



Addendum # 5

Bid Opportunity: 25-7748-RFT - St. Andrew's Public School 3rd Floor Classroom Refinishing Closing Date: Wednesday, May 21, 2025 2:00 PM

The following issued by the Board shall form part of the Bid / Proposal Solicitation document. The revisions and additions noted herein along with any attachments shall be read in conjunction with all other related documents. This Addendum shall, take precedence over the previously issued documents where differences occur. Receipt of this addendum must be acknowledged in the Bidding System, bids&tenders.

If you have already submitted a Bid / Proposal, it will be automatically withdrawn as a result of this addendum. You must resubmit the Bid / Proposal acknowledging all addenda and revising your Bid / Proposal to comply with all addenda.

Question 1:

Could not locate updated drawing A110 Roof Level Plan noted in Addendum 4.
Can this updated drawing please be provided?

Answer 1: Please see revised Addendum with A110 updated drawing.

Addendum #4

Project: WRDSB St Andrews, 65 Victoria Avenue, Cambridge, ON N1S 1X2

Project No.: 22988

Date: 16 May, 2025

The following information supplements and/or supersedes the bid documents issued on **May 02, 2025**.

This Addendum forms part of the contract documents and is to be read, interpreted, and coordinated with all other parts. The cost of all contained herein is to be included in the contract sum. The following revisions supersede the information contained in the original drawings and specifications issued for the above-named project to the extent referenced and shall become part thereof. Acknowledge receipt of this Addendum by inserting its number and date on the Tender Form. Failure to do so may subject the Bidder to disqualification.

Addenda Documents attached herein.

1. Addendum E1, Produced by Quasar Consulting Group, dated 05/15/2025.
2. Sheet A120 Second Floor Reflected Ceiling Plan, dated 05/16/2025.
3. Sheet A110 Roof Plan, dated 05/16/2025.

Specifications:

N/A

Drawings:

Electrical drawings

1. Refer to Addendum E1, dated 05/15/2025, issued here.

Architecture drawings

1. A120 Second Floor Reflected Ceiling Plan
DELETE A120 Second Floor Reflected Ceiling Plan, dated 05/02/2025;
ADD in lieu A120 Second Floor Reflected Ceiling Plan, issued here, dated 05/16/2025;
REVISIONS:
 - Addition and rearrangement of lights in Stair 904;
2. A110 Roof Level Plan
DELETE A110 Roof Level Plan, dated 05/02/2025;
ADD in lieu A110 Roof Level Plan, issued here, dated 05/16/2025;
REVISIONS:
 - Removal of 'new roof' note from roof legend

Clarifications:

1. Question: Roof Plan A110 – The roof legend shows diagonal hatching identifying new roof areas but is not shown on the roof plan itself. Please confirm that the only areas that require roof patching are the boxes around the condensers on the low and high roofs and the piping doghouse.

Answer: Correct. See updated plan A110 issued.

-- END OF ADDENDA #4 --

Project Name:	WRDSB – St. Andrew’s Senior Public School – Air Conditioning Upgrade	Date Issued:	May 15, 2025
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Quasar Project #:	ED-23-078
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Distribution

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Addendum #:	E-1
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Revision #:	0
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This Addendum forms part of the Contract Specifications and Drawings, and modifies the Bidding Documents, with Amendments and Additions noted below. This Addendum shall be added to the front of the specifications as issued. Bidders shall acknowledge receipt of this Addendum in the space provided in the Bid Form and include in bid amount.

This addendum includes modifications to the drawings and specifications as summarized below. Unless otherwise noted, all drawings and/or specifications listed below are attached herewith.

Changes to Drawings
1. Drawing E-101 – Second Floor Demolition & New Work Plans – Lighting (Issued herewith):

- a. Refer to attached, revised drawing #E-101 and provide all changes indicated. Modifications include, but are not limited to the following:
 1. Added note #6 to demolition key notes.
 2. Demolition Plan: removal of existing luminaires in existing stairs.
 3. Demolition Plan: removal of two wall mounted lights within corridor.
 4. New Work Plan: provision of new lighting within existing stairs and reconnection to existing circuits.
 5. New Work Plan: provision of new wall mounted lighting within corridor and reconnection to existing circuits.

2. Drawing E-202 - First Floor New Work Plan – Power & Systems

- a. Refer to attached, revised drawing #E-202 and note revision to the routing of the new feeders to new roof mounted condensing units ‘CU-3A’, ‘CU-3B’ and ‘CU-3C’. Routing shown is diagrammatic and is to be confirmed on site prior to rough-in.

3. Drawing E-203 – Second Floor Demolition & New Work Plans – Power & Systems (Issued herewith):

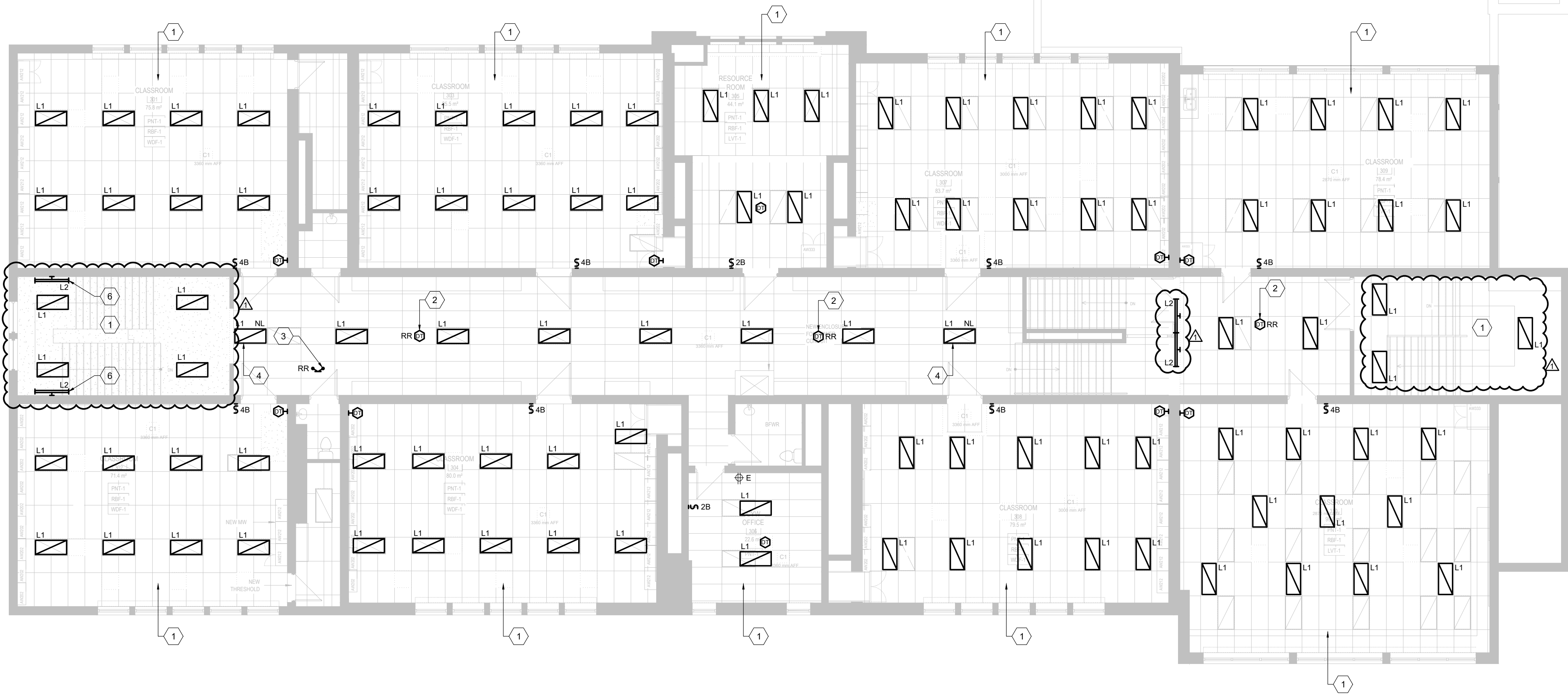
- a. Refer to attached, revised drawing #E-203 and provide all changes indicated. Modifications include, but are not limited to the following:
 1. Added Demolition Key Notes.
 2. Revised New Work Key Notes #3, #4, #5 and #6.
 3. Demolition Plan: added key note references for PA, fire alarm, WAP devices, etc.
 4. Demolition Plan: added additional removal and reinstallation of fire alarm detectors at stairwells.
 5. Demolition Plan: added existing to remain devices and existing devices to be removed to accommodate new millwork installation.
 6. New Work Plan: added existing to remain devices.
 7. New Work Plan: added reinstallation of PA, fire alarm, WAP devices, etc. for devices noted on demolition drawings.
 8. New Work Plan: added additional new receptacle devices – connect to branch circuits indicated.

4. Drawing E-301 – Electrical Schedules & Detail Sheet No. 1 (Issued herewith):

- a. Refer to attached, revised drawing #E-301 and note addition of type L2 to luminaire schedule for new wall mounted luminaires.
- b. For clarification purposes, refer to panel schedule labelled 'LP-M' and note that this should read 'LP-GA'.
- c. Delete duplicate lighting control schedule as indicated.
- d. Refer to retained lighting control schedule and note revision to description for two-zone dimming wall station.
- e. Note revisions to panel schedule for existing panel 'LP-G'.
- f. Add Lutron as an acceptable manufacturer within the Lighting Controls schedule.

