# Confidential

# **Design-Build Agreement**

# **DESIGN-BUILD AGREEMENT**

Royal Columbian Hospital Redevelopment Project

# FRASER HEALTH AUTHORITY

and

# BIRD DESIGN-BUILD CONSTRUCTION INC.

Dated: January 27, 2017

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#### **DESIGN-BUILD AGREEMENT**

**THIS AGREEMENT** dated for reference as of January 27, 2017 (the "Effective Date") is entered into:

#### BETWEEN:

Fraser Health Authority

(the "Authority")

#### AND:

Bird Design-Build Construction Inc.

(the "Design-Builder")

#### WHEREAS:

- A. The Authority has selected the Design-Builder to perform all Work for the Project referred to as the "Royal Columbian Hospital Redevelopment Project", as further described in this Agreement; and
- B. The parties wish to enter into this Agreement to set out their respective rights and obligations.

NOW THEREFORE in consideration of the premises and the mutual obligations contained in this Agreement, the parties agree as follows:

## PART A – DEFINITIONS AND INTERPRETATION

# 1 DEFINITIONS AND INTERPRETATION

- 1.1 In this Agreement, the following words and expressions have the following meanings:
  - "Agreement" means this agreement, including the documents referred to in Section 1.2;
  - "Apprenticeship Policy" has the meaning set out in Schedule 9 Apprenticeship Policy;
  - "Architect" means a professional architect registered and in good standing under the *Architects Act* (British Columbia);
  - "Authority" has the meaning set out on the first page of this Agreement;
  - "Authority's Consultant" means CannonDesign unless replaced in accordance with Section 5.6;
  - "Authority's Representative" has the meaning set out in Section 5.1;

"BC Hydro" means British Columbia Hydro and Power Authority;

"Bonds" has the meaning set out in Section 60.1;

"Bridges/Corridors" has the meaning set out in Schedule 1 - Statement of Requirements;

"Building" has the meaning set out in Schedule 1 - Statement of Requirements;

"Business Day" means a day other than a Saturday, Sunday or statutory holiday in British Columbia;

"Change" means a change in the Work, including any addition, deletion, alteration, revision or substitution:

"Change Directive" means a written instruction referenced as a "Change Directive" executed by the Authority and directing the Design-Builder to proceed with a Change;

"Change Order" means a written document referenced as a "Change Order" executed by the Authority and the Design-Builder and setting out a Change and the value or method of valuation of a Change and any adjustments to the Contract Price and Contract Time;

"Commissioning Plan" has the meaning set out in Section 33.1;

"Confidential Information" means information of a party that the party has designated as confidential at the time of disclosure and which is supplied, or to which access is granted, to or on behalf of the other party (whether before or after the Effective Date), either in writing, or in any other form, directly or indirectly pursuant to discussions with the other party and includes all analyses, compilations, studies and other documents whether prepared by or on behalf of a party which contain or otherwise reflect or are derived from such designated information;

"Construction" means all things, other than Design, necessary to complete the Work;

"Contaminants" means any materials, substances or hazardous wastes, the storage, manufacture, disposal, treatment, generation, use, transport, remediation or release into the environment of which is now or hereafter prohibited, controlled or regulated under the *Environmental Management Act* (British Columbia) and regulations;

"Contract Price" means the price set out in Section 2.1;

"Contract Time" means the time within which the Design-Builder will achieve Substantial Completion as set out in Section 3.1;

"Cooling Degree Days" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Credit Provider" has the meaning set out in Section 12.2;

"Design" means the design for the Project;

"Design and Construction Energy Target" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Design-Builder" has the meaning set out on the first page of this Agreement;

"Design-Builder's Consultant" means Stantec Architecture Ltd. as the principal Architect and coordinating professional and any other architectural or engineering firm or person, including any Architect or Professional Engineer, engaged by the Design-Builder to prepare the Drawings and Specifications, or to otherwise consult to the Design-Builder on the Project;

"Design-Builder's Representative" has the meaning set out in Section 5.2;

"Disclosed Data" means any information, data and documents (including in PLS-CADD or any other electronic format) made available or issued to the Design-Builder or any Subcontractor or other person on behalf of the Design-Builder or any Subcontractor in connection with the Project by or on behalf of the Authority, including any information relating to the Land or the requirements of any governmental authority, whether before or after the Effective Date:

"Dispute" means any disagreement, failure to agree or other dispute between the Authority and the Design-Builder arising out of or in connection with this Agreement, including in respect of the interpretation, breach, performance, validity or termination of this Agreement, whether in the law of contract or any other area of law;

"Drawings" means all drawings for the Project that are prepared by or for the Design-Builder and submitted to the Authority under the Review Procedure and that the Design-Builder is entitled to proceed with under the Review Procedure;

"Effective Date" has the meaning set out on the first page of this Agreement;

"End Date" means the date described in Section 4.1;

"Energy" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Energy Consumption" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Energy Model" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Energy Utility" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Environmental Credit" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Environmental Reports" has the meaning set out in Section 30.1(a);

"Existing Hospital" has the meaning set out in Schedule 1 - Statement of Requirements, and for greater certainty includes the existing heliport;

"Facility" means the buildings, related structures, utility connections, landscaping and other improvements to be constructed by the Design-Builder pursuant to this Agreement;

"FIPPA" means the *Freedom of Information and Protection of Privacy Act* (British Columbia);

"Force Majeure" means labour disputes, strikes, lock-outs, fire, unusual delay by common carriers or unavoidable casualties or, without limiting any of the foregoing, by a cause beyond the Design-Builder's reasonable control, but excludes:

- (i) any event that is the result of breach of this Agreement or Law;
- (ii) economic hardship or lack of financing;
- (iii) equipment failure;
- (iv) unavailability of personnel, labour or Subcontractors;
- (v) unavailability of materials;
- (vi) labour disputes, strikes or lock-outs of the personnel of the Design-Builder or the Subcontractors:
- (vii) delays resulting from adverse weather conditions; and
- (viii) unsuitable or unanticipated Site conditions, including subsurface conditions;

"Future Enabling Civil Works" has the meaning set out in Schedule 1 - Statement of Requirements.

"GST" means the goods and services tax imposed pursuant to Section IX of the Excise Tax Act (Canada);

"Health and Safety Plan" has the meaning set out in Section 31.5;

"Heating Degree Days" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Indemnified Parties" has the meaning set out in Section 58.1;

"Independent Energy Consultant" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Insurance Conditions" means the terms and conditions set out in Schedule 3 – Insurance Conditions:

"Key Individuals" means the persons identified in Schedule 5 – Key Individuals;

"Land" means the lands legally described as New West District, Plan BCP4410 Parcel A, Suburban Block 2;

"Laws" means the common law and any and all laws, statutes, enactments, by-laws, regulations, rules, orders, directives, policies, permits, licences, codes and rulings of any government, and any ministries, agencies, board, commission or tribunal of any government;

"LD Holdback" has the meaning set out in Section 43.1.

"LEED Gold Certification" means the award of a LEED Gold certification from the USGBC under the LEED Rating System;

"LEED Rating System" means USGBC's Leadership in Energy & Environmental Design (LEED) Green Building Rating System;

"Lien Holdback" means the 10% holdback required under the *Builders Lien Act* (British Columbia);

"Megawatt hour" or "MWh" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Non-Targeted Energy Consumption" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Other Contractor" means any person employed by or having a separate contract directly or indirectly with the Authority for work related to the Project, other than the Work;

"Performance Holdbacks" has the meaning set out in Section 43.1;

"Professional Engineer" means a professional engineer registered and in good standing under the *Engineers and Geoscientists Act* (British Columbia);

"Project" means the design, construction, testing and commissioning of the Facility and all other works in accordance with this Agreement;

"Project Binder" has the meaning set out in Section 45.1;

"Project Credits" means any incentive, income, credit, rebate, right, benefit or advantage provided by a governmental authority or industry group relating to energy, design, materials or environmental matters, including means of production of energy, input sources, use of products or materials, efficiencies, type and level of emissions, and compliance with any energy or environmental laws, regulations, rules or orders;

"Project Management Plan" means the management plan that (i) sets out a high level workplan to describe the manner in which the Design-Builder will manage the Project, including to address related matters such as traffic management and communications, and (ii) is prepared by or for the Design-Builder and submitted to the Authority;

"Proposal Extracts" means Schedule 7 – Proposal Extracts;

"PST" means the tax under the *Provincial Sales Tax Act* (British Columbia) and any regulation thereunder, including any transition provisions;

"Quality Management Plan" means the plan for quality management including quality control and quality assurance with respect to the Work, a draft of which is included in the Proposal Extracts, together with such changes to the plan that are prepared by the Design-Builder and submitted to the Authority under the Review Procedure and that the Design-Builder is entitled to proceed with under the Review Procedure;

"Record Drawings" means the as-built Drawings and Specifications that record the completed Facility;

"Review Procedure" means Schedule 2 – Review Procedure:

"Schedule of Values" means the schedule to be provided by the Design-Builder pursuant to Section 40.4 and reviewed by the Authority under the Review Procedure that allocates the Contract Price set out in Schedule 6 – Schedule of Prices over the course of the Project and that is the basis for monthly payments by the Authority for Work properly performed pursuant to this Agreement;

"Site" means the place where the Construction is to be performed on the Land as indicated on the Site Plan, together with, as indicated from time to time, other such areas that the Design-Builder may be permitted to access for purposes of Construction in accordance with a Work Plan pursuant to Section 25.2;

"Site Occupation Date" means the date that is the third Business Day after the Effective Date unless otherwise agreed by the Authority and the Design-Builder;

"Site Plan" means the plan of the Site attached as Appendix 1Q to the Statement of Requirements;

"Site Reports" means the following reports:

- (i) Geotechnical Exploration Report, by EXP Services Inc., dated May 9, 2014; and
- (ii) Geotechnical Exploration Report- Executive Summary, by EXP Services Inc., dated May 9, 2014;

"Site Weather Data" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Specifications" means all construction and other specifications for the Project prepared by or for the Design-Builder and submitted to the Authority under the Review Procedure and that the Design-Builder is entitled to proceed with under the Review Procedure; "Standards" means any and all Laws, professional standards and specifications applicable to the Work, or to work such as the Project, as they are in force from time to time in the latest current version thereof;

"Statement of Requirements" means Schedule 1 – Statement of Requirements;

"Subcontract" means a contract with a Subcontractor;

"Subcontractor" means a person or entity, including the Design-Builder's Consultant, having a contract with the Design-Builder or with a subcontractor of any tier to perform a part or parts of the Work or to supply products or materials for the Work;

"Submittal" means any and all items, documents and anything else required or specified by this Agreement (including by Section 17), and any and all subsequent revisions, amendments and changes thereto, in respect of the Design and the Construction to be submitted to, reviewed, accepted or otherwise processed or considered by the Authority;

"Submittal Schedule" has the meaning set out in Section 1.1 of Schedule 2 - Review Procedure;

"Substantial Completion" has the meaning set out in Section 44.2;

"Substantial Completion Certificate" means the certificate issued to the Design-Builder by the Authority's Consultant upon the achievement of Substantial Completion, as described in this Agreement;

"Substantial Completion Date" means the date that Substantial Completion has been achieved by the Design-Builder, as set out in the Substantial Completion Certificate;

"Target Substantial Completion Date" has the meaning set out in Section 3.1;

"Targeted Energy Components" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Targeted Energy Consumption" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Term" means the period commencing on the Effective Date and ending on the End Date;

"Test Period" has the meaning set out in Section 1.1 of Schedule 8 - Energy;

"Time Schedule" means the general schedule for timing of the Work as set out in the Proposal Extracts and as updated pursuant to Section 7;

"Total Completion" has the meaning set out in Section 44.11;

"Total Completion Certificate" means the certificate issued to the Design-Builder by the Authority's Consultant upon the achievement of Total Completion;

- "Total Completion Date" means the date that Total Completion has been achieved, as set out in the Total Completion Certificate;
- "User Consultation Group" has the meaning set out in Section 4 of Schedule 2 Review Procedure;
- "USGBC Experienced Modellers List" has the meaning set out in Section 1.1 of Schedule 8 Energy;
- "Warranty Holdback" has the meaning set out in Section 43.1;
- "Warranty Period" means the period defined in Section 38.1 during which the Design-Builder is required to repair any deficiencies or defects that arise in the Work;
- "Weather Data" has the meaning set out in Section 1.1 of Schedule 8 Energy;
- "Work" means everything to be undertaken by the Design-Builder under this Agreement;
- "Work Plan" has the meaning set out in Section 25.2; and
- "Workers' Compensation Board" or "WorkSafe BC" means the board constituted pursuant to the *Workers Compensation Act* (British Columbia).
- 1.2 This Agreement includes the following schedules and all sub-schedules, appendices and attachments to those schedules:
  - (a) Schedule 1 Statement of Requirements;
  - (b) Schedule 2 Review Procedure;
  - (c) Schedule 3 Insurance Conditions;
  - (d) Schedule 4 Communication Roles;
  - (e) Schedule 5 Key Individuals;
  - (f) Schedule 6 Schedule of Prices;
  - (g) Schedule 7 Proposal Extracts;
  - (h) Schedule 8 Energy; and
  - (i) Schedule 9 Apprenticeship Policy.
- 1.3 This Agreement will be interpreted according to the following provisions, except to the extent the context or the express provisions of this Agreement otherwise require:

- (a) no rule of law will apply that would construe this Agreement or any part of it against the party who (or whose counsel) drafted, prepared or put forward the Agreement or any part of it;
- (b) the table of contents, headings and sub-headings, marginal notes and references to them in this Agreement are for convenience of reference only, do not constitute a part of this Agreement and will not be taken into consideration in the interpretation or construction of, or affect the meaning of, this Agreement;
- (c) neither the organization of the Statement of Requirements, the Proposal Extracts or any other documents included in this Agreement into divisions, sections and parts, or the arrangement of drawings or specifications included in this Agreement will control the Design-Builder in dividing the Work among Subcontractors or in establishing the Work to be performed by a trade;
- (d) each reference to a Section or Schedule is a reference to a Section of or Schedule to this Agreement;
- (e) a Schedule includes all of the sub-schedules, appendices and other attachments attached to that Schedule;
- (f) each reference to an agreement, document, standard, principle or other instrument includes (subject to all relevant approvals and any other provisions of this Agreement expressly concerning such agreement, document, standard, principle or other instrument) a reference to that agreement, document, standard, principle or instrument as amended, supplemented, substituted, novated or assigned;
- (g) each reference to a statute or statutory provision (including any subordinate legislation) includes any statute or statutory provision which amends, extends, consolidates or replaces the statute or statutory provision or which has been amended, extended, consolidated or replaced by the statute or statutory provision and includes any orders, regulations, by-laws, ordinances, orders, codes of practice, instruments or other subordinate legislation made under the relevant statute:
- (h) each reference to time of day is a reference to Pacific Standard Time or Pacific Daylight Saving Time, as the case may be;
- (i) words importing the singular include the plural and vice versa;
- (i) words importing a particular gender include all genders;
- (k) each reference to a public organization is deemed to include a reference to any successor(s) to such public organization or any organization or entity or organizations or entities which has or have taken over the functions or responsibilities of such public organization;

- (l) unless the context otherwise requires, each reference to "parties" means the parties to this Agreement and each reference to a "party" means any one of the parties to this Agreement, provided however that a reference to a third party does not mean a party to this Agreement;
- (m) all monetary amounts are expressed in Canadian Dollars;
- (n) whenever this Agreement obliges a party (the "Payor") to pay any amount to the other party (the "Payee") in respect of any costs, expenses, fees, charges, liabilities, losses, claims or other sums incurred by the Payee:
  - (i) such obligation will be construed as applying only to so much of such sums as have been properly incurred on an arm's length commercial basis or, where not incurred on an arm's length commercial basis (including when the payment is made to an affiliate of the Payee), so much of them as are proper and reasonable; and
  - (ii) the Payee will, when requested by the Payor, provide supporting evidence of such costs, expenses, fees, charges, liabilities, losses, claims or other sums;
- (o) the Authority will not be imputed with knowledge of any fact, matter or thing unless that fact, matter or thing is within the actual knowledge of any of those of its employees or agents (including the Authority's Representative) who have responsibilities in connection with the conduct of the Work;
- (p) without limiting the extent of its actual knowledge, the Design-Builder will for all purposes of this Agreement be deemed to have such knowledge in respect of the Work as is held (or ought reasonably to be held) by all persons involved in carrying out the Work including the Design-Builder and the Subcontractors (including the Design-Builder's Consultant) and the officers, agents, employees or workers of any of them;
- (q) each requirement for a thing or action to be "in accordance with" or "in compliance with" any standard, code or specification or other requirement or stipulation means that such thing or action is to exceed or at least equal that standard, code, specification or other requirement or stipulation;
- (r) the words "include", "includes" and "including" are to be construed as meaning "include without limitation", "includes without limitation" and "including without limitation", respectively;
- (s) the terms "will", "shall" and "must" are synonymous and when used in relation to the Design-Builder they will be construed and interpreted as an obligation of the Design-Builder;
- (t) the Statement of Requirements includes provisions written in the imperative, and all such provisions will be construed as obligations of the Design-Builder;

- (u) when a party has "discretion", it means that party has the sole, absolute and unfettered discretion, with no requirement to act reasonably or provide reasons unless specifically required under the provisions of this Agreement;
- (v) any consent contemplated to be given under this Agreement must be in writing;
- (w) general words are not given a restrictive meaning:
  - (i) if they are introduced by the word "other", by reason of the fact that they are preceded by words indicating a particular class of act, matter or thing; or
  - (ii) by reason of the fact that they are followed by particular examples intended to be embraced by those general words;
- (x) words or abbreviations which have well-known technical or trade meanings are used in accordance with those meanings;
- (y) the expression "all reasonable efforts" and expressions of like import, when used in connection with an obligation of the Design-Builder, means taking in good faith and with due diligence all commercially reasonable steps to achieve the objective and to perform the obligation, including doing all that can reasonably be done in the circumstances taking into account each party's obligations hereunder to mitigate delays and additional costs to the other party, and in any event taking no less steps and efforts than those that would be taken by a commercially reasonable and prudent person in comparable circumstances but where the whole of the benefit of the obligation and where all the results of taking such steps and efforts accrued solely to that person's own benefit, provided that the foregoing will not require the Authority to:
  - (i) take any action which is contrary to the public interest, as determined by the Authority in its discretion; or
  - (ii) undertake any mitigation measure that might be available arising out of its status as a public body that would not normally be available to a private commercial party;
- (z) the expressions "by the Design-Builder" and "by or through the Design-Builder" and expressions of like import are synonymous and mean by the Design-Builder or by anyone employed by or through the Design-Builder, including the Design-Builder and all Subcontractors and their respective officers, agents, employees and workers;
- (aa) all accounting and financial terms used herein are, unless otherwise indicated, to be interpreted and applied in accordance with GAAP, consistently applied;
- (bb) if the time for doing an act falls or expires on a day that is not a Business Day, the time for doing such act will be extended to the next Business Day;

- each provision of this Agreement will be valid and enforceable to the fullest extent permitted by law. If any provision of this Agreement is held to be invalid, unenforceable or illegal to any extent, such provision may be severed and such invalidity, unenforceability or illegality will not prejudice or affect the validity, enforceability and legality of the remaining provisions of this Agreement. If any such provision of this Agreement is held to be invalid, unenforceable or illegal, the parties will promptly endeavour in good faith to negotiate new provisions to eliminate such invalidity, unenforceability or illegality and to restore this Agreement as nearly as possible to its original intent and effect; and
- (dd) each release, waiver of liability and indemnity in this Agreement expressed to be given in favour of a party is and will be interpreted as having been given in favour of and may be enforced by that party and, in the case of the Authority, by the Indemnified Parties.
- 1.4 All documents forming this Agreement are complementary, and what is required by any one will be as binding as if required by all.
- 1.5 If there is a conflict within the documents forming this Agreement:
  - (a) the provisions establishing the higher quality, manner or method of performing the Work, using the more stringent standards, will prevail, with the intent that the provisions which produce the higher quality with the higher levels of safety, reliability, durability, performance and service will prevail;
  - (b) the order of priority of documents from highest to lowest will be:
    - (i) the part of this Agreement from the first page to the page with the signatures of the persons executing this Agreement;
    - (ii) the schedules (including appendices, sub-schedules and attachments to the schedules), except Schedule 7 Proposal Extracts, in the order in which they are listed in Section 1.2;
    - (iii) Schedule 7 Proposal Extracts;
  - (c) specifications will govern over drawings;
  - (d) drawings of a larger scale will govern over those of a smaller scale of the same date:
  - (e) dimensions shown in drawings will govern over dimensions scaled from drawings; and
  - (f) later dated documents will govern over earlier dated documents of the same type.

# PART B – PRICE, TIME, TERM

# 2 CONTRACT PRICE

- 2.1 The Authority will pay the Contract Price of \$197,509,930 plus applicable GST to the Design-Builder for performance of the Work.
- 2.2 The Contract Price is the entire compensation to the Design-Builder for performance of the Work.
- 2.3 The Contract Price is subject to adjustments as provided in this Agreement.
- 2.4 The Authority will pay the Contract Price to the Design-Builder as provided in this Agreement.
- 2.5 The parties acknowledge that the Future Enabling Civil Works have been included in the Statement of Requirements, but do not form part of the Work unless the Authority exercises the option set out in this Section 2.5. At any time within 120 days of the Effective Date, the Authority in its sole discretion may in writing to the Design-Builder exercise an option to include the Future Enabling Civil Works in the Work. If the Authority exercises such option:
  - (a) the Future Enabling Civil Works will be included in the Work;
  - (b) the Contract Price will be increased by
  - (c) the Design-Builder will within 14 days of the exercise of the option revise the Schedule of Values to include the Future Enabling Civil Works; and
  - (d) the Design-Builder will include the Future Enabling Civil Works in the Time Schedule in the next monthly update the Design-Builder provides to the Authority.

If the Authority does not exercise such option, the Design-Builder will not be required to perform the Future Enabling Works.

2.6 The parties acknowledge that the Design-Builder has proposed an alternative clean agent gas fire suppression solution as described in the Statement of Requirements and the Proposal Extracts with a net effect of an increase in the Contract Price of calculated as an "Add" price to provide a Clean Agent Gas Fire Suppression System of and a "Delete" price for the pre-action sprinkler system in the CCH of .

If the Authority through development of the design determines that the Authority wishes to proceed with such solution, the parties will prepare and execute a Change Order to reflect a Change to include such solution in the Work for a net price increase in the Contract Price of .

# 3 CONTRACT TIME

- 3.1 The Design-Builder will commence the Work within 7 days after the Effective Date and will thereafter diligently perform the Work in accordance with this Agreement and achieve Substantial Completion on or before December 31, 2019 (the "Target Substantial Completion Date") and Total Completion on or before the date that is not more than 60 days after Substantial Completion.
- 3.2 The Design-Builder will perform the Work in compliance with the Time Schedule, as may be modified in accordance with the terms of this Agreement.
- 3.3 If the Design-Builder fails to achieve Substantial Completion on or before the Target Substantial Completion Date and the Authority has not extended the Time Schedule in accordance with this Agreement, the Design-Builder will pay to the Authority by way of liquidated damages and not as a penalty the sum of per day for each and every day after the Target Substantial Completion Date that Substantial Completion is not achieved (or if the Authority has extended the Time Schedule in accordance with this Agreement, such other date established for the Target Substantial Completion Date). The maximum aggregate amount of such liquidated damages will be of the Contract Price. If this Agreement is terminated, the reference in this Section 3.3 to the "Contract Price" will be deemed only for purposes of this Section 3.3 to be the amount to which the Design-Builder would have been entitled if the Design-Builder had properly performed and completed the Work and this Agreement had not been terminated. The liquidated damages will be the Authority's sole claim for damages against the Design-Builder for failure to achieve Substantial Completion by the Target Substantial Completion Date. The liquidated damages will not relieve the Design-Builder from its obligation to complete the Work or from any other duties, obligations or responsibilities of the Design-Builder under this Agreement, and will not limit the Authority's rights to terminate this Agreement for default of the Design-Builder under this Agreement.
- 3.4 The Authority and the Design-Builder agree that the amount in Section 3.3 represents a genuine pre-estimate of the damages and expenses that the Authority is likely to incur for such failure to meet the Target Substantial Completion Date for the Work and both parties expressly agree that such amount is not a penalty. The Authority may, in its discretion, either deduct the daily sums in respect of liquidated damages from the Performance Holdbacks or any amounts payable to the Design-Builder under this Agreement or may require payment thereof by the Design-Builder on demand.

## 4 TERM

- 4.1 With the exception of provisions that are expressly stated to survive the expiry of the Term, this Agreement is effective for the period commencing on the Effective Date and ending on the date (the "End Date") that (i) this Agreement is terminated in accordance with its terms or (ii) all of the following conditions are fulfilled:
  - (a) the Design-Builder and the Authority have performed all obligations required under this Agreement;

- (b) the Total Completion Certificate has been issued in accordance with Section 44.12; and
- (c) the Design-Builder has fulfilled all of its obligations pursuant to Section 38.

# 5 REPRESENTATIVES, AUTHORITY'S CONSULTANT AND KEY INDIVIDUALS

- 5.1 Within 7 days after the Effective Date, the Authority will give written notice to the Design-Builder designating its representative for the purposes of this Agreement (the "Authority's Representative"). The Authority will give written notice to the Design-Builder of any change of the Authority's Representative. The Authority or the Authority Representative may by written notice delegate any or all of the functions of the Authority's Representative to any other person, including for a specified period of time in the absence of the Authority's Representative.
- 5.2 The representative of the Design-Builder for the purposes of this Agreement (the "Design-Builder's Representative") will be the person designated as such in Schedule 5 Key Individuals, unless otherwise agreed by the Authority. The Design-Builder's Representative may by written notice delegate any or all of the functions of the Design-Builder's Representative to any other person, including for a specified period of time in the absence of the Design-Builder's Representative.
- 5.3 The Design-Builder's Representative will represent the Design-Builder at the Site and written instructions given to the Design-Builder's Representative by the Authority will be deemed to have been given to the Design-Builder.

# 5.4 [Intentionally Not Used]

- 5.5 The Authority will engage the Authority's Consultant to provide, without limitation, the following services, duties and responsibilities:
  - (a) determining of amounts owing to the Design-Builder based on the Authority's Consultant's observations and evaluations of the Design-Builder's applications for payment;
  - (b) issuing of certificates of payment;
  - interpreting, in the first instance, of the requirements of this Agreement and the making of findings as to the performance hereunder by both the Authority and the Design-Builder without showing partiality to either the Authority or the Design-Builder, and in no event incurring liability for the result of such interpretations or findings rendered in good faith in such capacity;
  - (d) interpreting and finding, in the first instance, of Disputes;
  - (e) assisting the Authority with advisory team services, including assisting with review of the Design;

- (f) rejecting Work which does not conform to the requirements of this Agreement;
- (g) testing and inspection of the Construction by the Authority's Consultant, whether or not such Construction has been fabricated, installed, or completed;
- (h) determining the dates of substantial performance under the *Builders Lien Act* (British Columbia), Substantial Completion and Total Completion and the issuing of certificates for same;
- (i) verification of the Design-Builder's applications for release of the Performance Holdbacks:
- (j) reviewing any defects or deficiencies in the Work at Substantial Completion and during the Warranty Period and the issuance of appropriate instructions for the correction of same; and
- (k) such other work that may be required by the Authority from time to time and that is acceptable to the Authority's Consultant.

The Authority reserves the right, on notice from the Authority to the Design-Builder, to perform or appoint an alternate advisor or consultant to perform, the services, duties and responsibilities identified in paragraphs (a) and (b) above (including determining amounts owing, evaluating applications for payment and issuing certificates of payment), and similar or ancillary services, duties and responsibilities, and upon any such notice the applicable provisions of this Agreement will be deemed to refer to the Authority or such alternate advisor or consultant in place of the Authority's Consultant.

- 5.6 If the Authority's Consultant's engagement is terminated, the Authority will engage a new Authority's Consultant to provide the Authority's Consultant's services. The Authority will notify the Design-Builder in writing before appointing a new Authority's Consultant and the Authority will not appoint any person to be the new Authority's Consultant to whom the Design-Builder may reasonably object.
- 5.7 Attached as Schedule 5 Key Individuals is a list of Key Individuals that the Design-Builder will utilize in undertaking the Design and Construction as described in that Schedule. Unless agreed by the Authority, no individual will hold more than one position set out in Schedule 5 Key Individuals.
- 5.8 With respect to each of the Key Individuals:
  - (a) The Design-Builder will use all reasonable efforts to retain the Key Individuals to perform the role described in Schedule 5 Key Individuals; and
  - (b) if for any reason a Key Individual resigns or is otherwise unavailable to perform the role described in Schedule 5 - Key Individuals then the Design-Builder will use all reasonable efforts to retain a replacement with similar expertise and experience to the unavailable Key Individual satisfactory to the Authority acting

reasonably, and the Design-Builder will not replace such Key Individual without the Authority's consent, acting reasonably.

