

INVITATION TO TENDER ("ITT") NO. PS20120994

HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC

Tenders are to be addressed to the Purchasing Services Office, City of Vancouver, 453 West 12th Avenue, Vancouver, British Columbia, Canada, V5Y 1V4, (Courier Delivery and Drop off is at the Information Desk, Main Floor Rotunda of the same address), prior to 3:00 pm Vancouver Time (as defined in Note 2 below), on October 16, 2012 ("Closing Time").

Tenders will be publicly registered on October 17, 2012 at 11:00 am.

NOTES:

- 1. Tenders must be in sealed envelopes or packages marked with the Tenderer's name, the ITT title and number. Tenderers should submit one (1) hard copy of the Tender and one (1) CD the same number of copies of any other documents required by the Tender Documents, including the bid bond described in Part B of this ITT.
- 2. Closing Time and Vancouver Time will be conclusively deemed to be the time shown on the Main Floor Rotunda Information Desk computer clock.
- 3. The City of Vancouver is open on business days from 8:30 a.m. to 4:30 p.m. Vancouver Time and closed Saturdays, Sundays, and holidays.
- 4. DO NOT SUBMIT BY FAX OR E-MAIL.

All queries related to this ITT should be submitted in writing to the attention of:

Philip Lai, P. Log, SCMP

Buyer II

Fax: 604-873-7057 Email: purchasing@vancouver.ca

(the "Contact Person")

INVITATION TO TENDER NO. PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC TABLE OF CONTENTS

A - INTRODUC	TION	Pages 1 to 22
1.0 Overvi	ew of Project	
•	Vancouver	
	Documents	
	ation Meeting	
	strative Requirements	
6.0 Conduc	ct of ITT - Inquiries and Clarifications	
APPENDICES T	O PART A - INTRODUCTION	
	formation Meeting Attendance Form	
	esponse Notification Form	
Appendix 3 Sc		
Appendix 4 Dr	•	
Appendix 5 O	wners Workplace Hazards	
	IS AND CONDITIONS OF ITT PROCESS	Pages 1 to 9
	ions and Interpretation	
	sion Instructions	
3.0 Bonds	- Duly	
4.0 Tender		
•	ance of Tenders of Contract	
	nation of Tender Documents	
	amination/Pre-Submission Due Diligence By Tenderer	
	retation and Clarifications	
•	t Approval	
11.0 Insurar	• •	
12.0 WorkSa	afeBC	
13.0 Labour	Rates and Equipment	
14.0 List of	Subcontractors and Suppliers	
15.0 Permit	s, Licenses and Fees	
	esident Withholding Tax	
	im Against the City	
	e Resolution	
	entiality and Privacy	
20.0 Releas	e of Information Restricted	
	OF TENDER, INCLUDING:	Pages FT1 to FT17
	Price and Schedule	
	of Award	
	to Proceed	
4.0 Condit 5.0 Amend	ments/Questions and Answers	
6.0 Certific		
7.0 Labour		
Schedule "A"	Schedule of Quantities and Prices	
Schedule "B"	Preliminary Construction Schedule	
Schedule "C"	Subcontractors and Suppliers	
Schedule "D"	Tenderer's Experience with Related Work	
Schedule "E"	Force Account Labour & Equipment Rates	

INVITATION TO TENDER NO. PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC TABLE OF CONTENTS

Schedule "F" Sample Consent of Surety

Schedule "G" Sustainability

Schedule "H" Certificate of Existing Insurance

Schedule "I" Certificate of Insurance Schedule "J" Undertaking of Insurance

PART D - FORM OF AGREEMENT

Form of Agreement

Pages AGT1 to AGT55

Definitions and General Conditions of Stipulated Price Contract (CCDC2 - 2008 - not attached, but incorporated by reference - see http://www.ccdc.org/downloads/index.html)

Schedule 1 - Supplementary General Conditions

Schedule 2 - List of Specifications and Drawings

Schedule 3 - Schedule of Prices

Schedule 4 - Subcontractors and Suppliers

Schedule 5 - Project Schedule

Schedule 6 - Performance and Labour and Material Payments Bonds

Schedule 7 - Insurance Certificate

Schedule 8 - Owner Pre-Contract Hazard Assessment

Schedule 9 - Contractor Pre-Contract Hazard Assessment Form

Schedule 10 - Force Account Labour and Equipment Rates

INVITATION TO TENDER NO. PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC PART A - INTRODUCTION

1.0 OVERVIEW OF PROJECT

- 1.1 The City of Vancouver (the "City") invites Tenders for the provision of HVAC upgrades at the Vancouver Academy of Music.
- 1.2 The Work generally includes, but is not limited to:
 - the supply of all labour and materials to complete the replacement of HVAC units, condenser cooling system including the cooling tower, boiler system, sheet-metal, piping, electrical, DDC control systems and general work as shown on the drawings and described herein for fully operational and functional systems;
 - See Appendix 3 for full Scope of Work; and
 - See Appendix 4 for Specifications and Drawings
- 1.3 The Work Site is located at Vancouver Academy of Music, 1270 Chestnut Street, Vancouver, BC, V6J 4R9.
- 1.4 The purpose of this ITT is to select a Tenderer with the capability and experience to efficiently and cost-effectively perform and complete the Work.

2.0 CITY OF VANCOUVER

- 2.1 The City of Vancouver, with a population of approximately 560,000 lies in a region of more than two (2) million people. Vancouver is the largest city in the province of British Columbia and the third largest metropolitan area in Canada. As the main western terminus of Canada's transcontinental highway and rail routes, as well as home to the Port of Vancouver, Vancouver is the primary city of western Canada and one of the nation's largest industrial centres.
- Vancouver is consistently rated as one of the most livable cities in the world and was host city of the 2010 Olympic and Paralympic Winter Games.

3.0 SUSTAINABILTY

- 3.1 The City's Procurement Policy and related Supplier Code of Conduct found at http://vancouver.ca/fs/bid/epp/index.htm aligns the City's overall approach to procurement with its corporate social, environmental and economic sustainability values and goals. It establishes a commitment to maximize benefits to the environment through product and service selection, to ensure safe and healthy workplaces, where human and civil rights are respected, and to support an environmentally sustainable local economy, whenever possible. In doing so, the Policy ensures incorporation of sustainability and ethical considerations as integral evaluation components in best-value supply selection.
- 3.2 Contractors are to provide environmentally sensitive products or services wherever possible. Where there is a requirement that the Contractor supplies materials, and where such materials may cause adverse effects, the Tenderer is to indicate the nature of the hazard in its tender submission. The Tenderer is to advise the City of any known alternatives or substitutes for such materials that would mitigate the effects of any adverse conditions on the environment.

4.0 TENDER DOCUMENTS

- 4.1 The Tender Documents are:
 - (a) Part A Introduction and its Appendices;
 - (i) Appendix 1 Information Meeting Attendance Form;

INVITATION TO TENDER NO. PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC PART A - INTRODUCTION

- (ii) Appendix 2 Response Notification Form;
- (iii) Appendix 3 Scope of Work;
- (iv) Appendix 4 Specifications and Drawings;
- (v) Appendix 5 Owners' Workplace Hazards
- (b) Part B Terms and Conditions of ITT Process;
- (c) Part C Form of Tender (including all Schedules),
- (d) Part D Form of Agreement (including all Schedules);
- (e) the Specifications (provided separately and to be incorporated as a Schedule to the Contract when finalized);
- (f) the Drawings (provided separately and to be incorporated as a Schedule to the Contract when finalized);
- (g) any and all amendments and questions and answers issued by the City prior to the Closing Time, as well as any and all amendments and questions and answers issued by the City after the Closing Time and accepted in writing by the Tenderer, as well as any and all clarifications accepted by the City prior to award of the Contract.
- 4.2 Specifications and Drawings will be available on the following link http://vancouver.ca/doing-business/bids-contracts-rfps-purchase-orders.aspx.

5.0 INFORMATION MEETING

- 5.1 Tenderers are invited to attend an Information Meeting on Tuesday, October 2, 2012 commencing at 9:00 am. *Please meet at the rear parking lot by loading bay.*
- 5.2 Location: Vancouver Academy of Music, 1270 Chestnut Street, Vancouver, BC, V6J 4R9
- All prospective Tenderers are asked to pre-register for the Information Meeting by submitting an Information Meeting Attendance Form (Appendix 1) by fax to Philip Lai, 604-873-7057or e-mail to Philip Lai at purchasing @vancouver.ca by 2:00pm, Friday, September 28, 2012.

6.0 ADMINISTRATIVE REQUIREMENTS

- 6.1 Please indicate whether or not you will be submitting a Tender prior to the Closing Time by submitting the Response Notification Form (Appendix 2) on or before 3:00pm, Thursday October 11, 2012.
- 6.2 It is the sole responsibility of the Tenderer to check the City's website at http://vancouver.ca/doing-business/bids-contracts-rfps-purchase-orders.aspx regularly for amendments and questions and answers related to this ITT.

7.0 CONDUCT OF ITT - INQUIRES AND CLARIFICATIONS

- 7.1 The City will have conduct of this ITT, and all communications are to be directed only to the Contact Person named on the cover page.
- 7.2 It is the responsibility of the Tenderer to thoroughly examine the Tender Documents and satisfy itself as to the full requirements of this ITT. All inquires should be in written form only, faxed to 604-873-7057 or e-mailed to purchasing@vancouver.ca to the attention of the Contact Person no later than five (5) business days prior to the Closing Time. If required, amendments and questions and answers will be posted on the City's website as noted above.

INVITATION TO TENDER PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC APPENDIX 1 - INFORMATION MEETING ATTENDANCE FORM



CITY OF VANCOUVER

Purchasing Services

Invitation to Tender No.PS20120994

To acknowledge your intent to attend the Information Meeting being held as per Part A, Introduction and to ensure that you receive the required information please submit this form to the person identified by 2:00pm, Friday, September 28, 2012.

Philip Lai, City of Vancouver

Fax: 604-873-0757

Email: purchasing@vancouver.ca

Your details:

Tenderer's Name:

"Tenderer"

Address:

Telephone:

Key Contact Person:

E-mail:

Incorporation Date:

We WILL attend the informational meeting for: "HVAC Upgrades at the Vancouver Academy of Music"

located at 1270 Chestnut Street, Vancouver, BC, V6J 4R9.

Authorized Signatory Name of Tenderer(Please print)

Date

E-mail Address (Please print)

INVITATION TO TENDER PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC APPENDIX 2 - RESPONSE NOTIFICATION FORM



CITY OF VANCOUVER

Purchasing Services

Your details:

E-mail:

Invitation to Tender No.PS20120994

To acknowledge your intent to submit a Tender, and to ensure that you receive the required information, please submit this form to the person identified below by 3:00pm, Thursday October 11, 2012.

Philip Lai, City of Vancouver

Fax: 604-873-0757

Email: purchasing@vancouver.ca

Tenderer's Name:

"Tenderer"

Address:

Telephone:

Key Contact Person:

Incorporation Date:

We WILL / WILL NOT submit a Tender for: ""HVAC Upgrades at the Vancouver Academy of Music"" on or before the Closing Time Tuesday, October 16, 2012 at 3:00:00 p.m PST.

Authorized Signatory Name of Tenderer (Please print)

E-mail Address (Please print) Date

1. GENERAL CONDITIONS:

- 1. The instructions to the Contractor and requirements of general conditions apply to the work.
- 2. All bids must be based on materials specified as standard.
- 3. Contractors shall familiarize themselves with the site conditions prior to submitting bids. Claims for extras due to site conditions will not be accepted.
- 4. Provide functioning systems that are complete in every detail and installed in accordance with good practice as per the Mechanical Contractors Association of British Columbia documents. "Code of practice for commissioning mechanical systems in buildings" latest edition and "Code of practice for Contractors within Division 15 Mechanical" latest edition
- 5. No heating and HVAC equipment may be used for temporary heating and/or ventilation during construction without prior approval from Engineer. If approval is granted, Contractor shall be responsible to return the heating and HVAC equipment to "Like New" condition for substantial completion inspection.
- 6. The Contractor shall provide all control wiring diagrams for the HVAC equipment. 24 volt wiring and conduit shall be provided and installed by the Mechanical Contractor. Provide 24 volt transformers as required.

2. SCOPE OF WORK

- The Contractor's scope of work shall include but not be limited to the supply of all labour and
 materials to complete the replacement of HVAC units, condenser cooling system including the
 cooling tower, boiler system, sheet-metal, piping, electrical, DDC control systems and general
 work as shown on the drawings and described herein for fully operational and functional
 systems.
- The Mechanical Contractor shall provide general contracting service and shall be responsible for retaining all the required sub-trades and services for a coordinated and complete installation.
- Site verification of the as-installed controls is a mandatory requirement by the Controls Sub-Contractor to ascertain requirements for the work and be responsible to communicate any deficiencies in the tender documents for issuance of any addenda before submission of the bid.
- Site verification of the as-installed electrical is a mandatory requirement by the Electrical Sub-Contractor to ascertain requirements for the work and be responsible to communicate any deficiencies in the tender documents for issuance of any addenda before submission of the bid.
- At commissioning, the contractor together with his boiler, cooling tower and air-conditioning unit technical representatives and controls sub-trade shall provide a system operating and maintenance demonstration to owner appointed representative operating and maintenance personnel (minimum 4 hour on-site).
- Base price is for the replacement of the existing air conditioning units, condenser cooling system including the cooling tower, remedial duct work, insulation and associated direct digital controls, electrical and general work. Separate price #1 is for replacement of the natural draft

boiler, associated venting, piping, insulation, direct digital controls, electrical and general work.

3. DRAWINGS AND SPECIFICATIONS

- 1. Contract drawings for mechanical work are in part diagrammatic, intended to convey the scope of work and indicate general arrangement of equipment, piping and ductwork. The Contractor shall lay out the work at the site and provide any necessary offsets and adjustments to suit the site conditions and avoid conflicts.
- 2. Care shall be taken to ensure that the installation is in accordance with detailed drawings, where given, and that the installation meets the design requirement.
- 3. The drawings and specifications are intended to be complementary. Anything called for in these specifications or shown on the drawings shall be considered as appearing in both and shall form part of the contract documents.
- 4. Take any information involving accurate dimensions of the building from the structure and architectural finishes by measurement of the building on the site.
- 5. Any discrepancies found between drawings and specifications, leaving in doubt the true intent or meaning shall be brought to the attention of the Engineer prior to the work being performed.
- 6. The term "provide" where used shall be understood to include labour, materials and services to supply and install the item or work referred to.

4. CODES AND PERMITS:

- 1. Comply with all applicable codes, obtain all necessary approvals and pay for all necessary permits prior to commencement of work.
- 2. All materials and equipment shall have prior approval for the application by the authorities having jurisdiction, e.g. Canadian Standards Association (C.S.A.) Canadian Gas Association (CGA) etc.
- 3. All work shall conform to the applicable codes including but not limited to the following:
 - 1) The British Columbia Building Code 2006.
 - 2) S.M.A.C.N.A. HVAC duct construction standards, 1st edition, 1995, Class C pressure rating.
 - 3) B.C. Electrical Code.
 - 4) Natural gas and propane installation code B149.-00 and B.C. Gas Safety Code/Amendments.
 - 5) H.V.A.C. Equipment shall be designed and installed in conformance with the requirements of division B Part 6.

5. INSPECTIONS AND APPROVALS:

- 1. All work and materials will be subject to inspection from time to time by the Engineer and the authority having jurisdiction. Inform the Engineer 48 hours in advance of any tests or covering burying or concealment of services to allow for inspection. Do not cover, bury or conceal services without the Engineer's approval.
- 2. Do not change any materials, equipment or construction method from what is shown on the drawings and specification without the approval of the Engineer. Any changes made without the Engineer's authorization may result in the work not being accepted and/or delay in issuance of the final letter of assurance.
- 3. The documents indicate the minimum standards to be applied to the work. Any approval of, or agreement to, a lower standard, by any person or authority will not necessarily be approved by the Engineer and may result in the work not being accepted and/or delay in issuance of the final letter of assurance.

6. SUBMITTALS:

- 1. Prior to commencement of work, submit at least 3 copies of complete shop drawings on all specified or approved equal materials to be used. Allow 5 working days to review.
- 2. The Contractor shall be responsible for delays caused by any required resubmission of shop drawings.
- 3. The Engineer's review is for general compliance with the intent of the contract documents and will not relieve the Contractor from responsibility for correctness of performance, function, details and dimensions.
- 4. Where alternate equipment has been submitted the Contractor bears responsibility for any redesign and construction required to accommodate the equipment.
- 5. If approval is received to use other than specified items, responsibility for specified capacities and insuring that items to be furnished will fit space available lies with the Contractor.
- 6. If non-specified equipment is used and it will not fit job site conditions or not meet with local code requirements, the Contractor assumes responsibility for replacement with items named in contract documents of other equipment to fit site conditions.
- 7. The shop drawings do not supersede the contract documents.

7. MAINTENANCE MANUALS:

- 1. At completion of construction, submit to Engineer 3 sets of maintenance information including 1 e-copy covering the operation and maintenance of HVAC systems. Incorporate with the HVAC maintenance information in a suitable 3 ring binder.
- 2. Manual shall include: description of the operation of the HVAC system, controls, approved balance report, copies of all permits, test reports, final inspection certificates and approvals, copies of all shop drawings, operating instructions for all equipment, maintenance schedules for all equipment, copies of all guaranties, names and addresses of Contractors and Suppliers.

8. AS BUILT DRAWINGS:

- 1. Obtain from the Engineer extra sets of drawings on which to mark, as the work progresses, any and all changes and deviations in runs of ductwork, piping risers or equipment locations from that shown. These drawings shall be kept on site and available for review at all times.
- 2. When the installation is complete, submit the complete marked-up "as-built" to Ron Wong & Associates Inc. Drawings shall be clean and legible with an acceptable standard of drafting and each sheet shall bear the Contractors name and be identified as as-built. Provide a letter certifying that these drawings accurately reflect the building as-built.
- 3. Include a cash allowance in the contract to cover the cost for Ron Wong & Associates Inc. to incorporate the as-built information into the Autocad files and to provide 2 sets of final asbuilt prints for review and sign-off by the Contractor for forwarding to the owner. Cash allowance to be \$250.00 per drawing.

9. GUARANTIES:

- 1. Provide a written guaranty of all material, workmanship and system performance for a period of (1) year after final acceptance, and replace forthwith any defective work during this period.
- 2. Such guaranty shall not override any specific guaranties provided or requested of longer duration.

10. INSTALLATION:

- 1. Provide access doors for all concealed serviceable components. Access doors shall maintain required fire ratings.
- 2. Provide isolating valves in branch lines to each equipment.
- 3. Identify each equipment and piping system with labels and stick on decals to indicate service and direction of flow. Labels shall be in lamicoid black formica with white reveal on engraving. Labels shall contain equipment tags and area served.
- 4. Label all valves with chain and lamicoid black formica tags. Match existing alphanumeric tagging system.
- 5. Install pipes with allowance for expansion, contraction and settling. Heating hot water pipes shall have expansion joints, loops or offsets as shown on the drawings and/or at least every 100 feet of straight run. Provide pipe anchors between expansion elements.
- 6. Co-ordinate locations and sizes of required HVAC chases and any additional bracing between studs for wall hung equipment.
- 7. Co-ordinate any required cutting of structure to facilitate passage of pipes and duct. All penetrations of wall, floor, and roof assemblies to be drilled holes as per listed fire stopping systems chainsaw holes are not permitted.
- 8. Ensure that the integrity of all fire separations is maintained where piping and ductwork systems penetrate rated structures. Contractor to seal tight around all piping with approved

caulking material and provide fire damper or fire flap for ductwork with required fireprotection rating of closure.

9. Thermostats and wall mounted sensors/equipment shall be located generally as shown but their exact location shall be field co-ordinated to avoid interference with wall mounted items and excessive radiant or other heat sources.

11. CO-OPERATION WITH OTHER TRADES:

- 1. Give full co-operation to all sub trades and furnish any information necessary to permit the work of all sub trades to be installed satisfactorily and with the least possible interference or delay.
- 2. Install all equipment, piping and ductwork to obtain ceiling heights, clearances for servicing and accessibility. In case of conflict, notify the Engineer before fabricating and installing any item referred to above. Carry out any required adjustment.

12. MATERIALS AND WORKMANSHIP:

- Unless otherwise specified, all materials and apparatus required for work shall be new, of first class quality and shall be furnished, delivered, erected, connected and finished in every detail, and shall be selected and arranged so as to fit properly into the building spaces.
 Where no specific kind or quality of material is given, a first class standard article as approved by the Engineer shall be furnished.
- 2. Use skilled and qualified, fitters, plumbers, metal workers, welders, electricians, helpers, and labour required to unload, transfer, erect, connect up, adjust, start, operate and test such systems. Helpers and unqualified workers shall be directly supervised at all times while working on the site by qualified trades persons.
- 3. Upon request produce copies of trade qualifications of any selected workers.
- 4. The Engineer shall have the right to reject any item that, in their opinion does not conform to an acceptable standard of quality, quietness of operation, finish, appearance and performance. Unacceptable material and/or workmanship must be rectified to the approval of the Engineer.

13. TESTING AND BALANCING OF THE SYSTEM:

- 1. The Contractor is responsible for the inspection of the complete ventilation and exhaust systems to see that they are installed in accordance with the intent of the plans and specifications. During the inspection ensure that:
 - 1) Adjust fan drives to get required and rated CFM and specified RPM
 - 2) Adjust temperature and fan/pump control sequence
 - 3) Optimize variable speed drive and by-pass pressure relief valve.
 - 4) Adjust the entire installation as to minimize noise and vibration from fans, compressors, starters and relays
 - 5) Eliminate any duct pulsation by use of stiffeners or additional supports as required
 - 6) Correct any equipment or component which is generating objectionable noise in the opinion of the owner or by local authorities

- 7) There are no air leaks.
- 8) The ductwork is properly supported
- 9) All duct connections are securely fastened to their respective collars or other fittings so they will not come off under maximum system pressure
- 10) Adjust balance valves.
- 2. The Contractor shall be responsible for the capacities of the ventilation and exhaust systems and equipment specified. Tolerance to be +/- 10% of quantities noted on drawings or in the equipment schedules.
- 3. Contractor to provide and co-ordinate services of an independent air testing and balance agency which specializes in testing and balancing of heating, ventilating and cooling system. K.D. Engineering, Western Mechanical Services or CES Engineering. All other agencies must apply for approval to the Engineer.
- 4. At completion of project, the independent testing and balance agency to submit balance report to the Engineer for review.

14. SHEET METAL DUCTWORK:

- Fabricate all ductwork from G90 galvanized sheet steel in accordance with S.M.A.C.N.A. Do not use ridged fibreglass ductwork. All ducts to be constructed for one inch pressure, class C.
- 2. Seal all sheet metal duct joints and seams with 3M duct sealer or aluminum foil pressure tape to the requirement of SMACNA class C. Use of duct tape is not acceptable.
- 3. Elbows are to be minimum radius 1.5 times duct dimensions.
- 4. Duct dimensions are noted as clear inside.
- 5. When flexible duct is used, it shall be Flexmaster Fab 4 un-insulated (ventilation systems) or Flexmaster Fab 8T insulated (HVAC systems), ULC approved class 1 duct. Flexible duct to be installed such that the connection will not come off when pulled with minimum 25 lb. force. Flexible metal duct is not acceptable.
- 6. Provide conical take offs on all right angle take offs in supply air ductwork.
- 7. All ductwork behind side wall registers and return air grilles to be painted flat black.
- 8. Supply and install access panels/doors for all concealed serviceable components. All access panels/doors shall be installed by mechanical Contractor except those on the drywall ceiling/enclosure.
- 9. Transition all ducts as required to attach to equipment
- 10. All square elbows shall have turning vanes and service access panel.
- 11. Install replacement control dampers.

15. VIBRATION ISOLATION:

1. Each AC unit shall be provided with vibration isolation and flexible duct connections of a minimum of 4" of reinforced neoprene.

2. Select isolation equipment in accordance with the manufacturer's instructions for the appropriate loads and frequencies to provide optimum isolation.

16. SEISMIC REQUIREMENTS:

GENERAL

The Contractor shall provide Seismic restraints for all equipment, piping, and duct-work that meet the requirements defined by the National Building Code of Canada (NBCC), British Columbia Building Code (BCBC), and "Guidelines for Seismic Restraints of Mechanical Systems and Plumbing Piping Systems" (SMACNA and PPIC)

The Contractor shall retain a B.C. Professional Engineer to review the adequacy of seismic restraint of all equipment, piping, and duct work and shall abide by all recommendations of the Engineer. Standard of acceptance: VibraTech Engineering Ltd. Dennis Mar - 604 299-4618; Bell Consulting Engineering Ltd, Jason Bell - 604 736-1779; Centroproject Consulting Ltd, Peter Jurasek - 604 430-8455.

The Contractor shall provide the Engineer with the necessary shop drawings, including details of seismic restraint, sealed by the Engineer.

The Engineer shall issue letters of assurance (Schedules B1, B2 and C-B) for the structural capacity of mechanical systems, including anchorage and seismic restraint.

The Equipment Manufacturer shall design equipment such that the strength and anchorage of internal components exceeds the force level used to restrain and anchor the equipment to the supporting structure.

SPECIFIC

The following rules apply to the attachment of restraints to structural members:

- Loads applied to unsupported spans of wood framing shall be carried by bracing to adjacent framing.
- Do not apply lateral loads to the bottom chord of OWSJ.
- Apply vertical loads to the bottom chord of OWSJ only at the panel point.
- Anchors on framing members shall be coach bolts passing through the member with oversized washers.
- Anchors on framing members shall be expansion and sleeve type.
- Screws in wood framing shall be used for shear loads only, not pull-out loads.
- The following rules apply to the restraint of piping:
- Where the hangers are more than 12" (300mm) in length from the top of the pipe or duct to the bottom of the structural support, seismic restraints shall be provided for the following.
- Fuel, gas, oil and compressed air piping 1" diameter and larger. Lateral or transverse restraints at 20ft. spacing and longitudinal restraint at 40 ft. spacing.
- All other piping in boiler and mechanical equipment rooms 1 ¼" diameter and larger.
- All other piping 2 ½" diameter and larger, including domestic water and drainage piping.

