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SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Title - Sujet Const.4 Bed Sle Exp,Nova Ins,Truro	
Solicitation No. - N° de l'invitation EC016-123366/A	**Amendment No. - N° modif.** 003
Client Reference No. - N° de référence du client R.043928.004	**Date** 2012-04-27
GETS Reference No. - N° de référence de SEAG PW-$PWB-020-3071	
File No. - N° de dossier PWB-2-35001 (020)	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2012-05-08	**Time Zone** **Fuseau horaire** Atlantic Daylight Saving Time ADT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Donovan, Janine PWB	**Buyer Id - Id de l'acheteur** pwb020
Telephone No. - N° de téléphone (506) 636-5347 ( )	**FAX No. - N° de FAX** (506) 636-4376
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:**	

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	**Delivery Offered - Livraison proposée**
Vendor/Firm Name and Address **Raison sociale et adresse du fournisseur/de l'entrepreneur** **Telephone No. - N° de téléphone** **Facsimile No. - N° de télécopieur**	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) **Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)** **Signature** **Date**	

Issuing Office - Bureau de distribution
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Canada

This Tender Amendment Number 3 is raised to include the following **Addendum No. 3.**

The following Addendum to the tender documents is effective immediately. This Addendum shall form part of the contract documents.

All other terms and conditions remain the same.

Addendum No. 3

1. **SPECIFICATION**

ADD Section 08 50 00 - Security Aluminum Windows.

2. **TENDER AMENDMENT NUMBER 2**

REMOVE Section 03 30 00 Cast-In-Place Concrete and **REPLACE WITH** Section 03 30 00 Cast-In-Place Concrete Revision 2 27/04/12 attached.

PART 1 - GENERAL

1 .1 NOT USED

1.2 REFERENCES

.1 Canadian Standards Association (CSA) :
.1 CAN/CSA-A440-M90 Windows.
.2 CAN/CSA-GI 64-M92 Hot Dip Galvanizíng of Irregularly Shaped Articles.
.3 CAN/CGSB-79.1-M91 Insect Screens.

.2 AAMA 605.2 Voluntary Specifications for High Performance Organic Coatings on Architectural Extrusions and Panels.

.3 AAMA 607.1 Specifications and Inspection Methods for Clear Anodic Finishes for Architectural Alumínum.

1.3 SAMPLES

.1 Submit samples ín accordance with Section 01 33 00 – Submittal Procedures.

.2 Submit one, complete full size window sample of each type window.

.3 Include frame, sash, sill, glazing and weatherproofing method, insect screens, surface finish and hardware. Show location of manufacturer's nameplates.

.4 Include 150 mm long samples of head, jamb, sil1, meeting rail, mullions to indicate profile.

1.4 SHOP DRAWINGS

.1 Submit shop drawings in accordance with Section 01 33 00 – Submittal Procedures.

.2 Indicate materials and detaí1s in scale full size for head, jamb and sill, profiles of components, elevations of unit, anchorage details, location of isolation coating, description of related components and exposed finishes fasteners, and caulking. Indicate location of manufacturer's nameplates.

1.5 TEST REPORTS

.1 Submit Test Reports from approved independent testing laboratories, certifying compliance with specifications, for:
.1 Window classifications.
.2 Anodized finish.
.3 Insect screens.
.4 Air tightness.
.5 Water tightness.
.6 Wind load resistance.

.7 Condensation resistance.
.8 Block operation - sliding windows only.
.9 Ease of operation - windows with operable lights.
.10 Forced entry resistance.

1.6 MAINTENANCE DATA

.1 Provide operation and maintenance data for windows for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.

PART 2 – PRODUCTS

2.1 MATERIALS

.1 Materials: to CAN/CSA-4440 supplemented as follows:

.2 All security aluminum windows by same manufacturer.

.3 Sash: aluminum, each sash double weather stripped

.4 Main frame: aluminum thermally broken

.5 Glass: to requirements of Section 08 80 50 of the following types : -
- .1 Fixed Units for secure windows (with security bars): Double Insulating glass units to CÀN/CGSB-l2.8, with outer pane of 6 mm thick grrey tj-nted tempered float glass and inner pane of 6 mm clear tempered float glass for total thickness of 31.75 mm, Low 'E' coating on surface no. 3.
- .2 Fixed Units (for non-secure windows) : Double Insulating glass units to CAN/CGSB-12.8, with outer pane consisting of one layer 6 mm grey tinted tempered float and inner pane of 6 mm clear tempered float glass for total thickness of 31 .75 mm, Low 'E' coating on surface no. 3 together with 12.5 mm air space and inner light consisting of two layers of 6 mm clear laminated tempered float glass (with .030 vinyl interlayer) laminated together with .060 vinyl interlayer.
- .3 Horizontal Sliding Units: to CAN/CGSB-12-1, 6 mm clear tempered float for inner sash; 6 mm grey tinted tempered float for outer sash, Low 'E' coating on surface no.3.