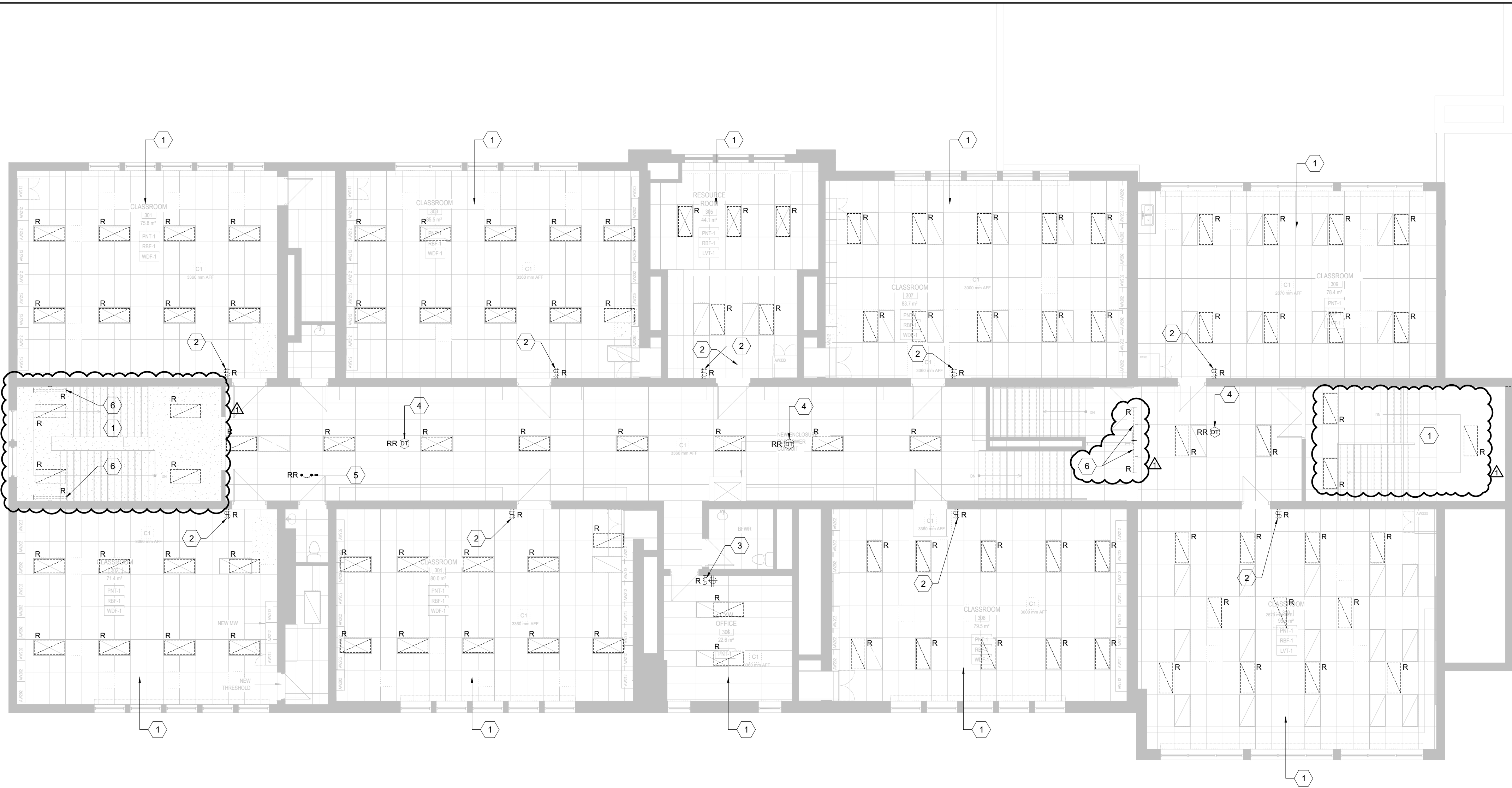
5. Drawing E-302 – Electrical Detail Sheet No. 2 (Issued herewith):

- a. Added lighting control details to this drawing.



2 SECOND FLOOR NEW WORK PLAN - LIGHTING

SCALE: 1:100



1 SECOND FLOOR DEMOLITION PLAN - LIGHTING

SCALE: 1:100

PROJECT GENERAL NOTES

1. LOCATION OF DEVICES AND LUMINAIRES ARE NOTED FOR DIAGRAMMATIC PURPOSES. CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS AND SITE CONDITIONS FOR EXACT DEVICE AND LUMINAIRE PLACEMENT.
2. NEW DEVICES SHOWN ON EXISTING WALL CONSTRUCTION SHALL BE INSTALLED SURFACE MOUNTED ON FS TYPE BACK BOXES WITH SURFACE RACEWAY (LEGRAND WIREMOLD 400 SERIES OR EQUIVALENT - WHITE), FROM DEVICE UP TO CEILING SPACE. CONDUIT SHALL BE PROVIDED ABOVE CEILING SPACE IN ALL LOCATIONS. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR AND CURRENT HAZARDOUS MATERIALS SURVEY.
3. FOR NEW BRANCH CIRCUITS NOTED ON THE FLOOR PLANS, PROVIDE A NEW 15A-1P BREAKER WITHIN EXISTING PANEL INDICATED AND EXTEND NEW FEEDERS TO EXISTING PANEL AND CONNECT COMPLETE.

NEW WORK KEY NOTES:

1. CONNECT NEW LUMINAIRES AND NEW LIGHTING CONTROLS WITHIN THIS SPACE INTO EXISTING LIGHTING BRANCH CIRCUIT SERVING THE SPACE. MODIFY EXISTING BRANCH CIRCUIT AS REQUIRED TO ACCOMMODATE NEW LUMINAIRES AND LIGHTING CONTROLS.
2. RE-INSTALL AND RECONNECT EXISTING CEILING MOUNTED OCCUPANCY SENSOR WITHIN NEW CEILING.
3. RE-INSTALL AND RECONNECT EXISTING CEILING MOUNTED EMERGENCY LIGHTING UNIT WITHIN NEW CEILING.
4. REWIRE EXISTING LUMINAIRE TO A NEW 'NIGHT-LIGHT' CIRCUIT. PROVIDE A NEW 15A-1P BREAKER WITHIN EXISTING PANEL L.P.-G WITHIN CORRIDOR AND EXTEND 2#12 + GROUND IN 21mm CONDUIT FROM BREAKER TO LUMINAIRE LOCATION AND CONNECT COMPLETE. BE RESPONSIBLE TO MODIFY EXISTING CORRIDOR LIGHTING CIRCUIT TO REMOVE LUMINAIRE FROM EXISTING CIRCUIT AND MAINTAINING THE DOWNSTREAM CONTINUITY OF OTHER LUMINAIRES CONNECTED TO THE SAME BRANCH CIRCUIT. SECOND 'NIGHT LIGHT' LUMINAIRE WITHIN THIS CORRIDOR TO BE CONNECTED TO THIS SAME NEW CIRCUIT.

PROJECT GENERAL NOTES

1. THIS DRAWING IS ISSUED TO SHOW PROPOSED SCOPE OF WORK ONLY. THE CONTRACTOR MUST PERFORM A SITE INSPECTION (INCLUDING CEILING SPACES) DURING THE TENDER PERIOD AND ENSURE THAT ALL WORK THAT IS VISIBLE IS INCLUDED IN THE DEMOLITION SCOPE OF WORK. ALL EXISTING SERVICES THAT PASS THROUGH THE RENOVATION AREA (UNLESS OBSOLETE) ARE TO BE MAINTAINED AND/OR RELOCATED TO SUIT THE SCOPE OF WORK.

DEMOLITION KEY NOTES:

1. EXISTING LIGHTING CIRCUITS TO BE RETAINED. MODIFY EXISTING BRANCH CIRCUIT WIRING AS REQUIRED AND RECONNECT TO NEW LIGHTING AND SWITCHING ARRANGEMENT COMPLETE.
2. EXISTING LIGHT SWITCH TO BE REMOVED IN ITS ENTIRETY. FOR FLUSH/RECESSED MOUNTED SWITCHES, DISCONNECT FROM EXISTING LIGHTING BRANCH CIRCUIT WITHIN ROOM. REMOVE EXISTING WIRING TO SWITCH AND PROVIDE BLANK STAINLESS STEEL FACEPLATE OVER EXISTING BOX. FOR SURFACE MOUNTED SWITCHES, DISCONNECT FROM EXISTING LIGHTING BRANCH CIRCUIT WITHIN ROOM. REMOVE EXISTING WIRING TO SWITCH AND ASSOCIATED SURFACE MOUNTED BOX AND CONDUIT OR RACEWAY.
3. EXISTING LIGHT SWITCH TO BE REMOVED. BE RESPONSIBLE TO DISCONNECT SWITCH FROM EXISTING LIGHTING BRANCH CIRCUIT WITHIN ROOM. REMOVE ALL EXISTING WIRING TO SWITCH AND REPLACE EXISTING SWITCH AND RECEPTACLE FACEPLATE WITH NEW COMBINATION STAINLESS STEEL BLANK AND RECEPTACLE FACEPLATE.
4. EXISTING CEILING MOUNTED OCCUPANCY SENSOR TO BE TEMPORARILY DISCONNECTED, TAKEN DOWN AND STORED ON SITE TO FACILITATE THE REMOVAL AND REPLACEMENT OF EXISTING CEILING. ONCE NEW CEILING WORK IS COMPLETE, BE RESPONSIBLE TO RE-INSTALL AND RECONNECT OCCUPANCY SENSOR IN SAME LOCATION. EXISTING WIRING SHALL BE COILED SAFELY WITHIN CEILING SPACE DURING THE COURSE OF CONSTRUCTION. TEST AND VERIFY DEVICE UPON COMPLETION OF WORK.
5. EXISTING CEILING MOUNTED EMERGENCY LIGHTING UNIT TO BE TEMPORARILY DISCONNECTED, TAKEN DOWN AND STORED ON SITE TO FACILITATE THE REMOVAL AND REPLACEMENT OF EXISTING CEILING. ONCE NEW CEILING WORK IS COMPLETE, BE RESPONSIBLE TO RE-INSTALL AND RECONNECT EMERGENCY LIGHTING UNIT IN SAME LOCATION. EXISTING WIRING SHALL BE COILED SAFELY WITHIN CEILING SPACE DURING THE COURSE OF CONSTRUCTION. TEST AND VERIFY DEVICE UPON COMPLETION OF WORK.
6. EXISTING WALL MOUNTED LUMINAIRES TO BE REMOVED AND REPLACED WITH NEW. BE RESPONSIBLE TO RETAIN EXISTING BRANCH CIRCUIT, MODIFY AS REQUIRED AND RECONNECT TO NEW LUMINAIRES COMPLETE. REFER TO NEW WORK PLANS AND LUMINAIRE SCHEDULE FOR FURTHER DETAILS.