• All rectangular ductwork 6 sq.ft. (0.5 sq. m) cross sectional area and larger, or round ductwork 28" (700 mm) diameter and larger.

The following rules apply to the restraint of equipment:

- All resiliently mounted equipment shall be provided with seismic snubbers.
- All floor/roof-mounted equipment shall be bolted to the floor/roof structure.
- Vertical tanks and water heaters shall be bolted to the floor and further secured with an encircling strap at the mid-point, with rigid bracing to the structure.

17. INSULATION:

- External ductwork insulation shall be one inch reinforced foil faced fiberglass duct insulation.
 Use rigid insulation in exposed locations. Tape all joints. All material and workmanship shall
 conform to NFPA 98A standards and BCICA quality standards for mechanical insulation sixth
 edition 2003. Externally insulate the following ducts:
 - 1) Supply air ductwork where replaced.
- 2. All ductwork and plenum shown cross hatched on the drawings shall be lined on all surfaces with one inch neoprene faced fibreglass acoustic insulation.
- 3. All hot water heating and cold water make-up pipes, valves and fittings shall be insulated with preformed fibreglass insulation with integral jacket. Thickness as follows:
 - 1) Piping in mechanical rooms, corridors and public spaces: 25mm (1")
- 4. All exposed piping, valves and fittings shall be covered with 25/50 rated PVC covering with one piece moulded PVC fitting covers. All joints to be sealed with tape and rivets.
- 5. Minimum insulation R-valves shall be in accordance with table 6.2.4.1.3 and 6.2.4.1.2A and 2B ASHRAE 90.1 2007.

18. CONDENSER COOLING AND HOT WATER HEATING PIPING:

- 1. Condenser and hot water heating piping shall be either:
 - A. Schedule 40 ASTM specification A-120 wrought steel.

Under 2½" (65mm):	butt-welded
Over 2½" (65mm):	Seamless or electric resistance welded
Fittings under 2 ½" (65mm):	150 lb. M.I. screwed
Fittings over 2 ½" (65mm):	welded or flanged

- B. Victaulic joints and fittings acceptable for condenser cooling and hot water heating piping system installation.
- 2. Piping supply main shall grade up in the direction of the flow at a uniform grade of 0.2%. All piping shall be installed so that all water can be drained and air expelled.

- 3. Eccentric reducers shall be installed with the straight side at the top of the mains for the water piping.
- 4. Pipe work shall be support so as to permit free movement due to expansion and contraction.
- 5. Vertical rising pipework shall be supported at the base or as indicated, to withstand the total weight of the riser. Branches from risers shall not be used as means of support for the riser.
- 6. Suspend piping using malleable iron or wrought steel hangers suspended from hanger rods, threaded each end not more than 2".
- 7. Where pipework passes through walls, floors, or ceilings, sleeves shall be provided.
- 8. Provide stainless steel bellows expansion joints with braided covers where shown on the drawings or where needed to prevent excessive stress movement.
- 9. Make-up water piping shall be Type L copper. Install reduced pressure backflow preventer including certification.

19. TESTING AND INSPECTION

- 1. Pressure test all new heating piping, valves and fittings.
- 2. Existing heating distribution piping will not be subject to testing. Isolate as required.
- 3. Pressure test to 100 PSIG for 24 hours. If any leaks occur the test shall be restarted after making good.

20. VALVES:

1. Shut-off valves up to 2":	125 lb. bronze gate valves-TOYO Fig. 293 OR 150lb ball valves - TOYO Fig. 5044A
2. Shut-off valves 65mm(2 ½") and up:	150 lb. butterfly valve-TOYO Fig. 917 BESL/G OR 150lb cast iron valves - TOYO Fig 421A
3. Check valves:	125 lb. bronze swing check - TOYO Fig. 236
4. Balance valves/Circuit setter:	Bronze construction -Bell & Gossett model CB calibrated balance valves

Install control valves.

21. BOILER:

- 1. Supply and install condensing boilers in the location as shown on the drawing with capacity as specified in the equipment schedule.
- 2. Temperature controls for regulation of burner operation shall be mounted on the boiler and the temperature sensing element shall be located adjacent to the boiler outlet. A manual reset high limit thermostat shall shut the burner down in the event of the flow temperature exceeding maximum regular setting.
- 3. Provide BACnet interface with DDC controls.

4. Each boiler module shall be c/w ASME pressure relief valve, manual reset low water cut off, flow switch, natural gas burner with intermittent electronic pilot ignition, full modulation gas control and insulated jacket. Boiler operating pressure shall be 207 kPa (30 PSIG) and tested to 345 kPa (50 PSIG).

22. PIPING CLEANING AND CHEMICAL TREATMENT:

Provide chemical feeding equipment for the condenser cooling and hot water heating systems and perform related services as described below.

- 1. All systems including the existing heating distribution system must be chemically cleaned and flushed remove all loose sand, dirt and other debris before water treatment is added.
- 2. Add cleaner to open and closed loop system at concentration levels as recommended by the water treatment specialist.
- 3. Install side stream filter for the heating system.
- 4. Submit shop drawings including proposed chemical quantities, calculations, procedures and equipment to be supplied. Provide written operating instructions and system schematics.
- 5. After initial treatment, provide a follow-up site visit 90 days after substantial completion to complete chemical sampling, analysis and any recalibration of the chemical treatment requirement. Provide a report to the Owner.
- 6. Provide written report containing log and procedure of system cleaning.

23. EQUIPMENT SCHEDULE:

1. Supply and install equipment in the location as shown on the drawing with capacity as specified in the equipment schedule.

24. CONTROLS GENERAL:

- 1. Provide a complete Direct Digital Control (DDC) system for the replacement heating, ventilating and air conditioning systems. Provide EnOcean Wireless Space Sensors as indicated on the mechanical drawings to satisfy the following sequence.
- 2. The DDC system shall be complete with BACnet capability to interface seamlessly with City of Vancouver requirements and shall include a MachPro Web Controller for internet interface to COV network accessible from City Hall sites.
- 3. Locate MachPro Web in the mechanical room. Provide COV approved Ethernet cable to building internet switch to interface with the COV network for off-site central communication.
- 4. All exposed low and line voltage control wiring in conduit. Plenum rated cable may be run to follow building lines in conceal spaces.
- 5. The existing control system is a pneumatic/electric system. This system shall be retained for control of all existing zone and terminal units such as hot water baseboard heaters, variable air volume valves, constant volume fan powered valves etc. Modify the existing pneumatic control as required for the above. Redundant pneumatic/electric controls shall be removed and disposed off-site. Repair or replacement of existing pneumatic controls not replaced by this project is not part of this scope of work.

- 6. The replacement HVAC equipment; cooling tower, air-conditioning units, boilers and pumps including the existing return air fans and hot water heating coils shall be DDC controlled. Provide all necessary equipment, replacement control valves and dampers, actuators, devices, transformers, relays and material including labour to complete a fully operational and functional DDC control system. Provide pneumatic/electric/DDC interface where existing heating coil control valve is re-used.
- 7. The contract documents provide a schematic drawing of the installed pneumatic/electric controls for information purposes. Site verification of the as-installed controls is a mandatory requirement by the Controls Contractor to ascertain requirements for the work and be responsible to communicate any deficiencies in the tender documents for issuance of any addenda before submission of the bid. No extra claim will paid for by Owner for failure to comply and resulting in extra work by the contractor.
- 8. Provide shop drawings including all associated graphic controls diagram and sequence of operation.
- 9. Warranty the DDC control system installation for 1 years inclusive of parts and labour. All DDC controllers shall be warranted for five years.
- 10. At commissioning provide a system operating and maintenance demonstration to owner appointed representative operating and maintenance personnel (allow as a minimum 4 hours on-site).
- 11. Include for one first heating and one first cooling season operation for optimizing HVAC operation.
- 12. Standard of acceptance: Fraser Valley Controls, Delta-ESC.

25. CONTROLS SEQUENCE OF OPERATION

1. AIR CONDITIONING SYSTEM - AC-2 (RECITAL HALL):

- 1) The air conditioning unit supply fan and associated return air fan shall be interlocked to operate continuously during occupied periods.
- 2) The outside air and return air dampers shall modulate in sequence between minimum position and 100% outside air to provide free heating and free cooling. A duct mouted supply air sensor shall reset the outdoor air dampers closed to maintain a supply air low limit of 55°F adjustable. The relief air damper shall operate in proportion with the outside air damper. Provide return air temperature sensor.
- 3) When free cooling is no longer available, the AC unit mechanical cooling shall be initiated and staged to maintain the space temperature set point. When return air temperature exceeds outside temperature by 2°F and mechanical cooling is enabled then the outside damper shall close to minimum position.
- 4) Upon a call for mechanical cooling, the unit condenser loop control valve shall fully open and the condenser pump shall start and ramp up to meet set point loop water supply pressure as sensed by a pressure transmitter installed in the cooling loop. Reverse operation when mechanical cooling is not required.

- 5) When supply air temperature falls below 55°F, the duct mounted heating coil HC-2 (lower floor ceiling) control valve shall modulate open to provide heating hot water flow through the coil to maintain supply air set point. Mechanical cooling is not required and the condenser loop control valve shall remain closed.
- 6) Provide a low limit temperature controller downstream of the mixed air section to deactivate AC unit operation upon sensing 35°F or less. Provide freeze alarm upon a low temperature condition.
- 7) During un-occupied periods the AC unit and associated return air fan shall shut down and the dampers shall position for full recirculation.

2. AIR CONDITIONING SYSTEM - AC-3 (PERIMETER ZONE):

- 1) The air conditioning unit supply fan and associated return air fan shall be interlocked to operate continuously during occupied periods.
- 2) The outside air and return air dampers shall modulate in sequence between minimum position and 100% outside air to provide free heating and free cooling. A duct mounted supply air sensor shall reset the outdoor air dampers closed to maintain a supply air low limit of 55°F adjustable. The relief air damper shall operate in proportion with the outside air damper. Provide return air temperature sensor.
- 3) When free cooling is no longer available, the AC unit mechanical cooling shall be initiated and staged to maintain the space temperature set point. When return air temperature exceeds outside temperature by 2°F and mechanical cooling is enabled then the outside damper shall close to minimum position.
- 4) Upon a call for mechanical cooling, the unit condenser loop control valve shall fully open and the condenser pump shall start and ramp up to meet set point loop water supply pressure as sensed by a pressure transmitter installed in the cooling loop. Reverse operation when mechanical cooling is not required.
- 5) Provide a low limit temperature controller downstream of the mixed air section to deactivate AC unit operation upon sensing 35°F or less. Provide freeze alarm upon a low temperature condition. During un-occupied periods the AC unit and associated return air fan shall shut down and the dampers shall position for full recirculation.

3. AIR CONDITIONING SYSTEM - AC-4 (INTERIOR ZONE):

- 1) The air conditioning unit supply fan and associated return air fan shall be interlocked to operate continuously during occupied periods.
- 2) The outside air and return air dampers shall modulate in sequence between minimum position and 100% outside air to provide free heating and free cooling. A duct mouted supply air sensor shall reset the outdoor air dampers closed to maintain a supply air low limit of 55°F adjustable. The relief air damper shall operate in proportion with the outside air damper. Provide return air temperature sensor.
- 3) When free cooling is no longer available, the AC unit mechanical cooling shall be initiated and staged to maintain the space temperature set point. When return air temperature exceeds outside temperature by 2°F and mechanical cooling is enabled then the outside damper shall close to minimum position.

- 4) Upon a call for mechanical cooling, the unit condenser loop control valve shall fully open and the condenser pump shall start and ramp up to meet set point loop water supply pressure as sensed by a pressure transmitter installed in the cooling loop. Reverse operation when mechanical cooling is not required.
- 5) During winter operation when supply air temperature falls below 55°F, the duct mounted heating coil HC-1 (2nd floor) control valve shall modulate open to provide heating hot water flow through the coil to maintain supply air set point of 74°F. Mechanical cooling is not required and the condenser loop control valve shall remain closed.
- 6) Provide a low limit temperature controller downstream of the mixed air section to deactivate AC unit operation upon sensing 35°F or less. Provide freeze alarm upon a low temperature condition.
- 7) During un-occupied periods the AC unit and associated return air fan shall shut down and the dampers shall position for full recirculation.

4. CONDENSER COOLING - CT-1 & P-2:

- 1) Upon call for cooling from AC-2, AC-3 or AC-4, the respective condenser loop control valve shall be opened and condenser cooling water loop pump P-2, shall initiate operation from low speed to high speed to maintain loop pressure via the VFD/loop pressure sensor controls. The cooling tower fan shall start at low speed.
- 2) When condenser cooling water supply temperature approaches 80°F, cooling tower fan speed shall ramp up to maintain condenser supply water to within 80°F as sensed through the supply water sensor. A return water temperature shall also be provided.
- 3) Reverse operation when AC units shut down. Pump P-2 off when all condenser loop control valves are closed.
- 4) Manual drain down of the condenser cooling system is completed by Operation & Maintenance Personnel for winterization.

5. CONDENSER COOLING LOOP CHEMICAL FEED:

1) Monitor chemical feed pump operation.

6. BOILERS - B-1, B-2 & B-3:

- 1) The heating pump P-1 to operate continuously during occupied hours when indoor/outdoor air temperature is less than 70°F/55°F (adjustable) respectively to meet the heating loop set point pressure. Install outdoor temperature sensor at the north face of the building (inconspicuous location) complete with shield and the indoor temperature sensor complete with guard in the 2nd floor Studio 2-15 (southwest corner)
- 2) During unoccupied hours and outside air temperature is greater than 38°F pump P-1 cycled to meet the heating loop set point pressure when indoor temperature is less than 65°F (adjustable). When outside air temperature is less than 38°F pump P-1 shall run continuously
- 3) When return water temperature is 115°F or less, condensing boiler and boiler pump B-1/BP-1, B-2/BP-2 and B-3/BP-3 shall be activated in sequence to maintain supply water of 150°F.

- 4) Should the outdoor air temperature fall below 40°F (adjustable) and return water temperature continues to fall with room temperature set point not being met, boiler and boiler pump B-1/BP-1, B-2/BP-2 and B-3/BP-3 shall increase supply water temperature to 180°F (over-riding the 150°F supply temperature above.)
- 5) Upon meeting the supply water temperature of 180°F with room temperature sensor satisfied and outdoor temperature increases above 40°F (adjustable), boiler and boiler pump B-1/BP-1, B-2/BP-2 and B-3/BP-3 shall decrease supply water temperature to 150°F.
- 6) Upon meeting the supply water temperature of 150°F and room temperature sensors are satisfied, boiler and boiler pump B-1/BP-1, B-2/BP-2 and B-3/BP-3 shall be deactivated in reverse order of start-up.
- 7) Boilers activated when flow through each boiler is proven and respective low water cutoff make contact.
- 8) Provide duty cycling for the boiler and boiler pump

26. ELECTRICAL GENERAL:

- 1. All electrical work shall be designed and installed to B C Electrical Code requirement.
- 2. Obtain all necessary permits.
- 3. Retain a B C registered Professional Electrical Engineer who shall oversee the design and installation and provide required Schedules B-1, B-2 and CB to COV requirements.
- 4. The work shall include all electrical requirements associated with replacing of existing mechanical equipment and installation of new mechanical equipment including interfacing of new direct digital control requirement.
- 5. Where existing wiring is not suitable for reuse to the replacement units, provide new. Where wiring is reused, confirm adequacy and suitability and adjust or extend accordingly to facilitate the installation of the replacement mechanical units. Teck cable and or/EMT wiring is acceptable. Run all wiring so as to not obstruct access, perpendicular to or follow building lines. Do not support off mechanical equipment piping or ducting. Provide independent cable tray or pole supports, anchored to the building structure.
- 6. Use approved ULC approved connectors, junction boxes, panels, breakers, relays, transformers, disconnects, magnetic starters etc. for fully functioning electrical service to suit the mechanical system and DDC installation requirements.
- 7. Corporate with all Trades.
- 8. Provide magnetic starters for fans and pumps to suit the DDC system. Wall mount as required. Remove redundant starters.
- 9. Variable frequency speed drives are specified for supply with respective pumps and the cooling tower. Wall mount as required.
- 10. In addition to installation of individual boiler disconnects in the vicinity of the boilers, provide a single disconnect at the entrance to the mechanical room.
- 11. Review the mechanical specifications and equipment schedule for electrical characteristics.

INVITATION TO TENDER PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC APPENDIX 4 - SPECIFICATIONS AND DRAWINGS

Please see the following link for the specifications and drawings (ACADEMY OF MUSIC MECHANCIAL ROOM EQUIPMENT REPLACEMENT - Dated June 24, 2012 (pages M-1 to M-6)): http://former.vancouver.ca/fs/bid/bidopp/ITT/ITT-PS20120994.htm.

SPECIFICATION TABLES OF THE EQUIPMENT

GAS FIRED BOILER				
UNIT TAG:	B-1	B-2	B-3	
LOCATION	MECH RM	MECH RM	MECH RM	
MANUFACTURER	IBC	IBC	IBC	
MODEL NUMBER	399	399	399	
INPUT (Btuh)	80 - 399	80 - 399	80 - 399	
OUTPUT (Btuh)	77 - 382	77 - 382	77 - 382	
EFFICIENCY	95.70%	95.70%	95.70%	
BOILER FLOW RATE (gpm)	20-45	20-45	20-45	
MAX. WATER TEMP. (°F)	200	200	200	
VENT & AIR INTAKE SIZE	4"	4"	4"	
VOLTS/PHASE/Hz	120/1/60	120/1/60	120/1/60	
NOTES	1 TO 8	1 TO 8	1 TO 8	

NOTES:

- 1. AQUASTAT CONTROLED WITH HIGH LIMIT CUT-OFF
- 2. VACUUM BREAKER
- 3. TEMPERATURE AND PRESSURE GAUGE
- 4. RELIEF VALVES
- 5. CSA APPROVED
- 6. GAS VALVE
- 7. WALL MOUNTING RACK AND SEISMIC MOUNTING CLIPS
- 8. WITH BACNET CONTROLS

EXPANSION TANK			
UNIT NUMBER	ET-1		
SERVICE	HEATING LOOP		
LOCATION	MECH RM		
CAPACITY (GAL)	90		
TANK DIMENSIONS:			
DIAMETER (INCH)	24"		
LENGTH (INCH)	56-1/2"		
ARRANGEMENT	VERTICAL		
MANUFACTURER	AMTROL		
MODEL	AX-180V		
NOTES	1		

NOTES:

1. ASME STANDARD

INVITATION TO TENDER PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC APPENDIX 4 - SPECIFICATIONS AND DRAWINGS

PUMPS					
UNIT NUMBER	BP-1	BP-2	BP-3	P-1	P-2
PUMP TYPE	INLINE	INLINE	INLINE	INLINE	INLINE
SERVICE	BOILER B-1	BOILER B-2	BOILER B-3	HEATING LOOP	CONDENSING LOOP
LOCATION	MECH RM	MECH RM	MECH RM	MECH RM	MECH RM
CAPACITY (gpm)	30	30	30	90	120
HEAD PRESSURE (ft of Water)	10	10	10	45	30
LIQUID TEMP (°F)	120-180	120-180	120-180	180	100
PUMP (RPM)	3300	3300	3300	1750	1750
MOTOR (hp)	1/6	1/6	1/6	2.0	2.0
MANUFACTURER	B & G	B & G	B & G	B & G	B & G
MODEL NUMBER	PL-45	PL-45	PL-45	2X2X7	2X2X7
VOLTS/PHASE/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	208/3/60	208/3/60
NOTES	2	2	2	1	1

NOTES:

- 1. C/W VFD BY ABB WITH BACNET
- 2. BUILT-IN 3-SPEED SWITCH

Please provide a SEPARATE PRICE #1 for the Gas Fired Boiler, Expansion Tank and Pumps (BP-1, BP-2, BP-3 and P-1) in "SCHEDULE A - SCHEDULE OF QUANTITIES AND PRICES" as per DRAWINGS.

COOLING TOWER				
UNIT NUMBER	CT-1			
LOCATION	ROOF			
MANUFACTURER	BAC			
MODEL	VT0-41J			
AIR FLOW (cfm)	13,500 @ 0.3" ESP			
CONDENSER WATER:				
FLOW (GPM)	120			
E.W.T. (°F)	102			
L.W.T. (°F)	82			
E.A.T. WET BULB (°F)	68			
NUMBER OF FAN MOTORS	1			
MOTOR POWER (hp)	7.5			
VOLTS/PHASE/Hz	208/3/60			
PAN HEATER (kW)	N/A			
VOLTS/PHASE/Hz	N/A			
NOTES	1 TO 11			

NOTES

- 1. C/W VARIABLE SPEED DRIVE WALL MOUNT CABINET INSTALLATION, SUPPORT BACNET INTERFACE.
- 2. CORROSION PROTECTION

INVITATION TO TENDER PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC APPENDIX 4 - SPECIFICATIONS AND DRAWINGS

- 3. REMOTE MOUNTED WEATHER PROOF TERMINAL STRIP C/W FAN START/STOP (ALL FANS), FAN STATUS (ALL FANS)
- 4. HIGH EFFICIENCY BLOWER MOTOR
- 5. OUTDOOR INSTALLATION
- 6. MANUFACTURER'S STARTUP AND REPORT
- 7. DUCT COLLAR CONNECTION AT UNIT TOP DISCHARGE
- 8. FLOAT CONTROL FOR PAN WATER LEVEL.
- 9. NEMA 1 ELECTRICAL PANEL. PANEL TO CONTAIN SINGLE SOURCE DISCONNECT SWITCH AND HOUSE FAN MOTOR STARTERS. A TERMINAL STRIP SHALL BE PROVIDED FOR WIRING BETWEEN THE ELECTRICAL PANEL AND COOLING TOWER COMPONENTS
- 10. PVC ELIMINATORS
- 11. HEAVY GUAGE TYPE 304 STAINLESS STEEL BASIN

WATER COOLED AIR CONDITIONING UNIT				
		10.0	10.4	
UNIT NUMBERS	AC-2	AC-3	AC-4	
LOCATION	MECH RM	MECH RM	MECH RM	
SERVICE	RECITAL HALL	PERIMETER ZONE	INTERIOR ZONE	
MANUFACTURER	TRANE	TRANE	TRANE	
MODEL NUMBER	SCWGU2064	SCWGU2564	SCWGU2564	
AIR VOLUME (CFM)	7500	9000	9600	
ESP [INCH OF WATER]	1.0	1.0	1.0	
COOLING:				
EAT (db/wd)(°F)	80/67	80/67	80/67	
LAT (db/wd)(°F)	58/55	58/55	58/55	
TOTAL CAPACITY (MBH)	280.8	306.24	307.75	
SENSIBLE CAPACITY (MBH)	187.5	227.39	232.83	
E.W.T. (°F)	82	82	82	
L.W.T. (°F)	102	102	102	
WATER:				
FLOW (GPM)	36	40	38	
W.P.D. (FT OF WATER)	1.64	2.33	1.99	
BLOWER MOTOR (hp)	7.5	7.5	93.3W	
VOLTS/PHASE/Hz	208/3/60	208/3/60	208/3/60	
UNIT MCA (amps)	118.2	118.2	124	
EER	14	14	14	
NOTES	1 TO 7	1 TO 7	1 TO 7	

ALTERNATE EQUAL: THERMOPLUS

NOTES:

- 1. STAINLESS STEEL DRAIN PAN WITH POSITIVE SLOPE,
- 2. ACOUSTIC PACKAGE CONSISTING OF DAMPENING MATERIAL ON COMPRESSOR DISCHARGE MUFFLER, 12mm INSULATION WITH 80 kg/m3 DENSITY, EXTERNAL PANELS WITH 12mm GLASS FIBRE DUAL DENSITY INSULATION,
- 3. UNIT C/W PRE-CONNECTION STARTER
- 4. UNIT C/W DISCONNECT SWITCH ON RIGHT SIDE & PIPING CONNECTION ON LEFT SIDE
- 5. R410a REFRIGERANT
- 6. C/W 2" MEDIUM EFFICIENCY FILTERS WITH 2" FILTER RACK,
- 7. SUPPORT BACNET INTERFACE,

INVITATION TO TENDER PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC APPENDIX 5 - OWNERS WORKPLACE HAZARDS

TO BE ISSUED AT A LATER DATE AS AN ADDENDUM.

1.0 DEFINITIONS AND INTERPRETATION

1.1 Definitions

Capitalized terms used in the Tender Documents have the meanings set out below. Capitalized terms not otherwise defined have the meanings set out in the Contract, unless the context otherwise requires.