- 5.9 Within 10 days of the Design-Builder having knowledge that a Key Individual is or will be unavailable, the Design-Builder will:
  - (a) notify the Authority; and
  - (b) immediately commence the process to retain a replacement prior to the unavailability of such Key Individual or promptly thereafter and will replace the Key Individual no later than 20 Business Days after the unavailability of such Key Individual.
- 5.10 If either the Authority or the Design-Builder reasonably considers that a replacement cannot reasonably be retained within such 20 Business Days, the Design-Builder will deliver to the Authority a reasonable program (set out, if appropriate, in stages) for retaining the replacement. The program will specify in reasonable detail the manner in, and the latest date, by which the replacement will be retained.
- 5.11 The Authority will have 10 Business Days from receipt of the program within which to notify the Design-Builder that the Authority, acting reasonably, does not accept the program, failing which the Authority will be deemed to have accepted the program. If the Authority notifies the Design-Builder that it does not accept the program as being reasonable, the parties will use all reasonable efforts within the following five Business Days to agree to any necessary amendments to the program put forward. In the absence of an agreement within such five Business Days, the question of whether the program (as it may have been amended by agreement) will result in the retainer of a replacement in a reasonable manner and within a reasonable time period (and, if not, what would be a reasonable program) may be referred by either party for resolution in accordance with Part K Dispute Resolution.
- 5.12 The Design-Builder acknowledges that the success of the Project to both the Design-Builder and the Authority is dependent on the retention at all times of the Key Individuals, and that if any of the Key Individuals are not available and are not replaced as required by this Agreement, the Authority will not be obtaining the Design and Construction at the quality and level assumed to be included in the payments to be made to the Design-Builder hereunder and that in addition the Authority may incur costs and expenses.
- 5.13 If either (i) the position of any Key Individual remains unfilled for more than 20 Business Days after the applicable individual Key Individual ceased to hold the position or ceased to perform the functions of that position, or (ii) the Authority has accepted a program under Section 5.11 and the Design-Builder at any time fails to comply with any part of the program:
  - (a) the Design-Builder will pay the Authority's reasonable internal administrative and personnel costs and all reasonable out-of-pocket costs related to any measures the Authority considers are reasonably incurred in relation to the position being

- unfilled, including the costs to ensure that Design-Builder meets its requirements for Design and Construction and for the Authority to review and consider any replacement under this Section 5; and
- (b) the Authority at its election may deem the position of the Key Individual to be a Change (other than the requirements to comply with this Section 5) and for the period of time that the Key Individual position has remained unfilled the Authority will be credited with the amount of the cost (wages, benefits, fees and other costs) that would have been incurred by the Design-Builder and Subcontractors in respect of the Key Individual plus a markup as set out in Section 49.2(b).

# PART C - THE WORK

#### 6 GENERAL

- 6.1 The Design-Builder will perform the Work in accordance with the requirements of this Agreement, including Schedule 1 Statement of Requirements.
- 6.2 The Design-Builder will perform and provide all professional design services, construction administration and construction work and all labour, services, products, materials, tools, water, heat, light, power, transportation, equipment, machinery and other facilities and services and everything else necessary for the performance of the Work.

# 7 TIME SCHEDULE

- 7.1 The Design-Builder will submit for review by the Authority, by no later than 14 days after the Effective Date and, in any event, before the Authority is required to make the first payment, a Time Schedule consistent with the form of Time Schedule included in the Proposal Extracts.
- 7.2 The Design-Builder will ensure that the Time Schedule will be consistent with and meet the Target Substantial Completion Date and the date required for Total Completion and all other applicable requirements of this Agreement including Schedule 1 Statement of Requirements.
- 7.3 The Design-Builder will submit for review by the Authority an updated Time Schedule at intervals of 1 month, reflecting progress to date and including a comparison to the previously submitted Time Schedule, the reasons for any changes from the previous Time Schedule and a forecast to achieving Substantial Completion and Total Completion.
- 7.4 If at any time the actual progress of the Work does not materially conform with the Time Schedule, the Design-Builder will:
  - (a) submit to the Authority a report identifying the reasons for such non-conformity; and

(b) submit to the Authority a revised Time Schedule that meet all applicable requirements of this Agreement and provides for the Work to be pursued diligently to Substantial Completion and Total Completion.

#### 8 CONTROL AND SUPERVISION OF THE WORK

- 8.1 The Design-Builder will effectively direct and supervise the Work using its best skill and attention. The Design-Builder will be solely liable and responsible for:
  - (a) all design and all construction means, methods, techniques, sequences and procedures with respect to the Work; and
  - (b) coordinating all parts of the Work under this Agreement and for coordinating the Work with work of Subcontractors and, in accordance with Section 22.2, with work of Other Contractors,

in accordance with generally accepted management and supervisory practices in British Columbia.

- 8.2 The Design-Builder will have the sole responsibility for the design, erection, operation, maintenance and removal of temporary structures and other temporary facilities and the design and execution of construction methods required in their use. The Design-Builder will engage and pay for Professional Engineers and Architects to perform these functions where required by Law, and in all cases where such temporary facilities and their method of construction are of such a nature that the education, training and qualifications of the Architect or Professional Engineer are required to produce safe and satisfactory results.
- 8.3 The Design-Builder will execute the Work in a continuous and diligent manner, and perform all its obligations in conformance with this Agreement, including the Project Management Plan and the Time Schedule.
- 8.4 Unless otherwise stated in this Agreement, the Design-Builder will perform the Work at the times, in the order of procedure and in the manner and method that the Design-Builder considers appropriate provided such Work is in conformance with this Agreement, including the Project Management Plan, Phasing Plan, Work Plan, Site Plan and the Time Schedule.
- 8.5 The Design-Builder will employ a competent construction manager, and necessary assistants, at the Site at all times during the progress of the Work.
- 8.6 The Design-Builder will employ or cause the Subcontractors to employ a sufficient number of sufficiently skilled workers to perform the Construction in compliance with this Agreement.
- 8.7 The Design-Builder will at all times maintain good order and discipline among its employees engaged on the Work.
- 8.8 Before commencing the Work, the Design-Builder will:

- (a) purchase and deliver the Bonds as set out in Section 60 to the Authority; and
- (b) file with the Authority certificates of all insurance policies and necessary endorsements to comply with the Insurance Conditions.
- 8.9 The Design-Builder will not perform any Construction on the Site prior to the Site Occupation Date and will not commence any Construction until the Design-Builder has submitted a Design for that portion of the Work to be constructed that is in conformance with this Agreement, submitted to the Authority under the Review Procedure and that the Design-Builder is entitled to proceed with under the Review Procedure.
- 8.10 If agreed to in writing by the Authority, the Design-Builder may perform necessary limited investigative and preparatory activities on the Site prior to the Site Occupation Date.
- 8.11 The Design-Builder will comply with the provisions of Schedule 9 Apprenticeship Policy.

# 9 QUALITY MANAGEMENT

- 9.1 The Design-Builder is solely responsible for the quality of the Work and will diligently implement its Quality Management Plan.
- 9.2 The Design-Builder will establish, implement and submit for the review by the Authority, by no later than 30 days after the Effective Date, a Quality Management Plan consistent with the form of Quality Management Plan included in the Proposal Extracts and the requirements of this Section 9. The Design-Builder will perform the Work in accordance with, and meet the requirements of, the Quality Management Plan.
- 9.3 The Quality Management Plan will:
  - (a) meet all applicable requirements of this Agreement;
  - (b) outline the procedures to be implemented to ensure robust and thorough quality control and quality assurance by the Design-Builder and its Subcontractors;
  - (c) clearly indicate the processes, testing, certification and auditing that will be performed to verify all parts of the Work comply with this Agreement;
  - (d) clearly indicate the timing of the elements of the Quality Management Plan and the documentation to demonstrate compliance that will be obtained by the Design-Builder and its Subcontractors and provided to the Authority;
  - (e) include all processes, testing, certification, auditing and documentation reasonably required by the Authority's Consultant; and
  - (f) ensure that the Work will meet the requirements of this Agreement.
- 9.4 The Design-Builder will not commence any Construction until:

- (a) the quality control and quality assurance procedures applicable to that part of the Work have been developed and included in the Quality Management Plan and the Design-Builder is entitled to proceed with the Quality Management Plan in accordance with the Review Procedure; and
- (b) such quality control and quality assurance procedures are fully implemented by the Design-Builder.
- 9.5 The Authority may at any time audit the Quality Management Plan and its implementation and may, at the Authority's expense, carry out independent quality control testing at any time.
- 9.6 Nothing in this Section 9 and no review, audit, inspection, acceptance, comment, approval, action or inaction by the Authority, the Authority's Representative, the Authority's Consultant or any person on behalf of the Authority or by or on behalf of any governmental authority will derogate from or relieve the Design-Builder from its obligations under this Agreement including sole responsibility for the quality of the Work, the Quality Management Plan and implementation of the Quality Management Plan.
- 9.7 The Authority, the Authority's Representative, the Authority's Consultant and other persons designated by the Authority will, subject to the terms of this Agreement relating to health and safety, have access to the Work at all times at the Site and wherever the Work is in preparation or progress and the Design-Builder will provide reasonable facilities for such access.
- 9.8 If any of the Work requires tests, inspections or approvals by this Agreement, or by the written instructions of the Authority or the Authority's Consultant, or by applicable Laws, the Design-Builder will give the Authority reasonable notice of when such Work is ready for review and inspection. The Design-Builder will arrange for and will give the Authority reasonable notice of the date and time of inspections by any governmental authorities.
- 9.9 The Design-Builder will furnish promptly to the Authority, on request, a copy of certificates and inspection reports relating to the Work.
- 9.10 If the Design-Builder covers, or permits to be covered, Work that has been designated for tests, inspections or approvals before such tests, inspections or approvals are made, given or completed, the Design-Builder will, if so directed, uncover such Work, have the inspections or tests satisfactorily completed, and make good the covering work at the Design-Builder's expense.
- 9.11 Subject to Section 9.10, the Authority may order any portion or portions of the Construction to be examined to confirm that such Construction is in accordance with the requirements of this Agreement. If the Construction is not in accordance with the requirements of this Agreement, the Design-Builder will correct the Construction and pay the cost of examination and correction. If the Construction is in accordance with the

- requirements of this Agreement, the Authority will pay all costs incurred by the Design-Builder as a result of such examination and the restoration of the Construction.
- 9.12 If the results of any testing or other aspect of the Quality Management Plan or implementation of the Quality Management Plan disclose that any part of the Work is incomplete or defective in any way, the Design-Builder will immediately complete that part of the Work or correct the defect at its own expense.
- 9.13 If the Authority's Consultant or other representatives of the Authority makes more than one review of any aspect of the Work as a result of such Work being incomplete or defective or reviews more than one test, inspection or approval in respect of any aspect of the Work as a result of such Work being incomplete or defective, the Design-Builder will bear the costs and expenses of the Authority, the Authority's consultant and other representative.
- 9.14 Prior to Total Completion, the Design-Builder will deliver to the Authority all tests and results taken and generated by the implementation of the Quality Management Plan.
- 9.15 The Design-Builder will permit access to the Site and to the Design and the Construction to persons designated by the Authority including persons representing other governmental authorities.

# 10 LEED GOLD CERTIFICATION

- 10.1 The Design-Builder will obtain LEED Gold Certification of the Facility in accordance with the following:
  - (a) The Design-Builder will register the Facility with USGBC.
  - (b) The Design-Builder will, subject to this Section 10, achieve all necessary prerequisites, credits and points under the LEED Rating System required to achieve the LEED Gold Certification and may in its discretion determine which of the credits and points to pursue, except that the Design-Builder will achieve the following LEED credits/points:
    - (i) Energy & Atmosphere Credit Optimize Energy Performance (8 points);
    - (ii) Energy & Atmosphere Credit Enhanced Commissioning (6 points);
    - (iii) Energy & Atmosphere Credit Advanced Metering (1 point);
  - (c) If at any time after the Effective Date, the requirements to achieve LEED Gold Certification under the LEED Rating System change and the Design-Builder is required to comply with such change in order to achieve LEED Gold Certification for the Facility, then the Design-Builder will forthwith notify the Authority of such change and such change will be a Change.
  - (d) The Design-Builder will compile and submit the required documents for LEED Gold Certification.

- (e) If for any reason the Design-Builder fails to achieve a minimum of 15 points for Energy & Atmosphere Credits as required by Section 10.1(b)(i)- (b)(iii) for the Facility within 24 months of the Substantial Completion Date then the Design-Builder will, upon written demand from the Authority, and in addition to any other payment owing under this Section 10.1 immediately pay to the Authority \$250,000 as liquidated damages and not as a penalty.
- (f) If for any reason the Design-Builder fails to obtain LEED Gold Certification for the Facility within 24 months of the Substantial Completion Date then the Design-Builder will, upon written demand from the Authority, and in addition to any other payment owing under this Section 10.1 immediately pay to the Authority \$250,000 as liquidated damages and not as a penalty.
- (g) Upon payment of amounts, if any, owing under this Section 10 the Design-Builder will have no further obligations in respect of obtaining LEED Gold Certification, except to provide the Authority with such information and administrative assistance as the Authority may reasonably require in relation to obtaining LEED Gold Certification, and for greater certainty the failure to obtain LEED Gold Certification will not be a default by the Design-Builder under this Agreement.
- (h) The Authority and the Design-Builder expressly agree that the amounts payable from the Design-Builder in this Section 10.1 are liquidated damages that represent a genuine pre-estimate of the damages and expenses that the Authority is likely to incur for such failure to achieve the LEED credits/points referred to in this Section 10.1 and LEED Gold Certification and both parties expressly agree that such amounts are not a penalty.
- 10.2 As a condition of Substantial Completion, the Design-Builder will deliver to the Authority:
  - (a) a LEED project checklist, generally in accordance with USGBC requirements, together with a written confirmation that, in the Design-Builder's judgment:
    - (i) the LEED credits/points required by Section 10.1(b) and Appendix 1A of the Statement of Requirements will be achieved for the Facility; and
    - (ii) LEED Gold Certification will be achieved for the Facility as required by Section 10;
  - (b) a written opinion from a LEED accredited professional supporting the confirmation described in Section 10.2(a) above;
  - (c) an electronic copy of the LEED Gold Certification submissions that have been made to the USGBC related to the Facility; and
  - (d) an electronic copy of the final peer reviewed Energy Model Report [as defined in Schedule 1 Statement of Requirements] and associated documentation, including

building energy simulation files and any workarounds or calculations performed outside of the energy simulation software.

# 11 ENERGY

- 11.1 The parties will comply with the provisions of Schedule 8 Energy.
- 11.2 The Design-Builder acknowledges that BC Hydro in partnership with Fortis BC will provide to the Authority a rebate or other Project Credits in respect of the Energy Model Report [as defined in Schedule 1 Statement of Requirements] and modelling of the Building, and the Design-Builder will assist the Authority in obtaining such rebate and any other Project Credits, including:
  - (a) registering the Building with all applicable BC Hydro programs;
  - (b) engaging a consultant acceptable to BC Hydro;
  - submitting the Design and obtaining agreement from BC Hydro for the proposed project baseline before commencing the energy modelling;
  - (d) conducting all energy modelling as required by BC Hydro or the Authority;
  - (e) engaging with BC Hydro during the development of design to create a BC Hydro energy compliance checklist and list of proposed energy conservation measures;
  - (f) completing the Work in accordance with the BC Hydro energy compliance checklist and Energy Model Report [as defined in Schedule 1 Statement of Requirements];
  - (g) facilitating any BC Hydro inspection or review of Construction and construction materials; and
  - (h) any other steps necessary to obtaining BC Hydro rebates and other Project Credits.
- 11.3 As a condition of Substantial Completion, the Design-Builder will deliver to the Authority:
  - (a) a BC Hydro energy modelling compliance checklist together with a written confirmation that:
    - (i) the Project has been designed and constructed to maximize available BC Hydro and Fortis BC rebates and other Project Credits; and
    - (ii) all steps have been performed, including providing all required documentation and information to the Authority and BC Hydro, to obtain BC Hydro rebates and other Project Credits (other than those steps that may only be performed by the Authority).

- The Authority acknowledges that BC Hydro rebates and other Project Credits may be received after Substantial Completion.
- 11.4 This Section 11 will not limit any requirements of the Statement of Requirements for energy modelling for any purpose.

# 12 PROJECT CREDITS

- 12.1 The Authority will be entitled to any and all Project Credits related to the Work, the Facility and its operation.
- 12.2 The Design-Builder will, on behalf of the Authority, engage with BC Hydro and Fortis BC (subject to Section 11, USGBC, and any other applicable incentive programs ("Credit Provider") and take all reasonable steps to obtain for the Authority the maximum benefits (funding, rebates, incentives and cost savings) offered by each Credit Provider under such program(s).
- 12.3 Without limitation, the Design-Builder will:
  - (a) meet with Credit Providers at an early stage of the design of the Project;
  - (b) carry out any required studies and modelling;
  - (c) collaborate with each Credit Provider to identify potential improvements to the Facility design and methods of performing the Work that may achieve greater Project Credits; and
  - (d) use all commercially reasonable efforts to maximize available Project Credits through the design and construction of the Facility (to the extent possible while maintaining consistency with the Statement of Requirements).

# 13 PRE-CONSTRUCTION SURVEY

- 13.1 The Design-Builder will conduct a pre-condition survey and post-condition surveys and deliver to the Authority monitoring surveys in accordance with Schedule 1 Statement of Requirements, Section 2.13.4, including the post-condition survey conducted 6 months following Substantial Completion.
- 13.2 The Design-Builder will protect the Work, the Site and property adjacent to the Site from settlement, will be responsible for all settlement caused by the Work by the Design-Builder and the Subcontractors and the Facility from and after the Effective Date and will make good all damage to the Work, the Site and property adjacent to the Site at its own expense or pay all costs incurred by the Authority or others in making good such damage. Nothing in this Section 13.2 limits the responsibility of the Design-Builder to take into account in the Design and Construction possible post-Warranty Period settlement and to take measures to minimize such settlement.

# 14 EQUIPMENT AND FURNISHINGS

14.1 Without limiting the requirements of the Statement of Requirements in respect of equipment and furnishings, the Design-Builder will complete the Design and Construction to integrate and accommodate all equipment and furnishings in the Facility as identified in the Statement of Requirements, including all required electrical and plumbing connections, structural support, seismic restraints and space for efficient access, all to the tolerances and specifications as may be specified and required by the manufacturers or vendors of the equipment (which may be of a higher standard than specified in this Agreement). The Design-Builder will include equipment and furnishings identified in the Statement of Requirements as part of the development of Design under this Agreement.

# 15 REVIEW PROCEDURE

15.1 The Review Procedure will apply to all Submittals and the parties will comply with the requirements of that Schedule.

# 16 GENERAL DESIGN REQUIREMENTS

16.1 The Design-Builder is responsible for the means, methods, techniques, sequences and procedures necessary to properly complete the Design in conformance with this Agreement, including the Project Management Plan and the Time Schedule.

# 16.2 The Design-Builder will:

- (a) ensure that the Work, including the Design, is fully compliant with all requirements of this Agreement (including the Statement of Requirements) and all applicable Laws; and
- (b) perform and complete the Design and the Work so as to provide the completed Project that is fit for the intended uses as described in the Statement of Requirements.

# 16.3 The Design-Builder will:

- (a) cause all portions and aspects of the Drawings and Specifications to be prepared under the direction of, and to be sealed under the professional seal of, the Design-Builder's Consultant;
- (b) cause the Design-Builder's Consultant to confirm to the Authority, under his or her professional seal (if applicable), that in the opinion of the Design-Builder's Consultant:
  - (i) the Drawings and Specifications implement and otherwise conform to the Statement of Requirements;
  - (ii) the Drawings and Specifications implement and otherwise conform to the Proposal Extracts;

- (iii) the Drawings and Specifications have been prepared in accordance with, and substantially comply with, all Standards; and
- (iv) the Design-Builder's Consultant has carried out the general reviews of the progress of the Construction, to the extent necessary, in order to determine to the Design-Builder's Consultant's satisfaction that the Construction is performed in general conformity with the requirements of the Agreement (including the Statement of Requirements), the Drawings and Specifications, Standards and applicable Laws; and
- (c) provide the Authority and all applicable governmental authorities with all letters of professional assurance as required pursuant to applicable Laws.
- The Design-Builder will not construct any part of the Work that is not based on the most recent Drawings and Specifications or that does not meet the Statement of Requirements and other requirements of this Agreement. To the extent that the Drawings and Specifications conflict with, modify or deviate from the Statement of Requirements and other requirements of this Agreement, the Design-Builder will revise the Drawings and Specifications and submit them to the Authority under the Review Procedure.
- 16.5 The Design-Builder will make, or cause the Design-Builder's Consultant to make, any revisions to the Drawings or Specifications as are necessary from time to time due to Changes and, for clarity, the Design-Builder will comply with Section 16.3 with respect to any such revisions.
- 16.6 Nothing in this Section 16, or otherwise in or under this Agreement, makes the Authority, the Authority's Representative, the Authority's Consultant or any other person on behalf of the Authority responsible for the Design of the Project, including compliance of the Drawings and Specifications with the Statement of Requirements and all Standards, and the Design-Builder will, notwithstanding any review or acceptance under the Review Procedure or this Section 16 or other act of the Authority, remain solely liable and responsible for compliance of the Drawings and Specifications with the Statement of Requirements and all Standards.
- 16.7 Without limiting any of the obligations of the Design-Builder under this Agreement, the duties and responsibilities of the Design-Builder with respect to the Design include:
  - (a) review of the documents, reports, drawings, Statement of Requirements and other information provided by the Authority and reporting promptly to the Authority any error, inconsistency or omission the Design-Builder may discover;
  - (b) preparation of a Design that meets the Statement of Requirements, all Standards, all applicable Laws and all terms of this Agreement;
  - (c) the coordination required to integrate all parts of the Design in the Work;
  - (d) preparation of all reports, documents, information, schemes and presentation materials as required by this Agreement;

- (e) inspecting the progress of the Construction in order to determine that the Work is in compliance with the requirements of the Design, Specifications, all Standards and all terms of this Agreement;
- (f) liaising with the Authority and local authorities having jurisdiction as required during the Design and Construction and providing copies of all correspondence with such local authorities to the Authority; and
- (g) providing all required assurances to local authorities having jurisdiction respecting substantial conformance of the Design with all Standards and as may be required for the issuance of or compliance with any permits, licenses or approvals.
- 16.8 The Design-Builder will ensure that the Design-Builder's Consultant and all other Architects, Professional Engineers and other professionals performing professional services related to the Design fulfill their duties and responsibilities to the standard of diligence, skill and care that such persons would customarily provide in accordance with their professional and legal obligations in similar circumstances and in the same general geographic location as the Site. Any failure by any of the Design-Builder's Consultants or other Architects, Professional Engineers or professionals performing professional services in relation to the Design will not relieve the Design-Builder of any responsibility for ensuring that the Work is carried out in conformance with this Agreement including the Statement of Requirements, the Design and all Standards.
- 16.9 If the Design-Builder's Consultant's engagement is terminated, the Design-Builder will engage a new Design-Builder's Consultant to provide the Design. The Design-Builder will notify the Authority in writing before appointing or re-appointing the Design-Builder's Consultant, and the Design-Builder will not appoint any Design-Builder's Consultant to whom the Authority may reasonably object.

# 17 DESIGN PROCESS

- 17.1 Unless otherwise agreed by the Authority, the Design-Builder will submit Drawings and Specifications and supporting information to the Authority for review under the Review Procedure in accordance with the Statement of Requirements, Section 2.8.
- 17.2 Within 30 days after the Effective Date, the Design-Builder will deliver to the Authority the schematic design Drawings and Specifications for the Project.
- 17.3 After review of the Submittals at the pre-tender Drawings and Specifications stage by the Authority, the Design-Builder will finalize and complete the "issued for construction" Drawings and Specifications. The Design-Builder will provide the final "issued for construction" Drawings and Specifications, and any revisions, to the Authority together with a certificate from the Design-Builder's Consultant that the "issued for construction" Drawings and Specifications conform to the requirements of this Agreement and Submittals from the pre-tender Drawings and Specifications stage (including to address comments received from the Authority). The Design-Builder will provide two (2) copies of the electronic versions of the above referenced Drawings and Specifications, revisions

- and certificate on CD or USB in the format outlined in the Statement of Requirements and acceptable to the Authority, acting reasonably.
- 17.4 Without limiting the generality of Section 17.1, each of the Submittals must be formatted in the manner as described in the Statement of Requirements and contain detail that is satisfactory to the Authority.
- 17.5 Each of the Submittals in this Section 17 must contain:
  - (a) 1 set of electronic versions of Drawings at full scale;
  - (b) 1 set of the electronic version of Specifications;
  - (c) 1 set of the electronic version of the supporting material (such as: code analysis, energy cost models, acoustic design reports, correspondence, design narratives etc.);
  - (d) a certificate from the Design-Builder's Consultant that the Drawings and Specifications conform to the requirements of this Agreement; and
  - (e) any other requirements set out in the Statement of Requirements or that the Authority may reasonably request.
- 17.6 The Design-Builder will comply with any requirements set out in the Statement of Requirements and Schedule 2 Design Process in relation to the stages and process for Design, including with respect to meetings, presentations, mock-ups and user groups.
- 17.7 Unless otherwise required by the Authority, the Design-Builder will provide and use, and make available to the Authority and representatives of the Authority, a secure and confidential internet-based system for the storage and exchange of Design documentation in electronic format acceptable to the Authority.

# 18 OWNERSHIP OF DOCUMENTS

- 18.1 The Design-Builder acknowledges and agrees that this Agreement contains intellectual property that is protected by copyright and that this intellectual property is intended to be used solely for the purposes of the Project. The Design-Builder will obtain prior written permission and will require the Design-Builder's Consultant and any other Subcontractors to obtain prior written permission for any other use.
- 18.2 Copyright for the Design and Drawings belongs to the Design-Builder, the Design-Builder's Consultant or other consultants who prepared them.
- 18.3 Plans, sketches, Drawings, graphic representations and Specifications, including computer generated designs, when prepared by the Design-Builder's Consultant or other consultants are instruments of their service and will remain their property whether the construction for which they are made is executed or not.

- 18.4 Submission or distribution of the Design-Builder's Consultants' or other consultants' plans, sketches, Drawings, graphic representations and Specifications to meet official regulatory requirements or for other purposes in connection with the Work is not to be construed as publication in derogation of their reserved rights.
- 18.5 The Authority may retain copies, including reproducible copies, of all plans, sketches, Drawings, graphic representations and Specifications and other material including the Record Drawings. The Design-Builder hereby grants to the Authority a non-exclusive, royalty-free, fully paid, world-wide, perpetual and irrevocable licence to use the Design and any and all such material for any purpose related to the use and ownership of the Facility and the Land (including any renovations, additions or alterations to the Facility), for completion of any Work in the event of termination of this Agreement and for reference purposes in connection with other operations, projects and facilities of the Authority. Such licence may be sublicensed, assigned, at the discretion of the Authority, to any third party who has or may acquire an interest or obligation related to the Facility, including for any facilities maintenance, life cycle repair/replacement or other services to the Authority or others in relation to the Facility. The Design-Builder at the Authority's request, and prior to any payment after such request is made, will deliver to the Authority a consent and acknowledgement signed by the Design-Builder's Consultant confirming such licence.
- 18.6 Models and renderings furnished by the Design-Builder are the property of the Authority.

#### 19 ERRORS IN DESIGN

- 19.1 The Design-Builder is responsible for the Design, including all errors, omissions or deficiencies in the Design.
- 19.2 The Design-Builder will give written notice to the Authority immediately upon becoming aware of any error, omission or deficiency in the Design.
- 19.3 The Design-Builder will remedy at its own cost any error, omission or deficiency identified in the Design, including any resulting error, omission or deficiency in the Design that results in defects or deficiencies in any part of the Construction that has been commenced or completed. The Design-Builder will ensure that such remediation will conform to the requirements of this Agreement.

# 20 LABOUR AND PRODUCTS

- 20.1 Unless otherwise expressly provided in this Agreement, the Design-Builder will provide and pay for all labour, products, materials, tools, equipment, machinery, water, heat, light, power, transportation and all other facilities, things and services (including services for Design) necessary for the performance of the Work in accordance with this Agreement.
- 20.2 All products, materials, equipment and machinery provided will be new unless otherwise expressly specified in this Agreement.

# 21 SUBCONTRACTS

- 21.1 The Design-Builder will preserve and protect the rights of the Authority under this Agreement with respect to any Work to be performed by a Subcontractor, so that the subcontracting does not prejudice the Authority's rights under this Agreement.
- 21.2 The Design-Builder will be responsible to the Authority for the performance of all Subcontractors and will require the Subcontractors to perform their work in accordance with the terms and conditions of this Agreement.
- 21.3 The Design-Builder will be as fully responsible to the Authority for acts and omissions of Subcontractors and of persons directly or indirectly employed by them as for the acts and omissions of persons directly employed by the Design-Builder.
- 21.4 Nothing contained in this Agreement will create any contractual relationship between the Authority and any Subcontractors or their officers, agents, employees or workers.
- 21.5 The Design-Builder will require every Subcontractor to observe the terms of this Agreement so far as they apply to that portion of the Work to be performed directly or indirectly by that Subcontractor. The Design-Builder will require that the terms of this Agreement that are applicable to the portion of the Work to be performed by a Subcontractor will form part of that Subcontract.
- 21.6 The Design-Builder will require that every Subcontract for designers and Subcontractors require such designers and Subcontractors, where requested by either the Authority or the Design-Builder, to attend any Dispute resolution process including discussions, negotiations, mediation or arbitration between the Design-Builder and the Authority; provide frank, candid and timely disclosure of relevant information and documentation; and, bona fide negotiations to resolve such Disputes.

# 22 OTHER CONTRACTORS

22.1 The Authority reserves the right to enter into separate contracts with Other Contractors in relation to the Project or to perform work itself. The Design-Builder will cooperate with and coordinate the Work with all concurrent construction activities by the Authority or Other Contractors on the Site or adjacent to the Site.

# 22.2 The Design-Builder will:

- (a) coordinate the Work with that of Other Contractors and connect the Work with the work of Other Contractors as applicable; and
- (b) ensure that performance of the Work is carried out in accordance with the Time Schedule so that Other Contractors are not delayed in their work.
- 22.3 The Design-Builder will promptly report to the Authority any apparent deficiencies in Other Contractors' work that could affect the Work as soon as they come to the Design-Builder's attention, and will confirm such report in writing promptly.