Δ	ISSUED WITH ADDENDUM #E-1	2025-05-15
3	ISSUED FOR TENDER	2025-05-02
2	ISSUED FOR DD CLIENT REVIEW	2025-04-11
1	ISSUED FOR DD CLIENT REVIEW	2025-03-26

ISSUE DATE:

PROJECT:

ST ANDREW'S
SENIOR PUBLIC
SCHOOL -
AIR CONDITIONING
UPGRADE

65 VICTORIA AVE. CAMBRIDGE, ON N1S 1X2

SHEET TITLE:

SECOND FLOOR
DEMOLITION &
NEW WORK PLANS -
LIGHTING

PROJECT NO: 22988
SCALE: AS NOTED
DRAWN BY: CW
REVIEWED BY: BD/TWS

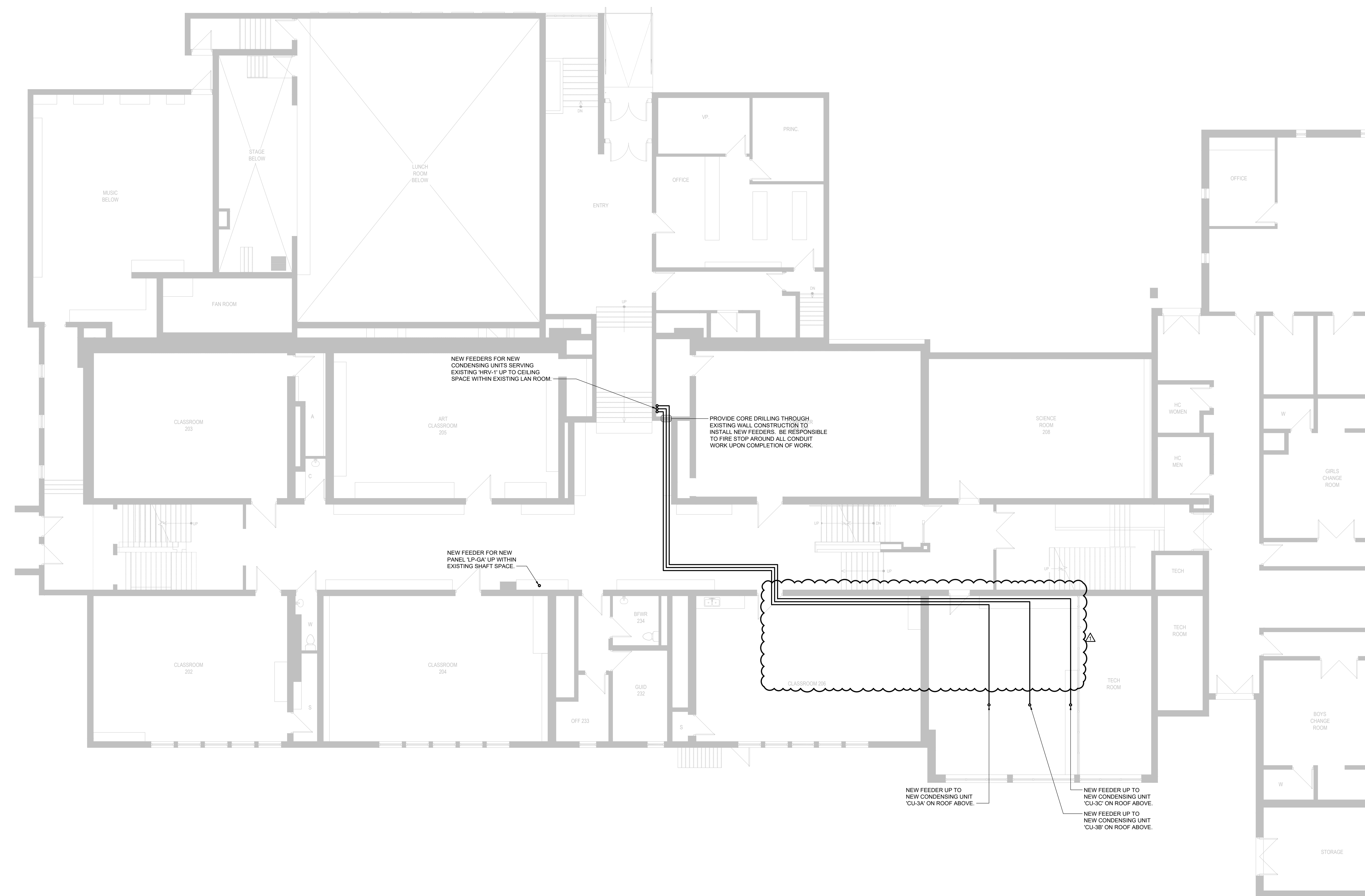
SHEET NO:

E-101



PROJECT GENERAL NOTES

- ROUTING OF CONDUITS IS DIAGRAMMATIC. CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM EXACT ROUTING ON SITE PRIOR TO ROUGH-IN AND INCLUDE FOR ALL OFFSETS, ETC. AS REQUIRED. INSTALLATION OF NEW FEEDERS SHALL BE COORDINATED WITH ALL EXISTING SERVICES ON SITE.



ISSUED WITH ADDENDUM #E-1	2025-05-15
ISSUED FOR TENDER	2025-05-02
ISSUED FOR DD CLIENT REVIEW	2025-04-11
ISSUED FOR DD CLIENT REVIEW	2025-03-26

ISSUE DATE:

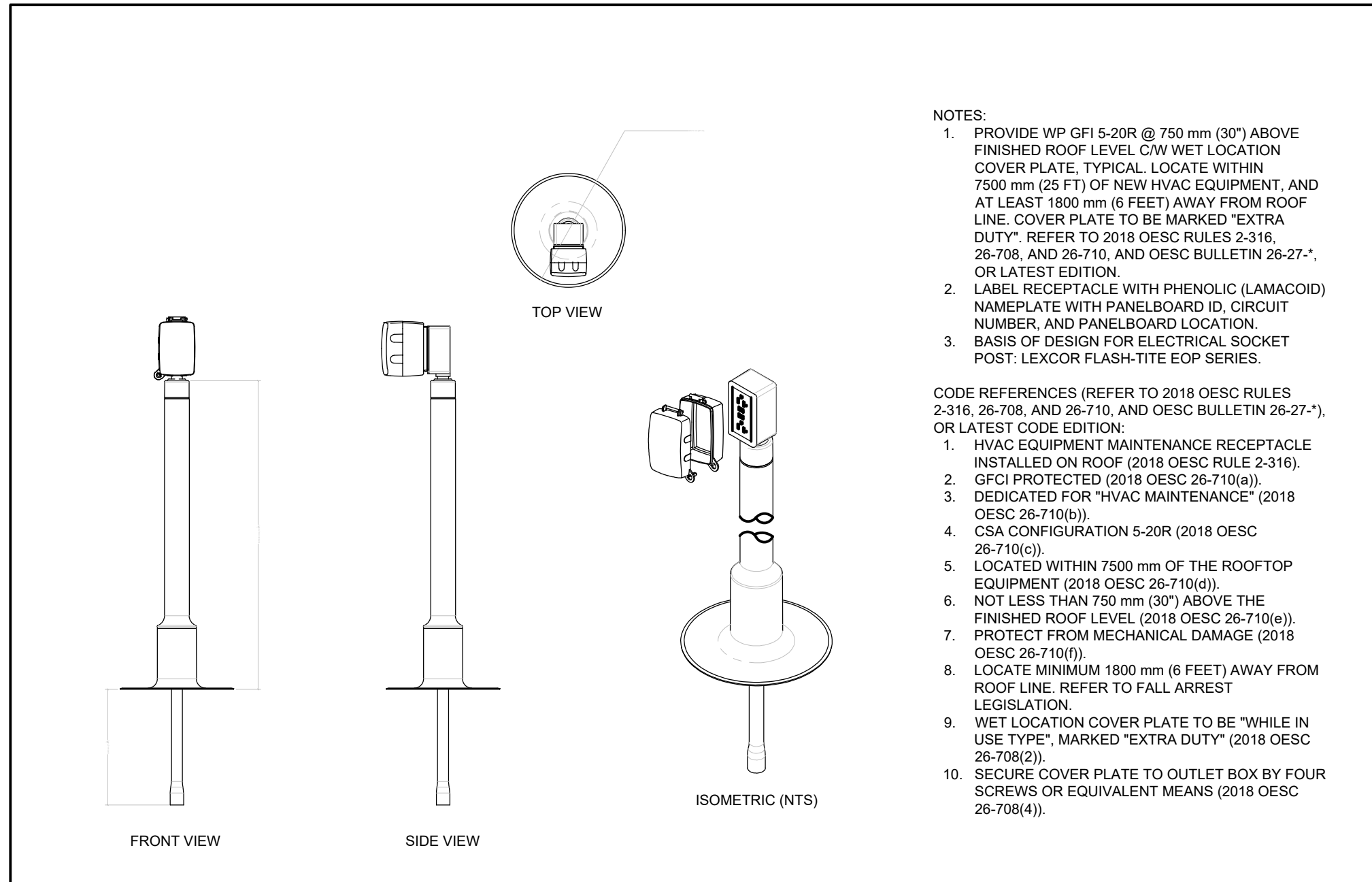
PROJECT:
**ST ANDREW'S
SENIOR PUBLIC
SCHOOL -
AIR CONDITIONING
UPGRADE**

65 VICTORIA AVE. CAMBRIDGE, ON N1S 1X2

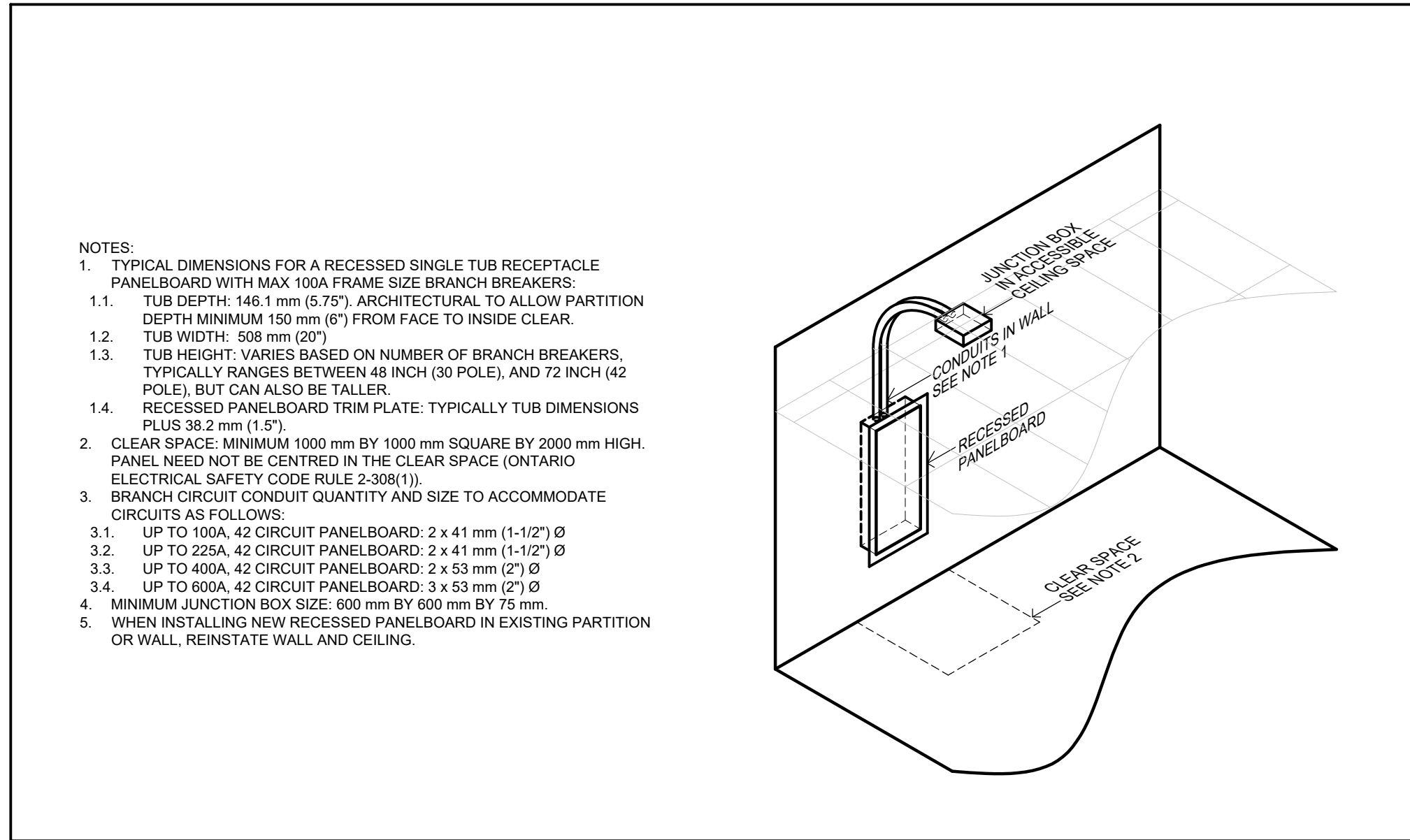
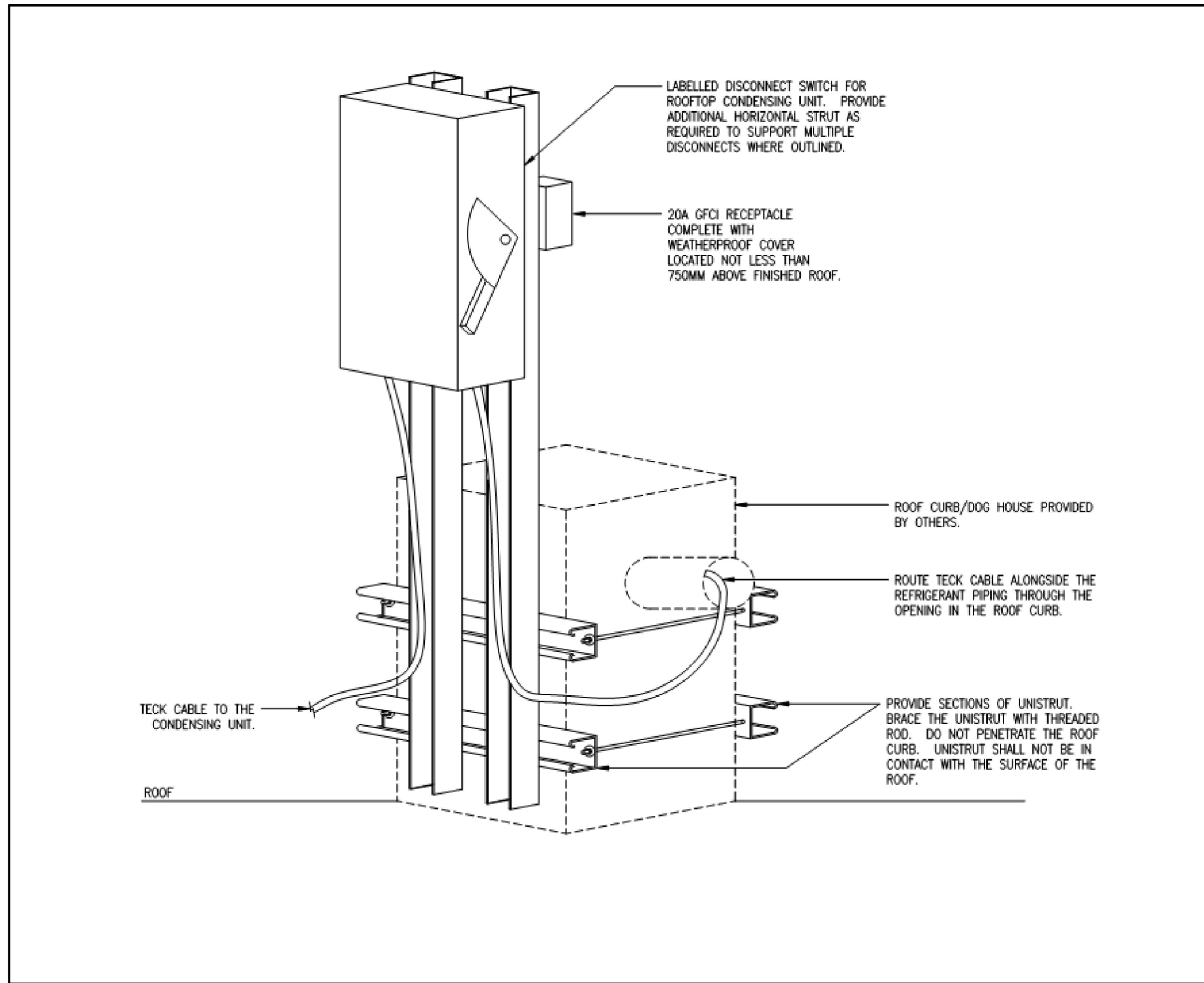
SHEET TITLE:
**FIRST FLOOR NEW
WORK PLAN -
POWER & SYSTEMS**