- (a) "Closing Time" has the meaning set out on the cover page of this ITT;
- (b) "Contract" (or "Agreement") means a contract substantially in the form of Part D Form Agreement that the City will enter into with the successful Tenderer;
- (c) "Contractor" means a Tenderer whose Tender the City has accepted and to whom the Contract has been awarded:
- (d) "Consultant" means the architect, engineer or other professional consultant who will act as the City's agent for the purpose of managing and administering the Contract, who may be an employee of the City or an independent consultant engaged by the City on its behalf;
- (e) "Drawings" means the graphic and pictorial portions of the Tender Documents issued as an appendix to the ITT;
- (f) "Form of Tender" means the form of tender in Part C Form of Tender to this ITT on which Tenderers are to complete their Tenders;
- (a) "HST" means the tax payable and imposed pursuant to Part IX of the Excise Tax Act (Canada) as amended, including any provincial component collected by Canada on behalf of British Columbia, and any successor legislation thereto;
- (g) "Information and Privacy Legislation" includes the Freedom of Information and Protection of Privacy Act (British Columbia) and all other similar legislation in effect from time to time;
- (h) "Losses" means, in respect of any matter, all:
 - (i) direct and indirect; and
 - (ii) consequential,

claims, demands, proceedings, losses, damages, liabilities, deficiencies, costs and expenses (including without limitation, all legal and other professional fees and disbursements, interest, penalties and amounts paid in settlement, whether from a third person or otherwise);

- (i) "Notice of Award" has the meaning set out in Part C Form of Tender;
- (j) "Notice to Proceed" has the meaning set out in Part C Form of Tender;
- (k) "Specifications" means the portion of the Tender Documents issued as an appendix to the ITT consisting of the written requirements and standards for products, systems, workmanship, quality, and the services necessary for the performance of the Work;
- (I) "Tender" means a tender submitted to the City in response to this ITT;
- (m) "Tender Contract" means the contract between the City and Tenderers governing the ITT process;
- (n) "Tender Documents" means the documents identified as such in Part A Introduction:

- (o) "Tenderer" means those entities eligible to participate in this ITT process;
- (p) "Tender Price" means the amount stipulated by the Tenderer in the space provided in the Form of Tender which, for greater certainty, is the Tenderer's proposed Contract price;
- (q) "Work" means the total construction and related services required by the Tender Documents; and
- (r) "Work Site" or "Site" means the area or areas on or about the City's property where the Work is to be carried out.

1.2 Interpretation

- (a) In these Tender Documents, any reference to the masculine includes the feminine and bodies corporate, and each includes the others where appropriate. Also, any reference to the singular includes the plural where appropriate.
- (b) If there is a conflict between or among (i) the Specifications and Drawings and (ii) Part A - Introduction, Part B - Terms and Conditions of ITT Process, Part C - Form of Tender (including the Schedules), Part D - Form of Agreement, the appendices and any amendments and questions and answers issued by the City (collectively, the "Balance of Tender Documents"), the Balance of Tender Documents shall prevail over the Specifications and Drawings.
- (c) In these Tender Documents, when the terms "should" or "are asked to" precede a requirement for the Tenderer, such requirement is not mandatory but it is strongly recommended. When the terms "will", "shall", "is to", "must" or "are to", "are required to" precede a requirement, such requirement is deemed to be mandatory. If a Tenderer is uncertain whether or not a requirement is mandatory, the Tenderer should submit an enquiry to the Contact Person.

2.0 SUBMISSION INSTRUCTIONS

- 2.1 The Tenderer must complete its Tender on the Form of Tender and submit its Tender in accordance with the instructions provided on the cover page of the ITT.
- 2.2 Tenders received after the Closing Time may be returned unopened to the Tenderer.
- 2.3 Faxed or emailed Tenders and/or other documents will not be accepted, and will be returned to the Tenderer.
- 2.4 Each Tender must be signed by an authorized signatory of the Tenderer, with the signatory's usual signature. Tenders by a company or partnership should specify the full legal name of the legal entity submitting the Tender.
- 2.5 All blank spaces in the Form of Tender should be filled in and all Schedules completed. All prices and notations should be legibly written in a non-erasable medium. Erasures, interlineations or other corrections should be initialled by the authorized signatory of the Tenderer.
- 2.6 Subject to any proposed variations requested in a Schedule to the Form of Tender, Tenders are to be all inclusive and without qualification or condition.
- 2.7 The City may, at any time and for any reason, extend the Closing Time by means of written amendment as set out in Part A Introduction.
- 2.8 The City will not be responsible for any cost incurred by the Tenderer in preparing the Tender.

3.0 BONDS

3.1 Tenders will be irrevocable and remain open for acceptance by the Owner for a period of ninety (90) calendar days after the Closing Time. Each Tender must be accompanied by a bid bond valid for a period of ninety (90) calendar days commencing on the Closing Time, payable to the "City of Vancouver", in the amount of ten percent (10%) of the Tender Price, and not a dollar amount, as a guarantee of the due execution of the Contract and the delivery of the performance bond and labour and material payment bond specified in the Form of Tender. The forms of these bonds are to be those issued by the Canadian Construction Documents Committee as follows:

Bid Bond: CCDC 220 (latest)

Performance Bond: CCDC 221 (latest)

Labour and Material Payment Bond: CCDC 222 (latest)

- 3.2 Each Tender must be accompanied by a "Consent of Surety", substantially in the form provided as a Schedule to the Form of Tender duly completed by a surety company authorized and licensed to carry on business in British Columbia.
- 3.3 The bid bond of unsuccessful Tenderers will be returned to them as soon as possible after the Contract is awarded and the bid bond of the Tenderer to whom the award is made will be returned upon execution of the Contract, delivery of a performance bond for 50% of the Tender Price and a labour and material payment bond for 50% of the Tender Price, commencement of the Work, and compliance with any other conditions set out in the Form of Tender. The cost of all bond premiums must be included in the Tender Price.
- 3.4 All bonds must be issued by a surety company authorized and licensed to carry on business in British Columbia.

4.0 TENDER PRICE

- 4.1 Subject to any adjustment for changes to the Work, which are approved by the City in accordance with the Tender Documents or Contract Documents, the Tender Price shall be the maximum compensation owing to the Contractor for the Work and the Contractor's compensation shall cover and include all profit and all costs of supervision, labour, material, equipment, overhead, financing and all other costs and expenses whatsoever incurred in performing the Work.
- 4.2 If unit prices and/or lump sums are requested in a Schedule to the Form of Tender such amounts will be used to compute interim progress payments and will be reviewed prior to Contract award so Tenderers are to ensure that the unit prices and/or lump sums accurately reflect the costs for each item. The Tenderer may be required to justify any submitted unit prices and/or lump sums. Failure by the Tenderer to submit a complete breakdown of Tender Price requested in a Schedule to the Form of Tender may result in an incomplete Tender and may be cause for rejection.
- 4.3 If an itemized breakdown of the Tender Price (or any portion of the Tender Price) is requested in a Schedule to the Form of Tender, the City may delete any items in order to meet budget limitation and award a Contract for only the remaining items.

5.0 ACCEPTANCE OF TENDERS

- 5.1 Notwithstanding anything to the contrary contained in the Tender Documents:
 - (a) Tenderers are notified that the lowest or any Tender need not necessarily be accepted and the City reserves the right to reject any and all Tenders at any time, or cancel the tender process, without further explanation or to accept any Tender considered advantageous to the City. Acceptance of any Tender is contingent on funds being approved and a contract award being made by Vancouver City Council and the compliance of the Tenderer with the conditions required to be satisfied upon receipt of a Notice of Award. Tenders which contain qualifying conditions or otherwise fail to conform to these Tender Documents may or may not be disqualified or rejected. The City may or may not waive any non-compliance, including a material non-compliance, irregularity or anomaly, with the Tender Documents or any conditions, including the timing of delivery of anything required by these Tender Documents and may at its sole discretion elect to retain for consideration Tenders which are non-conforming because they do not contain the content or form required by the Tender Documents or because they have not complied with the process for submission set out in this ITT.
 - (b) Where the City's representative is of the view, in his/her sole discretion, that there is an ambiguity or other discrepancy which cannot be discerned or resolved from examining the contents of the Tender, then whether or not such an ambiguity or discrepancy actually exists on the face of the Tender the City may, prior to Contract award, solicit clarification from the Tenderer or accept clarification from the Tenderer on any aspect of the Tender. Such clarification may include the acceptance of any further documents or information which will then form part of the Tender. The soliciting or accepting of such clarification (whether or not solicited) by the City will be without any duty or obligation on the City to advise any other Tenderers or to allow them to vary their Tender Prices as a result of the acceptance of clarification from any one or more Tenderers and the City will have no liability to any other Tenderer(s) as a result of such acceptance of clarification.
 - (c) The award of the Contract will be based on the evaluation of the Tenders by the City on any basis the City deems will best serve its interests, including but not limited to the following criteria, as applicable in the City's sole opinion:
 - the overall cost impact of the Tender on the operations of the City, including the addition of all applicable taxes to the prices quoted;
 - (ii) the ability and experience of the Tenderer, the Tenderer's proposed Suppliers and Subcontractors, and all of their respective senior staff and key personnel assigned to carry out the Work;
 - (iii) the Tenderer's technical credibility, financial resources, environmental responsibility and WorkSafeBC safety record;
 - (iv) the Tenderer's understanding of proposed Work;
 - (v) the Tenderer's scheduling of the Work in relation to the City's schedule and the ability to complete the Work within the time frame required by the City;
 - (vi) the Tenderer's ability to meet bonding and insurance requirements;

- (vii) the best value to the City based on quality, service, price and any of the criteria set out in this ITT based solely on the City's subjective assessment of the Tender;
- (viii) the quality of the references, resumes, curriculum vitae, and reputation of the Tenderer, its Suppliers and Subcontractors, and all of their respective senior staff and key personnel, particularly as it relates to the Work.
- (d) Where the City determines that all Tender Prices are too high, all Tenders may be rejected.
- (e) The City may, prior to Contract award, negotiate changes to the scope of the Work or any conditions with the Tenderer considered to provide best value or any one or more Tenderers without having any duty or obligation to advise any other Tenderers or to allow them to vary their Tender Prices as a result of changes to the scope of the Work or any conditions and the City will have no liability to any other Tenderer as a result of such negotiations or modifications.
- (f) The Tenderer acknowledges and agrees that the City will not be responsible for Losses incurred by a Tenderer as a result of or arising out of submitting a Tender for the proposed Contract, or due to the City's acceptance or non-acceptance of their Tender or any breach by the City of the Tender Contract between the City and each of the Tenderers or arising out of any Contract award not made in accordance with the express or implied terms of the Tender Documents.
- (g) The City may award the Contract on the basis of policies and preferences not stated in the Tender Documents or otherwise than as stated in the Tender Documents.
- (h) Prior to contract award, the Tenderer must demonstrate financial stability. Should the City so request, the Tenderer may be required to provide annual financial reports or a set of financial statements prepared by an accountant.
- (i) Guidelines or policies that may be applicable will not give rise to legal rights on the part of any Tenderer, Contractor, Subcontractor, Supplier, or others as against the City and will in no case create any liability on the part of the City. For certainty, the City's Procurement Policy, as may be amended or replaced from time to time, is now agreed to be an internal guideline document and creates no legal rights or obligations with respect to this ITT.

6.0 AWARD OF CONTRACT

- 6.1 Award of a Contract will be subject to approval and the Tenderer's compliance with the conditions required to be met upon receipt of the Notice of Award.
- The successful Tenderer will become the Contractor and will be required to sign the Contract with the City subject to any amendments approved by the City in writing.

7.0 EXAMINATION OF TENDER DOCUMENTS

7.1 Each Tenderer should examine the Tender Documents and must also satisfy itself of the extent of the Work. The Tenderer must make its own estimate of the facilities and difficulties attending the performance and the completion of the Work.

7.2 No allowance will be made subsequently on behalf of a Contractor for any error, omission or negligence on the Contractor's part or for non-compliance with the requirements of this clause.

8.0 SITE EXAMINATION/PRE-SUBMISSION DUE DILIGENCE BY TENDERER

- 8.1 Tenderers should make a careful examination of the Work Site and investigate and satisfy themselves at their own risk and expense as to all matters relating to the nature of the Work to be undertaken, the means of access, the extent of coordination with public use of adjacent areas, the extent of the Work to be performed and any and all matters which are referred to in the Specifications and Drawings and other Tender Documents, or which are necessary for the full and proper completion of the Work and the conditions under which it will be performed. No allowance will be made subsequently for any error, negligence, interpretation, or misinterpretation on the Contractor's part.
- 8.2 The City and the Consultant do not guarantee Work Site and geotechnical information (if any) provided in or with the Tender Documents and the Tenderer must evaluate such information relative to actual conditions.
- 8.3 Where any Tenderer wishes to evaluate any aspect of actual conditions (beyond the evaluation which it is already afforded by the access and information already provided for in this ITT), the City encourages the Tenderers to do so by submitting a written request to do so as far in advance of the Closing Time as is possible. The City will then consider whether or not to facilitate the request and if it decides to do so may at its option elect to undertake the evaluation and distribute the results to all Tenderers.

9.0 INTERPRETATION AND CLARIFICATIONS

- 9.1 If any Tenderer is in doubt as to the true meaning and intent of any part of the Specifications, Drawings, or other Tender Documents, the Tenderer should request an interpretation of same from the City at least five (5) Working Days prior to the Closing Time. If such an interpretation is not requested or confirmed by an amendment, the Tender will be presumed to be based upon the interpretation that may be subsequently given in accordance with the Contract Documents after award of the Contract.
- 9.2 Prior to the Closing Time, all requests for clarification of the Specifications, Drawings, or other Tender Documents will be answered in writing by the City and then sent to all prospective Tenderers who have submitted a Response Notification Form on or before the indicated deadline. The City is not responsible for verbal or any other explanations or interpretations of the Specifications, Drawings or other Tender Documents.

10.0 PRODUCT APPROVAL

10.1 Wherever any material, machinery, equipment and fixtures described in the Contract ("Product") is specified or shown by describing proprietary items, model numbers, catalogue numbers, manufacturer or trade names or similar reference, the Tenderer obligates itself to submit its Tender and accept award of the Contract based upon the use of such Products. Use of such reference is intended to establish the measure of quality which the Consultant has determined as a requisite and necessary for the Work. Where two or more Products are shown or specified, the Contractor has the option of which to use.

- 10.2 For approval of Products other than those specified, Tenderers should submit a request in writing to the City at least five (5) Working Days prior to the Closing Time. Requests must clearly define and describe the Product for which approval is requested. Requests should be accompanied by manufacturer's literature, specifications, drawings, cuts, performance data or other information necessary to completely describe the item. Approval by the City will only be in the form of an addendum to the Specifications issued by the City.
- 10.3 Approval of manufacturers and/or Products as noted are approved only insofar as they conform to the Specifications.

11.0 INSURANCE

- 11.1 The Tenderer should ensure that it can maintain insurance described in the Contract.
- 11.2 The Tenderer should complete and submit the "Certificate of Existing Insurance" attached as a Schedule to the Form of Tender, together with the "Undertaking of Insurance" attached as a Schedule to the Form of Tender.
- 11.3 Following Contract award, the successful Tenderer will be required to complete a Certificate of Insurance for the Work, a copy of which is attached as a Schedule to the Form of Tender.

12.0 WORKSAFEBC

12.1 The Tenderer should ensure that it can comply with all WorkSafeBC requirements as described in the Contract.

13.0 LABOUR RATES AND EQUIPMENT

13.1 Tenderers should provide if requested in a Schedule to the Form of Tender the force account labour and equipment rates setting out the all-inclusive hourly rates for all applicable types of equipment as well as the all-inclusive hourly rates for all applicable categories of labour which rates will then apply pursuant to the Contract.

14.0 LIST OF SUBCONTRACTORS AND SUPPLIERS

- Tenderers should provide if requested in a Schedule to the Form of Tender a list of Subcontractors and Suppliers, providing name, address of place of business and the portion of the Work to be done by the Subcontractor and/or Supplier or the equipment or materials to be supplied by the Subcontractor and/or Supplier.
- The City reserves the right to object to any of the Subcontractors and/or Suppliers listed in a Tender. If the City objects to a listed Subcontractor and/or Supplier, then the City will permit a Tenderer to propose a substitute Subcontractor and/or Supplier acceptable to the City. A Tenderer will not be required to make such a substitution and, if the City objects to a listed Subcontractor and/or Supplier, the Tenderer may, rather than propose a substitute Subcontractor and/or Supplier, consider its Tender rejected by the City and, by written notice, withdraw its tender. The City shall, in that event, return the Tenderer's bid security.

15.0 PERMITS, LICENSES AND FEES

15.1 The successful Tenderer will be required to obtain and pay for any applicable municipal, provincial and federal permits and licences necessary for the proper completion of the Work. The City will not be liable in any manner for same and the successful Tenderer agrees to indemnify and save the City harmless from and against all claims and Losses in relation to obtaining and paying for any applicable municipal, provincial and federal permits and licences necessary for the proper completion of the Work.

16.0 NON-RESIDENT WITHHOLDING TAX

16.1 Tenderers are advised that, if they are not residents of Canada, federal tax legislation requires that a certain percentage of the Contract Price otherwise payable to the Contractor be withheld by the City and remitted to the Receiver-General for Canada. The percentage required to be withheld and remitted varies depending among other things, on the country of residence, the provisions of any applicable tax treaties and the nature of the payment. Non-resident Tenderers may contact the Vancouver office of the Canada Revenue Agency, Taxation for further details. The City will receive a credit under the Contract for and any and all money withheld and remitted.

17.0 NO CLAIM AGAINST THE CITY

- 17.1 The Tenderer acknowledges and agrees that the City will not be responsible for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities (the "Damages") incurred by the Tenderer, including, without limiting the generality of the foregoing, any Damages incurred by the Tenderer directly or indirectly caused by any act or omission of the City or breach of any agreement or duty by the City, express or implied, and by submitting a Tender each Tenderer shall be deemed to have agreed that it has no claim whatsoever.
- 17.2 The Tenderer now indemnifies and will protect and save the City and any of its employees, advisors or representatives (including the Consultant) harmless from and against all Losses, in respect of any claim or threatened claim by any of its Subcontractors, or materials or equipment suppliers alleging or pleading:
 - (a) a breach of the Tender Contract by the City or any of its employees, advisors or representatives (including the Consultant);
 - (b) an unintentional tort, of the City or any of its employees, advisors or representatives (including the Consultant), occurring in the course of conducting this ITT; or
 - (c) liability on any other basis related to the Tendering process, bidding process or the Tender Contract.

18.0 DISPUTE RESOLUTION

18.1 Any dispute relating in any manner to this ITT, except only disputes arising between the City and any Tenderer to whom the City has made an award of the Contract, will be resolved by arbitration in accordance with the *Commercial Arbitration Act* (British Columbia) amended as follows:

- (a) The arbitrator will be selected by the City's Director Supply Management; and
- (b) The release, indemnity and limitation of liability set out above will:
 - (i) bind the arbitrator, the Tenderer and the City; and
 - (ii) survive any and all awards made by the arbitrator.

19.0 CONFIDENTIALITY AND PRIVACY

19.1 The Tender, once submitted to the City, becomes the property of the City, which is a public body required under Information and Privacy Legislation to protect or disclose certain types of records according to certain statutory rules. The Tender, upon submission to the City, will be received and held in confidence by the City, unless and to the extent that it is or must be disclosed pursuant to Information and Privacy Legislation. If unsuccessful, the Tenderer, at the City's request, shall destroy or return all copies and originals (in any format or medium) of the Tender Documents.

20.0 RELEASE OF INFORMATION RESTRICTED

20.1 No information concerning one Tenderer's Tender will be given out to the other Tenderers. Tenderers may attend the opening and registering of Tenders (referred to on the cover page of this ITT) in order to obtain information concerning the names of the other Tenderers who submitted a Tender and the Tender Price shown on each Form of Tender. However, no other information is anticipated to be disclosed by the City.

INVITATION TO TENDER NO. PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC PART C - FORM OF TENDER

Tender of:		
	Name of Person, Firm, or Company (the	"Tenderer")
Business Address:		
Postal or Zip Code:		
Cheque Payable / Remit to Address:		
Telephone No.:	Fax No.:	
Key Contact Person:		
E-mail:		
HST Registration No.:	Incorporation Date:	
City of Vancouver Business License (If your office is located in Vancouv		
WorkSafeBC Account Number:		
Dunn and Bradstreet Number: (or N/A if not applicable)		
September 21, 2012		Page FT1
Name of Tenderer	Initials (of Signing Officer

INVITATION TO TENDER NO. PS20120994 HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC SCHEDULE "B" (PART C - FORM OF TENDER)

1.0 TENDER PRICE AND SCHEDULE

Name of Tenderer

Having carefully read and examined the Tender Documents the undersigned hereby offers to complete the Work covered by the Tender Documents and to furnish all plant, tools, equipment, labour, products, material and supervision necessary to execute the Work for the Tender Price of:

	nder P	rice, which excludes HST, is	
			dollars
and		cents (\$	
		T NO. PS20120994 - OPTION 2 <u>WORK COMPLETED IN TU</u>	NO (2) PHASES
The Ter	nder P	rice, which excludes HST, is	
			dollars
and		cents (\$)
		ender price for Options 1 & 2 are the same, please fill-i	
		gned confirms that the above stated Tender Price include:	S:
(a)		overhead and profit;	auminimal toyon, and
(b)		taxes (except HST), including all federal, provincial, and n	•
(c)		other fees, charges, costs and expenses whatsoever relate	
		gned offers to complete the Work according to the follow	
(d)		k will begin by November , 2012 , subject to approval by the City issuing the Notice to Proceed.	vancouver City Council
(e)	Sub	stantial performance of:	
	•	OPTION 1 - Work (both cooling and heating) is targeted	for December 2012; or
	•	OPTION 2 - Cooling tower and Air Conditioning Unit is to 2012 and Boiler, Expansion Tanks is targeted for July 2	•
(f)	Tota	al performance of:	
	•	OPTION 1 - Work (both cooling and heating) is targeted or	for early January 2013
	•	OPTION 2 - Cooling tower and Air Conditioning Unit is to 2013 and Boiler, Expansion Tanks is targeted for July 3	•

Initials of Signing Officer

2.0 PAYMENT

If awarded this contract, the undersigned agrees that all payments to be made by the City will be by Electronic Funds Transfer and the undersigned will provide the City with the necessary banking information to facilitate this process.

3.0 NOTICE OF AWARD

The undersigned agrees that this Tender will be irrevocable and open for acceptance by the City for a period of ninety (90) calendar days commencing on the Closing Time, even if the Tender of another Tenderer is accepted by the City. If within this period the City delivers a written notice by which the Owner accepts the Tender (the "Notice of Award"), the undersigned will, within ten (10) Workings Days of the receipt of the Notice of Award, deliver to the Owner:

- (a) a performance bond and a labour and material payment bond, each in the amount of fifty percent (50%) of the Tender Price, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the City;
- (b) a detailed Construction Schedule;
- (c) a detailed Site Specific Safety and Health Plan addressing as a high-level overview the health and safety issues including, but not limited to hazards, mitigation measures, site orientations, safety meetings, first aid attendant requirements, and training requirements and record keeping including Contractor's Pre-Contract Hazard Assessment (GC 9.4.12);
- (d) a WorkSafeBC number and a "clearance letter" confirming that the Tenderer is in WorkSafeBC compliance;
- (e) a valid City of Vancouver business licence; and
- (f) a completed and signed Certificate of Insurance (in the form attached as Schedule to this Form of Tender) indicating that all such insurance coverage is in place.

4.0 NOTICE TO PROCEED

The undersigned agrees that upon the City's receipt and acceptance of the submissions above and the undersigned's execution and return of the Contract Documents, the City will deliver a "Notice to Proceed" by which the undersigned will:

- (a) commence the Work within two (2) Working Days of the receipt of the Notice to Proceed or such longer time as may be otherwise specified in the Notice to Proceed; and
- (b) issue, post, and copy the City on the Notice of Project as and when required under section 20.2 of the *Occupational Health & Safety Regulation* (BC Regulation 296/97).

5.0 CONDITIONS

(a) The undersigned agrees that if the undersigned receives a Notice of Award and fails or refuses to:

September 21, 2012	Page FT3
Name of Tenderer	Initials of Signing Officer

- deliver the documents by the times specified in the Notice of Award; or
- commence the Work as required by the Notice to Proceed,

then such failure or refusal will be deemed to be a refusal to enter into the Contract and the City may, on written notice to the undersigned, award the Contract to another party. It is further agreed that, as full compensation on account of damages suffered by the City because of such failure or refusal, the bid security shall be forfeited to the City in the amount equal to the lesser of:

- (i) the face value of the bid security; and
- (ii) the amount by which the Tender Price is less than the amount for which the City contracts with another party to perform the Work.
- The lowest or any submitted Tender will not necessarily be accepted. The City (b) reserves the right to reject this Tender at any time without further explanation or to accept any Tender considered advantageous to the City.
- The Schedules attached to this Form of Tender form an integral part of same. (c)

6

Name of Tenderer

6.0	AMENDMENTS/ADDENDUM/QUESTIONS AND ANSWERS
	Acknowledgment of receipt of the following amendments and questions and answers to the Tender Documents is hereby made:
	Addendum/Amendment No.
	Questions and Answers No.
The und	dersigned agrees that they thoroughly understand the terms and conditions contained therein.
7.0	OWNER PRE-CONTRACT HAZARD ASSESSMENT
	The undersigned acknowledges receipt of the Owner Pre-Contract Hazard Assessment, Schedule 8 of Part 4, Form of Agreement, and associated requirements as specified in Part 4, Form of Agreement, GC 9.4.12. [NTD: to be removed until forms are included]
Septem	nber 21, 2012 Page FT4

Initials of Signing Officer

8.0 CERTIFICATION

The undersigned now certify that this Tender complies in all respects with the Tender Documents.

9.0 LABOUR

The above stated price is based on the Work under the Contract being performed by union/non-union labour. (Delete "union" or "non-union" as applicable).

