ADDENDUM #2 **01 May 2015**

This addendum forms part of the contract documents and modifies the original specifications and drawings as follows. Acknowledge receipt of this addendum in the space provided on the Bid Form.

ARCHITECTURAL SPECFICATIONS

1. Section 09911 Painting

    1. ADD Section 09911 Painting (8 pages) in its entirety.

ARCHITECTURAL DRAWINGS

2. Drawing A1 Ground Floor Plan Alterations

    1. ADD FLOOR PLAN, CEILING PLAN AND DETAILS FOR FOOD SERVICES 108 (IN NORTHEAST CORNER OF GROUND FLOOR). THIS WORK CONSISTS OF ADDING POWER AND A DEMONSTRATION MIRROR OVER AN EXISTING ISLAND. REFER TO DRAWINGS ASK-100 TO ASK-103, ATTACHED.

    2. ADD FLOOR PLAN OF GYMNASIUM TO INDICATE WALL REPAIRS, PAINTING AND FLOOR PROTECTION. REFER TO DRAWING ASK-104, ATTACHED.

    3. PARTIAL PLAN 4/A1: ADD NOTE AT NEW WALL "140mm CONCRETE BLOCK WALL – PAINTED."

    4. SECTION 8/A1: REVISE NOTE "92mm METAL STUD BULKHEAD. INSTALL AROUND EXISTING MECHANICAL AND ELECTRICAL SEVICES" TO READ "92mm METAL STUD BULKHEAD. INSTALL AROUND EXISTING MECHANICAL AND ELECTRICAL SERVICES AT MAX. 400mm O.C."

3. Drawing A2 Second Floor Plan Alterations

    1. ADD FLOOR PLAN AND ELEVATION TO REMOVE EXISTING GLASS BLOCK AND PROVIDE NEW WINDOW IN ELECTRICAL ROOM 222. REFER TO DRAWING ASK-105 ATTACHED.

    2. PARTIAL R.C.P. 4/A2: REVISE LIGHTING TYPE AND LAYOUT AS PER DRAWING ASK-106, ATTACHED.

    3. PARTIAL R.C.P. 5/A2: REVISE LIGHTING TYPE AND LAYOUT AS PER DRAWING ASK-107, ATTACHED.

ELECTRICAL DRAWINGS

4. Drawing E1.1 Electrical Legend, Schedules, Site Plan and Drawing List

    1. REPLACE DRAWING E1.1 IN ITS ENTIRETY WITH DRAWIING E1.1 DATED APRIL 30, 2015, ATTACHED. DRAWING REVISIONS HAVE BEEN CLOUDED.

5. Drawing 2.1 Part Floor Plan – East Electrical

    1. REPLACE DRAWING E2.1 IN ITS ENTIRETY WITH DRAWING E2.1 DATED APRIL 30, 2015, ATTACHED. DRAWING REVISIONS HAVE BEEN CLOUDED.

6. Drawing E2.2 Part Floor Plan – West Electrical

1. REPLACE DRAWING E2.2 IN ITS ENTIRETY WITH DRAWING E2.2 DATED APRIL 30, 2015, ATTACHED. DRAWING REVISIONS HAVE BEEN CLOUDED.

7. Drawing E2.3 Part Floor Plans Electrical

1. ADD DRAWING E2.3 DATED APRIL 30, 2015 – PART FLOOR PLANS ELECTRICAL, ATTACHED.

END OF ADDENDUM NUMBER TWO

+ Section 09911 (8 pages), Drawings ASK-100 to ASK-107 inclusive, Drawings E1.1, E2.1, E2.2 and E2.3.

PART 1 - GENERAL

1.1 General

.1 Conform to Division 1 – General Requirements.

1.2 Related Sections

.1 Section 04220 – Concrete Masonry Units.
.2 Section 06200 – Finish Carpentry.
.3 Section 09250 – Gypsum Board.
.4 Divisions 15 &16: Mechanical and Electrical.

1.3 References

.1 American Society for Testing and Materials (ASTM)
  .1 ASTM D 3960- 93, Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.
.2 Canadian General Standards Board (CGSB)
  .1 CAN/CGSB-1.36- 97, General Purpose Interior Varnish.
  .2 CAN/CGSB-1.38- M91, Interior Enamel Undercoater.
  .3 CAN/CGSB-1.57- 96, Alkyd, Interior, Semigloss, Enamel.
  .4 CAN/CGSB-1.68- M91, Solvent Type Primer-Sealer for Interior Walls.
  .5 CAN/CGSB-1.73- 97, Exterior and Interior Enamel for Floors.
  .6 CAN/CGSB-1.100- 95, Interior Latex Type, Flat Paint.
  .7 CAN/CGSB-1.102- M89, Clear Alkyd Type Sealer.
  .8 CAN/CGSB-1.118- 95, Interior Alkyd, Flat Finish.
  .9 CAN/CGSB-1.119- 95, Primer-Sealer, Wall, Interior Latex Type.
  .10 CAN/CGSB-1.126- M91, Vinyl Sealer for Wood.
  .11 CAN/CGSB-1.145- 97, Solvent-Based Pigmented Stain.
  .12 CAN/CGSB-1.146- 92, Cold Curing, Gloss Epoxy Coating.
  .13 CAN/CGSB-1.150- M91, Clear Lacquer for Wood Furniture.
  .14 CAN/CGSB-1.165- M89, Cold Curing Epoxy Primer.
  .15 CAN/CGSB-1.175- 97, Polyurethane Interior Coating, Oil Modified, Clear, Gloss and Satin.
  .16 CGSB 1-GP-180Ma- 96, Coating, Polyurethane, Two-Package, General Purpose.
  .17 CAN/CGSB-1.188- 96, Emulsion Type Filler Masonry Block.
  .18 CAN/CGSB-1.195- 95, Interior Semigloss Latex Paint.
  .19 CAN/CGSB-1.198- 95, Cementitious Primer (for Galvanized Surfaces).
  .20 CAN/CGSB-1.202- 96, Interior Low Gloss Alkyd Enamel.
  .21 CAN/CGSB-1.209- 93, Low Sheen Latex Interior Paint.
  .22 CGSB 85-GP-10M- 79, Shop Painting Structural Steel.
  .23 CGSB 85-GP-11M- 80, Painting Steel for Protection Against Continuous Wetting.
  .24 CGSB 85-GP-16M- 79, Painting Galvanized Steel.
  .25 CGSB 85-GP-18M- 80, Painting, Maintenance, Exterior, Steel, for Protection Against Continuous Wetting.
  .26 CGSB 85-GP-32M- 79, Painting Concrete Floors.
  .27 CGSB 85-GP-33M- 79, Painting Interior Plaster and Wallboard.
  .28 CAN/CGSB-85.100- 93, Painting.
.3 Canadian Painting Contractors' Association (CPCA).
  .1 Painting Specifications Manual 1993.
.4 Canadian Standards Association (CSA)
  .1 CSA Z760- 94, Life Cycle Assessment.
.5 Steel Structures Painting Council (SSPC).
  .1 Systems and Specifications Manual 1989.

1.4 Description

.1 Read carefully all other Sections of the Specifications to determine the extent of prime and finish coats applied by other Sections.

.2 See Mechanical Divisions 15 and Electrical Division 16 for instructions on painting work to be done by Section 09911 on surface provided by those Divisions.

.3 Gloss range: paint and varnish textures are specified by their gloss type, which is defined by the dried film sheen factor. Refer to:

.1 MPI Painting Specification Manual - GLOSSARY OF TERMS to determine Sheen Factor for various gloss types.

.2 Locations A: Vest./ Corridors/ Stairs/ Washrooms/ Custodial/ Storage Areas

(1) block - MPI Gloss Level 7 (high gloss)
(2) gypsum board - MPI Gloss Level 3 (eggshell)
(3) doors/ frames - MPI Gloss Level 5 (semi gloss)
(4) wood - MPI Gloss level 5 (semi gloss)

.3 Locations B: Remaining Areas

(1) block - MPI Gloss Level 5 (semi gloss)
(2) gypsum board - MPI Gloss Level 3 (eggshell)
(3) doors/ frames - MPI Gloss Level 5 (semi gloss)
(4) wood - MPI Gloss level 5 (semi gloss)

1.5 Product Data

.1 Submit product data in accordance with Section 01330 – Submittal Procedures.

.2 Submit full records of all products used. List each product in relation to finish formula and include the following:

.1 Finish formula designation.
.2 Product type and use.
.3 CGSB number.
.4 Manufacturer's product number.
.5 Colour number s.
.6 Manufacturer's Material Safety Data Sheets (MSDS).
.7 Maximum VOC classification.

.3 Submit manufacturer's application instructions for each product specified.

1.6 Samples

.1 Submit samples in accordance with Section 01330 - Submittal Procedures.

.2 Submit duplicate 300mm x 200mm sample panels of each paint, stain, clear coating, formula, type, colour, and texture specified.

.3 Submit full range of available colours where colour availability is restricted.

.4 Use 3mm plate steel for finishes over metal surfaces. Use 12.5mm maple plywood for finishes over wood surfaces. Use 12.5mm gypsum board for finishes over gypsum board and other smooth surfaces.

1.7 Quality Assurance

.1 Retain purchase orders, invoices and other documents to prove that all materials utilized in this contract meet requirements of the specifications. Produce documents when requested by Consultant.

.2 Standard of Acceptance:

.1 Walls: No defects visible from a distance of 1000mm at 90º to surface.
.2 Ceilings: No defects visible from floor at 45º to surface when viewed using final lighting source.
.3 Final coat to exhibit uniformity of colour and uniformity of sheen across full surface area.

1.8 Delivery, Storage and Handling

.1 Deliver, store, handle and protect materials in accordance with Section 01610 – Basic Product Requirements.
.2 Deliver and store materials in original containers, sealed, with labels intact.
.3 Indicate on containers or wrappings:
  .1 Manufacturer's name and address.
  .2 Type of paint.
  .3 Compliance with applicable standard.
  .4 Colour number in accordance with established colour schedule.
.4 Remove damaged, opened and rejected materials from site.
.5 Provide and maintain dry, temperature controlled, secure storage.
.6 Observe manufacturer's recommendations for storage and handling.
.7 Store materials and supplies away from heat generating devices.
.8 Store materials and equipment in a well ventilated area with temperature range 7 to 30°C.
.9 Store temperature sensitive products above minimum temperature as recommended by manufacturer.
.10 Keep areas used for storage, cleaning and preparation, clean and orderly to approval of Consultant. After completion of operations, return areas to clean condition to approval of Consultant.
.11 Remove only in quantities required for same day use.
.12 Fire Safety Requirements:
  .1 Store oily rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis.
  .2 Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada.

1.9 Environmental Requirements

.1 Safety: comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling storage, and disposal of hazardous materials.
.2 Apply paint finishes only when temperature at location of installation can be satisfactorily maintained within manufacturer's recommendations.
.3 Substrate and ambient temperature must be within limits prescribed in paint standard and by manufacturer to approval of Consultant.
.4 Maintain minimum substrate and ambient air temperature of 5°C for Alkyd and 7°C for latex paints. Maximum relative humidity 85%. Maintain supplemental heating until paint has cured sufficiently.
.5 Provide temporary heating where permanent facilities are not available to maintain minimum recommended temperatures.
.6 Apply paint finish only in areas where dust is no longer being generated by related construction operations such that airborne particles will not affect the quality of the finished surface.
.7 Apply paint only when surface to be painted is dry, properly cured and adequately prepared.
.8 Provide minimum 270 lx on surfaces to be painted.

1.10 Extra Materials

.1 Submit maintenance materials in accordance with Section 01701 – Contract Closeout.
.2 Submit one - four litre can of each type and colour of finish coating. Identify colour and paint type in relation to established colour schedule and finish formula.
.3 Deliver to Site and store where directed.

