

## K. DISCONNECT SWITCHES

1. CARRY OUT ALL CHANGES AND ALTERATIONS REQUIRED BY THE AUTHORIZED INSPECTOR OF ANY AUTHORITY HAVING JURISDICTION WITHOUT DELAY TO THE PROGRESS OF THE WORK AND WITHOUT EXTRA COST.
2. PROVIDE WARNING SIGNS AND ARC FLASH LABELS AS SPECIFIED OR TO MEET REQUIREMENTS OF O.E.S.C, INSPECTION DEPARTMENT AND THE CONSULTANT.
3. UPON COMPLETION OF THE CONTRACT, ISSUE TO THE OWNER A FORMAL CERTIFICATION OF COMPLETION OF WORK BEFORE FINAL PAYMENT FOR WORK MAY BE CONSIDERED DUE.
4. PAYMENTS FOR ALL PERMITS, DEPOSITS, INSPECTION, SERVICES, AND OTHER FEES NECESSARY FOR THE WORK SHALL BE INCLUDED IN THE TENDER.
- D. MATERIALS
1. ALL MATERIALS AND EQUIPMENT (PRODUCTS) TO BE NEW AND FREE OF DEFECTS, CSA, ULC OR CANADIAN RECOGNIZED CERTIFICATION.
2. THIS IS A BASE BID SPECIFICATION. ITEMS ON THE DRAWINGS AND SUBSEQUENT DIVISIONS OF THESE SPECIFICATIONS ARE LISTED WITH THE NAMES OF A SPECIFIC MANUFACTURER, THE FIRST OF WHICH IS BASE BID AND HAS BEEN USED IN THE DESIGN AND IS THE EQUIPMENT SHOWN ON THE DRAWINGS. THE PRICE SUBMITTED FOR THIS CONTRACT SHALL BE BASED ON THE USE OF MATERIALS AND EQUIPMENT SPECIFIED AS THE BASE BID.
3. WHERE MORE THAN ONE MANUFACTURER IS LISTED FOR A PARTICULAR ITEM OR GROUPS OF ITEMS, THE CONTRACTOR SHALL STATE IN HIS TENDER FORM COST SAVINGS (IF ANY) FOR THE USE OF ALTERNATE PRODUCTS, AND SHALL NAME THE ALTERNATE MANUFACTURERS. HOWEVER, THESE PROPOSED MATERIALS MUST NOT BE USED IN CALCULATING THE BASE TENDER PRICE. THE CONSULTANT AND/OR OWNER SHALL HAVE THE FINAL OPTION OF ACCEPTING OR REJECTING ALTERNATE EQUIPMENT.
4. WHERE OTHER THAN A FIRST-NAMED PRODUCT IS PROPOSED, THE BIDDER WILL BE DEEMED TO REPRESENT THAT NAMED PRODUCT CONFORMS TO THE PERFORMANCE, QUALITY, SPACE AND WEIGHT CHARACTERISTICS OF THE BASE BID PRODUCT. THIS CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL DESIGN OR CONSTRUCTION COSTS GENERATED BY THE USE OF THE NON-FIRST NAMED BID MATERIAL. ACCEPTANCE OF NON-BASE MANUFACTURERS WITH RESPECT TO THEIR EQUIVALENCE SHALL BE SUBMITTED TO THE CONSULTANT'S REVIEW OF SHOP DRAWINGS.
- E. WIRES AND CABLES
1. ALL WIRING SHALL BE MINIMUM COPPER NO. 12 AWG WITH 600V INSULATION FOR 120/208V WIRING AND 1000V FOR 600V WIRING OF CHEMICALLY CROSS-LINKED THERMOSETTING POLYETHYLENE (XLPE) MATERIAL SUITABLE FOR 90° OPERATION. CONDUCTORS NO. 10 AWG AND LARGER SHALL BE STRANDED. CONDUCTOR SIZES SHALL BE IN ACCORDANCE WITH THE OESC AND AS INDICATED ON THE DRAWINGS. ALUMINUM WIRING IS NOT ACCEPTABLE UNLESS NOTED OTHERWISE.
2. ALL LOW VOLTAGE 6-24VDC EMERGENCY LIGHTING WIRING SHALL BE MINIMUM COPPER NO.10 AWG.
3. AC90 CABLE MAY ONLY BE USED FOR SHORT RUNS WITH MAXIMUM DISTANCE OF 3660mm (12ft) TO LIGHT FIXTURES AND RECEPTACLES IN CONCEALED AREAS ONLY UNLESS NOTED OTHERWISE ON DRAWINGS. AC90 CABLE (INCLUDING FIRE ALARM) NOT TO BE USED IN OPEN CEILING AREAS, ELEVATOR SHAFT AND STAIRWELL.
4. WHERE CONDUCTOR SIZES ARE NOT INDICATED THEY SHALL BE SIZED TO ENSURE THE VOLTAGE DROP DOES NOT EXCEED 2% FOR BRANCH CIRCUIT AND 3% FOR MAIN FEEDER AND THE REQUIREMENTS OF THE OESC.
5. ALL RACEWAYS SHALL BE EQUIPPED WITH A GREEN INSULATED GROUND CONDUCTOR AND SHALL MEET THE REQUIREMENTS OF THE OESC.
- F. CONDUIT
1. EMT AND RIGID GALVANIZED STEEL (RGS) CONDUIT TO BE CONCEALED IN FINISHED AREAS OF THE BUILDING.
2. FLEXIBLE METALLIC CONDUIT MAY BE USED FOR SHORT CONNECTIONS TO VIBRATING MECHANICAL EQUIPMENT.
3. MINIMUM CONDUIT SIZE SHALL BE 21mm (3/4") UNLESS NOTED OTHERWISE ON THE DRAWINGS.
4. WHERE SLEEVES OR OPENINGS ARE INSTALLED IN WALLS, FLOORS, ROOF OR PARTITIONS TO ACCOMMODATE RACEWAYS OR CABLES, PROVIDE ALL NECESSARY SEALS, FITTINGS, BARRIERS AND FIRE-RESISTANT MATERIALS TO RESTORE THE INSTALLATION TO ITS ORIGINAL FIRE RATING TO THE SATISFACTION OF THE GOVERNING AUTHORITIES.
5. WHERE CONDUIT MUST BE SURFACE MOUNTED TO EXPOSED CEILING/WALL SURFACES, PROVIDE EMT CONDUIT PAINTED TO MATCH CEILING/WALL SURFACES UNLESS NOTED OTHERWISE.

2. THE OWNER/CONSULTANT RESERVES THE RIGHT TO CHANGE LOCATIONS OF OUTLETS TO WITHIN 3660mm (12ft) OF LOCATION INDICATED ON THE DRAWINGS WITHOUT EXTRA CHARGE, PROVIDING CONTRACTOR IS ADVISED PRIOR TO INSTALLATION.
  3. ALL PULL/JUNCTION BOXES MUST BE ACCESSIBLE AFTER THE BUILDING IS COMPLETE. INSTALL PULL ROPE IN ALL EMPTY CONDUITS.
  4. ALL JUNCTION BOXES AND CONDUIT SUPPORT SYSTEM SHALL BE SECURED TIGHT TO THE UNDERSIDE OF THE BUILDING STRUCTURE. SUSPENDED JUNCTION BOXES AND CONDUITS WILL NOT BE ACCEPTED.
  5. ALL DEVICE BOXES TO BE RECESSED WHEREVER POSSIBLE. ALL JUNCTION BOXES SHALL BE SIZED TO ACCOMMODATE THE NUMBER OF RACEWAYS AND CONDUCTORS AND BE EASILY ACCESSIBLE AFTER INSTALLATION.
  6. WHERE BOXES MUST BE SURFACE MOUNTED TO EXPOSED CEILING/WALL SURFACES, PROVIDE SURFACE MOUNTED DIE-CAST ALUMINUM BOXES UNLESS NOTED OTHERWISE.
- H. WIRING DEVICES
1. SWITCHES, RECEPTACLES AND OUTLETS TO BE WHITE COLOR WITH STAINLESS STEEL COVER PLATES.
  2. DUPLEX RECEPTACLES
    - 2.1. 15 OR 20 AMP, 120 VOLT SPECIFICATION GRADE COMPLETE WITH BACK BOX
    - 2.2. EXTERIOR RECEPTACLES TO HAVE WET LOCATION COVER PLATE AND MARKED "EXTRA DUTY"
  3. TOGGLE SWITCHES TO BE 15 OR 20 AMP, 120 OR 347 VOLT AS REQUIRED COMPLETE WITH BACK BOX.
  4. LOW VOLTAGE SWITCHES OR VACANCY SENSORS TO BE AS SPECIFIED COMPLETE WITH BACK BOX.