- Where a Change is required as a result of the coordination and connection of the work of Other Contractors or the Authority with the Work, the Changes will only be made as provided in Section 47.
- 22.5 The Authority will require Other Contractors to coordinate and schedule their construction activities at the Site in accordance with the reasonable instructions of the Design-Builder acting as prime contractor that are applicable to health and construction safety at the Site and that are in accordance with the *Workers Compensation Act* (British Columbia).
- 22.6 The Design-Builder acknowledges that other persons working at the Site may be union or non-union and that the Authority wishes to ensure that labour peace is maintained. The Design-Builder will comply with all requirements of the Authority in respect of labour relations and the Design-Builder will take all reasonable precautions to avoid labour disruptions caused by, or contributed to by the Design-Builder, its Subcontractors or any persons performing the Work. The Design-Builder will bear the sole cost and expense of preventing, avoiding or removing any matter or events giving rise to a labour dispute.
- 22.7 The Authority will assure, where possible, that Other Contractors are bound to equivalent terms as those found in this Section 22.
- 22.8 Claims, disputes, and other matters in question between the Design-Builder and Other Contractors will be dealt with as provided in Section 63 provided the Other Contractors have reciprocal obligations. The Design-Builder will be deemed to have consented to arbitration of any dispute with any Other Contractor whose contract with the Authority contains a similar requirement to Section 63.

# 23 ACCESS TO AND USE OF SITE

- 23.1 Subject to the Site Plan, Project Management Plan and Work Plan and any limitations in this Agreement, the Authority grants to the Design-Builder a licence to enter and be upon the Site from the Site Occupation Date until Substantial Completion, to perform the Work that is required to be performed on the Site.
- 23.2 After Substantial Completion, the Authority will provide access to the Facility and the Site as reasonably required for completion of the Work and rectification of deficiencies including warranty deficiencies, taking into account the Authority's use and occupancy of the Facility and the Site.
- 23.3 After Substantial Completion, the Design-Builder will:
  - (a) coordinate with the Authority to ensure timely completion of the Work and rectification of deficiencies including warranty deficiencies;
  - (b) comply with the Authority's requirements as set out in Section 32 with respect to dust, noise and vibration;

- (c) minimize disruption to the Authority's use and occupancy of the Facility and will comply with all directions of the Authority with respect to timing, security and access for the rectification of deficiencies including warranty deficiencies; and
- (d) comply with the security requirements of the Authority as set out in the Statement of Requirements.

# 23.4 The Design-Builder will:

- (a) limit its activities to the areas within the Site which are identified in the Site Plan, Project Management Plan and Work Plan as required to perform the particular aspect of Work, unless the Design-Builder obtains permission to occupy or use other lands;
- (b) not access any areas of the Site or adjacent properties, including airspace, which it is not permitted to access under the Site Plan, Project Management Plan or Work Plan, without the prior written permission of the Authority; and
- (c) obtain any construction easements and permits that may be required for construction of the Project. When requested to do so by the Design-Builder, the Authority will provide reasonable assistance to the Design-Builder in obtaining such construction easements and permits required for the construction of the Project but, in no circumstance will the Authority be required to incur any costs or make any payments.

## 23.5 The Design-Builder will:

- (a) not remove or disturb trees or other vegetation for purposes of the Work, including for the purpose of providing a lay down area unless the trees and other vegetation are restored with trees and other vegetation of similar size and kind and in accordance with any applicable Laws and the Statement of Requirements. The Design-Builder will obtain any required tree cutting permits; and
- (b) rehabilitate all construction lay down areas to a standard not less than that observed for pre-existing conditions before Site Occupation Date and recorded in the pre-condition survey as described in Section 13.1.
- 23.6 The Design-Builder acknowledges that no parking is available at the Site and agrees that the Design-Builder, the Subcontractors and their respective workers will not park on public streets within a 1km radius of the Site. The Design-Builder will use reasonable efforts to provide temporary parking or other alternate transportation solutions for workers.

## 24 PHASED CONSTRUCTION

24.1 The Design-Builder will carry out the Construction in accordance with the Project Management Plan which will include, among other things:

- (a) all Site preparation;
- (b) Construction of the Facility, including the requirements and timing for construction and commissioning (including all systems and equipment);
- (c) restricting Construction to the Facility until it is completed by the Design-Builder and made available to the Authority for occupancy;
- (d) not carrying out any Construction on the remainder of the Site until the Facility is completed by the Design-Builder and made available to the Authority for occupancy;
- (e) demolition (if any);
- (f) Site landscaping (if any);
- (g) parking, access and traffic flows, including maintaining adequate vehicle, delivery and pedestrian access; and
- (h) compliance with all requirements of this Agreement,

and the Design-Builder will submit the Project Management Plan to the Authority within 30 days after the Effective Date and will not proceed until the Project Management Plan has received the notation "Reviewed" under Schedule 2 - Review Procedure. If the Design-Builder proposes revisions to the Project Management Plan, the Design-Builder will submit the proposed revised Project Management Plan to the Authority and will not proceed with revised Project Management Plan until it has received the notation "Reviewed" under Schedule 2 - Review Procedure.

# 24.2 The Design-Builder will:

- (a) comply with the reviewed Project Management Plan;
- (b) install at least a six foot high chain link fence around the perimeter of the area in which it is performing the Work and such hoarding as may be prescribed in the Statement of Requirements including any hoarding required to protect the public and separate the area of the Work from the other portions of the Site;
- (c) provide video surveillance on all sides of the Site as may be prescribed in the Statement of Requirements;
- (d) perform all Construction activities within the areas of the Site provided in the Site Plan and Project Management Plan, except as approved by the Authority;
- (e) perform all Construction activities without blocking or disrupting vehicle, delivery or pedestrian access, except as may be permitted pursuant to the Project Management Plan;

- (f) cause the Design-Builder's personnel, Construction workers, Subcontractors and suppliers to enter or exit the Site only at the access routes indicated on the Site Plan and Project Management Plan, unless otherwise approved by the Authority;
- (g) not use any explosives without the Authority's consent;
- (h) take reasonable steps to ensure that Construction workers or suppliers do not smoke on any portion of the Site or the Authority's property, which is a nonsmoking site;
- (i) provide a 24-hour hotline (and post the phone number in a prominent location on the Site) for:
  - (i) Authority staff to notify the Design-Builder of any Construction related emergencies; and
  - (ii) neighbours and passers-by to contact the Design-Builder,
  - and the Design-Builder will respond to any phone calls made on the hotline within 1 hour of receipt;
- (j) provide the neighbourhood committee with the name and contact information of a representative to direct their concerns;
- (k) provide a community liaison officer (who may be the same individual as the representative referred to in Section 24.2(j)) to provide a single point of contact regarding construction and development issues;
- (l) before commencing the Construction, prepare and implement in co-operation with the Authority a construction fire safety plan for the Project, which plan will describe emergency access routes to and from the Facility and the Site during an emergency.
- 24.3 If the Design-Builder performs any Construction outside of the area designated at the Site, the Design-Builder will comply with all policies and other requirements of the Authority.

# 25 CONNECTIONS AND INTEGRATION TO EXISTING HOSPITAL

- 25.1 The Existing Hospital must remain fully operational at all times during Construction.
- 25.2 Without limiting the other requirements of this Agreement, the Design-Builder will:
  - (a) co-operate with the Authority to co-ordinate any work required to connect to the Existing Hospital, including the Bridges/Corridors, to minimize the interference to the on-going operation of the Existing Hospital, including the delivery of quality patient care;

- (b) adhere to all Authority policies and procedures relating to the Existing Hospital established from time to time;
- (c) provide to the Authority for review a construction plan for the Bridges/Corridors construction that includes:
  - (i) maintaining vehicle, pedestrian and fire access to the Existing Hospital;
  - (ii) maintaining the relevant portion of the Existing Hospital site clean and free of debris or unnecessary materials;
  - (iii) preventing the introduction onto the Existing Hospital site of any materials or chemicals on to the site which would impact the operation of the site;
  - (iv) restricting vehicular and machinery traffic to only those vehicles and machinery that are essential to, and actively engaged in, performing work directly related to the Bridges/Corridors; and
  - (v) compliance with safety requirements;
- (d) prior to performing any Work in or around the Site that is not indicated in the Site Plan or Project Management Plan or proceeding with any proposed shutdown of Existing Hospital services, and in accordance with the timing requirements set out in Schedule 1- Statement of Requirements, Section 2.13.11, deliver to the Authority and obtain the Authority's approval of a work plan (the "Work Plan") clearly identifying:
  - (i) the activity that may interfere with the operation of the Existing Hospital, including a description of the nature, timing and extent of interference;
  - (ii) the steps the Design-Builder intends to take to minimize the extent of such interference:
  - (iii) the temporary measures that the Authority will be required to take to accommodate the interference;
  - (iv) any specific reporting relationships between the Design-Builder and the staff desirable or required to coordinate the interference; and
  - (v) any expansion of the area of the Site for the purpose of performing the Work indicated in the Work Plan,

unless the Authority, at its discretion, notifies the Design-Builder in writing that a Work Plan will not be required for particular work or a particular shutdown.

25.3 Prior to delivering a Work Plan, the Design-Builder will consult with the Authority and, upon reasonable request, the Authority will make appropriate staff available for such consultation to determine the Work Plan that minimizes interference to the Existing

Hospital. The Design-Builder will not proceed with any work in the Existing Hospital or any proposed shutdown of Existing Hospital services without:

- (a) the Authority's prior written approval of a Work Plan under this Section 25, such approval not to be unreasonably withheld or delayed; or
- (b) advance written notice from the Authority confirming that a Work Plan is not required.

## 26 SIGNAGE

26.1 The Design-Builder may erect signage at the Site during Construction to identify the Design-Builder and Subcontractors provided such signage and its location(s) is acceptable to the Authority, acting reasonably. The Design-Builder will also erect the Authority's signage as required by the Authority. Signage will be printed mesh integrated into the chain link fence referenced in Section 24.2(b).

#### 27 USE OF SITE

- 27.1 The Design-Builder will confine its construction machinery and equipment, tools, storage of materials and products, and the operations of workers to limits indicated in the Site Plan, Project Management Plan or Work Plan or by or under all applicable Laws, and will not unreasonably encumber the Site or other activities on the Site.
- 27.2 The Design-Builder will comply with the Authority's policies, procedures and instructions, including regarding parking, safety, harassment, fires, smoking, signs and advertisements.
- 27.3 The Design-Builder will not load or permit to be loaded any part of the Construction with a weight or force that endangers the safety of the Project.
- 27.4 The Design-Builder will ensure that the Work does not adversely impact the ongoing operations of the Authority, or any person on behalf of the Authority, near or adjacent to the Site, including the operation of the Royal Columbian Hospital.
- 27.5 The Design-Builder will confirm the location of all utilities and ensure that all of its labour force, employees, Subcontractors and any other workers at the Site:
  - (a) are made aware of the location of all utilities in connection with the Project and the importance of avoiding damage to those underground utilities;
  - (b) observe any instructions in connection with those utilities issued by the Authority on behalf of any applicable utility owners; and
  - (c) protect all such utilities.

#### 28 CONDITIONS AT SITE/DISCLOSED DATA

28.1 The Design-Builder acknowledges and agrees that:

- (a) it has received and reviewed a copy of all Site Reports;
- (b) it has had the opportunity to undertake examinations and investigations of the Site in order to satisfy itself as to Site conditions and the impact they could have on any or all of the Work (including Design and Construction), Contract Time and Contract Price;
- (c) only objective geotechnical data provided in the Site Reports can be relied upon for accuracy (subject to any qualifications or conditions set out in such information or this Agreement) but such data cannot be relied upon for sufficiency, relevancy or interpretation;
- (d) neither the Authority, the Authority's Representative, the Authority's Consultant nor any other person on behalf of the Authority is in any way responsible or liable for the completeness, interpretation or accuracy of the Site Reports (except accuracy of objective geotechnical data identified in Section 28.1(c)) or for any variation between Site conditions actually encountered by the Design-Builder and those set out in the Site Reports; and
- (e) subject to Sections 28.4, 29 and 30, the Design-Builder is not entitled to any adjustment in the Contract Time or Contract Price, or to any other remuneration, compensation or damages whatsoever, in any way connected with Site conditions.
- 28.2 It is the Design-Builder's responsibility to have conducted its own analysis and review of the Project and, before the execution of this Agreement, to have taken all steps it considers necessary to satisfy itself as to the accuracy, completeness and applicability of any Disclosed Data upon which it places reliance and to assess all risks related to the Project. Except with respect to the accuracy of objective geotechnical data identified in Section 28.1(c) the Design-Builder will not be entitled to and will not make (and will ensure that no Subcontractor makes) any claim against the Authority or any Indemnified Party, whether in contract, tort or otherwise including any claim in damages for extensions of time or for additional payments under this Agreement on the grounds:
  - (a) of any misunderstanding or misapprehension in respect of the Disclosed Data;
  - (b) that the Disclosed Data was incorrect or insufficient; or
  - (c) that incorrect or insufficient information relating to the Disclosed Data was given to it by any person other than the Authority,

nor will the Design-Builder be relieved from any obligation imposed on or undertaken by it under this Agreement on any such ground.

28.3 The Design-Builder, in order to design the Facility, is responsible for obtaining sufficiently accurate, complete and applicable geotechnical information necessary to properly design a foundation and structure of the Facility that is appropriate for the soils conditions. This may require supplementing the Disclosed Data. Accordingly, the Design-Builder is not entitled to any adjustment in the Contract Time or Contract Price,

- or to any other remuneration, compensation or damages whatsoever, in any way connected with Site conditions, including the matters described in Section 28.2 if it has failed to obtain sufficient geotechnical information necessary to prepare a Design that reasonably anticipates the soils conditions actually encountered.
- 28.4 If the Design-Builder is delayed in performing the Work as a result of inaccuracy in the objective geotechnical data provided in the Site Reports, the Design-Builder's entitlement to an extension of the Contract Time and reimbursement of costs will be determined in accordance with Section 51. If the Design-Builder is not delayed in performing the Work but incurs additional costs as a result of inaccuracy in the objective geotechnical data provided in the Site Reports, adjustment in the Contract Time or the Contract Price will be agreed upon or determined in accordance with Section 48 (Valuation and Certification of Changes).

## 29 ARCHAEOLOGICAL ITEMS

- 29.1 Upon discovery at the Site of any fossils, remains, coins, articles of value or antiquity, including all heritage objects (as defined in the *Heritage Conservation Act* (British Columbia)), the Design-Builder will:
  - (a) immediately notify the Authority;
  - (b) take all steps not to disturb the item and, if necessary, stop Construction to the extent required if performing the Construction would endanger the object or prevent or impede its excavation;
  - (c) take all necessary steps to preserve the item in the same position and condition in which it was found; and
  - (d) comply with all Laws and regulations and all requirements of governmental authorities with respect to such discovery including pursuant to the *Heritage Conservation Act* (British Columbia).
- 29.2 If the Design-Builder is delayed in performing the Work taking steps required under Section 29.1, the Design-Builder's entitlement to an extension of the Contract Time and reimbursement of costs will be determined in accordance with Section 51. If the Design-Builder is not delayed in performing the Work but incurs additional costs as a result of taking steps required under Section 29.1, adjustment in the Contract Time or the Contract Price will be agreed upon or determined in accordance with Section 48 (Valuation and Certification of Changes).

#### 30 CONTAMINANTS AND ENVIRONMENTAL MANAGEMENT

- 30.1 The Design-Builder acknowledges and agrees:
  - (a) it has received and reviewed a copy of the following reports:

- (i) Stage 1 Preliminary Site Investigation- Levelton, dated March 5, 2015, by Levelton Consultants;
- (ii) Ph1 EnviroSiteAss SLR Aug 14, 2014 Business Case, dated October 25, 2013, by SLR Consulting (Canada) Ltd.; and
- (iii) Hazardous Materials Sampling Royal Columbian Hospital Phase 1 Piping Upgrade, dated September 12, 2016 by ACM Environmental Corporation

(the "Environmental Reports");

- (b) it has had the opportunity to undertake examinations and investigations of the Site, including existing buildings and facilities that are the subject of the Work, in order to satisfy itself as to Site conditions and the impact they could have on any or all of the Work (including Design and Construction), Contract Time, and Contract Price;
- (c) it is responsible for all management, removal, abatement, containment and disposal of Contaminants disclosed in or reasonably inferred from the Environmental Reports; and
- (d) neither the Authority nor the Authority's Representative nor any other person on behalf of the Authority is in any way responsible or liable for the completeness, interpretation or accuracy of the Environmental Reports.
- 30.2 The Design-Builder acknowledges that the Authority has made no representation or warranty as to the absence or presence on, in or under the Site of any Contaminant. If the Design-Builder, after commencing the Work, encounters or has reason to believe in the existence of any Contaminant on, in or under the Site, the Design-Builder will at once take all reasonable steps, including suspension of the Work, as necessary to ensure that no person or property suffers injury, sickness, death, damage or destruction as a result of exposure to, or the presence of, any Contaminant, and the Design-Builder will immediately report such Contaminant to the relevant governmental authorities and to the Authority.
- 30.3 If the Design-Builder is delayed in performing the Work due to discovery of Contaminants, other than those disclosed in or reasonably inferred from the Environmental Reports, by taking steps required under Section 30.2, the Design-Builder's entitlement to an extension of the Contract Time and reimbursement of costs will be determined in accordance with Section 51. If the Design-Builder is not delayed in performing the Work but incurs additional costs due to discovery of such Contaminants, other than those disclosed in or reasonably inferred from the Environmental Reports, adjustment in the Contract Time or the Contract Price will be agreed upon or determined in accordance with Section 48 (Valuation and Certification of Changes).

#### 31 SITE SAFETY

- 31.1 The Design-Builder agrees to be the "prime contractor" for the purposes of all applicable occupational health and safety Laws, including the *Workers Compensation Act* (British Columbia), and the Design-Builder is responsible for filing any documents necessary to comply with the *Workers Compensation Act* (British Columbia), including a notice of project. The Design-Builder will comply with all requirements of the *Workers Compensation Act* (British Columbia) and any other occupational health and safety Laws, applicable to the Project, the Work or to the Site. The Authority will comply, and will cause Other Contractors to comply, with occupational health and safety requirements established by the Design-Builder to fulfil the Design-Builder's obligations as "prime contractor".
- 31.2 Prior to commencing the Work and as a condition of receiving payment on Substantial Completion and on Total Completion, the Design-Builder will provide the Authority with satisfactory written evidence of compliance by the Design-Builder with all requirements under the *Workers Compensation Act* (British Columbia), including payments of assessments due under it to the Workers' Compensation Board. Without limiting the foregoing, the Authority may at any time require the Design-Builder to provide evidence of compliance with all requirements under the *Workers Compensation Act* (British Columbia), or payment of assessments due under it to the Workers' Compensation Board, or both.
- 31.3 When required to do so by the Authority, the Design-Builder will provide the Authority with evidence of its compliance and compliance of any or all of its Subcontractors under Section 31.2.
- 31.4 Following the Site Occupation Date, the Design-Builder will coordinate health and safety for the Site for all activities performed by its workers as well as those of Subcontractors, utilities, inspectors, the Authority, Other Contractors and any others performing any activities at the Site.
- 31.5 The Design-Builder will establish, implement and provide for the review by the Authority, by no later than 30 days after the Effective Date, a plan (the "Health and Safety Plan") that meets all applicable requirements of this Agreement with respect to health and safety at the Site and that addresses the safety of the Authority, patients and others who may be on the Site or property in the vicinity of the Site. The Design-Builder will provide safety fencing and hoarding as necessary to limit access to the Site in accordance with the Health and Safety Plan.
- 31.6 The Design-Builder will ensure that its Health and Safety Plan is consistent with, and accommodates any requirements of, the Authority's policies regarding safety and that it specifically addresses the safety of the Authority, patients, visitors and others who may be on the Site or on property in the vicinity of the Site.
- 31.7 The Design-Builder will maintain and comply with the Health and Safety Plan in all material respects during execution of the Work.

31.8 Prior to any person accessing the Site pursuant to this Agreement, the Design-Builder will provide health and safety orientation and information to such person in accordance with its Health and Safety Plan.

# 32 DUST, NOISE AND VIBRATION

- 32.1 The Design-Builder will carry out its Construction to minimize dust and noise and vibration in accordance with Schedule 1 Statement of Requirements, Sections 2.13.5, 2.13.6 and 2.13.7.
- 32.2 Without limiting Section 32.1, the Design-Builder will discuss with the Authority any expected vibration from the Construction activities, will plan operations to minimize disruption to Existing Hospital operations, and will carry out its Construction activities, so that dust, noise and vibration transfer does not unreasonably and adversely Existing Hospital operations or use of properties in the vicinity of the Site, and in accordance with the Statement of Requirements.

## 33 TESTING AND COMMISSIONING

- 33.1 The Design-Builder will prepare and deliver to the Authority's Representative and the Authority's Consultant a detailed plan (the "Commissioning Plan") setting out the testing, commissioning, training and other activities the Design-Builder intends to carry out to satisfy this Section 33 and to achieve Substantial Completion, including:
  - (a) a description of the specific equipment and systems to be tested and commissioned and the associated commissioning requirements, including those to be completed before Substantial Completion;
  - (b) supporting documentation, including as appropriate:
    - (i) design calculations and/or assumptions;
    - (ii) manufacturer's specifications;
    - (iii) identification of all equipment and systems that require or are provided with redundancy or spare capacity and that will include complete successful demonstration in real time under full stress conditions:
    - (iv) identification of post-disaster requirements and protocols for all equipment and systems to be commissioned;
    - (v) a description of all systems which will be tested and commissioned for integration to other systems; and
    - (vi) a description of all systems and equipment where the Authority's clinical staff will be required to develop functional scenarios and to test and witness these functional scenarios:

- (c) a description of the training and education that the Design-Builder intends to provide to the Authority's staff to enable the Authority to properly utilize the equipment and systems installed in the Facility, including all training and education to be completed before Substantial Completion;
- (d) the name of the commissioning agent and the names of other persons to be involved in testing, commissioning and training;
- (e) a description of the Design-Builder's system for managing records of tests, inspections, quality assurance and training;
- (f) a general description of the Design-Builder's transition plans for handover to the Authority of the Facility at Substantial Completion;
- (g) a schedule, related to the Time Schedule, showing:
  - (i) the timing of all testing and commissioning, training and clinical acceptance testing;
  - (ii) for each requirement of Substantial Completion relating to commissioning (described in Section 44), the date upon which the Design-Builder anticipates achieving the requirement;
  - (iii) a matrix of all equipment and systems, including all integrated equipment and systems, and how they integrate with each other, along with an overview of the procedures that will be followed to demonstrate that integration of all equipment and systems has been and will be achieved; and
  - (iv) the timing and development of the functional scenarios with the Authority's clinical staff; and
- (h) any other requirements as set out in Schedule 1 Statement of Requirements.
- 33.2 The Commissioning Plan must be reasonable having regard to the requirements of this Section 33 and Schedule 1 Statement of Requirements, and will be developed and finalized as follows:
  - (a) the Design-Builder will deliver a preliminary draft of the Commissioning Plan to the Authority not less than 12 months before the Target Substantial Completion Date, failing which, the Design-Builder will pay to the Authority by way of liquidated damages and not as a penalty the sum of \$2,500 per week for each week or part thereof that the Design-Builder fails to deliver the preliminary draft. If the Design-Builder has not delivered to the Authority a preliminary draft of the Commissioning Plan by the date falling 9 months before the Target Substantial Completion Date, the liquidated damages applicable under this Section 33.2 will increase to \$5,000 per week for each week or part thereof that the Design-Builder has not delivered to the Authority the aforementioned preliminary draft;

- (b) the Authority will provide its comments, if any, on the preliminary draft of the Commissioning Plan to the Design-Builder within 20 Business Days of receipt of the preliminary draft;
- (c) the Design-Builder will deliver a revised draft of the Commissioning Plan to the Authority not less than 40 Business Days after receipt of the Authority's comments on the preliminary draft, failing which, the Design-Builder will pay to the Authority by way of liquidated damages and not as a penalty the sum of \$5,000 for each week or part thereof after the date falling 40 Business Days after the Authority's comments were received by the Design-Builder until the Design-Builder has delivered to the Authority a revised draft of the Commissioning Plan;
- (d) The liquidated damages in Section 33.2(a) and (c) will be the Authority's sole claim for damages against the Design-Builder for failure to deliver the preliminary draft or the revised draft of the Commissioning Plan by the required dates, as the case may be. The liquidated damages will not relieve the Design-Builder from its obligation to complete the preliminary or revised draft of the Commissioning Plan or from any other duties, obligations or responsibilities of the Design-Builder under this Agreement, and will not limit the Authority's rights to terminate this Agreement for default of the Design-Builder under this The Authority and the Design-Builder agree that the amounts in Section 33.2(a) and (c) represent a genuine pre-estimate of the damages and expenses that the Authority is likely to incur for such failure of the Design-Builder to deliver the preliminary or revised draft of the Commissioning Report, as the case may be, and both parties expressly agree that such amount is not a penalty. The Authority may, in its discretion, either deduct the weekly sums in respect of liquidated damages from the Performance Holdbacks or any amounts payable to the Design-Builder under this Agreement or may require payment thereof by the Design-Builder on demand.
- (e) the Authority will, within 15 Business Days of receipt of the revised draft, advise the Design-Builder whether the Authority accepts the Commissioning Plan, and if the Authority does not accept it the Authority will provide its reasons for such non-acceptance in sufficient detail to allow the Design-Builder to address them;
- (f) if the Authority does not accept the Commissioning Plan, the parties will, acting reasonably, diligently work together with a view to revising the Commissioning Plan to address the Authority's reasons for non-acceptance; and
- (g) if the Authority has not accepted the Commissioning Plan by the date that is 6 months before the Target Substantial Completion Date, the Design-Builder may refer the Dispute for resolution in accordance with Section 63.
- 33.3 The Design-Builder will retain a qualified independent commissioning agent (acceptable to the Authority, acting reasonably), to test and commission all equipment and systems in the Facility to demonstrate to the Authority that the Facility equipment and systems, including all major systems, are fully operational and that the Authority may occupy the Facility for its intended use as described in the Statement of Requirements. The

commissioning agent will prepare a written report to confirm the foregoing and confirm completion of all commissioning activities before Substantial Completion. Testing and commissioning will include, among other things, the following:

- a complete and successful demonstration in real time under full stress conditions for all equipment and systems that require or are provided with redundancy or spare capacity;
- (b) end to end testing and commissioning of key equipment and systems including but not limited to all medical equipment, communication systems (nurse call, wireless communications, intercom, overhead paging, telephones) and door controls; and
- (c) technical, clinical and operational validation or proper functioning of all equipment and systems and all points of integration between such equipment and systems.

# 34 DOCUMENTS AT THE SITE

- 34.1 The Design-Builder will keep at least 1 copy of the following documents at the Site in good order and available to the Authority:
  - (a) a copy of this Agreement;
  - (b) a copy of all development, building, electrical and plumbing permits and inspection reports;
  - (c) up to date and current Drawings and Specifications, including any shop drawings prepared or obtained in respect of the Work;
  - (d) the Project Management Plan;
  - (e) the Time Schedule:
  - (f) the Quality Management Plan;
  - (g) the Work Plan; and
  - (h) the Health and Safety Plan.

# 35 CLEANUP AND FINAL CLEANING OF WORK

- 35.1 The Design-Builder will maintain the Work in a tidy condition and free from the accumulation of waste products and debris, other than that caused by the Authority, Other Contractors or their employees.
- 35.2 The Design-Builder will promptly remove all surplus products, tools, construction machinery and equipment, and any waste and debris.

- 35.3 The Design-Builder will leave the Facility clean and suitable for occupancy and use by the Authority by the Substantial Completion Date in accordance with the Authority's standards of cleanliness.
- 35.4 The Design-Builder will leave the Site clean and suitable for occupancy and use by the Authority by the Substantial Completion Date.
- 35.5 In connection with any Work after the Substantial Completion Date, the Design-Builder will at all times leave the Work and Site clean and suitable for occupancy and use by the Authority but is not required to remove waste caused by the Authority.

## 36 REMEDIAL WORK

- 36.1 The Design-Builder will do all remedial work that may be required to make the several parts of the Work comply with the Statement of Requirements.
- 36.2 The Design-Builder will coordinate the Time Schedule for the Work to ensure that the requirement under Section 36.1 is kept to a minimum.
- 36.3 Remedial work will be performed by specialists familiar with the materials affected and will be performed in a manner to neither damage nor endanger any Work.

#### 37 REJECTED WORK

- 37.1 Defective Work, whether the result of poor design, poor workmanship, use of defective equipment or materials, or damage through carelessness, default or other acts of the Design-Builder or any Subcontractor, and whether incorporated in the Work or not, which has been rejected by the Authority as failing to conform to any of the Statement of Requirements, the Design or the Standards, will be removed promptly by the Design-Builder and replaced and re-executed promptly and properly at the Design-Builder's expense.
- 37.2 If the Design-Builder does not remove such defective Work within the time fixed by written notice by the Authority, the Authority may remove them and store any materials at the expense of the Design-Builder.
- Other Contractor's work destroyed or damaged by such removals or replacements will be made good by the Design-Builder promptly at the Design-Builder's expense.

## 38 WARRANTY

- 38.1 The Design-Builder will promptly correct, at its own expense, any Work that is not in accordance with this Agreement and any defects or deficiencies in the Work that appear during the period of 24 months after the Substantial Completion Date (the "Warranty Period").
- 38.2 The Design-Builder will correct defects or deficiencies at times and in a manner which causes as little inconvenience to the occupants of the Facility and the Authority's operations on and adjacent to the Site as is reasonably possible.