PART 2 - PRODUCTS

2.1 Paint Materials

.1 Qualified products: only paint materials listed on the CGSB Qualified Products List are acceptable for use on this project; DULUX Diamond, GENERAL PAINTS HP2000, or approved equal.
.2 Qualified products: only varnish, stain, enamel, lacquer and filler materials listed on the MPI Approved Product Lists are acceptable for use on this project producing a flame spread rating of less 150.
.3 Paint materials for each coating formula to be products of a single manufacturer.
.4 Low odour products: Whenever possible, select products exhibiting low odour characteristics.

2.2 Paint Colours

.1 Colours will be selected by Consultant. Note: There will be up to 10 different colours
.2 Perform all colour tinting operations prior to delivery of paint to site. On-site tinting of
.3 Second coat in a three coat system to be tinted slightly lighter colour than top coat to show visible difference between coats.

2.3 Paint Finishes

.1 Concrete and Lightweight Block - Locations A – INT 4.2J Epoxy – Modified Latex, Interior, MPI Gloss Level 5 (semi-gloss)
  .1 Two coats MPI #4; approved DULUX X-pert Int/Ext latex Blockfiller #36250; spray applied and back rolled to fill **all** pin holes, and as required by block texture.
  .2 Two coats MPI #215; approved Devoe Coatings Tru-Glaze WB 4426 waterborne.
.2 Concrete and Lightweight Block - Locations B – INT 4.2D Latex, Interior, High Performance Architectural, MPI Gloss Level 5 (semi-gloss)
  .1 Two coats MPI #4; approved DULUX X-pert Int/Ext latex Blockfiller #36250; spray applied and back rolled to fill **all** pin holes, and as required by block texture.
  .2 Two coats MPI #153; approved DULUX Diamond, Interior, Acrylic #13210.
.3 Gypsum Drywall – walls below 2400mm above finish floor – INT 9.2B Latex, Interior, High Performance Architectural, MPI Gloss Level 5 (semi-gloss)
  .1 One coat MPI #50; approved DULUX Lifemaster, Interior, Latex #59113
  .2 Two coats MPI #153; approved DULUX Diamond, Interior, Acrylic #13210.
.4 Gypsum Drywall – walls above 2400mm above finish floor/ bulkheads/ ceilings – INT 9.2M Latex, Interior, Institutional, Low Odour/ VOC, MPI Gloss Level 1 (flat)
  .1 One coat MPI #149; approved DULUX Lifemaster, Interior, Latex #59113
  .2 Two coats MPI #143; approved DULUX Lifemaster, Interior, Acrylic #59111.
.5 Metal (Ferrous) – INT5.1B – Light Industrial Coating, Interior, Water Based, MPI Gloss Level 5 (semi gloss)
  .1 One coat MPI #79; approved Devoe Devflex 4020 DTM
  .2 Two coats MPI #153; approved – Dulux Diamond, Interior, Acrylic #13210
.6 Wood – Opaque Finish (P) – INT 6.3A – Latex, High Performance Architectural MPI Gloss Level 5 (semi gloss)
  .1 One coat primer; MPI #39; approved DULUX X-pert, Aquacryllic #250
  .2 Two coats MPI #153; approved DULUX Diamond, Interior, Acrylic #13210
.7 Exposed Insulated Pipes and Ductwork – INT 10.1A – Latex, Interior, Institutional, Low Odour/ VOC, MPI Gloss Level 1 (flat)
  .1 One coat MPI #149; approved DULUX Lifemaster, Interior, Latex #59113
  .2 Two coats MPI # 143; approved DULUX Lifemaster, Interior Acrylic #59111

.8 Interior Copper and Aluminum (Mill Finish) – INT 5.4M - Latex, Interior, High Performance Architectural, MPI Gloss Level 5 (semi gloss)
  .1 One coat MPI #95; approved Devoe Devguard #4630, Low VOC
  .2 Two coats MPI #153; approved DULUX Diamond, Interior, Acrylic #13210
.9 High Temperature Pipe and Fittings – INT 5.2 - Heat Resistant Enamel, 205°C (400°F)
  .1 Two coats MPI #21; approved Devoe HT-4H High Temperature Silicone Acrylic

PART 3 - EXECUTION

3.1 General

.1 Perform all painting operations in accordance with CAN/CGSB-85.100 except where specified otherwise.
.2 Perform all painting operations in accordance with CPCA Painting Specifications Manual except where specified otherwise.
.3 Apply all paint materials in accordance with paint manufacturer's written application instructions.

3.2 Preparation

.1 Remove electrical cover plates, light fixtures, surface hardware on doors, door stops, bath accessories and all other surface mounted fittings and fastenings prior to undertaking any painting operations. Store for re-installation after painting is completed.
.2 Move and cover furniture and portable equipment as necessary to carry out painting operations. Replace as painting operations progress.
.3 As painting operations progress, place "WET PAINT" signs in occupied areas to approval of Consultant.

3.3 Protection

.1 Protect existing building surfaces not to be painted from paint spatters, markings and other damage. If damaged, clean and restore such surfaces as directed by Consultant.
.2 Cover or mask floors, windows and other ornamental hardware adjacent to areas being painted to prevent damage and to protect from paint drops and splatters. Use non-staining coverings.
.3 Protect items that are permanently attached such as Fire Labels on doors and frames.
.4 Protect factory finished products and equipment.
.5 Protect passing pedestrians, building occupants and the general public in and about the building.

3.4 Conditions of Work

.1 Investigate existing substrates for problems related to proper and complete preparation of surfaces to be painted. Report all damage, defects, unsatisfactory or unfavourable conditions before proceeding with work.
.2 Investigate moisture content of surfaces to be painted and report findings. Do not proceed with work until conditions fall within acceptable range as recommended by manufacturer.
.3 Maximum moisture content as follows:
  .1 Plaster and wallboard: 12%.
  .2 Masonry/Concrete: 12%.
  .3 Concrete Block/Brick: 12%.
  .4 Wood: 15%.

3.5 Cleaning

.1 Clean all surfaces to be painted as follows:
  .1 Remove all dust, dirt, and other surface debris by vacuuming, wiping with dry, clean cloths or compressed air.
  .2 Wash surfaces with solution of T.S.P. and clean warm water using a stiff bristle brush to remove dirt, oil and other surface contaminants.
  .3 Rinse scrubbed surfaces with clean water until foreign matter is flushed from surface.
  .4 Allow surfaces to drain completely and allow to dry thoroughly.
  .5 To prepare surfaces for water-based painting, water-based cleaners should be used in place of organic solvents.
  .6 Use trigger operated spray nozzles for water hoses.
  .7 Many water-based paints cannot be removed with water once dried. However, minimize the use of kerosene or any such organic solvents to clean up water-based paints.
.2 Prevent contamination of cleaned surfaces by salts, acids, alkalis, other corrosive chemicals, grease, oil and solvents before prime coat is applied and between applications of remaining coats. Apply primer, paint, or pre-treatment as soon as possible after cleaning and before deterioration occurs.
.3 Sand existing surfaces with intact, smooth, high gloss coatings to provide adequate adhesion for new finishes.

3.6 Surface Preparation

.1 Prepare new wood surfaces to CGSB 85-GP-1M.
.2 Where possible, prime all surfaces of new wood surfaces before installation. Use same primers as specified for exposed surfaces.
.3 Prepare previously painted wood surfaces to CGSB 85-GP-2M.
  .1 Apply vinyl sealer to CAN/CGSB-1.126 over knots, pitch, sap and resinous areas.
  .2 Apply wood filler to nail holes and cracks.
  .3 Tint filler to match stains for stained woodwork.
.4 Prepare stucco, brick, concrete masonry and concrete surfaces to CGSB 85-GP-31M.
.5 Prepare concrete floors to CGSB 85-GP-32M. Prepare new concrete floor by acid etching. Rinse with clean water and thoroughly dry.
.6 Prepare plaster and wallboard surfaces to CGSB 85-GP-33M.

3.7 Surface Preparation - Metal

.1 Clean new metal surfaces to be painted by: removing rust, loose mill scale, welding slag, dirt, oil, grease and other foreign substances in accordance with the following:
  .1 Solvent cleaning: SSPC-SP-1.
  .2 Hand tool cleaning: SSPC-SP-2.
  .3 Power tool cleaning: SSPC-SP-3.
  .4 Commercial blast cleaning: SSPC-SP-6.
  .5 Brush-off blast cleaning: SSPC-SP-7.
.2 Touch up shop primer to CGSB 85-GP-10M with primer as specified in applicable section. Touch-up to include cleaning and painting of field connections, welds, rivets, nuts, washers, bolts, and damaged or defective paint and rusted areas.
.3 Prepare galvanized steel and zinc coated steel surfaces to CGSB 85-GP-16M.
.4 Prepare copper and copper alloys surfaces to CGSB 85-GP-20M.
.5 Prepare new steel surfaces exposed normally to dry conditions to CGSB 85-GP-14M.
.6 Prepare previously painted steel surfaces exposed normally to dry conditions to CGSB 85-GP-15M.
.7 Prepare steel surfaces exposed to industrial environments to CGSB 85-GP-13M.
.8 Prepare steel surfaces exposed to water or high humidity levels to CGSB 85-GP-11M CGSB 85-GP-18M.

.9 Ductwork:
Wash thoroughly all ductwork to be exposed and painted in completed work with mineral spirits and wipe dry with completely clean cloths. Phosphatize galvanized metal surfaces using CGSB-31-GP-116 pretreatment or prime with galvanized metal primer.

.10 Do not apply paint until prepared surfaces have been accepted by Consultant.

3.8 Mixing Paint

.1 Mix ingredients in container before and during use and ensure breaking up of lumps, complete dispersion of settled pigment, and uniform composition.

.2 Thin paint for spraying according to manufacturer's instructions. If directions are not on container, obtain instructions in writing from manufacturer and provide copy of instructions to Consultant.

.3 Do not use kerosene or any such organic solvents to thin water-based paints.

3.9 Application

.1 Method of application to be as approved by Consultant. Apply paint by brushroller except where spraying is necessary to achieve acceptable finish. Conform to paint manufacturer's application instructions unless specified otherwise.

.2 Brush/ roller application.

.1 Work paint into cracks, crevices and corners. Paint surfaces not accessible to brushes by spray, daubers or sheepskins.

.2 Brush out runs and sags.

.3 Remove runs, sags and brush marks from finished work and repaint.

.3 Spray application.

.1 Provide 6mil poly dust curtains around rooms being sprayed to prevent transfer of paint and odour to other rooms.

.2 Provide and maintain equipment that is suitable for intended purpose, capable of properly atomizing paint to be applied, and equipped with suitable pressure regulators and gauges.

.3 Keep paint ingredients properly mixed in containers during paint application either by continuous mechanical agitation or by intermittent agitation as frequently as necessary.

.4 Apply paint in a uniform layer, with overlapping at edges of spray pattern.

.5 Brush out immediately all runs and sags.

.6 Use brushes to work paint into cracks, crevices and places which are not adequately painted by spray.

.4 Use dipping, sheepskins or daubers only when no other method is practical in places of difficult access and only when specifically authorized by Consultant.

.5 Apply each coat of paint as a continuous film of uniform thickness. Repaint thin spots or bare areas before next coat of paint is applied.

.6 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.

.7 Sand and dust between each coat to remove visible defects.

.8 Finish tops of cupboards, cabinets and projecting ledges, both above and below sight lines as specified for surrounding surfaces.

.9 Finish inside of cupboards and cabinets as specified for outside surfaces.

.10 Finish closets and alcoves as specified for adjoining rooms.

