

1. GENERAL

- .1 This Addendum is issued in accordance with Bid Document 00 21 13 Instructions to Bidders, Part 1, and amends the Bid Documents as set out below.
- .2 Such revisions shall become part of the Bid Documents, and shall change the original Bid Documents only in the manner and extent stated.

2. SPECIFICATIONS

- .1 Section 08 11 14 - Hollow Metal Doors and Frames
  - .1 **DELETE:** Section 08 11 14 - Hollow Metal Doors and Frames in its entirety.
  - .2 **ADD:** new Section 08 11 14 - Hollow Metal Doors and Frames as per attached
  - .3 **CLARIFICATION:** Delete requirement for STC rating of hollow metal doors and frames.
  - .4 **CLARIFICATION:** Frames and screens in units with SCW Doors are to be manufactured to accommodate 25mm sealed glazing
- .2 Section 08 14 10 - Flush Wood Doors:
  - .1 **CLARIFICATION:** Solid Core Wood Doors are not required to meet an STC rating. Doors to be prepared to accept door bottoms and gasket kit as per Section 08 71 10 - Door Hardware - General.

3. DRAWINGS

- .1 Drawing sheet A0.1 Hollow Metal Screen Elevation; drawing 1, sheet A2.3
  - .1 Screen type S1
    - .1 **CLARIFICATION:** Hollow metal screen type S1 can be fabricated in two separate sections and installed with a 125mm wide section of type P2c partition wall. Overall dimensions of the two sections including partition section to be equal to the overall dimension shown.
  - .2 Drawing sheet A0.1 Door and Frame Schedule
    - .1 **REVISE:** door D5003K width to be 965mm

4. EQUALS & ALTERNATES

\*\*Equals and alternates are approved subject to the following conditions:

- 1) Any differences in equipment size, weight, dimensions, paint colour, orientation, wiring, pipe routing, ductwork connections, roof openings, wall openings, sound levels, voltage ratings, venting requirements etc. shall not result in additional cost to the contract, the owner nor the consultants.
- 2) Costs associated with any required structural, electrical, mechanical, architectural and special modifications to suit this equipment shall be included in the tendered base bid of the installing contractor and/or the equipment supplier, or, be corrected in the field as required at no additional cost.

Section / Equipment	Specified	Submitted**	Equal or Alternate	Granted
12 50 00- Furniture	Per Drawing Sheet A7.1 – Furniture Schedule			
Type S1	Global – Vion task chair	1.Allseating 90088WA 2. Teknion NPRTN	Equal  Equal	Yes  No
Type S2	Global - Spritz	1.Mayline - Valore TSH1F3 2.Mayline – KTS1F	Equal	Yes

		3. Safco – Mii Nesting 4281	Equal	Yes
			Equal	No
Type S3	Global - LITE	1.Allseating – Inertial Guest 79054-NA hard surface casters 2.Rouillard- Lead V Guest Vr21 hard surface casters	Equal	Yes
			Equal	No
Type S3c	Global LITE	1.Allseating – Inertial Guest 79054-NA carpet casters 2.Rouillard- Lead V Guest Vr21 carpet casters	Equal	Yes
			Equal	No
S4	Global APP mid back	Rouillard – Pilium Ply wood Stool PL27	Equal	Yes
S5	Global Wind Linear Armless	Refer to addendum #3	Refer to addendum #3	Refer to addendum#3
T1	Global Contract Collab. Tables	1.Teknion – Thesis HUB tables THHDX	Equal	Yes
T2	Global Contract Licence	1.Teknion –Expansion Casegoods BCMNRB	Equal	Yes
T3	Global Meeting Table	1.Teknion –Expansion Training CTFTT	Equal	Yes
T4	Global Contract Contract Tables	1.Teknion – square Casual Tables ATCSB30	Equal	Yes
T5	Global –Wind Linear table	1.Teknion – expansion casegoods BCMCT 2.Rouillard Agora LP Tables LP482015P	Equal Equal	Yes No
WS1	Global – Zira	1.Teknion – Expansion Casegoods, BMRF,BMRS,BNSP,SNSLF	Equal	Yes
WS1a	Global – Zira	1.Teknion – Expansion Casegoods, BMRF, BNSP	Equal	Yes
WS1b	Global – Zira	1.Teknion – Expansion Casegoods, BMRS, BNSLF	Equal	Yes
WS2	Global – Bridges II	1.Teknion – Expansion Spine Desking RMDDL, RMDSL,RMDEL,RBHAT, etc.	Equal	Yes
WS3	Global Contract Bridges II benching	1.Teknion – Expansion Desking RTLDL, RBHAT	Equal	Yes