- 38.3 The Authority may carry out, or have others carry out, rectification work at the Design-Builder's cost if:
  - (a) the Authority gives notice to the Design-Builder of a defect or deficiency and the Design-Builder does not correct the defect or deficiency within a reasonable time, not to exceed 14 days, unless the nature of the defect or deficiency is such that it cannot be corrected within such time and the Authority, acting reasonably, agrees to an extension of such time; or
  - (b) the nature of the defect is such that it creates a risk to the health or safety of any occupant or user of the Facility, or risk of damage to the Facility, the environment or any property and the Authority gives notice to the Design-Builder within a reasonable time after the commencement or completion of the rectification work.
- 38.4 If the Authority carries out or has others carry out the rectification work pursuant to Section 38.3 the Design-Builder remains responsible for the Work (including the rectification work).
- 38.5 The Design-Builder will provide to the Authority extended warranties from Subcontractors where required by the Proposal Extracts or other provisions of this Agreement and any other extended warranties provided by Subcontractors.
- 38.6 The Design-Builder will correct, at its own cost, or pay the Authority for any damage resulting from the defects or deficiencies and the corrections required under Section 38.1.
- 38.7 Issuance of the Substantial Completion Certificate and the Total Completion Certificate, and final payment to the Design-Builder, do not relieve the Design-Builder from its responsibility under this Section 38.

#### 39 TITLE AND RISK

- 39.1 Title to the Work will vest only in the Authority. Without prejudice to any of the rights of the Authority under this Agreement, title to the Work or any part of the Work will vest in the Authority at the earliest of:
  - (a) the time that the Work or part of it is at the Site;
  - (b) the time that the Authority has paid for the Work or part of the Work; and
  - (c) the time of installation or construction of the Work or part of the Work.
- 39.2 The Work will remain under the care, custody and control of the Design-Builder and at the risk of the Design-Builder until Substantial Completion or until such earlier date determined by the Authority, and notified in writing to the Design-Builder, for occupancy and use by the Authority. The Design-Builder will exercise all reasonable care to avoid loss of, or damage to, the Work.
- 39.3 The Design-Builder represents and warrants that title to the Work and any part of the Work will pass to the Authority free and clear of all liens, charges and encumbrances.

#### PART D - PAYMENT AND COMPLETION

## 40 APPLICATIONS FOR PAYMENT

- 40.1 The Design-Builder will make applications for payment in accordance with this Section 40.
- 40.2 Applications for payment will be:
  - (a) submitted to the Authority's Consultant;
  - (b) dated the last day of the monthly period;
  - (c) for the value, proportionate to the amount of the Contract Price, of Work performed and material and equipment delivered to the Site to and at the date of submission; and
  - (d) submitted no more than once per month during the performance of the Work.
- 40.3 Pending determination of the final result of any Change, the undisputed value of the Work performed as a result of a Change is eligible to be included with payment applications.
- 40.4 The Design-Builder will submit to the Authority's Consultant for review, at least 14 days before the first application for payment, a Schedule of Values of the various parts of the Work, aggregating to the total amount of the Contract Price and divided so as to facilitate evaluation of applications for payment. The Schedule of Values will be consistent with the information set out in the breakdown of the Contract Price set out in Schedule 6 -Schedule of Prices and made out in such form and supported by such evidence as to its correctness as the Authority's Consultant may reasonably require. The Authority's Consultant will provide comments to the Design-Builder on the Schedule of Values, the Design-Builder will revise the Schedule of Values to address the comments, and so on, until such time as the Authority's Consultant is satisfied with the Schedule of Values. The Schedule of Values will be used as the basis for all applications for payment, unless it is found at any time to be in error, in which case it will be corrected in accordance with the Authority's Consultant's directions. If the Schedule of Values is not finalized prior to an application for payment, the Authority's Consultant may consider the applications for payment on the basis of the Schedule of Values under review and the Authority's Consultant's comments on such Schedule of Values or such other basis as determined by the Authority's Consultant.
- When making applications for payment, the Design-Builder will submit a statement based upon the Schedule of Values. Claims for material and equipment delivered to the Site but not yet incorporated into the Work will be supported by such evidence as the Authority's Consultant may reasonably require to establish the value and their delivery.
- 40.6 Subject to any further information that may be required by the Authority, the application for payment will include:

- (a) the amount applied for in the application;
- (b) the value of Work performed and material and equipment delivered to the Site;
- (c) payment amounts in respect of any Changes to which the Design-Builder is entitled under this Agreement, including under Section 40.3;
- (d) any adjustments to the Contract Price under this Agreement;
- (e) the balance of the Contract Price to complete the Work;
- (f) the amount of Lien Holdback;
- (g) the amount of Performance Holdbacks;
- (h) the amount of any withholding or amount to be released under Section 40.8;
- (i) certification by the Design-Builder that the Project Binder includes documentation current to within at least 30 days prior to the application, including all inspection reports;
- (j) a statutory declaration of an officer or senior management employee of the Design-Builder stating that all accounts for labour, subcontracts, materials, construction machinery and equipment and other indebtedness which may have been incurred by the Design-Builder in performing the Work and for which the Authority might in any way be held responsible have been paid in full, except for amounts properly retained as a holdback or as an identified amount in dispute; and
- (k) a clearance letter from the Workers' Compensation Board indicating that all current assessments due from the Design-Builder and all Subcontractors with subcontracts larger than \$50,000 in value have been paid.
- 40.7 Applications for release of the Lien Holdback will be made under Section 42 (Lien Holdback) and applications for any payment at Substantial Completion or Total Completion will be made under Section 44 (Substantial Completion and Total Completion).
- 40.8 It is a condition of payment that the following, and all documentation, certification and requirements of the following, are complete and up to date as of the date of each application for payment:
  - (a) Health and Safety Plan;
  - (b) Project Management Plan;
  - (c) Time Schedule;
  - (d) Quality Management Plan;

- (e) Project Binder updated as described in Section 45.3;
- (f) issued for construction Drawings and Specifications, commencing with the first application for payment 180 days prior to the Target Substantial Completion Date; and
- (g) Commissioning Plan commencing with the first application for payment 180 days prior to the Target Substantial Completion Date.

The Design-Builder will not be required to re-submit documentation previously provided. The Design-Builder will identify any changes to previously submitted documentation and at the Authority's request submit revised documentation.

The Authority acknowledges that the requirement in Section 40.8(f) for issued for construction Drawings and Specifications does not require the Design-Builder to provide such Drawings and Specifications prior to the date such Drawings and Specifications are required to perform the Work and in accordance with the other provisions of this Agreement.

If any of the foregoing listed items, including the required certification, documentation and certification for each listed item, is not complete and up to date, then the Authority may for each listed item that is not complete and up to date withhold from payment the amount of 3% of the total application for payment. This withholding will apply to each month for which such item or items is not complete and up to date. The applicable withholding will be released with the next monthly payment when such item is completed and up to date. In addition, in relation to the Quality Management Plan if the Authority's Consultant considers that the Design-Builder has not demonstrated that the Work to which the Quality Management Plan relates was satisfactorily performed then the Authority's Consultant may in accordance with Section 40.10 reduce the payment by the amount of such unsatisfactory Work and by the cost of the required processes, testing, certification, auditing and documentation required to ensure compliance with the Quality Management Plan.

- 40.9 Notwithstanding the actual progress, the following will apply:
  - (a) payment of the cost of the Bonds and cost of insurance will be made to the Design-Builder upon presentation of all bonding and insurance documentation required by this Agreement and upon presentation of satisfactory proof of payment of related fees or premiums; and
  - (b) payment for mobilization identified in the Schedule of Values will be a maximum of 1% of the Contract Price and payment will be made in two parts: 25% when the Design-Builder occupies the Site, and 75% when the Design-Builder has established a fully functional site office, construction equipment is on the Site and construction has commenced.
- 40.10 The Authority's Consultant, will, within 10 Business Days of receipt of the Design-Builder's application for payment, either:

- (a) accept the amount set out in the application for payment; or
- (b) adjust the amount of any payment to reflect the Authority's estimate of Work satisfactorily performed as of the date of the application for payment.

If the Authority's Consultant amends the application for payment, the Authority's Consultant will promptly notify the Design-Builder in writing and give reasons for the amendment.

- 40.11 Provided the Design-Builder is not in material default of any provision in this Agreement, the Authority will pay the Design-Builder within 10 Business Days of the Authority's Consultant approving or adjusting the Design-Builder's application for payment in accordance with Section 40.10 and the Schedule of Values.
- 40.12 Whenever any sum of money is recoverable from or payable by the Design-Builder pursuant to this Agreement or is an amount for which the Authority may be liable on account of a default by the Design-Builder, the Authority may deduct or set off such sum from, or may reduce, any amounts then due or that may thereafter become due to the Design-Builder under this Agreement. Without limiting the generality of the foregoing, the Authority may set-off any amounts for liquidated damages set out in this Agreement.

## 41 TAXES AND DUTIES

- 41.1 The Contract Price is inclusive of all applicable customs duties and taxes (including PST), other than GST, in effect at the Effective Date.
- 41.2 The Design-Builder will remit all customs duties and taxes to the applicable governmental authority as and when required by the relevant Law and will without limiting Section 58 (Indemnification), indemnify and hold the Indemnified Parties harmless from and against any customs duties and taxes that the Design-Builder fails to remit as and when due, and from and against any costs and penalties and interest that may be levied against the Indemnified Parties.
- 41.3 Any increase or decrease in costs to the Design-Builder due to changes in taxes or duties that are in effect at the Effective Date of this Agreement will increase or decrease the Contract Price accordingly.
- 41.4 Where an exemption or refund of taxes, customs duties or excise taxes is applicable to this Agreement by way of the Design-Builder filing claims for, or cooperating fully with the Authority and the proper authorities in seeking to obtain such exemption or refund, the Design-Builder will make such applications and provide such cooperation.
- 41.5 Refunds that are properly due to the Authority and have been recovered by the Design-Builder will be promptly refunded to the Authority.

## 42 LIEN HOLDBACK

- 42.1 The Authority will retain and release the Lien Holdback in accordance with the provisions of the *Builders Lien Act* (British Columbia).
- 42.2 For purposes of the *Builders Lien Act* (British Columbia), the Authority's Consultant will be the payment certifier for this Agreement.
- 42.3 For purposes of progressive release of portions of the Lien Holdback in respect of Subcontracts, the Authority's Consultant will be the payment certifier under the *Builders Lien Act* (British Columbia).
- 42.4 The Design-Builder will make application to the Authority's Consultant for certification under the *Builders Lien Act* (British Columbia). As a condition of making any application and as a condition of any certification, the Design-Builder will provide the Authority's Consultant with all information required by the Authority's Consultant.
- 42.5 Without limiting Section 58, the Design-Builder will, at its sole risk and expense, do everything necessary, including through the institution, prosecution or defence of legal proceedings, to promptly discharge from title to the Site any claims of builder's lien, builder's liens or certificates of pending litigation by any Subcontractor or other person claiming under or through the Design-Builder or Subcontractor. becomes aware that any such claim of builder's lien, builder's liens or certificate of pending litigation is threatened or has been registered against title to the Site, the Authority may, withhold out of the Lien Holdback or any other monies payable to the Design-Builder such amounts as the Authority reasonably considers necessary in order to secure the discharge of such claim of builder's lien, builder's liens or certificate of pending litigation. The Authority will cooperate with the Design-Builder in securing the discharge of any of the foregoing, subject to such arrangements being made as the Authority reasonably considers necessary before any such additional holdback monies are paid to any person or into court. This Section 42.5 will not apply to a claim of builder's lien, builder's liens or certificates of pending litigation that arise due to the improper nonpayment by the Authority.

# 43 PERFORMANCE HOLDBACKS

- 43.1 In addition to the Lien Holdback and any amount retained under this Agreement (including for deficiencies under Section 44.4), the Authority will retain:
  - a holdback of 5% of the Contract Price (the "LD Holdback") if at any time after the date that is 12 months before the Target Substantial Completion Date (or if the Authority has extended the Time Schedule in accordance with this Agreement, such other date established for the Target Substantial Completion Date), the Authority's Consultant determines that the Substantial Completion Date is not reasonably likely to occur on or before the Target Substantial Completion Date (or if the Authority has extended the Time Schedule in accordance with this Agreement, such other date established for the Target Substantial Completion Date);

- (b) a holdback of \$500,000 (the "LEED Holdback"); and
- (c) a holdback of \$1,000,000 (the "Warranty Holdback")

(collectively, the "Performance Holdbacks").

- 43.2 The Performance Holdbacks will be calculated as a percentage of the Contract Price and that percentage will be withheld from all payments, subject to Section 43.1(a), due by the Authority. The percentage applicable to payments will be adjusted as required from time to time if the Contract Price is adjusted.
- 43.3 The Authority will release the LD Holdback, less liquidated damages payable by the Design-Builder under Section 3.3 upon the achievement of Substantial Completion.
- 43.4 The Authority will release the LEED Holdback, less liquidated damages payable by the Design-Builder under Section 10, upon the achievement of the points, credits or LEED Gold Certification, as applicable.
- 43.5 The Authority will release the Warranty Holdback, less deductions for amounts owing to the Authority, upon the completion of the Warranty Period and satisfaction of all obligations of the Design-Builder under Section 38.
- 43.6 The Authority may apply the Performance Holdbacks against any amount owing by the Design-Builder to the Authority either prior to the Substantial Completion Date or during the Warranty Period. If any amount is applied against the Performance Holdbacks, the Design-Builder will at the Authority's option, acting reasonably, either pay such amount to the Authority to replenish the Performance Holdbacks then required to be withheld, or the Authority may withhold such amount from the next payment or payments due to the Design-Builder.
- 43.7 The Design-Builder will apply for payment of the applicable Performance Holdback and payment will be made in accordance with Section 40.
- 43.8 The Performance Holdbacks are not held in trust for the Design-Builder, property of the Design-Builder, earned by the Design-Builder or due and payable by the Authority until the conditions for release of the Performance Holdbacks are satisfied.
- 43.9 The Design-Builder as an alternative to the retention of the Performance Holdbacks may propose to the Authority to provide either a clean irrevocable standby letter of credit from a financial institution in Canada in a form acceptable to the Authority, or another form of performance security acceptable to the Authority. If the Authority accepts the proposal, the Authority will upon receipt of the performance security release the Performance Holdbacks to the Design-Builder.

#### 44 SUBSTANTIAL COMPLETION AND TOTAL COMPLETION

44.1 The Design-Builder may make application to the Authority for the Substantial Completion Certificate at any time after it believes it has achieved Substantial

Completion, as described in this Section 44 and has provided to the Authority's Consultant the items as required in Section 44.2(b).

- 44.2 "Substantial Completion" means that all of the following have been achieved:
  - (a) the Authority's Consultant has certified that substantial performance of the Work under the Builders Lien Act (British Columbia) has been achieved;
  - (b) the Facility is ready for use by the Authority or is being used by the Authority for the purpose intended, and the following items have been submitted to the Authority or completed by the Design-Builder:
    - (i) all equipment, mechanical and other systems (including medical gas systems) are in place, commissioned, received required certifications, and are fully operational;
    - (ii) a complete Project Binder, provided that:
      - (A) the commissioning reports may be preliminary; and
      - (B) the inspections, certificates, guarantees and warranties, and certifications may exclude only the items of Work that remain to be completed;
    - (iii) up to date and current Drawings and Specifications;
    - (iv) maintenance and operating tools, replacement parts or products as specified in the Statement of Requirements;
    - (v) a clearance letter from the Workers' Compensation Board indicating that all current assessments due from the Design-Builder and all Subcontractors have been paid;
    - (vi) a statement reconciling all Change Orders and claims under this Agreement with respect to the Work to the date of the application for Substantial Completion;
    - (vii) all approvals necessary for the Project from local authorities having jurisdiction;
    - (viii) an occupancy permit for the Facility as required from local authorities having jurisdiction;
    - (ix) a statutory declaration of an officer or senior management employee of the Design-Builder stating that all accounts for labour, subcontracts, materials, construction machinery and equipment and other indebtedness which may have been incurred by the Design-Builder in performing the Work and for which the Authority might in any way be held responsible have been paid

- in full, except for amounts properly retained as a holdback or as an identified amount in dispute;
- (x) demonstration and training to the Authority's satisfaction of all mechanical and electrically operated devices to the Authority's operating and maintenance staff;
- (xi) all training required by the Statement of Requirements;
- (xii) the LEED Project Checklist and written opinion as required by and in accordance with Section 10.2:
- (xiii) the BC Hydro energy modelling compliance checklist, as required by and in accordance with Section 11.3; and
- (xiv) the requirements of Section 35 (Cleanup and Final Cleaning of Work) have been fulfilled to the extent required by the Substantial Completion Date; and
- (xv) any other conditions specified in this Agreement with respect to achieving Substantial Completion;
- (c) a comprehensive deficiency list, including an estimated value for each item, has been submitted to the Authority's Consultant by the Design-Builder which will be supplemented by the Authority's Consultant acting reasonably; and
- (d) a schedule for completion of all remaining Work has been submitted to the Authority by the Design-Builder.
- 44.3 The Authority's Consultant with input from the Design-Builder's Consultant will, not later than 10 days after the receipt of an application from the Design-Builder for the Substantial Completion Certificate, review and assess the Work to verify that the application and the Work conform to the requirements set out in Section 44.2. Authority's Consultant will, not later than 7 days after the review, notify the Design-Builder of approval, or the reasons for disapproval, of the application. In the event of disapproval, the Design-Builder will rectify all matters that prevent the issuance of the Substantial Completion Certificate and the Authority's Consultant will within 7 days after notice from the Design-Builder of rectification, approve or disapprove of the application, and so on, until such time as the Authority's Consultant determines that Substantial Completion has been achieved. When the Authority's Consultant determines that Substantial Completion has been achieved, the Authority's Consultant will issue the Substantial Completion Certificate. Following the issuance of the Substantial Completion Certificate, the Authority's Consultant, with input from the Design-Builder, will establish a reasonable date for work still to be satisfactorily performed or replaced as specified in the list of deficiencies and for Total Completion. The Design-Builder will be responsible for all costs of any additional reviews by the Authority's Consultant after the first review that are necessary under this Section, where such additional reviews reveal that previously identified deficiencies or non-conformances to the requirements set out in

- Section 44.2 have not been corrected or completed in a manner satisfactory to the Authority's Consultant. Such costs will be deducted from any monies then due to the Design-Builder.
- 44.4 The Authority may retain out of the amount due and owing to the Design-Builder upon Substantial Completion:
  - (a) any sums required by law to satisfy any liens against the Work; and
  - (b) an amount determined by the Authority's Consultant to be equal to 2 times the estimated value of the Work as determined by the Authority's Consultant that is still to be satisfactorily performed or rectified or replaced to address the issues specified in the list of deficiencies; and
  - (c) any amount withheld pursuant to Section 42.5.
- 44.5 No payment will be made to the Design-Builder from amounts withheld under Section 44.4(b) until the completion or rectification or replacement of all the deficiencies and incomplete work specified in the deficiency list.
- 44.6 The Design-Builder will perform the work specified in the list of deficiencies at times and in a manner which causes as little inconvenience to the occupants of the Facility and the Authority's operations on and adjacent to the Site as is reasonably possible.
- 44.7 The Authority may carry out, or have others carry out, the work specified in the list of deficiencies at the Design-Builder's cost if:
  - (a) the Design-Builder does not complete the work by the date established by the Authority's Consultant in Section 44.3 and if the Authority gives notice to the Design-Builder and the Design-Builder does not complete, correct or replace the defect, deficiency or incomplete work within a reasonable time, not to exceed 14 days, unless the nature of the defect, deficiency or incomplete work is such that it cannot be completed or corrected within such time and the Authority, acting reasonably, agrees to an extension of such time; or
  - (b) the nature of the work is such that it creates a risk to the health or safety of any occupant or user of the Facility, or risk of damage to the Facility, the environment or any property and the Authority gives notice to the Design-Builder within a reasonable time after the commencement or completion of the rectification work.
- 44.8 If the Authority carries out or has others carry out the work pursuant to Section 44.7 the Design-Builder remains responsible for the work.
- 44.9 The Design-Builder will correct, at its own cost, or pay the Authority for any damage resulting from the work specified in the list of deficiencies.
- 44.10 The Design-Builder may make application to the Authority for the Total Completion Certificate at any time it believes it has achieved Total Completion as described in

Section 44.11 and has provided to the Authority's Consultant the items as required in Section 44.11(d).

- 44.11 "Total Completion" means that all of the following have been achieved:
  - (a) the entire Work has been performed to the requirements of this Agreement other than:
    - (i) work required to be performed under Section 38 and
    - (ii) achievement of the LEED credits/points and LEED Gold Certification from USGBC under Section 10;
  - (b) all deficiencies specified in the deficiency list(s) have been rectified or completed to the Authority's satisfaction;
  - (c) the requirements of Section 35 have been fulfilled; and
  - (d) the following items have been submitted by the Design-Builder and are acceptable to the Authority:
    - (i) all Submittals, including certified Record Drawings in accordance with Section 45 (Project Binder and Record Drawings)
    - (ii) the final Project Binder, including final commissioning reports, final inspections (structural, environmental, etc.) and deficiency reports;
    - (iii) a statutory declaration of an officer or senior management employee of the Design-Builder stating that all accounts for labour, subcontracts, materials, construction machinery and equipment and other indebtedness which may have been incurred by the Design-Builder in performing the Work and for which the Authority might in any way be held responsible have been paid in full, except for amounts properly retained as a holdback or as an identified amount in dispute, dated at least 45 days after the date of substantial performance under the *Builders Lien Act* (British Columbia);
    - (iv) a written statement of the Design-Builder that all claims for payment for Work done under this Agreement including claims and Change Orders have been presented to the Authority;
    - a clearance letter from the Workers' Compensation Board indicating that all current assessments due from the Design-Builder and all Subcontractors have been paid; and
    - (vi) certification, acceptable to the Authority, that all taxes, employment assistance payments, Canada Pension Plan contributions, duties, royalties and all other monies required to be paid by law or statute have been paid in full.

- 44.12 Upon receipt by the Authority of the Design-Builder's application for the Total Completion Certificate:
  - (a) The Authority's Consultant will, subject to the conditions contained in Section 44.11, and not later than 10 days after the receipt of an application from the Design-Builder for the Total Completion Certificate, review and assess the Work to verify that the application and the Work conform to the requirements set out in Section 44.11.
  - (b) The Authority's Consultant will, and not later than 7 days after the review contemplated in Section 44.12(a), notify the Design-Builder of approval, or the reasons for disapproval, of the application. In the event of a disapproval, the Design-Builder will rectify all matters that prevent the issuance of the Total Completion Certificate and the Authority's Consultant will within 7 days after notice from the Design-Builder of rectification, review and assess the Work and approve or disapprove of the application, and so on, until such time as the Authority's Consultant determines that Total Completion has been achieved.
  - (c) The Design-Builder will be responsible for all costs of additional reviews required for by Section 44.12(b), such costs to be deducted from the monies due to the Design-Builder, where any additional review undertaken by the Authority's Consultant pursuant to this Section reveals that previously identified deficiencies have not been corrected in a manner satisfactory to the Authority's Consultant.

When the Authority's Consultant determines that Total Completion has been achieved, the Authority's Consultant will issue the Total Completion Certificate and certify for payment the monies due to the Design-Builder under this Agreement, less any amount still retained for the Lien Holdback or the Performance Holdbacks, amounts withheld under Section 42.5 or any amount set-off in accordance with this Agreement. The date of Total Completion will be as stated in the Total Completion Certificate.

- 44.13 No payment made by the Authority under this Agreement, or partial or entire use or occupancy of the Work by the Authority, will constitute an acceptance of Work not in accordance with the requirements of this Agreement.
- 44.14 By issuing any certificate, the Authority and the Authority's Consultant do not guarantee, or otherwise become liable or responsible in any way for, the correctness or completeness of the Work, including the Design, and no certificate makes the Authority or Authority's Consultant in any way responsible or liable for adequacy of the Design or for the Work, all of which remain the responsibility of the Design-Builder.
- 44.15 As of the date of Total Completion, the Design-Builder expressly waives and releases the Authority from all claims against the Authority, including those that might arise from the negligence or breach of this Agreement by the Authority, except those made in writing prior to the Design-Builder's application for payment upon Total Completion and still unsettled and those arising in connection with the obligations of either party to be performed after Total Completion.

- 44.16 In the event of conflict between the provisions of this Section 44 and any other Section of this Agreement, the provisions of this Section 44 govern.
- 44.17 Without limiting any other withholding or set-off under this Agreement, the Authority may deduct from any payment to the Design-Builder under this Agreement the amount paid by the Authority to put the Design-Builder into compliance with the Insurance Conditions if the Design-Builder has defaulted in complying with the Insurance Conditions.

#### 45 PROJECT BINDER AND RECORD DRAWINGS

- 45.1 The Design-Builder will prepare and provide to the Authority a set of documentation that is bound in one or more binders (the "Project Binder").
- 45.2 The Project Binder will include the following:
  - (a) commissioning reports satisfactory to the Authority;
  - (b) all inspections, certifications, guarantees and warranties;
  - (c) maintenance manuals and operating instructions;
  - (d) certification by all testing, cleaning or inspection authorities or associations;
  - (e) confirmation of the Design-Builder's Consultant in accordance with Section 16.3(b);
  - (f) copies of all warranties and guarantees from Subcontractors; and
  - (g) all other documentation that is reasonably required by the Authority or by any party on behalf of the Authority to operate and maintain the Facility.
- 45.3 The Project Binder will be updated on a monthly basis with all documentation to Work completed up to the date is updated. The Design-Builder will provide and update 3 copies of the Project Binder, and will include 1 electronic file on a flashdrive, unless directed to use a different format by the Authority, acting reasonably.
- Within 60 days after achieving Substantial Completion, the Design-Builder will provide to the Authority the following:
  - (a) 2 complete sets of paper print Record Drawings, signed and sealed by the Design-Builder's Consultant, showing the as-built Work and identified in bold letters with the words "CERTIFIED AS-BUILT"; and
  - (b) 1 complete copy of the Record Drawings on CD in both BIM (Building Information Modelling) and Adobe PDF format acceptable to the Authority, acting reasonably.

#### 46 CASH ALLOWANCES

- 46.1 This Section 46 applies only if cash allowances are stated in this Agreement.
- 46.2 The Contract Price includes cash allowances, if any, stated in this Agreement. The allowances will be expended, if at all, only as the Authority authorizes. The scope of work or costs included in such cash allowances will be as described in this Agreement.
- 46.3 Cash allowances cover the net cost to the Design-Builder of services (including design services), materials, products, construction machinery and equipment, freight, unloading, handling, storage, installation and other expenditures authorized by the Authority that are incurred in performing the work stipulated under the cash allowances but do not include GST payable by the Authority to the Design-Builder.
- 46.4 The Contract Price, and not the cash allowances, includes the Design-Builder's overhead and profit in connection with such cash allowances.
- Where the actual costs expended by the Design-Builder for work under a cash allowance exceed the amount of the cash allowance, the Design-Builder will be compensated for any excess incurred and substantiated plus an amount for overhead and profit as set out in Section 49.2(b). Where the actual costs expended by the Design-Builder for work under a cash allowance is less than the amount of the cash allowance, the Authority will be credited for the unexpended portion of the cash allowance, but not for the Design-Builder's overhead and profit on such amount. Multiple cash allowances will not be combined for the purpose of calculating the foregoing.
- 46.6 The Contract Price will be adjusted to provide for any difference between the amount of each cash allowance and the actual cost of the work under that cash allowance.
- 46.7 The value of the Work performed under a cash allowance is eligible to be included in the monthly applications for payment.
- 46.8 The Design-Builder and the Authority will jointly prepare a schedule that shows when the Authority, through the Authority's Consultant, must authorize the ordering of items called for under cash allowances to avoid delaying the progress of the Work.

# **PART E – CHANGES**

#### 47 CHANGES

- 47.1 The Authority, without invalidating this Agreement, may require Changes, with the Contract Price and Contract Time adjusted in accordance with Section 48. The Authority may issue any Change Order or Change Directive, which can include a stop Work order or resume Work order, to the Design-Builder's Representative or to any other person authorized by the Design-Builder to receive a Change Order.
- 47.2 No Change will be made without a Change Order or Change Directive from the Authority.

- 47.3 The Design-Builder will not be entitled to a Change Order or Change Directive, or to any adjustments to the Contract Price or the Contract Time, for any Change for which the Design-Builder has not, prior to commencing the performance of a Change, obtained from the Authority a Change Order or Change Directive except where expressly allowed in this Agreement at Sections 28.4, 29.2 and 30.3.
- 47.4 The Authority may, at any time, require the Design-Builder to assess the impact of a proposed Change on the Contract Price and the Contract Time and the Design-Builder will provide the Authority with such assessment within 10 days after the Authority's request or such other time as may be agreed by the Authority, acting reasonably.

## 48 VALUATION AND CERTIFICATION OF CHANGES

- 48.1 The value of any Change will be determined by one or more of the following methods:
  - (a) by estimate and acceptance of a lump sum; or
  - (b) by unit prices or fee rates agreed upon (and which may include a maximum upset price).
- 48.2 The following process will be followed for Changes:
  - (a) where a Change is proposed or required by the Authority, the Design-Builder will promptly, and in any case within 10 days after the Change is proposed or required by the Authority, present to the Authority its claims for any adjustment to the Contract Price or the Contract Time that arise from the Change;
  - (b) where the Design-Builder claims a Change in Contract Price, the Design-Builder will provide a full breakdown of labour, material and other cost information;
  - (c) where the Authority and Design-Builder agree to the Change, including adjustments in the Contract Price and Contract Time, or to the method to be used to determine the adjustments, such Change will be effective when recorded in a Change Order; and
  - (d) the value of the Work performed as the result of a Change Order will be included in payment applications.
- 48.3 In the case of Changes to be paid for under Section 48.2(c), the form of presentation of costs and methods of measurement will be agreed to by the Authority and the Design-Builder before proceeding with the Change. The Design-Builder will keep accurate records of quantities or costs as agreed upon and will present an account of the costs of the Change, together with vouchers where applicable, at least once each month during performance of the Change, and will present a final account upon completion of the Change.
- 48.4 If the methods of valuation, measurement and value of any Change or any adjustment to the Contract Time cannot be promptly agreed upon, and in any case within 10 days after

the proposed Change, and the Change is required by the Authority in writing to be proceeded with, then the Change will be performed by the Design-Builder and the value of the Change and adjustment to the Contract Time will be determined in accordance with the Dispute resolution process described in Section 63.