.11 Finish top, bottom, edges and cutouts of doors after fitting as specified for door surfaces.

.12 Apply final coat of paint after inspection and correction of deficiencies and installation of flooring have been completed.

3.10 Mechanical and Electrical Equipment

.1 In finished areas: paint exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment. Colour and texture to match adjacent surfaces, except as noted otherwise.
.2 In boiler room, mechanical and electrical rooms: paint exposed conduits, piping, hangers,ductwork and other mechanical and electrical equipment.
.3 In other unfinished areas: leave exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment in original finish and touch up scratches and marks.
.4 Touch up scratches and marks on factory painted finishes and equipment with paint as supplied by manufacturer of equipment.
.5 Do not paint over nameplates.
.6 Keep sprinkler heads free of paint.
.7 Paint inside of ductwork where visible behind grilles, registers and diffusers with primer and one coat of matt black paint.
.8 Paint disconnect switches for fire alarm system and exit light systems in red enamel.
.9 Paint all fire protection piping red, unless directed otherwise.
.10 Paint all natural gas piping yellow, unless directed otherwise.
.11 Paint both sides and edges of backboards for telephone and electrical equipment before installation. Leave equipment in original finish except for touch-up as required, and paint conduits, mounting accessories and other unfinished items.

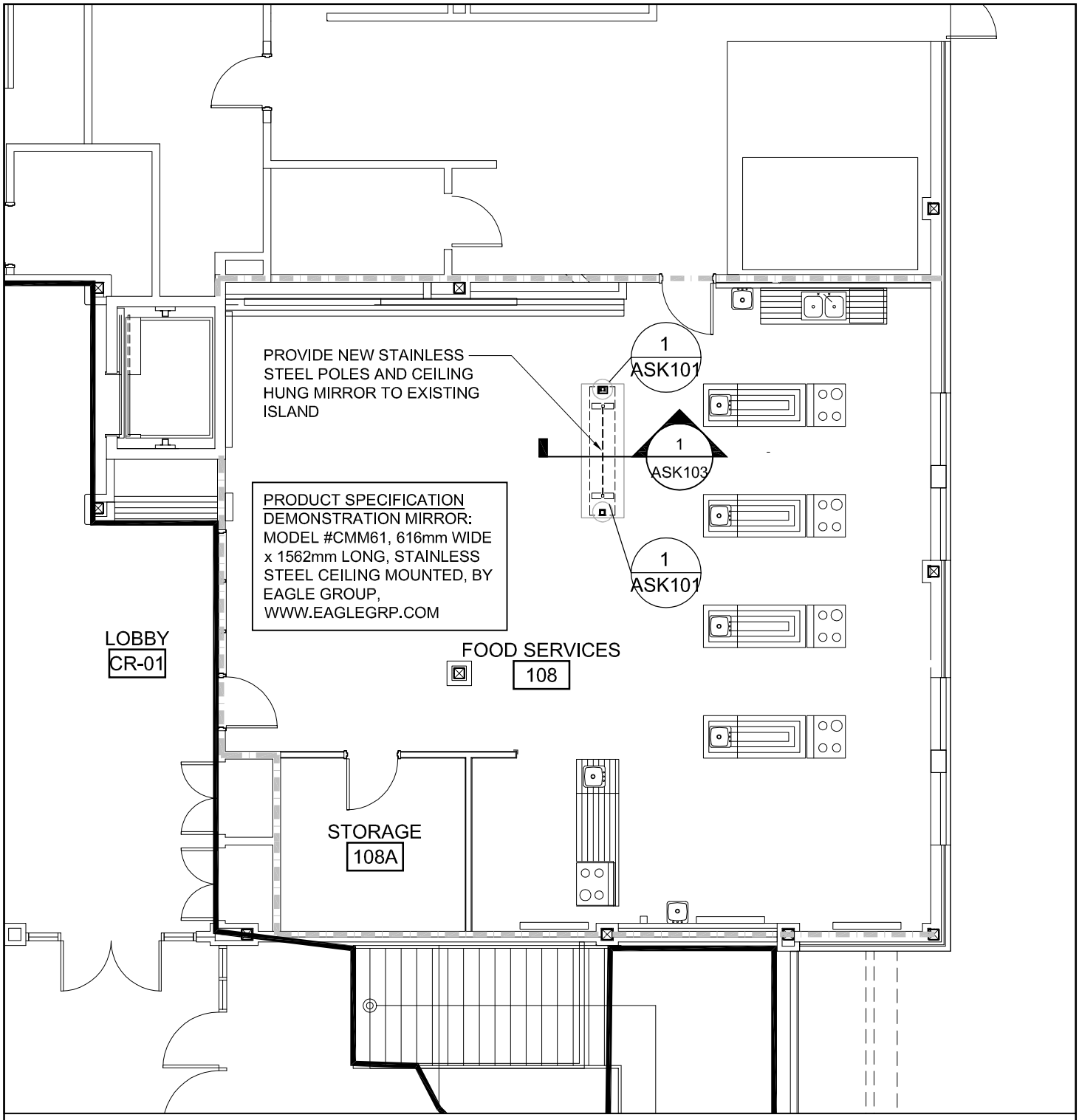
3.11 Field Quality Control

.1 Field inspection of painting operations to be carried out be independent inspection firm as designated by Consultant.
.2 Advise Consultant when each applied coating is ready for inspection. Do not proceed with subsequent coats until previous coat has been approved.
.3 Co-operate with inspection firm and provide access to all areas of the work.

3.12 Restoration

.1 Clean and re-install all hardware items that were removed before undertaken painting operations.
.2 Remove protective coverings and warning signs as soon as practical after operations cease.
.3 Remove paint splashings on exposed surfaces that were not painted. Remove smears and spatter immediately as operations progress, using compatible solvent.
.4 Protect freshly completed surfaces from paint droppings and dust to approval of Consultant. Avoid scuffing newly applied paint.
.5 Restore areas used for storage, cleaning, mixing and handling of paint to clean condition as approved by Consultant.

END OF SECTION



1 ASK100

PARTIAL FLOOR PLAN

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

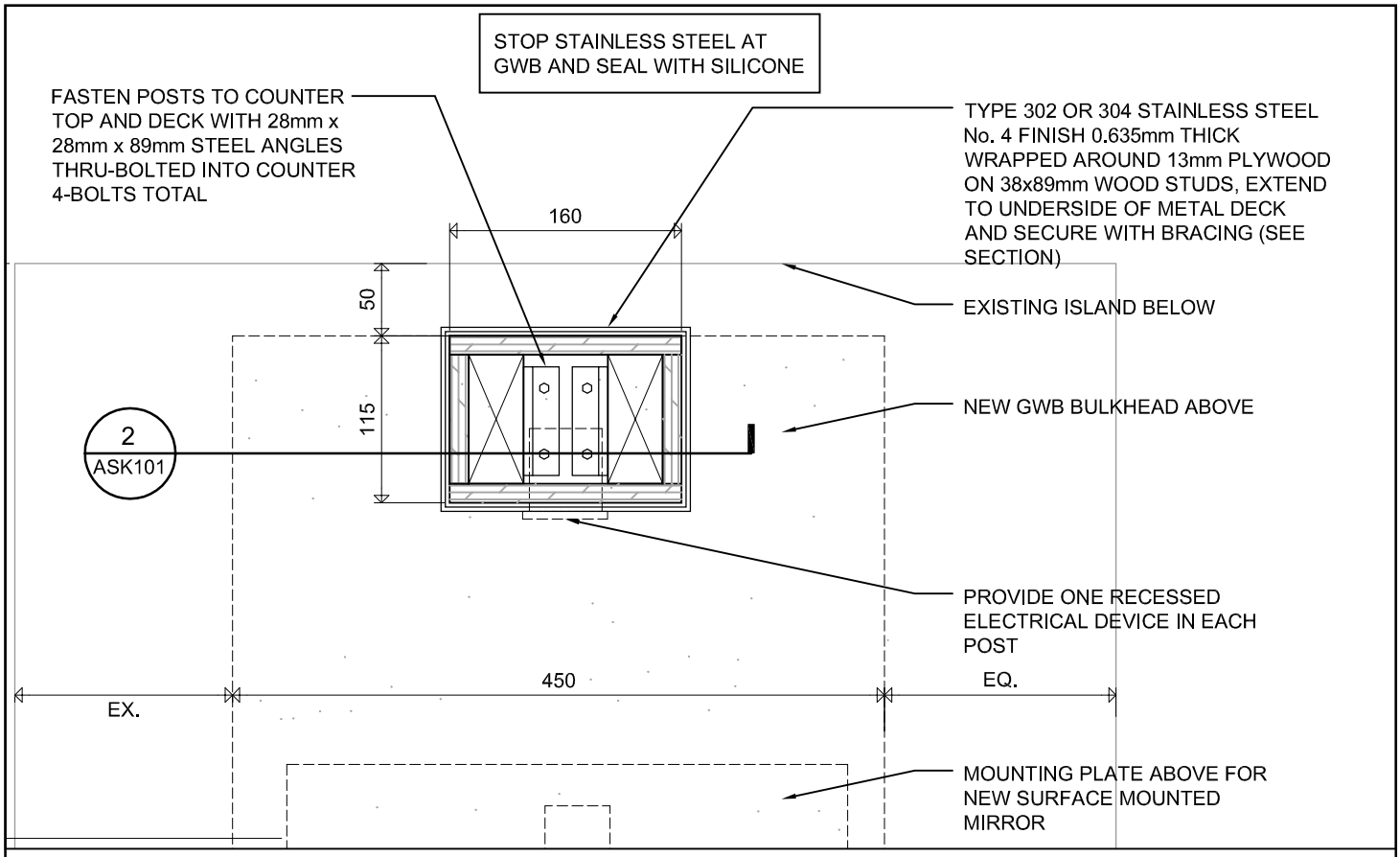
Project No.: 685

ADD MIRROR AND POWER TO EXISTING ISLAND IN FOOD SERVICES 108

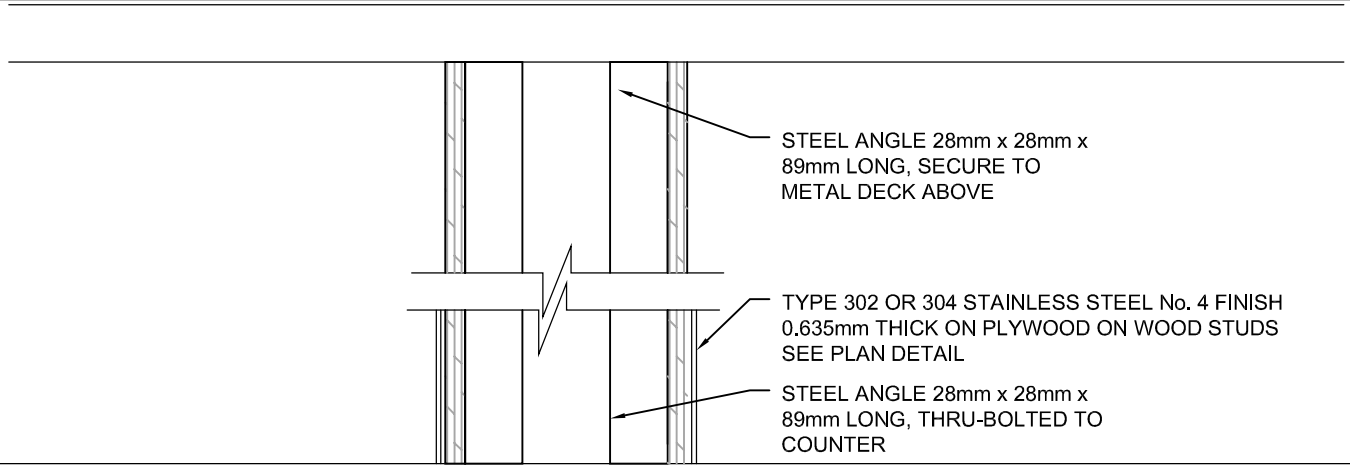
Plot Date: APR 2015

CORNERSTONE ARCHITECTURE
110-700 Richmond St. London ON Canada N6A 5C7
P 519 432 6644 F 519 432 6737
cornerstonearchitecture.ca