THE REMAINDER OF THIS PAGE IS INTENTIONALLY BLANK

September 21, 2012	Page FT5

Name of Tenderer

Initials of Signing Officer

SIGNED and SEALED this Tenderer:	day of	by the duly authorized	officers of the
Tenderer's Legal Name or	Registered Corpo	rate Name and Address:	
			(Seal)
Ву:		<u> </u>	
Ву:		_	
Witness' Name, Signature,	and Address whe	re Tenderer is a Proprietorship or Partner	ship:
Signature		Print Name	
Address			
September 21, 2012			Page FT6
Name of Tenderer		Initials of Signing	Officer

SCHEDULE "A" - OPTION 1 SCHEDULE OF QUANTITIES AND PRICES

The Tender Price, which excludes HST, is apportioned in accordance with the following table. The of the prices provided for each item should equal the Tender Price stipulated in the space provided in the Form of Tender which, for greater certainty, is the Tenderer's proposed Contract price. If there is any conflict between the Tender Price entered above and the correct summation of the prices provided below, the correct summation shall take precedence.

SEPARATE PRICE #1 - Gas Fired Boiler, Expansion Tank and Pumps (BP-1,	\$
BP-2, BP-3 and P-1)	

Item	Description	Price
1.	Mobilization	\$
2.	Removal and replacement of heating boiler system	\$
3.	Removal and replacement of THREE (3) A.C. units	\$
4.	Removal and replacement of cooling tower	\$
5.	Removal and replacement of chilled water lines, valves and controls	\$
6.	Installation of DDC controls systems including FOUR (4) hour demonstration	\$
7.	Provide seismic supports for new equipment	\$
8.	Balance and commission of new heating, ventilating and cooling system	
9.	Insulate all new piping as shown on drawings	\$
10.	Balance and commission new CHW system	\$
11.	Review system operation with owner	\$
12.	Provide TWO (2) copies of maintenance manuals with balance reports and all shop drawings of all equipment supplied for this job	\$
13.	Provide 'as built' drawings to mechanical consultant for incorporation into electronic files	\$
14.	Demobilization	\$
15.	Other, please specify (including cash allowances, contingency allowances and any other work or costs not reflected in the items above but required to complete the Work covered by the Tender Documents)	\$
	Tender Price (Lump Sum) <u>OPTION 1 - ALL WORK COMPLETED BY</u> <u>EARLY JANUARY 2013</u>	\$

September 21, 2012	Page FT
Name of Tenderer	Initials of Signing Officer

SCHEDULE "A" - OPTION 2 SCHEDULE OF QUANTITIES AND PRICES

The Tender Price, which excludes HST, is apportioned in accordance with the following table. The of the prices provided for each item should equal the Tender Price stipulated in the space provided in the Form of Tender which, for greater certainty, is the Tenderer's proposed Contract price. If there is any conflict between the Tender Price entered above and the correct summation of the prices provided below, the correct summation shall take precedence.

SEPARATE PRICE #1 - Gas Fired Boiler, Expansion Tank and Pumps (BP-1,	\$
BP-2, BP-3 and P-1)	

Item	Description	Price
1.	Mobilization	\$
2.	Removal and replacement of heating boiler system	\$
3.	Removal and replacement of THREE (3) A.C. units	\$
4.	Removal and replacement of cooling tower	\$
5.	Removal and replacement of chilled water lines, valves and controls	\$
6.	Installation of DDC controls systems including FOUR (4) hour demonstration	\$
7.	Provide seismic supports for new equipment	\$
8.	Balance and commission of new heating, ventilating and cooling system	
9.	Insulate all new piping as shown on drawings	\$
10.	Balance and commission new CHW system	\$
11.	Review system operation with owner	\$
12.	Provide TWO (2) copies of maintenance manuals with balance reports and all shop drawings of all equipment supplied for this job	\$
13.	Provide 'as built' drawings to mechanical consultant for incorporation into electronic files	\$
14.	Demobilization	\$
15.	Other, please specify (including cash allowances, contingency allowances and any other work or costs not reflected in the items above but required to complete the Work covered by the Tender Documents)	\$
	Tender Price (Lump Sum) <u>OPTION 2 - WORK COMPLETED IN</u> <u>TWO (2) PHASES</u>	\$

September 21, 2012	Page FT8
Name of Tenderer	Initials of Signing Officer

SCHEDULE "B"

PRELIMINARY CONSTRUCTION SCHEDULE

The Work is expected to begin by early NOVEMBER, 2012 and substantial performance is targeted for DECEMBER, 2012. Please clearly define time requirements for project milestones identified in the table below. If necessary, please add an attachment to this Schedule.

Milestone	Days After Notice To Proceed of Completion
Mobilization	
Substantial Performance	
Demobilization	
TABLE 1 - PROJECT MILESTONES - O	PTION 2 - <u>WORK COMPLETED IN TWO (2) PHASES</u>
Milestone	Days After Notice To Proceed of Completion
Mobilization	
Substantial Performance	
Demobilization Additional pages may be attached to this p "ITTPS20120994, FORM OF TENDER - SCHEDUL	
Additional pages may be attached to this p	age. Each such additional page is to be clearly marke LE B", and is to be signed by the Tenderer.

SCHEDULE "C" SUBCONTRACTORS AND SUPPLIERS

1.0 SUBCONTRACTORS

The Tender intends to use the following Subcontractors for the portions of the Work identified below. All Subcontractors who will perform any portion of the Work should be listed.

Subcontractor	Address	Type of Work

Additional pages may be attached to this page. Each such additional page is to be clearly marked "ITT PS20120994, FORM OF TENDER - SCHEDULE C", and is to be signed by the Tenderer.

Page FT10
Initials of Signing Officer

2.0 SUPPLIERS

The Tenderer intends to use the following Suppliers and manufacturers for: describe relevant portions of the Work.

Supplier	Manufacturer	Address	Item

Additional pages may be attached to this page. Each such additional page is to be clearly marked "ITT PS20120994, FORM OF TENDER - SCHEDULE C", and is to be signed by the Tenderer.

Page FT11
Initials of Signing Officer

SCHEDULE "D"

TENDERER'S EXPERIENCE WITH RELATED WORK

Tenderers should confirm that they have more than the required experience to perform the Work. Each Tenderer should submit a minimum of (3) completed projects (related in scope and size), including the following information Tenderer and for each and every Supplier and Subcontractor proposed in the Tender:

Description of Project:				
Location of Project:				
Contract Value:	\$			(Cdn. Dollars)
Start and Completion Dates:				
Completed on Schedule?	Yes	No	(Circle Correct Respo	nse)
Name of Contract Owner:				
Name of Project Reference:				
Current Telephone Number a	nd E-ma	ail of Pr	roject Reference:	
Names of Key Personnel and S	Subcont	ractors	::	
Additional pages may be attack "ITT PS20120994, FORM OF TEI				
			,	
September 21, 2012				Page FT12
Name of Tenderer				Initials of Signing Officer
Maine Di Tenuelei				ninciais di sidinila Ulticei

SCHEDULE "D"

TENDERER'S EXPERIENCE WITH RELATED WORK

Tenderers should confirm that they have more than the required experience to perform the Work. Each Tenderer should submit a minimum of (3) completed projects (related in scope and size), including the following information Tenderer and for each and every Supplier and Subcontractor proposed in the Tender:

Description of Project:				
Location of Project:				
Contract Value:	\$			(Cdn. Dollars)
Start and Completion Dates:				
Completed on Schedule?	Yes	No	(Circle Correct Respo	nse)
Name of Contract Owner:				
Name of Project Reference:				
Current Telephone Number a	nd E-ma	ail of Pr	roject Reference:	
Names of Key Personnel and S	Subcont	ractors	::	
Additional pages may be attach "ITT PS20120994, FORM OF TEN				
				•
September 21, 2012				Page FT13
Name of Tenderer				Initials of Signing Officer

SCHEDULE "D"

TENDERER'S EXPERIENCE WITH RELATED WORK

Tenderers should confirm that they have more than the required experience to perform the Work. Each Tenderer should submit a minimum of (3) completed projects (related in scope and size), including the following information Tenderer and for each and every Supplier and Subcontractor proposed in the Tender:

Description of Project:					
Location of Project:					
Contract Value:	\$			(Cdn. Do	llars)
Start and Completion Dates:					
Completed on Schedule?	Yes	No	(Circle Correct Respo	nse)	
Name of Contract Owner:					
Name of Project Reference:					
Current Telephone Number a	nd E-ma	ail of Pr	roject Reference:		
Names of Key Personnel and S	Subcont	ractors	:		
Additional pages may be attach "ITT PS20120994, FORM OF TEN					:d
September 21, 2012				Paç	ge FT14
Name of Tenderer				Initials of Signing Officer	

SCHEDULE "E"

FORCE ACCOUNT LABOUR & EQUIPMENT RATES

Tenderers should complete the following tables setting out the all-inclusive hourly rates for all applicable types of equipment as well as the all-inclusive hourly rates for all applicable categories of labour which rates will then apply pursuant to the Contract.

TABLE 1 - SCHEDULE OF LABOUR RATES

Job Classification	Regular Rate	Overtime Rate
	\$	\$
	\$	\$
	\$	\$
	\$	\$
	\$	\$
	\$	\$

TABLE 2 - SCHEDULE OF EQUIPMENT RATES

No.	Equipment Description	Hourly Rate	No. of Hours	Overhead And Profit	Total Price
		\$		\$	\$
		\$		\$	\$
		\$		\$	\$
		\$		\$	\$
		\$		\$	\$

Additional pages may be attached to this page. Each such additional page is to be clearly marked "ITT PS20120994, FORM OF TENDER - SCHEDULE E", and is to be signed by the Tenderer.

September 21, 2012	Page FT15
Name of Tenderer	Initials of Signing Officer

SCHEDULE "F" CONSENT OF SURETY

PROJECT:	
Should it be required, we the undersigned Surety Comsureties in an approved Contract Performance Bond and amount of fifty percent (50%) of the awarded Tender Proceeding the performance of the Work as described herein, which at the Tender Price set forth in the abour and Material Payment Bond we understand are to filed with the City within 10 Working Days of receip otherwise directed by the City. We hereby further declare that the undersigned Suret the Province of British Columbia and that it has a net the amounts herein set forth.	Labour and Material Payment Bond each in the rice for the fulfillment of the CONTRACT and for may be awarded to
The Common Seal of	
was hereto affixed in the presence of:	
September 21, 2012	Page FT16
Name of Tenderer	Initials of Signing Officer

SCHEDULE "G"

SUSTAINABILITY

The Tenderer will respond to the following sustainability requirements.

1.	The Tenderer is to list any products/services that are toxic and/or hazardous to the environment,
	human use, etc.

Item	Description of Toxin/Hazard	Substantiation for Use	Mitigation strategy to reduce the effect of the Toxin/Hazard

2. The Tender is to identify and advise its standard practice for disposal of obsolete or expired products and/or equipment.

Item	Type of Product/Equipment	Disposal Method

3. The Tenderer is to identify and advise its solutions to address and reduce carbon emissions.

Item	Carbon Emission Risk	Solution Use to Reduce Carbon Emissions

September 21, 2012	Page FT17
Name of Tenderer	Initials of Signing Officer

SCHEDULE "H" CERTIFICATE OF EXISTING INSURANCE (TO BE COMPLETED AND SUBMITTED WITH TENDER)

September 21, 2012 Page FT18

Name of Tenderer Initials of Signing Officer



CERTIFICATE OF EXISTING INSURANCE TO BE COMPLETED AND APPENDED TO THE PROPOSAL/TENDER

	Section 2 through 8 – to be completed and ex- THIS CERTIFICATE IS ISSUED TO: <u>City of</u> and certifies that the insurance policy (pol full force and effect.	Vancouver,	453 W 12 th Avenue, Va	ncouver, BC, V5Y 1V4	re ir
•	NAMED INSURED (must be the same name incorporated company)	as the prop	oonent/bidder and is eit	ther an individual or a legally	
	BUSINESS TRADE NAME or DOING BUSIN	ESS AS			
	BUSINESS ADDRESS				
	DESCRIPTION OF OPERATION				
•	PROPERTY INSURANCE (All Risks Covera	-			
	INSURERTYPE OF COVERAGE		Insured Values (Replace	cement Cost) -	
	TYPE OF COVERAGE		Building and Tenants' In	nprovements \$	
	POLICY NUMBER to to		Contents and Equipmen	t \$	
	POLICY PERIOD From to		Deductible Per Loss	\$	
	COMMERCIAL GENERAL LIABILITY INSUR		urrence Form)		
	Including the following extensions: √ Personal Injury	INSURER			
	√ Personal Injury	POLICY N	JMBER		
	 ✓ Personal Injury ✓ Property Damage including Loss of Use ✓ Products and Completed Operations ✓ Cross Liability or Severability of Interest ✓ Employees as Add Liability 	POLICY PE	-RIOD From	m to	
	V Products and Completed Operations	Dor Occurr	lability (Bodily Injury a	ind Property Damage Inclusive) -	
	√ Employees as Additional Insureds	Aggregate	ence	Ψ c	
	√ Blanket Contractual Liability	All Risk Te	nants' Legal Liability	Ψ \$	
	√ Cross Liability or Severability of Interest √ Employees as Additional Insureds √ Blanket Contractual Liability √ Non-Owned Auto Liability	Deductible	Per Occurrence	\$	
	AUTOMOBILE LIABILITY INSURANCE for o	poration of o	wood and/or loaced yehi	clos	
	INSTREE	peration of o	l imits of Liahility -	cies	
	POLICY NUMBER		Combined Single Limit	\$	
	INSURERPOLICY NUMBER to to		If vehicles are insured b	y ICBC, complete and provide Form APV-47.	
	☐ UMBRELLA OR ☐ EXCESS LIABILITY I	NSURANCE	Limits of Liability (Bo	dily Injury and Property Damage Inclusiv	/e) -
	DOLICY NUMBER		Aggregate	\$	
	INSURERPOLICY NUMBER to to		Self-Insured Retention	\$ 	
				<u> </u>	
	PROFESSIONAL LIABILITY INSURANCE INSURER		Limits of Liability	\$	
	INSURERPOLICY NUMBER		Aggregate	Φ	
	POLICY PERIOD From to		Deductible Per	\$ \$	
	FOLICT FERIOD FIGHT		Occurrence/Claim	\$	
	If the policy is in a "CLAIMS MADE" form,	olease speci		active Date:	
	OTHER INSURANCE				
	TYPE OF INSURANCE		Limits of Liability		
	INSURER		Per Occurrence	\$	
	POLICY NUMBER to to		Aggregate	\$	
	POLICY PERIOD From to		Deductible Per Loss	\$	
	TYPE OF INSURANCE		Limits of Liability		
	INSURER		Per Occurrence	\$	
	POLICY NUMBER		Aggregate	\$	
	POLICY PERIOD From to		Deductible Per Loss	\$	
	SIGNED BY THE INSURER OR ITS AUTHOR	RIZED REPR	FSENTATIVE		
				Dated	
		RIZED REPR			

SCHEDULE "I"

CERTIFICATE OF INSURANCE

(TO BE INSERTED UPON AWARD)

September 21, 2012 Page FT19

Name of Tenderer



GENERAL CERTIFICATE OF INSURANCE

Section 8 b) – City staff to select the required # of days Written Notice <u>before</u> sending the certificate out for completion Section 2 through 8 – to be completed and executed by the Insurer or its Authorized Representative

1.	THIS CERTIFICATE IS ISSUED TO: City of Vancouver, and certifies that the insurance policies as listed herein has effective date of the agreement described below.	453 W 12 th Avenue, Vancouver, BC, V5 we been issued to the Named Insured(s	SY 1V4 s) and are in full force and effect as of the		
2.	NAMED INSURED: [must be the same name as the Permittee/Licensee or Party(ies) to Contract and is/are either an individual(s) or a legally incorporated company(ies)]				
	MAILING ADDRESS:				
	LOCATION ADDRESS:				
	DESCRIPTION OF OPERATION, CONTRACT, AGREEMENT,	LEASE, PERMIT OR LICENSE:			
3.	PROPERTY INSURANCE naming the City of Vancouver as a waiver clause in favour of the City of Vancouver.				
	(All Risks Coverage including Earthquake and Flood)	INSURED VALUES: (Replacement			
	INSURER:TYPE OF COVERAGE:	Contents and Equipment:	s: \$		
		Deductible Per Loss:	\$		
	POLICY NUMBER: to to	Deductible Fel Loss.	\$		
4.	COMMERCIAL GENERAL LIABILITY INSURANCE (Occurren				
	Including the following extensions:	LIMITS OF LIABILITY: (Bodily I	Injury and Property Damage Inclusive)		
	√ Personal Injury √ Products and Completed Operations	Per Occurrence:	\$		
	√ Cross Liability or Severability of Interest	Per Occurrence.	4		
	√ Employees as Additional Insureds	Aggregate:	\$		
	√ Blanket Contractual Liability	. 199 9	•		
	Non-Owned Auto Liability	All Risk Tenants' Legal Liability:	\$		
	INSURER:				
	POLICY NUMBER:	Deductible Per Occurrence:	\$		
	POLICY PERIOD: From to				
5.	AUTOMOBILE LIABILITY INSURANCE for operation of owner	ed and/or leased vehicles			
	INSURER:	LIMITS OF LIABILITY:			
	POLICY NUMBER:	Combined Single Limit:	\$		
	POLICY PERIOD: From to	If vehicles are insured by ICBC	c, complete and provide Form APV-47.		
6.	☐ UMBRELLA OR ☐ EXCESS LIABILITY INSURANCE	LIMITS OF LIABILITY: (Bodily I	Injury and Property Damage Inclusive)		
	INSURER:	Per Occurrence:	\$		
	POLICY NUMBER:	Aggregate:	\$		
	POLICY PERIOD: From to	Self-Insured Retention:	\$		
7.	OTHER INSURANCE (e.g. Boiler & Machinery, Business Inte Period, and Limit	rruption, Crime, etc.) – Please specify N	Name of Insurer(s), Policy Number, Policy		
8.	POLICY PROVISIONS: Where required by the governing contract, agreement, leas a) The City of Vancouver, its officials, officers, employee liability arising out of the operation of the Named Insul b) SIXTY (60) days written notice of cancellation or mater listed herein, either in part or in whole, will be given by non-payment of premiums in which case the applicable c) The insurance policy (policies) listed herein shall be pri Any insurance or self-insurance maintained by the City	es, servants and agents have been addered pursuant to the governing contractives of the contractive contractives of the contractive that the contractive contractives of the contractive conditions will apply; imany with respect to all claims arising of the contractives of the contractive conditions.	ed as Additional Insureds with respect to t, agreement, lease, permit or license; verage with respect to any of the policies rtificate; the exception is cancellation for out of the operation of the Named Insured.		
	SIGNED BY THE INSURER OR ITS AUTHORIZED REPRESE	NTATIVE			
	PRINT NAME OF INSURER OR ITS AUTHORIZED REPRESE	NTATIVE, ADDRESS AND PHONE NUM	Dated: MBER		



PROFESSIONAL LIABILITY INSURANCE CERTIFICATE

Section 4 – City staff to select the required # of days Written Notice <u>before</u> sending out for completion Section 2, 3 & 4– to be completed and executed by the Insurer or its Authorized Representative

THIS CERTIFICATE IS ISSUED TO: City of Vancouver, 453 W 12th Avenue, Vancouver, BC, V5Y 1V4 and certifies that the insurance policy as listed herein has been issued to the Named Insured(s) and is in full force and effect as of the effective date of the agreement described below. NAMED INSURED: [must be the same name as the Permittee/Licensee or Party(ies) to Contract and is/are either an individual(s) or a legally incorporated company(ies)] **MAILING ADDRESS:** LOCATION ADDRESS: **DESCRIPTION OF OPERATION/CONTRACT:** PROFESSIONAL LIABILITY INSURANCE LIMITS OF LIABILITY: INSURER: ___ Per occurrence/claim: POLICY NUMBER: Aggregate: POLICY PERIOD: From ______ to _____ Deductible per occurrence/claim: \$ _____ If the policy is in a "CLAIMS MADE" form, please specify the applicable Retroactive Date: **POLICY PROVISIONS:** Where required by the governing contract, agreement, permit or license, it is understood and agreed that SIXTY (60) days written notice of cancellation or material change resulting in reduction of coverage with respect to the policy listed herein, either in part or in whole, will be given by the Insurer to the Holder of this Certificate. The exception is cancellation for nonpayment of premiums in which case the applicable statutory conditions will apply. SIGNED BY THE INSURER OR ITS AUTHORIZED REPRESENTATIVE

PRINT NAME OF INSURER OR ITS AUTHORIZED REPRESENTATIVE, ADDRESS AND PHONE NUMBER

SCHEDULE "J"

UNDERTAKING OF INSURANCE

To:

Title: ___

Full Corporate Name of Insurer:

City of Vancouver

Re:	PS20120994 - HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC							
Dear S	irs:							
	ne undersigned ed with this	undertaking	and no	w also	do h	ereby und	d agree	that if
	the Contractor Tender Docume	in accordance	with the	requireme	ents of	the Contra		
Dated	at	, Bri	tish Colun	nbia, this		day of	20	•
By:					_			

The "Certificate of Existing Insurance" provided with the ITT should be completed and signed and enclosed with this Schedule both of which are to be signed by the Insurance Company or an authorized Broker on behalf of the Insurance Company. A SEPARATE FORM (AND CERTIFICATE OF EXISTING INSURANCE) SHOULD BE SIGNED FOR EACH POLICY IF TENDERER HAS MORE THAN ONE INSURER OR BROKER FOR ITS POLICIES.

September 21, 2012

Page FT20

Name of Tenderer

Initials of Signing Officer



INVITATION TO TENDER ("ITT") NO. PS20120994

HVAC UPGRADES AT THE VANCOUVER ACADEMY OF MUSIC

FORM OF AGREEMENT

between
and
CITY OF VANCOUVER
2012

September 21, 2012 AGT1

TABLE OF CONTENTS

		Page
ARTICLE A-1	THE WORK	3
ARTICLE A-2	AGREEMENTS AND AMENDMENTS	4
ARTICLE A-3	CONTRACT DOCUMENTS	4
ARTICLE A-4	CONTRACT PRICE	4
ARTICLE A-5	PAYMENT	5
ARTICLE A-6	RECEIPT OF AND ADDRESSES FOR NOTICES	5
ARTICLE A-7	LAW OF CONTRACT	6
ARTICLE A-8	SUCCESSORS AND ASSIGNS	6
ARTICLE A-9	TIME OF THE ESSENCE	7
Schedule 1 - Su	upplementary General Conditions	
Schedule 2 - Li	ist of Specifications and Drawings	
Schedule 3 - Sc	chedule of Prices	
Schedule 4 - Su	ubcontractors and Suppliers	
Schedule 5 -Pr	oject Schedule	
Schedule 6 - Po	erformance and Labour and Material Payments Bonds;	
Schedule 7 - In	surance Certificate;	
Schedule 8 - O	wner Pre-Contract Hazard Assessment	
Schedule 9 - C	ontractor Pre-Contract Hazard Assessment Form	
Schedule 10 - I	Force Account Labour and Construction Equipment Rates:	

FORM OF AGREEMENT

THIS AGREEMENT is dated for reference [insert date]

BFTWFFN:

CITY OF VANCOUVER

453 West 12th Avenue

Vancouver, British Columbia V5Y 1V4

(the "Owner")

OF THE FIRST PART

AND:

[INSERT NAME OF CONTRACTOR]

[insert address]
(the "Contractor")

OF THE SECOND PART

BACKGROUND

- A. By way of an Invitation to Tender for HVAC upgrades at the Vancouver Academy of Music, the Owner requested tenders from general contractors to perform the Work.
- B. In response to the Invitation to Tender, the Contractor submitted a tender dated [insert date].
- C. After evaluating the tenders and obtaining approval of award of this Contract by the City of Vancouver, the Owner issued a Notice of Award to the Contractor thereby creating this Contract with the Contractor for the Work based on the Contractor's tender.

THE OWNER AND THE CONTRACTOR NOW AGREE AS FOLLOWS:

ARTICLE A-1 THE WORK

The Contractor shall:

- 1.1 perform the Work required by the Contract Documents for HVAC upgrades at the Vancouver Academy of Music located at 1270 Chestnut Street, Vancouver, BC for which the Contract Documents have been signed by the Owner and Contractor and for which [insert name of Consultant] is acting as, and is the Consultant;
- 1.2 do and fulfill everything indicated by the Contract Documents; and
- commence the Work by the [day] day of [month], [year] and, subject to adjustment in the Contract Time as provided for in the Contract Documents, attain Substantial Completion of the Project, as certified by the Consultant, by the [day] day of [month], [year], in accordance with the Project Schedule, included as Schedule to this Agreement.

ARTICLE A-2 AGREEMENTS AND AMENDMENTS

- 2.1 The Contract supersedes all prior negotiations, representations, or agreements, either written or oral, relating in any manner to the Work, including the tender documents that are not expressly listed in Article A-3 of this Agreement.
- 2.2 The Contract may be amended only as provided in the Contract Documents.

ARTICLE A-3 CONTRACT DOCUMENTS

- 3.1 The following are the Contract Documents referred to in Article A-1 of this Agreement, whether or not attached to this Agreement:
 - (a) this Agreement and the following Schedules:
 - (b) the Definitions and General Conditions of Stipulated Price Contract (CCDC2 2008), not attached but incorporated by reference;
 - (c) the following Schedules:
 - Schedule 1 Supplementary General Conditions;
 - Schedule 2 List of Specifications and Drawings (the listed Specifications and Drawings are incorporated by reference);
 - Schedule 3 Schedule of Prices:
 - Schedule 4 Subcontractors and Suppliers;
 - Schedule 5 -Project Schedule;
 - Schedule 6 Performance and Labour and Material Payments Bonds;
 - Schedule 7 Insurance Certificate:
 - Schedule 8 Owner Pre-Contract Hazard Assessment
 - Schedule 9 Contractor Pre-Contract Hazard Assessment Form
 - Schedule 10 Force Account Labour and Construction Equipment Rates;
 - the Form of Tender submitted by the Contractor, dated October XX, 2012, titled
 HVAC upgrades at the Vancouver Academy of Music (incorporated by reference);
 - (e) the Site Specific Safety and Health Plan provided by the Contractor to the City (incorporated by reference)
- 3.2 Capitalized terms used in the Contract Documents will have the meaning ascribed to such terms in the Contract Documents.

