

**Universal Washroom Renovation Holy Angels Learning  
Center  
102 Wellington Street East. Sault Ste. Marie, ON**

Date

**May 22, 2026**

PART 1 - General

- .1 Insert this Addendum in Section 00100 of the Specifications.
- .2 This Addendum is issued prior to tender closing to provide revisions to the Contract Documents.
- .3 Such revisions shall become part of the Contract Documents and shall change the original contract documents only in the manner and extent stated.
- .4 Should the instructions provided herein conflict with the requirements included in the previously issued contract documents or addenda, these instructions shall supersede.
- .5 Revise List of Contract Drawings in Specification Section 00 01 15 "List of Contract Documents" under subsection 1.3.1 to include and/or remove drawings as per the following Addendum.
- .6 Revise Table of Contents in Specification Section 00 01 11 "Table of Contents" to include and/or remove specification sections as per the following addendum.

PART 2 – Contract Documents

Drawings

- .1 Refer to Dwg. a0.00 – TITLE PAGE
  - .1 Replace with attached Dwg **a0.00r1 – TITLE PAGE**
- .2 ADD Dwg. **e0.0 – ELECTRICAL SPECIFICATIONS**
- .3 ADD Dwg. **e0.1 – ELECTRICAL LEGEND AND BILL OF MATERIALS**
- .4 ADD Dwg. **e2.00 – LEVEL 01 OVERALL ELECTRICAL PLAN**
- .5 ADD Dwg. **e2.10 – LEVEL 01 – POWER AND AUXILLARY SYSTEMS, EXISTING / REMOVALS & NEW**
- .6 ADD Dwg. **e3.10 – LEVEL 01 – LIGHTING AND CEILING DEVICES EXISTING/REMOVALS & NEW**

Specifications

- .1 Add Specification **Section 26 00 0 – Electrical General**

Questions*Received via email***1.**

Q: N/A

A: N/A

**Attachments**

<u>Reference Number</u>	<u>Name/Description</u>	<u>Size</u>	<u>Pages</u>
1	Drawing a0.00 – TITLE PAGE	11x17	1
2	Drawing e0.0 – ELECTRICAL SPECIFICATIONS	11x17	1
3	Drawing e0.1 – ELECTRICAL LEGEND AND BILL OF MATERIALS	11x17	1
4	Drawing e2.00 – LEVEL 01 OVERALL ELECTRICAL PLAN	11x17	1
5	Drawing e2.10 – LEVEL 01 – POWER AND AUXILLARY SYSTEMS, EXISTING / REMOVALS & NEW	11x17	1
6	Drawing e3.10 – LEVEL 01 – LIGHTING AND CEILING DEVICES EXISTING/REMOVALS & NEW	11x17	1
7	Specification 26 00 00 – Electrical General	8.5x11	5

**END OF ADDENDA**

# Universal Washroom Renovation Holy Angels Learning Center

102 Wellington Street East, Sault Ste. Marie, Ontario  
for the  
Huron-Superior Catholic District School Board

## Volume 1 - Drawings Architectural, Structural, Mechanical and Electrical

### Volume Index

Volume 1 - Drawings - Architectural, Structural, Mechanical and Electrical  
Volume 2 - Specification

### Drawing List

Volume 1 - Architectural, Structural, Mechanical, Electrical Drawings 11x17	
Title	
V1 title	Title Sheet
<b>Architectural</b>	
a 0.10	General Information & Building Assemblies
a 0.20	Level 01 - Context Plan
a 2.00	Level 01 - Washrooms Existing Removals & New
a 3.00	Level 01 - Reflected Ceiling Plan Existing Removals & New
a 12.00	Door Details
a 13.00	Washroom Specialties
afp 2.00	Level 01 - Floor Patterning Plan & Paint Plan
<b>Structural</b>	
s 0.00	Structural Work Specifications
s 1.00	Foundation and Ground Floor Plan and Typical Details
s 2.00	Second Floor Framing Plan and Lintel Schedule
<b>Mechanical</b>	
m 0.00	Mechanical Notes
m 0.10	Mechanical Notes, Legends, & Schedules
m 1.10	Level 1 Plumbing Plan - Washrooms - Existing / Removals & New
m 4.10	Level 1 HVAC Plan - Washrooms - Existing / Removals & New
<b>Electrical</b>	
e 0.00	Electrical Specifications
e 0.10	Electrical Legend and Bill of Materials
e 2.00	Overall Electrical Plan
e 2.10	Level 1 - Power and Auxiliary Systems - Existing / Removals & Proposed New
e 3.10	Level 1 - Lighting and Ceiling Devices - Existing / Removals & Proposed New

Prime Consultant  
Architecture, Mechanical and Electrical Engineering



INTEGRATED DESIGN  
ENGINEERING + ARCHITECTURE

421 Bay Street, Suite 507, Sault Ste. Marie Ont. Ca.  
Tele: (705) 949-5291 - Email: info@integrateddesign.ca

Structural  
Structural Engineering



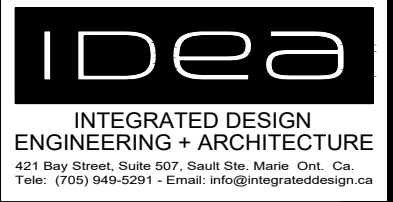
A2S CONSULTING ENGINEERS

202-123 March St., Sault Ste. Marie Ont. Ca.  
Tele: (705) 251-0420 - Email: info@a2s.ca

- 1.1 REFERENCE  
COMPLY WITH GENERAL CONDITIONS OF THE CONTRACT AND DIVISION 1.
- 1.2 INTENT  
PROVIDE EACH ITEM MENTIONED OR INDICATED OF QUALITY AND SUBJECT TO QUALIFICATIONS NOTED; PERFORM ACCORDING TO CONDITIONS STATED EACH OPERATION PRESCRIBED; AND PROVIDE THEREFORE ALL LABOUR, MATERIAL, EQUIPMENT, INCIDENTALS AND SERVICES REQUIRED TO COMPLETE THE INSTALLATION.
- 1.3 CUTTING, PATCHING, FINISHING, FIRESTOPPING AND FIREPROOFING
- ALL CUTTING, PATCHING AND FINISHING FOR DIVISION 26 TO BE COORDINATED WITH THE GENERAL CONTRACTOR.
  - PROVISION OF ALL FIRESTOPPING REQUIRED FOR WIRED SYSTEMS AND PENETRATION OF RATED WALLS, FLOORS AND PARTITIONS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR; TO BE FIELD COORDINATED WITH EXISTING CONDITIONS WHETHER INDICATED OR NOT INDICATED ON THE DRAWINGS.
- 1.4 RECORD DRAWINGS  
MAKE A SET OF WHITE PRINTS AS THE JOB PROGRESSES, CHANGES MADE THROUGH ANY APPROVED CHANGE ORDER AS WELL AS THE LOCATION OF FEEDERS, CONDUIT RUNS, JUNCTION BOXES, AND ALL CHANGES IN CIRCUITING, LOCATION OF EQUIPMENT, RUNS OF CONDUITS, WIRING, ETC. FROM THAT ORIGINALLY SHOWN, SO THAT ON THE COMPLETION OF THE JOB THE RECORD DRAWINGS WILL SHOW THE EXACT LOCATION AS ACTUALLY INSTALLED. LOCATION OF CONCEALED AND BURIED DUCTS, CONDUITS AND CABLES SHALL BE DIMENSIONED FROM FIXED REFERENCE POINTS. RECORD DRAWINGS SHALL BE KEPT AT THE SITE AND SHALL BE BROUGHT UP TO DATE AS THE WORK PROGRESSES. SUBMIT COMPLETED RECORD DRAWINGS BEFORE FINAL CERTIFICATE OF JOB ACCEPTANCE IS ISSUED.
- 1.5 DOCUMENTS REQUIRED  
THE FOLLOWING DOCUMENTS SHALL BE SUBMITTED TO THE CONSULTANT ON THE COMPLETION OF THE PROJECT AS DESCRIBED ABOVE;
- ELECTRICAL INSPECTION CERTIFICATE
  - GUARANTEE
  - AS-BUILT DRAWINGS
  - FIRE ALARM VERIFICATION CERTIFICATE AND TECHNICIAN NOTES
- 1.6 GUARANTEES  
AFTER THE WORK IS COMPLETE BUT BEFORE FINAL PAYMENT, GIVE THE OWNER A WRITTEN GUARANTEE THAT YOU WILL, AT NO CHARGE TO THE OWNER, REPLACE OR REPAIR ANY DEFECTS IN WORKMANSHIP AND MATERIALS NOT DUE, IN THE OPINION OF THE CONSULTANT TO MISUSE OR NEGLECT. GUARANTEE SHALL COVER A PERIOD OF 12 MONTHS FROM THE DATE OF ACCEPTANCE OF THE WORK BY THE CONSULTANT. THIS GUARANTEE SHALL IN NO WAY SUPPLANT ANY OTHER GUARANTEE OR GUARANTEES OF LONGER PERIOD, BUT SHALL BE BINDING ON ALL OTHER WORK NOT OTHERWISE COVERED.
- 1.7 CODES, PERMITS AND INSPECTION
- ALL WORK SHALL COMPLY STRICTLY TO THE REQUIREMENTS OF THE LATEST EDITIONS OF THE CANADIAN ELECTRICAL 'CSA' CODE AS ADOPTED AND AMENDED BY PROVINCIAL REGULATIONS AND THE ONTARIO BUILDING CODE. THESE CODES AND ANY ADDITIONAL REQUIREMENTS OF THE POWER UTILITY SHALL FORM AN INTEGRAL PART OF THIS SPECIFICATION. ALL EQUIPMENT SHALL BE CSA APPROVED. WHERE DRAWING CALLS FOR EQUIPMENT, WIRING OR OTHER REQUIREMENTS EXCEEDING THE MINIMUM REQUIREMENTS OF THE CODE, THE DRAWING SHALL BE FOLLOWED.
  - BEFORE STARTING ANY WORK, SUBMIT THE REQUIRED NUMBER OF COPIES OF THE ELECTRICAL DRAWINGS TO THE ELECTRICAL SAFETY AUTHORITY AND BUILDING INSPECTION DEPARTMENT, FOR THEIR APPROVAL AND COMMENTS.
  - PAY ALL FEES FOR EXAMINATION OF DRAWINGS AND OBTAIN ALL PERMITS REQUIRED AND PAY ALL PERMIT AND INSPECTION FEES.
  - ARRANGE FOR INSPECTION OF ALL WORK BY THE ELECTRICAL SAFETY AUTHORITY AND BUILDING INSPECTION DEPARTMENT. ON COMPLETION OF THE WORK, PRESENT TO THE OWNER THE FINAL UNCONDITIONAL CERTIFICATE OF APPROVAL.