ASK-100



1 ASK101 PLAN DETAIL



2 ASK101 PLAN DETAIL

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

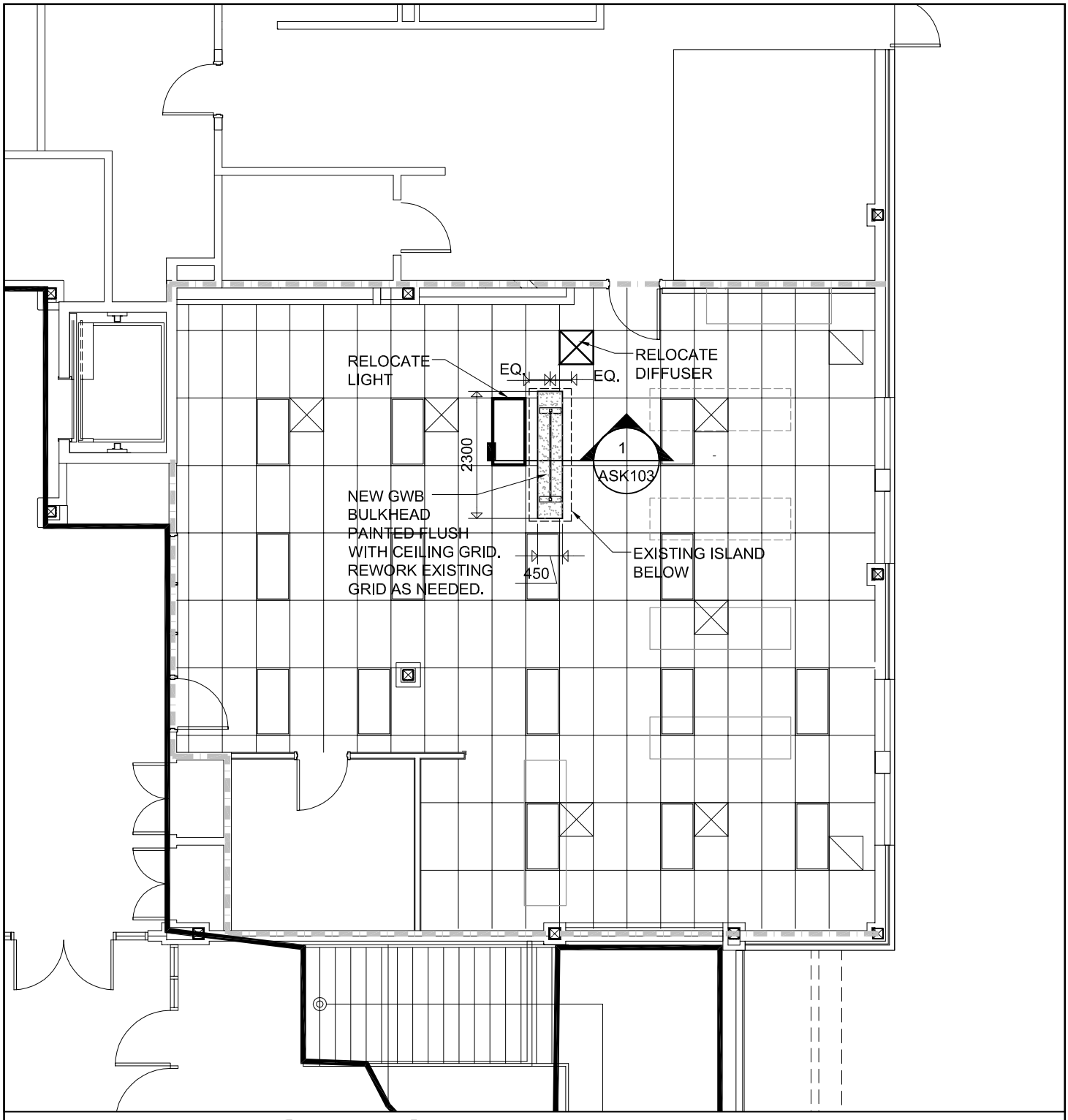
Project No.: 685

ADD MIRROR AND POWER TO EXISTING ISLAND IN FOOD SERVICES 108

Plot Date: APR 2015

CORNERSTONE ARCHITECTURE
11O-7OO Richmond St. London ON Canada N6A 5C7
P 519 432 6644 F 519 432 6737
cornerstonearchitecture.ca

ASK-101



1 ASK102 PARTIAL CEILING PLAN

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

Project No.: 685

ADD MIRROR AND POWER TO EXISTING ISLAND IN FOOD SERVICES 108

Plot Date: APR 2015

CORNERSTONE ARCHITECTURE
11O-7OO Richmond St. London ON Canada N6A 5C7
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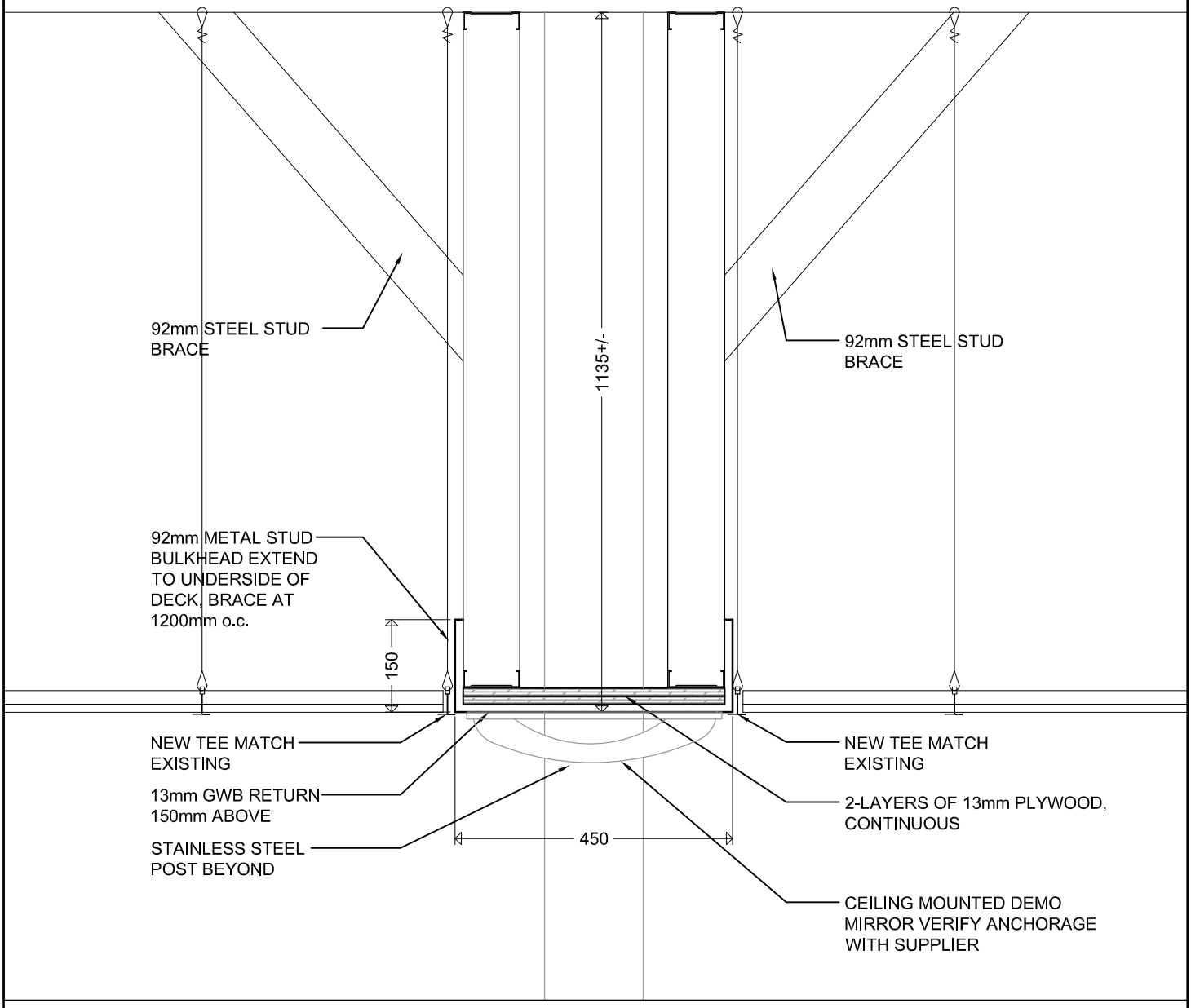
cornerstonearchitecture.ca

ASK-102



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ASK103

SECTION DETAIL

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

Project No.: 685

ADD MIRROR AND POWER TO EXISTING ISLAND IN FOOD SERVICES 108

Plot Date: APR 2015

CORNERSTONE ARCHITECTURE
11O-7OO Richmond St. London ON Canada N6A 5C7
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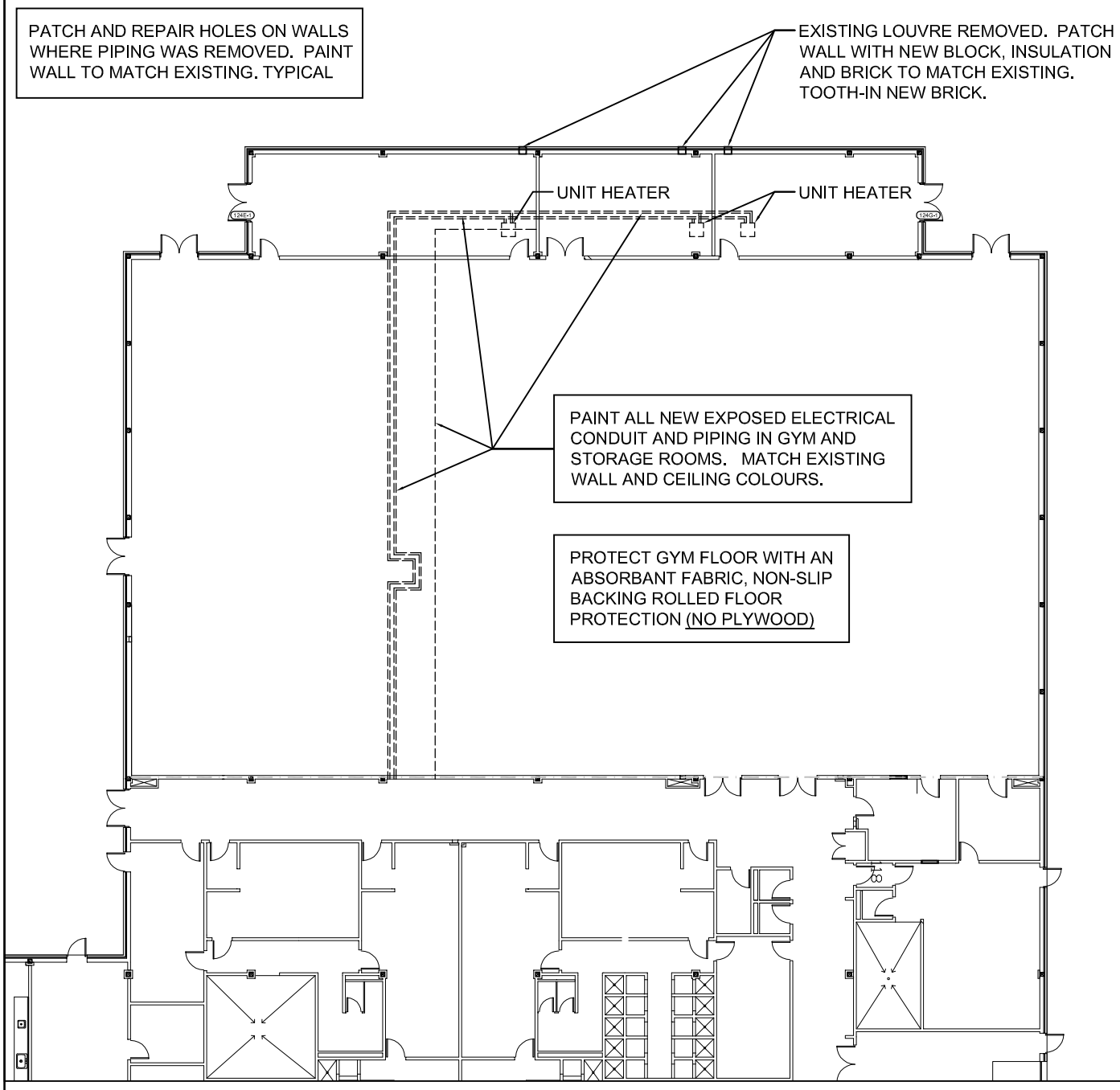
cornerstonearchitecture.ca