PROJECT NO: 22988
SCALE: AS NOTED
DRAWN BY: CW
REVIEWED BY: BD/TWS

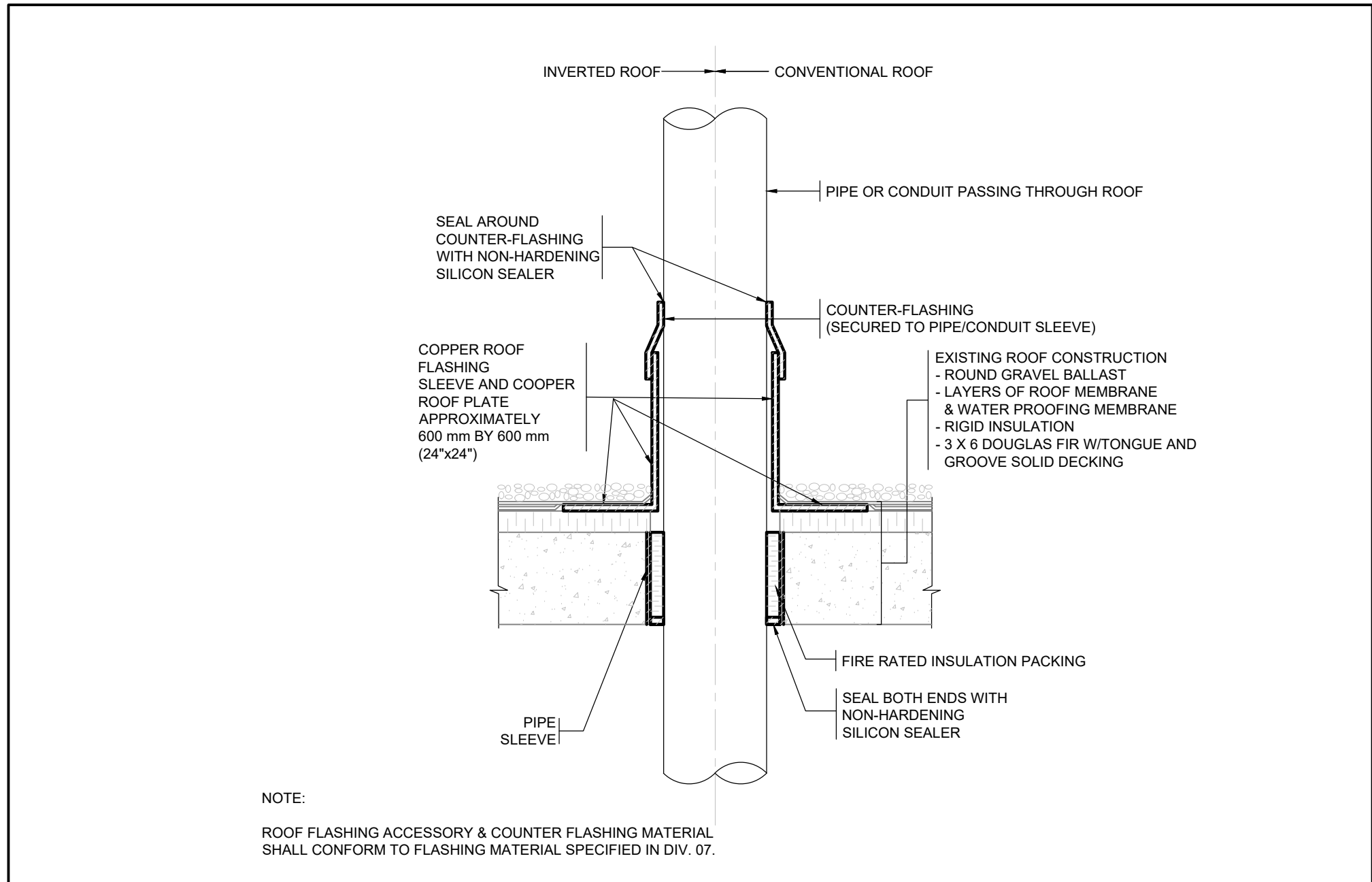
SHEET NO:
E-202



6 ROOF MOUNTED MAINTENANCE RECEPTACLE DETAIL
SCALE: NOT TO SCALE



4 INSTALLATION DETAIL OF TYPICAL PANELBOARD
SCALE: NOT TO SCALE



3 DETAIL OF CONDUIT PENETRATION THROUGH ROOF
SCALE: NOT TO SCALE

LOAD (WATTS)		LENGTH OF WIRE RUN (FEET)															
		13	18	25	30	35	50	60	75	100	150	200	250	300	400		
WIRE SIZE																	
6	12	41	30	21	18	15	11	9	8	6	4	-	-	-	-	-	-
	10	65	47	32	28	24	17	14	11	9	6	-	-	-	-	-	-
VOLT	8	110	75	54	45	39	27	22	18	14	9	7	-	-	-	-	-
12	12	165	110	85	71	61	42	35	29	21	14	10	8	-	-	-	-
	10	260	190	136	112	97	68	52	45	34	23	17	14	11	-	-	-
VOLT	8	415	300	215	180	154	108	90	72	54	36	27	21	16	-	-	-
24	12	660	440	340	284	244	168	140	116	84	56	40	32	26	21		
	10	1040	760	544	448	388	272	208	180	136	92	68	52	44	34		
VOLT	8	1668	1200	860	720	616	432	360	288	216	144	108	84	72	54		

2 EMERGENCY LIGHTING WIRING MAX VOLTAGE DROP
SCALE: NOT TO SCALE

MAXIMUM BRANCH WIRING DISTANCE FOR 120 V SYSTEM AT 3% VOLTAGE DROP									
WIRE SIZE	BREAKER SIZE (AMPERES)	15	20	30	40	50	60	70	80
	MAX. LOAD AT 80% (AMPERES)	12	16	24	32	40	48	56	68
NO.12	-----	24.4	18.3	-----	-----	-----	-----	-----	-----
NO.10	-----	38.1	29.0	19.1	-----	-----	-----	-----	-----
NO.8	-----	59.4	44.2	30.5	22.9	-----	-----	-----	-----
NO.6	-----	91.4	70.1	47.2	35.1	28.2	23.6	-----	-----
NO.4	-----	-----	109.7	73.2	54.9	42.7	38.1	32.0	27.4
NO.2	-----	-----	-----	114.3	85.3	68.6	57.9	50.3	41.1
NO.1	-----	-----	-----	-----	103.6	85.3	73.2	61.0	54.9
NO.1/0	-----	-----	-----	-----	128.0	102.9	85.3	73.2	64.0
NO.2/0	-----	-----	-----	-----	-----	121.9	100.6	86.9	74.7
NO.3/0	-----	-----	-----	-----	-----	-----	118.1	102.1	88.4
NO.4/0	-----	-----	-----	-----	-----	-----	-----	120.4	102.9
250 MCM	-----	-----	-----	-----	-----	-----	-----	-----	114.3
300 MCM	-----	-----	-----	-----	-----	-----	-----	-----	103.6

NOTE: DISTANCES INDICATED IN METRES FROM PANEL TO LOAD FOR SINGLE PHASE.

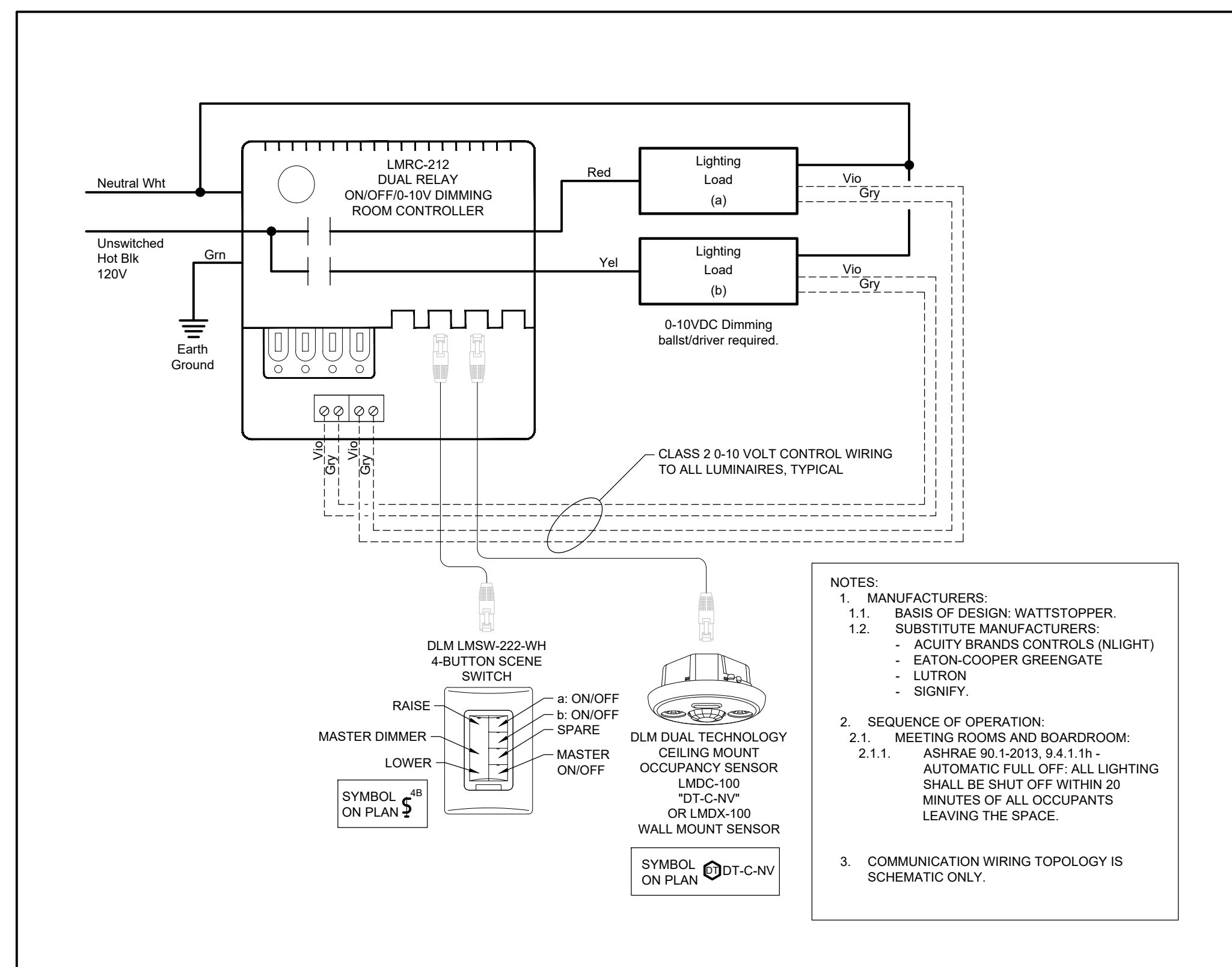
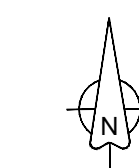
1 MAXIMUM BRANCH WIRING DISTANCE FOR 3% VOLTAGE DROP
SCALE: NOT TO SCALE