48.5 It is intended in all matters involving Changes that both the Authority and the Design-Builder will act promptly and in accordance with the times set out in this Section 48.

## 49 DETERMINATION OF COST

- 49.1 Subject to Section 49.2 whenever it is necessary for the purposes of this Agreement to determine the cost of a Change, the cost will be the amount agreed upon by the Design-Builder and the Authority within a reasonable time after the issue arises in any given instance.
- 49.2 If the Design-Builder and the Authority cannot agree as to the cost of the Change as contemplated in Section 49.1, the sole cost to which the Design-Builder will be entitled for the Change will be equal to the aggregate of:
  - (a) all reasonable and proper amounts actually expended by or legally payable by the Design-Builder in respect of labour, equipment or material (supported by invoices, purchase orders, timesheets and other customary industry documentation) that are directly attributable to the subject matter of the Change and that are within one of the classes of expenditures described in Section 49.3; plus
  - (b) to cover other costs, including overhead and profit, the following applicable markup on the amounts charged pursuant to Section 49.2(a):
    - (i) 5%, when the expenditure is a payment to a Subcontractor pursuant to Section 49.3(a); or
    - (ii) 10% when the Design-Builder performed the Change.
- 49.3 Classes of expenditure that are allowable (all without additional markups except as otherwise noted in Section 49) for the purposes of Section 49.2 are:
  - (a) payments to Subcontractors, including a maximum aggregate markup of 10% on the direct labour, equipment and material costs of the Subcontractors who directly perform the Change;
  - (b) wages, salaries and reasonable traveling expenses of employees of the Design-Builder while they are actually and properly engaged on the Work, other than wages, salaries, bonuses, reasonable living and travelling expenses of personnel of the Design-Builder generally employed at the head office, or at a general office, of the Design-Builder unless such personnel is engaged at the site of the Work, with the approval of the Authority;

- (c) payments for materials necessary for and incorporated in the Work or necessary for and consumed in the performance of the Work;
- (d) payment for equipment necessary for and incorporated in the Work;
- (e) payments for tools, other than tools customarily provided by tradespersons, necessary for and used in the performance of the Work;
- (f) payments for preparation, inspection, delivery, installation, commissioning and removal of equipment and materials necessary for the performance of the Work;
- (g) assessments payable under any statutory scheme relating to workers compensation, unemployment insurance or holidays with pay;
- (h) payments for renting equipment (but not tools) and allowances for equipment (but not tools) owned by the Design-Builder, necessary for the performance of the Work, provided that such payments or allowances are reasonable or have been agreed to by the Design-Builder and the Authority; and
- (i) other payments, made with the prior approval of the Authority, that are necessary for the performance of the Work, as determined by the Authority.
- 49.4 If the Design-Builder and the Authority cannot agree as to the cost of labour, equipment or material as contemplated in Section 49.1, and the Authority considers that a Change or series of related Changes may exceed \$50,000, the Authority may require the Design-Builder, and the Design-Builder will, obtain a minimum of 3 competitive quotations or tenders for all or any part of such Change or Changes as directed by the Authority.
- 49.5 The applicable markup set out in this Section 49 will apply to any credit to the Authority for reductions in the costs relating to a Change. Where both increases and reductions in costs relate to a Change, the applicable markup will apply to the net increase or reduction in costs.

#### 50 CHANGE DIRECTIVE

- 50.1 The Authority may issue a Change Directive to the Design-Builder directing the Design-Builder to proceed with a Change. The Design-Builder will proceed with the Change and the valuation and adjustments to the Contract Price and the Contract Time will be made as soon as reasonably possible after the implementation of the Change in the same manner as a Change for which a Change Order would be issued under this Agreement.
- 50.2 The Authority may issue Change Directives at any time, including prior to commencing the process for a Change Order or if there is a Dispute in relation to a Change or Change Order (including a Dispute as to whether there is a Change).

#### PART F – DELAYS

## 51 DELAYS

- 51.1 If the Design-Builder is delayed in performing the Work as a direct result of a failure of the Authority to provide access to the Site, or a breach by the Authority of the terms of this Agreement or by an order issued by any court or public authority having jurisdiction (providing such order was not issued as the result of any act or fault of the Design-Builder or a Subcontractor), or the events referred to in Sections 28.4, 29.2 or 30.3, then:
  - (a) the Contract Time will be extended for such reasonable time, taking into account the critical path as agreed by the Authority and the Design-Builder, acting reasonably, and the Design-Builder will be reimbursed for any costs directly incurred by it as the result of such delay, determined in accordance with Section 49; or
  - (b) if the Authority determines that the Target Substantial Completion Date can still be met and requests in writing that the Design-Builder accelerate the Work, the Design-Builder will accelerate its efforts to meet the Target Substantial Completion Date as directed by the Authority. The Design-Builder will be reimbursed for all reasonable and direct costs plus the markup set out in Section 49.2(b) incurred by it as a result of undertaking such acceleration efforts.
- 51.2 If the Design-Builder is delayed in performing the Work by an event of Force Majeure then:
  - (a) the Contract Time will be extended for such reasonable time taking into account the critical path, as agreed by the Authority, and the Design-Builder acting reasonably; or
  - (b) if the Authority determines that the Target Substantial Completion Date can still be met and requests in writing that the Design-Builder accelerate the Work, the Design-Builder will accelerate its efforts to meet the Target Substantial Completion Date as directed by the Authority. The Design-Builder will be reimbursed for all reasonable and direct costs plus the markup set out in Section 49.2(b) incurred by it as a result of undertaking such acceleration efforts.

Except as provided in Section 51.2(b) for acceleration of the Work required by the Authority, the Design-Builder will not be entitled to any costs incurred in relation to the Force Majeure or delays arising from the Force Majeure.

51.3 If the Design-Builder is delayed in the performance of the Work for any reason other than that for which an extension of time is permitted under this Section 51 or if the Design-Builder does not perform the Work substantially in accordance with the Time Schedule to meet the Target Substantial Completion Date, the Design-Builder will at its cost accelerate the Work to meet the Target Substantial Completion Date.

- The Design-Builder is not entitled to any extension of time or any reimbursement of costs 51.4 for delay under this Section 51 unless written notice is given to the Authority not later than 7 days after the date that the Design-Builder becomes aware of the event causing the delay. In the case of a continuing cause of delay only one notice is necessary. The notice will include the reason for the delay, the justification under this Agreement for the claim and an estimated value for the claim including all impacts of the delay and all steps taken or reasonably available to mitigate the delay and impact. The Design-Builder will provide a full, detailed, and organized account of the delay and amount claimed, including any supporting information or documentation, as required by the Authority or Authority's Consultant, before any delays or impacts will be considered. information and documentation must be presented promptly to the Authority, and in any event, no later than 30 days or such later date as the parties may agree, after the date on which the Design-Builder delivered notice, and in the event of a continuing delay such information and documentation must be updated every 30 days. No such account or update will be deemed to extend the time for delivery of notice, or revive a claim that has been waived. The Design-Builder waives any claim for extension of Contract Time or adjustment to the Contract Price, or any other compensation, expenses, loss or damages incurred as the result of a delay unless the Design-Builder provides such notice of the delay within the time period specified and provides the account of the delay and amount claimed and all required updates within the time periods specified.
- 51.5 In the case of any delay under Section 51.1 or Section 51.2 the Design-Builder will use all reasonable efforts to mitigate the costs and impacts of the delay including removing the cause of the delay as promptly as practicable such that the Time Schedule is maintained and that acceleration efforts, if requested by the Authority, are minimized.

## PART G – SUSPENSION AND TERMINATION

## 52 NON-DEFAULT SUSPENSION/TERMINATION

- 52.1 Notwithstanding that the Design-Builder may not be in default of the terms of this Agreement, if conditions arise which in the Authority's reasonable opinion make it necessary, the Authority may suspend performance of the Work or terminate this Agreement by giving 5 days' written notice to that effect to the Design-Builder and the suspension or termination is effective in the manner specified in the notice.
- 52.2 Without limiting Section 52.1, the Authority may, if it determines that there is an emergency, by notice to the Design-Builder, do either or both of the following:
  - (a) suspend the Work whenever in its opinion such suspension may be necessary to ensure the safety or life of others or of the Work or neighbouring property; or
  - (b) make Changes, and order, assess and award the cost of such Changes that are extra to the Contract Price in accordance with Section 48 and Section 49 as determined to be necessary.

- 52.3 The Authority will within 2 Business Days after a Change under Section 52.2(b) confirm in writing any Change instructions and if a Change has been performed by order of the Authority, the Design-Builder retains its right to claim the value of such Change.
- 52.4 The Design-Builder upon receiving notice of suspension or termination from the Authority will immediately suspend all operations except those, which, in the Design-Builder's reasonable opinion, are necessary to ensure the safety of personnel and the public or for the care and preservation of the Work and materials. Subject to any directions in the notice of suspension or termination, the Design-Builder will discontinue ordering materials, will not enter into any further Subcontracts (except such Subcontracts as are necessary for the safety of personnel or for the care and preservation of the Work) and will make every reasonable effort in the event of termination to cancel existing Subcontracts and orders on the best terms available.
- 52.5 During the period of suspension the Design-Builder will not remove from the Site any of the Work, or any material, without the prior written consent of the Authority.
- 52.6 If the period of suspension is 30 days or less, the Design-Builder, upon the expiration of the period of suspension, will resume the performance of the Work and will be paid for all costs reasonably incurred by the Design-Builder in complying with the suspension, determined in accordance with Section 49 and for costs reasonably incurred for acceleration of the Work so that Substantial Completion is achieved by the Target Substantial Completion Date where the Authority requires such acceleration by written notice to the Design-Builder. If the Authority does not require the acceleration of the Work, or if it is not possible for the Design-Builder, using all reasonable efforts, to achieve Substantial Completion by the Target Substantial Completion Date despite an intended acceleration of the Work, the Authority and the Design-Builder will, acting reasonably, agree on a new Target Substantial Completion Date.
- 52.7 If the period of suspension is greater than 30 days and, before 120 days after the date of the notice of suspension, the Authority and the Design-Builder agree to continue with and complete the Work, the Design-Builder will resume operations and complete the Work in accordance with any terms and conditions agreed upon by the Authority and the Design-Builder and the Design-Builder will be paid for all costs reasonably incurred by the Design-Builder in complying with the suspension, determined in accordance with Section 49.
- 52.8 If the period of suspension is greater than 30 days and the Authority and the Design-Builder do not agree to continue with and complete the Work, or they fail to agree on the terms and conditions upon which the Design-Builder is to resume operations and complete the Work, before 120 days after the date of the notice of suspension, this Agreement will be deemed to have been terminated.

- 52.9 If this Agreement is terminated pursuant to this Section 52:
  - (a) the Authority will pay the Design-Builder:
    - (i) in accordance with this Agreement, for all Work performed and for all of the Design-Builder's obligations under Subcontracts that it was unable to cancel, or asked by the Authority not to cancel, less any payments made by the Authority prior to termination; and
    - (ii) all costs reasonably incurred by the Design-Builder in complying with the suspension or termination order, determined in accordance with Section 49, less any costs already paid to the Design-Builder pursuant to Section 52.6; and
  - (b) the Authority will be entitled to:
    - (i) take possession of the Work or any part of the Work;
    - (ii) take possession of the Drawings and Specifications and make use of them in accordance with the rights granted under this Agreement; and
    - (iii) finish the Work or any part of the Work by whatever reasonable method the Authority may consider expedient.
- 52.10 The Design-Builder's obligations as to quality, correction and warranty of any Work performed continue in force after termination under this Section 52.
- 52.11 The Design-Builder, by giving written notice to the Authority, may suspend performance of the Work to the extent the Work is stopped for a period in excess of 30 days by an order of any court or public authority having jurisdiction through no act or fault of the Design-Builder or of anyone employed by it.

#### 53 DEFAULT AND TERMINATION OF AGREEMENT

- 53.1 The Authority may give written notice to the Design-Builder of default under this Agreement if the Design-Builder:
  - (a) is adjudged bankrupt, makes a general assignment for the benefit of creditors, or a receiver is appointed on account of its insolvency, or fails to make payment to creditors when payment is due;
  - (b) abandons the Work:
  - (c) breaches a material term of this Agreement;
  - (d) makes a material misrepresentation of a representation or warranty set out in this Agreement;

- (e) has delivered a statutory declaration in support of application for a payment under this Agreement that was false or materially inaccurate; or
- (f) has made an assignment of this Agreement without the required consent of the Authority.
- 53.2 If a default referred to in Section 53.1 occurs, other than a default referred to in Section 53.1(a) or 53.1(b), the Design-Builder will remedy the default within a 7 day rectification period after the notice given under Section 53.1. If the nature of such default is that it cannot be remedied within such 7 day period, the Design-Builder will within such 7 day period provide the Authority with a schedule acceptable to the Authority for remedying the default and the Design-Builder will remedy the default in accordance with that schedule.
- 53.3 If a default referred to in Section 53.1(a) or 53.1(b) occurs or if the Design-Builder fails to remedy any other default within the rectification period described in Section 53.2 or in accordance with the schedule acceptable to the Authority, the Authority may without prejudice to any other right or remedy exercise any or all of the following:
  - (a) suspend all or part of the Work;
  - (b) terminate the Design-Builder's right to continue with the Work in whole or in part;
  - (c) remedy the default and deduct the cost thereof from any payment then or thereafter due to the Design-Builder; and
  - (d) terminate this Agreement.
- 53.4 If the Authority terminates the right to continue with all or part of the Work or terminates this Agreement pursuant to Section 53.3, the Authority will be entitled to:
  - (a) take possession of the Work or any part of the Work;
  - (b) take possession of the Drawings and Specifications and make use of them in accordance with the rights granted under this Agreement;
  - (c) use construction machinery and equipment, subject to the rights of third parties;
  - (d) finish the Work or any part of the Work by whatever reasonable method the Authority may consider expedient;
  - (e) charge the Design-Builder the amount by which the full cost of finishing the Work and a reasonable allowance to cover the cost of corrections to Work performed by the Design-Builder that may be required under Section 38 exceeds the unpaid balance of the Contract Price; and

- (f) on expiry of the Warranty Period, charge the Design-Builder the amount by which the cost of corrections to Work under Section 38 exceeds the allowance provided for such corrections.
- 53.5 The termination of the right to continue with part of the Work does not relieve or discharge the Design-Builder from any obligations under this Agreement, except the obligation to perform the part of the Work removed from the Design-Builder.
- 53.6 The rights, powers and remedies conferred on the Authority under this Agreement are not intended to be exclusive but are cumulative, are in addition to, do not limit and are not in substitution for any other right, power and remedy existing under this Agreement, under any other agreement, at law or in equity. The exercise by the Authority of any right, power or remedy does not preclude the simultaneous or later exercise by the Authority of any other right, power or remedy.

#### 54 TERMINATION BY THE DESIGN-BUILDER

- 54.1 The Design-Builder may by giving written notice to the Authority declare the Authority in default of this Agreement for any of the following reasons:
  - (a) the Authority has failed to pay the Design-Builder within 45 days of the date that any payment becomes due to the Design-Builder in accordance with the terms of this Agreement, unless the Authority is bona fide disputing liability to make such payment and has provided notice to the Design-Builder of the basis for its dispute before the time provided in Section 40.10 for payment of invoices;
  - (b) the Authority has failed to substantially supply the Site to the Design-Builder, subject to any property availability restrictions identified in this Agreement, within 180 days following the Site Occupation Date; or
  - (c) substantially all of the Work is stopped by an order of any court or public authority having jurisdiction (providing that such order was not issued as the result of any act or fault of the Design-Builder or a Subcontractor) for a period of 90 days.
- 54.2 If a default referred to in Section 54.1 occurs, the Authority will remedy the default within a 21 day rectification period after the notice given under Section 54.1 or within such extension thereof established by the Design-Builder.
- 54.3 If the Authority fails to remedy the default within the rectification period described in Section 54.2 or any extension thereof established in accordance with that Section, the Design-Builder may:
  - (a) waive the default;
  - (b) further extend the rectification period;
  - (c) suspend the Work; or

- (d) terminate this Agreement.
- 54.4 If the Design-Builder terminates this Agreement in accordance with Section 54.3(d), the Design-Builder is entitled to be paid:
  - (a) in accordance with the terms of this Agreement for all Work satisfactorily performed to the date of termination; and
  - (b) expenses of the Design-Builder that are directly related to the termination and reasonable in the circumstances including the Design-Builder's obligations to other parties.

#### PART H – REPRESENTATIONS AND WARRANTIES

#### 55 REPRESENTATIONS AND WARRANTIES

- 55.1 The Design-Builder represents and warrants to the Authority:
  - (a) as of the Effective Date that:
    - (i) all necessary proceedings have been taken to authorize the Design-Builder to enter into this Agreement and to execute and deliver this Agreement;
    - (ii) this Agreement has been properly executed by an authorized signatory of the Design-Builder and is enforceable against the Design-Builder in accordance with its terms;
    - (iii) the Design-Builder has had sufficient time, opportunity and resources to investigate and has investigated and satisfied itself of every condition and risk relating to, affecting or that may affect the Project and the Work, or either of them, including the Site conditions, and the labour, equipment, material and other resources that may be necessary for the performance of the Work in a manner that will meet or exceed all requirements of this Agreement;
    - (iv) the Design-Builder's investigations and assessments described in Section 55.1(a)(iii), including of the Site conditions (such conditions including for greater certainty geotechnical conditions, subsurface conditions, bearing pressure, settlement characteristics and nature and consistency of soil), and any conclusions reached in such investigations and assessments, including any conclusions as to the effect, if any, on the Design, Construction, Substantial Completion Date and Contract Price, (or any of them), except for objective geotechnical information that can be relied upon for accuracy but not interpretation, sufficiency or relevance, are based on the Design-Builder's own experience, examination, knowledge, information, interpretation, assessment, analysis and judgment and not upon any statement, representation or information, whether oral or

- written, made, produced or provided by, through or on behalf of the Authority or its advisors;
- (v) subject to Section 28.1 in respect of the accuracy of objective geotechnical data identified in Section 28.1(c), the Design-Builder acknowledges that the investigations made by the Authority of the conditions of the Site, including subsurface conditions, are of a preliminary nature and are made for the purpose of study and preliminary design for the sole benefit of the Authority only except for objective geotechnical data that can be relied upon by the Design-Builder for accuracy but not interpretation, sufficiency or relevance;
- (vi) the Design-Builder has no knowledge of any fact that materially adversely affects or, so far as it can foresee, might materially adversely affect either its financial condition or its ability to fulfill its obligations under this Agreement;
- (vii) there is no bona fide proceeding pending or threatened against the Design-Builder, which would, if successful, materially adversely affect the ability of the Design-Builder to fulfill its obligations under this Agreement; and
- (viii) the Design-Builder acknowledges that it has the responsibility for informing itself of all aspects of the Project and all information necessary to perform the Work; and
- (b) as of the Effective Date (to the extent applicable as of the Effective Date) and at all times throughout the Term that:
  - (i) the Design-Builder has filed all tax, corporate information and other returns required to be filed by all applicable Laws, has complied with all workers' compensation legislation and other similar legislation to which it is subject, and has paid all taxes, fees and assessments due by the Design-Builder under those laws as of the Effective Date, except for Lien Holdback monies properly retained, payments deferred by agreement and accounts withheld by reason of legitimate dispute;
  - (ii) the Design-Builder holds all permits, licences, consents and authorities issued by any level of government, or any agency of any level of government, that are required by all applicable Laws to perform the Work;
  - (iii) the Design-Builder has paid, as they became due, all accounts, expenses, wages, salaries, taxes, rates, fees and assessments required to be paid by it in respect of the Work and fulfillment of its obligations under this Agreement;
  - (iv) the Design-Builder is not in breach of any Law that is material to performance of the Design-Builder's obligations under this Agreement;

- (v) the Key Individuals or any substitute with equivalent qualifications proposed by the Design-Builder who have first been expressly accepted in writing by the Authority will be available and fully involved in the performance of the Work; and
- (vi) the Design-Builder is registered for the purposes of the GST.
- 55.2 The Authority represents and warrants to the Design-Builder as of the Effective Date that:
  - (a) it has been properly constituted pursuant to applicable legislation;
  - (b) it has been properly authorized to fulfill the obligations of the Authority under this Agreement; and
  - (c) it has the power, capacity and authority to enter into this Agreement and to carry out its obligations under this Agreement.

### PART I – PROTECTION AND INDEMNITY

#### 56 PROTECTION OF WORK AND PROPERTY

- The Design-Builder will protect the Work, the Site and property adjacent to the Site from damage that may arise as the result of the Design-Builder's operations under this Agreement, and will be responsible for such damage, except damage that occurs as the result of actions of the Authority, its agents, employees or Other Contractors.
- 56.2 Should any damage occur to the Work, the Site and property adjacent to the Site for which the Design-Builder is responsible as provided in Section 56.1, the Design-Builder will make good such damage at its own expense or pay all costs incurred by the Authority or others in making good such damage.
- Should any damage occur to the Work, the Site and property adjacent to the Site for which the Design-Builder is not responsible as provided in Section 56.1, the Design-Builder will at the Authority's direction and expense make good such damage. The Contract Price and Contract Time will be adjusted in accordance with Section 48 and Section 49.

#### 57 EXCLUSIONS OF LIABILITY

- 57.1 Neither the Design-Builder nor the Authority will be liable to the other for any consequential or indirect damages in connection with this Agreement, whether based in contract, tort (including negligence), strict liability or otherwise and including loss of use, loss of revenues or profits and loss of opportunity. This Section 57.1 will not limit any liability the Design-Builder may have under this Agreement to pay liquidated damages.
- 57.2 Subject to Section 57.3 the maximum amount of the total aggregate liability of the Design-Builder to the Authority in connection with this Agreement, whether based in contract, tort (including negligence), strict liability or otherwise, is:

- (a) in respect of a loss by the Indemnified Parties for which insurance is to be provided by the Authority under Section 1 or Section 3 of Schedule 3 (Insurance Conditions), the applicable limit or sub-limit of the Wrap-up Liability coverage or the Course of Construction coverage, whichever is applicable to the loss, with such limit or sub-limit calculated without reduction for the amount of any deductible; or
- (b) in respect of any liability other than a loss referred to in Section 57.2(a) above, 50% of the Contract Price.

If this Agreement is terminated, the reference in this Section 57.2 to the "Contract Price" will be deemed only for purposes of this Section 57.2 to be the amount to which the Design-Builder would have been entitled if the Design-Builder had properly performed and completed the Work and this Agreement had not been terminated.

- 57.3 Section 57.2 will not limit the Design-Builder's liability in connection with:
  - (a) fraud, gross negligence or wilful, fraudulent or criminal misconduct;
  - (b) bodily injury, sickness, disease or death;
  - (c) liability to third parties in respect of tangible personal or real property;
  - (d) breach by the Design-Builder of its obligations of confidentiality under this Agreement; and
  - (e) penalties, fines or other liability imposed by a governmental authority, an administrative tribunal or a court of competent jurisdiction for breach of applicable Law.
- Nothing in this Section 57 will be construed to limit the liability of an insurer under the insurance required to be maintained under this Agreement.

# 58 INDEMNIFICATION

The Design-Builder will indemnify and save harmless the Authority and its officers, employees, representatives, consultants and agents including the Authority's Representative (collectively the "Indemnified Parties") from and against any and all losses, claims, damages, actions, causes of action, costs and expenses (including actual legal and other professional fees and disbursements) that any of the Indemnified Parties may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this Agreement, where the same or any of them are based upon, arise out of or occur, directly or indirectly, by reason of any act or omission of the Design-Builder or of any representative, agent, employee, officer, director, consultant of the Design-Builder or of any Subcontractor, excepting only liability to the extent arising out of the independent acts of the Indemnified Parties.

- 58.2 The obligations of the Design-Builder under Section 58 will not be affected by completion or termination of this Agreement, whether for default or otherwise, or suspension of the Work or any withdrawal of services or labour from the Project.
- 58.3 Neither the requirement of the Design-Builder to purchase and maintain insurance as described in the Insurance Conditions nor the acceptance of evidence of such insurance by the Authority will, in any manner, limit or qualify the right of the Authority to make a claim and recover insurance proceeds under the insurance policies described in the Insurance Conditions or the liability and obligations otherwise assumed by the Design-Builder under this Agreement.

# 59 DESIGN-BUILDER'S DISCHARGE OF LIABILITY

- 59.1 The Design-Builder will discharge all liabilities incurred by it, including for labour, equipment, materials or services used or reasonably required for use, in the performance of this Agreement, on or before the date each becomes due. In the case of bona fide disputed payments, the Design-Builder will discharge such liabilities when legally obliged to do so.
- 59.2 The Design-Builder will include as a condition of every Subcontract that the Subcontractor discharge all liabilities incurred by it, including for labour, equipment, materials, supplies or services used or reasonably required for use, in the performance of the Subcontract, on or before the date upon which each becomes due. In the case of bona fide disputed payments, the Design-Builder will discharge such liabilities when legally obliged to do so.
- 59.3 The Design-Builder will furnish the Authority with satisfactory evidence that its liabilities and those of Subcontractors have been discharged, such satisfactory evidence to be a statutory declaration in the form of CCDC 9A sworn by a knowledgeable officer or senior management employee of the Design-Builder or Subcontractor, as the case may be, or such other evidence as the Authority may require.
- 59.4 With the exception of any claim of builder's lien, builder's liens or certificates of pending litigation that arise due to the improper non-payment by the Authority, the Design-Builder will not directly or indirectly create, incur, assume or allow to be created by any of its Subcontractors or workers any lien, charge or encumbrance on the Site, Project or any part thereof or interest therein. The Design-Builder will immediately notify the Authority of any lien, charge or encumbrance asserted upon the Site, Project or any part thereof.

# PART J - SECURITY, RECORDS, REPORTS AND AUDIT

#### 60 BONDS

60.1 Before commencing the Work, the Design-Builder will purchase and deliver to the Authority an executed performance bond and an executed labour and materials payment bond (the "Bonds"). The form of the Bonds will be in accordance with the latest edition

- of the CCDC approved bond form or in substantially equivalent form acceptable to the Authority.
- 60.2 Each Bond under Section 60.1 will be in the amount of 50% of the Contract Price and will be issued by a surety licensed to transact the business of a surety in British Columbia and acceptable to the Authority, acting reasonably.
- 60.3 Upon entering into a Subcontract with a Subcontractor, the Design-Builder will advise the Subcontractor that a labour and materials payment Bond is in effect and will supply a copy of that Bond to the Subcontractor on request.
- 60.4 The Design-Builder will pay for and maintain the Bonds in force during the Term.
- 60.5 If the surety notifies either party that the Bonds are or are going to be terminated or cancelled for any reason whatsoever, the Design-Builder will obtain and provide the Authority with valid bonds effective from the date of termination or cancellation of the original bonds that comply with the bonding requirements of this Agreement.
- 60.6 The Design-Builder will, if required by the surety, obtain the written consent of the surety to any Change and will upon request by the Authority provide confirmation from the surety of such consent or confirmation from the surety that such consent is not required.
- 60.7 For greater certainty, the amount of the Bonds and any claim under the Bonds will not limit the Authority from seeking additional claims, damages, or remedies the Authority may be entitled to by reason of the Design-Builder's failure to successfully complete the Agreement in accordance with its terms and conditions.

# 61 INSURANCE

- 61.1 The Authority and the Design-Builder will obtain and maintain during the Term the insurance specified for each of them under the Insurance Conditions, and will otherwise comply with the Insurance Conditions.
- 61.2 Before beginning the Work, the Design-Builder will deliver to the Authority certified copies of all insurance coverage obtained by the Design-Builder in accordance with the Insurance Conditions, or such other proof of that insurance as is satisfactory to the Authority, acting reasonably.

# 62 RECORDS AND AUDIT

- 62.1 The Design-Builder will, in connection with this Agreement retain for a minimum of 6 years after the expiry of the Warranty Period all records, reports, and other documentation required under this Agreement and the following records, reports and other documentation relating to the Project whether or not required under other provisions of this Agreement:
  - (a) all documents relating to permits;

- (b) all notices, reports, results and certificates relating to completion of the Design and Construction and completion of all commissioning activities;
- (c) all records relating to any inspections of the Facility conducted under applicable Laws or by or of any governmental authority;
- (d) all orders or other requirements issued to the Design-Builder by any governmental authority in connection with the Work;
- (e) all documents relating to applications for payment, Changes or delay or other claims by the Design-Builder.

The Design-Builder will permit the Authority and its consultants and representatives to inspect and copy any or all such records, reports and other documentation.

- 62.2 Without limiting the other provisions of this Agreement, the Design-Builder will provide to the Authority and its consultants and representatives all records, reports and other documentation reasonably required by the Authority to support any applications for payment, Changes or delay or other claims by the Design-Builder.
- 62.3 The Authority and its consultants and representatives may on request, and acting reasonably, audit all books and records of the Design-Builder that relate to any applications for payment, Changes or delay or Disputes or other claims by the Design-Builder.
- 62.4 The Design-Builder will fully cooperate with the Authority to conduct an audit pursuant to this Section 62.