ASK-103



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ASK104

SECTION DETAIL

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

Project No.: 685

FLOOR PROTECTION AND PAINTING/ WALL REPAIR IN GYMNASIUM

Plot Date: APR 2015

CORNERSTONE ARCHITECTURE
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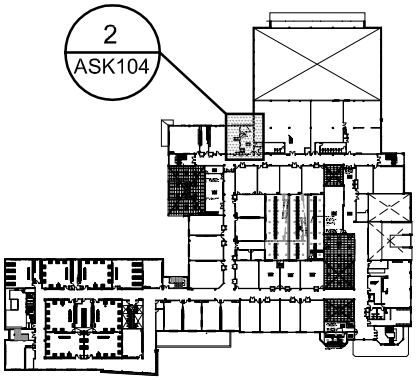
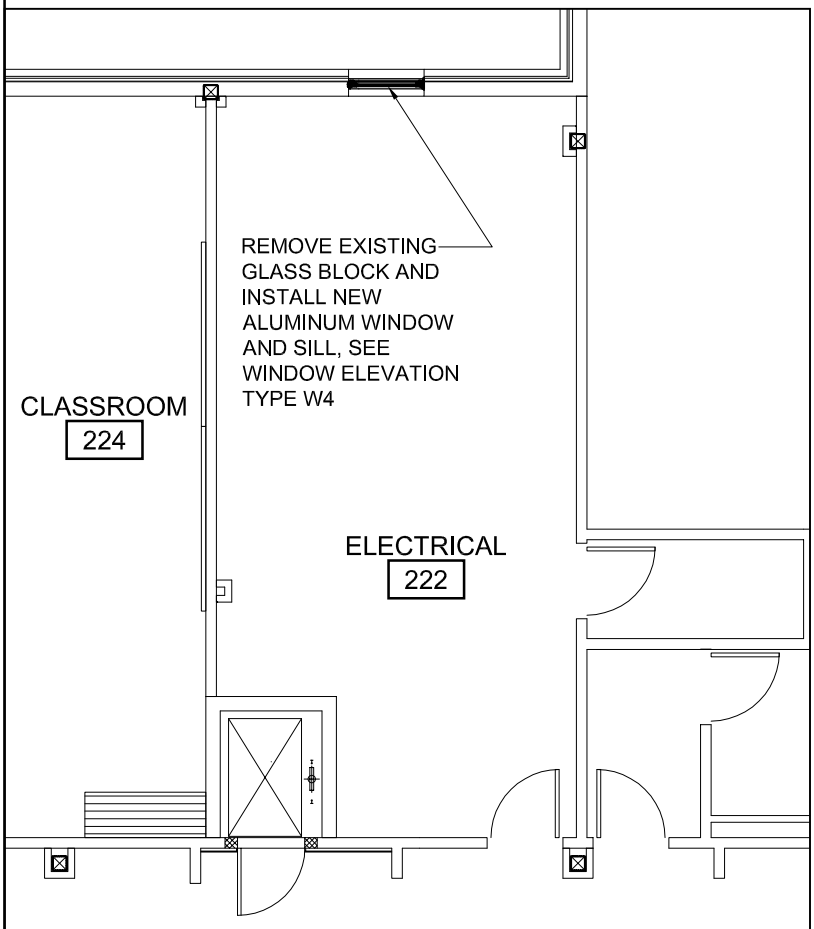
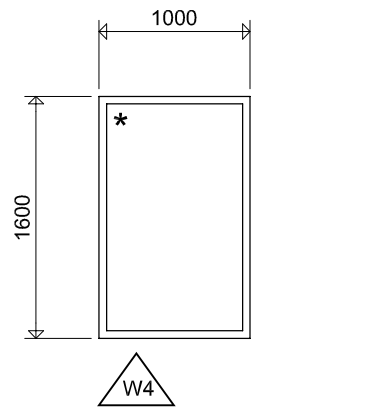
ASK-104



1 ASK105 KEY PLAN - SECOND FLOOR



2 ASK105 PARTIAL FLOOR PLAN



* THERMALLY INSULATED UNITS

3 ASK105 ELEVATION

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

Project No.: 685

REPLACE WINDOW IN MECHANICAL ROOM

Plot Date: APR 2015

CORNERSTONE ARCHITECTURE
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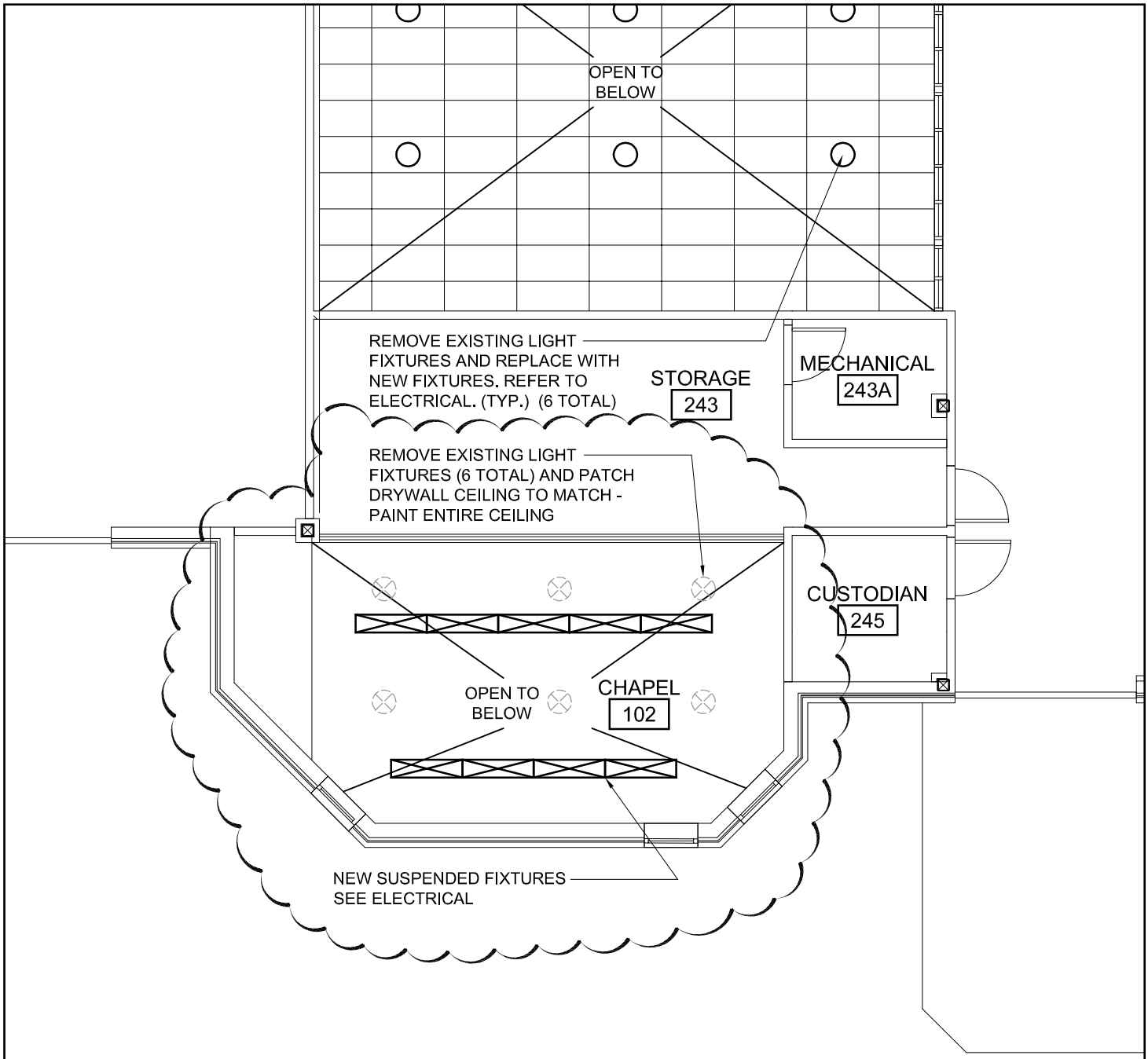
ASK-105



1
ASK106

SECTION DETAIL

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

Project No.:
685

REVISED CEILING LAYOUT IN CHAPEL 102

Plot Date:
APR 2015

CORNERSTONE ARCHITECTURE
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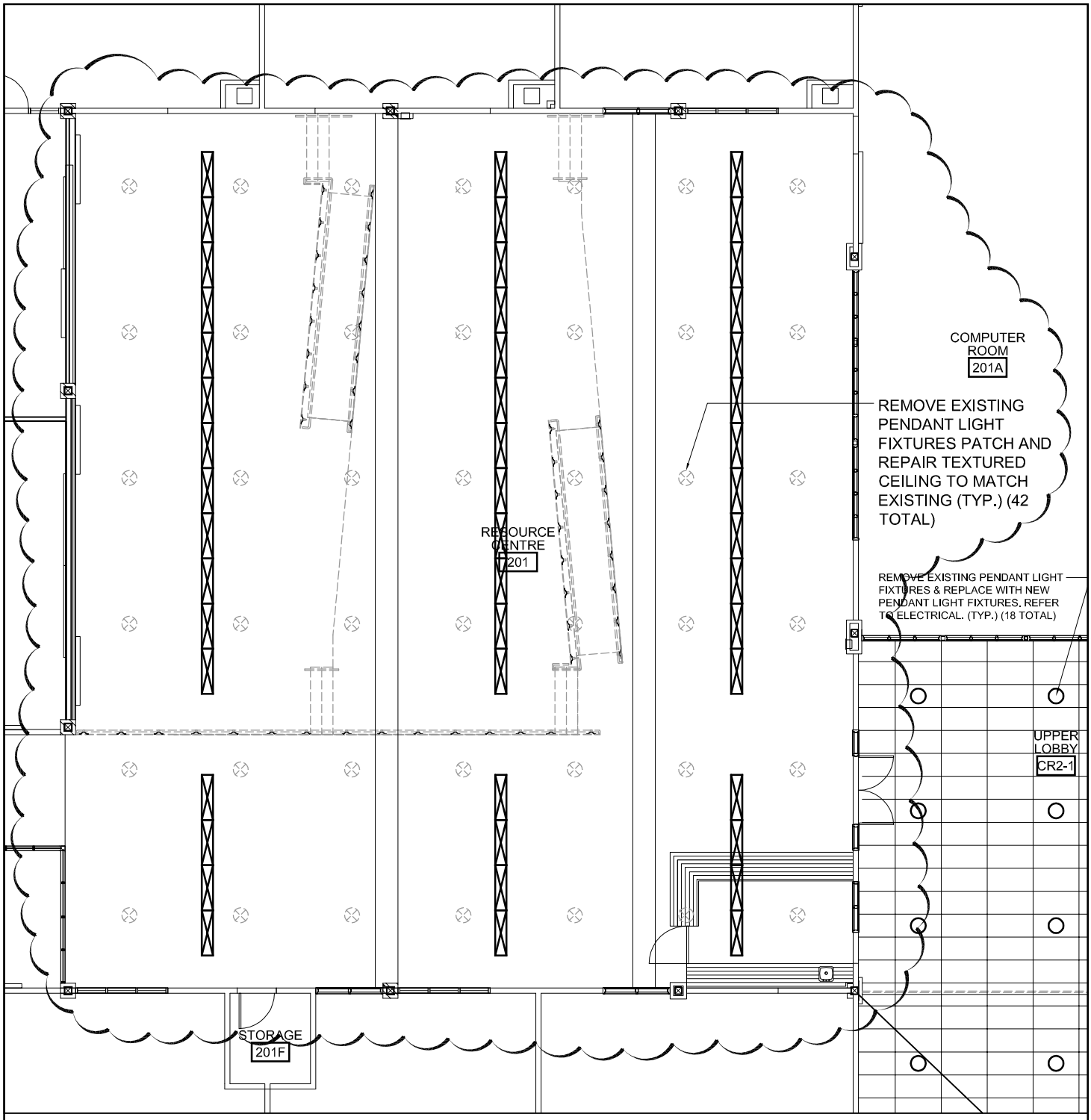
ASK-106