E1.3	SYMBOLS
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|------|-------------------------------|
| E1.4 | SCHEDULES AND WIRING DIAGRAMS |
| E2.1 | KEY PLAN, GROUND FLOOR        |

E2.2	KEY PLAN IF

- |      |   |
|------|---|
| E2.3 | KEY PLAN ROOF   |
| E3.1 | PANEL SCHEDULE AND MECHANICAL EQUIPMENT SCHEDULE NEW    |
| E4.1 | AREAS '1A', '1B' & '1C' PARTIAL GROUND FLOOR DEMOLITION |

- L. FIRE ALARM SYSTEM RENOVATIONS

- M. BREAKER PANELBOARDS

- N. UNIVERSAL WASHROOM DOOR CONTROLS/EMERGENCY CALL SYSTEM

1. EMERGENCY CALL KIT FOR USE WITHOUT POWER DOOR OPERATOR. CAMDEN DOOR CONTROLS CX-WEC10 c/w TRANSFORMER CX-TRK-2450.
  - 1.1. SINGLE GANG MUSHROOM PUSH/PULL BUTTON c/w STAINLESS STEEL COVER PLATE (CM-450R/12)
  - 1.2. SINGLE GANG LED ANNUNCIATOR WITH ADJUSTABLE SOUNDER (CM-AF50150)
  - 1.3. SINGLE GANG LED DOME LIGHT WITH ADJUSTABLE SOUNDER (CM-AF14150)
  - 1.4. WHITE SELF ADHESIVE VINYL ENGLISH SIGN, 152mm x 270mm (6"x10-5/8"), "IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE" (CM-SE21A)
2. DOOR CONTROL OPERATORS TO BE CAMDEN DOOR CONTROLS CX-WC13 c/w TRANSFORMER
  - 2.1. CX-33 ADVANCED LOGIC CONTROL
  - 2.2. CM-45/85SE11 FLUSH 4-1/2" 'PUSH TO LOCK' ILLUMINATED PUSH PLATE SWITCH WITH SIGN
  - 2.3. CM-45/45SE11 FLUSH 4-1/2" ILLUMINATED WHEELCHAIR & 'PUSH TO OPEN' PUSH PLATE WITH SIGN
  - 2.4. CM-45/4 'PUSH TO OPEN' 4-1/2" SQUARE PUSH PLATE SWITCH
  - 2.5. CM-55CBL FLUSH SQUARE MOUNTING BOX FOR CM-45/4
  - 2.6. CX-MDH RECESSED MAGNETIC DOOR CONTACT

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Architec

sn/der

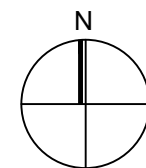
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## Key Plan N.T.S.



## Project North

True North

No.	Revisions	Date
0	Issued For Construction	Jun 4, 2021
B	Issued For Tender	Apr 19, 2021
A	Issued For Permit	Jan 21, 2021
No.	Issue	Date

General Contractor shall check and verify all dimensions and report all errors and omissions to the Architect. Do not scale the drawings. Drawings shall not be used for construction purposes until issued by the Architect for construction.

Drawing Title

## SPECIFICATIONS AND DRAWING LIST

Scale:	NTS	Date:	MAY 2020
Drawn by:	PI	Checked by:	JS
Job No.	Drawing No.		

20009

## E1.1

## 0. LIGHTING

- ## P. LIGHTING CONTROLS

- Q. NETWORK AND SYSTEMS

- ## R. MECHANICAL EQUIPMENT

- S. PUBLIC ADDRESS (PA) AND CCTV SYSTEM SYSTEM

- ## T. FIELD QUALITY CONTROL

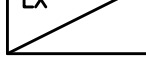
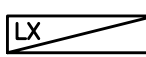

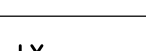
- ## U. EXECUTION

1. INSTALL CONDUIT AS A COMPLETE SYSTEM WITHOUT WIRES. CONTINUE CONDUIT FROM FITTING TO FITTING AND FASTEN SECURELY TO PLACE. CLEAN AND SEAL CONDUIT SYSTEM UNTIL WIRING IS INSTALLED.
2. INSTALL CONDUIT PARALLEL OR AT RIGHT ANGLES TO PROPERTY LINES, CURBS, ETC., WHERE PRACTICAL.
3. CUT ALL CONDUITS SQUARE AND REAM TO REMOVE SHARP EDGES AND BURRS. FIT CONDUITS CLOSELY AND TIGHTLY IN COUPLINGS.
4. INSTALL A PULL WIRE IN EACH EMPTY CONDUIT PROVIDED FOR FUTURE USE BY OTHERS.
5. CAP ALL CONDUITS WITH METAL, CARDBOARD OR PLASTIC, DURING CONSTRUCTION.









1. DO NOT PULL THE WIRES BEFORE THE ENTIRE CONDUIT SYSTEM IS COMPLETED AND CLEANED.
2. ENSURE THAT WIRES INSTALLED IN THE INTERIOR OF EQUIPMENT ARE NEATLY LACED WITH PLASTIC TIES AND GRASPED AND SECURED IN PLACE.
3. RUN POWER CONDUCTORS FULL LENGTH WITHOUT SPLICES OR TAPS FROM ORIGIN TO DESTINATION, UNLESS SPECIFICALLY CALLED FOR ON THE DRAWINGS. NO CABLE SPLICING ALLOWED IN UNDERGROUND INSTALLATION.
4. IDENTIFY EACH CABLE AND WIRE AT BOTH ENDS WITH PROPER CABLE AND WIRE NUMBER AS SHOWN ON THE DRAWINGS AND CABLE SCHEDULES IN ALL CONTROL PANELS, CONTROL DEVICES, DISTRIBUTION PANELS, PULL AND JUNCTION BOXES, ETC., USING APPROVED CABLE AND WIRE MARKERS.
5. FOLLOW NORMAL RECOMMENDED PRACTICES WHEN INSTALLING CABLES IN CABLE TRAYS TO AVOID DAMAGE TO CABLE SHEATHS, CONDUCTORS OR INSULATION. ENSURE THAT CABLES ARE NOT DAMAGED BY EXCESSIVE TENSION WHEN PULLING. REPLACE ANY DAMAGED AND REJECTED CABLE WITHOUT COST TO THE OWNER.
6. USE SUITABLE NON-HARDENING CABLE LUBRICANTS, WHERE REQUIRED, WHICH DO NOT CONTAIN ANY MATERIALS SUCH AS OIL, GREASE OR OTHER COMPOUNDS HARMFUL TO RUBBER, PVC OR POLYETHYLENE.
7. MAKE SPLICES AND TAPS FOR CONTROL CONDUCTORS AT APPROVED TERMINAL BLOCKS IN JUNCTION BOXES.

20009	E1.2
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GENERAL LIGHTING	
SYMBOL	DESCRIPTION
	2'X4' (610mmX1220mm) LIGHT FIXTURE. 'X' DENOTES TYPE
	1'X4' (305mmX1220mm) LIGHT FIXTURE. 'X' DENOTES TYPE
	CEILING MOUNTED STRIP LIGHT FIXTURE. 'X' DENOTES TYPE
	WALL MOUNTED STRIP LIGHT FIXTURE. 'X' DENOTES TYPE
GENERAL NOTE: 1. REFER TO GENERAL LIGHTING SCHEDULE FOR DETAILED SPECIFICATIONS.	

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

EMERGENCY LIGHTING	
SYMBOL	DESCRIPTION
	EMERGENCY BATTERY UNIT AND RUNNING MAN OR EXIT SIGN COMBO WITH TWO DC HEADS. 'X' DENOTES TYPE
	EMERGENCY BATTERY UNIT WITH TWO DC HEADS. 'X' DENOTES TYPE
	WALL MOUNTED EMERGENCY LIGHTING SINGLE REMOTE DC HEAD. 'X' DENOTES TYPE
	CEILING MOUNTED EMERGENCY LIGHTING SINGLE REMOTE DC HEAD. 'X' DENOTES TYPE
	WALL MOUNTED EMERGENCY LIGHTING DOUBLE REMOTE DC HEADS. 'X' DENOTES TYPE
	CEILING MOUNTED EMERGENCY LIGHTING DOUBLE REMOTE DC HEADS. 'X' DENOTES TYPE
	EMERGENCY CEILING MOUNTED RUNNING MAN OR EXIT SIGN. ARROW DENOTES DIRECTION OF EXIT. HATCHED AREA DENOTES ILLUMINATED FACE(ES). 'X' DENOTES TYPE
	EMERGENCY WALL MOUNTED RUNNING MAN OR EXIT SIGN. ARROW DENOTES DIRECTION OF EXIT. HATCHED AREA DENOTES ILLUMINATED FACE(ES). 'X' DENOTES TYPE
YUX.C	'Y' INDICATES BATTERY OR COMBO UNIT. 'X' INDICATES TYPE OF BATTERY OR COMBO UNIT. 'C' INDICATES DEDICATED BRANCH WIRING CIRCUIT FROM BATTERY OR COMBO UNIT. WIRE TO BE SIZED TO ENSURE NO MORE THAN 5% VOLTAGE DROP PER BRANCH
GENERAL NOTE: 1. REFER TO EMERGENCY LIGHTING SCHEDULE FOR DETAILED SPECIFICATION.	

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
















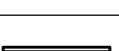
CONTROL DEVICE	
SYMBOL	DESCRIPTION
\$X	120V OR 347V SINGLE GANG, SINGLE POLE SWITCH, UNLESS NOTED WITH CONTROL DEVICE TYPE DESIGNATION LETTER. 'X' DENOTES CONTROL DEVICE TYPE
X\$X	120V OR 347V DOUBLE GANG, TWO SINGLE SWITCHES, UNLESS NOTED WITH CONTROL DEVICE TYPE DESIGNATION LETTER. 'X' DENOTES CONTROL DEVICE TYPE
ⓧ	CEILING MOUNTED VACANCY/OCCUPANCY SENSOR. 'X' DENOTES CONTROL DEVICE TYPE
PPX	POWER PACK. 'X' DENOTES CONTROL DEVICE TYPE
①	LINE VOLTAGE THERMOSTAT
◻	POWER DOOR OPERATOR PUSH TO OPEN BUTTON
◻L	POWER DOOR OPERATOR PUSH TO LOCK BUTTON

GENERAL NOTE: 1. REFER TO CONTROL DEVICE SCHEDULE FOR DETAILED SPECIFICATION.

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BARRIER FREE EMERGENCY CALL SYSTEM	
SYMBOL	DESCRIPTION
 E	EMERGENCY CALL PUSH BUTTON
 A	LOCAL LED ANNUNCIATOR AND SIREN COMBO
 S	LOCAL DOME LIGHT AND SIREN STROBE COMBO
GENERAL NOTE: 1. REFER TO "UNIVERSAL POWER DOOR OPERATOR/EMERGENCY CALL SYSTEM" IN ELECTRICAL SPECIFICATION FOR MORE DETAILS.	

