

Date Issued: February 3, 2012
Date Revised:

intra architect inc.

This Addendum is issued to provide for modifications and clarifications during bidding and shall form part of bidding and contract documents for this project.

Except as otherwise specified herein, work required by this Addendum shall be in accordance with instructions to invited tenderers and drawings accompanying same and issued addenda.

This Addendum (3 pages) is made up of nine (9) pages including the following enclosures:

2 pages	Architectural Detail Drawings – Issued as part of this Addendum – ASK-1, ASK-2
4 pages	Specification Section 07611 Metal Roofing Systems, Issued as part of this Addendum

1.0 SPECIFICATION REVISIONS

1.1 Refer to Section 00410 Bid Form

Refer to part 5 **Alternative Prices**

Refer to sentence 5.2.1 Alternative Price: No Alternative prices are requested.

Delete this sentence.

Add the following:

5.2.1 Alternative Price No.1: In lieu of the installation of the pre-manufactured Dura-Rib steel roof panels on the roof as indicated on the Drawings, Sections and Details provide a new metal roof over those portions of the high roof within grid nos. A to E and grid nos. 1 to 9x.

New metal roof shall be Vicwest System 3000 with TSR panel and as per the enclosed attached Specification Section 07611.

Add _____ and _____/100 Dollars (\$ _____)

Deduct _____ and _____/100 Dollars (\$ _____)

1.2 New Specification Section 07611 Metal Roofing Systems

New Specification Section 07611 Metal Roofing Systems is issued with this Addendum.

1.3 Bidders are requested to complete Alternative Price No. 1 and submit the completed Alternative Price requested in Addendum No. 1 at the time of the **first bid closing submission** in the same envelope as the bid form and as outlined in Section 0200 Instruction to Bidders sentence 10. **DELIVERY OF BID FORMS AND BID CLOSING.**

1.4 Refer to Section 07212

Refer to 2.3 Roof Insulation

Add: Roof insulation for the high roof within grid nos. A to E and grid nos. 1 to 9x shall be Dow Chemical Canada Inc. Styrofoam Deckmate Plus for the roof that re-uses the pre-manufactured Dura-Rib steel roof panels and as follows:

Date Issued: February 3, 2012
Date Revised:

intra architect inc.

MATERIALS

- .1 Roof Insulation: Extruded polystyrene board to CAN/ULC-S701, Type 3, rigid, closed cell type, with integral high density skin.
 - .1 Thermal Resistance: Long term aged RSI value of 0.87/25 mm.
 - .2 Board Size: 610 x 2440 mm [100] mm thick.
 - .3 Compressive Strength: Minimum 170 kPa.
 - .4 Water Absorption: to ASTM D2842, 0.7% by volume maximum.
 - .5 Edges: Butt Edge.
 - .6 Water Vapour Permeance: to ASTM E96, <90 ng/Pas m, per 25 mm thickness.
 - .7 Flame Spread/Smoke Developed Values: 100-205/over 500 to [CAN/ULC-S102] [CAN/ULC-S102.2]
- .8 Manufacturer and Product Name: STYROFOAM™ Brand DECKMATE™ Plus Extruded Polystyrene Foam Insulation, Dow Chemical Canada

EXECUTION EXAMINATION

- .1 Verify that the insulation boards and adjacent materials are compatible.
- .2 Ensure vapour retardant membrane is clean and dry.

INSTALLATION -INSULATION

- .1 Install insulation boards parallel in length to metal roofing fastening channel in order to minimize joints.
- .2 Ensure insulation boards are tightly fit to metal fastening channels and adjacent boards in order to minimize gaps.
- .3 Cut insulation to fit neatly to perimeter blocking and around any roof penetrations.
- .4 Keep insulation minimum 75 mm from heat emitting devices, and minimum 50 mm from sidewalls of CAN/ULC-S604 Type A chimneys and CAN/CGA-B149.1 and CAN/CGA 149.2 Type B and L vents.

Note: The roof insulation material for the new metal roof outlined under the Alternative Pricing is noted in Specification Section 07611 issued with this Addendum.