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ASK107

SECTION DETAIL

St. Patrick's Catholic High School

FACILITY UPGRADES

1001 The Rapids Parkway, Sarnia, Ontario

Project No.: 685

REVISE CEILING IN RESOURCE CENTRE 201

Plot Date: APR 2015

CORNERSTONE ARCHITECTURE
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cornerstonearchitecture.ca

ASK-107

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	MOUNTING TYPE	MOUNTING HEIGHT	LAMPS	VOLTS	SYSTEM WATTS	EQUAL MANUFACTURERS	NOTES
A4	LITHONIA CAT # IBH-12000LM-MD-HVOLT-40K-70CRI-WGX LED HIGH BAY LIGHT, 12000 LUMEN, 4000K	CHAIN SUSPENDED	4800mm A.F.F.	12000LU LED	347	131W	CFI, COLUMBIA, METALUX, THOMAS, PHILIPS	COMPLETE WITH WIREGUARD, NOTE 4
B	PEERLESS CAT # BRM9L-HI-30/70-SSH-U4-120-EZB-SCT-LP835-C210 1220mm LONG LED SUSPENDED LUMINAIRE, 3500K	AIRCRAFT CABLE SUSPENDED	4000mm A.F.F.	4800 LU LED	120	44W	PRUDENTIAL, AXIS	NOTE 3, NOTE 4
3 B1	PEERLESS CAT # BRM9L-LO-40/60-SSH-U4-120-EZB-SCT-LP835-C210 1220mm LONG LED SUSPENDED LUMINAIRE, 3500K	AIRCRAFT CABLE SUSPENDED	4000mm A.F.F.	3400 LU LED	120	30W	PRUDENTIAL, AXIS	NOTE 3, NOTE 4
P2	GOTHAM CAT # ICO-CYL-35-25-6AR-65-120 150mm INCITO CYLINDER LED DOWNLIGHT, 2500 LUMEN, 3500K, 65 DEGREE BEAM ANGLE	SUSPENDED	4000mm A.F.F.	2500 LU LED	120	42W	COOPER, JUNO, CREE, LIGHTOLIER	NOTE 3, NOTE 4
P3	GOTHAM CAT # ICO-CYL-35-30-6AR-65-120 150mm INCITO CYLINDER LED DOWNLIGHT, 3000 LUMEN, 3500K, 65 DEGREE BEAM ANGLE	SUSPENDED	7500mm A.F.F.	3000 LU LED	120	50W	COOPER, JUNO, CREE, LIGHTOLIER	NOTE 3, NOTE 4
P4	GOTHAM CAT # ICO-CYL-35-40-6AR-65-120 150mm INCITO CYLINDER LED DOWNLIGHT, 4000 LUMEN, 3500K, 65 DEGREE BEAM ANGLE	SUSPENDED	7500mm A.F.F.	4000 LU LED	120	64W	COOPER, JUNO, CREE, LIGHTOLIER	NOTE 3, NOTE 4
X	LITHONIA CAT # CSXWLED-30C-700-40K-T2M-347-DNAXD LED WALL PACK, 4000K	WALL PACK	MATCH EXISTING	6695 LU LED	347	69W	KEENE	FINISH TO MATCH EXISTING NOTE 4
Z3	GARDCO CAT # P21-A1-1-3-70LA-NW-HVU-BRP-SPA3-EHHS-CSA TYPE III DISTRIBUTION AREA LUMINAIRE WITH HOUSESIDE SHIELD, SQUARE POLE ADAPTER	EXISTING POLE	MATCH EXISTING	7350 LU LED	347	69W	LITHONIA	FINISH TO MATCH EXISTING NOTE 4
Z4	GARDCO CAT # P21-A1-1-4-105LA-NW-HVU-BRP-SPA3-EHHS-CSA TYPE IV DISTRIBUTION AREA LUMINAIRE WITH HOUSESIDE SHIELD, SQUARE POLE ADAPTER	EXISTING POLE	MATCH EXISTING	10,500 LU LED	347	103W	LITHONIA	FINISH TO MATCH EXISTING NOTE 4
Z5	GARDCO CAT # P21-A1-1-5W-165LA-NW-HVU-BRP-SPA3-CSA TYPE V DISTRIBUTION AREA LUMINAIRE, SQUARE POLE ADAPTER	EXISTING POLE	MATCH EXISTING	17,800 LU LED	347	164W	LITHONIA	FINISH TO MATCH EXISTING NOTE 4

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS TO CONFIRM LUMINAIRE MOUNTING PRIOR TO ORDERING. SUPPLY APPROPRIATE MOUNTING CLIPS AND/OR TRIMS AS REQUIRED. CONFIRM ELEVATIONS OF PENDANTS AND SCONCES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
2. CONFIRM VOLTAGE OF ALL EXISTING CIRCUITS PRIOR TO ORDERING REPLACEMENT LUMINAIRES.
3. PROVIDE 347-120V STEP DOWN TRANSFORMER IN ACCESSIBLE CEILING SPACE OR PROVIDE ACCESS PANEL FOR ALL TRANSFORMERS MOUNTED IN DRYWALL CEILINGS.
3. 4. ALL EQUAL MANUFACTURERS TO BE ENERGY STAR CERTIFIED OR DLC LISTED.

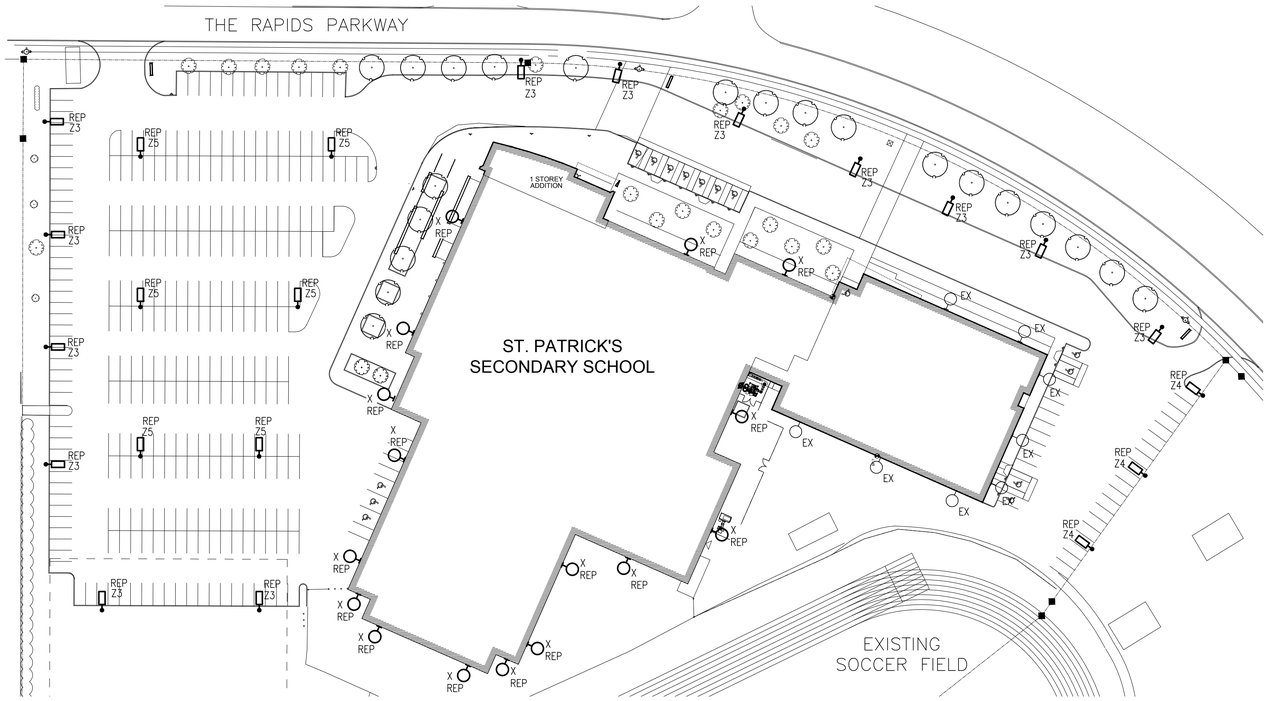
MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT SUPPLIED AND INSTALLED BY DIVISION 15, WIRED BY DIVISION 16							CONTROL EQUIPMENT SUPPLIED AND INSTALLED BY DIVISION 16						
ITEM	DESCRIPTION	LOCATION	hp	MCA	PHASE	VOLTS	STARTER / CONTROL TYPE	FED FROM	BREAKER SIZE	POLES	CONDUCTOR SIZE	CONDUIT SIZE	NOTES
HP-406	HEAT PUMP	CORRIDOR CR1-9		19	3	208	DS	PANEL	20	3	3 #10	21mm	
HP-413	HEAT PUMP	MECHANICAL RM 218		10.4	3	208	DS	PANEL '2H'	15	3	3 #12	21mm	
UH-424	UNIT HEATER	ROOMS 124E/F/G			1	120	DS	EXISTING	15	1	EX	EX	

NOTES:
1. DIVISION 16 TO OBTAIN COPIES OF MECHANICAL EQUIPMENT SHOP DRAWINGS AND COORDINATE ELECTRICAL SERVICES.
2. PROVIDE LOCAL NON-FUSED DISCONNECT SWITCHES AT MOTORS IN ACCORDANCE WITH SECTION 28-604 OF THE ONTARIO ELECTRICAL SAFETY CODE.
3. UNLESS INDICATED OTHERWISE ALL CONTROL WIRING IS BY DIVISION 15.