.6 Isolation coatíng: alkali resistant bituminous paint.

.7 Air Seals: Self-adhesive expansion membrane, SBS modified bitumen with woven fabric reinforcement, min. 1.0 mm thickness compatible with air/vapour retarder.

.8 Accessories: provide all fasteners and attachments including steel angle or bent plate clips.
- .1 Anti-lift out block required on internal sash.
- .2 All exposed screws to be tamperproof.

.9 Sealant Materials: to requirements of Section 07 92 00

.10 Rigid Insulation: manufacturer's standard rigid insulation, to suit conditions.

2.2 WINDOW TYPE AND CLASSIFICATION

.1 Types:
- .1 Sliding: horizontal double operating with removable sash (from exterior).
  - .1 Acceptable material: Fulton Windows "l200 Series Security Window (Style B)".
- .2 Fixed: with removable double insulating glass (removable from exterior).
  - .1 Acceptable material-: Fulton Windows "1200 Series Security Window Style B)".
- .3 Screens: on ventilating portion of windows as indicated.

.2 Classification Rating: to CAN/CSA-A440:
- .1 Air tightness: A3
- .2 Water tightness: B7
- .3 Wind load resistance: C5
- .4 Condensation resistance: Temperature Index, I 65
- .5 Forced Entry: F2

2.3 FABRICATION

.1 Fabricate in accordance with CAN/CSA-A440 supplemented as follows :

.2 Fabricate units square and true with maximum tolerance of plus or minus 1 .5 mm for units with a diagonal measurement of 1800 mm or less and plus or minus 3 mm for units with a diagonal measurement over 1800 mm.

.3 Face dimensions detailed are maximum permissible sizes.

.4 Brace frames to maintain squareness and rigidity during shipment and installation.

.5 Finish steel clips and reinforcement with 380g/m2 zinc coating to CAN/CSA-G164.

.6 Factory fit rigid insulation to perimeter members as detailed.

2.4 FINISHES

.1 Finish Coatings: Conform to Aluminum Association (AA) designations.

.2 Exterior exposed aluminum surfaces: Fínish aluminum components with factory-applied premium quality Fluoropolymer Coating System with semi-gloss colour. Comply with AÀMA 605 performance properties for high –performance organic coatings. Custom colour as selected by Departmental Representative.
- .1 Acceptable Material: PPG "Duranar" coating system or an approved equal.

.3 Interior exposed aluminum surfaces: AA-MI2C22A41 anodized to 215-R1, .07 mils

thickness, prepared with a chemical pretreatment. anodized to clear colour.
.1 Acceptable Material: Kawneer #17 clear.

.4 Touch up primer for galvanized steel surfaces: SSPC 20 paint zinc rich

.5 Concealed steel items: Galvanized in accordance with CSA G164M to 600 gm/m².

2.5 ISOLATION COATING

.1 Isolate aluminum from following components, by means of isolation coating:
.1 Dissimilar metals except stainless steel, zinc, or white bronze of small area.
.2 Concrete, mortar and masonry.
.3 Wood.

2.6 GLAZING

.1 Glaze windows ín accordance with CAN/CSÀ-4440, the manufacturer's instructions and the requirements of Section 08 80 50.

2.7 HARDWARE

.1 Hardware: stainless steel or white bronze sash locks and aluminum handles to provide security and permit easy operation of units.

.2 Locks: provide operating sash with spring loaded locking device, to provide automatic locking in closed position.

.3 Provide special keyed opening device for windows normally locked.

2.8 AIR BARRIER AND AIR VAPOUR RETARDER

.1 Equip window frames with factory installed air seal sheet material for sealing to building air,/vapour retarder as follows:
.1 Material: identical to, or compatible with, building air barrier and vapour retarder materials to provide required air tightness and vapour diffusion control throughout exterior envelope assembly.
.2 Material width: adequate to provide required air tightness and vapour diffusion control to building air/vapour retarder from interior.

PART 3 – EXECUTION

3.1 WINDOW INSTALLATION

.1 Install in accordance with CAN/CSA-4440, the window manufacturer's written recommendations and the reviewed shop drawings.

.2 Arrange components to prevent abrupt variation in colour.

