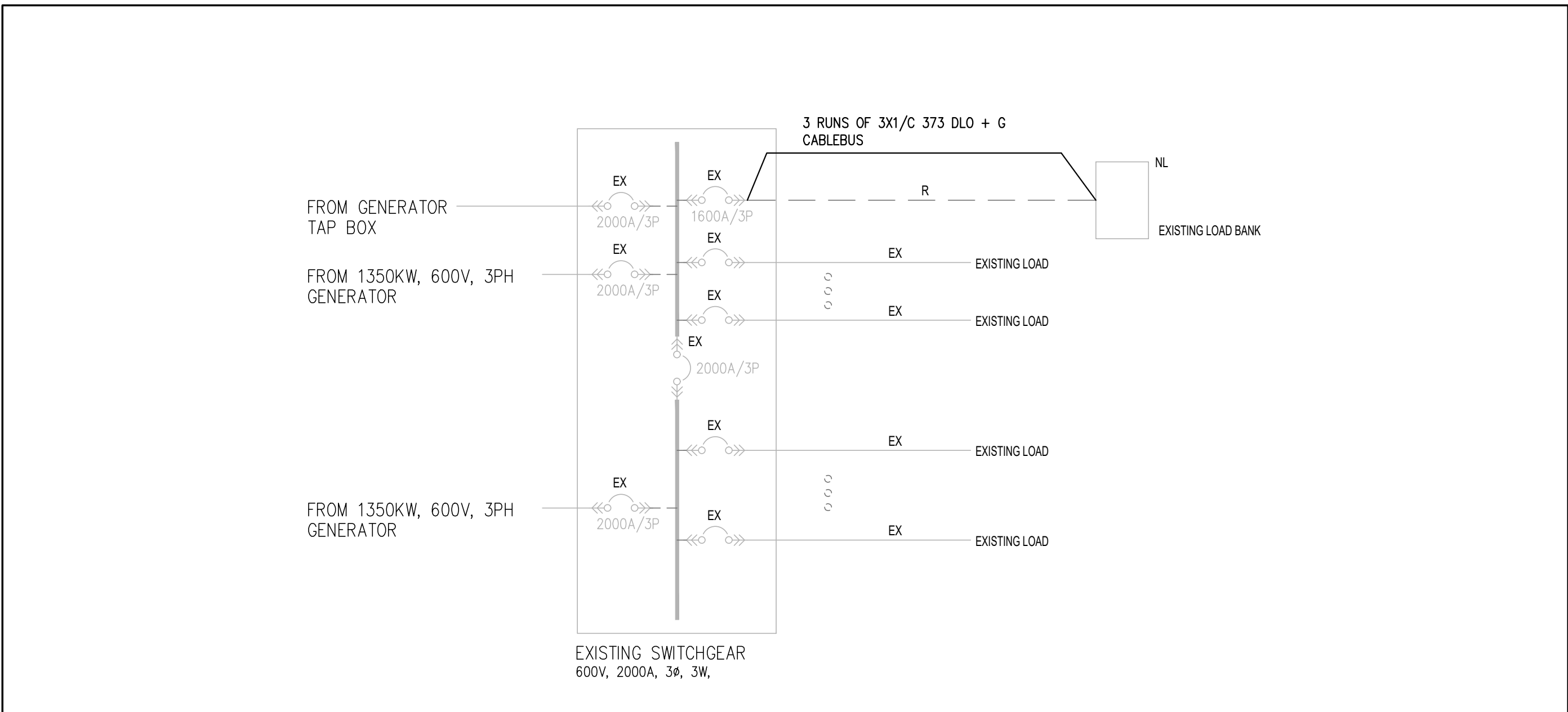
MRK-23004289

CHECKED:

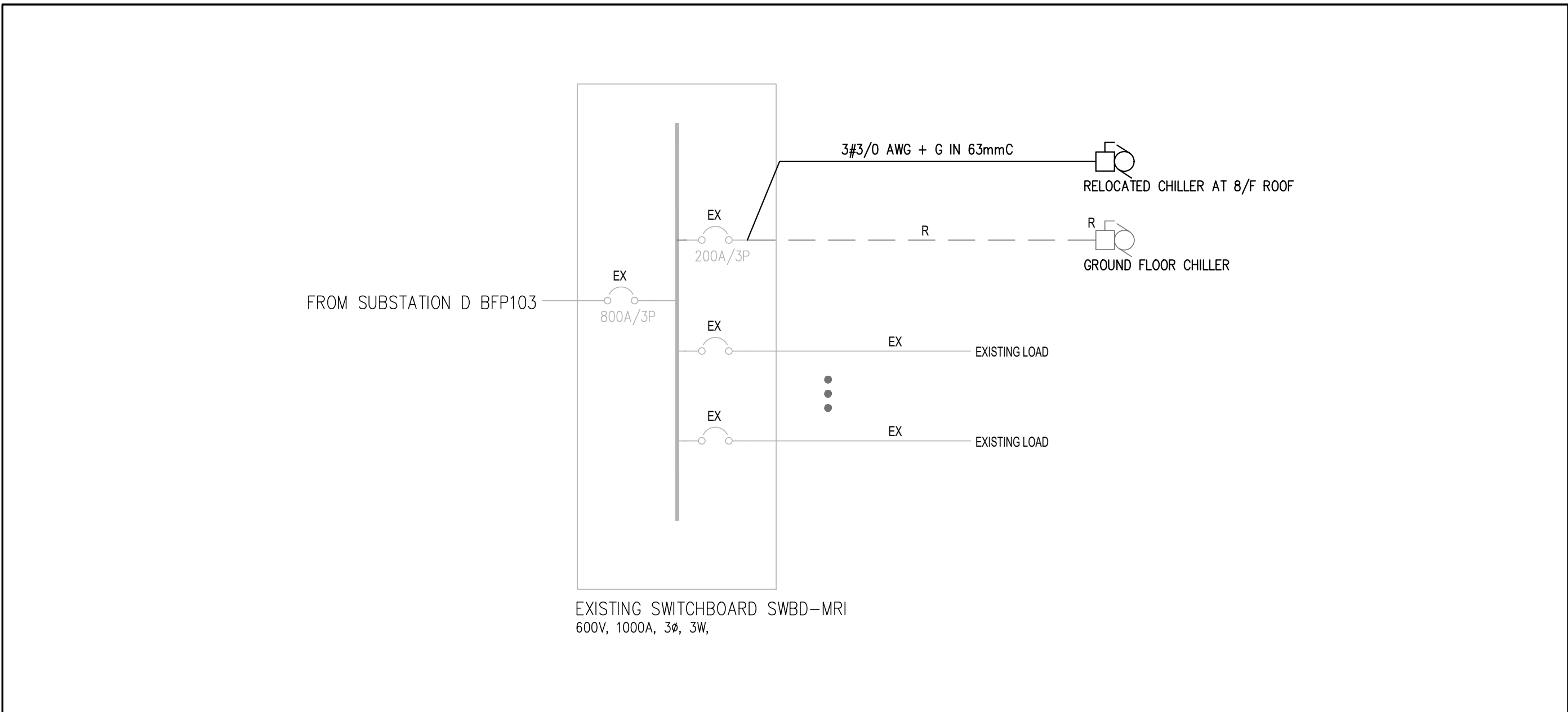
M.S.

DRAWING NO:

E202



1
E401 PARTIAL POWER DISTRIBUTION RISER DIAGRAM - G/F LOAD BANK RELOCATION
SCALE: N.T.S.



2
E401 PARTIAL POWER DISTRIBUTION RISER DIAGRAM - CHILLER RELOCATION
SCALE: N.T.S.

LUMINAIRE SCHEDULE

TYPE	BASE MANUFACTURER (AS SPECIFIED)	CATALOGUE NUMBER	CEILING MOUNTED			WALL MOUNTED			WATTAGE	COLOUR TEMP.	VOLTAGE		REMARKS
			SURFACE	RECESSED	SUSPENDED	SURFACE	RECESSED	BRACKET			120V	347V	
G1	PIONEER LIGHTING	TO-648-4-30K-120				•			37W	3000K	•		COMPLETE WITH ALL NECESSARY MOUNTING ACCESSORIES.

- NOTES:
- ALL FINISHES, FLANGE AND PLASTER COLOURS TO BE CONFIRMED WITH ARCHITECT/DESIGNER PRIOR TO ORDERING LUMINAIRES.
 - ALL LUMINAIRES SHALL BE CSA APPROVED.
 - CONTRACTOR TO PROVIDE MOUNTING ACCESSORIES AND HARDWARE TO SUIT CEILING AND WALL FINISHES.
 - PROVIDE APPROVED EQUAL FOR ENGINEER'S REVIEW DURING SHOP DRAWINGS REVIEW.
 - PROVIDE SUITABLE STEP DOWN TRANSFORMER FOR ANY LOW VOLTAGE LIGHTING AS REQUIRED.

CLIENT:



University Health Network
Toronto Western Hospital
399 Bathurst Street
Toronto, ON M5T 2S8
www.uhn.ca

ARCHITECT:



160 Pears Ave. - Suite 300
Toronto, ON M6R 3P6
416-538-0763
www.cumulusarch.com

CONSULTANT:



1-800-660-3217 / 1-800-660-0167
220 Commerce Valley Drive West, Suite 110
Markham, ON L3T 0A8
Canada
www.exp.com

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

PROJECT STATUS:

REVISIONS

NO	DESCRIPTION	DATE
1	Issued for Permit	2024.04.05
2	Issued for 90% CD	2024.09.06
3	Issued for 100% CD	2024.09.27
4	Issued for Tender	2024.10.11

PROJECT:

UHN TWH - Seniors Emergency Medicine Centre
399 Bathurst Street, Toronto ON M5T 2S8
UHN PROJECT NO.: SAP #110022016

TITLE:

ELECTRICAL RISER DIAGRAM AND
LUMINARIE SCHEDULE

PROJECT NO:

MRK-23004289

CHECKED:

M.S.

DRAWING NO:

E301