MOTOR CONTROL ABBREVIATIONS

DS	UN-FUSED DISCONNECT SWITCH	FHP	FRACTIONAL HORSE POWER	MCA	MINIMUM CIRCUIT AMPACITY



PART ELECTRICAL SITE PLAN

SCALE: 1:750

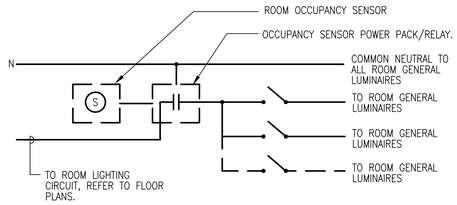
ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
LIGHTING		
A	FLUORESCENT LUMINAIRE	SEE LUMINAIRE SCHEDULE
A	INCANDESCENT/FLUORESCENT OR HID LUMINAIRE	SEE LUMINAIRE SCHEDULE
A	INCANDESCENT/FLUORESCENT OR HID LUMINAIRE	SEE LUMINAIRE SCHEDULE
A	SITE LUMINAIRE - POLE MOUNTED	POLE MOUNTED
	OCCUPANCY SENSOR - REFER TO SPECIFICATION	WALL MOUNTED AT CEILING
	OCCUPANCY SENSOR - REFER TO SPECIFICATION	CEILING SURFACE MOUNTED
$	SINGLE POLE SWITCH	1100mm (43") A.F.F.
$D	SINGLE POLE DIMMER SWITCH	1100mm (43") A.F.F.
$K	KEY SWITCH	1100mm (43") A.F.F.
POWER		
	MOTOR	
	ELECTRICAL PANEL	SEE PANEL SCHEDULE

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	P	POLE
AFG	ABOVE FINISHED GRADE	PH	PHASE
C	CONDUIT	REL	IF DASHED - EXISTING TO BE RELOCATED
CL	FLUSH CEILING MOUNTED	REL	IF SOLID - EXISTING IN NEW LOCATION
DMS	DIGITAL METERING SYSTEM	REM	EXISTING TO BE REMOVED
EX	EXISTING TO REMAIN	REP	EXISTING TO BE REPLACED WITH NEW
GFCI	GROUND FAULT DEVICE	RR	REMOVE EXISTING AND REPLACE IN NEW LOCATION
NEW	NEW DEVICE		
OC	ABOVE COUNTER - 230mm (9")	WG	WIRE GUARD

ELECTRICAL DRAWING LIST



TYPICAL OCCUPANCY SENSOR SCHEMATIC

N.T.S.

NOTES:

1. ADJUST OCCUPANCY SENSORS TO TURN LIGHTS OFF WHEN ROOM UNOCCUPIED FOR 10 MINUTES.
2. WIRING BETWEEN OCCUPANCY SENSOR AND CONTROL UNIT TO BE IN CONDUIT.
3. MOUNT POWER PACK IN ACCESSIBLE CEILING SPACE NEXT TO LUMINAIRE OR SWITCH AT LOCATION ELECTRICAL FEED FROM LIGHTING PANEL TERMINATES.
4. WIRE AND CONNECT OCCUPANCY SENSOR AND POWER PACK AS PER MANUFACTURER'S RECOMMENDATIONS.
5. REFER TO ELECTRICAL SPECIFICATIONS FOR SPECIFIC INFORMATION ON SENSORS AND POWER PACKS.
6. REFER TO FLOOR PLANS FOR LOCATION AND QUANTITY OF SENSORS AND LIGHT SWITCHES.

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1	ISSUED FOR OWNER REVIEW	09 APR 2015
2	ISSUED FOR BID	16 APR 2015
3	AS PER ADDENDUM	30 APR 2015

ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD

St. Patrick's Catholic High School

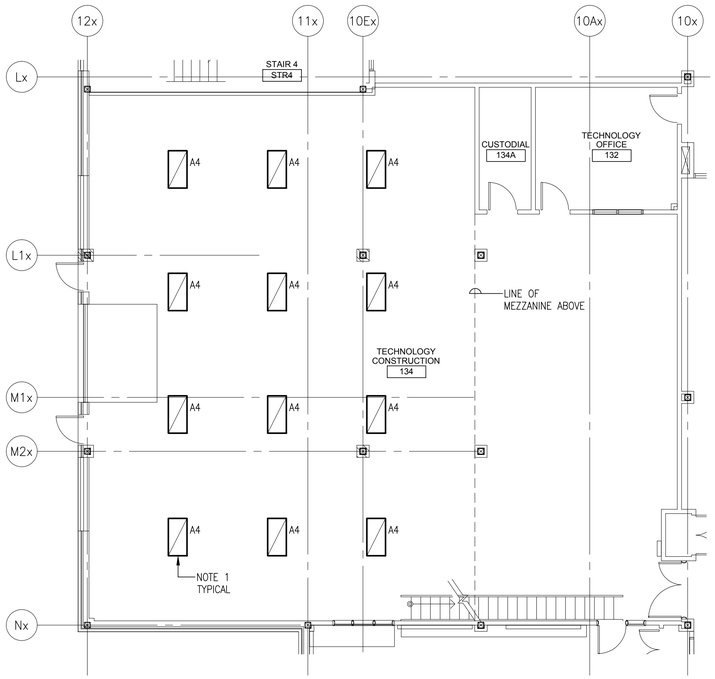
Existing Facility Upgrades — Sarnia, Ontario

ELECTRICAL LEGEND, SCHEDULES SITE PLAN AND DRAWING LIST

Project No.: 7641 | Drawn By: ALU | Revised: 30 APR 2015

E1.1

FILE NAME: 7641E101.DWG
DATE PLOTTED: 30-Apr-2015 8:37 AM
DATE ROTTED: 30-Apr-2015 8:37 AM

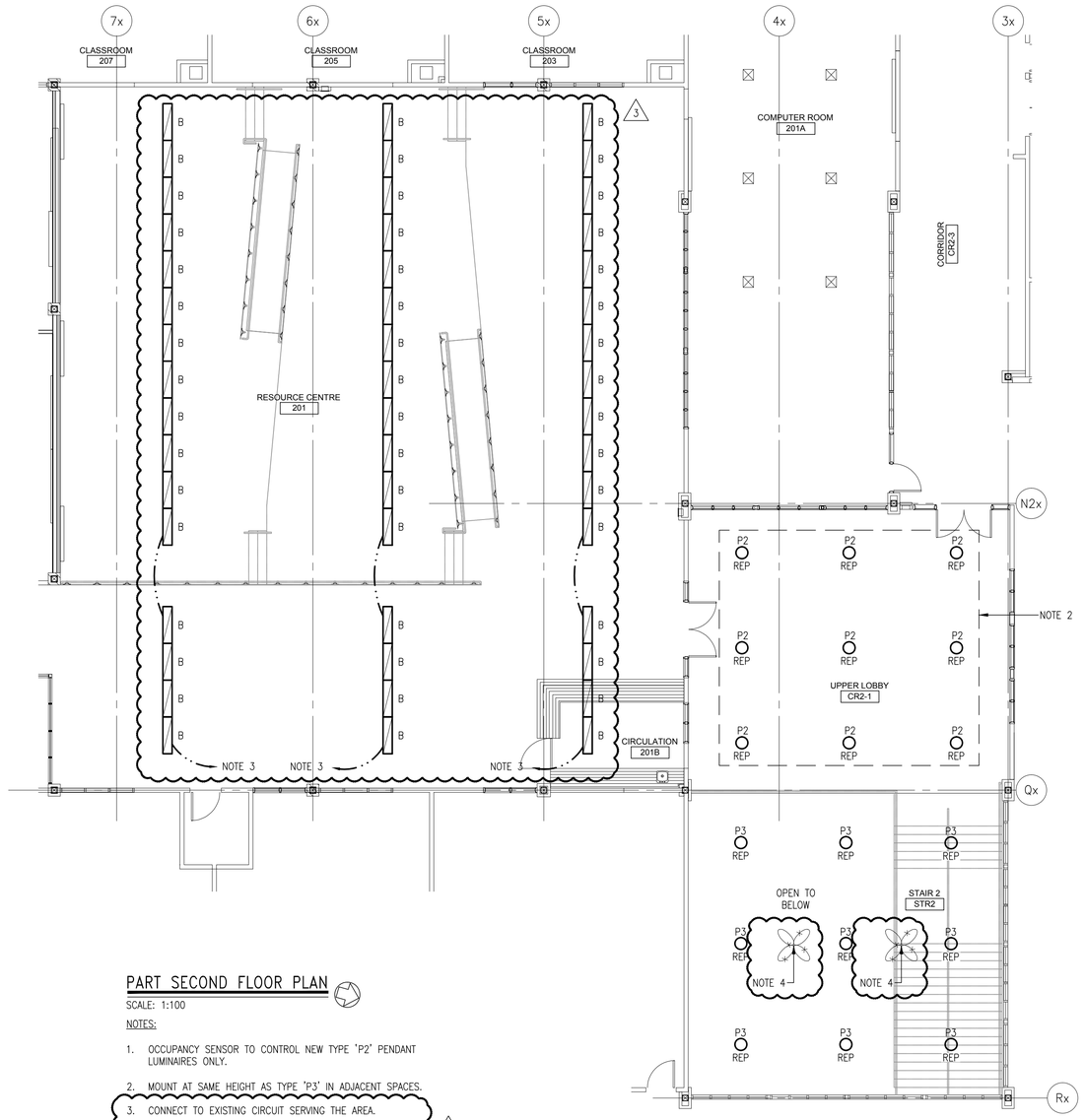


PART GROUND FLOOR PLAN

SCALE: 1:100

NOTES:

1. REPLACE EXISTING WITH NEW. CONNECT TO EXISTING WIRING AND SWITCHING. CHAIN SUSPEND TO MATCH EXISTING LUMINAIRE HEIGHT.

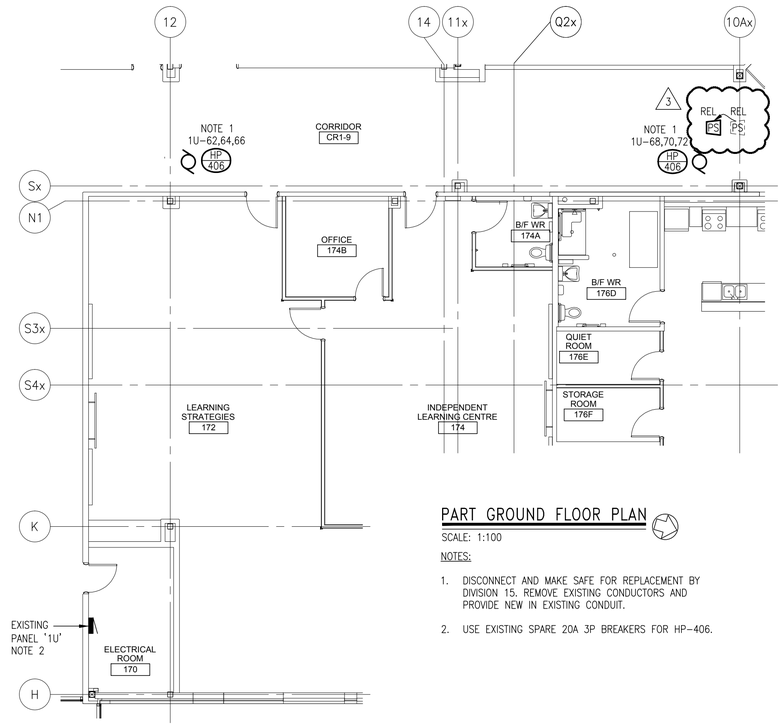


PART SECOND FLOOR PLAN

SCALE: 1:100

NOTES:

1. OCCUPANCY SENSOR TO CONTROL NEW TYPE 'P2' PENDANT LUMINAIRES ONLY.
2. MOUNT AT SAME HEIGHT AS TYPE 'P3' IN ADJACENT SPACES.
3. CONNECT TO EXISTING CIRCUIT SERVING THE AREA.
4. REMOVE EXISTING CEILING FAN AND ALL ASSOCIATED CONTROLS AND WIRING BACK TO SOURCE.