2.0 DRAWINGS

3.1 Drawing No. A4.0

Revise the roofing to include new saddle flashing at the five projecting bay elements, three on the east elevation (located at grid nos. 8 to 7x, grid 6 and grid nos. 3x to 2, along grid Ax) and two on the west elevation (located at grid nos. 7 to 6x and grid nos. 3 to 3y, along grid Ex). Revise the roofing to include new cricket flashing along the west side of the projecting bay element on the north elevation (located at grid Bz and 9).

Refer to the detail drawing no. ASK-1 and ASK-2 dated February 3, 2012 and forms part of this Addendum.

Note that detail drawings no. ASK-1 and ASK-2 dated February 3, 2012 shall apply both to the pre-manufactured Dura-Rib steel roof panels indicated on the Drawings and shall also apply to the new metal roof outlined in this Addendum under Alternative Prices requested.

3.2 Drawing No. A5.0 and A5.1

Refer to Finish Schedule.
Refer to F12.

Date Issued: February 3, 2012
Date Revised:

indra architect inc.

Revise note: Colour: Slate Grey to read **Colour:** To match F5, to match Benjamin Moore 2173-20 Tawny Brown.

Note: Colour revision indicated is for the pre-manufactured Dura-Rib steel roof that is to be repainted.

The colour for the new metal roofing requested in this Addendum under the Alternative Prices is noted in Specification Section 07611 issued with this Addendum.

3.3 Drawing No. A5.1

Refer to the west elevation.

Add: One metal roof scupper, size 100mm x 250mm, for the new low roof. Locate scupper approximately 1750mm north of grid 2x at the roof level (approximately 75mm above the low point of the roof to be confirmed on site). Work includes supply and installation of scupper and all required work for a complete installation. Colour of scupper visible from exterior to match wall siding colour.

END OF SECTION 00902

Date Issued: Feb 3, 2012
Date Revised:

lrbk architect inc.

PART 1 – GENERAL

1.1 DESCRIPTION

- .1 General Requirements
Division 1, General Requirements, is part of this specification and shall apply as if repeated here
- .2 Work furnished and included:
 - .1 Structural liner.
 - .2 Thermal barrier.
 - .3 Air/vapour barrier.
 - .4 Rigid insulation.
 - .5 Roof panel and support system.
 - .6 Accessories including associated flashings, closures, sealants.
- .3 Related work not included:
 - .1 Structural framing members including purlins, eave and ridge elements, and other elements required to support the cladding system.
 - .2 Mechanical equipment and/or ductwork as well as their supporting framing.
 - .3 Flashings associated with other trades.

1.2 STANDARDS

- .1 Design of cladding system in accordance to the latest edition of:
 - .1 CSA-S136 for the design of Cold Formed Steel Structural Members
 - .2 Canadian Sheet Steel Building Institute Standards 10M, 20M, B11.
 - .3 National Building Code of Canada

1.3 QUALITY ASSURANCE

- .1 Manufacturer of roof system, and installer shall demonstrate at least five years experience in projects similar in scope.
- .2 This section establishes the standard of quality required for the complete metal roof system. Proposed substitutions must meet this standard, and will be considered as follows:
 - .1 A written request for approval of a substitution is received at least ten (10) days prior to tender closing.
 - .2 The request includes a complete item-by-item description comparing the proposed substitution to the specified system, together with manufacturer's literature, samples, test data, engineering standards and performance evaluation indicating comparable standards to those specified.

1.4 DESIGN REQUIREMENTS

- .1 Design roof system to resist
 - .1 Snow loads and snow build-up and rain load, expected in this geographical region NBCC climatic data, 50 year probability; snow load (Ss) = 1.5 kPa and rain load (Sr) = 0.40 kPa.
 - .2 Wind loads, positive and negative, expected in this geographical region NBCC climatic data, 50 year probability; wind load $q(1/50) - 0.59$ kPa.
 - .3 Dead load of roof system.
- .2 Deflection of the roof system is not to exceed $(1/240^{\text{th}})$ of the span for the specified live loading.
- .3 Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, overstressing of components, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime sky heat loss.

- .1 Temperature Change (Range): 20 deg C, ambient; 40 deg C, material surfaces

1.5 SAMPLES

- .1 Submit samples of standard coloured metal roof sheet for review by the consultant, prior to fabrication.

Date Issued: Feb 3, 2012
Date Revised:

larchitect inc.