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POWER AND SYSTEMS	
SYMBOL	DESCRIPTION
	120VAC, 15 AMP DUPLEX RECEPTACLE
	120VAC, 15 AMP DUPLEX GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE
	120VAC, 20 AMP T-SLOT DUPLEX RECEPTACLE
	120VAC, 20 AMP T-SLOT DUPLEX GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE
	240VAC, 30 AMP 14-30R DRYER RECEPTACLE
	HARD WIRED POWER CONNECTION RATED PER EQUIPMENT SPECIFICATION
	HARD WIRED POWER CONNECTION FOR HARDWIRED TOUCHLESS FAUCET
	SURFACE MOUNTED ELECTRICAL PANEL BOARD
	RECESSED ELECTRICAL PANEL BOARD
	FAN OR MOTOR
	THREE BLADE CEILING FAN
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MAGNETIC MOTOR STARTER. 'X' DENOTES TYPE
	WALL MOUNTED PROGRAM BELL
	VARIABLE FREQUENCY DRIVE
	JUNCTION BOX
	PULL BOX
	ELECTRICAL POWER OR SYSTEMS DEVICE OR BOX. 'X' DENOTES TYPE
	HDMI OUTLET
	DATA OUTLET. 'X' DENOTES NUMBER OF DATA OUTLET(S)
	TELEPHONE OUTLET. 'X' DENOTES NUMBER OF TELEPHONE CABLE(S)
	DATA/TELEPHONE OUTLET. 'XD' DENOTES NUMBER OF DATA CABLE(S). 'XV' DENOTES NUMBER OF TELEPHONE CABLE(S)
	CEILING RECESSED DATA OUTLET. 'X' DENOTES NUMBER OF DATA CABLE(S)
	WIRELESS ACCESS POINT
	CEILING MOUNTED PUBLIC ADDRESS SPEAKER
	WALL MOUNTED PUBLIC ADDRESS SPEAKER
	WIREMOLD. EXACT LENGTH TO BE VERIFIED AND FIELD CUT ON SITE AS REQUIRED. 'X' DENOTES TYPE


GENERAL NOTE: 1. REFER TO POWER AND SYSTEMS SCHEDULE FOR DETAILED SPECIFICATION.

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FIRE ALARM AND CARBON MONOXIDE SYSTEMS	
SYMBOL	DESCRIPTION
	FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR
	FIRE ALARM FIXED HEAT DETECTOR
	FIRE ALARM PULL STATION
	WALL MOUNTED FIRE ALARM BELL
	WALL MOUNTED FIRE ALARM STROBE
	SURFACE MOUNTED FIRE ALARM CONTROL PANEL

GENERAL NOTE: 1. REFER TO "FIRE ALARM SYSTEM RENOVATIONS" IN ELECTRICAL SPECIFICATIONS FOR MORE DETAILS.

GENERAL NOTE: 1. REFER TO "FIRE ALARM SYSTEM RENOVATIONS" IN ELECTRICAL SPECIFICATIONS FOR MORE DETAILS.

CCTV SYSTEMS	
SYMBOL	DESCRIPTION
	CEILING MOUNTED CAMERA. 'X' DENOTES TYPE
GENERAL NOTE: 1. REFER TO SECURITY SYSTEMS SCHEDULE FOR DETAILED SPECIFICATION.	

GENERAL NOTE: 1. REFER TO SECURITY SYSTEMS SCHEDULE FOR DETAILED SPECIFICATION.

SECURITY SYSTEMS	
SYMBOL	DESCRIPTION
	CEILING MOUNTED SECURITY MOTION SENSOR
	CEILING MOUNTED EMERGENCY STROBE LIGHT

GENERAL NOTE: 1. REFER TO SECURITY SYSTEMS SCHEDULE FOR DETAILED SPECIFICATION.

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ABBREVIATIONS	
AFF	DENOTES ABOVE FINISHED FLOOR
AFG	DENOTES ABOVE FINISHED GRADE
CH	DENOTES COUNTER HEIGHT
c/w	DENOTES COMPLETE WITH
DS	DENOTES DISCONNECT SWITCH
ED	DENOTES EXISTING DEVICE TO BE DEMOLISHED INCLUDING WIRING/CONDUIT(S) STRIPPED BACK TO SOURCE
ER	DENOTES EXISTING DEVICE TO BE RELOCATED
EX	DENOTES EXISTING DEVICE TO REMAIN
GFCI	DENOTES GROUND FAULT CIRCUIT INTERRUPTER
HL	DENOTES DEVICE MOUNTED AT HIGH LEVEL NEAR CEILING
H/O /A	DENOTES HAND/OFF/AUTO
MF	DENOTES DEVICE MOUNTED AT THE FACE OF MILLWORK
NTS	DENOTES NOT TO SCALE
REL	DENOTES EXISTING DEVICE AT RELOCATED LOCATION
TR	DENOTES TAMPER RESISTANT
TYP	DENOTES TYPICAL
WP	DENOTES WEATHERPROOF

LINE TYPES	
LINE TYPE	DESCRIPTION
-----	DENOTES LINE VOLTAGE WIRE
— · — · — · — · —	DENOTES 0-10V DIMMING WIRE
—————	DENOTES LOW VOLTAGE WIRE
— · — · — · — · —	DENOTES LINE VOLTAGE AND 0-10V DIMMING WIRE
-----	DENOTES DEVICE TO BE DEMOLISHED OR RELOCATED
—————	DENOTES NEW OR RELOCATED DEVICE
—————	DENOTES EXISTING DEVICE TO REMAIN

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# BURLINGTON CENTRAL H.S. RENOVATIONS

1433F Baldwin Street  
Burlington, ON

Architect

sn/der

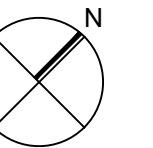
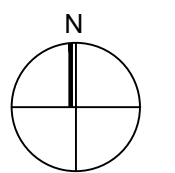
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Key Plan N.T.S.



## Project North

True North

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General Contractor shall check and verify all dimensions and report all errors and omissions to the Architect. Do not scale the drawings. Drawings shall not be used for construction purposes until issued by the Architect for construction.

Drawing Title:

KEY PLAN  
GROUND FLOOR

Scale: AS SHOWN	Date: MAY 2020
Drawn by: PI	Checked by: JS
Job No. 20009	Drawing No. E2.1

THIRD FLOOR KEY PLAN  
SCALE: 1:250



ROOF KEY PLAN  
SCALE: 1:250


PANEL ID: 1N				MOUNTING: SURFACE										PANEL MAINS: 125 A			
VOLTAGE: 120/208V				LOCATION: EXISTING STORAGE ROOM 116										MAIN BREAKER: 125 A			
PHASE/WIRE: 3PH/4W				FED FROM: 125A-3P BREAKER FROM 'TECH WING' PANEL										KAIC RATING: 10 KAIC			
DESCRIPTION	BRK SIZE	BRK TYPE	WIRE SIZE	LOAD	CCT	BUS	CCT	LOAD	WIRE SIZE	BRK TYPE	BRK SIZE	DESCRIPTION					
EMERG LITE/RUNNING MAN SIGNS	15A-1P		2#12	100	1	A	2	400	2#12		15A-1P	REC-OFFICES 113 & 114					
LITE-OFFICES/ROOMS	15A-1P		2#12	786	3	B	4	400	2#12		15A-1P	REC-OFFICES 106 & 112					
LITE-OFFICES/OPEN AREAS	15A-1P		2#12	892	5	C	6	400	2#12		15A-1P	REC-OFFICES 105 & 106					
UNIV.WR.-LITE/EF-1/EMERG	15A-1P		2#12	250	7	A	8	200	2#12		15A-1P	REC-PRINCIPAL OFFICE 103					
UNIV.WR.-REC CHANGE TABLE	15A-1P		2#12	100	9	B	10	200	2#12		15A-1P	REC-GUIDANCE FRONT/STOR					
UNIV.WR.-DOOR OP	15A-1P		2#12	500	11	C	12	600	2#12		15A-1P	REC-GUIDANCE BACK/CORR					
UNIV.WR.-HAND DRYER	15A-1P		2#12	1200	13	A	14	400	2#12		15A-1P	REC-OFFICES 107 & 115					
UNIV.WR.-TOUCHLESS FAUCET	15A-1P		2#12	50	15	B	16	400	2#12		15A-1P	REC-MEETING 102					
SPARE	15A-1P				17	C	18	400	2#12		15A-1P	REC-COPY ROOM 108					
REC-FRIDGE BREAKFAST AREA	15A-1P		2#12	700	19	A	20	800	2#12		20A-1P	REC-LARGE PRINTER ROOM 108					
REC-FRIDGE BREAKFAST AREA	15A-1P		2#12	700	21	B	22	150	2#12		15A-1P	REC-SHREDDER 108					
COUNTER REC-BREAKFAST AREA	15A-1P		2#12	200	23	C	24	500	2#12		20A-1P	REC-SMALL PRINTER 108					
MOTORIZED DAMPERS	15A-1P		2#12	50	25	A	26	400	2#12		15A-1P	REC-GENERAL OFFICE/RECEPTION					
REC-GENERAL OFFICE	15A-1P		2#12	100	27	B	28	200	2#12		15A-1P	REC-RECEPTION					
REC-CCTV MONITOR RECEPTION	15A-1P		2#12	500	29	C	30	300	2#12		15A-1P	REC-PA SYSTEM					
REC-KITCHENETTE FRIDGE	15A-1P		2#12	800	31	A	32	400	2#12		15A-1P	REC-OPEN STATIONS					
REC-KITCHENETTE MW	15A-1P		2#12	800	33	B	34	100	2#12		20A-1P	20A CONVENIENCE REC-ROOF					
FC-1 & FC-2 CONDENSATE PUMPS	15A-1P		2#12	500	35	C	36	600	2#12		20A-1P	REC-GFCI KITCHENETTE					
SPARE	15A-1P				37	A	38				20A-1P	SPARE					
SPARE	15A-1P				39	B	40					SPACE					
SPARE	15A-1P				41	C	42					SPACE					
SPARE	15A-1P				43	A	44					SPACE					
SPARE	15A-1P				45	B	46					SPACE					
SPARE	15A-1P				47	C	48					SPACE					
SPARE	15A-3P				49	A	50				30A-3P	SPARE					
					51	B	52										
					53	C	54										
CU-3	30A-3P		3#8 TECK90	2595	55	A	56	2595	3#8 TECK90		30A-3P	CU-4					
				2595	57	B	58	2595									
				2595	59	C	60	2595									
DUCT HEATER DH-1	35A-2P		2#8	2500	61	A	62	553	3#10		15A-3P	FAN COIL FC-1					
			2500	63	B	64	553										
SPACE					65	C	66	553									
SPACE					67	A	68	553									
ERV-1	15A-2P		2#12	260	69	B	70	553	3#10		15A-3P	FAN COIL FC-2					
				260	71	C	72	553									
BRK TYPE: * GFCI BREAKER				LOAD PHASE A (W): 14496													
** COMBINATION AFCI				LOAD PHASE B (W): 13042									TOTAL LOAD (W): 39486				
*** LOCK ON BREAKER				LOAD PHASE C (W): 11948									TOTAL AMPS (A): 109.605				