.3 Set units in prepared openings, plumb, square, level, free from twist, warp or superimposed loads, adequately secure in manner not restricting thermal movement at or between components.

.4 Provide for deflection of structure to prevent transmission of structural loads to windows

.5 Provide connectors to structural frame and building components.

3.2 CAULKING

.1 Seal joints between non-operating components of window units with sealant to provide weathertight seal from outside and air / vapour seal at inside.

.2 Apply sealant in accordance with Section 07 92 00 - Joint Sealers. Conceal sealant within window units except where exposed use is permitted by Departmental Representative.

END

PART 1 - GENERAL

1.1 RELATED WORK

.1	Concrete Formwork	Section 03 10 00
.2	Concrete Reinforcement	Section 03 20 00
.3	Concrete Walks, Curbs & Gutters	Section 32 16 15
.4	Manholes & Catch Basin Structures	Section 33 05 16

1.2 REFERENCES

.1 CSA-A23.1, Concrete Materials and Methods of Concrete Construction.

.2 CSA-A23.2, Methods of Test and Standard Practices for Concrete.

.3 CSA-A23.3, Design of Concrete Structures

.4 CSA-A3000, Cementitious Materials Compendium.

.5 ASTM C260, Specification for Air-Entraining Admixtures for Concrete.

.6 ASTM C494, Specification for Chemical Admixtures for Concrete.

.7 CAN/CGSB-37.2, Emulsified Asphalt, Mineral Colloid-Type, Unfilled, for Dampproofing and Waterproofing and for Roof Coatings.

.8 CAN/CGSB-51.34, Vapour Barrier, Polyethylene Sheet for Use in Building Construction.

.9 ASTM C939 Test Method for Flow of Grout for Preplaced-Aggregate Concrete

.10 ASTM D412, Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension

.11 ASTM D624, Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomer

.12 ASTM D1653, Test Methods for Water Vapour Transmission of Organic Coating Films

.13 ASTM D1751, Specification for Preformed Expansion Joint Fillers

.14 ASTM D2240 Test Method for Rubber Property—Durometer Hardness

.15 ASTM C309 Specification for Liquid Membrane-Forming Compounds for Curing Concrete

1.3 CERTIFICATES

.1 Submit certificates in accordance with Section 01 33 00.

.2 Provide certification that mix proportions selected will produce concrete of quality, yield and strength as specified in concrete mixes, and will comply with CSA-A23.1.

.3 Provide certification that plant, equipment, and materials to be used in concrete comply with requirements of CSA-A23.1. Ready-mix Plant must be a member of the Atlantic Provinces Ready Mixed Concrete Association and must hold a current "Certificate of Ready Mixed Concrete Production Facilities" as issued by the Association.

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Portland cement with fly ash replacement: to CSA-3000.

.2 Supplementary cementing materials: to CSA-A3000.

.3 Water: to CSA-A23.1.

.4 Aggregates: to CSA-A23.1. Coarse aggregates to be normal density.

.5 Air entraining admixture: to ASTM C260.

.6 Chemical admixtures: to ASTM C494. Departmental Representative to approve accelerating or set retarding admixtures during cold and hot weather placing.

.7 Concrete retarders: to ASTM C494 low VOC, solvent free.

.8 Shrinkage compensating grout: premixed compound consisting of aggregate, cement, water reducing and plasticizing agents. Compressive strength: 55 MPa psi at 28 days.

.9 Ribbed waterstops: extruded PVC Arctic Grade with shop welded corner and intersecting pieces:
- .1 Tensile strength: to ASTM D412, method A, Die "C", minimum 11 MPa.
- .2 Elongation: to ASTM D412, method A, Die "C", minimum 275%.
- .3 Tear resistance: to ASTM D624, method A, Die "B", minimum 44 kN/m.

.10 Premoulded joint fillers:
- .1 Bituminous impregnated fiber board: to ASTM D1751.

.11 Weep hole tubes: plastic.

.12 Dampproof membrane:
- .1 0.25 mm polyethylene film to CAN/CGSB-51.34

.13 Dampproofing:
.1 Emulsified asphalt, mineral colloid type, unfilled: to CAN/CGSB-37.2.

.14 Control Joint Filler:
.1 Two component, quick setting, semi-rigid, solvent free, self leveling, polyurea; Minimum tensile strength of 4.5 Mpa; minimum elongation of 200% as per ASTM D412, and a minimum Shore A Hardness of 85 as per ASTM D2240.