SCHEDULE 26 06 50.23 - LIGHTING CONTROL DEVICE SCHEDULE							
SYMBOL	TYPE	DESCRIPTION	BASIS OF DESIGN MANUFACTURERS AND PRODUCT SERIES	CONTROL WIRING	VOLTAGE OUTPUT	MOUNTING	SPACES SERVED
26 2	UI-DIM-2V-2B	DIMMING WALL STATION, ONE-ZONE, 0-10 V DIMMING, CONNECTED TO POWER PACK FOR CONTROL OF ONE ZONE OF LIGHTING.	LEGRAND WATTSTOPPER LMSW-211-WH	DIGITAL	-	WALL	OFFICE/RESOURCE ROOM
4B	UI-DIM-2V-4B	DIMMING WALL STATION, TWO-ZONE, 0-10 V DIMMING, CONNECTED TO POWER PACK FOR CONTROL OF TWO ZONES OF LIGHTING.	LEGRAND WATTSTOPPER LMSW-222-WH	DIGITAL	-	WALL	CLASSROOM
DT-W-2V	DT-W-2V	WALL MOUNT OCCUPANCY SENSOR, 24 V, DUAL TECHNOLOGY SENSOR, MIN 1200 SQ FT COVERAGE	LEGRAND WATTSTOPPER LMDX-100	DIGITAL	-	WALL +/- 10 FEET AFF	
DT-C-2V	DT-C-2V	CEILING MOUNTED OCCUPANCY SENSOR, 24 V, DUAL TECHNOLOGY SENSOR	LEGRAND WATTSTOPPER LMDC-100	DIGITAL	-		
LIGHTING CONTROLS SCHEDULE NOTES: 1. LIGHTING CONTROLS OF ONE MANUFACTURER THROUGH PROJECT TO ENSURE PRODUCT COMPATIBILITY. 2. ALTERNATE MANUFACTURERS: ACUTY BRANDS, COOPER LIGHTING SOLUTIONS, SIGNIFY (FORMERLY PHILIPS LIGHTING), WATTSTOPPER/LEGRAND. 3. DUAL TECHNOLOGY SENSORS: PASSIVE INFRARED/ULTRASONIC, OR PASSIVE INFRARED/MICROPHONIC, DEPENDING ON MANUFACTURER. MICROPHONIC SENSORS ACCEPTABLE IN LIEU OF ULTRASONIC. 4. POSITION CEILING MOUNTED OCCUPANCY SENSORS A MINIMUM 1200 mm (4'-0") FROM NEAREST AIR DIFFUSER, HVAC OUTLETS, HEATING BLOWERS, ETC. 5. CONFIRM INSTALLATION REQUIREMENTS, WIRING DIAGRAMS, ETC. WITH MANUFACTURER'S DETAILS. 6. SUBMIT SHOP DRAWINGS FOR CONSULTANT'S REVIEW PRIOR TO PLACING ANY ORDER. 7. CONFIRM FINISH COLOUR WITH CONSULTANT DURING SUBMITTAL REVIEW.							

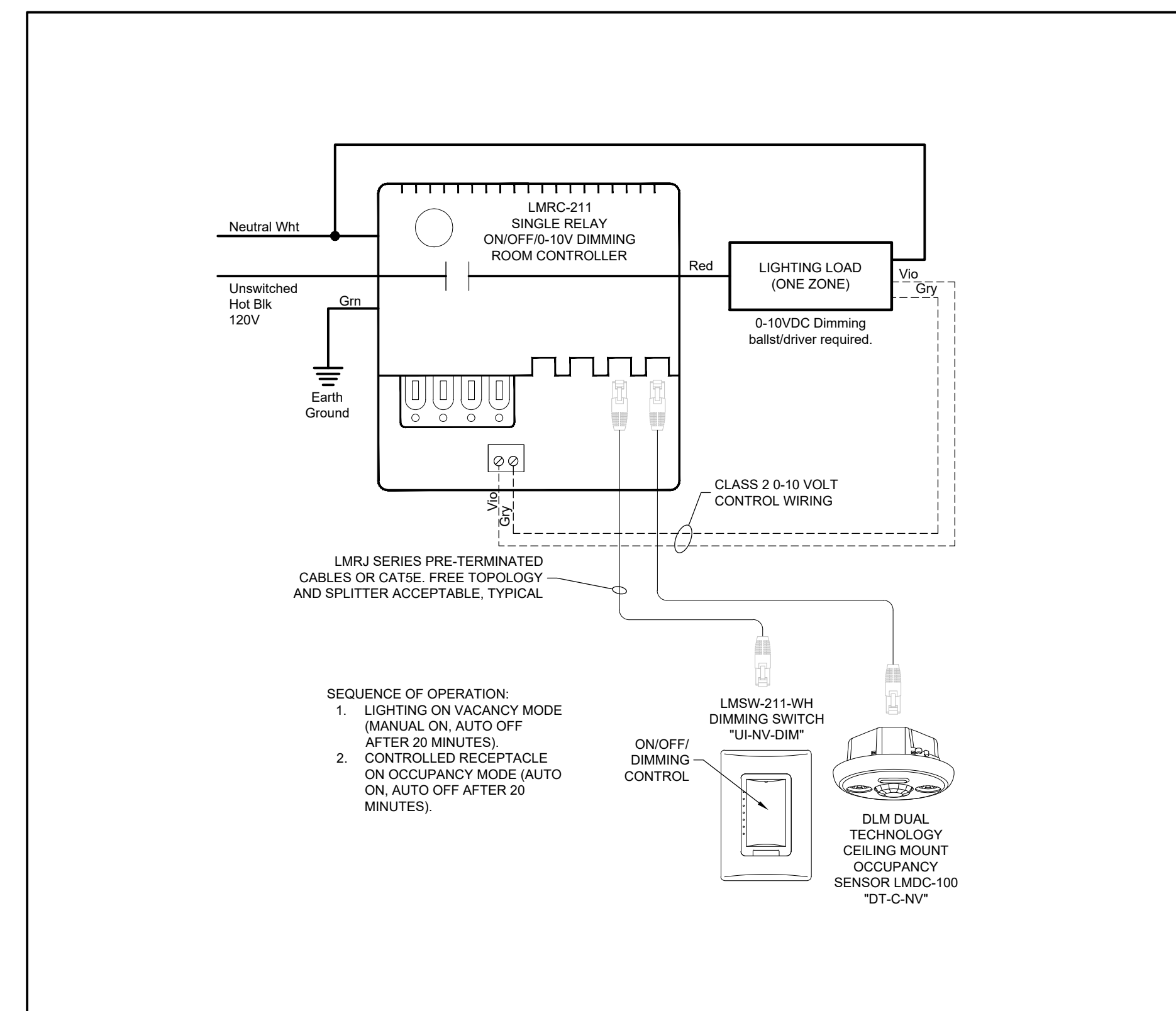
SCHEDULE 26 06 50.16 - LIGHTING FIXTURE SCHEDULE							
SYMBOL	TYPE	DESCRIPTION	BASIS OF DESIGN MANUFACTURER AND CAT NO. SEE NOTE 1	VOLTAGE/ INPUT WATTS	LUMEN PACKAGE (3500 K CCT UNLESS NOTED OTHERWISE) MINIMUM 80 CRI	MOUNTING	REFERENCE
L1		RECESSED 2' x 4' LED TROFFER STYLE LUMINAIRE COMPLETE WITH WHITE FINISH, AND K12 ACRYLIC	PEERLESS ELECTRIC (OMNILUMEN) PEERLUX SERIES	120V	4000 LUMEN 4000K	RECESSED 4-BAR CEILING	
L2		7.5" WIDE x 4" DEEP x 48" LONG WALL MOUNTED LED LUMINAIRE COMPLETE WITH ONE-PIECE COLD ROLLED STEEL HOUSING AND ACRYLIC LENS	PEERLESS ELECTRIC (OMNILUMEN) PEERLUX SERIES CAT #ANM-WM-4-40K-WM-MV	120V	4000 LUMEN 4000K	SURFACE WALL MOUNT	
LIGHTING FIXTURE SCHEDULE NOTES: 1. UNLESS NOTED OTHERWISE, ACCEPTED ALTERNATE MANUFACTURERS AND SUPPLIERS: ACUTY BRANDS LIGHTING, COOPER LIGHTING SOLUTIONS, CREE CANADA, HUBBELL LIGHTING, PEERLESS ELECTRIC, SIGNIFY (FORMERLY PHILIPS LIGHTING), VICO/VIDOR/VIDEOLIGHTING. 2. WHERE AN INCOMPLETE MODEL/CAT NO. IS LISTED, MANUFACTURER/SUPPLIER MUST CONFIRM THE PROPOSED FIXTURE WITH THE CONSULTANT A MINIMUM OF ONE WEEK PRIOR TO TENDER CLOSE. 3. SUBMIT SHOP DRAWINGS FOR CONSULTANT'S REVIEW PRIOR TO PLACING ANY ORDER.							