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1. THE ELECTRICAL CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING ALL ELECTRICAL ITEMS ON SITE PRIOR TO COMMENCING WORK. IF THERE ARE ERRORS OR OMISSIONS ON THE DRAWINGS, THE CONTRACTOR WILL MODIFY THE DRAWINGS AND NOTIFY THE CONSULTANT OF ANY MAJOR DISCREPANCIES BETWEEN THE DRAWINGS AND SITE CONDITIONS.
2. THE ELECTRICAL CONTRACTOR IS FULLY RESPONSIBLE FOR REMOVING/RELOCATING ALL ELECTRICAL DEVICES/CABLES/CONDUITS ETC. IN AREAS BEING DEMOLISHED AS SHOWN ON ARCHITECTURAL AND ELECTRICAL DRAWINGS. NO ATTEMPT HAS BEEN MADE TO IDENTIFY EVERY SINGLE EXISTING ELECTRICAL DEVICE ON EXISTING DRAWINGS. THE CONTRACTOR IS TO VISIT THE SITE PRIOR TO SUBMITTING TENDER PRICE TO REVIEW WHAT IS REQUIRED WITH RESPECT TO DEMOLITION. NO EXTRAS WILL BE ALLOWED FOR NOT THOROUGHLY REVIEWING THE EXISTING SITE.
3. FOR INDICATED DEVICES SHOWN TO BE DEMOLISHED, ELECTRICAL CONTRACTOR TO REWORK EXISTING WIRING OR PROVIDE NEW WIRING AND CONDUITS TO SUIT NEW DEVICES AS SHOWN ON DRAWINGS.
4. FOR INDICATED DEVICES ARE TO BE RELOCATED, ELECTRICAL CONTRACTOR TO REWORK EXISTING WIRING AND REINSTALL EXISTING DEVICES AS SHOWN IN RENOVATION PLAN.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY WITH THE OWNER ALL DEVICES TO BE SALVAGED, MOVED & STORED PRIOR TO DEMOLITION.

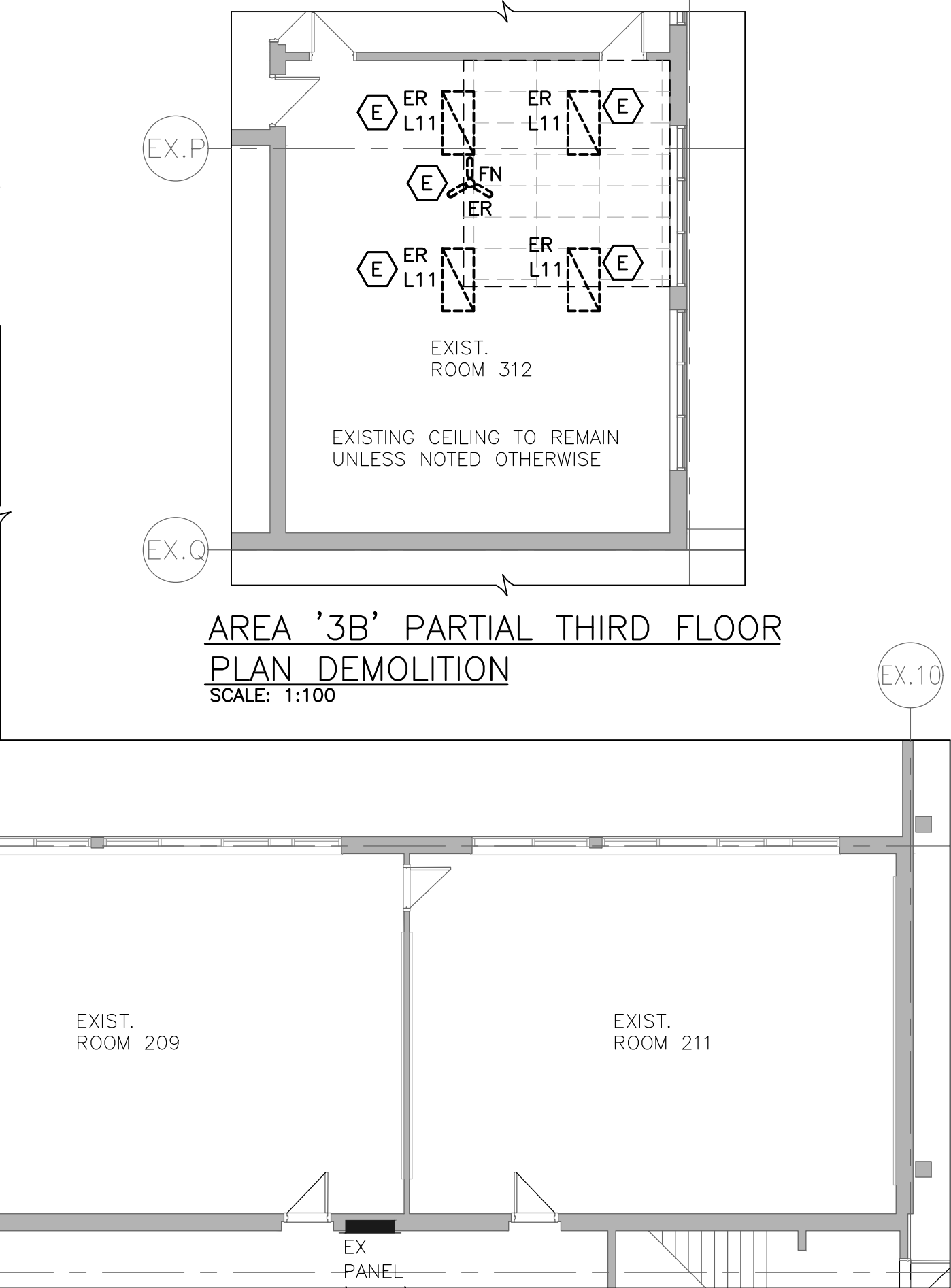
 EXISTING 70A-3P CIRCUIT BREAKER IN EXISTING 1200A, 120/208V SIEMENS PANEL TO BE REPLACED WITH NEW. REFER TO NEW DRAWING E5.1 FOR DETAILS.

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### E4.1





EXIST. VESTIBULE

EXIST. LOBBY

EXIST. ENTRANCE

EXIST. STOR. RM.