ARTICLE A-4 CONTRACT PRICE

4.1 The Contract Price (which excludes HST but otherwise includes all applicable fees, all municipal taxes, all permits and inspection costs, and all customs and excise import duties and WorkSafeBC assessments relating to the Work) to do, perform and supply all the Work in accordance with, and perform all the obligations specified by the Contract Documents is [insert Contract Price].

- 4.2 All HST payable by the Owner to the Contractor is [insert applicable amount of HST]. This amount is not included in section 4.1.
- 4.3 All amounts are in Canadian Funds.
- 4.4 The Contract Price shall be subject to adjustments as provided for in the Contract Documents.

ARTICLE A-5 PAYMENT

- 5.1 Subject to GC5.2 *Applications for Progress Payment*, as modified by the Supplementary General Conditions, the Owner will pay the Contract Price to the Contractor together with applicable HST and will deduct and then make payment of the *Lien Act* holdback amount and certified deficiency holdback amounts together with such HST which may be applicable to those payments, all in accordance with the Contract Documents.
- 5.2 The payment for any Work under this Contract made to the Contractor by the Owner will not be construed as an acceptance of any Work being in accordance with the Contract Documents.
- 5.3 Should either party fail to make payments as they become due under the terms of the Contract Documents or in an award by arbitration or court, interest at the Prime Rate plus two percent (2%) per annum on such unpaid amounts will also become due and payable until payment. Such interest will be compounded on a monthly basis. The Prime Rate will be the rate established by the Bank of Canada from time to time as the minimum rate at which the Bank of Canada makes short term advances to Canadian chartered banks.

ARTICLE A-6 RECEIPT OF AND ADDRESSES FOR NOTICES

- 6.1 Except as otherwise expressly provided in the Contract Documents, communications between the parties or between them and the Consultant will be in writing and sent to the following addresses and will be deemed to be received by the recipient:
 - on the date of delivery, if delivered by hand to the individual, a member of the firm or to an officer of the corporation for whom they are intended; or
 - .2 on the day following transmission, if sent by facsimile (and confirmed by documentation of successful fax transmission) or e-mail transmission (except where, in the case of e-mail, the recipient's computer notifies the sender that the recipient is absent, e.g., the "auto-reply" feature has been activated); or
 - .3 five (5) Working Days after the date of mailing, if sent by post, unless there is a postal service strike or other disruption.
 - (i) to the Owner at:

City of Vancouver 453 West 12th Avenue Vancouver, British Columbia V5Y 1V4

Fax No.: [insert] Email: [insert]

(ii) to the Contractor at:

[insert name and address]

(iii) to the Consultant at:

[insert name and address]

or such other person, position, address as one party may advise the other from time to time or at any time.

ARTICLE A-7 LAW OF CONTRACT

7.1 The laws of British Columbia will apply to and govern the Contract Documents and the Courts of British Columbia will have jurisdiction over all disputes not resolved by mediation or arbitration.

ARTICLE A-8 SUCCESSORS AND ASSIGNS

8.1 The Contract shall enure to the benefit of and be binding upon the Owner and Contractor and their respective successors and permitted assigns.

THE REMAINDER OF THIS BLANK IS INTENTIONALLY BLANK.

TIME OF THE ESSENCE

8.2 All time limits stated in this Contract are of the essence of the Contract.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the date first herein above written.

CITY OF VANCOUVER			
by its authorized signatories:			
Signature:			
Name:			
Title:			
Signature:			
Name:			
Title:			
[INSERT NAME (OF CONTRACTOR]		
by its authorized	d signatories:		
Signature:			
Name:			
Title:			
Signature:			
Name:			
Title:			

Proof of authority in the form of a certified copy of a resolution naming the person or persons in question as authorized to sign the Agreement for and on behalf of the corporation or partnership, who are parties to this Agreement, shall be attached.

SCHEDULE 1

SUPPLEMENTARY GENERAL CONDITIONS THE SUPPLEMENTARY GENERAL CONDITIONS FOR CCDC2-2008

CONTRACT DOCUMENTS ARE MODIFICATIONS OF CCDC 2 -2008

- 1.1.1 These Supplementary General Conditions amend the Agreement, Definitions and General Conditions of Standard Construction Document CCDC 2 Stipulated Price Contract, 2008 edition ("CCDC 2"), available for download at http://www.ccdc.org/downloads/index.html. Any reference in the Contract Documents or the Tender Documents to "General Conditions" or "GC" means the General Conditions contained in the CCDC 2 as amended by these Supplementary General Conditions. Whenever there is a conflict between these Supplementary General Conditions or wherever the Contract Documents are silent and these Supplementary General Conditions speak to a particular issue or matter, the provisions of these Supplementary General Conditions shall take precedence.
- 1.1.2 Unless the context dictates otherwise and to the extent not otherwise defined in the Contract Documents, defined terms in these Supplementary General Conditions adopt the meanings given thereto in the CCDC 2.
- 1.1.3 To the extent that the *Lien Act* expressly forbids parties from contracting out of all or some of the provisions of the *Lien Act* then, with respect to but only to the extent that, those provisions of the *Lien Act* are deemed to apply to any provisions of these Supplementary Conditions then the provisions set out in the *Lien Act* shall overrule any provision of the Contract Documents that is determined to contradict or contravene the *Lien Act* but only to the extent of such contradiction or contravention.

1 AMENDMENTS TO THE FORM OF AGREEMENT (CCDC 2)

Delete Pages 1 to 6 of CCDC 2 consisting of the "Agreement between Owner and Contractor".

AMENDMENTS TO THE DEFINITIONS

The following definitions from CCDC 2 are amended:

Add the following at the end of paragraph 5:

Contract

The Contract supersedes all prior negotiations, representations or agreements, either written or oral, except to the extent included in the Contract Documents or expressly incorporated by reference into the Contract by an actual reference to same in Article A-3 of the Agreement - CONTRACT DOCUMENTS.

Delete paragraph 6 and replace with the following:

6. Contract Documents

The Contract Documents consist of those documents listed in Article A-3 of the Agreement - CONTRACT DOCUMENTS, those documents expressly incorporated by reference into the Contract by an actual reference to same in Article A-3 of the Agreement - CONTRACT DOCUMENTS, amendments agreed upon in writing between the parties together with all other documents, schedules and additions mutually agreed to or settled by the parties from time to time in respect of this Contract.

Add the following at the end of the paragraph 12:

12. Owner

...and expressly excludes the Owner while acting in its capacity as a municipal regulatory authority.

Add the following definition of "Owner Caused Event" as a new paragraph 12.A

12A. Owner-Caused Event

An Owner-Caused Event is a wrongful act or omission of the Owner, the Consultant or anyone employed or engaged by them directly or indirectly, which is contrary to the express provisions of the Contract Documents, but for further certainty any event which is beyond the reasonable control of the Owner, the Consultant or anyone employed or engaged by them directly or indirectly is deemed to be an Excusable Event and not an Owner-Caused Event.

Delete the definition of Substantial Performance of the Work at paragraph 20 and replace with the following:

20. Substantial Performance of the Work

Substantial Performance of the Work shall have the same meaning as "completed" in the *Lien Act* including as interpreted by section 1(3) thereof and shall be determined as provided therein and herein.

Delete the definition of Work at paragraph 25 and replace it with the following:

25. Work

Work means the total construction and related services required by the Contract Documents or properly inferable therefrom.

The following definitions shall be added to and will apply in the Contract Documents:

27. Applicable Laws

Applicable Laws means all applicable federal, provincial and municipal laws, bylaws, codes, rules, regulations, policies and requirements applicable to the Work and the Project.

28. Applicable Permits

Applicable Permits means all necessary approvals, permits, licenses and consents required for the performance of the Work.

29. Certificate of Completion

Certificate of Completion means the certificate under section 7 of the *Lien Act* stating that work under a contract or subcontract has been completed (see definition of Substantial Performance of the Work) and includes an order made under section 7(5) of the *Lien Act*.

30. Environmental Law

Environmental Law means any applicable law relating to the protection of the environment or occupational health and safety including those pertaining to (a) reporting, licensing, permitting, investigating, remediating and cleaning up in connection with any presence or release, or the threat of the same, of Hazardous Substances, and (b) the generation, manufacture, processing, distribution, use, re-use, treatment, storage, disposal, transport, labeling, handling and the like of Hazardous Substances.

31. Excusable Event

An Excusable Event means an event or circumstance (i) that is beyond the reasonable control of the Contractor, and its Subcontractors and Suppliers, and could not reasonably have been foreseen by the Contractor or its Subcontractors and Suppliers, and (ii) the impact of which could not have been avoided or substantially avoided by the exercise by them of commercially reasonable measures, but for greater certainty includes (subject to items (i) and (ii) above and subject also to items (v) through (viii) below) any (iii) acts of God, storm, earthquake, flood, fire, lightning, war (declared or undeclared), hostilities, national emergency, civil disturbance or commotion, insurrection, embargo, blockade, import restriction, epidemic, landslide, explosion, and (iv) government order, or regulation or other act of the public authority (except where the order or act results from a party's own acts or omissions or its failure to comply with Applicable Laws or Applicable Permits), but for greater certainty excludes in any event (v) any Site Labour Disturbance, (vi) temperature, precipitation, wind or other weather condition which, in any four week period, differs from the statistical average for that condition in that period by more than one standard deviation, calculated based on relevant data available from Environment Canada, (vii) a circumstance or cause resulting from the fault or negligence or omission of the Contractor or its Subcontractors or Suppliers, or their failure to perform the Contractor's obligations under this Contract including a failure to properly plan or carry out the Work in accordance with the terms hereof, or (viii) an event or circumstance which by the exercise of reasonable diligence could have been avoided or the effect of which could have been mitigated or which arises from a lack of funds.

32. Final Certificate for Payment

Final Certificate for Payment means the certificate issued on Total Performance of the Work.

33. Hazardous Substance

Hazardous Substance means any contaminant, waste, hazardous substance, hazardous waste, or dangerous goods in such quantities and concentrations as contravene applicable limitations under Environmental Law and that may impair the Environment, injure or damage property or plant or animal life or harm or impair the health of any individual.

34. Holdback Amount

Holdback Amount means the holdback required by the Lien Act.

35. Lien or Liens

Lien or Liens means a lien under the Lien Act.

36. Lien Act

Lien Act means the Builders Lien Act (British Columbia) and any additional successor or replacement legislation which may be passed that is applicable to the Site.

37. Owner's Site Construction Rules

Owner's Site Construction Rules means all applicable policies, standards, protocols, rules and directions of Owner with regard to the Project and completion of the Work including those identified in the Specifications, Special Conditions or other Contract Documents.

38. Schedule of Prices

Schedule of Prices means the Schedule of Prices attached as Schedule 2 to the Agreement.

39. Site

Site means the construction location and boundaries shown on the Drawings.

40. Site Labour Disturbance

Site Labour Disturbance means any strike, lock-out or labour disturbance, including those resulting from any jurisdictional or non-affiliation issues, involving employees, whether or not members of a trade union, of the Contractor, any Subcontractor, any Supplier, or any of their respective subcontractors of any tier, which delays or in any way adversely affects the performance and completion of Work at the Site.

41. Total Performance of the Work

Total Performance of the Work means the entire Work has been satisfactorily performed and is so certified by the Consultant.

42. Trade Union Council

Trade Union Council means a council or association of trade unions of which employees of the Contractor or a Subcontractor are members

43. WorkSafeBC Rules

WorkSafe BC Rules means the *Workers Compensation Act* (British Columbia) including without limitation the *WorkSafeBC Occupational Health and Safety Regulation* (British Columbia), and all amendments made to such act and regulations and in force from time to time, and to any statute or regulation that may be passed which supplements or supersedes such regulations

ALTERATION OF GENERAL CONDITIONS AND ADDITIONAL CONDITIONS

GC1.1 CONTRACT DOCUMENTS

GC1.1.7 is deleted in its entirety and replaced as follows:

If there is a conflict within the Contract Documents, the order of priority of documents, from highest to lowest, shall be:

- the Agreement between the Owner and the Contractor;
- these Supplementary General Conditions;
- the Special Conditions (if any);
- the Definitions and General Conditions, Form CCDC2 2008;
- the Specifications and Drawings; and
- the Form of Tender

GC1.5 ADVERTISING

GC1.5.1 is added as follows:

The Contractor will obtain the Owner's prior written approval for any public advertising, press release or other general publicity matter, in which the name or trademarks of the Owner or any other person are mentioned or used or in which words are used from which any connection with the Owner name or trademarks may be inferred. The Contractor will not allow or permit any public ceremony in connection with the Work without the permission of the Owner provided in writing. The Contractor will not erect or permit the erection of any sign or advertising without the prior written approval of the Owner.

GC2.2 ROLE OF THE CONSULTANT

GC2.2.5 is deleted in its entirety and replaced with the following:

The Consultant will be the Payment Certifier pursuant to the *Lien Act*. Based on the Consultant's observations and evaluation of the Contractor's application for payment and review of the status of the Work including the Schedule of Work, the Consultant will approve progress draws and will issue the Certificate of Completion and the Final Certificate for Payment.

GC2.2.19 is added as follows:

Notwithstanding GC2.2.13, the Contractor shall be responsible for requesting any required instructions or clarifications from the Consultant which are needed for the performance of the Work and shall request such instructions or clarifications in time to avoid any delay of the Work.

GC2.2.20 is added as follows:

Nothing in GC2.2 shall derogate from or affect the terms and provisions of any contractual or other legal relations between the Owner and the Consultant, and such contractual and other legal relations shall in all cases take precedence over GC2.2 in the event of a conflict.

GC2.3 REVIEW AND INSPECTION OF THE WORK

GC2.3.1 is amended by deleting the first sentence of the paragraph and replacing it with the following:

The Owner and the Consultant and their authorized representatives shall have access to the Work at all times.

GC2.3.2 is amended by deleting the first sentence of the paragraph and replacing it with the following:

If work is designated for review, tests, inspections or approvals in the Contract Documents, or by the Consultant's instructions, or by the laws or ordinances of the Place of the Work, the Contractor shall give the Consultant reasonable notification of when the work will be ready for review and inspection.

GC2.3.4 is deleted in its entirety and replaced with the following:

If the Contractor covers, or permits to be covered, work that has been designated for review, tests, inspections or approvals before such special tests, inspections or approvals are made, given or completed, the Contractor shall, if so directed, uncover such work, have the review, inspections or tests satisfactorily completed, and make good covering work at the Contractor's expense

GC2.3.8 is added as follows:

The Consultant may:

- .1 review and monitor the Contractor's performance of any aspects of the Work for conformance with the requirements of the Contract, including review and monitor the following:
 - (a) Contractor's submittals; and
 - (b) any and all construction activities;

.2 perform or arrange for the performance of any tests, checks, and inspections of the Work as the Owner may reasonably request whether or not specifically required by the Contract Documents.

Should the Consultant be required to make more than one review of rejected work or should the Consultant perform additional reviews due to failure of the Work to comply with the application status of completion made by the Contractor, the Contractor is required to compensate the Owner for such additional Consultant services including expenses incurred. Adjustment for such compensation should be made as outlined under PART 6 - CHANGES IN THE WORK.

GC2.3.9 is added as follows:

Review, monitoring and/or approval by the Consultant or Owner of the Contractor's performance of the Contract shall not relieve the Contractor of its sole responsibility and liability for the proper performance of the Contract strictly in accordance with its terms.

GC2.3.10 is added as follows:

Acceptance of the Work by the Owner does not free the Contractor from correcting deficiencies as provided in GC2.4 - DEFECTIVE WORK - which are missed at the time of drawing up the deficiency list or are hidden deficiencies.

GC2.4 DEFECTIVE WORK

GC2.4.1 is amended by adding the following to the end of the paragraph:

In the event that work or materials are found to be condemned then if the Contractor does not remove such condemned materials or work within the time fixed by written notice, the Owner may remove them and may store such materials at the expense of the Contractor. If the Contractor does not pay the expense of such removal within five (5) calendar days thereafter, the Owner may, upon ten (10) days written notice sell such materials with the proceeds thereof, if any, after deducting all the costs and expenses that should have been borne by the Contractor, being returned to the Contractor.

GC2.4.3 is deleted in its entirety and replaced with the following:

If in the opinion of the Consultant it is not expedient to correct defective work or work not performed as provided in the Contract Documents, the Owner may deduct from the amount otherwise due to the Contractor the difference in value between the work as performed and that called for by the Contract Documents or, at the option of the Owner, the cost or value of such work as would have been necessary to correct such non-compliance with the Contract Documents. If the Owner and the Contractor do not agree on the difference in value, they shall refer the matter to the Consultant for a determination.

GC3.1 CONTROL OF THE WORK

GC3.1.3 is added as follows:

The Contractor shall, and shall ensure that each Subcontractor shall, employ competent and skilled workmen and apprentices and shall employ proper equipment in good condition. The Contractor shall have complete control over its employees and Subcontractors and shall enforce discipline and order among its employees and assure discipline and order by its Subcontractors including, in all cases, without limiting the foregoing, compliance with and enforcement of Owner's Site Construction Rules and requirements of WorkSafeBC Rules.

GC3.1.4 is added as follows:

The Contractor shall be familiar with, and its performance of this Contract shall be governed by and comply with, all Applicable Laws and Applicable Permits which exist at present or which may be respectively enacted or obtained after the date hereof by bodies or tribunals having jurisdiction or authority over the Work, and with Owner's Site Construction Rules.

GC3.2 CONSTRUCTION BY OWNER OR OTHER CONTRACTORS

GC3.2.2 is amended by deleting the first sentence and replacing it with the following:

When separate contracts are awarded for other parts of the Project, or when work is performed by the Owner's own forces, the Contractor shall:

GC3.2.2.3 is deleted in its entirety.

GC3.2.3.3 is amended by adding the following to the end of the paragraph:

Failure by the Contractor to so report shall invalidate any claims against the Owner by reason of the deficiencies of the other contractors or the Owner's own forces work except those of which the Contractor was not reasonably aware.

GC3.2.7 is added as follows:

The Contractor acknowledges that the Site generally and portions of the Project will continue to be used by the Owner and others as described in the Owner's Site Construction Rules and Special Conditions. The Contractor will work simultaneously and harmoniously with others using the Site and use all efforts not to interfere with or delay others.

GC3.5 CONSTRUCTION SCHEDULE

GC3.5.1.1 is deleted in its entirety and replaced with the following:

... prepare and submit to the Owner and the Consultant within ten (10) Working Days of Issuance of the Notice of Award, a construction schedule that indicates the timing of the major activities of the Work and provides sufficient detail of the critical events and their inter-relationship to demonstrate the Work will be performed in conformity with the Contract Time:

GC3.5.1.3 is amended by adding the following to the end:

... indicating the results expected from the resulting change in schedule.

GC3.5.2 is added as follows:

The Contractor will regularly monitor the progress of the Work and advise the Owner and the Consultant of any revisions to, or any slippage in, the construction schedule and any extensions of the Contract Time as a result of Change Orders issued hereunder.

GC3.5.3 is added as follows:

The Contractor will submit to the Consultant and the City's project manager [NTD: not defined] monthly updates and provide comments on adherence to the construction schedule and details of any remedial actions being undertaken to improve schedule slippages.

GC3.5.4 is added as follows:

If the construction schedule is not adhered to, the Contractor will use all reasonable means to accelerate the Work, without additional compensation, to comply with the construction schedule.

GC3.6 SUPERVISION

GC3.6.3 is added as follows:

Any superintendent or foreman whose work is unsatisfactory to the Consultant, or to whom the Consultant may have any reasonable objection, shall be dismissed from the Work upon written notice of the Consultant. No superintendents or foremen will be substituted or replaced, except at the request or with the written consent of the Owner, or as a result of such employee's voluntary termination of employment or incapacity and any replacement will have comparable or superior qualifications and experience.

GC3.7 SUBCONTRACTORS AND SUPPLIERS

GC3.7.2 is deleted in its entirety and replaced as follows:

The Contractor shall indicate in writing those Subcontractors or Suppliers whose bids have been received by the Contractor which the Contractor would be prepared to accept for the performance of a portion of the Work. Should the Owner not object before signing the Contract, the Contractor shall employ those Subcontractors or Suppliers so identified by the Contractor in writing for the performance of that portion of the Work to which their bid applies. No change of Subcontractors shall be made without cause or written consent of the Consultant and Owner, which consent will not be unreasonably withheld.

GC3.7.7 is added as follows:

In every subcontract the Contractor shall specify that the Consultant shall be the person responsible for payment certification under that subcontract for the purposes of the *Lien Act*. With every request to the Consultant for a determination whether a subcontract has been completed, the Contractor shall furnish a detailed description of the scope of work covered by the subcontract and a complete reconciliation of the subcontract account. In this GC3.7.7, the word "subcontract" shall have the meaning it has when used in the *Lien Act*.

GC3.8 LABOUR AND PRODUCTS

GC3.8 is deleted in its entirety and replaced with the following:

3.8.1 Union Contractors

(a) Open Site

The Site and adjacent work areas associated with the Project are, or are part of, an "open site" and the Work will be performed on a "no strike/no lockout" basis.

Accordingly, the Contractor and its Subcontractors, as well as the Owner and other contractors, may employ labour at the Site who are members of a trade union, including a trade union affiliated with a Trade Union Council or who are members of another trade union, or who are not members of a trade union.

(b) Labour Disruptions

The Contractor will use its best commercial efforts to ensure that no Site Labour Disturbance shall occur and the Contractor:

- (i) will only retain Subcontractors for the Work whose employees are either:
 - (1) certified in British Columbia to be represented by a trade union and subject to a collective agreement which does not expire until after the date of Total Performance of the Work; or
 - (2) not so certified; and

require such Subcontractors to only retain subcontractors and suppliers whose employees are either certified in British Columbia to be represented by a trade union and subject to a collective agreement which does not expire until after the date of Total Performance of the Work or are not so certified; and

(ii) represents and warrants that, with respect to any employees of the Contractor who may work at or near the Site and who are certified in British Columbia to be represented by a trade union and subject to a collective agreement, such collective agreement to which such employees are subject does not expire until after the date of Total Performance of the Work;

but if any Site Labour Disturbance occurs and does or may adversely impact on the Owner, the Work or the Contract Time, the Contractor will use its best commercial efforts to ensure that the length and extent of such impact is minimized (including without limitation by cooperating with the Owner in any measures they may take to ameliorate such impact) and the Contractor will be liable to the Owner for any such impact.

(c) Required for Union Contractors

Without limiting the generality of Section (b) above, if the Contractor, or any Subcontractor, proposes to employ labour at the Site who are members of a trade union, including a trade union that is affiliated with a Trade Union Council authorized to bind its member trade unions, then the Contractor must first submit to the Consultant:

- (i) a waiver of all non-affiliation or reservations rights under applicable collective agreements, including renewals or replacements thereof, effective for the duration of the Contract and executed by the Trade Union Council on behalf of all trades, or executed by the particular trade unions whose members will be so employed; and
- (ii) an agreement that there will be no Site Labour Disturbance at or affecting the Site and/or the progress of the Work, effective for the duration of the Contract, and executed by the Trade Union Council on behalf of all trades, or executed by the particular trade unions whose members will be so employed.

(d) Fair Wages

The Contractor shall pay or cause to be paid to every person employed on the Work not less than the wages or remuneration generally accepted as current at that time.

- 3.8.2 The Contractor shall provide and pay for labour, Products, tools, Construction Equipment, water, heat, light, power, transportation, and other facilities and services necessary for the performance of the Work in accordance with the Contract.
- 3.8.3 Unless otherwise specified in the Contract Documents, Products provided shall be new. Products which are not specified shall be of a quality consistent with those specified and their use acceptable to the Consultant.
- 3.8.4 The Contractor shall maintain good order and discipline among the Contractor's employees engaged on the Work and shall not employ on the Work anyone not skilled in the tasks assigned. The Owner shall have the right, by written notification to the Contractor, to require the removal from the Project of any employee of the Contractor or a Subcontractor of the Contractor who is incompetent, untrained, acts in an unsafe manner, is disorderly or is otherwise unsatisfactory or who breaches the Owner's Site

Construction Rules or the terms of this Contract. Any such employee shall be immediately removed from the Site by the Contractor and shall not be employed again on the Project without the prior written approval of the Owner.

3.8.5 All materials shall be delivered, stored, handled and applied in strict accordance with the manufacturer's instructions, and shall be delivered with type, grade and brand name clearly identifiable and with seals intact.

GC3.9 DOCUMENTS AT THE SITE/DAILY RECORD

GC3.9.1 is deleted in its entirety and replaced with the following:

The Contractor shall keep one copy (as opposed to the originally executed set) of current Contract Documents, Shop Drawings, Change Orders, Change Directives, diary record set out in GC3.9.2 below, submittals, reports, and records of meetings at the Place of the Work, in good order, properly indexed, and available at all regular working hours on Working Days to the Owner and the Consultant.

GC3.9.2 is added as follows:

The Contractor shall, from the date of commencement of the Work, maintain a careful diary record of the progress of the Work. This record shall be open to the Consultant's inspection at all reasonable times and delivered to the Consultant on completion of the Work. The diary shall include:

- 1. daily weather conditions;
- 2. commencement, progress and completion of various portions of the work;
- 3. dates of all meetings and their purpose; and
- 4. dates of visits or inspections by government authorities, inspectors, utility companies, etc.

GC3.10 SHOP DRAWINGS

GC3.10.2 is amended by adding the following to the end:

... or as the Consultant may reasonably request.