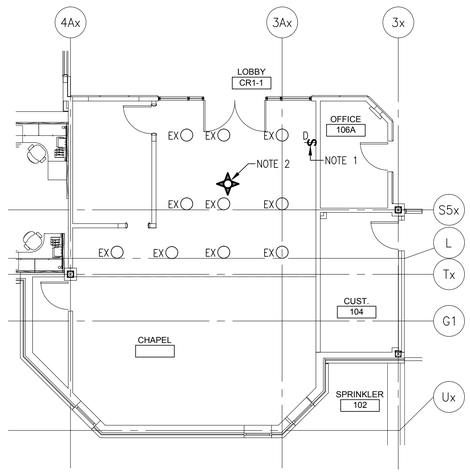


PART GROUND FLOOR PLAN

SCALE: 1:100

NOTES:

1. DISCONNECT AND MAKE SAFE FOR REPLACEMENT BY DIVISION 15. REMOVE EXISTING CONDUCTORS AND PROVIDE NEW IN EXISTING CONDUIT.
2. USE EXISTING SPARE 20A 3P BREAKERS FOR HP-406.

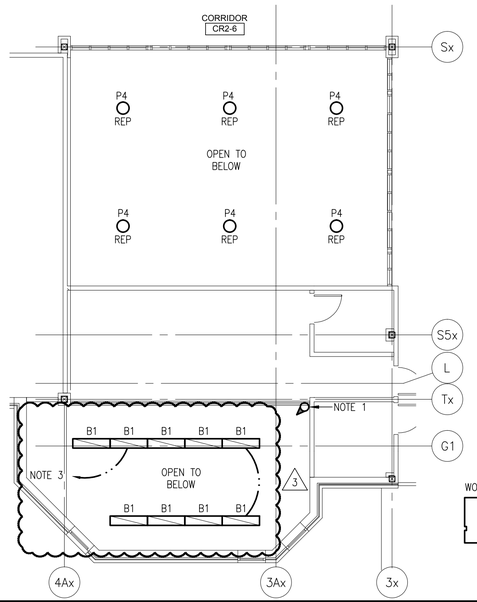


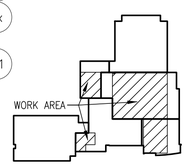
PART GROUND FLOOR PLAN

SCALE: 1:100

NOTES:

1. PROVIDE NEW DIMMER SWITCH FOR NEW TYPE 'P3' LUMINAIRES ONLY.
2. PROVIDE CEILING MOUNTED OCCUPANCY SENSOR TO CONTROL EXISTING RECESSED DOWNLIGHTS ONLY.





KEY PLAN

N.T.S.

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DATE ROTTED: 30-Apr-2015 8:37 AM

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1	ISSUED FOR OWNER REVIEW	09 APR 2015
2	ISSUED FOR BID	16 APR 2015
3	AS PER ADDENDUM	30 APR 2015

ST. CLAIR CATHOLIC
DISTRICT SCHOOL BOARD

St. Patrick's Catholic High School

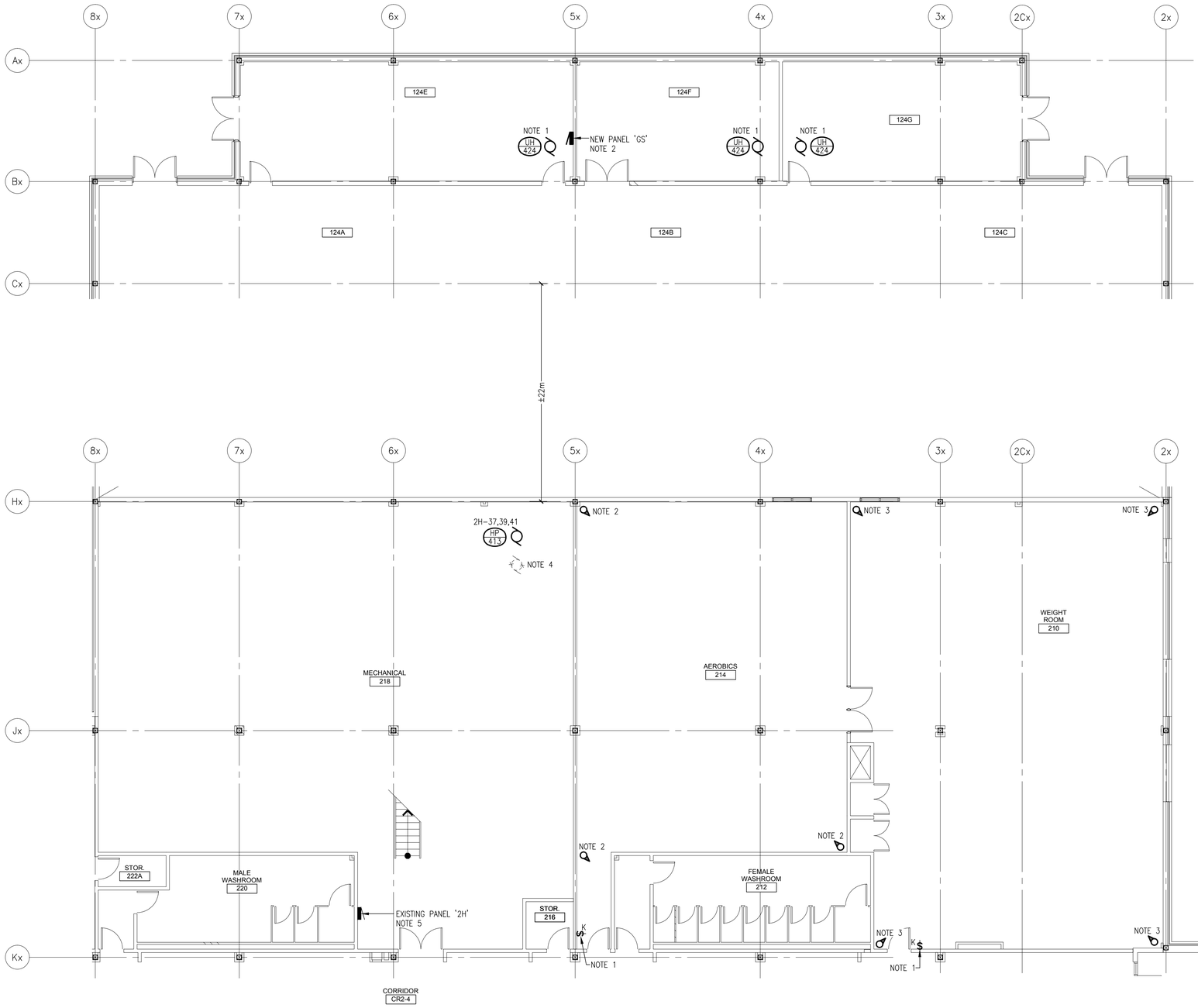
Existing Facility Upgrades

Sarnia, Ontario

Revised: 30 APR 2015
Drawn By: ALU
Project No.: 7641

PART FLOOR PLANS - EAST
ELECTRICAL

E2.1



PART GROUND FLOOR PLAN

SCALE: 1:100

NOTES:

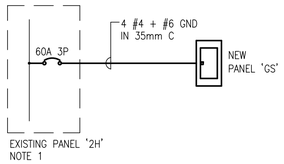
1. DISCONNECT AND MAKE SAFE FOR REPLACEMENT BY DIVISION 15. CONNECT NEW UNIT HEATERS TO EXISTING CIRCUIT. REWORK AND EXTEND WIRING AS REQUIRED.
2. PROVIDE NEW PANEL ON AVAILABLE WALL SPACE. COORDINATE LOCATION ON SITE. ROUTE CONDUIT ACROSS GYM CEILING TO MECHANICAL ROOM 218. REFER TO PART ELECTRICAL RISER DIAGRAM ON THIS DRAWING FOR DETAILS.

PART SECOND FLOOR PLAN

SCALE: 1:100

NOTES:

1. REPLACE EXISTING SWITCH WITH KEY SWITCH.
2. CONNECT OCCUPANCY SENSORS TO CONTROL EXISTING LIGHTING IN AEROBICS ROOM.
3. CONNECT OCCUPANCY SENSORS TO CONTROL EXISTING LIGHTING IN WEIGHT ROOM.
4. DISCONNECT AND MAKE SAFE FOR REPLACEMENT BY DIVISION 15. REMOVE CONDUCTORS AND PROVIDE NEW IN EXISTING CONDUIT.
5. PROVIDE 15A 3P BREAKER (TYPE AND RATING TO MATCH EXISTING) FOR HP-413.

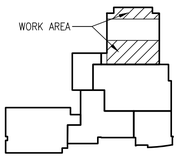


PART ELECTRICAL RISER DIAGRAM

N.T.S.

NOTES:

1. PROVIDE NEW BREAKER TO SUIT EXISTING EATON POWERLINE PANEL.



KEY PLAN

N.T.S.

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Existing Facility Upgrades

Sarnia, Ontario

Revised: 30 APR 2015
Drawn By: ALU
Project No.: 7641

PART FLOOR PLANS - WEST
ELECTRICAL

E2.2

FILE NAME: 7641E02.DWG
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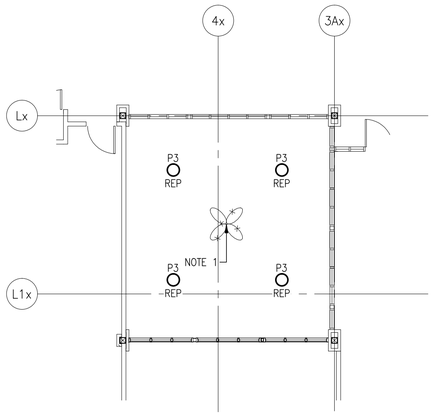
DATE ROTTED: 30-Apr-2015 8:37 AM

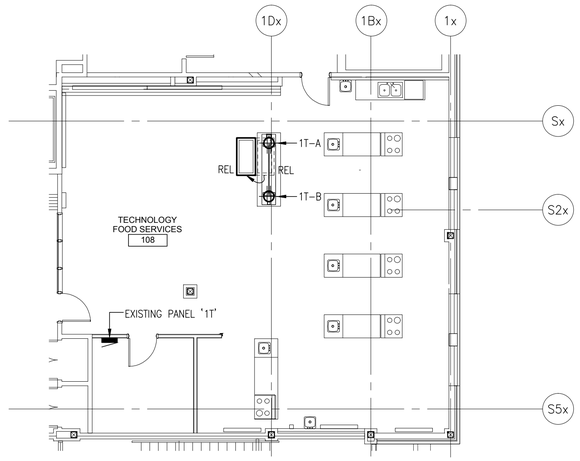


PART SECOND FLOOR PLAN

SCALE: 1:100

NOTES:

1. REMOVE EXISTING CEILING FAN AND ALL ASSOCIATED CONTROLS AND WIRING BACK TO SOURCE.

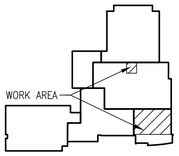


PART GROUND FLOOR PLAN

SCALE: 1:100

NOTES:

1. PROVIDE TWO 20A 1P BREAKERS IN EXISTING PANEL '1T' TO SERVE NEW RECEPTACLES. TYPE AND RATINGS TO MATCH EXISTING PANEL.



KEY PLAN

N.T.S.

FILE NAME: 7641EDX.DWG
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St. Patrick's Catholic High School

Sarnia, Ontario

Existing Facility Upgrades

PART FLOOR PLANS
ELECTRICAL

Project No.:	Drawn By:	Revised:
7641	ALU	30 APR 2015

E2.3