- 1.8 SHOP DRAWINGS  
ON AWARD OF CONTRACT, SUBMIT FOR REVIEW LIST OF DELIVERY DATES AND SHOP DRAWINGS FOR ALL EQUIPMENT.
- 1.9 ELECTRICAL MATERIALS AND METHODS  
ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS, NOISE AND VIBRATION. ALL EQUIPMENT SHALL BE CSA APPROVED, OR WITH SPECIAL ELECTRICAL SAFETY AUTHORITY APPROVAL.
- 1.10 COORDINATION  
SCHEDULE AND COORDINATE ALL WORK WITH OTHER TRADES. RELOCATE OR REPLACE CONDUIT OR EQUIPMENT WHICH INTERFERES WITH OTHER TRADES DUE TO LACK OF COORDINATION WITH OTHER TRADES.
- 1.11 TEMPORARY USAGE  
THE OWNER SHALL HAVE TEMPORARY USE OF INSTALLATION PRIOR TO FINAL ACCEPTANCE.
- 1.12 EXTRAS, RELOCATION OF EQUIPMENT  
ALL CLAIMS FOR EXTRAS SHALL BE SUPPORTED BY WRITTEN AUTHORIZATION AND ITEMIZED MATERIAL AND LABOUR COST BREAKDOWNS. THERE SHALL BE NO EXTRA CLAIM FOR RELOCATION OF ANY EQUIPMENT WITHIN 3m (10 FEET) OF THE ORIGINAL LOCATION PROVIDED THE REQUEST TO RELOCATE IT IS GIVEN BEFORE IT IS INSTALLED.
- 1.13 IDENTIFICATION  
ALL ELECTRICAL EQUIPMENT MOUNTED AND CONNECTED BY THIS CONTRACTOR, WHETHER SUPPLIED BY HIM OR NOT, SHALL BE IDENTIFIED BY MEANS OF LABELS.
- 1.14 WIRING METHOD
- ALL WIRING SHALL BE CONCEALED WHERE POSSIBLE EXCEPT THAT CONDUITS IN ELECTRICAL ROOMS AND OTHER AREAS NOTED MAY BE INSTALLED ON SURFACE.
    - RIGID STEEL CONDUITS USED IN
      - ALL EXPOSED WIRING SUBJECT TO MECHANICAL DAMAGE. - ALL AREAS REQUIRED BY CODE.
    - EMT CONDUITS CAN BE USED WHERE PERMITTED BY CODE.
      - EXPOSED WIRING.
      - IN FURRED WALLS.
  - ARMORED TECK CABLE (TECK90) MAY BE USED FOR EXTERIOR CONNECTIONS FOR NEW EXTERIOR CANOPY LIGHTS.
- 1.15 CONDUCTORS  
ALL CONDUCTORS SHALL BE COPPER 600V GRADE WITH INSULATION TYPE RW90 OR AS NOTED. MINIMUM CONDUCTOR SIZE SHALL BE # 12AWG AND COLOUR CODED.
- 1.16 WIRING FOR MECHANICAL WORK  
MECHANICAL TRADE WILL SUPPLY ALL STARTERS, CONTROL TRANSFORMERS AND CONTROLS FOR EQUIPMENT SUPPLIED BY THEM AND WILL MOUNT ALL THESE EXCEPT FOR WALL MOUNTED STARTERS AND WALL MOUNTED LINE VOLTAGE CONTROLS, WHICH SHALL BE MOUNTED BY ELECTRICAL TRADE. ELECTRICAL TRADE SHALL DO ALL POWER WIRING, WHICH IS WIRING WHICH CARRIES THE LOAD CURRENT OF THE MOTOR, HEATER, HVAC OR OTHER EQUIPMENT SUPPLIED BY MECHANICAL TRADE. MECHANICAL TRADE WILL DO ALL OTHER RELATED WIRING. i.e. CONTROL WIRING
- 1.17 QUANTITIES  
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL MATERIAL QUANTITIES AND LENGTHS SHOWN IN THESE DRAWING FOR CORRECTNESS.
- 1.18 PANEL SCHEDULE LABELING  
TRACE ALL EXISTING CIRCUITS AND UPDATE EXISTING PANEL SCHEDULES FOR ELECTRICAL PANELS FEEDING IMPACTED AREAS PRIOR TO PROCEEDING WITH ANY REMOVALS WORK TO ESTABLISH THE EXISTING CONDITION DURING CONSTRUCTION, COORDINATE ALL CIRCUIT TRACING IMPACTING POWER FEEDS TO CRITICAL AREAS OUTSIDE OF NORMAL OPERATING HOURS AND ENSURE ALL ARE BACK ONLINE PRIOR TO REGULAR OPERATING HOURS TO AVOID IMPACT TO OWNER SYSTEMS, ETC. AT COMPLETION OF PROJECT, UPDATE ALL AFFECTED PANELS WITH TYPE WRITTEN PANEL SCHEDULES TO SUIT ACTUAL DEVICES/LOADS BEING SERVED.

- 2.0 FIRE ALARM SYSTEM
- SUPPLY AND INSTALL EQUIPMENT AND ACCESSORIES NOTED ON DRAWINGS FOR FIRE ALARM SYSTEM.
  - COMPLETE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE CAN/ULC S524 'STANDARD FOR THE INSTALLATION OF FIRE ALARM SYSTEMS'.
  - WHERE THE REQUIREMENTS OF THIS SECTION EXCEED THE MINIMUM REQUIREMENTS OF THE ULC STANDARD, THESE SPECIFICATIONS SHALL GOVERN.
  - THERMAL DETECTORS SHALL HAVE TWIST LOCK MOUNTING FOR EASE OF MAINTENANCE, TESTING AND REPLACEMENT. ACTIVATION OF THE FIXED TEMPERATURE ELEMENT IN THE DETECTOR SHALL BE INDICATED BY A VISIBLE MEANS.
  - WIRING SHALL BE SIZED IN ACCORDANCE WITH CLASS 2 REQUIREMENTS, AND SHALL BE PROTECTED FROM MECHANICAL INJURY OR OTHER INJURIOUS CONDITIONS SUCH AS MOISTURE, EXCESSIVE HEAT OR CORROSIVE ACTION IN ACCORDANCE WITH CLASS 1 REQUIREMENTS. CONDUCTORS SHALL BE SOLID COPPER, SIZED TO SYSTEM MANUFACTURER'S REQUIREMENTS.
  - VERIFICATION AND CERTIFICATION OF FIRE ALARM EQUIPMENT SHALL COMPLY WITH THE REQUIREMENTS OF CAN/ULC STANDARDS S536 AND S537. THE MANUFACTURER SHALL MAKE AN INSPECTION OF THE FIRE ALARM EQUIPMENT, INCLUDING THOSE COMPONENTS NECESSARY TO THE DIRECT OPERATION OF THE SYSTEM SUCH AS MANUAL STATIONS, THERMAL DETECTORS AND CONTROLS, WHETHER OR NOT MANUFACTURED BY THE MANUFACTURER. THE INSPECTION SHALL COMPRISE AN EXAMINATION OF SUCH EQUIPMENT FOR THE FOLLOWING:
    - THAT THE TYPE OF EQUIPMENT INSTALLED IS THAT DESIGNATED IN THE SPECIFICATIONS.
    - THAT THE WIRING CONNECTIONS TO ALL EQUIPMENT COMPONENTS SHOW THAT THE INSTALLER UNDERTOOK TO HAVE OBSERVED ULC AND CSA REQUIREMENTS.
    - THAT EQUIPMENT OF THE MANUFACTURER'S HAS BEEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND THAT ALL SIGNALING DEVICES OF WHATEVER MANUFACTURER HAVE BEEN OPERATED OR TESTED TO VERIFY THEIR OPERATION; AND
    - THAT THE SUPERVISORY WIRING OF THOSE ITEMS OF EQUIPMENT CONNECTED TO A SUPERVISED CIRCUIT IS OPERATING AND THAT THE GOVERNMENTAL REGULATIONS, IF ANY, CONCERNING SUCH SUPERVISORY WIRING, HAVE BEEN MET TO THE SATISFACTION OF INSPECTING OFFICIALS..
  - THE MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE WITH RESPECT TO ANY CHANGES NECESSARY TO CONFORM TO THE ABOVE. DURING THE PERIOD OF INSPECTION BY THE MANUFACTURER, MAKE AVAILABLE TO THE MANUFACTURER ELECTRICIANS AS DESIGNATED BY THE MANUFACTURER. THE VERIFICATION MUST MEET CAN STANDARD S537 AND OPEN FLAME IS NOT TO BE USED FOR TESTING.
- ON COMPLETION OF THE INSPECTION AND WHEN ALL OF THE ABOVE CONDITIONS HAVE BEEN COMPLIED WITH, AND DEFICIENCIES INDICATED IN PRELIMINARY REPORT HAVE BEEN CORRECTED, THE MANUFACTURER SHALL ISSUE TO THE ARCHITECT:
- A COPY OF THE INSPECTING TECHNICIAN'S REPORT SHOWING LOCATION OF EACH DEVICE AND CERTIFYING THE TEST RESULTS OF EACH DEVICE
  - A CERTIFICATE OF VERIFICATION CONFIRMING THAT THE INSPECTION HAS BEEN COMPLETED AND SHOWING THE CONDITIONS UPON WHICH SUCH INSPECTION AND CERTIFICATION HAVE BEEN RENDERED.
  - PROOF OF LIABILITY INSURANCE FOR THE INSPECTION.
- 2.8 ALL COSTS INVOLVED IN THIS INSPECTION SHALL BE INCLUDED IN THE TENDER PRICE.