.15 Curing and Sealing Compound:
.1 Shall be an acrylic emulsion and water based curing compound, clear in colour. Product shall meet the requirements of ASTM C 309 and shall have a maximum VOC content of 300 ounces per cubic foot. (300 grams per litre)

.16 Surface Hardener:
.1 Shall be mineral, non metallic, shake applied. Minimum hardness shall be 6.5-7 on Mohs scale. Minimum compressive strength at 28 days shall be 7200 psi (50 MPa).

2.2 CONCRETE MIXES

.1 Proportion normal density concrete in accordance with CSA-A23.1, Alternative 1 to give the following properties for all concrete:
.1 Type GU Portland cement.
.2 Minimum compressive strength at 28 days:

.1	Concrete Elements unless noted otherwise:	28 MPa
.2	Exterior Concrete Elements exposed to weather	35 MPa
.3	Mud Slab	15 MPa

.3 Nominal size of coarse aggregate: 20 mm.
.4 Slump at time and point of discharge: 75mm ± 25mm
.5 Air content: as per Table 4 of CSA Standard A23.1
.6 Chemical admixtures: in accordance with CSA – A3000.
.7 Replace 20% of cement by mass with flyash in accordance with CAN/CSA-A23.5. If floor hardener is to be used in slabs, contact supplier of hardener regarding compatibility between hardener and flyash and adjust flyash content as necessary.
.8 Class of exposure shall be to Table 1 of CSA A23.1
.9 Concrete Mix design to meet requirements of Table 2 in CSA A23.1 for appropriate class of exposure
.10 All concrete to meet requirements of Tables 1 through 4 of CSA A23.1.

PART 3 – EXECUTION

3.1 PREPARATION

.1 Obtain Departmental Representative's approval before placing concrete. Provide 24 hours notice prior to placing of concrete.

.2 Pumping of concrete is permitted only after approval of equipment and mix.

.3 Ensure reinforcement and inserts are not disturbed during concrete placement.

.4 Prior to placing of concrete obtain Departmental Representative's approval of proposed method for protection of concrete during placing and curing in adverse weather.

.5 Maintain accurate records of poured concrete items to indicate date, location of pour, quality, air temperature and test samples taken.

.6 In locations where new concrete is dowelled to existing work, drill holes in existing concrete. Place steel dowels of deformed steel reinforcing bars and pack solidly with epoxy grout to anchor and hold dowels in positions as indicated.

.7 Do not place load upon new concrete until authorized by Departmental Representative.

3.2 CONSTRUCTION

.1 Do cast-in-place concrete work in accordance with CSA-A23.1.

.2 Holes, sleeves and inserts cast in during construction.

- .1 No sleeves, ducts, pipes or other openings shall pass through beams or column except where indicated or approved by Departmental Representative.
- .2 Where approved by Departmental Representative, set sleeves, ties, pipe hangers and other inserts and openings as indicated or specified elsewhere. Provided they are shown on structural drawings, sleeves, pipes or openings, that are not greater than 450 mm square, or 450 mm in diameter, may pass through walls and slabs provided that no more than two reinforcing bars are interrupted and additional reinforcing steel is incorporated as per details on structural drawings. Contact Departmental Representative before installing any openings greater than 15 mm x 150 mm or 150 mm diameter that are not shown on structural drawings.
- .3 Do not eliminate or displace reinforcement to accommodate hardware. If inserts cannot be located as specified, obtain approval of modifications from Departmental Representative before placing of concrete.
- .4 Check locations and sizes of sleeves and openings shown on drawings.
- .5 Set special inserts for strength testing as indicated and as required by non-destructive method of testing concrete.

.3 Anchor bolts.

- .1 Set anchor bolts to templates under supervision of appropriate trade prior to placing concrete.
- .2 Locate anchor bolts used in connection with expansion shoes, rollers and rockers with due regard to ambient temperature at time of erection.

.4 Drainage holes and weep holes:

- .1 Install weep hole tubes and drains as indicated.

.5 Grout under base plates and machinery using procedures in accordance with

manufacturer's recommendations which result in 100 % contact over grouted area.

.6 Finishing and Curing:
- .1 Finish concrete in accordance with CSA-A23.1. Provide steel trowel finish for floor slabs unless noted otherwise. Coordinate finish with architect prior to casting slab.
- .2 Use procedures acceptable to Departmental Representative or those noted in CSA-A23.1 to remove excess bleed water. Ensure surface is not damaged.
- .3 Use curing compounds compatible with applied finish on concrete surfaces.

.7 Provide depressions to accommodate flooring as required.

.8 Rub exposed sharp edges of concrete with carborundum to produce 3 mm radius edges unless otherwise indicated.