#### PART K - DISPUTE RESOLUTION

# 63 DISPUTE RESOLUTION

- 63.1 All Disputes will be resolved in accordance with the Dispute resolution process set out in this Section 63.
- 63.2 The Dispute resolution process set out in this Section 63 may be commenced by either party by giving notice to the other party briefly setting out the pertinent facts, the remedy or relief sought and the grounds on which such remedy or relief is sought.
- 63.3 Within 7 days of a notice under Section 63.2, the Design-Builder's Representative and the Authority's Representative will:
  - (a) make bona fide efforts to resolve any Dispute arising between them by amicable negotiations; and
  - (b) provide frank, candid and timely disclosure of all relevant facts, information and documents, including full written particulars of the nature, entitlement and magnitude of any Dispute including the relevant provisions of this Agreement.

- 63.4 If the Authority's Representative and the Design-Builder's Representative fail to resolve the Dispute within 10 days after receipt of the notice pursuant to Section 63.3, the parties will refer the Dispute and all information to a nominated senior officer of the Authority and a nominated senior officer of the Design-Builder for resolution.
- 63.5 If the nominated senior officer of the Authority and the nominated senior officer of the Design-Builder fail to resolve the Dispute within 10 days after the Dispute has been referred to them, unless otherwise agreed in writing by the parties, either party may refer the Dispute to the Authority's Consultant by notice in writing to both the Authority's Consultant and to the other party. The Authority will require the Authority's Consultant to give a decision in writing and within a reasonable period of time. Both parties reserve their rights to dispute the decision of the Authority's Consultant.
- Where either or both parties dispute the Authority's Consultant's decision made pursuant to Section 63.5, the parties will abide by the Authority's Consultant's decision until such time as the Dispute is finally resolved under the other provisions of this Section 63.
- 63.7 If either party disputes the Authority's Consultant's decision made pursuant to Section 63.5, or if the Authority's Consultant's decision is not made within a reasonable period of time, either party may elect to give notice of its intention to submit the Dispute to binding arbitration. If within 10 days of such notice the other party does not give a notice of objection to arbitration, the Dispute will be resolved by arbitration. The Dispute will be referred to a single arbitrator and finally resolved by binding arbitration under the rules of the British Columbia International Commercial Arbitration Centre. The arbitrator will be chosen by mutual agreement between the Design-Builder and the Authority. If an arbitrator has not been appointed within 14 days of the date that the Dispute has been referred to an arbitrator, the arbitrator will be appointed by the British Columbia International Commercial Arbitration Centre.
- 63.8 Prior to receiving a notice of intention to submit a Dispute to binding arbitration or after giving a notice of objection to arbitration in accordance with Section 63.7 a party may commence proceedings in respect of the Dispute in the courts of British Columbia and serve the other party as required in respect of such proceedings.
- Any of the times specified in this Section 63 may be varied by mutual agreement between the Design-Builder's Representative and the Authority's Representative.
- 63.10 Pursuit of the resolution of a Dispute under any part of this Section 63 does not relieve either party of its responsibility to ensure timely performance of its obligations under this Agreement. In relation to all Disputes, whether or not a notice under Section 63.2 has been given, the Design-Builder will diligently proceed with the Work and closely track all costs and impacts associated with the Dispute and may reserve its rights concerning the Dispute.

#### PART L - GENERAL PROVISIONS

# 64 LAWS, NOTICE, PERMITS AND FEES

- 64.1 The Design-Builder will perform the Work in accordance with all applicable Laws and Standards and will comply with all Laws and Standards that may affect or relate to the Work.
- 64.2 The Design-Builder will apply for, pay for and obtain the development permit, the building permit, the occupancy permit and all other permits, licences and approvals required for the performance of the Work. When requested to do so by the Design-Builder, the Authority may at its discretion provide reasonable assistance to the Design-Builder in obtaining permits, licences, and approval required for the performance of the Work but, in no circumstance will the Authority be required to incur any costs or make any payments pursuant to this Section.
- 64.3 All applicable Laws in force in British Columbia, as amended from time to time, govern the Work.
- 64.4 Except as otherwise provided in this Agreement, if after the Effective Date changes are made to the applicable Laws and Standards, either party will be entitled to make a claim an adjustment in the Contract Price or the Contract Time as a Change as provided in Section 47.

# 65 INTELLECTUAL PROPERTY FEES

65.1 The Design-Builder will obtain and pay for all intellectual property rights (including of any patent, copyright, industrial design, trademark or trade secret) all royalties and licence fees required for the performance of the Work and will, without limiting Section 58, indemnify and hold the Authority harmless from and against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of the Design-Builder's performance of the Work under this Agreement that are attributable to infringement or an alleged infringement of any intellectual property right by the Design-Builder or its Subcontractors or anyone for whose acts the Design-Builder may be liable.

# 66 CONFIDENTIALITY AND COMMUNICATIONS

- 66.1 Subject to Section 66.2, each party will hold in confidence any Confidential Information received from the other party, except that this Section 66 will not restrict:
  - (a) the Design-Builder from disclosing or granting access to such information to its professional advisers and consultants, to the extent necessary, to enable it to perform (or to cause to be performed) or to enforce its rights or obligations under this Agreement and provided further that the Design-Builder may, subject to obtaining confidentiality restrictions similar to those set out in this Agreement, provide to a Subcontractor and its advisors, or provide or cause to be provided to other third parties, Confidential Information which is necessary to enable the

- Design-Builder to perform (or to cause to be performed) its obligations under this Agreement; and
- (b) the Authority from disclosing or granting access to such information to any provincial ministry, Partnerships British Columbia Inc. and any other governmental authority which require the information in relation to the Project;
- 66.2 Subject to any restrictions on the Confidential Information which are imposed by a third party that may own any Confidential Information, the obligation to maintain the confidentiality of the Confidential Information does not apply to:
  - (a) Confidential Information which the party that disclosed the Confidential Information confirms in writing is not required to be treated as Confidential Information;
  - (b) Confidential Information which is or comes into the public domain otherwise than through any disclosure prohibited by this Agreement;
  - (c) Confidential Information to the extent any person is required to disclose such Confidential Information by Law, including a disclosure required under FIPPA;
  - (d) Confidential Information to the extent consistent with any Authority's policy concerning the Authority's Confidential Information, the details of which have been provided to the Design-Builder in writing prior to the disclosure; or
  - (e) the material referred to in Section 18.5 and any Confidential Information that the Authority is entitled to receive from the Design-Builder pursuant to this Agreement.
- 66.3 Without prejudice to any other rights and remedies that the other party may have, each of the parties agrees that damages may not be an adequate remedy for a breach of Section 66.1 and that the other party will, in such case, be entitled to the remedies of injunction, specific performance or other equitable relief for any threatened or actual breach of Section 66.1 subject, in the case of a claim for any such remedy against the Authority, to the provisions of the *Crown Proceeding Act* (British Columbia).
- 66.4 Unless required by any Law, neither party will make or permit to be made any public announcement or disclosure whether for publication in the press, radio, television or any other medium of any Confidential Information, without the consent of the other party (which will not be unreasonably withheld or delayed).
- 66.5 Except to the extent required for compliance with any applicable securities laws, the Design-Builder will not make any public announcement relating to the Project or this Agreement without the prior written consent of the Authority. The Design-Builder, with the prior written consent of the Authority, may include the Project in its promotional materials.

- 66.6 The Design-Builder acknowledges that the Authority may, in its discretion and without consultation with the Design-Builder, make any public announcement relating to the Project.
- 66.7 The parties will comply with Schedule 4 Communication Roles.

# 67 NOTICE

- Any notice or communication required or permitted to be given under this Agreement will be in writing and will be considered to have been sufficiently given if delivered by hand or transmitted by facsimile or electronic transmission to the address, facsimile number or electronic mail address of each party set out below:
  - (a) if to the Authority:

Fraser Health Authority Royal Columbian Hospital Redevelopment Suite 800, 287 Nelson's Court

New Westminster, BC V3L 0H3

**Attention:** Barry Pearce

<u>Telephone:</u> (604) 777-8336 (ext 525151) <u>Email</u>: barry.pearce@fraserhealth.ca

(b) if to the Design-Builder:

Bird Design-Build Construction Inc. Unit 2370- Building 2000 6900 Graybar Road Richmond, BC V6W 0A5

Attention: Ken Nakagawa Telephone: (604) 271-4600 Email: ken.nakagawa@bird.ca

with a copy to:

Bird Design-Build Construction Inc.

5700 Explorer Drive Suite 400 Mississauga, ON L4W 0C6

Attention: Charles Caza, Senior Vice President and General Counsel

Fax: (905) 602-1516

Email: Charles.Caza@bird.ca

or to such other address, facsimile number or electronic mail address as any party may, from time to time, designate in the manner set out above.

- 67.2 Any such notice or communication will be considered to have been received:
  - (a) if delivered by hand during business hours (and in any event, at or before 5:00 pm local time in the place of receipt) on a Business Day, upon receipt by a responsible representative of the receiver, and if not delivered during business hours, upon the commencement of business hours on the next Business Day;
  - (b) if sent by facsimile transmission during business hours (and in any event, at or before 5:00 pm local time in the place of receipt) on a Business Day, upon the sender receiving confirmation of the transmission, and if not transmitted during business hours, upon the commencement of business hours on the next Business Day following confirmation of the transmission; and
  - (c) if sent by electronic transmission during business hours (and in any event, at or before 5:00 pm local time in the place of receipt) on a Business Day, upon receipt, and if not delivered during business hours, upon the commencement of business hours on the next Business Day, provided that:
    - (i) the receiving party has, by electronic transmission, by hand delivery or by facsimile transmission, acknowledged to the notifying party that it has received such notice; or
    - (ii) within 24 hours after sending the notice, the notifying party has also sent a copy of such notice to the receiving party by hand delivery or facsimile transmission.
- 67.3 Delivery by mail will not be considered timely notice under this Agreement.
- 67.4 In the event of an emergency or urgent matter, in addition to the notice required by this Section 67, a verbal notice will be given as soon as the party giving the notice becomes aware of any material event or circumstance that gives rise to the requirement for a written notice being given.

#### 68 LEGAL RELATIONSHIP

- 68.1 The Design-Builder is an independent contractor and not the servant, employee, partner or agent of the Authority.
- 68.2 The Design-Builder will not commit the Authority to the payment of any money to any person.
- 68.3 No partnership, joint venture or agency involving the Authority is created by this Agreement or under this Agreement.
- 68.4 All personnel engaged by the Design-Builder to design and construct the Project are at all times the employees or Subcontractors of the Design-Builder and not of the Authority. The Design-Builder is solely responsible for all matters arising out of the relationship of employer and employee.

# 69 ASSIGNMENT

- 69.1 The Design-Builder will not, without the prior written consent of the Authority, assign, either directly or indirectly, any right or obligation of the Design-Builder under this Agreement.
- 69.2 The Authority may, upon notice to the Design-Builder, assign any or all of its rights or obligations under this Agreement to any other agency or organization that will assume responsibility for the operation of the Facility. Subject to the foregoing and subject to the right of assignment of the licence referred to in Section 18.5, the Authority will not, without the prior written consent of the Design-Builder, assign, either directly or indirectly, any right or obligation of the Authority under this Agreement.

#### 70 INTEREST

70.1 If payment by either party of any amount payable under this Agreement is not made when due, interest will be payable on such amount at 2% per annum over the prime rate, calculated from the date due under this Agreement until paid, compounded monthly. The party to whom payment is owed and overdue will notify the other party at least monthly of the overdue amount and the accrued interest on that amount. The prime rate is the annual rate of interest announced by the Royal Bank of Canada (or its successor), or any other Canadian chartered bank agreed to by the parties, as its "prime" rate then in effect for determining interest rates on Canadian dollar commercial loans made by it in Canada.

# 71 WAIVER

- 71.1 No waiver by either party of a right of that party or any breach by the other party in the performance of any of its obligations under this Agreement is effective unless it is in writing.
- 71.2 No waiver of any right or obligation is a waiver of any other right or obligation under this Agreement.

- 71.3 Failure or delay to complain of an act or failure of the other party or to declare the other party in default, irrespective of how long the failure or delay continues, does not constitute a waiver by the party of any of its rights against the other party.
- 71.4 The duties and obligations imposed by this Agreement and the rights and remedies available hereunder will be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by Law.

#### 72 ASSUMPTION OF RISK

72.1 Except to the extent expressly allocated to the Authority or otherwise provided for under this Agreement, all risks, costs and expenses in relation to the performance by the Design-Builder of its obligations under this Agreement are allocated to, and accepted by, the Design-Builder as its entire and exclusive responsibility.

#### 73 GENERAL DUTY TO MITIGATE

73.1 In all cases where the Design-Builder is entitled to receive from the Authority any additional compensation or any costs, damages or extensions of time, the Design-Builder will use all reasonable efforts to mitigate such amount required to be paid by the Authority to the Design-Builder under this Agreement, or the length of the extension of time. Upon request from the Authority, the Design-Builder will promptly submit a detailed description, supported by all such documentation as the Authority may reasonably require, of the measures and steps taken by the Design-Builder to mitigate and meet its obligations under this Section 73.

# 74 OTHER PROVISIONS

- 74.1 The exclusions, waivers and limitations of liability, representations and warranties and indemnities in this Agreement, the provisions of Sections 62, 63, 65, 66 and rights accrued prior to completion or termination of this Agreement will survive the completion or termination of this Agreement.
- 74.2 This Agreement constitutes the entire agreement between the parties, expressly superseding all prior agreements and communications (both oral and written) between any of the parties hereto with respect to all matters contained herein or therein, and except as stated herein or the instruments and documents to be executed and delivered pursuant hereto, contains all the representations and warranties of the respective parties.
- 74.3 No waiver of any provision of this Agreement and no consent required pursuant to the terms of this Agreement is binding or effective unless it is in writing and signed by the party providing such waiver or consent.
- 74.4 No failure to exercise, and no delay in exercising, any right or remedy under this Agreement will be deemed to be a waiver of that right or remedy. No waiver of any breach of any provision of this Agreement will be deemed to be a waiver of any subsequent breach of that provision or of any similar provision.

- 74.5 This Agreement enures to the benefit of and binds the Authority, its successors and its assigns and the Design-Builder and its successors and permitted assigns.
- 74.6 The parties must do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- 74.7 The Design-Builder and the Authority will take all reasonable and necessary steps to minimize and avoid all costs and impacts arising out of the performance of the Work and this Agreement.
- 74.8 Neither the Authority nor the Design-Builder will take advantage of any apparent discrepancy, ambiguity, error or omission in this Agreement and will notify the other party forthwith following the detection of anything it suspects may be an ambiguity, discrepancy, error or omission.
- 74.9 Each Schedule attached to this Agreement is an integral part of this Agreement as if set out at length in the body of this Agreement.
- 74.10 This Agreement may only be amended by an agreement of the parties in writing. No such amendments will be valid unless executed by the Authority and the Design-Builder.
- 74.11 This Agreement will be deemed to be made pursuant to the Laws of the Province of British Columbia and the Laws of Canada applicable therein and will be governed by and construed in accordance with such Laws.
- 74.12 For the purposes of any legal actions or proceedings brought by any party hereto against the other party, the parties hereby irrevocably submit to the exclusive jurisdiction of the courts of the Province of British Columbia and acknowledge their competence and the convenience and propriety of the venue and agree to be bound by any judgment thereof and not to seek, and hereby waive, review of its merits by the courts of any other jurisdiction.
- 74.13 Where the Design-Builder is a joint venture, partnership or consortium, each member agrees to be jointly and severally liable for the obligations of the Design-Builder.
- 74.14 Time is of the essence of this Agreement.
- 74.15 This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and this has the same effect as if the signatures on the counterparts were on a single copy of this Agreement so that it will not be necessary in making proof of this Agreement to produce or account for more than one such counterpart.
- 74.16 A party may deliver an executed copy of this Agreement by facsimile or other electronic means but that party will immediately deliver to the other parties an originally executed copy of this Agreement.

# [Execution Page Follows]

IN WITNESS WHEREOF the parties have executed this Agreement as of the Effective Date.

FRA	SER HEALTH AUTHORITY
Per:	Michael Marchbank
	CEO
BIR	D DESIGN-BUILD CONSTRUCTION INC
Per:	Ian Boyd CEO

IN WITNESS WHEREOF the parties have executed this Agreement as of the Effective Date.

# FRASER HEALTH AUTHORITY

Per:			
	Michael Marchbank		
	CEO		

BIRD DESIGN-BUILD CONSTRUCTION INC.

Per:

Ian Boyd

President and CEC

Per:

Ken McClure

**Executive Vice President Commercial** 

# **SCHEDULE 1**

# STATEMENT OF REQUIREMENTS

See separate document.

#### **SCHEDULE 2**

#### REVIEW PROCEDURE

#### 1. SUBMITTAL SCHEDULE

- 1.1 The parties agree that the preliminary schedule for Submittals (the "Submittal Schedule") is included in the Time Schedule that is included in the Proposal Extracts, and that the Submittal Schedule will conform to the requirements identified in Section 17 of the Design-Build Agreement. The Submittal Schedule may be amended by agreement of the parties in accordance with the terms of this Section 1. Any amendment to the Submittal Schedule will provide for a progressive and orderly flow of Submittals from the Design-Builder to the Authority as appropriate to allow sufficient time for review of each Submittal by the Authority, taking into account both the resources necessary to be available to the Authority to conduct such review and any user group consultations.
- 1.2 Unless a longer period is required by this Agreement or is otherwise reasonably required by the Authority, the Submittal Schedule will allow a minimum of:
  - (a) 15 Business Days for the Authority's review of Submittals submitted in relation to the Design pursuant to this Schedule, or
  - (b) 10 Business Days for the Authority's review of other Submittals,

from the date of receipt for review of and response to each Submittal, provided that if the Design-Builder has made major changes to the grouping and volume of Submittals, such period of time will be adjusted, acting reasonably, taking into account the factors set forth in this Section 1.

- 1.3 The Design-Builder will in scheduling Submittals and in the performance of the Design and the Construction, allow adequate time prior to performing the Design and the Construction that are the subject of the Submittals, for review of the Submittals and for the Design-Builder to make changes to the Submittals, the Design and the Construction that may be required if comments are received on the Submittals.
- 1.4 If the Submittal Schedule indicates that a large number of Submittals will be made at one time, the Authority may request a longer period for review or a staggering of the Submittals, and the Design-Builder will revise the Submittal Schedule accordingly, taking into account both the availability of resources required by the Authority to conduct such review and whether delay in the review of the subject matter of the Submittal will have a material impact on the Design-Builder's ability to progress future anticipated Submittals and the Design or Construction in accordance with the Time Schedule.
- 1.5 The Design-Builder will submit the Submittal Schedule, including amendments prior to the start of Construction and, subsequently, to the Authority on a monthly basis until Substantial Completion is achieved.

- 1.6 All amended Submittal Schedules will be required to meet all the requirements of this Section 1.
- 1.7 The Design-Builder will submit all Submittals to the Authority in accordance with the current amended Submittal Schedule.
- 1.8 The Design-Builder will bear the risk of delays and additional costs caused as a result of the late submission of Submittals to the Authority, by Submittals which are rejected and required to be re-submitted in accordance with the terms of this Schedule 2 Review Procedure, or by changes in the Design and Construction required as a result of comments made pursuant to this Schedule 2 Review Procedure.

# 2. GENERAL REQUIREMENTS FOR SUBMITTALS

- 2.1 Unless otherwise specified by this Agreement or by the Authority, the Design-Builder will issue an electronic copy of each Submittal in .pdf format or other format agreed by the parties acting reasonably. Unless otherwise required by this Agreement or by applicable Law to be signed or sealed at the time the Submittal is first provided to the Authority, upon assignment of the comment "REVIEWED" by the Authority of each Submittal the Design-Builder will issue a paper copy (or an electronically sealed copy if agreed by the Authority) of the Submittal that has been sealed by the Design-Builder's Consultant as required by Section 2.4 below.
- 2.2 The Design-Builder will compile and maintain a Submittal log that includes the date, contents and status of the submission of all Submittals, including the date, contents and status of the submission of all Submittals, including the date of receipt and content of all returned Submittals and comments thereon.
- 2.3 All Submittals will be in English.
- All Submittals, and all amended versions of Submittals, required by this Agreement or by applicable Law to be signed or sealed by persons with professional designations (including where applicable by registered professional architects or engineers) will be so signed and, where applicable, sealed, and will include confirmation by such person or persons that the Work proposed by the Submittal meets the requirements of the Agreement, including the Statement of Requirements.
- 2.5 All Submittals will include all documents to be reviewed and will clearly identify the purpose of the Submittal, the Design-Builder's proposed course of action relating to the Submittal and the Design and the Construction that are the subject of the Submittal.
- 2.6 All Submittals will refer to the relevant provisions of Schedule 1 Statement of Requirements and to any matter that has previously been subject to review. All Submittals will:
  - (a) be clearly identified as a Submittal and will be delivered with appropriate covering documentation, which will include a list of all attached Submittals and for each Submittal the document number(s) or drawing number(s);

- (b) include revision numbers (if applicable);
- (c) include document or drawing title(s);
- (d) include name of entity that prepared the Submittal;
- (e) include details of the Submittal log showing date and delivery information and/or log number of all previous submissions of that Submittal; identification of any previous Submittal superseded by the current Submittal, and a description of the portions of the Submittal that are the subject of review.

# 3. COMMENTS

- 3.1 The Authority will review and respond to each Submittal in accordance with the applicable time periods for the Submittal.
- 3.2 The Authority will return Submittals to the Design-Builder and assign one of the following 3 comments:
  - (a) "REVIEWED";
  - (b) "CORRECT DEFICIENCIES"; or
  - (c) "REJECTED".
- 3.3 The comment "REVIEWED" will be assigned to those Submittals that, in the opinion of the Authority, acting reasonably, conform to the requirements of this Agreement. The Design-Builder will comply with and implement such Submittals.
- 3.4 The comment "CORRECT DEFICIENCIES" will be assigned to those Submittals that, in the opinion of the Authority, acting reasonably, generally conform to the requirements of this Agreement, but in which minor deficiencies have been found and identified by the Authority's review. The Design-Builder will, to the extent necessary, correct these Submittals and provide a copy of such Submittals to the Authority before the Design-Builder implements the portions of such Submittals that have received comments, but may proceed on the portions of such Submittals that have not received comments. The Design-Builder will comply with and implement such corrected Submittals. If at any time it is discovered that the Design-Builder has not corrected the deficiencies on Submittals that were correctly stamped "CORRECT DEFICIENCIES", then the Design-Builder will be required to modify the Submittals, the relevant Design and the Construction as required to correct the deficiencies and the Design-Builder may be required, at the Authority's discretion, acting reasonably, to resubmit relevant Submittals.
- 3.5 The comment "REJECTED" will be assigned to those Submittals that, in the opinion of the Authority, acting reasonably, contain significant deficiencies or do not conform with the requirements of this Agreement, including this Schedule 2 Review Procedure. The Design-Builder will correct and re-submit these Submittals within 10 Business Days after the comment has been provided to the Design-Builder. The Authority will then review

such corrected Submittals and assign a comment to the corrected Submittal. The Submittals will be corrected, revised and resubmitted as often as may be required to obtain a comment that permits the Design-Builder to proceed. Except with the written consent of the Authority, the Design-Builder will not proceed with any Design or Construction to which such Submittals receiving the comment "REJECTED" relate until the Design-Builder obtains a comment that permits the Design-Builder to proceed.

- 3.6 The Authority may request additional time for the review of any Submittal, including where the Submittal is voluminous or requires extensive review by representatives (including consultants) of the Authority, and the Design-Builder will extend such time for any reasonable requests by the Authority.
- 3.7 If the Authority does not respond to a Submittal within the applicable time periods for the Submittal, the Submittal will be deemed "REVIEWED" and the Design-Builder may proceed with and implement the Design and the Construction on the basis set forth in the applicable Submittal without any further action or documentation required.
- 3.8 Where the Authority issues the comment "CORRECT DEFICIENCIES" or "REJECTED", the Authority will provide reasons for the comment, referencing the particulars of the Section(s) of the Agreement (including the Statement of Requirements) that the Submittal fails to satisfy.
- 3.9 If at any time after assigning any comment to a Submittal or where Section 3.7 of this Schedule has applied, the Authority or the Design-Builder discovers deficiencies or any failure to conform to the requirements of this Agreement, the Authority may revise the comment assigned to any Submittal. If the parties agree or it is determined in accordance with Section 63 (Dispute Resolution) of the Agreement that the revised comment is correct, the Design-Builder will make all such corrections to the Submittals and the Design and the Construction.
- 3.10 For the purpose of facilitating and expediting the review and correction of Submittals, the Authority's Representative and the Design-Builder's Representative will meet as may be mutually agreed to discuss and review any outstanding Submittals and any comments thereon.
- 3.11 In lieu of returning a Submittal, the Authority may by letter notify the Design-Builder of the comment assigned to the Submittal and if such comment is "CORRECT DEFICIENCIES" or "REJECTED" the letter will contain comments in sufficient detail for the Design-Builder to identify the correction sought.

#### 4. USER CONSULTATION PROTOCOL

4.1 The Design-Builder acknowledges that review of the Design by the Authority and consultation with the Facility users is an essential step in the completion of the detailed design of the Facility. Accordingly, the Design-Builder will conduct consultations with representatives of the Facility users (the "User Consultation Groups") as described in this Schedule 2. The Authority will make reasonable efforts, as requested by the Design-Builder, to assist and support the Design-Builder with the consultation process, but

- nothing in this Section 4 will be interpreted to give the Authority responsibility for the Design, the Design schedule or the user consultation process.
- 4.2 The Authority will establish User Consultation Groups that may include the Authority, the Authority's Representatives, employees, agents, contractors and subcontractors, physicians, nurses, other clinicians, patients, visitors, students and volunteers. The Authority may also from time to time include residents, families and neighbours in the user consultation process.
- 4.3 Unless agreed by the Authority, all aspects of the Design will be subject to review by one or more User Consultation Groups.
- 4.4 The User Consultation Groups will include a User Consultation Group designated as the "Core User Group" with responsibility for coordinating the Design review process with the Design-Builder.
- 4.5 Unless otherwise agreed, Submittals will be provided and reviewed in accordance with the following:
  - (a) Draft Submittal to the Authority:
    - (i) The Design-Builder will provide a draft Submittal as indicated on the Submittal Schedule that includes all relevant material with a covering transmittal indicating the purpose of the Submittal, and the information that should be reviewed by the Authority and the User Consultation Groups.
    - (ii) All changes from a previous Submittal should be clearly indicated in accordance with Section 7 of this Schedule 2.
  - (b) User Consultation Group:
    - (i) 5 Business Days following the draft Submittal, the Design-Builder will present the relevant material at a meeting of the relevant User Consultation Group(s).
    - (ii) The presentation will be made in person by the Architect or, if the Authority agrees, the Design-Builder's engineer or other subject matter expert.
    - (iii) The Design-Builder's presentation will include a page-by-page review of the draft Submittal.
    - (iv) The Design-Builder must be in attendance, preferably in person but teleconference is acceptable.
    - (v) During the presentation, a representative of the Design-Builder will take "live minutes" so that all parties can agree on the content of the minutes during the meeting. The Design-Builder will circulate the minutes

immediately after the meeting to all parties and within 3 Business Days the Design-Builder must circulate formal minutes for review. If the Authority notifies the Design-Builder of any errors in the minutes, the Design-Builder will correct such errors within 3 Business Days of the Authority's notice.

- (c) Informal Comments from the Authority:
  - (i) The Authority will provide any informal feedback through to the Design-Builder.
  - (ii) The Authority will provide additional informal feedback within one week after the presentation, unless the Authority advises the Design-Builder in writing. The period will not exceed two weeks unless agreed with the Design-Builder.
- (d) Formal Submittal to the Authority:
  - (i) The Design-Builder will make the formal Submittal within 10 Business Days following the presentation (or 5 Business Days after receiving additional informal feedback).
  - (ii) If the Design-Builder does not address the feedback received at the presentation or subsequently provided by the Authority, the Design-Builder will provide commentary on the reasons for not addressing the feedback.
- (e) Formal Response from the Authority:
  - (i) The Authority will respond within 15 Business Days following the formal Submittal in accordance with this Schedule 2.
- 4.6 The process set out in this Section 4 will be set out in the Submittal Schedule.
- 4.7 The parties acknowledge that Design development is an iterative and interactive process and that additional User Consultation Group review and meetings may be required from those shown on the Submittal Schedule. The parties will co-operate to amend the Submittal Schedule as may be required from time to time to ensure that sufficient consultations with the User Consultation Group in relation to each component of the Design (and changes to the Design resulting from such consultations) are completed prior to the Design-Builder making the formal Submittal.
- 4.8 The Authority and the Design-Builder will not be bound by the consultations with the User Consultation Groups, unless reflected in the formal Submittal and comments from the Authority.
- 4.9 If the Design-Builder considers that compliance with any comment raised by a User Consultation Group member would lead to a Change, the Design-Builder will, before

taking into account such comment or objection, notify the Authority. If it is agreed by the Authority that such comments or objections would lead to a Change then the procedure as detailed in Part E- CHANGES of the Design-Build Agreement will apply. In all cases, the parties will cooperate to identify potential alternative solutions to any comments or objections raised that would not lead to a Change.

4.10 The User Consultation Group consultation meetings will be held in New Westminster, B.C., or another location designated by the Authority, at a space made available by the Authority.