1.6 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01300.
 - .1 Indicate arrangement of pre-finished Roof Sheet, including joints, types and locations of supports, fasteners, flashing, gutters, mitres, and all metal components related to the roof installation. Include for Structural Liner, Thermal Barrier, Membrane Air/Vapour Barrier, Insulation, as part of the roof system.
 - .2 Drawings shall be signed and sealed by a Professional Engineer, attesting to the ability of the metal panels assembly to withstand the specified loads.

1.7 MAINTENANCE DATA

- .1 Provide maintenance data for cleaning and maintenance of panel finishes for incorporation into manual specified in Section 01781.

1.8 PRODUCT DELIVERY, HANDLING AND STORAGE

- .1 Store components and materials in accordance with panel manufacturer's recommendations and protect from elements.
- .2 Protect prefinished steel during fabrication, transportation, site storage and erection, in accordance with CSSBI Standards.

1.9 GUARANTEE

- .1 For work in this section, warranty by installer against defects or deficiencies in materials or workmanship shall be for a period of one year from date of substantial completion.

1.10 WARRANTY

- .1 Provide a manufacturer's written warranty: Furnish panel manufacturer's written warranty covering failure of factory-applied exterior finish within the warranty period. Warranty period for finish: 40 years after the date of Substantial Completion. The values below are based on normal environments and exclude any aggressive atmospheric conditions.
 - .1 WeatherX™ (Siliconized Polyester - SMP) will not crack, chip, or peel (lose adhesion) for forty (40) years from date of installation (40.5 yrs from application). This does not include minute fracturing that may occur during the normal fabrication process. WeatherX™ (Siliconized Polyester - SMP) will not chalk in excess of a number six (6) rating, in accordance with ASTM D-4214-98 method D659 at any time for thirty (30) years from date of installation (30.5 yrs from application); will not change colour more than eight (8.0) Hunter ΔE units as determined by ASTM method D-2244-02.

PART 2 – PRODUCTS

2.1 MATERIALS:

- .1 Roof System: TSR: System 3000 by Vicwest.
 - .1 Structural Liner: Vicwest Steel Roof Deck, as specified in Section 05311 - Steel Deck, profile number RD938 and fabricated from ASTM A653M structural quality Grade 230 galvanized steel, with zinc coating of Z275 galvanized, as designated by ASTM A653M having a nominal core thickness as per Structural Drawings.
 - .2 Thermal Barrier: Dens Deck Roof Board, 13 mm thick as per drawings.
 - .3 Air/Vapour Barrier: Membrane shall be Ice and Water Shield by W. R. Grace or an approved equal.

Indus architect inc. Date Issued: Feb 3, 2012
Date Revised:

- .4 Insulation: Rigid type Owens Corning Type 703 of sufficient thickness to provide RSI value of 3.52 (R20), and designed to transfer gravity loads through the system to the structural liner.
- .5 Clip and Subgirt System:
 - .1 TSR Clips, Long Purpose-made, sliding clip designed to accommodate expansion and contraction of the roof sheet. Made from galvanized material, thickness to suit design parameters.
 - .2 Continuous hat bar and zee clips made from galvanized material, thickness to suit design parameters, to accommodate depth of insulation.
 - .3 Roof Fasteners: As specified by manufacturer, to resist wind uplift and sliding snow forces.
- .6 Prefinished Roof Sheet, exposed to exterior.
 - .1 Profile: TSR, Seamed joint at 610 mm (24 inches) c/c with seams a minimum of 50 mm (2 inches) above the bottom of the ribbed profile.
 - .2 Panel: Z275 galvanized (zinc coated) sheet steel conforming to ASTM A653M structural quality Grade 230 or 340 or AZ180 Galvalume Plus, sheet steel conforming to ASTM A792M Grade 230 or 340, having a nominal core thickness 0.61mm (0.024").

2.2 PANEL FINISHES:

- .1 Prefinished roof sheet coating: Prepainted with WeatherX™ Series, one side.

2.3 COLOUR

- .1 Prefinished roof sheet colour to be unfinished Galvalume Plus AZ180 selected from the manufacturer's Standard colour range.