seal

Not to be used for construction unless sealed and signed by the Architect or Engineer

All measurements to be confirmed in field by Contractor. Errors & omissions to be reported to Architect or Engineer prior to proceeding with work. Responsibility for coordination of all work remains with General Contractor

revision  
0. 2026 05 22 - ISSUED FOR TENDER (ADD#1)

**Universal Washroom Renovation**  
**Holy Angels Learning Center**  
 102 Wellington Street East, Sault Ste. Marie, Ontario  
 for the  
 Huron-Superior Catholic District School Board  
**Electrical Specifications**

Project Name: \_\_\_\_\_  
Dwg. Name: \_\_\_\_\_

Date: 2026 05 22  
Scale: n.t.s.  
Checked by: J. biemann  
Drawn by: s.lever

Project No.: 26009  
Dwg. No.: e0.0

# ELECTRICAL LEGEND

	DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE - 5-20R
	DUPLEX RECEPTACLE - CLASS A GROUND FAULT
	DUPLEX RECEPTACLE - 5-20R CLASS A GROUND FAULT
	DIRECT POWER CONNECTION
	SWITCH - LINE VOLTAGE TOGGLE
	SWITCH - OCCUPANCY (EXISTING)
	GFCI DEVICE - 1-GANG BOX MOUNTED
	CEILING MOUNT OCCUPANCY SENSOR (EXISTING)
	LIGHTING CONTROL POWER PACK LINE TO LOW-VOLTAGE RELAY - DIV. 26 TO COORDINATE INSTALL IN ACCESSIBLE CEILING.
	EMERGENCY LAMP - DUAL HEADS
	EMERGENCY BATTERY PACK - DUAL HEADS
	EXISTING CEILING RECESSED P/A SPEAKER
	NEW 2X2 CEILING RECESSED P/A LAY-IN TILE
	FIRE ALARM PANEL & MAIN ANNUNCIATOR
	HEAT DETECTOR
	SMOKE DETECTOR
	COMBINATION FIRE ALARM BELL & STROBE - WALL PLATE
	FIRE ALARM BELL
	CONDUIT EXPOSED, IN WALLS OR CEILING SPACE
	CONDUIT UP
	CONDUIT DN
	BARRIER-FREE DOOR OPERATOR PUSH-BUTTON
	BARRIER-FREE DOOR OPERATOR (BY DIV. 8)
	ELECTRIC STRIKE C/W POWER SUPPLY (BY DIV. 8)
	DOOR CONTACT (BY DIV. 8)
	WASHROOM EMERGENCY CALL BUTTON (
	WASHROOM EMERGENCY ANNUNCIATOR
	WASHROOM EMERGENCY CALL DOME LIGHT
	ELECTRICAL PANEL
	LIGHTING FIXTURE
	SINGLE GANG JUNCTION BOX
	OCTAGON OR SQUARE GANG JUNCTION BOX
A.C.	ABOVE COUNTER
EX	EXISTING TO REMAIN
EI	EXISTING TO REINSTALLED IN SAME LOCATION
EP	EXISTING TO BE REPLACED
ER	EXISTING TO BE REMOVED

# ELECTRICAL EQUIPMENT SCHEDULE

Tag	Description	Manufacturer	Model No.	Quantity
GFI	RECEPTACLES-COMMERCIAL SPECIFICATION GRADE, 10 YEAR WARRANTY, WHITE FINISH, RATINGS AND TYPES INCLUDING GFI TYPE AS REQUIRED AS NOTED ON PLANS C/W BRUSHED STAINLESS STEEL DECORATOR COVERPLATE TO SUIT.	LEVITON	AS REQ'D	AS REQ'D
GFCI	BLANK FACE GFCI C/W SELF TEST FUNCTION, 10 YEAR WARRANTY, WHITE, 20A RATED FOR FEED-THROUGH CONNECTION TO DIRECT WIRED DEVICES SUCH AS HAND DRYERS C/W BRUSHED STAINLESS STEEL COVERPLATE; GANGED AS REQ'D.	LEVITON	GFRBF	AS REQ'D
§OC	WALL SWITCH DECORATOR SENSOR C/W ON/OFF PUSHBUTTON CONTROL, 120VAC LINE VOLTAGE BOX MOUNTING, PIR TECHNOLOGY, VANDAL RESISTANT LENS STANDARD, CONFIGURED IN AUTOMATIC MODE.	ACUITY/SENSOR SWITCH	WSX-WH	AS REQ'D
■	STANDARD RANGE 360° CEILING MOUNT SENSOR, LOW-VOLTAGE, PASSIVE INFRARED TECHNOLOGY, RJ-45 NETWORK CONNECTION TO LIGHTING NETWORK, MOUNTING BOX TO SUIT CEILING TYPE IN LOCATIONS AS INDICATED AND AS NECESSARY TO MEET MANUFACTURER'S INSTALLATION REQUIREMENTS C/W 120V TO LV LIGHTING CONTROL POWER PACKS AS REQUIRED.	ACUITY/SENSOR SWITCH	CM-9 C/W PP20	AS REQ'D
□	LED RECESSED EDGE-LIT LOW PROFILE PANEL TROFFER, 2 X 2, 45W, APPROX 5175 LUMEN OUTPUT @ 4000K, 80 CRI MINIMUM, 0-10V FULL RANGE DIMMING LED DRIVER DOWN TO 10%, ALUMINUM CONSTRUCTION FRAME WITH WHITE FINISH, 120V C/W HIGHLY IMPACT RESISTANT DIFFUSER PANEL IF ACRYLIC TESTED IN CONFORMANCE WITH CAN/ULC-S102-M, DRYWALL MOUNTING KIT AND 10 YEAR WARRANTY ON ALL DRIVERS AND LED COMPONENTS BASED ON A 10% MAX FAILURE OF LEDS.	STANPRO	L3PNL-2-LS2- W/40K	AS REQ'D
△EMB	EMERGENCY LIGHTING BATTERY UNIT, FACTORY WHITE STEEL COMPACT ENCLOSURE WITH CORROSION RESISTANT UNDERCOATING, SUITABLE FOR WALL MOUNTING, REMOVEABLE FRONT PANEL, LINE VOLTAGE CORD CONNECTED TO RECEPTACLE ON WALL BY DIV. 26 WHERE INDICATED, 2-2.5W MR-16 LED LAMPS, PER CSA C22.2 AND CSA-C860 STANDARDS, 120VAC, 12VDC, 72W, SEALED 10 YEAR BATTERY.	STANPRO	SLA12-2L	AS REQ'D
△EM	EMERGENCY LAMPS - EMERGENCY LIGHTING REMOTE FIXTURES, DOUBLE HEAD, THERMOPLASTIC CONSTRUCTION, WHITE, 6-12VDC TO BE FIELD CONFIRMED, C/W 2 - 3W PAR18 LED LAMPS. UNITS TO BE FIELD COORDINATED WALL OR CEILING TO SUIT COVERAGE OF AREA INDICATED COORDINATED BY DIV. 26.	STANPRO	N2-06-12V3WLJ	AS REQ'D
HD	HAND DRYER, 120/208V, 12.5A MAX @ 120V, ADJUSTABLE OUTPUT (1500 TO 800W, 19,000 TO 1000 LFM, 83 TO 69 DB), STEEL ONE-PIECE COVER WITH FINISH TO BE DETERMINED BY ARCHITECT DURING SHOP DRAWING REVIEW, AUTO-SENSING SUPPLY VOLTAGE CIRCUIT, HANDS-FREE SELF-CALIBRATING INFRA-RED SENSOR, COLD PLASMA CLEAN ANTI-MICROBIAL TECHNOLOGY C/W TAMPER PROOF BOLTS, 5 YEAR WARRANTY AND WALL RECESS KIT.	AMERICAN DRYER	CPC9-XX C/W ADA-RK	1
ANN CB E/S P/O	WASHROOM EMERGENCY CALL KIT C/W DOUBLE GANG LED ANNUNCIATOR WITH PRESS FOR ASSISTANCE AND ASSISTANCE REQUESTED LED INDICATOR WIT BUILT-IN SOUNDER, SINGLE GANG DOME LIGHT WITH BUILT-IN SOUNDER FOR INSTALLATION IN CORRIDOR OUTSIDE OF ROOM, COORDINATE POWER CONNECTION TO LOGIC CONTROLLER AND ASSOCIATED EMERGENCY CALL SYSTEM KIT COMPLETE WITH BACK-BOX, CONDUIT ROUGH-INS AND ALL WIRING FOR DEVICES TO BE ROUGHED IN TO SUIT FINAL APPROVED SHOP DRAWINGS INCLUDING ALL LINE/LOW VOLTAGE INTERCONNECTION WIRING FOR COMPLETE INSTALL IN ACCORDANCE WITH OBC SECTION 3.8.3.12 (2) FOR UNIVERSAL W/RS; LOGIC CONTROLLER AT DOOR TO BE INTERFACED WITH D/C AND TIE-IN WITH ELECTRIC STRIKE BY DIV. 8 FOR AUTOMATIC RELEASE IN THE EVENT OF AN EMERGENCY CALL, 120V DIRECT CONNECT TO POWER OPERATOR AND TO 120V TO LOW-VOLTAGE POWER SUPPLY FOR CONTROL OF ELECTRIC STRIKE SUPPLIED BY DIV. 8 AND MOUNTED IN ACCESSIBLE CEILING SPACE BY DIV. 26.	Camden	SUPPLIED BY DIV. 8 CS-WC13AXFM (CONTROL KIT) WITH ILLUMINATED PUSHBUTTONS CB/ANN: CM-AF540SO DOME LIGHT (EM): CM-AF141SO	AS REQ'D
ST	FIRE BELL AND STROBE COMBINATION - WALL MOUNTED BELL-STROBE PLATE, RED FINISH, 15 CD STROBE OUTPUT C/W LENS MARKING KIT NOTING "FIRE", RECESSED BACK BOX INSTALLATION TO SUIT DEVICE LOCATIONS INDICATED INCLUDING ANY REQUIRED BACK BOXES AND FINAL MOUNTING ACCESSORIES FOR A RECESSED WALL INSTALLATION.	TROY LFS	Bell: SSM24-6 Wall Plate & Strobe: 403-5A-R c/w LKW-1	1
●	HEAT DETECTOR, CONVENTIONAL. FIXED TEMPERATURE/RATE OF RISE HEAT DETECTOR, ULC LISTED; FOR INSTALLATION ON EXISTING LEVEL 1 CONVENTIONAL ZONE; EXACT COMPATIBLE HEAT DETECTOR DEVICE TO BE CONFIRMED BY ELECTRICIAN/FIRE ALARM VENDOR PRIOR TO SHOP DRAWING SUBMITTAL.	TROY LFS	AS REQ'D	3
■	LAY-IN CEILING SPEAKER, 2' X 2' SPEAKER FOR S.A.T. GRID MOUNTING, 25/70V SELECTABLE TRANSFORMER, 8 OHM COIL, SELECTABLE TAPS FROM 0.3 TO 5 WATTS TO BE FIELD CONFIRMED AND ADJUSTED BY CONTRACTOR TO SUIT OWNER PREFERRED SOUND LEVEL, SCUFF RESISTANT PERFORATED GRILLE, INTEGRAL BACKBOX C/W 8" SPEAKER INCLUDING FACTORY WHITE BAKED ACRYLIC ENAMEL FINISH.	Valcom	VE522A-2	3