**ATTACHED ITEMS:**

1. AG Engineering – Electrical Addendum #1
2. Section 08 11 14 - Hollow Metal Doors and Frames

**END OF ADDENDUM**

Project: **LU Teaching Commons Renovation**

Location: **Thunder Bay, Ontario**

Project No.: **A101-17-006**

Date: **October 2, 2017**

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**The contract is hereby amended as follows:**

**ELECTRICAL**

**Equivalent Products**

<b><u>Product Description</u></b>	<b><u>Specified Product</u></b>	<b><u>Acceptable Equivalent Product</u></b>
<b>Type 'T1' Light Fixture</b>	<b>PHILIPS#</b> 1-DL-G-41L-835-4-D-UNV-DIM	<b>CREE#</b> ZR14C-40L-35K-10V-FD
<b>Type 'T2' Light Fixture</b>	<b>PHILIPS#</b> 2-DL-G-43L-835-4-D-UNV-DIM	<b>CREE#</b> ZR24C-40L-35K-10V-FD
<b>Type 'P1' Light Fixture</b>	<b>PHILIPS#</b> 2905-L-B-C-Q-Q-04-1-1-E-W	<b>PAL#</b> MLS2-I/D-MO/HO-K35-4'-CNOP/LOH-F01M-120-DIM
<b>Type 'D1' Light Fixture</b>	<b>PHILIPS#</b> Frame-In #: C4-R-N Engine #: C4L-10-8-35-M-Z10-U Trim #: C4-R-DL-CL	<b>CREE#</b> Housing#: KR4-13L-35K-120V-10V Reflector#: KR4T-SSGC-FF

**End of Addendum**

## **Part 1 General**

### **1.1 RELATED DOCUMENTS**

- .1 Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

### **1.2 RELATED SECTIONS**

- .1 Section 07 92 10 - Joint Sealing.
- .2 Section 08 71 10 - Door Hardware.
- .3 Section 08 80 50 - Glazing.
- .4 Section 09 91 10 - Painting.

### **1.3 REFERENCES**

- .1 American Society for Testing and Materials (ASTM International)
  - .1 ASTM A653/A653M-01a, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  - .2 ASTM B29-92(1997), Specification for Refined Lead.
  - .3 ASTM B749-97, Specification for Lead and Lead Alloy Strip, Sheet and Plate Products.
- .2 Canadian General Standards Board (CGSB)
  - .1 CAN/CGSB-1.181-99, Ready-Mixed Organic Zinc-Rich Coating.
  - .2 CGSB 41-GP-19Ma-84, Rigid Vinyl Extrusions for Windows and Doors.
- .3 Canadian Standards Association (CSA International)
  - .1 G40.20/G40.21-98, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
  - .2 CSA W59-M1989(R2001), Welded Steel Construction (Metal Arc Welding) (Metric Version).
- .4 Canadian Steel Door Manufacturers' Association, (CSDMA).
  - .1 CSDMA, Specifications for Commercial Steel Doors and Frames, 1990.
  - .2 CSDMA, Recommended Selection and Usage Guide for Commercial Steel Doors, 1990.
- .5 National Fire Protection Association (NFPA)
  - .1 NFPA 80-99, Standard for Fire Doors and Fire Windows.
  - .2 NFPA 252-99, Standard Methods of Fire Tests of Door Assemblies.
- .6 Underwriters' Laboratories of Canada (ULC)
  - .1 CAN4-S104-80(R1985), Fire Tests of Door Assemblies.
  - .2 CAN4-S105-85(R1992), Fire Door Frames Meeting the Performance Required by CAN4-S104.
- .7 CAN/ULC-S702-97, Thermal Insulation, Mineral Fibre, for Buildings.
- .8 CAN/ULC-S704-01, Thermal Insulation, Polyurethane and Polyisocyanurate Boards, Faced.