2.4 ACCESSORIES

- .1 Flashing: In accordance with Section 07620. Formed from same materials as the roof sheet. Custom fabricated to suit architectural details, as required. The colour of the flashing at the roof perimeter edge that meets the vertical metal wall panels shall match the wall panel colour.
- .2 Closures: Foam and metal closures to suit profiles selected, to manufacturer's recommendations.
- .3 Sealants: In accordance with manufacturer's recommendation and Section 07920.

2.5 FABRICATION

- .1 Fabricate roof components to comply with dimensions, profiles, gauges and details as shown on the shop drawings, including fascia and soffit panels and all companion flashing.
- .2 Fabricate all components of the system in the factory, ready for field installation.
- .3 Provide roof sheet and all accessories in longest practicable length to minimize field lapping of joints.

PART 3 — EXECUTION

3.1 EXAMINATION

- .1 Examine work of other Sections upon which work of this Section depends.
- .2 Report all discrepancies to consultant before beginning work on the roof system.

3.2 INSTALLATION

- .1 Thermal & Moisture Protection:

Date Issued: Feb 3, 2012
Date Revised:

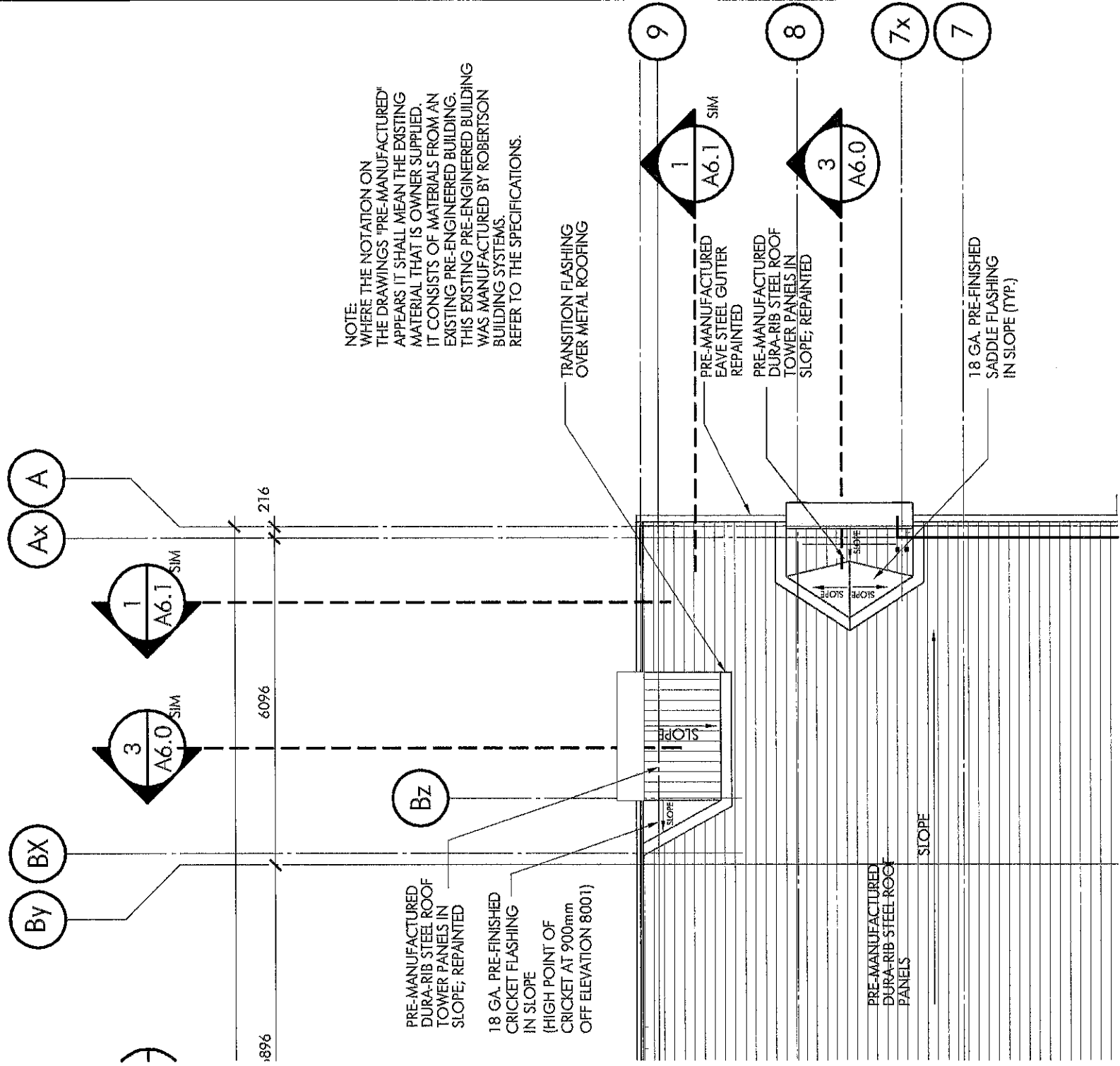
larchitect inc.