**GENERAL EQUIPMENT SCHEDULE PRODUCT SELECTIONS EQUALS/ALTERNATES APPROVALS NOTE:**

EQUIPMENT SELECTIONS SPECIFIED ABOVE ARE PROVIDED FOR STANDARD OF DESIGN BASIS, PRODUCTS WITH EQUAL QUALITY, LOOK AND OPERATING SPECIFICATIONS WILL BE ACCEPTABLE AND ARE TO BE CONFIRMED DURING SHOP DRAWING REVIEW AS LONG AS SUPPLY/DELIVERY TIMES DO NOT IMPACT THE CONSTRUCTION SCHEDULE, CONSULTANT RESERVES RIGHT TO ENFORCE SUPPLY OF FIRST LISTED PRODUCT, IF PROPOSED PRODUCT SUBMITTED AT TIME OF SHOP DRAWING REVIEW IS NOT DEEMED TO BE AN ACCEPTABLE EQUAL/ALTERNATE PRODUCT OR DELIVERY TIMES IMPACT THE ABILITY TO MEET THE CONSTRUCTION SCHEDULE.

**IDEA**  
 INTEGRATED DESIGN  
 ENGINEERING + ARCHITECTURE  
 421 Bay Street, Suite 507, Sault Ste. Marie Ont. Ca.  
 Tele: (705) 949-5291 - Email: info@integrateddesign.ca

seal

Not to be used for construction unless sealed and signed by the Architect or Engineer

All measurements to be confirmed in field by Contractor. Errors & omissions to be reported to Architect or Engineer prior to proceeding with work. Responsibility for coordination of all work remains with General Contractor

revision  
 0. 2026 05 22 - ISSUED FOR TENDER (ADD#1)

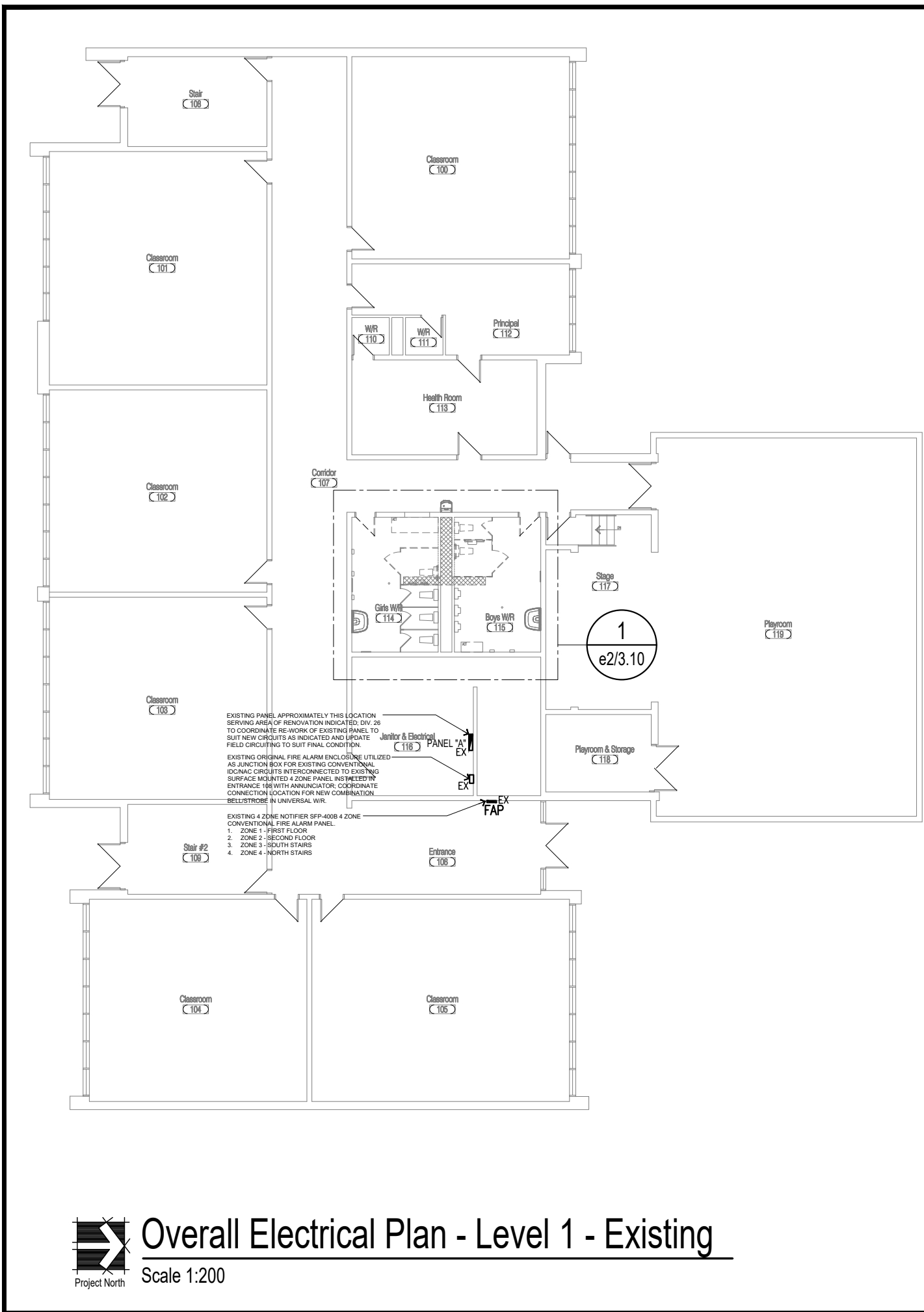
**Universal Washroom Renovation**  
**Holy Angels Learning Center**  
 102 Wellington Street East, Sault Ste. Marie, Ontario  
 for the  
 Huron-Superior Catholic District School Board