GC3.10.13 is added as follows:

The Contractor represents and warrants that it has reviewed all Contract and Tender Documents and inspected and examined the Site and the Project to the extent it considers necessary and in accordance with prudent practice and satisfied itself as to the nature and extent of the conditions, including the physical and climatic conditions which may be encountered in the performance of the Work and to the extent possible to establish the state and quality of the existing construction. The Contractor further acknowledges that it will be required to share the Site with the Owner and others, all as described in the Owner's Site Construction Rules and Special Conditions.

GC3.12 CUTTING AND REMEDIAL WORK

GC3.12.3 is amended by adding the following to the end:

... unless the Owner elects to do the work or retain other contractors, after having given the contractor written notice of the work to be performed. Such work shall be performed in accordance with GC3.2.

GC4.1 CASH ALLOWANCES

GC4.1.1 is deleted in its entirety and replaced as follows:

The Contract Price includes the cash allowances, if any, stated in the Contract Documents. Except to the extent specifically described in the Contract Documents, the scope of work or costs included in such cash allowances will:

- (a) cover the net out-of-pocket cost of the Contractor for services, products, construction machinery and equipment, freight, unloading, handling, storage, installation and other authorized expenses incurred in performing the work stipulated under the cash allowances, and
- (b) will not cover labour or installation, unless (and then only to the extent):
 - (i) specifically stated in the Specifications or Drawings as being included in the cash allowance, or
 - (ii) specifically designated as an itemized or separate price, and is therefore included as an itemized or separate price item,

and otherwise will be deemed to be included in the Contract Price.

GC4.1.2 is deleted in its entirety and replaced as follows:

The Contract Price, and not the cash allowances, includes the Contractor's and Subcontractors' overhead and profit in respect to such cash allowances. Unless noted otherwise, none of the work included in the Drawings and Specifications is intended to be paid for by the cash allowances. The cash allowances are for the Owner's use, at the Owner's sole discretion.

GC4.1.3 is amended by adding the following to the end of the paragraph:

The Consultant may require that cash allowance Work proceed only after competitive tenders or proposals are sought and received by the Contractor for all or any part of such Work. The Contractor shall provide full disclosure to the Consultant of all such tenders or proposals. The Contractor shall not accept any such tenders or proposals without the prior consent of the Consultant. The Contractor shall maintain at the Site, or such other location as the Consultant may approve, accurate and complete records and accounts documenting all costs incurred under cash allowances. These records and accounts shall be available for inspection by the Consultant and the Owner at all reasonable times, and the Consultant and the Owner may take copies thereof.

PART 5 PAYMENT

GC5.1 FINANCING INFORMATION REQUIRED OF THE OWNER

GC5.1 (including the heading) is deleted in its entirety and replaced with the following:

GC5.1 GENERAL FINANCIAL/PAYMENT PROVISIONS

5.1.1 The Owner shall, at the request of the Contractor, before signing the Contract, and promptly from time to time thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. The Contractor now acknowledges that Owner's financial statements as published pursuant to the Financial Information Act (British Columbia) constitute full satisfaction of this requirement and satisfactory evidence of the Owner's ability to fulfill its obligations under this Contract.

- 5.1.2 The Owner shall give the Contractor Notice in Writing of any material change in the Owner's financial arrangements to fulfill the Owner's obligations under the Contract during the performance of the Contract.
- 5.1.3 The Owner shall pay to the Contractor for the proper and timely performance and completion of the Work the Contract Price, consisting of:
 - (i) if all or part of the Work is designated as Unit Price Work in the Schedule of Prices, the product of each Unit Price stated in the Schedule of Prices, multiplied by the measured and actual quantity of each corresponding item of Work necessary for the proper performance and completion of the Work;
 - (ii) if all or part of the Work is designated as Lump Sum Work in the Schedule of Prices, the aggregate of Lump Sum Prices stated in the Schedule of Prices;
 - (iii) the aggregate of all Cash Allowances, if any, specified in the Schedule 1 of the Agreement; and
 - (iv) if all or part of the Work is designated as Cost Plus Work, the cost reasonably and necessarily incurred by the Contractor in performing and completing such Work, such cost to be determined in accordance with GC5.1A.3, plus a percentage or fixed fee, as stated in the Schedule of Prices.
- 5.1.4 The Contract Price is subject to adjustment only in accordance with the Contract Documents.
- 5.1.5 The Contract Price is expressed and payable in Canadian dollars.
- 5.1.6 Subject to the provisions of the Contract Documents and in accordance with the Lien Act in respect of Holdbacks, the Owner shall:
 - .1 make progress payments to the Contractor on account of the Contract Price when due, based:
 - (i) on the value of the Work completed and Products and materials incorporated into the Work as certified by the Consultant, and
 - (ii) Products and materials delivered to the Site but not yet incorporated into the Work, as agreed to by the Owner,

together with the Value Added Taxes as are applicable;

- upon issuance of a Certificate of Completion in respect of a subcontract to which the Contractor is a party, and where fifty-five (55) calendar days have elapsed since the issuance of the Certificate of Completion without any Liens having been filed which arose under the subcontract, pay the Holdback Amount to the Contractor in respect to the subcontract;
- upon issuance of the Certificate of Completion (in respect to Substantial Performance of the Work), and where fifty-five (55) calendar days have elapsed since the issuance of the Certificate of Completion without any Liens or other liens having arisen with respect to this Contract, pay the balance of the Holdback Amount to the Contractor in respect to this Contract;
- upon issuance of the Final Certificate for Payment (in respect to Total Performance of the Work), and provided no Liens or other liens have arisen in respect to this Contract, pay the balance of the Contract Price to the Contractor.

- 5.1.7 If either party fails to pay when due an amount owing to the other under this Contract, that amount will bear interest at the Bank Rate plus two percent (2%), calculated daily from the due date to the date of payment. For this purpose, the "Bank Rate" means the rate of interest established from time to time by the Bank of Canada as the minimum rate at which the Bank of Canada advances short term loans to Canadian chartered banks.
- 5.1.8 If the Work suffers any loss or damage, as a result of which an amount is paid under any policy of insurance provided by the Owner under the Contract, then such amount shall be paid to the Owner and advanced to the Contractor in monthly progress payments as the Contractor performs and completes repair or restoration Work in respect of such loss or damage.

GC5.1A BASIS OF PAYMENT:

5.1A.1 Basis of Payment for Unit Price Work

- .1 *Unit Price Work:* Payment for Unit Price Work, if any, shall be based on the Unit Prices set out in the Schedule of Prices.
- .2 *Measurement:* The Contractor shall measure the Work and the Consultant will verify such measurements to determine payment to the Contractor in accordance with the measurement provisions of the Contract Documents.

5.1A.2 Basis of Payment for Lump Sum Work

.1 Lump Sum Work: Payment for Lump Sum Work, if any, shall be based on the Lump Sum Prices set out in the Schedule of Prices.

5.1A.3 Basis of Payment for Cost Plus Work

- Cost Plus Work: Payment for Cost Plus Work, if any, shall be based on the cost of such Work, as provided in GC5.1A.3.2, plus a fixed fee or percentage fee calculated as a percentage of the cost of such Work, for the Contractor's overhead and profit. The fixed fee or percentage fee shall be as provided in the Schedule of Prices, except in the case of the valuation of changes in the Lump Sum Work on a cost-plus basis, in which case the applicable percentages shall be limited to the percentages stipulated in GC5.1A.4. In any event, any percentage fee, whether specified in the Schedule of Prices or in this GC5.1A.3.1 shall not be applied to the cost of Construction Equipment for which rates are provided in the Schedule of Construction Equipment Rates (if applicable) or labour for which rates are provided in the Schedule of Labour Rates (if applicable).
- .2 Cost of the Work: The cost of Cost Plus Work and Work done under a Change Directive or Change Order on a cost-plus basis, except as otherwise specified in the Contract Documents, shall be at rates prevailing in the locality of the Site and, subject to GC5.1A.5, shall include the following cost elements as applicable to such Work:
 - (i) wages and benefits paid for labour in the direct employ of the Contractor under applicable collective bargaining agreements, or under a salary or wage schedule agreed upon by the Consultant and the Contractor;

- (ii) salaries, wages, and benefits of the Contractor's personnel, when stationed at the field office, in whatever capacity employed; or personnel at shops or on the road, engaged in expediting the production or transportation of materials or equipment;
- (iii) contributions, assessments, or taxes incurred for such items as employment insurance, provincial or territorial health insurance, workers' compensation, and Canada Pension Plan, insofar as such cost is based on wages, salaries, or other remuneration paid to employees of the Contractor and included in the cost of the Work as provided in paragraphs (i) and (ii);
- (iv) travel and subsistence expenses of the Contractor's personnel described in paragraphs (i) and (ii);
- (v) the cost of all Products, including the cost of transportation thereof;
- (vi) the cost of Construction Equipment, Temporary Work, and hand tools not owned by the workers, including transportation, and maintenance thereof, which are consumed in the performance of the Work, at cost less salvage value on such items used but not consumed, which remain the property of the Contractor;
- (vii) the cost of all tools and Construction Equipment, exclusive of hand tools used in the performance of the Work, whether rented from or provided by the Contractor or others, including installation, minor repairs and replacements, dismantling, removal, transportation and delivery cost thereof;
- (viii) deposits lost;
- (ix) the amounts of all subcontracts;
- the cost of quality assurance such as independent inspection and testing services;
- (xi) charges levied by authorities having jurisdiction at the Site;
- (xii) any adjustment in premiums for all bonds and insurance which the Contractor is required by the Contract Documents to purchase and maintain;
- (xiii) any adjustment in Value Added Taxes, other than taxes on income or capital, for which the Contractor is liable;
- (xiv) charges for long distance telephone and facsimile communications, courier services, expressage, and petty items incurred in relation to the performance of the Work;
- (xv) the cost of removal and disposal of waste products and debris; and
- (xvi) cost incurred due to emergencies affecting the safety of persons or property.
- .3 Approval Required: The Contractor shall obtain the Consultant's approval prior to subcontracting or entering into other agreements for Cost Plus Work or Work done under a Change Directive or Change Order on a cost-plus basis.

- .4 Rejection of Costs: The Consultant may refuse to certify payment for all or part of the cost of any item under any cost element, where the item in question was unsuitable, unnecessary or the cost was otherwise improperly incurred in the performance of the Work.
- .5 Records: The Contractor shall keep full and detailed accounts and records necessary for the documentation of the cost of Cost Plus Work and Work done under a Change Directive or Change Order on a cost-plus basis, and shall provide the Consultant with copies thereof when requested.
- Access to Records: the Owner, the Consultant and the Owner Representative shall be afforded reasonable access to all of the Contractor's books, records, correspondence, instructions, drawings, receipts, vouchers, and memoranda related to the cost of Cost Plus Work and Work done under a Change Directive or Change Order on a cost-plus basis, and for this purpose the Contractor shall preserve such records for a period of one (1) year after the date of Substantial Performance of the Work.

5.1A.4 Cost Plus Contract Rates and Mark Ups

When Cost Plus Work is performed or a change in the Work is valued on a cost-plus basis, then:

- (i) the costs of labour will be determined by the labour rates specified in the Schedule of Labour Rates, without mark up, unless otherwise specified therein;
- (ii) the costs of Construction Equipment will be determined by the construction equipment rates specified in the Schedule of Construction Equipment Rates, without mark up, unless otherwise specified therein;
- (iii) in the case of changes in Lump Sum Work valued on a cost-plus basis, the amount of subcontracts specified will be subject to a mark up of five percent (5%) for overhead and profit, but all other costs specified in GC5.1A.3.2 will be subject to a mark up of ten percent (10%); and
- (iv) for further certainty, to the extent that any changes involve changes in the estimated quantities of Unit Price Work such changes will be determined solely by the Unit Prices, without mark-up, unless otherwise specified therein.

5.1A.5 Cost Plus Maximum under Change Order

When a change in Lump Sum Work is valued on a cost plus basis, the Consultant may require that the aggregate amount incurred under the corresponding Change Order shall not exceed a maximum amount acceptable to the Owner, acting reasonably, and specified in the Change Order, as such amount may be revised from time to time by subsequent written authorization of the Consultant. The Contractor shall not be entitled to payment in excess of such applicable maximum amounts in respect of any such Change Orders.

5.1A.6 Daily Records for Cost Plus Work under Change Order

When a change in Lump Sum Work is valued on a cost plus basis, the Contractor shall prepare and submit to the Owner Representative on a daily basis a report of costs incurred in performing Work under the corresponding Change Orders. The report must identify all such open Change Orders, and summarize on a current basis costs incurred, allocated to the cost of labour, Material and Construction Equipment, and otherwise in such reasonable detail as the Owner Representative may direct.

GC5.2 APPLICATIONS FOR PROGRESS PAYMENT

GC5.2 is deleted in its entirety and replaced with the following:

- 5.2.1 Applications for payment shall be submitted on or before the last day of each calendar month, dated as of the last day of the month, and be in respect to the Work completed prior to the application being signed (the "payment period").
- 5.2.2 The amount claimed shall be for the value, proportionate to the amount of the Contract, of Work performed and Products delivered to the Place of the Work as of the last day of the payment period.
- 5.2.3 The Contractor shall submit to the Consultant, at least fifteen (15)calendar days before the first application for payment, a schedule of values for the parts of the Work, aggregating the total amount of the Contract Price, so as to facilitate evaluation of applications for payment. A second schedule, stating the anticipated monthly progress payments, is to be submitted upon request.
- 5.2.4 The schedule of values shall be made out in such form and supported by such evidence as the Consultant may reasonably direct and when accepted by the Consultant, shall be used as the basis for applications for payment, unless it is found to be in error.
- 5.2.5 When making applications for payment, the Contractor shall submit a statement based upon the schedule of values. Claims for Products delivered to the Site but not yet incorporated into the Work shall be supported by such evidence as the Consultant may reasonably require to establish the ownership, value and delivery of the Products. The Owner has the right to refuse payment for Products delivered to the Site but not incorporated in the Work. The Contractor shall obtain the Owner's written permission prior to invoicing for such Products.

5.2.6 Each application for payment shall:

- .1 be in such form and detail as the Consultant shall require and submitted consistently in such form and detail unless otherwise advised by the Consultant;
- .2 be attached to a statement or statutory declaration sworn by an officer of the Contractor which verifies the accuracy and completeness of the information contained therein, and for each application following the first application also include in addition to the foregoing and not in lieu of same, a current CCDC 9A Statutory Declaration of Progress Payment Distribution by Contractor which shall be completed and sworn before a Notary Public or Commissioner for Oaths for the Province of British Columbia;
- .3 relate the Work for which payment is claimed to the Construction Schedule and the schedule of values provided and provide such back-up invoices and other materials as may be reasonably necessary for the Consultant to review such application;
- verify that there are no Liens or other liens relating to the Contractor, the Work or the Products registered against the Owner, the Project or the Site or the Owner's interest therein or against the Holdback Amount, by signing and submitting the appended "Statement Regarding Outstanding Claims";
- .5 attach the documents required under GC10.4 demonstrating compliance by the Contractor and each Subcontractor with WorkSafe BC Rules;

- .6 attach the monthly update contemplated by GC3.5.3; and
- .7 provide a comprehensive list of items which remain to be completed and any defective items which remain to be corrected and the Contractor's estimate of the costs and time to complete or correct such items.
- 5.2.7 The Contractor shall deliver a complete application as provided in GC5.2.6 and if such application is not complete, the Consultant may reject all or the applicable portions of same by promptly (and in any event within five (5) calendar days of its receipt) notifying the Contractor of the deficiencies in the application. The Contractor will promptly supply to the Consultant such further certification or information as may be necessary to remedy the deficiencies in the application.
- 5.2.8 An application for payment shall be deemed to be received by the Consultant only if and when submitted in full conformity with GC5.2.6.

GC5.3 PROGRESS PAYMENT

GC5.3.1.2 is amended by adding the following to the end:

If, after a certificate of payment has been issued to the Owner (and prior to payment by the Owner), the Consultant determines on the basis of new information that the amount certified for payment is incorrectly high or low relative to the Work being certified, then the Consultant shall issue a revised certificate.

GC5.3.1.3 is amended by deleting the words "Article A-5 of the Agreement and replacing with "this GC5".

GC5.3.2 is added as follows:

Subject to the provisions of the Lien Act, the Owner may retain a deficiency holdback from progress draws prior to Substantial Performance of the Work to ensure that sufficient money is withheld to fund the deficiency holdback at Substantial Performance of the Work

GC5.4 SUBSTANTIAL PERFORMANCE OF THE WORK

GC5.4 (including the heading) is deleted in its entirety and replaced with the following:

GC5.4 SUBSTANTIAL PERFORMANCE OF THE WORK/CERTIFICATE OF COMPLETION

- 5.4.1 When the Contractor considers that Substantial Performance of the Work has been achieved, or if permitted by the Lien Act the Contractor wishes to apply for a Certificate of Completion in respect to a subcontract with a Subcontractor, the Contractor shall, within one Working Day, deliver to the Consultant and to the Owner an application for a Certificate of Completion of same (a "Completion Certificate Application") in conformity with GC5.4.4.
- 5.4.2 The Consultant will review the Work to verify the validity of the application and shall promptly, and in any event, no later than twenty (20) calendar days after receipt of the Contractor's list and application:
 - .1 advise the Contractor in writing that the Work or the designated portion of the Work is not "completed" (as that term is used in the Lien Act) and give reasons why, or
 - .2 issue a Certificate of Completion in respect to the Work or subcontract stating on the certificate the date of issuance in accordance with the Lien Act and issue a copy of that certificate to each of the Owner and the Contractor.

- 5.4.3 Immediately following the issuance of the Certificate of Completion for the Work, the Contractor, in consultation with the Consultant, shall establish a reasonable date for Total Performance of the Work (which date will be deemed to be the date for same set out in the Construction Schedule if such date is specified).
- 5.4.4 The Completion Certificate Application referred to in GC5.4.1 shall consist of the following:
 - a cover letter stating that the submittal is an application for a Certificate of Completion as well as an application for payment, and clearly identifying the Work or subcontract for which the Certificate of Completion is being sought;
 - all of the certifications and information required on an application for payment as set out in GC5.2.6;
 - .3 with respect to the Work or subcontract, as applicable, all deliverables, including copies of all manufacturer's warranties, called for in the Contract Documents which are or should be available at the time of the Completion Certificate Application including without limitation and by way of example only all operation manuals, service manuals, warranty certificates, maintenance contracts, service contracts, software licences, inspection reports, and other applicable manuals, contracts, certificates, guarantees and warranties.
- 5.4.5 Failure to include an incomplete or defective item on Completion Certificate
 Application or the Consultant's issuance of a Certificate of Completion or certificate of
 payment in respect to same does not alter the responsibility of the Contractor to
 complete the Contract.
- 5.4.6 Subject to the requirements of the Lien Act relative to the date of issuance by the Consultant of the Certificate of Completion of the Work pursuant to GC5.4.2.2:
 - .1 the Consultant shall issue to the Owner and copy to the Contractor a certificate of payment for an amount equal to the Contract Price less:
 - (i) three times the value of any deficiencies shown on the comprehensive list of items to be completed or corrected, as determined by the Consultant,
 - (ii) the value of incomplete work as determined by the Consultant, and
 - (iii) the amounts of all previous certificates of payment;
 - the Owner shall then make payment to the Contractor in accordance with the provisions of GC5.3.1.3 provided always that a Completion Certificate Application shall be deemed received only if and when submitted in accordance with GC5.2.6 as well as GC5.4.4.

GC5.5 PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE WORK

- GC5.5 is deleted in its entirety and replaced with the following:
- 5.5.1 After the issuance of the Certificate of Completion evidencing Substantial Performance of the Work, the Contractor shall:
 - .1 submit an application for payment of the Holdback Amount,
 - .2 submit a current CCDC 9A Statutory Declaration of Progress Distribution by Contractor, as well as a current CCDC 9B Statutory Declaration of Progress Distribution by Subcontractor from each of the Subcontractors, which in every

case shall be fully and properly completed and sworn before a Notary Public or Commissioner for Oaths for the Province of British Columbia;

- verify that there are no Liens or other liens relating to the Contractor, the Work or the Products registered against the Owner, the Project or the Site or the Owner's interest therein or against the Holdback Amount, by signing and submitting the appended "Statement Regarding Outstanding Claims";
- .4 attach the documents required under GC10.4 demonstrating compliance by the Contractor and each Subcontractor with WorkSafe BC Rules; and
- attach copies of a current title search of the Site confirming that no Liens have been registered prior to the time the release of the Holdback Amount is due.
- 5.5.2 After the receipt of and approval of the application documents described in GC5.5.1, the Consultant will issue a certificate for payment of the Holdback Amount (less any previous releases of the Holdback Amount on account of subcontract Certificates of Completion).
- 5.5.3 The Contractor now acknowledges that the Owner is exempt under the regulations of the Lien Act from the requirement to keep the Holdback Amount in a separate holdback account.
- 5.5.4 The Holdback Amount is due and payable as set out in GC5.1.6.4. The Owner may retain out of the Holdback Amount any sums required by law to satisfy any Liens or other liens against the Contract, Work, Site, or Owner's interest in the Site or, if permitted by the Lien Act, other third party monetary claims against the Contractor which are enforceable against the Owner. Except to the extent expressly prohibited by the Lien Act, the Owner may retain out of the Holdback Amount any deficiency holdbacks provided for in the Contract Documents.

5.5.5 [Intentionally Deleted]

GC5.6 PROGRESSIVE RELEASE OF HOLDBACK

GC5.6.1 is deleted in its entirety and replaced with the following:

Any portion of the Holdback Amount in respect to a Subcontractor or Supplier subcontract is due and payable as set out in GC5.1.6.3. The Owner may retain out of the subcontract portion of the Holdback Amount any sums required by law to satisfy any Liens or other liens against the Contract, Work, Site, or Owner's interest in the Site or, if permitted by the Lien Act, other third party monetary claims against the Contractor which are enforceable against the Owner. Except to the extent expressly prohibited by the Lien Act, the Owner may retain out of the Holdback Amount any deficiency holdbacks provided for in the Contract Documents.

GC5.6.2 is deleted in its entirety.

GC5.6.3 is amended by deleting the words "final certificate for payment" and replacing with "Final Certificate for Payment".

GC5.7 FINAL PAYMENT

- GC5.7.1 is deleted in its entirety and replaced as follows:
- 5.7.1 When the Contractor considers that Total Performance of the Work has been achieved, the Contractor shall submit its final application for payment. The application for payment on attaining Total Performance of the Work shall consist of the following:

- all of the certifications and information required on an application for payment as set out in GC5.2.6, all appropriately amended to clearly confirm that the Work is fully completed, all Products have been delivered, and all Lien periods have expired with no Liens or other liens having been filed;
- .2 a current CCDC 9A Statutory Declaration of Progress Distribution by Contractor, as well as a current CCDC 9B Statutory Declaration of Progress Distribution by Subcontractor from each of the Subcontractors, which in every case shall be fully and properly completed and sworn before a Notary Public or Commissioner for Oaths for the Province of British Columbia;
- copies of a current title search of the Site confirming that no Liens have been registered as at the date of application for Final Certificate for Payment; and
- .4 all deliverables called for in the Contract Documents which were not delivered at the time of Substantial Performance of the Work.

GC5.7.3 is amended by deleting the words "final certificate for payment" and replacing with "Final Certificate for Payment".

GC5.7.4 is deleted in its entirety and replaced as follows:

Subject to paragraph 10.4.1 of GC10.4 - WORKERS' COMPENSATION, and the *Lien Act*, the Owner shall, no later than twenty-one (21) calendar days after the issuance of a Final Certificate for Payment, pay the Contractor as provided in GC5.1.6.4

GC6.1 OWNER'S RIGHT TO MAKE CHANGES

GC6.1.3 is added as follows:

Change Orders, contemplated Change Orders, and Change Directives shall be on printed forms supplied by the Owner or Consultant and may include:

- .1 job site instructions or site memo forms, for immediate authorization on Site in order not to delay the performance of the Work and for changes of a minor nature with no price variation, shall be issued on site on the signature of the Consultant only;
- .2 contemplated Change Orders issued by the Consultant for purposes of the Contractor's response on method of adjustment and extent of adjustment to Contract Price and Time shall be signed by the Consultant only;
- .3 Change Orders authorizing the Contractor to proceed with the Work as set out by the Consultant and Contractor in the contemplated Change Order shall be signed by the Owner and Contractor.

GC6.1.4 is added as follows:

The Unit Prices, if any, set out in the Schedule of Prices are firm and fixed, and shall not be subject to adjustment as a result of any difference between the estimated quantities shown in such schedule and the corresponding actual quantities whether or not any Change Orders or Change Directives are issued.

GC6.3 CHANGE DIRECTIVE

- GC6.3.3 is deleted in its entirety.
- GC6.3.5 is deleted in its entirety.
- GC6.3.6 is deleted in its entirety and replaced as follows:

Subject to GC6.3.13, the adjustment in the Contract Price for a change in the Work carried out by way of a Change Directive shall be on the basis of the Contractor's actual and properly documented expenditures and savings attributable to the change. If a change in the Work results in expenditures only, the change in the Work shall be valued as Cost Plus Work in accordance with GC5A. - BASIS OF PAYMENT. If a change in the Work results in savings only, the amount of the credit shall be the actual cost savings to the Contractor, without deduction for overhead or profit. If a change in the Work results in both expenditures and savings, overhead and profit on the Work shall be payable only on the net increase in expenditures, if any, with respect to that change in the Work.

GC6.3.7 is deleted in its entirety.

GC6.3.8 is deleted in its entirety.

GC6.3.9 is deleted in its entirety.

GC6.3.10 is deleted in its entirety.