.9 Toppings.
- .1 In pouring base course, make allowance for overlay toppings as necessary and applicable.
- .2 Place toppings over hardened base course in accordance with CSA-A23.1 and topping manufacturer's recommendations.
- .3 Follow instructions by Departmental Representative in case conflicting requirements arise between CSA-A23.1 and manufacturer's recommendations.
- .4 Ensure that joints in topping are at the same locations as those in base course. Provide dividers, edge strips and reinforcing mesh as indicated.

.10 Waterstops.
- .1 Install waterstops to provide continuous water seal. Do not distort or pierce waterstop in such a way as to hamper performance. Do not displace reinforcement when installing waterstops. Use equipment to manufacturer's requirements to field splice waterstops. Tie waterstops rigidly in place.
- .2 Use only straight heat sealed butt joints in field. Use factory welded corners and intersections unless otherwise approved by Departmental Representative.

.11 Joints
- .1 Construction Joints – Walls and Structural Slabs:
  - .1 In general, incorporate either horizontal or vertical construction joints, in accordance with CSA-A23.1.
  - .2 Immediately before next pour, clean construction joint and brush with grout of neat cement.
  - .3 Run reinforcement through construction joints unless noted otherwise.
  - .4 Construction Joints to be keyed unless noted otherwise.
- .2 Construction Joints – Slabs on Grade:
  - .1 In general, incorporate construction joints, in accordance with CSA-A23.1.
  - .2 Immediately before next pour, clean construction joint and brush with grout of neat cement.
  - .3 Do not continue reinforcing thru Construction Joint. At slab mid-depth, provide 12 mm diameter plain dowels, greased one side, at 600 mm centres.

.4 Construction Joints to be keyed.

.3 Slab on Grade Isolation Joints:

.1 Do not install isolation joints in structural slabs.

.2 Isolation joints around all columns to form a square or round panel. Square isolation joints shall be orientated so all corners of the square align with slab control joints.

.3 Install 13 mm thick premoulded joint filler where slab on grade meets vertical surfaces. Install joint filler to within 13 mm of top of slab where sealer is indicated.

.4 Slab on Grade Control Joints/Saw cuts:

.1 Discontinue reinforcing at saw cut location by stopping reinforcing 75 mm from each side of saw cut location.

.2 Saw 3 mm inch wide control joints into top surface of concrete slab. Depth of saw cut shall be between 1/3rd and 1/4th of total slab thickness. Do not saw-cut suspended slabs on metal deck.

.3 Locate control joints as indicated on structural drawings. Maximum spacing of control joints in each direction shall be 30 times the slab thickness. If drawings note different spacing, drawings will govern.

.4 Align control joints with columns when possible. Provide control joints in two directions at all inside corners.

.5 Timing of cutting control joints is crucial. Cut joints as soon as possible after casting slab. Timing of cutting control joints after casting of slab will vary as weather conditions, concrete mixes, etc. change.

.6 Completely clean out saw-cut joints of dirt, oil, grease, and similar contaminants. Mask floor surfaces at joints while filling. Follow recommendations of joint filler manufacturer and fill all saw-cut joints with joint filler as specified.

.12 Under-slab polyethylene film:

.1 Install polyethylene vapour barrier under concrete slabs-on-grade inside building.

.2 Lap polyethylene film vapour barrier a minimum 150 mm at joints and seal.

.3 Seal punctures in polyethylene film valpour barrier before placing concrete. Use patching material at least 150 mm larger than puncture and seal.

.13 Curing and Sealing Compound:

.1 Install in accordance with the manufacturers recommendations. Ensure compatibility with flooring adhesives. Remove as required prior to using flooring adhesives.

.14 Surface Hardener:

.1 Install in accordance with manufacturers recommendations. Refer to manufacturer for application rates. Do not apply on concrete containing more than 3% air.

3.3 SURFACE TOLERANCE

.1 Concrete tolerance in accordance with CSA-A23.1 straight edge method. Variations over

the 3000 mm long straight edge shall be +/- 6 mm.

3.4 FIELD QUALITY CONTROL

.1 Inspection and testing of concrete and concrete materials will be carried out by a Testing Laboratory approved by Departmental Representative in accordance with CSA-A23.1 and CSA-A23.2.

.2 Inspection and testing of concrete and concrete materials will be undertaken at no additional cost to the Contract.

.3 Testing Laboratory will take additional test cylinders during cold weather concreting. Cure cylinders on job site under same conditions as concrete which they represent.

.4 Non-destructive Methods for Testing Concrete shall be in accordance with CSA-A23.2.

.5 Inspection or testing will not augment or replace Contractor quality control nor relieve him of his contractual responsibility.

END