#### 5. DISPUTES

5.1 If the Design-Builder disputes any comment issued by the Authority in respect of a Submittal, including on the basis that the comment is or would result in a Change, the Design-Builder will promptly notify the Authority of the details of such Dispute and will submit the reasons why the Design-Builder believes a different comment should be assigned, together with appropriate supporting documentation. The Authority will review the Submittal, the reasons and supporting documentation and within 7 Business Days after receipt thereof will either confirm the original comment or notify the Design-Builder of a revised comment. Nothing in this Section 4 will limit either party's right to refer a Dispute for resolution in the first instance to the Authority's Consultant under Section 63 (Dispute Resolution) of the Agreement.

# 6. EFFECT OF REVIEW

6.1 Any review of and comment by the Authority on any Submittals are for general conformity to the obligations and requirements of this Agreement, and any such review and comment will not relieve the Design-Builder of the risk and responsibility for the Design and the Construction and for meeting all of its obligations and requirements of this Agreement, and will not create any new or additional obligations or liabilities for the Authority. Without limiting the generality of the foregoing any and all errors or omissions in Submittals or of any review and comment will not exclude or limit the Design-Builder's obligations or liabilities in respect of the Design or the Construction under this Agreement or exclude or limit the Authority's rights in respect of the Design and the Construction under this Agreement.

# 7. SUBMITTAL EXPLANATION

7.1 At any time, the Authority may, acting reasonably, require the Design-Builder, including the Design-Builder's Consultant, Subcontractors and any other relevant personnel, at no additional cost to the Authority, to explain to the Authority and the Authority's advisors the intent of the Design-Builder's Submittals, including in relation to any design and any associated documentation and as to its satisfaction of the Statement of Requirements.

#### 8. REVISIONS

- 8.1 The Design-Builder will ensure that Submittals keep the same, unique reference number throughout the review process, and that all subsequent revisions of the same Submittal are identified by a sequential revision number and identified and tracked in the Submittal log. Correspondence related to such Submittal will reference the reference number and revision number.
- 8.2 Re-submittals will clearly show all revisions from the previous Submittal. Bound documents, including reports and manuals, will contain a preface that clearly states how revisions are marked and the previous revision number against which the revisions have been marked and highlighted within the document. A consistent format for mark-ups of documents will be used (e.g. deletions struck out and additions underscored). Revised portions of drawings will be clearly marked (with appropriate means to visually distinguish between the parts of the drawing that are revised and the parts that are not revised) and the revision number and description of the revision will be included on the drawing.
- 8.3 All revisions on print media will be initialled by hand by the individual designer, design checker and, where applicable, by the drafter and the drafting checker and will identify the persons who initialled the Submittal. Electronic versions of the Submittal will identify the persons who initialled the revisions to the printed version of the Submittal.
- 8.4 The Design-Builder will keep all Drawings and Specifications current. If any Drawings and Specifications are revised as part of a Submittal, all other Drawings and Specifications relying on or based on those Drawings and Specifications will also be revised accordingly. All such revised Drawings and Specifications will also be submitted with the Submittal to which it relates.

# 9. AUDIT BY THE AUTHORITY

- 9.1 Without limiting any other right under the Agreement, the Authority will have the right to audit all Submittals, including comparing all Submittals to previous Submittals.
- 9.2 If during an audit or at any other time it is discovered by the Authority or the Design-Builder that any Submittals were not correctly implemented, the Design-Builder will at its sole cost immediately take all necessary steps to correct and modify the applicable Submittals and the Design and Construction to which they relate and will advise the Authority of all such corrections and modifications.

#### **SCHEDULE 3**

#### INSURANCE CONDITIONS

Without restricting the generality of the indemnification provisions in Section 58, insurance and coverage will be arranged and paid for as follows:

#### 1. WRAP-UP LIABILITY INSURANCE

- 1.1 The Authority will provide, maintain and pay for Wrap-up Liability Insurance with a limit of inclusive per occurrence, general aggregate for bodily injury, death, and damage to property including loss of use thereof, product/completed operations liability with a limit of aggregate.
- 1.2 This insurance will cover the Authority, Design-Builder & Subcontractors, Architects, Engineers, Consultants and anyone employed by them to perform a part or parts of the Work (includes both Construction and Design services, but excludes all professional services, under this Agreement) but excluding suppliers whose only function is to supply and/or transport products to the project site or security protection persons or organizations providing site protection on or at the insured project. The insurance does not extend to any activities, works, jobs or undertakings of the insureds other than those directly related to the Work of this Agreement.
- 1.3 The insurance will preclude subrogation claims by the insurer against anyone insured hereunder.
- 1.4 The insurance will include coverage for:
  - (a) Products or Completed Operations Liability (no less than period)
  - (b) Blanket Contractual Liability;
  - (c) Cross Liability;
  - (d) Contingent Employer's Liability:
  - (e) Personal Injury Liability;
  - (f) Shoring, Blasting, Excavating, Underpinning, Demolition, Pile-driving and Caisson Work, Work Below Ground Surface, Tunneling and Grading, as applicable;
  - (g) Liability with respect to Non-Owned Licensed Vehicles (no less than );
  - (h) Broad Form Property Damage;

- (i) Broad Form Completed Operations;
- (j) Limited Pollution Liability (no less than );
- (k) Employees as Additional Insureds;
- (l) Broad Form Tenants Legal Liability (no less than
- (m) Operation of Attached Machinery; and
- (n) Forest Fire Fighting Expenses (no less than
- 1.5 Any applicable deductibles will not exceed except with respect to bodily injury for which there will be no deductible.
- 1.6 This insurance will be maintained continuously from commencement of the Work until Substantial Completion of the Project, plus cover completed operations for a further period of no less than

# 2. PROFESSIONAL LIABILITY INSURANCE

- 2.1 The Design-Builder or the Design-Builder's Consultant during the term of this Agreement will provide and maintain continuously from the commencement of the Work, until years after Substantial Completion of the Project, the following insurance which will be placed with such company or companies and in such form and amounts and with such deductibles as may be acceptable to the Authority:
  - (a) Project Specific Professional Errors and Omissions Liability Insurance, protecting the Design-Builder or the Design-Builder's Consultant, sub-consultant(s) and their respective servant(s), agent(s) or employee(s) against any loss or damage arising out of the Design under this Agreement. Such insurance will be for the adequate amount acceptable to the Authority and will in any event be not less than per claim and with a limit of

aggregate, such limits to be dedicated specifically to the

Project;

(b) Any applicable deductibles will not exceed

#### 3. PROPERTY COVERAGE INSURANCE

The Authority will provide, maintain and pay for Course of Construction coverage, against "All Risks" of direct physical loss or damage including flood and earthquake, and will cover all materials, property, structures and equipment purchased for, entering into, or forming part of the Work whilst located anywhere within Canada and continental United States of America during construction, erection, installation and testing, but such coverage will not include coverage for Design-Builder's and Subcontractors' equipment of any description. Such coverage will be maintained until Substantial Completion of the Project.

Deductibles, per occurrence, not exceeding the following amounts and if more than one deductible applies, the highest one will apply:

- 1. For floods,
- 2. For earthquakes, the greater of of the total project value insured;
- 3. For testing and commissioning,
- 4. For soft costs, a waiting period of 30 days; and
- 5. For all other insured perils,
- 3.1 The coverage will include as a protected entity, each Design-Builder, Subcontractor, Architect or Engineer who is engaged in the Project.
- 3.2 The coverage will contain a waiver of the Authority's rights of subrogation against all protected entities except where a loss is deemed to have been caused by or resulting from any error in design or any other professional error or omission, or manufacturers (not employees of the insured).
- 3.3 The Design-Builder will, at his own expense, take special precaution to prevent fires occurring in or about the Work and will observe, and comply with, all insurance policy warranties and all laws and regulations in force respecting fires.

#### 4. AUTOMOBILE LIABILITY INSURANCE

4.1 The Design-Builder will provide, maintain and pay for, and require all Subcontractors to provide, maintain and pay for Automobile Liability Insurance in respect of all owned or leased vehicles, subject to limits of not less than inclusive per occurrence. The insurance will be placed with such company or companies and in such form and deductibles as may be acceptable to Authority.

# 5. AIRCRAFT AND/OR WATERCRAFT LIABILITY INSURANCE

5.1 The Design-Builder will provide, maintain and pay for liability insurance with respect to owned or non-owned aircraft and watercraft if used directly or indirectly in the performance of the Work, subject to limits of not less than

inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof and including Aircraft Passenger Hazard where applicable. The insurance will name the Authority as an additional insured, include a cross liability clause, be endorsed to provide the Authority with 30 days' advance written notice of cancellation and be placed with such company or companies and in such form and deductibles as may be acceptable to Authority.

#### 6. CONTRACTORS POLLUTION LIABILITY INSURANCE

- When applicable, the Design-Builder (or Design-Builder's Subcontractors) will require all Subcontractors to provide, maintain and pay for:
- 6.2 Contractors Pollution Liability insurance, where the Design-Builder's performance (or Design-Builder's Subcontractor's performance) of the work is associated with hazardous materials clean up, removal and or containment, transit, and disposal. This insurance must have a limit of liability not less than inclusive per occurrence insuring against bodily injury, death and damage to property including loss of use thereof.
- 6.3 The Authority must be included as an additional insured for its vicarious liability. Such insurance shall not be impaired by any biological contaminants (without limitation, mould and bacteria), asbestos, or lead-based paint exclusions. Such insurance to include sudden and gradual pollution events for third party liability including ongoing and completed operations. Any "Insured versus Insured" exclusion shall not prejudice coverage for the Authority and shall not affect the Authority's ability to bring suit against the Design-Builder as a third party.
- Any insurance required under this Section 6 must be endorsed to provide the Authority with 30 days' advance written notice of cancellation. If any such insurance is provided on a claims-made basis and that insurance is cancelled or not renewed, such policy must provide a extended reporting period.
- 6.5 The Design-Builder must cause all Subcontractors to provide to the Authority a Certificate of Insurance confirming all policies and endorsements necessary to comply with the insurance requirements outlined herein, or upon request, a certified copy of the required insurance policy.

# 7. GENERAL

- 7.1 The description of the Authority arranged insurance described herein is provided on a summary basis only and is not a statement of the actual policy terms and conditions. The Authority does not represent or warrant that the Authority arranged insurance contains insurance for any and all losses. It is the Design-Builder's responsibility to ascertain the exact nature and extent of coverage provided by the Authority arranged insurance, to review all policies pertaining thereto and to obtain any other insurance that it may be prudent for the Design-Builder to obtain.
- 7.2 The Design-Builder will also provide, maintain and pay for any other insurance that the Design-Builder is required by law to carry, or which the Design-Builder considers necessary.
- 7.3 Unless specified otherwise, the duration of each coverage and insurance policy will be from the date of commencement of the Work until the date of final certificate for payment.

- 7.4 The Authority will, upon request, provide the Design-Builder with proof of insurance of those coverages and insurances required to be provided by the Authority prior to commencement of the Work and subsequent certified copy of policies within a reasonable time period thereafter.
- 7.5 The Design-Builder and/or its Subcontractors, Design-Builder's Consultants and subconsultants as may be applicable, will be responsible for any deductible amounts under the policies of coverage and insurance except for perils of flood and earthquake.
- 7.6 The Design-Builder will provide the Authority with proof of insurance for those insurances required to be provided by the Design-Builder (or Design-Builder's Consultant) prior to the commencement of the Work in the form of a completed Certificate of Insurance and will also provide a certified copy of any required policies upon request.
- 7.7 The Authority will not be responsible for injury to the Design-Builder's employees or for loss or damage to the Design-Builder's or to the Design-Builder's employees' machinery, equipment, tools or supplies which may be temporarily used or stored in, on or about the premises during construction and which may, from time to time, or at the termination of this Agreement, be removed from the premises. The Design-Builder hereby waives all rights of recourse against the Authority or any other contractor with regard to damage to the Design-Builder's property.

#### **SCHEDULE 4**

#### **COMMUNICATION ROLES**

The Authority and the Design-Builder will share responsibilities for communications, including community relations, stakeholder consultation, media relations and emergency communications on the terms set out in this Schedule.

#### 1. **GENERAL**

- 1.1 The Design-Builder will be guided by the Authority's best practices regarding communications. Unless otherwise specified by the Authority, the governing document relating to best practices will be the disclosure guidance document entitled "Procurement Related Disclosure for Public Private Partnerships" posted at www.Partnershipsbc.ca.
- 1.2 The Design-Builder will consult and cooperate with the Authority regarding communications activities relating to the Project.
- 1.3 The desired outcome of communications activities is to inform and involve the public and other stakeholders about the progress, value and benefits of the Project and to develop and maintain support for the Project.
- 1.4 Communications strategies and plans involving the interests of both parties are to be prepared on a joint basis, with one party taking a lead role and the other a supporting role, as described in this Schedule.
- 1.5 Where communications strategies and plans involve the interests of both parties, each party will give the other a reasonable opportunity (taking into account the need for timely communications) to consider communications strategies and plans initiated by the other and, if information is supplied by a party, it should include or be accompanied by sufficient explanatory or other material to enable the information to be properly considered.
- 1.6 The Design-Builder will consider and, acting reasonably, take into account, public and other stakeholder input in regard to its plans for the Design and Construction.
- 1.7 This Schedule is a guideline and may be amended by mutual agreement. Non-compliance with this Schedule by either party will not constitute a breach of this Agreement.
- 1.8 No communication regarding the subject matter of a Dispute, including one resolved under Section 63 (Dispute Resolution) of the Agreement, will be made without the prior written consent of the Authority or the Design-Builder, as the case may be, unless otherwise ordered under the Dispute resolution procedure.
- 1.9 The Design-Builder acknowledges that FIPPA applies to the Authority, that nothing in this Schedule limits any requirements for compliance with FIPPA and that the Authority may be required to make disclosure of information under FIPPA.

- 1.10 The Design-Builder acknowledges that the Authority will be free to disclose (including on Websites) this Agreement and any and all terms hereof, except for those portions that would not be required to be disclosed under FIPPA. The Authority will consult with the Design-Builder prior to such disclosure.
- 1.11 Except for Section 1.10, this Schedule is subject to the parties' obligations in respect of Confidential Information pursuant to Section 66 of this Agreement.

#### 2. CATEGORIES OF COMMUNICATIONS

The following categories of communications are covered by this Schedule and each category applies during the Construction period:

- (a) <u>Communications Planning</u>: the Design-Builder will be provided with a copy of parts of the Project Communications Plan prepared by the Authority and applicable to this Project and will support the implementation of the strategies and activities listed in it;
- (b) <u>Community Relations</u>: keeping all key audiences including external and internal Project stakeholders (as identified in communications plans) informed, including providing overall Project information, including information about schedule, design, construction (including traffic management), facilities management and other services, using any and all appropriate communications tools and tactics;
- (c) <u>Consultation</u>: engaging in discussions with Project stakeholders;
- (d) <u>Media Relations</u>: providing media with Project updates and responding to issues raised by the media; and
- (e) <u>Emergency Communications</u>: preparing and implementing crisis communications planning and preparedness.

# 3. LEAD AND SUPPORTING ROLES

- 3.1 Within each category of communications set out in Section 2 of this Schedule, the Design-Builder will play either a lead or supporting role, working with the Authority to achieve the desired communications outcomes.
- 3.2 For all categories of communication, and whether communication occurs as part of a lead or supporting role, no advertising that involves payment, by the Design-Builder, to a third party may include the Authority or the Project unless the Design-Builder obtains the prior consent of the Authority, not to be unreasonably withheld or delayed.

#### 4. LEAD RESPONSIBILITIES

The following is an overview of the responsibilities associated with lead roles:

- (a) developing an overall strategic communications plan for the Project, that includes plans for communications, community relations, consultation, media relations and emergency communications;
- (b) having regard for the input of the supporting party, approving communication plans and tactics in response to specific circumstances, unless otherwise indicated in this Schedule:
- (c) implementing its role in approved plans;
- (d) achieving the outcomes set out in the strategic communication plan;
- (e) maintaining constructive and positive relationships with the public and other stakeholders;
- (f) providing information, as required by the supporting party and its team members, to support communication and consultation activities;
- (g) as relevant to its lead role, organizing, attending and participating in community and other stakeholder consultation meetings and carrying out other communication activities to consult with and report back to the community and other stakeholders, including open houses, information updates, public displays, advertising, website creation, maintenance updates, construction notices, milestone celebration events, news releases and tours, and directing inquiries to the supporting party as appropriate;
- (h) assuming responsibility for costs related to carrying out lead responsibilities to a standard acceptable to the Authority, in the amounts and in the manner approved by the Authority;
- (i) monitoring whether the Design and Construction are conducted in a manner consistent with strategic communication plans and advising the parties of any material inconsistency; and
- (j) having a trained media relations spokesperson available 24/7 to respond to media requests.

#### 5. SUPPORTING RESPONSIBILITIES

The following is an overview of the responsibilities associated with supporting roles:

- (a) assisting with the implementation of plans, including drafting of other communication documents, as directed by the lead party;
- (b) implementing its role in approved plans;
- (c) maintaining constructive and positive relationships with the public and other stakeholders:

- (d) providing information, as required by the lead party and its team members, to support communication and consultation activities;
- (e) as relevant to its supporting role, organizing, attending and participating in community and other stakeholder consultation meetings and carrying out other communication activities to consult with and report back to the community and other stakeholders, including open houses, information updates, public displays, advertising, website creation, maintenance updates, construction notices, milestone celebration events, news releases and tours, and directing inquiries to the lead party as appropriate;
- (f) assuming responsibility for costs related to carrying out supporting responsibilities to a standard acceptable to the Authority, in amounts and in a manner approved by the Authority; and
- (g) having a local, trained media relations spokesperson available 24/7 to respond to media requests.

#### 6. ALLOCATION OF LEAD AND SUPPORTING ROLES

The lead and supporting roles will be allocated as set out in the following table, unless otherwise required by the Authority in consultation with the Design-Builder:

[ ]

CATEGORY	LEAD	SUPPORTING
Communications Planning	Authority	Design-Builder
Community Relations	Authority	Design-Builder
Consultation	Authority	Design-Builder
Media Relations	Authority	Design-Builder
Emergency	Authority	Design-Builder
Communications Relating		
to existing Authority		
employees, programs,		
services and facilities; and		
Design-Builder performance		
Emergency	Design-Builder	Authority
Communications related to		
Design-Builder Site health		
and safety		
Construction	Authority	Design-Builder
Moves	Authority	Design-Builder
Traffic	Authority	Design-Builder
Noise	Authority	Design-Builder

## 7. AUTHORITY RIGHT TO STEP IN AT DESIGN-BUILDER'S COST

If the Design-Builder is required to take a lead role but fails to comply with its obligations under this Schedule in any material respect, the Authority may give reasonable notice to the Design-Builder that it intends to undertake and assume the lead role obligations of the Design-Builder, at the expense of the Design-Builder, including all direct costs of engaging third party assistance with communication responsibilities and all direct costs of the Authority in connection with fulfilling the Design-Builder's obligations under this Schedule.

# **KEY INDIVIDUALS**

Individual's Name	Company Name	Role
Ken Raaflaub	Bird	Design-Builder's Representative
Andris Ozols	Bird	Design-Build Director
Jimmy Ng	Stantec	Mechanical Engineering Lead
Dean Kaardal	Stantec	Electrical Engineering Lead
Tommy Chiu	Stantec	Design-Builder IMIT Lead
Bruce Raber	Stantec	Lead Architect
Tony Maida	Bird	Design Team Technical Lead
Loi Huynh	Bird	Design-Build Construction Manager

## SCHEDULE OF PRICES

The Contract Price represents the entire compensation to the Design-Builder by the Authority for any and all costs related to the Work, including but not limited to all fees, cash allowances, contingencies and all duties and taxes, excluding GST payable by the Authority to the Design-Builder.

The attached schedule is a breakdown of the Contract Price solely for the purpose of assisting the parties to develop the Schedule of Values, and will not be used or relied upon by the Design-Builder for any purpose.



Breakdown of Contract Price		
		Value
HARD COSTS		
Division 1 - General Requirements	\$	
Division 2 - Existing Conditions	\$	
Division 3 - Concrete	\$	
Division 4 - Masonry	\$	
Division 5 - Metals	\$	
Division 6 - Wood, Plastics and Composites	\$	
Division 7 - Thermal and Moisture Protection	\$	
Division 8 - Openings	\$	
Division 9 - Finishes	\$	
Division 10 - Specialties	\$	
Division 12 - Furnishings	\$	
Division 13 - Special Construction	\$	
Division 14 - Conveying Equipment	\$	
Division 21 - Fire Suppression	\$	
Davison 22 - Plumbing	\$	
Division 23 - Heating, Ventilating and Air Conditioning (HVAC)	\$	
Division 25 - Integrated Automation	\$	
Division 26 - Electrical	\$	
Division 27 - Communications	\$	
Division 28 - Electronic Safety and Security	\$	
Division 31 - Earthwork	\$	
Division 32 - Exterior Improvements	\$	
Division 33 - Utilities On Site	\$	
Division 33 - Utilities Off Site	\$	
Landscape Maintenance	\$	
Other (specify)	\$	
Hard Costs Sub-Total	\$	
	Ť	
SOFT COSTS		
Architectural Design Fees	\$	
Structural Design Fees	\$	
Mechanical Engineering Design Fees	\$	
Electrical Engineering Design Fees	\$	
Civil Engineering Design Fees	\$	
Geotechnical Engineering Design Fees	\$	
Building Envelope Consultants Fees	\$	
Landscape Architect Fees	\$	
Infection Control Professional Fees	\$	
Code Consultant Fees	\$	
Legal Advisor Fees	\$	
Acoustic Consultant	\$	
Signage & Wayfinding	\$	
• • •		
Interior Design	\$	
Specialty Mental Health	\$	
Off-Site Designs	\$	



Breakdown of Contract Price		
		Value
Commissioning Consultant Fees		
Insurances - Specify	_	
Insurances - Specify	_	
Development Permit	_	
Building Permit	_	
Development Cost Charges		
Other - Specify	_	
Other - Specify		
Soft Costs Sub-Total	-	
General Expense Costs		
Pursuit Costs	_	
Ongoing General Expense	_	
Mobilization		
Project Staff		
Project Overhead		
Construction Equipment		
Testing		
Mockups		
Permits and Fees		
Bonding and Security		
Insurance	_	
General Expense Sub-Total		
Future Enabling Works Cost	_	
Total Costs	_	
Fee		
Nominal Cost of the Proposal (Contract Price	\$	197,509,930.00
Nonlina Cost of the Froposal (Contract Frice	Ψ	191,508,850.00

# PROPOSAL EXTRACTS

See separate document

#### **ENERGY**

### 1. INTERPRETATION

### 1.1 Definitions

In this Schedule, in addition to the definitions set out in Section 1 of this Agreement:

- "Cooling Degree Days" for a period means the figure obtained or calculated from the Site Weather Data setting out the extent to which the average outdoor temperature during that period at the Site was greater than a mean temperature of +18 degrees Celsius;
- "Design and Construction Energy Target" means MWh per year, not to exceed MWh per year;
- "Energy" means electrical and thermal energy used within, by or for the Building and electrical and thermal energy used within, by or for exterior elements connected to the building electrical and thermal systems;
- **Energy Consumption**" for a period means the total amount of Energy consumed at the Building during that period, expressed in MWh as reflected by the readings for the metered utilities and as calibrated by the Independent Energy Consultant;
- "Energy Model" means an hourly energy simulation produced using whole building energy modelling software;
- "Energy Utility" means each different type of energy that is purchased or produced for use in the Building (and may include, but not be limited to, electricity, propane, natural gas or fuel oil);
- "Environmental Credit" means any income, credit, right, benefit or advantage relating to environmental matters including type and level of emissions, means of production of Energy, input sources and compliance with any environmental laws, regulations, rules or orders;
- "Heating Degree Days" for a period means the figure obtained or calculated from the Site Weather Data setting out the extent to which the average outdoor temperature during that period at the Site was less than a mean temperature of +18 degrees Celsius;
- "Independent Energy Consultant" means one or more individuals who are listed on the USGBC Experienced Modellers List and are engaged to complete the adjustments to the energy target, as described in Section 3.3 of this Schedule;
- "Megawatt hour", or "MWh", is the unit of energy to be used throughout this Schedule and 1 MWh is equivalent to 3.6 GJ;
- "Non-Targeted Energy Consumption" means energy consumed by the Building excluding energy consumed by Targeted Energy Components;

"Site Weather Data" means the weather data from CN2014 file for Abbotsford, British Columbia, WMO# 71108(0) as available from WhiteBox Technologies;

# "Targeted Energy Components" means all:

- (a) Hardwired lighting;
- (b) Elevators;
- (c) HVAC systems;
- (d) All mechanical equipment including, but not limited to, pumps, fans, chillers, heaters, boilers, humidifiers and steam generators; and
- (e) Any other electrical components that the parties agree to add from time to time;

"Targeted Energy Consumption" means Energy Consumption minus Non-Targeted Energy Consumption, such consumption to be calculated from the applicable building management systems and metering systems;

"**Test Period**" means the 12 month period commencing on the first day of the first complete calendar month that is 6 months after the Substantial Completion Date;

"USGBC Experienced Modellers List" means the most recent version of the US Green Building Council's Experienced Modellers List; and

"Weather Data" means the data obtained from Environment Canada's "National Climate Data and Information Archive" including but not limited to daily temperature.

## 2. ENERGY CONSUMPTION

2.1 Recording and Monitoring of Weather Data and Energy Consumption

The Design-Builder will:

- (a) install equipment to record and monitor consumption of each type of Energy in the Building. Such equipment must be suitable and properly calibrated to enable a detailed monitoring of Energy trends and consumption to allow analysis of the data collected to enable various matters, including:
  - (i) comparisons to be made with the declared energy targets;
  - (ii) early warning of malfunctions and deviations from norms; and
- (b) secure all such properly recorded information so that it is not lost or degraded as a result of any equipment or service malfunctions, and will secure such information from any adjustment, modification or loss from any source.

## 2.2 Energy Consumption Certificate

Promptly after the end of the Test Period, the Design-Builder will deliver to the Authority a certificate showing for the Building:

- (a) the Energy Consumption for the Test Period with respect to:
  - (i) Energy Consumption;
  - (ii) Targeted Energy Consumption; and
  - (iii) Non-Targeted Energy Consumption;
- (b) the Weather Data for the Test Period, including the number of Cooling Degree Days and Heating Degree Days;
- (c) building occupancy; and
- (d) any other variable that affects the Energy Consumption relative to the energy model assumptions set out in Attachment 1 to this Schedule.

## 3. DESIGN AND CONSTRUCTION ENERGY GUARANTEE

3.1 Building to Meet or Beat Design and Construction Energy Target

The Design-Builder warrants to the Authority that the Building will be designed and constructed so that the Targeted Energy Consumption per year will not exceed the Design and Construction Energy Target.

3.2 Monitoring of Energy Consumption

During the Test Period, the Design-Builder and the Authority will monitor Energy Consumption in order to determine the Energy Consumption and the Targeted Energy Consumption for the Test Period.

## 3.3 Adjustment to Energy Consumption

Before the end of the Test Period, the Design-Builder will engage an Independent Energy Consultant acceptable to the Authority, acting reasonably, to determine whether and to what extent the Energy Consumption for the Test Period should be adjusted based on factors which, in the energy consultant's professional opinion, are applicable, including actual climate conditions, occupancy, equipment use and Authority controlled effects during the Test Period, and differ from the factors taken into account in the energy model assumptions set out in Appendix 1 to this Schedule.

A more detailed methodology for this adjustment will be developed to the satisfaction of the Authority, the Design-Builder and the Independent Energy Consultant and may use the energy model used to develop the Design and Construction Energy Target and/or another analytical tool. The detailed methodology will include a simplified summary of inputs, assumptions, and changes reasonably required by each party for purposes of clearly explaining the adjustments.

# 3.4 Failure to Achieve Design and Construction Energy Target

If the Targeted Energy Consumption in the Test Period (as may be adjusted pursuant to Section 3.3 of this Schedule) exceeds the Design and Construction Energy Target, then the failure to meet the Design and Construction Energy Target will be deemed to be a defect or deficiency to which Section 38 (Warranty) applies. Without limiting the obligations of the Design-Builder under Section 38 (Warranty), the Design-Builder will modify the Building (including the electrical, mechanical or other systems) as required so that annual Targeted Energy Consumption does not exceed the Design and Construction Energy Target, subject to compliance with the Statement of Requirements and the approval of such modifications by the Authority, not to be unreasonably withheld or delayed. The maximum amount of the total aggregate liability of the Design-Builder to the Authority under Section 11.1 of this Agreement and this Schedule 8 (including Sections 3.1 and 3.4 of this Schedule) is \$1,000,000.

## 4. ENVIRONMENTAL CREDITS

### 4.1 Entitlement to Environmental Credits

The Authority will be entitled to any and all Environmental Credits related to the Building and its operation and the Design-Builder will use commercially reasonable efforts to assist the Authority in achieving the maximum Environmental Credits available.

### **APPENDIX 1**

## **ENERGY MODEL ASSUMPTIONS**

Appendix 1 to Schedule 8 is to apply for energy models submitted for at proposal and substantial completion phases for the Design and Construction Energy Target. The Design-Builder shall apply the following modeling methodologies and assumptions and produce documents as described herein.