### **1.4 DESIGN REQUIREMENTS**

- .1 Design exterior frame assembly to accommodate to expansion and contraction when subjected to minimum and maximum surface temperature of -35°C to 35°C.
- .2 Maximum deflection for exterior steel entrance screens under wind load of 1.2 kPa not to exceed 1/175th of span.

## **1.5 SUBMITTALS**

- .1 Shop Drawings
  - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
  - .2 Indicate each type of door, material, steel core thicknesses, mortises, reinforcements, location of exposed fasteners, openings, glazed louvred, arrangement of hardware, fire rating and finishes.
  - .3 Indicate each type frame material, core thickness, reinforcements, glazing stops, location of anchors and exposed fastenings and reinforcing, fire rating and finishes.
  - .4 Include schedule identifying each unit, with door marks and numbers relating to numbering on drawings and door schedule.
  - .5 Submit test and engineering data, and installation instructions.

## **1.6 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction Waste Management And Disposal.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper plastic polystyrene corrugated cardboard packaging material in appropriate on-site bins for recycling.
- .4 Divert unused paint and sealant materials from landfill to official hazardous material collections site approved by Consultant.
- .5 Do not dispose of unused paint and sealant materials into sewer systems, into lakes, streams, onto ground or in other locations where it will pose health or environmental hazard.
- .6 Divert unused metal materials from landfill to metal recycling facility approved by Consultant.
- .7 Divert unused wood materials from landfill to recycling reuse composting facility approved by Consultant.
- .8 Damaged or broken glazing materials are not recyclable. These materials must not be disposed of with materials destined for recycling.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Hot dipped galvanized steel sheet: to ASTM A653M, ZF75, minimum base steel thickness in accordance with CSDMA Table 1 - Thickness for Component Parts.
- .2 Reinforcement channel: to CSA G40.20/G40.21, Type 44W, coating designation to ASTM A653M, ZF75.

### **2.2 ADHESIVES**

- .1 Honeycomb cores and steel components: heat resistant, spray grade, resin reinforced neoprene/rubber (polychloroprene) based, low viscosity, contact cement.
- .2 Polystyrene and polyurethane cores: heat resistant, epoxy resin based, low viscosity, contact cement.
- .3 Lock-seam doors: fire resistant, resin reinforced polychloroprene, high viscosity, sealant/adhesive.

## **2.3 PRIMER**

- .1 Touch-up prime CAN/CGSB-1.181.

## **2.4 ACCESSORIES**

- .1 Door silencers: single stud rubber/neoprene type, three per door.
- .2 Interior top and bottom caps: rigid polyvinylchloride extrusion conforming to CGSB 41-GP-19Ma.
- .3 Fabricate glazing stops as formed channel, minimum 16 mm height, accurately fitted, butted at corners and fastened to frame sections with counter-sunk oval head sheet metal screws.
- .4 Metallic paste filler: to manufacturer's standard.
- .5 Sealant: to Section 07 92 10 - Joint Sealing.
- .6 Glazing: to Section 08 80 50 - Glazing.
  - .1 Make provisions for glazing as indicated and provide necessary glazing stops including fire rated glazing kits in rated doors and frames.
  - .2 Provide removable stainless steel glazing beads for use with glazing tapes and compounds and secured with countersunk stainless steel screws dry glazing of snap-on type.

## **2.5 FRAMES FABRICATION**

- .1 Frames shall be fabricated from Commercial Steel to ASTM A653/A653M with an A40 (ZF120) "galvanneal" coating.
- .2 Frame shall be constructed to profiles indicated on drawings.
- .3 Base steel thickness to be 1.5mm (16 ga).
- .4 Frames shall be drilled and tapped or reinforced for mortice or surface mounted hardware in accordance with the approved hardware schedule.
- .5 Frame anchors shall be of a type and quality to suit wall conditions and used in accordance with manufacturers instructions but not less than three anchor points per jamb.
- .6 Securely attach floor anchors to inside of each jamb profile.
- .7 Weld in 2 temporary jamb spreaders per frame to maintain proper alignment during shipment.
- .8 Drill frames for door bumpers, three per frame.
- .9 At all hollow metal frames for Solid Core Wood Doors, install mineral wool batt insulation around perimeter of all frames, inside all frame tubes and full depth of base tube.
- .10 Prepare frames for door gaskets supplied under section 08 71 10 - Door Hardware - General.