**Electrical Legend and Bill of Materials**

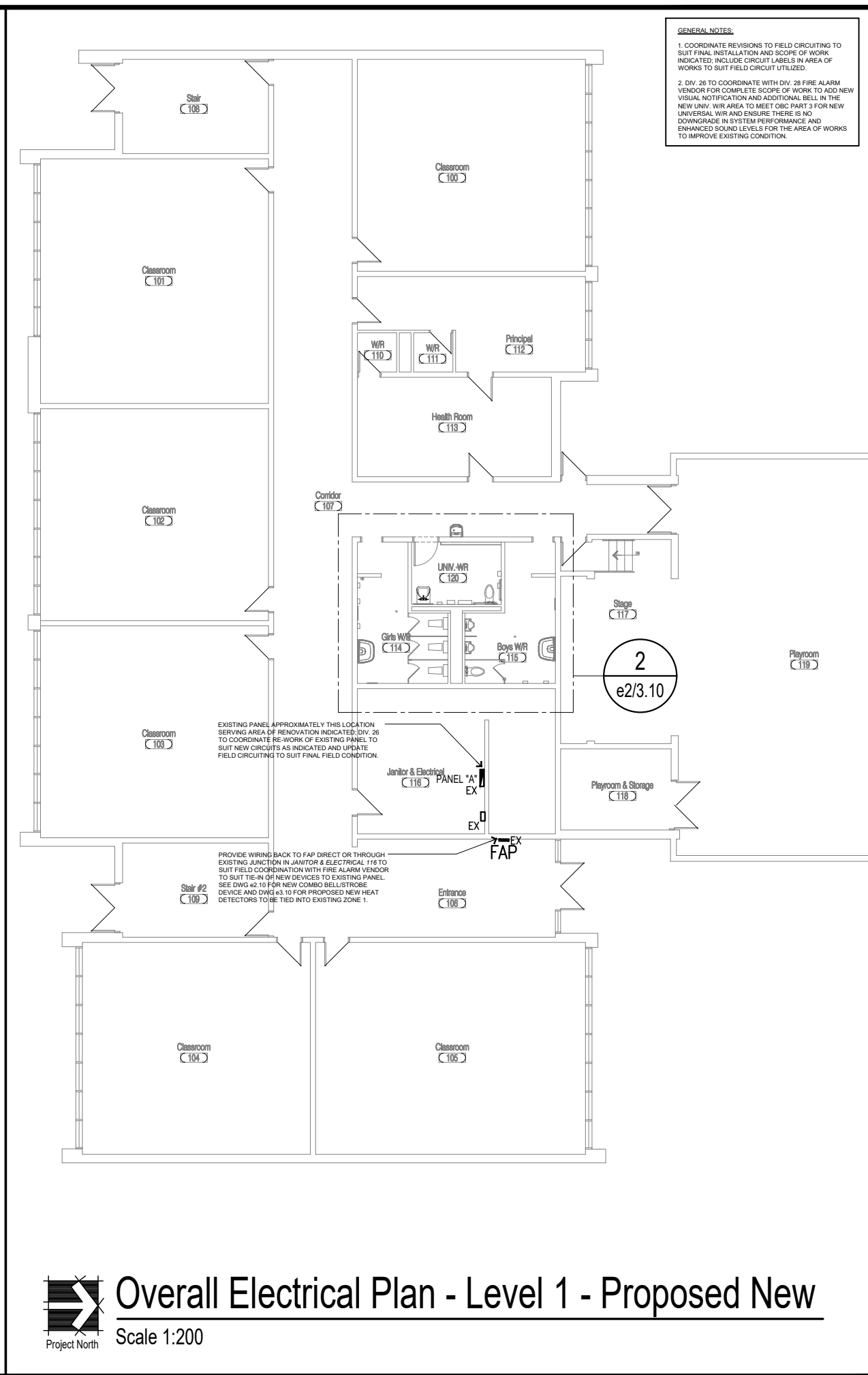
Dwg. Name: \_\_\_\_\_  
 Project Name: \_\_\_\_\_

Date: 2026 05 22  
 Scale: n.t.s.  
 Checked by: j.biemann  
 Drawn by: s.lever

Project No.: 26009  
 Dwg. No.: e0.1



**Overall Electrical Plan - Level 1 - Existing**  
Scale 1:200



**Overall Electrical Plan - Level 1 - Proposed New**  
Scale 1:200

**GENERAL NOTES:**  
1. COORDINATE REVISIONS TO FIELD CIRCUITING TO SUIT FINAL INSTALLATION AND SCOPE OF WORK INDICATED. INCLUDE CIRCUIT LABELS IN AREA OF WORKS TO SUIT FIELD CIRCUIT UTILIZED.  
2. DIV. 26 TO COORDINATE WITH DIV. 28 FIRE ALARM VENDOR FOR COMPLETE SCOPE OF WORK TO ADD NEW VISUAL NOTIFICATION AND ADDITIONAL BELL IN THE NEW UNIV. WR AREA TO MEET OBC PART 3 FOR NEW UNIVERSAL WR AND ENSURE THERE IS NO DOWNGRADE IN SYSTEM PERFORMANCE AND ENHANCED SOUND LEVELS FOR THE AREA OF WORKS TO IMPROVE EXISTING CONDITION.

**IDEA**  
**INTEGRATED DESIGN ENGINEERING + ARCHITECTURE**  
421 Bay Street, Suite 507, Sault Ste. Marie Ont. Ca.  
Tele: (705) 949-5291 - Email: info@integrateddesign.ca

seal  
Not to be used for construction unless sealed and signed by the Architect or Engineer  
All measurements to be confirmed in field by Contractor. Errors & omissions to be reported to Architect or Engineer prior to proceeding with work. Responsibility for coordination of all work remains with General Contractor

revision  
0. 2026 05 22 - ISSUED FOR TENDER (ADD#1)

**Universal Washroom Renovation  
Holy Angels Learning Center**  
102 Wellington Street East, Sault Ste. Marie, Ontario  
for the  
Huron-Superior Catholic District School Board

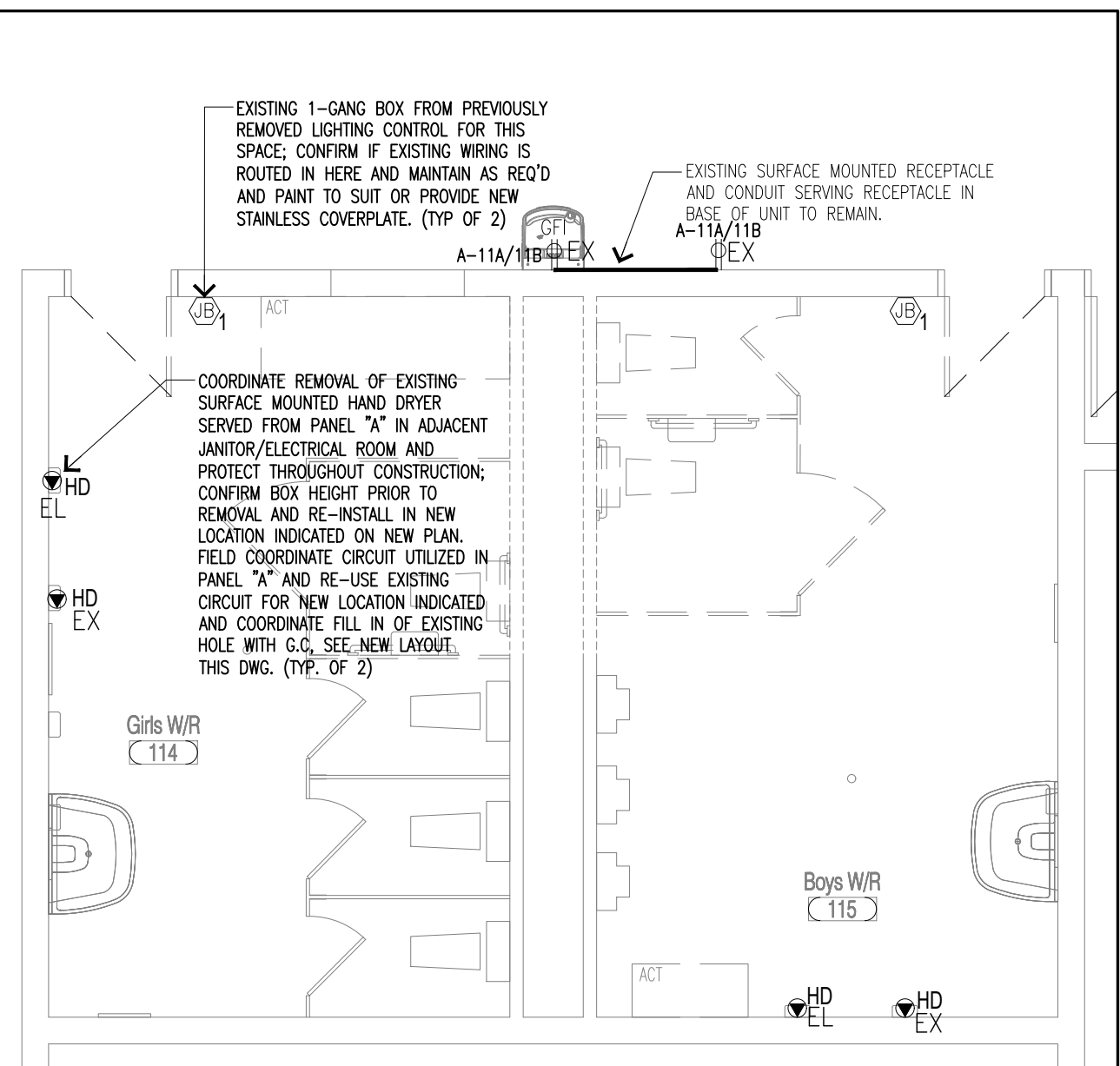
Dwg. Name: **Level 01 Overall Electrical Plan**  
Project Name:

Date: 2026 05 22  
Scale: 1:200  
Checked by: **J. Biemann**  
Drawn by: **S. Lever**

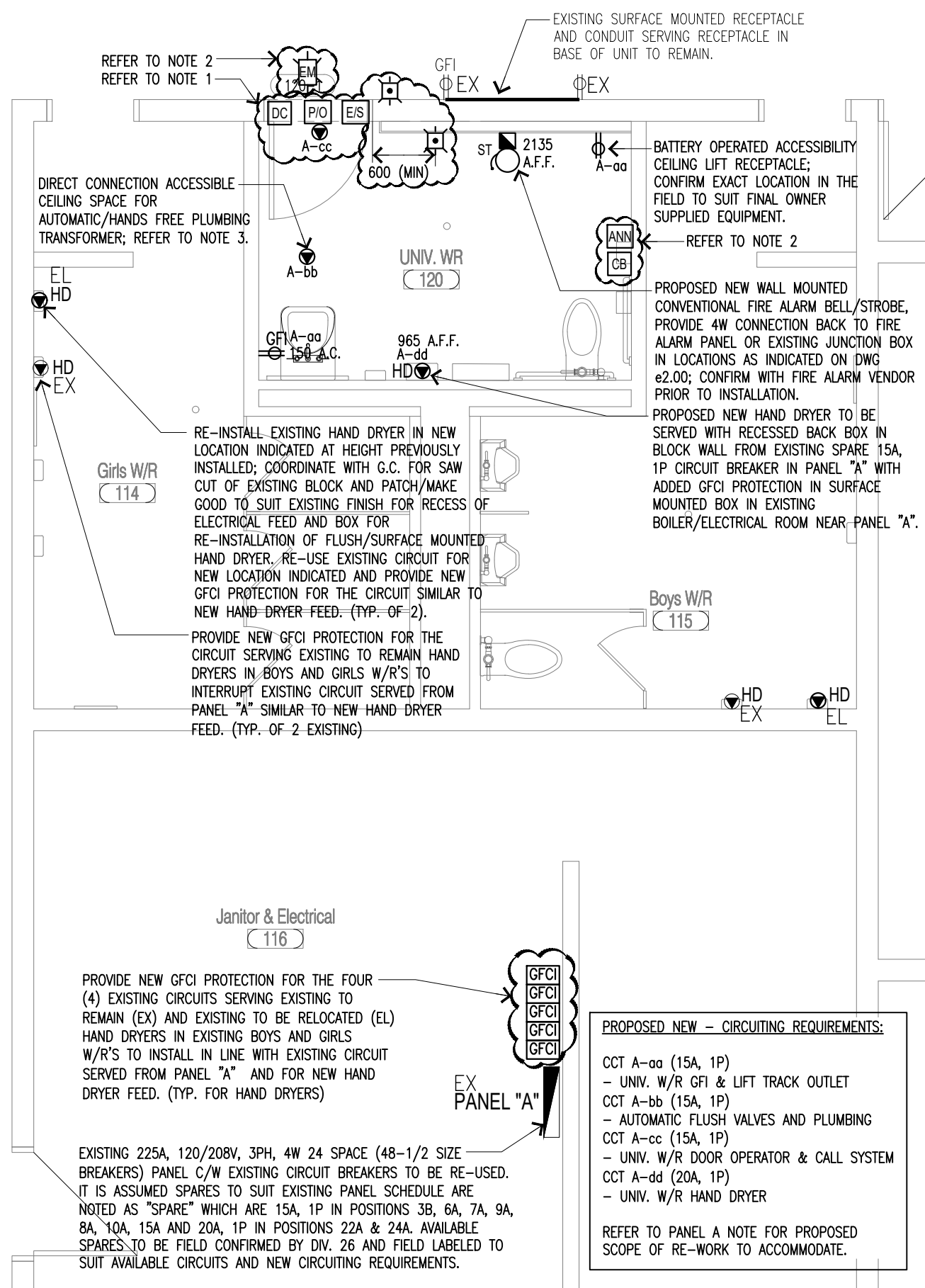
Project No.: 26009  
Dwg. No.: **e 2.00**

**GENERAL NOTES - NEW SCOPE OF WORK:**

1. PROVIDE 120V POWER CONNECTION FROM PANEL "A" (REFER TO DWG e2.00 FOR LOCATION) TO NEW POWER OPERATOR (BY DIV. 8, INSTALLED BY DIV. 26.) FOR CONTROL OF DOOR; SUPPLY/INSTALL RECESSED BOXES FOR PUSHBUTTONS FROM ECS ON LATCH SIDE OF DOOR AT BETWEEN 39 1/2" A.F.F. TO 42" A.F.F. C/W 1/2" RECESSED EMT TO CEILING SPACE WITH WIRING TO DOOR VENDOR SUPPLIER OPERATOR/LOW-VOLTAGE POWER SUPPLY TO SUIT APPROVED MANUFACTURER INSTALLATION REQUIREMENTS. PROVIDE NEW 1P 15A BREAKER MATCHING EXISTING IN PANEL "A" FOR CIRCUIT.
2. WASHROOM EMERGENCY CALL KIT (BY DIV. 8, INSTALLED BY DIV. 26. REFER TO SPEC SECTION 10 28 10). PROVIDE POWER CONNECTION FROM NEW POWER OPERATOR CIRCUIT TO LOGIC CONTROLLER AND ASSOCIATED EMERGENCY CALL SYSTEM KIT COMPLETE WITH BACK-BOXES, CONDUIT ROUGH-INS AND ALL WIRING FOR DEVICES TO BE ROUGHED IN TO SUIT FINAL APPROVED SHOP DRAWINGS INCLUDING ALL LINE/LOW VOLTAGE INTERCONNECTION WIRING FOR COMPLETE INSTALL IN ACCORDANCE WITH OBC SECTION 3.8.3.12 (2). PROVIDE RECESSED DOUBLE GANG BOX FOR CALL BUTTON/ANNUNCIATOR, SURFACE MOUNTED SINGLE GANG BOX FOR DOME LIGHT; LOGIC CONTROLLER AT DOOR TO BE INTERFACED WITH SURFACE MOUNTED DOOR CONTACT AND TIED-IN WITH ELECTRIC STRIKE BY DIV. 8 FOR AUTOMATIC RELEASE IN THE EVENT OF AN EMERGENCY CALL.
3. PROVIDE 120V POWER CONNECTION IN ACCESSIBLE CEILING SPACE IN LOCATION TO BE CONFIRMED WITH MECHANICAL CONTRACTOR FOR LOCATION AND ACCESS FOR MECHANICAL SUPPLIED LOW VOLTAGE TRANSFORMER(S) FOR HANDS FREE FIXTURES; FEED FROM NEW CIRCUIT SERVING POWER OPERATOR. COORDINATE EXACT REQUIREMENTS WITH FINAL APPROVED MECHANICAL SHOP DRAWINGS AND FIELD COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO ROUGH IN.



**1 Washrooms - Power and Auxiliary Systems - Existing / Removals**  
e2.10 Scale 1:50



**2 Washrooms - Power and Auxiliary Systems - Proposed New**  
e2.10 Scale 1:50

seal

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revision  
0. 2026 05 22 - ISSUED FOR TENDER (ADD#1)

**Universal Washroom Renovation**  
**Holy Angels Learning Center**  
102 Wellington Street East, Sault Ste. Marie, Ontario  
for the  
Huron-Superior Catholic District School Board

Dwg. Name: **Level 01 - Power and Auxiliary Systems Existing / Removals & New**

Date: 2026 05 22  
Scale: 1:50  
Checked by: J. Biemann  
Drawn by: S. Lever

Project No.: 26009  
Dwg. No.: e 2.10

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revision  
 0. 2026 05 22 - ISSUED FOR TENDER (ADD#1)