L11 ER

L11 ER

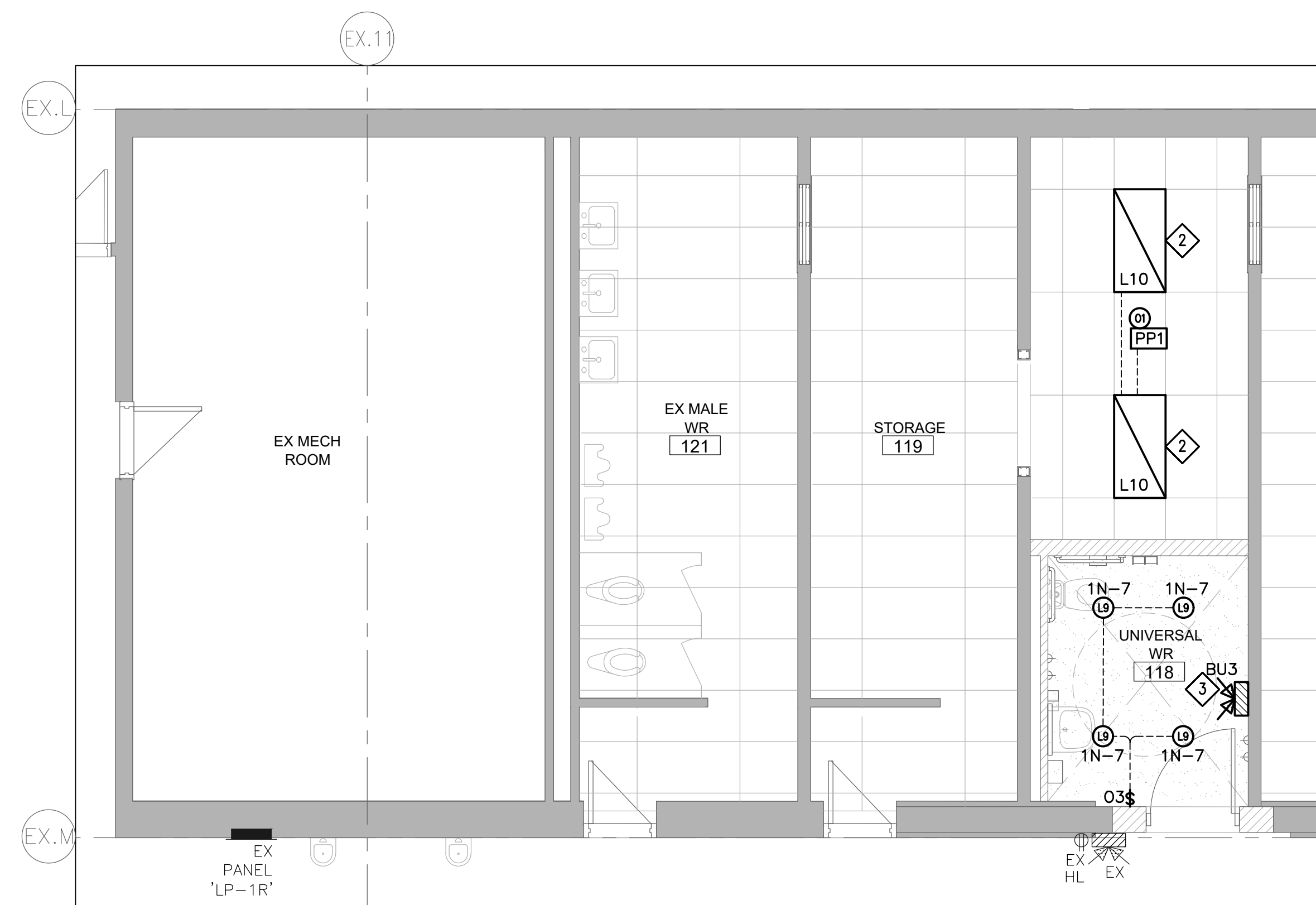
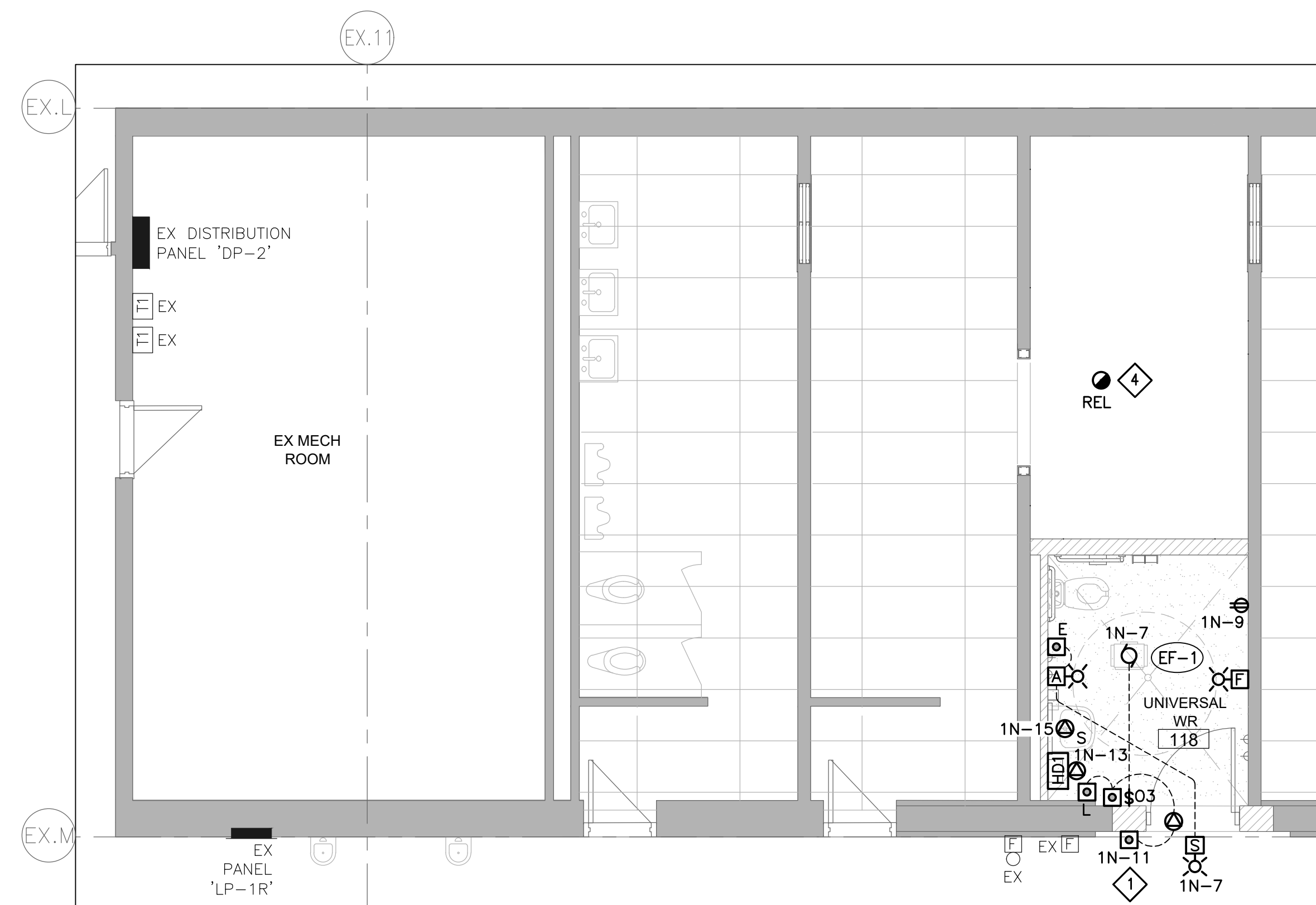
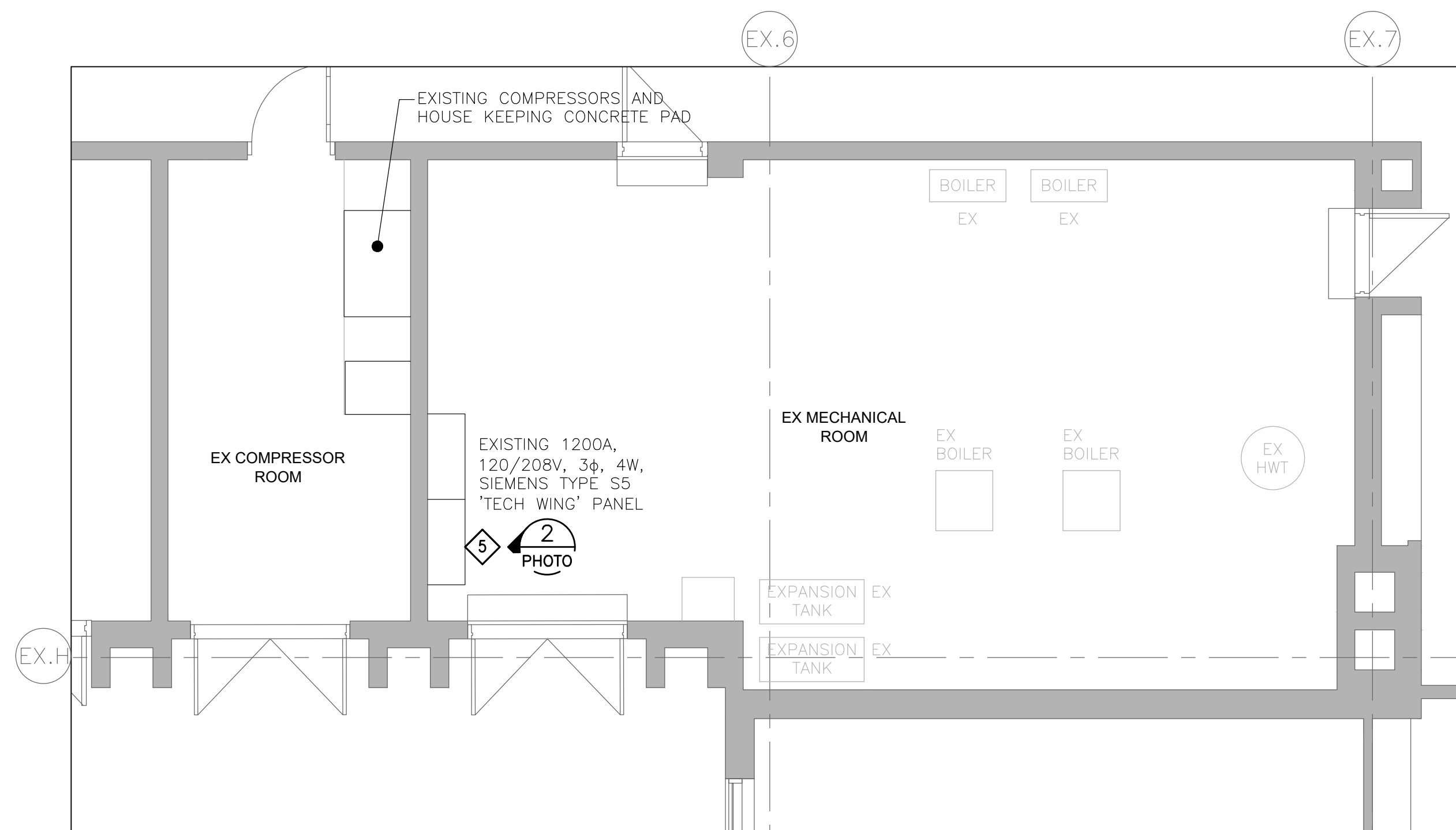
L1 ED

L13 ED

N

PHOTO '2'





GENERAL NOTE:

1. ALL EXPOSED EMT CONDUIT TO BE PAINTED TO MATCH EXISTING WALL/CEILING COLOUR.

DRAWING KEYNOTES:

1. NEW DOOR OPERATOR SUPPLIED BY GENERAL CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR. FOR FIRE RATED DOORS (REFER TO ARCHITECTURAL DRAWINGS) PROVIDE INTERLOCK TO FIRE ALARM CONTROL PANEL SO THE DOOR OPERATOR GETS DE-ENERGIZED IN CASE OF FIRE.
2. REUSE EXISTING BRANCH CIRCUIT BREAKER, PROVIDE NEW BOX, CONDUITS AND BRANCH WIRING AS REQUIRED AND WIRE TO NEW LIGHT FIXTURES AS SPECIFIED.
3. REUSE EXISTING EMERGENCY LIGHTING CIRCUIT BREAKER, PROVIDE NEW WIRING/CONDUITS AS REQUIRED FOR NEW EMERGENCY BATTERY UNIT AS SPECIFIED.
4. RELOCATE EXISTING FIRE ALARM DEVICE AS SHOWN, PROVIDE NEW WIRING/CONDUIT/BOX AND WIRE TO EXISTING FIRE ALARM SYSTEM AS REQUIRED. REFER TO DRAWING E1.1 FIRE ALARM SYSTEM RENOVATIONS SPECIFICATIONS REGARDING VERIFICATION REQUIREMENT.
5. REPLACE EXISTING SPARE BREAKER WITH NEW 125A-3P CIRCUIT BREAKER IN EXISTING SIEMENS PANEL TO FEED NEW PANEL '1N' LOCATED ON GROUND FLOOR EXISTING STORAGE ROOM 116. REFER TO DRAWINGS E2.1 FOR ROUTING OF POWER CABLE AND E5.3 FOR NEW PANEL '1N'.