SC47 GC6.4 CONCEALED OR UNKNOWN CONDITIONS

GC6.4.1 is deleted in its entirety and replaced as follows:

If the Contractor discovers conditions at the Place of the Work which are subsurface or otherwise concealed physical conditions at the Site which existed before the commencement of the Work, could not reasonably have been discovered by proper investigation by the Contractor under GC3.10.13, and which differ materially from those disclosed in the Contract Documents, including any geotechnical report, environmental assessment, or other report included or referenced in the Contract Documents or provided or made known to the Contractor before the commencement of the Work; then the Contractor shall give Notice in Writing to the Consultant of such conditions before they are disturbed and in no event later than five (5) Working Days after first observance of the conditions.

GC6.4.1A is added as follows:

The Contractor must give notice under GC6.4.1 within five (5) Working Days after discovery of the conditions or the time when the Contractor by reasonable diligence could have discovered the conditions, failing which the Contractor may not make or enforce any claim against the Owner, whether for a change in the Contract Price or other compensation or for an extension of the Contract Time arising from those conditions.

GC6.4.4 is deleted in its entirety and replaced as follows:

If such concealed or unknown conditions relate to Hazardous Substances, artifacts and fossils, or mould, the parties will be governed by the provisions of GC9.2 - TOXIC AND HAZARDOUS SUBSTANCES, GC9.3 - ARTIFACTS AND FOSSILS and GC9.5 - MOULD.

GC6.5 DELAYS

GC6.5 is deleted in its entirety and replaced as follows:

6.5.1 Delay Claims Limited

The Contractor shall be entitled to an extension of the Contract Time and/or an adjustment to the Contract Price or other compensation for delay, howsoever caused, if and to the extent only expressly permitted under this GC6.5 or in respect of a change in the Work, in each case as authorized only by a Change Order and in no event will these provisions apply to delays

arising directly or indirectly from the Contractor's Shut-Down-Obligations (as defined in Part F - Special Conditions).

6.5.2 Excusable Event

If the Contractor is delayed in the performance or completion of the Work by an Excusable Event, then, subject to the other conditions of this GC6.5, the Contract Time shall be extended for such reasonable time as the Consultant determines, after consultation with the Contractor, as being required to accommodate the anticipated impact on the Contract Schedule of the Excusable Event. Any such time extension shall be confirmed by Change Order under GC6.1. The Contractor shall not be entitled to make or enforce any claim against Owner for any change in the Contract Price or other compensation as a result of an Excusable Event.

6.5.3 Owner-Caused Event

If the Contractor is delayed in the performance or completion of the Work by a Owner-Caused Event, then subject to the other conditions of this GC6.5, the Contract Time shall be extended for such reasonable time as the Consultant determines, after consultation with the Contractor, as being required to accommodate the anticipated impact on the Contract Schedule of the Owner-Caused Event, and the Contract Price shall be adjusted to compensate the Contractor for the reasonable direct costs incurred, or anticipated to be incurred, by it as a result of the delay.

6.5.4 Claim Conditions

The right of the Contractor to an extension of the Contract Time, and/or an adjustment of the Contract Price under this GC6.5 is subject to the conditions that:

- .1 *Timely Notice:* The Contractor gives the Owner prompt written notice of the delay, the nature of the Excusable Event or the Owner-Caused Event, as the case may be, and its intent to submit a claim for time extension and/or adjustment of the Contract Price, and in any event, such notice must be given not later than five (5) Working Days after the occurrence of the Excusable Event or the Owner-Caused Event;
- .2 Claim Details: The Contractor promptly gives the Owner details of its claim, including the time required to accommodate the anticipated impact on the Contract Schedule, and if applicable, the costs incurred, or anticipated to be incurred, by the Contractor as a result of the delay, and in any event such details must be given not later than fourteen (14) Working Days after the occurrence of the Excusable Event or the Owner-Caused Event;
- .3 *Mitigation Measures:* The Contractor has taken, and continues to take, all reasonable measures, including those, if any, recommended by the Owner to minimize the impact of the delay on the Contract Schedule, and in the case of a claim for adjustment of the Contract Price, all reasonable measures, including those, if any, recommended by the Owner, to minimize the costs incurred, or anticipated to be incurred, by the Contractor as a result of the delay;
- .4 *Critical Path Impacted:* No extension of time and/or adjustment of the Contract Price or other financial compensation will be granted, unless the Excusable Event or the Owner-Caused Event, as the case may be, has an adverse impact on the critical path established by the Contract Schedule;
- .5 Concurrent Delays: If there are concurrent delays and impacts, some of which entitle the Contractor to relief under this GC6.5 and some of which do not, the Contractor is not entitled to relief under this GC6.5, the Contractor shall be entitled to an extension

of the Contract Time, and if applicable an adjustment of the Contract Price in respect of a Owner-Caused Event, only to the extent that the delays entitling the Contractor to relief under this GC6.5 exceed those that do not so entitle the Contractor to such relief; and

- .6 No Cumulative Impact Claims: Each claim under this GC6.5 based in whole or in part on a particular event must be submitted and will be considered and assessed separately, and the Contractor may not make or enforce any claim under this GC6.5 or otherwise for the cumulative impact on schedule or on cost of two or more such events.
- .7 Acceleration/Suspension of the Work
 - (a) **Notice:** The Contractor shall give the Owner notice of any delay in the performance of the Work, howsoever caused, and any event or circumstance that could reasonably be expected to cause such delay. The notice shall be given promptly after the delay, event or circumstance is known to the Contractor. The notice shall be accompanied by details of the Contractor's plan to avoid or mitigate the duration and adverse impact of the delay.
 - (b) Acceleration Order: If there is a delay, or threatened delay, in the performance of the Work, or if the Owner wishes to accelerate the Work for its convenience, the Consultant, after consultation with the Contractor, may order the Contractor to accelerate the Work, including by way of the provision of additional labour, including overtime work, and Construction Equipment. Each acceleration order must be in writing and signed by the Consultant. The Contractor shall comply promptly with any order given under this GC6.5.5(b).
 - (c) Cost Allocation: If the delay, or threatened delay, in respect of which an order is made under GC6.5.5(b) does not entitle the Contractor to an extension of the Contract Time under GC6.4, including any delay or threatened delay caused by the Contractor, or any Subcontractor, Supplier or other person for whose acts and omissions the Contractor is responsible under the Contract, then all costs incurred by the Contractor in complying with the order will be for the Contractor's account. If the delay, or threatened delay, would entitle the Contractor to an extension of the Contract Time under GC6.4, then the Consultant, in lieu of granting such extension in whole or in part, shall issue a Change Directive and/or a Change Order under GC6.1, and the Contract Price will be adjusted accordingly.
 - (d) Owner's Right to Suspend the Work: The Owner, at any time and from time to time, may suspend the performance of the Work, in whole or in part, for a period not exceeding ninety (90) days as to any one suspension, by notice to the Contractor. The Contractor shall comply promptly with any notice given under this GC6.5.5, and shall resume full performance of the Work promptly on notice from Owner to do so. Owner shall pay to the Contractor the documented costs reasonably incurred by it as a consequence of the suspension, such cost to include the incremental costs of demobilization and remobilization, Construction Equipment rental or standby charges, Materials storage, bonding and insurance costs, overhead and similar costs payable by the Contractor to Subcontractors, but excluding any allowance for profit or loss of profit, all such costs to be certified by the Consultant and confirmed by Change Order. The Contractor shall use all commercially reasonable efforts to

avoid or minimize such costs, including following any reasonable written directions given by Owner for that purpose.

6.5.6 Protect Work During the Delay

During any delay or suspension of the Work, the Contractor shall maintain adequate surveillance of the Work and undertake such maintenance and protection of the Work as may be reasonable to maintain public safety and to protect materials, plant and equipment already installed in the Work or delivered to the Place of Work, and shall provide any other protective measures as may be described in the Contract Documents.

GC7.1 OWNER'S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK OR TERMINATE THE CONTRACT

GC7.1.5.2 is amended by deleting the words "final certificate for payment" and replacing with "Final Certificate for Payment".

GC7.1.7 is added as follows:

- 7.1.7 The Owner may terminate the Contract at any time for the convenience of the Owner by notice given to the Contractor. It the Contract is terminated under this GC7.1.7, then:
 - (a) the Contractor shall suspend performance of the Work and shall not incur further cost or expense in relation to the Work, except (i) as necessary to protect the Work and the safety of persons, or (ii) as authorized or directed in writing by the Owner;
 - (b) the Contractor shall remove from the Site its personnel and all Construction Equipment and other material that is owned or leased by the Contractor, except as otherwise required to comply with GC7.1.7(a)(i) and (ii); and
 - (c) the Owner shall pay the Contractor for all Work performed, including the cost of complying with GC7.1.7(a)(i) and (ii), in accordance with the terms and conditions of payment set out in the Contract, together with the documented and reasonable cost of terminating subcontracts with Subcontractors and Suppliers and demobilizing the Contractor's personnel and Construction Equipment, all as certified by the Consultant, and upon such payment being made, the Contractor shall have no further or other claim against the Owner for, or in connection with, termination of the Contract.

GC7.2 CONTRACTOR'S RIGHT TO SUSPEND THE WORK OR TERMINATE CONTRACT

GC7.2.2 is amended by replacing the number "20" where it appears in the first sentence with the number "30" and by adding the following to the beginning of the first sentence as follows:

Except for the period during which an Owner-initiated suspension under GC6.5.5(d) is in effect or subsequently takes effect,

GC7.2.3 is amended by adding the following to the beginning of the first sentence:

If the default cannot be corrected in five (5) Working Days or in such other time as may be subsequently agreed in writing by the parties,

GC7.2.3.1 is deleted in its entirety.

GC7.2.3.4 is deleted in its entirety and replaced with the following:

the Owner violates the requirements of the Contract to a substantial degree and the Consultant, except for GC5.1- GENERAL FINANCIAL/PAYMENT PROVISIONS, confirms by written statement to the Contractor that sufficient cause exists.

GC7.2.4 is amended by revising the second line to read:

corrected within fourteen (14) Working Days

GC 8.2 NEGOTIATION, MEDIATION AND ARBITRATION

GC8.2.1.1 is deleted in its entirety and replaced as follows:

.1 within thirty (30) Working Days after the Contract was awarded, or

GC8.2.1.2 is deleted in its entirety and replaced as follows:

.2 if the parties neglected to make an appointment within the thirty (30) Working Days, within twenty (20) Working Days after either party by Notice in Writing requests that the Project Mediator be appointed.

GC8.2.3 is amended by adding the following to the end:

However, the Owner and the Contractor nonetheless irrevocably and unconditionally attorn to the jurisdiction of the courts of British Columbia, and courts to which appeals therefrom may be taken, in respect of any dispute or claim arising under or relating to the Contract. The Owner and the Contractor acknowledge and agree that such courts have jurisdiction, but not necessarily exclusive jurisdiction in respect of any such dispute or claim. If a dispute arises under or in relation to this Contract, and the dispute cannot be resolved by the Owner's Project Manager and the Contractor's principal representative on Site within three (3) Working Days after the dispute arises, or the Owner's Project Manager is not authorized to resolve the dispute, then:

- (a) the dispute will be referred to the Owner's Director of Facilities and the Contractor's project manager for resolution, and it they cannot resolve the dispute within three (3) Working Days after referral to them, then
- (b) the dispute will be referred to a senior executive of the Owner designated by it and a senior executive of the Contractor designated by it, for resolution, and if they cannot resolve the dispute within three (3) Working Days after referral to them, then
- either party may take such further legal proceedings as they consider necessary for the resolution of the dispute either concurrently with or in lieu of the process outlined in GC8.2.4 to GC8.2.9.

GC8.2.4 is amended by revising the second line to read:

...the parties may request the Project Mediator...

GC8.2.6 is amended by revising the second line to read:

...either party may request referral of the dispute...

GC8.2.7 is deleted in its entirety and replaced as follows:

If a Notice in Writing is not given under paragraph 8.2.6 within the required time or the other party does not reply and agree to binding arbitration, the parties may refer the unresolved dispute to the courts or to any other form of dispute resolution, including arbitration, which they have agreed to use

GC8.2.9 is added as follows:

Where references are made in the Contract Documents to "the time of bid closing", it is intended by the parties that this shall mean the effective date of the contract.

GC9.1 PROTECTION OF WORK AND PROPERTY

GC9.1.1 is deleted in its entirety and replaced with the following:

The Contractor shall protect the Work, Products delivered to the Site and the Owner's property and property on or adjacent to the Site from theft and damage which may arise as the result of the Contractor's operations under the Contract, and shall be responsible for such theft and damage, except theft and damage which occurs as the result of:

- .1 errors in the Contract Documents;
- .2 acts or omissions by the Owner, other contractors, their agents and employees.

GC9.1.4 is amended by revising the first line to read:

Should damage to the Work, Products delivered to the Site, the Place of Work, the Owner's property ...

GC9.1.5 is added as follows:

The Contractor is responsible for protection of the Work during shutdown, including shutdowns caused by strikes.

GC9.2 TOXIC AND HAZARDOUS SUBSTANCES

GC9.2.1 is deleted in its entirety and replaced with the following:

For the purposes of the Contract, the Owner shall be deemed to have control and management of the Place of the Work with respect to the condition of the Place of the Work prior to the commencement of the Work in relation to applicable Environmental Law and the presence of any Hazardous Substances.

GC9.2.2 is deleted in its entirety and replaced with the following:

Prior to the Contractor commencing the Work, the Owner shall:

- take reasonable steps to determine whether the Place of the Work contains any Hazardous Substances and, if so, whether the condition of the Place of the Work is in compliance with applicable Environmental Law; and
- .2 provide the Consultant and the Contractor with a written list of any such Hazardous Substances that the Owner knows to exist on, and their locations within, the Place of the Work.

GC9.2.3 is deleted in its entirety and replaced with the following:

Unless the Contract expressly provides otherwise, the Owner shall be responsible for taking such steps as may be necessary, in accordance with applicable Environmental Law to dispose of, store or otherwise deal with Hazardous Substances so as to cause the Place of the Work to comply with the requirements of applicable Environmental Law before the Contractor commences the Work.

GC9.2.4 is deleted in its entirety and replaced with the following:

Except as previously disclosed in writing by the Owner or as otherwise known by the Contractor, if the Contractor:

.1 encounters Hazardous Substances at the Place of the Work; or

- .2 has reasonable grounds to believe that Hazardous Substances are present at the Place of the Work which were not brought to the Place of the Work by the Contractor or anyone for whom the Contractor is responsible or which were disclosed but have not been dealt with as required under paragraph 9.2.3, the Contractor shall:
 - .1 take reasonable steps, including stopping the Work, to ensure that no person's exposure to any Hazardous Substance at the Place of the Work exceeds any applicable levels contrary to the requirements of applicable Environmental Law, and
 - .2 immediately report the circumstances to the Consultant and the Owner by Notice in Writing.

GC9.2.5 is deleted in its entirety and replaced with the following:

If the Owner and the Contractor, acting reasonably, fail to agree on whether the condition of the Place of the Work is in compliance with applicable Environmental Law prior to the commencement of the Work or whether Hazardous Substances were brought onto the Place of the Work by the Contractor or anyone for whom the Contractor is responsible, or whether the Contractor or anyone for whom the Contractor is responsible caused the release of Hazardous Substances on the Place of the Work, the Owner shall retain an independent qualified expert to investigate and report on the subject of the dispute. Subject to paragraph 9.2.6, the Owner shall pay for the cost of the expert's investigation and report. The Owner will provide a copy of the expert's report to the Contractor.

GC9.2.6 is deleted in its entirety and replaced with the following:

If the expert's report under paragraph 9.2.5 determines that the Place of the Work was in compliance with applicable Environmental Law prior to the commencement of the Work or that Hazardous Substances were brought onto the Place of the Work by the Contractor or any for whom the Contractor is responsible, or that the Contractor or anyone for whom the Contractor is responsible caused the release of a Hazardous Substance on the Place of the Work, the Contractor shall pay for the cost of the expert's investigation and report.

GC9.2.7 is deleted in its entirety and replaced with the following:

If the Owner and the Contractor agree, or if the expert's report under paragraph 9.2.5 concludes, that the Contractor or anyone for whom the Contractor is responsible brought a Hazardous Substance onto, or caused the release of a Hazardous Substance on, the Place of the Work, the Contractor shall promptly at the Contractor's expense:

- take such steps as are necessary to safely and in compliance with Environmental Law remove, transport and dispose of such Hazardous Substance and to remediate the Place of the Work to such extent as is required to cause the Place of the Work to comply with all applicable Environmental Law;
- make good any damage to the Work, the Owner's property and any property affected by any migration of the Hazardous Substance as provided in paragraph 9.1.3 of GC9.1 PROTECTION OF WORK AND PROPERTY;
- .3 reimburse the Owner for all resultant costs and expenses reasonably incurred by the Owner; and
- .4 indemnity the Owner as required by GC12.1 INDEMNIFICATION

GC9.2.8 is deleted in its entirety and replaced with the following:

If the Owner and the Contractor agree, or if the expert's report under paragraph 9.2.5 concludes, that the Contractor or anyone for whom the Contractor is not responsible for bringing a Hazardous Substance onto, or for causing the release of a Hazardous Substance on, the Place of the Work, the Owner shall promptly at the Owner's expense:

- take such steps as are necessary to safely and in compliance with Environmental Law remove, transport and dispose of such Hazardous Substance and to remediate the Place of the Work to such extent as is required to cause the Place of the Work to comply with all applicable Environmental Law;
- .2 reimburse the Contractor for all resultant costs and expenses reasonably incurred by the Contractor;
- .3 extend the Contract time for such reasonable time as the Consultant may recommend in consultation with the Contractor and the expert referred to in paragraph 9.2.5 and reimburse the Contractor for reasonably cost incurred as a result of the delay, and
- .4 indemnity the Contractor as required by GC12.1 INDEMNIFICATION.

GC9.2.9 is amended by deleting the words "Part 8 of the General Conditions - Dispute Resolution" from the second line and replacing with "Part 8 - DISPUTE RESOLUTION".

GC9.2.10 is added as follows:

The Contractor shall, and shall ensure that anyone for whom the Contractor is responsible shall, at all times comply with all applicable Environmental Law and ensure that all Work is conducted in compliance with all applicable Environmental Law.

GC 9.3 ARTIFACTS AND FOSSILS

GC9.3.1 is deleted in its entirety and replaced with the following:

If the Contractor or anyone for whom the Contractor is responsible discovers fossils coins, articles of value or antiquity, structures and other remains or things of scientific, cultural or historical interest at the Place of the Work (in GC9.3 called, "Historical Items"), the Contractor shall immediately give Notice in Writing thereof to the Owner and the Consultant. As shall, as between the Owner and the Contractor, all Historical Items shall be, and shall be deemed to be, the absolute property of the Owner and the Contractor hereby irrevocably waives and disclaims any right, title or interest therein.

GC9.3.2 is deleted in its entirety and replaced with the following:

The Contractor shall take all reasonable precautions, and shall comply with all reasonable directions from the Consultant, to prevent removal or damage to Historical Items as identified in paragraph 9.3.1 or as otherwise known to be present on the Place of the Work.

GC9.3.3 is deleted in its entirety and replaced with the following:

The Consultant will investigate the impact on the Work of the discovery of any Historical Item identified in paragraph 9.3.1. If conditions are found that would cause an increase or decrease in the Contractor's cost or time to perform the Work, the Consultant, with the Owner's approval, will issue appropriate instructions for a change in the Work as provided in GC6.2 - CHANGE ORDER or GC6.3 - CHANGE DIRECTIVE.

GC9.4 CONSTRUCTION SAFETY

The above heading for GC9.4 is amended by adding "& WORKSAFEBC RULES" to the end.

GC9.4.2 is added as follows:

Unless otherwise specified in the Contract Documents or notified to the contrary by the Consultant, the Contractor is the "Prime Contractor" for the purpose of all Applicable Laws relative to occupational health and safety, including the discharge of all duties of the "Prime Contractor" under the Workers Compensation Act (British Columbia), notwithstanding that the Owner, the Consultant or an Other Contractor may provide from time to time some of the services normally provided by such "Prime Contractor". In this GC9.4 "Prime Contractor" means the contractor so defined under the Workers Compensation Act (British Columbia).

GC9.4.3 is added as follows

If the Contractor is the "Prime Contractor", the Contractor shall:

- a. Compliance with Law: comply with all Applicable Laws, and all reasonable rules established by the Owner of which the Contractor is given timely notice through the Consultant, relative to occupational health and safety;
- b. Safety Programs: initiate, maintain and supervise all safety programs and measures in connection with the performance of the Work, which program shall respond fully to the requirements of all Applicable Laws relative to occupational health and safety, all to the satisfaction of the Consultant;
- c. Site Meetings: conduct regular safety meetings at the Site, no less frequently than weekly, record minutes of such meetings and give copies of such minutes to the Consultant on a weekly basis;
- d. Safety Equipment: supply and maintain at the Site all safety equipment necessary to protect workers and others from accident or injury; and
- e. First Aid: supply and maintain at the Site all personnel, equipment and supplies necessary for the provision of appropriate first-aid to any worker or person suffering an accident or injury at or about the Site, and establish an emergency procedure for prompt removal of any such person from the Site to a hospital, clinic or medical office for further treatment.
- f. Notice to Project: prior to commencement of construction, the Contractor will:
 - (1) complete and file a "Notice of Project" with the WorkSafeBC in compliance with Section 20.2 of the WorkSafeBC Rules, and
 - (2) post the Notice of Project at the Site, and
 - (3) will provide a copy of the Notice of Project to the Owner and confirm in writing that the Notice of Project has been posted at the Site.

GC9.4.4 is added as follows

If, or for so long as the Contractor is not the "Prime Contractor", the Contractor shall:

- a. Compliance with Law: comply with all Applicable Laws, and all reasonable rules established by the Owner of which the Contractor is given timely notice through the Consultant, relative to occupational health and safety;
- b. Compliance with Directions: comply with all reasonable directions issued by the "Prime Contractor" regarding compliance with Applicable Laws, and rules established by the Owner, relative to occupational health and safety; and
- c. Site Safety Meetings: attend all Site safety meetings convened by the "Prime Contractor".

GC9.4.5 is added as follows

Whether or not the Contractor is the "Prime Contractor", it shall:

- a. Reporting: report immediately to the "Prime Contractor" (if not the Contractor) and the Consultant all accidents and injuries of any kind or severity occurring on or about the Site and involving employees of the Contractor or any Subcontractor, or any other person of which the Contractor is aware, and arising out of or in connection with the Work;
- b. Written Confirmation: confirm in writing each report made under subparagraph (a); and
- c. City Policy: respect and adhere to Owner's safety and training polices relative to the Site and the Work.

GC9.4.6 is added as follows

If the Consultant determines that the Contractor is not in compliance with its obligations as "Prime Contractor", if applicable, the Owner may, but is not obliged to, provide some or all of the services required to discharge those obligations. All costs incurred by the Owner in providing such services shall be paid by the Contractor to the Owner, and may be deducted from any amount then or thereafter becoming due to the Contractor under the Contract.

GC9.4.7 is added as follows:

The Contractor shall indemnify and save harmless the Owner from any and all damages, liabilities, cost, fines, penalties, fees and expenses whatsoever including, without limitation, legal fees, charges and disbursements as between a solicitor and his own client, related to or arising out of the assignment to the Contractor, and the Contractor's assumption, of the responsibilities, obligations and liabilities of the Prime Contractor under the WorkSafeBC Rules with respect to the place of the Work.

GC9.4.8 is added as follows:

The Contractor agrees that it shall at its own expense procure and carry or cause to be procured and carried and paid for, full WorkSafeBC coverage for itself and all workers, employees, servants and others engaged in or upon any work or service which is the subject of this Contract.

GC9.4.9 is added as follows:

The Contractor agrees that the Owner has the unfettered right to set off the amount of the unpaid premiums and assessments for such WorkSafeBC coverage against any monies owing by the Owner to the Contractor. The Owner shall have the right to withhold payment under this Contract until the WorkSafeBC premiums, assessments or penalties in respect of work done or service performed in fulfilling this Contract had been paid in full.

GC9.4.10 is added as follows:

Within ten (10) Business Days of the City delivering the Notice of Award to the Contractor, the Contractor will provide the Owner with the Contractor's and all Subcontractor's WorkSafeBC registration numbers.

GC9.4.11 is added as follows:

Within ten (10) Working Days of the Owner delivering the Notice of Award to the Contractor, and concurrently with making any application for payment under this Contract, the Contractor will provide the Owner with written confirmation that the Contractor and all Subcontractors are registered in good standing with the WorkSafeBC and that all assessments have been paid to date of the Notice of Award or date of application for payment, as applicable.

GC9.4.12 is added as follows:

The Contractor may or may not have received, as part of the Contract Documents, a "Pre-Contract Hazard Assessment" prepared by or for the Owner pursuant to the Owner's statutory obligations under the WorkSafeBC Rules (Section 119 of the Act) as an "owner of a workplace". Despite the Owner's statutory obligations, the Contractor now acknowledges and agrees that the Contractor may not rely on the "Pre-Contract Hazard Assessment" and now agrees to assume by the terms of this Contract full responsibility for carrying out the Owner's obligations under Section 119 of the Workers' Compensation Act, including without limitation and by way of example only, conducting all due diligence inquiries of all applicable Owner staff and departments in order to ascertain what, if any, information is known or has been recorded by Owner staff about the Site that is necessary to identify and eliminate or control hazards to the health or safety of persons at the Site. The Owner now agrees to make all reasonable efforts to assist the Contractor in obtaining timely access to Owner staff and Owner records for this purpose. Within ten (10) Working Days of the Owner delivering the Notice of Award to the Contractor, the Contractor will complete such due diligence inquiries and must complete and deliver written confirmation to the Consultant, in a form acceptable to the Consultant, a Pre-Contract Hazard Assessment, prior to the Owner being obligated to issue the Notice to Proceed.