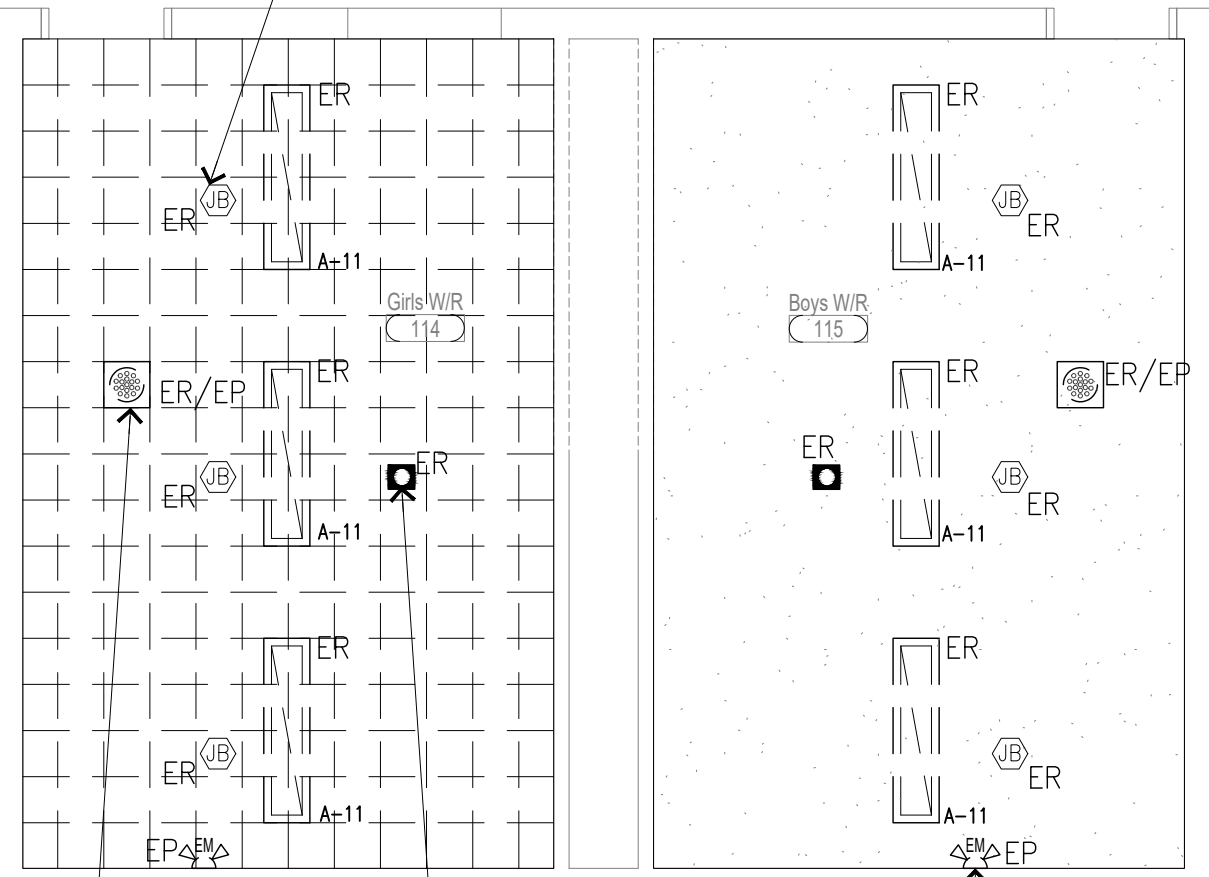
**Universal Washroom Renovation  
 Holy Angels Learning Center**  
 102 Wellington Street East, Sault Ste. Marie, Ontario  
 for the  
 Huron-Superior Catholic District School Board

Dwg. Name: **Level 01 - Lighting and Ceiling Devices Existing/Removals & New**

Date: 2026 05 22  
 Scale: 1:50  
 Checked by: J. Biemann  
 Drawn by: S. Lever

Project No.: 26009  
 Dwg. No.: e 3.10

COORDINATE REMOVAL OF EXISTING JUNCTION BOXES WITH COVERS FROM PREVIOUSLY REMOVED/RELOCATED LIGHT FIXTURES TO SUIT REPLACEMENT OF CEILING AND REVISE WIRING TO SUIT FEEDING OF PROPOSED NEW LIGHTS IN S.A.T. CEILING AS INDICATED ON NEW PLAN, THIS DWG. (TYP. OF 6)



COORDINATE REMOVAL OF EXISTING OCCUPANCY SENSORS, POWER PACKS, ETC. TO SUIT INSTALLATION OF NEW FIXTURES AND CONTROLS AS NOTED ON NEW. (TYP. OF 2 LOCATIONS).

COORDINATE REMOVAL OF EXISTING RECESSED PUBLIC ADDRESS SPEAKERS AND TURN OVER TO OWNER; TO BE REPLACED WITH NEW IN S.A.T. CEILING; SEE NEW LAYOUT FOR PROPOSED NEW P/A SCOPE. (TYP. OF 2)

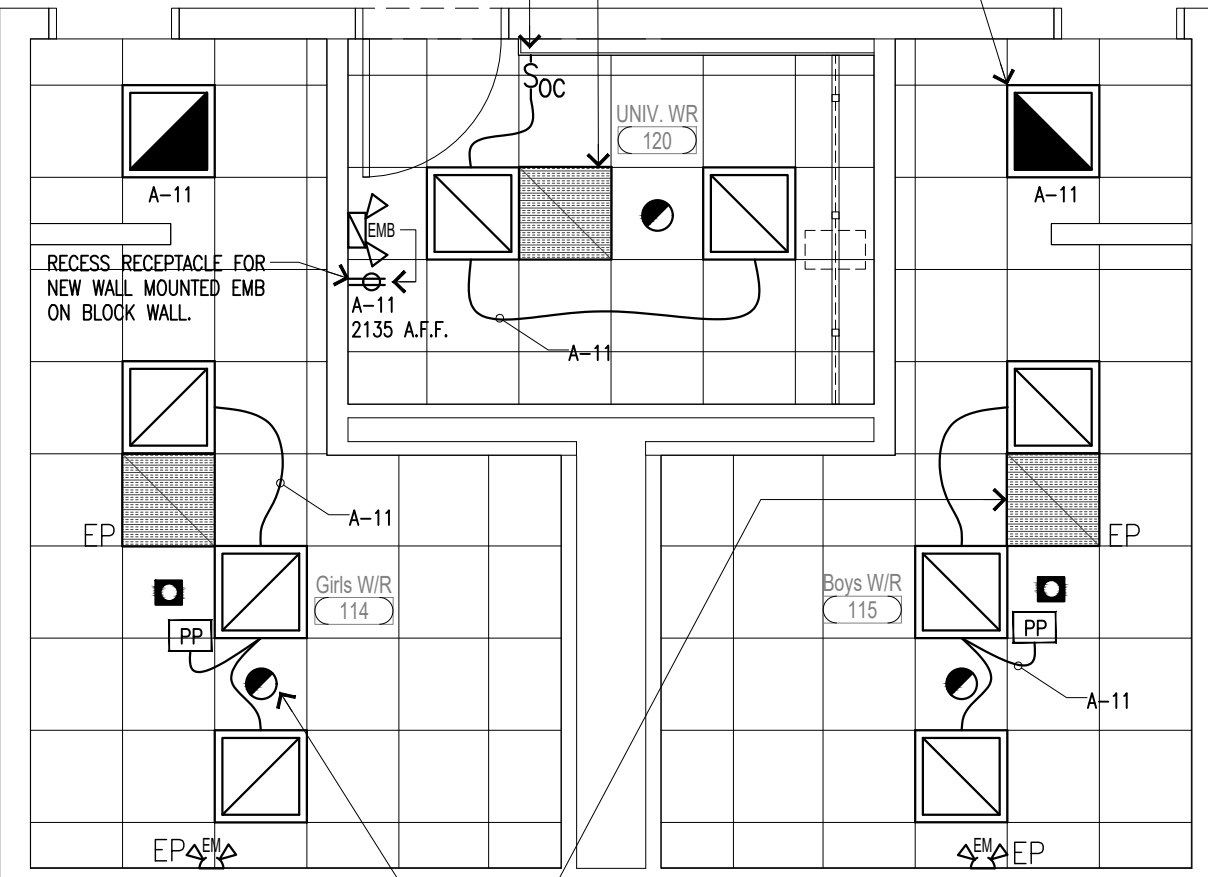
REPLACE EXISTING EM HEADS WITH NEW USING EXISTING BOX, RE-FEED FROM NEW EMB INDICATED IN NEW UNIV. W/R ON NEW PLAN, THIS DWG. (TYP. OF 2)



PROVIDE NEW 2X2 LAY-IN TILE P/A SPEAKER FOR UNIV W/R ADDED TO EXISTING P/A ZONE C/W ALL NEW WIRING, ETC. AS REQ'D.

RECESS AUTOMATIC SENSOR SWITCH IN NEW WALL CONSTRUCTION. COORDINATE WITH GENERAL CONTRACTOR; TO BE MOUNTED 1050 A.F.F.

ALWAYS ON 24/7 FIXTURE. (TYP. OF 2)



PROVIDE NEW 2X2 LAY-IN TILE P/A SPEAKERS TO REPLACE PREVIOUSLY REMOVED; TWO TO BE RECONNECTED TO EXISTING RELOCATED P/A CIRCUIT TO SUIT C/W ALL NECESSARY SUPPORTS, WIRING, JUNCTIONS, ETC. AS REQ'D FOR RE-CONNECTION AND REPLACEMENT OF NEW AND ADDITION OF NEW SPEAKER FOR NEW UNIV. W/R. ALL NEW WIRING, ETC. AS REQ'D. (TYP. OF 2 REPLACED NOTED AS "EP" AND ONE NEW)

PROVIDE NEW HEAT DETECTORS TIED INTO EXISTING CONVENTIONAL IDC ZONE - FIRST FLOOR THAT COVERS THIS AREA OF WORKS.



**1 Washrooms - Lighting and Ceiling Devices - Existing / Removals**

e2.10 Scale 1:50

**2 Washrooms - Lighting and Ceiling Devices - Proposed New**

e2.10 Scale 1:50

**PART 1 - GENERAL****1.1 CODES AND REFERENCE STANDARDS**

- .1 Do complete installation in compliance with latest editions of and all amendments to the following Codes and Standards. Where conflicts in requirements occur, the higher standard shall apply:
  - .1 Ontario Electrical Safety Code;
  - .2 CSA;
  - .3 The Building Code (Ontario);
  - .4 All governing municipal requirements.
- .2 Conform with all General Requirements, as applicable to this Section.