Client  
**Halton District School Board**  
2050 Guelph Line  
Burlington, Ontario

**BURLINGTON CENTRAL  
H.S. RENOVATIONS**

1433F Baldwin Street  
Burlington, ON

Architect

sn/der

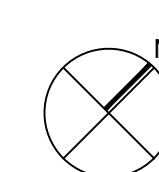
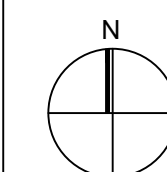
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[www.snyderarchitects.ca](http://www.snyderarchitects.ca)

## Consultants



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Key Plan N.T.S.



Project North True North

[illegible]

0	Issued For Construction	Jun 4, 2021
B	Issued For Permit	Nov 15, 2021
A	Issued For Completion	Sep 24, 2022
No.	Issue	Date

General Contractor shall check and verify all dimensions and report all errors and omissions to the Architect. Do not scale the drawings. Drawings shall not be used for construction purposes until issued by the Architect for construction.

Drawing Title:

LIGHTING, POWER & SYSTEMS  
AREAS '1A' & '1B' PARTIAL  
GROUND FLOOR NEW

Scale: AS SHOWN	Date: MAY 2020
Drawn by: PI	Checked by: JS
Job No.	Drawing No.

20009

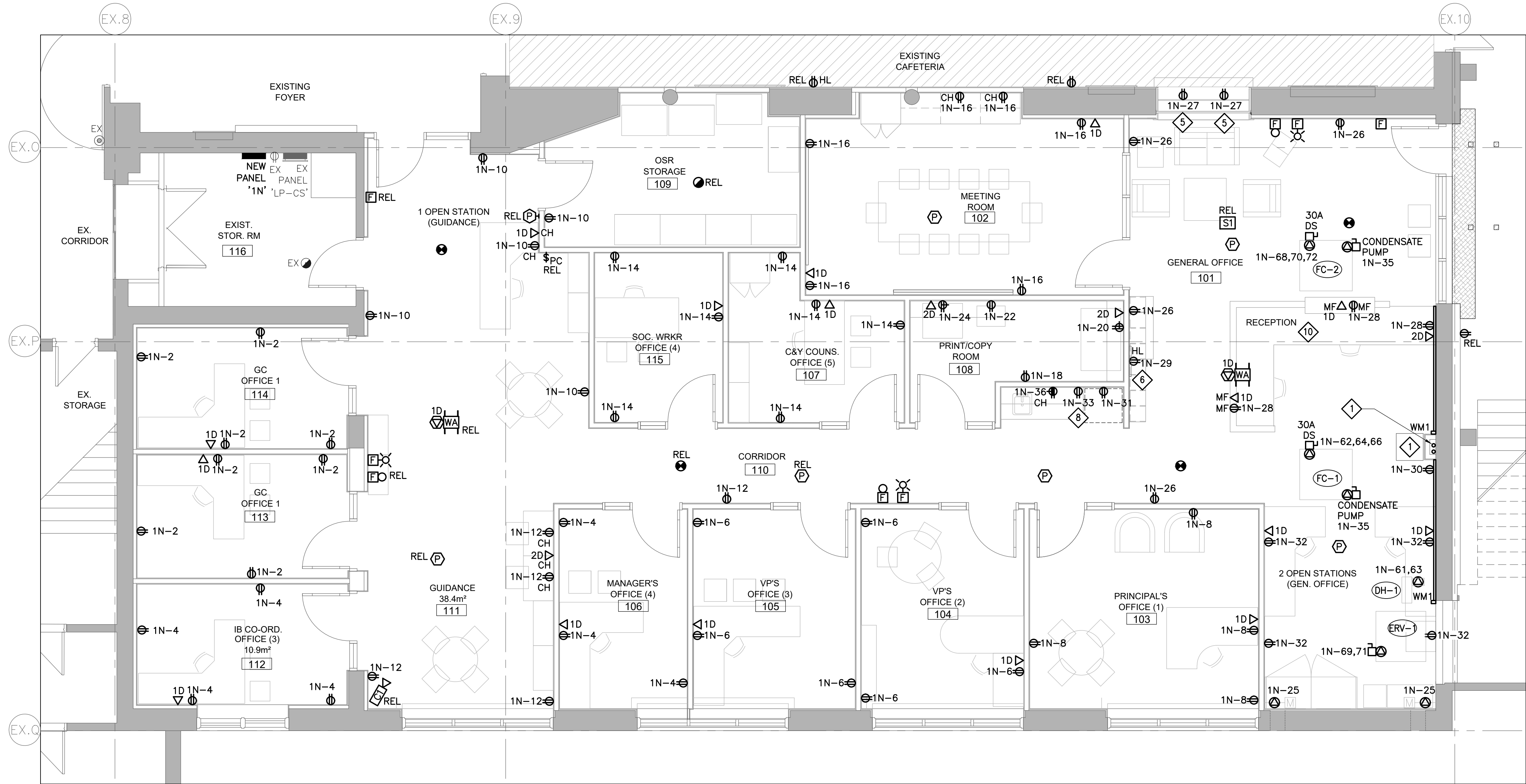
E5.1



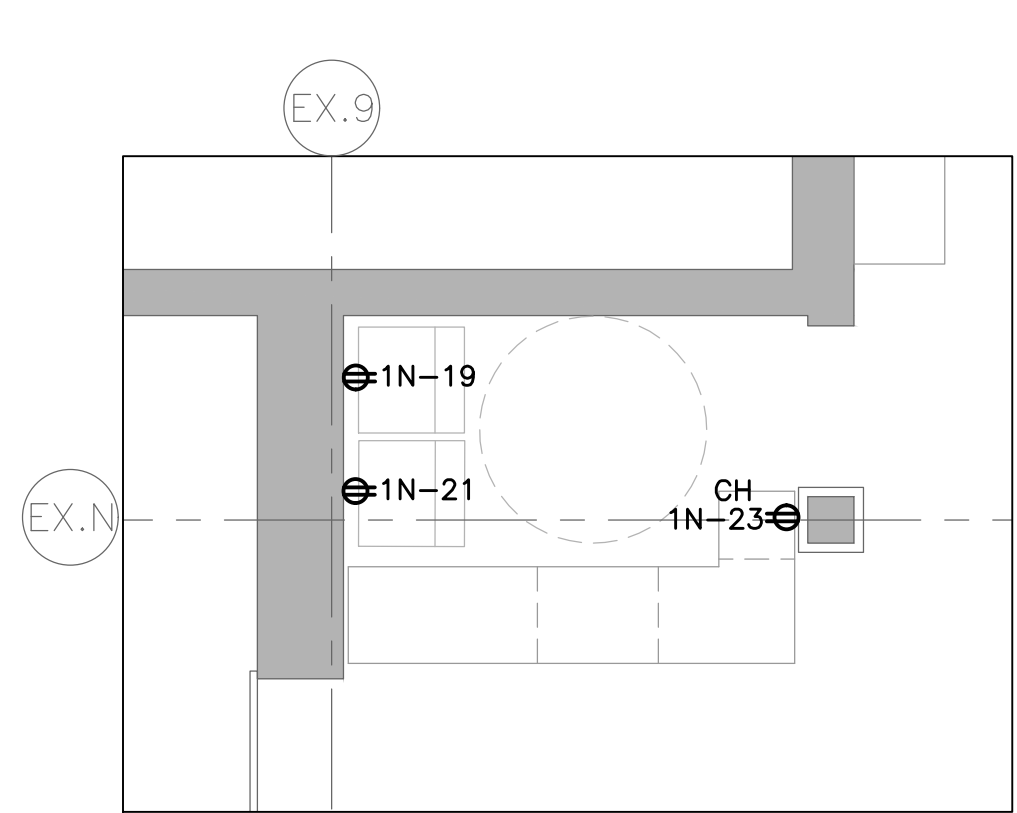
2 REUSE EXISTING LIGHTING BRANCH CIRCUIT,  
PROVIDE NEW WIRING/CONDUITS/BOX AS REQUIRED  
FOR NEW LIGHT FIXTURE AS SPECIFIED.