26 06 20.16 - ELECTRICAL PANELBOARD SCHEDULE												
PANEL ID: LP-GA		VOLTS: 120/208V				LOCATION: EXISTING LEVEL 2 CORRIDOR						
MAIN BUS: 100A				PHASE: 3				FED FROM: EXISTING MAIN SWITCHBOARD				
MAIN BREAKER: NONE				WIRE: 4				FEEDER ENTRY AT: BOTTOM				
TYPE:				MOUNTING: RECESSED				FEEDER: REFER TO DRAWING NOTES				
INTERRUPTING CAPACITY: 10KA MIN				ENCLOSURE RATING:				REMARKS:				
CIR NO.	DESCRIPTION	WATTAGE			BRK R	Ø	BRK R	WATTAGE			DESCRIPTION	CIR NO.
		ØA	ØB	ØC				ØA	ØB	ØC		
1	FAN COIL UNIT 'FCU-301'	268	-	-	15	A	15	234	-	-	FAN COIL UNIT 'FCU-302'	2
3		-	268	-		B	-	-	234	-		4
5	FAN COIL UNIT 'FCU-303'	-	-	268	15	A	15	-	-	234	FAN COIL UNIT 'FCU-304'	6
7		268	-	-		A	15	234	-	-		8
9	FAN COIL UNIT 'FCU-305'	-	37	-	15	B	15	-	37	-	FAN COIL UNIT 'FCU-306'	10
11		-	-	37		C	-	-	37			12
13	FAN COIL UNIT 'FCU-307'	268	-	-	15	A	15	234	-	-	FAN COIL UNIT 'FCU-308'	14
15		-	268	-		B	15	-	234	-		16
17	FAN COIL UNIT 'FCU-309'	-	-	268	15	C	15	-	-	262	FAN COIL UNIT 'FCU-310'	18
19		268	-	-		A	15	262	-	-		20
21		-	3945	-		B	-	-	5167	-		22
23	ROOF MOUNTED CONDENSING UNIT 'CU-1'	-	-	3945	40	C	50	-	-	5167	ROOF MOUNTED CONDENSING UNIT 'CU-2'	24
25		3945	-	-		A	5167	-	-	-		26
27	HVY UNIT - W CONTROL BOXES & HEATER	-	400	-	15**	B	20**	-	1500	-	COND. UNIT 3A-3B-3C HEAT TRACE & PAN HTR	28
29		-	-	400		C	15*	-	-	1200	COND. UNIT CU-1 & CU-2 HEAT TRACE & PAN HTR	30
31	ROOF TOP SERVICE RECEPT	1500	-	-	20**	A	20**	1500	-	-	ROOF TOP SERVICE RECEPT	32
33	SPARE BREAKER	-	0	-	15	B	15	-	0	-	SPARE BREAKER	34
35	301 - RECEPT	-	-	1000	15	C	15	-	-	1000	303 - RECEPT	36
37	307 - RECEPT	1000	-	-	15	A	15	1000	-	-	309 - RECEPT	38
39	SPARE BREAKER	-	0	-	15	B	15	-	0	-	SPARE BREAKER	40
41	SPARE BREAKER	-	-	0	20	C	20	-	-	0	SPARE BREAKER	42
TOTAL ØA: ___ W, TOTAL ØB: ___ W, TOTAL ØC: ___ W												
NOTES: * - PROVIDE LOCKABLE BREAKER ** - PROVIDE GFI TYPE BREAKER *** - COORDINATE EXACT BREAKER SIZE WITH EQUIPMENT SHOP DRAWINGS R - RECEPTACLE L - LIGHTING CIRCUIT NUMBERS ARE GIVEN FOR GROUPING ONLY. SITE VERIFY AVAILABLE CIRCUIT BREAKER SPACES IN PANELS DURING TENDER WALKTHROUGH.												

26 06 20.16 - ELECTRICAL PANELBOARD SCHEDULE												
PANEL ID: LP-G			VOLTS: 120/208V				LOCATION: EXISTING LEVEL 2 CORRIDOR					
MAIN BUS: 225A			PHASE: 3				FED FROM: EXISTING MAIN SWITCHBOARD					
MAIN BREAKER: NONE			WIRE: 4				FEEDER ENTRY AT: BOTTOM					
TYPE:			MOUNTING: RECESSED				FEEDER: EXISTING					
INTERRUPTING CAPACITY: 10KA MIN			ENCLOSURE RATING:				REMARKS:					
CIR NO.	DESCRIPTION	WATTAGE			BRK R	Ø	BRK R	WATTAGE			DESCRIPTION	CIR NO.
		ØA	ØB	ØC				ØA	ØB	ØC		
1	EXISTING LOAD	0	-	-	40	A	15	0	-	-	EXISTING LOAD	2
3		-	0	-		B	15	-	0	-	EXISTING LOAD	4
5	EXISTING LOAD	-	-	0	15	C	15	-	-	0	EXISTING LOAD	6
7	EXISTING LOAD	0	-	-	15	A	15	0	-	-	EXISTING LOAD	8
9	EXISTING LOAD	-	0	-	15	B	15	-	0	-	EXISTING LOAD	10
11	EXISTING LOAD	-	-	0	15	C	15	-	-	0	EXISTING LOAD	12
13	EXISTING LOAD	0	-	-	15	A	15	0	-	-	EXISTING LOAD	14
15	EXISTING LOAD	-	0	-	15	B	15	-	0	-	EXISTING LOAD	16
17	EXISTING LOAD	-	-	0	15	C	15	-	-	0	EXISTING LOAD	18
19	SPARE BRKR	0	-	-	15	A	15*	0	-	-	EXISTING LOAD	20
21	EXISTING LOAD	-	0	-	15	B	15*	-	0	-	EXISTING LOAD	22
23	301 - RECEPT	-	-	1000	15	C	15	-	-	0	EXISTING LOAD	24
25	301, 303 - RECEPT	1000	-	-	15	A	15	1000	-	-	307 - RECEPT	26
27	303 - RECEPT	-	1000	-	15	B	15	-	1000	-	307, 309 - RECEPT	28
29	302, 304 - RECEPT	-	-	1000	15	C	15	-	-	1000	302 - RECEPT	30
31	304 - RECEPT	1000	-	-	15	A	15	1000	-	-	304 - RECEPT	32
33	308 - RECEPT	-	1000	-	15	B	15	-	1000	-	308 - RECEPT	34
35	310 - RECEPT	-	-	1000	15	C	15	-	-	1000	308 - RECEPT	36
37	301, 303 - RECEPT	1000	-	-	15	A	15	1000	-	-	302 - REC	38
39	310 - REC	-	1000	-	15	B	15	-	1000	-	310 - REC	40
41	SPARE BRKR	0	-	-	15	A	15*	0	-	-	SPARE BRKR	42
TOTAL ØA: ____ W, TOTAL ØB: ____ W, TOTAL ØC: ____ W												
NOTES:												
* - PROVIDE LOCKABLE BREAKER												
** - PROVIDE GFI TYPE BREAKER												
*** - COORDINATE EXACT BREAKER SIZE WITH EQUIPMENT SHOP DRAWINGS												
R - RECEPTACLE												
L - LIGHTING												
CIRCUIT NUMBERS ARE GIVEN FOR GROUPING ONLY. SITE VERIFY AVAILABLE CIRCUIT BREAKER SPACES IN PANELS DURING TENDER WALKTHROUGH.												