GC9.4.13 is added as follows:

The Contractor will indemnify the Owner and hold harmless the Owner from all manner of claims, demands, costs, losses, penalties and proceedings arising out of or in any way related to:

- .1 unpaid WorkSafeBC assessments of the Contractor or any other employer for whom the Contractor is responsible under this Contract,
- the acts or omissions of any person engaged directly or indirectly by the Contractor in the performance of this Contract, or for whom the Contractor is liable pursuant to the Contractor's obligations as the Prime Contractor, and which acts or omissions are or are alleged by the WorkSafeBC to constitute a breach of the WorkSafeBC Rules or other failure to observe safety rules, regulations and practices of WorkSafeBC, including any and all fines and penalties levied by the WorkSafeBC, or
- .3 any breach of the Contractor's obligations under Clause GC9.1

GC9.4.14 is added as follows:

The Contractor agrees to retain a full-time construction safety officer for projects governed by Section 1.8 and Sub-section 1.10.5 of the Vancouver Building By-law. The construction safety officer shall bear written proof of qualification satisfactory to the City of Vancouver's Director of Permits and Licenses.

GC9.5 MOULD

GC9.5.1 is deleted in its entirety and replaced with the following:

If the Contractor or the Owner observers or reasonably suspects the presence of mould of the nature and quantity at the Place of the Work such that special handling and precautions are required under Environmental Law or that otherwise may reasonably present a hazard to the health and safety of persons, the remediation of which has not been separately arranged by the Owner or is not expressly part of the Work,

.1 the observing party shall promptly report the circumstances to the other party by Notice in Writing;

- .2 the Contractor shall promptly take all reasonable steps, including stopping all or such portions of the Work as may be necessary to ensure that no person suffers injury, sickness or death and that no property is damaged as a result of exposure to or the presence of the mould; and
- .3 if the Owner and the Contractor do not agree on whether any mould discovered is of the nature and quantity such that special handling and precautions are required under Environmental Law or whether such mould may otherwise reasonably present a hazard to the health and safety of persons or with respect to what steps are appropriate to be taken to deal with the mould, or as to the cause of the presence of the mould, the Owner shall retain an independent qualified expert to investigate and report on the subject of the dispute. Subject to paragraph 9.5.2, the Owner shall pay for the cost of the expert's investigation and report. The Owner will provide a copy of the expert's report to the Contractor.

GC9.5.2 is deleted in its entirety and replaced with the following:

If the expert's report under paragraph 9.5.1.3 determines that the mould does not require special handling and precautions in compliance with Environmental Law or does not otherwise reasonably present a hazard to the health and safety of persons, the Contractor will pay for the cost of the expert's investigation and report. If the expert's report under paragraph 9.5.1.3 determines that the mould was caused as the result of the acts or omissions of the Contractor or anyone for whom the Contractor is responsible, the Contractor shall promptly, at the Contractor's expense:

- .1 take such steps as are necessary to safely and in compliance with Environmental Law remove, transport and dispose of such mould and to remediate the Place of the Work to such extent as is required to cause the Place of the Work to comply with all applicable Environmental Law;
- make good any damage to the Work, the Owner's property and any property affected by the mould as provided in paragraph 9.1.3 of GC9.1 PROTECTION OF WORK AND PROPERTY;
- .3 reimburse the Owner for all resultant costs and expenses reasonably incurred by the Owner; and
- .4 indemnify the Owner as required by GC12.1 INDEMNIFICATION.

GC9.5.3 is deleted in its entirety and replaced with the following:

If the Owner and the Contractor agree, or if the expert's report under paragraph 9.5.1.3 concludes, that the presence of mould on the Place of the Work requires special handling or precautions under Environmental Law or otherwise presents a hazard to the health or safety of persons, and that the Contractor or anyone for whom the Contractor is responsible is not responsible for the presence of such mould, the Owner shall promptly at the Owner's expense:

- take such steps as are necessary to safely and in compliance with Environmental Law remove, transport and dispose of such mould and to remediate the Place of the Work to such extent as is required to cause the Place of the Work to comply with all applicable Environmental Law;
- .2 reimburse the Contractor for the cost of taking the steps under paragraph 9.5.1.2 and making good any damage to the Work as provided in paragraph 9.1.4 of GC9.1 PROTECTION OF WORK AND PROPERTY; and

extend the Contract Time for such reasonable time as the Consultant may recommend in consultation with the Contractor and the expert referred to in paragraph 9.5.1.3 and reimburse the Contractor for reasonable costs incurred as a result of the delay, and

GC10.1 TAXES AND DUTIES

GC10.1.1 is deleted in its entirety and replaced as follows:

The Contractor shall allow for the payment by the Contractor of all federal, provincial and municipal taxes, rates, levies, assessments and duties, both refundable and non-refundable, and all deposits, (temporary crossings, excavations, etc.). The Contractor agrees that the Owner shall not be liable for any of the said items and agrees to indemnify and save harmless at all times the Owner from and against all claims which may be made with respect thereto. The Owner will pay the Contractor the amount of the Value Added Taxes as indicated in ARTICLE A-4 CONTRACT PRICE of the AGREEMENT but its cost shall be excluded from the Contract Price.

GC10.1.2 is amended by revising the first line to read:

...in such included taxes, duties and rebates...

GC10.1.3 is added as follows:

Where an exemption or recovery of government sales taxes, customs duties or excise taxes is applicable to the Contract, the Contractor shall submit for the Owner's review the exemption or recovery application and the supporting invoices of the actual quantities of materials incorporated in the Work prior to applying for the rebate. The Owner will then issue a certificate verifying the application. The Contractor acknowledges its submission of its Tender Form and agreement to the Contract Price on the basis that the Contractor will be entitled to all such rebates.

GC10.2 LAWS, NOTICES, PERMITS AND FEES

GC10.2.2 is deleted in its entirety and replaced as follows:

The Contractor shall, except as set out below in this GC10.2.2 and unless otherwise specified in the Contract Documents, obtain and all permits, licences, and certificates and pay all fees required for the performance of the Work, and obtain all necessary access and storage rights for areas outside of the Site (including without limitation and by way of example only, parking for its workers, swing arc of any construction crane required for the Work, or storage of materials) but this shall not include the development permit and building permit which have been obtained by the Consultant, paid for by the Owner, and issued to the Owner, nor shall it include the obligation to obtain easements or other access rights over the actual Site.

GC10.2.3 deleted in its entirety and replaced as follows:

The Contractor shall be responsible for the procurement of permits, licences, inspections, and certificates, which are necessary for the performance of the Work and customarily obtained by contractors in the jurisdiction of the Place of the Work after the issuance of the building permit The Contract Price includes the cost of all permits (except building and development permits but including occupancy permits), licences, inspections and certificates and their procurement. The Contractor will arrange for all inspections and testing required by such permits. The Contractor shall provide to the Consultant copies of all permits and inspection reports from the various authorities as soon as they are received.

GC10.2.5 is amended by revising the first sentence to read:

The Contractor shall be responsible to provide reasonable verification that the Contract Documents ...

GC10.4 WORKERS' COMPENSATION

GC10.4 is deleted in its entirety.

PART 11 INSURANCE AND CONTRACT SECURITY

GC11.1 INSURANCE (including the heading) is deleted in its entirety and replaced as follows:

GC11.1 GENERAL INSURANCE REQUIREMENTS

- 11.1.1 The Contractor and Subcontractors shall be required to file with the Owner within ten (10) Working Days of issuance of the Notice of Award, a Certificate of Insurance, and where required by the Owner's Director of Risk Management, certified copies of all insurance policies and endorsements evidencing the placement and endorsement of insurance in accordance with this GC11.
- 11.1.2 The Contractor and Subcontractor shall be required to file evidence of renewal of the insurance policies required under this GC11 with the owner at least fifteen (15) calendar days prior to their expiry.
- 11.1.3 In addition to the specific requirements below, all policies of insurance shall
 - .1 be endorsed so as to provide for thirty (30) calendar days' prior notice to the Owner of cancellation, lapse or material change,
 - .2 if property insurance (as opposed to liability) insurance, contain a waiver of subrogation in favour of the Owner Insurance Group (as defined below) and all employees and agents of the Owner Insurance Group,
 - .3 specifically name the City of Vancouver and the Consultant as additional insureds (collectively referred to in this GC11 as the "Owner Insurance Group"),
 - .4 be issued by a company or companies authorized to issue insurance policies in British Columbia, and
 - be issued on a policy form acceptable to the Owner's Director of Risk Management.
- 11.1.4 Unless otherwise specified, insurance shall be continuously maintained from no later than the ten (10) Working Days after issuance of the Notice of Award through to the date of Total Performance of the Work.

GC11.2 SPECIFIC INSURANCE COVERAGE is added as follows:

- 11.2.1 Without restricting the generality of GC12.1 INDEMNIFICATION, and despite the limits of liability set out in GC12.1 INDEMNIFICATION, the Contractor shall provide at the Contractor's expense the following types of insurance:
 - (a) Commercial General Liability protecting the Owner Insurance Group, the Contractor, and their respective subcontractors, agents and employees against damages arising from personal injury (including death) and claims for property damage which may arise out of the operations of the Contractor, its Subcontractors, or their respective agents or employees in connection with the Work.

The policy shall be placed prior to commencement of the Work and shall specifically cover liability arising out of the performance of this Contract and shall cover all liability assumed by the Contractor under any contract or agreement, including the indemnity provisions of this Contract. The policy shall be maintained continuously throughout the entire term of the contract until Total Performance of the Work, and thereafter, in the case of completed operations coverage for a further period of twenty-four (24) months and shall contain the following extensions of coverage:

- .1 Broadform Property Damage and completed Operations;
- .2 Personal Injury;
- .3 Blanket Contractual Liability;
- .4 Cross Liability and Severability of Interests Clause;
- .5 Contingent Employer's Liability; and
- .6 Non-owned Auto Liability,

And where such further risk exists, following extensions of coverage shall be included:

- .1 Shoring, blasting, excavating, underpinning, demolition, removal, pile-driving and grading, as applicable;
- .2 Hoist liability;
- .3 Operation of attached machinery; and
- .4 Contractor's pollution liability including coverage for asbestos, mould or other hazardous substances.

This insurance shall be for an amount of not less than five million dollars (\$5,000,000) inclusive per occurrence, and shall include a standard form of severability of interests and cross-liability clause. The deductible per occurrence shall not exceed five thousand dollars (\$5,000) and the Contractor shall be liable for all deductible amounts.

- (c) Automobile Liability Insurance to be carried at all times on all licensed vehicles owned by or leased to the Contractor, protecting against damages arising from bodily injury (including death), and from claims for property damage arising from the operations of the Contractor, its agents or employees. This insurance shall be for a minimum amount of five million dollars (\$5,000,000) inclusive per accident.
- (d) Property and Boiler Insurance
 - (1) All-Risks Course of Construction Property Insurance in the joint names of the Contractor and the Owner Insurance Group, covering the Work and all property of every description to be used in the performance of the Work. This insurance shall be primary, and be of an amount of not less than the sum of the Contract Price. The deductible per occurrence shall not exceed ten thousand dollars (\$10,000).
 - (2) **Boiler Insurance** insuring the interests of the Contractor and the Owner Insurance Group for not less than the replacement value of

- boilers and pressure vessels forming part of the Work. This insurance shall be maintained continuously from commencement of use or operation of the property insured and until ten (10) Working Days after the date of Total Performance of the Work, as set out in the certificate of Total Performance of the Work.
- (3) Occupancy by Owner: Where the Owner wishes to use or occupy part or all of the Work prior to Total Performance of the Work, it shall give the requisite written to the Contractor pursuant to GC13 Occupancy and if requested the Contractor shall promptly notify the Owner in writing of the additional premium cost, if any, to maintain property and boiler insurance, which shall be at the Owner's expense.
 - If, because of such use or occupancy, the Contractor is not requested to or is requested to but is unable to provide coverage, the Owner upon written notice from the Contractor and prior to such use or occupancy shall provide, maintain and pay for property and boiler insurance insuring the full value of the Work, as in subparagraphs (1) and (2), including coverage for such use or occupancy and shall provide the Contractor with proof of such insurance. The Contractor shall refund to the Owner the unearned premiums applicable to the Contractor's polices upon termination of coverage.
- (4) Owner to be Loss Payee: The policy shall provide that, in the event of loss or damage, payment shall be made to the Owner. Loss or damage shall not affect the rights and obligations of either party under the Contract except that the Contractor shall be entitled to such reasonable extension of the Contract Time relative to the extent of the loss or damage as the Consultant may decide in consultation with the Contractor.
- (5) Payment for Loss or Damage. The Contractor shall be entitled to receive from the Owner, in addition to the amount due under the Contract, the amount at which the Owner's interest in restoration of the Work has been appraised, such amount to be paid as the restoration of the Work proceeds and in accordance with the requirements of GC5.3 APPLICATIONS FOR PAYMENT and GC5.4 PROGRESS PAYMENTS. In addition the Contractor shall be entitled to receive from the payments made by the insurer the amount of the Contractor's interest in the restoration of the Work.
- (6) Deductibles: The Contractor shall be responsible for payment of all deductible amounts.
- (7) Loss Caused by Other Contractor: In the event of loss or damage to the Work arising from the work or act of the Owner or an other Contractor, then the Owner, shall pay the Contractor the cost of restoring the Work as the restoration of the Work proceeds and in accordance with the requirements of GC5.3 - APPLICATIONS FOR PAYMENT and GC5.4 - PROGRESS PAYMENTS.
- (e) All Risk Contractor's Equipment Insurance covering all equipment owned or rented by the Contractor and its agents or employees against all risks of loss or damage with coverage sufficient to allow for immediate replacement.

Where, in the Owner's opinion, marine risk exists, the Contractor is also required to carry the following coverage:

- (f) Hull & Machinery Insurance in the amount not less than the full value of the vessel, barge or equipment with a deductible of no more than ten thousand dollars (\$10,000) protecting the Contractor and its Subcontractors from all claims for loss or damage to any vessel, barge or equipment arising out of ownership or operation of the Contractor or its Subcontractors.
- (g) Protection & Indemnity Insurance including Owner's legal liability insurance to cover all claims for bodily injury including death, property damage or loss arising out of the activities conducted by the Contractor, Subcontractor, or their respective employees or agents in an amount no less than five million dollars (\$5,000,000) per occurrence and a deductible of not more than ten thousand dollars (\$10,000).

GC11.3 FAILURE TO INSURE is added as follows:

11.3.1 If the Contractor fails to provide evidence of the required insurance under this GC11 as and when required by the Contract Documents, then the Owner shall have the right to do so and then give evidence of same to the Contractor and Consultant and the cost of doing so will then be payable by the Contractor to the Owner or at the Owner's option may be deducted from the Contract Price by Change Directive.

GC11.2 CONTRACT SECURITY

GC11.2 (including the heading) is deleted in its entirety and renumbered as follows:

GC11.4 CONTRACT SECURITY

- 11.4.1 The Contractor shall pay for and deliver to the Owner, within ten (10) working Days of issuance of the Notice of Award, a performance bond and a labour and material payment bond, which shall each be for fifty percent (50%) of the Contract Price and shall include, but shall not be limited to:
 - .1 payment of any Consultant's and legal expenses incurred by the Owner in determining the extent of the Work executed and Work still to be executed, and any additional Work required as a result of the interruption of the Work,
 - .2 payment of additional expenses caused to the Owner for watchmen's services, light, heat, power, etc. incurred to the Owner during the period between the default of the original Contract and the commencement of the new Contract,
 - extended guarantee periods, corrections after final payment, and warranty obligations, and
 - .4 coverage of the faithful performance of all terms and conditions of the Contract Documents including all additions and revisions thereto permitted under the Contract.
- 11.4.2 Such bonds shall be issued by a duly licensed surety company authorized to transact the business of a surety in British Columbia and the bonds shall be maintained in good standing until the issuance of the Final Certificate for Payment and the expiry of the warranty. Subject to the requirements of this GC11.4, the bonds shall be in accordance with the latest edition of the CCDC approved bond forms.

11.4.3 The Contractor will give the Owner Notice in Writing of any material change in the surety within five (5) calendar days of the occurrence.

GC12.1 INDEMNIFICATION

GC12.1.1 is deleted in its entirety and replaced as follows:

The Contractor now indemnifies and shall defend, indemnify and hold harmless the Owner, the Consultant, the project manager and their respective directors, officers, employees, agents, consultants or advisors (collectively, the "Indemnitees") from and against all claims, demands, losses, costs, damages, actions, suits or proceedings ("Liability"), whether founded in equity or at law including contract, tort or statute and howsoever caused, arising from or in any way connected with any wrongful or negligent act, error or omission of, or defective goods supplied by, the Contractor, Subcontractors, Suppliers or their respective employees or agents when attending the Site or in the performance of the Work, whether or not any one or more of the Indemnitees are contributorily negligent. Expressly excluded from this indemnity is any Liability caused solely and directly by the wrongful act or negligence of an Indemnitee.

GC12.1.2 is deleted in its entirety and replaced as follows:

The obligation of the Contractor to indemnity hereunder shall be limited to the greater of the Contract Price or five million dollars (\$5,000,000) but in no event shall the sum be greater than twenty million dollars (\$20,000,000). However, despite any other term of this Contract, in no event will this limitation apply in any way to reduce or limit the indemnity or recovery by either party under any insurance policy or bond required by the Contract Documents and in no event will this limit apply to the Contractor's or Owner's obligations to indemnify under GC9.2 – TOXIC AND HAZARDOUS SUBSTANCES, GC9.4 CONSTRUCTION SAFETY & WORKSAFE BC RULES, GC9.5 –MOULD and GC10.3 – PATENT FEES.

GC12.1.3 is deleted in its entirety and replaced as follows:

The obligation of the Contractor to indemnify hereunder shall be inclusive of interest and all legal costs.

GC12.1.4 is deleted in its entirety and replaced as follows:

The Owner and the Contractor shall indemnify and hold harmless the other from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of their obligations described in GC9.2 - TOXIC AND HAZARDOUS SUBSTANCES, GC9.4 CONSTRUCTION SAFETY & WORKSAFE BC RULES, GC9.5 -MOULD and GC10.3 - PATENT FEES

GC12.1.5 is deleted in its entirety.

GC12.1.6 is deleted in its entirety and replaced as follows:

In respect to any claim for indemnity or to be held harmless by the Owner or the Contractor:

- .1 Notice in Writing of such claim shall be given within a reasonable time after the facts upon which such claim is based became known;
- should any party be required as a result of its obligation to indemnify another to pay or satisfy a final order, judgment or award made against the party entitled by this contract to be indemnified, then the indemnifying party upon assuming all liability for any costs that might result shall have the right to appeal in the name of the party against whom such final order or judgment has been made until such rights of appeal have been exhausted.

GC12.1.7 is added as follows:

GC12.1 - INDEMNIFICATION shall govern over the provisions of paragraph 1.3.1 of GC1.3 - RIGHTS AND REMEDIES.

GC12.2 WAIVER OF CLAIMS

GC12.2.1 is deleted in its entirety and replaced as follows:

Waiver of Claims by Owner: As of the date of the Final Certificate for Payment, the Owner expressly waives and releases the Contractor from all claims against the Contractor including without limitation those that might arise from the negligence or breach of Contract by the Contractor except one or more of the following:

- .1 those made in writing prior to the date of the Final Certificate for Payment and still unsettled:
- .2 those arising from the provisions of GC12.1 INDEMNIFICATION or GC12.3 WARRANTY;
- those arising from the provisions of GC9.3 TOXIC AND HAZARDOUS SUBSTANCES AND MATERIALS, GC9.4 CONSTRUCTION SAFETY & WORKSAFE BC RULES, GC9.5 -MOULD and GC10.3 PATENT FEES and those arising from the Contractor bringing or introducing any toxic or hazardous substances and materials to the Place of the Work after the Contractor commences the Work; and
- those arising from the Contractor's actions, errors, omissions or negligence which result in delays or substantial defects or deficiencies in the Work. "Substantial defects or deficiencies" means those defects or deficiencies in the Work which affect the Work to such an extent or in such a manner that all or any part of the Work is unfit for the purpose intended by the Contract Documents.

GC12.2.2 is deleted in its entirety and replaced as follows:

Waiver of Claims by Contractor: As of the date of the final certificate for payment, the Contractor expressly waives and releases the Owner from all claims against the Owner including without limitation those that might arise from the negligence or breach of Contract by the Owner except:

- .1 those made in writing prior to the Contractor's application for Final Payment and still unsettled; and
- those arising from the provisions of GC9.3 TOXIC AND HAZARDOUS SUBSTANCES AND MATERIALS or GC10.3 PATENT FEES.

GC12.2.3 is deleted in its entirety and replaced as follows:

GC12.2 - WAIVER OF CLAIMS shall govern over the provisions of paragraph 1.3.1 of GC1.3 - RIGHTS AND REMEDIES.

GC 12.2.4 is deleted in its entirety and replaced as follows:

The Owner waives and releases the Contractor from all claims referred to in paragraph 12.2.1.4 except claims for which Notice in Writing of claim has been received by the Contractor from the Owner within a period of six (6) years from the date of Substantial Performance of the Work.

GC12.2.5 is deleted in its entirety.

GC12.2.6 is deleted in its entirety.

GC12.2.7 is deleted in its entirety.

GC12.2.8 is deleted in its entirety.

GC12.2.9 is deleted in its entirety.

GC12.2.10 is deleted in its entirety.

GC12.3 WARRANTY

GC12.3.1 is deleted in its entirety and replaced as follows:

The Contractor shall perform the Work in a good and workmanlike manner.

GC12.3.2 is deleted in its entirety and replaced as follows:

The Contractor now warrants that the Work (and all Products) will be free from all defects arising from faulty construction, manufacturing, installation, materials, equipment or workmanship in any part of the Work (or Products) for a period of one (1) year commencing from the issuance of the Certificate of Total Performance of the Work and for any Work and Products warranted by a Subcontractor or Supplier for a period of longer than one (1) year after Total Performance of the Work, the Contractor now warrants that it has fully and effectively assigned such warranty to the Owner and that the Owner may enforce same to the same extent and in the same manner as if the warranty had been issued directly to the Owner by that Subcontractor or Supplier.

GC12.3.3 is deleted in its entirety and replaced as follows:

For the purposes of this GC12.3, the phrase, "defects arising from faulty construction, manufacturing, installation, materials, equipment or workmanship in any part of the Work (or Products)"

- (a) expressly excludes any and all defects arising from or contributed to by the acts or omissions of the Consultant in the design and specification of the Work as set out in the Drawings, Specifications, or other written instructions or directives issued by the Consultant under this Contract, but only to the extent of the Consultant's defective design or specification, and
- (b) expressly includes all defects or deficiencies that arise even if the Work is carried out in a good and workmanlike manner.

GC12.3.4 is deleted in its entirety and replaced as follows:

During the warranty period, the Contractor will promptly repair and correct all defects at no cost to the Owner. If the Contractor fails to repair or correct any defect during the warranty period within ten (10) calendar days of written notice of its existence, the Owner may but is not obligated to make the repairs or corrections itself and the actual out-of-pocket costs of such repairs or corrections made by the Owner will be payable by the Contractor to the Owner within seven (7) calendar days of receiving an invoice from the Owner for same. In the event of an emergency where, in the opinion of the Owner, delay could cause serious loss or damage, or inconvenience to the public, the repairs or corrections may be made without prior notice being sent to the Contractor.

GC12.3.5 is deleted in its entirety and replaced as follows:

Where, pursuant to GC13.1 - Occupancy, the Owner commences the use of the Work and Products for their intended purposes prior to the issuance of the Certificate of Total Performance of the Work, the warranty period will be deemed to commence from the issuance date despite such prior use, but only with respect to those portions of the Work and Products so used by the Owner.

GC12.3.6 is deleted in its entirety and replaced as follows:

Issuance of the Certificate of Total Performance of the Work will not extinguish any of the Contractor's obligations under this Contract and the Contractor will remain liable to perform and complete all Work and carry out all obligations required under this Contract

GC13.1 OCCUPANCY

GC13.1 is added as follows:

The Owner reserves the right to take possession of and use any completed or partially completed portion of the Work, regardless of the time of completion of the Work, providing it does not interfere with the Contractor's Work determined by the Consultant.

GC13.1.2 is added as follows:

Such taking possession or use of such Work or part thereof as described in GC13.1.1 shall not be construed as final acceptance of the Work or any part thereof, or an acknowledgement of fulfillment of the Contract.

END OF SUPPLEMENTARY GENERAL CONDITIONS

SCHEDULE 2 LIST OF SPECIFICATIONS AND DRAWINGS

To Be Inserted Upon Award

The following is the list of Specifications and Drawings referred to in Article A-3:

SCHEDULE 3 SCHEDULE OF PRICES To Be Inserted Upon Award

The Contract Price referred to in Article A-4 of the Agreement includes the following:

SCHEDULE 4 LIST OF SUBCONTRACTORS AND SUPPLIERS To Be Inserted Upon Award

The following are the Subcontractors that the Contractor will use for the Work:

SCHEDULE 5 PROJECT SCHEDULE To Be Inserted Upon Award

(See attached)

SCHEDULE 6 PERFORMANCE AND LABOUR AND MATERIAL PAYMENT BONDS

To Be Inserted Upon Award

(see attached)

SCHEDULE 7 INSURANCE CERTIFICATE

To Be Inserted Upon Award

(see attached)

SCHEDULE 8 OWNER PRE-CONTRACT HAZARD ASSESSMENT FORM

To Be Inserted Upon Award

SCHEDULE 8 CONTRACTOR PRE-CONTRACT HAZARD ASSESSMENT FORM

To Be Inserted Upon Award

SCHEDULE 10 FORCE ACCOUNT LABOUR & EQUIPMENT RATES

To Be Inserted Upon Award