- .1 Structural Liner: Install Structural Liner in accordance with Section 05311 Steel Deck. Ensure installation is complete before starting roof work.
 - .2 Thermal Barrier: Install Dens Deck Roof Board perpendicular to flutes of Structural Liner. Fasten using manufacturer's recommended fasteners, with spacing to suit wind loading conditions.
 - .3 Clip Support: Install 125 mm wide galvanized support plate at clip locations if required. Thickness to suit design parameters.
 - .4 Air/Vapour Barrier: Install membrane Air/Vapour Barrier in accordance with manufacturer's recommendations. Ensure all joints are properly lapped, sealed and tied in with wall air/vapour barriers to ensure airtight construction. Provide a continuous seal at all openings in the roof system.
 - .5 Support Clips: Attach TSR Clips, hat bar, and zee clips using fasteners as recommended by the manufacturer, to suit the substrate.
 - .6 Insulation: Install rigid Insulation in one layer, as shown on the drawings. Tightly butt against support clips. Insulation should be continuous.
- .2 Roof Panel Installation
- .1 Install exterior prefinished roof panels on panel support clips, using manufacturer's proper construction procedure. Ensure batten is positively locked for full length of roof. Close interlocking side joints by using a purpose-made seaming machine, as supplied by the manufacturer.
 - .2 Where indicated on approved shop drawings, secure the end-lap of metal roofing sheets in accordance with the manufacturers specifications and details to provide a weather-tight seal. Exposed fasteners to match colour of the roof sheet.
 - .3 Provide notched and formed closures, sealed against weather penetration, at changes in pitch, and at ridges and eaves, where required.
 - .4 Install all companion flashing as shown on the shop drawings. Use concealed fasteners when possible. Exposed fasteners to match colour of roof sheet.

3.3 CLEAN-UP

- .1 Remove protective film from panels.
- .2 Clean exposed panel surfaces in accordance with manufacturer's instructions.
- .3 Repair and touch up with colour matching high grade enamel minor surface damage, only where permitted by the Architect and only where appearance after touch-up is acceptable to Architect.
- .4 Replace damaged panels and components that, in opinion of the Architect, cannot be satisfactorily repaired.

END OF SECTION 07611



NOTE:
 WHERE THE NOTATION ON
 THE DRAWINGS "PRE-MANUFACTURED"
 APPEARS IT SHALL MEAN THE EXISTING
 MATERIAL THAT IS OWNER SUPPLIED.
 IT CONSISTS OF MATERIALS FROM AN
 EXISTING PRE-ENGINEERED BUILDING.
 THIS EXISTING PRE-ENGINEERED BUILDING
 WAS MANUFACTURED BY ROBERTSON
 BUILDING SYSTEMS.
 REFER TO THE SPECIFICATIONS.

READ THIS DETAIL DRAWING IN CONJUNCTION WITH DRAWING A4.0

intra architect inc.

2501 RUTHERFORD ROAD,
 BUILDING B, SUITE 25
 VAUGHAN, ONTARIO
 L4K 2N6

TEL: (905) 653-5370
 FAX: (905) 653-5372

INFO@INTRARCH.COM
 WWW.INTRARCH.COM

PROJECT:

ADDITION
 FOR
 NEWCASTLE FELLOWSHIP
 BAPTIST CHURCH
 200 KING AVE. EAST
 NEWCASTLE, ONTARIO

DRAWING:

PART ROOF PLAN

PLOTTED:

PROJECT No.:

2828

DATE:

FEB 3, 2012

SCALE:

1 : 100

DRAWING No.:

ASK-1