## **2.6 FRAMES: WELDED TYPE**

- .1 Welding in accordance with CSA W59.
- .2 Accurately mitre or mechanically joint frame product and securely weld on inside of profile.
- .3 Cope accurately and securely weld butt joints of mullions, transom bars, centre rails and sills.

- .4 Grind welded joints and corners to a flat plane, fill with metallic paste and sand to uniform smooth finish.

## **2.7 DOOR FABRICATION GENERAL**

- .1 Doors General: swing type, 44mm thick, flush, with provision for glass and/or louvre openings as indicated.
- .2 Interior doors: Fabricated from Commercial Steel to ASTM A653/A653M with an A40 (ZF120) "galvanneal" coating, invisible, vertical, lockseam edges, filled, sanded smooth and primed. 1.2mm (18 ga) face sheet, stiffened, insulated and sound deadened with honeycomb core laminated under pressure to each face sheet.
- .3 Blank, reinforce, drill doors and tap for either mortised, cylinder lock and deadlock in accordance with approved hardware list and electronic hardware.
- .4 Factory prepare holes 12.7 mm diameter and larger except mounting and through-bolt holes, on site, at time of hardware installation.
- .5 Reinforce doors where required, for surface mounted hardware. Provide flush PVC top caps to exterior doors. Provide inverted, recessed, spot welded channels to top and bottom of interior doors.
- .6 Provide factory-applied touch-up primer at areas where zinc coating has been removed during fabrication.
- .7 Manufacturer's nameplates on doors are not permitted.

## **2.8 FRAME ANCHORAGE**

- .1 Provide appropriate anchorage to floor and wall construction.
- .2 Locate each wall anchor immediately above or below each hinge reinforcement on hinge jamb and directly opposite on strike jamb.
- .3 Provide 2 anchors for rebate opening heights up to 1520 mm and 1 additional anchor for each additional 760 mm of height or fraction thereof.
- .4 Locate anchors for frames in existing openings not more than 150 mm from top and bottom of each jambs and intermediate at 660 mm o.c. maximum.

## **Part 3 Execution**

### **3.1 INSTALLATION GENERAL**

- .1 Install labelled steel fire rated doors and frames to NFPA 80 except where specified otherwise.
- .2 Install doors and frames to CSDMA Installation Guide.

### **3.2 FRAME INSTALLATION**

- .1 Set frames plumb, square, level and at correct elevation.
- .2 Secure anchorages and connections to adjacent construction.
- .3 Brace frames rigidly in position while building-in. Install temporary horizontal wood spreader at third points of door opening to maintain frame width. Provide vertical support at centre of head for openings over 1200 mm wide. Remove temporary spreaders after frames are built-in.
- .4 Make allowances for deflection of structure to ensure structural loads are not transmitted to frames.

- .5 Caulk perimeter of frames between frame and adjacent material.
- .6 Maintain continuity of air barrier and vapour retarder.

### **3.3 DOOR INSTALLATION**

- .1 Install doors and hardware in accordance with hardware templates and manufacturer's instructions and Section 08 71 10 - Door Hardware - General.
- .2 Provide even margins between doors and jambs and doors and finished floor and thresholds as follows.
  - .1 Hinge side: 1.0 mm.
  - .2 Latchside and head: 1.5 mm.
  - .3 Finished floor, top of carpet noncombustible sill and thresholds: 13 mm.
- .3 Adjust operable parts for correct function.
- .4 Install louvres.

### **3.4 FINISH REPAIRS**

- .1 Touch up with primer finishes damaged during installation.
- .2 Fill exposed frame anchors and surfaces with imperfections with metallic paste filler and sand to a uniform smooth finish.

### **3.5 GLAZING**

- .1 Install glazing for doors and frames in accordance with Section 08 80 50 - Glazing.

**END OF SECTION**