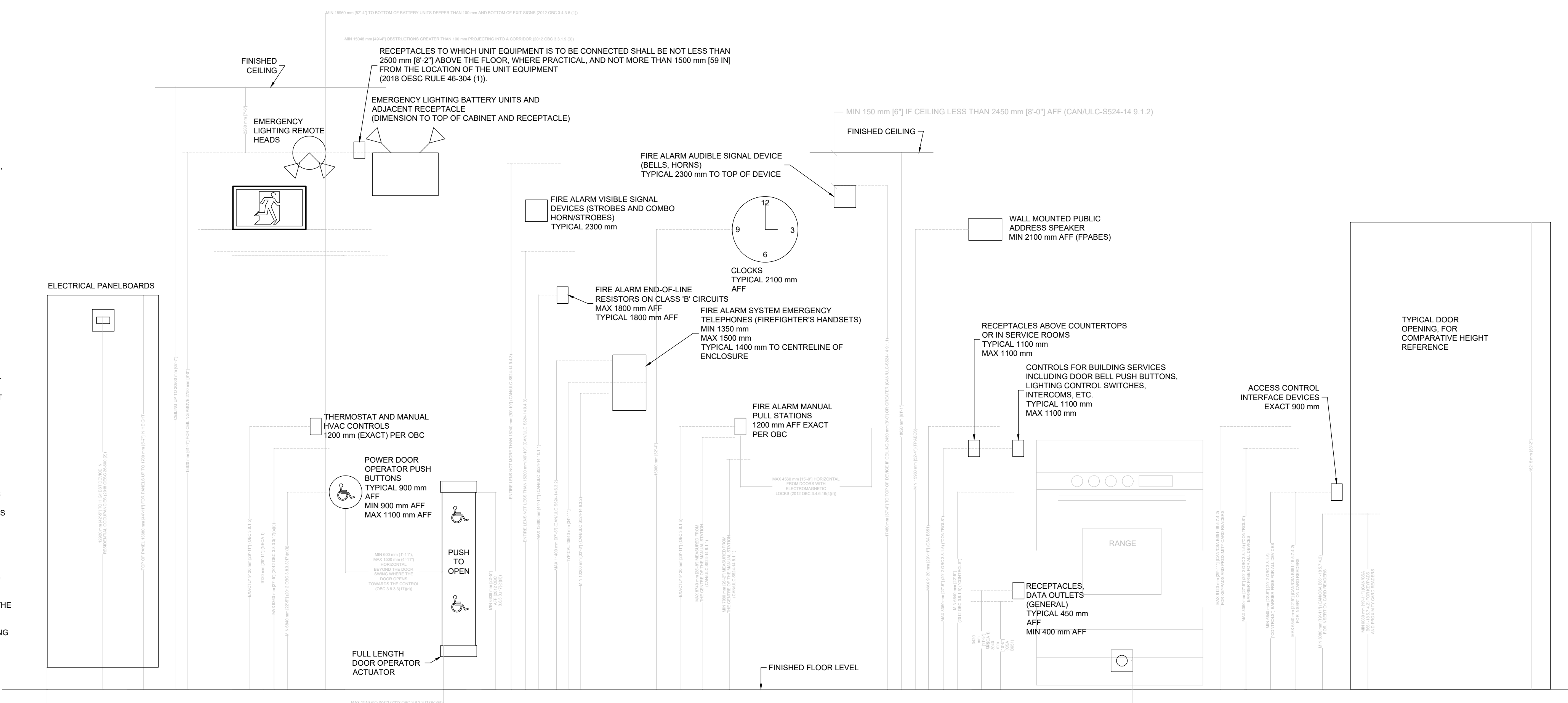


3 LIGHTING CONTROL DETAIL FOR TYPICAL CLASSROOMS
SCALE: NOT TO SCALE



2 LIGHTING CONTROL DETAIL FOR ROOMS #305 & #306
SCALE: NOT TO SCALE

- GENERAL NOTES:
1. DEVICE DIMENSIONS TO THE CENTRELINE OF THE DEVICE, UNLESS NOTED OTHERWISE. METRIC DIMENSIONS GOVERN.
 2. DEVICES, INCLUDING ACCESS CONTROL, INTERFACE DEVICES, DOOR OPERATOR PUSH BUTTONS, AND FIRE ALARM MANUAL PULL STATIONS ARE NOT TO BE INSTALLED ON HOLLOW METAL DOOR FRAMES UNLESS OTHERWISE NOTED.
 3. DEVICE MOUNTING HEIGHT RULES:
 - 3.1. EXACT DIMENSIONS, WHERE INDICATED, MUST BE FOLLOWED, AND NO DEVIANCE IS PERMITTED.
 - 3.2. TYPICAL DIMENSIONS, WHERE INDICATED, ARE A PREFERENCE OF THE DESIGNER FOR CONSISTENCY OF INSTALLATION.
 - 3.3. WHERE CIRCUMSTANCES PREVENT A TYPICAL DIMENSION FROM BEING MET, DEVICES MAY BE INSTALLED WITHIN THE RANGE OF MINIMUM AND MAXIMUM THAT MEETS ALL THE REFERENCED DOCUMENTS, CONFIRM EXACT MOUNTING HEIGHT WITH THE CONSULTANT.
 4. METRIC DIMENSIONS GOVERN. DIMENSIONS PROVIDED IN OTHER UNITS PROVIDED FOR EASE OF REFERENCE ONLY.
 5. REFER TO ARCHITECT OR INTERIOR DESIGNER'S DRAWINGS FOR ELEVATIONS OR MOUNTING HEIGHTS NOT DETAILED HERE.
- THIS DETAIL IS SPECIFIC TO INSTALLATIONS IN ONTARIO. OWNERS ACCESSIBILITY DESIGN GUIDELINES MAY BE MORE STRINGENT.
- REFERENCES AND DOCUMENT ORDER OF PRECEDENCE FOR ACCESSIBLE DESIGN:
1. 2012 ONTARIO BUILDING CODE (OBC), WITH AMENDMENTS EFFECTIVE JAN 1, 2015 (MANDATORY)
 2. CAN/ULC S524-06 - INSTALLATION OF FIRE ALARM SYSTEMS (MANDATORY)
 3. 2018 ONTARIO ELECTRICAL SAFETY CODE (OESC)
 4. CAN/CSA B561-18 - ACCESSIBLE DESIGN FOR THE BUILT ENVIRONMENT (VOLUNTARY STANDARD)
 5. FINAL PROPOSED ACCESSIBLE DESIGN STANDARD - JULY, 2010 (FPABES). THIS DOCUMENT WAS SUBMITTED TO THE ONTARIO MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING FOR CONSIDERATION IN AN UPCOMING REVISION TO THE ONTARIO BUILDING CODE. TO DATE, THE RECOMMENDATIONS HAVE NOT BEEN ACTED UPON AND THE FPABES IS THEREFORE NOT MANDATORY.
 6. NECA 1-2010: STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION (TABLE 3 - TYPICAL MOUNTING HEIGHTS).
 7. GOOD ENGINEERING JUDGEMENT AND MANUFACTURER'S RECOMMENDATIONS.



1 TYPICAL MOUNTING HEIGHTS OF WALL MOUNTED DEVICES
SCALE: NOT TO SCALE

3	ISSUED WITH ADDENDUM #E-1	2025-05-15
3	ISSUED FOR TENDER	2025-05-02
2	ISSUED FOR DD CLIENT REVIEW	2025-04-11
1	ISSUED FOR DD CLIENT REVIEW	2025-03-26

ISSUE DATE:

PROJECT:
ST ANDREW'S
SENIOR PUBLIC
SCHOOL -
AIR CONDITIONING
UPGRADE

65 VICTORIA AVE. CAMBRIDGE, ON N1S 1X2

SHEET TITLE:
ELECTRICAL
DETAIL SHEET No.2

PROJECT NO: 22988
SCALE: AS NOTED
DRAWN BY: CW
REVIEWED BY: BD/TWS

SHEET NO:
E-302

REFLECTED CEILING PLAN GENERAL NOTES

- REFER TO MECHANICAL DOCUMENTS AND SPECIFICATIONS FOR FULL DESCRIPTION OF DIFFUSER TYPES AND QUANTITIES, REFER TO ARCHITECTURAL FOR LOCATION ONLY.
- REFER TO MECHANICAL AND ELECTRICAL DOCUMENTS FOR OTHER ITEMS TO BE INCORPORATED BUT NOT SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLAN. IF SUCH ITEMS ARE DRAWN IN ARCHITECTURAL DRAWINGS, IT IS FOR LOCATION ONLY.
- REFLECTED CEILING PLANS ARE TO BE READ IN CONJUNCTION WITH DETAILS AND DRAWINGS SHOWN ELSEWHERE WITHIN THE CONTRACT DOCUMENTS. IN THE EVENT OF DISCREPANCIES THE MORE STRINGENT REQUIREMENTS GOVERN (IE. GYPSUM BULKHEADS SHOWN ON REFLECTED CEILING PLANS MAY NOT APPEAR IN BUILDING SECTIONS BUT ARE REQUIRED TO BE INCORPORATED).
- UNLESS NOTED OTHERWISE: ALL INTERIOR PARTITION ASSEMBLIES AND BULKHEADS TO CONTINUE TO US OF FLOOR SHEATHING/DECK/SLAB AND ROOF SHEATHING/DECK/SLAB, WITH US OF BULKHEADS A MIN OF 25mm BELOW ADJACENT ACOUSTIC TILE FINISH.
- ALL EXPOSED MECHANICAL AND ELECTRICAL SERVICES AND STRUCTURE TO BE PAINTED. REFER TO MECHANICAL AND ELECTRICAL DOCUMENTS FOR SPECIFIC EXCLUSIONS. ALLOW FOR TWO COLOURS FROM MANUFACTURES FULL RANGE, UNLESS OTHERWISE NOTED.
- COORDINATE THE HEIGHT OF BULKHEADS WITH CEILING HEIGHTS AND INTERIOR DETAILS THROUGHOUT.
- ALL BULKHEADS CONTAINING MECHANICAL AND/OR ELECTRICAL ELEMENTS (FOR EXAMPLE: AIR DIFFUSERS), TO BE FRAMED AND FURRED ACCORDINGLY TO ALLOW FOR CLEARANCES AND PASSAGE OF ALL SUCH ELEMENTS.
- PROVIDE ADDITIONAL FRAMING AND HANGERS AS REQUIRED TO BRIDGE AROUND INTERFACES, INCLUDING BUT NOT LIMITED TO MECHANICAL, ELECTRICAL, STRUCTURAL, AND PARTITIONS.
- CEILING ACCESS PANELS: ABOVE SUSPENDED CEILINGS, LOCATE MECHANICAL AND ELECTRICAL ITEMS THAT NEED ACCESS, WITHIN 600mm HORIZONTALLY AND 1000mm VERTICALLY FROM ALL CEILING ACCESS PANELS.
- CONTRACTOR TO PROVIDE CONDUIT LAYOUT SHOP DRAWINGS FOR ALL SURFACE MOUNTED CONDUIT AT EXPOSED CEILING LOCATIONS, AND EXPOSED COLUMN LOCATIONS, FOR CONSULTANT REVIEW PRIOR TO INSTALLATION. RUN CONDUIT HIDDEN ALONG BEAM LENGTHS AND BETWEEN JOISTS IN CAVITY. BENDS TO BE 90 DEGREES.

REFLECTED CEILING PLAN FIXTURE LEGEND

- EXISTING PANEL LIGHT FIXTURE
- NEW PANEL LIGHT FIXTURE
- NEW WALL MOUNTED LIGHT FIXTURE
- EXISTING DIFFUSER GRILLE
- NEW DIFFUSER GRILLE
- EXISTING SPRINKLER HEAD, SEE MECHANICAL DWGS.
- NEW SPRINKLER HEAD, SEE MECHANICAL DWGS.
- EX. REINSTATED AUDIO SYSTEM, SEE ELECTRICAL DWGS.
- EX. REINSTATED PROJECTOR SYSTEM, SEE ELECTRICAL DWGS.

REFLECTED CEILING PLAN LEGEND

- EXISTING WALL TO REMAIN
- EXISTING CEILING TO REMAIN



1. ALL DATUMS ARE REFERENCED TO T/O F/F GROUND UNLESS OTHERWISE NOTED
2. REFER TO ROOF DETAILS FOR ALL MECHANICAL PENETRATIONS THROUGH ROOF MEMBRANE

- 01 NEW ROOF TO TIE INTO EXISTING MEMBRANES AND BARRIERS
- 02 EX ROOF DRAIN

[illegible]

3	05/16/2025	ADDENDUM #4
2	05/02/2024	ISSUED FOR TENDER
1	11/14/2023	DESIGN DEVELOPMENT

NO.	DATE	DESCRIPTION
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ST ANDREW'S
SENIOR PUBLIC
SCHOOL

65 VICTORIA AVE. CAMBRIDGE, ON N1S 1X2

ROOF LEVEL PLAN

PROJECT NO: 22988

SCALE: As indicated

DRAWN BY:

REVIEWED BY:

SHEET NO:

A110