## E5.2

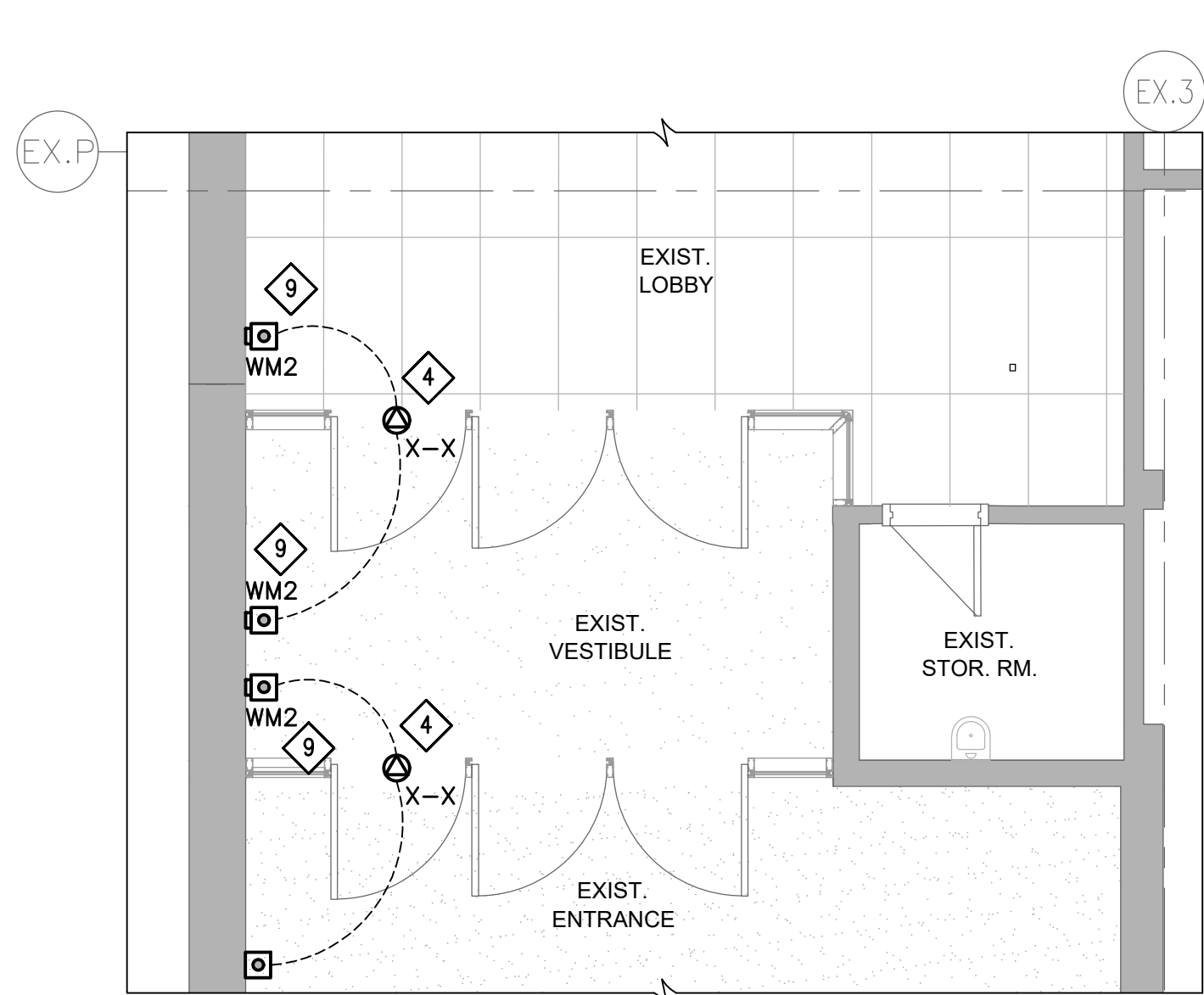




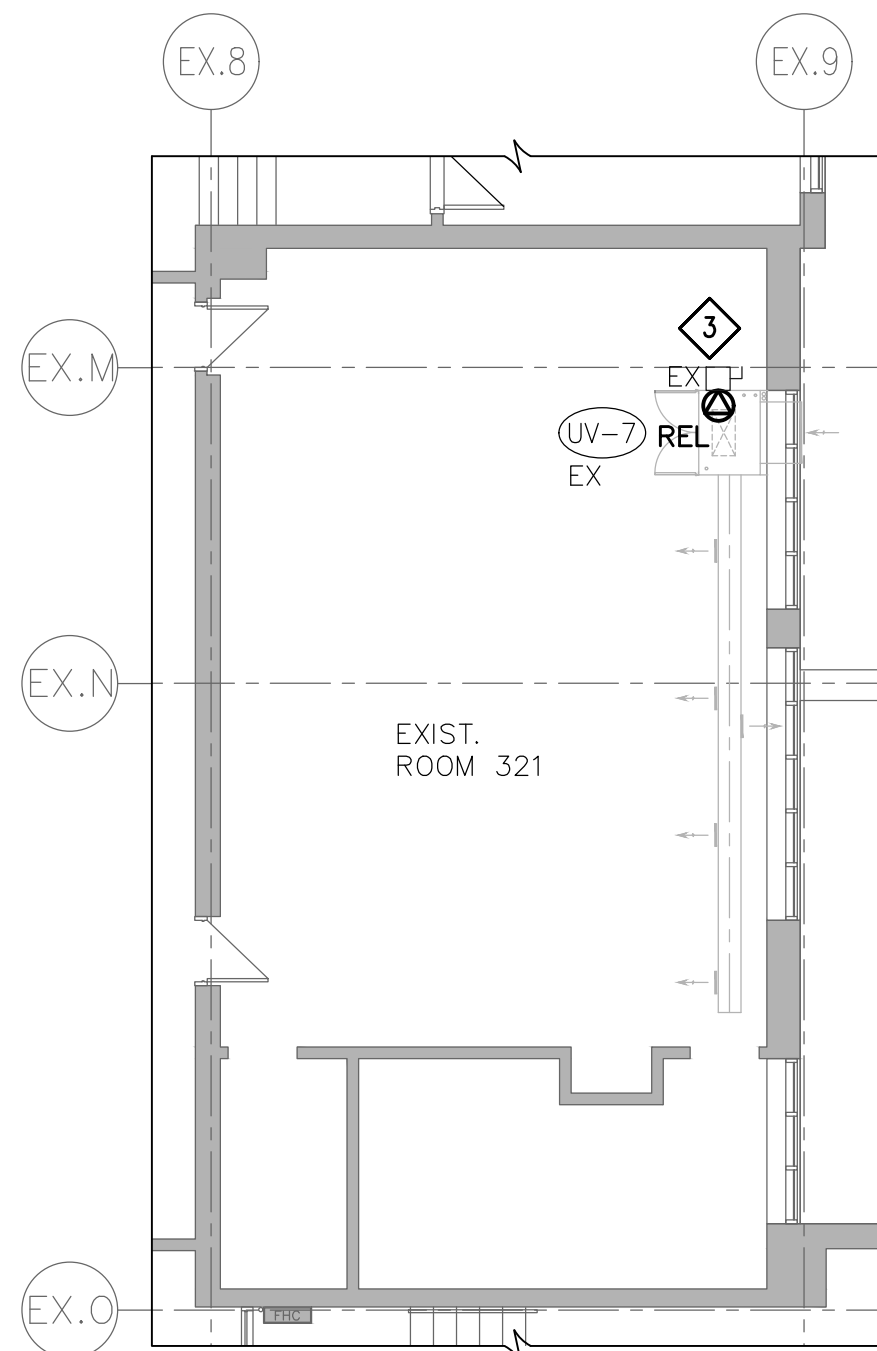
AREA '1C' POWER & SYSTEMS PARTIAL GROUND FLOOR PLAN NEW  
SCALE: 1:50



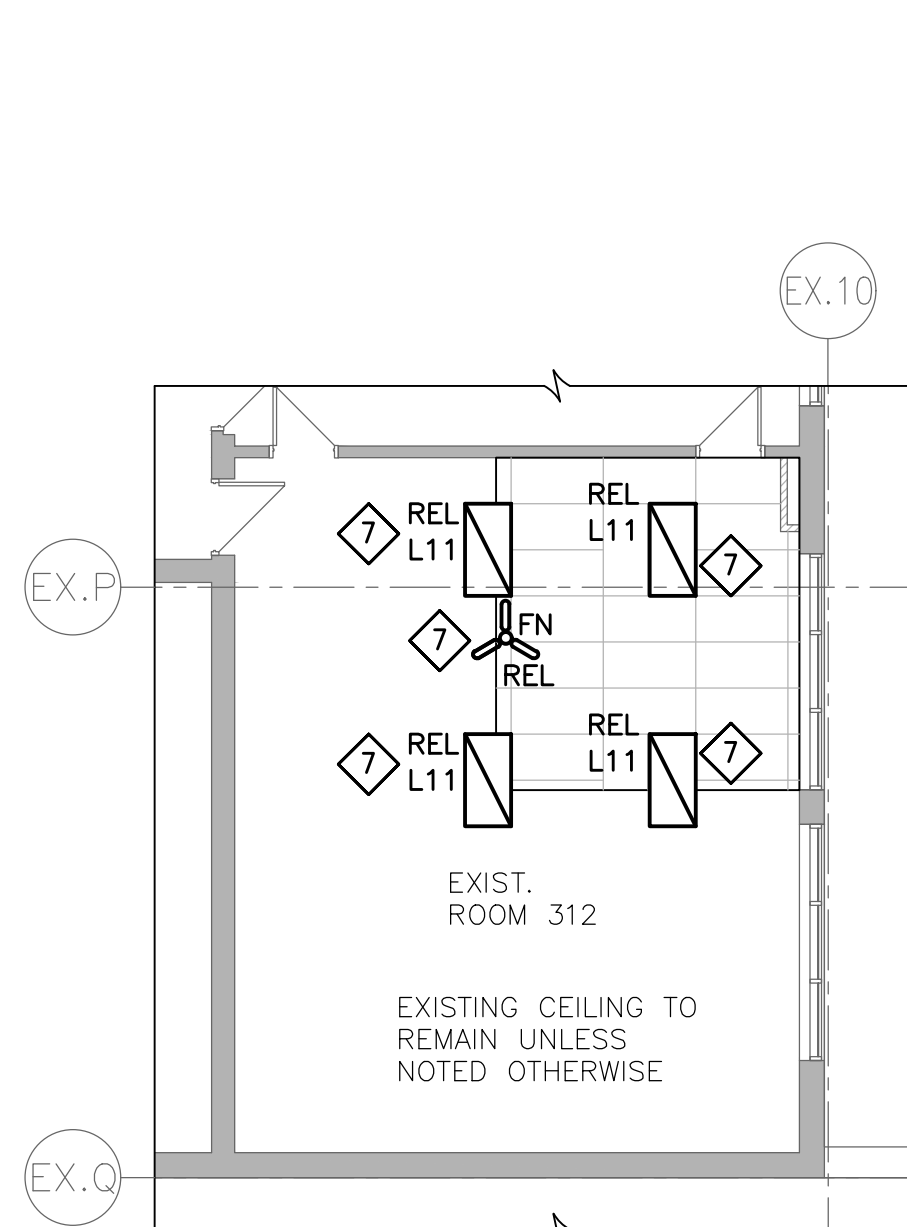
AREA '1D' POWER PARTIAL GROUND FLOOR PLAN NEW  
SCALE: 1:50



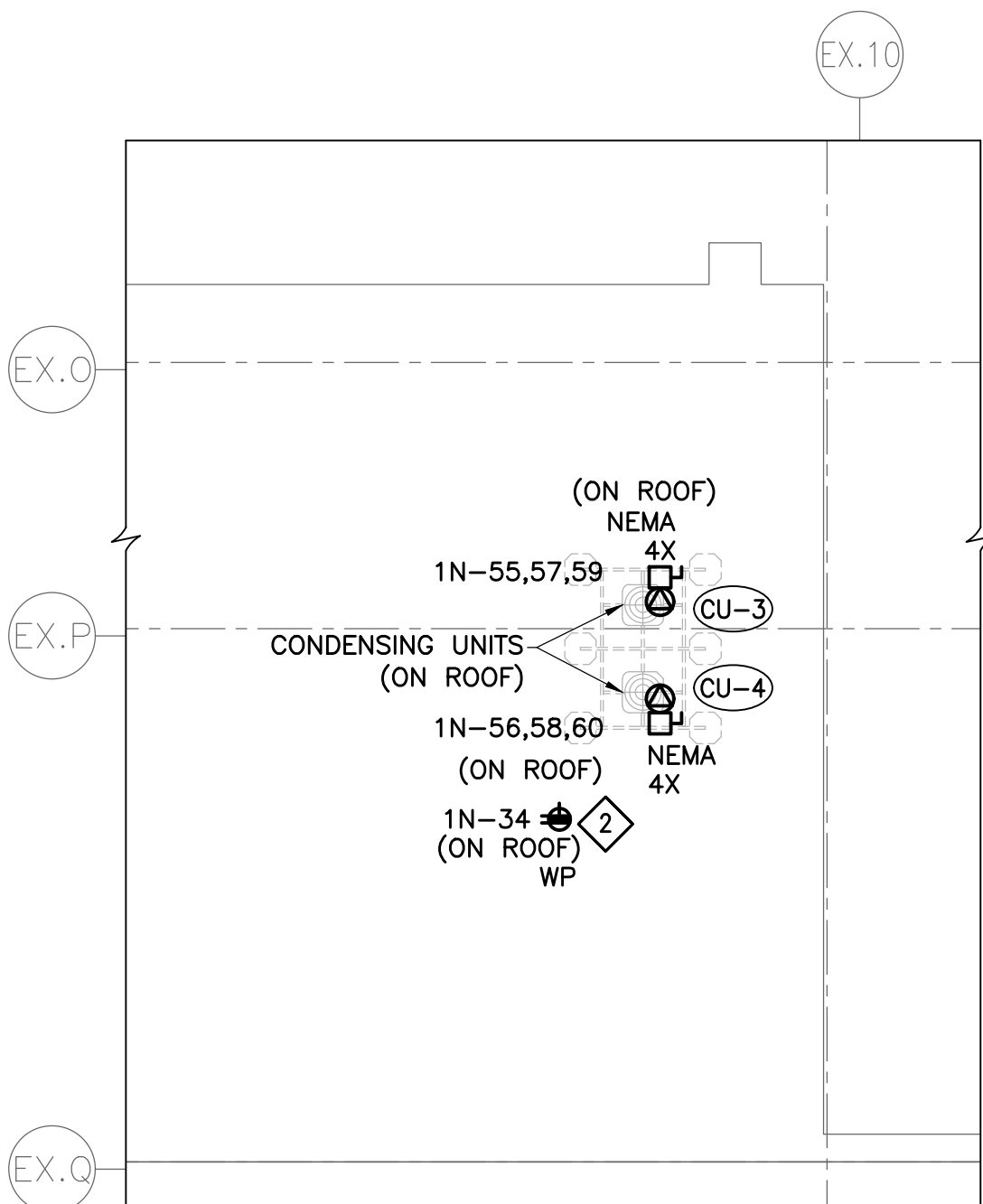
AREA '1E' POWER PARTIAL GROUND FLOOR PLAN NEW  
SCALE: 1:50



AREA '3A' POWER PARTIAL THIRD FLOOR PLAN NEW  
SCALE: 1:100



AREA '3B' LIGHTING AND POWER PARTIAL THIRD FLOOR PLAN NEW  
SCALE: 1:100



AREA 'RA' POWER PARTIAL ROOF PLAN NEW  
SCALE: 1:100

GENERAL NOTE:

- ALL EXPOSED EMT CONDUIT TO BE PAINTED TO MATCH EXISTING WALL/CEILING COLOUR.

DRAWING KEYNOTES:

- EXISTING MAIN PA SYSTEM INCLUDING ALL EQUIPMENT AND ACCESSORIES TO BE RELOCATED AS SHOWN. NEW TWO (2) MINIMUM OF 53mm EMPTY RACEWAY c/w PULL ROPES PROVIDED BY ELECTRICAL CONTRACTOR TO BE TERMINATE AT THIS LOCATION. ELECTRICAL CONTRACTOR TO FIELD DETERMINE THE BEST SUITABLE ROUTING OF THE NEW RACEWAY. THE PA SYSTEM CONTRACTOR SHALL PROVIDE ALL NEW REQUIRED MATERIALS, LABOUR AND REWIRE ALL EXISTING PA DEVICES TO MAIN PA SYSTEM.
- PROVIDE NEW WEATHERPROOF 20A GFCI RECEPTACLE FOR MAINTENANCE OF MECHANICAL EQUIPMENT ON ROOF AS PER ESA STANDARDS SECTION '26-710'. NEW RECEPTACLE TO BE MOUNTED ON STAINLESS STEEL PEDESTAL AT MINIMUM OF 750mm ABOVE FINISHED ROOF LEVEL.
- RECONNECT EXISTING POWER CONNECTION FOR EXISTING UNIT VENTILATOR AFTER INSTALLATION OF NEW WINDOW.
- ELECTRICAL CONTRACTOR TO FIELD VERIFY TO REUSE EXISTING SPARE BREAKER OR PROVIDE NEW DEDICATED 15A-1P CIRCUIT BREAKER IN EXISTING PANEL. PROVIDE NEW BOX, CONDUITS AND BRANCH WIRING AS REQUIRED AND WIRE FROM THE NEAREST PANEL TO NEW POWER DOOR OPERATOR (SUPPLIED BY GENERAL CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR) AS REQUIRED.