**1.2 PERMITS, FEES**

- .1 Submit to the Electrical Safety Authority (and Ontario Power Authority as required by Owner) the necessary number of drawings and specifications for examination and receive necessary approval and permits prior to commencement of work.
- .2 Pay all associated fees.
- .3 Engineer will provide drawings at no cost.
- .4 Furnish a Certificate of Acceptance from the Electrical Safety Authority on completion of building electrical work. Pay all fees associated with inspections.

**1.3 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

- .1 Submit shop drawings and product data in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate details of construction, dimensions, capacities, weights and electrical performance characteristics of equipment or material.
- .3 Where applicable, provide wiring, single line and schematic diagrams.
- .4 Include wiring drawings or diagrams showing interconnection with work of other Sections.

**1.4 OPERATION AND MAINTENANCE**

- .1 Provide operation and maintenance data for incorporation into maintenance manual.
- .2 Include in operations and maintenance data:
  - .1 Details of design elements, construction features, component junction and maintenance requirements to permit effective start-up, operation, maintenance, repair, modification, extension and expansion of any portion of feature of installation.
  - .2 Technical data, product data, supplemented by bulletins, component illustrations, of items, and parts lists. Advertising or sales literature not acceptable.
  - .3 Wiring and schematic diagrams and performance curves.
  - .4 Names and addresses of nearest suppliers for all items

included in maintenance manuals.

.3 Provide maintenance materials/tools as necessary to properly service equipment to suit manufacturer's recommended service method.

1.5 CARE, OPERATION AND START-UP

.1 Instruct operating personnel in the operation, care and maintenance of equipment.

1.6 CLOSEOUT SUBMITTALS

.1 Provide operation and maintenance data into manual specified in Section 01 78 00 - Closeout Submittals.

1.7 QUALITY ASSURANCE

.1 All installations shall be neat and tidy and be in accordance with manufacturer's recommended installation requirements.

.2 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.

.3 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

.4 Pre-installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.

1.8 WASTE MANAGEMENT AND DISPOSAL

.1 Remove from site and dispose of packaging materials at appropriate recycling facilities.

.2 Dispose of all packaging material in appropriate on-site bin for recycling in accordance with site waste management program.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

.1 Refer to the drawings for standard of acceptance for product manufacturers to suit proposed Consultant design intent, equal/alternate products will be entertained if submitted for review and approved in accordance with timeline as indicated on electrical equipment schedule.

.2 The Consultant reserves the right to enforce supply/install of first listed product should shop drawings be submitted for review of system or manufacturer that is not listed on the drawings or an approved equal/alternate product.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

.1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 MATERIALS AND EQUIPMENT

.1 Equipment and material shall be certified by CSA, a recognized Certification Organization or a recognized Field Evaluation Agency, and manufactured to standard quoted.

3.3 GENERAL ROUGH-IN AND INSTALLATION REQUIREMENTS

.1 Provide outlet boxes and all cabling in conduit as indicated on plans

- .2 Change the location of devices if instructed so at no extra cost or credit, providing distance from location shown on plans does not exceed 3 m (10') and information is given before installation.
- .3 Do not install outlets back-to-back in wall, allow minimum 150 mm (6") horizontal clearance between boxes.
- .4 Locate light switches on latch side of doors.
- .5 Mounting height of equipment is from finished floor to centre-line of equipment unless specified or indicated otherwise.
- .6 If mounting height of equipment is not indicated, verify with the Engineer before proceeding with installation.
- .7 Coordinate routing of all electrical services and feeds for power, communications, security, etc. concealed within walls and ceilings in conduit where noted or inaccessible; coordinate inclusion of access hatches as necessary with General Contractor.
- .8 Coordinate all fireproofing and firestopping with Division 7 (General Contractor) to suit existing fire separations.
- .9 Electrical installations shall be carried out so as to minimize the possibility of contributing to or causing a fire/explosion and insulation damage or deterioration.
- .10 Install electrical equipment at the following heights unless indicated otherwise on the drawings; all controlled devices to be located in accordance with OBC Section 3.8 for accessibility.
  - .1 Switches: 1050mm to centre-line of box
  - .2 Wall receptacles:
    - .1 General: 600 mm (24") to bottom of box or as indicated on the drawings for special locations.
  - .3 Panelboards: as required by Code and to match existing where being replaced.

### 3.4 PROTECTION

- .1 Protect exposed live equipment during construction for personnel safety.
- .2 Shield and mark live parts 'LIVE 120 VOLTS' or with appropriate voltage.
- .3 Arrange for installation of temporary doors for rooms containing electrical distribution equipment. Keep these doors locked except when under direct supervision.

### 3.5 IDENTIFICATION

- .1 .1 Identify electrical equipment with labels to match the tags indicated on the drawings.
  - .1 All components including switches, receptacles and junction boxes are to be labeled to suit Owner distribution labeling standard to be confirmed with project manager prior to labeling.
- .2 Identify wiring with permanent indelible identifying markings, either numbered or coloured Plastic tapes, on both ends of phase conductors or

feeders and branch circuit wiring.

- .3 Maintain phase sequence and colour coding throughout.
- .4 Use colour coded wires in communication cables, matched throughout system.
- .5 Colour code conduits, junction boxes and metallic sheathed cables.
- .6 Code with plastic tape or paint at points where conduit or cable enters a wall, ceiling, or floor and at 9 m (30') intervals.
- .7 Identify conduits and junction boxes with identifiers to suit separate systems, utilize the same colour for each separate system and indicated on all junction boxes with tags to suit system type/circuit number(s), etc.
- .8 Manufacturers' nameplates and CSA labels to be clearly visible and legible after equipment is installed.

### 3.6 TERMINATIONS

- .1 Lugs, terminals, screws used for termination of wiring to be suitable for type of conductor being used, either copper or aluminum.
- .2 Torque all lugs to values recommended by manufacturer.

### 3.7 CONDUIT

- .1 All interior conduits up to and including one and a quarter inches in diameter shall be EMT (thinwall) where code permits.
- .2 All bends, offsets and elbows shall be so made that conduit is not injured or flattened. Bends improperly formed shall be replaced with factory made bends and fittings used together. Not more than three 90 degree bends shall be installed between boxes.
- .3 All empty conduit shall be left with measuring tape type pull lines in place.
- .4 All underground conduit to be PVC conduit, size as specified.

### 3.8 CIRCUIT BREAKERS

- .1 Breakers that control lighting which is not otherwise switched shall be switching duty.
- .2 Revise existing and provide breakers as noted on the drawing including spares.
- .3 Provide an updated type written index card for any impacted panelboards with separate copy to Owner.

### 3.9 GROUNDING

- .1 Ground electrical equipment and wiring in accordance with all applicable codes whether shown on the drawings or not.
- .2 Grounding equipment to CSA C22-2 No. 41 1950 (R1967).
- .3 Copper grounding conductors to CSA G7.1-1964.

### 3.10 FINISHES

- .1 All switches, receptacles, and like wiring devices to be of decorator commercial specification grade, white colour unless noted otherwise on the drawings.
- .2 Coverplates to be brushed stainless steel unless noted otherwise on

the drawings.

.3 Manual switches to be installed so that up position is a closed switch.

.4 Gang switches and receptacles or GFCI devices where practical.

### 3.11 LIGHT FIXTURES AND CONTROLS

.1 All interior lights including associated lighting controls to be as specified on the drawings or equal/alternate manufacturer and approved by Consultant.

.2 Provide lighting with all indicated controls as indicated on the drawings and fixtures as indicated on the drawing fixture schedule including all necessary mounting equipment such as hangers, chain, screws, boxes, etc.

.3 Supply and install appropriate lamps in all fixtures where not integral LED type.

### 3.12 EMERGENCY LIGHTING SYSTEM

.1 Provide complete emergency egress lighting system to reference Standard CSA C22.2 141 Performance Certified and as indicated on the drawings.

.2 All fixtures shall operate at an identical DC voltage level and be manufactured by a single manufacturer.

### 3.13 FIRE ALARM SYSTEM

.1 Perform all modifications as required to existing fire alarm system devices as indicated on drawings based on minor Part 11 construction revisions necessitating the protection of existing devices through construction; , prevention of false alarms; and coordinating with Owner monitoring vendor and fire alarm vendor of record for all inspections and verifications to suit timing of work.

.1 Coordinate timing of all work and verifications, etc. to suit general contractor construction schedule.

### 3.14 SYSTEM TESTS

.1 Conduct and pay for tests of the following:  
.1 Power distribution system including: voltage, grounding and load balancing as required to suit new installation.  
.2 Circuits originating from branch distribution panels.  
.3 Lighting and its control.

.2 Inform in Consultant in advance and carry out tests in presence of Engineer if requested.

.3 Provide instruments, meters, equipment and personnel required to conduct tests during and at conclusion of work.

### 3.15 COORDINATION OF PROTECTIVE DEVICES

.1 Ensure circuit protective devices such as overcurrent trips, relays and fuses are installed to values and settings indicated and as required by equipment being served by the overcurrent devices.

### 3.16 CLEANING

.1 Perform cleaning as required during and at completion of work.

.2 At time of final cleaning, clean lighting reflectors, lenses, and other lighting surfaces.

END OF SECTION