# 1. Methodology

#### 1.1 General

- (a) Follow modelling procedures in accordance with protocols of LEED and ASHRAE 90.1 Part 11 Energy Cost Budget Method.
- (b) A 'baseline' or 'reference' building simulation is not required for the Design and Construction Energy Target.
- (c) Weather Data for the energy models submitted for proposal and substantial completion is to be the CN2014 file for Abbotsford, British Columbia, WMO# 71108(0) as available from WhiteBox Technologies.
- (d) Utility rates for calculation of annual energy cost, including applicable taxes, are to be as follows:
  - (i) Electricity: Demand \$11.44/kW | Consumption \$0.64/kWh
  - (ii) Natural gas: Assume \$0.025/kWh

## 1.2 Simulation Engines.

- (a) For determining the Design and Construction Energy Target, simulation engines and other calculations tools are at the discretion of the proponent.
- (b) Compliance with the energy target provisions of Schedule 8 is required regardless of simulation and calculation tools, or techniques employed by the proponent.
- (c) For the proposal stage evaluations, simulations are to be performed in EnergyPlus versions 8.4 and later, or DOE2.2/eQuest 3.64 or later. By definition, EE4 and other DOE2.1 based simulation tools are excluded. Submit request to use other software.

### 1.3 Simulation Methods

(a) Proponents utilizing DOE2.2/eQuest are to manually correct all heating and cooling energy due to zone temperature drift imposed by the minimum deadband

- width and throttling ranges required by the algorithms of DOE2.2. Drift from design space setpoint must be limited to 0.55K (1°R).
- (b) If heat recovery by enthalpy wheels is incorporated in the design, latent effectiveness may only be simulated if capacity modulation is controlled by air bypass or on/off control. Enthalpy wheel speed modulation may only be employed if zero latent effectiveness is assumed.
- (c) Thermal zones in the simulation are to reflect the zones in the design except in cases where doing so would cause simulation issues or inaccuracies, such as:
  - (i) Zones served by single-zone equipment such as cooling fan coils and ventilation air provided by a central VAV system.
  - (ii) Large, open spaces served by multiple air terminals or supplemental HVAC units.
  - (iii) Other may to be identified by the proponent.
- (d) Internal loads of thermal zones are to be based on the sum of internal loads applied to the spaces with the thermal zones.
- (e) Schedules and temperature settings may be applied to thermal zones based on those of the dominant space.
- (f) Combination of like interior zones are to follow the following criteria:
  - (i) Same internal loads (lighting, plug & process loads, and occupant density).
  - (ii) Same minimum outdoor air and supply air exchange rates.
  - (iii) Served by the same air system and no zone supplemental equipment.
  - (iv) Same operating schedules.
- (g) Combination of like exterior zones are to follow the following criteria:
  - (i) Criteria (f)(i) through (f)(iv) per interior zones
  - (ii) Same net floor area +/- 20%
  - (iii) Within a tolerance of 10%, zines have the same ratio of net floor area to: design cooling airflow; design heating airflow; and perimeter heating capacities;.
  - (iv) Same exterior surface & window constructions, and shading elements.

- (v) Same ratio of net floor area to exterior wall & window areas within a tolerance of 10%, and facing directions within 10° or all exterior surfaces facing +/- 40° from true north.
- (vi) All zones are completely shaded, or all zones are completely unshaded by topographical features, other buildings, or by surfaces of the building itself.
- (h) Interior conditioned zones with on-ground floors more than 1.5m below grade and more than 2.5m from perimeter walls may be modeled with ground temperatures 2°C below the annual average room temperature.

#### 1.4 Central Plant

- (a) In order better assess the performance of the Mental Health Building being connected to the new Energy Centre, a notional and scaled version of the plant will be simulated based on its proposed design.
- (b) Scale the size of the cooling plant relative to the design cooling load of the building and a sizing factor of 20%.
- (c) Size the heating equipment relative to the design heating load of the MCH building and a sizing factor of 20%.
- (d) Size the steam plant relative to the design humidification load and sizing factor of 20%
- (e) Configure the thermal loops and employ the same efficiency features in the notional plant per the proposed plant.
- (f) Employ the same quantity of boilers, chillers, heat rejection devices, pumps & other equipment.
- (g) Scale loop flows and capacities relative to those in the proposed plant.
- (h) All other parameters of the notional plant are to be based on the proposed plant, such as, but not limited to:
  - (i) Operating schedules
  - (ii) Setpoints, equipment sequencing, control logic
  - (iii) Equipment efficiency correction curves.

## 1.5 Equipment Efficiency Curves

(a) Provide continuous plots of the efficiency curves utilized in the simulation. Plot these as a function of part load ratio (PLR) and the range of fluid and/or outdoor temperatures for which the equipment is expected to operate. Plot zero-tolerance

- efficiency test points to demonstrate suitability of correction curves. No efficiency point can exceed an error of 5%.
- (b) Provide part load operating points are to be 0.75, 0.55, 0.35 and the PLR at maximum turn-down ratio.
- (c) For hot water boilers plot efficiency points at three return water temperatures between for each of the four PLR points. Exception: Boilers that are expected to operate at full load only, or at part load only under emergency/redundancy circumstances need not have additional PLR points less than 1.0.
- (d) For HVAC refrigeration machines, plot at each of 4 PLRs, 9 operating points representing zero-tolerance coefficient of performance values at three evaporator leaving temperatures for each of three condenser leaving temperatures.
- (e) For heat recovery chillers, demonstrate that the efficiencies curves utilized in the simulation engine reflect zero-tolerance coefficient of performance values at the expected heat recovery (heating) fluid temperatures leaving the condenser, and each of 3 evaporator temperatures, for the part load ratios for which the machine is expected to operate.

## 1.6 Summary Report

- (a) Provide an energy model summary, complete description inputs, assumptions, and end-use breakdown including heating, humidification, cooling, lighting, fans, pumps, service water heating, and plug and process loads.
- (b) Provide input and output summary reports from the energy simulation software.
- (c) Identify the energy consumption by fuel type, i.e., electricity, natural gas, or any other source of energy that may be available;
- (d) Include assumptions & parameters not described, or that deviate from those described herein.
- (e) For the Design and Construction Energy Target, provide calculations and results for total indicative building annual energy consumption, both as MWh and kWh/m2, with separate listings for Targeted and Non-Targeted Energy Consumption and by sourced energy type

# 2. Modeling Assumptions

## 2.1 General

(a) To ensure comparable simulations while allowing flexibility in modeling approach, use the default assumptions shown in the following tables to determine operating parameters for the various spaces, unless other Owner-provided data contradicts these assumptions, or where knowledge or experience dictate that a different assumption would better reflect actual operating conditions.

# 2.2 Space Usage

- (a) Use the appropriate space type categories based on the tables below to define the inputs to best represent the building design based on the particular zoning strategy and modeling approach used.
- 2.3 The following information is contained within Tables 1 through 4.
  - (a) Table 1 contains general modeling assumptions to be used when building the energy model including design conditions.
  - (b) Table 2 contains specific space assumptions for occupant density, operating schedules, applicable space types from National Energy Code of Canada for Buildings (NECB 2011), and space specific notes. For each space type, base the Peak Receptacle Load and Service Heating Load on Table A-8.4.3.3(1) of NECB 2011 in keeping with the applicable space type noted in Table 2.
  - (c) Table 3 provides departmental operating schedules. For departments operating less than 24 hours per day, assume occupied temperatures are and airflow are required at the beginning of the hour in which the department is open unless otherwise indicated in Table 4.
  - (d) Table 4 provides detailed operating schedules referenced for specific rooms by Table 2.

Table 1

General Assumptions	
Task Lighting	Included within Electrical Plug and Process Loads
Process Loads	IT server room electricity consumption: 50 kW, apply Schedule 5.
Service Hot Water	Annual service hot water (SHW) consumption is to be 366 MWh of thermal energy, excluding efficiency of generation, and based on code-compliant fixtures. This value can be reduced based on the degree to which actual fixtures selected reduce hot water consumption.  SHW does not need to be applied at the zone level.  Operating schedules for SHW use are to be based on those listed in Tables 2 and 4 or understanding of space use.  Space SHW use is to be in proportion to the default SHW intensities of Table A-8.4.3.3(1) of NECB 2011, and adjusted for each space type such that the product of:  a) space SHW load intensity (W)

General Assumptions							
	b) space operating fraction for each hour of annual schedule (h)						
	c) fraction of reduced-flow fixture to code compliant fixture SHW usage, and						
	d) MW per W						
	for all spaces equals total SHW consumption.						
	This load is to be applied to the SHW plant loop.						
Thermal Process Loads	Assume that there are no thermal process loads.						
Electrical Plug Loads	Apply electrical plug loads as internal loads for each zone. Apply operating schedules for the plug loads based on the space or department types listed in Part B and C, or based on understanding of the space use.						
	Distribute the plug load intensity in proportion to those in Table A-8.4.3.2.(1)B of NECB 2011 for the space types listed, and adjusted for each space type such the product of:						
	a) space plug load intensity (W)						
	b) load fraction for each hour of annual schedule (h)						
	c) MW per W						
	for all spaces equals 380 MWh.						
	Use a modeling approach that takes into account the appropriate portion of loads that directly contribute to the gains in the conditioned space.						
Elevators	Based upon the design						
Exterior Lighting	Based upon the design						
Parkade	Based upon the design. Assume 4 hours daily exhaust fan operation controlled by vehicle emission sensors.						
	Lighting is to be continuously available and consumption may be reduced by proposed application of appropriate occupancy controls.						
Interior Lighting	Enter interior lighting load based on design; base schedules on default						

General Assumptions	
	lighting schedules outlined in Part B below, and adjust based on the extent to which the lighting design enables lights to be turned off when not needed.
Ventilation Rate	To be modeled per design. Apply CSA Z317 minimum air change rates and only setback air flow rates as indicated in Table 2 and Table 4.
Temperature Settings	All space temperature setpoints:
	Cooling: 23.6°C Occupied   29°C Un-Occupied
	Heating: 22.4°C Occupied   16°C Un-Occupied
	Only apply setback temperature as identified in Table 2 and Table 4.

**Table 2: Assumptions for Space Usage** 

Department	Individual Room	Occupant Density		-		Schedule	Notes <sup>1</sup>	NECB 2011 Default Space Categories Building / Space
		#	m <sup>2</sup> /occ	Sc	ž	3 1		
Inpatient	Patient Rooms		20	3C		Health / Institutional: Patient Rooms		
Inpatient	Family/Visitor		2.0	3C		Assembly:		
	Lounge					Recreation / Lounge		
Inpatient	Staff Conference		1.7	6A		Assembly:		
	Room					Conference / Meeting		
Inpatient	Exam/treatment		7.0	3D		Health / Institutional:		
	room/Therapy					Dental Suite / Exam		
	Room							
Inpatient	Consult Therapy		5.5	3D		Health / Institutional:		
	Room					Dental Suite / Exam		
Inpatient	Patient Multi-		1.9	3C		Assembly:		
	Purpose Room					Recreation / Lounge		
Inpatient	Dining Room /		3.1	3C		Food Service: Leisure		
	Lounge					Dining		
Inpatient	Patient Quiet		2.0	3C		Assembly:		
	Lounge					Recreation / Lounge		

<sup>&</sup>lt;sup>1</sup> Notes column is intended to address any exceptions to the schedules (particularly temperature setbacks) if necessary.

Department	Individual Room		cupant ensity	Schedule	Notes <sup>1</sup>	NECB 2011 Default Space Categories Building / Space
		#	m <sup>2</sup> /occ	Sc	Ž	
Inpatient	Patient Bedroom	1		3B		Health / Institutional:
						Patient Rooms
Inpatient	Seclusion Room	1		3C		Health / Institutional:
						Patient Rooms
Inpatient	Staff Lockers		10	6A		Assembly / Locker Room
	G 007		1.0	- 1		and Shower
Inpatient	Staff Lounge / Multi-Purpose Room		10	6A		Assembly: Recreation / Lounge
Inpatient	Reception		3.7	3C		Assembly:
						Recreation / Lounge
Inpatient	Client Waiting		1.5	3C		Assembly:
	Area					Recreation / Lounge
Inpatient	Office		11.2	3C		Office
Inpatient	Group Therapy		1.5	3C		Health / Institutional:
T	Room		2.7	2.4		Dental Suite / Exam
Inpatient	Resident/Intern		3.7	3A		Assembly:
Innationt	Workroom Staff Conference		1.4	6B		Conference / Meeting Assembly:
Inpatient	Room		1.4	OD		Conference / Meeting
Inpatient	Staff Lounge		3.0	3C		Assembly:
транен	Stair Louige		3.0	30		Recreation / Lounge
Inpatient	Waiting Area		1.4	3A		Assembly:
<b>P</b>	8					Recreation / Lounge
Inpatient	Staff Workroom		3.7	3C		Assembly:
-						Conference / Meeting
Inpatient	Waiting Area		1.4	1A		Assembly:
						Recreation / Lounge
Inpatient	Reception/Clerical		4.6	1A		Office
	Workstation					
Inpatient	Conference Room		1.5	6B		Education:
-	(Large)					Classroom
Inpatient	Inpatient/Client		1.4	3B		Assembly:
Ŧ	Seating Alcove		4.7	20		Recreation / Lounge
Inpatient	Exercise /		4.5	3C		Assembly:
Innationt	Wellness Room		200	3D		Recreation / Lounge Storage / Warehouse:
Inpatient	Utility Rooms / Storage Rooms /		200	ענ		Active Storage, Fine
	Housekeeping					Active Storage, Pille
	Closet / Linen					
	Closet					
Inpatient	Corridors		100	3D		Service and Common:

Department	Individual Room		cupant ensity	Schedule	Notes <sup>1</sup>	NECB 2011 Default Space Categories Building / Space
	Ī	#	m <sup>2</sup> /occ	Scł	No.	Dunuing / Space
						Corridors
Inpatient	Patient Clinical		20	3C		Health / Institutional:
-	Areas (other than					Nursery
	patient rooms)					•
Inpatient	Pharmacy /		20	3C		Health / Institutional:
	Medication Room					Pharmacy
Outpatients	Main Entrance Lobby		10	1B		Assembly: Lobby
Outpatients	Large		2.3	1A		Assembly:
	Multipurpose					Recreation / Lounge
	Room					
Outpatients	Reception		3.7	1A		Assembly:
						Recreation / Lounge
Outpatients	Waiting Area		2	1A		Assembly:
			•			Recreation / Lounge
Outpatients	Consultation /		2.8	1A		Health / Institutional:
	Therapy Room			1.4		Dental Suite / Exam
Outpatients	Large		2	1A		Health / Institutional:
	Consultation /					Dental Suite / Exam
Outpotionts	Therapy Room Exam / Treatment		6.8	1A	_	Health / Institutional:
Outpatients	Room		0.8	1A		Dental Suite / Exam
Outpatients	Large Group		2	1A	+	Health / Institutional:
Outpatients	Therapy Room		2	1/1		Dental Suite / Exam
Outpatients	Pt Change Room		10	6A		Assembly:
Outpatients	I t Change Room		10	071		Locker Room and
						Shower
Outpatients	ECT Treatment		15	1A		Health / Institutional:
- · · · <b>r</b>	Room					Patient Rooms
Outpatient	Recovery Room		8.3	1A		Health / Institutional:
1						Patient Rooms
Outpatient	Post-Recovery		5	1A		Health / Institutional:
-	Room					Patient Rooms
Outpatient	Patient Rooms		20	1A		Health / Institutional:
						Patient Rooms
Outpatient	Family/Visitor		2.0	1A		Assembly:
	Lounge					Recreation / Lounge
Outpatient	Staff Lockers		10	6B		Assembly:
						Locker Room and
			1			Shower
Outpatient	Staff Lounge /		10	6B		Assembly:
	Multi-Purpose					Recreation / Lounge

De partment	Individual Room		cupant ensity	Schedule	Notes <sup>1</sup>	NECB 2011 Default Space Categories Building / Space				
		#	m <sup>2</sup> /occ	Sch	No	Dunuing / Space				
	Room									
Outpatient	Office		11.2	1B		Office				
Outpatient	Staff Conference		1.4	6B		Assembly:				
1	Room					Conference / Meeting				
Outpatient	Staff Lounge		3.0	6B		Assembly:				
-						Recreation / Lounge				
Outpatient	Exam Room		9.5	1A		Health / Institutional:				
1						Dental Suite / Exam				
Outpatient	Staff Workroom		3.7	1B		Assembly:				
1						Conference / Meeting				
Outpatient	Corridors		100	1B		Service and Common:				
-						Corridors				
Outpatient	Patient Clinical		20	1A		Health / Institutional:				
-	Areas (other than					Nursery				
	patient rooms)									
Outpatient	Medication Room		20	1A		Health / Institutional:				
						Pharmacy				
Research &	Video conference		2.5	2A		Assembly:				
Education	Room					Conference / Meeting				
Research &	Multipurpose		2.5	2A		Assembly:				
Education	Room					Conference / Meeting				
Research &	Seminar/ Small		3.25	2A		Assembly:				
Education	Group Therapy					Conference / Meeting				
Research &	Office		10	2C		Office				
Education										
Research &	Learner's Lounge		12.5	6B		Assembly:				
Education						Recreation / Lounge				
Research &	Consult / Exam		9	2B		Health / Institutional:				
Education	(Clinical Skills)					Dental Suite / Exam				
Research &	Exam / Procedure		9	2B		Health / Institutional:				
Education	(Clinical Skills)					Dental Suite / Exam				
Research &	Testing Rooms		6.8	2C		Health / Institutional:				
Education	(Clinical Skills)					Dental Suite / Exam				
Research &	Phlebotomy		4.5	2B		Health / Institutional:				
Education	Station					Dental Suite / Exam				
Research &	Waiting Area	_	3	2C		Assembly:				
Education						Recreation / Lounge				
Research &	Clinical trials		11	2C		Health / Institutional:				
Education	prep/staging area					Dental Suite / Exam				

# **Table 3: Department Hours of Operation**

Department	Days	Hours of Operation
Outpatient Mental Health &	Monday-Friday	06:30 through 17:00
Substance Use		06:30 through 22:00
	Saturday	Closed
	Sunday	Closed
Inpatient Mental Health &	Monday-Sunday	24 Hours
Substance Use		
Mental Health & Substance	Monday-Sunday	06:30 through 22:00
Use - Education & Applied		
Research		

**Table 4: Space Type Operating Schedules<sup>2</sup>** 

	Table 4:					ig SCI	ie duie	: S																	
Operatir	Operating Schedule 1A: Outpatient																								
Un	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0.2	0.7	0.9	0.8	0.8	0.8	0.6	0.8	0.8	0.8	0.6	0.2	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.9	0.9	0.9	0.6	0	0	0	0	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.6	0.9	0.9	0.9	0.8	0.5	0.8	0.9	0.9	0.9	0.5	0.05	0.05	0.05	0.05	0.05	0.05
Monday	Fans	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
through Friday	Heating <sup>0</sup> C	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.7	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.7	0.4	0.05	0.05	0.05	0.05	0.05	0.05
	Occ.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Fans	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Saturday Sunday	Heating <sup>0</sup> C	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Sullday	Cooling <sup>0</sup> C	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Operatir	ng Sched	ule 11	B: Ou	tpatio	ent																				
Un	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0.2	0.7	0.9	0.8	0.8	0.8	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.2	0	0
Monday	Lgt.	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.6	0	0
through	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.6	0.9	0.9	0.9	0.8	0.5	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.5	0.05	0.05
Friday	Fans	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
	Heating	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16

<sup>&</sup>lt;sup>2</sup> Regarding the Fan schedules, note that during setback times fans can cycle on as needed based on a demand for heating/cooling or to maintain indoor air quality for any spaces using a demand control ventilation approach

	<sup>0</sup> C																								
	Cooling OC	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.4	0.05	0.05
	Occ.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.05
Saturday	Fans	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Sunday	Heating <sup>0</sup> C	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	Cooling OC	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Operatir	ng Sched	ule 2	A: Ed	ucatio	on & 1	Resea	arch																		
Un	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0.2	0.7	0.9	0.8	0.8	0.8	0.6	0.8	0.8	0.8	0.8	0.6	0.5	0.4	0.3	0.3	0	0
	Lgt.	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.9	0.9	0.9	0.8	0.7	0.6	0.6	0.6	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.6	0.9	0.9	0.9	0.8	0.5	0.8	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.05	0.05
Monday through	Fans	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF																
Sunday	Heating <sup>0</sup> C	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16
	Cooling <sup>0</sup> C	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.6	0.5	0.4	0.4	0.05	0.05
Operatir	ng Sched	ule 21	B: Ed	ucatio	on & 1	Resea	rch																		
Un	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0.2	0.7	0.9	0.8	0.8	0.8	0.6	0.8	0.8	0.6	0.5	0.4	0.3	0.3	0	0	0	0
Monday	Lgt.	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.9	0.8	0.7	0.6	0.6	0.6	0	0	0	0
through	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.6	0.9	0.9	0.9	0.8	0.5	0.8	0.9	0.7	0.7	0.7	0.7	0.7	0.05	0.05	0.05	0.05
Saturday	Fans	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF														
	Heating <sup>0</sup> C	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16

	Cooling <sup>0</sup> C	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.7	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.05	0.05	0.05	0.05
	Occ.	0	0	0	0	0	0	0	0.2	0.7	0.9	0.8	0.8	0.6	0.8	0.8	0.6	0.5	0.4	0.3	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.9	0.8	0.7	0.6	0.6	0	0	0	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.6	0.9	0.9	0.9	0.5	0.8	0.9	0.7	0.7	0.7	0.7	0.05	0.05	0.05	0.05	0.05
Sunday	Fans	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF												
Sunday	Heating <sup>0</sup> C	16	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.4	0.6	0.5	0.4	0.05	0.05	0.05	0.05	0.05
Operatin	g Sched	ule 20	C: Ed	ucatio	on & 1	Resea	arch																		
Un	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0.2	0.7	0.9	0.8	0.8	0.8	0.6	0.6	0.5	0.4	0.3	0.3	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.7	0.6	0.6	0.6	0	0	0	0	0	0
M 1	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.6	0.9	0.9	0.9	0.8	0.5	0.7	0.7	0.7	0.7	0.7	0.05	0.05	0.05	0.05	0.05	0.05
Monday through	Fans	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF												
Friday	Heating <sup>0</sup> C	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.05	0.05	0.05	0.05	0.05	0.05
	Occ.	0	0	0	0	0	0	0	0.2	0.7	0.9	0.8	0.8	0.6	0.6	0.5	0.3	0	0	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.7	0.6	0	0	0	0	0	0	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.6	0.9	0.9	0.8	0.5	0.7	0.7	0.7	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Saturday	Fans	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF																
Saturday	Heating <sup>0</sup> C	16	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Sunday	Occ.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Plug					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tiug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
, , , , , , , , , , , , , , , , , , ,	Fans	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
I	Heating <sup>0</sup> C	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Operating	g Sche di	ule 3A	A: Inp	oatie n	t - St	aff Su	ippor	t																	
Until	il Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0.4	0.4	0.4	0.4	0.4	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.4	0.4	0.4	0.4	0.4
	Lgt.	0.6	0.6	0.6	0.6	0.6	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.8	0.9	0.9	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6
	Plug	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.8	0.5	0.8	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Monday	Fans	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
through Sunday	Heating <sup>0</sup> C	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4
	Cooling <sup>0</sup> C	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
	SHW	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5
Operating Schedule 3B: Inpatient - Patient Bed Rooms																									
Until	il Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	1	1	1	1	1	1	1	0.5	0	0	0	0	0	0	0	0	0.5	0.7	1	1	1	1	1	1
	Lgt.	0	0	0	0	0	0.5	1	0.5	0	0	0	0	0	0	0	0	0.5	1	0.8	0.5	0.8	0.5	0.2	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.2	0.4	0.6	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.8	0.9	0.8	0.6	0.8	0.6	0.4	0.05
Monday	Fans	ON	ON	ON	ON	ON	ON	ON	ON	OFF	ON														
through Sunday	Heating <sup>0</sup> C	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16	16	16	16	16	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4
(	Cooling <sup>0</sup> C	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29	29	29	29	29	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.5	1	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.6	0.5	0.4	0.4	0.4	0.4	0.05	0.05
Operating	Sched	ule 30	C: Inp	oatie n	t - Pa	tient	Suppo	ort																	
	il Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

	Occ.	0	0	0	0	0	0	0	0.5	0.5	0.2	0.5	0.5	1	0.5	0.5	0.5	0.5	1	0.5	0.3	0	0	0	0
	Lgt.	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.05
Monday	Fans	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF													
through Sunday	Heating <sup>0</sup> C	16	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.05	0.05
Operatir	ng Sched	ule 31	D: Inp	patie n	ıt - Cl	inic 8	The	rapy																	
Un	ntil Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0	0	0.9	0.9	0.9	0.9	0.33	0.9	0.9	0.9	0.9	0.2	0.2	0.1	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	0.5	1	1	1	1	0.5	1	1	1	1	1	0.7	0.5	0	0	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.9	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.7	0.5	0.2	0.05	0.05	0.05	0.05	0.05
Monday through	Fans	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF												
Sunday	Heating <sup>0</sup> C	16	16	16	16	16	16	18	20	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	29	27	25	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	29	29	29	29
	SHW	0.05	0.05	0.05	0.05	0.05	0.05	0.5	1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.3	0.05	0.6	0.5	0.05	0.05	0.05	0.05
Operatir	ng Sched	ule 4:	24/7																						
Un	ntil Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Lgt.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Plug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Monday through	Fans	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Sunday	Heating <sup>0</sup> C	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4
	Cooling <sup>0</sup> C	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
	SHW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Operatin	ng Sched	ule 5:	: IT S	erver	Load	l																			
_	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Monda	y-Friday	0.6	0.6	0.6	0.6	0.6	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6
	Saturday	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6
	Sunday	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
Operatin	g Sched	ule 6	A: Co	nfe re	nce/S	Staff L	oung	e/Loc	kers/	Misce	ellane	ous													
Un	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0	0	0	1	0	0.2	0	0	0.5	0	0.4	0	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0
Manday	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monday through	Fans	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF						
Sunday	Heating <sup>0</sup> C	16	16	16	16	16	16	16	18	20	22.4	22.4	22.4	20	20	22.4	20	22.4	16	16	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	29	29	27	25	23.6	23.6	23.6	25	25	23.6	25	23.6	29	29	29	29	29	29	29
	SHW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operatin	g Sched	ule 6	B: Co	nfe re	nce/S	taff L	ounge	e/Loc	kers/	Misce	llane	ous													
Un	til Hour:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Occ.	0	0	0	0	0	0	0	1	0	0.2	0	0	0.5	0	0.4	0	0	0	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Mondoy	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monday through	Fans	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF								
Friday	Heating <sup>0</sup> C	16	16	16	16	16	18	20	22.4	20	22.4	20	20	22.4	20	22.4	16	16	16	16	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	27	25	23.6	25	23.6	25	25	23.6	25	23.6	29	29	29	29	29	29	29	29	29
	SHW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Occ.	0	0	0	0	0	0	0	0	0.5	0	1	0	0	0.2	0	0	0	0	0	0	0	0	0	0
Saturday	Lgt.	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
Sucarady	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1	0.05	0.05	0.05	0.05	1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Fans	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF									

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	Heating <sup>0</sup> C	16	16	16	16	16	18	18	20	22.4	20	22.4	20	20	22.4	16	16	16	16	16	16	16	16	16	16
	Cooling OC	29	29	29	29	29	27	27	25	23.6	25	23.6	25	25	23.6	29	29	29	29	29	29	29	29	29	29
	SHW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Occ.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lgt.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Plug	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Cumday	Fans	OFF																							
Sunday	Heating <sup>0</sup> C	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	Cooling <sup>0</sup> C	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	SHW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### APPRENTICESHIP POLICY

### 1. APPRENTICESHIP POLICY

- 1.1 The Design-Builder acknowledges that it has obtained a copy of and has reviewed the Ministry of Jobs, Tourism and Skills Training (JTST) policy set out in Apprentices on Public Projects Policy and Procedure Guidelines, Date: July, 2015, Update: March, 2016 available at <a href="http://www2.gov.bc.ca/gov/content/industry/construction-industry/apprentices">http://www2.gov.bc.ca/gov/content/industry/construction-industry/apprentices</a> (the "Apprenticeship Policy").
- 1.2 Unless defined in this Agreement, capitalized terms in this Schedule 9 have the meaning given in the Apprenticeship Policy.

## 2. APPLICATION

- 2.1 The Design-Builder agrees that the Apprenticeship Policy applies to this Agreement and the Design-Builder will, subject to the reasonable assistance of the Authority, comply with the requirements of the Apprenticeship Policy.
- 2.2 The Design-Builder agrees that the Authority requires the Design-Builder to apply the Apprenticeship Policy to Subcontractors and Subcontracts (of all tiers) valued at \$500,000 or more.

## 3. **REQUIREMENTS**

- 3.1 The Design-Builder acknowledges that the requirements of the Apprenticeship Policy and this Schedule 9 include:
  - (a) using Registered Apprentice(s) in respect of Specified Trades valued at \$500,000 or more;
  - (b) reporting in Form A: Confirmation of Intent to Use Registered Apprentices as soon as practicable and at least 5 days prior to commencement of Work under this Agreement or work under the applicable Subcontract and completing all supplementary forms (Form A) as required;
  - (c) reporting in Form B: Apprentice Utilization Report quarterly and upon completion of Work under this Agreement or work under the applicable Subcontract; and
  - (d) complying with applicable requirements in relation to Personal Information.
- 3.2 The Design-Builder further acknowledges that under the Apprenticeship Policy the Authority may, or may permit JTST, to exercise all provisions of the Apprenticeship Policy applicable to the Contracting Authority or the Province (whether through JTST or otherwise) provisions that permit the Contracting Authority:

- (a) to delay the start of Work on the Project until the Authority has confirmed, through JTST, that Registered Apprentices will be used on the Project; and
- (b) to delay issue of final payment in relation to the applicable Work until the final Form B is submitted.
- 3.3 The Design-Builder represents that the Design-Builder will ensure that the provisions of this Schedule 9 are incorporated into applicable Subcontracts.
- 3.4 The Design-Builder and the Authority acknowledge that any change to the Apprenticeship Policy will, if required by the Authority to be implemented for purposes of this Agreement, be implemented as a Change under Part E- Changes.