- REFER TO ARCHITECTURAL DRAWING A501 FOR EXACT LOCATION AND FURTHER INFORMATION.
- ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL NEW RECEPTACLE AS REQUIRED FOR RELOCATED EXISTING CCTV MONITOR. COORDINATE WITH CCTV CONTRACTOR FOR EXACT MONITOR LOCATION PRIOR TO DEVICE ROUGH-IN. CCTV MONITOR TO BE INSTALLED AT 610mm (2ft) BELOW CEILING.
- REINSTALL AND RECONNECT EXISTING CEILING DEVICES INCLUDING LIGHT FIXTURES AND CEILING FAN AFTER REINSTALLATION OF CEILING TILES/GRID.
- REFER TO ARCHITECTURAL ELEVATION DRAWINGS FOR EXACT LOCATION OF KITCHENETTE MW RECEPTACLE.
- PROVIDE SURFACE MOUNTED RACEWAY TO CEILING SPACE FROM PUSHBUTTON BOX. PUSHBUTTON TO BE MOUNTED ON SURFACE MOUNTED WIREMOLD DEVICE BOX.
- FOR MOUNTING LOCATION OF RECEPTACLES AND DATA OUTLETS IN RECEPTION DESK REFER TO ARCHITECTURAL DRAWING A601

Client  
**Halton District School Board**  
2050 Guelph Line  
Burlington, Ontario

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Architect

**sn/der**

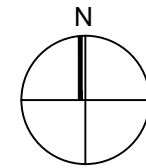
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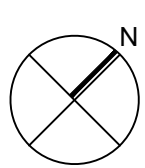
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Key Plan N.T.S.



Project North



True North

No.	Revisions	Date
0	Issued For Construction	Jun 4, 2021
C	Issued For Addendum No.1	May 5, 2021
B	Issued For Tender	Apr 19, 2021
A	Issued For Permit	Jan 21, 2021
No.	Issue	Date

General Contractor shall check and verify all dimensions and report all errors and omissions to the Architect. Do not scale the drawings. Drawings shall not be used for construction purposes until issued by the Architect for construction.

Drawing Title:  
**POWER & SYSTEMS AREAS  
'1C', '1D', '3A' & 'RA' GROUND,  
THIRD FLOORS AND ROOF NEW**

Scale:	AS SHOWN	Date:	MAY 2020
Drawn by:	PI	Checked by:	JS
Job No.		Drawing No.	

20009

E5.3